

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: P529138

Luminaire Tested: **GALN-SA4B-735-U-AFL-GRSWH**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P529138  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-28)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA4B-735-U-AFL-GRSWH  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH WHITE GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18921 lumens  
Efficiency: N/A  
Efficacy: 115.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G2

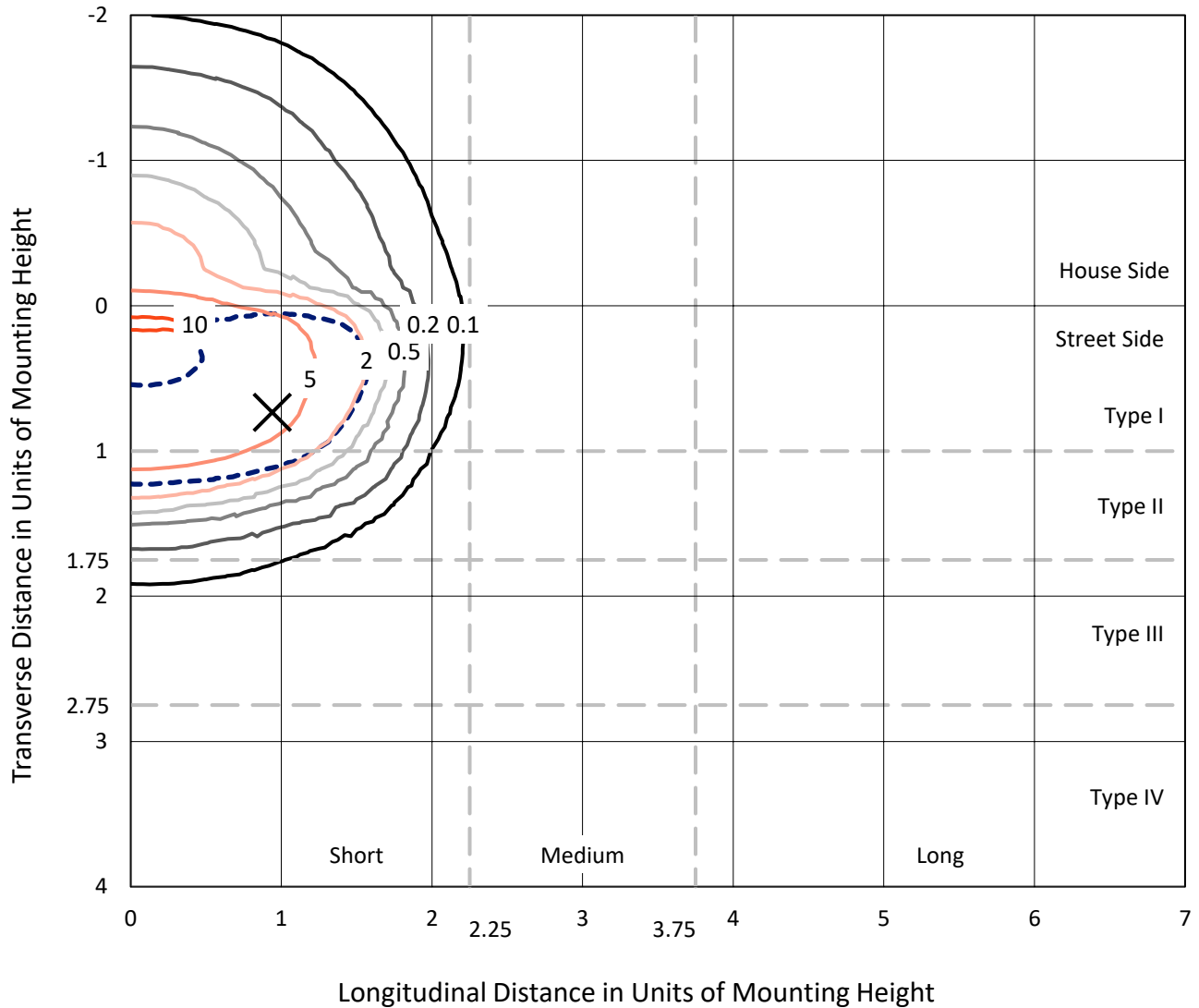
Input Watts (W): 164  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

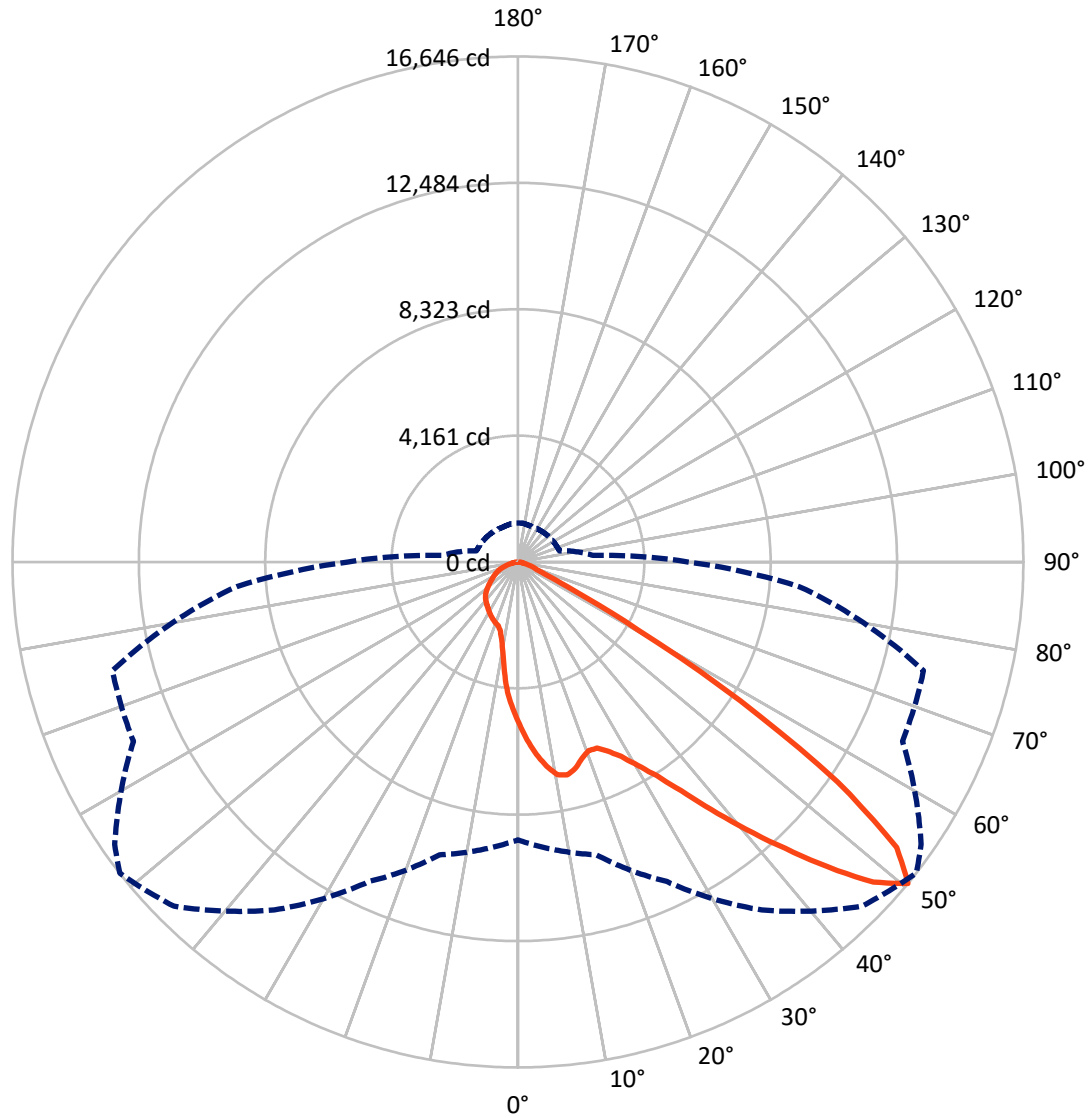
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.9 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 52-Deg Lateral    - - - Horizontal Cone Through 50-Deg Vertical

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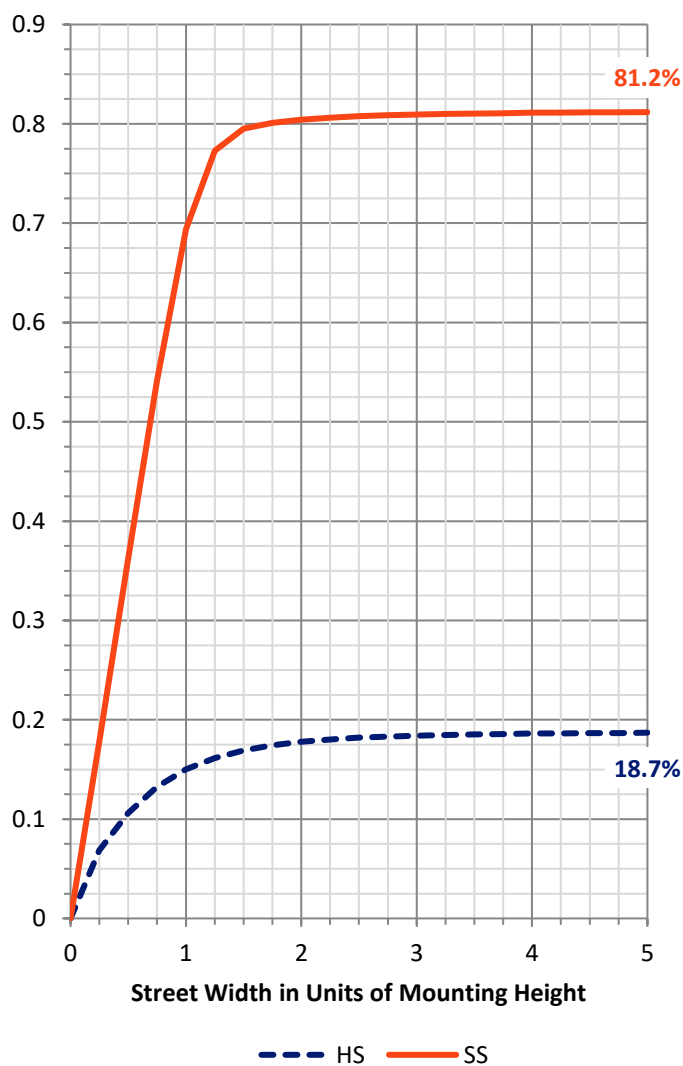
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3556.7   | 0.0    | 3556.7  |
|                    | % Fixture | 18.8     | 0.0    | 18.8    |
| <b>Street Side</b> | Lumens    | 15364.3  | 0.0    | 15364.3 |
|                    | % Fixture | 81.2     | 0.0    | 81.2    |
| <b>Total</b>       | Lumens    | 18921.0  | 0.0    | 18921.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 491.6   | 2.6       |
| 10°-20°   | 1317.6  | 7.0       |
| 20°-30°   | 2219.4  | 11.7      |
| 30°-40°   | 3724.4  | 19.7      |
| 40°-50°   | 5697.4  | 30.1      |
| 50°-60°   | 4153.8  | 22.0      |
| 60°-70°   | 924.4   | 4.9       |
