

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: P192023

Luminaire Tested: **GLEON-AF-05-LED-E1-SL4-7050-1200-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P192023  
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-05-LED-E1-SL4-7050-1200-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 5000K, 1200mA 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: 26487 lumens  
Efficiency: N/A  
Efficacy: 82.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G4

Input Watts (W): 320  
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

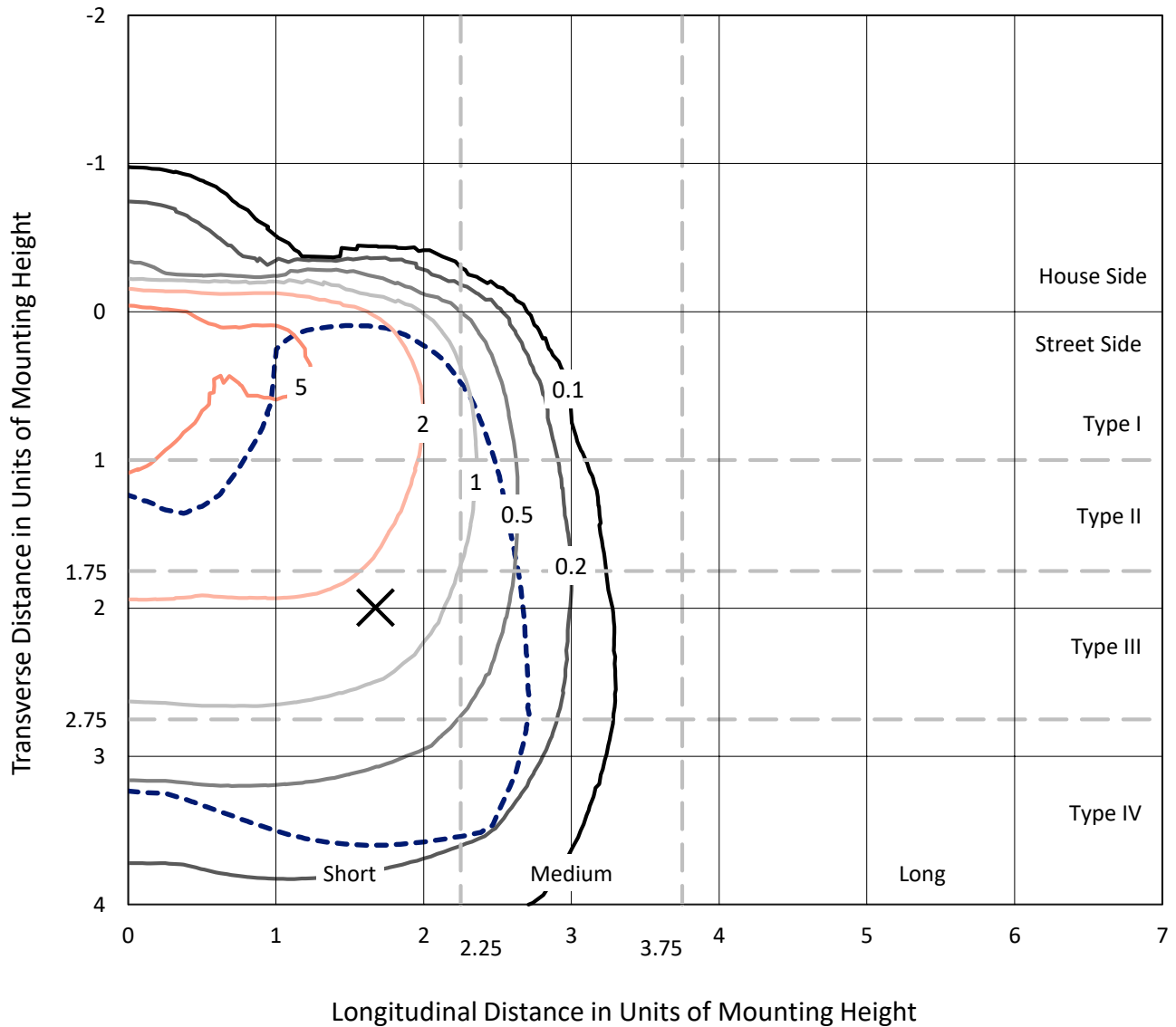


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

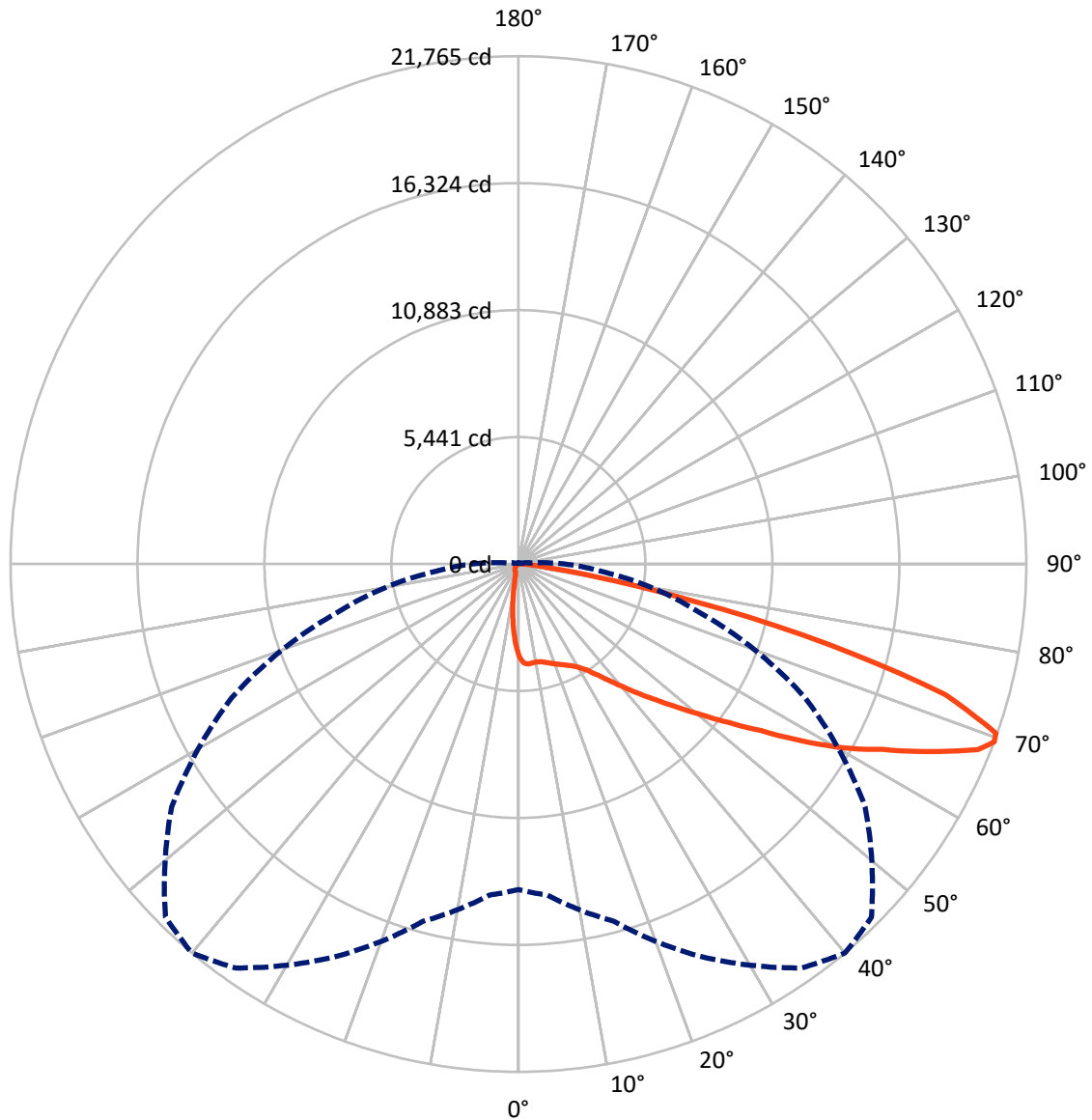


Based on 25 foot mounting height. Maximum calculated value = 6.9 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

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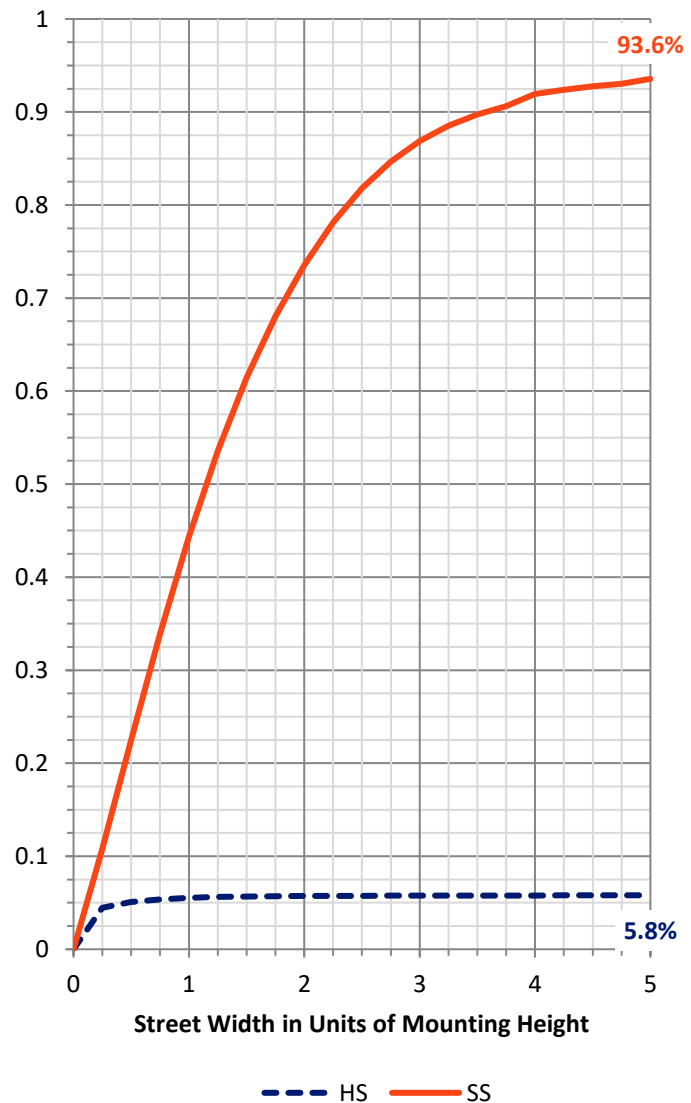
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1549.6   | 0.0    | 1549.6  |
|                    | % Fixture | 5.9      | 0.0    | 5.9     |
| <b>Street Side</b> | Lumens    | 24937.4  | 0.0    | 24937.4 |
|                    | % Fixture | 94.1     | 0.0    | 94.1    |
| <b>Total</b>       | Lumens    | 26487.0  | 0.0    | 26487.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 320.9   | 1.2       |
| 10°-20°   | 789.0   | 3.0       |
| 20°-30°   | 1329.0  | 5.0       |
| 30°-40°   | 2175.7  | 8.2       |
| 40°-50°   | 3767.1  | 14.2      |
| 50°-60°   | 5933.5  | 22.4      |
| 60°-70°   | 7749.0  | 29.3      |
| 70°-80°   | 3991.1  | 15.1      |
