

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: P383166

Luminaire Tested: **GLEON-SA5A-735-U-SL3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P383166  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-23)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GLEON-SA5A-735-U-SL3-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3500K, 615mA 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: 18535 lumens  
Efficiency: N/A  
Efficacy: 114.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G3

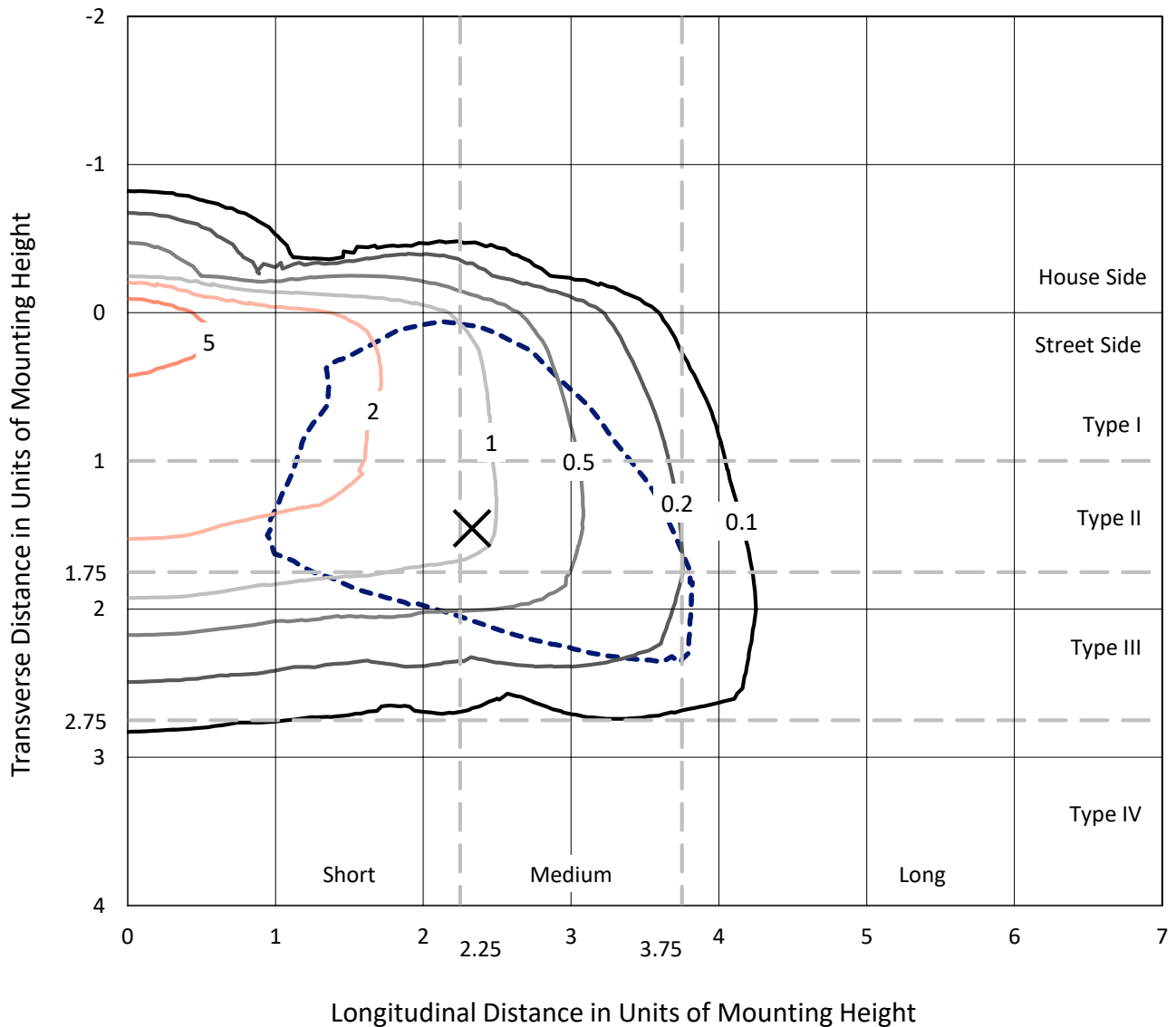
Input Watts (W): 162  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

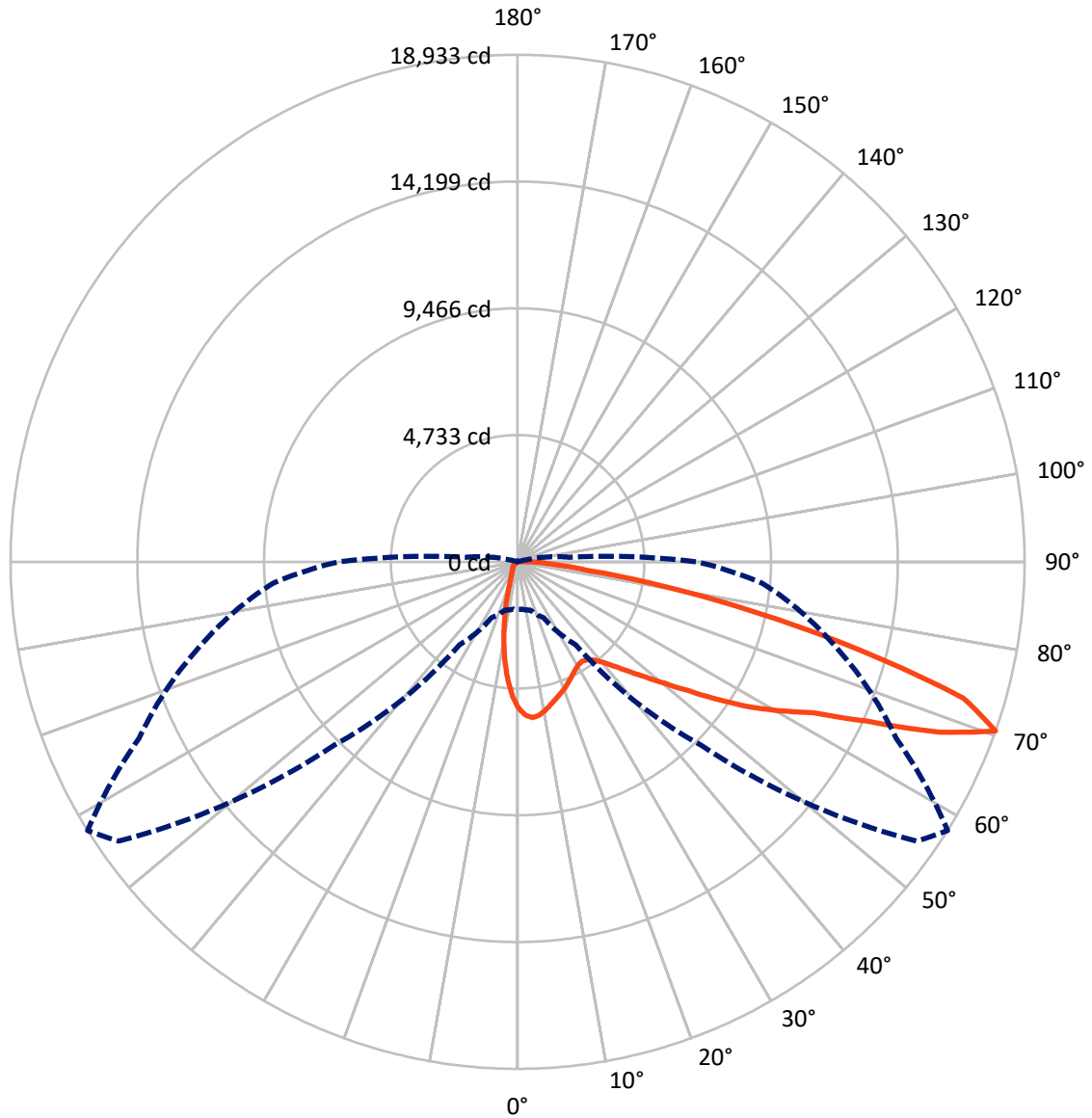
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.9 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1586.2   | 0.0    | 1586.2  |
|                    | % Fixture | 8.6      | 0.0    | 8.6     |
| <b>Street Side</b> | Lumens    | 16948.8  | 0.0    | 16948.8 |
|                    | % Fixture | 91.4     | 0.0    | 91.4    |
| <b>Total</b>       | Lumens    | 18535.0  | 0.0    | 18535.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 447.7   | 2.4       |
| 10°-20°   | 939.7   | 5.1       |
| 20°-30°   | 1235.3  | 6.7       |
| 30°-40°   | 1636.1  | 8.8       |
| 40°-50°   | 2445.4  | 13.2      |
| 50°-60°   | 3917.5  | 21.1      |
| 60°-70°   | 4938.0  | 26.6      |
| 70°-80°   | 2663.5  | 14.4      |
| 80°-90°   | 311.8   | 1.7       |
| 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°    | 18535.0 | 100.0     |
