

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: P194481

Luminaire Tested: **GLEON-AF-03-LED-E1-SL3-7060-1200-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P194481  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24289)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-AF-03-LED-E1-SL3-7060-1200-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 5700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17031 lumens  
Efficiency: N/A  
Efficacy: 89.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G3

Input Watts (W): 191  
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

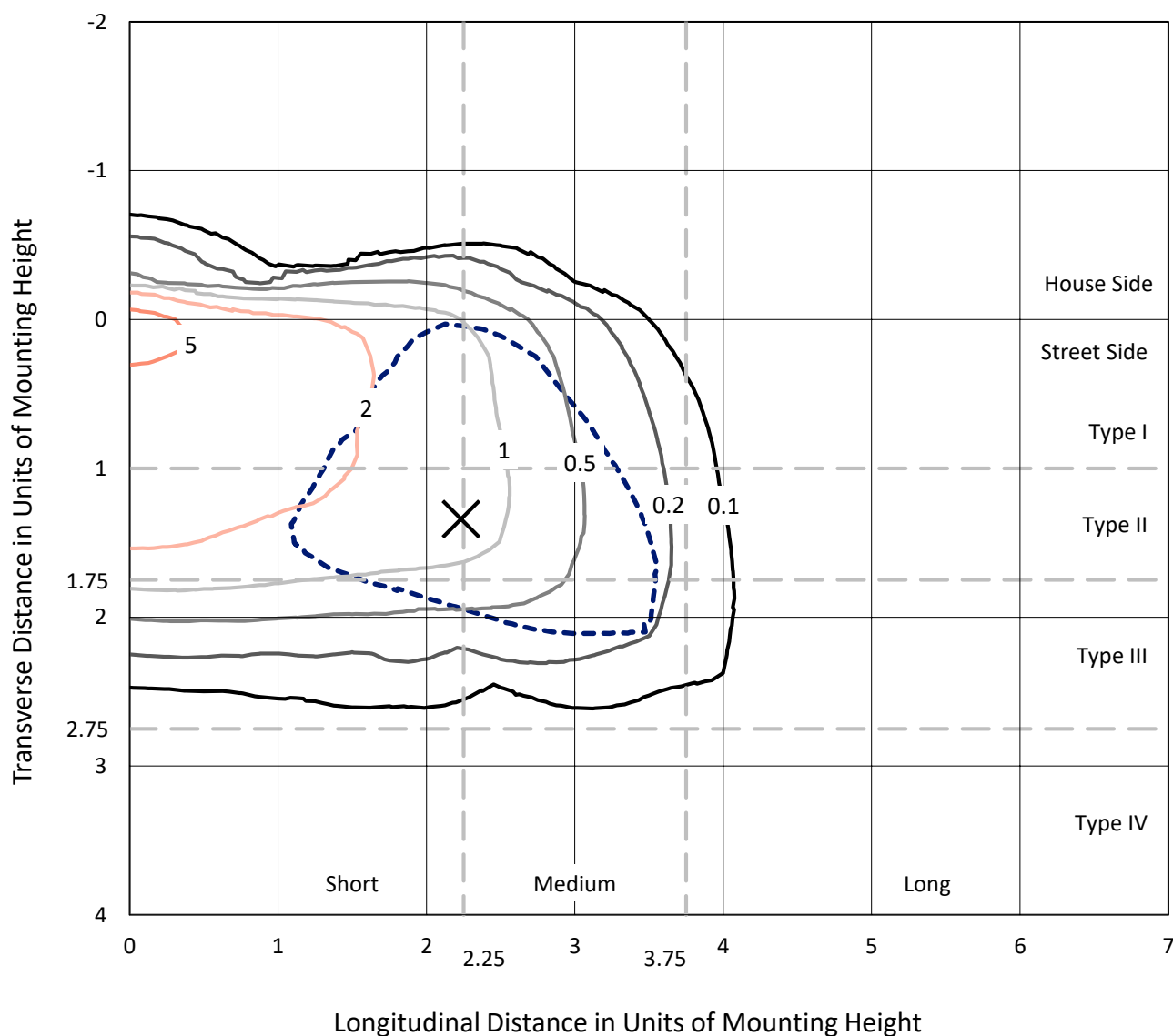


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

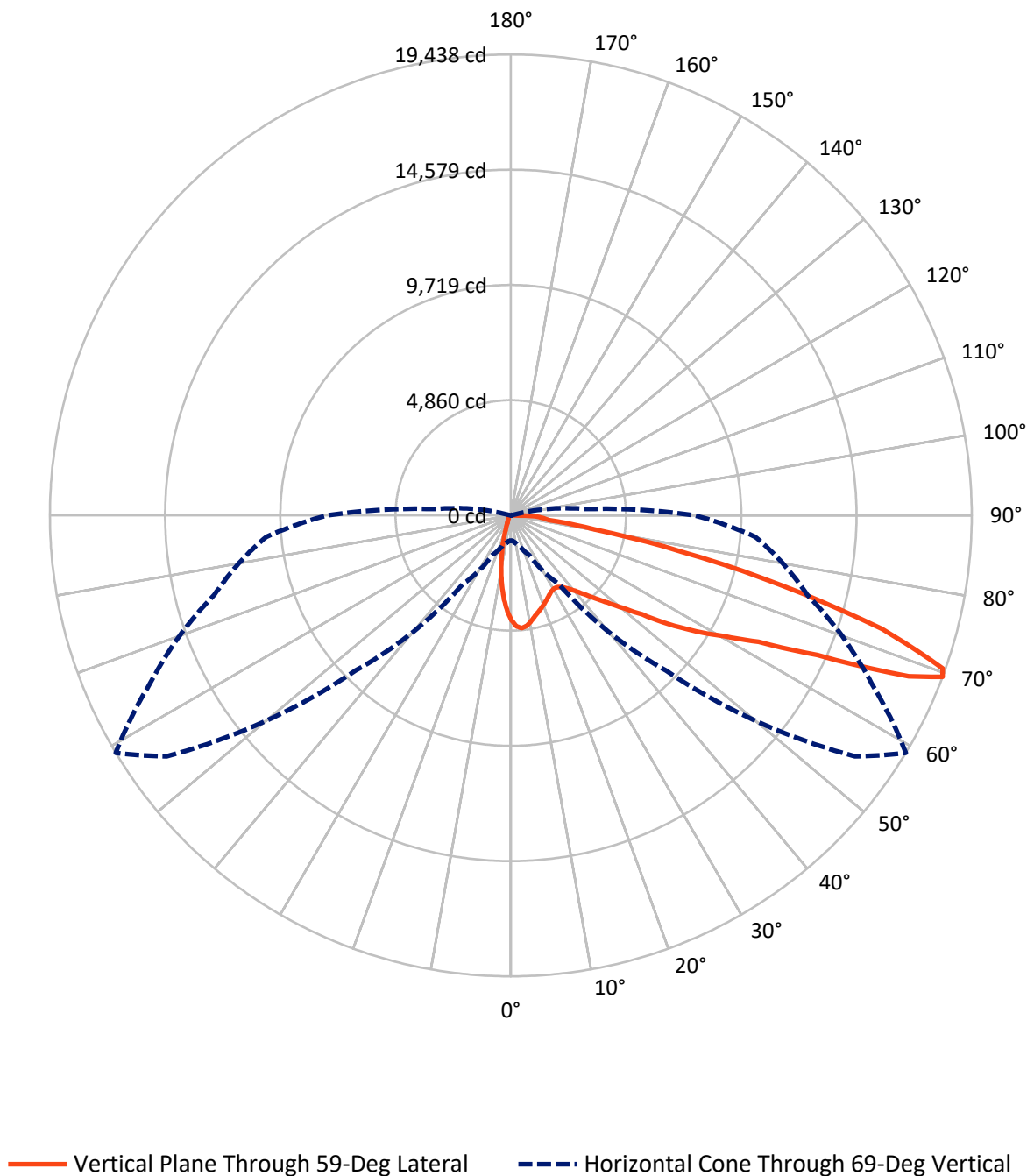


Based on 25 foot mounting height. Maximum calculated value = 7.1 fc  
 Type III - Short - Non-Cutoff

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## Luminous Intensity Polar Plot



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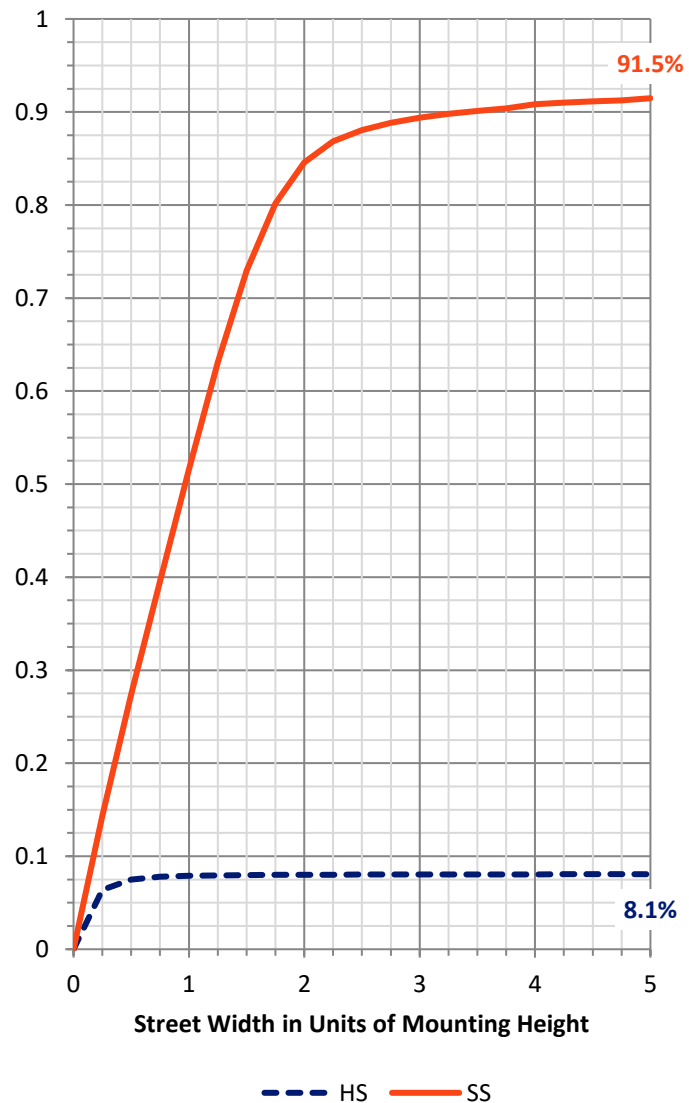
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1387.0   | 0.0    | 1387.0  |
|                    | % Fixture | 8.1      | 0.0    | 8.1     |
| <b>Street Side</b> | Lumens    | 15644.0  | 0.0    | 15644.0 |
|                    | % Fixture | 91.9     | 0.0    | 91.9    |
| <b>Total</b>       | Lumens    | 17031.0  | 0.0    | 17031.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 359.8   | 2.1       |
| 10°-20°   | 743.5   | 4.4       |
| 20°-30°   | 1000.5  | 5.9       |
| 30°-40°   | 1452.6  | 8.5       |
| 40°-50°   | 2418.7  | 14.2      |
