

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: P194888

Luminaire Tested: **GLEON-AF-10-LED-E1-T4FT-7060-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P194888  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24295)  
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-T4FT-7060-1200  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(10) 70 CRI, 5700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 65020 lumens  
Efficiency: N/A  
Efficacy: 101.6 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B4 - U0 - G5

Input Watts (W): 640  
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

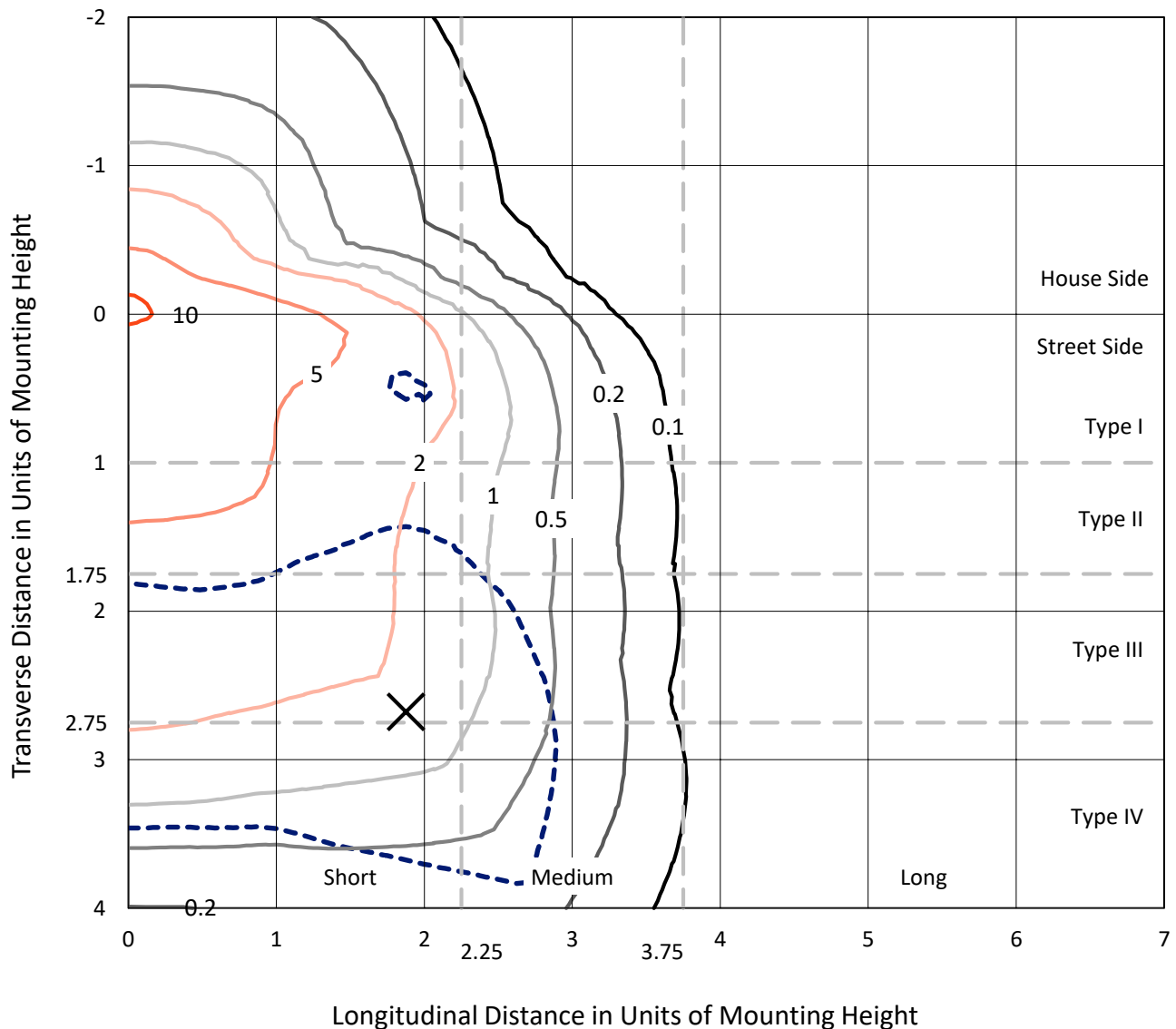


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

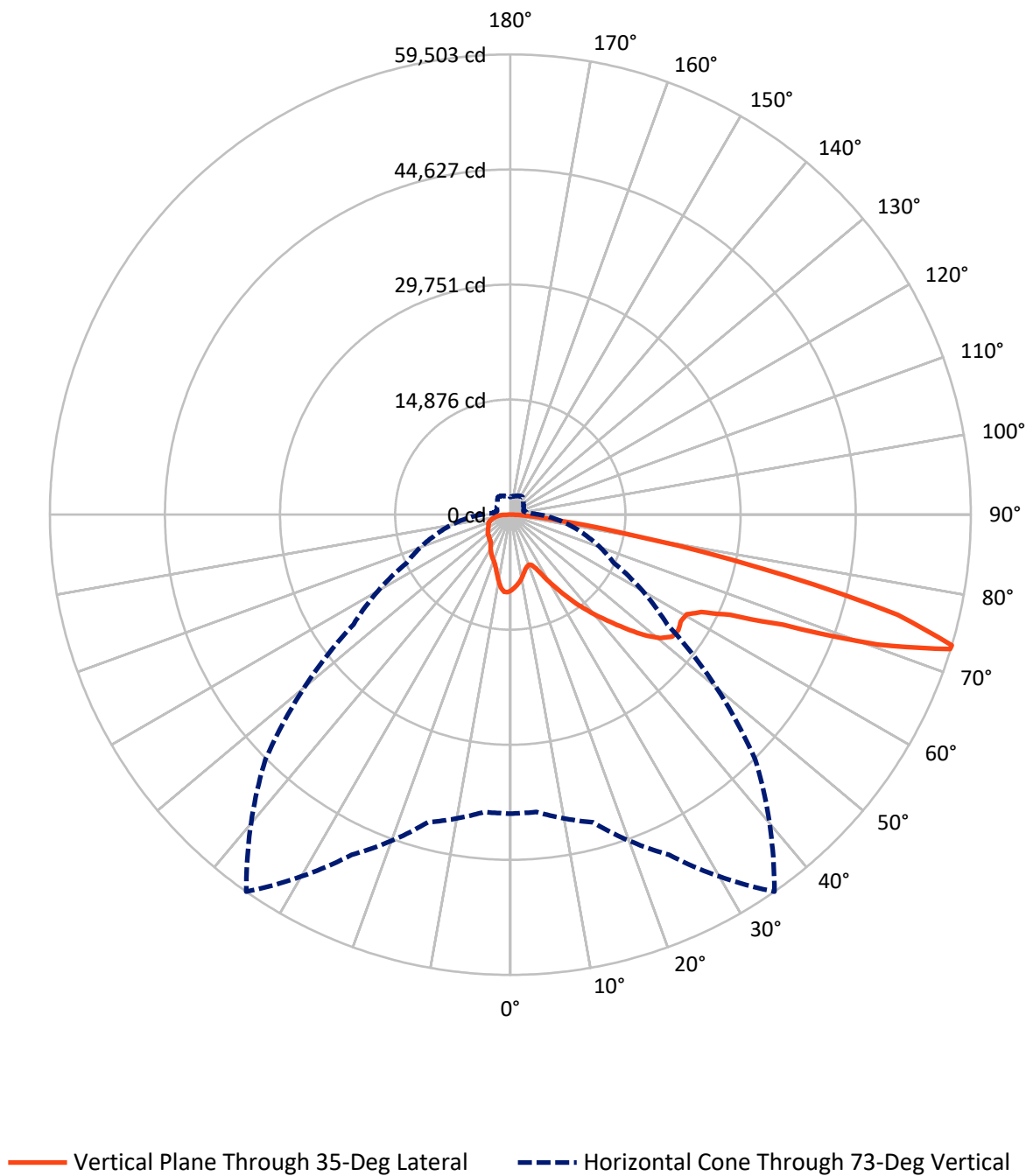


Based on 30 foot mounting height. Maximum calculated value = 10.9 fc  
Type IV - Short - Non-Cutoff

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 12401.1  | 0.0    | 12401.1 |
|                    | % Fixture | 19.1     | 0.0    | 19.1    |
| <b>Street Side</b> | Lumens    | 52618.9  | 0.0    | 52618.9 |
|                    | % Fixture | 80.9     | 0.0    | 80.9    |
| <b>Total</b>       | Lumens    | 65020.0  | 0.0    | 65020.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 888.4   | 1.4       |
| 10°-20°   | 2217.3  | 3.4       |
| 20°-30°   | 3584.6  | 5.5       |
| 30°-40°   | 6010.9  | 9.2       |
| 40°-50°   | 9265.6  | 14.3      |
| 50°-60°   | 12430.8 | 19.1      |
| 60°-70°   | 16560.3 | 25.5      |
| 70°-80°   | 12630.5 | 19.4      |
| 80°-90°   | 1431.6  | 2.2       |
| 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°    | 65020.0 | 100.0     |