| 0°-180°   | 18535.0 | 100.0     |

**Coefficient of Utilization**

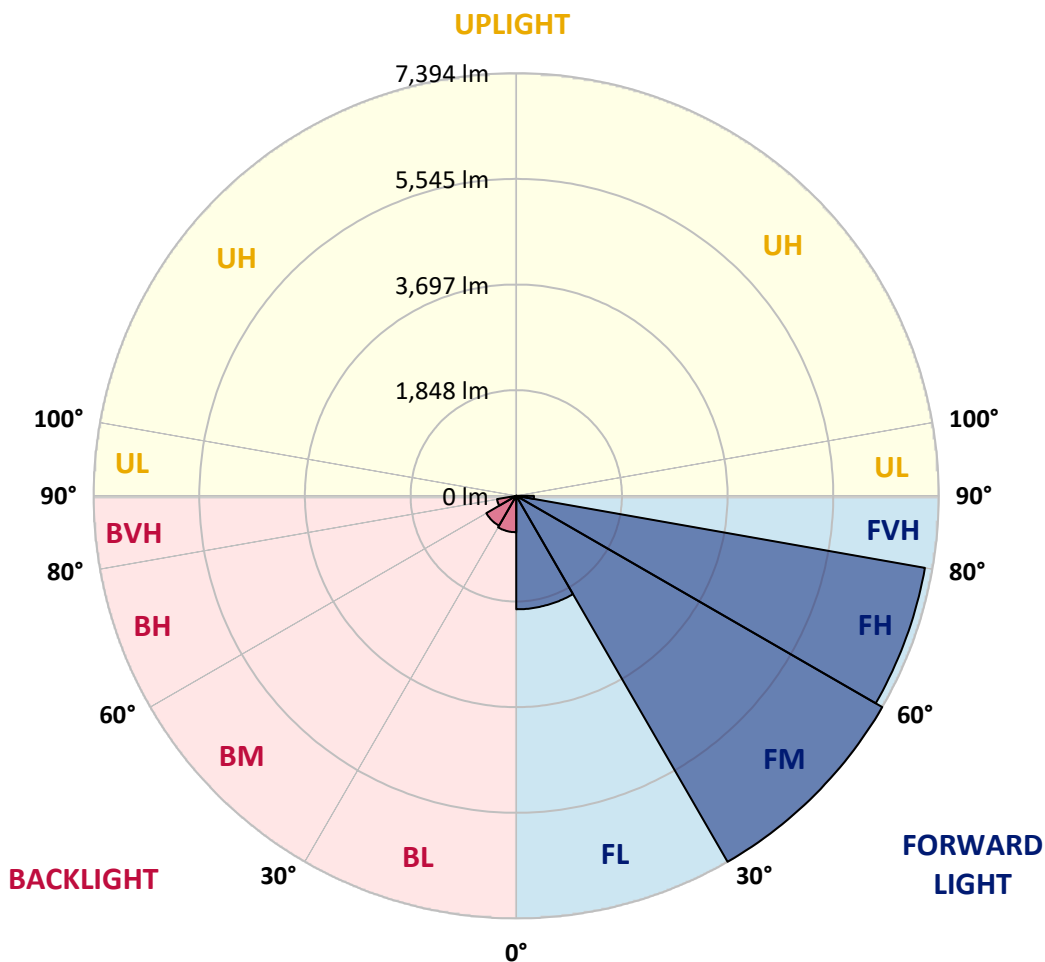


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1985.5 | 10.7      |                         |      |         |
| FM (30°-60°)   | 7393.9 | 39.9      |                         |      |         |
| FH (60°-80°)   | 7260.4 | 39.2      |                         |      | G3/7500 |
| FVH (80°-90°)  | 309.1  | 1.7       |                         |      | G3/500  |
| BL (0°-30°)    | 637.3  | 3.4       | B2/1000                 |      |         |
| BM (30°-60°)   | 605.1  | 3.3       | B1/1000                 |      |         |
| BH (60°-80°)   | 341.1  | 1.8       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 2.7    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G3**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 55°     | 58°     | 65°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0°    | 5475.2 | 5475.2 | 5475.2 | 5475.2 | 5475.2 | 5475.2  | 5475.2  | 5475.2  | 5475.2  | 5475.2  | 5475.2  |
| 2.5°  | 5929.1 | 5914.5 | 5909.1 | 5899.8 | 5864.4 | 5829.7  | 5761.1  | 5741.8  | 5698.6  | 5596.2  | 5487.5  |
| 5°    | 5933.8 | 5932.9 | 5949.1 | 5945.3 | 5932.9 | 5916.7  | 5867.4  | 5842.0  | 5768.8  | 5622.4  | 5423.5  |
| 7.5°  | 5647.8 | 5662.4 | 5698.6 | 5727.9 | 5761.9 | 5805.8  | 5811.9  | 5787.3  | 5727.2  | 5569.2  | 5305.6  |
| 10°   | 5264.0 | 5287.1 | 5338.0 | 5395.8 | 5484.4 | 5572.2  | 5650.9  | 5647.8  | 5627.0  | 5471.3  | 5163.8  |