| 80°-90°   | 431.7   | 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°    | 26487.0 | 100.0     |
| 0°-180°   | 26487.0 | 100.0     |



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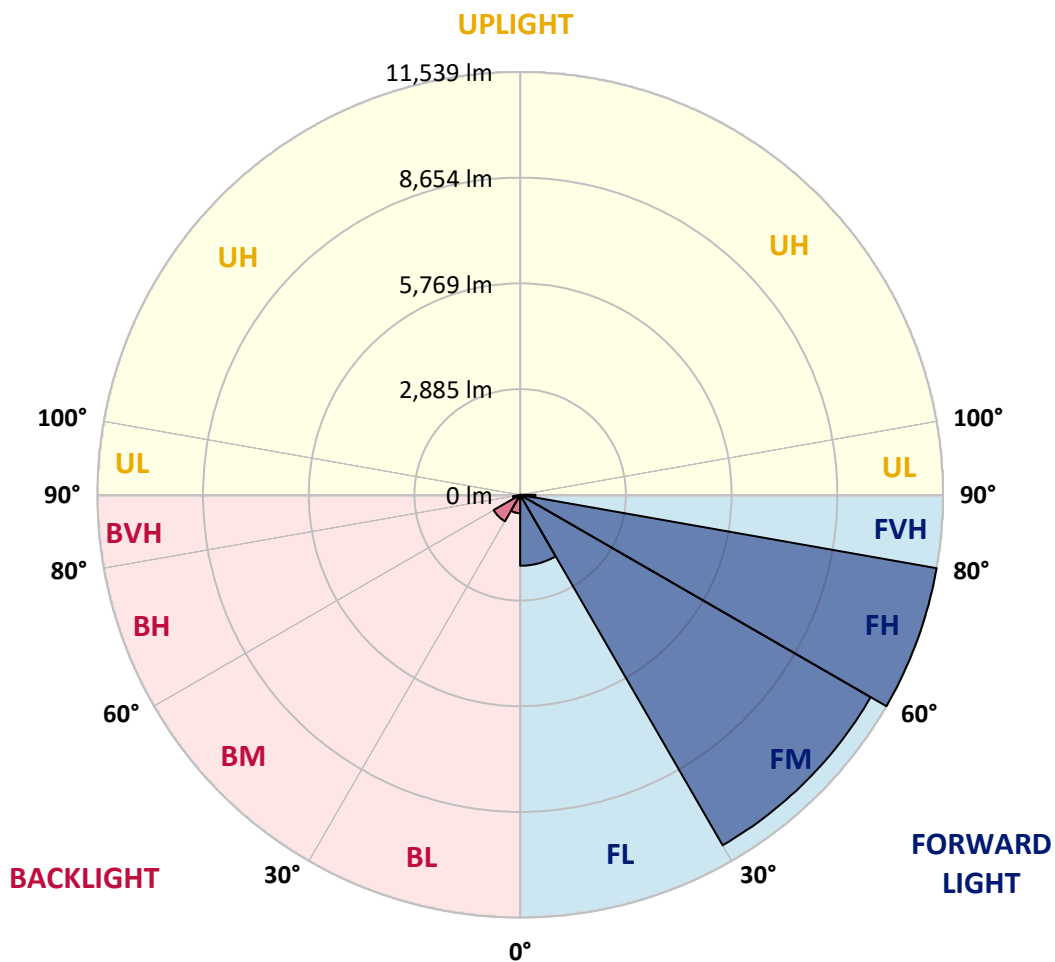
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1937.0  | 7.3       |                         |      |          |
| FM   | (30°-60°)   | 11043.4 | 41.7      |                         |      |          |
| FH   | (60°-80°)   | 11538.8 | 43.6      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 418.2   | 1.6       |                         |      | G3/500   |
| BL   | (0°-30°)    | 502.0   | 1.9       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 832.9   | 3.1       | B1/1000                 |      |          |
| BH   | (60°-80°)   | 201.2   | 0.8       | B1/500                  |      | G1/500   |
| BVH  | (80°-90°)   | 13.6    | 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-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 40°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3957.3  | 3957.3  | 3957.3  | 3957.3  | 3957.3  | 3957.3  | 3957.3  | 3957.3  | 3957.3  | 3957.3  | 3957.3  |
| 2.5°  | 4345.1  | 4321.5  | 4307.3  | 4288.4  | 4264.7  | 4244.2  | 4236.4  | 4178.0  | 4122.8  | 4047.2  | 3960.4  |
| 5°    | 4425.5  | 4417.7  | 4392.4  | 4367.2  | 4338.8  | 4307.3  | 4290.0  | 4220.6  | 4141.8  | 4031.4  | 3880.0  |
| 7.5°  | 4433.4  | 4424.0  | 4392.4  | 4357.8  | 4318.3  | 4280.5  | 4250.5  | 4181.2  | 4108.6  | 3996.7  | 3812.2  |
| 10°   | 4420.8  | 4409.8  | 4386.1  | 4348.3  | 4299.4  | 4263.2  | 4233.2  | 4167.0  | 4105.5  | 4004.6  | 3799.6  |
