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LIGHTING STUDY

**San Diego State University Mission Valley Campus
San Diego, California**

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Table of Contents

1. Summary.....	6
2. Project Description.....	8
3. Glossary of Lighting Terminology.....	9
4. Review of Lighting Regulations & Reference Standards.....	12
4.1 California State University.....	12
4.2 San Diego Municipal Code.....	13
4.3 Lighting Zone Designation.....	15
4.4 California Vehicle Code, Division 11. Rules of the Road.....	15
4.5 IESNA Recommended Practices.....	16
5. Significance Threshold.....	16
6. Methodology.....	17
6.1 Existing Conditions Procedures.....	17
6.2 Project Analysis.....	18
7. Existing Site Analysis.....	20
7.1 Existing Conditions Monitoring Sites.....	21
7.2 Criteria.....	23
7.3 Monitoring Site Survey Data.....	24
8. Project Analysis.....	39
8.1 Building Lighting Analysis.....	39
8.2 Sign Lighting Analysis.....	47
8.3 Project Sign Lighting Conclusions.....	53
8.4 Construction Lighting Analysis.....	53
9. Conclusion.....	58
APPENDIX A: Building Lighting Concept Plan.....	61
APPENDIX B: Sign Lighting Concept Plan.....	75
APPENDIX C: Construction Lighting Concept Plan.....	77
APPENDIX D: CALGreen 2016 Building Energy Efficiency Standards, pages 40,41.....	78
APPENDIX E: CALGreen 2016 Building Energy Efficiency Standards, Table 5.106.9.....	80
APPENDIX F: IESNA 10 th Edition Lighting Handbook, Table 26.4, Nighttime Outdoor Lighting Zone Definitions.....	81
APPENDIX G: IESNA 10 th Edition Lighting Handbook, Table 26.5, Recommended Light Trespass Illuminance Limits.....	81
APPENDIX H: ANSI/IES RP39-19 Recommended Practice: Off-Roadway Sign Luminance.....	82
APPENDIX I: Building Lighting Illuminance Light Trespass Calculation (fc).....	85
APPENDIX J: Sign Lighting Illuminance Light Trespass Calculation (fc).....	140

APPENDIX K: Construction Lighting Illuminance Light Trespass Calculation (fc)	194
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List of Tables

Table 1. Vertical Calculation Plane Locations and Dimensions.....	18
Table 2. Existing Conditions Lighting Criteria	23
Table 3. Measured Illuminance (fc) at Monitoring Sites.....	24
Table 4: Measured Luminance, (cd/m ²) at Monitoring Sites.....	25
Table 5: Building Light Trespass Illuminance (fc).....	40
Table 6: Monitoring Site View Angle to Stadium Light Poles.....	43
Table 7: View Angle at Residential Properties to the Stadium Light Poles	44
Table 8: Contrast Ratio: comparison of existing measured to Project Building Lighting @ 1500 cd/m ²	45
Table 9: Sign Light Trespass Illuminance (fc).....	49
Table 10: Contrast Ratio: comparison of existing measured to Project Signs @ 600 cd/m ²	51
Table 11: Construction Light Trespass Illuminance (fc).....	54
Table 12: Contrast Ratio: comparison of existing measured to Project Construction Lighting @ 600 cd/m ²	57

List of Figures

Figure 1: Project Site and Surrounding Properties	5
Figure 2: Inverse square law diagram (hyperphysics.phy-astr.gsu.edu)	10
Figure 3: Minolta LS-100 meter	17
Figure 4: Project Site and Vertical Calculation Plane Locations.....	19
Figure 5: Project Site and Monitoring Sites.....	22
Figure 6: ME1 February 11, 2019, 4:06 PM.....	27
Figure 7: ME1 February 11, 2019, 8:55 PM.....	27
Figure 8: ME2 February 11, 2019, 4:04 PM.....	28
Figure 9: ME2 February 11, 2019, 8:46 PM.....	28
Figure 10: ME3 May 20, 2019, 12:40 PM	29
Figure 11: ME3 May 20, 2019, 8:40 PM	29
Figure 12: ME4 May 20, 2019, 12:57 PM	30
Figure 13: ME4 May 20, 2019, 8:35 PM	30
Figure 14: MS1 February 10, 2019, 4:45 PM.....	31
Figure 15: MS1 February 11, 2019, 8:05 PM.....	31
Figure 16: MS2 May 20, 2019, 1:19 PM	32
Figure 17: MS2 May 20, 2019, 10:17 PM	32
Figure 18: MS3 May 20, 2019, 1:24 PM	33

Figure 19: MS3 May 20, 2019, 8:12 PM	33
Figure 20: MW1 May 20, 2019, 11:55 AM	34
Figure 21: MW1 May 20, 2019, 9:33 PM	34
Figure 22: MN1 February 11, 2019, 4:14 PM	35
Figure 23: MN1 February 11, 2019, 7:40 PM	35
Figure 24: MN2 February 11, 2019, 4:35 PM	36
Figure 25: MN2 February 11, 2019, 7:06 PM	36
Figure 26: MN3 February 10, 2019, 4:15 PM	37
Figure 27: MN3 February 11, 2019, 8:28 PM	37
Figure 28: MN4 February 10, 2019, 4:30 PM	38
Figure 29: MN4 February 11, 2019, 7:25 PM	38
Figure 30: Building Light Trespass Illuminance (fc) at VP-W3	39
Figure 31: Site Section from MN1 to Stadium.....	42
Figure 33: Sign Light Trespass Illuminance (fc) at VP-N1 at Friars Road.....	48
Figure 34: Sign Light Trespass Illuminance (fc) at VP-N1 at San Diego Mission Road.....	50

This Lighting Study by Francis Krahe & Associate Inc. analyzes the new lighting associated with the proposed Project improvements at 9449 Friars Road in the City of San Diego, including new outdoor lighting for streets, building exterior lighting, sports fields, parks, and the proposed new Stadium within the Project (hereinafter referred to Building Lighting), new outdoor sign lighting (hereinafter referred to as Sign Lighting), and temporary construction phase lighting (Construction Lighting). The Project site is bounded by Friars Road to the north, commercial properties on Northside Drive to the west, the San Diego River borders the Project to the south with commercial use properties fronting on Camino del Rio Road and the I-8 Freeway further to the south, and the Interstate I-15 Freeway borders the Project site to the east. Adjacent sensitive use sites include existing residential use properties to the north, east, south and west of the Project site. The nearest sensitive use residential zoned properties exist directly across Friars Road to the north of the Project site, above the bluff to the north of the Project site on Broadview Avenue, to the east of the I-15 Freeway, and to the south of the I-8 Freeway. A sensitive native habitat is located adjacent to the Project south property line within the San Diego River watershed.



Figure 1: Project Site and Surrounding Properties

This Study reviews the parameters that affect Light Trespass or Glare (each as defined below) at adjacent sensitive use properties in the vicinity of the Project, reviews the applicable lighting metrics and regulations pertaining to artificial lighting, examines the existing lighting conditions within and surrounding the Project, and evaluates the Project's proposed Building, Sign, and Construction Lighting to identify potential environmental impacts on surrounding sensitive use properties.

The methods of analysis utilized for this Study are based upon the recommended practices established by the Illuminating Engineering Society of North America (IESNA) for the practice of illumination engineering design and application, and the actual measurements of light sources and illuminated surfaces.

1. Summary

This Study reviews the proposed Project (as described herein as Appendix A, B, and C) with respect to Light Trespass and Glare at adjacent sensitive use properties near the Project site. Residential properties, natural habitat at San Diego Creek, and the adjacent I-15 Freeway are identified as the most sensitive use sites due to their close proximity to the Project and possible direct view of the Project Building Lighting, Project Signs, and Construction Lighting. Light intensity diminishes rapidly in relation to distance (see Inverse Square Law page 10). Therefore, more distant sensitive site locations will receive much lower Light Trespass illuminance and/or luminance, and will therefore be less affected by the Project.

Exterior lighting impact issues are focused around two key subjects: Light Trespass and Glare. These two technical terms are defined by the Illuminating Engineering Society of North America (IESNA) as follows:

- **Light Trespass¹** is the light that falls on a property but originates on an adjacent property. Light Trespass is measured in terms of illuminance (foot-candles or metric units lux), and can be measured at any point and in any direction. Where Light Trespass is evaluated the illuminance is measured perpendicular to the source of light, toward the source of light, at the property line, or the location where light is causing an issue, such as a residential window or balcony.
- **Glare²** occurs when either the luminance is too high or the range of brightness in a visual field is too large. A bright light source, such as a flood light or street light, viewed against a dark sky may be uncomfortable to look at, and may create a temporary sensation of blindness, which is referred to as disability glare. Glare is evaluated by measuring the luminance (footlamberts or metric units candelas/m²) at the source of light, such as a digital display, in comparison to the surrounding adjacent luminance. The term which describes the extent of Glare at an observer position for a view is referred to as contrast, and is determined by the variation of luminance within the field of view. "High," "Medium," and "Low" contrast are terms used to describe contrast ratios. The ratio of peak measured luminance to the average within a field of view: contrast ratios greater than 30:1, between 10:1 and 30:1, and below 10:1, respectively. Contrast ratios above 30:1 are generally uncomfortable for the human eye to perceive. Any source luminance that is more than 50 times the adjacent background will be viewed as prominent, and may be viewed as distracting.

Light Trespass is evaluated at night. Glare may occur either during the day or night.

This Report analyzes the Project potential environmental impacts relating to lighting based on the Project Building Lighting described in Appendix A, Project Sign Lighting described in Appendix B, and Construction Phase Lighting as described in Appendix C of this Study.

This Study establishes the following illumination levels for Building Lighting for purposes of environmental analysis. Exterior building and site lighting must comply with the requirements of the California Green Building Code (CALGreen), which stipulates maximum light trespass illuminance at the project property line and/or public right of way. The IESNA also publishes recommended professional practice standards regarding light trespass and glare. Accordingly, the Building Lighting would comply with the following requirements:

- Project Light Trespass illuminance will not exceed 1.4 fc at the Project site property line or the

¹ IESNA Handbook, 10th Edition, 19.3: Light Pollution and Trespass, page 19.7

² IESNA Handbook, 10th Edition, 4.10: Glare, page 4.25

centerline of adjacent public right of way.

- Project Building Lighting will not exceed contrast ratio of 30 to one.

This Study demonstrates the Light Trespass from the Building Lighting at the adjacent residential use properties is below the 1.4 footcandles (fc) threshold as defined by CALGreen.

Furthermore, the Building Lighting is evaluated with respect to Glare visible at adjacent residential properties or roadways. To present a conservative analysis, this Study evaluates the Building Lighting with a maximum luminance of 1500 cd/m² at night. This Study analyzes the Glare from the Building Lighting at sensitive use properties at night by calculating the contrast ratio, which compares the maximum Project Building Lighting luminance to the existing average luminance measured at monitoring sites surrounding the Project site, which are adjacent to sensitive use properties. The calculated contrast ratios are less than 30:1, which indicates the Building Lighting will not create a new Glare condition at adjacent sensitive use properties. The Glare at roadways is evaluated with respect to the standards identified by the California Motor Vehicle Code, which defines maximum sign luminance within driver's field of view for both day and night. This Study confirms the Building Lighting will not exceed the maximum luminance defined by the California Motor Vehicle Code during the day, at night, and during periods of low sun intensity.

Therefore, the results of this Study indicate the Project Building Lighting will not create a new source of Light Trespass or Glare.

This Study establishes the following illumination levels for Sign Lighting for purposes of environmental analysis. Accordingly, the Sign Lighting would comply with the following requirements:

- Project Sign Light Trespass illuminance will not exceed 1.4 fc at adjacent residential use properties.
- Project Signs will not exceed 600 cd/m² (all white) from sunset until 20 minutes before sunrise and will not exceed 6000 cd/m² (all white) during the day, from 20 minutes before sunset to sunrise.
- Project Signs will transition smoothly from daytime (6000 cd/m²) to nighttime (600 cd/m²).

This Study demonstrates the Light Trespass from the Sign Lighting at the adjacent sensitive use properties is below 1.4 footcandles (fc) threshold at the Project property line or adjacent public right of way adjacent to sensitive use properties. There is no Light Trespass threshold for commercial use properties, which are not considered light or glare-sensitive receptors. Therefore, at commercial properties where the illuminance is calculated to be above the 1.4 fc threshold, there is no Light Trespass impact from the Sign Lighting.

Furthermore, the Sign Lighting is evaluated with respect to Glare visible at adjacent residential properties or roadways. To present a conservative analysis, this Study evaluates the Project Sign Lighting with a maximum luminance of 6000 cd/m² during the day and 600 cd/m² at night with all signs operating at all white. The actual Project Signs luminance will be less than 600 cd/m² during the night, since the Signs will operate with varied color and patterns that create average luminance much less than the all-white configuration used in this analysis, and the higher luminance may not be necessary to create adequate prominence for the Signs. The most recent IESNA recommended luminance suggest a much lower luminance at 160 cd/m² (see Appendix H) for Lighting Zone 4. This Study evaluates the Signs with higher luminance at 600 cd/m² to present a very conservative analysis.

This Study analyzes the Glare from the Sign Lighting at sensitive use properties at night by calculating the contrast ratio, which compares the maximum Project Sign luminance to the existing average luminance measured at residential use properties near to the Project site. The calculated contrast ratios are less than 30:1, which indicates the Project Sign Lighting will not create a new Glare condition at adjacent sensitive use properties. The Glare at roadways is evaluated with respect to the standards identified by the California Motor Vehicle Code, which defines maximum sign luminance within driver's field of view for both day and night. This Study confirms the Sign Lighting will not exceed the maximum luminance defined by the California Motor Vehicle Code during the day, at night, and during periods of low sun intensity.

Therefore, the results of this Study indicate the Project Sign Lighting will not create a new source of Light

Trespass or Glare.

This Study establishes the following illumination levels for Construction Lighting for purposes of environmental analysis. Exterior construction lighting must comply with the requirements of CALGreen, which stipulates maximum light trespass illuminance at the project property line and or centerline of adjacent public right of way. The IESNA also publishes recommended professional practice standards regarding light trespass and glare. Accordingly, the Construction Lighting would comply with the following requirements:

- Project Construction Light Trespass illuminance will not exceed 1.4 fc at the Project site property line or the centerline of adjacent public right of way.
- Project Construction Lighting will not exceed contrast ratio of 30 to one.

This Study demonstrates the Light Trespass from the Construction Lighting at the adjacent residential use properties is below the 1.4 footcandles (fc) threshold as defined by CALGreen.

Furthermore, the Construction Lighting is evaluated with respect to Glare visible at adjacent residential properties or roadways. To present a conservative analysis, this Study evaluates the Construction Lighting with a maximum luminance of 600 cd/m² at night. This Study analyzes the Glare from the Construction Lighting at sensitive use properties at night by calculating the contrast ratio, which compares the maximum Project Construction Lighting luminance to the existing average luminance measured at monitoring sites surrounding the Project site, which are adjacent to sensitive use properties. The calculated contrast ratios are less than 30:1, which indicates the Construction Lighting will not create a new Glare condition at adjacent sensitive use properties. The Glare at roadways is evaluated with respect to the standards identified by the California Motor Vehicle Code, which defines maximum sign luminance within driver's field of view for both day and night. This Study confirms the Construction Lighting will not exceed the maximum luminance defined by the California Motor Vehicle Code during the day, at night, and during periods of low sun intensity.

Therefore, the results of this Study indicate the Project Construction Lighting will not create a new source of Light Trespass or Glare.

2. Project Description

The Project Site studied for purposes of this study encompasses 172 acres in a developed area that supports a variety of land uses. The existing stadium and surrounding parking will be demolished and redeveloped to include the proposed SDSU Mission Valley campus, including educational, office, research, retail, sports and entertainment uses within the Project Site.

Land uses located in the area surrounding the Project site include public right-of-way, residential, retail, recreation, commercial, industrial and religious institutions. The I-15 Freeway abuts the Project site to the east. Along the opposite side of the I-15 freeway exists multi-residential developments stretching from San Diego Mission Road to Ranch Mission Road. Friars Road and San Diego Mission Road border the Project site to the north. Mission Village Drive runs north-south and dead ends into the Project site on the north side. Existing detached single-family housing exists atop the hills to the north. Additionally, there is a multi-residential development (Monte Vista Apartment Homes) directly north of Friars road, to the northwest of the Project site. A shopping center borders the Project site to the west. Residential use properties are located on the opposite side of the shopping center to the southwest of the Project site. The San Diego River borders the Project to the south. The I-8 Freeway and commercial use properties exist on the south side of the natural drainage. Residential use properties exist further south at the top of the hills that overlook the Project site. There are additional more distant single family residential homes further to the south of the I-8 Freeway, and to the north of the Project site and north of Friars road.

Figure 1 above shows the location of the project site in blue, and shows adjacent residential use properties in red, and the drainage swale in green.

The proposed SDSU Mission Valley Campus Project will include exterior building and site lighting for all of the proposed uses (Building Lighting as described in Appendix A), illuminated signs (Sign Lighting as described in Appendix B), and temporary construction phase lighting (Construction Lighting as described in Appendix C). Project Building Lighting includes exterior street lights, sports field lighting, and Stadium field lighting. Signs

within the Project proposed and analyzed in this report include sign pylons at the Project perimeter. Construction Phase Lighting includes pole mounted area lights to support night construction within the proposed Stadium site area. This analysis represents a conservative evaluation of the potential for offsite Light Trespass Illuminance and Glare from the Project Building, Sign Lighting, and Construction Lighting.

3. Glossary of Lighting Terminology

Discussions of lighting issues include precise definitions, descriptions or terminology of the specific lighting technical parameters. The following glossary summarizes explanations of the technical lighting terms utilized in this Study and the related practice standards to facilitate discussion of these issues. The following technical terms are used in this Study.

- Brightness:** The magnitude of sensation that results from viewing surfaces from which light comes to the eye. This sensation is determined partly by the measurable luminance of the source and partly by the conditions of observation (Context), such as the state of adaptation of the eye. For example, very bright lamps at night appear dim during the day, because the eye adapts to the higher brightness of daylight.
- BUG Rating:** A luminaire classification system established in *IES TM15-11*, BUG Ratings Addendum that provides for uniform assessment of the directional characteristics of illumination for exterior area lighting. BUG is an acronym composed of Backlight, Uplight, and Glare. BUG ratings are based on a zonal lumen calculations for secondary solid angles defined in *IES TM15-11*.
- Candela:** Measure of light energy from a source at a specific standard angle and distance. Candela (cd) is a convenient measure to evaluate output of light from a lamp or light fixture in terms of both the intensity of light and the direction of travel of the light energy away from the source.
- Contrast:** Calculated evaluation of high, medium and low contrast of visible light sources or surfaces within the Property by a ratio of luminance. Contrast is the ratio of one surface luminance to a second surface luminance or to the field of view. Contrast exceeding 30 to 1 are usually deemed uncomfortable; 10 to 1 are clearly visible; and less than 3 to 1 appear to be equal.
- Fully Shielded:** A lighting fixture constructed in such a manner that all light emitted by the fixture, either directly from the lamp or a diffusing element, or indirectly by reflection or refraction from any part of the Luminaire, is projected below the horizontal as determined by photometric test or certified by the manufacturer. Any structural part of the light fixture providing this shielding must be permanently affixed. In other words, no light shines above the horizontal from any part of the fixture.
- Glare:** Glare is visual discomfort experienced from high luminance or high range of luminance. For exterior environments at night, glare occurs when the range of luminance in a visual field is too large. The light energy incident at a point is measured by a scale of footcandles or lux, and is described in the technical term Illuminance. This incident light is not visible to the eye until it is reflected from a surface, such as pavement, wall, dust in the atmosphere or the surface of a light bulb. The visible brightness of a surface is measured in footlamberts (or metric equivalent candelas per square meter) and is described by the term Luminance.
- The human eye processes brightness variations across a very broad spectrum of intensities. The range of brightness generated by direct noon sun versus a moonlight evening is over 5000 to 1. Human eyes are capable of accommodating to this range of intensities given adequate time to adjust. However, the eye cannot process brightness ratios of more than 30 to 1 within

a view without discomfort. See IESNA 10th Edition Handbook, Section 4.10.1, Discomfort Glare and Section 10.9.2 Calculating Glare.

For the purpose of this analysis, brightness of light sources may be described subjectively by the following criteria:

High Contrast Conditions: View of light fixture emitting surface, such as a lens, reflector, or lamp, where brightness contrast ratio exceeds 30 to 1 (source Luminance to background Luminance ratio in footlamberts).

Medium Contrast Conditions: Brightly lighted surfaces where contrast ratio exceeds 10 to 1, but is less than 30 to 1 (lighted surface Luminance to background Luminance ratio in footlamberts).

Low Contrast Conditions: Illuminated surfaces where contrast ratio exceeds 3 to 1, but less than 10 to 1 (source Luminance to background Luminance ratio in footlamberts).

Illuminance:

Illuminance is the means of evaluating the density of Luminous Flux. Illuminance indicates the amount of Luminous Flux from a light source falling on a given area. Illuminance is measured in footcandles (fc) which is the lumens per square foot, or Lux (lumens per square meter). Illuminance need not necessarily be related to a real surface since it may be measured at any point within a space. Illuminance is determined from the Luminous intensity of the light source. Illuminance of a point source decreases with the square of the distance from the light source (see Inverse Square Law definition).

Horizontal Illuminance:

Illuminance incident upon a horizontal plane. The orientation of the illuminance meter or calculation point will be 180° from Nadir.

Vertical Illuminance:

Illuminance incident upon a vertical plane. The orientation of the illuminance meter or calculation point will be 90° from Nadir.

Inverse Square Law:

In physics, an inverse-square law is any physical law stating that a specified physical quantity or intensity is inversely proportional to the square of the distance from the source of that physical quantity. The fundamental cause for

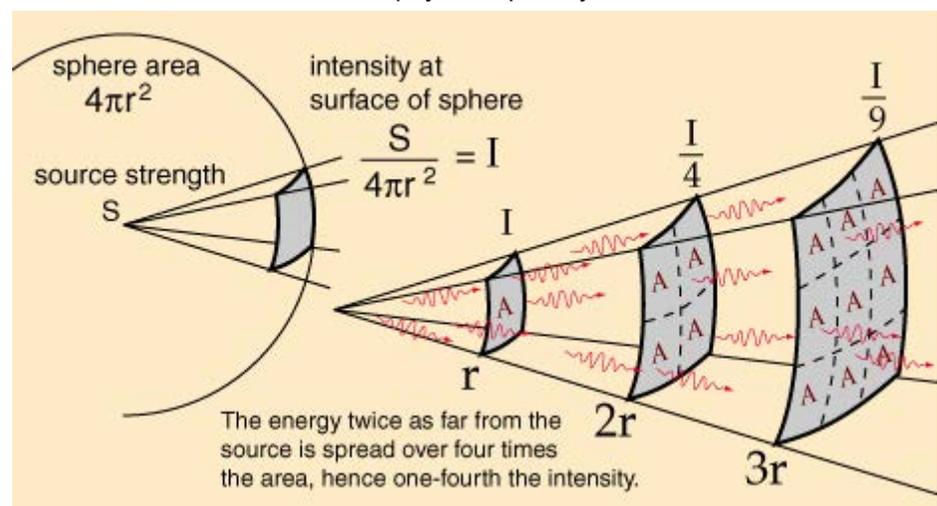


Figure 2: Inverse square law diagram (hyperphysics.phy-astr.gsu.edu)

this relationship can be understood as geometric dilution corresponding to point-source radiation into three-dimensional space (see Figure 2). The divergence of a vector field which is the resultant of radial inverse-square law fields with respect to one or more sources is everywhere proportional to the

	strength of the local sources, and hence zero outside sources. Newton's law of universal gravitation follows an inverse-square law, as do the effects of electric, magnetic, light, sound, and radiation phenomena. Thus, Illuminance decreases with the square of the distance from the light source.
Output Direction:	Luminaires for general lighting are classified in accordance with the percentages of total luminaire output emitted above and below horizontal. The light distribution curves may take many forms within the limits of upward and downward distribution, depending upon the type of light and the design of the luminaire.
Lighting Array:	An installation of multiple light sources or lamps where the distance between each lamp or light source within the Lighting Array is less than 5 feet on center in any direction from any other source.
Light Source:	Device which emits light energy from an electric power source.
Light Trespass:	Electric light from subject property incident onto adjacent properties, measured in footcandles or lux, usually analyzed by measurement at or near the adjacent property line.
Lighting Zone (LZ):	Defined by IESNA and summarized in Table 26.4 in the Handbook and adopted by CALGreen.
Lighting Zone LZ1:	Areas where lighting might adversely affect flora and fauna or disturb the character of the area. The vision of human residents and users is adapted to low light levels. Lighting may be used for safety, security and/or convenience but it is not necessarily uniform or continuous. After curfew most lighting should be extinguished or reduced as activity levels decline.
Lighting Zone LZ2:	Outdoor areas of human activity where the vision of human residents and users is adapted to moderate light levels. Lighting is not uniform or consistent. Lighting is generally desired for safety, security and/or convenience.
Lighting Zone LZ3:	Outdoor areas of human activity where the vision of human residents and users is adapted to moderately high light levels. Lighting is generally desired for safety, security and/or convenience.
Lighting Zone LZ4:	Outdoor areas of human activity where the vision of human residents and users is adapted to high light levels. Lighting is generally desired for safety, security and/or convenience.
Luminaire:	A complete lighting unit consisting of a light source together with the parts designed to distribute the light, to position and protect the light source, and to connect the light source to the power supply. Also referred to as a Light Fixture.
Luminance:	Luminance is a measure of emissive or reflected light from a specific surface in a specific direction over a standard area. Luminance is measured in footlamberts (fL) ($1/\pi$ Candela per square foot) or cd/m^2 (Candela per square meter). $1\text{fL} = 3.43 \text{ cd}/\text{m}^2$.
	Whereas Illuminance indicates the amount of Luminous Flux falling on a given surface, Luminance describes the brightness of an illuminated or luminous surface. Luminance is defined as the ratio of luminous intensity of a surface (Candela) to the projected area of this surface (m^2 or ft^2).

Luminous Flux:	<p>Mean value of total Candelas produced by a light source. Luminous Flux describes the total amount of light emitted by a light source. The unit for measuring Luminous Flux is Lumen (lm).</p> <p>This radiation could basically be measured or expressed in watts. This does not, however, describe the optical effect of a light source adequately, since the varying spectral sensitivity of the eye is not taken into account. To include the spectral sensitivity of the eye the Luminous Flux is measured in lumen. Radiant Flux or 1 W emitted at the peak of the spectral sensitivity (in the photopic range at 555 nanometers produces a Luminous Flux of 683 lumen). The unit of lumen does not define direction.</p>
Monitoring Sites:	<p>Monitoring Sites are locations selected for observation and field lighting measurements to evaluate the views to the Project from adjacent sensitive use properties and to determine the extent and intensity of existing light sources within and surrounding the Project. The Monitoring Sites are within the public right of way, and may be adjacent to sensitive use sites. These locations are representative of the view to the Project from the vicinity of the sensitive sites surrounding the Project to the north, south, east and west. Figure 5 below illustrates the Monitoring Site locations.</p>
Skyglow:	<p>Skyglow is the description of luminous atmospheric background and results from both natural and human made conditions. Natural causes of skyglow include sunlight reflected from the surface of the earth and moon, sunlight illuminating the upper atmosphere, and visible illumination from other interplanetary sources. Human made causes of skyglow include electric light that is emitted directly upward into the sky (Uplight), or reflected off of the ground.</p>
Vertical Plane (VP):	<p>The location of a vertical surface where illuminance data is calculated to evaluate light trespass illuminance. The orientation of the vertical surface is 90° from Nadir. The calculation plane simulates the illumination (fc) captured by light meters. See Figure 4.</p>

4. Review of Lighting Regulations & Reference Standards

Exterior lighting is regulated throughout California by the state energy and building codes, and local municipal codes. The Project site is a part of the California State University Campus, therefore applicable code sections include the State of California Green Building Code, CALGreen, and the California Vehicle Code. Local municipal codes include the City of San Diego Municipal Code (SDMC). Reference standards include model lighting ordinances provided by the Illuminating Engineering Society of North America (IESNA) and the International Dark Sky Organization, ASHRAE 90-75, and the U.S. Green Building Council. Various aspects of these reference standards are included in state and local regulations to improve the outcomes of any approved project and avoid future disputes or legal challenges to proposed exterior lighting or lighted signs. The lighting standards summarized below balance the requirements of property owners for sufficient brightness and flexibility for the use of a particular property, with minimizing the off-site negative effects of Light Trespass and Glare.

4.1 California State University

The California State University regulates lighting with respect to light trespass (i.e., the spillover of light onto adjacent light-sensitive properties) by way of enforcement of the building code requirements of the California Building Code, CALGreen, and the California Electrical Code.

Title 24 of the California Code of Regulations (CCR), also known as the California Building Standards Code, consists of regulations to control building standards throughout the State. The following components of Title 24 include standards related to lighting:

California Green Building Standards Code (Title 24, Part 11)

The California Green Building Standards Code, which is Part 11 of Title 24, is commonly referred to as the CALGreen. Paragraph 5.1106.8, Light pollution reduction, requires that all non-residential outdoor lighting must comply with the following:

- The minimum requirements in the CEC for Lighting Zones 1–4 as defined in Chapter 10 of the California Administrative Code as noted above; and
- Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

The local City of San Diego ordinances pertaining to outdoor lighting are listed in the following paragraph. The requirements of CALGreen are common to both.

4.2 San Diego Municipal Code

The SDMC regulates lighting with respect to light trespass (i.e., the spillover of light onto adjacent light-sensitive properties) and glare. The City also enforces the building code requirements of the San Diego Building Code, the California Building Code, CALGreen, and the California Electrical Code.

Regulations applicable to the Project include the 2016 versions of the SDMC and the California Vehicle Code.

Chapter 14, Article 2, Division 7, Off-Site Development Impact Regulations, includes the following sections regarding light and glare:

“§142.0701 Purpose of Off-Site Development Impact Regulations

The purpose of these regulations is to provide standards for glare and lighting. The intent of these regulations is to minimize negative impacts from development to surrounding property.

§142.0705 When Off-Site Development Impact Regulations Apply

- (a) This division applies to all development that produces glare, or lighting in any zone, whether or not a permit or other approval is required for the use.

City of San Diego Ordinance Number O-20186, Amending SDMC Chapter 14, Article 2, Division 7.

§142.0740 Outdoor Lighting Regulations

- (a) Purpose and Intent
- (1) Outdoor lighting fixtures shall be installed in a manner that minimizes negative impacts from light pollution including light trespass, glare, and urban sky glow in order to preserve enjoyment of the night sky and minimize conflict caused by unnecessary illumination.
 - (2) Regulation of outdoor lighting is also intended to promote lighting design that provides for public safety and conserves electrical energy.
 - (3) It is the intent that, in addition to the regulations set forth in Section 142.0740, outdoor lighting fixtures shall be installed and operated in compliance with the following regulations, to the extent applicable:
 - (A) California Energy Code, California Code of Regulations, Title 24, Part 6;
 - (B) Green Building Regulations (Chapter 14, Article 10); and
 - (C) Electrical Regulations (Chapter 14, Article 6).

- (b) Applicability:

All new outdoor lighting fixtures, including the replacement of previously conforming outdoor lighting fixtures, shall comply with Section 142.0740. Maintenance, repair, and replacement of parts within a previously conforming outdoor lighting fixture shall be exempt if the new parts are of generally the same type and size as those that comprise the existing outdoor lighting fixture.

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- (c) General regulations that apply to all outdoor lighting:
- 1) Outdoor lighting shall comply with the applicable California Energy Code lighting power requirement for the lighting zones identified on Map C-948 filed in the office of the City Clerk.
 - (2) Shields and flat lenses shall be required to control and direct the light below an imaginary horizontal plane passing through the lowest point of the fixture, except for: ...
 - (E) Lighting for sports and athletic fields;
 - (F) Outdoor illuminated signs;
 - (3) New outdoor lighting fixtures shall minimize light trespass in accordance with the Green Building Regulations where applicable, or otherwise shall direct, shield, and control light to keep it from falling onto surrounding properties. Zero direct-beam illumination shall leave the premises.
 - (4) Outdoor lighting shall not exceed nominal 4000 Kelvin Color Correlated Temperature (CCT).
 - (5) All outdoor lighting, including search lights, shall be turned off between 11:00 P.M. and 6:00 A.M. except:
 - (A) Outdoor lighting may remain lighted for commercial and industrial uses that continue to be fully operational after 11:00 P.M. such as sales, assembly, and repair; and for security purposes or to illuminate walkways, roadways, equipment yards, and parking lots subject to the following:

Adequate lighting for public safety shall be maintained. Outdoor lighting shall otherwise be reduced after 11:00 P.M. where practicable.

 - (i) Within 30 miles of the Palomar and Mount Laguna observatories, outdoor lighting after 11:00 P.M. shall be limited to a maximum of 4,050 lumens per fixture or a maximum of 2500 Kelvin CCT.
 - (B) Outdoor lighting for the following is permitted to remain lighted after 11:00 P.M. and is exempt from the maximum Kelvin CCT and maximum lumen requirements specified in Section 142.0740(c)(4) and (c)(5)(A):
 - (i) Outdoor lighting used to illuminate recreational activities that are not in a residential zone may continue after 11:00 P.M. only when equipped with automatic timing devices and shielded to minimize light pollution.

Illuminated on-premises signs for businesses that are open to the public after 11:00 P.M. may remain lighted during business operating hours only. Illuminated off-premises advertising display signs shall not be lighted after 11:00 P.M. Signs located both on-and off-premises shall be equipped with automatic timing devices.
 - (6) On properties which are adjacent to or contain sensitive biological resources, any exterior lighting shall be limited to low-level lights and shields to minimize the amount of light entering any identified sensitive biological resource areas.
 - (e) Temporary outdoor lighting (including lighting for temporary uses, special events, and seasonal holiday lighting) is exempt from Section 142.0740(c)(2), (4), and (5) -PAGE 8 OF 15- 0- 20186 Document Number; 351971 2 (O-2012-122) COR. COPY where the lighting does not exceed 60 consecutive days or more than 120 days during any one year period.
 - (f) Deviations from Section 142.0740 may be requested with a Process Four Planned Development Permit in accordance with Section 126.0602(b) (1).
 - (g) Outdoor lighting on facilities or lands owned, operated, controlled or protected by the United States Government, State of California, County of San Diego, City of San Diego, or other public entity or public agency not subject to City of San Diego ordinances is exempt from the requirements of this division. Voluntary compliance with the intent of Section 142.0740 is encouraged.”

4.3 Lighting Zone Designation

The Project site at 9449 Friars Road in the City of San Diego and surrounding properties are urban, mixed use, commercial, and residential zones with extensive existing nighttime entertainment and sports venue use. An existing natural habitat abuts the Project site along the south property line and extends south to the San Diego River. Current best practices for lighting standards recognize the unique issues related to night time use adjacent to residential and sensitive use properties. The California Energy Code (CEC) includes designations for Lighting Zones (LZ) 1 through 4, included below in Appendix D, which correspond to the Light Trespass recommendations within the IESNA 10th Edition Handbook, Table 26.4, included herein Appendix F and G.

The existing conditions within and surrounding the Project site are consistent with the definition of Lighting Zone 4 noted above. In addition, the IESNA defines Lighting Zone 4 as:

“Areas of human activity where the vision of human residents and users is adapted to high light levels. Lighting is generally considered necessary for safety, security and/or convenience and it is mostly uniform or continuous.”

This description applies to the existing Stadium site, which includes uniform parking and field lighting, and is currently used for sports and entertainment activity at night.

The IESNA Table 26.5, lists a Pre-curfew illuminance of 15 Lux (1.4 footcandles) maximum at the location where trespass is under review for Lighting Zone 4.

The existing conditions to the south of the Project site within the San Diego River may be viewed as consistent with the definition of Lighting Zone 1 as defined by IESNA as: “Areas where lighting might adversely affect flora and fauna or disturb the character of the area. The vision of human residents and users is adapted to low light levels. Lighting may be used for safety, security and/or convenience but it is not necessarily uniform or continuous. After curfew most lighting should be extinguished or reduced as activity levels decline.” IESNA Table 26.5, lists a Pre-curfew 1 Lux (0.09 footcandles) maximum at the location where trespass is under review for Lighting Zone 1. However, the existing site includes illuminated sports fields, parking lots, and maintenance yards immediately adjacent to the south property line, and the existing measured illuminance is far greater than 0.09 fc, with a range from 0.38 fc minimum to 1.18 fc maximum measured at Monitoring sites MS2 and MS3 adjacent to the Project south property line (see Figure 5 and Table 3 below). The measured illuminance is greater than the maximum defined for Lighting Zone 3 and less than the maximum defined for Lighting Zone 4. This analysis evaluates the introduction of new sources of light that would increase the light trespass and or glare at adjacent sensitive use properties. The existing Project site is a sports and entertainment facility with existing high intensity sports and parking lot lighting which projects more than the illuminance defined in Lighting Zone 1 (0.09 fc).

The CEC standard is well defined and supported by the IESNA and ASHRAE, and other independent lighting organizations such as the International Dark Sky Organization and U.S. Green Building Council.

4.4 California Vehicle Code, Division 11. Rules of the Road

Chapter 2, Article 3 of the California Vehicle Code stipulates limits to the location of light sources that may cause glare and impair the vision of drivers.

ARTICLE 3. Offenses Relating to Traffic Devices [21450 - 21468] (Article 3 enacted by Stats. 1959, Ch. 3.), Section 21466.5. No person shall place or maintain or display, upon or in view of any highway, any light of any color of such brilliance as to impair the vision of drivers upon the highway. A light source shall be considered vision impairing when its brilliance exceeds the values listed below.

The brightness reading of an objectionable light source shall be measured with a 1-1/2 degree photoelectric brightness meter placed at the driver's point of view. The maximum measured brightness of the light source within 10 degrees from the driver's normal field of view shall not be more than 1,000 times the minimum measured brightness in the driver's field of view, except that when the minimum measured brightness in the field of view is 10 footlamberts or less, the measured brightness of the light source in footlambert shall not exceed 500 plus 100 times the angle, in degrees, between the driver's field of view and the light source.

4.5 IESNA Recommended Practices

The Illuminating Engineering Society of North America (IESNA) recommends illumination standards for a wide range of building and development types. These recommendations are widely recognized and accepted as best practices and are therefore a consistent predictor of the type and direction of illumination for any given building type. For all areas not stipulated by the regulatory building code, municipal code or specifically defined requirements, the IESNA standards are used as the basis for establishing the amount and direction of light for the Project. The IESNA 10th Edition Handbook is the current reference published by IESNA, which supersedes the 9th Edition IESNA Handbook and various Recommended Practice (RP) References published by IESNA prior to 2011. IESNA recommendations for Sign Lighting are further summarized in APPENDIX H: ANSI/IES RP39-19 Recommended Practice: Off-Roadway Sign Luminance

The IESNA 10th Edition Lighting Handbook defines Outdoor Lighting Zones relative to a range of human activity versus natural habitat. Table 26.4, Nighttime Outdoor Lighting Zone Definitions, included in Appendix F of this Study, establishes the Zone designation for a range of existing lighting conditions, from low or no existing lighting to high light levels in urban areas. Table 26.4 is referenced by the CEC as noted above in relation to allowable energy use for outdoor lighting. In addition, the IESNA 10th Edition Lighting Handbook defines Recommended Light Trespass Limits in Table 26.5, included in the Appendix G hereto, relative to the Outdoor Lighting Zones. The Recommended Light Trespass Illuminance Limits describe the maximum Light Trespass values in Lux at the location where trespass is under review.

The existing conditions surrounding the Project site are best described as Lighting Zone 4, as the existing site is an active stadium site used for sports and entertainment events. IESNA Table 26.5, lists a Pre-curfew 15 Lux (1.4 footcandles) maximum at the location where trespass is under review for Zone 4.

5. Significance Threshold

Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 California Code of Regulations, Sections 15000–15387) provides a set of sample questions to evaluate impacts with regard to aesthetics, including light and glare. The question that pertains to Light Trespass and Glare is as follows:

Would the project:

- Create a new source of substantial light and glare which would adversely affect day or nighttime views in the area?

In the context of this question from Appendix G of the CEQA Guidelines, the determination of significance in this Study takes into account the following factors:

- The change in ambient nighttime levels as a result of project light sources; and
- The extent to which project lighting would spill off the Property and affect adjacent residential or other sensitive use properties.

Specifically, the Project Building Lighting would create a significant impact with regard to artificial light or glare if:

- The Project Building Lighting Trespass Illuminance exceeds 1.4 foot-candles at the property line of a residential zoned property and therefore adversely changes the ambient light level at residential properties.
- The Project Building Lighting creates Glare with new high contrast conditions, with luminance greater than 600 cd/m² or contrast ratio greater than 30:1, visible from a field of view from a residentially zoned property.

Specifically, the Project Sign Lighting would create a significant impact with regard to artificial light or glare if:

- The Project Sign Lighting Trespass Illuminance exceeds 1.4 foot-candles at the property line of a residential zoned property and therefore adversely changes the ambient light level at residential properties.
- The Project Sign Lighting creates Glare with new high contrast conditions, with luminance greater

than 600 cd/m² or contrast ratio greater than 30:1, visible from a field of view from a residentially zoned property.

In addition, based on the California Vehicle Code requirements identified above, the Project Sign Lighting would create a significant impact with regard to artificial light or glare effects on drivers of motor vehicles if:

- The maximum measured brightness of the light source within 10 degrees from the driver's normal field of view shall not be more than 1,000 times the minimum measured brightness in the driver's field of view, except that when the minimum measured brightness in the field of view is 10 footlamberts or less, the measured brightness of the light source in footlambert shall not exceed 500 plus 100 times the angle, in degrees, between the driver's field of view and the light source.³

Specifically, the Project Construction Lighting would create a significant impact with regard to artificial light or glare if:

- The Project Construction Lighting Trespass Illuminance exceeds 1.4 foot-candles at the property line of a residential zoned property and therefore adversely changes the ambient light level at residential properties.
- The Project Construction Lighting creates Glare with new high contrast conditions, with luminance greater than 600 cd/m² or contrast ratio greater than 30:1, visible from a field of view from a residentially zoned property.

