

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: P459358

Luminaire Tested: **GALN-SA8B-735-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P459358  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA8B-735-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 43222 lumens  
Efficiency: N/A  
Efficacy: 133.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

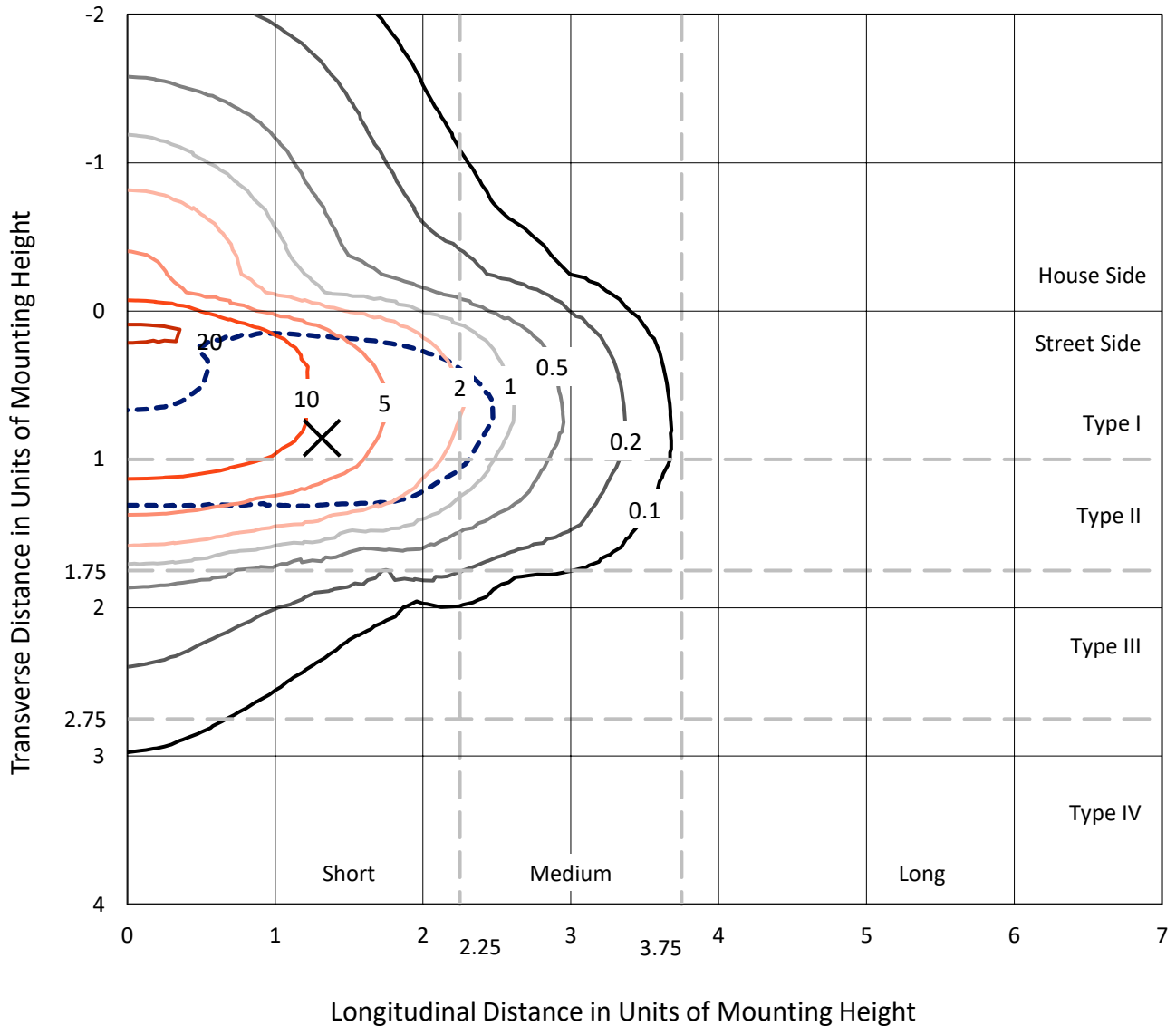
Input Watts (W): 325  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

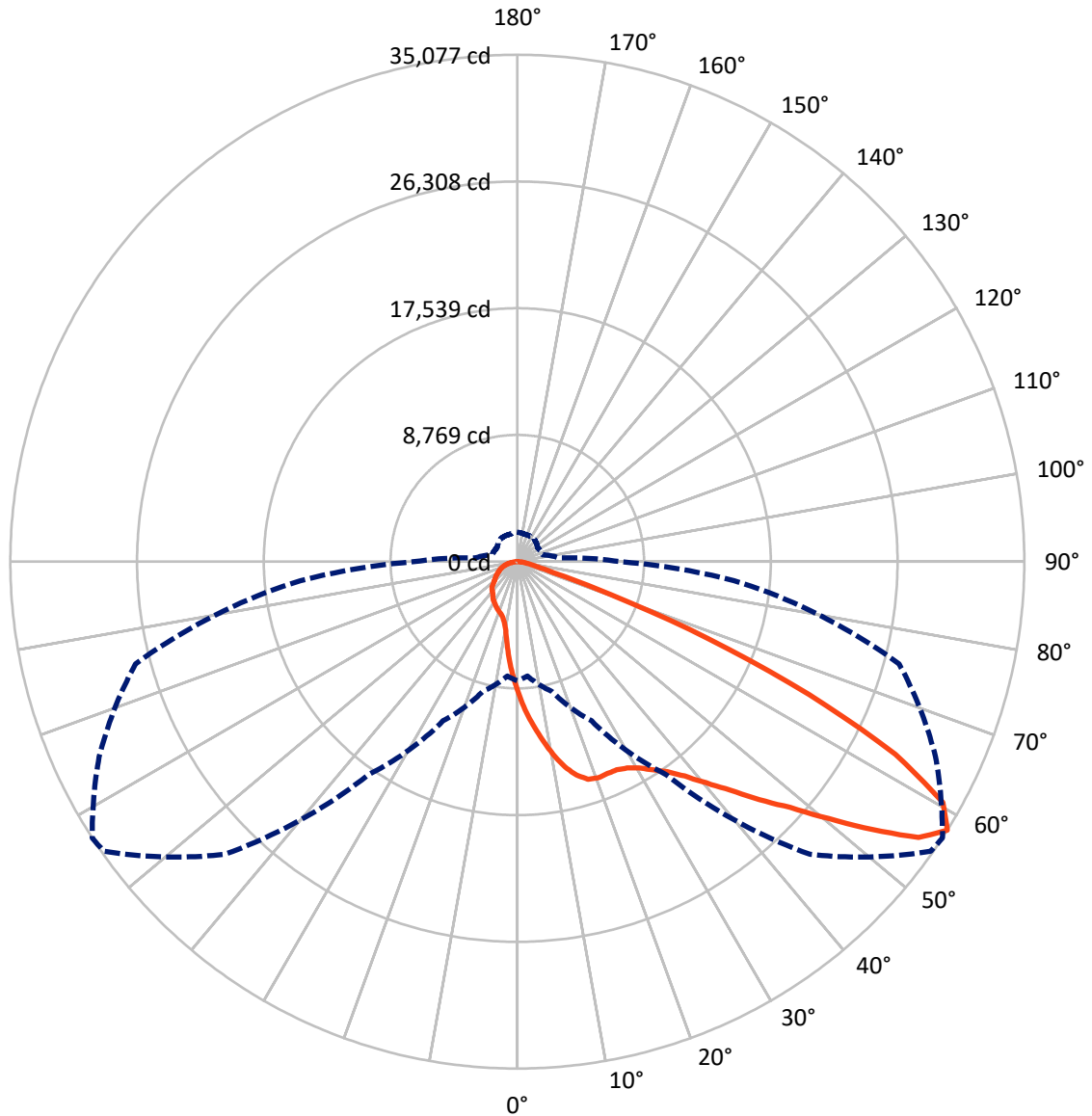
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 22.1 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 6572.9   | 0.0    | 6572.9  |
|                    | % Fixture | 15.2     | 0.0    | 15.2    |
| <b>Street Side</b> | Lumens    | 36649.1  | 0.0    | 36649.1 |
|                    | % Fixture | 84.8     | 0.0    | 84.8    |
| <b>Total</b>       | Lumens    | 43222.0  | 0.0    | 43222.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 872.7   | 2.0       |
| 10°-20°   | 2572.0  | 6.0       |
| 20°-30°   | 4270.8  | 9.9       |
| 30°-40°   | 6433.0  | 14.9      |
| 40°-50°   | 9658.6  | 22.3      |
| 50°-60°   | 10826.1 | 25.0      |
| 60°-70°   | 6335.9  | 14.7      |
| 70°-80°   | 1874.1  | 4.3       |
| 80°-90°   | 378.8   | 0.9       |
| 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°    | 43222.0 | 100.0     |
| 0°-180°   | 43222.0 | 100.0     |

**Coefficient of Utilization**



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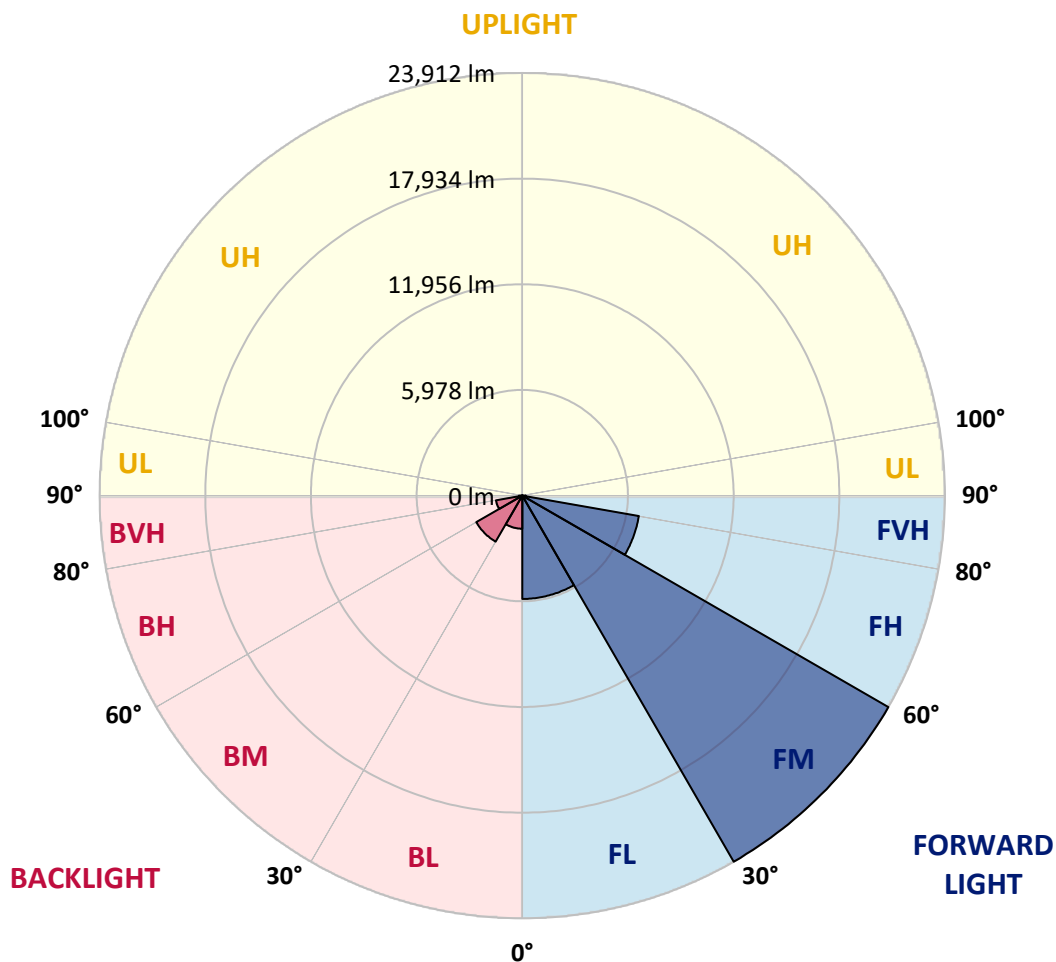
