

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: P192156

Luminaire Tested: **GLEON-AF-08-LED-E1-T2-7050-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P192156  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24139)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-08-LED-E1-T2-7050-600  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30844 lumens  
Efficiency: N/A  
Efficacy: 120.0 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Medium - Full Cutoff  
BUG Rating: B3 - U0 - G4

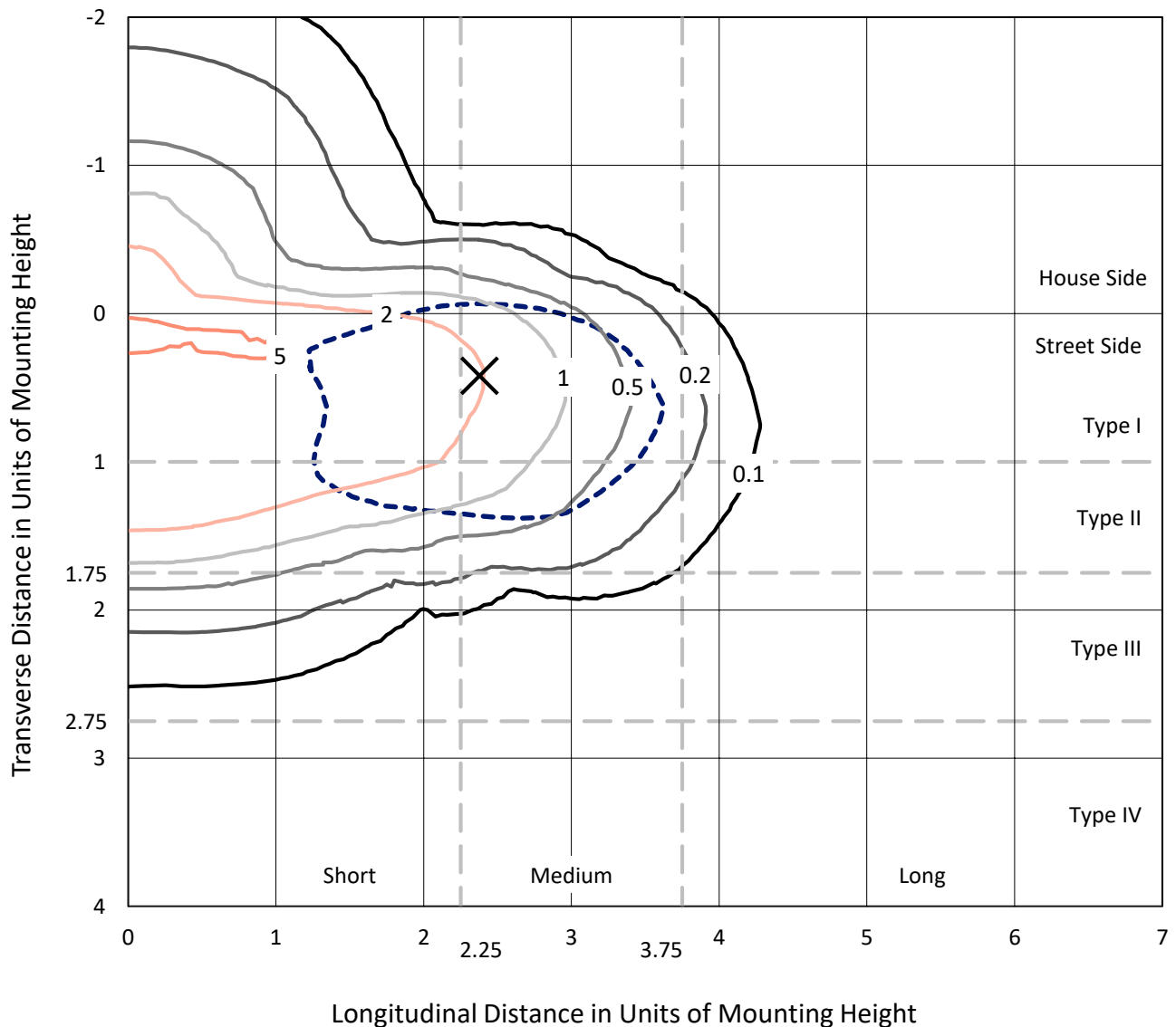
Input Watts (W): 257  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

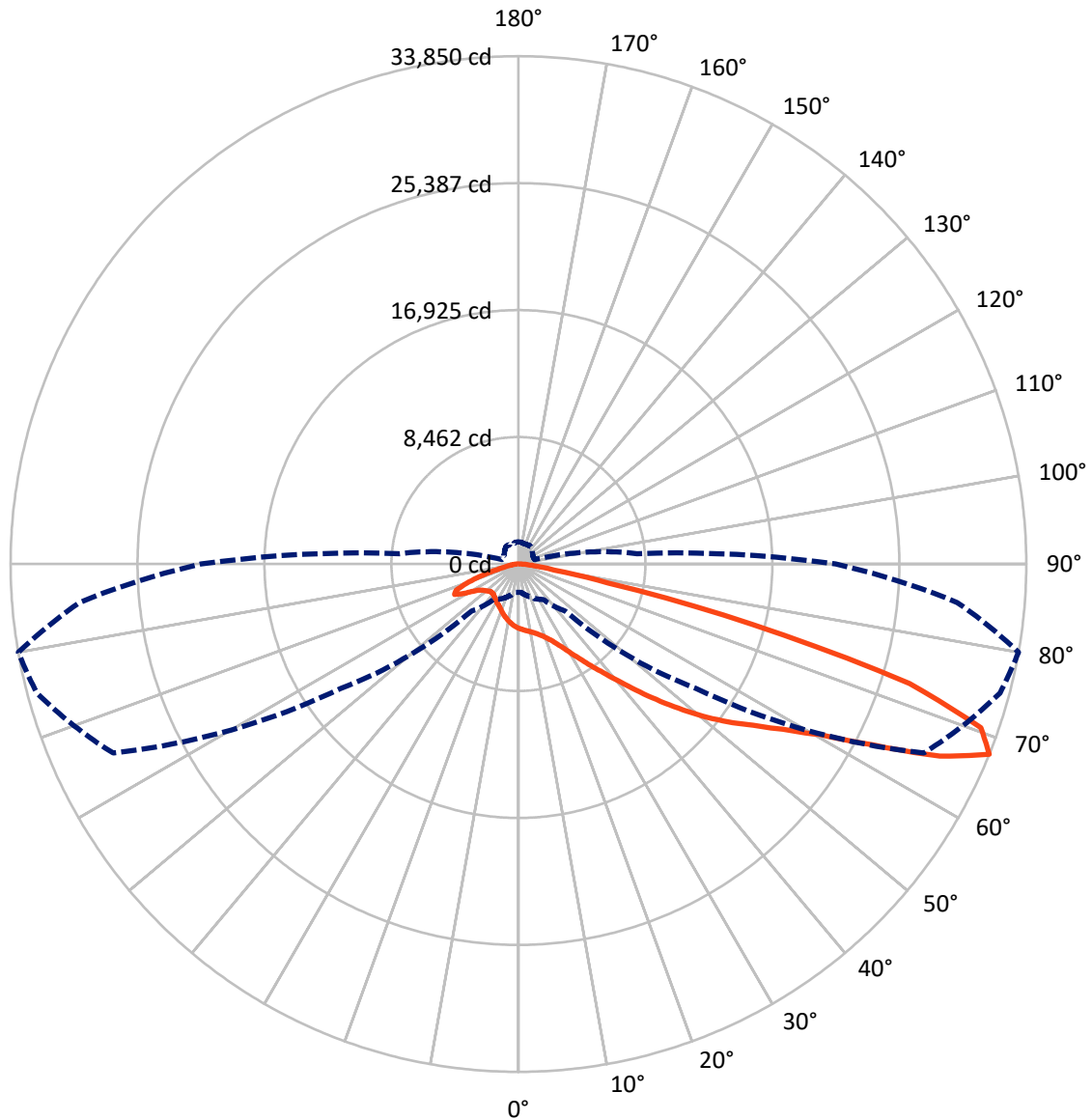
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.8 fc  
 Type II - Medium - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5680.3   | 0.0    | 5680.3  |
|                    | % Fixture | 18.4     | 0.0    | 18.4    |
| <b>Street Side</b> | Lumens    | 25163.7  | 0.0    | 25163.7 |
|                    | % Fixture | 81.6     | 0.0    | 81.6    |
| <b>Total</b>       | Lumens    | 30844.0  | 0.0    | 30844.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 395.3   | 1.3       |
| 10°-20°   | 1138.7  | 3.7       |
| 20°-30°   | 1884.8  | 6.1       |
| 30°-40°   | 3083.0  | 10.0      |
| 40°-50°   | 4977.9  | 16.1      |
| 50°-60°   | 7186.6  | 23.3      |
| 60°-70°   | 7930.8  | 25.7      |
| 70°-80°   | 3655.6  | 11.9      |
| 80°-90°   | 591.3   | 1.9       |
| 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°    | 30844.0 | 100.0     |
| 0°-180°   | 30844.0 | 100.0     |



