

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: P450483

Luminaire Tested: **GALN-SA1B-740-U-AFL-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P450483  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA1B-740-U-AFL-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 4000K, 800mA LIGHTSQUARE WITH 16 LEDS AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4717 lumens  
Efficiency: N/A  
Efficacy: 107.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B0 - U0 - G0

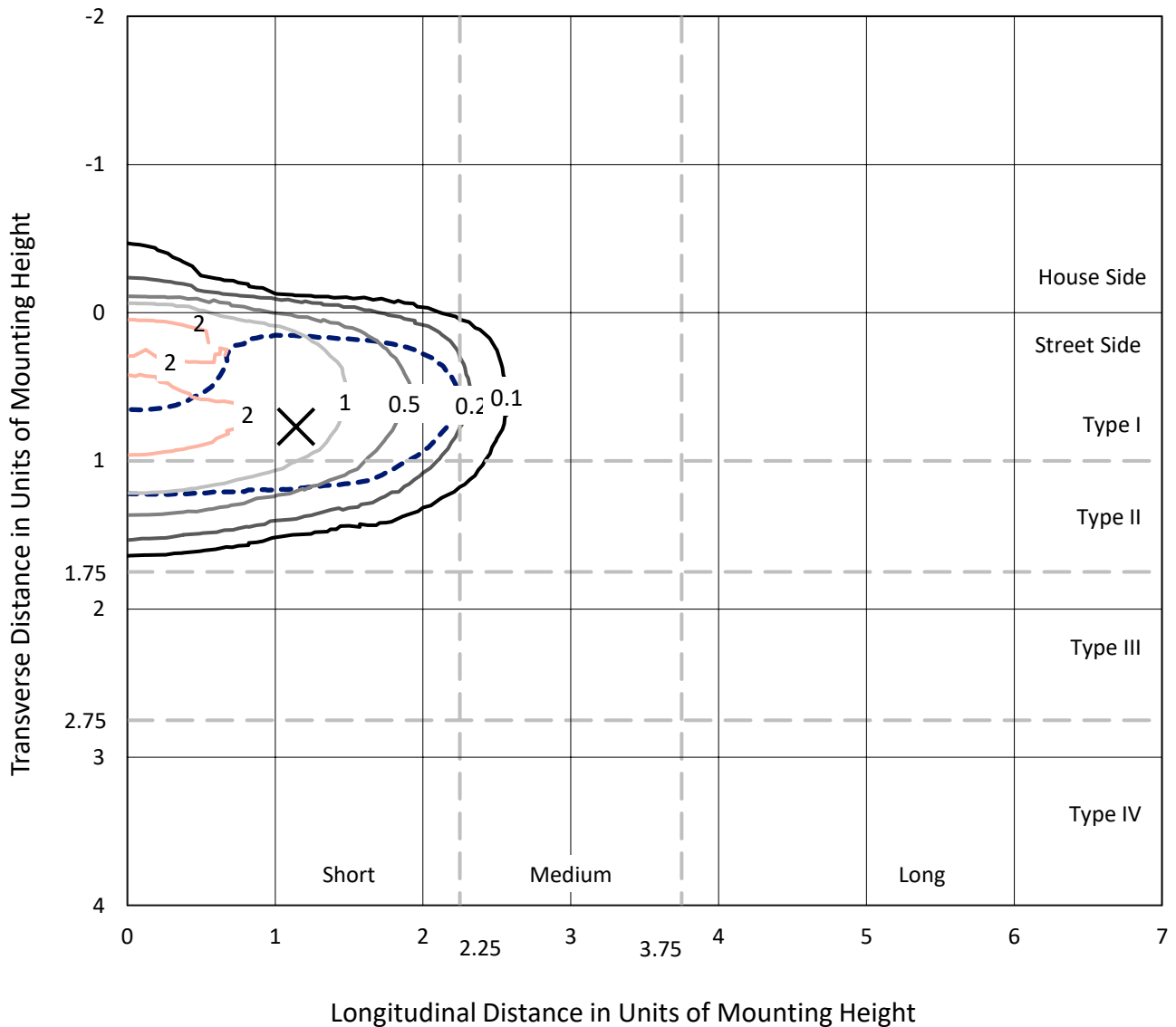
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

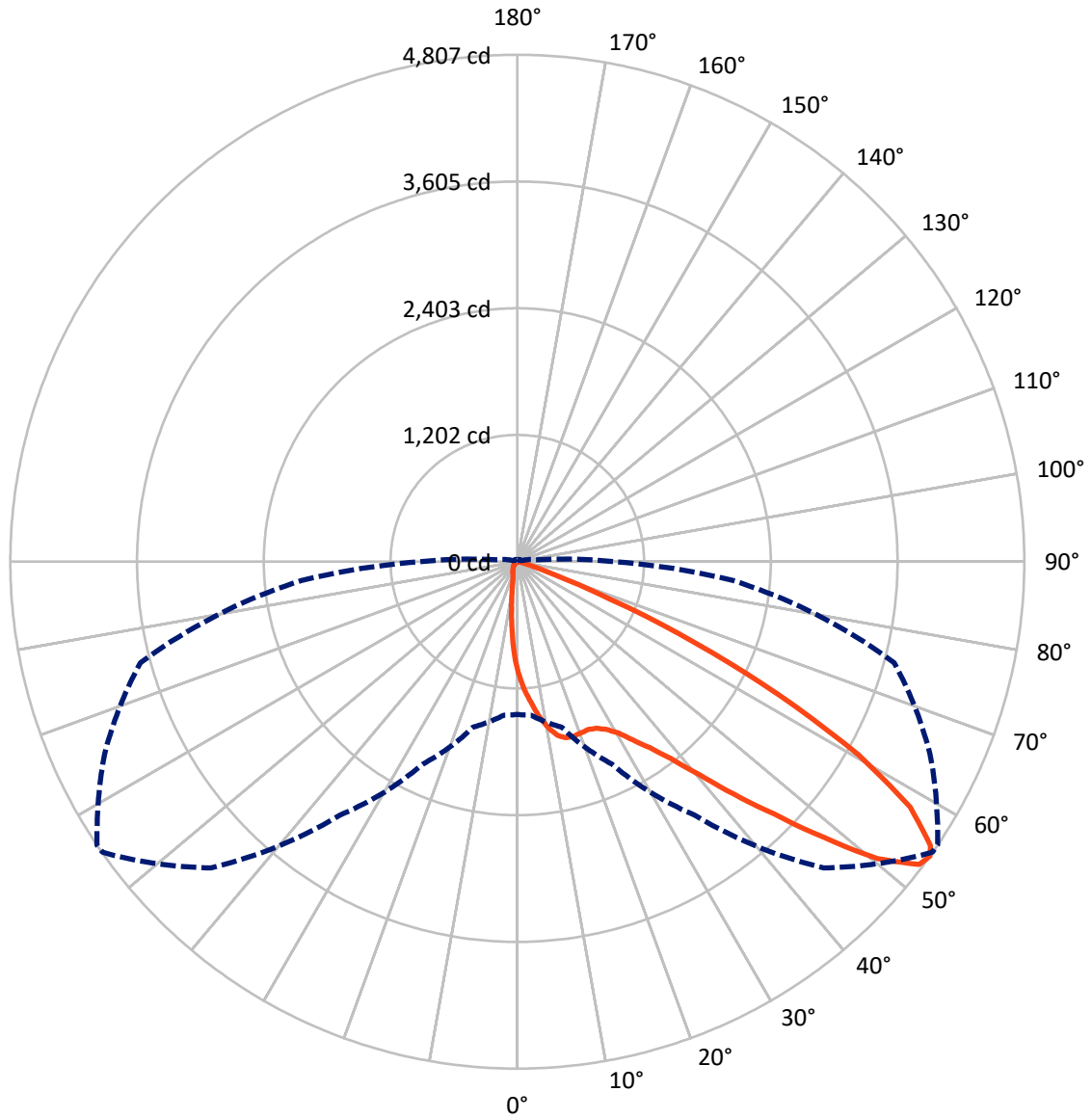
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral    - - - Horizontal Cone Through 54-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 223.1    | 0.0    | 223.1  |
|                    | % Fixture | 4.7      | 0.0    | 4.7    |
| <b>Street Side</b> | Lumens    | 4493.9   | 0.0    | 4493.9 |
|                    | % Fixture | 95.3     | 0.0    | 95.3   |
| <b>Total</b>       | Lumens    | 4717.0   | 0.0    | 4717.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 92.6   | 2.0       |
| 10°-20°   | 250.3  | 5.3       |
| 20°-30°   | 433.6  | 9.2       |
| 30°-40°   | 748.4  | 15.9      |
| 40°-50°   | 1273.8 | 27.0      |
| 50°-60°   | 1260.6 | 26.7      |
| 60°-70°   | 575.4  | 12.2      |
| 70°-80°   | 73.9   | 1.6       |
| 80°-90°   | 8.3    | 0.2       |
| 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°    | 4717.0 | 100.0     |
| 0°-180°   | 4717.0 | 100.0     |

