

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: P193601

Luminaire Tested: **GLEON-AF-03-LED-E1-SL2-8030-1200-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P193601
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLEON-AF-03-LED-E1-SL2-8030-1200-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13474 lumens
Efficiency: N/A
Efficacy: 70.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G2

Input Watts (W): 191
Input Voltage (V): NR
Input Current (A_{in}): 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

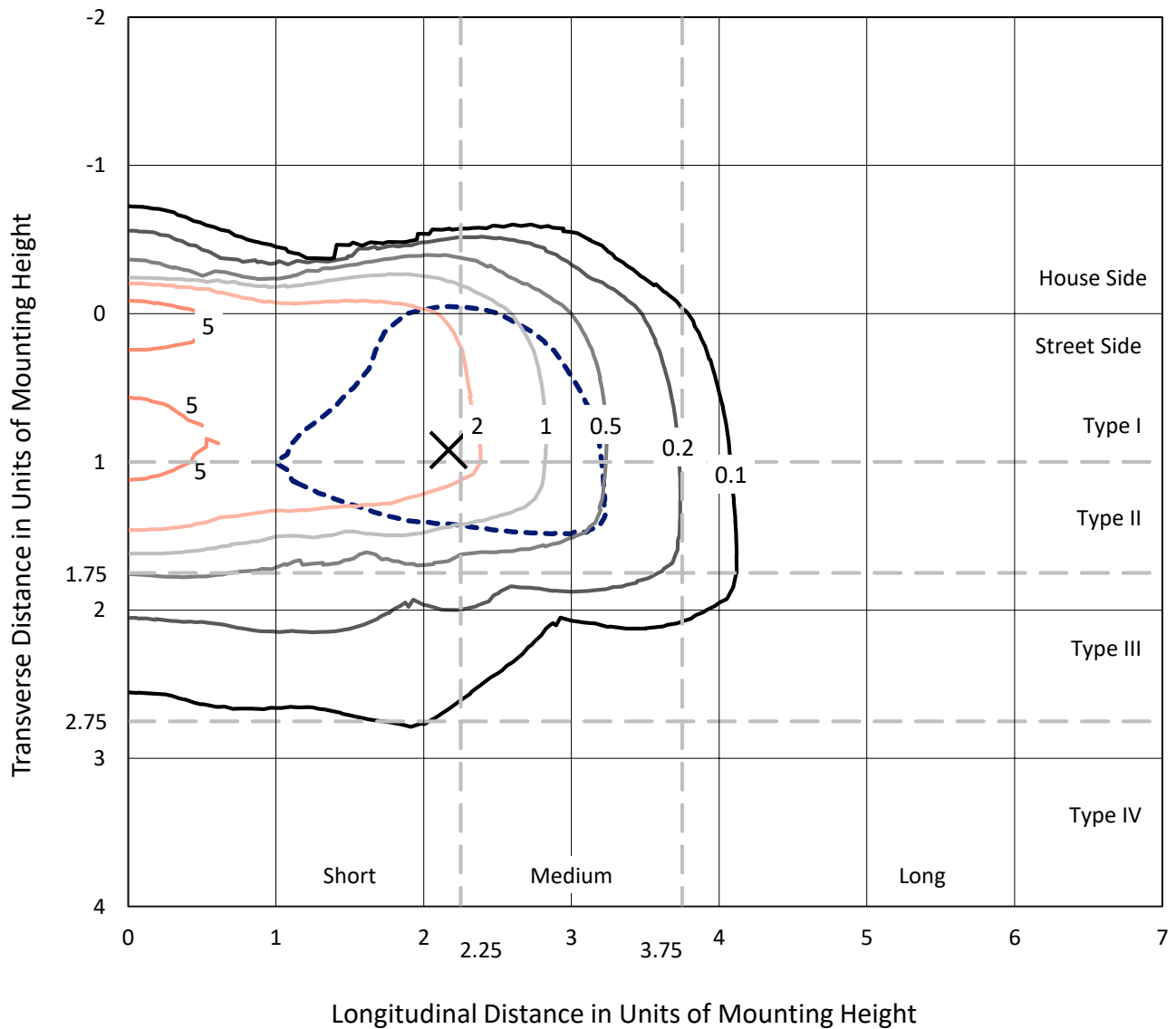


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Iso-Footcandle Lines of Horizontal Illumination

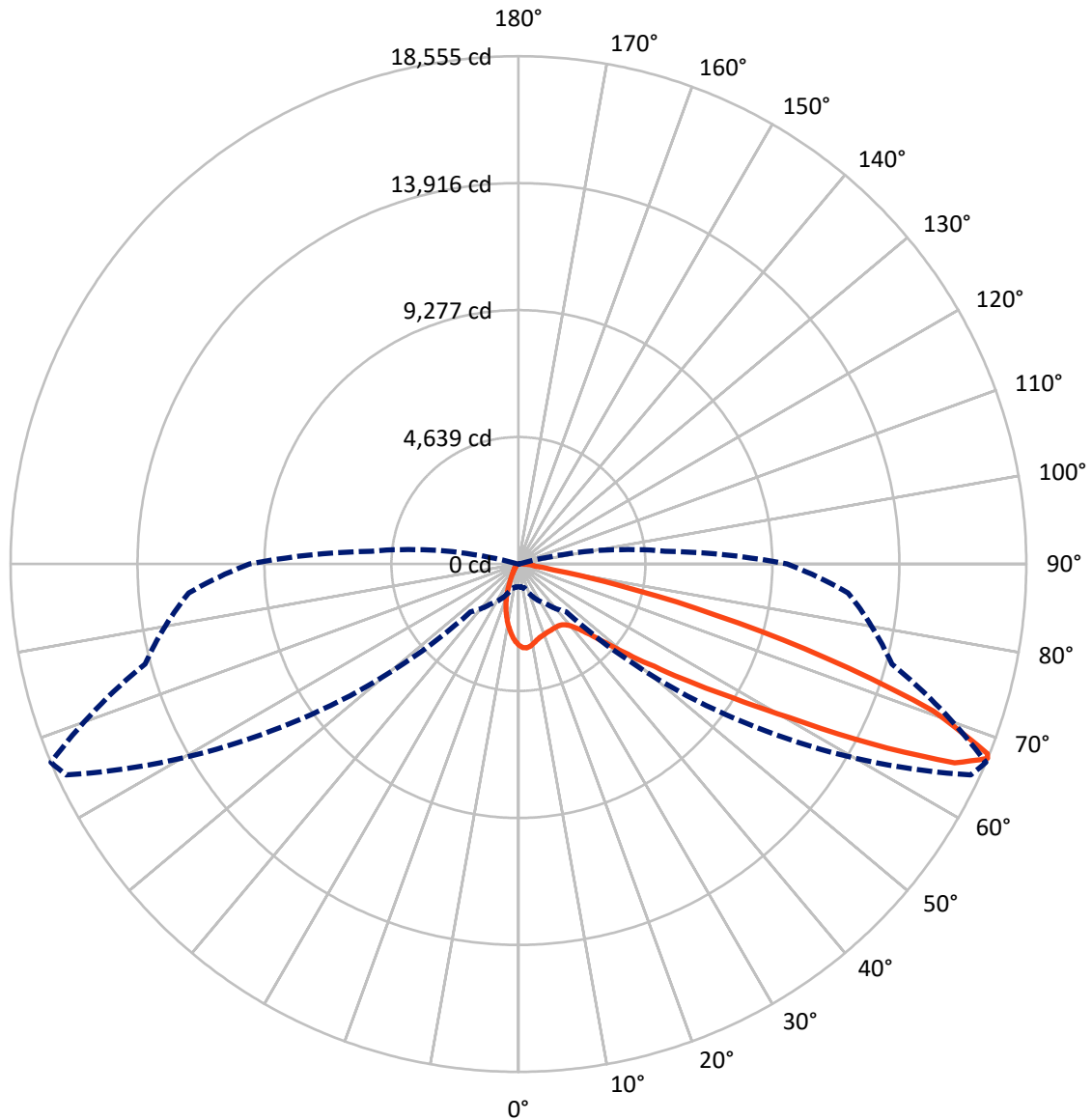
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.4 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1399.0 | 0.0 | 1399.0 |
| | % Fixture | 10.4 | 0.0 | 10.4 |
| Street Side | Lumens | 12075.0 | 0.0 | 12075.0 |
| | % Fixture | 89.6 | 0.0 | 89.6 |
| Total | Lumens | 13474.0 | 0.0 | 13474.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 241.8 | 1.8 |
| 10°-20° | 514.6 | 3.8 |
| 20°-30° | 748.2 | 5.6 |
| 30°-40° | 1167.2 | 8.7 |
| 40°-50° | 2067.7 | 15.3 |
| 50°-60° | 3271.9 | 24.3 |
| 60°-70° | 3747.5 | 27.8 |
| 70°-80° | 1554.4 | 11.5 |
| 80°-90° | 160.6 | 1.2 |
| 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° | 13474.0 | 100.0 |
