

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: P459041

Luminaire Tested: **GALN-SA5C-735-U-SL2-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459041  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA5C-735-U-SL2-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 3500K, 1050mA 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: 26842 lumens  
Efficiency: N/A  
Efficacy: 99.8 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G4

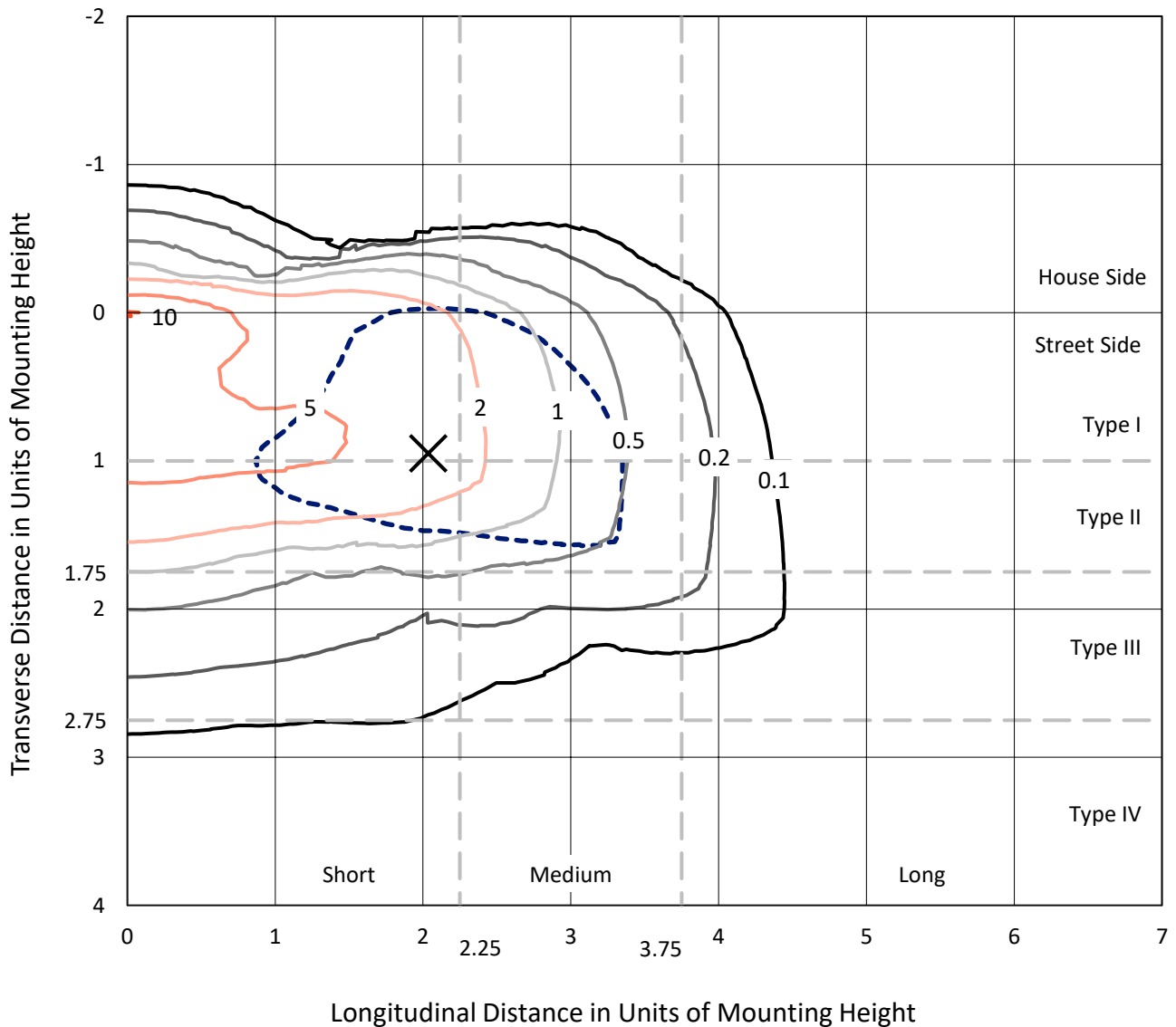
Input Watts (W): 269  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

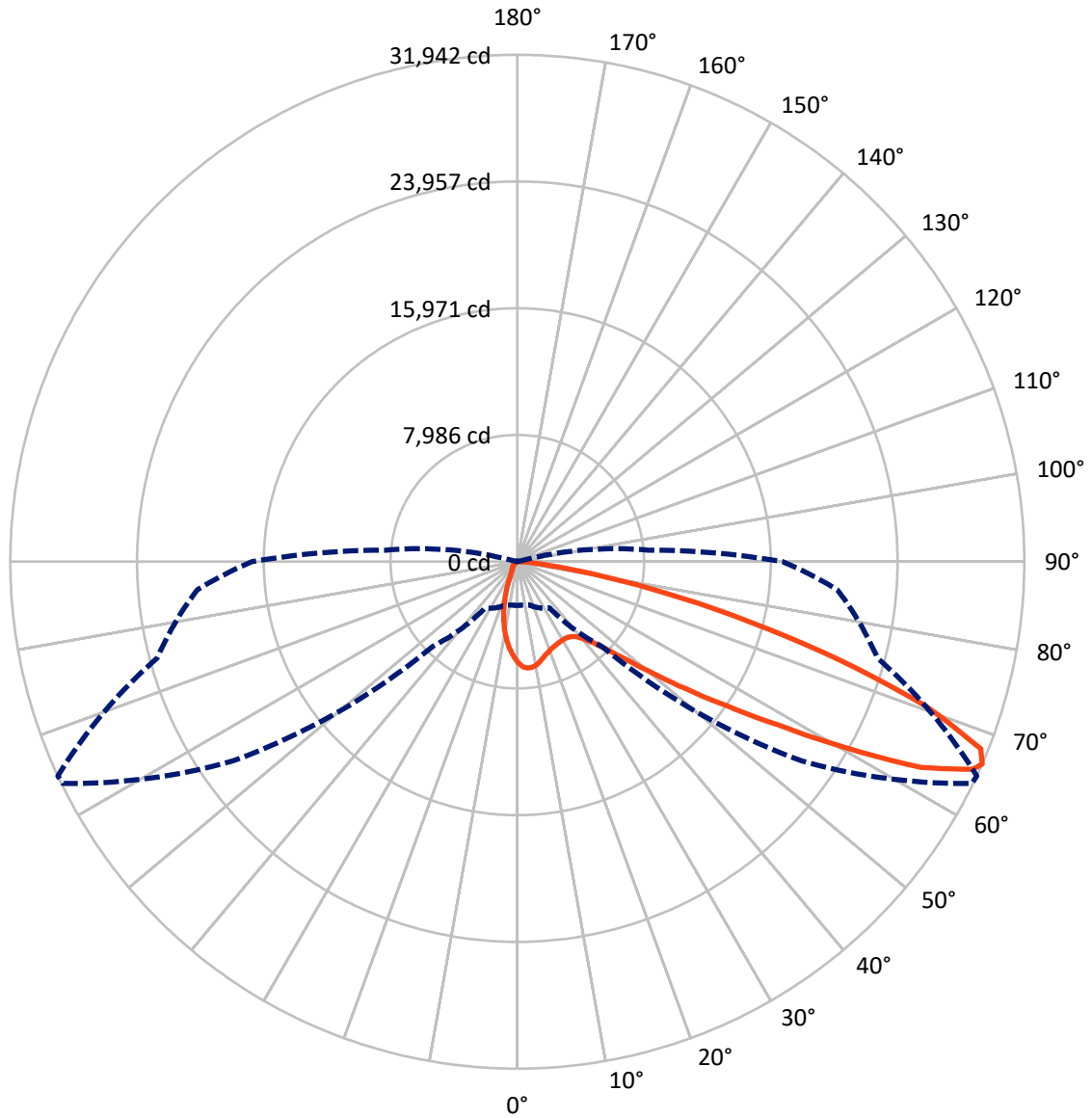
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.2 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2775.8   | 0.0    | 2775.8  |
|                    | % Fixture | 10.3     | 0.0    | 10.3    |
| <b>Street Side</b> | Lumens    | 24066.2  | 0.0    | 24066.2 |
|                    | % Fixture | 89.7     | 0.0    | 89.7    |
| <b>Total</b>       | Lumens    | 26842.0  | 0.0    | 26842.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 520.6   | 1.9       |
| 10°-20°   | 1134.3  | 4.2       |
| 20°-30°   | 1624.8  | 6.1       |
| 30°-40°   | 2373.2  | 8.8       |
| 40°-50°   | 3979.5  | 14.8      |
| 50°-60°   | 6641.1  | 24.7      |
| 60°-70°   | 7049.3  | 26.3      |
| 70°-80°   | 3192.6  | 11.9      |
| 80°-90°   | 326.7   | 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°    | 26842.0 | 100.0     |
| 0°-180°   | 26842.0 | 100.0     |

**Coefficient of Utilization**



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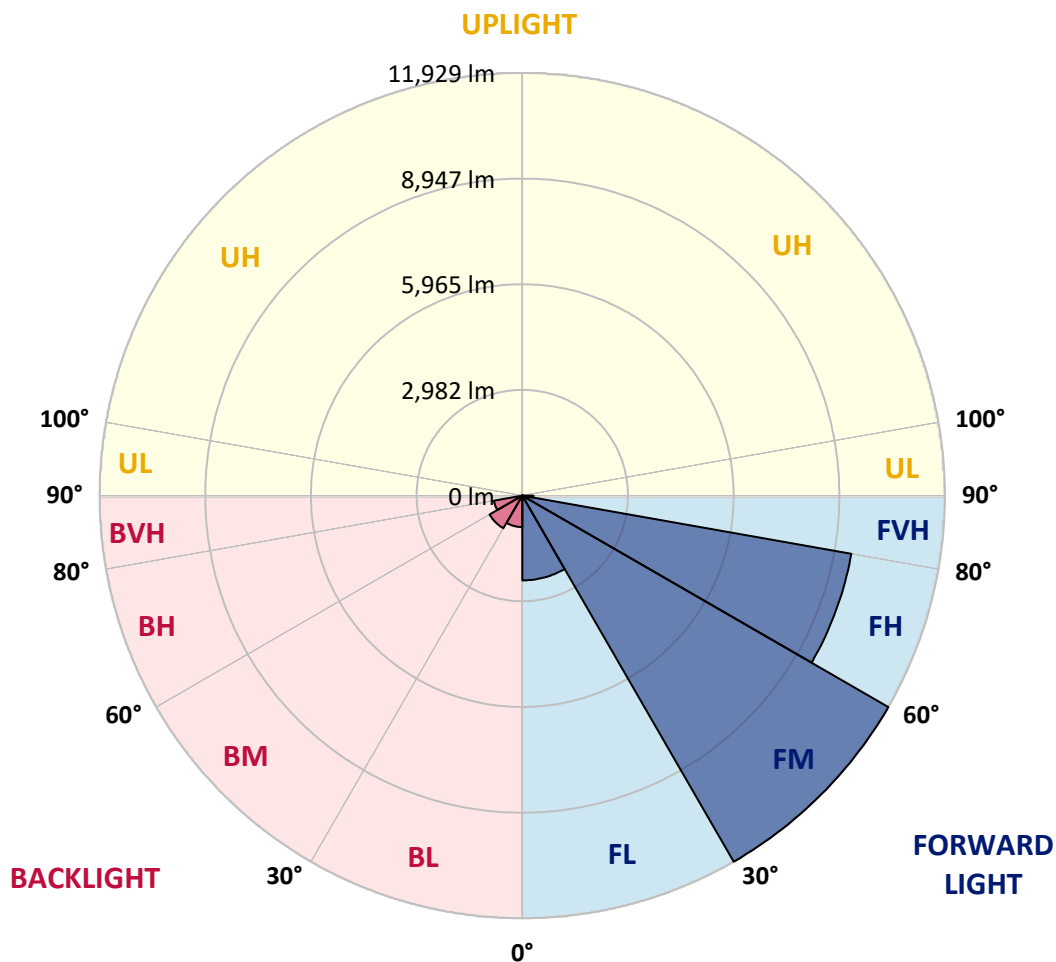