| 70°-80°   | 333.4   | 1.8       |
| 80°-90°   | 59.0    | 0.3       |
| 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°    | 18921.0 | 100.0     |
| 0°-180°   | 18921.0 | 100.0     |

**Coefficient of Utilization**



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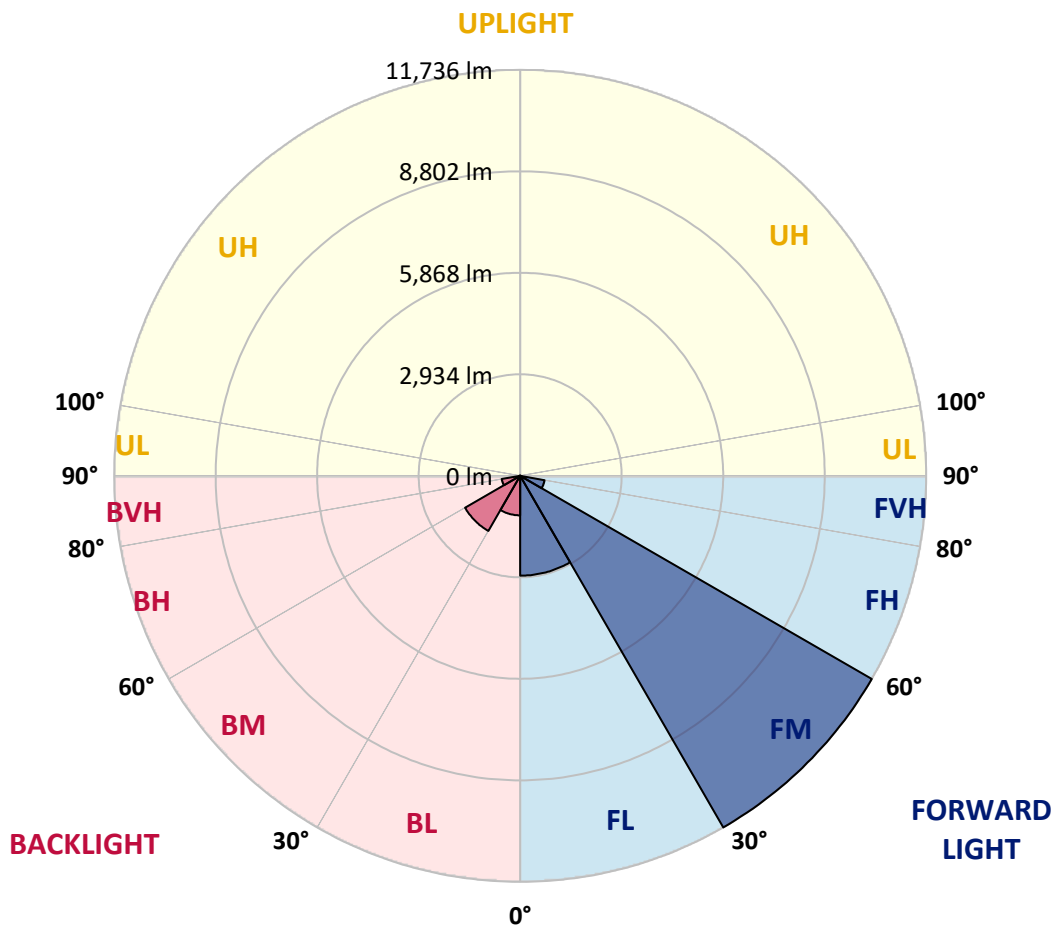
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 2886.1  | 15.3      |                         |      |         |
| FM (30°-60°)   | 11735.8 | 62.0      |                         |      |         |
| FH (60°-80°)   | 716.0   | 3.8       |                         |      | G1/1800 |
| FVH (80°-90°)  | 26.4    | 0.1       |                         |      | G1/100  |
| BL (0°-30°)    | 1142.5  | 6.0       | B3/2500                 |      |         |
| BM (30°-60°)   | 1839.8  | 9.7       | B2/2500                 |      |         |
| BH (60°-80°)   | 541.9   | 2.9       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 32.6    | 0.2       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 52°     | 55°     | 65°     | 75°     | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 5333.5  | 5333.5  | 5333.5  | 5333.5  | 5333.5  | 5333.5  | 5333.5  | 5333.5  | 5333.5  | 5333.5  | 5333.5 |
| 2.5°  | 6279.8  | 6159.0  | 6172.7  | 6086.0  | 5992.5  | 5965.1  | 5869.4  | 5778.2  | 5709.8  | 5563.8  | 5429.3 |
| 5°    | 6863.6  | 6827.1  | 6772.4  | 6703.9  | 6633.3  | 6460.0  | 6361.9  | 6247.9  | 5997.1  | 5771.3  | 5547.9 |
| 7.5°  | 6947.9  | 6941.1  | 6970.7  | 6970.7  | 6995.8  | 6929.7  | 6790.6  | 6710.8  | 6444.0  | 6076.9  | 5661.9 |
