

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P192955

Luminaire Tested: **GLEON-AF-07-LED-E1-SL4-7030-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P192955  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-AF-07-LED-E1-SL4-7030-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 33048.7 lumens  
Efficiency: N/A  
Efficacy: 84.5 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G5

Input Watts (W): 391  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

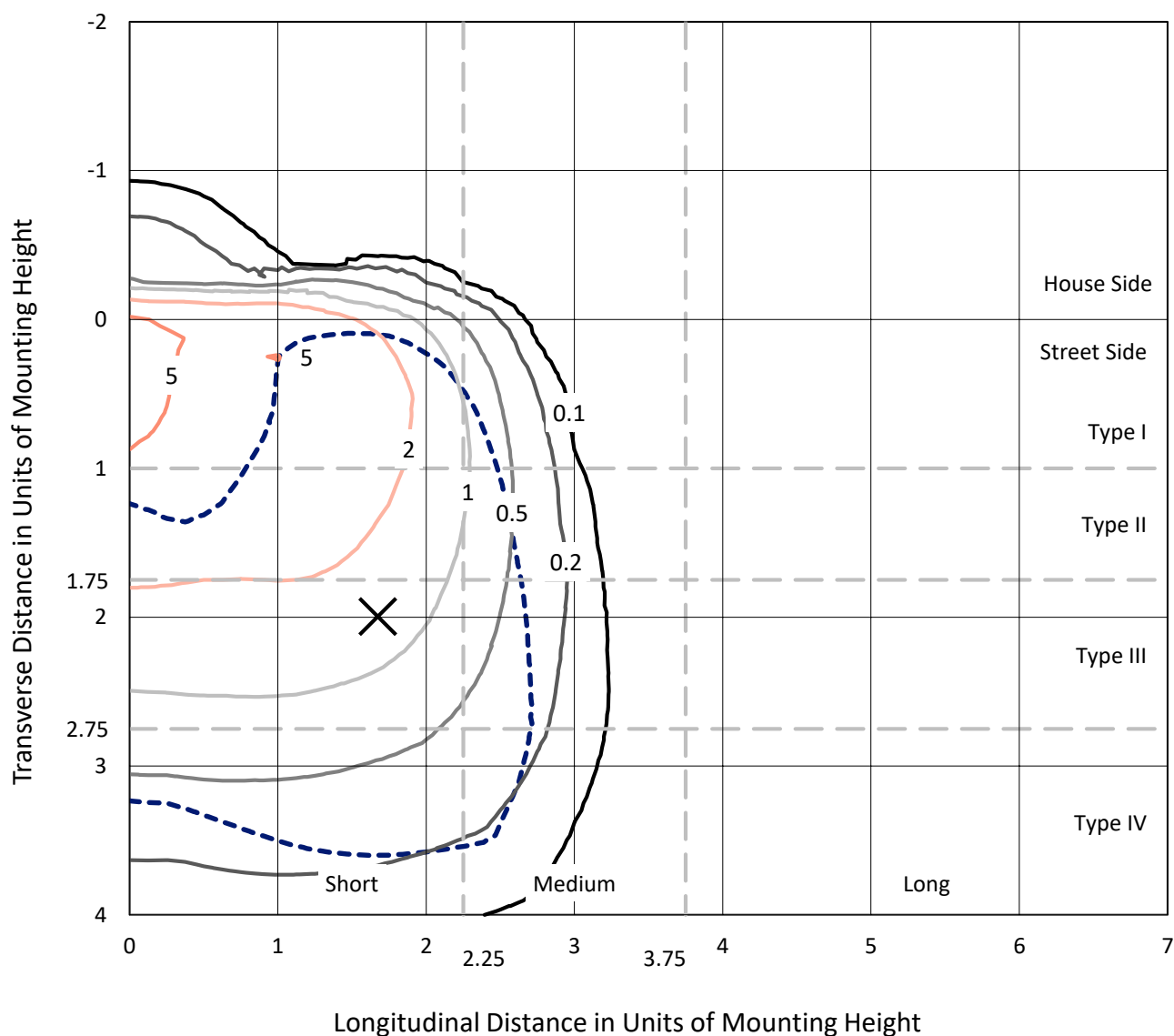


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 --- 1/2 Max cd

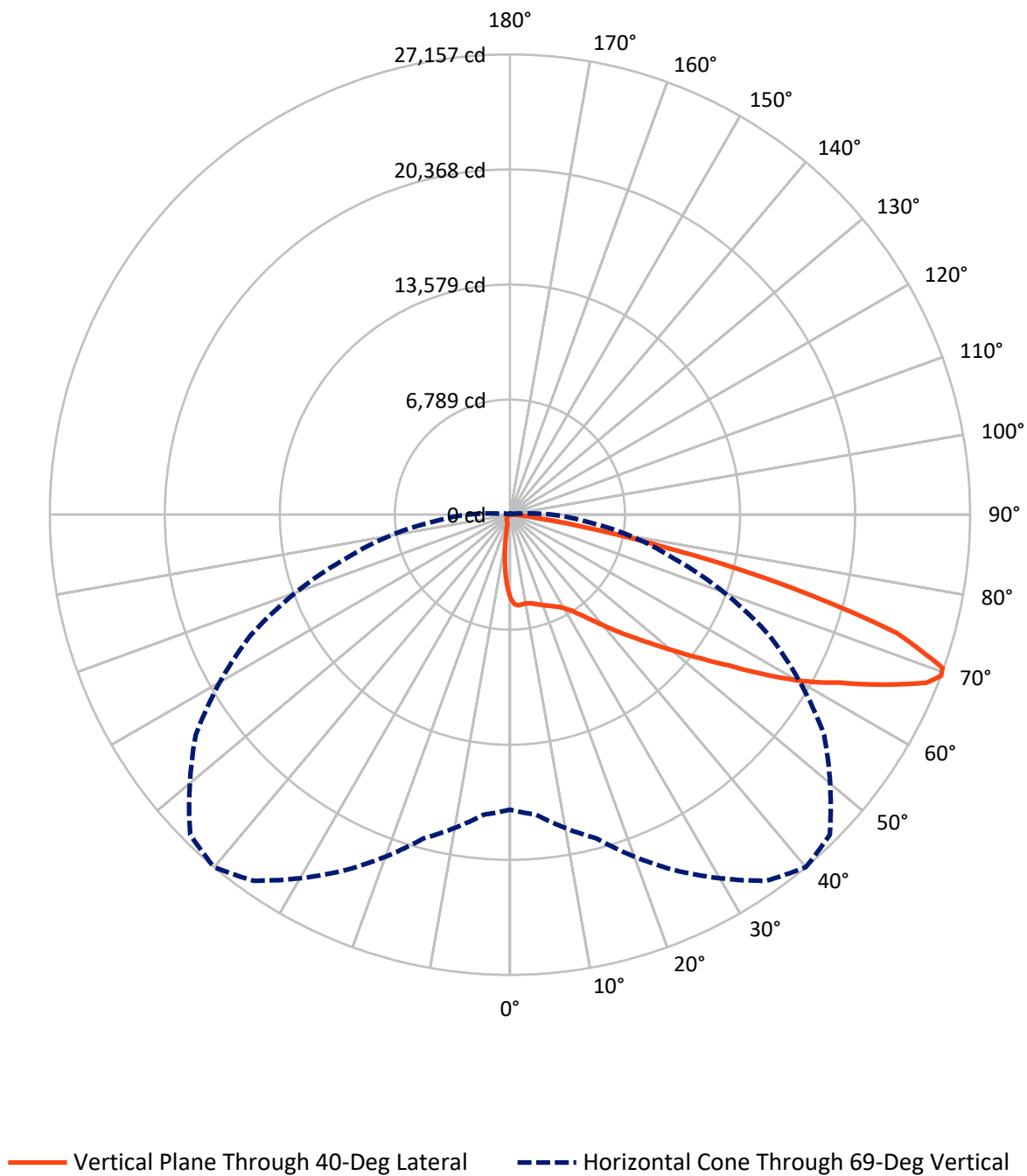


Based on 30 foot mounting height. Maximum calculated value = 6 fc  
 Type IV - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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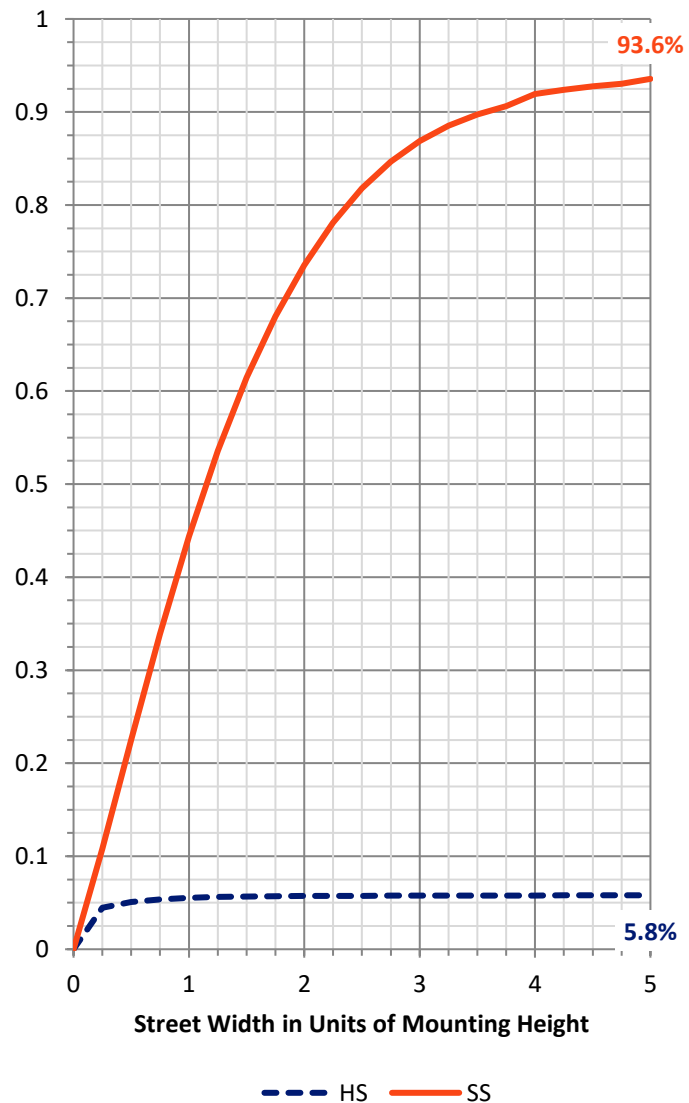
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1933.5   | 0.0    | 1933.5  |
|                    | % Fixture | 5.9      | 0.0    | 5.9     |
| <b>Street Side</b> | Lumens    | 31115.2  | 0.0    | 31115.2 |
|                    | % Fixture | 94.1     | 0.0    | 94.1    |
| <b>Total</b>       | Lumens    | 33048.7  | 0.0    | 33048.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 400.3   | 1.2       |
| 10°-20°   | 984.5   | 3.0       |
| 20°-30°   | 1658.3  | 5.0       |
| 30°-40°   | 2714.6  | 8.2       |
| 40°-50°   | 4700.3  | 14.2      |
| 50°-60°   | 7403.5  | 22.4      |
| 60°-70°   | 9668.7  | 29.3      |