CATALOG NUMBER: GALN-SA5C-735-U-SL2-HSS

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

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|---------|-----------|-------------------------|------|----------|
|                |         |           | B                       | U    | G        |
| FL (0°-30°)    | 2391.7  | 8.9       |                         |      |          |
| FM (30°-60°)   | 11929.2 | 44.4      |                         |      |          |
| FH (60°-80°)   | 9429.0  | 35.1      |                         |      | G4/12000 |
| FVH (80°-90°)  | 316.3   | 1.2       |                         |      | G3/500   |
| BL (0°-30°)    | 888.0   | 3.3       | B2/1000                 |      |          |
| BM (30°-60°)   | 1064.6  | 4.0       | B2/2500                 |      |          |
| BH (60°-80°)   | 812.9   | 3.0       | B2/1000                 |      | G2/1000  |
| BVH (80°-90°)  | 10.4    | 0.0       |                         |      | 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 II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 64°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 6365.2  | 6365.2  | 6365.2  | 6365.2  | 6365.2  | 6365.2  | 6365.2  | 6365.2  | 6365.2  | 6365.2  | 6365.2  |
| 2.5°  | 6707.9  | 6715.1  | 6724.2  | 6736.9  | 6745.9  | 6718.8  | 6680.7  | 6637.2  | 6628.1  | 6535.6  | 6423.2  |
| 5°    | 6348.9  | 6359.8  | 6439.6  | 6483.1  | 6581.0  | 6669.8  | 6726.0  | 6733.3  | 6729.6  | 6642.6  | 6463.1  |
| 7.5°  | 5837.7  | 5868.5  | 5946.4  | 6022.6  | 6205.7  | 6374.3  | 6573.7  | 6713.3  | 6722.4  | 6698.8  | 6475.8  |