6. Methodology

6.1 Existing Conditions Procedures

Existing conditions lighting observations were conducted following recommended practice procedures defined by the IESNA in RP-33-00 Lighting for Outdoor Environments, TM10-00 Addressing Obtrusive Light (Urban Sky Glow and Light Trespass) in Conjunction with Roadway Lighting, and TM11-00 Light Trespass: Research, Results and Recommendations. Field illuminance and luminance measurements were conducted to accurately document all existing incident and visible light at each Monitoring Site location. Incident light can be understood as a vector of luminous flux moving through space. As the vector (light) is incident upon a surface, the intensity of the resulting illuminance will vary depending upon the relative orientation of the vector to the surface. The greatest illuminance will result when the surface and vector are perpendicular. The least illuminance will result when the surface and vector are parallel. In the field conditions, where there are multiple sources of light originating from varied positions, illuminance measurements are recorded horizontally with the photosensor facing up at 3 feet above grade, and vertically with the photosensor facing the Project as per as per IESNA standards. These measurements document the total horizontal illuminance received at a Monitoring Site as well as the direction and intensity of light converging on the Monitoring Site from the direction of the Property. Since most of the Monitoring Sites are located at a long distance away from the Property, greater than 100 feet as noted in Section 7 below, the vertical illuminance represents a plane perpendicular to the light sources. Under these conditions, there is little difference between the vertical and perpendicular plane, and the vertical plane analysis that is conducted in this Study would be equal to or greater than the measured luminance from a precisely perpendicular plane analysis. Therefore, this study utilizes a vertical illuminance analysis. The existing Illuminance is measured with a Minolta Illuminance meter.

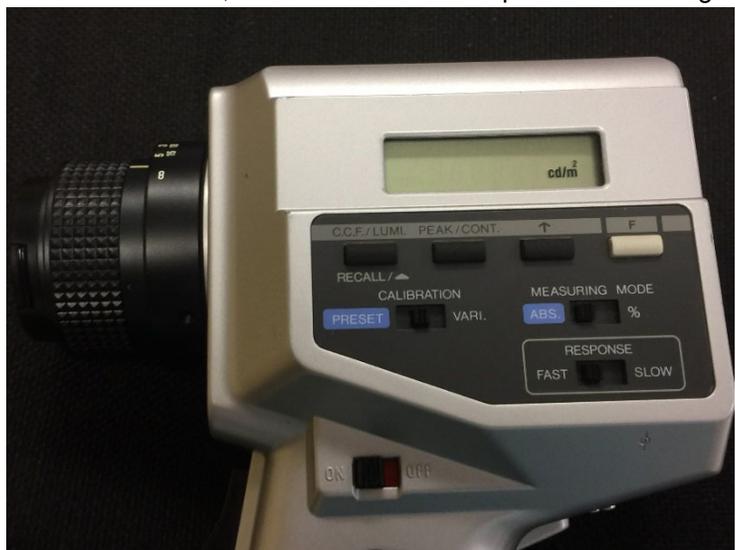


Figure 3: Minolta LS-100 meter

³ The driver's field of view from the center of the roadway plus 10 degrees."

The existing luminance is measured from a Monitoring Site to light sources and surfaces within the field of view toward the Property from that Monitoring Site. This existing conditions luminance data is measured with a Minolta LS-100 Luminance meter with procedures consistent with best practices for field measurement of luminance as per IESNA standards. The LS-100 meter utilized by Francis Krahe & Associates, Inc. reports luminance data in either candelas per square meter or footlamberts (fL), measured within a one degree cone, focused on the light source or illuminated surface. All existing luminance data measured and reported in this Study are recorded as cd/m².

6.2 Project Analysis

The analysis of the Project includes evaluation of the illuminance Light Trespass from the Project at the nearest adjacent sensitive use property lines, and an evaluation of Glare from the Project visible at sensitive use properties or at adjacent roadway locations.

This Study presents a conservative analysis with respect to Light Trespass and Glare. The Project is evaluated with a configuration of the maximum permissible exterior Building Lighting, Sign Lighting, and Construction Lighting that are within the limits of the California Building Code. This Study evaluates the Project Building Lighting presented in Appendix A, the Project Sign Lighting Concept identified in Appendix B, and the Construction Phase Lighting identified in Appendix C.

a. Project Light Trespass Analysis

Light Trespass illuminance is calculated at the location where lighting is under review through the illumination modeling software program AGI32. This software utilizes the 3-dimensional architectural computer model, including Project Building Lighting, Project Sign Lighting, and Construction Phase Lighting locations, dimensions, and luminous specifications to generate an accurate prediction of future illuminance. Light Trespass illuminance is evaluated with respect to vertical illuminance at the locations where lighting is under review.⁴

Table 1. Vertical Calculation Plane Locations and Dimensions

Vertical Plane	Calculation Plane Minimum Elevation		Calculation Plane Maximum Elevation			Vertical Plane Height (feet)
	Property Line Elevation Above Sea Level (feet)	Min. Above Project Site (Property Line - 86')	Street Elevation, Above Sea Level (feet)	Existing Maximum Building Height	Elevation Above Project Site (Street Elevation + Building Height - 86')	
VP-E1	64	-22	66	70	50	72
VP-N1	100	14	170	70	154	140
VP-N2	300	214	350	35	299	85
VP-N3	250	164	275	35	224	60
VP-S2	375	289	400	35	349	60
VP-S3	250	164	396	35	345	181
VP-W1	63	-23	66	40	20	43

To evaluate Light Trespass at the nearest sensitive use properties, the illuminance from the Project is calculated at the review location within a vertical plane at the sensitive use property line, extending from grade to a maximum viewing elevation above grade. The calculated illuminance data is presented at 10 feet on center. The calculation plane simulates the illumination (fc) captured by light meters. Figure 4 illustrates the locations where the lighting is under review and where the vertical illuminance is calculated to evaluate Light Trespass.

Vertical planes VP-E2, VP-N4, VP-S1, VP-W2, and VP-W3 are located at the Project property line or centerline

⁴ See Note 2, above.

of the adjacent public right of way, and extend vertically from the elevation of the stadium (designated as 0 vertical height) to 250 feet above the elevation of the stadium, which is greater than the elevation of the highest light fixture, sign, or light pole within the lighting concept plans in Appendix A, B, and C.

Vertical planes VP-E1, VP-N1, VP-N2, VP-N3, VP-S2, VP-S3, and VP-W1 are located at the nearest residential property lines. These vertical planes vary in elevation relative to the Project Site, and total height as a result of the topography between the Project Site and the Vertical Plane locations. All Vertical Plane elevations are determined from the elevation above sea level in the vicinity of the Vertical plane location. The elevation of the Project site is 86 feet above sea level. The minimum elevation of the calculation plane occurs at the lowest elevation along the property line which faces the Project site. The maximum elevation of the vertical plane extends above the adjacent residential buildings. Vertical plane VP-W1 includes an additional 40 feet above the adjacent street grade for the height of the building. Residential properties at vertical planes VP-N1 and VP-E1 include 70 feet for the height of the building above the adjacent street grade. VP-N2, VP-N3, VP-S2, and VP-S3 include 35 feet for the height of the building above the adjacent street grade. Conservative elevation



Figure 4: Project Site and Vertical Calculation Plane Locations

values are used to ensure coverage of the full extent of residential sites where Light Trespass is under review. See Table 1 for a summary of elevations and vertical plane heights.

The vertical calculation planes analyze the lighting at the locations adjacent to the Project property line, which will be greater than the illuminance at any location more distant from the Project. Incident light (fc) from a source degrades in proportion to the inverse square of the distance from the source to the location where lighting is under review. The illuminance E_v (fc) incident at any given distance D (ft) from an illuminated surface S (ft²) with uniform surface luminance of L (cd/m²) is calculated by the following formula:

$$E_v = \frac{L \times S}{10.76 \times D^2}$$

This formula illustrates the exponential reduction in illuminance at any location as the distance increases from a light source. More distant sensitive use properties will receive significantly less light from the Project due to the increased distance. Therefore, the Project will produce a less significant Light Trespass impact on sensitive use properties more distant from the nearest adjacent residential property line.

b. Project Glare Analysis

Glare from the Project is evaluated at nearby sensitive night use properties and for drivers on adjacent streets. Project luminance is evaluated by the contrast ratio, which equals the maximum Project luminance divided by the measured average existing luminance within the field of view at the Monitoring Sites identified in the field survey of existing conditions (see Section 7 below). Contrast ratios greater than 30:1 are considered potential glare conditions.

The potential roadway glare impacts are analyzed with respect to the Project Sign luminance compliance with the California Vehicle Code requirements for both night and day conditions at the roadways adjacent to the Project Site. According to California Vehicle Code Section 21466.5, the Project Signs would have a significant impact with regard to artificial light or glare if:

- The maximum measured brightness of a light source within 10 degrees from a driver's normal line of sight exceed 1,000 times the minimum measured brightness in the driver's field of view, except when the minimum values are less than 10 footlamberts (fL).
- At minimum luminance less than 10 footlamberts (fL) the source brightness shall not exceed 500 fL plus 100 times the angle, in degrees, between the driver's line of sight and the light source.

The roadway glare analysis includes evaluation of the view angle from the driver's line of sight to the Project Sign Lighting to determine the visibility of the Project Sign Lighting, and evaluates the luminance of the Project Sign Lighting at that location.

7. Existing Site Analysis

The Project Site studied for purposes of this study encompasses 172 acres owned in a developed area that supports a variety of land uses. The existing stadium and surrounding parking will be demolished and redeveloped to include the proposed SDSU Mission Valley campus, including educational, office, research, retail, sports, and entertainment uses within the Project Site.

Land uses located in the area surrounding the Project site include public right-of-way, residential, retail, recreation, commercial, industrial, and religious institutions. The Project site is bounded by Friars Road to the north, commercial properties on Northside Drive to the west, the San Diego River borders the Project to the south with commercial use properties fronting on Camino del Rio Road and the I-8 Freeway further to the south, and the Interstate I-15 Freeway to the east. Adjacent sensitive use sites include existing residential use properties to the north, east, south and west of the Project site. The nearest sensitive use residential zoned properties exist at the following locations: north of the Project site, north of Friars Road; to the north of the Project site on Broadview Avenue; to the east of the Project site, east of the I-15 Freeway; to the south of the Project site, south of the I-8 Freeway; to the west of the Project site at Fenton Parkway. A sensitive native habitat is located adjacent to the south property line within the San Diego River. Figure 1 above shows the location of the Project site in blue, the surrounding residential properties in red, and the drainage swale in green.

The distance to adjacent residential properties varies considerably. The distance from the Project north property line to the nearest adjacent residential property north of Friars Road is 112 feet. The distance from the Project north property line to the nearest residential property to the north at Broadview Avenue is 922 feet. The distance from the Project east property line to the nearest residential use property to the east of the I-15 Freeway is 350 feet. The distance from the Project south property line to the nearest residential property line to the south is 1,920 feet. The distance from the Project west property line to the nearest residential property line to the west is 83 feet. The Project south property line abuts the San Diego River.

Existing lighting conditions within and surrounding the Project consist of stadium lighting, stadium illuminated signs, exterior stadium parking lot lights, exterior sports fields lighting, exterior lighting utilized for security and safety, roadway lighting and lighting at surrounding public right of way streets and adjacent residences.

7.1 Existing Conditions Monitoring Sites

Monitoring sites are utilized to describe and evaluate the existing lighting conditions at and surrounding the Project Site to determine the maximum potential impacts that may result from light or glare onto adjacent sensitive sites surrounding the Project. All Monitoring Site locations are within close proximity of the Project and have views of the Project. Monitoring Sites may also be considered existing residential use properties, or may be located adjacent to existing residential properties. The following criteria are used to select potential Monitoring Site locations:

Project Light Visibility – Monitoring sites are analyzed that provide direct view of the areas of greatest light intensity from the Project.

Proximity – Monitoring sites at the least distance to the Project are analyzed. These locations are selected because light intensity decreases exponentially with distance. Locations at a greater distance will experience less light intensity than nearby locations.

Figure 5 shows the Project's location, the Monitoring Site locations, and the properties surrounding the Project. The Project site is shaded blue. Monitoring Site locations were selected for observation and field lighting measurements to evaluate the views to the Project from adjacent residential properties or roadways and to determine the extent and intensity of existing light sources within and surrounding the Project. The Monitoring Sites are within the public right of way, adjacent to residences, or within the Project property. These locations are representative of the view to the Project from the vicinity of the residences and roadways surrounding the Project to the north, south, east, and west.

Figure 5 illustrates the following Monitoring Site locations:

Monitoring Site ME1: Monitoring Site ME1 is located within the Project site at the existing parking, northeast of the existing stadium. This location is used to evaluate the Project impacts on the I-15 vehicular traffic and residential properties within the Project site. The location within Project site is approximately 345 feet west of the east property line.

Monitoring Site ME2: Monitoring Site ME2 is located within the Project site at the existing parking lot, east of the existing stadium. This location is used to evaluate the lighting impact from the Project on the I-15 Freeway and the residential properties directly east of I-15 Freeway. The location within the Project site is approximately 175 feet west of the east property line.

Monitoring Site ME3: Monitoring Site ME3 is located east of the Project at the south edge of the San Diego Mission Road right of way to the north of the Bella Posta Apartments. This location is used to evaluate the Project's impact on the Bella Posta residential properties immediately east of the I-15 freeway. The location is approximately 350 feet east of the Project east property line.

Monitoring Site ME4: Monitoring Site ME4 is located east of the Project site at the north edge of the Rancho Mission Road right of way to the south of the Bella Posta Apartments. This location is used to evaluate the Project's impact on the Bella Posta residential properties

immediately east of the I-15 freeway. The location is approximately 520 feet east of the Project east property line with 30 feet of elevation gain.

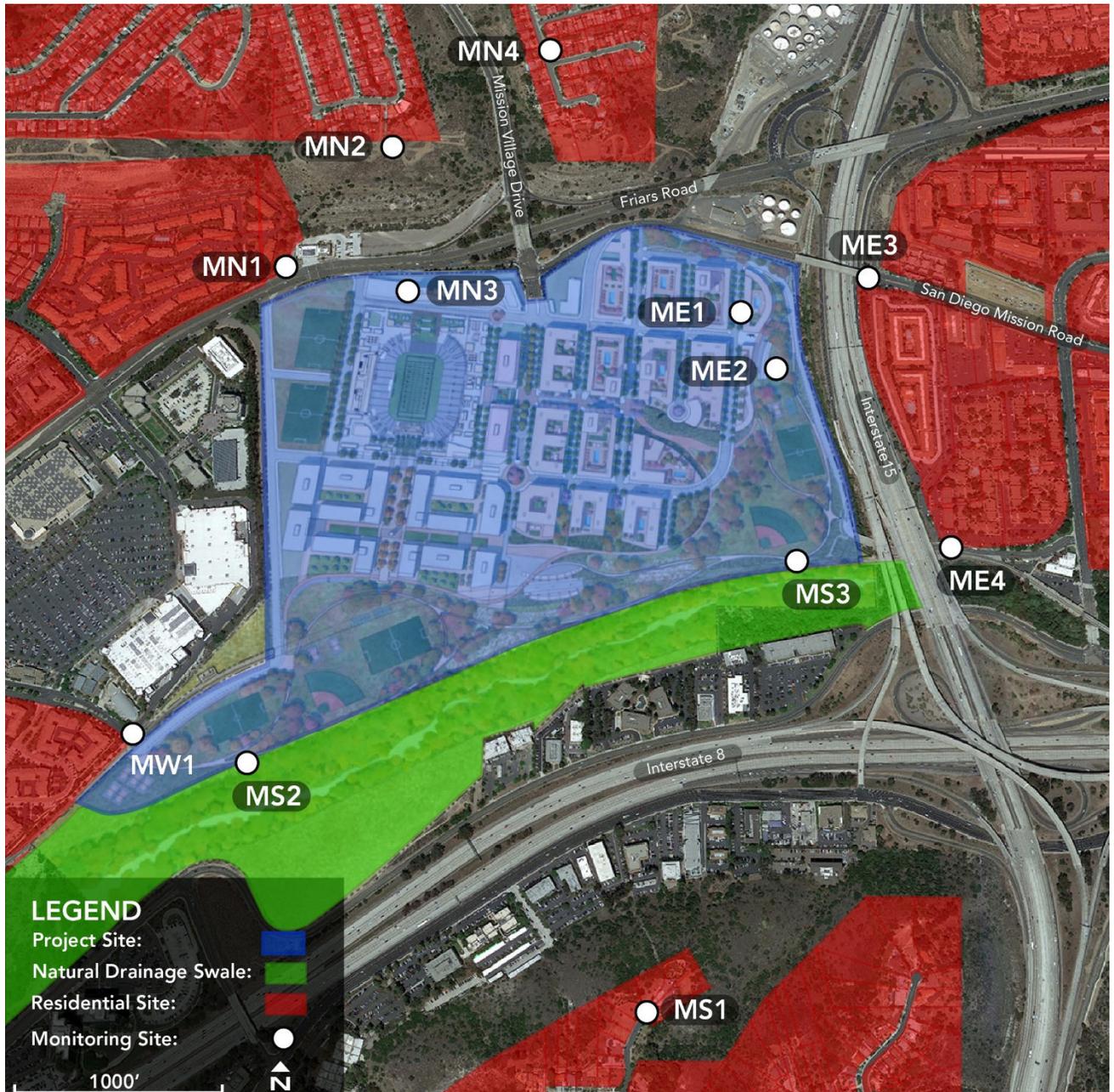


Figure 5: Project Site and Monitoring Sites

Monitoring Site MS1: Monitoring Site MS1 site is located within the public right-of-way at the end of Cromwell Court, adjacent to the south property line of 5278 Cromwell Court. This location is used to evaluate the Project’s impact at the residential properties on the bluffs to the south of the Project site. The distance to the Project south property line is approximately 1,900 feet with 341 feet of elevation gain.

Monitoring Site MS2: Monitoring Site MS2 site is located at the Project south property line adjacent to the San Diego River. This location is used to evaluate the Project impact on the San Diego River to the south of the Project site. The distance to the Project south property line is approximately 10 feet.

- Monitoring Site MS3:** Monitoring Site MS3 site is located at the Project south property line adjacent to the San Diego River. This location is used to evaluate the Project impact on the San Diego River to the south of the Project site. The distance to the Project south property line is approximately 20 feet.
- Monitoring Site MW1:** Monitoring Site MW1 site is located at the Project west property line adjacent to the Del Rio Home development. This location is used to evaluate the residential properties to the west of the Project site. The distance to the Project west property line is approximately 83 feet with 3 feet of elevation gain.
- Monitoring Site MN1:** Monitoring Site MN1 is located on the north side of Friars road at the west property line of the San Diego Fire-Rescue Department Station 45. This location is used to evaluate the Project's impact at the Monte Vista Apartment Homes residential properties to the northwest of the Project. The distance to the Project north property line is approximately 100 feet with 6 feet of elevation gain.
- Monitoring Site MN2:** Monitoring Site MN2 is located on the northern bluff overlooking the Project site, directly south of the residential property at 9381 Broadview Avenue. This location is used to evaluate the Project's impact at the residential properties on Broadview Avenue and adjacent residential streets that have views of the Project site. The distance to the Project north property line is approximately 783 feet with 205 feet of elevation gain.
- Monitoring Site MN3:** Monitoring Site MN3 is located within the project site in the parking lot, northwest of the existing stadium. This location is used to evaluate the Project's impact on vehicular traffic traveling on Friars Road and residential properties on the bluffs to the north of the Project site. The location within the Project site is approximately 138 feet from the north property line, midway between the Project west property line and Mission Village Drive.
- Monitoring Site MN4:** Monitoring Site MN4 is located within public right-of-way on Harcourt Drive, north of Yolanda Avenue. This location is used to evaluate the Project impact at the residential properties on Harcourt Drive and adjacent residential streets that have views of the project. The distance to the Project north property line is approximately 1,215 feet with 237 feet of elevation gain.

7.2 Criteria

As established in Section 1.3, the following factors were used to assess the existing conditions at each Monitoring Site:

Table 2. Existing Conditions Lighting Criteria

Criteria	Metric	Procedure
Light Trespass - Illuminance	Measured illuminance (footcandle) documented at each Monitoring Site	Measured horizontal and vertical illuminance recorded each Monitoring Site with Minolta illuminance meter.
Glare – Contrast Ratio	Measured luminance documented at each Monitoring Site Observed existing conditions	Measured luminance recorded at each Monitoring Site with Minolta luminance meter. Day and night photograph to record the evaluation of the view to the Property from the Monitoring Site in terms of project visibility and prominent light sources, lighted surfaces, and illuminated signs.

7.3 Monitoring Site Survey Data

The observations and measurement of existing lighting conditions within and surrounding the Property are summarized below in relation to the evaluation factors established in Section 5, Significance Threshold:

Illuminance: The Illuminance listed in Table 3, below, summarize the measured Illuminance at the Monitoring Sites. The measured illuminance is consistent with a sports and entertainment site lighting condition, with relatively high illuminance within the Project site and at the street and sidewalk within the adjacent public right of way and nearby commercial properties, and lower illuminance within surrounding residential properties. The existing Project site includes parking lot lighting, stadium field lighting, roadway lighting, lighting for sports fields, and maintenance facilities. Adjacent commercial properties to the west, street lighting on the surrounding streets, and lighting at I-15 and I-8 Freeways contribute to illuminance at residential and sensitive use properties surrounding the Project site.

Measured illuminance greater than 1.5 fc is evaluated as high illuminance, from 0.75 fc to 1.5 fc is evaluated as medium illuminance, and from 0.74 fc or less as low illuminance.

The highest existing horizontal illuminance level was recorded at Monitoring Site at ME1 with 2.58 fc, while the lowest horizontal illuminance was recorded at Monitoring Site MW1 at 0.02 fc. The highest existing vertical illuminance level was recorded at Monitoring Site MN3 at 3.65 fc, while the lowest vertical illuminance was recorded at Monitoring Site ME4 at 0.17 fc

Table 3. Measured Illuminance (fc) at Monitoring Sites

Monitoring Site	Illuminance (fc)		Evaluation
	Horizontal	Vertical	
ME1	2.58	2.24	High horizontal and vertical illuminance
ME2	1.91	1.93	High horizontal and vertical illuminance
ME3	0.06	0.30	Low horizontal and vertical illuminance
ME4	0.16	0.17	Low horizontal and vertical illuminance
MS1	0.14	0.58	Low horizontal and vertical illuminance
MS2	0.38	0.75	Low horizontal and Medium vertical illuminance
MS3	1.18	0.45	Medium horizontal illuminance, low vertical illuminance
MW1	0.02	0.20	Low horizontal and vertical illuminance
MN1	0.34	1.52	Low horizontal illuminance, High vertical illuminance
MN2	0.03	0.52	Low horizontal and vertical illuminance
MN3	1.34	3.65	Medium horizontal and High vertical illuminance
MN4	0.03	0.29	Low horizontal and vertical illuminance

Contrast/Glare: The evaluation of High, Medium and Low Contrast describes the perception of how bright a visible object appears in comparison to the surrounding objects within any given field of view. The “luminance ratio” is the ratio of the highest Measured Luminance as compared to the Luminance within the field of view

visible at an observer position. This ratio is referred to as “contrast”, and is determined by the variation of luminance. “High,” “Medium,” and “Low” contrast are terms used to describe effect of the contrast ratios (the ratio of peak measured luminance to the average within a field of view) of greater than 30:1, between 10:1 and 30:1, and below 10:1, respectively. Luminance contrast ratios above 30:1 are generally uncomfortable for the human eye to perceive. High Contrast indicates a potential Glare condition.

Table 4 summarizes the measured luminance at each Monitoring Site along with qualitative evaluation of the existing luminance. The notes below for each Monitoring Site include observations of the prominence of visible light sources and surrounding illuminated surfaces within the field of view to the Project from the Monitoring Sites, and the visibility of the Property within the field of view.

Table 4: Measured Luminance, (cd/m²) at Monitoring Sites

Monitoring Site	Luminance (cd/m ²)		Contrast Ratio (Max / Average)	Evaluation
	Maximum	Average		
ME1	4975.0	613.2	8.1	High maximum and average luminance, Low contrast
ME2	7611.0	859.3	8.9	High maximum and average luminance, Low contrast
ME3	417.1	62.2	6.7	Medium maximum and average luminance, Low contrast
ME4	1721.0	106.2	16.2	High maximum and Medium average luminance, Medium contrast
MS1	2258.0	124.7	18.1	High maximum, Medium average luminance, Medium contrast
MS2	1711.0	137.4	12.5	High maximum, Medium average luminance, Medium contrast
MS3	6141.0	371.2	16.5	High maximum, Medium average luminance, Medium contrast
MW1	426.4	50.6	8.4	Medium maximum, Medium average luminance, Low contrast
MN1	8015.0	505.0	15.9	High maximum, Medium average luminance, Medium contrast
MN2	2325.0	185.2	12.6	High maximum, Medium average luminance, Medium contrast
MN3	5665.0	531.6	10.7	High maximum, Medium average luminance, Medium contrast
MN4	2120.0	99.2	21.4	High maximum, Medium average luminance, Medium contrast

The measured luminance recorded at the Monitoring Sites within the view to the Project includes prominent, high brightness light sources and illuminated surfaces, such as existing parking lot floodlights, stadium field lights, stadium concourse lights, recreational field lighting, security lighting, street lights, illuminated signs, and

flood lighted buildings, as well as lower brightness surfaces such as sidewalks, parking lots, and un-illuminated walls or landscape areas. The existing Project Site is a sports stadium with surrounding surface parking lot flood light poles. The Monitoring sites survey a range of light conditions from areas, with minimal lighting to well illuminated areas with many bright surfaces visible.

The highest maximum luminance was recorded at Monitoring Site at MN1 with 8,015 cd/m², while the lowest maximum luminance was recorded at Monitoring Site ME3 at 417.1 cd/m².

The highest average luminance was recorded at Monitoring Site ME2 at 859 cd/m², while the lowest average luminance was recorded at Monitoring Site MW1 at 50.6 cd/m²

The wide variation in recorded luminance indicates the wide variation in existing light conditions within and surrounding the Project site, with areas of very little lighting and other zones with extensive outdoor lighting. The High to Medium maximum luminance measured indicates the visibility of the high luminance light sources within the existing Project site including the existing parking lot flood lights and the existing stadium field lights and concourse lights, as well as the sports lighting at the existing recreational and practice fields near the south property line.

a. Monitoring Site ME1:

Monitoring Site ME1 is located within the existing stadium parking lot to the northeast of the stadium. The area surrounding ME1 is uniformly illuminated by the parking lot pole flood lights. The view to the west toward the proposed new stadium site includes direct view of light sources from the parking poles and from the stadium concourse. The view to the west includes visible sky glow from the stadium field lighting, and direct view of the light sources within the parking lot poles. The view of the stadium and parking lot is unobstructed.



Figure 6: ME1 February 11, 2019, 4:06 PM



Figure 7: ME1 February 11, 2019, 8:55 PM

b. Monitoring Site ME2:

Monitoring Site ME2 is located within the existing stadium parking lot to the east of the stadium and south of Monitoring Site ME1. The area surrounding ME2 is uniformly illuminated by the existing parking pole flood lights. The view from ME2 to the proposed new Stadium location includes direct views of light sources from the existing parking poles and from the existing stadium. The view from ME2 to the west includes sky glow from the stadium field lighting, and bright visible light sources from the stadium field lights, stadium concourse lighting, and parking poles. The view of the stadium and surrounding parking lot is unobstructed.



Figure 8: ME2 February 11, 2019, 4:04 PM



Figure 9: ME2 February 11, 2019, 8:46 PM

c. Monitoring Site ME3:

Monitoring Site ME3 is located to the east of the Project site at the south side of the San Diego Mission Street right of way to the north of the Bella Post Apartments, east of the I-15 Freeway. The primary visible sources of light from the Project site are the parking pole flood lights and stadium field lights. There are direct views of light sources from the parking poles and from the stadium field lighting. The view of the Project is partly obstructed by trees lining the east and west side of the I-15 Freeway. ME3 is approximately 65 feet above sea level.



Figure 10: ME3 May 20, 2019, 12:40 PM



Figure 11: ME3 May 20, 2019, 8:40 PM

d. Monitoring Site ME4:

Monitoring Site ME4 is located to the east of the Project site at the north side of the Mission street right of way to the south of the Bella Post Apartments east of the I-15 Freeway. The primary visible source of light from ME4 toward the Project site are the Mission Street roadway lights, stadium lights within the Project site, and the Bella Post Apartments exterior light sources. There is an obscured view of the existing stadium field light sources within the Project site. Many dark surfaces are visible when looking in the direction of the Project site. There is noticeable sky glow from the Project site parking lot and stadium field lighting.



Figure 12: ME4 May 20, 2019, 12:57 PM



Figure 13: ME4 May 20, 2019, 8:35 PM

e. **Monitoring Site MS1:**

Monitoring Site MS1 site is located south of the Project Site at the north most end of Cromwell Court. The view to the Project site from MS1 includes the stadium field lighting, parking pole flood lights within the Project site, and vehicles travelling on the I-15 freeway. Maximum measured luminance include the Stadium field lights at 2258 cd/m². Skyglow is visible from the stadium field lighting. The view of the Project site from MS1 is mostly unobstructed, and the elevation of MS1 is above the Project site at 395 feet above sea level.



Figure 14: MS1 February 10, 2019, 4:45 PM



Figure 15: MS1 February 11, 2019, 8:05 PM

f. Monitoring Site MS2:

Monitoring Site MS2 site is located at the Project south property line adjacent to the San Diego River. The view from MS2 toward the Project site includes sports field lighting and parking pole flood lights within the existing Project site. Maximum measured luminance include the sports field lights at 1711 cd/m². Skyglow is visible from the stadium field lighting. The view of the Project site from MS2 is unobstructed.



Figure 16: MS2 May 20, 2019, 1:19 PM



Figure 17: MS2 May 20, 2019, 10:17 PM

g. Monitoring Site MS3:

Monitoring Site MS3 site is located at the Project south property line adjacent to the San Diego River. The view from MS3 to the Project site includes the existing parking pole flood lights within the Project site. Maximum measured luminance include the Stadium parking lot lights at 6141 cd/m². Skyglow is visible from the stadium field lighting. The area beneath and to the south of the Trolley line appears darker than portion of the Project parking lot on the north side of the Metro line. The view of the Project site from MS3 to the Project site is unobstructed.



Figure 18: MS3 May 20, 2019, 1:24 PM



Figure 19: MS3 May 20, 2019, 8:12 PM

h. Monitoring Site MW1:

Monitoring Site MW1 is located on the west side of Fenton Parkway right of way, approximately 90 feet west of the Project west property line. The area adjacent to MW1 is illuminated by ambient light from the adjacent Fenton Parkway Trolley Station site, and adjacent commercial parking lighting to the east of Fenton Parkway. Views from MW1 to the Project site include parking light poles within the commercial property to the east of Fenton Parkway, and distant views of the Project site parking lot light poles. The view of the Stadium and onsite LED signs is mostly obstructed by commercial buildings and trees. The parking lot flood light poles illuminating the Project site parking lot along the south edge of the Project site are visible from MW1. Maximum measured luminance include the Stadium field lights at 426 cd/m². MW1 is approximately 63 feet above sea level.



Figure 20: MW1 May 20, 2019, 11:55 AM



Figure 21: MW1 May 20, 2019, 9:33 PM

i. Monitoring Site MN1:

Monitoring Site MN1 is located on the north side of the Friars Road right of way at the west property line of the San Diego Fire-Rescue Department Station 45. The area adjacent to MN1 is illuminated by roadway light poles along Friars Road and ambient light from the Project site. The view from MN1 to the Project site includes street light poles along Friars Road, parking poles within the Project site, the existing stadium field lighting, and the LED sign pylon within the Project site along Friars Road. The view of the onsite LED signage and stadium lighting from MN1 is mostly unobstructed. The parking lot flood light poles illuminating the parking lot to the east are visible. The view of parking lot flood light poles is obstructed towards the east. Maximum measured luminance include the Stadium parking lights at 8015 cd/m².



Figure 22: MN1 February 11, 2019, 4:14 PM



Figure 23: MN1 February 11, 2019, 7:40 PM

j. Monitoring Site MN2:

Monitoring Site MN2 is located to the north of the Project site overlooking the stadium, south of residential properties along Broadview Avenue. The measured illuminance at Monitoring Site MN2 is low. The view from MN2 toward the Project site includes the Stadium field lighting, the parking pole poles within the Project site, and light from vehicles traveling on the I-15 freeway. Maximum measured luminance include the Stadium field lights at 2325 cd/m². There is visible skyglow from the stadium field lighting. The view to the existing north parking lot is obstructed by planting and the slope. MN2 is approximately 308 feet above sea level.



Figure 24: MN2 February 11, 2019, 4:35 PM



Figure 25: MN2 February 11, 2019, 7:06 PM

k. Monitoring Site MN3:

Monitoring Site MN3 is located within the existing stadium parking lot to the northwest of the stadium. The view from MN3 to the proposed stadium site includes direct view of light sources from the parking poles, the stadium concourse lights and stadium field lighting. The area surrounding MN3 is uniformly well illuminated by the existing parking lot floodlights. The view from MN3 to the proposed future stadium site is bright with visible sky glow from the stadium field lighting and glare from the parking lot flood lights. Maximum measured luminance include the Stadium parking lights at 5665 cd/m². The view from MN3 to the proposed stadium is mostly unobstructed.



Figure 26: MN3 February 10, 2019, 4:15 PM



Figure 27: MN3 February 11, 2019, 8:28 PM

I. Monitoring Site MN4:

Monitoring Site MN4 is located north of the Project site on Harcourt Drive, north of the Yolanda Avenue intersection. The view from MN4 to the Project Site includes direct view of the stadium field lighting and street lights along Harcourt Drive. The ground plane of the Project site is not visible from MN4. The view of the stadium is partially obstructed by trees, electrical poles, and residential buildings on the west side of Harcourt Drive. Sky glow from the stadium field lighting is visible in the distance. The measured illuminance at monitoring site MN4 is low. Maximum measured luminance include the Stadium field lights at 2120 cd/m². MN4 is approximately 255 feet above sea level.



Figure 28: MN4 February 10, 2019, 4:30 PM



Figure 29: MN4 February 11, 2019, 7:25 PM

8. Project Analysis

The Project would introduce a new Lighting as described in Section 2 and depicted in Appendix A, B, and C. Future proposed Project may cause Light Trespass or Glare with respect to the following variables:

- The Project Lighting projects light toward an adjacent residential use property, and is close enough (immediately adjacent to or less than 1000 feet away) to create substantial Light Trespass illuminance at a sensitive use property line.
- The light source surface area is large enough to create substantial Light Trespass illuminance at an adjacent sensitive use property line.
- The light source surface is bright and creates Glare, or high contrast conditions, when the light source surface luminance is compared to the surrounding surface luminance.

8.1 Building Lighting Analysis

The following criteria are used to evaluate the Light Trespass and Glare impacts of the Project Building Lighting:

- Light Trespass illuminance must be less than 1.4 fc at adjacent residential use zoned property lines.
- Project Building Lighting creates high contrast conditions, greater than 1500 cd/m² and greater than 30 to 1 contrast ratio.

a. Light Trespass Illuminance Analysis – Building Lighting

The Light Trespass analysis evaluates the illuminance (fc) at the locations where lighting is under review with respect to light leaving the Project toward adjacent properties from the Project Building Lighting. The Project Building Lighting includes the light sources as defined in and as illustrated in the Project Lighting Plan (Appendix A).

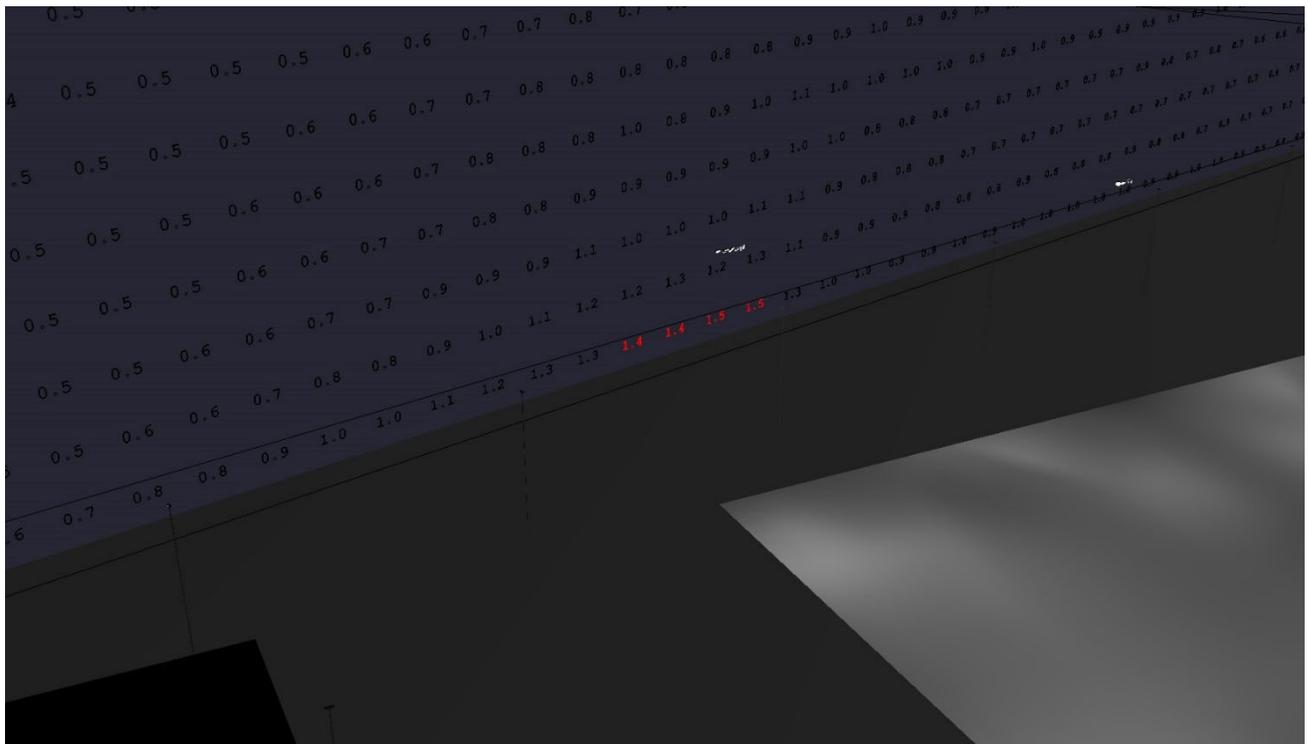


Figure 30: Building Light Trespass Illuminance (fc) at VP-W3

As summarized in Table 5, the Project Building Light Trespass illuminance at the Vertical Planes varies from a minimum of 0.00 fc to a maximum of 1.7 fc. Complete calculated data is presented in Appendix I.

The maximum Building Lighting Trespass Illuminance occurs at the Project west property line at Vertical Plane VP-W3 at 1.7 fc, which is greater than the 1.4 fc maximum illuminance threshold established above in Section

5. Vertical Plane VP-W3 is located at the west Project site property line south of Friars Road from Stadium Way to Northside Drive, adjacent to existing commercial use properties. There is no lighting impact at commercial use properties, therefore the Project Building Lighting will not introduce a new source of light trespass at VP-W3.

Light Trespass illuminance is less than 1.4 fc at VP-W1 and VP-W2 which are located to the west of the Project site. Therefore, the Project Building lighting will not create a new source of light trespass to the west of the Project site.

Table 5: Building Light Trespass Illuminance (fc)

Vertical Plane	Description	Trespass Illuminance			Analysis Threshold: E _v less than 1.4 fc max
		E _v Vertical fc			
		Max	Min	Avg	
VP-E1	East Residential Property Line	0.30	0.00	0.12	Below threshold, not a significant impact
VP-E2	East Project (Center of I-15 Freeway ROW)	0.50	0.00	0.16	Below threshold, not a significant impact
VP-S1	South Project Property Line	1.30	0.00	0.30	Below threshold, not a significant impact
VP-S2	South Residential Property Line	0.10	0.00	0.00	Below threshold, not a significant impact
VP-S3	South Residential Property Line	0.10	0.00	0.00	Below threshold, not a significant impact
VP-W1	West Residential Property Line	0.80	0.00	0.21	Below threshold, not a significant impact
VP-W2	West Project Property Line	1.00	0.00	0.31	Below threshold, not a significant impact
VP-W3	West Project Property Line	1.70	0.10	0.48	Below threshold, not a significant impact
VP-N1	North Residential Property Line	0.50	0.00	0.18	Below threshold, not a significant impact
VP-N2	North Residential Property Line	0.20	0.00	0.08	Below threshold, not a significant impact
VP-N3	North Residential Property Line	0.00	0.00	0.00	Below threshold, not a significant impact
VP-N4	North Project (Center of Friars Rd ROW)	0.90	0.00	0.17	Below threshold, not a significant impact

The maximum Building Lighting Trespass Illuminance at the Project south property line occurs at Vertical Plane VP-S1, at 1.3 fc, which is less than the 1.4 fc maximum illuminance threshold established above in Section 5. Vertical Plane VP-S1 is located at the south Project site property line adjacent to the San Diego River. There are existing sports fields with existing sports and parking lighting adjacent to the San Diego River which generate

the high measured luminance noted at Monitoring sites MS-2 and MS-3 above. The Project Building Lighting plan includes new recreational athletic fields with sports lighting at similar locations to the existing fields. The calculated illuminance at VP-S1 is similar to the existing measured illuminance at MS-3 and below the 1.4 fc maximum illuminance threshold. Therefore, the Project Building Lighting will not introduce a new source of light trespass at VP-S1.