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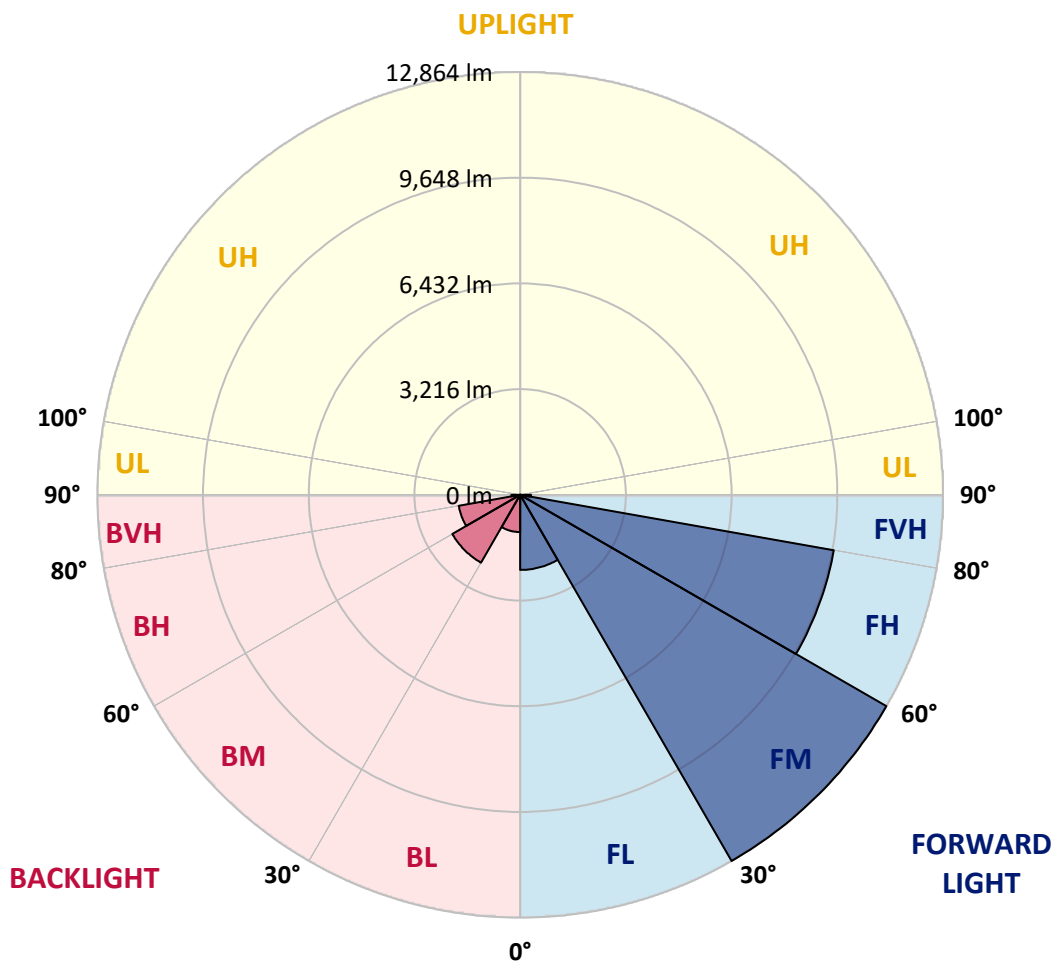
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|---------|-----------|-------------------------|------|----------|
|                |         |           | B                       | U    | G        |
| FL (0°-30°)    | 2285.5  | 7.4       |                         |      |          |
| FM (30°-60°)   | 12864.3 | 41.7      |                         |      |          |
| FH (60°-80°)   | 9688.9  | 31.4      |                         |      | G4/12000 |
| FVH (80°-90°)  | 325.1   | 1.1       |                         |      | G3/500   |
| BL (0°-30°)    | 1133.3  | 3.7       | B3/2500                 |      |          |
| BM (30°-60°)   | 2383.2  | 7.7       | B2/2500                 |      |          |
| BH (60°-80°)   | 1897.6  | 6.2       | B3/2500                 |      | G3/2500  |
| BVH (80°-90°)  | 266.2   | 0.9       |                         |      | G3/500   |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G4**

Type II Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 80°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4285.1  | 4285.1  | 4285.1  | 4285.1  | 4285.1  | 4285.1  | 4285.1  | 4285.1  | 4285.1  | 4285.1  | 4285.1  |
| 2.5°  | 4687.5  | 4660.2  | 4664.7  | 4657.2  | 4634.4  | 4594.9  | 4552.4  | 4474.9  | 4394.5  | 4351.9  | 4318.5  |
| 5°    | 5079.3  | 5071.7  | 5061.1  | 5036.8  | 4979.1  | 4897.1  | 4795.3  | 4658.7  | 4511.4  | 4433.9  | 4359.5  |
| 7.5°  | 5372.4  | 5367.8  | 5354.1  | 5338.9  | 5282.8  | 5184.1  | 5030.7  | 4836.3  | 4622.2  | 4515.9  | 4400.5  |