| 0°-180°   | 65020.0 | 100.0     |

**Coefficient of Utilization**



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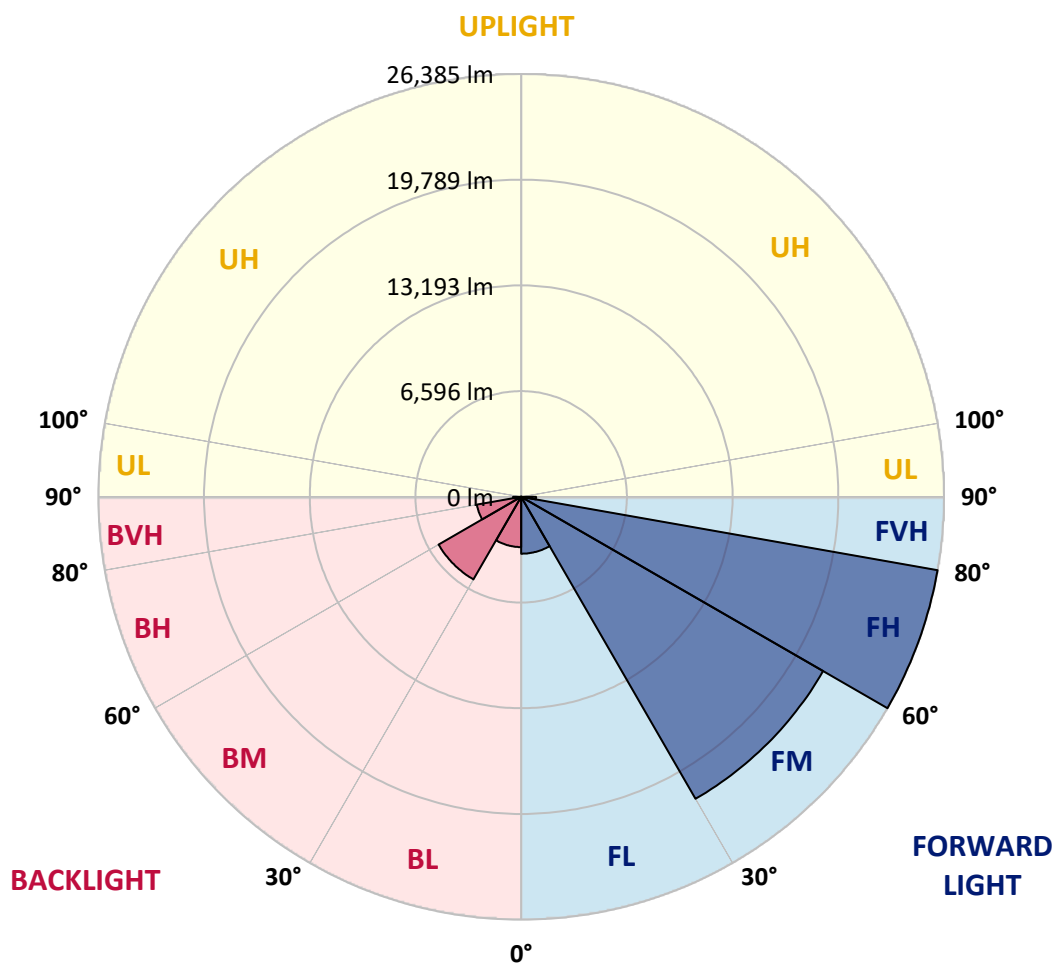
CATALOG NUMBER: GLEON-AF-10-LED-E1-T4FT-7060-1200

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3552.3  | 5.5       |                         |      |         |
| FM   | (30°-60°)   | 21756.1 | 33.5      |                         |      |         |
| FH   | (60°-80°)   | 26385.1 | 40.6      |                         |      | G5      |
| FVH  | (80°-90°)   | 925.4   | 1.4       |                         |      | G5      |
| BL   | (0°-30°)    | 3138.1  | 4.8       | B4/5000                 |      |         |
| BM   | (30°-60°)   | 5951.2  | 9.2       | B4/8500                 |      |         |
| BH   | (60°-80°)   | 2805.7  | 4.3       | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 506.2   | 0.8       |                         |      | G4/750  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G5**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 9813.5  | 9813.5  | 9813.5  | 9813.5  | 9813.5  | 9813.5  | 9813.5  | 9813.5  | 9813.5  | 9813.5  | 9813.5  |
| 2.5°  | 9426.4  | 9445.1  | 9423.2  | 9451.3  | 9498.2  | 9548.1  | 9582.5  | 9632.4  | 9688.6  | 9766.7  | 9785.4  |
| 5°    | 8983.0  | 9011.1  | 9011.1  | 9061.1  | 9151.6  | 9232.8  | 9307.7  | 9388.9  | 9507.5  | 9641.8  | 9694.9  |
| 7.5°  | 8495.9  | 8511.5  | 8539.6  | 8614.6  | 8745.7  | 8861.2  | 8967.4  | 9098.5  | 9260.9  | 9438.9  | 9532.5  |
| 10°   | 7908.9  | 7930.8  | 7974.5  | 8080.6  | 8258.6  | 8417.8  | 8570.8  | 8751.9  | 8958.0  | 9179.7  | 9298.4  |