| 10°   | 5422.5  | 5442.4  | 5482.3  | 5632.8  | 5785.1  | 6042.5  | 6321.7  | 6584.6  | 6606.3  | 6700.6  | 6464.9  |
| 12.5° | 5098.0  | 5127.0  | 5175.9  | 5292.0  | 5475.1  | 5718.0  | 6035.3  | 6388.8  | 6434.1  | 6666.2  | 6434.1  |
| 15°   | 4871.4  | 4885.9  | 4934.8  | 5049.0  | 5226.7  | 5451.5  | 5772.4  | 6183.9  | 6223.8  | 6620.9  | 6428.7  |
| 17.5° | 4764.4  | 4780.7  | 4815.2  | 4905.8  | 5052.7  | 5261.1  | 5574.8  | 6019.0  | 6069.7  | 6591.8  | 6448.6  |
| 20°   | 4793.4  | 4807.9  | 4809.7  | 4856.9  | 4956.6  | 5132.4  | 5429.8  | 5864.9  | 5930.1  | 6573.7  | 6481.3  |
| 22.5° | 4958.4  | 4960.2  | 4938.4  | 4916.7  | 4951.1  | 5078.0  | 5340.9  | 5767.0  | 5834.0  | 6570.1  | 6519.3  |
| 25°   | 5204.9  | 5210.4  | 5174.1  | 5098.0  | 5029.1  | 5094.4  | 5321.0  | 5703.5  | 5763.3  | 6561.0  | 6542.9  |
| 27.5° | 5545.8  | 5544.0  | 5533.1  | 5406.2  | 5210.4  | 5166.9  | 5337.3  | 5669.1  | 5719.8  | 6535.6  | 6552.0  |
| 30°   | 6022.6  | 6008.1  | 5984.5  | 5841.3  | 5542.2  | 5342.7  | 5406.2  | 5647.3  | 5694.4  | 6499.4  | 6528.4  |
| 32.5° | 6492.1  | 6546.5  | 6542.9  | 6406.9  | 6033.5  | 5656.4  | 5549.4  | 5676.3  | 5710.8  | 6475.8  | 6493.9  |
| 35°   | 7039.6  | 7037.8  | 7177.4  | 7126.7  | 6689.7  | 6057.0  | 5794.2  | 5772.4  | 5799.6  | 6492.1  | 6477.6  |
| 37.5° | 7547.3  | 7594.4  | 7812.0  | 7864.5  | 7465.7  | 6622.7  | 6140.4  | 5979.1  | 5988.1  | 6602.7  | 6517.5  |
| 40°   | 8180.0  | 8270.6  | 8595.1  | 8771.0  | 8419.3  | 7462.1  | 6651.7  | 6358.0  | 6359.8  | 6874.7  | 6668.0  |
| 42.5° | 8995.8  | 9139.0  | 9441.8  | 9735.5  | 9546.9  | 8455.5  | 7418.5  | 6958.1  | 6954.4  | 7353.3  | 7012.4  |