| 12.5° | 4406.6  | 4395.6  | 4384.6  | 4365.6  | 4323.1  | 4297.8  | 4272.6  | 4209.6  | 4154.4  | 4069.2  | 3845.4  |
| 15°   | 4420.8  | 4414.5  | 4427.1  | 4419.2  | 4395.6  | 4373.5  | 4348.3  | 4291.5  | 4241.1  | 4170.1  | 3928.9  |
| 17.5° | 4480.7  | 4480.7  | 4520.1  | 4524.9  | 4502.8  | 4471.3  | 4435.0  | 4378.2  | 4335.7  | 4275.8  | 4028.2  |
| 20°   | 4621.0  | 4616.3  | 4666.8  | 4676.2  | 4622.6  | 4573.7  | 4520.1  | 4450.8  | 4417.7  | 4379.8  | 4126.0  |
| 22.5° | 4862.3  | 4840.2  | 4870.2  | 4860.7  | 4755.1  | 4679.4  | 4613.2  | 4528.0  | 4510.7  | 4493.3  | 4234.8  |
| 25°   | 5176.0  | 5163.4  | 5183.9  | 5090.9  | 4904.8  | 4802.4  | 4723.5  | 4627.4  | 4627.4  | 4644.7  | 4357.8  |
| 27.5° | 5631.7  | 5584.4  | 5515.0  | 5351.0  | 5072.0  | 4941.1  | 4856.0  | 4753.5  | 4780.3  | 4844.9  | 4520.1  |
| 30°   | 6098.3  | 6046.3  | 5887.1  | 5634.8  | 5275.3  | 5138.2  | 5038.8  | 4931.6  | 4994.7  | 5112.9  | 4737.7  |
| 32.5° | 6558.7  | 6500.4  | 6274.9  | 5956.4  | 5567.0  | 5429.8  | 5333.7  | 5215.4  | 5321.1  | 5519.7  | 5056.2  |
| 35°   | 7004.9  | 6952.9  | 6692.7  | 6317.5  | 5954.9  | 5841.3  | 5753.1  | 5650.6  | 5786.2  | 6063.6  | 5505.5  |
| 37.5° | 7506.2  | 7449.5  | 7132.6  | 6725.8  | 6426.3  | 6344.3  | 6279.6  | 6177.2  | 6413.7  | 6820.4  | 6131.4  |
| 40°   | 8122.7  | 8026.5  | 7599.3  | 7194.1  | 6971.8  | 6932.4  | 6888.2  | 6874.0  | 7241.4  | 7804.2  | 6965.5  |
| 42.5° | 8829.0  | 8671.4  | 8088.0  | 7687.6  | 7570.9  | 7599.3  | 7588.2  | 7651.3  | 8277.2  | 9027.7  | 7980.8  |
