

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: P452081

Luminaire Tested: **GALN-SA3A-730-U-SL2-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P452081
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA3A-730-U-SL2-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 3000K, 615mA 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: 10175 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

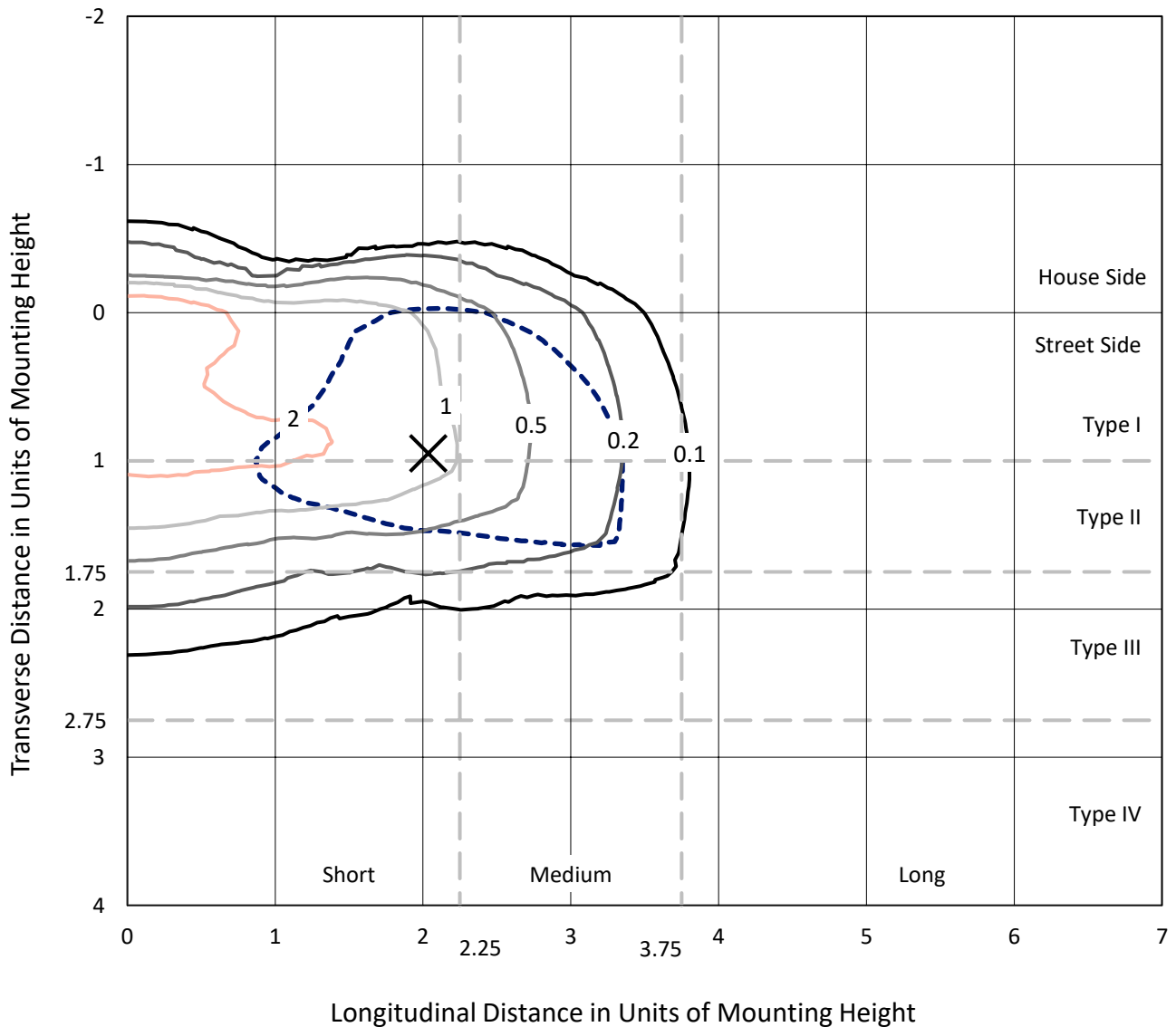
Input Watts (W): 93
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

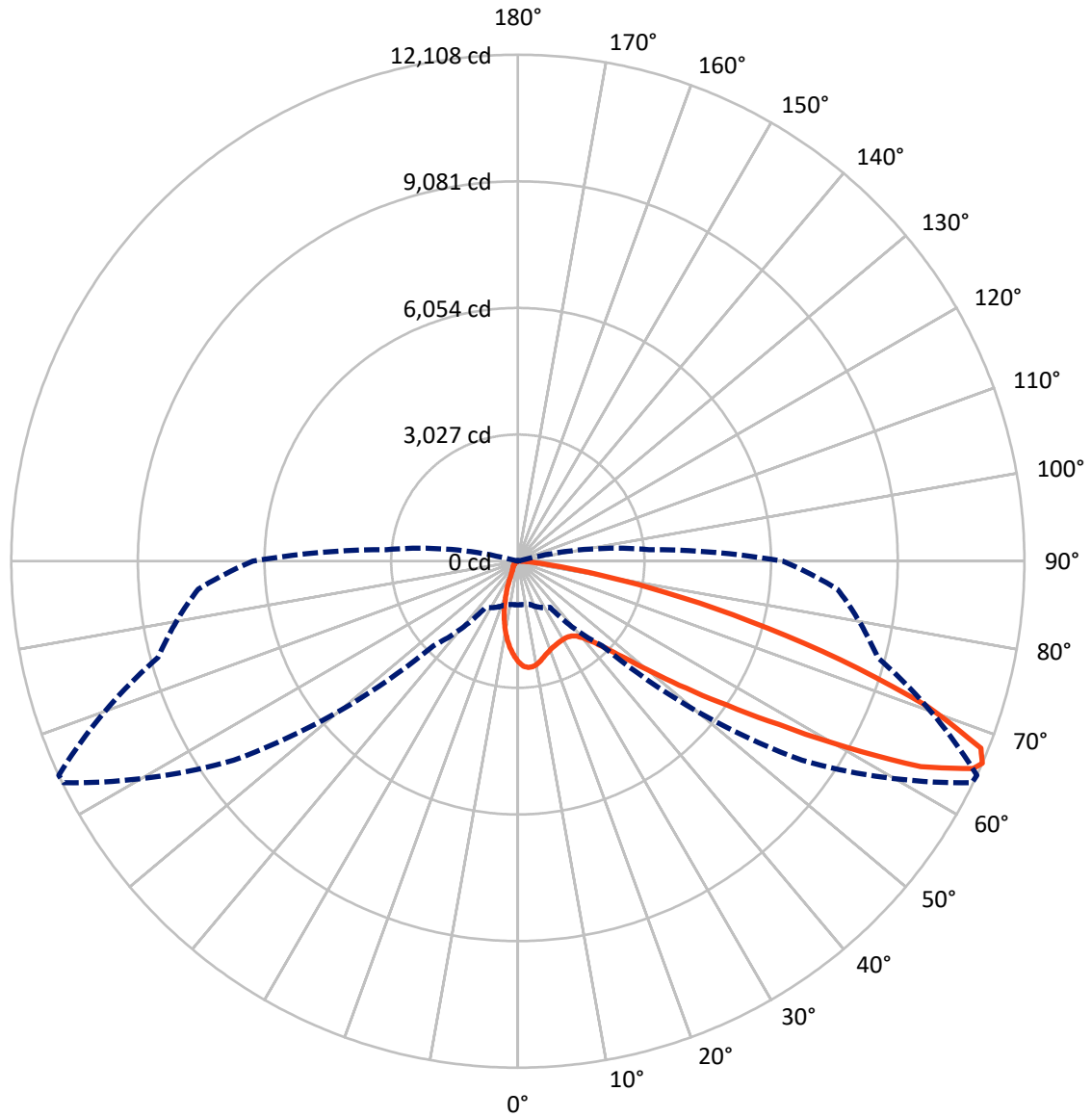
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1052.2 | 0.0 | 1052.2 |
| | % Fixture | 10.3 | 0.0 | 10.3 |
| Street Side | Lumens | 9122.8 | 0.0 | 9122.8 |
| | % Fixture | 89.7 | 0.0 | 89.7 |
| Total | Lumens | 10175.0 | 0.0 | 10175.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 197.3 | 1.9 |
| 10°-20° | 430.0 | 4.2 |
| 20°-30° | 615.9 | 6.1 |
| 30°-40° | 899.6 | 8.8 |
| 40°-50° | 1508.5 | 14.8 |
| 50°-60° | 2517.4 | 24.7 |
| 60°-70° | 2672.2 | 26.3 |
| 70°-80° | 1210.2 | 11.9 |
| 80°-90° | 123.8 | 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° | 10175.0 | 100.0 |
| 0°-180° | 10175.0 | 100.0 |

Coefficient of Utilization



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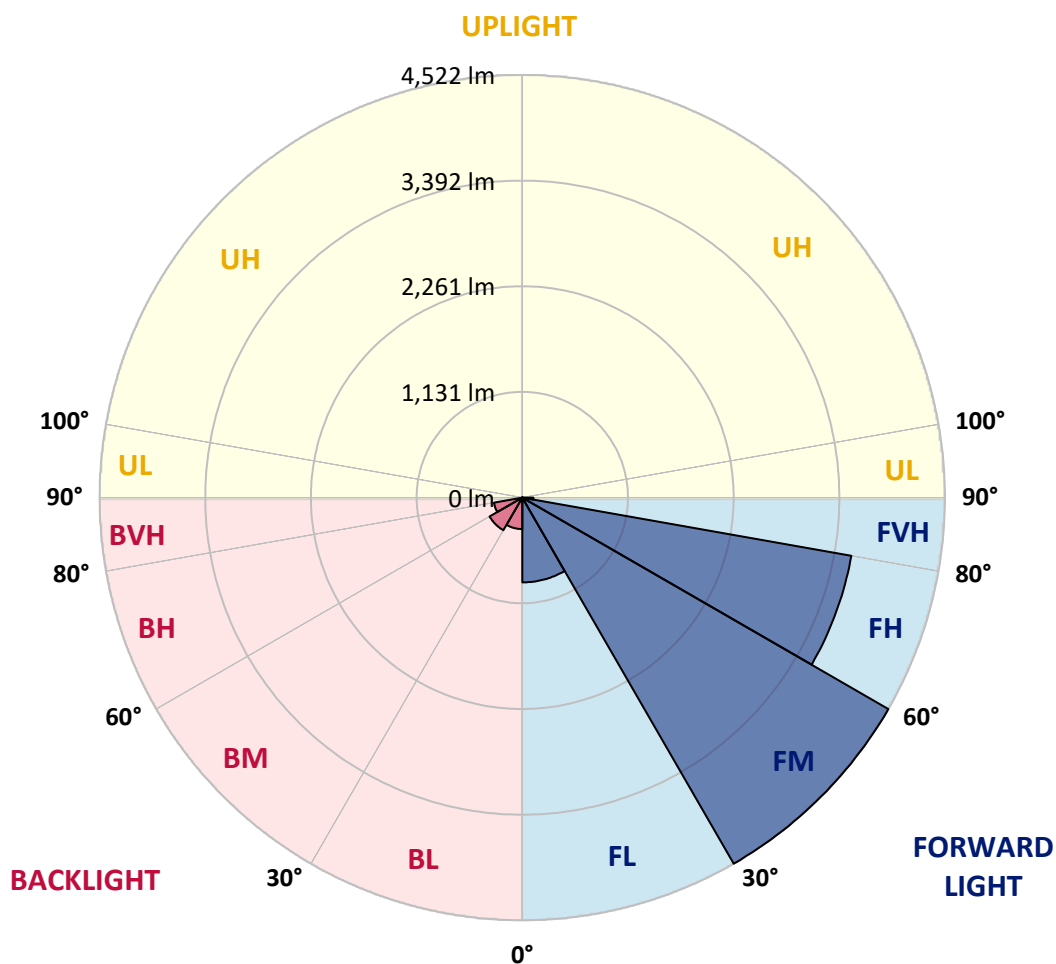