| 10°   | 6355.1  | 6375.6  | 6519.2  | 6706.2  | 6966.2  | 7146.3  | 7123.5  | 7103.0  | 6811.1  | 6309.5  | 5796.4 |
| 12.5° | 5883.1  | 5837.5  | 5921.8  | 6081.4  | 6471.4  | 6906.9  | 7201.0  | 7203.3  | 7128.1  | 6681.1  | 5894.5 |
| 15°   | 5616.3  | 5648.2  | 5671.0  | 5746.2  | 6040.4  | 6544.3  | 7061.9  | 7214.7  | 7545.4  | 6943.4  | 6049.5 |
| 17.5° | 5787.3  | 5680.1  | 5675.6  | 5693.8  | 5844.3  | 6222.8  | 6804.3  | 7066.5  | 7773.4  | 7280.9  | 6241.1 |
| 20°   | 6010.8  | 6008.5  | 5944.6  | 5921.8  | 5919.5  | 6257.0  | 6635.5  | 6991.3  | 7894.2  | 7718.7  | 6434.9 |
| 22.5° | 6403.0  | 6403.0  | 6298.1  | 6247.9  | 6140.7  | 6416.6  | 6658.3  | 6900.1  | 8094.9  | 8019.7  | 6528.4 |
| 25°   | 7059.7  | 6952.5  | 6772.4  | 6649.2  | 6587.7  | 6685.7  | 6900.1  | 7116.7  | 8270.5  | 8338.9  | 6722.2 |
| 27.5° | 7666.2  | 7497.5  | 7408.5  | 7196.5  | 7114.4  | 7057.4  | 7253.5  | 7472.4  | 8475.7  | 8836.0  | 6827.1 |
| 30°   | 8354.9  | 8325.2  | 8165.6  | 7892.0  | 7689.0  | 7584.1  | 7764.3  | 7980.9  | 8851.9  | 9344.5  | 7068.8 |
| 32.5° | 9586.2  | 9317.1  | 9100.5  | 8765.3  | 8434.7  | 8211.2  | 8389.1  | 8532.7  | 9476.7  | 9875.8  | 7333.3 |
| 35°   | 10915.6 | 10828.9 | 10455.0 | 9850.7  | 9344.5  | 9143.8  | 9248.7  | 9355.9  | 10204.1 | 10687.6 | 7777.9 |
| 37.5° | 12222.2 | 12103.6 | 11795.8 | 11287.3 | 10671.6 | 10263.4 | 10338.7 | 10464.1 | 11020.5 | 11782.1 | 8320.7 |
| 40°   | 13161.6 | 13015.7 | 12860.6 | 12785.4 | 12174.3 | 11615.6 | 11572.3 | 11604.2 | 12124.1 | 12808.2 | 8922.6 |