| 45°   | 9535.3  | 9332.0  | 8631.9  | 8214.1  | 8229.9  | 8329.2  | 8390.7  | 8643.0  | 9574.8  | 10430.9 | 9073.4  |
| 47.5° | 10134.5 | 9934.2  | 9153.8  | 8783.3  | 8972.5  | 9168.0  | 9335.1  | 9812.8  | 10908.6 | 11812.0 | 9923.2  |
| 50°   | 10646.9 | 10457.7 | 9707.2  | 9409.2  | 9834.9  | 10150.2 | 10421.4 | 11129.3 | 12343.3 | 12863.6 | 10519.1 |
| 52.5° | 11066.2 | 10940.1 | 10281.1 | 10126.6 | 10820.3 | 11282.2 | 11679.5 | 12527.8 | 13614.0 | 13718.1 | 10982.7 |
| 55°   | 11474.6 | 11384.7 | 10897.5 | 10979.5 | 11977.5 | 12606.6 | 13109.5 | 14011.3 | 14708.2 | 14430.7 | 11427.3 |
| 57.5° | 11944.4 | 11862.4 | 11600.7 | 12061.1 | 13498.9 | 14290.4 | 14839.1 | 15326.2 | 15671.5 | 15159.1 | 11846.7 |
| 60°   | 12423.7 | 12376.4 | 12382.7 | 13262.5 | 15245.8 | 16005.8 | 16308.5 | 16434.6 | 16617.5 | 15844.9 | 11870.3 |
| 62.5° | 12880.9 | 12970.8 | 13276.6 | 14599.4 | 16918.6 | 17502.0 | 17654.9 | 17779.4 | 17565.0 | 15953.7 | 10966.9 |
| 65°   | 13655.0 | 13801.7 | 14531.6 | 16388.9 | 18758.5 | 19382.9 | 19540.5 | 19113.3 | 17714.8 | 14547.4 | 8920.5  |
| 67.5° | 14033.4 | 14301.4 | 15603.7 | 18056.9 | 20543.2 | 21237.0 | 21178.6 | 19200.0 | 15897.0 | 11093.0 | 5724.7  |
| 69°   | 13954.6 | 14240.0 | 15851.2 | 18567.7 | 21136.0 | 21765.1 | 21394.6 | 18138.9 | 13543.1 | 8036.0  | 3514.3  |
| 70°   | 13642.4 | 13930.9 | 15723.5 | 18548.8 | 21211.7 | 21709.9 | 20994.2 | 16828.7 | 11450.9 | 5876.0  | 2197.8  |
| 72.5° | 11392.6 | 11641.7 | 13959.3 | 16765.7 | 19540.5 | 19135.3 | 17563.4 | 11659.0 | 5579.6  | 1600.3  | 495.1   |