| 70°-80°   | 4979.8  | 15.1      |
| 80°-90°   | 538.7   | 1.6       |
| 90°-100°  | 0.0     | 0.0       |
| 100°-110° | 0.0     | 0.0       |
| 110°-120° | 0.0     | 0.0       |
| 120°-130° | 0.0     | 0.0       |
| 130°-140° | 0.0     | 0.0       |
| 140°-150° | 0.0     | 0.0       |
| 150°-160° | 0.0     | 0.0       |
| 160°-170° | 0.0     | 0.0       |
| 170°-180° | 0.0     | 0.0       |
| 0°-90°    | 33048.7 | 100.0     |
| 0°-180°   | 33048.7 | 100.0     |

**Coefficient of Utilization**



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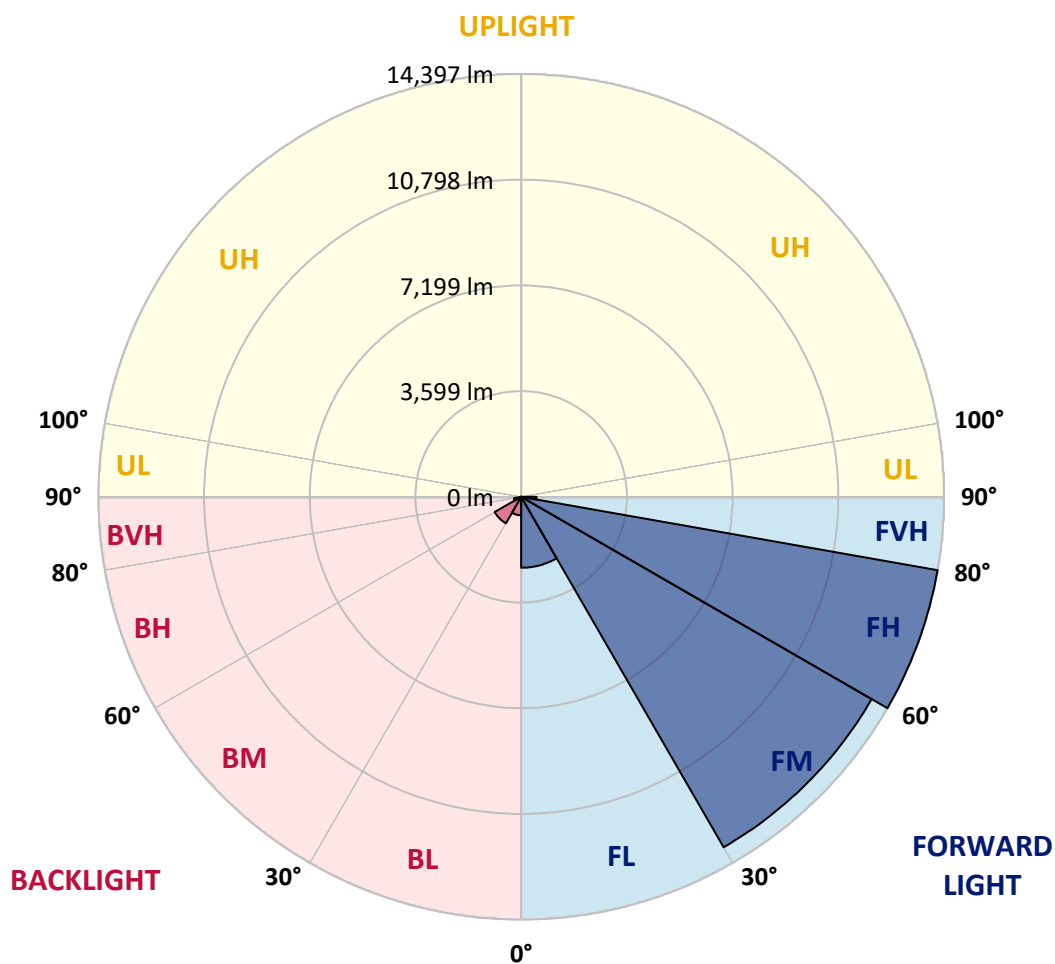
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|---------|-----------|-------------------------|------|--------|
|      |             |         |           | B                       | U    | G      |
| FL   | (0°-30°)    | 2416.8  | 7.3       |                         |      |        |
| FM   | (30°-60°)   | 13779.2 | 41.7      |                         |      |        |
| FH   | (60°-80°)   | 14397.4 | 43.6      |                         |      | G5     |
| FVH  | (80°-90°)   | 521.8   | 1.6       |                         |      | G4/750 |
| BL   | (0°-30°)    | 626.3   | 1.9       | B2/1000                 |      |        |
| BM   | (30°-60°)   | 1039.2  | 3.1       | B2/2500                 |      |        |
| BH   | (60°-80°)   | 251.0   | 0.8       | B1/500                  |      | G1/500 |
