

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: P269749

Luminaire Tested: **GLEON-AF-10-LED-E1-T3R-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P269749  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P40129)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-10-LED-E1-T3R-7027  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 52336.5 lumens  
Efficiency: N/A  
Efficacy: 93.8 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G5

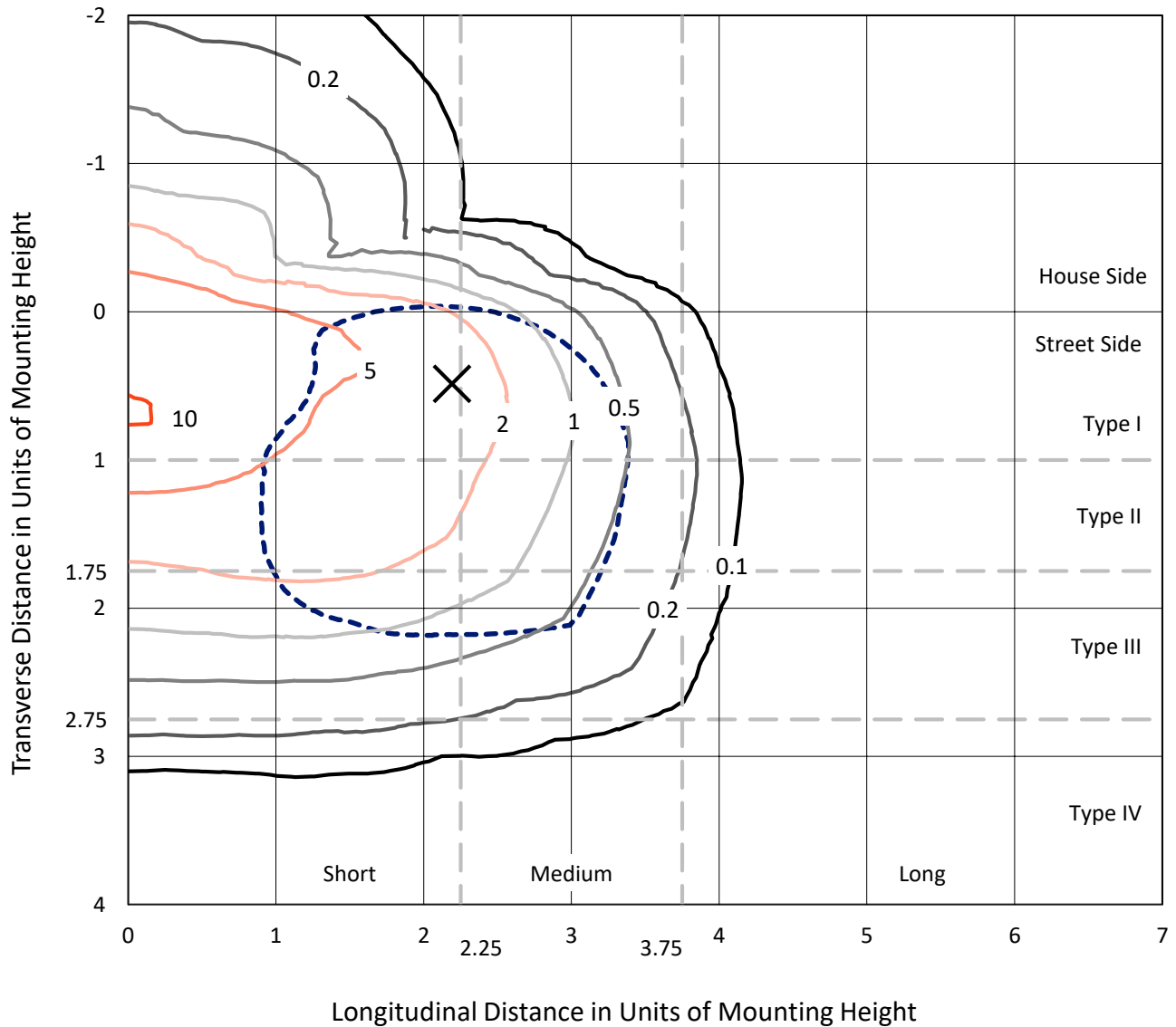
Input Watts (W): 558  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

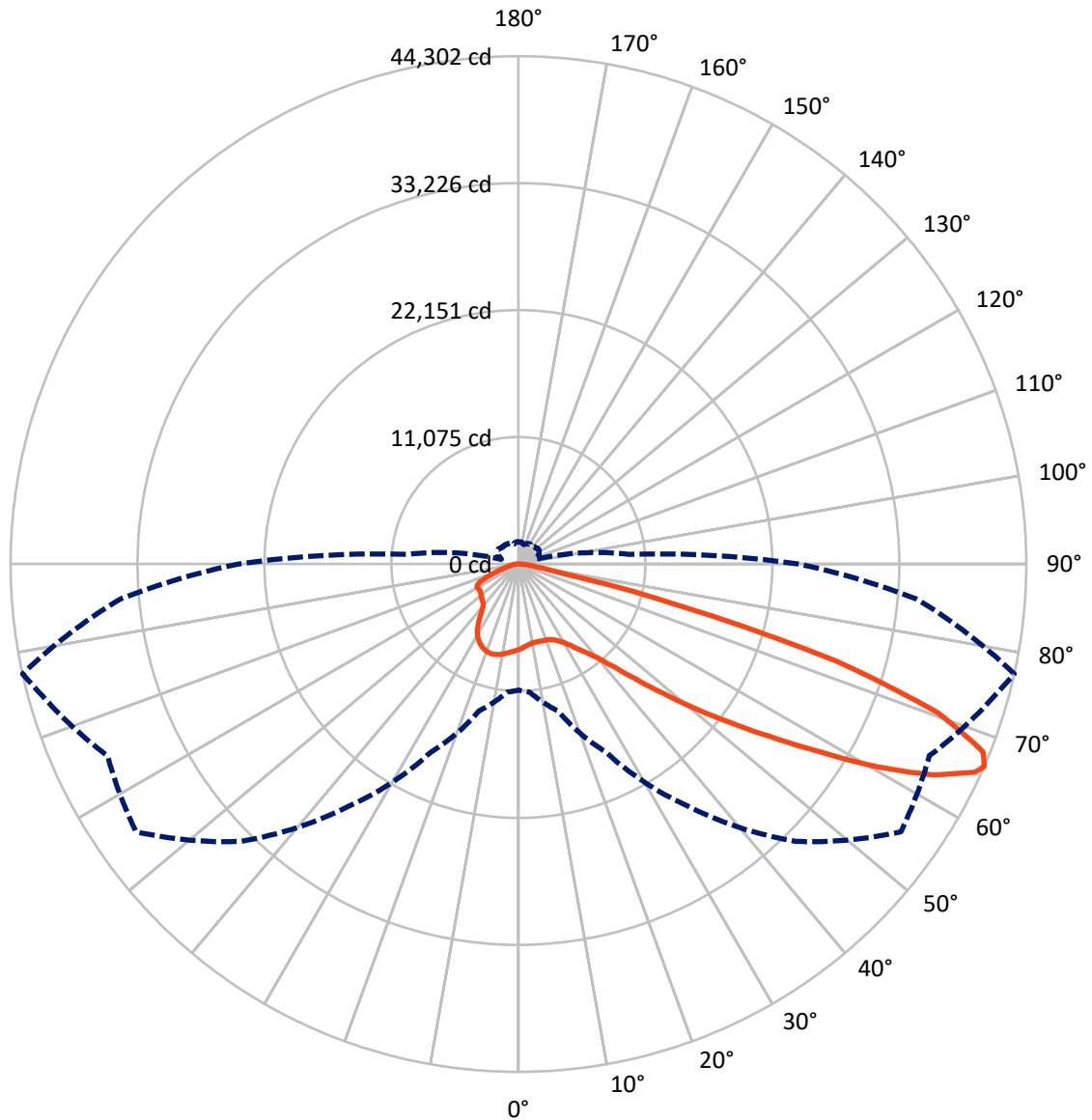
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.2 fc  
 Type III - Short - Full Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 8941.4   | 0.0    | 8941.4  |
|                    | % Fixture | 17.1     | 0.0    | 17.1    |
| <b>Street Side</b> | Lumens    | 43395.1  | 0.0    | 43395.1 |
|                    | % Fixture | 82.9     | 0.0    | 82.9    |
| <b>Total</b>       | Lumens    | 52336.5  | 0.0    | 52336.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 666.3   | 1.3       |
| 10°-20°   | 1879.8  | 3.6       |
| 20°-30°   | 3208.2  | 6.1       |
| 30°-40°   | 5135.8  | 9.8       |
| 40°-50°   | 7934.3  | 15.2      |
| 50°-60°   | 11253.5 | 21.5      |
| 60°-70°   | 15054.2 | 28.8      |
| 70°-80°   | 6537.7  | 12.5      |
| 80°-90°   | 666.6   | 1.3       |
| 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°    | 52336.5 | 100.0     |
| 0°-180°   | 52336.5 | 100.0     |



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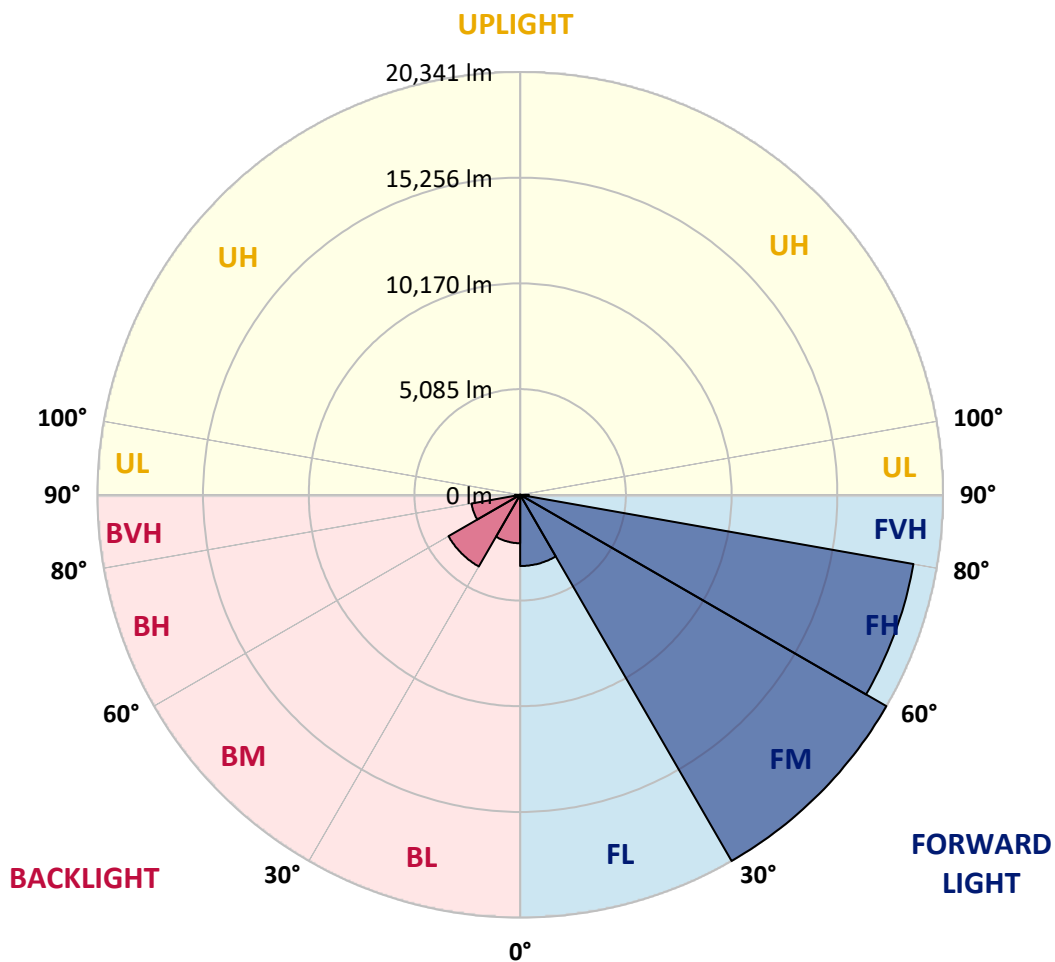