Vertical plane VP-S2 is located adjacent to the Cromwell Court residential community, which is more distant from the Project site than VP-S1. The calculated light trespass illuminance at VP-S2 is 0.10 fc which is substantially lower than at VP-S1 due to the increased distance. The light trespass illuminance at VP-S2 is less than 1.4 fc, therefore the Project Building Lighting will not introduce a new source of light trespass.

Vertical plane VP-S3 is located adjacent to the Wilshire Drive residential community, which is more distant from the Project site than VP-S1. The calculated light trespass illuminance at VP-S3 is 0.10 fc which is substantially lower than at VP-S1 due to the increased distance. The light trespass illuminance at VP-S3 is less than 1.4 fc, therefore the Project Building Lighting will not introduce a new source of light trespass.

Light Trespass illuminance is less than 1.4 fc at VP-S1, VP-S2, and VP-S3. Therefore, the Project Building lighting will not create a new source of light trespass at the residential properties to the south of the Project site.

The maximum light trespass illuminance at the east Project property line at vertical plane VP-E2 is 0.5 fc, which is less than the maximum 1.4 fc threshold. Therefore, the Project Building lighting will not create a new source of light trespass at vertical plane VP-E2. Vertical plane VP-E1 is located more distant from the Project site and the calculated light trespass illuminance is substantially lower with a maximum of 0.30 fc. Therefore, the Project Building lighting will not create a new source of light trespass at the residential properties to the east of the Project site.

The maximum light trespass illuminance to the north of the Project occurs at the center line of Friars Road to the north of the north Project property line. The calculated illuminance at vertical plane VP-N4 is 0.9 fc, which is less than the maximum 1.4 fc threshold. Therefore, the Project Building lighting will not create a new source of light trespass at vertical plane VP-N4.

Vertical plane VP-N1 is located adjacent to the Monte Vista Apartment Homes residential community, which is more distant from the Project site than VP-N4. The calculated light trespass illuminance at VP-N1 is 0.50 fc which is substantially lower than at VP-N4 due to the increased distance. The light trespass illuminance at VP-N1 is less than 1.4 fc, therefore the Project Building Lighting will not introduce a new source of light trespass.

Vertical plane VP-N2 is located adjacent to the Broadway Avenue residential community, which is more distant from the Project site than VP-N4. The calculated light trespass illuminance at VP-N2 is 0.20 fc which is substantially lower than at VP-N4 due to the increased distance. The light trespass illuminance at VP-N2 is less than 1.4 fc, therefore the Project Building Lighting will not introduce a new source of light trespass.

Vertical plane VP-N3 is located adjacent to the Harcourt Drive and Goodwick Court residential community, which is more distant from the Project site than VP-N4. The calculated light trespass illuminance at VP-N3 is 0.00 fc which is substantially lower than at VP-N4 due to the increased distance. The light trespass illuminance at VP-N3 is less than 1.4 fc, therefore the Project Building Lighting will not introduce a new source of light trespass.

Light Trespass illuminance is less than 1.4 fc at VP-N1, VP-N2, VP-N3, and VP-N4. Therefore, the Project Building lighting will not create a new source of light trespass at the residential properties to the north of the Project site.

b. Glare Analysis – Building Lighting

Glare from Project Building Lighting occurs when the light source is visible against a dark background, such as a dark sky, or when a high brightness source is aimed at a low angle within the field of view. The direct view of any light source is a significant source of glare, or high contrast conditions. For this Study, the maximum night time Building Lighting luminance is 1500 cd/m², which is a conservative luminance value, greater than the maximum visible brightness calculated from the shielded light sources proposed in the Project Building Lighting Plan as noted below.

The measured existing maximum luminance is summarized in Table 4 in Section 7 above varies considerably from 417 to 8015 cd/m². The Project lighting plan will comply with the current CALGreen standards which require all exterior building and site lighting to be shielded to contain light and brightness to within the Project site property. The Project will comply with the Backlight Uplight and Glare (BUG) ratings identified in CALGreen Title 24, Part 11, Table 5.106.8 MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT AND GLARE (BUG) RATINGS enclosed in Appendix E of this Study.

The direct view of the Project street and parking lot lighting may present a potential for high contrast and glare conditions. Compliance with the BUG ratings will limit direct view of any light sources within the Project site from surrounding residential properties. For instance, for all the Project's exterior lights, Title 24 limits the FVH (Forward Very High angle) and BVH (Backward Very High angle) zonal lumens to 10 to 500 lumens for Zone 4 properties. These limits prevent the use of light fixtures that will contain a light source visible to the surrounding properties. In addition, the requirements are more stringent at distances less than 0.5 mounting heights from the property line (roughly 10 to 20 feet from the property line), where the fixtures would be brightest due to the shortest distance from the adjacent residential properties. The maximum brightness of shielded street lights in compliance with the BUG ratings will be less than 100 cd/m².

The Project lighting will include high-intensity LED Stadium sports field lighting. The view angle from the Monitoring sites to the highest elevation of the Project Stadium light poles (124 feet above existing grade) is summarized in Table 6 below and illustrated for monitoring site MN1 in Figure 31. View angles in Table 6 greater than zero represent angles above horizontal, or views looking down from residential sites located above the elevation of the Stadium light poles. View angles from 0 degrees to -20 degrees represent angles below horizontal but above the shielding angle of the Stadium lighting fixtures. View angles from -21 degrees to -90 degrees represent angles below horizontal where the Stadium lighting fixture source may be directly visible.

The Project field lighting includes high power LED sports flood lights with shields and louvers designed to limit direct view of any portion of the light source from angles above -20 degrees below horizontal, which may be visible from areas outside the Project site boundary. For all Monitoring site locations, the view to the Project site is distant, and the viewing angle to the light source is very low, so that the Project design shielding will prevent direct view of the light source.

The most sensitive locations for potential glare impacts are those sites close to the Project at an elevation below the height of the Stadium sports field lights where the viewing angle would be more vertical than -20 degrees from horizontal. Monitoring Site MN1 along Friars Road to the north of the Project site is nearest to the Project site and is below the elevation of the tallest field lights, mounted to the light poles on the east side of the Stadium aimed to the north, and northwest. The view angle from MN1 to the Stadium light poles is estimated to be -5.84 degrees below horizontal (where the horizon is 0 degrees and perpendicular down is -90 degrees). The Project lighting will include focused lights aimed to the sports field surface with shielding to minimize light spill from -20

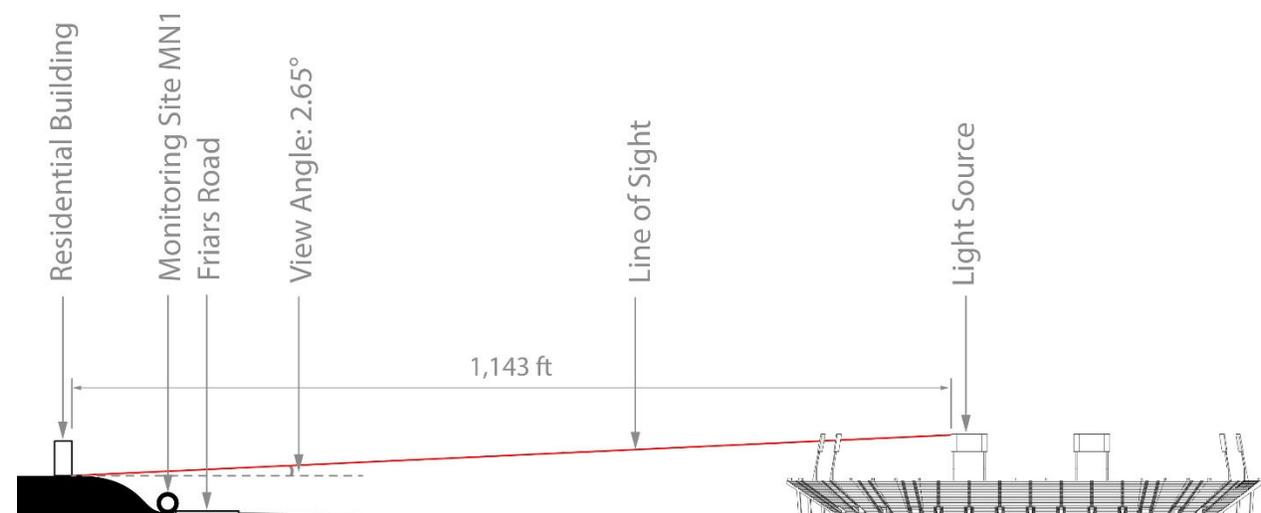


Figure 31: Site Section from MN1 to Stadium

degrees below horizontal and above. Therefore, the center beam of the highest light source will not be directly visible from MN1. The adjacent residential properties to the north of Monitoring site MN1 are located at a higher elevation relative to MN1 and the Stadium, and will therefore have less visibility of the light source than at MN1. Figure 31 illustrates the site topography and the location of the Stadium light poles relative to the elevation of Monitoring Site MN1 and the elevation of adjacent residential properties at the Monte Vista Apartment homes, and the distance between Stadium light poles, MN1, and the Monte Vista Apartments. The distance to the Stadium light poles aimed north and northwest toward the Monte Vista Apartments is approximately 1,143 feet, and the view angle is -2.65 degrees below horizontal.

Table 6: Monitoring Site View Angle to Stadium Light Poles

Monitoring Site	View Angle From Monitoring Site			Analysis
	Distance to Nearest Stadium Lighting (feet)	Elevation (Monitoring Site - Stadium Pole) (feet)	View Angle From Horizontal (degrees)	
MN1	1,047	-107	-5.84	Stadium light beam angle not in view; No impact
MN2	1,443	90	3.57	Angle above horizontal. Stadium light beam angle not in view; No impact
MN3	495	-129	-14.61	Stadium light beam angle not in view; No impact
MN4	2,118	94	2.54	Angle above horizontal. Stadium light beam angle not in view; No impact
ME1	2,069	-152	-4.20	Stadium light beam angle not in view; No impact
ME2	2,325	-152	-3.74	Stadium light beam angle not in view; No impact
ME3	2,682	-117	-2.50	Stadium light beam angle not in view; No impact
ME4	3,208	-146	-2.61	Stadium light beam angle not in view; No impact
MS1	3,537	187	3.03	Angle above horizontal. Stadium light beam angle not in view; No impact
MS2	2,211	-160	-4.14	Stadium light beam angle not in view; No impact
MS3	2,514	-156	-3.55	Stadium light beam angle not in view; No impact
MW1	2,522	-148	-3.36	Stadium light beam angle not in view; No impact

Table 7 summarizes the elevations and distances to the Stadium light poles from the adjacent surrounding residential communities. Residential properties with view angles greater than MN1 will have less visibility of the Stadium light sources than at MN1. The worst case lowest view angle occurs at MW1 at -3.29 degrees, at a much greater distance from the Stadium than MN1 at 2,522 feet.

Table 7: View Angle at Residential Properties to the Stadium Light Poles

Property	Adjacent Monitoring Site(s)	View Angle From Residential Property			Analysis
		Distance to Nearest Stadium Lighting	Elevation Difference	View Angle From Horizontal	
Monte Vista Apartment Homes	MN1	1,143	-53	-2.65	Stadium light beam angle not in view; No impact
Residential at Broadview Avenue	MN2	1,555	100	3.68	Above horizontal, Stadium light beam angle not in view; No impact
Residential at Harcourt Drive	MN4	813	47	3.31	Above horizontal, Stadium light beam angle not in view; No impact
Bella Posta Apartments	ME3 & ME4	2,700	-142	-3.01	Stadium light beam angle not in view; No impact
Residential at Cromwell Court	MS1	3,505	187	3.05	Above horizontal, Stadium light beam angle not in view; No impact
Del Rio Apartment Homes	MW1	2,522	-145	-3.29	Stadium light beam angle not in view; No impact

The maximum Building Lighting source luminance is determined by the rated light fixture luminance at the viewing angle from the nearest residential properties. The Del Rio Apartment Homes adjacent to Monitoring Site MW1 has the worst case, lowest view angle at -3.29 degrees below horizontal to the Stadium highest light fixture. The highest luminance will be observed if the highest aiming angle Stadium sports field lights at -30 degrees below horizontal are visible from the Del Rio Apartment Homes. At the view angle of -3.29 degrees, the visible portion of the Stadium Lights will be at the intersection of the aiming angle and the viewing angle (-30 degrees - (-3.29) = 26.71 degrees). The light fixture photometric test data provided by the light fixture manufacturer in the IES candlepower data format indicates the source lumens will be 31,832 candelas at 26.71 degrees. The visible, measurable luminance at the Del Rio Apartments adjacent to MW1 at 2,522 feet from the Stadium lights within a 1 degree cone at 141.4 m² is 225.2 cd/m².

The Monte Vista Apartment Homes adjacent to Monitoring Site MN1 has a higher view angle than MW1 at -2.65 degrees below horizontal, but is substantially closer to the Stadium at 1143 feet. The greatest luminance will be observed if the highest aiming angle of the Stadium lights at -30 degrees below horizontal are visible from the Monte Vista Apartment Homes. At the view angle of -2.65 degrees, the visible portion of the Stadium lights will be at the intersection of the aiming angle and the viewing angle (-30 degrees - (-2.65) = 27.35 degrees). The light fixture photometric test data provided by the light fixture manufacturer in the IES candlepower data format indicates the source lumens will be 28,487 candelas at 27.35 degrees. The visible, measurable luminance at the Del Rio Apartments adjacent to MN1 at 1,143 feet from the Stadium lights within a 1 degree cone of 29.04 m² is 981 cd/m².

This Study analyzes the maximum Building Lighting luminance at 1500 cd/m², which is greater than the calculated luminance above, to present a conservative test case, which is greater than the probable actual luminance. The Stadium light fixtures are aimed at various positions within the sports field and few are aimed at the maximum aiming angle analyzed above. The probability of a direct in line view from the sensitive use residential properties adjacent to the Monitoring Sites to any of the Stadium light fixtures aimed at the maximum aiming angle is low. However, this worst case, higher luminance condition is evaluated for all Monitoring Sites to present a conservative analysis.

Table 8 below summarizes the contrast ratio calculated for the maximum Building Lighting luminance in comparison to the existing Average Measured luminance.

Contrast Ratios above 30:1 are considered high contrast, and may introduce a new source of Glare. Contrast Ratios less than or equal to 30:1 are considered medium contrast, and will not introduce a new source of Glare. Contrast Ratios less than 10:1 are considered low contrast, and will not introduce a new source of Glare

The Building Lighting Contrast Ratio does not exceed 30:1 at any Monitoring Sites. Contrast Ratios vary from a minimum of 1.7:1 to a maximum of 29.7:1.

The maximum Contrast Ratio occurs at Monitoring Site MW1 at 29.7:1, which is Medium Contrast, and indicates the Project Building Lighting will not introduce a new source of glare. Contrast Ratios at Monitoring Sites ME3, ME4, MS1, MS2, and MN4 are greater than 10:1 and less than 30:1 indicating a Medium Contrast Ratio.

Table 8: Contrast Ratio: comparison of existing measured to Project Building Lighting @ 1500 cd/m²

Monitoring Site	Existing Measured Luminance (cd/m ²)		Project Building Lighting		
	Average	Maximum	Building Lighting Maximum Luminance (cd/m ²)	Contrast Ratio	Analysis
				Maximum to Existing Average Luminance	
ME1	613.2	4975	1500	2.4	Low Contrast Ratio, No Glare Impact
ME2	859.3	7611	1500	1.7	Low Contrast Ratio, No Glare Impact
ME3	62.2	417	1500	24.1	Medium Contrast Ratio, No Glare Impact
ME4	106.2	1721	1500	14.1	Medium Contrast Ratio, No Glare Impact
MS1	124.7	2258	1500	12.0	Medium Contrast Ratio, No Glare Impact
MS2	137.4	1711	1500	10.9	Medium Contrast Ratio, No Glare Impact
MS3	371.2	6141	1500	4.0	Low Contrast Ratio, No Glare Impact
MW1	50.6	426	1500	29.7	Medium Contrast Ratio, No Glare Impact
MN1	505.0	8015	1500	3.0	Low Contrast Ratio, No Glare Impact
MN2	185.2	2325	1500	8.1	Low Contrast Ratio, No Glare Impact
MN3	531.6	5665	1500	2.8	Low Contrast Ratio, No Glare Impact
MN4	99.2	2120	1500	15.1	Medium Contrast Ratio, No Glare Impact

Contrast Ratios at Monitoring Sites ME1, ME2, MS3, MN1, MN2, and MN3 are less than 10:1, which indicates Low Contrast. The existing measured luminance is medium to high luminance due to the visibility of the existing

parking lot flood lights, sports field lights, and Stadium lighting. The Project Building lighting will provide more focused lighting, directed down to the Project site, and with shields applied to the sports lighting fixtures to reduce luminance to low or medium contrast ratios.

Therefore, the new Project Building Lighting will be low to medium contrast, which indicates the Project will not introduce a new source of Glare.

c. Glare Analysis for Roadways – Building Lighting

The lighting impact to driver's visibility from Building Lighting is evaluated by way of the methodology defined above at the locations where lighting is under review. As summarized below, the results of this evaluation demonstrate the light impacts resulting from the Building Lighting at the locations where light is under review are below the significance threshold for excessive luminance, or glare, during night, twilight (sunrise/sunset), and day. The Project meets the California Vehicle Code standard for roadways approaching the Project from all directions.

The Glare analysis of the Building Lighting during night assumes the simultaneous use of all Project Building Lighting at the maximum luminance stipulated above, and compares the resulting luminance to the most stringent requirements of the California Vehicle Code to determine if the Building Lighting will introduce a source of distracting glare to drivers. The most stringent condition identified within the California Vehicle Code Section 21466.5, states: "except that when the minimum measured brightness in the field of view is 10 footlamberts or less, the measured brightness of the light source in footlamberts (fL) shall not exceed 500 plus 100 times the angle, in roadway degrees, between the driver's field of view and the light source." Thus, a conservative evaluation, occurs where the Building Lighting is visible within the centerline of the driver's field of view, the angle noted above within the field of view is 0, the surrounding surface luminance is less than 10 fL, and therefore the maximum allowable luminance is 500 fL. Therefore, the most conservative condition at night evaluates Building Lighting against a threshold for luminance of a maximum 500 fL.

A measured brightness within the driver's field of view of less than 10 fL may occur at night. The Building Lighting is evaluated with a maximum luminance of 1500 cd/m². Calculating the equivalent Building Lighting luminance by converting to English units from metric units: 1500 cd/m² equals 437.3 fL. The Building Lighting will not exceed 437.3 fL, which is less than the 500 fL maximum, the most conservative limit stipulated by the California Vehicle Code for conditions where the minimum brightness in the driver's field of view is less than 10 fL.

For Project Building light fixtures located beyond the driver's 10 degree field of view the maximum luminance is permitted to increase under the California Vehicle Code. For example, light sources located 15 degrees from the centerline of the driver's field of view would be limited to a maximum of 1,000 fL (500 fL plus 100 times the angle (5 degrees) = 1,000 fL). All Building Lighting will operate at maximum of 481.8 fL at night, or less than approximately 50% of the maximum allowed by the California Vehicle code for those locations at 15 degrees from the center of the driver's field of view. Therefore, at night the Building Lighting will not exceed the 1000 fL threshold and will not introduce a new source of Glare as defined by the California Vehicle Code Section 21466.5.

Building Lighting is designed to not exceed 1500 candelas/m² (481.8 fL) luminance. These values are less than the California Vehicle Code standard, the maximum allowable luminance identified as the threshold for glare, therefore Building Lighting will not create a new source of Glare.

d. Conclusions Project Building Lighting

The Project proposes to install new Building Lighting while minimizing Light Trespass and Glare to neighboring sensitive use properties through design features that comply with the following design standards:

- Light Trespass illuminance will be less than 1.4 fc at all adjacent residential use properties.
- At night glare at sensitive residential or roadway sites will be less than high contrast conditions with a maximum Building Lighting luminance of 1500 cd/m².

This analysis accurately evaluates the potential for Project Building Lighting to create a new source of Light Trespass and or Glare at adjacent sensitive use properties. The Project Building Lighting locations, types, dimensions, and maximum luminance are as described by the Concept Plan in Appendix A, and are evaluated

with all Project Building Lighting operating simultaneously at maximum luminance of 1500 cd/m². As such, this analysis represents a conservative evaluation of the proposed Project Building Lighting potential for off-site Light Trespass, and Glare.

8.2 Sign Lighting Analysis

The following criteria are used to evaluate the Light Trespass and Glare impacts of the Project Sign Lighting:

- Light Trespass illuminance must be less than 1.4 fc at adjacent residential use zoned property lines.
- Project Building Lighting creates high contrast conditions, greater than 600 cd/m² and greater than 30 to 1 contrast ratio.

a. Light Trespass Illuminance Analysis – Sign Lighting

The Light Trespass analysis evaluates the illuminance (fc) at the locations where lighting is under review with respect to light leaving the Project toward adjacent properties from the Project Sign Lighting. The Project includes the light sources as defined in and as illustrated in the Project Sign Lighting Plan (Appendix B).

As summarized in Table 9, the Project Sign Light Trespass illuminance at the Vertical Planes varies from a minimum of 0.00 fc to a maximum of 13.8 fc. Complete calculated data is presented in Appendix J.

The maximum Sign Lighting Trespass Illuminance occurs at the Project north property line at Vertical Plane VP-N4 at 13.8 fc, which is greater than the 1.4 fc maximum illuminance threshold established above in Section 5. Vertical Plane VP-N4 is located at the center of the Friars Road right of way, north of the Project site north property line. The Friars Road right of way is not a sensitive use site. Therefore the Project Sign Lighting will not introduce a new source of light trespass at VP-N4, at the center of the Friars Road right of way.

Vertical plane VP-N1 is located adjacent to the Monte Vista Apartment Homes residential community, which is more distant from the Project site than VP-N4. The calculated light trespass illuminance at VP-N1 is 1.40 fc which is substantially lower than at VP-N4 due to the increased distance. The light trespass illuminance at VP-N1 is equal to, but does not exceed 1.4 fc, therefore the Project Sign Lighting is within the threshold established above, will not introduce a new source of light trespass. As noted above, the Project Signs will not operate in an all-white, maximum 600 cd/m² in normal conditions, and this Study evaluates a very conservative value for Sign luminance.

Vertical plane VP-N2 is located adjacent to the Broadway Avenue residential community, which is more distant from the Project site than VP-N4. The calculated light trespass illuminance at VP-N2 is 0.10 fc which is substantially lower than at VP-N4 due to the increased distance. The light trespass illuminance at VP-N2 is less than 1.4 fc, therefore the Project Sign Lighting will not introduce a new source of light trespass.

The Project Sign Light Trespass Illuminance calculation data is presented in rendered views within Figures 32 and 33. The calculated data is presented as a grid on the Vertical Plane surface to the west, south, east, and north of the Project site. Locations where the calculated illuminance is equal to or less than 1.4 fc are presented in black text. Locations where the calculated illuminance is greater than 1.4 fc are presented in red text.

Vertical plane VP-N3 is located adjacent to the Harcourt Drive and Goodwick Court residential community, which is more distant from the Project site than VP-N4. The calculated light trespass illuminance at VP-N3 is 0.20 fc which is substantially lower than at VP-N4 due to the increased distance. The light trespass illuminance at VP-N3 is less than 1.4 fc, therefore the Project Sign Lighting will not introduce a new source of light trespass at vertical plane VP-N3.

Light Trespass illuminance does not exceed 1.4 fc at the residential properties adjacent to VP-N2, VP-N3, and VP-N4. Therefore, the Project Building lighting will not create a new source of light trespass at the residential properties to the north of the Project site.

The maximum Sign Lighting Trespass Illuminance at the Project south property line at Vertical Plane VP-S1 is 0.2 fc, which is less than the 1.4 fc maximum illuminance threshold established above in Section 5. Vertical Plane VP-S1 is located at the south Project site property line adjacent to the San Diego River. The light trespass illuminance at VP-S1 is less than 1.4 fc, therefore the Project Sign Lighting will not introduce a new source of

light trespass.

Vertical plane VP-S2 is located adjacent to the Cromwell Court residential community, which is more distant from the Project site than VP-S1. The calculated light trespass illuminance at VP-S2 is 0.00 fc which is substantially lower than at VP-S1 due to the increased distance. The light trespass illuminance at VP-S2 is less than 1.4 fc, therefore the Project Sign Lighting will not introduce a new source of light trespass.

Vertical plane VP-S3 is located adjacent to the Wilshire Drive residential community, which is more distant from the Project site than VP-S1. The calculated light trespass illuminance at VP-S3 is 0.00 fc which is substantially lower than at VP-S1 due to the increased distance. The light trespass illuminance at VP-S3 is less than 1.4 fc, therefore the Project Sign Lighting will not introduce a new source of light trespass.

The maximum light trespass illuminance at the east Project property line at vertical plane VP-E2 is 1.2 fc, which is less than the maximum 1.4 fc threshold. Therefore, the Project Sign lighting will not create a new source of light trespass at vertical plane VP-E2. Vertical plane VP-E1 is located more distant from the Project site and the calculated light trespass illuminance is substantially lower with a maximum of 0.40 fc. Therefore, the Project Sign lighting will not create a new source of light trespass at the residential properties to the east of the Project site.

The maximum light trespass illuminance at the west Project property line at vertical plane VP-W3 is 0.6 fc, which is less than the maximum 1.4 fc threshold. Therefore, the Project Sign lighting will not create a new source of light trespass at vertical plane VP-W3. Vertical plane VP-W1 is located more distant from the Project site and the calculated light trespass illuminance is substantially lower with a maximum of 0.00 fc. Vertical plane VP-W2 is located more distant from the Project site and the calculated light trespass illuminance is substantially lower with a maximum of 0.00 fc. Therefore, the Project Sign lighting will not create a new source of light trespass at the residential properties to the west of the Project site.

Light Trespass illuminance is less than 1.4 fc at VP-S1, VP-S2, and VP-S3. Therefore, the Project Sign lighting will not create a new source of light trespass at the residential properties to the south of the Project site.

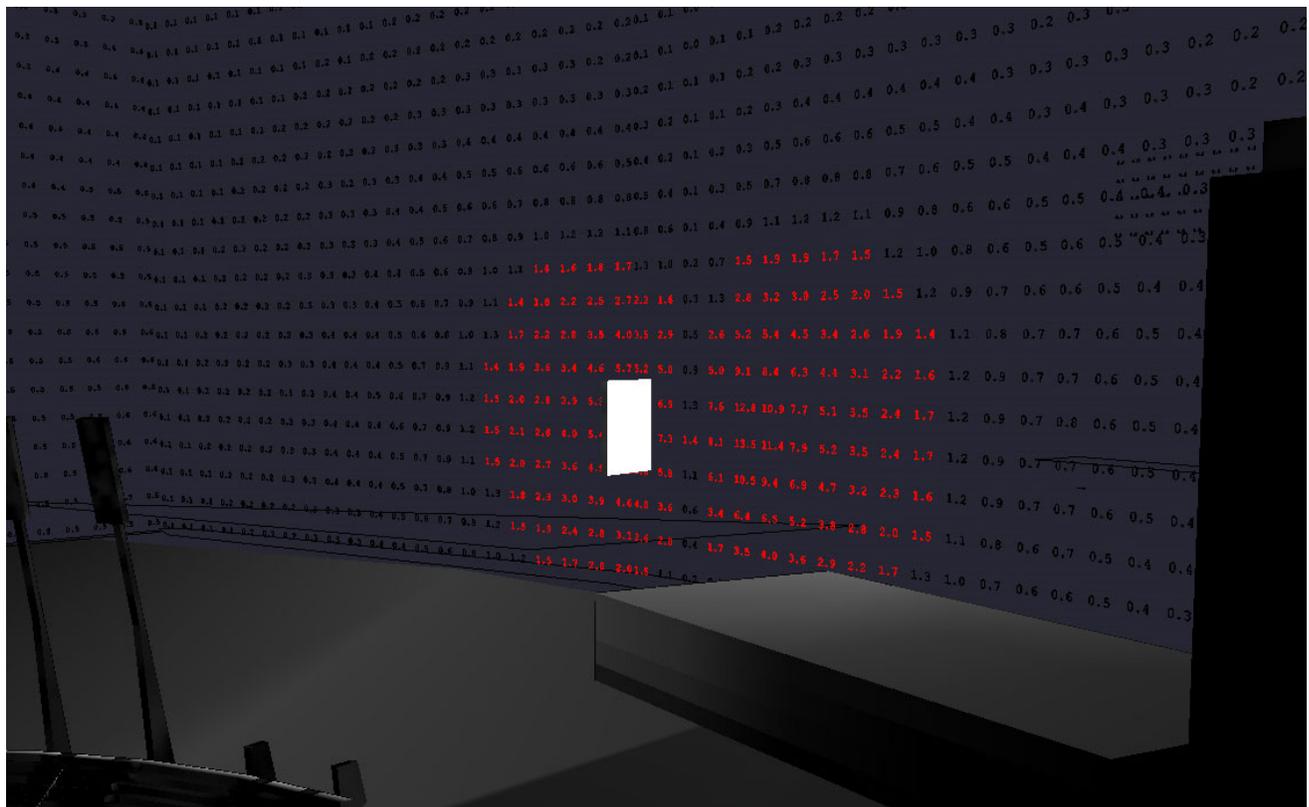


Figure 32: Sign Light Trespass Illuminance (fc) at VP-N1 at Friars Road

Table 9: Sign Light Trespass Illuminance (fc)

Vertical Plane	Description	Illuminance (fc)			Analysis (Threshold less than 1.4 fc maximum)
		Vertical			
		Max	Min	Avg	
VP-E1	East Residential Property Line	0.40	0.00	0.18	Below threshold, not a significant impact
VP-E2	East Project (Center of I-15 Freeway ROW)	1.20	0.00	0.29	Below threshold, not a significant impact
VP-S1	South Project Property Line	0.20	0.00	0.03	Below threshold, not a significant impact
VP-S2	South Residential Property Line	0.00	0.00	0.00	Below threshold, not a significant impact
VP-S3	South Residential Property Line	0.00	0.00	0.00	Below threshold, not a significant impact
VP-W1	West Residential Property Line	0.00	0.00	0.00	Below threshold, not a significant impact
VP-W2	West Project Property Line	0.00	0.00	0.00	Below threshold, not a significant impact
VP-W3	West Project Property Line	0.60	0.00	0.11	Below threshold, not a significant impact
VP-N1	North Residential Property Line	1.40	0.00	0.37	Equal to threshold, not a significant impact
VP-N2	North Residential Property Line	0.10	0.00	0.06	Below threshold, not a significant impact
VP-N3	North Residential Property Line	0.20	0.10	0.10	Below threshold, not a significant impact
VP-N4	North Project (Center of Friars Rd ROW)	13.80	0.00	0.72	Above threshold, not a significant impact

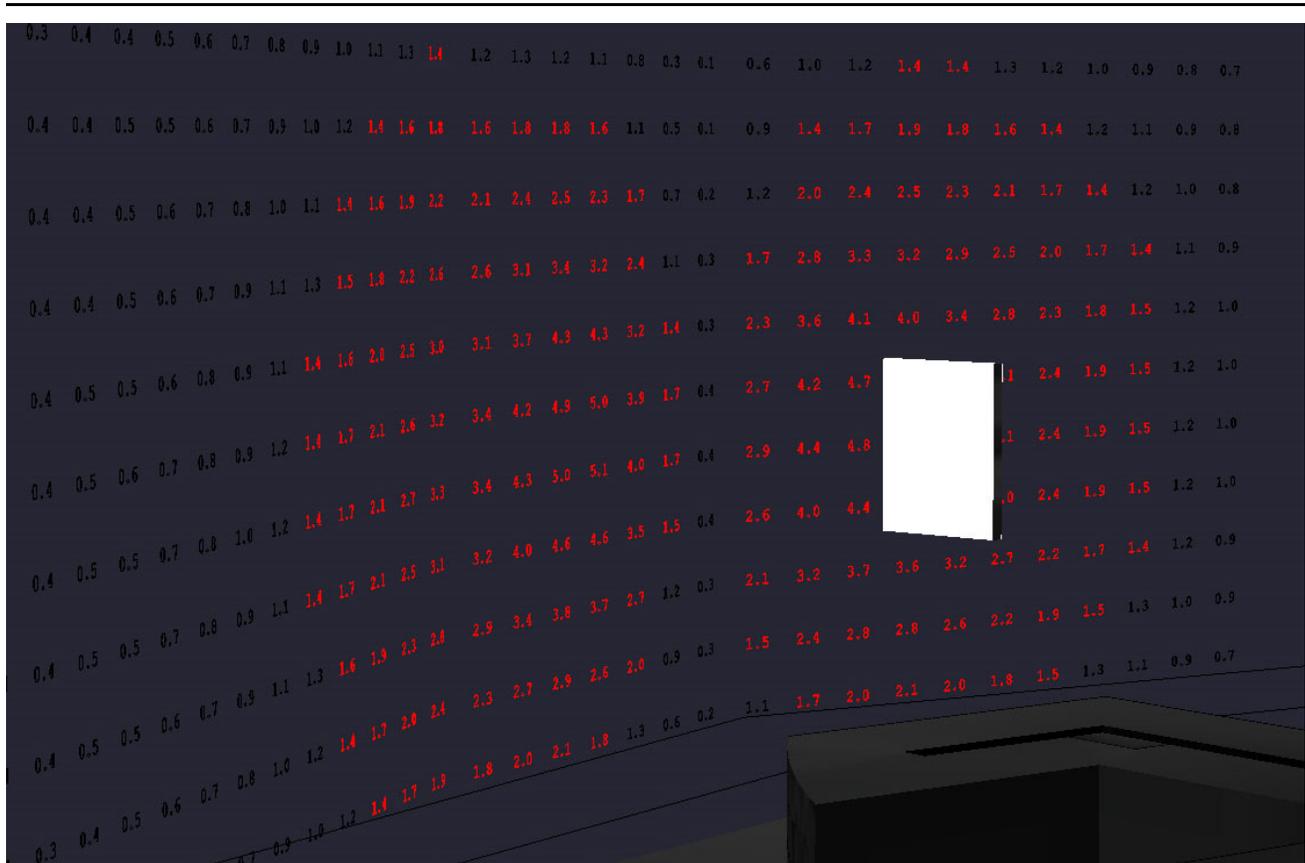


Figure 33: Sign Light Trespass Illuminance (fc) at VP-N1 at San Diego Mission Road

b. Glare Analysis Project Signs

Glare from Project Sign Lighting occurs when the Sign is visible against a dark background, such as a dark sky, or when a high brightness source is aimed at a low angle within the field of view. The maximum Sign Lighting source brightness is determined by the rated source luminance. For this Study, the maximum night time Sign Lighting luminance is 600 cd/m². The measured existing luminance is summarized in Table 4 in Section 7 above. Table 10 below summarizes the contrast ratio calculated for the maximum Sign Lighting luminance in comparison to the existing Average Measured luminance.

Contrast Ratios less than or equal to 30:1 are considered medium contrast, and will not introduce a new source of Glare. Contrast Ratios less than 10:1 are considered low contrast, and will not introduce a new source of Glare.

The Project Sign Contrast Ratio does not exceed 30:1 at any Monitoring Sites. The Contrast Ratio varies from a minimum of 0.7:1 to a maximum of 11.9:1. The maximum Sign Lighting contrast ratio is calculated at MW1, with a contrast of 11.9 to 1, which is a medium Contrast Ratio, which indicates the Sign Lighting will not introduce a new source of Glare. All other Monitoring Sites are less than 10:1, which indicates a Low Contrast ratio, and therefore the Sign Lighting will not introduce a new source of Glare.

Table 10: Contrast Ratio: comparison of existing measured to Project Signs @ 600 cd/m²

Monitoring Site	Existing Measured Luminance (cd/m ²)		Project Sign Lighting		
			Sign Lighting Maximum Luminance (cd/m ²)	Contrast Ratio	Analysis
	Average	Maximum		Maximum to Existing Average Luminance	
ME1	613.2	4975	600	1.0	Low Contrast Ratio, No Glare Impact
ME2	859.3	7611	600	0.7	Low Contrast Ratio, No Glare Impact
ME3	62.2	417	600	9.6	Low Contrast Ratio, No Glare Impact
ME4	106.2	1721	600	5.7	Low Contrast Ratio, No Glare Impact
MS1	124.7	2258	600	4.8	Low Contrast Ratio, No Glare Impact
MS2	137.4	1711	600	4.4	Low Contrast Ratio, No Glare Impact
MS3	371.2	6141	600	1.6	Low Contrast Ratio, No Glare Impact
MW1	50.6	426	600	11.9	Medium Contrast Ratio, No Glare Impact
MN1	505.0	8015	600	1.2	Low Contrast Ratio, No Glare Impact
MN2	185.2	2325	600	3.2	Low Contrast Ratio, No Glare Impact
MN3	531.6	5665	600	1.1	Low Contrast Ratio, No Glare Impact
MN4	99.2	2120	600	6.0	Low Contrast Ratio, No Glare Impact

c. Glare Analysis for Roadways – Project Signs

The lighting impact to driver's visibility from Sign Lighting is evaluated by way of the methodology defined above at the locations where lighting is under review. As summarized below, the results of this evaluation demonstrate the light impacts resulting from the Sign Lighting at the locations where light is under review are below the significance threshold for excessive luminance, or glare, during night, twilight (sunrise/sunset), and day. The Project meets the California Vehicle Code standard for roadways approaching the Project from all directions.

The Glare analysis of the Sign Lighting during night assumes the simultaneous use of all Sign Lighting at the maximum luminance stipulated above, and compares the resulting luminance to the most stringent requirements of the California Vehicle Code to determine if the Sign Lighting will introduce a source of distracting glare to drivers. The most stringent condition identified within the California Vehicle Code Section 21466.5, states: "except that when the minimum measured brightness in the field of view is 10 footlamberts or less, the measured brightness of the light source in footlamberts (fL) shall not exceed 500 plus 100 times the angle, in roadway degrees, between the driver's field of view and the light source." Thus, a conservative evaluation, occurs where the Sign Lighting is visible within the centerline of the driver's field of view, the angle noted above within the field of view is 0, the surrounding surface luminance is less than 10 fL, and therefore the maximum allowable luminance is 500 fL. Therefore, the most conservative condition at night evaluates Sign Lighting against a threshold for luminance of a maximum 500 fL.

A measured brightness within the driver's field of view of less than 10 fL may occur at night. The Sign Lighting is evaluated with a maximum luminance of 600 cd/m². Calculating the equivalent Sign Lighting luminance by

converting to English units from metric units: 600 cd/m^2 equals 174.9 fL . The Sign Lighting will not exceed 174.9 fL , which is 65% less than the 500 fL maximum, the most conservative limit stipulated by the California Vehicle Code for conditions where the minimum brightness in the driver's field of view is less than 10 fL .

For Signs located beyond the driver's 10 degree field of view the maximum luminance is permitted to increase under the California Vehicle Code. For example, light sources located 15 degrees from the centerline of the driver's field of view would be limited to a maximum of $1,000 \text{ fL}$ (500 fL plus 100 times the angle (5 degrees) = $1,000 \text{ fL}$). All Sign Lighting will operate at maximum of 174.9 fL at night, or less than approximately 18% of the maximum allowed by the California Vehicle code for those locations at 15 degrees from the center of the driver's field of view. Therefore, at night the Sign Lighting will not exceed the 1000 fL threshold and will not introduce a new source of Glare as defined by the California Vehicle Code Section 21466.5.

The Sign Lighting is also evaluated during twilight, which is the transition period from day to night, from 20 minutes before sunset to sunset, and the transition from night to day, from 20 minutes before sunrise to sunrise. Sunlight increases gradually from the minimum brightness at sunrise to maximum brightness at mid-day, and then decreases gradually to the minimum brightness at sunset. Therefore, the minimum ambient luminance occurs at sunset or sunrise. However, in order to analyze the most conservative, low level sunlight conditions, this analysis adjusts the time frame for the minimum ambient luminance condition of 10 fL to 20 minutes prior to sunset and 20 minutes after sunrise, extending the duration of night. At 20 minutes prior to sunset the ambient sunlight will be greater than the minimum values at sunset, and at 20 minutes after sunrise the luminance will be greater than the minimum at sunrise. At 20 minutes prior to sunset, the minimum luminance values within the driver's field of view will be above the minimum night time values (10 fL) due to the light from the setting or rising sun. However, to maintain a conservative analysis, this evaluation assumes the minimum luminance within the driver's field of view will be less than 10 fL from 20 minutes prior to sunset until 20 minutes after sunrise. Therefore, the maximum luminance threshold during this time will remain at 500 fL as noted above in the evaluation of the night threshold. The maximum light source luminance of 500 fL converting to metric units equals 1719 cd/m^2 .

The proposed Project Lighting is designed to limit maximum luminance to less than 600 cd/m^2 (174.9 fL) maximum luminance, from 20 minutes before sunset to 20 minutes after sunrise. Therefore, the Sign Lighting will not exceed 600 cd/m^2 for the period beginning 20 minutes prior to sunset until 20 minutes after sunrise. Therefore, at 20 minutes before and including sunset and at sunrise and 20 minutes after, the Sign Lighting will not exceed the threshold of 500 fL , and will therefore not introduce a new source of glare.

Sign Lighting is designed to not exceed 600 candelas/m^2 (174.9 fL) luminance at night. These values are less than the California Vehicle Code standard, including 20% of the maximum allowable luminance identified as the threshold for glare during the day, therefore Sign Lighting will not create a new source of Glare.

The evaluation of the Project Signs during the day (20 minutes after sunrise until 20 minutes before sunset) compares the daytime, ambient brightness to the maximum sign brightness stipulated by the California Vehicle Code during full sun conditions and overcast sky conditions. The California Vehicle Code, Section 21466.5 above permits the Project Signs to "generate light intensity levels greater than 1,000 times the minimum measured brightness in the driver's field of view, except when the minimum values are less than 10 fL ."