| 50°-60°   | 3773.1  | 22.2      |
| 60°-70°   | 4669.0  | 27.4      |
| 70°-80°   | 2366.2  | 13.9      |
| 80°-90°   | 247.6   | 1.5       |
| 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°    | 17031.0 | 100.0     |
| 0°-180°   | 17031.0 | 100.0     |

**Coefficient of Utilization**



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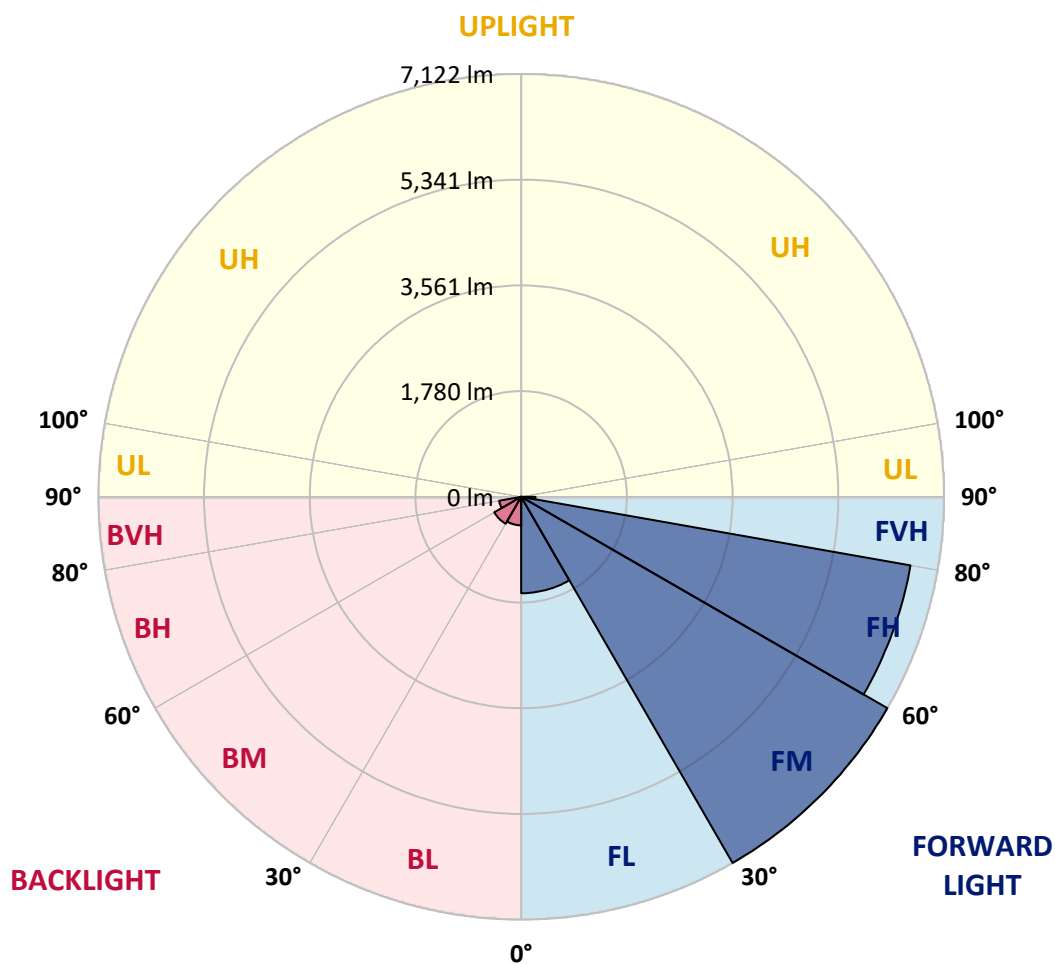
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1623.7 | 9.5       |                         |      |         |
| FM   | (30°-60°)   | 7121.9 | 41.8      |                         |      |         |
| FH   | (60°-80°)   | 6658.5 | 39.1      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 240.0  | 1.4       |                         |      | G3/500  |
| BL   | (0°-30°)    | 480.1  | 2.8       | B1/500                  |      |         |
| BM   | (30°-60°)   | 522.6  | 3.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 376.7  | 2.2       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 7.6    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G3**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 55°     | 59°     | 65°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0°    | 4432.9 | 4432.9 | 4432.9 | 4432.9 | 4432.9 | 4432.9  | 4432.9  | 4432.9  | 4432.9  | 4432.9  | 4432.9  |
| 2.5°  | 4858.6 | 4856.7 | 4835.5 | 4825.9 | 4808.5 | 4771.9  | 4715.1  | 4685.3  | 4637.1  | 4553.3  | 4440.6  |
| 5°    | 4814.3 | 4837.4 | 4849.9 | 4850.9 | 4863.4 | 4849.9  | 4798.9  | 4773.9  | 4707.4  | 4572.6  | 4370.3  |