| 12.5° | 7493.6  | 7487.4  | 7506.1  | 7584.2  | 7740.3  | 7933.9  | 8155.6  | 8386.6  | 8639.5  | 8898.7  | 9042.3  |
| 15°   | 7353.1  | 7318.8  | 7247.0  | 7228.2  | 7312.5  | 7506.1  | 7762.2  | 8046.3  | 8349.2  | 8661.4  | 8839.4  |
| 17.5° | 7440.6  | 7381.2  | 7184.5  | 7040.9  | 7028.4  | 7175.2  | 7446.8  | 7765.3  | 8115.0  | 8495.9  | 8717.6  |
| 20°   | 7990.1  | 7849.6  | 7365.6  | 7031.5  | 6916.0  | 6987.8  | 7225.1  | 7562.3  | 7974.5  | 8480.3  | 8764.4  |
| 22.5° | 9304.6  | 9098.5  | 8071.3  | 7449.9  | 7059.6  | 6972.2  | 7150.2  | 7509.2  | 7990.1  | 8673.9  | 9036.1  |
| 25°   | 11218.6 | 10925.1 | 9282.7  | 8492.8  | 7687.2  | 7222.0  | 7262.6  | 7631.0  | 8211.8  | 9123.5  | 9560.6  |
| 27.5° | 12729.8 | 12539.3 | 10865.8 | 9963.4  | 8830.0  | 7896.4  | 7627.9  | 7937.0  | 8664.5  | 9860.4  | 10306.9 |
| 30°   | 13629.0 | 13513.5 | 12558.1 | 11630.7 | 10288.1 | 8970.5  | 8327.3  | 8511.5  | 9373.3  | 10881.4 | 11249.8 |
| 32.5° | 14671.9 | 14603.2 | 14134.9 | 13282.5 | 11861.8 | 10381.8 | 9435.7  | 9370.2  | 10322.5 | 12108.5 | 12277.1 |
| 35°   | 15752.2 | 15730.4 | 15455.6 | 14843.6 | 13551.0 | 12242.7 | 10906.4 | 10463.0 | 11356.0 | 13382.4 | 13276.2 |
| 37.5° | 16757.6 | 16720.2 | 16560.9 | 16205.0 | 15318.2 | 14241.0 | 12405.1 | 11583.9 | 12470.7 | 14600.1 | 14128.6 |
| 40°   | 18609.2 | 18315.7 | 17769.3 | 17500.8 | 17104.2 | 15924.0 | 13594.7 | 12629.9 | 13625.9 | 15761.6 | 14865.5 |
| 42.5° | 20866.6 | 20388.9 | 19371.0 | 19002.6 | 18946.4 | 17251.0 | 14406.5 | 13644.7 | 14790.6 | 16913.8 | 15589.9 |