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3425.7  | 6.5       |                         |      |         |
| FM   | (30°-60°)   | 20340.7 | 38.9      |                         |      |         |
| FH   | (60°-80°)   | 19210.7 | 36.7      |                         |      | G5      |
| FVH  | (80°-90°)   | 418.1   | 0.8       |                         |      | G3/500  |
| BL   | (0°-30°)    | 2328.7  | 4.4       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3982.9  | 7.6       | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2381.2  | 4.5       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 248.5   | 0.5       |                         |      | G3/500  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G5**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 77.5°   | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 7458.2  | 7458.2  | 7458.2  | 7458.2  | 7458.2  | 7458.2  | 7458.2  | 7458.2  | 7458.2  | 7458.2  | 7458.2  |
| 2.5°  | 6597.6  | 6642.2  | 6679.3  | 6713.8  | 6783.1  | 6896.8  | 7027.9  | 7134.2  | 7287.6  | 7317.2  | 7398.9  |
| 5°    | 5991.8  | 5991.8  | 6021.5  | 6073.4  | 6167.4  | 6338.0  | 6516.0  | 6753.5  | 7087.3  | 7166.4  | 7384.0  |
| 7.5°  | 5697.5  | 5699.9  | 5717.4  | 5761.8  | 5843.5  | 5999.2  | 6194.5  | 6473.9  | 6926.6  | 7057.7  | 7428.5  |
| 10°   | 5806.4  | 5781.6  | 5744.5  | 5722.3  | 5734.6  | 5826.0  | 6011.5  | 6323.2  | 6827.6  | 6995.8  | 7527.4  |
| 12.5° | 6414.6  | 6367.6  | 6239.1  | 6068.4  | 5905.3  | 5838.4  | 5947.3  | 6251.5  | 6785.5  | 6981.0  | 7658.5  |