| 10°   | 5396.7  | 5404.2  | 5414.9  | 5455.9  | 5463.5  | 5410.3  | 5253.9  | 5018.6  | 4737.6  | 4601.0  | 4453.7  |
| 12.5° | 5190.1  | 5206.8  | 5247.8  | 5352.6  | 5463.5  | 5528.8  | 5448.3  | 5209.9  | 4872.8  | 4707.3  | 4520.5  |
| 15°   | 4916.8  | 4925.9  | 4976.0  | 5120.3  | 5319.2  | 5521.2  | 5597.1  | 5420.9  | 5047.4  | 4843.9  | 4620.7  |
| 17.5° | 4799.9  | 4804.4  | 4839.4  | 4935.0  | 5120.3  | 5408.8  | 5680.6  | 5650.2  | 5261.5  | 5014.0  | 4743.7  |
| 20°   | 4740.7  | 4751.3  | 4801.4  | 4895.6  | 5012.5  | 5264.5  | 5692.8  | 5897.7  | 5516.6  | 5226.6  | 4898.6  |
| 22.5° | 4909.2  | 4904.7  | 4922.9  | 4970.0  | 5068.7  | 5220.5  | 5683.6  | 6152.8  | 5841.6  | 5499.9  | 5100.5  |
| 25°   | 5302.5  | 5319.2  | 5287.3  | 5234.2  | 5266.1  | 5372.4  | 5732.2  | 6429.2  | 6248.5  | 5850.7  | 5364.8  |
| 27.5° | 5862.8  | 5846.1  | 5799.0  | 5674.5  | 5609.2  | 5654.8  | 5893.2  | 6726.8  | 6754.2  | 6312.3  | 5714.0  |
| 30°   | 6421.6  | 6408.0  | 6362.4  | 6210.6  | 6076.9  | 6039.0  | 6206.0  | 7068.5  | 7357.0  | 6866.5  | 6142.2  |
| 32.5° | 7001.7  | 6986.5  | 6944.0  | 6792.1  | 6631.2  | 6543.1  | 6650.9  | 7463.3  | 8067.6  | 7528.6  | 6646.4  |
| 35°   | 7716.9  | 7688.0  | 7598.4  | 7387.4  | 7229.4  | 7161.1  | 7211.2  | 7959.8  | 8887.6  | 8312.1  | 7258.3  |
| 37.5° | 8389.6  | 8433.6  | 8342.5  | 8050.9  | 7845.9  | 7821.7  | 7877.8  | 8565.7  | 9771.4  | 9188.3  | 7961.3  |
| 40°   | 9065.3  | 9072.9  | 8990.9  | 8752.5  | 8541.4  | 8501.9  | 8643.1  | 9300.6  | 10814.6 | 10236.0 | 8816.2  |