| 7.5°  | 4513.8 | 4522.5 | 4558.1 | 4588.9 | 4648.7 | 4705.5  | 4723.8  | 4713.2  | 4673.7  | 4529.2  | 4260.5  |
| 10°   | 4192.2 | 4200.8 | 4243.2 | 4283.7 | 4364.6 | 4452.2  | 4544.6  | 4563.9  | 4580.3  | 4467.6  | 4154.6  |
| 12.5° | 3914.8 | 3923.5 | 3966.8 | 4019.8 | 4114.2 | 4222.0  | 4365.5  | 4397.3  | 4469.5  | 4408.9  | 4069.9  |
| 15°   | 3676.0 | 3679.8 | 3722.2 | 3787.7 | 3900.4 | 4039.0  | 4201.8  | 4252.8  | 4363.6  | 4367.4  | 3995.7  |
| 17.5° | 3472.8 | 3482.4 | 3508.4 | 3571.0 | 3694.3 | 3865.7  | 4055.4  | 4128.6  | 4258.6  | 4332.8  | 3923.5  |
| 20°   | 3348.5 | 3358.2 | 3357.2 | 3391.9 | 3502.6 | 3685.6  | 3909.0  | 3996.7  | 4154.6  | 4297.1  | 3859.0  |
| 22.5° | 3324.5 | 3324.5 | 3299.4 | 3294.6 | 3360.1 | 3513.2  | 3756.9  | 3863.8  | 4061.2  | 4281.7  | 3813.7  |
| 25°   | 3410.2 | 3406.3 | 3343.7 | 3292.7 | 3295.6 | 3387.1  | 3609.5  | 3736.6  | 3982.2  | 4292.3  | 3789.6  |
| 27.5° | 3591.2 | 3586.4 | 3507.4 | 3410.2 | 3332.2 | 3331.2  | 3497.8  | 3634.6  | 3919.6  | 4342.4  | 3799.2  |
| 30°   | 3841.6 | 3839.7 | 3754.0 | 3631.7 | 3490.1 | 3360.1  | 3459.3  | 3583.5  | 3879.2  | 4432.9  | 3821.4  |
| 32.5° | 4115.1 | 4112.2 | 4047.7 | 3918.7 | 3739.5 | 3490.1  | 3499.7  | 3603.7  | 3890.7  | 4553.3  | 3875.3  |
| 35°   | 4405.0 | 4400.2 | 4372.3 | 4259.6 | 4062.2 | 3729.9  | 3632.6  | 3713.5  | 3963.9  | 4733.4  | 3981.3  |
| 37.5° | 4719.0 | 4723.8 | 4744.0 | 4636.1 | 4429.1 | 4066.0  | 3855.1  | 3910.0  | 4111.3  | 4978.0  | 4153.6  |
| 40°   | 5182.2 | 5181.2 | 5188.0 | 5046.4 | 4847.0 | 4477.2  | 4166.2  | 4183.5  | 4357.8  | 5302.6  | 4415.6  |