| 15°   | 7408.7  | 7389.0  | 7149.2  | 6795.5  | 6399.9  | 6068.4  | 5994.3  | 6224.3  | 6790.5  | 6998.2  | 7814.3  |
| 17.5° | 8655.1  | 8628.0  | 8311.4  | 7797.0  | 7151.5  | 6506.2  | 6159.9  | 6246.5  | 6807.9  | 7027.9  | 7965.1  |
| 20°   | 9913.8  | 9829.8  | 9488.4  | 8875.2  | 8046.7  | 7102.1  | 6434.4  | 6303.3  | 6830.2  | 7060.0  | 8123.5  |
| 22.5° | 10853.4 | 10784.2 | 10477.7 | 9881.6  | 8927.0  | 7792.1  | 6802.9  | 6402.3  | 6901.8  | 7154.0  | 8318.8  |
| 25°   | 11679.5 | 11684.3 | 11380.2 | 10804.0 | 9817.3  | 8523.9  | 7277.7  | 6667.0  | 7084.8  | 7346.9  | 8585.8  |
| 27.5° | 12700.6 | 12641.4 | 12356.9 | 11785.8 | 10697.6 | 9263.4  | 7851.4  | 7030.3  | 7356.8  | 7621.4  | 8937.0  |
| 30°   | 13922.3 | 13880.3 | 13551.4 | 12903.4 | 11674.5 | 10057.2 | 8506.7  | 7453.2  | 7707.9  | 7982.5  | 9396.9  |
| 32.5° | 15359.0 | 15339.3 | 14998.0 | 14164.7 | 12802.0 | 10991.9 | 9275.8  | 8012.2  | 8232.2  | 8516.7  | 10057.2 |
| 35°   | 17045.6 | 17048.0 | 16645.0 | 15643.4 | 14036.0 | 12080.0 | 10148.7 | 8731.7  | 8870.3  | 9166.9  | 10843.6 |
| 37.5° | 18084.1 | 18210.4 | 18059.4 | 17038.2 | 15433.2 | 13296.7 | 11281.3 | 9686.2  | 9597.2  | 9896.4  | 11686.8 |
| 40°   | 18306.6 | 18460.0 | 18937.3 | 18417.9 | 16996.1 | 14637.0 | 12285.3 | 10603.8 | 10492.5 | 10858.4 | 12772.5 |
| 42.5° | 17995.1 | 18207.8 | 19216.7 | 19582.7 | 18655.5 | 16288.8 | 13635.5 | 11966.2 | 11825.3 | 12317.4 | 14122.7 |
| 45°   | 17809.6 | 17968.0 | 19135.2 | 20188.6 | 20094.6 | 18155.9 | 15354.1 | 13677.6 | 13625.5 | 14271.0 | 15680.5 |