| 42.5° | 9763.8  | 9779.0  | 9640.8  | 9420.6  | 9265.7  | 9273.3  | 9434.3  | 10161.6 | 12011.1 | 11470.5 | 9800.2  |
| 45°   | 10591.3 | 10614.1 | 10462.3 | 10173.8 | 10032.5 | 10316.5 | 10249.7 | 11127.4 | 13323.1 | 12873.6 | 10930.0 |
| 47.5° | 11456.9 | 11491.8 | 11376.4 | 11106.1 | 10930.0 | 11320.2 | 11065.1 | 12197.9 | 14735.3 | 14378.4 | 12170.6 |
| 50°   | 11929.1 | 11979.2 | 12091.6 | 12071.9 | 12033.9 | 11968.6 | 11974.7 | 13345.9 | 16191.5 | 15945.5 | 13446.1 |
| 52.5° | 11675.5 | 11674.0 | 12084.0 | 12582.1 | 13113.5 | 13153.0 | 13083.2 | 14556.1 | 17552.0 | 17477.6 | 14647.2 |
| 55°   | 10515.4 | 10594.4 | 11215.4 | 12179.7 | 13631.3 | 14537.9 | 14744.4 | 15942.4 | 18888.3 | 18974.8 | 15866.5 |
| 57.5° | 8583.9  | 8649.2  | 9487.4  | 10831.3 | 12932.8 | 15360.9 | 17107.1 | 17957.5 | 20382.5 | 20786.4 | 17489.8 |
| 60°   | 5821.8  | 5900.8  | 6789.1  | 8403.2  | 11053.0 | 14902.3 | 19356.0 | 21553.2 | 22171.2 | 23089.9 | 19767.5 |
| 62.5° | 3421.1  | 3492.5  | 4216.8  | 5301.0  | 7782.2  | 12771.9 | 20343.0 | 26668.9 | 25012.3 | 26565.7 | 23241.7 |
| 65°   | 2355.2  | 2403.7  | 2756.0  | 3299.6  | 4471.9  | 8602.1  | 19119.1 | 30200.9 | 29384.0 | 30872.1 | 27270.2 |
| 67.5° | 1895.1  | 1889.0  | 2168.4  | 2538.9  | 2879.0  | 4435.5  | 14457.4 | 29801.5 | 33228.7 | 33849.8 | 29361.2 |
| 70°   | 1561.0  | 1554.9  | 1744.7  | 2051.5  | 2300.5  | 2497.9  | 7874.8  | 25148.9 | 32445.2 | 32697.3 | 27435.8 |
| 72.5° | 1305.9  | 1312.0  | 1433.4  | 1661.2  | 1887.5  | 1881.4  | 3460.6  | 17691.7 | 25524.0 | 27267.2 | 21870.6 |