**Coefficient of Utilization**



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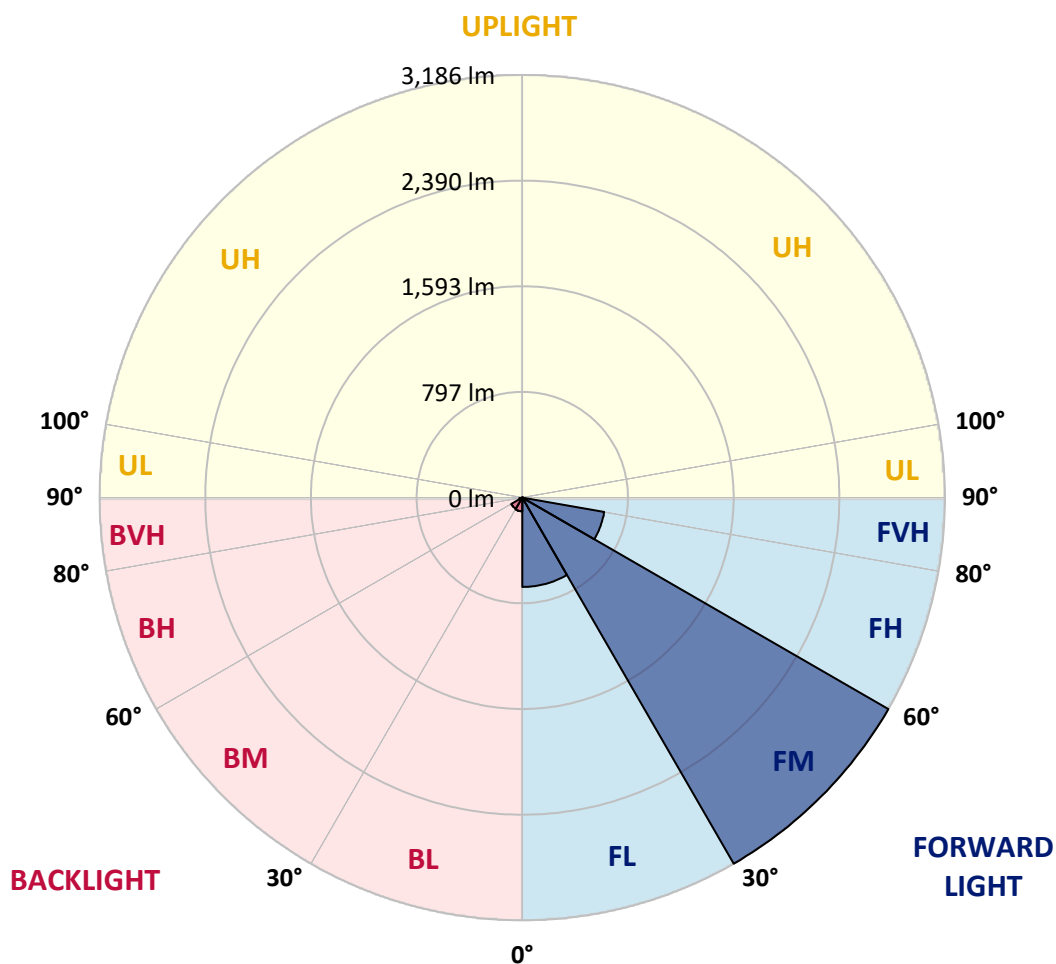
CATALOG NUMBER: GALN-SA1B-740-U-AFL-HSS

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|----------------|--------|-----------|-------------------------|------|--------|
|                |        |           | B                       | U    | G      |
| FL (0°-30°)    | 673.4  | 14.3      |                         |      |        |
| FM (30°-60°)   | 3186.2 | 67.5      |                         |      |        |
| FH (60°-80°)   | 626.9  | 13.3      |                         |      | G0/660 |
| FVH (80°-90°)  | 7.4    | 0.2       |                         |      | G0/10  |
| BL (0°-30°)    | 103.2  | 2.2       | B0/110                  |      |        |
| BM (30°-60°)   | 96.7   | 2.0       | B0/220                  |      |        |
| BH (60°-80°)   | 22.3   | 0.5       | B0/110                  |      | G0/110 |
| BVH (80°-90°)  | 0.9    | 0.0       |                         |      | G0/10  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B0-U0-G0**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 56°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1048.0 | 1048.0 | 1048.0 | 1048.0 | 1048.0 | 1048.0 | 1048.0 | 1048.0 | 1048.0 | 1048.0 | 1048.0 |
| 2.5°  | 1331.9 | 1322.6 | 1309.9 | 1300.0 | 1276.8 | 1243.4 | 1208.1 | 1208.1 | 1174.0 | 1126.6 | 1078.2 |
| 5°    | 1536.2 | 1530.1 | 1517.7 | 1492.3 | 1466.2 | 1419.4 | 1348.4 | 1336.0 | 1275.2 | 1189.3 | 1098.9 |