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 5842.6  | 13.5      |                         |      |         |
| FM   | (30°-60°)   | 23912.3 | 55.3      |                         |      |         |
| FH   | (60°-80°)   | 6697.7  | 15.5      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 196.5   | 0.5       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1872.8  | 4.3       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3005.4  | 7.0       | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1512.4  | 3.5       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 182.3   | 0.4       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 57°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 9080.4  | 9080.4  | 9080.4  | 9080.4  | 9080.4  | 9080.4  | 9080.4  | 9080.4  | 9080.4  | 9080.4  | 9080.4  |
| 2.5°  | 11283.1 | 11160.1 | 11063.1 | 10977.9 | 10866.7 | 10566.3 | 10265.8 | 10261.0 | 10022.1 | 9653.0  | 9274.5  |
| 5°    | 13121.5 | 12955.8 | 12977.1 | 12712.2 | 12447.2 | 12011.8 | 11375.4 | 11342.3 | 10833.6 | 10142.8 | 9440.1  |
| 7.5°  | 14318.6 | 14321.0 | 14254.7 | 14103.3 | 13817.0 | 13322.6 | 12601.0 | 12437.7 | 11730.3 | 10682.2 | 9629.3  |
| 10°   | 14257.1 | 14321.0 | 14432.2 | 14562.3 | 14649.9 | 14406.2 | 13748.4 | 13549.7 | 12629.3 | 11335.2 | 9839.9  |
| 12.5° | 13438.5 | 13537.9 | 13696.4 | 14022.9 | 14550.5 | 14952.7 | 14727.9 | 14567.0 | 13670.4 | 11985.8 | 10071.8 |