| 75°   | 1102.4  | 1105.4  | 1185.9  | 1346.9  | 1532.1  | 1515.4  | 1876.8  | 9584.6  | 14837.0 | 16050.3 | 12123.5 |
| 77.5° | 938.4   | 941.5   | 993.1   | 1082.7  | 1214.8  | 1208.7  | 1369.7  | 4140.9  | 6189.3  | 6113.4  | 4146.9  |
| 80°   | 836.7   | 836.7   | 861.0   | 877.7   | 950.6   | 923.2   | 1015.9  | 1989.2  | 2616.3  | 2415.9  | 1655.1  |
| 82.5° | 656.0   | 659.0   | 807.8   | 801.8   | 748.6   | 713.7   | 713.7   | 1172.3  | 1386.4  | 1281.6  | 968.8   |
| 85°   | 369.0   | 367.5   | 520.8   | 628.6   | 659.0   | 502.6   | 498.1   | 656.0   | 754.7   | 665.1   | 469.2   |
| 87.5° | 157.9   | 161.0   | 241.4   | 279.4   | 373.5   | 312.8   | 308.2   | 338.6   | 384.2   | 332.5   | 217.1   |
| 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°    | 4285.1  | 4285.1 | 4285.1 | 4285.1 | 4285.1 | 4285.1 | 4285.1 | 4285.1 | 4285.1 | 4285.1 | 4285.1 |
| 2.5°  | 4286.6  | 4247.2 | 4160.6 | 4052.8 | 3955.6 | 3891.8 | 3834.1 | 3750.6 | 3755.2 | 3697.5 | 3655.0 |
| 5°    | 4283.6  | 4201.6 | 4001.2 | 3762.8 | 3533.5 | 3368.0 | 3243.5 | 3131.1 | 3103.8 | 3050.6 | 3018.7 |
| 7.5°  | 4286.6  | 4153.0 | 3815.9 | 3434.8 | 3150.8 | 2941.3 | 2835.0 | 2775.8 | 2762.1 | 2743.9 | 2745.4 |
| 10°   | 4297.3  | 4109.0 | 3612.4 | 3128.1 | 2830.4 | 2692.3 | 2666.4 | 2684.7 | 2705.9 | 2712.0 | 2713.5 |
| 12.5° | 4321.6  | 4069.5 | 3389.2 | 2854.7 | 2630.0 | 2587.5 | 2631.5 | 2693.8 | 2734.8 | 2754.5 | 2753.0 |
| 15°   | 4376.2  | 4039.1 | 3175.1 | 2640.6 | 2519.1 | 2541.9 | 2623.9 | 2712.0 | 2771.2 | 2798.5 | 2800.1 |
| 17.5° | 4435.5  | 3995.1 | 2954.9 | 2476.6 | 2437.1 | 2494.8 | 2596.6 | 2699.8 | 2772.7 | 2803.1 | 2809.2 |