| 42.5° | 13230.0 | 13410.2 | 13458.1 | 13761.3 | 13617.7 | 13159.4 | 12892.6 | 12899.4 | 13177.6 | 13822.9 | 9531.5 |
| 45°   | 13086.4 | 12919.9 | 13273.4 | 14101.1 | 14575.4 | 14789.7 | 14340.5 | 14283.5 | 13829.7 | 14411.2 | 9834.7 |
| 47.5° | 11579.1 | 11624.7 | 12222.2 | 13531.0 | 14901.5 | 15859.2 | 15754.3 | 15565.0 | 14178.6 | 14390.7 | 9786.9 |
| 50°   | 9152.9  | 9428.9  | 9983.0  | 11613.3 | 13989.4 | 16027.9 | 16645.9 | 16208.1 | 13971.1 | 13825.2 | 9298.9 |
| 52.5° | 6095.1  | 6209.1  | 6574.0  | 8678.7  | 11248.5 | 14326.8 | 15619.7 | 15720.1 | 13779.6 | 13084.1 | 8680.9 |
| 55°   | 2713.5  | 2704.4  | 3217.4  | 4533.1  | 7057.4  | 10901.9 | 12762.6 | 13373.7 | 13043.1 | 12329.3 | 8078.9 |
| 57.5° | 1149.2  | 1188.0  | 1397.8  | 1958.7  | 3470.5  | 6578.5  | 8646.7  | 9182.6  | 10030.8 | 10124.3 | 6197.7 |
| 60°   | 777.6   | 782.1   | 839.1   | 980.5   | 1452.5  | 3089.7  | 4535.4  | 5178.5  | 5785.0  | 5744.0  | 3288.1 |
| 62.5° | 611.1   | 627.1   | 670.4   | 727.4   | 861.9   | 1402.4  | 2029.4  | 2387.4  | 2426.2  | 2040.8  | 1247.3 |
| 65°   | 522.2   | 524.5   | 567.8   | 615.7   | 675.0   | 816.3   | 978.2   | 996.5   | 1007.9  | 971.4   | 916.7  |
| 67.5° | 431.0   | 435.5   | 469.7   | 524.5   | 579.2   | 624.8   | 670.4   | 693.2   | 745.6   | 848.3   | 834.6  |
| 70°   | 342.0   | 348.9   | 378.5   | 424.1   | 474.3   | 501.7   | 558.7   | 579.2   | 627.1   | 706.9   | 738.8  |
| 72.5° | 259.9   | 262.2   | 287.3   | 319.2   | 364.8   | 392.2   | 440.1   | 462.9   | 494.8   | 563.2   | 592.9  |