| 15°   | 12927.5 | 12986.6 | 13074.1 | 13294.2 | 13862.0 | 14824.9 | 15407.0 | 15321.8 | 14652.2 | 12721.6 | 10332.0 |
| 17.5° | 12771.3 | 12830.4 | 12858.8 | 12993.7 | 13398.3 | 14384.9 | 15674.3 | 15825.7 | 15522.9 | 13398.3 | 10594.6 |
| 20°   | 12927.5 | 12955.8 | 12955.8 | 13036.3 | 13353.3 | 14127.0 | 15662.5 | 15967.7 | 16237.4 | 14209.8 | 10840.7 |
| 22.5° | 13336.8 | 13348.6 | 13332.0 | 13360.4 | 13597.0 | 14198.0 | 15551.3 | 15929.8 | 16814.7 | 14898.3 | 11032.3 |
| 25°   | 14001.6 | 14020.5 | 13911.7 | 13845.4 | 14018.1 | 14510.3 | 15612.8 | 15960.6 | 17266.6 | 15556.0 | 11160.1 |
| 27.5° | 14756.3 | 14780.0 | 14647.5 | 14493.7 | 14574.1 | 14895.9 | 15854.1 | 16166.4 | 17604.9 | 16204.3 | 11240.5 |
| 30°   | 15681.4 | 15690.9 | 15468.5 | 15283.9 | 15231.9 | 15470.8 | 16265.8 | 16556.8 | 18026.0 | 16968.5 | 11361.2 |
| 32.5° | 16627.8 | 16698.7 | 16412.5 | 16152.2 | 16064.7 | 16138.0 | 16873.8 | 17155.4 | 18527.6 | 17789.4 | 11555.2 |
| 35°   | 17914.8 | 17926.7 | 17583.6 | 17266.6 | 16977.9 | 17072.6 | 17652.2 | 17855.7 | 19220.8 | 18738.2 | 11829.7 |
| 37.5° | 19521.3 | 19630.1 | 19157.0 | 18565.5 | 18210.6 | 18073.4 | 18593.9 | 18816.3 | 20193.2 | 19902.2 | 12243.7 |
| 40°   | 21305.2 | 21345.4 | 20940.9 | 20571.8 | 19923.5 | 19526.0 | 19885.7 | 20127.0 | 21392.8 | 21291.0 | 12724.0 |
| 42.5° | 22426.7 | 22514.2 | 22545.0 | 22507.1 | 22019.7 | 21352.5 | 21489.8 | 21603.3 | 22812.3 | 22594.7 | 13216.1 |
| 45°   | 22805.2 | 22935.3 | 23375.4 | 24307.6 | 24359.6 | 23701.9 | 23382.5 | 23491.3 | 24359.6 | 23910.1 | 13686.9 |