| 20°   | 4512.9  | 3940.4 | 2724.1 | 2353.6 | 2359.7 | 2425.0 | 2520.7 | 2623.9 | 2704.4 | 2730.2 | 2742.4 |
| 22.5° | 4614.6  | 3881.2 | 2522.2 | 2253.4 | 2271.6 | 2321.7 | 2396.1 | 2485.7 | 2555.6 | 2567.7 | 2578.4 |
| 25°   | 4751.3  | 3817.4 | 2361.2 | 2162.3 | 2169.9 | 2198.7 | 2248.9 | 2302.0 | 2350.6 | 2336.9 | 2347.6 |
| 27.5° | 4935.0  | 3762.8 | 2241.3 | 2078.8 | 2065.1 | 2071.2 | 2097.0 | 2113.7 | 2139.5 | 2101.6 | 2106.1 |
| 30°   | 5150.7  | 3703.6 | 2148.6 | 2005.9 | 1967.9 | 1957.3 | 1963.4 | 1972.5 | 1992.2 | 1940.6 | 1933.0 |
| 32.5° | 5401.2  | 3632.2 | 2062.1 | 1942.1 | 1889.0 | 1867.7 | 1870.8 | 1895.1 | 1971.0 | 1939.1 | 1922.4 |
| 35°   | 5692.8  | 3551.7 | 1971.0 | 1872.3 | 1835.8 | 1805.5 | 1802.4 | 1878.4 | 2104.6 | 2084.9 | 2069.7 |
| 37.5° | 6034.4  | 3471.2 | 1879.9 | 1793.3 | 1796.4 | 1762.9 | 1752.3 | 1838.9 | 2130.4 | 2053.0 | 2042.3 |
| 40°   | 6468.7  | 3428.7 | 1802.4 | 1709.8 | 1747.8 | 1743.2 | 1721.9 | 1766.0 | 1960.3 | 1819.1 | 1800.9 |
| 42.5° | 7006.2  | 3434.8 | 1744.7 | 1620.2 | 1690.1 | 1738.7 | 1705.2 | 1706.8 | 1776.6 | 1670.3 | 1653.6 |
| 45°   | 7669.8  | 3506.2 | 1703.7 | 1548.8 | 1624.8 | 1734.1 | 1699.2 | 1674.9 | 1680.9 | 1624.8 | 1615.7 |
| 47.5° | 8444.2  | 3653.4 | 1674.9 | 1489.6 | 1562.5 | 1717.4 | 1697.7 | 1665.8 | 1652.1 | 1621.7 | 1614.1 |
| 50°   | 9305.2  | 3867.5 | 1653.6 | 1433.4 | 1506.3 | 1690.1 | 1699.2 | 1656.7 | 1641.5 | 1629.3 | 1624.8 |
| 52.5° | 10151.0 | 4112.0 | 1621.7 | 1384.8 | 1462.3 | 1656.7 | 1703.7 | 1647.5 | 1630.8 | 1621.7 | 1617.2 |