| 12.5° | 4879.4 | 4906.4 | 4965.0 | 5050.5 | 5176.1 | 5319.5  | 5459.7  | 5479.0  | 5513.6  | 5383.4  | 5032.8  |
| 15°   | 4542.6 | 4565.7 | 4623.6 | 4728.3 | 4884.0 | 5076.7  | 5282.4  | 5317.9  | 5407.4  | 5314.9  | 4923.3  |
| 17.5° | 4256.6 | 4271.3 | 4313.7 | 4430.1 | 4610.4 | 4844.0  | 5111.4  | 5180.7  | 5314.1  | 5260.9  | 4828.5  |
| 20°   | 4057.1 | 4059.3 | 4087.1 | 4168.8 | 4349.1 | 4610.4  | 4934.1  | 5033.5  | 5215.5  | 5214.6  | 4730.7  |
| 22.5° | 3958.4 | 3950.7 | 3956.1 | 4003.0 | 4135.6 | 4387.7  | 4756.9  | 4874.8  | 5126.8  | 5175.3  | 4631.2  |
| 25°   | 3939.9 | 3933.7 | 3918.3 | 3924.5 | 4004.6 | 4192.7  | 4578.0  | 4714.5  | 5049.0  | 5151.5  | 4544.9  |
| 27.5° | 3997.7 | 4003.9 | 3977.6 | 3949.9 | 3956.1 | 4066.3  | 4419.3  | 4577.3  | 4985.7  | 5151.5  | 4484.0  |
| 30°   | 4114.1 | 4117.2 | 4097.9 | 4061.6 | 4013.1 | 4030.8  | 4309.1  | 4467.1  | 4954.2  | 5187.0  | 4445.4  |
| 32.5° | 4242.8 | 4259.8 | 4257.5 | 4228.1 | 4158.8 | 4087.1  | 4282.9  | 4427.0  | 4951.8  | 5265.5  | 4441.6  |
| 35°   | 4402.3 | 4421.6 | 4453.9 | 4447.8 | 4375.4 | 4257.5  | 4372.2  | 4485.6  | 4997.3  | 5395.0  | 4483.3  |
| 37.5° | 4571.8 | 4601.2 | 4670.5 | 4703.7 | 4656.6 | 4523.3  | 4572.7  | 4653.5  | 5119.0  | 5604.7  | 4588.8  |
| 40°   | 4736.1 | 4769.2 | 4895.6 | 5025.8 | 4990.4 | 4853.2  | 4876.3  | 4941.0  | 5335.6  | 5906.0  | 4789.2  |
| 42.5° | 4897.1 | 4946.4 | 5132.2 | 5346.4 | 5388.8 | 5279.4  | 5291.7  | 5343.4  | 5657.0  | 6320.6  | 5116.8  |