| 45°   | 9987.5  | 10087.2 | 10431.6 | 10897.6 | 10777.9 | 9842.4  | 8535.3  | 7888.1  | 7841.0  | 8138.3  | 7623.4  |
| 47.5° | 10843.2 | 10979.2 | 11329.1 | 11860.2 | 12404.1 | 11535.7 | 9869.6  | 9166.2  | 9135.4  | 9387.4  | 8671.3  |
| 50°   | 11216.7 | 11336.3 | 11704.3 | 12449.5 | 13767.5 | 13758.4 | 11856.6 | 11031.7 | 10979.2 | 11115.1 | 10292.1 |
| 52.5° | 10806.9 | 10919.3 | 11291.0 | 12219.2 | 14409.2 | 16466.9 | 14735.6 | 13372.2 | 13308.8 | 13134.7 | 12228.3 |
| 55°   | 9403.7  | 9496.2  | 10045.5 | 11111.5 | 14162.7 | 18272.6 | 18702.3 | 16263.9 | 16017.3 | 15341.1 | 14420.1 |
| 57.5° | 7487.4  | 7440.3  | 7781.1  | 9019.4  | 12716.0 | 18878.1 | 22774.1 | 19866.2 | 19425.6 | 17248.3 | 16274.8 |
| 60°   | 5188.6  | 5333.7  | 5471.4  | 6287.3  | 9561.4  | 17828.4 | 25306.8 | 24394.9 | 23814.8 | 19124.7 | 18051.4 |
| 62.5° | 3814.4  | 3910.5  | 4001.2  | 4378.2  | 6011.7  | 14235.2 | 25754.6 | 29046.9 | 28532.0 | 21117.1 | 19746.5 |
| 65°   | 3016.7  | 3024.0  | 3060.2  | 3431.9  | 3961.3  | 9256.9  | 23602.7 | 31670.2 | 31537.9 | 23035.2 | 20433.6 |
| 66°   | 2748.4  | 2750.2  | 2806.4  | 3205.3  | 3555.2  | 7538.2  | 21878.5 | 31869.7 | 31942.2 | 23495.7 | 20232.4 |
| 67.5° | 2402.1  | 2394.9  | 2476.5  | 2880.8  | 3237.9  | 5435.2  | 18792.9 | 31061.1 | 31490.7 | 23849.2 | 19509.0 |
| 70°   | 1861.9  | 1852.8  | 1952.5  | 2416.6  | 2982.3  | 3625.9  | 12491.1 | 26670.1 | 27362.7 | 23125.8 | 17261.0 |
| 72.5° | 1240.1  | 1247.3  | 1417.7  | 1907.2  | 2846.3  | 3192.6  | 7514.6  | 20288.6 | 21267.6 | 19097.5 | 13578.9 |