| 75°   | 7012.8  | 7151.5  | 10016.2 | 12630.2 | 14758.7 | 13718.1 | 11701.6 | 5800.4  | 1663.3  | 452.5   | 274.3   |
| 77.5° | 3705.0  | 3768.1  | 5483.5  | 7444.8  | 9355.6  | 7741.2  | 5997.4  | 2262.4  | 766.2   | 283.8   | 198.7   |
| 80°   | 2189.9  | 2237.2  | 2953.0  | 3403.9  | 4048.7  | 3381.8  | 2398.0  | 1389.0  | 548.7   | 178.2   | 176.6   |
| 82.5° | 1253.4  | 1283.4  | 2141.0  | 1891.9  | 1595.5  | 1362.2  | 1193.5  | 1316.5  | 329.5   | 119.8   | 182.9   |
| 85°   | 460.4   | 466.7   | 1204.5  | 1439.4  | 949.1   | 564.4   | 592.8   | 1091.0  | 88.3    | 75.7    | 143.5   |
| 87.5° | 214.4   | 209.7   | 619.6   | 881.3   | 555.0   | 357.9   | 461.9   | 239.6   | 34.7    | 48.9    | 39.4    |
| 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°    | 3957.3 | 3957.3 | 3957.3 | 3957.3 | 3957.3 | 3957.3 | 3957.3 | 3957.3 | 3957.3 | 3957.3 | 3957.3 |
| 2.5°  | 3910.0 | 3851.7 | 3746.0 | 3637.2 | 3526.9 | 3441.7 | 3358.2 | 3292.0 | 3269.9 | 3228.9 | 3232.1 |
| 5°    | 3790.2 | 3683.0 | 3462.2 | 3238.4 | 3005.0 | 2812.7 | 2631.4 | 2484.7 | 2413.8 | 2341.3 | 2341.3 |
| 7.5°  | 3686.1 | 3530.0 | 3184.8 | 2820.6 | 2443.7 | 2126.8 | 1841.5 | 1627.1 | 1508.8 | 1414.2 | 1412.6 |
| 10°   | 3646.7 | 3435.4 | 2953.0 | 2431.1 | 1906.1 | 1474.1 | 1135.2 | 917.6  | 805.6  | 733.1  | 730.0  |
| 12.5° | 3664.0 | 3402.3 | 2774.8 | 2071.7 | 1412.6 | 947.5  | 657.4  | 517.1  | 469.8  | 447.8  | 447.8  |
| 15°   | 3714.5 | 3392.9 | 2596.7 | 1720.1 | 998.0  | 592.8  | 436.7  | 398.9  | 395.7  | 395.7  | 395.7  |
| 17.5° | 3776.0 | 3396.0 | 2413.8 | 1378.0 | 679.5  | 424.1  | 376.8  | 372.1  | 375.2  | 375.2  | 375.2  |