| 75°   | 187.0   | 193.8   | 212.1   | 228.0   | 234.9   | 253.1   | 298.7   | 323.8   | 369.4   | 399.0   | 401.3  |
| 77.5° | 98.1    | 102.6   | 107.2   | 107.2   | 130.0   | 164.2   | 193.8   | 207.5   | 239.4   | 262.2   | 250.8  |
| 80°   | 38.8    | 41.0    | 52.4    | 70.7    | 91.2    | 118.6   | 139.1   | 145.9   | 173.3   | 187.0   | 193.8  |
| 82.5° | 22.8    | 25.1    | 34.2    | 50.2    | 66.1    | 84.4    | 100.3   | 107.2   | 125.4   | 141.4   | 145.9  |
| 85°   | 11.4    | 13.7    | 20.5    | 31.9    | 43.3    | 52.4    | 50.2    | 47.9    | 47.9    | 45.6    | 47.9   |
| 87.5° | 4.6     | 4.6     | 6.8     | 6.8     | 6.8     | 9.1     | 11.4    | 11.4    | 11.4    | 13.7    | 13.7   |
| 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°    | 5333.5 | 5333.5 | 5333.5 | 5333.5 | 5333.5 | 5333.5 | 5333.5 | 5333.5 | 5333.5 | 5333.5 | 5333.5 |
| 2.5°  | 5340.4 | 5249.1 | 5164.8 | 5009.7 | 4841.0 | 4793.1 | 4597.0 | 4526.3 | 4476.1 | 4416.9 | 4398.6 |
| 5°    | 5367.7 | 5246.9 | 4975.5 | 4663.1 | 4414.6 | 4095.3 | 3885.6 | 3659.8 | 3495.6 | 3454.6 | 3443.2 |
| 7.5°  | 5424.7 | 5217.2 | 4749.8 | 4277.8 | 3769.3 | 3336.0 | 3005.4 | 2827.5 | 2670.2 | 2661.1 | 2645.1 |
| 10°   | 5488.6 | 5128.3 | 4503.5 | 3762.4 | 3112.5 | 2711.2 | 2512.8 | 2435.3 | 2396.5 | 2387.4 | 2382.9 |
| 12.5° | 5541.0 | 5110.1 | 4227.6 | 3260.8 | 2647.4 | 2405.7 | 2346.4 | 2339.5 | 2355.5 | 2360.1 | 2369.2 |
| 15°   | 5563.8 | 5037.1 | 3894.7 | 2811.6 | 2357.8 | 2268.9 | 2293.9 | 2321.3 | 2332.7 | 2362.3 | 2339.5 |
| 17.5° | 5607.1 | 4943.6 | 3484.2 | 2455.8 | 2195.9 | 2211.8 | 2255.2 | 2287.1 | 2305.3 | 2325.9 | 2296.2 |