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 906.6 | 8.9 | | | |
| FM (30°-60°) | 4522.0 | 44.4 | | | |
| FH (60°-80°) | 3574.2 | 35.1 | | | G2/5000 |
| FVH (80°-90°) | 119.9 | 1.2 | | | G2/225 |
| BL (0°-30°) | 336.6 | 3.3 | B1/500 | | |
| BM (30°-60°) | 403.5 | 4.0 | B1/1000 | | |
| BH (60°-80°) | 308.2 | 3.0 | B1/500 | | G1/500 |
| BVH (80°-90°) | 3.9 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 64° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|--------|
| 0° | 2412.9 | 2412.9 | 2412.9 | 2412.9 | 2412.9 | 2412.9 | 2412.9 | 2412.9 | 2412.9 | 2412.9 | 2412.9 |
| 2.5° | 2542.8 | 2545.5 | 2548.9 | 2553.8 | 2557.2 | 2546.9 | 2532.4 | 2516.0 | 2512.5 | 2477.5 | 2434.9 |
| 5° | 2406.7 | 2410.8 | 2441.0 | 2457.5 | 2494.6 | 2528.3 | 2549.6 | 2552.4 | 2551.0 | 2518.0 | 2450.0 |
| 7.5° | 2212.9 | 2224.6 | 2254.1 | 2283.0 | 2352.4 | 2416.3 | 2491.9 | 2544.8 | 2548.3 | 2539.3 | 2454.8 |
| 10° | 2055.5 | 2063.1 | 2078.2 | 2135.2 | 2193.0 | 2290.5 | 2396.4 | 2496.0 | 2504.3 | 2540.0 | 2450.7 |
| 12.5° | 1932.5 | 1943.5 | 1962.0 | 2006.0 | 2075.4 | 2167.5 | 2287.8 | 2421.8 | 2439.0 | 2526.9 | 2439.0 |
| 15° | 1846.6 | 1852.1 | 1870.6 | 1913.9 | 1981.3 | 2066.5 | 2188.1 | 2344.1 | 2359.3 | 2509.8 | 2436.9 |
| 17.5° | 1806.0 | 1812.2 | 1825.3 | 1859.6 | 1915.3 | 1994.3 | 2113.2 | 2281.6 | 2300.8 | 2498.8 | 2444.5 |
