

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: P192783

Luminaire Tested: **GLEON-AF-05-LED-E1-SL2-7030-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P192783  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-05-LED-E1-SL2-7030-800-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19254.7 lumens  
Efficiency: N/A  
Efficacy: 91.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G3

Input Watts (W): 210  
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



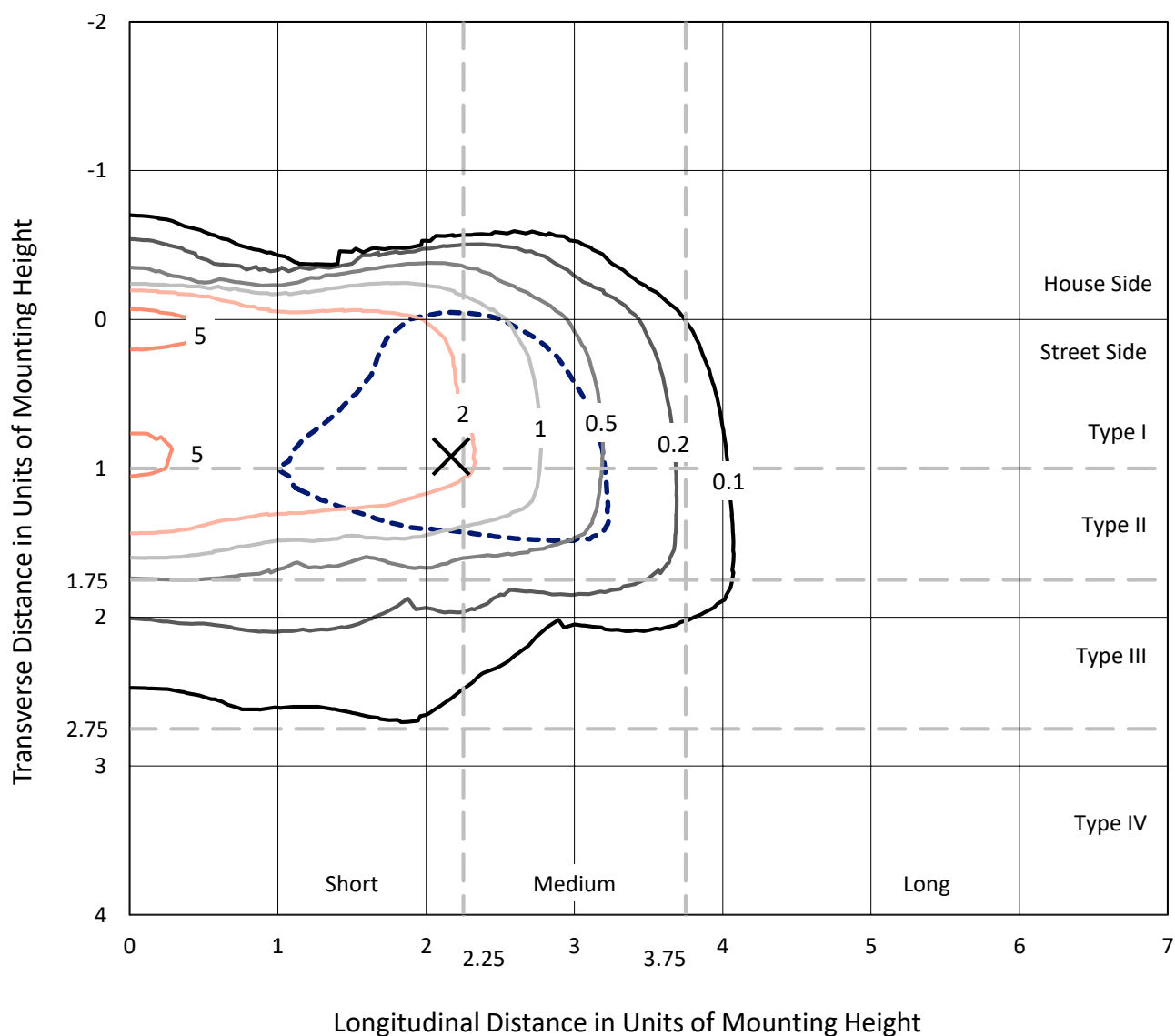
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

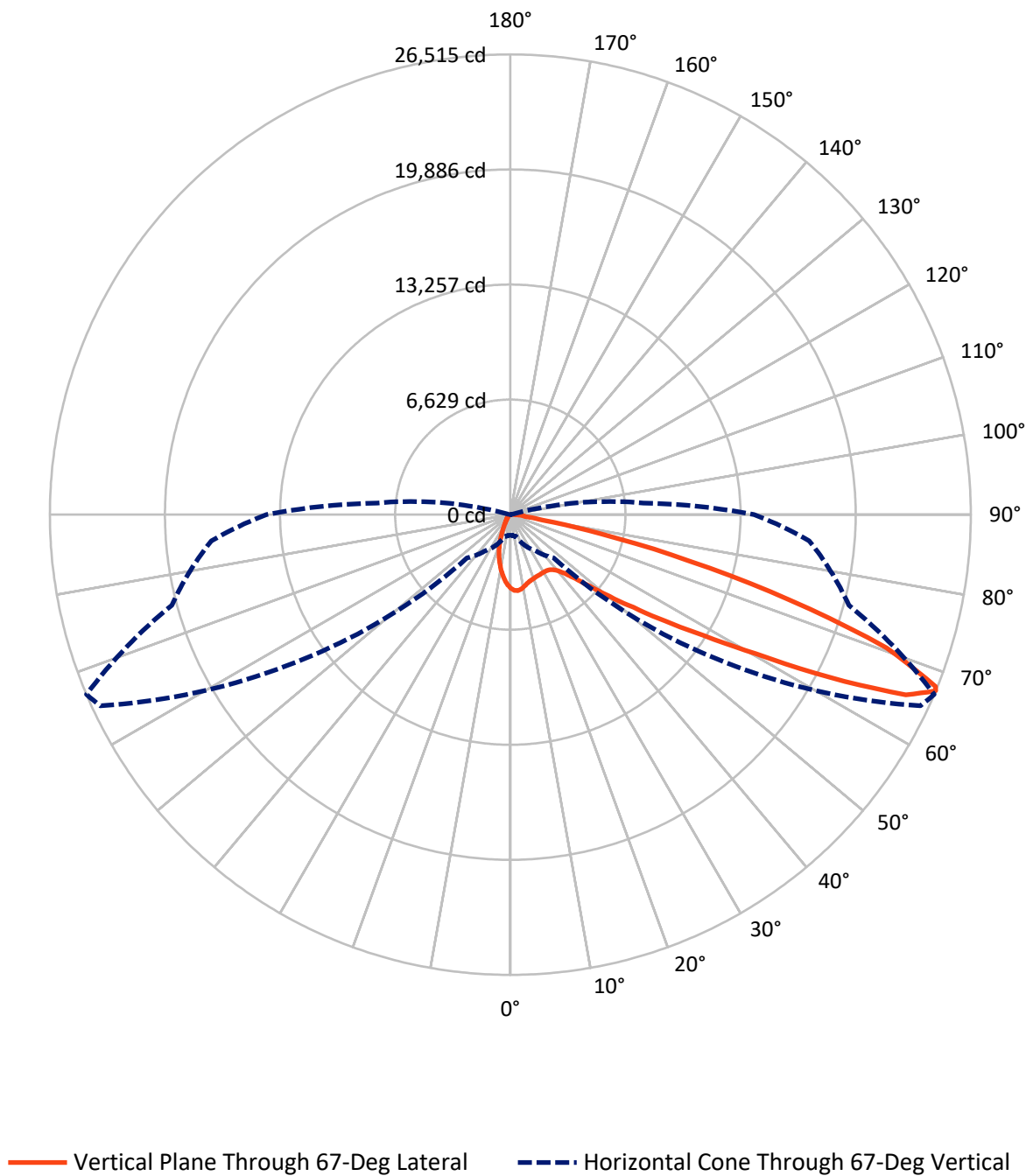


Based on 25 foot mounting height. Maximum calculated value = 6.8 fc  
 Type II - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1999.2   | 0.0    | 1999.2  |
|                    | % Fixture | 10.4     | 0.0    | 10.4    |
| <b>Street Side</b> | Lumens    | 17255.5  | 0.0    | 17255.5 |
|                    | % Fixture | 89.6     | 0.0    | 89.6    |
| <b>Total</b>       | Lumens    | 19254.7  | 0.0    | 19254.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 345.5   | 1.8       |
| 10°-20°   | 735.4   | 3.8       |
| 20°-30°   | 1069.2  | 5.6       |
| 30°-40°   | 1668.0  | 8.7       |
| 40°-50°   | 2954.8  | 15.3      |
| 50°-60°   | 4675.7  | 24.3      |
| 60°-70°   | 5355.3  | 27.8      |
| 70°-80°   | 2221.4  | 11.5      |
| 80°-90°   | 229.5   | 1.2       |
| 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°    | 19254.7 | 100.0     |
| 0°-180°   | 19254.7 | 100.0     |