| 42.5° | 6022.9 | 5964.2 | 5786.0 | 5497.1 | 5296.8 | 4947.2  | 4558.1  | 4539.8  | 4659.3  | 5704.2  | 4782.5  |
| 45°   | 7152.6 | 7027.4 | 6565.1 | 6011.4 | 5755.2 | 5476.9  | 5040.6  | 4981.9  | 5058.0  | 6186.7  | 5235.2  |
| 47.5° | 8124.3 | 7994.3 | 7340.4 | 6546.8 | 6241.5 | 5979.6  | 5605.9  | 5500.0  | 5525.0  | 6726.9  | 5809.1  |
| 50°   | 8454.6 | 8391.1 | 7820.0 | 7013.0 | 6712.5 | 6612.3  | 6261.8  | 6132.7  | 6097.1  | 7351.9  | 6474.6  |
| 52.5° | 8340.0 | 8335.2 | 7954.8 | 7315.4 | 7143.9 | 7267.2  | 7087.1  | 6937.8  | 6806.9  | 8010.7  | 7151.6  |
| 55°   | 8156.1 | 8180.2 | 8009.7 | 7580.2 | 7574.4 | 7865.3  | 8215.8  | 8091.6  | 7712.1  | 8726.2  | 7735.2  |
| 57.5° | 7648.6 | 7751.6 | 7978.9 | 8081.0 | 8317.9 | 8615.5  | 9155.7  | 9228.9  | 8780.2  | 9274.2  | 8219.7  |
| 60°   | 6205.9 | 6432.2 | 7175.7 | 8153.2 | 9276.1 | 10017.7 | 10290.2 | 10352.8 | 9656.5  | 9729.7  | 8873.6  |
| 62.5° | 4405.0 | 4636.1 | 5579.0 | 7232.5 | 9290.6 | 11860.0 | 11980.4 | 11734.8 | 10621.5 | 10404.8 | 10001.3 |
| 65°   | 2338.3 | 2516.5 | 3286.9 | 5220.7 | 8055.0 | 12287.6 | 14936.0 | 14204.1 | 12324.2 | 11732.9 | 11458.4 |
| 67.5° | 1196.1 | 1250.0 | 1556.3 | 2555.0 | 5537.6 | 10914.3 | 17585.4 | 18100.6 | 15258.6 | 13050.3 | 11388.1 |
| 69°   | 1058.4 | 1090.2 | 1293.4 | 1847.1 | 3546.0 | 9244.3  | 17714.4 | 19438.3 | 16794.7 | 12940.5 | 10349.0 |
| 70°   | 1024.7 | 1052.6 | 1237.5 | 1671.9 | 2771.7 | 7752.6  | 17220.4 | 19320.8 | 17187.6 | 12522.6 | 9572.7  |
| 72.5° | 869.6  | 893.7  | 1101.7 | 1477.3 | 2252.6 | 3848.4  | 13988.3 | 16371.9 | 15423.3 | 10431.8 | 6929.2  |