| 45°   | 5089.8 | 5145.3 | 5420.4 | 5684.8 | 5798.0 | 5750.3  | 5802.7  | 5836.6  | 6077.0  | 6868.6  | 5558.4  |
| 47.5° | 5372.6 | 5436.6 | 5774.2 | 6075.6 | 6274.3 | 6305.2  | 6410.8  | 6433.2  | 6608.1  | 7506.8  | 6134.1  |
| 50°   | 5924.5 | 5942.2 | 6247.4 | 6521.0 | 6807.7 | 6992.7  | 7112.9  | 7129.9  | 7250.9  | 8204.2  | 6853.2  |
| 52.5° | 6618.9 | 6630.5 | 6803.1 | 6986.5 | 7312.6 | 7690.2  | 7971.5  | 7995.4  | 8020.8  | 8884.0  | 7563.0  |
| 55°   | 7308.6 | 7307.2 | 7421.2 | 7529.1 | 7902.1 | 8450.9  | 9061.3  | 9075.9  | 8893.3  | 9529.1  | 8105.6  |
| 57.5° | 7739.5 | 7781.1 | 7954.6 | 8093.3 | 8614.3 | 9317.9  | 10165.0 | 10218.9 | 9809.7  | 10007.0 | 8642.1  |
| 60°   | 7602.4 | 7622.4 | 8006.9 | 8520.2 | 9501.3 | 10550.3 | 11281.7 | 11295.6 | 10498.6 | 10484.0 | 9320.2  |
| 62.5° | 6477.1 | 6487.9 | 7092.2 | 8150.3 | 9950.7 | 12148.8 | 12628.9 | 12403.1 | 11290.9 | 11146.1 | 10131.8 |
| 65°   | 4439.3 | 4509.4 | 5014.2 | 6322.1 | 9125.3 | 13151.5 | 14714.4 | 14340.7 | 12498.7 | 12100.2 | 10865.6 |
| 67.5° | 2614.3 | 2599.6 | 2849.3 | 3812.7 | 6702.1 | 12485.5 | 17352.6 | 16981.2 | 14145.6 | 12739.1 | 10650.5 |
| 70°   | 1785.8 | 1775.7 | 1871.3 | 2308.3 | 3783.5 | 9685.6  | 18182.7 | 18932.6 | 15600.0 | 12309.1 | 9166.1  |
| 72.5° | 1274.7 | 1280.1 | 1421.2 | 1793.4 | 2375.4 | 5643.1  | 15636.2 | 17411.2 | 15144.5 | 10730.7 | 6967.2  |
| 75°   | 865.5  | 880.1  | 1082.1 | 1471.3 | 2082.5 | 2870.9  | 11095.9 | 13235.4 | 12332.2 | 7798.8  | 4004.6  |