| 7.5°  | 1619.2 | 1622.1 | 1622.7 | 1616.0 | 1603.6 | 1557.5 | 1487.2 | 1478.6 | 1381.5 | 1266.3 | 1126.0 |
| 10°   | 1539.7 | 1553.7 | 1567.4 | 1595.0 | 1634.2 | 1645.3 | 1605.5 | 1596.6 | 1501.2 | 1344.3 | 1155.2 |
| 12.5° | 1421.3 | 1428.9 | 1436.6 | 1480.2 | 1558.8 | 1648.8 | 1690.5 | 1690.2 | 1609.4 | 1421.9 | 1192.5 |
| 15°   | 1366.2 | 1372.9 | 1373.5 | 1393.0 | 1461.1 | 1592.2 | 1726.8 | 1731.6 | 1715.0 | 1517.7 | 1232.6 |
| 17.5° | 1377.7 | 1383.1 | 1378.6 | 1383.4 | 1419.1 | 1529.8 | 1722.7 | 1738.6 | 1800.6 | 1609.7 | 1268.8 |
| 20°   | 1452.5 | 1463.0 | 1445.8 | 1432.4 | 1443.2 | 1513.3 | 1708.7 | 1730.9 | 1861.1 | 1699.4 | 1301.9 |
| 22.5° | 1586.8 | 1592.5 | 1570.9 | 1534.3 | 1515.2 | 1547.9 | 1704.8 | 1726.8 | 1912.7 | 1772.9 | 1321.0 |
| 25°   | 1736.0 | 1734.1 | 1710.3 | 1669.2 | 1629.1 | 1618.0 | 1730.0 | 1749.7 | 1955.3 | 1839.1 | 1326.8 |
| 27.5° | 1885.3 | 1891.0 | 1850.9 | 1800.0 | 1751.9 | 1723.0 | 1786.3 | 1801.0 | 2003.4 | 1914.6 | 1333.8 |
| 30°   | 2058.7 | 2049.5 | 2010.0 | 1951.8 | 1896.7 | 1856.3 | 1877.0 | 1881.1 | 2069.5 | 2014.5 | 1352.2 |
| 32.5° | 2284.4 | 2258.9 | 2214.7 | 2112.8 | 2073.4 | 2004.9 | 2010.0 | 2015.1 | 2150.1 | 2113.5 | 1374.5 |
| 35°   | 2590.5 | 2589.2 | 2502.7 | 2365.5 | 2269.4 | 2184.4 | 2162.2 | 2166.3 | 2272.0 | 2260.5 | 1423.8 |
| 37.5° | 2959.0 | 2964.1 | 2865.5 | 2727.4 | 2550.4 | 2415.5 | 2369.7 | 2370.3 | 2457.2 | 2463.5 | 1498.9 |
| 40°   | 3259.2 | 3272.5 | 3213.6 | 3120.4 | 2945.7 | 2734.7 | 2657.7 | 2650.7 | 2717.5 | 2709.5 | 1606.2 |
| 42.5° | 3388.4 | 3400.8 | 3422.7 | 3455.2 | 3359.1 | 3185.0 | 3003.3 | 3012.8 | 3033.2 | 2977.5 | 1726.5 |