| 20° | 1817.0 | 1822.5 | 1823.2 | 1841.1 | 1878.9 | 1945.6 | 2058.3 | 2223.2 | 2247.9 | 2491.9 | 2456.9 |
| 22.5° | 1879.6 | 1880.3 | 1872.0 | 1863.8 | 1876.8 | 1924.9 | 2024.6 | 2186.1 | 2211.5 | 2490.5 | 2471.3 |
| 25° | 1973.0 | 1975.1 | 1961.4 | 1932.5 | 1906.4 | 1931.1 | 2017.0 | 2162.0 | 2184.7 | 2487.1 | 2480.2 |
| 27.5° | 2102.2 | 2101.6 | 2097.4 | 2049.3 | 1975.1 | 1958.6 | 2023.2 | 2149.0 | 2168.2 | 2477.5 | 2483.7 |
| 30° | 2283.0 | 2277.5 | 2268.5 | 2214.3 | 2100.9 | 2025.3 | 2049.3 | 2140.7 | 2158.6 | 2463.7 | 2474.7 |
| 32.5° | 2461.0 | 2481.6 | 2480.2 | 2428.7 | 2287.1 | 2144.2 | 2103.6 | 2151.7 | 2164.8 | 2454.8 | 2461.7 |
| 35° | 2668.5 | 2667.8 | 2720.7 | 2701.5 | 2535.9 | 2296.0 | 2196.4 | 2188.1 | 2198.5 | 2461.0 | 2455.5 |
| 37.5° | 2860.9 | 2878.8 | 2961.3 | 2981.2 | 2830.0 | 2510.5 | 2327.7 | 2266.5 | 2269.9 | 2502.9 | 2470.6 |
| 40° | 3100.8 | 3135.1 | 3258.2 | 3324.8 | 3191.5 | 2828.6 | 2521.5 | 2410.1 | 2410.8 | 2606.0 | 2527.6 |
| 42.5° | 3410.0 | 3464.3 | 3579.1 | 3690.4 | 3619.0 | 3205.2 | 2812.1 | 2637.6 | 2636.2 | 2787.4 | 2658.2 |
| 45° | 3786.0 | 3823.8 | 3954.3 | 4130.9 | 4085.6 | 3731.0 | 3235.5 | 2990.1 | 2972.3 | 3085.0 | 2889.8 |
| 47.5° | 4110.3 | 4161.9 | 4294.5 | 4495.9 | 4702.0 | 4372.9 | 3741.3 | 3474.6 | 3463.0 | 3558.5 | 3287.0 |