| BVH  | (80°-90°)   | 16.9    | 0.1       |                         |      | G1/100 |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |        |

**BUG Rating: B2-U0-G5**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 40°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4937.7  | 4937.7  | 4937.7  | 4937.7  | 4937.7  | 4937.7  | 4937.7  | 4937.7  | 4937.7  | 4937.7  | 4937.7  |
| 2.5°  | 5421.6  | 5392.1  | 5374.4  | 5350.8  | 5321.3  | 5295.7  | 5285.9  | 5213.1  | 5144.3  | 5049.8  | 4941.6  |
| 5°    | 5521.9  | 5512.0  | 5480.6  | 5449.1  | 5413.7  | 5374.4  | 5352.7  | 5266.2  | 5167.9  | 5030.1  | 4841.3  |
| 7.5°  | 5531.8  | 5519.9  | 5480.6  | 5437.3  | 5388.1  | 5340.9  | 5303.6  | 5217.0  | 5126.6  | 4986.8  | 4756.7  |
| 10°   | 5516.0  | 5502.2  | 5472.7  | 5425.5  | 5364.5  | 5319.3  | 5281.9  | 5199.3  | 5122.6  | 4996.7  | 4741.0  |
| 12.5° | 5498.3  | 5484.5  | 5470.7  | 5447.1  | 5394.0  | 5362.6  | 5331.1  | 5252.4  | 5183.6  | 5077.3  | 4798.0  |
| 15°   | 5516.0  | 5508.1  | 5523.8  | 5514.0  | 5484.5  | 5457.0  | 5425.5  | 5354.7  | 5291.8  | 5203.3  | 4902.3  |
| 17.5° | 5590.8  | 5590.8  | 5640.0  | 5645.9  | 5618.3  | 5579.0  | 5533.8  | 5462.9  | 5409.8  | 5335.0  | 5026.2  |
| 20°   | 5765.8  | 5759.9  | 5822.9  | 5834.7  | 5767.8  | 5706.8  | 5640.0  | 5553.4  | 5512.0  | 5464.8  | 5148.2  |
| 22.5° | 6066.8  | 6039.3  | 6076.7  | 6064.9  | 5933.0  | 5838.6  | 5756.0  | 5649.8  | 5628.2  | 5606.5  | 5283.9  |
| 25°   | 6458.4  | 6442.6  | 6468.1  | 6352.2  | 6119.9  | 5992.1  | 5893.7  | 5773.7  | 5773.7  | 5795.3  | 5437.3  |