| 47.5° | 17488.3 | 17631.7 | 18754.4 | 20329.5 | 20940.3 | 19867.2 | 17418.9 | 15769.6 | 15871.0 | 16716.6 | 17438.7 |
| 50°   | 17661.2 | 17720.7 | 18328.9 | 19970.9 | 21185.2 | 21120.9 | 19726.2 | 18193.0 | 18539.2 | 19595.1 | 19429.4 |
| 52.5° | 17636.6 | 17789.9 | 18279.5 | 19382.4 | 21217.2 | 21894.8 | 21998.8 | 20895.8 | 21625.3 | 22837.0 | 21637.7 |
| 55°   | 14258.6 | 14540.5 | 17698.3 | 19234.1 | 21331.1 | 22654.0 | 24021.5 | 23744.5 | 25104.7 | 26516.7 | 24130.4 |
| 57.5° | 13615.7 | 13793.7 | 15544.5 | 19545.6 | 21934.5 | 24103.1 | 26271.9 | 26880.3 | 29155.2 | 30794.7 | 27167.0 |
| 60°   | 13489.6 | 13709.7 | 15522.3 | 19926.5 | 23158.6 | 26464.7 | 29607.7 | 30676.1 | 34083.8 | 35879.1 | 30688.4 |
| 62.5° | 13096.4 | 13333.7 | 15376.4 | 19876.9 | 24897.0 | 29731.5 | 33878.5 | 34711.8 | 38757.5 | 40503.3 | 33633.6 |
| 65°   | 11850.0 | 12072.6 | 14186.9 | 19078.3 | 26069.2 | 33218.2 | 38933.0 | 38411.3 | 42447.0 | 43760.0 | 35102.4 |
| 66°   | 10997.0 | 11214.5 | 13249.7 | 18138.5 | 25797.0 | 34207.4 | 40723.4 | 39556.1 | 43273.0 | 44301.6 | 34815.7 |
| 67.5° | 9436.5  | 9607.2  | 11429.7 | 16034.1 | 24350.4 | 34484.2 | 42229.3 | 40416.7 | 43359.5 | 43722.9 | 33176.2 |
| 70°   | 5962.1  | 6011.5  | 7428.5  | 11068.6 | 18432.9 | 29907.0 | 39936.9 | 38280.2 | 39783.6 | 38799.5 | 27812.5 |
| 72.5° | 2586.6  | 2569.3  | 3565.9  | 5630.8  | 10435.5 | 20067.3 | 32305.7 | 31586.1 | 31207.7 | 28962.3 | 19469.0 |
| 75°   | 1439.3  | 1458.9  | 1852.1  | 2613.9  | 4241.0  | 9856.9  | 21133.3 | 20223.3 | 17075.3 | 14570.1 | 8828.2  |