| 47.5° | 22178.2 | 22400.6 | 23212.2 | 25123.8 | 26555.2 | 26604.9 | 25642.0 | 25403.0 | 25769.7 | 25000.8 | 14027.6 |
| 50°   | 20557.6 | 20604.9 | 21847.0 | 24615.2 | 27584.4 | 29380.1 | 28384.1 | 27939.3 | 27108.9 | 25807.6 | 14261.8 |
| 52.5° | 18049.7 | 18104.1 | 19145.1 | 22251.6 | 26950.3 | 31320.2 | 31592.3 | 30797.3 | 28469.3 | 26434.6 | 14415.6 |
| 55°   | 13398.3 | 13712.9 | 14858.1 | 17860.4 | 23945.6 | 31138.0 | 34142.8 | 33690.9 | 30113.6 | 26931.4 | 14656.9 |
| 57.5° | 8238.2  | 7949.5  | 9307.6  | 12151.4 | 18009.5 | 28634.9 | 34930.6 | 35077.3 | 31923.5 | 27347.8 | 15061.5 |
| 60°   | 3790.2  | 3847.0  | 4407.7  | 6267.4  | 10977.9 | 22400.6 | 32900.7 | 33828.1 | 32924.3 | 27333.6 | 15163.3 |
| 62.5° | 2612.0  | 2559.9  | 2418.0  | 2751.6  | 5006.3  | 14167.2 | 27790.2 | 29361.2 | 30918.0 | 26484.2 | 14758.7 |
| 65°   | 2335.2  | 2283.1  | 2008.7  | 1916.4  | 2299.7  | 6175.1  | 20202.7 | 22185.3 | 26032.4 | 24340.7 | 13750.8 |
| 67.5° | 2181.4  | 2110.4  | 1826.5  | 1646.7  | 1642.0  | 2458.2  | 11912.5 | 14299.7 | 19308.4 | 20578.9 | 11914.8 |
| 70°   | 2020.5  | 1963.7  | 1682.2  | 1483.4  | 1398.3  | 1545.0  | 5235.8  | 6854.1  | 12537.1 | 14829.7 | 9281.6  |
| 72.5° | 1859.6  | 1793.4  | 1540.2  | 1327.3  | 1216.1  | 1156.9  | 2006.3  | 2609.6  | 7083.6  | 8891.2  | 5690.1  |
| 75°   | 1625.4  | 1592.3  | 1377.0  | 1201.9  | 1081.2  | 934.5   | 1272.9  | 1452.7  | 3388.0  | 4083.6  | 2855.7  |
| 77.5° | 1421.9  | 1386.4  | 1223.2  | 1050.5  | 962.9   | 759.5   | 903.8   | 986.6   | 1429.0  | 1656.2  | 1289.4  |