**Coefficient of Utilization**



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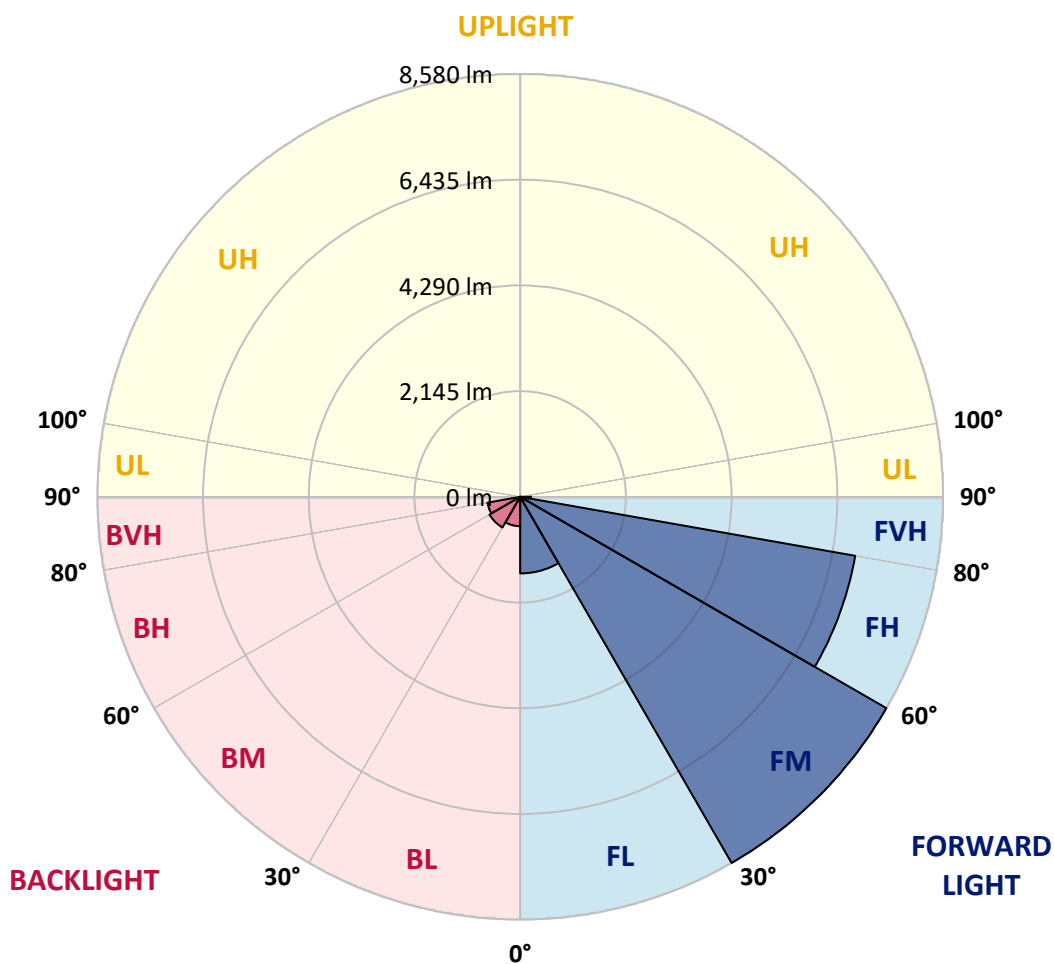
CATALOG NUMBER: GLEON-AF-05-LED-E1-SL2-7030-800-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1553.6 | 8.1       |                         |      |         |
| FM   | (30°-60°)   | 8580.0 | 44.6      |                         |      |         |
| FH   | (60°-80°)   | 6902.9 | 35.9      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 219.1  | 1.1       |                         |      | G2/225  |
| BL   | (0°-30°)    | 596.6  | 3.1       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 718.5  | 3.7       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 673.8  | 3.5       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 10.3   | 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-G3**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°     | 45°     | 55°     | 65°     | 67°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4246.4 | 4246.4 | 4246.4 | 4246.4 | 4246.4  | 4246.4  | 4246.4  | 4246.4  | 4246.4  | 4246.4  | 4246.4  |
| 2.5°  | 4390.1 | 4399.1 | 4398.0 | 4404.8 | 4420.4  | 4421.6  | 4405.9  | 4375.5  | 4368.8  | 4329.5  | 4261.0  |
| 5°    | 4048.7 | 4074.6 | 4090.2 | 4154.2 | 4226.1  | 4312.7  | 4377.8  | 4401.4  | 4398.0  | 4370.0  | 4266.6  |
| 7.5°  | 3659.0 | 3684.9 | 3702.8 | 3778.0 | 3873.6  | 4021.8  | 4191.4  | 4330.6  | 4342.9  | 4373.3  | 4262.1  |
| 10°   | 3399.6 | 3404.1 | 3428.8 | 3500.6 | 3600.6  | 3752.2  | 3954.4  | 4198.1  | 4235.1  | 4346.4  | 4250.8  |