| 20°   | 3839.0 | 3397.6 | 2216.7 | 1061.1 | 479.3  | 368.9  | 354.7  | 353.2  | 356.3  | 356.3  | 357.9  |
| 22.5° | 3916.3 | 3405.5 | 2019.6 | 793.0  | 395.7  | 348.4  | 337.4  | 337.4  | 339.0  | 339.0  | 337.4  |
| 25°   | 4004.6 | 3421.2 | 1814.7 | 588.1  | 361.0  | 334.2  | 324.8  | 323.2  | 324.8  | 323.2  | 321.6  |
| 27.5° | 4115.0 | 3443.3 | 1586.1 | 460.4  | 345.3  | 320.1  | 312.2  | 312.2  | 310.6  | 309.0  | 307.4  |
| 30°   | 4253.7 | 3468.5 | 1329.1 | 391.0  | 329.5  | 307.4  | 299.6  | 298.0  | 296.4  | 293.2  | 293.2  |
| 32.5° | 4465.0 | 3523.7 | 1075.2 | 354.7  | 312.2  | 290.1  | 283.8  | 283.8  | 280.6  | 277.5  | 275.9  |
| 35°   | 4789.7 | 3632.5 | 848.2  | 332.7  | 293.2  | 271.2  | 263.3  | 263.3  | 260.1  | 258.6  | 257.0  |
| 37.5° | 5239.1 | 3798.1 | 659.0  | 312.2  | 274.3  | 250.7  | 242.8  | 241.2  | 238.1  | 234.9  | 233.3  |
| 40°   | 5836.6 | 4003.0 | 518.7  | 293.2  | 255.4  | 230.2  | 223.9  | 220.7  | 214.4  | 209.7  | 209.7  |
| 42.5° | 6587.1 | 4236.4 | 421.0  | 272.8  | 233.3  | 211.3  | 206.5  | 201.8  | 190.8  | 186.0  | 184.5  |
| 45°   | 7372.2 | 4446.0 | 356.3  | 249.1  | 211.3  | 192.3  | 189.2  | 181.3  | 167.1  | 162.4  | 162.4  |
| 47.5° | 7938.2 | 4494.9 | 313.7  | 227.0  | 190.8  | 171.9  | 170.3  | 156.1  | 143.5  | 140.3  | 138.7  |
| 50°   | 8291.4 | 4398.7 | 279.1  | 205.0  | 171.9  | 152.9  | 148.2  | 130.9  | 123.0  | 119.8  | 118.2  |
| 52.5° | 8529.5 | 4226.9 | 250.7  | 186.0  | 154.5  | 135.6  | 124.6  | 111.9  | 105.6  | 102.5  | 102.5  |
| 55°   | 8720.2 | 3984.1 | 222.3  | 168.7  | 140.3  | 121.4  | 105.6  | 96.2   | 89.9   | 86.7   | 86.7   |