| 75°   | 723.4   | 736.1   | 930.0   | 1417.7  | 2471.0  | 3043.9  | 4253.2  | 14467.3 | 15092.7 | 13187.3 | 8459.2  |
| 77.5° | 378.9   | 384.3   | 520.3   | 935.5   | 1894.5  | 2826.4  | 2833.6  | 9242.4  | 9536.1  | 6408.7  | 3348.5  |
| 80°   | 201.2   | 195.8   | 279.2   | 563.8   | 1303.5  | 2481.9  | 2298.8  | 4893.1  | 5087.1  | 1903.6  | 846.6   |
| 82.5° | 76.1    | 83.4    | 148.7   | 369.8   | 770.5   | 1782.1  | 1979.7  | 2162.8  | 2095.8  | 418.8   | 355.3   |
| 85°   | 14.5    | 18.1    | 63.5    | 219.4   | 388.0   | 745.1   | 1459.4  | 1060.6  | 982.6   | 157.7   | 204.9   |
| 87.5° | 1.8     | 3.6     | 18.1    | 52.6    | 56.2    | 252.0   | 431.5   | 293.7   | 253.8   | 58.0    | 85.2    |
| 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°    | 6365.2  | 6365.2 | 6365.2 | 6365.2 | 6365.2 | 6365.2 | 6365.2 | 6365.2 | 6365.2 | 6365.2 | 6365.2 |
| 2.5°  | 6368.9  | 6319.9 | 6156.7 | 5995.4 | 5830.4 | 5681.8 | 5580.2 | 5415.2 | 5373.6 | 5313.7 | 5279.3 |
| 5°    | 6356.2  | 6241.9 | 5928.3 | 5585.7 | 5266.6 | 4922.1 | 4659.3 | 4405.4 | 4269.5 | 4200.6 | 4175.2 |
| 7.5°  | 6319.9  | 6138.6 | 5649.1 | 5112.5 | 4601.2 | 4086.4 | 3638.6 | 3297.7 | 3078.4 | 2927.9 | 2826.4 |
| 10°   | 6247.4  | 5997.2 | 5324.6 | 4586.7 | 3814.4 | 3134.6 | 2567.1 | 2135.6 | 1802.1 | 1696.9 | 1700.5 |
| 12.5° | 6173.1  | 5839.5 | 4962.0 | 4003.0 | 3045.7 | 2188.2 | 1586.3 | 1245.5 | 1086.0 | 1033.4 | 1022.5 |
| 15°   | 6104.2  | 5689.0 | 4606.7 | 3437.3 | 2268.0 | 1417.7 | 1022.5 | 902.8  | 859.3  | 850.3  | 848.5  |
| 17.5° | 6067.9  | 5549.4 | 4227.8 | 2790.1 | 1582.7 | 962.7  | 819.4  | 786.8  | 774.1  | 765.1  | 761.4  |