| 77.5° | 465.5  | 481.7  | 719.8  | 1185.4 | 1882.8 | 1994.6  | 7137.6  | 9109.0  | 7746.5  | 3506.0  | 1160.7  |
| 80°   | 194.2  | 203.4  | 336.8  | 861.7  | 1626.9 | 1751.9  | 4199.6  | 5523.7  | 3300.9  | 691.3   | 259.0   |
| 82.5° | 84.0   | 88.6   | 140.3  | 514.0  | 1216.2 | 1479.0  | 2223.5  | 2657.4  | 1000.4  | 151.8   | 130.2   |
| 85°   | 16.2   | 17.0   | 57.8   | 272.1  | 776.1  | 834.7   | 1441.2  | 1412.7  | 449.3   | 65.5    | 94.8    |
| 87.5° | 0.0    | 0.0    | 13.9   | 85.5   | 228.1  | 454.7   | 879.4   | 868.6   | 152.6   | 31.6    | 35.5    |
| 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°    | 5475.2 | 5475.2 | 5475.2 | 5475.2 | 5475.2 | 5475.2 | 5475.2 | 5475.2 | 5475.2 | 5475.2 | 5475.2 |
| 2.5°  | 5431.9 | 5378.8 | 5267.1 | 5129.1 | 5023.6 | 4907.1 | 4814.6 | 4697.5 | 4646.7 | 4649.0 | 4621.2 |
| 5°    | 5310.2 | 5200.7 | 4953.4 | 4641.2 | 4400.8 | 4152.7 | 3939.1 | 3726.4 | 3600.8 | 3559.9 | 3521.4 |
| 7.5°  | 5136.0 | 4962.6 | 4568.0 | 4087.1 | 3680.2 | 3282.5 | 2936.4 | 2632.0 | 2439.4 | 2345.3 | 2310.6 |
| 10°   | 4939.5 | 4695.9 | 4124.9 | 3491.3 | 2910.2 | 2372.3 | 1923.7 | 1533.7 | 1378.0 | 1272.5 | 1245.5 |
| 12.5° | 4766.8 | 4437.0 | 3691.7 | 2880.2 | 2190.3 | 1541.4 | 1113.7 | 870.9  | 765.4  | 723.7  | 716.7  |
| 15°   | 4604.3 | 4195.0 | 3274.8 | 2326.8 | 1516.7 | 948.8  | 708.3  | 625.8  | 601.1  | 594.2  | 594.2  |
| 17.5° | 4450.8 | 3964.6 | 2867.0 | 1781.9 | 1003.5 | 665.1  | 586.5  | 568.1  | 560.3  | 559.6  | 560.3  |