| 45°   | 22643.3 | 22193.6 | 21316.3 | 20851.0 | 21057.1 | 18453.1 | 15221.4 | 14728.1 | 15989.5 | 18122.1 | 16336.1 |
| 47.5° | 24538.5 | 23832.9 | 22671.4 | 22811.9 | 23261.5 | 19589.6 | 16052.0 | 15892.7 | 17304.0 | 19474.1 | 17263.5 |
| 50°   | 24607.2 | 24067.1 | 23558.1 | 24398.0 | 25097.4 | 20635.6 | 17091.7 | 17113.6 | 18912.1 | 21175.8 | 18496.8 |
| 52.5° | 23180.3 | 23064.8 | 23873.5 | 25194.2 | 26202.7 | 21463.0 | 18275.1 | 18375.0 | 20969.7 | 23130.3 | 19851.9 |
| 55°   | 22680.7 | 22549.6 | 23483.2 | 24916.3 | 26352.6 | 22146.8 | 19558.4 | 19739.5 | 23458.2 | 25191.1 | 21172.6 |
| 57.5° | 23898.4 | 23608.1 | 23670.5 | 24785.2 | 25987.3 | 22896.2 | 20957.2 | 21322.5 | 26162.1 | 26992.7 | 22021.9 |
| 60°   | 27301.8 | 26680.5 | 25500.2 | 25472.1 | 26184.0 | 24020.2 | 22574.6 | 23021.1 | 28972.3 | 27854.5 | 21690.9 |
| 62.5° | 32075.9 | 31454.5 | 29243.9 | 27804.5 | 27698.3 | 25874.9 | 24560.4 | 24679.0 | 30595.9 | 26686.7 | 19670.8 |
| 65°   | 37243.4 | 36687.6 | 34217.8 | 32185.2 | 31204.7 | 28947.3 | 26867.8 | 25419.0 | 30065.1 | 23473.8 | 16136.3 |
| 67.5° | 43516.2 | 42919.8 | 40796.6 | 38920.1 | 37977.1 | 33905.6 | 28488.3 | 24710.3 | 26696.1 | 18184.6 | 11599.5 |
| 70°   | 47903.1 | 47294.2 | 46457.4 | 47978.0 | 50285.4 | 41058.9 | 28697.5 | 21828.3 | 19939.3 | 12086.6 | 6981.6  |
| 72.5° | 42179.8 | 41895.7 | 43422.5 | 49826.4 | 59437.0 | 45398.9 | 25940.5 | 15892.7 | 11580.8 | 6416.4  | 4040.3  |
| 73°   | 38645.3 | 38582.8 | 41186.9 | 48530.6 | 59502.6 | 44730.7 | 24732.1 | 14771.8 | 9932.2  | 5676.4  | 3693.7  |
| 75°   | 17450.8 | 17953.5 | 23661.1 | 37068.5 | 51696.7 | 36859.3 | 17407.1 | 8474.1  | 5610.9  | 3921.7  | 2788.3  |