| 80°   | 1041.0  | 1076.5  | 1031.5  | 927.4   | 858.8   | 596.2   | 608.0   | 676.7   | 849.4   | 939.3   | 787.9   |
| 82.5° | 660.1   | 726.3   | 795.0   | 714.5   | 650.6   | 470.8   | 421.1   | 447.2   | 579.7   | 615.1   | 350.2   |
| 85°   | 276.8   | 281.5   | 461.4   | 435.3   | 371.5   | 279.2   | 253.2   | 267.4   | 309.9   | 324.1   | 163.2   |
| 87.5° | 106.5   | 104.1   | 163.2   | 151.4   | 115.9   | 80.4    | 80.4    | 89.9    | 123.0   | 113.6   | 52.1    |
| 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°    | 9080.4 | 9080.4 | 9080.4 | 9080.4 | 9080.4 | 9080.4 | 9080.4 | 9080.4 | 9080.4 | 9080.4 | 9080.4 |
| 2.5°  | 9111.2 | 8943.2 | 8609.6 | 8195.6 | 7892.7 | 7552.1 | 7251.6 | 7036.3 | 6955.8 | 6918.0 | 6847.0 |
| 5°    | 9104.1 | 8772.9 | 8082.0 | 7358.0 | 6776.0 | 6179.8 | 5675.9 | 5349.4 | 5321.0 | 5103.3 | 5082.0 |
| 7.5°  | 9106.5 | 8600.2 | 7500.0 | 6435.3 | 5548.1 | 4937.7 | 4521.3 | 4412.5 | 4282.3 | 4249.2 | 4265.8 |
| 10°   | 9113.6 | 8380.1 | 6875.4 | 5522.1 | 4663.3 | 4263.4 | 4107.3 | 4064.7 | 4069.4 | 4083.6 | 4086.0 |
| 12.5° | 9123.0 | 8167.2 | 6227.1 | 4828.9 | 4166.4 | 4000.8 | 3984.2 | 4022.1 | 4062.3 | 4093.1 | 4100.2 |
| 15°   | 9134.9 | 7923.5 | 5595.4 | 4270.5 | 3918.0 | 3903.8 | 3958.2 | 4022.1 | 4078.9 | 4123.8 | 4130.9 |
| 17.5° | 9120.7 | 7639.6 | 5065.5 | 3927.4 | 3780.8 | 3849.4 | 3939.3 | 4019.7 | 4071.8 | 4114.4 | 4119.1 |
| 20°   | 9087.5 | 7322.6 | 4554.4 | 3686.1 | 3695.6 | 3806.8 | 3903.8 | 3979.5 | 4036.3 | 4057.6 | 4074.1 |