| 45°   | 3325.0 | 3344.8 | 3431.0 | 3631.5 | 3721.9 | 3663.3 | 3446.6 | 3413.2 | 3326.9 | 3268.7 | 1847.4 |
| 47.5° | 3061.2 | 3109.3 | 3253.4 | 3587.3 | 3903.6 | 4101.5 | 3946.9 | 3902.6 | 3621.0 | 3481.3 | 1924.4 |
| 50°   | 2627.4 | 2630.3 | 2831.1 | 3257.9 | 3809.4 | 4378.1 | 4457.7 | 4424.6 | 3895.0 | 3600.6 | 1963.3 |
| 52.5° | 1904.7 | 1967.4 | 2151.3 | 2645.6 | 3401.4 | 4336.1 | 4783.2 | 4769.5 | 4177.6 | 3661.7 | 2019.3 |
| 54°   | 1448.0 | 1460.1 | 1623.7 | 2114.1 | 2932.6 | 4105.4 | 4803.3 | 4806.5 | 4318.0 | 3698.6 | 2052.4 |
| 55°   | 1187.1 | 1158.1 | 1329.9 | 1801.0 | 2612.8 | 3901.4 | 4737.7 | 4753.0 | 4381.0 | 3717.7 | 2076.9 |
| 57.5° | 562.7  | 563.0  | 694.4  | 950.0  | 1636.4 | 3029.4 | 4337.0 | 4391.1 | 4388.0 | 3750.5 | 2152.3 |
| 60°   | 284.8  | 286.7  | 315.7  | 438.5  | 808.3  | 2013.9 | 3586.0 | 3714.9 | 4050.3 | 3755.3 | 2177.1 |
| 62.5° | 199.2  | 197.0  | 192.2  | 211.0  | 340.2  | 1023.5 | 2669.8 | 2781.8 | 3441.2 | 3573.6 | 2098.2 |
| 65°   | 170.6  | 165.8  | 152.4  | 149.6  | 171.9  | 407.7  | 1662.8 | 1845.5 | 2627.4 | 3094.3 | 1873.5 |
| 67.5° | 145.8  | 143.8  | 131.8  | 124.4  | 121.6  | 177.6  | 858.0  | 954.1  | 1795.9 | 2224.2 | 1419.1 |
| 70°   | 123.8  | 122.8  | 115.5  | 106.3  | 98.3   | 106.3  | 318.2  | 394.3  | 1000.9 | 1197.6 | 669.6  |
| 72.5° | 100.6  | 101.5  | 102.8  | 91.0   | 82.7   | 75.4   | 135.9  | 158.2  | 418.8  | 428.0  | 234.2  |
| 75°   | 88.2   | 87.2   | 87.2   | 79.2   | 69.1   | 56.0   | 74.8   | 80.5   | 128.3  | 119.0  | 54.4   |