| 55°   | 11094.0 | 4417.2 | 1573.1 | 1343.8 | 1425.8 | 1614.1 | 1703.7 | 1633.9 | 1615.7 | 1617.2 | 1615.7 |
| 57.5° | 12368.0 | 4910.7 | 1515.4 | 1308.9 | 1381.8 | 1562.5 | 1674.9 | 1618.7 | 1595.9 | 1597.4 | 1599.0 |
| 60°   | 14358.7 | 5780.8 | 1445.6 | 1274.0 | 1327.1 | 1501.8 | 1635.4 | 1585.3 | 1562.5 | 1568.6 | 1570.1 |
| 62.5° | 17286.3 | 7057.9 | 1354.5 | 1222.4 | 1269.4 | 1436.5 | 1580.7 | 1542.8 | 1520.0 | 1535.2 | 1535.2 |
| 65°   | 20329.3 | 8184.6 | 1242.1 | 1157.1 | 1208.7 | 1365.1 | 1512.4 | 1489.6 | 1466.8 | 1501.8 | 1500.3 |
| 67.5° | 21147.8 | 7932.5 | 1129.7 | 1085.7 | 1148.0 | 1286.1 | 1430.4 | 1418.3 | 1406.1 | 1466.8 | 1463.8 |
| 70°   | 18786.5 | 6368.5 | 1026.5 | 1012.8 | 1081.2 | 1201.1 | 1342.3 | 1342.3 | 1334.7 | 1380.3 | 1369.7 |
| 72.5° | 14313.1 | 4515.9 | 927.8  | 935.4  | 1005.2 | 1108.5 | 1246.7 | 1257.3 | 1245.1 | 1267.9 | 1258.8 |
| 75°   | 7662.2  | 2584.4 | 829.1  | 850.3  | 911.1  | 1014.3 | 1140.4 | 1151.0 | 1143.4 | 1141.9 | 1146.4 |
| 77.5° | 2546.5  | 1263.4 | 725.8  | 759.2  | 812.4  | 917.2  | 1029.5 | 1046.2 | 1028.0 | 1025.0 | 1023.5 |
| 80°   | 1134.3  | 794.2  | 611.9  | 656.0  | 703.1  | 806.3  | 912.6  | 926.3  | 906.5  | 933.9  | 898.9  |
| 82.5° | 728.9   | 522.4  | 490.5  | 539.1  | 584.6  | 695.5  | 795.7  | 798.7  | 780.5  | 906.5  | 772.9  |
| 85°   | 353.8   | 323.4  | 369.0  | 413.0  | 452.5  | 546.7  | 659.0  | 660.5  | 615.0  | 560.3  | 540.6  |
| 87.5° | 176.1   | 188.3  | 246.0  | 285.5  | 305.2  | 375.1  | 479.8  | 470.7  | 451.0  | 410.0  | 378.1  |
| 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)