| 20°   | 4290.5 | 3734.1 | 2466.3 | 1305.6 | 700.6  | 563.4  | 541.8  | 531.8  | 529.5  | 529.5  | 529.5  |
| 22.5° | 4137.2 | 3503.6 | 2076.3 | 932.6  | 561.8  | 514.0  | 503.3  | 496.3  | 494.0  | 493.3  | 491.7  |
| 25°   | 3990.0 | 3284.8 | 1695.6 | 659.0  | 493.3  | 470.9  | 461.7  | 452.5  | 445.5  | 441.6  | 439.3  |
| 27.5° | 3869.0 | 3089.8 | 1341.1 | 528.7  | 445.5  | 426.2  | 414.6  | 400.8  | 383.8  | 376.1  | 373.0  |
| 30°   | 3772.7 | 2911.7 | 1033.6 | 446.2  | 400.8  | 381.5  | 363.8  | 339.9  | 315.2  | 302.1  | 301.4  |
| 32.5° | 3697.1 | 2736.8 | 784.5  | 394.6  | 360.7  | 336.8  | 311.3  | 281.3  | 252.8  | 238.2  | 237.4  |
| 35°   | 3660.1 | 2582.6 | 599.6  | 356.9  | 325.2  | 295.2  | 263.6  | 230.5  | 202.7  | 188.8  | 187.2  |
| 37.5° | 3684.8 | 2452.4 | 467.8  | 325.2  | 295.2  | 260.5  | 223.5  | 188.8  | 164.1  | 151.8  | 151.1  |
| 40°   | 3775.0 | 2369.2 | 380.0  | 298.3  | 269.8  | 227.4  | 187.2  | 154.9  | 134.1  | 124.1  | 123.3  |
| 42.5° | 3966.9 | 2338.4 | 324.5  | 275.9  | 245.1  | 196.6  | 155.7  | 127.9  | 108.7  | 101.7  | 100.2  |
| 45°   | 4287.4 | 2383.8 | 286.7  | 254.3  | 219.7  | 167.2  | 128.7  | 104.8  | 87.8   | 82.4   | 81.7   |
| 47.5° | 4714.5 | 2503.3 | 259.7  | 233.5  | 196.6  | 141.0  | 107.1  | 84.8   | 71.6   | 66.3   | 65.5   |
| 50°   | 5264.7 | 2692.9 | 237.4  | 212.7  | 174.9  | 119.4  | 88.6   | 67.1   | 55.5   | 51.6   | 51.6   |
| 52.5° | 5863.6 | 2918.7 | 217.3  | 193.5  | 153.3  | 99.4   | 71.6   | 51.6   | 44.0   | 39.3   | 39.3   |