| 77.5° | 62.1   | 59.8   | 70.0   | 65.2   | 57.6   | 39.8   | 42.6   | 45.2   | 53.1   | 45.5   | 25.5   |
| 80°   | 43.0   | 43.0   | 44.9   | 58.6   | 51.9   | 29.0   | 26.1   | 28.0   | 31.5   | 27.1   | 14.6   |
| 82.5° | 24.2   | 24.8   | 29.3   | 31.2   | 30.2   | 19.4   | 17.2   | 17.5   | 21.0   | 18.5   | 9.2    |
| 85°   | 2.9    | 4.8    | 16.9   | 16.5   | 12.4   | 8.6    | 9.5    | 9.9    | 13.0   | 11.5   | 5.4    |
| 87.5° | 0.3    | 0.6    | 3.5    | 4.5    | 3.2    | 3.5    | 3.5    | 3.5    | 4.5    | 5.1    | 3.8    |
| 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°    | 1048.0 | 1048.0 | 1048.0 | 1048.0 | 1048.0 | 1048.0 | 1048.0 | 1048.0 | 1048.0 | 1048.0 | 1048.0 |
| 2.5°  | 1052.1 | 1027.9 | 970.3  | 903.5  | 860.9  | 791.5  | 732.9  | 690.6  | 680.1  | 659.7  | 665.8  |
| 5°    | 1050.8 | 1000.6 | 883.1  | 759.0  | 626.6  | 528.0  | 454.5  | 396.5  | 371.1  | 354.2  | 342.4  |
| 7.5°  | 1051.5 | 972.9  | 784.5  | 586.8  | 428.7  | 331.9  | 263.8  | 228.5  | 204.9  | 195.1  | 196.4  |
| 10°   | 1053.4 | 941.7  | 669.9  | 434.7  | 289.3  | 214.5  | 172.8  | 155.9  | 148.0  | 146.7  | 146.4  |
| 12.5° | 1057.8 | 907.6  | 560.4  | 322.7  | 202.4  | 155.9  | 140.0  | 134.3  | 131.8  | 131.8  | 130.8  |
| 15°   | 1062.6 | 870.1  | 469.4  | 240.0  | 155.9  | 134.0  | 126.7  | 123.8  | 122.2  | 122.2  | 121.9  |
| 17.5° | 1062.6 | 826.8  | 384.4  | 186.2  | 134.3  | 123.2  | 117.4  | 113.6  | 112.3  | 112.3  | 112.0  |
| 20°   | 1055.9 | 776.5  | 309.0  | 149.9  | 121.9  | 113.0  | 107.2  | 103.1  | 101.5  | 100.9  | 100.6  |