| 20°   | 6037.1  | 5427.9 | 3865.2 | 2184.6 | 1082.3 | 788.6  | 734.2  | 703.4  | 681.7  | 672.6  | 667.2  |
| 22.5° | 6015.3  | 5302.8 | 3489.9 | 1691.5 | 828.5  | 699.8  | 650.8  | 611.0  | 580.1  | 569.3  | 562.0  |
| 25°   | 5982.7  | 5165.1 | 3111.0 | 1236.4 | 698.0  | 621.8  | 565.6  | 518.5  | 478.6  | 458.7  | 455.0  |
| 27.5° | 5935.6  | 5009.1 | 2695.8 | 915.5  | 623.7  | 552.9  | 484.1  | 426.0  | 386.2  | 364.4  | 366.2  |
| 30°   | 5859.4  | 4846.0 | 2280.7 | 727.0  | 563.8  | 482.2  | 407.9  | 351.7  | 313.6  | 297.3  | 295.5  |
| 32.5° | 5768.8  | 4648.4 | 1900.0 | 623.7  | 509.4  | 418.8  | 340.8  | 291.9  | 262.9  | 250.2  | 248.4  |
| 35°   | 5683.6  | 4449.0 | 1512.0 | 560.2  | 453.2  | 360.8  | 286.4  | 244.7  | 223.0  | 212.1  | 213.9  |
| 37.5° | 5636.4  | 4271.3 | 1178.4 | 509.4  | 407.9  | 310.0  | 246.6  | 210.3  | 190.4  | 181.3  | 179.5  |
| 40°   | 5667.2  | 4126.2 | 937.3  | 464.1  | 357.1  | 266.5  | 212.1  | 181.3  | 161.4  | 148.7  | 148.7  |
| 42.5° | 5812.3  | 4062.8 | 756.0  | 420.6  | 310.0  | 230.2  | 184.9  | 155.9  | 134.2  | 121.5  | 123.3  |
| 45°   | 6254.6  | 4129.9 | 632.7  | 380.7  | 266.5  | 199.4  | 159.5  | 128.7  | 108.8  | 99.7   | 97.9   |
| 47.5° | 6988.9  | 4381.9 | 547.5  | 339.0  | 228.4  | 170.4  | 134.2  | 107.0  | 87.0   | 79.8   | 78.0   |
| 50°   | 8272.4  | 4902.2 | 484.1  | 297.3  | 194.0  | 145.0  | 110.6  | 85.2   | 68.9   | 61.6   | 61.6   |
| 52.5° | 10038.2 | 6037.1 | 438.7  | 250.2  | 163.2  | 123.3  | 90.6   | 68.9   | 54.4   | 48.9   | 47.1   |
| 55°   | 11883.8 | 7233.6 | 415.2  | 210.3  | 136.0  | 101.5  | 72.5   | 54.4   | 41.7   | 36.3   | 34.4   |