| 0°-180° | 13474.0 | 100.0 |



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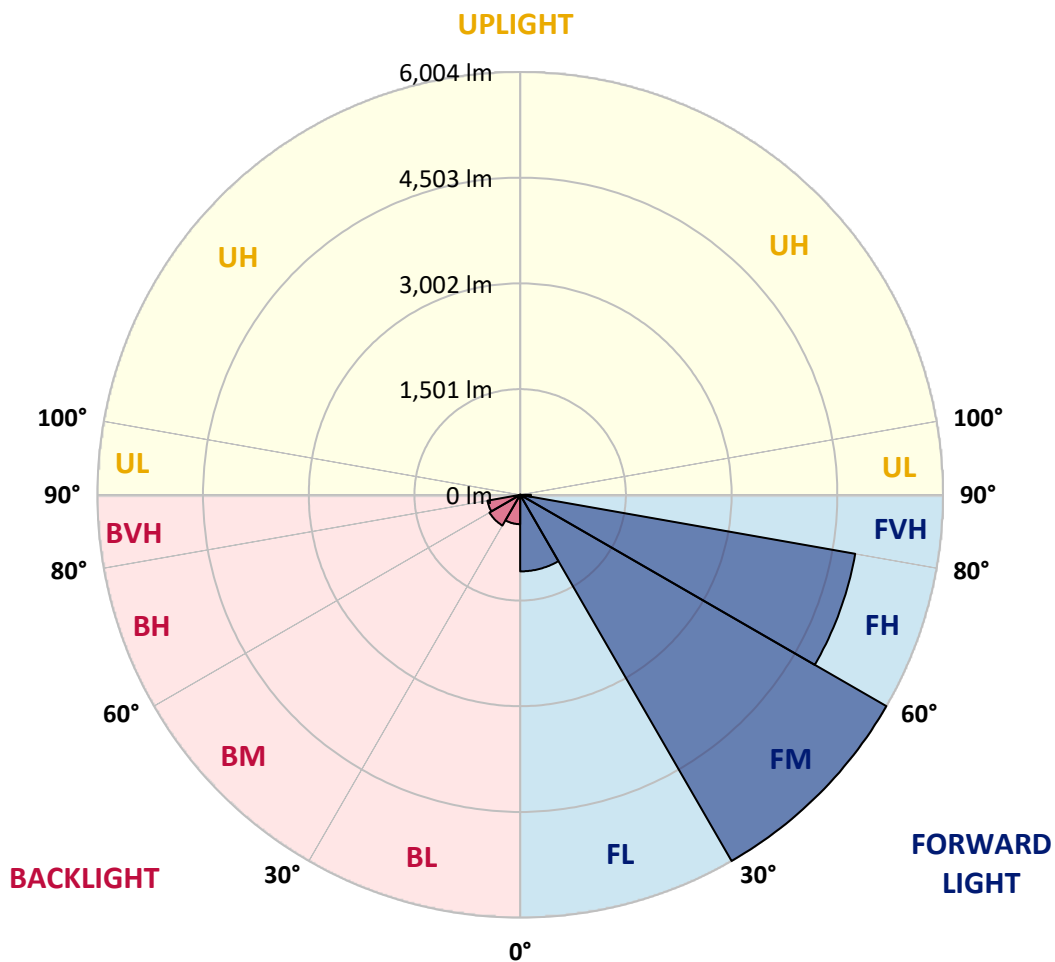
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1087.1 | 8.1 | | | |
| FM (30°-60°) | 6004.0 | 44.6 | | | |
| FH (60°-80°) | 4830.5 | 35.9 | | | G2/5000 |
| FVH (80°-90°) | 153.3 | 1.1 | | | G2/225 |
| BL (0°-30°) | 417.5 | 3.1 | B1/500 | | |
| BM (30°-60°) | 502.8 | 3.7 | B1/1000 | | |
| BH (60°-80°) | 471.5 | 3.5 | B1/500 | | G1/500 |
| BVH (80°-90°) | 7.2 | 0.1 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 67° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| 0° | 2971.5 | 2971.5 | 2971.5 | 2971.5 | 2971.5 | 2971.5 | 2971.5 | 2971.5 | 2971.5 | 2971.5 | 2971.5 |
| 2.5° | 3072.1 | 3078.4 | 3077.6 | 3082.3 | 3093.3 | 3094.1 | 3083.1 | 3061.9 | 3057.2 | 3029.7 | 2981.7 |
| 5° | 2833.2 | 2851.3 | 2862.3 | 2907.1 | 2957.4 | 3017.9 | 3063.5 | 3080.0 | 3077.6 | 3058.0 | 2985.7 |
| 7.5° | 2560.5 | 2578.6 | 2591.1 | 2643.8 | 2710.6 | 2814.3 | 2933.0 | 3030.5 | 3039.1 | 3060.3 | 2982.5 |
| 10° | 2378.9 | 2382.1 | 2399.4 | 2449.7 | 2519.6 | 2625.7 | 2767.2 | 2937.7 | 2963.7 | 3041.5 | 2974.7 |
| 12.5° | 2229.6 | 2232.0 | 2254.8 | 2309.0 | 2383.7 | 2490.5 | 2639.1 | 2836.3 | 2876.4 | 3017.9 | 2973.1 |
| 15° | 2123.5 | 2132.2 | 2152.6 | 2209.2 | 2288.6 | 2394.7 | 2547.1 | 2761.7 | 2809.6 | 3009.2 | 2987.2 |