| 77.5° | 1154.9  | 1182.0  | 1535.7  | 1854.7  | 1904.0  | 3437.4  | 9889.0  | 8046.7  | 4844.4  | 3887.3  | 2453.1  |
| 80°   | 912.5   | 961.9   | 1340.4  | 1444.1  | 1283.4  | 1416.9  | 3194.9  | 2554.5  | 1916.4  | 1758.3  | 1271.0  |
| 82.5° | 722.1   | 756.7   | 1149.9  | 1093.0  | 897.6   | 954.4   | 1530.7  | 1491.1  | 1246.3  | 1135.1  | 734.5   |
| 85°   | 519.3   | 583.5   | 944.7   | 823.4   | 588.5   | 642.9   | 1016.3  | 974.3   | 714.6   | 583.5   | 324.0   |
| 87.5° | 212.7   | 276.9   | 667.7   | 546.4   | 328.9   | 299.2   | 507.0   | 477.3   | 338.8   | 247.4   | 160.7   |
| 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°    | 7458.2  | 7458.2  | 7458.2 | 7458.2 | 7458.2 | 7458.2 | 7458.2 | 7458.2 | 7458.2 | 7458.2 | 7458.2 |
| 2.5°  | 7450.8  | 7510.1  | 7586.7 | 7633.7 | 7658.5 | 7675.7 | 7703.1 | 7700.5 | 7707.9 | 7710.4 | 7720.4 |
| 5°    | 7500.3  | 7599.1  | 7710.4 | 7740.2 | 7740.2 | 7712.8 | 7685.7 | 7641.3 | 7623.8 | 7619.0 | 7623.8 |
| 7.5°  | 7628.9  | 7737.6  | 7834.1 | 7799.4 | 7725.2 | 7616.5 | 7475.5 | 7351.9 | 7285.2 | 7262.8 | 7257.9 |
| 10°   | 7792.1  | 7923.1  | 7962.7 | 7831.7 | 7614.0 | 7351.9 | 7072.4 | 6869.7 | 6753.5 | 6721.3 | 6711.3 |
| 12.5° | 7989.9  | 8113.5  | 8059.1 | 7782.1 | 7379.0 | 6956.2 | 6570.5 | 6246.5 | 6004.1 | 5927.5 | 5922.5 |
| 15°   | 8207.5  | 8303.9  | 8113.5 | 7628.9 | 7027.9 | 6404.7 | 5717.4 | 5158.4 | 4856.7 | 4760.3 | 4752.9 |
| 17.5° | 8410.2  | 8459.7  | 8081.3 | 7361.8 | 6511.1 | 5502.2 | 4589.7 | 4159.4 | 4055.5 | 4080.2 | 4085.2 |
| 20°   | 8583.3  | 8583.3  | 7972.5 | 6978.5 | 5697.5 | 4312.8 | 3736.5 | 3729.1 | 3803.2 | 3877.4 | 3892.4 |