| 50° | 4251.9 | 4297.3 | 4436.8 | 4719.2 | 5218.8 | 5215.4 | 4494.5 | 4181.8 | 4161.9 | 4213.4 | 3901.4 |
| 52.5° | 4096.6 | 4139.2 | 4280.1 | 4631.9 | 5462.1 | 6242.1 | 5585.8 | 5069.0 | 5045.0 | 4979.0 | 4635.4 |
| 55° | 3564.7 | 3599.7 | 3807.9 | 4212.0 | 5368.6 | 6926.6 | 7089.5 | 6165.1 | 6071.7 | 5815.3 | 5466.2 |
| 57.5° | 2838.3 | 2820.4 | 2949.6 | 3419.0 | 4820.2 | 7156.1 | 8633.0 | 7530.7 | 7363.7 | 6538.3 | 6169.3 |
| 60° | 1966.9 | 2021.8 | 2074.1 | 2383.3 | 3624.5 | 6758.2 | 9593.1 | 9247.4 | 9027.5 | 7249.6 | 6842.8 |
| 62.5° | 1445.9 | 1482.4 | 1516.7 | 1659.7 | 2278.9 | 5396.1 | 9762.8 | 11010.8 | 10815.6 | 8004.9 | 7485.3 |
| 65° | 1143.6 | 1146.3 | 1160.0 | 1300.9 | 1501.6 | 3509.0 | 8947.1 | 12005.2 | 11955.1 | 8732.0 | 7745.8 |
| 66° | 1041.8 | 1042.5 | 1063.8 | 1215.0 | 1347.7 | 2857.5 | 8293.5 | 12080.8 | 12108.3 | 8906.5 | 7669.5 |
| 67.5° | 910.6 | 907.8 | 938.8 | 1092.0 | 1227.4 | 2060.3 | 7123.8 | 11774.3 | 11937.2 | 9040.5 | 7395.3 |
| 70° | 705.8 | 702.4 | 740.1 | 916.1 | 1130.5 | 1374.5 | 4735.0 | 10109.9 | 10372.4 | 8766.3 | 6543.1 |
| 72.5° | 470.1 | 472.8 | 537.4 | 723.0 | 1079.0 | 1210.2 | 2848.6 | 7690.8 | 8061.9 | 7239.3 | 5147.4 |
| 75° | 274.2 | 279.0 | 352.5 | 537.4 | 936.7 | 1153.9 | 1612.2 | 5484.1 | 5721.2 | 4998.9 | 3206.6 |
| 77.5° | 143.6 | 145.7 | 197.2 | 354.6 | 718.2 | 1071.4 | 1074.1 | 3503.5 | 3614.8 | 2429.4 | 1269.3 |