During the day (20 minutes after sunrise until 20 minutes before sunset) sunlight with clear sky conditions or light overcast conditions provides sufficient illuminance to generate surface brightness greater than 10 fL and up to 1200 fL on the least reflective surfaces, such as roadway pavement. Utilizing the value of 10 fL as the minimum within the driver's field of view, the maximum allowable brightness would be 1,000 times 10 fL , or $10,000 \text{ fL}$. The Project Signs will not exceed $6,000 \text{ cd/m}^2$ (1749 fL) during the daytime hours of operation, and therefore operate at less than 18% of the maximum luminance stipulated by the California Vehicle Code. Therefore, the Sign Lighting would not create a new source of glare during day time hours of operation with clear sky or light overcast conditions.

Severe storms, heavy cloud cover, or other atmospheric conditions may occur during the day, which may cause the minimum brightness within the driver's field of view to be less than 10 fL . The Project Signs will include an electronic control system to reduce the sign luminance from $6,000 \text{ cd/m}^2$ (1749 fL) to 600 cd/m^2 (174.9 fL) maximum when the ambient sun light falls to illuminance values similar to night, less than 100 fc . During the

day, when storms, cloud cover, or other low ambient sunlight conditions occur and when the ambient sunlight is less than 100 fc, the Project Signs would transition from the daytime 6,000 cd/m² (1749 fL) to 600 cd/m² (174.9 fL) maximum, and thereby ensure that the sign luminance remains less than 20% of the maximum stipulated by the California Vehicle Code. Therefore, the Sign Lighting would not create a new source of glare during day time periods with storm or severe overcast weather conditions.

8.3 Project Sign Lighting Conclusions

The Project proposes to install new Sign Lighting while minimizing Light Trespass and Glare to neighboring sensitive use properties through design features that comply with the following design standards:

Light Trespass illuminance will be less than 1.4 fc at all adjacent residential use properties.

At night and during sunset, sunrise, glare at sensitive residential or roadway sites will be less than high contrast conditions with a maximum sign luminance of 600 cd/m².

Project Lighting will be controlled by a photocell on and time clock off to transition smoothly from the daytime conditions to the maximum nighttime luminance of 600 candelas/m².

This analysis accurately evaluates the potential for Project Sign Lighting to create a new source of Light Trespass and or Glare at adjacent sensitive use properties. The Project Sign Lighting locations, types, dimensions, and maximum luminance are as described by the Sign Lighting Concept Plan in Appendix B, and are evaluated with all Project Sign Lighting operating simultaneously at maximum luminance of 600 cd/m², all white. As such, this analysis represents a conservative evaluation of the proposed Project Sign Lighting potential for off-site Light Trespass, and Glare.

8.4 Construction Lighting Analysis

The following criteria are used to evaluate the Light Trespass and Glare impacts of the Project Construction Lighting:

- Light Trespass illuminance must be less than 1.4 fc at adjacent residential use zoned property lines.
- Project Construction Lighting creates high contrast conditions, greater than 600 cd/m² and greater than 30 to 1 contrast ratio.

a. Light Trespass Illuminance Analysis – Construction Lighting

The Light Trespass analysis evaluates the illuminance (fc) at the locations where lighting is under review with respect to light leaving the Project toward adjacent properties from the Project Construction Lighting. The Project includes the light sources as defined in and as illustrated in the Construction Lighting Concept Plan (Appendix C).

As summarized in Table 11, the Project Construction Light Trespass illuminance at the Vertical Planes varies from a minimum of 0.00 fc to a maximum of 0.80 fc. Complete calculated data is presented in Appendix K.

The maximum Construction Lighting Trespass Illuminance to the west occurs at the west Project property line at Vertical Plane VP-W3 at 0.6 fc, which is less than the 1.4 fc maximum illuminance threshold established above in Section 5.

Vertical Plane VP-W3 is located at the west Project site property line south of Friars Road from Stadium Way to Northside Drive, adjacent to existing commercial use properties. Vertical Plane VP-W2 is located at the west Project Site property line south of Northside drive to Fenton Parkway. There is no lighting impact at commercial use properties, and the maximum light trespass illuminance is less than 1.4 fc. Vertical plane VP-W1 is located adjacent to the west Project site property line at Fenton Parkway and the Del Rio Apartment Homes residential community. The maximum light trespass illuminance from Construction Lighting at VP-W1 is 0.00 fc, which is less than the 1.4 fc threshold. Light Trespass illuminance is less than 1.4 fc at VP-W1, VP-W2, and VP-W3. Therefore, the Project Construction lighting will not create a new source of light trespass at the properties to the west of the Project site.

Table 11: Construction Light Trespass Illuminance (fc)

Vertical Plane	Description	Trespass Illuminance			Analysis Threshold: E _v less than 1.4 fc max
		E _v Vertical fc			
		Max	Min	Avg	
VP-E1	East Residential Property Line	0.10	0.00	0.00	Below threshold, not a significant impact
VP-E2	East Project (Center of 1-15 Freeway ROW)	0.20	0.00	0.00	Below threshold, not a significant impact
VP-S1	South Project Property Line	0.20	0.00	0.02	Below threshold, not a significant impact
VP-S2	South Residential Property Line	0.00	0.00	0.00	Below threshold, not a significant impact
VP-S3	South Residential Property Line	0.10	0.00	0.00	Below threshold, not a significant impact
VP-W1	West Residential Property Line	0.00	0.00	0.00	Below threshold, not a significant impact
VP-W2	West Project Property Line	0.00	0.00	0.00	Below threshold, not a significant impact
VP-W3	West Project Property Line	0.60	0.10	0.24	Below threshold, not a significant impact
VP-N1	North Residential Property Line	0.50	0.00	0.13	Below threshold, not a significant impact
VP-N2	North Residential Property Line	0.20	0.00	0.01	Below threshold, not a significant impact
VP-N3	North Residential Property Line	0.20	0.00	0.00	Below threshold, not a significant impact
VP-N4	North Project (Center of Friars Rd ROW)	0.80	0.00	0.18	Below threshold, not a significant impact

The maximum Construction Lighting Trespass Illuminance at the Project south property line at Vertical Plane VP-S1 is 0.2 fc, which is less than the 1.4 fc maximum illuminance threshold established above in Section 5. Vertical Plane VP-S1 is located at the south Project site property line adjacent to the San Diego River. The calculated illuminance at VP-S1 is far less than the existing measured illuminance at Monitoring Sites MS2 and MS3 and will therefore not introduce a new source of light trespass.

Vertical plane VP-S2 is located adjacent to the Cromwell Court residential community, which is more distant from the Project site than VP-S1. The calculated light trespass illuminance at VP-S2 is 0.00 fc which is substantially lower than at VP-S1 due to the increased distance. The light trespass illuminance at VP-S2 is less than 1.4 fc, therefore the Project Construction Lighting will not introduce a new source of light trespass.

Vertical plane VP-S3 is located adjacent to the Wilshire Drive residential community, which is more distant from the Project site than VP-S1. The calculated light trespass illuminance at VP-S3 is 0.10 fc which is substantially lower than at VP-S1 due to the increased distance. The light trespass illuminance at VP-S3 is less than 1.4 fc, therefore the Project Construction Lighting will not introduce a new source of light trespass.

Light Trespass illuminance is less than 1.4 fc at VP-S1, VP-S2, and VP-S3. Therefore, the Project Construction Lighting will not create a new source of light trespass at the residential properties to the south of the Project site.

The maximum light trespass illuminance at the east Project property line at vertical plane VP-E2 is 0.2 fc, which is less than the maximum 1.4 fc threshold. Therefore, the Project Construction lighting will not create a new source of light trespass at vertical plane VP-E2. Vertical plane VP-E1 is located more distant from the Project site than VP-E2, and the calculated light trespass illuminance is substantially lower with a maximum of 0.10 fc. Therefore, the Project Construction lighting will not create a new source of light trespass at the residential properties to the east of the Project site.

The maximum light trespass illuminance to the north of the Project occurs at the center line of Friars Road to the north of the north Project property line. The calculated illuminance at vertical plane VP-N4 is 0.8 fc, which is less than the maximum 1.4 fc threshold. Therefore, the Project Construction lighting will not create a new source of light trespass at vertical plane VP-N4.

Vertical plane VP-N1 is located adjacent to the Monte Vista Apartment Homes residential community, which is more distant from the Project site than VP-N4. The calculated light trespass illuminance at VP-N1 is 0.50 fc which is substantially lower than at VP-N4 due to the increased distance. The light trespass illuminance at VP-N1 is less than 1.4 fc, therefore the Project Construction Lighting will not introduce a new source of light trespass.

Vertical plane VP-N2 is located adjacent to the Broadway Avenue residential community, which is more distant from the Project site than VP-N4. The calculated light trespass illuminance at VP-N2 is 0.20 fc which is substantially lower than at VP-N4 due to the increased distance. The light trespass illuminance at VP-N2 is less than 1.4 fc, therefore the Project Construction Lighting will not introduce a new source of light trespass.

Vertical plane VP-N3 is located adjacent to the Harcourt Drive and Goodwick Court residential community, which is more distant from the Project site than VP-N4. The calculated light trespass illuminance at VP-N3 is 0.20 fc which is substantially lower than at VP-N4 due to the increased distance. The light trespass illuminance at VP-N3 is less than 1.4 fc, therefore the Project Construction Lighting will not introduce a new source of light trespass.

Light Trespass illuminance is less than 1.4 fc at VP-N1, VP-N2, VP-N3, and VP-N4. Therefore, the Project Construction lighting will not create a new source of light trespass at the residential properties to the north of the Project site.

b. Glare Analysis – Construction Lighting

Glare from Project Construction Lighting occurs when the light source is visible against a dark background, such as a dark sky, or when a high brightness source is aimed at a low angle within the field of view. The direct view of any light source is a significant source of glare, or high contrast conditions. The Project Construction lighting plan will comply with the current CALGreen standards which require all exterior site lighting to comply with the Backlight Uplight and Glare (BUG) ratings identified in CALGreen Title 24, Part 11, Table 5.106.8 MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT AND GLARE (BUG) RATINGS enclosed in Appendix E of this Study.

The direct view of the Project construction lighting may present a potential for high contrast and glare conditions. Compliance with the BUG ratings will limit direct view of any light sources within the Project site from surrounding residential properties. For instance, for all the Project's exterior lights, Title 24 limits the FVH (Forward Very High angle) and BVH (Backward Very High angle) zonal lumens to 10 to 500 lumens for Zone 4 properties. These limits prevent the use of light fixtures that will contain a light source visible to the surrounding properties. In addition, the requirements are more stringent at distances less than 0.5 mounting heights from the property line (roughly 60 to 65 feet from the property line), where the fixtures would be brightest due to the shortest distance from the adjacent residential properties.

The Project Construction lighting will include high-intensity LED construction lighting. The view angle from the Monitoring sites to the highest elevation of the Project Construction light poles (124 feet above existing grade) is similar to the analysis summarized in Table 6 above and illustrated for monitoring site MN1 in Figure 31 above.

View angles in Table 6 greater than zero represent angles above horizontal, or views looking down from residential sites located above the elevation of the Construction Lighting poles. View angles from 0 degrees to -20 degrees represent angles below horizontal but above the shielding angle of the Construction Lighting fixtures. View angles from -21 degrees to -90 degrees represent angles below horizontal where the Construction Lighting fixture source may be directly visible.

The Project Construction Lighting includes high power LED flood lights with shields and louvers designed to limit direct view of any portion of the light source from angles above -20 degrees below horizontal which would be visible from areas outside the Project site boundary. For all Monitoring site locations and adjacent sensitive use residential properties, the view to the Project site is distant, and the viewing angle to the light source is very low, so that the Project design shielding will prevent direct view of the light source.

The most sensitive locations for potential glare impacts are those sites close to the Project at an elevation below the height of the Construction Lighting fixtures where the viewing angle would be more vertical than -20 degrees from horizontal. Monitoring Site MN1 along Friars Road to the north of the Project site is nearest to the Project site and is below the elevation of the tallest Construction lights, mounted to the light poles on the east side of the Stadium aimed to the north, and northwest. The view angle from MN1 to the Construction light poles is estimated to be -5.84 degrees below horizontal (where the horizon is 0 degrees and perpendicular down is -90 degrees). The Project Construction lighting will include focused lights aimed to the construction site surfaces with shielding to minimize light spill from -20 degrees below horizontal and above. Therefore, the light source will not be directly visible from MN1. The adjacent residential properties to the north of Monitoring site MN1 are located at a higher elevation relative to MN1 and the Stadium, and will therefore have less visibility of the light source than at MN1. Figure 31 illustrates the site topography and the location of the Stadium relative to the elevation of Monitoring Site MN1 and the elevation of adjacent residential properties at the Monte Vista Apartment homes, and the distance between Stadium light poles, MN1 and the Monte Vista Apartments. The distance to the Construction light poles aimed north and northwest toward the Monte Vista Apartments is approximately 1,143 feet, and the view angle is -2.65 degrees below horizontal.

Table 7 above summarizes the elevations and distances to the Stadium and the Construction light poles from the adjacent surrounding residential communities. Residential properties with view angles greater than MN1 will have less visibility of the Construction light sources than at MN1. The worst case lowest view angle occurs at MW1 at -3.29 degrees, at a much greater distance from the Stadium than MN1 at 2,522 feet.

The maximum Construction Lighting source luminance is determined by the rated light fixture luminance at the viewing angle from the nearest residential properties. The Del Rio Apartment Homes adjacent to Monitoring Site MW1 has the worst case, lowest view angle at -3.29 degrees below horizontal to the Construction Lighting highest light fixture. The highest luminance will be observed if the highest aiming angle Construction Lights at -30 degrees below horizontal are visible from the Del Rio Apartment Homes. At the view angle of -3.29 degrees, the visible portion of the Construction Lights will be at the intersection of the aiming angle and the viewing angle (-30 degrees - (-3.29) = 26.71 degrees). The light fixture photometric test data provided by the light fixture manufacturer in the IES candlepower data format indicates the source lumens will be 16,128.9 candelas at 26.71 degrees. The visible, measurable luminance at the Del Rio Apartments adjacent to MW1 at 2,522 feet from the Construction Lights within a 1 degree cone of 113.7 m² is cd/m².

The Monte Vista Apartment Homes adjacent to Monitoring Site MN1 has a higher view angle than MW1 at -2.65 degrees below horizontal, but is substantially closer to the Stadium Construction Lights at 1143 feet. The greatest luminance will be observed if the highest aiming angle of the Construction Lights at -30 degrees below horizontal are visible from the Monte Vista Apartment Homes. At the view angle of -2.65 degrees, the visible portion of the Construction Lights will be at the intersection of the aiming angle and the viewing angle (-30 degrees - (-2.65) = 27.35 degrees). The light fixture photometric test data provided by the light fixture manufacturer in the IES candlepower data format indicates the source lumens will be 15,634.6 candelas at 27.35 degrees. The visible, measurable luminance at the Del Rio Apartments adjacent to MN1 at 1,143 feet from the Construction Lights within a 1 degree cone of 29.04 m² is 538 cd/m².

This Study analyzes the maximum Construction Lighting luminance at 600 cd/m², which is greater than the calculated luminance above, to present a conservative test case, which is greater than the probable actual luminance. The Construction Light fixtures are aimed at various positions within the Stadium construction site and few are aimed at the maximum aiming angle analyzed above. The probability of a direct in line view from the sensitive use residential properties adjacent to the Monitoring Sites to any of the Construction light fixtures aimed at the maximum aiming angle is low. However, this worst case, higher luminance condition is evaluated for all Monitoring Sites to present a conservative analysis.

Table 12: Contrast Ratio: comparison of existing measured to Project Construction Lighting @ 600 cd/m²

Monitoring Site	Existing Measured Luminance (cd/m ²)		Project Construction Lighting		
	Average	Maximum	Construction Lighting Maximum Luminance (cd/m ²)	Contrast Ratio	Analysis
				Maximum to Existing Average Luminance	
ME1	613.2	4975	600	1.0	Low Contrast Ratio, No Glare Impact
ME2	859.3	7611	600	0.7	Low Contrast Ratio, No Glare Impact
ME3	62.2	417	600	9.6	Low Contrast Ratio, No Glare Impact
ME4	106.2	1721	600	5.7	Low Contrast Ratio, No Glare Impact
MS1	124.7	2258	600	4.8	Low Contrast Ratio, No Glare Impact
MS2	137.4	1711	600	4.4	Low Contrast Ratio, No Glare Impact
MS3	371.2	6141	600	1.6	Low Contrast Ratio, No Glare Impact
MW1	50.6	426	600	11.9	Medium Contrast Ratio, No Glare Impact
MN1	505.0	8015	600	1.2	Low Contrast Ratio, No Glare Impact
MN2	185.2	2325	600	3.2	Low Contrast Ratio, No Glare Impact
MN3	531.6	5665	600	1.1	Low Contrast Ratio, No Glare Impact
MN4	99.2	2120	600	6.0	Low Contrast Ratio, No Glare Impact

Table 12 summarizes the contrast ratio calculated for the maximum Construction Lighting luminance in comparison to the existing Average Measured luminance.

Contrast Ratios above 30:1 are considered high contrast, and may introduce a new source of Glare. Contrast Ratios less than or equal to 30:1 are considered medium contrast, and will not introduce a new source of Glare. Contrast Ratios less than 10:1 are considered low contrast, and will not introduce a new source of Glare.

Contrast Ratios vary from a minimum of 0.7:1 to a maximum of 11.9:1. The Contrast Ratio at monitoring site MW1 is 11.9:1, which is Medium Contrast, and indicates the Construction Lighting will not introduce a new source of glare. Contrast Ratios at all other monitoring sites are less than 10:1, which indicates Low Contrast. The existing measured luminance is medium to high luminance due to the visibility of the existing parking lot flood lights, sports field lights, and Stadium lighting. The Construction Lighting will provide more focused illumination, directed down to the Project site, and with shields applied to the lighting fixtures to reduce luminance to low or medium contrast ratios.

Therefore, the Construction Lighting will be low to medium contrast, which indicates the Project will not introduce a new source of Glare.

c. Glare Analysis for Roadways – Construction Lighting

The lighting impact to driver's visibility from Construction Lighting is evaluated by way of the methodology defined above at the locations where lighting is under review. As summarized below, the results of this evaluation demonstrate the light impacts resulting from the Construction Lighting at the locations where light is under review are below the significance threshold for excessive luminance, or glare, during night, twilight (sunrise/sunset),

and day. The Project meets the California Vehicle Code standard for roadways approaching the Project from all directions.

The Glare analysis of the Construction Lighting during night assumes the simultaneous use of all Project Construction Lighting at the maximum luminance stipulated above, and compares the resulting luminance to the most stringent requirements of the California Vehicle Code to determine if the Construction Lighting will introduce a source of distracting glare to drivers. The most stringent condition identified within the California Vehicle Code Section 21466.5, states: "except that when the minimum measured brightness in the field of view is 10 footlamberts or less, the measured brightness of the light source in footlamberts (fL) shall not exceed 500 plus 100 times the angle, in roadway degrees, between the driver's field of view and the light source." Thus, a conservative evaluation, occurs where the Construction Lighting is visible within the centerline of the driver's field of view, the angle noted above within the field of view is 0, the surrounding surface luminance is less than 10 fL, and therefore the maximum allowable luminance is 500 fL. Therefore, the most conservative condition at night evaluates Construction Lighting against a threshold for luminance of a maximum 500 fL.

A measured brightness within the driver's field of view of less than 10 fL may occur at night. The Construction Lighting is evaluated with a maximum luminance of 600 cd/m². Calculating the equivalent Construction Lighting luminance by converting to English units from metric units: 600 cd/m² equals 174.9 fL. The Construction Lighting will not exceed 174.9 fL, which is 65% less than the 500 fL maximum, the most conservative limit stipulated by the California Vehicle Code for conditions where the minimum brightness in the driver's field of view is less than 10 fL.

For Project Construction light fixtures located beyond the driver's 10 degree field of view the maximum luminance is permitted to increase under the California Vehicle Code. For example, light sources located 15 degrees from the centerline of the driver's field of view would be limited to a maximum of 1,000 fL (500 fL plus 100 times the angle (5 degrees) = 1,000 fL). All Construction Lighting will operate at maximum of 174.9 fL at night, or less than approximately 18% of the maximum allowed by the California Vehicle code for those locations at 15 degrees from the center of the driver's field of view. Therefore, at night the Construction Lighting will not exceed the 1000 fL threshold and will not introduce a new source of Glare as defined by the California Vehicle Code Section 21466.5.

Construction Lighting is designed to not exceed 600 candelas/m² (174.9 fL) luminance. These values are less than the California Vehicle Code standard, and the maximum allowable luminance identified as the threshold for glare, therefore Construction Lighting will not create a new source of Glare.

d. Conclusions Project Construction Lighting

The Project proposes to install new Construction Lighting while minimizing Light Trespass and Glare to neighboring sensitive use properties through design features that comply with the following design standards:

- Light Trespass illuminance will be less than 1.4 fc at all adjacent residential use properties.
- At night glare at sensitive residential or roadway sites will be less than high contrast conditions with a maximum Construction Lighting luminance of 600 cd/m².

This analysis accurately evaluates the potential for Project Construction Lighting to create a new source of Light Trespass and or Glare at adjacent sensitive use properties. The Project Construction Lighting locations, types, dimensions, and maximum luminance are as described by the Construction Lighting Concept Plan in Appendix C, and are evaluated with all Project Construction Lighting operating simultaneously at maximum luminance of 600 cd/m². As such, this analysis represents a conservative evaluation of the proposed Project Construction Lighting potential for off-site Light Trespass, and Glare.

9. Conclusion

This Study reviews the proposed Project (as described herein as Appendix A, B, and C) with respect to Light Trespass and Glare at adjacent sensitive use properties near the Project site. Residential properties, natural habitat at San Diego Creek, and the adjacent I-15 Freeway are identified as the most sensitive use sites due to their close proximity to the Project and possible direct view of the Project Building Lighting, Project Signs, and Construction Lighting. Light intensity diminishes rapidly in relation to distance (see Inverse Square Law page

8). Therefore, more distant sensitive site locations will receive much lower Light Trespass illuminance and or luminance, and will therefore be less affected by the Project.

Exterior lighting impact issues are focused around two key subjects: Light Trespass and Glare.

This Report analyzes the Project potential environmental impacts relating to lighting based on the Project Building Lighting described in Appendix A, Project Sign Lighting described in Appendix B, and Construction Phase Lighting as described in Appendix C of this Study.

This Study establishes the following illumination levels for Building Lighting for purposes of environmental analysis. Exterior building and site lighting must comply with the requirements of CALGreen, which stipulates maximum light trespass illuminance at the project property line and or public right of way. The IESNA also publishes recommended professional practice standards regarding light trespass and glare. Accordingly, the Building Lighting would comply with the following requirements:

- Project Light Trespass illuminance will not exceed 1.4 fc at the Project site property line or the centerline of adjacent public right of way.
- Project Building Lighting will not exceed contrast ratio of 30 to one.

This Study demonstrates the Light Trespass from the Building Lighting at the adjacent residential use properties is below the 1.4 footcandles (fc) threshold as defined by CALGreen.

Furthermore, the Building Lighting is evaluated with respect to Glare visible at adjacent residential properties or roadways. To present a conservative analysis, this Study evaluates the Building Lighting with a maximum luminance of 1500 cd/m² at night. This Study analyzes the Glare from the Building Lighting at sensitive use properties at night by calculating the contrast ratio, which compares the maximum Project Building Lighting luminance to the existing average luminance measured at monitoring sites surrounding the Project site, which are adjacent to sensitive use properties. The calculated contrast ratios are less than 30:1, which indicates the Building Lighting will not create a new Glare condition at adjacent sensitive use properties. The Glare at roadways is evaluated with respect to the standards identified by the California Motor Vehicle Code, which defines maximum sign luminance within driver's field of view for both day and night. This Study confirms the Building Lighting will not exceed the maximum luminance defined by the California Motor Vehicle Code during the day, at night, and during periods of low sun intensity.

Therefore, the results of this Study indicate the Project Building Lighting will not create a new source of Light Trespass or Glare.

This Study establishes the following illumination levels for Sign Lighting for purposes of environmental analysis. Accordingly, the Sign Lighting would comply with the following requirements:

- Project Sign Light Trespass illuminance will not exceed 1.4 fc at adjacent residential use properties.
- Project Signs will not exceed 600 cd/m² (all white) from sunset until 20 minutes before sunrise and will not exceed 6000 cd/m² (all white) during the day, from sunrise to 20 minutes before sunset.
- Project Signs will transition smoothly from daytime (6000 cd/m²) to nighttime (600 cd/m²).

This Study demonstrates the Light Trespass from the Sign Lighting at the adjacent sensitive use properties is below 1.4 footcandles (fc) threshold at the Project property line or adjacent to sensitive use properties. Therefore, there is no Light Trespass impact from the Sign Lighting.

Furthermore, the Sign Lighting is evaluated with respect to Glare visible at adjacent residential properties or roadways. To present a conservative analysis, this Study evaluates the Project Sign Lighting with a maximum luminance of 6000 cd/m² during the day and 600 cd/m² at night with all signs operating at all white. The actual Project Signs luminance will be less than 600 cd/m² during the night, since the Signs will operate with varied color and patterns that create average luminance much less than the all-white configuration used in this analysis, and the higher luminance may not be necessary to create adequate prominence for the Signs. The most recent IESNA recommended luminance suggest a much lower luminance at 160 cd/m² (see Appendix H) for Lighting

Zone 4. This Study evaluates the Signs with higher luminance at 600 cd/m² to present a very conservative analysis.

This Study analyzes the Glare from the Sign Lighting at sensitive use properties at night by calculating the contrast ratio, which compares the maximum Project Sign luminance to the existing average luminance measured at residential use properties near to the Project site. The calculated contrast ratios are less than 30:1, which indicates the Project Sign Lighting will not create a new Glare condition at adjacent sensitive use properties. The Glare at roadways is evaluated with respect to the standards identified by the California Motor Vehicle Code, which defines maximum sign luminance within driver's field of view for both day and night. This Study confirms the Sign Lighting will not exceed the maximum luminance defined by the California Motor Vehicle Code during the day, at night, and during periods of low sun intensity.

Therefore, the results of this Study indicate the Project Sign Lighting will not create a new source of Light Trespass or Glare.

This Study establishes the following illumination levels for Construction Lighting for purposes of environmental analysis. Exterior construction lighting must comply with the requirements of CALGreen, which stipulates maximum light trespass illuminance at the project property line and or centerline of adjacent public right of way. The IESNA also publishes recommended professional practice standards regarding light trespass and glare. Accordingly, the Construction Lighting would comply with the following requirements:

- Project Construction Light Trespass illuminance will not exceed 1.4 fc at the Project site property line or the centerline of adjacent public right of way.
- Project Construction Lighting will not exceed contrast ratio of 30 to one.

This Study demonstrates the Light Trespass from the Construction Lighting at the adjacent residential use properties is below the 1.4 footcandles (fc) threshold as defined by CALGreen.

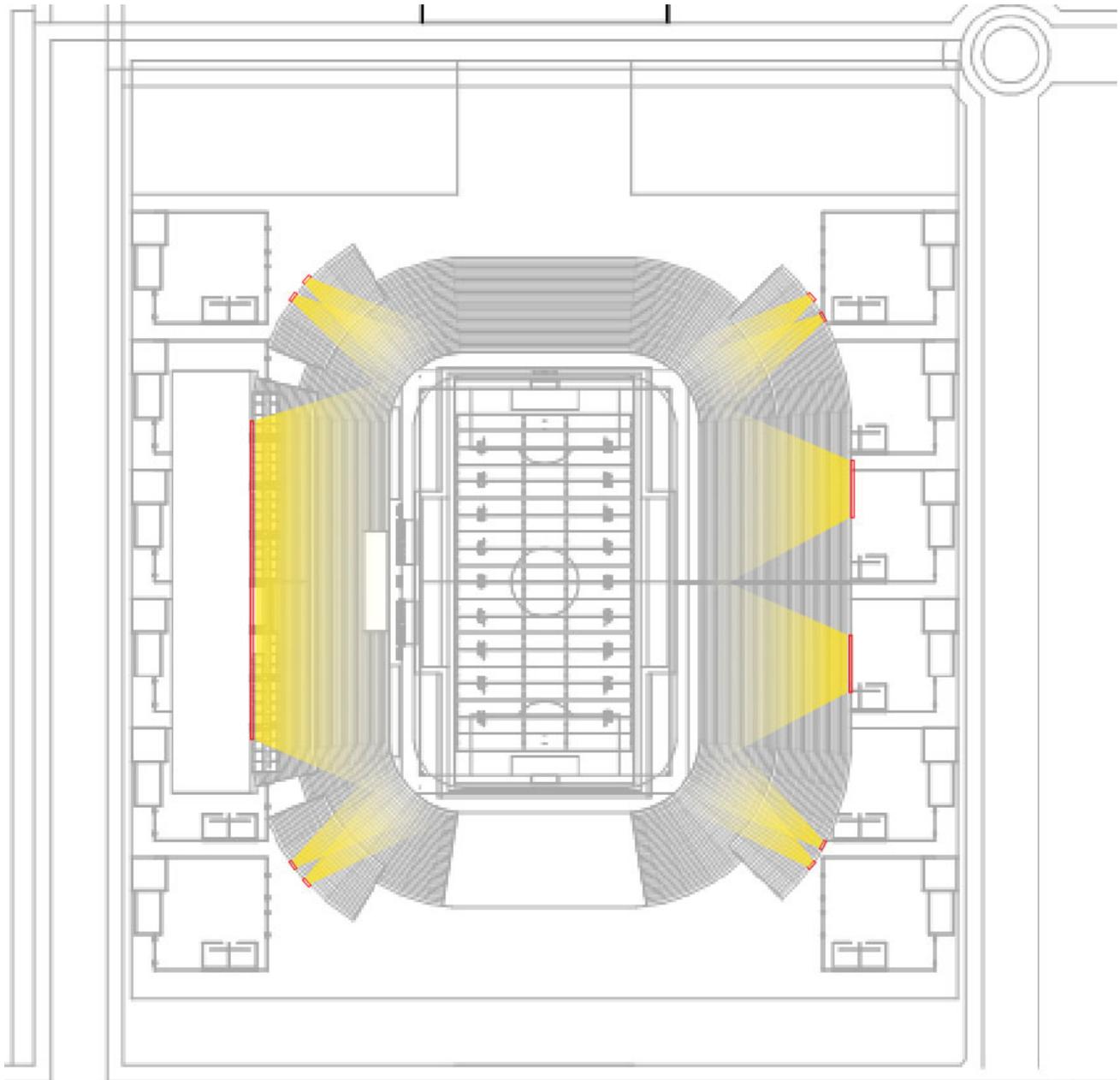
Furthermore, the Construction Lighting is evaluated with respect to Glare visible at adjacent residential properties or roadways. To present a conservative analysis, this Study evaluates the Construction Lighting with a maximum luminance of 600 cd/m² at night. This Study analyzes the Glare from the Construction Lighting at sensitive use properties at night by calculating the contrast ratio, which compares the maximum Project Construction Lighting luminance to the existing average luminance measured at monitoring sites surrounding the Project site, which are adjacent to sensitive use properties. The calculated contrast ratios are less than 30:1, which indicates the Construction Lighting will not create a new Glare condition at adjacent sensitive use properties. The Glare at roadways is evaluated with respect to the standards identified by the California Motor Vehicle Code, which defines maximum sign luminance within driver's field of view for both day and night. This Study confirms the Construction Lighting will not exceed the maximum luminance defined by the California Motor Vehicle Code during the day, at night, and during periods of low sun intensity.

Therefore, the results of this Study indicate the Project Construction Lighting will not create a new source of Light Trespass or Glare.

APPENDIX A: Building Lighting Concept Plan

Building Lighting Concept Plan for the exterior site consists of four sports field lighting conditions and roadway poles.

The stadium field lighting uses 2 types floodlights mounted at 124 feet above grade to light the field playing surface. 38,680,000 total lumens are used to illuminate the field surface. The illuminance at the field surface: Max 335 fc, Min 98 fc, Avg 214 fc.





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Product Specification
SUFA-X 1KW
 LED Sports Flood Lighting



Applications
 Highbay
 Outdoor Pole
 Arm-mounted Area
 Roadway Luminaires
 Sports Lighting

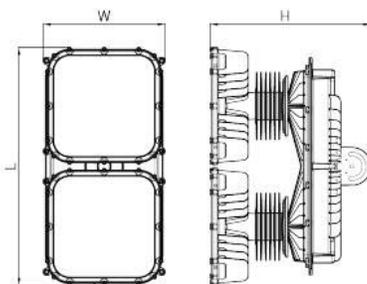
Description

Excellent Cooling Structure
 High Efficiency Lighting
 NMBF™ Technology – Pin Point Narrow Beam

Specifications

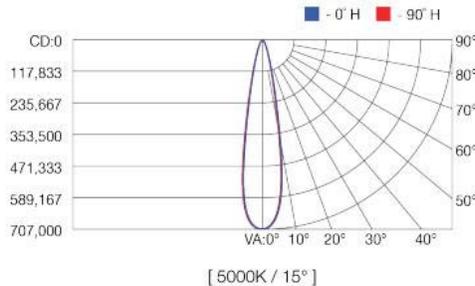
Model Name	SFX1K0 (A-Type)	
Power Consumption	1000W	
Light Source	3.0W High Power LED Chips	
Correlated Color Temperature	5000K (3000K / 4000K / 5700K available)	
Luminous Flux *	105,000 lm	110,000 lm
Luminous Efficacy *	105 lm/W	110 lm/W
Color Rendering Index	80 Ra	70 Ra
Light Distribution	15° / 30° / 45°	
LED Chip Manufacturer	CREE	
Input Voltage	200 – 277 Vac	
Input Current	Max 6.0A (@200Vac)	
Power Factor	≥0.9 at Max load	
Frequency	50 / 60 Hz	
Surge Protection	Line-Line 20KV, Line-FG 20KV	
Driver Type	Constant Current (CC)	
Fixture & Driver Manufacturer	KMW INC. / Made in Korea	
Size (W x L x H)	12.7 x 24.9 x 16.8 (inch)	323 x 632 x 426 (mm)
Weight (Driver included)	70.6 lb	32.0 Kg
Material	Body	Cast Aluminum
	Optic	Silver Coating Reflector
	Cover	Tempered Glass 3.2T (Clear)
Finish	Anodized	
IP Rating	IP66	
Mounting Option	Swivel Bracket	
Operating Temperature	-22°F ~ 140°F	-30°C ~ 60°C
Life Time	50,000 Hours (@77°F / 25°C)	
Warranty	5 Years (12 hours usage per day)	
Option		
Control System	Wireless (ZigBee) / Wired (RS-485)	

*Tolerance : ± 5%



Photometry

See photometric .ies files for details.





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183-6, Yeongcheon-ro, Hwaseong-si, Gyeonggi-do, South Korea
Tel : +82-31-370-8866 / E-Mail : ledsales@gigateraled.com / Homepage : www.gigateraled.com

Product Specification
SUFA-X 1KW
LED Sports Flood Lighting

Control System (Optional)

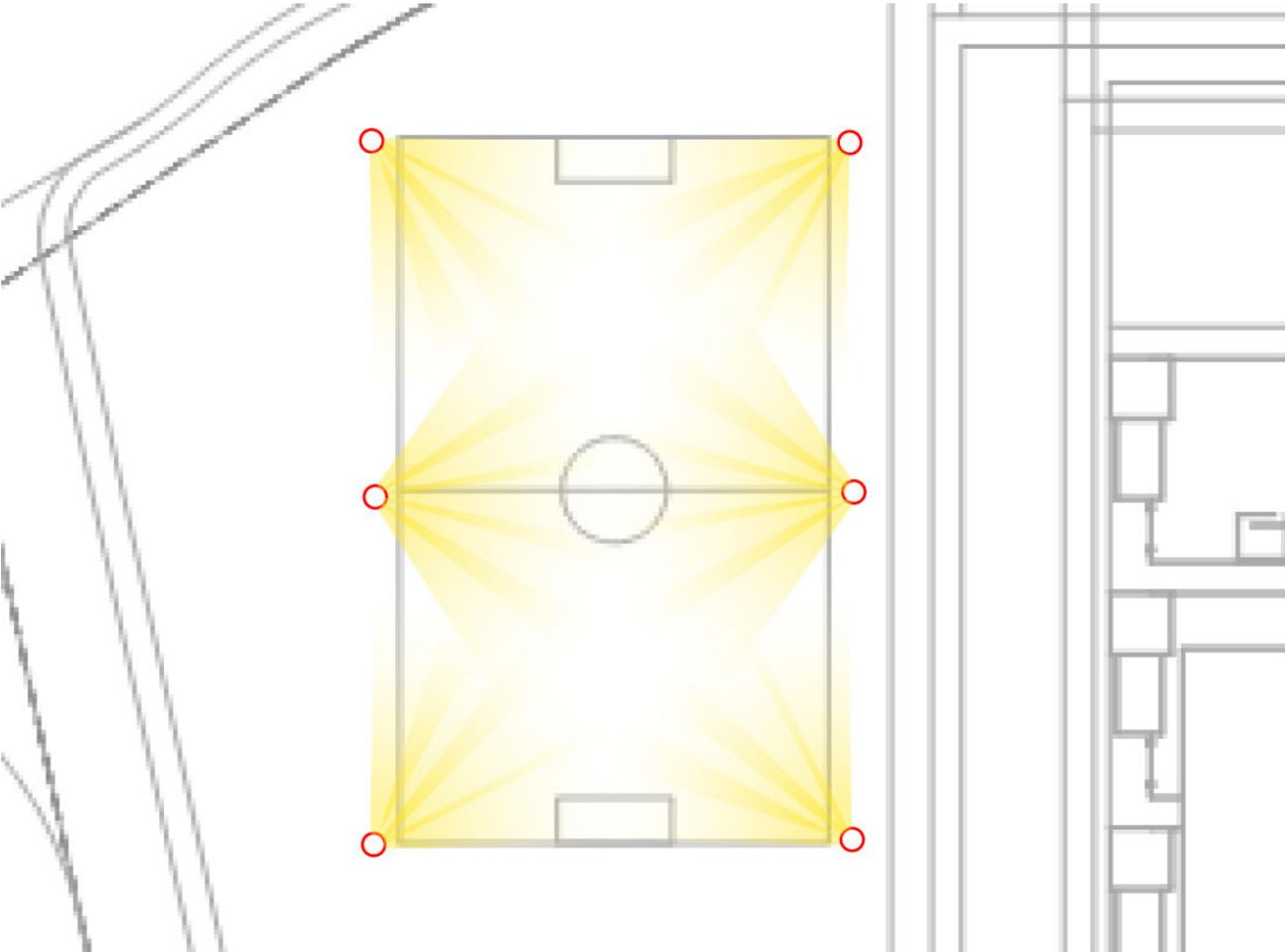
ZigBee		Wireless Control
Input Voltage		15 Vdc
Max. Power Consumption		0.3 W (@15Vdc)
Standard		2.4 GHz - IEEE 802.15.4 (Compatible)
Network		Mesh
RF Tx Power		Max. +8 dBm (Typ. 5 dBm)
Data Rate		250 kbps
Security		128 bit AES Encryption Algorithms
Dimmer		PWM, 0 – 10 Vdc
Antenna		Omni Type, 2 dBi
RS-485		Wired Control
Input Voltage		15 Vdc
Max. Power Consumption		0.2 W (@15Vdc)
Communication Method		RS-485
Data Rate		38400 bps, 8-N-1
Dimmer Level		PWM, 0 – 10 Vdc



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2

Soccer field lighting uses floodlight luminaires mounted at 75 feet above grade to light the field surface. 1,829,000 lumens are used to illuminate each soccer field. The illuminance at the field surface: Max 22, Min 6, Avg 14 fc.



LED large scale floodlights - narrow beam distribution

Housing: Two piece die-cast aluminum construction consisting of an optical housing and a separate driver housing with thermal management fins. Die-castings are marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy.

Enclosure: Die-cast aluminum lens frame with clear safety glass lens secured by mechanically captive stainless steel fasteners. The internal optical assembly consists of reflectors constructed of pure anodized aluminum, silicone collimating lenses, and aluminum ring louvers. Fully gasketed using high temperature silicone gaskets for weather tight operation.

Mounting Yoke: $3/16"$ thick stainless steel yoke allows for vertical adjustment with die-cast aluminum luminaire attachment. Yoke is provided with mounting holes for various BEGA mounting accessories. Optionally available with mounting yoke rated to withstand a maximum of 3.0G vibration load rating per ANSI C136.21-2010.

Electrical: 303.0W LED luminaire, 323.0 total system watts, -30°C start temperature. Maximum ambient temperature 25°C . Integral 120V through 277V electronic LED driver, 0-10V dimming. LED module(s) are available from factory for easy replacement. Standard LED color temperature is 4000K with a >80 CRI. Available in 3000K (>80 CRI); add suffix K3 to order. Available in 2200K; consult factory for details.

Note: LEDs supplied with luminaire. Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to www.bega-us.com.

Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order.

CSA certified to U.S. and Canadian standards, suitable for wet locations. Protection class IP67.

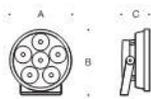
Weight: 45.7 lbs.

EPA (Effective projection area): 2.16 sq. ft.

Luminaire Lumens: 40,861 lumens

Mounting options:

- 79435** Mounting bracket for pole top $\varnothing 3"$
- 79553** Pole mount canopy for 5" O.D. pole
- 79554** Wall mount canopy
- 79550** Pole mount arm for for 5" O.D. pole
- 79551** Wall mount arm
- 79555** Pole mount hub for pole top $\varnothing 3"$
- 70762** Pole top for 2 floodlights
- 70763** Pole top for 3 floodlights
- 70764** Pole top for 4 floodlights
- 70761** Cross beam for 3 floodlights
- 70765** Cross beam for 6 floodlights



High-performance floodlights - narrow beam

	LED	β	A	B	C		
84521	303W	21°	19 1/2"	20 7/8"	9"	71101	71105

β = Beam angle 180° glare shield Internal louver

BEGA 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 FAX (805) 566-9474 www.bega-us.com

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- Type:
- BEGA Product:
- Project:
- Voltage:
- Color:
- Options:
- Modified:



LED large scale floodlights - high ambient temperature - wide beam distribution

BEGA

Application

LED high-performance floodlights for use in high ambient temperatures with wide beam light distribution for use on bridges, large signage and facades.