| 22.5° | 8773.7  | 8660.0  | 7782.1 | 6437.0 | 4545.2 | 3528.8 | 3444.7 | 3514.0 | 3598.0 | 3679.6 | 3692.0 |
| 25°   | 9008.7  | 8721.9  | 7517.6 | 5615.9 | 3573.3 | 3204.9 | 3237.0 | 3293.8 | 3335.9 | 3387.9 | 3395.2 |
| 27.5° | 9270.8  | 8801.0  | 7168.8 | 4485.7 | 3100.9 | 3002.0 | 3026.7 | 3046.6 | 3041.7 | 3061.5 | 3066.4 |
| 30°   | 9584.8  | 8892.5  | 6691.7 | 3506.5 | 2905.7 | 2829.0 | 2784.4 | 2767.1 | 2767.1 | 2799.3 | 2811.7 |
| 32.5° | 10005.2 | 9028.4  | 6006.6 | 3004.6 | 2811.7 | 2705.3 | 2561.8 | 2497.6 | 2522.4 | 2631.1 | 2655.8 |
| 35°   | 10467.7 | 9174.4  | 5079.2 | 2834.0 | 2791.9 | 2648.5 | 2426.0 | 2307.1 | 2309.6 | 2411.1 | 2443.2 |
| 37.5° | 10972.2 | 9359.8  | 4062.9 | 2801.8 | 2836.4 | 2650.9 | 2354.2 | 2191.0 | 2124.2 | 2124.2 | 2136.6 |
| 40°   | 11617.6 | 9550.3  | 3289.0 | 2824.0 | 2930.5 | 2680.6 | 2317.1 | 2099.5 | 1911.6 | 1916.4 | 1926.3 |
| 42.5° | 12458.4 | 9713.5  | 2873.5 | 2871.1 | 3044.0 | 2720.2 | 2314.7 | 1978.2 | 1815.0 | 1926.3 | 2027.7 |
| 45°   | 13393.1 | 9795.1  | 2690.6 | 2913.1 | 3135.7 | 2745.0 | 2275.0 | 1958.6 | 1827.4 | 2158.8 | 2351.8 |
| 47.5° | 14468.8 | 9748.0  | 2589.2 | 2927.8 | 3157.8 | 2745.0 | 2230.5 | 2005.5 | 1914.0 | 2500.2 | 2725.1 |
| 50°   | 15648.4 | 9612.0  | 2490.2 | 2898.2 | 3150.4 | 2739.9 | 2272.6 | 2052.4 | 1946.2 | 2559.5 | 2715.2 |
| 52.5° | 17035.6 | 9498.3  | 2386.3 | 2834.0 | 3098.6 | 2712.7 | 2321.9 | 2032.8 | 1844.8 | 2327.0 | 2435.8 |
| 55°   | 18618.4 | 9530.5  | 2270.0 | 2742.4 | 3016.9 | 2660.8 | 2304.7 | 1953.5 | 1738.4 | 2050.0 | 2116.8 |