| 17.5° | 2088.2 | 2097.6 | 2103.9 | 2144.7 | 2217.0 | 2320.8 | 2477.2 | 2713.0 | 2767.2 | 3014.0 | 3014.7 |
| 20° | 2125.1 | 2132.2 | 2118.0 | 2128.2 | 2173.0 | 2265.8 | 2418.2 | 2671.3 | 2735.7 | 3019.5 | 3050.1 |
| 22.5° | 2262.6 | 2265.8 | 2227.3 | 2182.5 | 2174.6 | 2225.7 | 2371.9 | 2638.3 | 2707.4 | 3034.4 | 3091.8 |
| 25° | 2498.4 | 2492.9 | 2430.0 | 2333.4 | 2242.2 | 2218.6 | 2344.4 | 2617.9 | 2693.3 | 3050.1 | 3135.0 |
| 27.5° | 2782.9 | 2790.8 | 2704.3 | 2563.6 | 2389.9 | 2265.8 | 2340.4 | 2609.2 | 2687.0 | 3061.1 | 3172.7 |
| 30° | 3128.7 | 3139.7 | 3040.7 | 2863.8 | 2614.7 | 2382.1 | 2376.6 | 2607.6 | 2683.1 | 3054.0 | 3175.9 |
| 32.5° | 3481.6 | 3494.9 | 3417.1 | 3234.8 | 2914.9 | 2577.0 | 2458.3 | 2624.9 | 2690.9 | 3029.7 | 3157.8 |
| 35° | 3850.9 | 3869.8 | 3817.9 | 3661.5 | 3322.0 | 2858.3 | 2602.1 | 2677.6 | 2727.9 | 3027.3 | 3139.7 |
| 37.5° | 4361.0 | 4378.3 | 4280.8 | 4115.0 | 3814.8 | 3235.6 | 2833.2 | 2776.6 | 2815.1 | 3065.0 | 3144.4 |
| 40° | 5122.5 | 5120.2 | 4868.7 | 4614.8 | 4356.3 | 3715.0 | 3157.8 | 2955.8 | 2975.4 | 3179.0 | 3202.6 |
| 42.5° | 5952.5 | 5948.5 | 5576.8 | 5190.9 | 4957.5 | 4305.2 | 3584.5 | 3265.4 | 3252.1 | 3388.8 | 3353.5 |
| 45° | 6592.2 | 6591.4 | 6288.0 | 5853.4 | 5681.3 | 4982.7 | 4136.2 | 3696.1 | 3675.7 | 3729.9 | 3631.7 |