Materials

Luminaire housing and constructed of die-cast marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy
 Clear safety glass
 Reflector surface made of pure anodized aluminum
 Silicone optical collimating lens
 Composite concentric ring louvers
 High temperature silicone gasket
 Mechanically captive stainless steel fasteners
 3/16" stainless steel mounting yoke

NRTL listed to North American Standards, suitable for wet locations
 Protection class IP 67

Weight: 25.8 lbs.

EPA (Effective projection area): 1.29 sq. ft.

Electrical

Operating voltage 120-277VAC
 Minimum start temperature -30°C
 Maximum ambient temperature 45°C (50°C when aimed $> 50^{\circ}$)
 LED module wattage 124.8W
 System wattage 140.0W
 Controllability 0-10V dimmable
 Color rendering index $R_a > 80$
 Luminaire lumens 6,948 lumens (4000K)
 Lifetime at $T_a = 15^{\circ}\text{C}$ 300,000 h (L70)
 Lifetime at $T_a = 45^{\circ}\text{C}$ 170,000 h (L70)

LED color temperature

- 4000K - Product number + **K4**
- 3500K - Product number + **K35**
- 3000K - Product number + **K3**
- 2700K - Product number + **K27**
- 2200K - Product number + **K2**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details.

Finish

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors Black (BLK) White (WHT) RAL:
 Bronze (BRZ) Silver (SLV) CUS:

Type:

BEGA Product:

Project:

Modified:

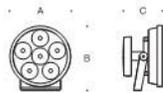
Available Accessories

- 71 110** 180° glare shield
- 79 510** 360° glare shield

Mounting options

- 79 435** Mounting bracket for pole top $\varnothing 3"$
- 79 553** Pole mount canopy for 5" O.D. pole
- 79 554** Wall mount canopy
- 79 550** Pole mount arm for for 5" O.D. pole
- 79 551** Wall mount arm
- 79 555** Pole mount hub for pole top $\varnothing 3"$
- 70 762** Pole top for 2 floodlights
- 70 763** Pole top for 3 floodlights
- 70 764** Pole top for 4 floodlights
- 70 761** Cross beam for 3 floodlights
- 70 765** Cross beam for 6 floodlights

See individual accessory spec sheet for details.



LED large scale floodlights - flat beam					
	LED	β	A	B	C
84 539	124.8W	12/54°	14 3/4"	16"	9 1/4"

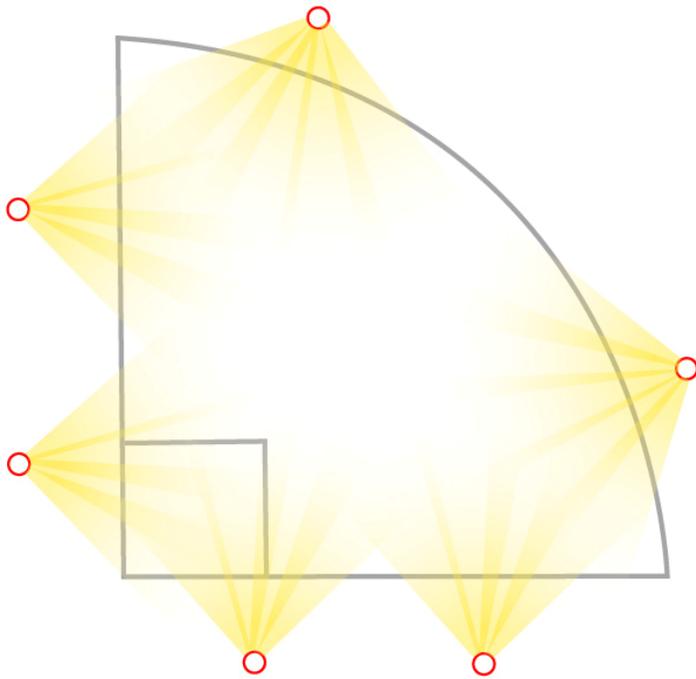
β = Beam angle

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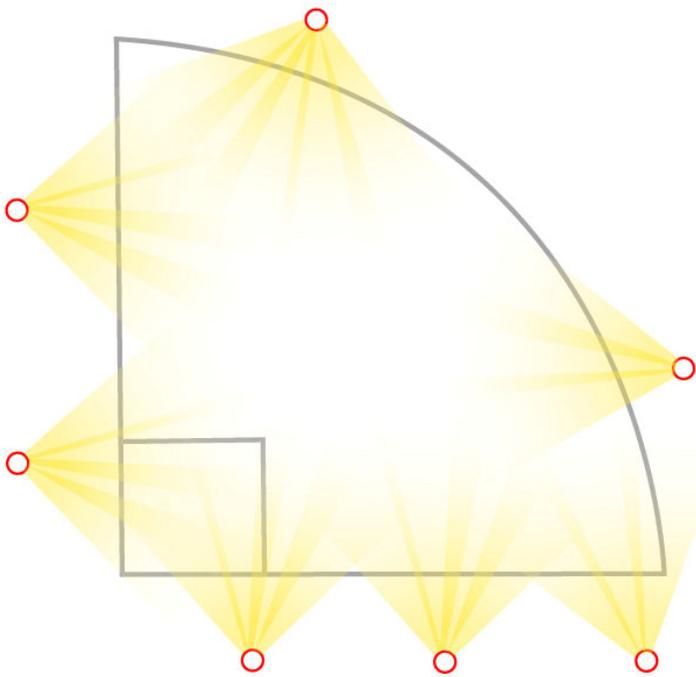
Due to the dynamic nature of lighting products and the associated technologies, luminaire data on this sheet is subject to change at the discretion of BEGA North America. For the most current technical data, please refer to bega-us.com
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The East Baseball field adjacent to the I-10 freeway uses floodlight luminaires mounted on 6 poles at 75 feet above grade to light the field surface. 1,474,000 total lumens are used to illuminate each baseball field. The illuminance at the field surface: Max 38 fc, Min 5 fc, Avg 20 fc.



The West Baseball field adjacent to the San Diego River includes floodlight luminaires mounted on 7 poles at 75 feet above grade to light the field surface. 1,474,000 total lumens are utilized to illuminate each baseball field. The illuminance at the field surface: Max 42 fc, Min 4.4 fc, Avg 17 fc.



LED large scale floodlights - narrow beam distribution

Housing: Two piece die-cast aluminum construction consisting of an optical housing and a separate driver housing with thermal management fins. Die-castings are marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy.

Enclosure: Die-cast aluminum lens frame with clear safety glass lens secured by mechanically captive stainless steel fasteners. The internal optical assembly consists of reflectors constructed of pure anodized aluminum, silicone collimating lenses, and aluminum ring louvers. Fully gasketed using high temperature silicone gaskets for weather tight operation.

Mounting Yoke: $\frac{3}{16}$ " thick stainless steel yoke allows for vertical adjustment with die-cast aluminum luminaire attachment. Yoke is provided with mounting holes for various BEGA mounting accessories. Optionally available with mounting yoke rated to withstand a maximum of 3.0G vibration load rating per ANSI C136.21-2010.

Electrical: 303.0W LED luminaire, 323.0 total system watts, -30°C start temperature. Maximum ambient temperature 25°C . Integral 120V through 277V electronic LED driver, 0-10V dimming. LED module(s) are available from factory for easy replacement. Standard LED color temperature is 4000K with a >80 CRI. Available in 3000K (>80 CRI); add suffix K3 to order. Available in 2200K; consult factory for details.

Note: LEDs supplied with luminaire. Due to the dynamic nature of LED technology, LED luminaire data on this sheet is subject to change at the discretion of BEGA-US. For the most current technical data, please refer to www.bega-us.com.

Finish: All BEGA standard finishes are polyester powder coat with minimum 3 mil thickness. Available in four standard BEGA colors: Black (BLK); White (WHT); Bronze (BRZ); Silver (SLV). To specify, add appropriate suffix to catalog number. Custom colors supplied on special order.

CSA certified to U.S. and Canadian standards, suitable for wet locations. Protection class IP67.

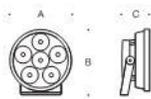
Weight: 45.7 lbs.

EPA (Effective projection area): 2.16 sq. ft.

Luminaire Lumens: 40,861 lumens

Mounting options:

- 79435** Mounting bracket for pole top $\varnothing 3"$
- 79553** Pole mount canopy for 5" O.D. pole
- 79554** Wall mount canopy
- 79550** Pole mount arm for for 5" O.D. pole
- 79551** Wall mount arm
- 79555** Pole mount hub for pole top $\varnothing 3"$
- 70762** Pole top for 2 floodlights
- 70763** Pole top for 3 floodlights
- 70764** Pole top for 4 floodlights
- 70761** Cross beam for 3 floodlights
- 70765** Cross beam for 6 floodlights



High-performance floodlights - narrow beam

	LED	β	A	B	C		
84521	303W	21°	19 $\frac{1}{2}$	20 $\frac{3}{8}$	9	71101	71105

β = Beam angle 180° glare shield Internal louver

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- Type:
- BEGA Product:
- Project:
- Voltage:
- Color:
- Options:
- Modified:



LED large scale floodlights - high ambient temperature - wide beam distribution

BEGA

Application

LED high-performance floodlights for use in high ambient temperatures with wide beam light distribution for use on bridges, large signage and facades.

Materials

Luminaire housing and constructed of die-cast marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy
 Clear safety glass
 Reflector surface made of pure anodized aluminum
 Silicone optical collimating lens
 Composite concentric ring louvers
 High temperature silicone gasket
 Mechanically captive stainless steel fasteners
 3/16" stainless steel mounting yoke

NRTL listed to North American Standards, suitable for wet locations
 Protection class IP 67

Weight: 25.8 lbs.

EPA (Effective projection area): 1.29 sq. ft.

Electrical

Operating voltage	120-277VAC
Minimum start temperature	-30°C
Maximum ambient temperature	45°C (50°C when aimed > 50°)
LED module wattage	124.8W
System wattage	140.0W
Controllability	0-10V dimmable
Color rendering index	Ra > 80
Luminaire lumens	6,948 lumens (4000K)
Lifetime at Ta = 15°C	300,000 h (L70)
Lifetime at Ta = 45°C	170,000 h (L70)

LED color temperature

4000K - Product number + **K4**
 3500K - Product number + **K35**
 3000K - Product number + **K3**
 2700K - Product number + **K27**
 2200K - Product number + **K2**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details.

Finish

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors	Black (BLK)	White (WHT)	RAL:
	Bronze (BRZ)	Silver (SLV)	CUS:

Type:

BEGA Product:

Project:

Modified:

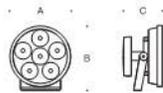
Available Accessories

71 110	180° glare shield
79 510	360° glare shield

Mounting options

79 435	Mounting bracket for pole top Ø 3"
79 553	Pole mount canopy for 5" O.D. pole
79 554	Wall mount canopy
79 550	Pole mount arm for for 5" O.D. pole
79 551	Wall mount arm
79 555	Pole mount hub for pole top Ø 3"
70 762	Pole top for 2 floodlights
70 763	Pole top for 3 floodlights
70 764	Pole top for 4 floodlights
70 761	Cross beam for 3 floodlights
70 765	Cross beam for 6 floodlights

See individual accessory spec sheet for details.



LED large scale floodlights - flat beam					
	LED	β	A	B	C
84 539	124.8W	12/54°	14 3/4"	16"	9 1/4"

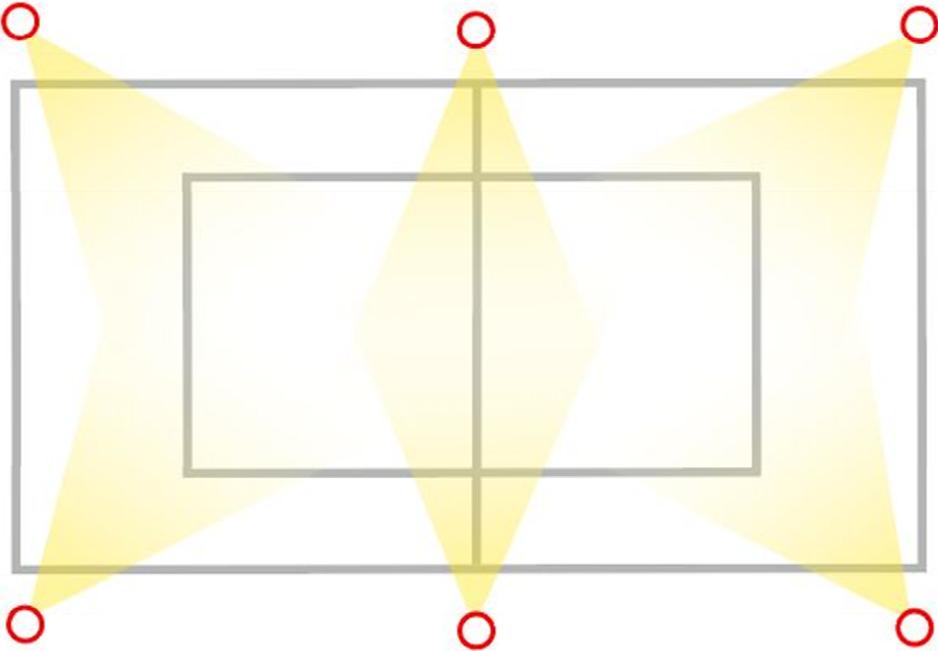
β = Beam angle

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Due to the dynamic nature of lighting products and the associated technologies, luminaire data on this sheet is subject to change at the discretion of BEGA North America. For the most current technical data, please refer to bega-us.com
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Tennis and basketball court lighting consists of floodlights mounted at 28 feet above grade. 142,600 total lumens are used to illuminate each tennis or basketball court. The illuminance at the court surface: Max 65 fc, Min 5 fc, Avg 30 fc.



LED large scale floodlights - high ambient temperature - wide beam distribution

BEGA

Application

LED high-performance floodlights for use in high ambient temperatures with wide beam light distribution for use on bridges, large signage and facades.

Materials

Luminaire housing and constructed of die-cast marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy
 Clear safety glass
 Reflector surface made of pure anodized aluminum
 Silicone optical collimating lens
 Composite concentric ring louvers
 High temperature silicone gasket
 Mechanically captive stainless steel fasteners
 3/16" stainless steel mounting yoke

NRTL listed to North American Standards, suitable for wet locations
 Protection class IP 67

Weight: 25.8 lbs.

EPA (Effective projection area): 1.29 sq. ft.

Electrical

Operating voltage	120-277VAC
Minimum start temperature	-30°C
Maximum ambient temperature	45°C (50°C when aimed > 50°)
LED module wattage	124.8W
System wattage	140.0W
Controllability	0-10V dimmable
Color rendering index	Ra > 80
Luminaire lumens	6,948 lumens (4000K)
Lifetime at Ta = 15°C	300,000 h (L70)
Lifetime at Ta = 45°C	170,000 h (L70)

LED color temperature

- 4000K - Product number + **K4**
- 3500K - Product number + **K35**
- 3000K - Product number + **K3**
- 2700K - Product number + **K27**
- 2200K - Product number + **K2**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details.

Finish

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors	Black (BLK)	White (WHT)	RAL:
	Bronze (BRZ)	Silver (SLV)	CUS:

Type:

BEGA Product:

Project:

Modified:

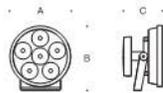
Available Accessories

- 71 110** 180° glare shield
- 79 510** 360° glare shield

Mounting options

- 79 435** Mounting bracket for pole top Ø 3"
- 79 553** Pole mount canopy for 5" O.D. pole
- 79 554** Wall mount canopy
- 79 550** Pole mount arm for for 5" O.D. pole
- 79 551** Wall mount arm
- 79 555** Pole mount hub for pole top Ø 3"
- 70 762** Pole top for 2 floodlights
- 70 763** Pole top for 3 floodlights
- 70 764** Pole top for 4 floodlights
- 70 761** Cross beam for 3 floodlights
- 70 765** Cross beam for 6 floodlights

See individual accessory spec sheet for details.



LED large scale floodlights - flat beam					
	LED	β	A	B	C
84 539	124.8W	12/54°	14 3/4"	16"	9 1/4"

β = Beam angle

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Due to the dynamic nature of lighting products and the associated technologies, luminaire data on this sheet is subject to change at the discretion of BEGA North America. For the most current technical data, please refer to bega-us.com
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Street lighting poles are 45' tall and spaced 100 feet on center on all streets within the project. Each luminaire produces 10,700 lumens. Illuminance at the ground surface: Max 1.1 fc, Min 0.3 fc, Avg 0.7 fc.

LEDway® Series

LEDway® LED Street Light

Product Description

Luminaire housing is all aluminum construction. Standard luminaire utilizes terminal block for power input suitable for #2-#14 AWG wire. Luminaire is designed to mount on a 2" (51mm) IP, 2.375" (60mm) O.D. horizontal tenon and/or a 1.25" (32mm) IP, 1.66" (42mm) O.D. horizontal tenon (minimum 8" [203mm] in length) and is adjustable +/- 5° to allow for luminaire leveling (two axis T-level included).

Applications: Roadway, parking lots, walkways and general area spaces

Performance Summary

- Patented NanoOptic® Product Technology
- Made in the U.S.A. of U.S. and imported parts
- CRI:** Minimum 70 CRI
- CCT:** 4000K (+/- 300K), 5700K (+/- 500K) standard
- Limited Warranty*:** 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

* See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Field-Installed		
Bird Spikes for Light Engine XA-BRDSPK30 - 20-30 LED XA-BRDSPK60 - 40-60 LED XA-BRDSPK90 - 70-90 LED XA-BRDSPK120 - 100-120 LED	Bird Spikes for Housing XA-BRDSPKHSG	External Backlight Shield XA-XSLBLS30 - 20-30 LED XA-XSLBLS60 - 40-60 LED XA-XSLBLS90 - 70-90 LED XA-XSLBLS120 - 100-120 LED



LED Count (x10)	Dim. "A"	Weight
02	17.5" (443mm)	13.0 lbs. (5.9kg)
03	17.5" (443mm)	13.5 lbs. (6.1kg)
04	22.0" (559mm)	16.5 lbs. (7.5kg)
05	22.0" (559mm)	17.0 lbs. (7.7kg)
06	22.0" (559mm)	17.5 lbs. (7.9kg)
07	26.8" (681mm)	22.0 lbs. (10.0kg)
08	26.8" (681mm)	22.5 lbs. (10.2kg)
09	26.8" (681mm)	22.5 lbs. (10.2kg)
10	33.1" (842mm)	27.5 lbs. (12.5kg)
11	33.1" (842mm)	28.0 lbs. (12.7kg)
12	33.1" (842mm)	28.0 lbs. (12.7kg)

Ordering Information

Example: STR-LWY-2M-HT-02-E-UL-SV-700

STR-LWY		HT		E											
Product	Optic	Mounting	LED Count (x10)	Series	Voltage	Color Options*	Drive Current	Options							
STR-LWY	2M Type II Medium	HT Horizontal Tenon	02	E	UL Universal 120-277V	BK Black	525 525mA	DIM 0-10V Dimming - Control by others - Refer to Dimming spec sheet for details - Can't exceed specified drive current							
			03												
	2S Type II Short		04						UH Universal 347-480V	BZ Bronze	700 700mA	R NEMA® Photocell Receptacle - 3-pin receptacle per ANSI C136.10 - Intended for downlight applications with maximum 45° tilt - Photocell and shorting cap by others			
			05												
	3M Type III Medium		06										SV Silver	UTL Utility - Includes exterior wattage label that reflects watts for the drive current selected. The ability to exceed selected drive current will be disabled	
			07												
	4M Type IV Medium		08												40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire
			09												
	5M Type V Medium		10												
			11												
	12														

* Light engine portion of extrusion is not painted and will remain natural aluminum regardless of color selection



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Rev. Date: V4 10/04/2018

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LEDway® LED Street Light

Product Specifications

CONSTRUCTION & MATERIALS

- Housing is all aluminum construction
- Terminal block for power input suitable for #2-#14 AWG wire
- HT Mount is designed to mount on a 2" (51mm) IP, 2.375" (60mm) O.D. horizontal tenon and/or a 1.25" (32mm) IP, 1.66" (42mm) O.D. horizontal tenon (minimum 8" [203mm] in length) and is adjustable +/- 5° to allow for luminaire leveling (two axis T-level included)
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, and silver are available
- **Weight:** See Dimensions and Weight chart on page 1

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Quick disconnect harness suitable for mate and break under load provided on power feed to driver for ease of maintenance
- Integral 10kV surge suppression protection standard
- To address inrush current, slow blow fuse or type C/D breaker should be used
- **10V Source Current:** 20-60 LED: 0.15mA; 80-120 LED: 0.30mA

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Meets CALTrans 611 Vibration testing and GR-63-CORE Section 4.4.1/5.4.2 Earthquake Zone 4
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- 10K surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Luminaire and finish are endurance tested to withstand 5,000 hours of elevated ambient salt fog as defined in ASTM Standard B 117
- Meets Buy American requirements within ARRA
- Meets FCC Part 15 standards for conducted and radiated emissions
- **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

Electrical Data*								
LED Count (x10)	System Watts 120-277V	System Watts 347-480V	Total Current (A)					
			120V	208V	240V	277V	347V	480V
525mA								
02	35	39	0.30	0.18	0.16	0.15	0.12	0.10
03	53	55	0.45	0.26	0.23	0.21	0.16	0.13
04	66	71	0.56	0.33	0.29	0.26	0.21	0.16
05	86	87	0.72	0.42	0.37	0.33	0.25	0.19
06	100	103	0.84	0.49	0.43	0.38	0.30	0.22
07	120	124	1.01	0.60	0.54	0.49	0.37	0.28
08	139	140	1.17	0.69	0.62	0.56	0.41	0.31
09	149	156	1.26	0.74	0.66	0.59	0.46	0.34
10	167	172	1.41	0.83	0.73	0.65	0.50	0.38
11	182	188	1.54	0.89	0.79	0.70	0.55	0.41
12	197	204	1.67	0.96	0.85	0.75	0.59	0.44
700mA								
02	47	51	0.39	0.23	0.21	0.19	0.15	0.12
03	70	73	0.59	0.34	0.30	0.27	0.21	0.16
04	91	93	0.77	0.45	0.39	0.35	0.27	0.20
05	113	115	0.96	0.55	0.48	0.43	0.33	0.25
06	134	135	1.13	0.65	0.57	0.50	0.39	0.29
07	163	165	1.37	0.80	0.71	0.63	0.48	0.36
08	182	186	1.54	0.90	0.79	0.70	0.54	0.40
09	203	207	1.72	0.99	0.87	0.78	0.60	0.45
10	227	229	1.92	1.11	0.97	0.86	0.67	0.49
11	248	250	2.10	1.21	1.05	0.93	0.73	0.53
12	267	274	2.26	1.30	1.13	1.00	0.80	0.58

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-480V +/-10%.

Cree LEDway® Ambient Adjusted Lumen Maintenance ¹					
Ambient	Initial LMF	25K hr Projected ² LMF	50K hr Projected ² LMF	75K hr Calculated ³ LMF	100K hr Calculated ³ LMF
5°C (41°F)	1.04	1.01	0.99	0.98	0.96
10°C (50°F)	1.03	1.00	0.98	0.97	0.95
15°C (59°F)	1.02	0.99	0.97	0.96	0.94
20°C (68°F)	1.01	0.98	0.96	0.95	0.93
25°C (77°F)	1.00	0.97	0.95	0.94	0.92

¹Lumen maintenance values at 25°C are calculated per TM-21 based on LM-80 data and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors
²In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) (i.e. the packaged LED chip)
³In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) (i.e. the packaged LED chip)



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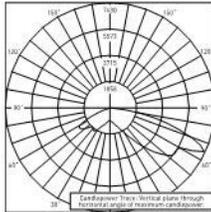
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LEDway® LED Street Light

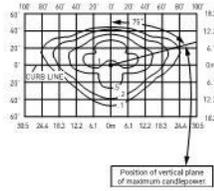
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards by a NVLAP accredited laboratory. To obtain an IES file specific to your project consult: <http://lighting.cree.com/products/outdoor/street-and-roadway/ledway-series>

2M



CESTL Test Report #: 2015-0025
STR-LWY-2M-**-06-E-UL-700-40K
Initial Delivered Lumens: 10,706



STR-LWY-2M-**-03-E-UL-700-40K
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 5,688
Initial FC at grade

Type II Medium Distribution				
LED Count (x10)	4000K		5700K	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
525mA				
02	3,064	B1 U0 G1	3,182	B1 U0 G1
03	4,550	B1 U0 G1	4,725	B1 U0 G1
04	6,079	B2 U0 G2	6,313	B2 U0 G2
05	7,549	B2 U0 G2	7,839	B2 U0 G2
06	9,000	B2 U0 G2	9,346	B2 U0 G2
07	10,532	B2 U0 G2	10,937	B2 U0 G2
08	11,982	B3 U0 G3	12,443	B3 U0 G3
09	13,419	B3 U0 G3	13,935	B3 U0 G3
10	14,994	B3 U0 G3	15,571	B3 U0 G3
11	16,440	B3 U0 G3	17,072	B3 U0 G3
12	17,880	B3 U0 G3	18,568	B3 U0 G3
700mA				
02	3,830	B1 U0 G1	3,977	B1 U0 G1
03	5,688	B2 U0 G2	5,907	B2 U0 G2
04	7,598	B2 U0 G2	7,891	B2 U0 G2
05	9,436	B2 U0 G2	9,799	B2 U0 G2
06	11,250	B3 U0 G3	11,683	B3 U0 G3
07	13,145	B3 U0 G3	13,671	B3 U0 G3
08	14,978	B3 U0 G3	15,554	B3 U0 G3
09	16,774	B3 U0 G3	17,419	B3 U0 G3
10	18,742	B3 U0 G3	19,463	B3 U0 G3
11	20,550	B3 U0 G3	21,340	B3 U0 G3
12	22,351	B3 U0 G3	23,210	B3 U0 G3

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>.

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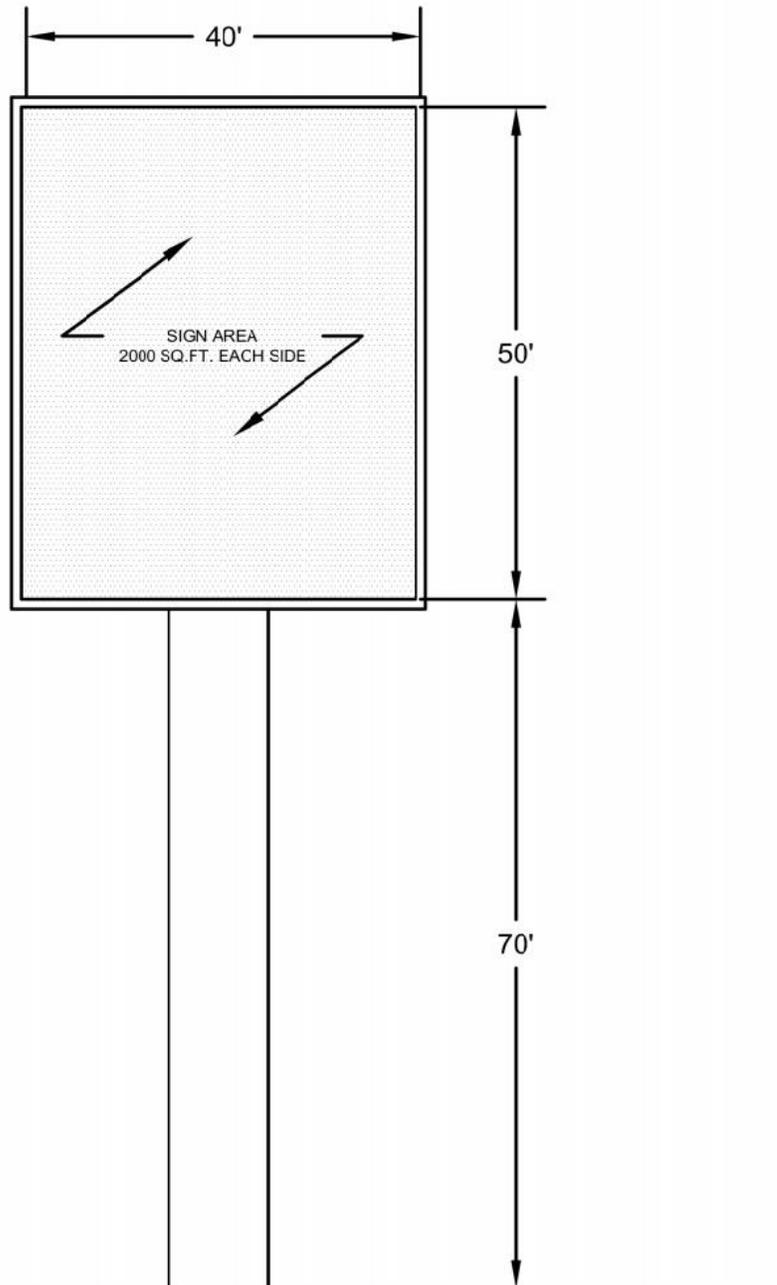
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APPENDIX B: Sign Lighting Concept Plan

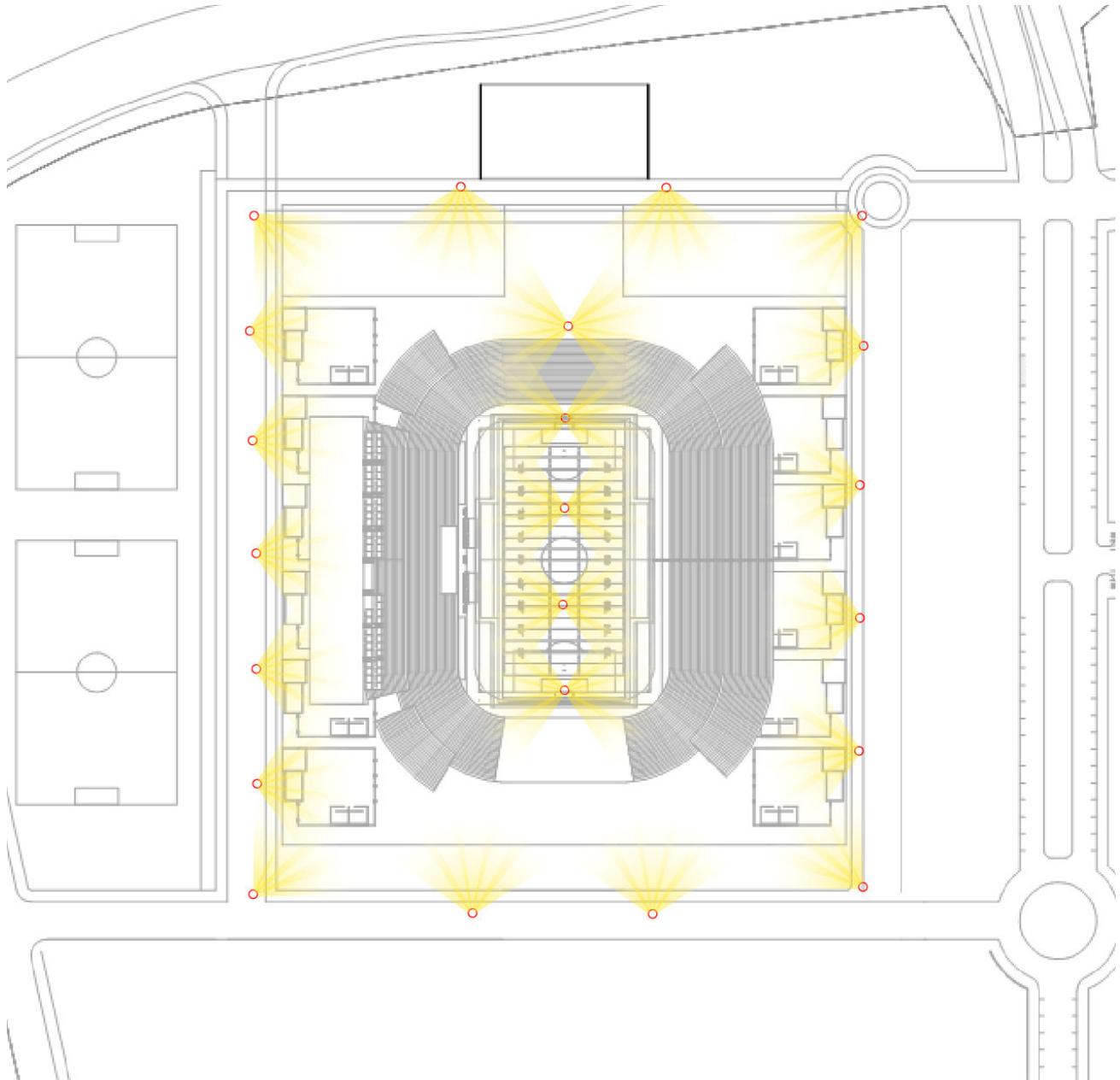
The sign Lighting Concept Plan consists of three identical signs at the perimeter of the site at the north and east project boundaries. All signs are double sided with a brightness of 600 candelas per square meter. Signs are oriented perpendicular to the adjacent roadways.





APPENDIX C: Construction Lighting Concept Plan

Construction Lighting illuminates the stadium construction site to an average of 10 fc. 7,773,000 total lumens are used to illuminate the construction site to an average of 10 fc. 17 poles, each at 124 feet above grade surround the construction site on all sides. 5 Additional poles are located within the project site.



APPENDIX D: CALGreen 2016 Building Energy Efficiency Standards, pages 40,41*2016 Building Energy Efficiency Standards**Page 40*

10-114 – DETERMINATION OF OUTDOOR LIGHTING ZONES AND ADMINISTRATIVE RULES FOR USE

This section establishes rules for implementing outdoor lighting zones to show compliance with Section 140.7 of Title 24, California Code of Regulations, Part 6.

- (a) **Lighting Zones.** Exterior lighting allowances in California vary by Lighting Zones (LZ).
- (b) **Lighting Zone Characteristics.** TABLE 10-114-A specifies the relative ambient illumination level and the statewide default location for each lighting zone.
- (c) **Amending the Lighting Zone Designation.** A local jurisdiction may officially adopt changes to the lighting zone designation of an area by following a public process that allows for formal public notification, review, and comment about the proposed change. The local jurisdiction may determine areas where Lighting Zone 4 is applicable and may increase or decrease the lighting zones for areas that are in State Default Lighting Zones 1, 2 and 3, as specified in TABLE 10-114-A.
- (d) **Commission Notification, Amended Outdoor Lighting Zone Designation.** Local jurisdictions who adopt changes to the State Default Lighting Zones shall notify the Commission by providing the following materials to the Executive Director:
 - 1. A detailed specification of the boundaries of the adopted Lighting Zones, consisting of the county name, the city name if any, the zip code(s) of the re-designated areas, and a description of the physical boundaries within each zip code;
 - 2. A description of the public process that was conducted in adopting the Lighting Zone changes; and
 - 3. An explanation of how the adopted Lighting Zone changes are consistent with the specifications of Section 10-114.
- (e) The Commission shall have the authority to not allow Lighting Zone changes which the Commission finds to be inconsistent with the specifications of Section 10-114.

10-114 – DETERMINATION OF OUTDOOR LIGHTING ZONES AND ADMINISTRATIVE RULES FOR USE

TABLE 10-114-A LIGHTING ZONE CHARACTERISTICS AND RULES FOR AMENDMENTS BY LOCAL JURISDICTIONS

Zone	Ambient Illumination	State wide Default Location	Moving Up to Higher Zones	Moving Down to Lower Zones
LZ0	Very Low	Undeveloped areas of government designated parks, recreation areas, and wildlife preserves.	Undeveloped areas of government designated parks, recreation areas, and wildlife preserves can be designated as LZ1 or LZ2 if they are contained within such a zone.	Not applicable
LZ1	Low	Developed portion of government designated parks, recreation areas, and wildlife preserves. Those that are wholly contained within a higher lighting zone may be considered by the local government as part of that lighting zone.	Developed portion of a government designated park, recreation area, or wildlife preserve, can be designated as LZ2 or LZ3 if they are contained within such a zone.	Not applicable.
LZ2	Moderate	Rural areas, as defined by the 2010 U.S. Census.	Special districts within a default LZ2 zone may be designated as LZ3 or LZ4 by a local jurisdiction. Examples include special commercial districts or areas with special security considerations located within a rural area.	Special districts and government designated parks within a default LZ2 zone may be designated as LZ1 by the local jurisdiction for lower illumination standards, without any size limits.
LZ3	Moderately High	Urban areas, as defined by the 2010 U.S. Census.	Special districts within a default LZ3 may be designated as a LZ4 by local jurisdiction for high intensity nighttime use, such as entertainment or commercial districts or areas with special security considerations requiring very high light levels.	Special districts and government designated parks within a default LZ3 zone may be designated as LZ1 or LZ2 by the local jurisdiction, without any size limits.
LZ4	High	None.	Not applicable.	Not applicable.

APPENDIX E: CALGreen 2016 Building Energy Efficiency Standards, Table 5.106.9

TABLE 5.106.8 [N]
 MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT AND GLARE (BUG) RATINGS^{1,2}

ALLOWABLE RATING	LIGHTING ZONE 1	LIGHTING ZONE 2	LIGHTING ZONE 3	LIGHTING ZONE 4
Maximum Allowable Backlight Rating³				
Luminaire greater than 2 mounting heights (MH) from property line	No Limit	No Limit	No Limit	No Limit
Luminaire back hemisphere is 1 – 2 MH from property line	B2	B3	B4	B4
Luminaire back hemisphere is 0.5 – 1 MH from property line	B1	B2	B3	B3
Luminaire back hemisphere is less than 0.5 MH from property line	B0	B0	B1	B2
Maximum Allowable Uplight Rating				
For area lighting ⁴	U0	U0	U0	U0
For all other outdoor lighting, including decorative luminaires	U1	U2	U3	U4
Maximum Allowable Glare Rating⁵				
Luminaire greater than 2 MH from property line	G1	G2	G3	G4
Luminaire front hemisphere is 1 – 2 MH from property line	G0	G1	G1	G2
Luminaire front hemisphere is 0.5 – 1 MH from property line	G0	G0	G1	G1
Luminaire back hemisphere is less than 0.5 MH from property line	G0	G0	G0	G1

1. IESNA Lighting Zones 0 and 5 are not applicable; refer to Lighting Zones as defined in the *California Energy Code* and Chapter 10 of the *California Administrative Code*.
2. For property lines that abut public walkways, bikeways, plazas and parking lots, the property line may be considered to be 5 feet beyond the actual property line for purpose of determining compliance with this section. For property lines that abut public roadways and public transit corridors, the property line may be considered to be the centerline of the public roadway or public transit corridor for the purpose of determining compliance with this section.
3. If the nearest property line is less than or equal to two mounting heights from the back hemisphere of the luminaire distribution, the applicable reduced Backlight rating shall be met.
4. General lighting luminaires in areas such as outdoor parking, sales or storage lots shall meet these reduced ratings. Decorative luminaires located in these areas shall meet U-value limits for "all other outdoor lighting."
5. If the nearest property line is less than or equal to two mounting heights from the front hemisphere of the luminaire distribution, the applicable reduced Glare rating shall be met.