| 27.5° | 7026.8  | 6967.8  | 6881.2  | 6676.7  | 6328.4  | 6165.2  | 6059.0  | 5931.0  | 5964.6  | 6045.2  | 5640.0  |
| 30°   | 7609.2  | 7544.2  | 7345.5  | 7030.8  | 6582.3  | 6411.2  | 6287.1  | 6153.4  | 6232.0  | 6379.6  | 5911.4  |
| 32.5° | 8183.5  | 8110.8  | 7829.4  | 7432.1  | 6946.1  | 6775.0  | 6655.0  | 6507.5  | 6639.2  | 6887.1  | 6308.7  |
| 35°   | 8740.2  | 8675.3  | 8350.6  | 7882.5  | 7430.0  | 7288.4  | 7178.4  | 7050.4  | 7219.7  | 7565.7  | 6869.4  |
| 37.5° | 9365.8  | 9295.0  | 8899.6  | 8392.1  | 8018.3  | 7916.0  | 7835.3  | 7707.4  | 8002.5  | 8510.1  | 7650.5  |
| 40°   | 10135.0 | 10014.9 | 9481.8  | 8976.3  | 8698.9  | 8649.7  | 8594.7  | 8577.0  | 9035.3  | 9737.6  | 8691.0  |
| 42.5° | 11016.3 | 10819.5 | 10091.7 | 9592.0  | 9446.4  | 9481.8  | 9468.1  | 9546.7  | 10327.7 | 11264.2 | 9957.9  |
| 45°   | 11897.6 | 11643.8 | 10770.3 | 10249.1 | 10268.7 | 10392.6 | 10469.4 | 10784.1 | 11946.7 | 13015.0 | 11321.2 |
| 47.5° | 12645.1 | 12395.3 | 11421.5 | 10959.2 | 11195.2 | 11439.2 | 11647.7 | 12243.8 | 13611.0 | 14738.2 | 12381.5 |
| 50°   | 13284.4 | 13048.4 | 12112.1 | 11740.2 | 12271.4 | 12664.8 | 13003.2 | 13886.5 | 15401.1 | 16050.3 | 13125.1 |
| 52.5° | 13807.7 | 13650.3 | 12828.0 | 12635.3 | 13500.8 | 14077.2 | 14573.0 | 15631.2 | 16986.7 | 17116.5 | 13703.4 |
| 55°   | 14317.3 | 14205.2 | 13597.2 | 13699.5 | 14944.8 | 15729.6 | 16357.2 | 17482.5 | 18352.0 | 18005.7 | 14258.3 |