| 57.5° | 20641.2 | 9913.8  | 2131.6 | 2626.1 | 2905.7 | 2574.3 | 2242.9 | 1916.4 | 1706.3 | 1859.6 | 1899.1 |
| 60°   | 22898.9 | 10581.5 | 1958.6 | 2510.0 | 2767.1 | 2435.8 | 2195.8 | 1933.8 | 1721.2 | 1844.8 | 1864.5 |
| 62.5° | 24555.7 | 10969.7 | 1810.2 | 2339.4 | 2579.3 | 2282.5 | 2136.6 | 1956.1 | 1760.7 | 1896.7 | 1891.7 |
| 65°   | 25005.8 | 10331.6 | 1624.7 | 2089.5 | 2324.5 | 2121.7 | 2062.4 | 1980.8 | 1777.9 | 1938.7 | 1916.4 |
| 66°   | 24375.1 | 9644.3  | 1543.1 | 1973.3 | 2195.8 | 2042.6 | 2025.3 | 1978.2 | 1770.6 | 1943.8 | 1906.7 |
| 67.5° | 22844.4 | 8234.8  | 1402.2 | 1802.7 | 1990.6 | 1923.9 | 1965.9 | 1956.1 | 1750.7 | 1938.7 | 1886.8 |
| 70°   | 18630.7 | 5618.4  | 1199.3 | 1501.1 | 1656.8 | 1693.9 | 1852.1 | 1876.9 | 1686.5 | 1852.1 | 1738.4 |
| 72.5° | 13017.2 | 3422.5  | 1060.9 | 1164.7 | 1340.4 | 1444.1 | 1696.4 | 1768.1 | 1599.9 | 1617.3 | 1508.4 |
| 75°   | 6291.0  | 1817.6  | 961.9  | 902.5  | 1041.0 | 1206.8 | 1508.4 | 1619.7 | 1464.0 | 1352.7 | 1313.1 |
| 77.5° | 1961.0  | 1110.3  | 816.0  | 727.0  | 816.0  | 974.3  | 1261.2 | 1419.4 | 1303.3 | 1132.6 | 1117.8 |
| 80°   | 1053.4  | 816.0   | 628.2  | 583.5  | 645.4  | 764.1  | 991.5  | 1184.5 | 1120.2 | 1016.3 | 907.6  |
| 82.5° | 694.8   | 529.2   | 465.0  | 452.6  | 492.1  | 583.5  | 736.9  | 981.8  | 981.8  | 870.5  | 633.0  |
| 85°   | 358.6   | 324.0   | 319.0  | 319.0  | 343.7  | 388.2  | 502.1  | 756.7  | 806.1  | 459.9  | 380.8  |
| 87.5° | 178.0   | 185.5   | 173.2  | 180.5  | 192.9  | 190.4  | 239.8  | 380.8  | 455.0  | 279.5  | 232.4  |
| 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)