APPENDIX F: IESNA 10th Edition Lighting Handbook, Table 26.4, Nighttime Outdoor Lighting Zone Definitions
Table 26.4 | Nighttime Outdoor Lighting Zone Definitions

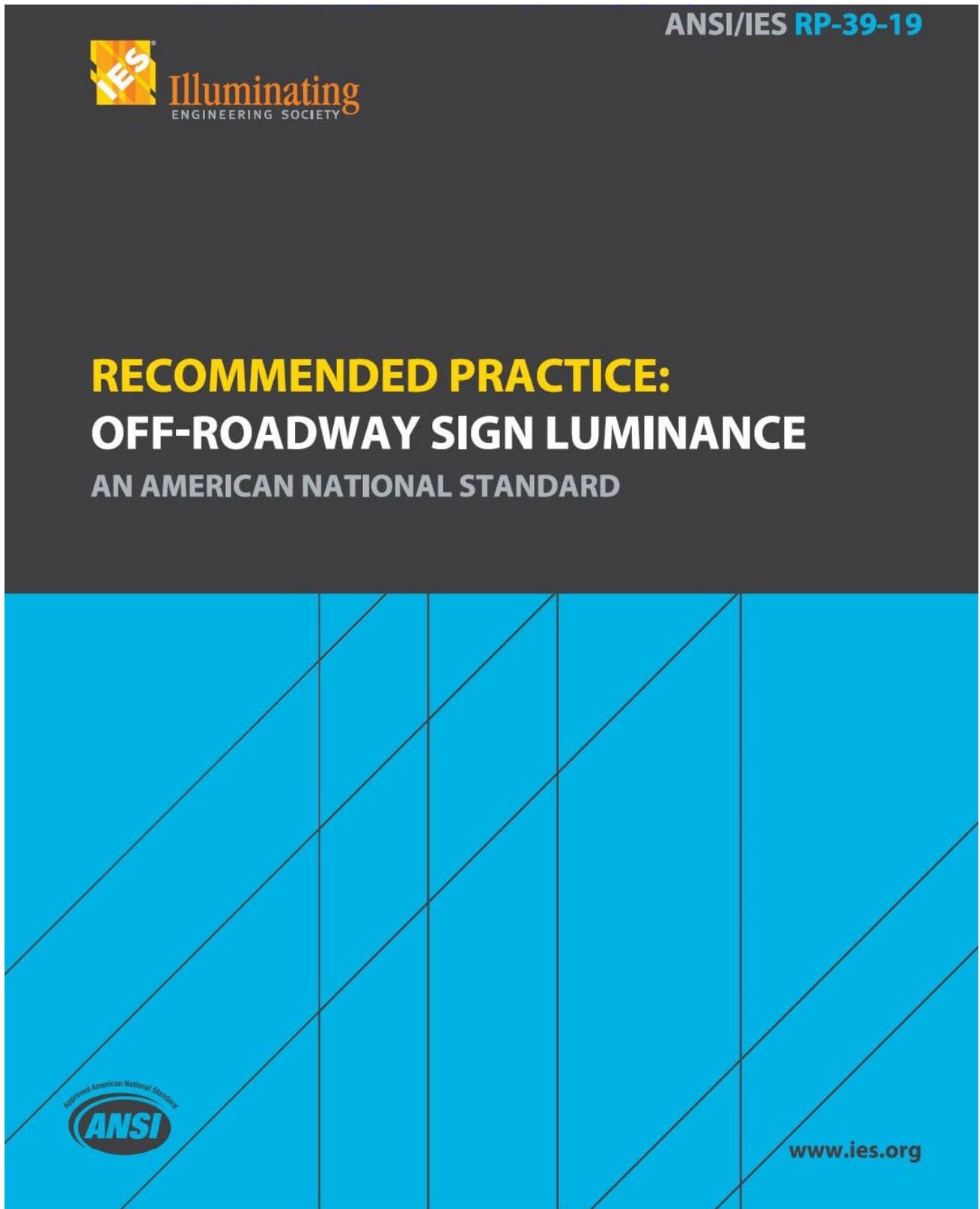
Zone	Outdoor Lighting Situation	Definition
LZ4	High Ambient Lighting	Areas of human activity where the vision of human residents and users is adapted to high light levels. Lighting is generally considered necessary for safety, security and/or convenience and it is mostly uniform and/or continuous. After curfew, lighting may be extinguished or reduced in some areas as activity levels decline.
LZ3	Moderately High Ambient Lighting	Areas of human activity where the vision of human residents and users is adapted to moderately high light levels. Lighting is generally desired for safety, security and/or convenience and it is often uniform and/or continuous. After curfew, lighting may be extinguished or reduced in most areas as activity levels decline.
LZ2	Moderate Ambient Lighting	Areas of human activity where the vision of human residents and users is adapted to moderate light levels. Lighting may typically be used for safety and convenience but it is not necessarily uniform or continuous. After curfew, lighting may be extinguished or reduced as activity levels decline.
LZ1	Low Ambient Lighting	Areas where lighting might adversely affect flora and fauna or disturb the character of the area. The vision of human residents and users is adapted to low light levels. Lighting may be used for safety and convenience but it is not necessarily uniform or continuous. After curfew, most lighting should be extinguished or reduced as activity levels decline.
LZ0	No Ambient Lighting	Areas where the natural environment will be seriously and adversely affected by lighting. Impacts include disturbing the biological cycles of flora and fauna and/or detracting from human enjoyment and appreciation of the natural environment. Human activity is subordinate in importance to nature. The vision of human residents and users is adapted to the darkness, and they expect to see little or no lighting. When not needed, lighting should be extinguished.

APPENDIX G: IESNA 10th Edition Lighting Handbook, Table 26.5, Recommended Light Trespass Illuminance Limits
Table 26.5 | Recommended Light Trespass Illuminance Limits

Lighting Zone	Limit in lux ^a	
	Pre-curfew	Post-curfew
LZ4	15	6
LZ3	8	3
LZ2	3	1
LZ1	1	0
LZ0	0.1	0

- a. Maximum initial illuminance on a plane perpendicular to the line of sight to the luminaire(s). Plane located at observer position where light trespass is under review. [7]

APPENDIX H: ANSI/IES RP39-19 Recommended Practice: Off-Roadway Sign Luminance



Recommended Practice: Off-Roadway Sign Luminance

e.g., a computer monitor ($< 200 \text{ cd/m}^2$) and a sunlit wall outside a window ($> 5,000 \text{ cd/m}^2$) can be seen next to each other without turning the head. Excessive transient adaptation soon results in eye fatigue.

transition: A visual effect used on an electronic message sign to change from one message to another.

window sign: A sign affixed to the surface of a window with its message intended to be visible to the exterior environment.

3.0 Lighting Zones

Similar to land use zoning, lighting zones are set by a community to help define desired ambient light levels. The lighting zones range from an area or district with no ambient light (LZ0) to one of very high ambient light (LZ4). Default zones will typically be LZ1, LZ2 or LZ3.

Lighting zones have the following attributes:

- Help communities minimize the contrast (and conflict) between extremes in lighting, such as a brightly lighted car dealership adjacent to or within line of sight of a residential neighborhood
- May determine restrictions on outdoor lighting that impacts “places of sleep,” such as residential areas, hospitals, and long-term care facilities
- May employ vertical distinctions, such as in mixed-use facilities where the commercial aspects are at street level and residential units are on the higher levels
- Encourage minimal changes in visual adaptation when traveling from site to site

Brief descriptions follow. For more details on the determination and use of lighting zones, the reader is referred to the *IDA/IES Model Lighting Ordinance*,⁶ or *IES RP-33-14, Lighting for Exterior Environments*.⁷

LZ0: No ambient light. Areas where the natural environment could be affected seriously and adversely by small amounts of electric lighting at night. This is the recommended default zone for wilderness areas, parks and preserves, and undeveloped rural areas.

LZ1: Low ambient light. Developed areas within a natural environment and areas of human activity that are inherently dark at night. This is the recommended default zone for rural and low-density residential areas.

LZ2: Moderate ambient light. Areas of human activity (i.e., habitation, recreation and/or work) where electric lighting *may* be required for safety and convenience at night. This is the recommended default zone for light-commercial business districts and high-density or mixed-use residential districts.

LZ3: Moderately high ambient light. Areas of human activity (i.e., habitation, recreation and/or work) where electric lighting may be continuous and is required for safety and convenience at night. This is the recommended default zone for large cities’ business districts.

LZ4: Very high ambient light. Areas of very high levels of human activity at night, including significant interaction among pedestrians and/or vehicles. Most cities do not have areas that meet this criterion. This is not a default zone.

4.0 Recommendations

4.1 Sign Luminance Recommendations

A sign may not exceed a maximum luminance level in any direction, measured in candelas per square meter (cd/m^2), or nits, based on the lighting zone (see **Section 3.0**) in which it is located, regardless of the method of illumination. These maximum luminance levels^{8,9,10} are provided in **Table 4-1**.

Table 4-1. Maximum Sign Luminance by Lighting Zone (cd/m^2 , or nits)

LIGHTING ZONE	NIGHTTIME	DAYTIME
LZ0	0	0
LZ1	20	3,500
LZ2	40	3,500
LZ3	80	3,500
LZ4	160	3,500

ANSI/IES RP-39-19

These recommendations are the same for any technology used to produce sign lighting. Many measures of performance and perception have been shown to depend on luminance, because it is one of the direct stimuli to vision. For this reason, all recommendations are made using cd/m² or nits, and a calibrated luminance meter is required to accurately measure sign lighting for compliance. (See **Section 4.4 Measurement of Maximum Sign Luminance.**)

All illuminated signs shall comply with the maximum luminance levels specified in **Table 4-1** for nighttime conditions beginning at least one-half hour before apparent sunset for the specific geographic location and date. All illuminated signs shall comply with this maximum luminance level throughout the night, if the sign is energized, until no later than one-half hour before apparent sunrise, at which time the sign may resume luminance levels appropriate for daytime conditions, when required or appropriate.

4.2 Environmental Considerations

Signs that have external illumination, whether the light source is mounted above or below the sign face or panel, shall have lighting fixtures (luminaires) that are aimed toward the sign surface. The luminaire optical system shall restrict the illumination to the sign face and minimize light trespass and off-site glare.

4.3 Electronic Sign Message Transition and Duration Recommendations

Message duration should be limited to not less than twenty seconds in length, and no motion video or rapidly flashing graphic elements are permitted.^{11,12,13}

4.4 Measurement of Maximum Sign Luminance

Measurements of maximum sign luminance shall follow the following procedures:

- Sign luminance shall be measured using a luminance meter with a current NIST^{*}-traceable calibration. The use of a luminance meter with a ½-degree field of view is recommended.
- Luminance measurements shall be taken during the hours between the end of evening civil twilight and the beginning of morning civil twilight.

- Luminance measurements shall be taken from a position as close to the sign being measured as reasonably possible.
- The light meter (photometer) shall be positioned for measurements such that the portion of the sign being measured fills the central circle of the viewfinder (the "measurement area"). All measurements shall be taken of the sign surface at its maximum level of illuminance. In addition, the field of view of the meter used shall be fully covered by the white or lightest-colored surface of the sign. It may be necessary to move the photometer closer to the sign until this is possible.
- At least 5 individual measurements shall be made for each sign, and the measurements should be averaged.
- The use of a tripod is recommended.
- Measurements shall be taken on cloudless nights with no atmospheric elements such as rain, snow, fog, or other atmospheric particulates that could affect the measurements.

^{*}U.S. National Institute of Science and Technology

APPENDIX I: Building Lighting Illuminance Light Trespass Calculation (fc)

Building Lighting illuminance data presented below is derived from the lighting illuminance calculations prepared as per the methods described in Section 6.2 above. Illuminance data is presented in the following tables with location coordinates defined relative to the elevation and horizontal distance from lower left, viewing from the Project to the vertical plane where Light Trespass illuminance is under review. Grid data is displayed at ten feet on center, vertical and horizontal.

VP-E1

HORIZONTAL		5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165	
VERTICAL (ft)	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
	48	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0.1
	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
	28	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0.1
	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0
	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-12	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0
	-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-E1

HORIZONTAL		175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
VERTICAL (ft)	58	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	48	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	38	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	28	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0.1	0.1
	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
	-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-E1

HORIZONTAL		345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
VERTICAL (ft)	58	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	48	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	38	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	28	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	18	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	8	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-2	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-12	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-22	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-E1
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
58	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
48	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.3
38	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
28	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1
18	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.1	0.2	0.1	0.1
-2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1
-12	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.3	0.1	0.2	0.1	0.1
-22	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1

VP-E1
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
58	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
48	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.3	0.1	0.1	0.3
38	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
28	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2
18	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1
8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
-2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
-12	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1
-22	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-E1
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
58	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
48	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
38	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2
28	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2
18	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2
8	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
-2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2
-12	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
-22	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.3	0.3	0.1	0.1	0.1	0.2	0.1	0.1	0.1

VP-E1
HORIZONTAL

	1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
58	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
48	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
38	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
28	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
18	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
-2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
-12	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
-22	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VP-E1

HORIZONTAL		1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
VERTICAL (ft)	58	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	48	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	38	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	28	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	18	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2
	-2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1
	-12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2
	-22	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1

VP-E1

HORIZONTAL		1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525
VERTICAL (ft)	58	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	48	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
	38	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	28	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	18	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-12	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-22	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-E1

HORIZONTAL		1535	1545	1555	1565
VERTICAL (ft)	58	0.2	0.2	0.2	0.2
	48	0.1	0.1	0.1	0.1
	38	0.2	0.2	0.2	0.1
	28	0.2	0.2	0.2	0.2
	18	0.2	0.2	0.2	0.2
	8	0.1	0.1	0.1	0.1
	-2	0.1	0.1	0.1	0.1

VP-E2

HORIZONTAL		5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
VERTICAL (ft)	245	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0
	235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

VP-E2

HORIZONTAL		175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
VERTICAL (ft)	245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0.1	0.1
	115	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1
	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1
	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

VP-E2
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
245	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0.1	0	0.1
235	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1
225	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-E2
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0.1
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0	0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0	0	0.1	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VERTICAL (ft)

VP-E2
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
165	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
145	0.1	0.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
75	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2
65	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
5	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VP-E2
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
245	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1
235	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2
225	0.3	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3
215	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.4	0.3	0.3	0.4	0.2
205	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3
195	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3
185	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
175	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2
165	0.3	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
155	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.1	0.1	0.3	0.3	0.1	0.1	0.3	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.4
135	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4
125	0.1	0.1	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
115	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3
105	0.3	0.1	0.4	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4
95	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.4	0.3
85	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3
75	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.5	0.3	0.3	0.3	0.4
65	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.4	0.3
45	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
35	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3
25	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3
5	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3

VP-E2
HORIZONTAL

	1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
245	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2
235	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.4	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3
215	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
205	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.4	0.4	0.2
185	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.3
175	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.4
165	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3
155	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.4	0.3	0.3
145	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.4	0.3
135	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3
125	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.4	0.3
115	0.4	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4
105	0.2	0.2	0.4	0.3	0.3	0.3	0.4	0.3	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.2	0.4
95	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3
85	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
75	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
65	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3
55	0.3	0.3	0.4	0.3	0.3	0.5	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.3
45	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.3
35	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.5	0.5	0.4	0.3	0.3	0.4
25	0.2	0.2	0.3	0.4	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3
15	0.3	0.3	0.3	0.4	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3
5	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.3

VERTICAL (ft)

VP-E2
HORIZONTAL

	1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
215	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
205	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.3	0.3	0.3	0.4	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
165	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3
155	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3
145	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
125	0.3	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.2	0.2
115	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
105	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.3
95	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3
85	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
65	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
55	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3
35	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3
25	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
15	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5	0.4	0.3	0.5	0.5	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3

VERTICAL (ft)

VP-E2
HORIZONTAL

	1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
165	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
155	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
145	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.2
135	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
125	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
115	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
105	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
95	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
85	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
65	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2
15	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3
5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2

VERTICAL (ft)

VP-E2
HORIZONTAL

	1535	1545	1555	1565	1575	1585	1595	1605	1615	1625	1635	1645	1655	1665	1675	1685	1695
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
165	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2
75	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VERTICAL (ft)

VP-E2

HORIZONTAL	1705	1715	1725	1735	1745	1755	1765	1775	1785	1795
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1
225	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VERTICAL (ft)

VP-S1
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VERTICAL (ft)

VP-S1
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
245	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
205	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
195	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
185	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
175	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
165	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
85	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4
65	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
55	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
45	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
35	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
25	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
15	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5
5	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.5

VERTICAL (ft)

VP-S1 HORIZONTAL		345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
VERTICAL (ft)	245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	235	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	225	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
	215	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	205	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	195	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
	185	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	175	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	165	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
	155	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
	145	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4
	135	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
	125	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.4	0.4	0.4
	115	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
	105	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	95	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7
	85	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7
	75	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6
	65	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
	55	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7
45	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	
35	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9	0.9	1	1	1	1	0.9	
25	0.5	0.5	0.5	0.5	0.6	0.7	0.7	0.8	0.9	0.9	1	1	1.1	1.1	1.1	1.1	1	
15	0.5	0.5	0.5	0.6	0.7	0.7	0.8	0.9	1	1.1	1.1	1.2	1.1	1.1	1.1	1.2	1.1	
5	0.6	0.5	0.6	0.7	0.8	0.9	0.9	1	1.1	1.1	1.1	1.2	1.2	1.2	1.1	1.1	1.2	

VP-S1 HORIZONTAL		515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
VERTICAL (ft)	245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	235	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2
	225	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	215	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	205	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4
	195	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
	185	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	175	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.4	0.5	0.4	0.3	0.5	0.3	0.4
	165	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5
	155	0.5	0.5	0.5	0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5
	145	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	135	0.5	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6
	125	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	115	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6
	105	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
	95	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7
	85	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7
	75	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.7
	65	0.6	0.7	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.8	0.7	0.7	0.7	0.6	0.6	0.5
	55	0.7	0.7	0.7	0.8	0.8	1	1	1	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.6	0.5
45	0.8	0.8	0.8	0.9	0.9	1	1.1	1.1	1.1	1.1	1	1	1	1	0.9	0.9	0.8	
35	0.9	0.9	0.9	0.9	0.9	1.1	1.1	1.1	1.1	1.1	1.1	1	1	1	0.9	0.9	0.8	
25	1	1	1	1	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1	1	0.9	0.9	0.9	0.8	
15	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.1	1.1	1.1	1	1	0.9	0.9	0.8	0.8	
5	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1	1	0.9	0.9	0.8	0.8	

VP-S1
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
245	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2
225	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
215	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
205	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
175	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
165	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
155	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
145	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
125	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2
105	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
85	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
75	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
65	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
55	0.5	0.5	0.6	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
45	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
35	0.8	0.8	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
25	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
15	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4
5	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4

VERTICAL (ft)

VP-S1
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VERTICAL (ft)

VP-S1
HORIZONTAL

	2385	2395	2405	2415	2425	2435	2445	2455	2465	2475	2485	2495	2505	2515	2525	2535	2545
245	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
235	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
195	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.2	0.2	0.4	0.2
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.3	0.3	0.2
85	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.3	0.3	0.3	0.2
75	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2
65	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4

VERTICAL (ft)

VP-S1
HORIZONTAL

	2555	2565	2575	2585	2595	2605	2615	2625	2635	2645	2655	2665	2675	2685	2695	2705	2715
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.4
225	0.2	0.2	0.3	0.2	0.2	0.4	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
215	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
205	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4
195	0.2	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3
175	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.4	0.3	0.2	0.3	0.4	0.4	0.3
165	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.4
155	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.5	0.3	0.5	0.3	0.4	0.3	0.3	0.4	0.4
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.3
135	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.5
125	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.4
115	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.5	0.5
105	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.4	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4
95	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5
85	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.6	0.4	0.5
75	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6	0.6
65	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.5	0.4	0.6
55	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.6	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.4	0.6
45	0.3	0.3	0.3	0.4	0.4	0.6	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.5	0.6	0.4	0.5
35	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.6	0.5	0.8	0.5	0.5	0.6	0.5	0.5
25	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5
15	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.7	0.5	0.5
5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.7	0.6	0.6

VERTICAL (ft)

VP-S1
HORIZONTAL

	2725	2735	2745	2755	2765	2775	2785	2795	2805	2815	2825	2835	2845	2855	2865	2875	2885
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.4
235	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4
225	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.6	0.4	0.5	0.4	0.4	0.4	0.6	0.4	0.4
215	0.5	0.3	0.3	0.5	0.3	0.6	0.3	0.4	0.5	0.4	0.6	0.4	0.4	0.4	0.4	0.5	0.4
205	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.7	0.4	0.4	0.7	0.4
195	0.2	0.2	0.3	0.3	0.2	0.4	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
185	0.2	0.2	0.3	0.2	0.4	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.4	0.5	0.3	0.3	0.3
175	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4
165	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.7	0.4	0.7	0.4	0.4	0.5	0.4	0.5	0.6
155	0.3	0.4	0.3	0.4	0.5	0.6	0.5	0.6	0.4	0.4	0.4	0.4	0.4	0.6	0.5	0.5	0.4
145	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.3	0.4	0.4	0.3	0.3	0.3	0.6	0.4	0.3	0.4
135	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.6	0.7	0.6	0.5	0.6	0.5	0.5	0.5
125	0.3	0.3	0.4	0.4	0.4	0.3	0.5	0.3	0.4	0.3	0.3	0.7	0.5	0.4	0.4	0.4	0.4
115	0.4	0.6	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0.5	0.6	0.7	0.5	0.5	0.5	0.7	0.7
105	0.3	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.6
95	0.4	0.6	0.7	0.5	0.6	0.5	0.5	0.5	0.6	0.6	0.5	0.7	0.5	0.5	0.6	0.6	0.6
85	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.7	0.6	0.6	0.7	0.7	0.5	0.7	0.7	0.6	0.7
75	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
65	0.5	0.4	0.5	0.5	0.5	0.4	0.4	0.5	0.6	0.6	0.5	0.5	0.6	0.8	0.7	0.6	0.6
55	0.4	0.4	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.7
45	0.4	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
35	0.5	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.7	0.6	0.7	0.8	0.8	0.7	0.9	0.8	0.8
25	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8	0.9	0.9	0.8	0.9
15	0.8	0.5	0.7	0.7	0.7	0.9	0.7	0.8	0.8	0.9	0.8	0.8	0.9	0.9	0.9	0.9	1
5	0.6	0.6	0.6	0.7	0.8	0.9	0.9	0.8	0.9	0.9	0.9	1	0.9	0.9	1	1	1

VERTICAL (ft)

VP-S1
HORIZONTAL

	2895	2905	2915	2925	2935	2945	2955	2965	2975	2985	2995	3005	3015	3025	3035	3045	3055
245	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
235	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
225	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
215	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
205	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
195	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
185	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3
175	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
165	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.5	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
155	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
145	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4
135	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
125	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4
115	0.5	0.7	0.5	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8
105	0.4	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5
95	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
85	0.6	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
75	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8
65	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.7	0.8	0.8	0.7	0.7	0.8	0.7
55	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.9	0.8	0.8
45	0.7	0.7	0.8	0.8	0.8	0.9	0.8	0.9	0.8	0.9	0.9	0.9	0.9	0.9	1	1	1
35	0.9	0.8	0.9	0.8	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.9	1	1	1	1
25	0.8	0.9	0.9	0.9	0.9	1	0.9	0.9	0.9	0.9	1	1	1	1	1	1.1	1.1
15	0.9	1	0.9	0.9	0.9	1	1	1	0.9	1	1	1	1	1	1	1.1	1.1
5	1.1	1	1	1.1	1	1	1	1	1	1	1	1	1	1	1	1.1	1.1

VERTICAL (ft)

VP-S1
HORIZONTAL

	3065	3075	3085	3095	3105	3115	3125	3135	3145	3155	3165	3175	3185	3195	3205	3215	3225
245	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
235	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3
225	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
215	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
205	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
195	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
185	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
175	0.6	0.6	0.5	0.6	0.5	0.6	0.5	0.5	0.6	0.4	0.5	0.6	0.7	0.5	0.6	0.6	0.7
165	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
155	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.8
145	0.5	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
135	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.8	0.8
125	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
115	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
105	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
95	0.8	0.9	0.9	0.9	0.9	1	1	1	1	1	1	1	1	1	1	1	1
85	0.9	0.9	0.9	0.9	1	1	1	1	1	1	1	1	1	1	1	1	1
75	0.9	0.9	0.9	1	1	1	1	1	1	1	1	1	1	1.1	1.1	1	1
65	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.7	0.7	0.6	0.7	0.6	0.7	0.6	0.6
55	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.9	0.9	0.7	0.8	0.8	0.7	0.8	0.7	0.8	0.7
45	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2
35	1.1	1.1	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.1	1.2	1.1	1.1	1.2	1.2	1.2	1.2
25	1.1	1.1	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.3	1.2
15	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.2
5	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.2	1.2

VERTICAL (ft)

VP-S1
HORIZONTAL

	3235	3245	3255	3265	3275	3285	3295	3305	3315	3325	3335	3345	3355	3365	3375	3385	3395
245	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
235	0.3	0.4	0.3	0.4	0.4	0.4	0.3	0.5	0.4	0.6	0.4	0.4	0.4	0.4	0.3	0.4	0.3
225	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
215	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
205	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
195	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
185	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.4	0.4
175	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5
165	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5
155	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
145	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4
135	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7
125	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4
115	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6
105	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
95	1	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7
85	1	1	1	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.8
75	1	1	1	1	0.9	1	0.9	0.9	0.9	0.8	0.8	0.7	0.8	0.7	0.7	0.7	0.7
65	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
55	0.8	0.7	0.8	0.9	0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
45	1.2	1.2	1.1	1.1	1.1	1	1.1	1	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8
35	1.2	1.2	1.2	1.1	1.1	1.1	1	1	1	0.9	0.9	0.8	0.8	0.9	0.8	0.8	0.8
25	1.2	1.2	1.2	1.1	1.1	1.1	1	1	1	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8
15	1.2	1.2	1.1	1.1	1.1	1	1	1	1	0.9	0.9	0.9	0.9	0.8	0.9	0.8	0.8
5	1.2	1.2	1.1	1.1	1.1	1	1	1	1	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9

VERTICAL (ft)

VP-S1
HORIZONTAL

	3405	3415	3425	3435	3445	3455	3465	3475	3485	3495	3505	3515	3525	3535	3545	3555	3565
245	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2
235	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4
225	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.4
215	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.5	0.5	0.5
205	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.6	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.4
195	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
185	0.4	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3
175	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.6	0.4	0.5	0.6	0.5	0.6	0.4	0.4	0.4
165	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.6
155	0.6	0.6	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.6	0.5	0.5	0.5	0.5	0.5
145	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.5	0.3	0.4	0.3	0.5	0.3	0.4
135	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.7	0.5	0.5	0.5	0.5	0.5
125	0.5	0.4	0.5	0.6	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.6	0.5	0.4	0.3
115	0.7	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.7	0.7	0.5	0.5	0.5
105	0.6	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.4	0.5	0.6	0.4	0.4	0.4	0.4	0.4	0.4
95	0.7	0.7	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7
85	0.7	0.7	0.7	0.7	0.6	0.6	0.7	0.7	0.8	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.5
75	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5
65	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.6	0.6	0.7	0.6	0.7	0.8	0.5	0.5	0.5
55	0.7	0.8	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.6	0.9	0.6	0.7
45	0.8	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.9
35	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.8	1	0.8	0.7
25	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	1	0.9	0.8	0.8	0.8	1
15	0.8	0.8	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1	0.9	1.1	0.9	1	0.9
5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.1	1.1	1	1	1	1.1	1.1	1

VERTICAL (ft)

VP-S1
HORIZONTAL

	3575	3585	3595	3605	3615	3625	3635	3645	3655	3665	3675	3685	3695	3705	3715	3725	3735
245	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.4	0.3	0.2	0.3	0.2	0.2	0.2
235	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.2
225	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
215	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.3	0.4	0.4	0.3	0.4	0.4	0.3
205	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
195	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2
185	0.3	0.2	0.3	0.3	0.3	0.2	0.3	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2
175	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.3	0.6	0.4	0.3	0.3	0.4	0.3	0.3
165	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.7	0.4	0.4	0.4	0.3
155	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.6	0.5	0.4	0.5	0.4	0.4	0.4	0.5	0.5	0.4
145	0.3	0.5	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.5	0.3	0.3	0.5	0.2	0.2	0.3	0.3
135	0.5	0.5	0.6	0.6	0.6	0.4	0.6	0.5	0.6	0.7	0.4	0.5	0.4	0.6	0.4	0.4	0.4
125	0.3	0.5	0.4	0.5	0.4	0.3	0.5	0.6	0.4	0.4	0.4	0.5	0.3	0.3	0.3	0.2	0.3
115	0.7	0.5	0.5	0.6	0.6	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.6	0.4	0.5	0.4	0.5
105	0.5	0.5	0.5	0.6	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.3	0.5	0.5	0.3	0.3	0.3
95	0.7	0.5	0.5	0.7	0.6	0.7	0.7	0.6	0.7	0.7	0.7	0.6	0.4	0.5	0.5	0.5	0.4
85	0.5	0.7	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.5
75	0.6	0.5	0.7	0.6	0.6	0.7	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5
65	0.5	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4
55	0.7	0.5	0.7	0.6	0.7	0.5	0.6	0.5	0.6	0.7	0.4	0.5	0.5	0.5	0.5	0.4	0.4
45	0.7	0.7	0.9	0.8	0.6	0.8	0.6	0.7	0.6	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.5
35	0.7	0.8	0.7	0.9	0.7	0.8	0.8	0.6	0.6	0.6	0.5	0.6	0.5	0.6	0.5	0.6	0.6
25	0.8	0.8	0.8	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.6	0.7	0.6	0.6
15	1	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.7	0.8	0.7	0.6	0.7	0.7	0.6	0.6	0.8
5	1.1	1	0.9	0.9	0.9	0.9	0.9	0.8	1	0.9	0.8	0.7	0.8	0.7	0.8	0.7	0.7

VERTICAL (ft)

VP-S1
HORIZONTAL

	3745	3755	3765	3775	3785	3795	3805	3815	3825	3835	3845	3855	3865	3875	3885	3895	3905
245	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2
215	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2
205	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2
195	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2
175	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2
165	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
155	0.4	0.4	0.4	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
145	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
125	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.4	0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3
105	0.4	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
95	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3
85	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3
75	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
65	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
55	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
45	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4
35	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
25	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4
15	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5
5	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.5

VERTICAL (ft)

VP-S1
HORIZONTAL

	3915	3925	3935	3945	3955	3965	3975	3985	3995	4005	4015	4025	4035	4045	4055	4065	4075
245	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
235	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
85	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
75	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
65	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
55	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3
15	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3

VERTICAL (ft)

VP-S1
HORIZONTAL

	4085	4095	4105	4115	4125	4135	4145	4155	4165	4175	4185	4195	4205	4215	4225	4235	4245
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2
225	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
175	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
125	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
115	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
105	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
95	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
85	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
75	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
65	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
35	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
15	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

VP-S1
HORIZONTAL

	4255	4265	4275	4285	4295	4305	4315	4325	4335	4345	4355	4365	4375	4385	4395	4405	4415
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
215	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
205	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1
175	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
165	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
155	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4
145	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2
135	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
105	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2
95	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
85	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
65	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
55	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
45	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4
35	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
25	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
15	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3
5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

VP-S1
HORIZONTAL

	4425	4435	4445	4455	4465	4475	4485	4495	4505	4515	4525	4535	4545	4555	4565	4575	4585
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
215	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
205	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.2	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
165	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
125	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
85	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
75	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
65	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
55	0.4	0.4	0.4	0.3	0.4	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1
15	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1

VERTICAL (ft)

VP-S1
HORIZONTAL

	4595	4605	4615	4625	4635	4645	4655	4665	4675	4685	4695	4705	4715
245	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0
235	0.1	0.1	0.1	0.1	0	0.1	0	0	0	0	0	0	0
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1
165	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
135	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0
5	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S2
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
359	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
349	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
339	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-S2
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
359	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
349	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
339	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-S2
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
359	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
349	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
339	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0
329	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
309	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0

VP-S3

HORIZONTAL		5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
VERTICAL (ft)	354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

VP-S3

HORIZONTAL		175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
VERTICAL (ft)	354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	324	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0.1	0
	314	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0
	304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	274	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0
	264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
164	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	

VP-S3
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S3
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
354	0	0	0	0	0	0	0	0	0	0	0	0,1	0	0	0	0	0
344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
334	0	0,1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0,1	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S3

HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835
354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0,1	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W1

HORIZONTAL		5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
VERTICAL (ft)	27	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
	17	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
	7	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
	-3	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-13	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
-23	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	

VP-W1

HORIZONTAL		175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
VERTICAL (ft)	27	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.4
	17	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.5	0.5
	7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.4
	-3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4
	-13	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
-23	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	

VP-W1

HORIZONTAL		345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
VERTICAL (ft)	27	0.5	0.5	0.6	0.6	0.5	0.7	0.6	0.8	0.7	0.5	0.6	0.4	0.6	0.5	0.7	0.4	0.7
	17	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7
	7	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6
	-3	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6
	-13	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
-23	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	

VP-W1

HORIZONTAL		515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
VERTICAL (ft)	27	0.4	0.6	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	17	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.1	0.2	0.1	0.1	0.1	0.1	0.1
	-3	0.5	0.5	0.6	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-13	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1
-23	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	

VP-W1

HORIZONTAL		685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
VERTICAL (ft)	27	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
	17	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
	7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
	-3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
	-13	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
-23	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	

VP-W1

HORIZONTAL		855	865	875	885	895	905	915	925	935	945
VERTICAL (ft)	27	0	0	0	0	0	0	0	0	0	0
	17	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0	0
	-3	0	0	0	0	0	0	0	0	0	0
	-13	0	0	0	0	0	0	0	0	0	0
-23	0	0	0	0	0	0	0	0	0	0	0

VP-W2
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
245	0	0	0	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0.1
235	0	0	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
225	0	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1
215	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0	0	0.1	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
135	0	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
125	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0	0	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
75	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2
65	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
55	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VERTICAL (ft)

VP-W2
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.2
225	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
215	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
205	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4
165	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
155	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.4	0.5	0.6
125	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
115	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.5
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.1
95	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7
85	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7
75	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.9
65	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.4
55	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.5	0.6
45	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.8
35	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.4	0.5	0.6	0.7	0.8
25	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7
15	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6
5	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5

VERTICAL (ft)

VP-W2
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
235	0.1	0.2	0.2	0.1	0.3	0.2	0.3	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3
225	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
215	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
205	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4
165	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4
155	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
115	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
105	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.6
85	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.6
75	0.8	0.9	0.9	0.9	1	1	1	1	1	1	0.9	0.9	0.9	0.8	0.8	0.8	0.7
65	0.4	0.8	0.8	0.7	0.5	1	0.7	0.6	0.9	0.6	0.5	0.8	0.7	0.5	0.6	0.5	0.7
55	0.8	0.9	0.8	0.6	0.9	0.9	0.7	1	0.8	1	0.8	0.6	0.8	0.6	0.8	0.6	0.7
45	0.9	0.9	1	1	1	1	1	1	1	1	1	1	0.9	0.9	0.8	0.7	0.7
35	0.8	0.9	0.9	1	1	1	1	1	1	1	1	0.9	0.9	0.8	0.8	0.7	0.6
25	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.6	0.6
15	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.8	0.6	0.6	0.6	0.5
5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4

VERTICAL (ft)

VP-W2
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2
235	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
185	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.4	0.4	0.4	0.3	0.4	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
165	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3
155	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
95	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
85	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75	0.6	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
65	0.5	0.4	0.5	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
55	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
15	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

VERTICAL (ft)

VP-W2
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3
165	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.3
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3
135	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
115	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
105	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
95	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
85	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
75	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
65	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
35	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
15	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
5	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5

VERTICAL (ft)

VP-W2
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.2	0.3	0.3	0.3
215	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
205	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2
185	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2
175	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
165	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
155	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
145	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
135	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
125	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
115	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
105	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.5	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3
95	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4
85	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
75	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4
65	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
55	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
45	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
35	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
25	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
15	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5
5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.6

VERTICAL (ft)

VP-W2 HORIZONTAL		1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
VERTICAL (ft)	245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2
	235	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.3
	225	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3
	215	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3
	205	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	195	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.4
	185	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3
	175	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3
	165	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	155	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.4	0.3	0.3	0.3	0.3
	145	0.3	0.4	0.5	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
	135	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	125	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	115	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
	105	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	95	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
	85	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.3
	75	0.4	0.4	0.5	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	65	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4
	55	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3
45	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.5	
35	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
25	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.4	
15	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.4	0.5	
5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	

VP-W2 HORIZONTAL		1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
VERTICAL (ft)	245	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.3	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2
	235	0.2	0.2	0.4	0.4	0.3	0.2	0.2	0.4	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.2	0.2
	225	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	215	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3
	205	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.4	0.3
	195	0.2	0.4	0.2	0.2	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	185	0.2	0.2	0.2	0.2	0.4	0.2	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	175	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
	165	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3
	155	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.4
	145	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
	135	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5	0.3	0.3	0.5	0.3	0.3	0.3	0.4
	125	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	115	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
	105	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
	95	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3
	85	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	75	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
	65	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.5	0.4
	55	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
45	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	
35	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
25	0.4	0.5	0.4	0.4	0.6	0.6	0.5	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	
15	0.4	0.4	0.4	0.6	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	
5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	

VP-W2 HORIZONTAL		1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525	
VERTICAL (ft)	245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
	235	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.4
	225	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	215	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	205	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	195	0.2	0.4	0.2	0.4	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2
	185	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	175	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	165	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	155	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	145	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	135	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.4
	125	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	115	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	105	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4
	95	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	85	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	75	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	65	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	55	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4
45	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.4	
35	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
25	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	
15	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.5	0.5	
5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	

VP-W2 HORIZONTAL		1535	1545	1555	1565	1575	1585	1595	1605	1615	1625	1635	1645	1655
VERTICAL (ft)	245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	235	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.2	0.3	0.2	0.3	0.2
	225	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	215	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	205	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	195	0.2	0.3	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2
	185	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
	175	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3
	165	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	155	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	145	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	135	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
	125	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4
	115	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	105	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4
	95	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	85	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	75	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
	65	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4
	55	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
45	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.5	
35	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
25	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	
15	0.4	0.5	0.5	0.5	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	
5	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.5	

VP-W3
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
55	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2
45	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
25	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
15	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VERTICAL (ft)

VP-W3
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2
15	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VERTICAL (ft)

VP-W3
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
245	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
235	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.3
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
165	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
65	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VERTICAL (ft)

VP-W3
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
245	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
235	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
225	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
215	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5
205	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4
195	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
185	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
175	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
165	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
155	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
145	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
135	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
125	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
115	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
95	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
85	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
75	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3
65	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
15	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
5	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

VERTICAL (ft)

VP-W3
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
245	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
235	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
225	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.6
215	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
205	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
195	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.5	0.5
185	0.3	0.3	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
175	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.5	0.5	0.5
165	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
155	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5
145	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.4	0.5	0.5	0.5	0.5
135	0.3	0.3	0.3	0.5	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
125	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
115	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
105	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
95	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
85	0.3	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
75	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
65	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7
55	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7
45	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7
35	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.8
25	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.9
15	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.9	1	1
5	0.4	0.4	0.4	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.9	0.8	0.9	1	1	1

VERTICAL (ft)

VP-W3
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
245	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.6	0.6	0.5	0.6	0.5	0.6	0.5	0.5	0.5
235	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.5	0.6	0.5	0.6	0.5	0.6	0.6
225	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.7	0.7	0.7
215	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.6	0.7	0.7	0.6
205	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.7	0.6
195	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5
185	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.6	0.5	0.6	0.6	0.5	0.5
175	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
165	0.5	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.6	0.7	0.6	0.7	0.6	0.7	0.7	0.7	0.7
155	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.7
145	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.7	0.5	0.5	0.5	0.6	0.7	0.6	0.6
135	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.7	0.7
125	0.5	0.6	0.5	0.5	0.5	0.7	0.5	0.5	0.5	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
115	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.8	0.7	0.7	0.8
105	0.6	0.5	0.5	0.5	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.8	0.6	0.6
95	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1
85	0.6	0.6	0.6	0.7	0.7	0.9	0.8	0.9	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.9
75	0.6	0.7	0.6	0.7	0.8	0.7	0.7	1	0.8	0.8	1	0.9	1.1	0.8	0.8	0.8	0.8
65	0.6	0.7	0.7	0.7	0.8	0.9	0.8	0.7	0.8	0.8	0.9	0.8	0.9	0.8	0.9	0.9	1
55	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.9	1	0.9	1	0.9	0.9	0.9	0.9
45	0.7	0.8	0.8	0.8	0.9	1.1	1	1	1	1	1	1.1	1	1.1	1	1.1	1
35	0.8	0.8	0.8	0.9	0.9	1	1	1.1	1.1	1.2	1.1	1.1	1.1	1.2	1.3	1.2	1.2
25	0.9	0.9	0.9	1	1.1	1.2	1.1	1.2	1.3	1.2	1.3	1.2	1.4	1.3	1.3	1.4	1.3
15	1	1	1	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.5
5	1.1	1.1	1.1	1.2	1.3	1.4	1.4	1.4	1.5	1.5	1.6	1.5	1.5	1.6	1.6	1.6	1.6

VERTICAL (ft)

VP-W3
HORIZONTAL

	1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
245	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4
235	0.6	0.6	0.6	0.6	0.7	0.7	0.5	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.5	0.5
225	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.7	0.6	0.7	0.7	0.6	0.6	0.6	0.6
215	0.6	0.7	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6
205	0.7	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6
195	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.6	0.5	0.5	0.6	0.4	0.4	0.5
185	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.7	0.5	0.7	0.5	0.5	0.5	0.6	0.5	0.6	0.5
175	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.8	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6
165	0.7	0.8	0.7	0.8	0.7	0.7	0.7	0.9	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6
155	0.8	0.7	0.7	0.8	0.7	0.7	0.8	0.7	0.7	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7
145	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.7	0.6	0.5	0.6	0.7	0.6	0.7
135	0.7	0.8	0.8	0.7	0.9	0.7	0.7	0.8	1	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7
125	0.6	0.6	0.6	0.7	0.7	0.6	0.8	0.6	0.8	0.9	0.6	0.7	0.7	0.7	0.8	0.6	0.7
115	0.8	0.8	0.9	0.8	0.9	0.9	0.9	0.8	1	0.9	0.8	0.8	0.8	0.9	0.8	0.8	0.8
105	0.6	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.9	0.7	0.6	0.7	0.8	0.7	0.7	0.7
95	0.8	0.8	0.9	0.9	1	0.9	0.9	1	0.9	1	1	0.9	0.9	0.8	0.9	1	0.9
85	0.8	0.8	0.9	1	1	0.9	0.9	1	1	1.1	1	0.9	1	1	1	0.9	1
75	0.8	1	1	0.8	1	1	0.8	0.8	0.8	0.7	0.7	0.8	0.7	0.7	0.7	0.8	0.8
65	0.9	0.8	1	0.9	0.9	0.8	0.7	0.8	0.7	0.8	0.8	0.6	0.8	0.6	0.8	0.7	0.6
55	0.9	0.9	1	0.9	1	0.8	0.9	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7
45	1.1	1.1	1.1	1	0.9	0.8	0.8	0.7	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.8
35	1.2	1.1	1.2	1	1	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.8	0.9	0.8
25	1.4	1.3	1.2	1.3	1	0.9	0.9	0.9	0.9	1	0.9	1	0.9	1	0.9	0.8	0.9
15	1.5	1.6	1.4	1.3	1.1	1.1	0.9	1	1	0.9	0.9	0.9	1.1	1	1	0.9	1
5	1.6	1.7	1.5	1.4	1.3	1.1	1.1	1	1	1.1	1	1	1	1	1.1	1.2	1.3

VP-W3
HORIZONTAL

	1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
245	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
235	0.5	0.6	0.5	0.5	0.5	0.4	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.5	0.4	0.5	0.4
225	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.7	0.6	0.6	0.6	0.5	0.7
215	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.6	0.6	0.5	0.5	0.5
205	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.5	0.6	0.6	0.5	0.5
195	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4
185	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.4	0.4
175	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6
165	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6
155	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.5	0.7	0.5	0.6	0.7	0.6	0.6	0.6	0.6	0.5
145	0.6	0.6	0.6	0.6	0.7	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.5
135	0.7	0.8	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7
125	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7
115	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.8	0.9	0.8	0.7	0.8
105	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.9	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6
95	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.9	0.8	0.9	0.8	0.8	1	0.8
85	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1	0.9	1	1.1	0.9	0.9	0.9	0.9	0.9
75	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9
65	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.6	0.7
55	0.7	0.7	0.8	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
45	0.7	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.9	0.7
35	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
25	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.9	0.9	0.9
15	1	1	1.1	1	1	1	1	1	1	1	1	0.9	1	0.9	1	0.9	0.9
5	1.1	1.2	1	1.1	1.2	1.1	1.1	1.2	1.1	1	1.1	1.1	1	1.1	1	1	1