| 77.5° | 4193.3  | 4368.2  | 7403.1  | 17603.8 | 32647.3 | 21965.7 | 7887.0  | 4190.2  | 3587.6  | 2769.5  | 2035.8  |
| 80°   | 1786.0  | 1845.3  | 2850.7  | 6503.8  | 15371.3 | 8845.6  | 3634.4  | 2807.0  | 2482.3  | 1932.7  | 1426.9  |
| 82.5° | 992.9   | 1055.4  | 1617.4  | 2950.6  | 6204.1  | 3016.2  | 2216.9  | 1954.6  | 1633.0  | 1164.6  | 927.3   |
| 85°   | 562.0   | 596.4   | 946.1   | 1648.6  | 2629.0  | 1211.5  | 1327.0  | 1298.9  | 921.1   | 599.5   | 455.9   |
| 87.5° | 265.4   | 287.3   | 455.9   | 765.0   | 1030.4  | 474.6   | 674.4   | 743.1   | 577.6   | 365.3   | 237.3   |
| 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):**

|       | 95°     | 105°   | 115°   | 125°    | 135°    | 145°    | 155°    | 165°    | 175°    | 180°    |
|-------|---------|--------|--------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 9813.5  | 9813.5 | 9813.5 | 9813.5  | 9813.5  | 9813.5  | 9813.5  | 9813.5  | 9813.5  | 9813.5  |
| 2.5°  | 9807.3  | 9863.5 | 9929.1 | 9963.4  | 9994.6  | 10032.1 | 10069.6 | 10069.6 | 10075.8 | 10078.9 |
| 5°    | 9738.6  | 9854.1 | 9957.2 | 10000.9 | 10010.2 | 10010.2 | 10000.9 | 9950.9  | 9907.2  | 9925.9  |
| 7.5°  | 9595.0  | 9763.6 | 9851.0 | 9835.4  | 9716.7  | 9579.4  | 9463.8  | 9323.3  | 9251.5  | 9239.0  |
| 10°   | 9388.9  | 9582.5 | 9598.1 | 9442.0  | 9148.5  | 8855.0  | 8611.4  | 8374.1  | 8261.7  | 8233.6  |
| 12.5° | 9161.0  | 9338.9 | 9239.0 | 8917.4  | 8445.9  | 8018.2  | 7709.1  | 7468.7  | 7362.5  | 7334.4  |
| 15°   | 8976.7  | 9098.5 | 8845.6 | 8339.8  | 7746.5  | 7293.8  | 7037.8  | 6859.8  | 6784.9  | 6763.0  |