| 47.5° | 6864.9 | 6869.6 | 6717.1 | 6411.4 | 6483.7 | 5899.0 | 4831.8 | 4320.1 | 4289.5 | 4267.5 | 4118.2 |
| 50° | 6652.7 | 6662.1 | 6674.7 | 6615.0 | 7072.4 | 7130.5 | 5764.6 | 5199.6 | 5184.6 | 5086.4 | 4853.0 |
| 52.5° | 5959.5 | 6007.5 | 6155.2 | 6344.6 | 7276.7 | 8312.5 | 7227.2 | 6292.0 | 6211.8 | 6107.3 | 5850.3 |
| 55° | 4791.7 | 4844.3 | 5124.9 | 5584.7 | 6972.6 | 9089.0 | 9276.8 | 7700.3 | 7566.7 | 7254.7 | 6883.8 |
| 57.5° | 3171.1 | 3252.9 | 3660.0 | 4244.7 | 6089.2 | 9214.0 | 11321.8 | 9654.9 | 9189.6 | 8335.3 | 7917.2 |
| 60° | 1747.1 | 1825.7 | 2267.3 | 2797.0 | 4397.9 | 8596.3 | 12697.1 | 12199.6 | 11377.6 | 9543.3 | 9172.3 |
| 62.5° | 1075.9 | 1118.3 | 1444.5 | 1937.3 | 2637.5 | 6784.7 | 12981.6 | 15397.5 | 14445.8 | 11098.6 | 10688.3 |
| 65° | 856.6 | 874.7 | 1034.3 | 1583.6 | 1890.9 | 4035.6 | 12062.9 | 17835.4 | 17517.9 | 12981.6 | 12045.6 |
| 67° | 831.5 | 838.6 | 914.0 | 1359.6 | 1782.4 | 2474.0 | 10106.0 | 18232.3 | 18554.5 | 14121.2 | 12088.0 |
| 67.5° | 837.0 | 844.9 | 916.4 | 1297.5 | 1779.3 | 2273.6 | 9431.7 | 18075.9 | 18483.0 | 14211.6 | 11900.2 |
| 70° | 807.1 | 831.5 | 1049.2 | 1296.7 | 1692.1 | 1889.3 | 5648.3 | 15661.6 | 16085.2 | 13204.8 | 10097.3 |
| 72.5° | 286.1 | 287.6 | 453.5 | 1049.2 | 1839.8 | 1909.8 | 2836.3 | 11481.3 | 11794.9 | 10101.3 | 7279.9 |
| 75° | 169.8 | 144.6 | 150.9 | 298.6 | 1758.1 | 1854.7 | 1636.3 | 7336.4 | 7453.5 | 5788.2 | 3686.7 |