| 22.5° | 8959.8 | 6944.0 | 4109.6 | 3499.2 | 3593.9 | 3747.6 | 3863.6 | 3908.5 | 3844.6 | 3799.7 | 3811.5 |
| 25°   | 8742.1 | 6451.9 | 3695.6 | 3347.8 | 3501.6 | 3664.8 | 3783.1 | 3674.3 | 3622.2 | 3603.3 | 3612.8 |
| 27.5° | 8470.0 | 5912.5 | 3383.3 | 3189.3 | 3383.3 | 3572.6 | 3539.4 | 3520.5 | 3496.8 | 3466.1 | 3473.2 |
| 30°   | 8176.7 | 5384.9 | 3118.3 | 3066.2 | 3255.5 | 3364.4 | 3378.6 | 3409.3 | 3383.3 | 3336.0 | 3354.9 |
| 32.5° | 7904.6 | 4888.0 | 2917.2 | 2962.1 | 3165.6 | 3149.1 | 3255.5 | 3291.0 | 3170.3 | 3011.8 | 3018.9 |
| 35°   | 7672.7 | 4426.7 | 2765.8 | 2860.4 | 3011.8 | 3018.9 | 3125.4 | 3002.4 | 2872.2 | 2796.5 | 2801.3 |
| 37.5° | 7497.6 | 4067.0 | 2666.4 | 2772.9 | 2815.5 | 2905.4 | 2848.6 | 2784.7 | 2768.1 | 2716.1 | 2718.5 |
| 40°   | 7393.5 | 3752.4 | 2602.5 | 2704.3 | 2697.2 | 2758.7 | 2576.5 | 2640.4 | 2664.0 | 2647.5 | 2649.8 |
| 42.5° | 7289.4 | 3530.0 | 2536.3 | 2609.6 | 2607.3 | 2486.6 | 2446.4 | 2500.8 | 2562.3 | 2569.4 | 2564.7 |
| 45°   | 7206.6 | 3357.3 | 2467.7 | 2465.3 | 2512.6 | 2323.3 | 2311.5 | 2344.6 | 2432.2 | 2474.8 | 2472.4 |
| 47.5° | 7114.4 | 3212.9 | 2363.6 | 2297.3 | 2311.5 | 2221.6 | 2202.7 | 2216.9 | 2323.3 | 2392.0 | 2410.9 |
| 50°   | 6998.4 | 3068.6 | 2233.4 | 2143.5 | 2084.4 | 2127.0 | 2131.7 | 2134.1 | 2240.5 | 2318.6 | 2335.2 |
| 52.5° | 6906.2 | 2959.8 | 2084.4 | 2018.1 | 1947.2 | 2041.8 | 2077.3 | 2082.0 | 2145.9 | 2209.8 | 2221.6 |
| 55°   | 6960.6 | 2898.3 | 1937.7 | 1890.4 | 1826.5 | 1954.3 | 2022.9 | 2032.3 | 2046.5 | 2093.8 | 2100.9 |