| 80° | 76.3 | 74.2 | 105.8 | 213.7 | 494.1 | 940.8 | 871.4 | 1854.8 | 1928.4 | 721.6 | 320.9 |
| 82.5° | 28.9 | 31.6 | 56.4 | 140.2 | 292.1 | 675.5 | 750.5 | 819.9 | 794.4 | 158.8 | 134.7 |
| 85° | 5.5 | 6.9 | 24.1 | 83.2 | 147.1 | 282.5 | 553.2 | 402.0 | 372.5 | 59.8 | 77.7 |
| 87.5° | 0.7 | 1.4 | 6.9 | 19.9 | 21.3 | 95.5 | 163.6 | 111.3 | 96.2 | 22.0 | 32.3 |
| 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):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2412.9 | 2412.9 | 2412.9 | 2412.9 | 2412.9 | 2412.9 | 2412.9 | 2412.9 | 2412.9 | 2412.9 | 2412.9 |
| 2.5° | 2414.2 | 2395.7 | 2333.8 | 2272.7 | 2210.1 | 2153.8 | 2115.3 | 2052.8 | 2037.0 | 2014.3 | 2001.2 |
| 5° | 2409.4 | 2366.1 | 2247.2 | 2117.4 | 1996.4 | 1865.8 | 1766.2 | 1670.0 | 1618.4 | 1592.3 | 1582.7 |
| 7.5° | 2395.7 | 2327.0 | 2141.4 | 1938.0 | 1744.2 | 1549.0 | 1379.3 | 1250.1 | 1166.9 | 1109.9 | 1071.4 |
| 10° | 2368.2 | 2273.4 | 2018.4 | 1738.7 | 1445.9 | 1188.2 | 973.1 | 809.6 | 683.1 | 643.2 | 644.6 |
| 12.5° | 2340.0 | 2213.6 | 1881.0 | 1517.4 | 1154.5 | 829.5 | 601.3 | 472.1 | 411.7 | 391.7 | 387.6 |
| 15° | 2313.9 | 2156.5 | 1746.3 | 1303.0 | 859.7 | 537.4 | 387.6 | 342.2 | 325.7 | 322.3 | 321.6 |
| 17.5° | 2300.2 | 2103.6 | 1602.6 | 1057.6 | 600.0 | 364.9 | 310.6 | 298.3 | 293.4 | 290.0 | 288.6 |