| 57.5° | 14903.4 | 14801.2 | 14474.5 | 15049.1 | 16843.1 | 17830.7 | 18515.2 | 19123.1 | 19553.9 | 18914.5 | 14781.4 |
| 60°   | 15501.4 | 15442.4 | 15450.4 | 16548.0 | 19022.7 | 19971.0 | 20348.7 | 20506.0 | 20734.2 | 19770.3 | 14810.9 |
| 62.5° | 16071.9 | 16184.1 | 16565.7 | 18216.2 | 21110.0 | 21837.7 | 22028.7 | 22184.0 | 21916.6 | 19906.1 | 13683.7 |
| 65°   | 17037.9 | 17220.8 | 18131.6 | 20449.0 | 23405.6 | 24184.6 | 24381.4 | 23848.2 | 22103.3 | 18151.2 | 11130.4 |
| 67.5° | 17510.0 | 17844.4 | 19469.4 | 22530.3 | 25632.5 | 26498.1 | 26425.3 | 23956.5 | 19835.2 | 13841.2 | 7142.9  |
| 69°   | 17411.7 | 17767.6 | 19778.1 | 23167.7 | 26372.1 | 27157.1 | 26694.8 | 22632.5 | 16898.1 | 10026.8 | 4384.9  |
| 70°   | 17022.1 | 17382.0 | 19618.8 | 23144.1 | 26466.6 | 27088.2 | 26195.1 | 20997.8 | 14287.8 | 7331.8  | 2742.3  |
| 72.5° | 14214.9 | 14525.7 | 17417.6 | 20919.1 | 24381.4 | 23875.8 | 21914.5 | 14547.5 | 6961.9  | 1996.7  | 617.8   |
| 75°   | 8750.0  | 8923.2  | 12497.6 | 15759.2 | 18414.9 | 17116.5 | 14600.6 | 7237.4  | 2075.4  | 564.6   | 342.3   |
| 77.5° | 4622.9  | 4701.5  | 6842.0  | 9289.1  | 11673.4 | 9658.9  | 7483.1  | 2822.9  | 956.0   | 354.1   | 247.9   |
| 80°   | 2732.5  | 2791.5  | 3684.6  | 4247.1  | 5051.7  | 4219.6  | 2992.1  | 1733.1  | 684.6   | 222.4   | 220.3   |
| 82.5° | 1563.9  | 1601.3  | 2671.5  | 2360.6  | 1990.8  | 1699.6  | 1489.2  | 1642.6  | 411.2   | 149.4   | 228.3   |
| 85°   | 574.3   | 582.3   | 1503.0  | 1796.0  | 1184.3  | 704.2   | 739.6   | 1361.3  | 110.2   | 94.4    | 178.9   |