| 22.5° | 1032.7 | 709.4  | 246.0  | 128.9  | 111.7  | 104.1  | 96.7   | 92.0   | 90.7   | 90.1   | 90.4   |
| 25°   | 991.3  | 633.6  | 194.8  | 113.3  | 102.5  | 93.2   | 86.9   | 83.4   | 82.1   | 82.1   | 82.4   |
| 27.5° | 948.7  | 554.4  | 154.3  | 101.5  | 91.3   | 83.1   | 78.0   | 75.7   | 75.4   | 76.4   | 76.7   |
| 30°   | 909.2  | 474.8  | 125.1  | 92.0   | 81.5   | 74.5   | 71.0   | 70.3   | 70.3   | 70.7   | 71.0   |
| 32.5° | 865.3  | 405.1  | 104.7  | 83.7   | 73.5   | 67.5   | 65.6   | 65.6   | 66.2   | 66.2   | 66.8   |
| 35°   | 837.6  | 345.3  | 92.0   | 75.7   | 67.5   | 62.4   | 61.1   | 61.4   | 62.4   | 63.6   | 64.3   |
| 37.5° | 822.7  | 297.6  | 83.7   | 69.4   | 61.7   | 58.2   | 57.0   | 57.6   | 59.8   | 62.1   | 62.4   |
| 40°   | 823.9  | 261.6  | 77.0   | 64.0   | 57.3   | 53.5   | 52.5   | 54.4   | 56.6   | 58.9   | 59.2   |
| 42.5° | 837.9  | 234.9  | 70.7   | 57.6   | 53.5   | 48.1   | 47.7   | 49.6   | 50.6   | 52.8   | 53.1   |
| 45°   | 854.5  | 215.5  | 64.0   | 50.9   | 46.5   | 41.7   | 42.0   | 43.6   | 44.9   | 48.4   | 49.0   |
| 47.5° | 859.6  | 202.1  | 56.3   | 43.3   | 38.2   | 36.6   | 36.9   | 37.9   | 40.4   | 43.6   | 43.9   |
| 50°   | 865.3  | 193.8  | 49.0   | 36.6   | 32.5   | 32.1   | 32.5   | 33.1   | 34.7   | 36.0   | 35.6   |
| 52.5° | 889.8  | 193.5  | 43.0   | 31.8   | 27.7   | 28.3   | 28.6   | 28.3   | 27.1   | 25.1   | 24.5   |
| 54°   | 912.7  | 194.4  | 40.1   | 29.6   | 25.5   | 26.4   | 26.1   | 24.5   | 21.3   | 19.4   | 18.5   |