| 17.5° | 8880.0  | 8904.9 | 8442.8 | 7759.0  | 7128.3  | 6750.5  | 6591.3  | 6507.0  | 6478.9  | 6463.3  |
| 20°   | 8926.8  | 8751.9 | 8058.8 | 7218.9  | 6622.5  | 6357.1  | 6319.6  | 6297.8  | 6291.5  | 6282.2  |
| 22.5° | 9161.0  | 8705.1 | 7706.0 | 6706.8  | 6179.1  | 6063.6  | 6094.8  | 6091.7  | 6085.5  | 6079.2  |
| 25°   | 9579.4  | 8745.7 | 7362.5 | 6219.7  | 5807.6  | 5782.6  | 5838.8  | 5838.8  | 5813.8  | 5813.8  |
| 27.5° | 10132.0 | 8830.0 | 6978.4 | 5757.6  | 5470.4  | 5473.5  | 5517.2  | 5504.7  | 5476.6  | 5457.9  |
| 30°   | 10806.4 | 8883.1 | 6528.8 | 5342.3  | 5155.0  | 5142.5  | 5155.0  | 5101.9  | 5017.6  | 5011.4  |
| 32.5° | 11496.5 | 8817.5 | 6007.4 | 4973.9  | 4820.9  | 4792.8  | 4783.4  | 4708.5  | 4611.7  | 4583.6  |
| 35°   | 12121.0 | 8577.1 | 5476.6 | 4680.4  | 4502.4  | 4440.0  | 4483.7  | 4458.7  | 4371.3  | 4349.4  |
| 37.5° | 12576.8 | 8130.6 | 4998.9 | 4421.2  | 4274.5  | 4258.9  | 4287.0  | 4296.4  | 4193.3  | 4171.5  |
| 40°   | 12882.8 | 7524.9 | 4589.9 | 4202.7  | 4230.8  | 4171.5  | 4077.8  | 4012.2  | 3981.0  | 3971.6  |
| 42.5° | 13129.5 | 6894.1 | 4246.4 | 4099.6  | 4240.1  | 4068.4  | 3865.5  | 3759.3  | 3815.5  | 3840.5  |
| 45°   | 13413.6 | 6279.0 | 3959.1 | 3971.6  | 4193.3  | 3949.8  | 3718.7  | 3615.7  | 3637.5  | 3643.8  |
| 47.5° | 13803.9 | 5529.7 | 3650.0 | 3765.6  | 4037.2  | 3868.6  | 3628.2  | 3481.4  | 3378.4  | 3331.5  |
| 50°   | 14344.1 | 4642.9 | 3328.4 | 3534.5  | 3884.2  | 3809.3  | 3487.7  | 3331.5  | 3141.1  | 3097.4  |
| 52.5° | 14718.7 | 3815.5 | 3063.0 | 3340.9  | 3746.8  | 3690.6  | 3375.3  | 3172.3  | 2972.5  | 2935.0  |
| 55°   | 14515.8 | 3169.2 | 2832.0 | 3125.5  | 3565.7  | 3543.9  | 3281.6  | 3009.9  | 2853.8  | 2822.6  |