| 20°   | 5629.9 | 4859.2 | 3098.9 | 2243.8 | 2138.9 | 2168.5 | 2227.8 | 2252.9 | 2275.7 | 2284.8 | 2250.6 |
| 22.5° | 5609.4 | 4685.9 | 2759.1 | 2072.8 | 2084.2 | 2122.9 | 2175.4 | 2202.7 | 2189.0 | 2152.6 | 2132.0 |
| 25°   | 5554.7 | 4441.9 | 2405.7 | 1963.3 | 2006.6 | 2075.0 | 2116.1 | 2095.6 | 2070.5 | 2049.9 | 2043.1 |
| 27.5° | 5552.4 | 4143.2 | 2150.3 | 1863.0 | 1940.5 | 2034.0 | 2020.3 | 2002.1 | 2013.5 | 1997.5 | 1979.3 |
| 30°   | 5563.8 | 3853.6 | 1940.5 | 1806.0 | 1892.6 | 1938.2 | 1954.2 | 1935.9 | 1949.6 | 1920.0 | 1929.1 |
| 32.5° | 5504.5 | 3570.9 | 1803.7 | 1739.8 | 1835.6 | 1833.3 | 1885.8 | 1899.5 | 1867.5 | 1806.0 | 1815.1 |
| 35°   | 5529.6 | 3342.9 | 1687.4 | 1710.2 | 1771.8 | 1771.8 | 1812.8 | 1796.8 | 1712.5 | 1676.0 | 1685.1 |
| 37.5° | 5702.9 | 3119.4 | 1630.4 | 1669.1 | 1710.2 | 1728.4 | 1714.8 | 1646.3 | 1625.8 | 1625.8 | 1630.4 |
| 40°   | 5867.1 | 2927.8 | 1596.2 | 1660.0 | 1653.2 | 1664.6 | 1564.3 | 1571.1 | 1571.1 | 1573.4 | 1562.0 |
| 42.5° | 6013.0 | 2797.9 | 1568.8 | 1605.3 | 1616.7 | 1557.4 | 1495.8 | 1489.0 | 1505.0 | 1502.7 | 1493.6 |
| 45°   | 6065.5 | 2690.7 | 1530.1 | 1543.7 | 1552.9 | 1454.8 | 1425.2 | 1411.5 | 1429.7 | 1436.6 | 1445.7 |
| 47.5° | 5864.8 | 2601.8 | 1486.7 | 1459.4 | 1441.1 | 1377.3 | 1338.5 | 1313.4 | 1336.2 | 1375.0 | 1384.1 |
| 50°   | 5607.1 | 2485.5 | 1418.3 | 1365.9 | 1327.1 | 1299.7 | 1272.4 | 1247.3 | 1263.3 | 1290.6 | 1283.8 |
| 52.5° | 5226.3 | 2303.1 | 1331.7 | 1276.9 | 1210.8 | 1217.7 | 1192.6 | 1178.9 | 1188.0 | 1188.0 | 1181.2 |