| 77.5° | 117.1 | 102.2 | 105.3 | 132.0 | 669.6 | 1828.8 | 1299.9 | 3825.8 | 3700.8 | 2030.0 | 785.1 |
| 80° | 66.8 | 58.9 | 62.9 | 115.5 | 243.6 | 1706.2 | 1226.0 | 1551.4 | 1322.7 | 344.2 | 216.9 |
| 82.5° | 35.4 | 29.9 | 36.2 | 95.1 | 169.8 | 1063.3 | 1228.4 | 749.8 | 594.1 | 116.3 | 147.8 |
| 85° | 12.6 | 10.2 | 17.3 | 65.2 | 113.2 | 326.2 | 1138.8 | 630.3 | 495.1 | 56.6 | 112.4 |
| 87.5° | 2.4 | 2.4 | 7.1 | 26.7 | 45.6 | 99.8 | 673.5 | 374.1 | 250.7 | 33.8 | 77.0 |
| 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° | 2971.5 | 2971.5 | 2971.5 | 2971.5 | 2971.5 | 2971.5 | 2971.5 | 2971.5 | 2971.5 | 2971.5 | 2971.5 |
| 2.5° | 2962.1 | 2928.3 | 2882.7 | 2826.9 | 2760.9 | 2702.7 | 2659.5 | 2614.7 | 2605.3 | 2589.6 | 2587.2 |
| 5° | 2942.4 | 2884.3 | 2771.1 | 2641.4 | 2503.1 | 2378.2 | 2276.8 | 2186.4 | 2146.3 | 2111.7 | 2107.8 |
| 7.5° | 2913.4 | 2826.1 | 2633.6 | 2424.5 | 2208.4 | 2011.9 | 1845.3 | 1727.4 | 1619.0 | 1567.1 | 1559.2 |
| 10° | 2879.6 | 2754.6 | 2478.8 | 2188.8 | 1890.1 | 1612.7 | 1365.1 | 1157.6 | 1031.9 | 957.2 | 947.8 |
| 12.5° | 2848.1 | 2684.7 | 2320.8 | 1944.3 | 1547.5 | 1176.5 | 858.2 | 660.2 | 528.1 | 474.7 | 468.4 |
| 15° | 2833.2 | 2628.1 | 2173.0 | 1694.4 | 1189.1 | 749.0 | 469.2 | 363.1 | 319.9 | 307.3 | 306.5 |
| 17.5° | 2831.6 | 2580.1 | 2028.4 | 1435.9 | 833.1 | 435.4 | 305.7 | 279.0 | 270.4 | 267.2 | 267.2 |