VP-W3
HORIZONTAL

	1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525
245	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4
235	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4
225	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.5	0.5	0.5
215	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.6	0.5	0.7	0.6	0.6	0.5	0.6	0.6	0.6	0.5
205	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.5	0.6	0.5	0.5	0.6	0.6	0.7	0.5	0.5
195	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.4	0.4	0.4	0.4	0.4
185	0.4	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.6	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.4
175	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5
165	0.7	0.7	0.6	0.6	0.7	0.6	0.6	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.7	0.6
155	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.7	0.5	0.6
145	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.6	0.4
135	0.7	0.8	0.7	0.7	0.6	0.7	0.8	0.6	0.7	0.7	0.7	0.7	0.6	0.7	0.6	0.6	0.8
125	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.6	0.5	0.6	0.5	0.5	0.6
115	0.7	0.7	0.7	0.7	0.9	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.6
105	0.6	0.6	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.5	0.6	0.5	0.5
95	0.9	0.8	0.8	0.8	0.8	0.8	1	0.8	0.7	0.9	0.7	0.8	0.8	0.7	0.7	0.8	0.7
85	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.8	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.7
75	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6
65	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.5
55	0.7	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.5	0.6	0.5	0.5
45	0.7	0.9	0.7	0.8	0.7	0.6	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.5
35	0.9	0.8	0.7	0.7	0.8	0.8	0.7	0.8	0.7	0.8	0.6	0.6	0.7	0.6	0.6	0.6	0.5
25	0.8	1	0.8	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.8	0.6	0.6	0.7
15	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.9	0.9	0.7	0.7	0.7	0.7	0.7	0.7
5	1	1.1	1	1.1	1	1	1.1	1	0.9	0.9	0.9	0.8	0.8	0.9	0.8	0.8	0.8

VERTICAL (ft)

VP-W3
HORIZONTAL

	1535	1545	1555	1565	1575	1585	1595	1605	1615	1625	1635	1645	1655	1665	1675	1685	1695
245	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
235	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.3
225	0.5	0.5	0.5	0.5	0.6	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
215	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4
205	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5
195	0.4	0.4	0.4	0.4	0.5	0.3	0.3	0.5	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
185	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
175	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
165	0.7	0.5	0.5	0.6	0.5	0.6	0.6	0.5	0.6	0.5	0.5	0.6	0.4	0.4	0.4	0.4	0.4
155	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4
145	0.5	0.4	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3
135	0.7	0.7	0.7	0.5	0.7	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.4	0.4	0.4
125	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5
115	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4
105	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.4	0.5	0.4	0.4
95	0.6	0.7	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5
85	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
75	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
65	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.7	0.6	0.6	0.5	0.5	0.5	0.5
55	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5
45	0.6	0.5	0.5	0.6	0.6	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.7	0.6	0.6
35	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7
25	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.9	0.9	1	0.8	0.8	0.9	0.8	0.7	0.7	0.7
15	0.7	0.7	0.8	0.9	0.8	0.9	0.9	1	1	1	1	0.9	0.9	0.9	0.8	0.8	0.8
5	0.9	0.8	0.8	0.9	1.1	1	1.1	1.1	1.1	1.1	1.1	1.1	1	1	1	1	0.9

VERTICAL (ft)

VP-W3
HORIZONTAL

	1705	1715	1725	1735	1745	1755
245	0.3	0.3	0.3	0.3	0.3	0.3
235	0.3	0.3	0.3	0.3	0.3	0.3
225	0.4	0.4	0.4	0.4	0.3	0.3
215	0.4	0.4	0.4	0.3	0.3	0.3
205	0.4	0.4	0.4	0.4	0.3	0.3
195	0.3	0.3	0.3	0.3	0.3	0.3
185	0.3	0.3	0.3	0.3	0.3	0.3
175	0.4	0.3	0.4	0.3	0.3	0.3
165	0.4	0.4	0.4	0.3	0.3	0.3
155	0.4	0.4	0.4	0.4	0.3	0.3
145	0.3	0.3	0.3	0.3	0.3	0.3
135	0.4	0.4	0.4	0.4	0.4	0.3
125	0.4	0.3	0.3	0.3	0.3	0.3
115	0.4	0.4	0.4	0.4	0.4	0.4
105	0.4	0.4	0.4	0.3	0.3	0.3
95	0.4	0.4	0.4	0.4	0.4	0.4
85	0.5	0.5	0.4	0.4	0.5	0.4
75	0.5	0.4	0.4	0.4	0.4	0.4
65	0.5	0.5	0.4	0.4	0.4	0.4
55	0.5	0.5	0.4	0.4	0.4	0.4
45	0.5	0.5	0.5	0.4	0.4	0.4
35	0.6	0.5	0.5	0.5	0.5	0.4
25	0.7	0.6	0.5	0.5	0.5	0.4
15	0.7	0.6	0.6	0.6	0.5	0.4
5	0.8	0.7	0.6	0.6	0.5	0.5

VERTICAL (ft)

VP-N1
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N1
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
164	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0.3	0.3	0.3	0.3
154	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0.4	0.4	0.4	0.3
144	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0.4	0.4	0.4	0.4
134	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0.3	0.4	0.4	0.4
124	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0.4	0.4	0.4	0.4
114	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0.3	0.4	0.3	0.4
104	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0.4	0.3	0.4	0.4
94	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.4	0.4	0.4	0.3	0.4
84	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0.4	0.4	0.4	0.4
74	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0.3	0.4	0.4	0.4
64	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0.3	0.3	0.3	0.4
54	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0.3	0.3	0.3	0.3
44	0	0	0	0	0	0	0	0	0	0	0.3	0.3	0.3	0.3	0.3	0.3	0.3
34	0	0	0	0	0	0	0	0	0	0	0.4	0.3	0.4	0.4	0.4	0.4	0.3
24	0	0	0	0	0	0	0	0	0	0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
14	0	0	0	0	0	0	0	0	0	0	0.4	0.4	0.4	0.4	0.4	0.4	0.4

VERTICAL (ft)

VP-N1
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
164	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
154	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2
144	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
134	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2
124	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
114	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2
104	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
94	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
84	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.2
74	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.2
64	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.2	0.2
54	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2
44	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
34	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
24	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2
14	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.2

VERTICAL (ft)

VP-N1
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
164	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
154	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
144	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
134	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
124	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
114	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
104	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
94	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
84	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2
74	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
64	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
54	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2
44	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2
34	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
24	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
14	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VERTICAL (ft)

VP-N1
HORIZONTAL

	685	695
164	0.2	0.2
154	0.2	0.2
144	0.2	0.2
134	0.2	0.2
124	0.2	0.2
114	0.2	0.2
104	0.2	0.2
94	0.2	0.2
84	0.2	0.2
74	0.2	0.2
64	0.2	0.2
54	0.2	0.2
44	0.2	0.2
34	0.2	0.2
24	0.2	0.2
14	0.2	0.2

VERTICAL (ft)

VP-N2
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
304	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
294	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
284	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
274	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
264	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
254	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
244	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
234	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
224	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
214	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-N2
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
304	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
294	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
284	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
274	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
264	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
254	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
244	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
234	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
224	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
214	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-N2
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
304	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
294	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
284	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
274	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
264	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
254	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
244	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
234	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
224	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
214	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-N2
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
304	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
294	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
284	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
274	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
264	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
254	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
244	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
234	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
224	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
214	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-N2
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
304	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
294	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
284	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
274	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
264	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
254	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
244	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
234	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
224	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
214	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0.1	0	0

VP-N2
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005
304	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0
294	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-N3
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N3
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N3
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455
234	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
245	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
235	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5
225	0.3	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
215	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.5
205	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
195	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
185	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
175	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.5	0.4	0.5	0.5	0.5
165	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5
155	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4
145	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
135	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
125	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5
115	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
105	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
95	0.4	0.4	0.4	0.4	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
85	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
75	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
65	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.6	0.6	0.6
55	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
45	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
35	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
25	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.7	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
15	0.5	0.5	0.5	0.6	0.7	0.8	0.9	0.8	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.6
5	0.5	0.6	0.6	0.7	0.9	0.9	0.9	0.8	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.6

VERTICAL (ft)

VP-N4
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
245	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
235	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
225	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
215	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
205	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6
195	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5
185	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
175	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.6	0.5
165	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.5	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5
155	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
145	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
135	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5
125	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
115	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5
105	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5
95	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
75	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
65	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
55	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
45	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
35	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
25	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
15	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6
5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6

VERTICAL (ft)

VP-N4
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
245	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.7
235	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
225	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
215	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7
205	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7
195	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.6
185	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.6
175	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
165	0.5	0.5	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6
155	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
145	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
135	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
125	0.5	0.5	0.4	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5
115	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4
105	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.4
95	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4
85	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4
75	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4
65	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.5	0.4	0.4	0.4	0.4
55	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4
45	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
35	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4
25	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4
15	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
5	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4

VERTICAL (ft)

VP-N4
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
245	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
235	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
225	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.8
215	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
205	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
195	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
185	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
175	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
165	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7
155	0.5	0.5	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
145	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
135	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
125	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
115	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
105	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5
95	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
85	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
75	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
65	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3
55	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3
25	0.4	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.3	0.3	0.2	0.2	0.1
15	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.4	0.5	0.5	0.4	0.3	0.2	0.2	0.2
5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.6	0.6	0.5	0.4	0.3	0.2	0.2

VERTICAL (ft)

VP-N4
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
245	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8
235	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8
225	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8
215	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8
205	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
195	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7
185	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7
175	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7
165	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7
155	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6
145	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6
135	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
125	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5
115	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5
105	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
95	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
85	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
75	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
65	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0
15	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0
5	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
245	0.8	0.7	0.6	0.6	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.8	0.7	0.6	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.7	0.7	0.6	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.7	0.7	0.6	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.7	0.7	0.6	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.7	0.6	0.6	0.5	0.3	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.7	0.6	0.6	0.5	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.7	0.6	0.6	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.6	0.6	0.5	0.5	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.6	0.6	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.6	0.5	0.5	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.6	0.5	0.5	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.5	0.5	0.4	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.5	0.4	0.4	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.5	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
95	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.4	0.4	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4
HORIZONTAL

	1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.7
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.6	0.6
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.5	0.6	0.6
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.6
205	0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.6
195	0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.5	0.5
185	0.1	0.1	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.4	0.4	0.5	0.5	0.5
175	0.1	0.1	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.5
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.5
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.4	0.4
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.4	0.4	0.4
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.4	0.4
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4	0.3
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-N4
HORIZONTAL

	1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
245	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5
235	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4
225	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4
215	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4
205	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
195	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
185	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3
175	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
165	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
155	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
145	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
135	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
125	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
115	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
55	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-N4
HORIZONTAL

	1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525
245	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
235	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
225	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
215	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
205	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
165	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-N4
HORIZONTAL

	1535	1545	1555	1565	1575	1585	1595	1605	1615	1625	1635	1645	1655	1665	1675	1685	1695
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0	0	0	0	0	0	0.1	0	0	0	0	0.1	0.1	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-N4
HORIZONTAL

	1705	1715	1725	1735	1745	1755	1765	1775	1785	1795	1805	1815	1825	1835	1845	1855	1865
245	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
235	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
225	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0
215	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
205	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0
195	0.2	0.2	0.2	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0
185	0.2	0.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0.2	0.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0.1	0.1	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0.1	0.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0.1	0.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0.1	0.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0.1	0.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4
HORIZONTAL

	1875	1885	1895	1905	1915	1925	1935	1945	1955	1965	1975	1985	1995	2005	2015	2025	2035
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4
HORIZONTAL

	2045	2055	2065	2075	2085	2095	2105	2115	2125	2135	2145	2155	2165	2175	2185	2195	2205
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4
HORIZONTAL

	2215	2225	2235	2245	2255	2265	2275	2285	2295	2305	2315	2325	2335	2345	2355	2365	2375
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4
HORIZONTAL

	2385	2395	2405	2415	2425	2435	2445	2455	2465	2475	2485	2495	2505	2515	2525	2535	2545
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4
HORIZONTAL

	2555	2565	2575	2585	2595	2605	2615	2625	2635	2645	2655	2665	2675	2685	2695	2705	2715
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4

HORIZONTAL

	2725	2735	2745	2755	2765	2775	2785	2795	2805	2815	2825	2835	2845	2855	2865	2875	2885
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0.1	0	0	0	0.1	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4

HORIZONTAL

	2895	2905	2915	2925	2935	2945	2955	2965	2975	2985	2995	3005	3015	3025	3035	3045	3055
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4

HORIZONTAL

	3065	3075	3085	3095	3105	3115	3125	3135	3145	3155	3165	3175	3185	3195	3205	3215	3225
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4

HORIZONTAL

	3235	3245	3255	3265	3275	3285	3295	3305	3315	3325	3335	3345	3355	3365	3375	3385	3395
245	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4

HORIZONTAL

	3405	3415	3425	3435	3445	3455	3465	3475	3485	3495	3505	3515	3525	3535	3545	3555	3565
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4

HORIZONTAL

	3575	3585	3595	3605	3615	3625	3635	3645
245	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0
225	0	0	0	0.1	0	0	0	0
215	0	0	0	0	0	0	0	0.1
205	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0.1	0
35	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0.1	0
5	0	0	0	0	0	0	0	0

VERTICAL (ft)

APPENDIX J: Sign Lighting Illuminance Light Trespass Calculation (fc)

Sign Lighting illuminance data presented below is derived from the lighting illuminance calculations prepared as per the methods described in Section 6.2 above. Illuminance data is presented in the following tables with location coordinates defined relative to the elevation and horizontal distance from lower left, viewing from the Project to the vertical plane where Light Trespass illuminance is under review. Grid data is displayed at ten feet on center, vertical and horizontal.

VP-E1		HORIZONTAL																
		5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
VERTICAL (ft)	58	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
	48	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
	38	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
	28	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2
	18	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	8	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	-2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
	-12	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2
	-22	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2

VP-E1		HORIZONTAL																
		175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
VERTICAL (ft)	58	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
	48	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
	38	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
	28	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
	18	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
	8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
	-2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	-12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
	-22	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VP-E1		HORIZONTAL																
		345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
VERTICAL (ft)	58	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
	48	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
	38	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
	28	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4
	18	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4
	8	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4
	-2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3
	-12	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	-22	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

VP-E1		HORIZONTAL																
		515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
VERTICAL (ft)	58	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
	48	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
	38	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
	28	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
	18	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
	8	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
	-2	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
	-12	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
	-22	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2

VP-E1
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
58	0.1	0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
48	0.1	0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
38	0.1	0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
28	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
18	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
8	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
-2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
-12	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
-22	0.1	0.1	0.1	0.1	0	0	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2

VP-E1
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
58	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
48	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
38	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
28	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
18	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
-2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
-12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
-22	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VP-E1
HORIZONTAL

	1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
58	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
48	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
38	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
28	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
18	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
8	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
-2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
-12	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
-22	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1

VP-E1
HORIZONTAL

	1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
58	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
48	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
38	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
28	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
18	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
-2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
-12	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
-22	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-E1

HORIZONTAL		1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525		
VERTICAL (ft)	58	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	
	48	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	
	38	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
	28	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
	18	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
	8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	-2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
	-12	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	
	-22	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	

VP-E1

HORIZONTAL		1535	1545	1555	1565
VERTICAL (ft)	58	0	0	0	0
	48	0	0	0	0
	38	0	0	0	0
	28	0	0	0	0
	18	0.1	0	0	0
	8	0.1	0	0	0
	-2	0	0	0	0
	-12	0	0	0	0
	-22	0	0	0	0

VP-E2
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VERTICAL (ft)

VP-E2
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.2
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VERTICAL (ft)

VP-E2
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
245	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
85	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
75	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
65	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
55	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
35	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
25	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
15	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
5	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VP-E2
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
245	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5
235	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
225	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
215	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
205	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6
195	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6
185	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6
175	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6
165	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7
155	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7
145	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.7
135	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.7
125	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7
115	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.7
105	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7
95	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7
85	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7
75	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7
65	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7
55	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.7
45	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7
35	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7
25	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6
15	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6
5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6

VP-E2
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845	
245	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	
235	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.3	
225	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.3	
215	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.3	
205	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.4	
195	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.4	
185	0.7	0.7	0.7	0.8	0.8	0.8	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.6	0.5	0.4	
175	0.7	0.7	0.7	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.7	0.6	0.6	0.5	
165	0.7	0.7	0.8	0.9	0.9	1	1	1	1	1	1	0.9	0.9	0.9	0.8	0.7	0.6	0.5
155	0.7	0.8	0.8	0.9	0.9	1	1	1	1	1	1	1	0.9	0.8	0.7	0.6	0.5	
145	0.7	0.8	0.8	1	1	1	1	1.1	1.1	1.1	1	1	1	0.9	0.8	0.7	0.6	
135	0.8	0.8	0.8	1	1	1.1	1.1	1.1	1.1	1.1	1.1	1	1	0.9	0.8	0.7	0.6	
125	0.8	0.8	0.8	1	1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1	1	0.9	0.7	0.6	
115	0.8	0.8	0.9	1	1.1	1.1	1.1	1.1	1.2	1.2	1.1	1.1	1.1	1	0.9	0.8	0.6	
105	0.8	0.8	0.9	1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.1	1.1	1	0.9	0.8	0.6	
95	0.8	0.8	0.9	1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.1	1.1	1	0.9	0.8	0.6	
85	0.8	0.8	0.9	1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.1	1.1	1	0.9	0.8	0.6	
75	0.8	0.8	0.9	1	1	1.1	1.1	1.1	1.1	1.2	1.1	1.1	1	1	0.9	0.7	0.6	
65	0.8	0.8	0.8	1	1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1	0.9	0.8	0.7	0.6	
55	0.7	0.8	0.8	1	1	1	1.1	1.1	1.1	1.1	1.1	1	1	0.9	0.8	0.7	0.6	
45	0.7	0.8	0.8	0.9	1	1	1	1.1	1	1	1	1	0.9	0.9	0.8	0.7	0.5	
35	0.7	0.7	0.8	0.9	0.9	1	1	1	1	1	1	0.9	0.9	0.8	0.7	0.6	0.5	
25	0.7	0.7	0.7	0.9	0.9	0.9	0.9	0.9	1	0.9	0.9	0.9	0.8	0.8	0.7	0.6	0.5	
15	0.6	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7	0.6	0.5	0.5	
5	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.5	0.4	

VERTICAL (ft)

VP-E2
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
245	0.2	0.1	0.1	0	0.1	0.1	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5
235	0.2	0.1	0.1	0	0.1	0.1	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
225	0.2	0.2	0.1	0	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.5	0.6
215	0.3	0.2	0.1	0	0.1	0.2	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6
205	0.3	0.2	0.1	0	0.1	0.2	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
195	0.3	0.2	0.1	0	0.1	0.2	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7
185	0.3	0.2	0.1	0	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
175	0.4	0.2	0.1	0	0.1	0.2	0.4	0.4	0.5	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.7
165	0.4	0.3	0.1	0	0.1	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8
155	0.4	0.3	0.1	0	0.1	0.3	0.4	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8
145	0.4	0.3	0.1	0	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.8
135	0.5	0.3	0.1	0	0.2	0.3	0.4	0.6	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9
125	0.4	0.3	0.1	0	0.2	0.3	0.5	0.6	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9
115	0.5	0.3	0.1	0	0.2	0.3	0.5	0.6	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9
105	0.5	0.3	0.1	0	0.2	0.3	0.5	0.6	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
95	0.5	0.3	0.1	0	0.2	0.3	0.5	0.6	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
85	0.5	0.3	0.1	0.1	0.2	0.3	0.5	0.6	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
75	0.5	0.3	0.1	0.1	0.2	0.3	0.5	0.6	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9
65	0.4	0.3	0.1	0.1	0.2	0.3	0.5	0.6	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9
55	0.4	0.3	0.1	0.1	0.2	0.3	0.4	0.6	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9
45	0.4	0.3	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.8	0.8	0.8	0.9	0.9	0.8
35	0.4	0.2	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8
25	0.4	0.2	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8
15	0.3	0.2	0.1	0.1	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.7	0.7	0.7	0.8	0.7	0.7
5	0.3	0.2	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7

VERTICAL (ft)

VP-E2
HORIZONTAL

	1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
245	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
235	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
225	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
215	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
205	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
195	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
185	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3
175	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3
165	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3
155	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3
145	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3
135	0.9	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3
125	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4
115	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3
105	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.3
95	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.3
85	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3
75	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3
65	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3
55	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3
45	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3
35	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3
25	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3
15	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3
5	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3

VP-E2
HORIZONTAL

	1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
245	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
235	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
225	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
215	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
205	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
195	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
185	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
175	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
165	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
155	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
145	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
135	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
125	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
115	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
105	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
95	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
85	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
75	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
65	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
55	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
45	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
35	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
25	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
15	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
5	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1

VP-E2

HORIZONTAL

	1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-E2

HORIZONTAL

	1535	1545	1555	1565	1575	1585	1595	1605	1615	1625	1635	1645	1655	1665	1675	1685	1695
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
115	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0
105	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0
95	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0
85	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0
65	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0
55	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0
45	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0
35	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0
15	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-E2
HORIZONTAL

	1705	1715	1725	1735	1745	1755	1765	1775	1785	1795
245	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2
235	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.2
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.2
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.2
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.2
115	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.2
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2

VERTICAL (ft)

VP-S1
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
245	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.1
235	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2
205	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
165	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
105	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
95	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
85	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
75	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
65	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
55	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.2

VERTICAL (ft)

VP-S1
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
245	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
205	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
105	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
85	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
55	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VERTICAL (ft)

VP-S1
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VERTICAL (ft)

VP-S1
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VERTICAL (ft)

VP-S1
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0	0
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0	0
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1

VERTICAL (ft)

VP-S1
HORIZONTAL

	1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
245	0.1	0.1	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0
235	0.1	0.1	0.1	0	0.1	0	0.1	0	0	0	0	0	0	0	0	0	0
225	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0
215	0.1	0.1	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0.1	0	0.1	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0
195	0	0	0.1	0.1	0.1	0	0.1	0	0	0	0	0	0	0	0	0	0
185	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0
165	0	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0
145	0	0	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	1535	1545	1555	1565	1575	1585	1595	1605	1615	1625	1635	1645	1655	1665	1675	1685	1695
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	1705	1715	1725	1735	1745	1755	1765	1775	1785	1795	1805	1815	1825	1835	1845	1855	1865
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	1875	1885	1895	1905	1915	1925	1935	1945	1955	1965	1975	1985	1995	2005	2015	2025	2035
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	2045	2055	2065	2075	2085	2095	2105	2115	2125	2135	2145	2155	2165	2175	2185	2195	2205
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	2215	2225	2235	2245	2255	2265	2275	2285	2295	2305	2315	2325	2335	2345	2355	2365	2375
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	2385	2395	2405	2415	2425	2435	2445	2455	2465	2475	2485	2495	2505	2515	2525	2535	2545
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	2555	2565	2575	2585	2595	2605	2615	2625	2635	2645	2655	2665	2675	2685	2695	2705	2715
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	2725	2735	2745	2755	2765	2775	2785	2795	2805	2815	2825	2835	2845	2855	2865	2875	2885
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	2895	2905	2915	2925	2935	2945	2955	2965	2975	2985	2995	3005	3015	3025	3035	3045	3055
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1

HORIZONTAL

	3065	3075	3085	3095	3105	3115	3125	3135	3145	3155	3165	3175	3185	3195	3205	3215	3225
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1

HORIZONTAL

	3235	3245	3255	3265	3275	3285	3295	3305	3315	3325	3335	3345	3355	3365	3375	3385	3395
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	3405	3415	3425	3435	3445	3455	3465	3475	3485	3495	3505	3515	3525	3535	3545	3555	3565
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	3575	3585	3595	3605	3615	3625	3635	3645	3655	3665	3675	3685	3695	3705	3715	3725	3735
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	3745	3755	3765	3775	3785	3795	3805	3815	3825	3835	3845	3855	3865	3875	3885	3895	3905
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	3915	3925	3935	3945	3955	3965	3975	3985	3995	4005	4015	4025	4035	4045	4055	4065	4075
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	4085	4095	4105	4115	4125	4135	4145	4155	4165	4175	4185	4195	4205	4215	4225	4235	4245
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	4255	4265	4275	4285	4295	4305	4315	4325	4335	4345	4355	4365	4375	4385	4395	4405	4415
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	4425	4435	4445	4455	4465	4475	4485	4495	4505	4515	4525	4535	4545	4555	4565	4575	4585
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	4595	4605	4615	4625	4635	4645	4655	4665	4675	4685	4695	4705	4715
245	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S2
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
359	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
349	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
339	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S2
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
359	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
349	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
339	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S2
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
359	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
349	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
339	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S3

HORIZONTAL		5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
VERTICAL (ft)	354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-S3

HORIZONTAL		175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
VERTICAL (ft)	354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-S3
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S3
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S3

HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835
354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W1
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-W1
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-W1
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-W1
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-W1
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-W1
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945
27	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
-3	0	0	0	0	0	0	0	0	0	0
-13	0	0	0	0	0	0	0	0	0	0
-23	0	0	0	0	0	0	0	0	0	0

VP-W2

HORIZONTAL		5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165	
VERTICAL (ft)	245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

VP-W2

HORIZONTAL		5	15	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	
VERTICAL (ft)	245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

VP-W2
HORIZONTAL

	5	15	325	335	345	355	365	375	385	395	405	415	425	435	445	455	465
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2
HORIZONTAL

	5	15	475	485	495	505	515	525	535	545	555	565	575	585	595	605	615
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2
HORIZONTAL

	5	15	625	635	645	655	665	675	685	695	705	715	725	735	745	755	765
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2
HORIZONTAL

	5	15	775	785	795	805	815	825	835	845	855	865	875	885	895	905	915
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2

HORIZONTAL

	5	15	925	935	945	955	965	975	985	995	1005	1015	1025	1035	1045	1055	1065
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2

HORIZONTAL

	5	15	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185	1195	1205	1215
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2
HORIZONTAL

	5	15	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355	1365
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2
HORIZONTAL

	5	15	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2

HORIZONTAL

	5	15	1525	1535	1545	1555	1565	1575	1585	1595	1605	1615	1625	1635	1645	1655
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W3

HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W3

HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-W3

HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-W3
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W3
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
245	0	0	0	0	0.1	0	0	0	0	0	0	0.1	0	0	0	0.1	0
235	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0.1	0
215	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0	0.1	0
205	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0.1	0.1	0	0	0
195	0.1	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W3
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
245	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0	0	0.1	0.1	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0	0	0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0	0	0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0	0	0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1

VP-W3
HORIZONTAL

	1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-W3
HORIZONTAL

	1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2

VP-W3
HORIZONTAL

	1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
85	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
65	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3

VP-W3
HORIZONTAL

	1535	1545	1555	1565	1575	1585	1595	1605	1615	1625	1635	1645	1655	1665	1675	1685	1695
245	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
235	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4
225	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
215	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
205	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
195	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
185	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
175	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
165	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
155	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
145	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
135	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
125	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
115	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
105	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
95	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
85	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
75	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
65	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
55	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
45	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
35	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
25	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
15	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5
5	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5

VP-W3
HORIZONTAL

	1705	1715	1725	1735	1745	1755
245	0.5	0.5	0.5	0.5	0.5	0.5
235	0.5	0.5	0.5	0.5	0.5	0.5
225	0.5	0.5	0.5	0.5	0.5	0.5
215	0.5	0.5	0.5	0.5	0.5	0.5
205	0.5	0.5	0.5	0.5	0.5	0.5
195	0.5	0.5	0.5	0.5	0.5	0.5
185	0.5	0.5	0.5	0.5	0.5	0.5
175	0.5	0.5	0.5	0.5	0.5	0.5
165	0.5	0.5	0.5	0.5	0.5	0.6
155	0.5	0.5	0.5	0.6	0.6	0.6
145	0.5	0.5	0.5	0.6	0.6	0.6
135	0.5	0.6	0.6	0.6	0.6	0.6
125	0.5	0.5	0.6	0.6	0.6	0.6
115	0.6	0.6	0.6	0.6	0.6	0.6
105	0.5	0.6	0.6	0.6	0.6	0.6
95	0.5	0.5	0.5	0.6	0.6	0.6
85	0.5	0.6	0.6	0.6	0.6	0.6
75	0.6	0.6	0.5	0.6	0.6	0.6
65	0.5	0.5	0.6	0.6	0.6	0.6
55	0.5	0.5	0.6	0.6	0.6	0.6
45	0.5	0.5	0.5	0.5	0.6	0.6
35	0.5	0.5	0.5	0.5	0.5	0.6
25	0.5	0.5	0.5	0.5	0.5	0.5
15	0.5	0.5	0.5	0.5	0.5	0.5
5	0.5	0.5	0.5	0.5	0.5	0.5

VP-N1
HORIZONTAL

		5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
VERTICAL (ft)	164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	

VP-N1
HORIZONTAL

		175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
VERTICAL (ft)	164	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.3	0.3	0.3	0.3	0.3
	154	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.3	0.3	0.3	0.3	0.3
	144	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.3	0.3	0.3	0.3	0.3
	134	0	0	0	0	0	0	0	0	0	0	0.2	0.3	0.3	0.3	0.3	0.3	0.3
	124	0	0	0	0	0	0	0	0	0	0	0.2	0.3	0.3	0.3	0.3	0.3	0.3
	114	0	0	0	0	0	0	0	0	0	0	0.2	0.3	0.3	0.3	0.3	0.3	0.3
	104	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.3	0.3	0.3	0.3	0.3
	94	0	0	0	0	0	0	0	0	0	0	0.2	0.3	0.3	0.3	0.3	0.3	0.3
	84	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.3	0.3	0.3	0.3	0.3
	74	0	0	0	0	0	0	0	0	0	0	0.2	0.3	0.3	0.3	0.3	0.3	0.3
	64	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.3	0.3	0.3	0.3	0.3
	54	0	0	0	0	0	0	0	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.3	0.3
	44	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3
	34	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3
	24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3
14	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	

VP-N1
HORIZONTAL

		345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
VERTICAL (ft)	164	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.7	0.8	0.8	1.3	1.2
	154	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.3	1.2
	144	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.3	1.3
	134	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.9	0.9	1.4	1.3
	124	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.3	1.3
	114	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.4	1.3
	104	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.4	1.3
	94	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.4	1.3
	84	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.3	1.3
	74	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.3	1.3
	64	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	1.3	1.2
	54	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	1.3	1.2
	44	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	1.2	1.2
	34	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	1.2	1.1
	24	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	1.2	1.1
14	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	1.1	1.1	

VP-N1		HORIZONTAL																
		515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
VERTICAL (ft)	164	1.2	1.1	1.1	1	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4
	154	1.2	1.1	1.1	1	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4
	144	1.2	1.1	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4
	134	1.2	1.2	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4
	124	1.2	1.2	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4
	114	1.2	1.2	1.1	1.1	1	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4
	104	1.2	1.2	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4
	94	1.2	1.2	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4
	84	1.2	1.2	1.1	1	0.9	0.9	0.8	0.8	0.7	0.6	0.6	0.6	0.6	0.5	0.5	0.4	0.4
	74	1.2	1.2	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4
	64	1.2	1.1	1.1	1	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4
	54	1.2	1.1	1	1	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4
	44	1.1	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4
	34	1.1	1	1	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4
	24	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.3
	14	1	1	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.3

VP-N1		HORIZONTAL	
		685	695
VERTICAL (ft)	164	0.4	0.3
	154	0.4	0.3
	144	0.4	0.3
	134	0.4	0.3
	124	0.4	0.3
	114	0.4	0.3
	104	0.4	0.3
	94	0.4	0.3
	84	0.4	0.3
	74	0.4	0.3
	64	0.4	0.3
	54	0.3	0.3
	44	0.3	0.3
	34	0.3	0.3
	24	0.3	0.3
	14	0.3	0.3

VP-N2
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-N2
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-N2
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
304	0	0	0	0	0	0	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
294	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
284	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
274	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
264	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
254	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
244	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
234	0	0	0	0	0	0	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
224	0	0	0	0	0	0	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
214	0	0	0	0	0	0	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-N2
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
304	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
294	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
284	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
274	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
264	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
254	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
244	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
234	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
224	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
214	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-N2

HORIZONTAL

		685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
VERTICAL (ft)	304	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	294	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	284	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	274	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	264	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	254	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	244	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	234	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	224	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	214	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-N2

HORIZONTAL

		855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005
VERTICAL (ft)	304	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	294	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	284	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	274	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	264	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	254	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	244	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	234	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	224	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	214	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-N3

HORIZONTAL		5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
VERTICAL (ft)	234	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	224	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	214	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	204	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	194	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	184	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	174	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	164	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-N3

HORIZONTAL		175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
VERTICAL (ft)	234	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	224	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	214	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	204	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	194	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	184	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	174	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	164	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-N3

HORIZONTAL		345	355	365	375	385	395	405	415	425	435	445	455
VERTICAL (ft)	234	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	224	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	214	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	204	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	194	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	184	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	174	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	164	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-N4
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
195	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
185	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
175	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
165	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
155	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
145	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
135	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
125	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
115	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
105	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
95	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4
85	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
75	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
65	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
55	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
45	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
35	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
25	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3

VERTICAL (ft)

VP-N4
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
245	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6	0.6
235	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7
225	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8
215	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.8	0.8	0.9
205	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9
195	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.9	0.9	1	1.1
185	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9	1	1.2	1.3
175	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5	0.6	0.7	0.7	0.8	0.9	1	1.1	1.3	1.4
165	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1	1.1	1.2	1.4	1.6
155	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.9	1.1	1.2	1.3	1.5	1.7
145	0.4	0.3	0.4	0.4	0.4	0.5	0.6	0.6	0.7	0.8	0.9	1	1.1	1.1	1.3	1.4	1.9
135	0.4	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1	1.2	1.3	1.5	1.7	2
125	0.4	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1	1.2	1.4	1.6	1.8	2.1
115	0.4	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1.1	1.2	1.4	1.6	1.9	2.2
105	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	1	1.1	1.3	1.4	1.6	1.9	2.2
95	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	1	1.1	1.2	1.4	1.7	1.9	2.2
85	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.8	0.9	1.1	1.2	1.4	1.6	1.9	2.2
75	0.4	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1.1	1.2	1.4	1.6	1.9	2.2
65	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1	1.2	1.3	1.5	1.8	2.1
55	0.4	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1	1.1	1.3	1.5	1.7	2
45	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.8	0.9	1.1	1.2	1.4	1.6	1.8
35	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1	1.1	1.3	1.5	1.7
25	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.8	0.8	1	1.1	1.2	1.3	1.5	1.5
15	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1	1.1	1.2	1.3
5	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8	0.9	1	1.1	1.2

VERTICAL (ft)

VP-N4
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
245	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.4	0.3	0.3	0.2	0.1	0.1	0.2	0.3	0.4
235	0.7	0.7	0.8	0.8	0.8	0.7	0.7	0.6	0.5	0.4	0.3	0.2	0.1	0.1	0.2	0.4	0.5
225	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.6	0.5	0.4	0.3	0.1	0.1	0.3	0.5	0.6
215	0.9	1	1	1.1	1.1	1.1	1	1	0.7	0.6	0.5	0.3	0.1	0.1	0.3	0.6	0.8
205	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.2	0.9	0.8	0.6	0.4	0.1	0.2	0.5	0.8	1
195	1.2	1.3	1.4	1.5	1.6	1.6	1.6	1.5	1.2	1	0.8	0.5	0.2	0.2	0.6	1	1.3
185	1.4	1.5	1.7	1.8	1.9	2	2	1.9	1.5	1.3	1.1	0.7	0.2	0.3	0.8	1.3	1.7
175	1.6	1.7	1.9	2.1	2.3	2.4	2.4	2.4	1.9	1.7	1.4	0.9	0.3	0.3	1.1	1.8	2.4
165	1.8	2	2.2	2.4	2.7	2.9	3	3	2.5	2.3	1.9	1.3	0.4	0.4	1.5	2.5	3.2
155	2	2.2	2.5	2.8	3.1	3.4	3.6	3.7	3.1	3	2.5	1.7	0.5	0.6	2.2	3.5	4.4
145	2.1	2.5	2.8	3.2	3.6	4	4.4	4.6	3.9	3.9	3.4	2.3	0.6	0.8	3.1	4.9	6
135	2.3	2.7	3.1	3.6	4.1	4.6	5.1	5.4	4.8	4.9	4.4	3.1	0.8	1.2	4.3	6.7	8
125	2.4	2.9	3.3	3.9	4.5	5.1	5.8	6.2	5.7	5.9	5.5	4	1.1	1.5	5.7	8.8	10.1
115	2.6	3	3.5	4.1	4.8	5.5	6.3	6.9	6.3	6.8	6.5	4.8	1.2	1.9	7	10.7	12
105	2.6	3.1	3.6	4.3	5	5.8	6.7	7.4	6.8	7.4	7.2	5.4	1.4	2.1	7.9	12	13.4
95	2.6	3.1	3.7	4.3	5.1	5.9	6.8	7.5	6.9	7.6	7.4	5.6	1.4	2.2	8.2	12.4	13.8
85	2.6	3.1	3.6	4.2	5	5.8	6.6	7.3	6.8	7.3	7.1	5.3	1.4	2.1	7.8	11.7	13
75	2.5	3	3.5	4	4.7	5.4	6.2	6.7	6.1	6.6	6.3	4.6	1.2	1.8	6.7	10.1	11.5
65	2.4	2.8	3.3	3.8	4.3	5	5.6	6	5.3	5.6	5.2	3.8	1	1.5	5.4	8.2	9.5
55	2.3	2.6	3	3.4	3.9	4.4	4.8	5.1	4.5	4.6	4.1	2.9	0.7	1.1	4	6.2	7.4
45	2.1	2.4	2.7	3.1	3.4	3.8	4.1	4.3	3.7	3.6	3.1	2.1	0.6	0.8	2.9	4.6	5.5
35	1.9	2.1	2.4	2.7	3	3.2	3.4	3.5	2.9	2.8	2.4	1.6	0.4	0.6	2	3.3	4.1
25	1.7	1.9	2.1	2.3	2.5	2.7	2.8	2.8	2.3	2.1	1.7	1.1	0.3	0.5	1.5	2.3	3
15	1.5	1.7	1.8	2	2.1	2.2	2.2	2.2	1.8	1.6	1.3	0.8	0.2	0.3	1.1	1.7	2.2
5	1.3	1.4	1.5	1.7	1.8	1.8	1.8	1.7	1.4	1.2	1	0.6	0.2	0.2	0.8	1.2	1.6

VP-N4
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
245	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4
235	0.6	0.6	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4
225	0.7	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.4
215	0.9	1	1.1	1.1	1.1	1.1	1	1	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5
205	1.2	1.3	1.4	1.4	1.3	1.3	1.2	1.2	1.1	1	0.9	0.8	0.7	0.7	0.6	0.6	0.5
195	1.5	1.6	1.7	1.7	1.7	1.6	1.5	1.4	1.2	1.1	1	0.9	0.8	0.8	0.7	0.6	0.6
185	2	2.2	2.2	2.2	2	1.9	1.7	1.6	1.4	1.3	1.1	1	0.9	0.8	0.7	0.7	0.6
175	2.7	2.8	2.8	2.7	2.5	2.3	2.1	1.8	1.6	1.4	1.3	1.1	1	0.9	0.8	0.7	0.6
165	3.6	3.7	3.6	3.3	3	2.7	2.4	2.1	1.8	1.6	1.4	1.2	1.1	1	0.9	0.8	0.7
155	4.8	4.8	4.5	4.1	3.6	3.2	2.8	2.4	2.1	1.8	1.6	1.4	1.2	1	0.9	0.8	0.7
145	6.3	6.1	5.6	4.9	4.3	3.7	3.1	2.7	2.3	2	1.7	1.5	1.3	1.1	1	0.8	0.8
135	8.1	7.6	6.8	5.8	5	4.2	3.5	3	2.5	2.1	1.8	1.6	1.3	1.2	1	0.9	0.8
125	10	9.1	7.9	6.7	5.6	4.7	3.9	3.2	2.7	2.3	1.9	1.6	1.4	1.2	1	0.9	0.8
115	11.7	10.4	8.9	7.4	6.1	5	4.1	3.4	2.8	2.3	2	1.7	1.4	1.2	1.1	0.9	0.8
105	12.8	11.3	9.5	7.9	6.4	5.2	4.3	3.5	2.9	2.4	2	1.7	1.5	1.2	1.1	0.9	0.8
95	13.1	11.5	9.7	8	6.5	5.3	4.3	3.5	2.9	2.4	2	1.7	1.5	1.2	1.1	0.9	0.8
85	12.6	11.1	9.4	7.8	6.3	5.2	4.2	3.5	2.9	2.4	2	1.7	1.4	1.2	1.1	0.9	0.8
75	11.2	10.1	8.6	7.2	5.9	4.9	4	3.3	2.8	2.3	1.9	1.7	1.4	1.2	1	0.9	0.8
65	9.4	8.7	7.6	6.5	5.4	4.5	3.8	3.2	2.6	2.2	1.9	1.6	1.4	1.2	1	0.9	0.8
55	7.6	7.2	6.5	5.6	4.8	4.1	3.5	2.9	2.5	2.1	1.8	1.5	1.3	1.1	1	0.9	0.7
45	5.9	5.8	5.4	4.8	4.2	3.6	3.1	2.6	2.3	1.9	1.7	1.4	1.2	1.1	0.9	0.8	0.7
35	4.5	4.5	4.3	3.9	3.5	3.1	2.7	2.4	2	1.8	1.5	1.3	1.2	1	0.9	0.8	0.7
25	3.4	3.5	3.4	3.2	2.9	2.6	2.3	2.1	1.8	1.6	1.4	1.2	1.1	0.9	0.8	0.7	0.6
15	2.5	2.6	2.7	2.6	2.4	2.2	2	1.8	1.6	1.4	1.2	1.1	1	0.9	0.8	0.7	0.6
5	1.9	2	2.1	2	2	1.8	1.7	1.5	1.4	1.2	1.1	1	0.9	0.8	0.7	0.6	0.5