| 55°   | 4683.6 | 1892.6 | 1185.7 | 1147.0 | 1092.2 | 1110.5 | 1115.0 | 1096.8 | 1078.6 | 1094.5 | 1080.8 |
| 57.5° | 3196.9 | 1336.2 | 1058.0 | 1058.0 | 1003.3 | 1028.4 | 1026.1 | 982.8  | 939.5  | 944.0  | 934.9  |
| 60°   | 1849.3 | 1064.9 | 975.9  | 966.8  | 909.8  | 930.3  | 934.9  | 905.3  | 839.1  | 843.7  | 834.6  |
| 62.5° | 1051.2 | 909.8  | 852.8  | 839.1  | 827.7  | 846.0  | 846.0  | 807.2  | 750.2  | 754.8  | 745.6  |
| 65°   | 893.9  | 843.7  | 761.6  | 759.3  | 754.8  | 759.3  | 741.1  | 700.0  | 649.9  | 629.4  | 631.6  |
| 67.5° | 811.8  | 779.8  | 700.0  | 679.5  | 665.8  | 663.6  | 629.4  | 590.6  | 567.8  | 549.5  | 547.3  |
| 70°   | 711.4  | 686.4  | 627.1  | 599.7  | 586.0  | 554.1  | 519.9  | 494.8  | 462.9  | 453.8  | 462.9  |
| 72.5° | 563.2  | 560.9  | 538.1  | 508.5  | 478.9  | 453.8  | 424.1  | 389.9  | 360.3  | 353.4  | 337.5  |
| 75°   | 389.9  | 394.5  | 399.0  | 394.5  | 369.4  | 337.5  | 303.3  | 275.9  | 239.4  | 218.9  | 214.3  |
| 77.5° | 255.4  | 262.2  | 269.1  | 259.9  | 244.0  | 214.3  | 191.5  | 157.3  | 130.0  | 114.0  | 111.7  |
| 80°   | 187.0  | 196.1  | 200.7  | 193.8  | 175.6  | 152.8  | 127.7  | 100.3  | 79.8   | 66.1   | 66.1   |
| 82.5° | 143.7  | 152.8  | 157.3  | 145.9  | 127.7  | 109.5  | 91.2   | 70.7   | 54.7   | 43.3   | 41.0   |
| 85°   | 50.2   | 47.9   | 57.0   | 59.3   | 70.7   | 66.1   | 54.7   | 41.0   | 31.9   | 22.8   | 20.5   |
| 87.5° | 13.7   | 13.7   | 16.0   | 16.0   | 13.7   | 11.4   | 11.4   | 11.4   | 9.1    | 6.8    | 6.8    |
| 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)