| 20° | 2830.8 | 2534.6 | 1883.8 | 1167.9 | 528.9 | 290.0 | 254.6 | 248.3 | 242.1 | 238.1 | 238.1 |
| 22.5° | 2839.5 | 2493.7 | 1732.9 | 894.4 | 333.2 | 235.0 | 224.0 | 217.7 | 209.8 | 204.3 | 203.5 |
| 25° | 2848.1 | 2462.2 | 1578.9 | 636.6 | 241.3 | 204.3 | 193.3 | 184.7 | 173.7 | 166.6 | 165.8 |
| 27.5° | 2849.7 | 2423.0 | 1413.8 | 426.0 | 202.0 | 178.4 | 164.3 | 150.9 | 138.3 | 131.2 | 130.5 |
| 30° | 2826.1 | 2356.9 | 1230.7 | 287.6 | 178.4 | 154.8 | 136.0 | 121.8 | 110.0 | 104.5 | 104.5 |
| 32.5° | 2779.8 | 2275.2 | 1029.5 | 216.9 | 158.8 | 132.8 | 112.4 | 99.0 | 91.2 | 88.8 | 88.0 |
| 35° | 2738.1 | 2187.2 | 822.8 | 183.9 | 142.2 | 112.4 | 92.0 | 83.3 | 78.6 | 77.8 | 77.0 |
| 37.5° | 2713.7 | 2116.4 | 628.7 | 166.6 | 126.5 | 94.3 | 77.8 | 71.5 | 69.2 | 67.6 | 68.4 |
| 40° | 2732.6 | 2057.5 | 464.5 | 152.5 | 110.8 | 78.6 | 66.0 | 62.9 | 60.5 | 59.7 | 59.7 |
| 42.5° | 2815.1 | 2047.3 | 345.0 | 139.9 | 95.9 | 65.2 | 57.4 | 55.0 | 53.4 | 52.7 | 53.4 |
| 45° | 3032.0 | 2110.2 | 268.0 | 128.1 | 80.9 | 55.0 | 48.7 | 47.9 | 47.2 | 47.2 | 47.2 |
| 47.5° | 3358.2 | 2239.8 | 223.2 | 114.7 | 67.6 | 47.2 | 42.4 | 41.7 | 40.9 | 41.7 | 41.7 |
| 50° | 3910.7 | 2477.2 | 199.6 | 101.4 | 55.8 | 40.1 | 36.2 | 36.2 | 36.2 | 36.2 | 36.9 |
| 52.5° | 4750.8 | 2944.0 | 183.9 | 88.0 | 45.6 | 33.8 | 30.7 | 30.7 | 31.4 | 31.4 | 32.2 |