| 87.5° | 267.5   | 261.6   | 773.1   | 1099.7  | 692.4   | 446.6   | 576.4   | 299.1   | 43.2    | 60.9    | 49.1    |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

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**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4937.7  | 4937.7 | 4937.7 | 4937.7 | 4937.7 | 4937.7 | 4937.7 | 4937.7 | 4937.7 | 4937.7 | 4937.7 |
| 2.5°  | 4878.7  | 4805.9 | 4674.0 | 4538.3 | 4400.6 | 4294.3 | 4190.1 | 4107.5 | 4080.0 | 4028.8 | 4032.8 |
| 5°    | 4729.2  | 4595.3 | 4320.0 | 4040.6 | 3749.4 | 3509.5 | 3283.2 | 3100.3 | 3011.7 | 2921.3 | 2921.3 |
| 7.5°  | 4599.3  | 4404.6 | 3973.8 | 3519.3 | 3049.1 | 2653.7 | 2297.7 | 2030.1 | 1882.6 | 1764.5 | 1762.6 |
| 10°   | 4550.1  | 4286.5 | 3684.6 | 3033.4 | 2378.3 | 1839.3 | 1416.3 | 1144.9 | 1005.1 | 914.7  | 910.7  |
| 12.5° | 4571.7  | 4245.2 | 3462.2 | 2584.8 | 1762.6 | 1182.3 | 820.3  | 645.2  | 586.1  | 558.7  | 558.7  |
| 15°   | 4634.7  | 4233.4 | 3240.0 | 2146.2 | 1245.2 | 739.6  | 544.8  | 497.6  | 493.8  | 493.8  | 493.8  |
| 17.5° | 4711.5  | 4237.3 | 3011.7 | 1719.3 | 847.9  | 529.2  | 470.2  | 464.3  | 468.1  | 468.1  | 468.1  |
| 20°   | 4790.2  | 4239.3 | 2765.9 | 1323.9 | 597.9  | 460.3  | 442.6  | 440.7  | 444.5  | 444.5  | 446.6  |
| 22.5° | 4886.5  | 4249.1 | 2519.9 | 989.5  | 493.8  | 434.8  | 420.9  | 420.9  | 423.0  | 423.0  | 420.9  |
| 25°   | 4996.7  | 4268.8 | 2264.3 | 733.7  | 450.4  | 417.1  | 405.3  | 403.2  | 405.3  | 403.2  | 401.3  |