VP-N4
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
245	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
215	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
205	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
195	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
185	0.5	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
175	0.6	0.7	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
165	0.6	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
155	0.6	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
145	0.7	0.7	0.7	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
135	0.7	0.8	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
125	0.7	0.8	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
115	0.7	0.8	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
105	0.7	0.8	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2
95	0.7	0.8	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
85	0.7	0.8	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
75	0.7	0.8	0.7	0.6	0.6	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
65	0.7	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
55	0.7	0.7	0.7	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
45	0.6	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
35	0.6	0.7	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
25	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
15	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
5	0.5	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2

VERTICAL (ft)

VP-N4
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
245	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0.2	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0.2	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0.2	0.2	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0.2	0.2	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0.2	0.2	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0.2	0.2	0.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0.2	0.2	0.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0.2	0.2	0.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0.2	0.2	0.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0.2	0.2	0.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0.2	0.2	0.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0.2	0.2	0.2	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0.2	0.2	0.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0.2	0.2	0.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0.2	0.2	0.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0.2	0.2	0.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0.2	0.2	0.2	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0.2	0.2	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0.2	0.2	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0.2	0.2	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0.2	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0.2	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0.2	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4

HORIZONTAL

	1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-N4

HORIZONTAL

	1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
245	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
235	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
225	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
215	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
205	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
195	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
185	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
175	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
165	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
155	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
145	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
135	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
125	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
115	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
105	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
95	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
85	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
75	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
65	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
55	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
45	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
35	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
25	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
15	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
5	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1

VP-N4
HORIZONTAL

	1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0

VP-N4
HORIZONTAL

	1535	1545	1555	1565	1575	1585	1595	1605	1615	1625	1635	1645	1655	1665	1675	1685	1695
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VP-N4
HORIZONTAL

	1705	1715	1725	1735	1745	1755	1765	1775	1785	1795	1805	1815	1825	1835	1845	1855	1865
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VP-N4
HORIZONTAL

	1875	1885	1895	1905	1915	1925	1935	1945	1955	1965	1975	1985	1995	2005	2015	2025	2035
245	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6
235	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6
225	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6
215	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7
205	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7
195	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.8
185	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8
175	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.8
165	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9
155	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9
145	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.8	0.8	0.9
135	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	0.9
125	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1
115	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1
105	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1
95	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1
85	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1
75	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1
65	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1
55	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9	1
45	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.8	0.9
35	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8	0.9
25	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8
15	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7	0.8
5	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.7	0.7

VP-N4
HORIZONTAL

	2045	2055	2065	2075	2085	2095	2105	2115	2125	2135	2145	2155	2165	2175	2185	2195	2205
245	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8
235	0.6	0.7	0.7	0.8	0.8	0.8	0.9	0.9	1	1	1	1	0.9	0.9	0.9	0.9	0.9
225	0.7	0.7	0.8	0.8	0.9	0.9	1	1	1.1	1.1	1.2	1.2	1	1	1	1	1
215	0.7	0.8	0.8	0.9	0.9	1	1	1.1	1.2	1.2	1.3	1.3	1.1	1.1	1.2	1.2	1.2
205	0.8	0.8	0.9	1	1	1.1	1.1	1.2	1.3	1.4	1.5	1.5	1.3	1.3	1.4	1.4	1.4
195	0.8	0.9	0.9	1	1.1	1.2	1.2	1.3	1.4	1.5	1.6	1.7	1.5	1.5	1.6	1.7	1.6
185	0.9	0.9	1	1.1	1.2	1.2	1.4	1.5	1.6	1.7	1.8	1.9	1.6	1.7	1.8	1.9	1.9
175	0.9	1	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.9	2	2.1	1.8	2	2.1	2.2	2.3
165	0.9	1	1.1	1.2	1.3	1.5	1.6	1.7	1.9	2	2.2	2.4	2	2.2	2.4	2.6	2.7
155	1	1.1	1.2	1.3	1.4	1.5	1.7	1.9	2	2.2	2.4	2.6	2.3	2.5	2.7	2.9	3
145	1	1.1	1.2	1.3	1.5	1.6	1.8	2	2.2	2.4	2.6	2.8	2.5	2.7	3	3.3	3.5
135	1.1	1.2	1.3	1.4	1.5	1.7	1.9	2.1	2.3	2.5	2.8	3	2.7	3	3.3	3.6	3.9
125	1.1	1.2	1.3	1.4	1.6	1.7	1.9	2.2	2.4	2.6	2.9	3.2	2.8	3.2	3.5	3.9	4.2
115	1.1	1.2	1.3	1.5	1.6	1.8	2	2.2	2.5	2.7	3	3.3	2.9	3.3	3.7	4.1	4.5
105	1.1	1.2	1.3	1.5	1.6	1.8	2	2.3	2.5	2.8	3.1	3.4	3	3.4	3.8	4.2	4.7
95	1.1	1.2	1.3	1.5	1.7	1.8	2	2.3	2.5	2.8	3.1	3.4	3.1	3.4	3.9	4.3	4.7
85	1.1	1.2	1.3	1.5	1.6	1.8	2	2.3	2.5	2.8	3.1	3.4	3	3.4	3.8	4.2	4.6
75	1.1	1.2	1.3	1.5	1.6	1.8	2	2.2	2.5	2.7	3	3.3	2.9	3.3	3.7	4.1	4.5
65	1.1	1.2	1.3	1.4	1.6	1.7	1.9	2.1	2.4	2.6	2.9	3.2	2.8	3.1	3.5	3.9	4.2
55	1	1.2	1.3	1.4	1.5	1.7	1.9	2.1	2.3	2.5	2.8	3	2.6	2.9	3.2	3.5	3.8
45	1	1.1	1.2	1.3	1.5	1.6	1.8	2	2.1	2.4	2.6	2.8	2.4	2.7	3	3.2	3.4
35	1	1.1	1.1	1.3	1.4	1.5	1.7	1.8	2	2.2	2.4	2.6	2.2	2.4	2.7	2.9	3
25	0.9	1	1.1	1.2	1.3	1.4	1.6	1.7	1.9	2	2.2	2.3	2	2.2	2.4	2.5	2.6
15	0.8	0.9	1	1.1	1.2	1.3	1.4	1.6	1.7	1.8	2	2.1	1.8	1.9	2.1	2.2	2.2
5	0.8	0.9	0.9	1	1.1	1.2	1.3	1.4	1.5	1.7	1.8	1.9	1.6	1.7	1.8	1.9	1.9

VP-N4
HORIZONTAL

	2215	2225	2235	2245	2255	2265	2275	2285	2295	2305	2315	2325	2335	2345	2355	2365	2375
245	0.7	0.7	0.6	0.5	0.4	0.3	0.2	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.7	0.8
235	0.8	0.8	0.7	0.6	0.5	0.4	0.3	0.1	0.1	0.2	0.4	0.5	0.6	0.7	0.8	0.9	0.9
225	1	0.9	0.8	0.7	0.6	0.4	0.3	0.1	0.1	0.3	0.4	0.6	0.7	0.8	0.9	1	1.1
215	1.1	1.1	1	0.8	0.7	0.5	0.3	0.1	0.1	0.3	0.5	0.6	0.8	1	1.1	1.2	1.2
205	1.3	1.3	1.2	1	0.8	0.6	0.4	0.1	0.1	0.3	0.5	0.8	1	1.1	1.3	1.4	1.5
195	1.6	1.5	1.4	1.3	1	0.7	0.4	0.1	0.1	0.4	0.7	0.9	1.2	1.4	1.5	1.7	1.7
185	1.9	1.8	1.7	1.5	1.2	0.9	0.5	0.1	0.1	0.5	0.8	1.1	1.4	1.6	1.8	2	2
175	2.3	2.2	2.1	1.8	1.5	1.1	0.6	0.2	0.2	0.6	0.9	1.3	1.7	2	2.2	2.3	2.4
165	2.7	2.6	2.5	2.2	1.8	1.3	0.8	0.2	0.2	0.7	1.1	1.6	2	2.3	2.5	2.7	2.7
155	3.1	3.1	3	2.6	2.2	1.6	1	0.2	0.2	0.8	1.3	1.9	2.4	2.7	3	3.1	3.1
145	3.6	3.6	3.5	3.1	2.6	1.9	1.1	0.3	0.3	0.9	1.5	2.2	2.8	3.1	3.4	3.5	3.5
135	4.1	4.1	4	3.6	3	2.2	1.3	0.3	0.3	1.1	1.8	2.5	3.2	3.6	3.9	4	3.9
125	4.5	4.5	4.5	4.1	3.4	2.5	1.5	0.3	0.3	1.2	2	2.9	3.5	4	4.3	4.3	4.2
115	4.8	4.9	4.8	4.4	3.7	2.8	1.6	0.4	0.4	1.3	2.2	3.1	3.8	4.3	4.6	4.6	4.4
105	5	5.1	5.1	4.7	3.9	2.9	1.7	0.4	0.4	1.4	2.3	3.3	4	4.5	4.8	4.8	4.6
95	5	5.2	5.1	4.8	4	3	1.7	0.4	0.4	1.4	2.4	3.3	4.1	4.6	4.8	4.9	4.7
85	5	5.1	5	4.7	4	2.9	1.7	0.4	0.4	1.4	2.3	3.3	4	4.5	4.8	4.8	4.6
75	4.7	4.9	4.7	4.4	3.7	2.7	1.5	0.4	0.4	1.3	2.2	3.1	3.8	4.3	4.5	4.5	4.4
65	4.4	4.5	4.4	4	3.4	2.5	1.4	0.3	0.4	1.2	2	2.9	3.6	4	4.2	4.3	4.1
55	4	4	3.9	3.6	3	2.2	1.3	0.3	0.4	1.1	1.8	2.5	3.2	3.6	3.8	3.9	3.8
45	3.6	3.6	3.4	3.1	2.5	1.9	1.1	0.3	0.3	1	1.6	2.2	2.8	3.2	3.4	3.5	3.5
35	3.1	3.1	2.9	2.6	2.2	1.6	0.9	0.2	0.3	0.8	1.4	1.9	2.4	2.8	3	3.1	3
25	2.7	2.6	2.4	2.2	1.8	1.3	0.8	0.2	0.2	0.7	1.1	1.6	2	2.3	2.5	2.6	2.7
15	2.2	2.2	2	1.8	1.5	1.1	0.6	0.2	0.2	0.6	1	1.3	1.7	1.9	2.1	2.2	2.3
5	1.9	1.8	1.7	1.5	1.2	0.9	0.5	0.1	0.2	0.5	0.8	1.1	1.4	1.6	1.8	1.9	2

VP-N4
HORIZONTAL

	2385	2395	2405	2415	2425	2435	2445	2455	2465	2475	2485	2495	2505	2515	2525	2535	2545
245	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.6	0.6
235	0.9	1	1	1	0.9	0.9	0.9	0.8	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.6
225	1.1	1.1	1.1	1.1	1	1	1	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.7	0.7
215	1.3	1.3	1.3	1.2	1.2	1.1	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.6	0.7	0.7
205	1.5	1.5	1.5	1.4	1.3	1.3	1.2	1.1	1.1	1	0.9	0.8	0.8	0.7	0.7	0.8	0.7
195	1.7	1.7	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1	0.9	0.8	0.8	0.7	0.8	0.8
185	2	1.9	1.9	1.8	1.7	1.6	1.4	1.3	1.2	1.1	1.1	1	0.9	0.8	0.8	0.9	0.8
175	2.3	2.2	2.2	2	1.9	1.7	1.6	1.5	1.3	1.2	1.1	1	0.9	0.9	0.8	0.9	0.8
165	2.6	2.5	2.4	2.2	2.1	1.9	1.7	1.6	1.4	1.3	1.2	1.1	1	0.9	0.8	0.9	0.9
155	3	2.9	2.7	2.5	2.2	2.1	1.9	1.7	1.5	1.4	1.3	1.1	1	0.9	0.9	1	0.9
145	3.3	3.1	2.9	2.7	2.4	2.2	2	1.8	1.6	1.5	1.3	1.2	1.1	1	0.9	1	0.9
135	3.7	3.4	3.2	2.9	2.6	2.4	2.1	1.9	1.7	1.5	1.4	1.2	1.1	1	0.9	1	0.9
125	4	3.7	3.4	3.1	2.8	2.5	2.2	2	1.8	1.6	1.4	1.3	1.1	1	0.9	1.1	1
115	4.2	3.9	3.5	3.2	2.8	2.5	2.3	2	1.8	1.6	1.4	1.3	1.2	1	0.9	1.1	1
105	4.3	4	3.6	3.3	2.9	2.6	2.3	2	1.8	1.6	1.4	1.3	1.2	1.1	0.9	1.1	1
95	4.4	4	3.7	3.3	2.9	2.6	2.3	2.1	1.8	1.6	1.4	1.3	1.2	1.1	0.9	1.1	1
85	4.3	4	3.6	3.2	2.9	2.6	2.3	2	1.8	1.6	1.4	1.3	1.2	1	0.9	1.1	1
75	4.2	3.9	3.5	3.2	2.8	2.5	2.2	2	1.8	1.6	1.4	1.3	1.1	1	0.9	1	1
65	3.9	3.7	3.4	3.1	2.7	2.5	2.2	2	1.8	1.6	1.4	1.3	1.1	1	0.9	1	1
55	3.7	3.4	3.2	2.9	2.6	2.4	2.1	1.9	1.7	1.5	1.4	1.2	1.1	1	0.9	1	0.9
45	3.3	3.2	3	2.7	2.4	2.2	2	1.8	1.6	1.4	1.3	1.2	1.1	1	0.9	1	0.9
35	3	2.8	2.7	2.5	2.3	2.1	1.9	1.7	1.5	1.4	1.2	1.1	1	0.9	0.8	0.9	0.9
25	2.6	2.5	2.4	2.2	2	1.9	1.7	1.5	1.4	1.3	1.1	1	0.9	0.9	0.8	0.9	0.8
15	2.3	2.2	2.1	2	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1	0.9	0.8	0.7	0.9	0.8
5	2	1.9	1.9	1.8	1.6	1.5	1.4	1.3	1.2	1.1	1	0.9	0.8	0.8	0.7	0.8	0.8

VP-N4
HORIZONTAL

	2555	2565	2575	2585	2595	2605	2615	2625	2635	2645	2655	2665	2675	2685	2695	2705	2715
245	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
235	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
225	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
215	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
205	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
195	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
185	0.8	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
175	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
165	0.8	0.8	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
155	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
145	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
135	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
125	0.9	0.8	0.8	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
115	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
105	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
95	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
85	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
75	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
65	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
55	0.9	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
45	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
35	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
25	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
15	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
5	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3

VP-N4
HORIZONTAL

	2725	2735	2745	2755	2765	2775	2785	2795	2805	2815	2825	2835	2845	2855	2865	2875	2885
245	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
165	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
55	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VERTICAL (ft)

VP-N4
HORIZONTAL

	2895	2905	2915	2925	2935	2945	2955	2965	2975	2985	2995	3005	3015	3025	3035	3045	3055
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VERTICAL (ft)

VP-N4

HORIZONTAL

	3065	3075	3085	3095	3105	3115	3125	3135	3145	3155	3165	3175	3185	3195	3205	3215	3225
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1
5	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1

VP-N4

HORIZONTAL

	3235	3245	3255	3265	3275	3285	3295	3305	3315	3325	3335	3345
245	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
55	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1
5	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1

APPENDIX K: Construction Lighting Illuminance Light Trespass Calculation (fc)

Construction Lighting illuminance data presented below is derived from the lighting illuminance calculations prepared as per the methods described in Section 6.2 above. Illuminance data is presented in the following tables with location coordinates defined relative to the elevation and horizontal distance from lower left, viewing from the Project to the vertical plane where Light Trespass illuminance is under review. Grid data is displayed at ten feet on center, vertical and horizontal.

VP-E1
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0.1	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-22	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-E1
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0
-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-E1
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-2	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0
-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-E1
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-E1

HORIZONTAL		685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
VERTICAL (ft)	58	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0
	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0
	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	18	0	0	0	0	0.1	0	0	0	0.1	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-2	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0
	-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-22	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-E1

HORIZONTAL		855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
VERTICAL (ft)	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-E1

HORIZONTAL		1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
VERTICAL (ft)	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0
	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-22	0	0.1	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0

VP-E1

HORIZONTAL		1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
VERTICAL (ft)	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-E1

HORIZONTAL		1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525
VERTICAL (ft)	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-E1

HORIZONTAL		1535	1545	1555	1565
VERTICAL (ft)	58	0	0	0	0
	48	0	0	0	0
	38	0	0	0	0
	28	0	0	0	0
	18	0	0	0	0
	8	0	0	0	0
	-2	0	0	0	0
	-12	0	0	0	0
	-22	0	0	0	0

VP-E2
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-E2
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0.1	0	0	0	0	0.1	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-E2

HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0
215	0	0	0	0.1	0	0	0	0	0	0	0	0.1	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
185	0.1	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0

VP-E2

HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
225	0.1	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0
185	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
135	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0
65	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-E2
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0.1
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0.1
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-E2
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-E2
HORIZONTAL

	1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
245	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
215	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0.1
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-E2
HORIZONTAL

	1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
205	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0
45	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-E2

HORIZONTAL

	1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0.1	0	0	0	0	0	0	0	0.1	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0

VP-E2

HORIZONTAL

	1535	1545	1555	1565	1575	1585	1595	1605	1615	1625	1635	1645	1655	1665	1675	1685	1695
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-E2

HORIZONTAL

	1705	1715	1725	1735	1745	1755	1765	1775	1785	1795
245	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0.1	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0.1
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1

HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
245	0	0.1	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0.1	0	0	0	0	0	0	0	0.1	0.1	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-S1

HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0.1	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-S1
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0.1	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
215	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0.1
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
185	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0.1
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
165	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0.1
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
95	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0.1
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
55	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0.1
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1

VERTICAL (ft)

VP-S1
HORIZONTAL

	2045	2055	2065	2075	2085	2095	2105	2115	2125	2135	2145	2155	2165	2175	2185	2195	2205
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VERTICAL (ft)

VP-S1
HORIZONTAL

	2215	2225	2235	2245	2255	2265	2275	2285	2295	2305	2315	2325	2335	2345	2355	2365	2375
245	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0.1	0.1	0.1	0.1	0.1	0	0.1	0	0	0	0	0	0	0	0	0	0
225	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0.1	0
215	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0
205	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0.1	0	0
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0.1	0	0	0
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0.1
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
55	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
35	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
15	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VERTICAL (ft)

VP-S1
HORIZONTAL

	2385	2395	2405	2415	2425	2435	2445	2455	2465	2475	2485	2495	2505	2515	2525	2535	2545
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0
185	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0.1	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0.1	0.1	0.1	0.1	0.1	0	0.1	0	0	0	0	0	0	0	0	0	0
5	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	2555	2565	2575	2585	2595	2605	2615	2625	2635	2645	2655	2665	2675	2685	2695	2705	2715
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
195	0.1	0	0	0	0	0	0	0	0.1	0.1	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0.1	0
175	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0
155	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0.1	0	0	0	0	0.1	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1

HORIZONTAL

	2725	2735	2745	2755	2765	2775	2785	2795	2805	2815	2825	2835	2845	2855	2865	2875	2885
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0
65	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0.1
25	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0

VP-S1

HORIZONTAL

	2895	2905	2915	2925	2935	2945	2955	2965	2975	2985	2995	3005	3015	3025	3035	3045	3055
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0
15	0	0	0	0.1	0	0.1	0	0	0	0	0	0	0	0.1	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-S1

HORIZONTAL		3065	3075	3085	3095	3105	3115	3125	3135	3145	3155	3165	3175	3185	3195	3205	3215	3225
VERTICAL (ft)	245	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0
	235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	225	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0
	215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	195	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	55	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

VP-S1

HORIZONTAL		3235	3245	3255	3265	3275	3285	3295	3305	3315	3325	3335	3345	3355	3365	3375	3385	3395
VERTICAL (ft)	245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
	65	0	0	0	0	0	0	0	0	0	0	0.1	0	0.1	0	0	0	0
	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

VP-S1
HORIZONTAL

	3405	3415	3425	3435	3445	3455	3465	3475	3485	3495	3505	3515	3525	3535	3545	3555	3565
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	3575	3585	3595	3605	3615	3625	3635	3645	3655	3665	3675	3685	3695	3705	3715	3725	3735
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	3745	3755	3765	3775	3785	3795	3805	3815	3825	3835	3845	3855	3865	3875	3885	3895	3905
245	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	3915	3925	3935	3945	3955	3965	3975	3985	3995	4005	4015	4025	4035	4045	4055	4065	4075
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	4085	4095	4105	4115	4125	4135	4145	4155	4165	4175	4185	4195	4205	4215	4225	4235	4245
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	4255	4265	4275	4285	4295	4305	4315	4325	4335	4345	4355	4365	4375	4385	4395	4405	4415
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	4425	4435	4445	4455	4465	4475	4485	4495	4505	4515	4525	4535	4545	4555	4565	4575	4585
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S1
HORIZONTAL

	4595	4605	4615	4625	4635	4645	4655	4665	4675	4685	4695	4705	4715
245	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S2
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
359	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
349	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
339	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S2
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
359	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
349	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
339	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S2
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
359	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
349	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
339	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
329	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
309	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
299	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S3
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
334	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
304	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S3
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S3
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S3
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-S3

HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835
354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
344	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
334	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
324	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
314	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W1

HORIZONTAL		5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
VERTICAL (ft)	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-W1

HORIZONTAL		175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
VERTICAL (ft)	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-W1

HORIZONTAL		345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
VERTICAL (ft)	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-W1

HORIZONTAL		515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
VERTICAL (ft)	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-W1

HORIZONTAL		685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
VERTICAL (ft)	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	-23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-W1

HORIZONTAL		855	865	875	885	895	905	915	925	935	945
VERTICAL (ft)	27	0	0	0	0	0	0	0	0	0	0
	17	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0	0
	-3	0	0	0	0	0	0	0	0	0	0
	-13	0	0	0	0	0	0	0	0	0	0
	-23	0	0	0	0	0	0	0	0	0	0

VP-W2
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2

HORIZONTAL		685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
VERTICAL (ft)	245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

VP-W2

HORIZONTAL		855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
VERTICAL (ft)	245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

VP-W2
HORIZONTAL

	1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2
HORIZONTAL

	1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2
HORIZONTAL

	1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2
HORIZONTAL

	1535	1545	1555	1565	1575	1585	1595	1605	1615	1625	1635	1645	1655
245	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-W2
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
105	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2
95	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
85	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
75	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
65	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
55	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
15	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2

VERTICAL (ft)

VP-W2
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
165	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
85	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
55	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VERTICAL (ft)

VP-W2
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
245	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2
85	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
75	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3
65	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3
15	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.5	0.2	0.2	0.2	0.2	0.2

VERTICAL (ft)

VP-W2
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
105	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
95	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
85	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
65	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
55	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
45	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
25	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3
15	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3

VERTICAL (ft)

VP-W2
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
185	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
165	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2
155	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.3
145	0.2	0.2	0.3	0.2	0.2	0.2	0.4	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
135	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
125	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
115	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
105	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3
95	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
85	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
65	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3
55	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.3
45	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3
35	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
25	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3
15	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
5	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

VERTICAL (ft)

VP-W2
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
245	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2
235	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
215	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.4	0.2
205	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2
195	0.4	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
185	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.3	0.2	0.2
165	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.4	0.3	0.2	0.3
145	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2
135	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
125	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
115	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3
105	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
95	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4
85	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3
75	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3
65	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
55	0.4	0.3	0.3	0.3	0.4	0.3	0.5	0.4	0.3	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.3
45	0.3	0.3	0.4	0.3	0.5	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3
35	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.5	0.4	0.3	0.4
25	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.4	0.3
15	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.5	0.4	0.4	0.3	0.3	0.4	0.4

VERTICAL (ft)

VP-W2
HORIZONTAL

	1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.2	0.2	0.2	0.2	0.4
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.2	0.2	0.2	0.3	0.2
225	0.2	0.4	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2
215	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.3	0.3	0.3
205	0.5	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3
195	0.2	0.3	0.4	0.4	0.3	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.2
185	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
175	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.4	0.3	0.2	0.3	0.3	0.3
165	0.3	0.3	0.3	0.2	0.2	0.4	0.4	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.2	0.2
155	0.2	0.4	0.3	0.2	0.2	0.3	0.2	0.4	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.2
145	0.4	0.3	0.2	0.2	0.3	0.3	0.2	0.4	0.2	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2
135	0.3	0.4	0.3	0.3	0.3	0.3	0.5	0.3	0.2	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.2
125	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3
115	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3
105	0.3	0.4	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
95	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
85	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3
75	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.5	0.4	0.3	0.3
65	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.4
55	0.3	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.4
45	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.3	0.6	0.4	0.3	0.4	0.4	0.3
35	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.6	0.3	0.4	0.6	0.3	0.3	0.3	0.4
25	0.4	0.3	0.5	0.3	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.5	0.3	0.3	0.4	0.3	0.5
15	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.5
5	0.3	0.3	0.4	0.3	0.3	0.5	0.3	0.3	0.4	0.5	0.4	0.3	0.4	0.3	0.5	0.4	0.4

VP-W2
HORIZONTAL

	1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3
235	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.3	0.2	0.3	0.2	0.3
215	0.3	0.2	0.2	0.4	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.3
205	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.3	0.4	0.2	0.3	0.3	0.3	0.4	0.2	0.2	0.2	0.4	0.2	0.3	0.2	0.2	0.2	0.2
185	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2
175	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.5	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.2
165	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.3	0.2	0.4	0.2	0.3	0.3	0.2	0.2	0.3	0.3
155	0.3	0.2	0.3	0.6	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3
145	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.4	0.3	0.2	0.2	0.3	0.2
135	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.4	0.4	0.3	0.3	0.2
125	0.2	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.3
115	0.3	0.3	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
105	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3
95	0.3	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3
85	0.3	0.4	0.4	0.3	0.6	0.4	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3
65	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.5	0.3	0.4	0.3	0.5	0.3	0.3	0.4	0.4	0.3
55	0.4	0.3	0.4	0.3	0.5	0.3	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.3
45	0.5	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
35	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.3	0.5	0.5	0.4	0.3	0.5	0.4	0.3	0.4	0.4
25	0.4	0.5	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.5	0.4	0.4	0.4	0.3	0.3
15	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.3
5	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.3

VP-W2
HORIZONTAL

	1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525
245	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.2	0.5	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2
215	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2
205	0.2	0.4	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2
195	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3
185	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.3
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.3	0.3	0.2
165	0.2	0.4	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2
145	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3
125	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2
105	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
95	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3
85	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
65	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
55	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3
45	0.5	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3
35	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
25	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.4	0.3
15	0.3	0.3	0.4	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3
5	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3

VERTICAL (ft)

VP-W2
HORIZONTAL

	1535	1545	1555	1565	1575	1585	1595	1605	1615	1625	1635	1645	1655	1665	1675	1685	1695
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3
195	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2
175	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
165	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3
155	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2
135	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
115	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.3	0.2	0.3
105	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2
95	0.4	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
85	0.3	0.3	0.3	0.3	0.3	0.4	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2	0.2
75	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2	0.3	0.2
65	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2
55	0.3	0.3	0.4	0.3	0.3	0.4	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.4	0.2
45	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
35	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
25	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.2
15	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
5	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

VERTICAL (ft)

VP-W2
HORIZONTAL

	1705	1715	1725	1735	1745	1755
245	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2
205	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.4
185	0.2	0.2	0.2	0.2	0.2	0.2
175	0.2	0.2	0.2	0.2	0.2	0.2
165	0.2	0.2	0.2	0.2	0.2	0.2
155	0.2	0.2	0.2	0.2	0.2	0.2
145	0.2	0.2	0.2	0.2	0.2	0.2
135	0.2	0.2	0.2	0.2	0.2	0.2
125	0.2	0.2	0.2	0.2	0.2	0.2
115	0.2	0.2	0.2	0.2	0.2	0.2
105	0.2	0.2	0.2	0.2	0.2	0.2
95	0.2	0.2	0.2	0.2	0.2	0.2
85	0.2	0.3	0.2	0.2	0.2	0.2
75	0.2	0.2	0.2	0.2	0.3	0.3
65	0.5	0.2	0.2	0.2	0.3	0.2
55	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.3	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2
25	0.2	0.2	0.2	0.2	0.2	0.2
15	0.2	0.2	0.2	0.3	0.2	0.3
5	0.2	0.2	0.2	0.2	0.1	0.1

VERTICAL (ft)

VP-N1
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N1
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
164	0	0	0	0	0	0	0	0	0	0	0.3	0.2	0.2	0.2	0.2	0.2	0.3
154	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
144	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
134	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
124	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
114	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
104	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
94	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
84	0	0	0	0	0	0	0	0	0	0	0.2	0.3	0.2	0.2	0.2	0.2	0.2
74	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
64	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
54	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
44	0	0	0	0	0	0	0	0	0	0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
34	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.2	0.2	0.2	0.2
24	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.2	0.1	0.1	0.2	0.2
14	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1

VERTICAL (ft)

VP-N1
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
164	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.2
154	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.4	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2
144	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2
134	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2
124	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2
114	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2
104	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.5	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2
94	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2
84	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
74	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
64	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2
54	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
44	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
34	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
24	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
14	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VERTICAL (ft)

VP-N1
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
164	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
154	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
144	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
134	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
124	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
114	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
104	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
94	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
84	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
74	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
64	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2
54	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2
44	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.3	0.2	0.2	0.2	0.2
34	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2
24	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
14	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2

VP-N1
HORIZONTAL

	685	695
164	0.2	0.2
154	0.2	0.2
144	0.2	0.2
134	0.2	0.2
124	0.2	0.2
114	0.2	0.2
104	0.2	0.2
94	0.2	0.2
84	0.2	0.2
74	0.2	0.2
64	0.2	0.2
54	0.2	0.2
44	0.2	0.2
34	0.2	0.2
24	0.2	0.2
14	0.2	0.2

VP-N2
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0

VP-N2
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
304	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-N2
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
304	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0.2
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
284	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0.1	0	0	0
274	0	0	0	0	0	0	0	0	0.2	0	0	0	0	0	0	0	0
264	0	0	0	0	0	0.2	0	0	0.2	0	0	0	0	0	0	0	0
254	0	0	0	0.1	0	0	0	0	0	0	0	0.1	0	0	0	0	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-N2
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
304	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0	0	0	0	0.1	0	0	0	0	0	0	0.1	0	0.1	0	0
264	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0
244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0

VP-N2

HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
304	0	0.1	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0
294	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0
274	0	0.1	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0.1	0
264	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0.2	0	0	0
254	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0.1	0
244	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0.1	0	0	0
234	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0.1	0	0	0	0.1	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-N2

HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005
304	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
294	0	0.1	0	0.1	0	0	0	0	0	0	0.1	0	0	0	0	0.1
284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
274	0	0.1	0	0	0	0	0	0	0	0.1	0	0.1	0	0.1	0	0
264	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
254	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
244	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0

VP-N3
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
234	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0.1	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N3
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
234	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
224	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N3
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455
234	0	0	0	0	0	0	0	0	0.1	0	0	0
224	0	0	0	0	0	0.1	0	0	0	0	0	0
214	0	0	0	0	0	0	0	0	0	0	0	0
204	0	0	0	0	0	0	0	0	0	0	0	0
194	0	0	0	0	0	0	0	0	0	0	0	0
184	0	0	0	0	0	0	0	0	0	0	0	0
174	0	0	0	0	0.1	0	0	0	0	0	0	0
164	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4
HORIZONTAL

	5	15	25	35	45	55	65	75	85	95	105	115	125	135	145	155	165
245	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.3
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
165	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3
145	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.4	0.3	0.3
125	0.2	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.4
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.4
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
85	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
75	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3
65	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
15	0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
5	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VERTICAL (ft)

VP-N4
HORIZONTAL

	175	185	195	205	215	225	235	245	255	265	275	285	295	305	315	325	335
245	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
235	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4
225	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3
215	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4
205	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
195	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4
185	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4
175	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5
165	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.4	0.4	0.4	0.5	0.4
155	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.6	0.4	0.4	0.4
145	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4
135	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
125	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4
115	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5
105	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
95	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.6
85	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5
75	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5
65	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.6
55	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.6	0.4	0.5	0.5	0.6
45	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
35	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.5	0.5
25	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.4
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.4	0.4
5	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3

VERTICAL (ft)

VP-N4
HORIZONTAL

	345	355	365	375	385	395	405	415	425	435	445	455	465	475	485	495	505
245	0.3	0.3	0.3	0.4	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
235	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
225	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
215	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
205	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
195	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
185	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
175	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6
165	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5
155	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
145	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
135	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
125	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
115	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6
105	0.6	0.5	0.5	0.5	0.5	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6
95	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
85	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
75	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
65	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
55	0.5	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
45	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6
35	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6
25	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
15	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
5	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

VERTICAL (ft)

VP-N4
HORIZONTAL

	515	525	535	545	555	565	575	585	595	605	615	625	635	645	655	665	675
245	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4
235	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
225	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
215	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.4	0.6	0.4	0.4
205	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4
195	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.5	0.4	0.4
185	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.4
175	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
165	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5
155	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.7	0.5	0.5
145	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.5	0.5	0.5
135	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5
125	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5
115	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
105	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
95	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6
75	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
65	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.7
55	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.6
45	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
35	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.7
25	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8	0.6	0.6	0.6
15	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.7	0.5	0.5	0.6	0.6	0.6	0.6	0.6
5	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.5	0.6	0.5	0.6

VERTICAL (ft)

VP-N4
HORIZONTAL

	685	695	705	715	725	735	745	755	765	775	785	795	805	815	825	835	845
245	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3
235	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.4
225	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4
215	0.4	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4
205	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.5
195	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5
185	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.4	0.4
175	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.5
165	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.6	0.4	0.4	0.5	0.4	0.4
155	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.4	0.4	0.6	0.4	0.5	0.7	0.6	0.4	0.5
145	0.5	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.6	0.6	0.5	0.6
135	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.6	0.6	0.5
125	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.6	0.6	0.5	0.6	0.5	0.4	0.5	0.6	0.4
115	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.6
105	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.7	0.6	0.5
95	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.8	0.6	0.7	0.5	0.6
85	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.5	0.6
75	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.8	0.6	0.6	0.7	0.6	0.7	0.5
65	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.6	0.7	0.6	0.6	0.6	0.7
55	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8	0.7	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.6
45	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.6	0.6
35	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7
25	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.6
15	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.6
5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6

VP-N4
HORIZONTAL

	855	865	875	885	895	905	915	925	935	945	955	965	975	985	995	1005	1015
245	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3
235	0.4	0.3	0.4	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3
225	0.4	0.4	0.5	0.4	0.5	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.3	0.5	0.3	0.3	0.3
215	0.6	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.3	0.3	0.4	0.3	0.5	0.4	0.3	0.4
205	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4
195	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4
185	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4
175	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5
165	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4
155	0.5	0.5	0.5	0.4	0.5	0.5	0.4	0.4	0.5	0.4	0.5	0.6	0.5	0.5	0.4	0.4	0.4
145	0.4	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.4	0.4	0.5	0.4
135	0.4	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.5
125	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4
115	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.6	0.4	0.4	0.5
105	0.5	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.6	0.5	0.4	0.5
95	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.4
85	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.5	0.5	0.4	0.4	0.4
75	0.6	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.5
65	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.4	0.4	0.5
55	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4
45	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
35	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.5	0.6	0.5	0.5	0.6	0.5	0.5	0.4	0.6
25	0.8	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.4
15	0.6	0.6	0.6	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.5
5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.7	0.5	0.5	0.5

VP-N4
HORIZONTAL

	1025	1035	1045	1055	1065	1075	1085	1095	1105	1115	1125	1135	1145	1155	1165	1175	1185
245	0.3	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
235	0.3	0.3	0.3	0.3	0.3	0.6	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3
225	0.3	0.5	0.3	0.3	0.3	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3
215	0.3	0.3	0.5	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.4
205	0.3	0.5	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.4
195	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3
185	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.3	0.3	0.4	0.4
175	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.5	0.3	0.3	0.4	0.4	0.4	0.3	0.3
165	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.3	0.3
155	0.4	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.5	0.4	0.5	0.4	0.5	0.3	0.3	0.3
145	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4
135	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4
125	0.4	0.4	0.5	0.5	0.5	0.4	0.5	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3
115	0.6	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5
105	0.4	0.5	0.4	0.4	0.5	0.4	0.4	0.6	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3
95	0.4	0.5	0.5	0.6	0.4	0.6	0.6	0.4	0.4	0.5	0.4	0.5	0.4	0.4	0.5	0.4	0.4
85	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4
75	0.5	0.4	0.5	0.6	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4
65	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4
55	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.4
45	0.4	0.4	0.5	0.6	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
35	0.6	0.6	0.4	0.5	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
25	0.4	0.5	0.5	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5
15	0.5	0.5	0.4	0.4	0.6	0.5	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.4	0.4
5	0.5	0.5	0.5	0.5	0.5	0.6	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4

VP-N4
HORIZONTAL

	1195	1205	1215	1225	1235	1245	1255	1265	1275	1285	1295	1305	1315	1325	1335	1345	1355
245	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2
235	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
225	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
215	0.3	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
205	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
195	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
185	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
175	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
165	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
155	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
145	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3
135	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3
125	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3
115	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
105	0.4	0.4	0.3	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
95	0.3	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3
85	0.4	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
75	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
65	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
55	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3
45	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
35	0.4	0.6	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3
25	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.3	0.3	0.3	0.3
15	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.5	0.3	0.4	0.3	0.3
5	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

VP-N4
HORIZONTAL

	1365	1375	1385	1395	1405	1415	1425	1435	1445	1455	1465	1475	1485	1495	1505	1515	1525
245	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
185	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
165	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
125	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
105	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
95	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
75	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2
55	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
45	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
25	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
15	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
5	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

VP-N4
HORIZONTAL

	1535	1545	1555	1565	1575	1585	1595	1605	1615	1625	1635	1645	1655	1665	1675	1685	1695
245	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
235	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
225	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
215	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
205	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
195	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
185	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
165	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
115	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2
105	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
95	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
85	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
75	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
65	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.3
55	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
45	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
35	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.3
25	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
15	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
5	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3

VP-N4
HORIZONTAL

	1705	1715	1725	1735	1745	1755	1765	1775	1785	1795	1805	1815	1825	1835	1845	1855	1865
245	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
225	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
215	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
205	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
195	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
185	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
135	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125	0.2	0.2	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
115	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
105	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
95	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
85	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
75	0.3	0.3	0.3	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
55	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
45	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
35	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0
25	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0
15	0.3	0.3	0.3	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0
5	0.3	0.3	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4
HORIZONTAL

	1875	1885	1895	1905	1915	1925	1935	1945	1955	1965	1975	1985	1995	2005	2015	2025	2035
245	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
235	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
225	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
215	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
205	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.1
195	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0
185	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0.1
175	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
165	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0
155	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0
145	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0
135	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0
125	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0
115	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0
105	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0
95	0.1	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0
85	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0	0
75	0.1	0.1	0.1	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
65	0.1	0.1	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
5	0	0	0.1	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4

HORIZONTAL

	2045	2055	2065	2075	2085	2095	2105	2115	2125	2135	2145	2155	2165	2175	2185	2195	2205
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4

HORIZONTAL

	2215	2225	2235	2245	2255	2265	2275	2285	2295	2305	2315	2325	2335	2345	2355	2365	2375
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4

HORIZONTAL

	2385	2395	2405	2415	2425	2435	2445	2455	2465	2475	2485	2495	2505	2515	2525	2535	2545
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4

HORIZONTAL

	2555	2565	2575	2585	2595	2605	2615	2625	2635	2645	2655	2665	2675	2685	2695	2705	2715
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0

VERTICAL (ft)

VP-N4

HORIZONTAL

	2725	2735	2745	2755	2765	2775	2785	2795	2805	2815	2825	2835	2845	2855	2865	2875	2885
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0
105	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
75	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-N4

HORIZONTAL

	2895	2905	2915	2925	2935	2945	2955	2965	2975	2985	2995	3005	3015	3025	3035	3045	3055
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
145	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0.1	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0.1	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0.1	0	0.1
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0

VP-N4

HORIZONTAL

	3065	3075	3085	3095	3105	3115	3125	3135	3145	3155	3165	3175	3185	3195	3205	3215	3225
245	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0	0
25	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-N4

HORIZONTAL

	3235	3245	3255	3265	3275	3285	3295	3305	3315	3325	3335	3345	3355	3365	3375	3385	3395
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VP-N4
HORIZONTAL

	3405	3415	3425	3435	3445	3455	3465	3475	3485	3495	3505	3515	3525	3535	3545	3555	3565
245	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
195	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0.1	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

VERTICAL (ft)

VP-N4
HORIZONTAL

	3575	3585	3595	3605	3615	3625	3635	3645
245	0	0	0	0	0	0	0	0
235	0	0	0	0	0	0	0	0
225	0	0	0	0	0	0	0	0
215	0	0	0	0	0	0	0	0
205	0	0	0	0	0	0	0	0
195	0	0	0.1	0	0	0	0	0
185	0	0	0	0	0	0	0	0
175	0	0	0	0	0	0	0	0
165	0	0	0	0	0	0	0	0
155	0	0	0	0	0	0	0	0
145	0	0	0	0	0	0	0	0
135	0	0	0	0	0	0	0	0
125	0	0	0	0	0	0	0	0
115	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0

VERTICAL (ft)