| 55° | 5686.8 | 3563.3 | 169.8 | 74.7 | 38.5 | 28.3 | 25.1 | 25.9 | 26.7 | 27.5 | 27.5 |
| 57.5° | 6702.2 | 4249.4 | 158.0 | 61.3 | 33.0 | 22.8 | 21.2 | 22.0 | 22.8 | 24.4 | 24.4 |
| 60° | 7927.4 | 4992.1 | 140.7 | 47.9 | 27.5 | 18.1 | 16.5 | 18.1 | 20.4 | 22.0 | 22.8 |
| 62.5° | 9272.9 | 5710.4 | 118.7 | 37.7 | 22.8 | 14.1 | 13.4 | 16.5 | 19.6 | 21.2 | 22.0 |
| 65° | 10192.4 | 5936.0 | 91.2 | 30.7 | 17.3 | 10.2 | 11.0 | 14.9 | 18.9 | 21.2 | 21.2 |
| 67° | 9819.9 | 5381.9 | 74.7 | 25.9 | 14.1 | 7.9 | 10.2 | 14.9 | 18.9 | 20.4 | 21.2 |
| 67.5° | 9561.3 | 5165.0 | 71.5 | 25.1 | 13.4 | 7.9 | 10.2 | 14.9 | 18.9 | 21.2 | 21.2 |
| 70° | 7779.7 | 3880.0 | 59.7 | 18.9 | 11.0 | 7.1 | 8.6 | 14.1 | 18.1 | 20.4 | 20.4 |
| 72.5° | 5405.5 | 2392.3 | 53.4 | 13.4 | 9.4 | 6.3 | 7.9 | 13.4 | 17.3 | 19.6 | 20.4 |
| 75° | 2569.9 | 866.1 | 45.6 | 10.2 | 8.6 | 5.5 | 7.1 | 13.4 | 17.3 | 19.6 | 19.6 |
| 77.5° | 524.2 | 201.2 | 36.9 | 8.6 | 7.1 | 5.5 | 6.3 | 12.6 | 16.5 | 18.9 | 18.9 |
| 80° | 172.1 | 77.8 | 27.5 | 7.9 | 7.1 | 5.5 | 6.3 | 11.8 | 16.5 | 18.1 | 18.9 |
| 82.5° | 124.2 | 39.3 | 18.1 | 7.9 | 7.1 | 5.5 | 5.5 | 11.8 | 15.7 | 18.1 | 18.1 |
| 85° | 95.1 | 27.5 | 11.8 | 7.9 | 7.1 | 5.5 | 5.5 | 11.0 | 14.9 | 17.3 | 17.3 |
| 87.5° | 62.9 | 11.0 | 9.4 | 7.9 | 7.1 | 5.5 | 5.5 | 11.0 | 14.1 | 16.5 | 17.3 |
| 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)