| 12.5° | 3186.2 | 3189.6 | 3222.2 | 3299.6 | 3406.2  | 3559.0  | 3771.3  | 4053.2  | 4110.5  | 4312.7  | 4248.6  |
| 15°   | 3034.5 | 3046.9 | 3076.0 | 3157.0 | 3270.4  | 3422.0  | 3640.0  | 3946.6  | 4015.1  | 4300.3  | 4268.9  |
| 17.5° | 2984.1 | 2997.5 | 3006.5 | 3064.9 | 3168.2  | 3316.4  | 3540.0  | 3876.8  | 3954.4  | 4307.0  | 4308.2  |
| 20°   | 3036.9 | 3046.9 | 3026.7 | 3041.3 | 3105.3  | 3237.9  | 3455.8  | 3817.4  | 3909.4  | 4314.8  | 4358.7  |
| 22.5° | 3233.3 | 3237.9 | 3182.8 | 3118.8 | 3107.6  | 3180.5  | 3389.4  | 3770.2  | 3869.0  | 4336.3  | 4418.2  |
| 25°   | 3570.3 | 3562.4 | 3472.6 | 3334.5 | 3204.1  | 3170.4  | 3350.2  | 3741.0  | 3848.7  | 4358.7  | 4479.9  |
| 27.5° | 3976.8 | 3988.1 | 3864.5 | 3663.5 | 3415.3  | 3237.9  | 3344.5  | 3728.7  | 3839.8  | 4374.4  | 4533.9  |
| 30°   | 4471.0 | 4486.7 | 4345.2 | 4092.6 | 3736.5  | 3404.1  | 3396.3  | 3726.4  | 3834.2  | 4364.4  | 4538.4  |
| 32.5° | 4975.2 | 4994.3 | 4883.2 | 4622.6 | 4165.5  | 3682.6  | 3513.0  | 3751.1  | 3845.5  | 4329.5  | 4512.5  |
| 35°   | 5503.2 | 5530.0 | 5456.0 | 5232.4 | 4747.4  | 4084.6  | 3718.5  | 3826.4  | 3898.3  | 4326.1  | 4486.7  |
| 37.5° | 6232.0 | 6256.7 | 6117.4 | 5880.5 | 5451.5  | 4623.8  | 4048.7  | 3967.9  | 4022.9  | 4379.9  | 4493.5  |
| 40°   | 7320.3 | 7316.9 | 6957.5 | 6594.8 | 6225.3  | 5308.8  | 4512.5  | 4224.0  | 4252.1  | 4542.9  | 4576.6  |
| 42.5° | 8506.3 | 8500.6 | 7969.4 | 7417.9 | 7084.4  | 6152.3  | 5122.4  | 4666.5  | 4647.4  | 4842.7  | 4792.2  |
| 45°   | 9420.5 | 9419.4 | 8985.8 | 8364.8 | 8118.8  | 7120.3  | 5910.8  | 5281.9  | 5252.6  | 5330.2  | 5189.9  |