| 20° | 2288.5 | 2057.6 | 1465.2 | 828.1 | 410.3 | 298.9 | 278.3 | 266.6 | 258.4 | 255.0 | 252.9 |
| 22.5° | 2280.2 | 2010.2 | 1322.9 | 641.2 | 314.1 | 265.3 | 246.7 | 231.6 | 219.9 | 215.8 | 213.0 |
| 25° | 2267.9 | 1957.9 | 1179.3 | 468.7 | 264.6 | 235.7 | 214.4 | 196.5 | 181.4 | 173.9 | 172.5 |
| 27.5° | 2250.0 | 1898.8 | 1021.9 | 347.1 | 236.4 | 209.6 | 183.5 | 161.5 | 146.4 | 138.1 | 138.8 |
| 30° | 2221.1 | 1837.0 | 864.5 | 275.6 | 213.7 | 182.8 | 154.6 | 133.3 | 118.9 | 112.7 | 112.0 |
| 32.5° | 2186.8 | 1762.1 | 720.2 | 236.4 | 193.1 | 158.8 | 129.2 | 110.6 | 99.6 | 94.8 | 94.2 |
| 35° | 2154.5 | 1686.5 | 573.2 | 212.4 | 171.8 | 136.8 | 108.6 | 92.8 | 84.5 | 80.4 | 81.1 |
| 37.5° | 2136.6 | 1619.1 | 446.7 | 193.1 | 154.6 | 117.5 | 93.5 | 79.7 | 72.2 | 68.7 | 68.0 |
| 40° | 2148.3 | 1564.1 | 355.3 | 175.9 | 135.4 | 101.0 | 80.4 | 68.7 | 61.2 | 56.4 | 56.4 |
| 42.5° | 2203.3 | 1540.1 | 286.6 | 159.4 | 117.5 | 87.3 | 70.1 | 59.1 | 50.9 | 46.0 | 46.7 |
| 45° | 2370.9 | 1565.5 | 239.8 | 144.3 | 101.0 | 75.6 | 60.5 | 48.8 | 41.2 | 37.8 | 37.1 |
| 47.5° | 2649.3 | 1661.0 | 207.5 | 128.5 | 86.6 | 64.6 | 50.9 | 40.5 | 33.0 | 30.2 | 29.6 |
| 50° | 3135.8 | 1858.3 | 183.5 | 112.7 | 73.5 | 55.0 | 41.9 | 32.3 | 26.1 | 23.4 | 23.4 |
| 52.5° | 3805.2 | 2288.5 | 166.3 | 94.8 | 61.9 | 46.7 | 34.4 | 26.1 | 20.6 | 18.6 | 17.9 |