| 27.5° | 5134.4  | 4296.3 | 1979.0 | 574.3  | 430.8  | 399.4  | 389.5  | 389.5  | 387.6  | 385.5  | 383.6  |
| 30°   | 5307.5  | 4327.9 | 1658.3 | 487.9  | 411.2  | 383.6  | 373.7  | 371.8  | 369.9  | 365.9  | 365.9  |
| 32.5° | 5571.1  | 4396.7 | 1341.6 | 442.6  | 389.5  | 361.9  | 354.1  | 354.1  | 350.1  | 346.3  | 344.2  |
| 35°   | 5976.4  | 4532.4 | 1058.4 | 415.0  | 365.9  | 338.3  | 328.6  | 328.6  | 324.6  | 322.7  | 320.6  |
| 37.5° | 6537.0  | 4739.0 | 822.2  | 389.5  | 342.3  | 312.8  | 302.9  | 301.0  | 297.0  | 293.2  | 291.1  |
| 40°   | 7282.5  | 4994.7 | 647.3  | 365.9  | 318.7  | 287.3  | 279.3  | 275.5  | 267.5  | 261.6  | 261.6  |
| 42.5° | 8218.9  | 5285.9 | 525.2  | 340.4  | 291.1  | 263.7  | 257.8  | 251.9  | 238.0  | 232.1  | 230.2  |
| 45°   | 9198.5  | 5547.5 | 444.5  | 310.9  | 263.7  | 240.1  | 236.1  | 226.2  | 208.5  | 202.5  | 202.5  |
| 47.5° | 9904.8  | 5608.5 | 391.4  | 283.3  | 238.0  | 214.4  | 212.5  | 194.7  | 178.9  | 175.1  | 173.0  |
| 50°   | 10345.4 | 5488.4 | 348.2  | 255.7  | 214.4  | 190.7  | 184.8  | 163.3  | 153.4  | 149.4  | 147.5  |
| 52.5° | 10642.5 | 5274.1 | 312.8  | 232.1  | 192.8  | 169.2  | 155.3  | 139.7  | 131.7  | 127.9  | 127.9  |
| 55°   | 10880.6 | 4971.1 | 277.4  | 210.6  | 175.1  | 151.5  | 131.7  | 119.9  | 112.1  | 108.1  | 108.1  |
| 57.5° | 10947.4 | 4559.9 | 242.0  | 192.8  | 157.4  | 133.8  | 112.1  | 104.3  | 94.4   | 92.5   | 92.5   |