| 55°   | 931.2  | 195.4  | 38.5   | 28.0   | 24.2   | 24.5   | 24.8   | 21.6   | 17.5   | 15.6   | 15.0   |
| 57.5° | 967.5  | 193.2  | 34.7   | 24.5   | 21.3   | 20.0   | 19.7   | 14.3   | 9.5    | 8.3    | 7.6    |
| 60°   | 949.3  | 174.4  | 31.5   | 21.0   | 18.1   | 16.2   | 13.4   | 8.0    | 4.8    | 3.5    | 3.5    |
| 62.5° | 878.0  | 148.0  | 28.0   | 17.2   | 15.0   | 12.4   | 7.0    | 4.5    | 2.2    | 1.3    | 1.0    |
| 65°   | 785.4  | 124.4  | 25.1   | 13.7   | 11.8   | 8.0    | 3.8    | 2.9    | 1.0    | 0.0    | 0.0    |
| 67.5° | 584.0  | 92.3   | 21.3   | 10.8   | 8.9    | 5.1    | 2.5    | 1.6    | 0.3    | 0.0    | 0.0    |
| 70°   | 270.5  | 56.3   | 18.1   | 8.3    | 6.4    | 3.8    | 1.9    | 1.0    | 0.0    | 0.0    | 0.0    |
| 72.5° | 77.7   | 35.3   | 15.0   | 6.0    | 4.5    | 3.2    | 1.6    | 0.6    | 0.3    | 0.0    | 0.0    |
| 75°   | 27.1   | 28.3   | 11.1   | 4.5    | 3.5    | 2.2    | 1.3    | 0.6    | 0.3    | 0.0    | 0.0    |
| 77.5° | 16.2   | 22.9   | 7.0    | 3.8    | 2.9    | 1.9    | 1.3    | 0.6    | 0.3    | 0.3    | 0.0    |
| 80°   | 9.2    | 15.3   | 4.5    | 3.2    | 2.5    | 1.6    | 1.0    | 0.6    | 0.3    | 0.3    | 0.0    |
| 82.5° | 5.1    | 7.3    | 3.5    | 2.9    | 2.2    | 1.6    | 1.0    | 0.6    | 0.3    | 0.3    | 0.3    |
| 85°   | 4.1    | 3.8    | 2.9    | 2.5    | 1.9    | 1.3    | 1.0    | 0.3    | 0.0    | 0.0    | 0.0    |
| 87.5° | 3.2    | 2.5    | 2.5    | 2.5    | 1.9    | 1.3    | 1.0    | 0.3    | 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)