| 55°   | 6358.4 | 3116.0 | 195.7  | 178.8  | 127.2  | 82.4   | 54.7   | 39.3   | 32.3   | 30.1   | 30.1   |
| 57.5° | 6852.5 | 3326.4 | 171.1  | 153.3  | 101.7  | 67.1   | 41.6   | 29.3   | 23.8   | 22.4   | 22.4   |
| 60°   | 7492.9 | 3583.8 | 147.2  | 124.8  | 80.1   | 50.9   | 30.8   | 20.8   | 17.7   | 17.0   | 17.0   |
| 62.5° | 8197.3 | 3734.9 | 125.7  | 100.2  | 62.4   | 37.7   | 22.4   | 13.9   | 13.1   | 13.1   | 12.3   |
| 65°   | 8628.2 | 3521.4 | 105.5  | 80.1   | 48.5   | 28.5   | 14.6   | 10.1   | 11.6   | 10.8   | 9.2    |
| 67.5° | 8078.7 | 2756.8 | 86.4   | 62.4   | 37.7   | 21.6   | 9.2    | 6.9    | 12.3   | 10.1   | 7.7    |
| 70°   | 6689.1 | 1929.9 | 67.1   | 44.0   | 30.1   | 18.5   | 6.1    | 4.7    | 13.1   | 10.1   | 6.1    |
| 72.5° | 5005.8 | 1291.7 | 53.2   | 29.3   | 22.4   | 16.2   | 5.4    | 2.3    | 11.6   | 8.5    | 5.4    |
| 75°   | 2735.3 | 520.3  | 42.4   | 18.5   | 13.9   | 11.6   | 3.8    | 1.6    | 7.7    | 6.1    | 3.8    |
| 77.5° | 719.8  | 137.2  | 30.8   | 12.3   | 7.7    | 4.7    | 2.3    | 0.7    | 3.8    | 3.1    | 1.6    |
| 80°   | 183.4  | 53.2   | 20.0   | 8.5    | 5.4    | 2.3    | 0.0    | 0.0    | 0.7    | 0.0    | 0.0    |
| 82.5° | 97.9   | 22.4   | 12.3   | 6.1    | 3.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 74.0   | 14.6   | 6.9    | 3.8    | 0.7    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 28.5   | 4.7    | 2.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 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)