| 57.5° | 7123.8 | 2912.5 | 1819.4 | 1757.9 | 1710.6 | 1850.2 | 1966.1 | 1973.2 | 1963.7 | 2020.5 | 2030.0 |
| 60°   | 7173.5 | 2905.4 | 1731.9 | 1611.2 | 1582.8 | 1739.0 | 1883.3 | 1897.5 | 1895.1 | 1977.9 | 1994.5 |
| 62.5° | 6965.3 | 2815.5 | 1644.3 | 1488.2 | 1469.2 | 1625.4 | 1767.4 | 1824.1 | 1836.0 | 1954.3 | 1975.6 |
| 65°   | 6475.6 | 2630.9 | 1528.4 | 1358.0 | 1358.0 | 1504.7 | 1656.2 | 1734.2 | 1767.4 | 1925.9 | 1949.5 |
| 67.5° | 5829.7 | 2413.3 | 1410.1 | 1246.8 | 1242.1 | 1388.8 | 1537.9 | 1618.3 | 1670.3 | 1885.6 | 1899.8 |
| 70°   | 4838.3 | 2119.9 | 1263.4 | 1126.2 | 1126.2 | 1258.7 | 1393.5 | 1490.5 | 1566.2 | 1809.9 | 1809.9 |
| 72.5° | 3314.7 | 1762.6 | 1086.0 | 989.0  | 991.3  | 1114.4 | 1251.6 | 1360.4 | 1450.3 | 1658.5 | 1663.3 |
| 75°   | 2096.2 | 1377.0 | 892.0  | 842.3  | 851.7  | 967.7  | 1109.6 | 1223.2 | 1403.0 | 1639.6 | 1646.7 |
| 77.5° | 1114.4 | 967.7  | 709.8  | 697.9  | 709.8  | 816.2  | 974.8  | 1130.9 | 1407.7 | 1421.9 | 1398.3 |
| 80°   | 721.6  | 686.1  | 560.7  | 537.1  | 541.8  | 657.7  | 868.3  | 1074.1 | 1130.9 | 1145.1 | 1093.1 |
| 82.5° | 392.7  | 435.3  | 397.5  | 373.8  | 373.8  | 513.4  | 740.5  | 854.1  | 811.5  | 674.3  | 643.5  |
| 85°   | 168.0  | 203.5  | 205.8  | 179.8  | 172.7  | 317.0  | 496.8  | 466.1  | 433.0  | 414.0  | 409.3  |
| 87.5° | 47.3   | 66.2   | 66.2   | 49.7   | 37.9   | 87.5   | 99.4   | 28.4   | 0.0    | 2.4    | 4.7    |
| 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)