| 57.5° | 13501.0 | 2760.2 | 2654.0 | 2922.5  | 3344.0  | 3419.0  | 3156.7  | 2872.6  | 2760.2  | 2738.3  |
| 60°   | 11565.2 | 2504.1 | 2541.6 | 2785.1  | 3162.9  | 3294.1  | 3031.8  | 2797.6  | 2722.7  | 2707.1  |
| 62.5° | 8973.6  | 2332.4 | 2457.3 | 2685.2  | 3022.4  | 3206.7  | 2963.1  | 2788.3  | 2760.2  | 2741.4  |
| 65°   | 6428.9  | 2195.0 | 2366.7 | 2585.3  | 2894.4  | 3125.5  | 2938.1  | 2775.8  | 2782.0  | 2766.4  |
| 67.5° | 4368.2  | 2073.2 | 2257.5 | 2472.9  | 2769.5  | 3053.7  | 2903.8  | 2732.1  | 2810.1  | 2791.4  |
| 70°   | 3056.8  | 1954.6 | 2129.4 | 2329.3  | 2613.4  | 2953.7  | 2841.3  | 2666.5  | 2660.2  | 2585.3  |
| 72.5° | 2385.5  | 1798.5 | 1954.6 | 2129.4  | 2413.6  | 2813.2  | 2716.4  | 2519.7  | 2416.7  | 2338.6  |
| 73°   | 2276.2  | 1761.0 | 1910.9 | 2085.7  | 2369.9  | 2778.9  | 2682.1  | 2479.1  | 2363.6  | 2291.8  |
| 75°   | 1882.8  | 1598.6 | 1736.0 | 1892.1  | 2182.5  | 2616.5  | 2513.5  | 2294.9  | 2148.2  | 2104.5  |
| 77.5° | 1480.0  | 1367.6 | 1498.7 | 1639.2  | 1923.4  | 2379.2  | 2263.7  | 2054.5  | 1973.3  | 1935.9  |
| 80°   | 1095.9  | 1133.4 | 1248.9 | 1373.8  | 1667.3  | 2126.3  | 2023.3  | 1814.1  | 2176.3  | 2085.7  |
| 82.5° | 771.2   | 858.6  | 964.8  | 1077.2  | 1398.8  | 1879.7  | 1754.8  | 1539.3  | 1592.4  | 1323.9  |
| 85°   | 455.9   | 562.0  | 661.9  | 758.7   | 1008.5  | 1558.1  | 1448.8  | 1227.1  | 1005.4  | 958.6   |
| 87.5° | 265.4   | 312.2  | 340.3  | 440.3   | 693.2   | 1174.0  | 1021.0  | 908.6   | 521.4   | 352.8   |
| 90°   | 0.0     | 0.0    | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)