| 75°   | 581.7  | 660.7  | 1057.4 | 1384.9 | 2095.6 | 2186.1  | 9222.2  | 11831.1 | 10990.4 | 7036.1  | 3609.5  |
| 77.5° | 139.6  | 150.2  | 298.5  | 1101.7 | 1916.5 | 1924.2  | 4743.0  | 7354.8  | 5998.9  | 2507.8  | 853.3   |
| 80°   | 75.1   | 72.2   | 83.8   | 218.6  | 1784.5 | 1805.7  | 2135.1  | 3570.0  | 2141.8  | 416.0   | 281.2   |
| 82.5° | 53.0   | 50.1   | 53.9   | 91.5   | 561.5  | 1644.9  | 1544.7  | 1616.0  | 887.9   | 159.9   | 126.2   |
| 85°   | 19.3   | 18.3   | 29.9   | 82.8   | 176.2  | 945.7   | 1587.1  | 1332.9  | 719.4   | 73.2    | 92.5    |
| 87.5° | 6.7    | 5.8    | 11.6   | 45.3   | 53.9   | 402.6   | 979.4   | 1007.4  | 283.1   | 44.3    | 43.3    |
| 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°    | 4432.9 | 4432.9 | 4432.9 | 4432.9 | 4432.9 | 4432.9 | 4432.9 | 4432.9 | 4432.9 | 4432.9 | 4432.9 |
| 2.5°  | 4393.4 | 4333.7 | 4224.0 | 4111.3 | 4007.3 | 3882.1 | 3819.5 | 3757.8 | 3731.8 | 3722.2 | 3676.9 |
| 5°    | 4266.3 | 4165.2 | 3932.1 | 3698.1 | 3482.4 | 3253.2 | 3102.0 | 2980.6 | 2909.4 | 2874.7 | 2819.8 |
| 7.5°  | 4103.6 | 3937.9 | 3584.5 | 3223.3 | 2887.2 | 2555.9 | 2310.4 | 2121.6 | 1991.6 | 1929.0 | 1872.2 |
| 10°   | 3945.6 | 3725.1 | 3222.4 | 2730.3 | 2273.8 | 1834.6 | 1495.6 | 1250.0 | 1093.1 | 1020.8 | 974.6  |
| 12.5° | 3804.1 | 3518.0 | 2872.8 | 2249.7 | 1676.7 | 1162.4 | 817.6  | 622.1  | 524.9  | 491.2  | 474.8  |
| 15°   | 3677.9 | 3327.3 | 2542.5 | 1793.2 | 1135.4 | 664.5  | 446.9  | 380.4  | 365.0  | 365.0  | 363.1  |
| 17.5° | 3558.5 | 3140.5 | 2223.7 | 1364.6 | 712.7  | 406.4  | 340.0  | 331.3  | 331.3  | 335.1  | 335.1  |