| 55° | 4504.8 | 2742.1 | 157.4 | 79.7 | 51.5 | 38.5 | 27.5 | 20.6 | 15.8 | 13.7 | 13.1 |
| 57.5° | 5177.6 | 3098.0 | 147.1 | 64.6 | 41.2 | 29.6 | 21.3 | 15.8 | 11.0 | 9.6 | 8.9 |
| 60° | 5822.9 | 3386.0 | 125.1 | 51.5 | 32.3 | 21.3 | 15.8 | 11.0 | 7.6 | 6.2 | 6.2 |
| 62.5° | 6400.2 | 3553.7 | 98.3 | 41.2 | 24.7 | 15.1 | 10.3 | 8.2 | 5.5 | 4.1 | 4.1 |
| 65° | 6467.5 | 3335.8 | 74.2 | 31.6 | 17.9 | 9.6 | 6.2 | 6.2 | 4.1 | 2.7 | 2.7 |
| 66° | 6332.1 | 3151.0 | 65.3 | 28.9 | 15.8 | 8.2 | 5.5 | 4.8 | 3.4 | 2.1 | 2.1 |
| 67.5° | 6029.8 | 2835.5 | 56.4 | 24.7 | 13.1 | 6.2 | 4.1 | 4.1 | 2.7 | 1.4 | 1.4 |
| 70° | 5209.9 | 2316.0 | 44.7 | 18.6 | 9.6 | 4.8 | 2.7 | 2.7 | 2.1 | 1.4 | 1.4 |
| 72.5° | 3970.8 | 1729.1 | 36.4 | 13.7 | 6.9 | 3.4 | 2.1 | 2.1 | 2.1 | 1.4 | 1.4 |
| 75° | 2395.0 | 931.2 | 28.2 | 10.3 | 6.2 | 2.7 | 1.4 | 2.1 | 2.7 | 2.1 | 1.4 |
| 77.5° | 882.4 | 316.8 | 22.0 | 8.2 | 4.8 | 2.7 | 1.4 | 1.4 | 2.7 | 2.1 | 2.1 |
| 80° | 216.5 | 82.5 | 15.8 | 6.9 | 4.8 | 2.7 | 1.4 | 1.4 | 2.7 | 2.7 | 2.7 |
| 82.5° | 100.3 | 35.0 | 11.0 | 6.2 | 4.8 | 2.7 | 1.4 | 1.4 | 2.1 | 2.7 | 2.7 |
| 85° | 57.7 | 16.5 | 8.9 | 6.9 | 4.8 | 2.7 | 1.4 | 1.4 | 2.1 | 2.7 | 2.7 |
| 87.5° | 23.4 | 8.2 | 8.2 | 6.9 | 5.5 | 3.4 | 1.4 | 1.4 | 1.4 | 2.1 | 2.1 |
| 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)