| 47.5° | 9810.2 | 9816.8 | 9599.0 | 9162.2 | 9265.4  | 8429.9  | 6904.7  | 6173.5  | 6129.8  | 6098.3  | 5884.9  |
| 50°   | 9506.8 | 9520.5 | 9538.4 | 9453.0 | 10106.6 | 10189.7 | 8237.8  | 7430.2  | 7409.0  | 7268.6  | 6935.0  |
| 52.5° | 8516.3 | 8584.8 | 8796.0 | 9066.7 | 10398.6 | 11878.8 | 10327.8 | 8991.4  | 8876.9  | 8727.5  | 8360.3  |
| 55°   | 6847.5 | 6922.6 | 7323.6 | 7980.7 | 9964.0  | 12988.5 | 13256.9 | 11003.9 | 10813.1 | 10367.2 | 9837.1  |
| 57.5° | 4531.6 | 4648.4 | 5230.2 | 6065.7 | 8701.6  | 13167.1 | 16179.2 | 13797.1 | 13132.2 | 11911.5 | 11314.1 |
| 60°   | 2496.6 | 2608.9 | 3240.1 | 3997.0 | 6284.8  | 12284.3 | 18144.5 | 17433.6 | 16258.9 | 13637.6 | 13107.5 |
| 62.5° | 1537.5 | 1598.1 | 2064.2 | 2768.4 | 3769.1  | 9695.5  | 18551.1 | 22003.5 | 20643.5 | 15860.2 | 15274.0 |
| 65°   | 1224.1 | 1250.0 | 1478.0 | 2263.0 | 2702.1  | 5767.0  | 17238.3 | 25487.4 | 25033.6 | 18551.1 | 17213.6 |
| 67°   | 1188.2 | 1198.3 | 1306.2 | 1942.9 | 2547.2  | 3535.5  | 14441.8 | 26054.5 | 26514.9 | 20179.6 | 17274.2 |
| 67.5° | 1196.1 | 1207.4 | 1309.5 | 1854.2 | 2542.7  | 3249.1  | 13478.1 | 25831.0 | 26412.8 | 20308.8 | 17005.7 |
| 70°   | 1153.4 | 1188.2 | 1499.4 | 1853.0 | 2418.0  | 2699.9  | 8071.6  | 22380.8 | 22986.2 | 18870.0 | 14429.5 |
| 72.5° | 408.8  | 411.1  | 648.0  | 1499.4 | 2629.1  | 2729.1  | 4053.2  | 16407.1 | 16855.3 | 14435.0 | 10403.1 |
| 75°   | 242.5  | 206.6  | 215.7  | 426.7  | 2512.3  | 2650.5  | 2338.2  | 10484.0 | 10651.3 | 8271.5  | 5268.4  |