| 20°   | 3443.9 | 2962.4 | 1915.5 | 979.4  | 448.8  | 322.6  | 307.2  | 305.3  | 307.2  | 312.0  | 312.0  |
| 22.5° | 3345.6 | 2800.6 | 1627.6 | 672.2  | 333.2  | 290.8  | 283.1  | 280.2  | 281.2  | 284.1  | 286.0  |
| 25°   | 3272.5 | 2663.8 | 1356.0 | 455.5  | 287.0  | 264.8  | 256.2  | 251.4  | 247.5  | 247.5  | 249.4  |
| 27.5° | 3226.2 | 2548.2 | 1093.1 | 331.3  | 258.1  | 240.8  | 227.3  | 219.6  | 210.9  | 206.1  | 208.0  |
| 30°   | 3192.5 | 2438.5 | 846.5  | 270.6  | 231.1  | 213.8  | 196.5  | 183.9  | 171.4  | 165.6  | 167.6  |
| 32.5° | 3180.0 | 2349.8 | 632.7  | 238.8  | 207.1  | 187.8  | 166.6  | 150.2  | 136.8  | 131.9  | 132.9  |
| 35°   | 3213.7 | 2279.5 | 463.2  | 215.7  | 187.8  | 163.7  | 139.6  | 121.3  | 110.8  | 107.9  | 108.8  |
| 37.5° | 3302.3 | 2242.0 | 346.7  | 196.5  | 170.5  | 143.5  | 116.5  | 99.2   | 92.5   | 92.5   | 93.4   |
| 40°   | 3469.9 | 2241.0 | 278.3  | 183.0  | 155.1  | 124.2  | 96.3   | 83.8   | 79.9   | 81.9   | 82.8   |
| 42.5° | 3714.5 | 2292.1 | 242.7  | 170.5  | 141.6  | 105.9  | 79.9   | 71.3   | 70.3   | 72.2   | 73.2   |
| 45°   | 4048.7 | 2385.5 | 223.4  | 159.9  | 127.1  | 88.6   | 67.4   | 61.6   | 61.6   | 64.5   | 65.5   |
| 47.5° | 4458.0 | 2522.2 | 207.1  | 149.3  | 112.7  | 74.2   | 57.8   | 53.9   | 54.9   | 57.8   | 58.7   |
| 50°   | 4951.1 | 2694.6 | 190.7  | 137.7  | 102.1  | 61.6   | 50.1   | 47.2   | 48.2   | 52.0   | 53.0   |
| 52.5° | 5512.5 | 2926.7 | 177.2  | 127.1  | 88.6   | 51.0   | 42.4   | 40.4   | 42.4   | 46.2   | 47.2   |
| 55°   | 5994.0 | 3134.7 | 160.8  | 118.5  | 71.3   | 42.4   | 34.7   | 34.7   | 36.6   | 41.4   | 42.4   |