| 60°   | 10461.6 | 3818.3 | 214.4  | 171.1  | 141.6  | 116.1  | 98.4   | 88.5   | 78.6   | 76.7   | 74.8   |
| 62.5° | 9180.8  | 2954.7 | 188.8  | 151.5  | 123.9  | 100.3  | 84.5   | 72.7   | 64.9   | 64.9   | 64.9   |
| 65°   | 7003.2  | 1981.0 | 165.2  | 131.7  | 108.1  | 84.5   | 72.7   | 59.0   | 55.0   | 55.0   | 57.1   |
| 67.5° | 4192.1  | 1078.1 | 141.6  | 112.1  | 92.5   | 70.8   | 60.9   | 51.2   | 49.1   | 51.2   | 51.2   |
| 69°   | 2457.0  | 633.4  | 127.9  | 100.3  | 80.7   | 63.0   | 53.1   | 45.3   | 49.1   | 51.2   | 51.2   |
| 70°   | 1516.7  | 426.8  | 118.0  | 90.4   | 72.7   | 57.1   | 49.1   | 43.2   | 47.2   | 49.1   | 49.1   |
| 72.5° | 423.0   | 220.3  | 94.4   | 70.8   | 59.0   | 47.2   | 39.4   | 39.4   | 45.3   | 47.2   | 47.2   |
| 75°   | 275.5   | 163.3  | 72.7   | 53.1   | 45.3   | 37.3   | 33.5   | 37.3   | 43.2   | 45.3   | 45.3   |
| 77.5° | 228.3   | 133.8  | 59.0   | 43.2   | 37.3   | 35.4   | 31.4   | 33.5   | 39.4   | 41.3   | 41.3   |
| 80°   | 208.5   | 94.4   | 47.2   | 39.4   | 33.5   | 31.4   | 29.5   | 27.6   | 35.4   | 37.3   | 37.3   |
| 82.5° | 198.7   | 74.8   | 41.3   | 35.4   | 31.4   | 27.6   | 25.5   | 27.6   | 31.4   | 33.5   | 35.4   |
| 85°   | 123.9   | 49.1   | 37.3   | 33.5   | 27.6   | 25.5   | 25.5   | 25.5   | 29.5   | 31.4   | 31.4   |
| 87.5° | 45.3    | 39.4   | 33.5   | 27.6   | 23.6   | 23.6   | 23.6   | 23.6   | 25.5   | 29.5   | 29.5   |
| 90°   | 0.0     | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)