| 77.5° | 167.3  | 146.0  | 150.4  | 188.7  | 956.9   | 2613.4  | 1857.6  | 5467.3  | 5288.5  | 2901.0  | 1122.0  |
| 80°   | 95.5   | 84.2   | 89.8   | 165.1  | 348.2   | 2438.2  | 1752.0  | 2217.0  | 1890.1  | 491.8   | 310.0   |
| 82.5° | 50.6   | 42.7   | 51.7   | 135.9  | 242.5   | 1519.6  | 1755.4  | 1071.4  | 849.1   | 166.2   | 211.1   |
| 85°   | 17.9   | 14.6   | 24.7   | 93.2   | 161.7   | 466.1   | 1627.3  | 900.8   | 707.6   | 80.9    | 160.6   |
| 87.5° | 3.4    | 3.4    | 10.2   | 38.1   | 65.1    | 142.6   | 962.5   | 534.6   | 358.3   | 48.3    | 110.1   |
| 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°    | 4246.4  | 4246.4 | 4246.4 | 4246.4 | 4246.4 | 4246.4 | 4246.4 | 4246.4 | 4246.4 | 4246.4 | 4246.4 |
| 2.5°  | 4232.9  | 4184.6 | 4119.5 | 4039.8 | 3945.4 | 3862.4 | 3800.5 | 3736.5 | 3723.0 | 3700.6 | 3697.3 |
| 5°    | 4204.9  | 4121.7 | 3960.0 | 3774.7 | 3577.0 | 3398.5 | 3253.6 | 3124.4 | 3067.1 | 3017.7 | 3012.2 |
| 7.5°  | 4163.4  | 4038.7 | 3763.4 | 3464.7 | 3155.9 | 2875.0 | 2637.0 | 2468.5 | 2313.6 | 2239.4 | 2228.3 |
| 10°   | 4115.0  | 3936.4 | 3542.1 | 3127.8 | 2701.0 | 2304.6 | 1950.9 | 1654.3 | 1474.6 | 1367.9 | 1354.5 |
| 12.5° | 4070.0  | 3836.4 | 3316.4 | 2778.5 | 2211.4 | 1681.3 | 1226.4 | 943.4  | 754.8  | 678.4  | 669.3  |
| 15°   | 4048.7  | 3755.6 | 3105.3 | 2421.4 | 1699.2 | 1070.3 | 670.6  | 518.9  | 457.1  | 439.1  | 438.0  |
| 17.5° | 4046.5  | 3687.1 | 2898.6 | 2051.9 | 1190.5 | 622.2  | 436.9  | 398.7  | 386.3  | 381.9  | 381.9  |
| 20°   | 4045.4  | 3622.0 | 2692.0 | 1668.9 | 755.8  | 414.4  | 363.9  | 354.9  | 346.0  | 340.4  | 340.4  |