| 57.5° | 13658.7 | 8172.7 | 388.0  | 170.4  | 108.8  | 78.0   | 56.2   | 41.7   | 29.0   | 25.4   | 23.6   |
| 60°   | 15361.0 | 8932.3 | 330.0  | 136.0  | 85.2   | 56.2   | 41.7   | 29.0   | 19.9   | 16.3   | 16.3   |
| 62.5° | 16883.9 | 9374.7 | 259.3  | 108.8  | 65.3   | 39.9   | 27.2   | 21.8   | 14.5   | 10.9   | 10.9   |
| 65°   | 17061.6 | 8800.0 | 195.8  | 83.4   | 47.1   | 25.4   | 16.3   | 16.3   | 10.9   | 7.3    | 7.3    |
| 66°   | 16704.4 | 8312.3 | 172.2  | 76.1   | 41.7   | 21.8   | 14.5   | 12.7   | 9.1    | 5.4    | 5.4    |
| 67.5° | 15906.7 | 7480.2 | 148.7  | 65.3   | 34.4   | 16.3   | 10.9   | 10.9   | 7.3    | 3.6    | 3.6    |
| 70°   | 13743.9 | 6109.6 | 117.8  | 48.9   | 25.4   | 12.7   | 7.3    | 7.3    | 5.4    | 3.6    | 3.6    |
| 72.5° | 10475.2 | 4561.4 | 96.1   | 36.3   | 18.1   | 9.1    | 5.4    | 5.4    | 5.4    | 3.6    | 3.6    |
| 75°   | 6318.1  | 2456.5 | 74.3   | 27.2   | 16.3   | 7.3    | 3.6    | 5.4    | 7.3    | 5.4    | 3.6    |
| 77.5° | 2327.8  | 835.8  | 58.0   | 21.8   | 12.7   | 7.3    | 3.6    | 3.6    | 7.3    | 5.4    | 5.4    |
| 80°   | 571.1   | 217.6  | 41.7   | 18.1   | 12.7   | 7.3    | 3.6    | 3.6    | 7.3    | 7.3    | 7.3    |
| 82.5° | 264.7   | 92.5   | 29.0   | 16.3   | 12.7   | 7.3    | 3.6    | 3.6    | 5.4    | 7.3    | 7.3    |
| 85°   | 152.3   | 43.5   | 23.6   | 18.1   | 12.7   | 7.3    | 3.6    | 3.6    | 5.4    | 7.3    | 7.3    |
| 87.5° | 61.6    | 21.8   | 21.8   | 18.1   | 14.5   | 9.1    | 3.6    | 3.6    | 3.6    | 5.4    | 5.4    |
| 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)