| 57.5° | 6457.3 | 3352.4 | 146.4  | 102.1  | 55.9   | 33.7   | 28.9   | 29.9   | 32.7   | 37.6   | 38.5   |
| 60°   | 7137.2 | 3721.2 | 129.0  | 85.7   | 42.4   | 27.0   | 24.1   | 25.0   | 28.9   | 33.7   | 34.7   |
| 62.5° | 8291.9 | 4282.7 | 111.7  | 71.3   | 32.7   | 21.2   | 19.3   | 21.2   | 26.0   | 31.8   | 32.7   |
| 65°   | 9333.9 | 4510.9 | 91.5   | 59.7   | 25.0   | 16.4   | 16.4   | 19.3   | 25.0   | 30.8   | 31.8   |
| 67.5° | 8753.2 | 3797.3 | 71.3   | 47.2   | 19.3   | 12.5   | 13.5   | 18.3   | 24.1   | 30.8   | 31.8   |
| 69°   | 7741.0 | 3104.9 | 60.7   | 37.6   | 16.4   | 11.6   | 12.5   | 18.3   | 24.1   | 29.9   | 30.8   |
| 70°   | 6952.3 | 2621.4 | 53.9   | 31.8   | 14.4   | 11.6   | 12.5   | 17.3   | 24.1   | 29.9   | 30.8   |
| 72.5° | 4656.4 | 1415.7 | 43.3   | 23.1   | 13.5   | 10.6   | 10.6   | 17.3   | 23.1   | 28.9   | 29.9   |
| 75°   | 2001.2 | 391.0  | 34.7   | 16.4   | 11.6   | 9.6    | 9.6    | 16.4   | 22.2   | 27.9   | 29.9   |
| 77.5° | 366.0  | 99.2   | 27.9   | 14.4   | 11.6   | 9.6    | 8.7    | 15.4   | 21.2   | 27.0   | 27.9   |
| 80°   | 145.4  | 49.1   | 22.2   | 12.5   | 10.6   | 8.7    | 7.7    | 14.4   | 20.2   | 26.0   | 27.0   |
| 82.5° | 87.6   | 27.9   | 18.3   | 11.6   | 10.6   | 7.7    | 6.7    | 12.5   | 19.3   | 25.0   | 26.0   |
| 85°   | 71.3   | 19.3   | 14.4   | 11.6   | 9.6    | 7.7    | 5.8    | 11.6   | 17.3   | 24.1   | 25.0   |
| 87.5° | 34.7   | 13.5   | 13.5   | 10.6   | 9.6    | 7.7    | 5.8    | 10.6   | 16.4   | 23.1   | 24.1   |
| 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)