| 22.5° | 4057.7  | 3563.6 | 2476.4 | 1278.2 | 476.2  | 335.8  | 320.1  | 311.1  | 299.9  | 292.0  | 290.8  |
| 25°   | 4070.0  | 3518.5 | 2256.3 | 909.7  | 344.8  | 292.0  | 276.3  | 264.0  | 248.2  | 238.0  | 237.0  |
| 27.5° | 4072.3  | 3462.4 | 2020.4 | 608.7  | 288.7  | 254.9  | 234.7  | 215.7  | 197.6  | 187.6  | 186.4  |
| 30°   | 4038.7  | 3368.1 | 1758.7 | 411.1  | 254.9  | 221.2  | 194.3  | 174.0  | 157.3  | 149.3  | 149.3  |
| 32.5° | 3972.3  | 3251.3 | 1471.2 | 310.0  | 226.8  | 189.8  | 160.6  | 141.5  | 130.2  | 127.0  | 125.7  |
| 35°   | 3912.8  | 3125.6 | 1175.8 | 262.8  | 203.3  | 160.6  | 131.4  | 119.1  | 112.3  | 111.2  | 110.1  |
| 37.5° | 3878.0  | 3024.6 | 898.4  | 238.0  | 180.9  | 134.7  | 111.2  | 102.1  | 98.9   | 96.5   | 97.7   |
| 40°   | 3904.9  | 2940.2 | 663.8  | 217.9  | 158.3  | 112.3  | 94.3   | 89.8   | 86.5   | 85.3   | 85.3   |
| 42.5° | 4022.9  | 2925.6 | 493.1  | 200.0  | 137.0  | 93.2   | 82.0   | 78.6   | 76.4   | 75.3   | 76.4   |
| 45°   | 4332.9  | 3015.4 | 383.0  | 183.0  | 115.7  | 78.6   | 69.6   | 68.5   | 67.4   | 67.4   | 67.4   |
| 47.5° | 4799.0  | 3200.7 | 318.9  | 164.0  | 96.5   | 67.4   | 60.6   | 59.5   | 58.5   | 59.5   | 59.5   |
| 50°   | 5588.5  | 3540.0 | 285.2  | 144.9  | 79.8   | 57.3   | 51.7   | 51.7   | 51.7   | 51.7   | 52.8   |
| 52.5° | 6789.1  | 4207.0 | 262.8  | 125.7  | 65.1   | 48.3   | 43.8   | 43.8   | 44.9   | 44.9   | 46.0   |
| 55°   | 8126.6  | 5092.0 | 242.5  | 106.7  | 55.0   | 40.4   | 35.9   | 37.0   | 38.1   | 39.4   | 39.4   |