| 57.5° | 8773.8 | 3654.6 | 193.9  | 154.5  | 126.1  | 107.2  | 89.9   | 83.6   | 75.7   | 74.1   | 74.1   |
| 60°   | 8384.4 | 3060.2 | 171.9  | 137.2  | 113.5  | 93.0   | 78.8   | 70.9   | 63.1   | 61.5   | 59.9   |
| 62.5° | 7358.0 | 2368.1 | 151.4  | 121.4  | 99.3   | 80.4   | 67.8   | 58.3   | 52.0   | 52.0   | 52.0   |
| 65°   | 5612.7 | 1587.6 | 132.4  | 105.6  | 86.7   | 67.8   | 58.3   | 47.3   | 44.1   | 44.1   | 45.7   |
| 67.5° | 3359.8 | 864.0  | 113.5  | 89.9   | 74.1   | 56.8   | 48.9   | 41.0   | 39.4   | 41.0   | 41.0   |
| 69°   | 1969.2 | 507.7  | 102.5  | 80.4   | 64.6   | 50.5   | 42.6   | 36.3   | 39.4   | 41.0   | 41.0   |
| 70°   | 1215.6 | 342.1  | 94.6   | 72.5   | 58.3   | 45.7   | 39.4   | 34.7   | 37.8   | 39.4   | 39.4   |
| 72.5° | 339.0  | 176.6  | 75.7   | 56.8   | 47.3   | 37.8   | 31.5   | 31.5   | 36.3   | 37.8   | 37.8   |
| 75°   | 220.7  | 130.9  | 58.3   | 42.6   | 36.3   | 30.0   | 26.8   | 30.0   | 34.7   | 36.3   | 36.3   |
| 77.5° | 182.9  | 107.2  | 47.3   | 34.7   | 30.0   | 28.4   | 25.2   | 26.8   | 31.5   | 33.1   | 33.1   |
| 80°   | 167.1  | 75.7   | 37.8   | 31.5   | 26.8   | 25.2   | 23.6   | 22.1   | 28.4   | 30.0   | 30.0   |
| 82.5° | 159.2  | 59.9   | 33.1   | 28.4   | 25.2   | 22.1   | 20.5   | 22.1   | 25.2   | 26.8   | 28.4   |
| 85°   | 99.3   | 39.4   | 30.0   | 26.8   | 22.1   | 20.5   | 20.5   | 20.5   | 23.6   | 25.2   | 25.2   |
| 87.5° | 36.3   | 31.5   | 26.8   | 22.1   | 18.9   | 18.9   | 18.9   | 18.9   | 20.5   | 23.6   | 23.6   |
| 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)