| 57.5° | 9577.6  | 6072.5 | 225.7  | 87.6   | 47.2   | 32.6   | 30.4   | 31.4   | 32.6   | 34.9   | 34.9   |
| 60°   | 11328.5 | 7133.9 | 201.0  | 68.5   | 39.4   | 25.7   | 23.6   | 25.7   | 29.2   | 31.4   | 32.6   |
| 62.5° | 13251.3 | 8160.3 | 169.6  | 53.9   | 32.6   | 20.2   | 19.1   | 23.6   | 28.1   | 30.4   | 31.4   |
| 65°   | 14565.3 | 8482.7 | 130.2  | 43.8   | 24.7   | 14.6   | 15.8   | 21.3   | 27.0   | 30.4   | 30.4   |
| 67°   | 14032.9 | 7690.9 | 106.7  | 37.0   | 20.2   | 11.3   | 14.6   | 21.3   | 27.0   | 29.2   | 30.4   |
| 67.5° | 13663.4 | 7380.9 | 102.1  | 35.9   | 19.1   | 11.3   | 14.6   | 21.3   | 27.0   | 30.4   | 30.4   |
| 70°   | 11117.4 | 5544.7 | 85.3   | 27.0   | 15.8   | 10.2   | 12.3   | 20.2   | 25.7   | 29.2   | 29.2   |
| 72.5° | 7724.6  | 3418.7 | 76.4   | 19.1   | 13.4   | 9.0    | 11.3   | 19.1   | 24.7   | 28.1   | 29.2   |
| 75°   | 3672.5  | 1237.7 | 65.1   | 14.6   | 12.3   | 7.8    | 10.2   | 19.1   | 24.7   | 28.1   | 28.1   |
| 77.5° | 749.1   | 287.5  | 52.8   | 12.3   | 10.2   | 7.8    | 9.0    | 17.9   | 23.6   | 27.0   | 27.0   |
| 80°   | 246.0   | 111.2  | 39.4   | 11.3   | 10.2   | 7.8    | 9.0    | 16.8   | 23.6   | 25.7   | 27.0   |
| 82.5° | 177.4   | 56.2   | 25.7   | 11.3   | 10.2   | 7.8    | 7.8    | 16.8   | 22.5   | 25.7   | 25.7   |
| 85°   | 135.9   | 39.4   | 16.8   | 11.3   | 10.2   | 7.8    | 7.8    | 15.8   | 21.3   | 24.7   | 24.7   |
| 87.5° | 89.8    | 15.8   | 13.4   | 11.3   | 10.2   | 7.8    | 7.8    | 15.8   | 20.2   | 23.6   | 24.7   |
| 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)