

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: P194031

Luminaire Tested: **GLEON-AF-03-LED-E1-T3R-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P194031
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-03-LED-E1-T3R-8030
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 3000K, 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: 15161 lumens
Efficiency: N/A
Efficacy: 91.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B2 - U0 - G3

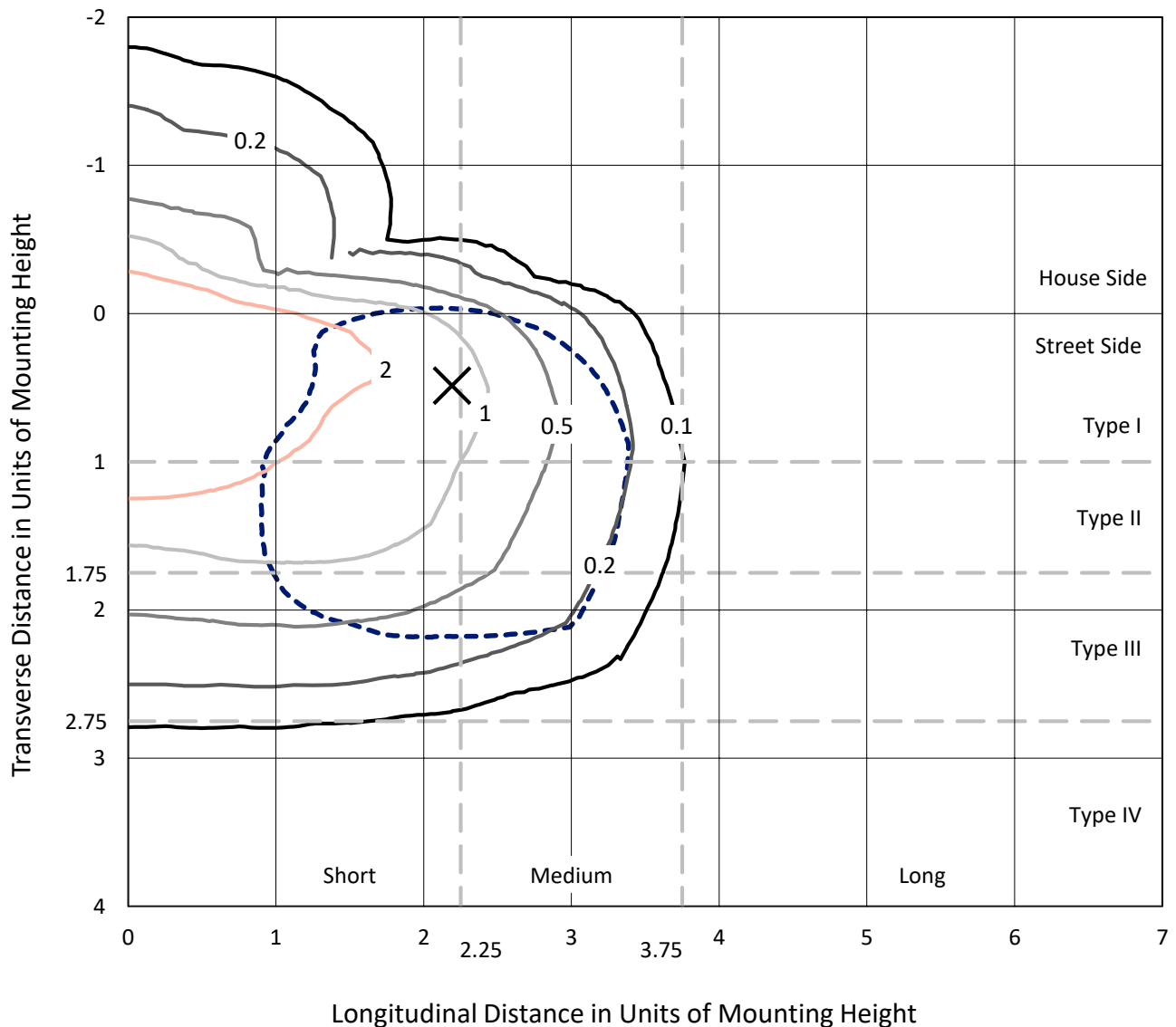
Input Watts (W): 166
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

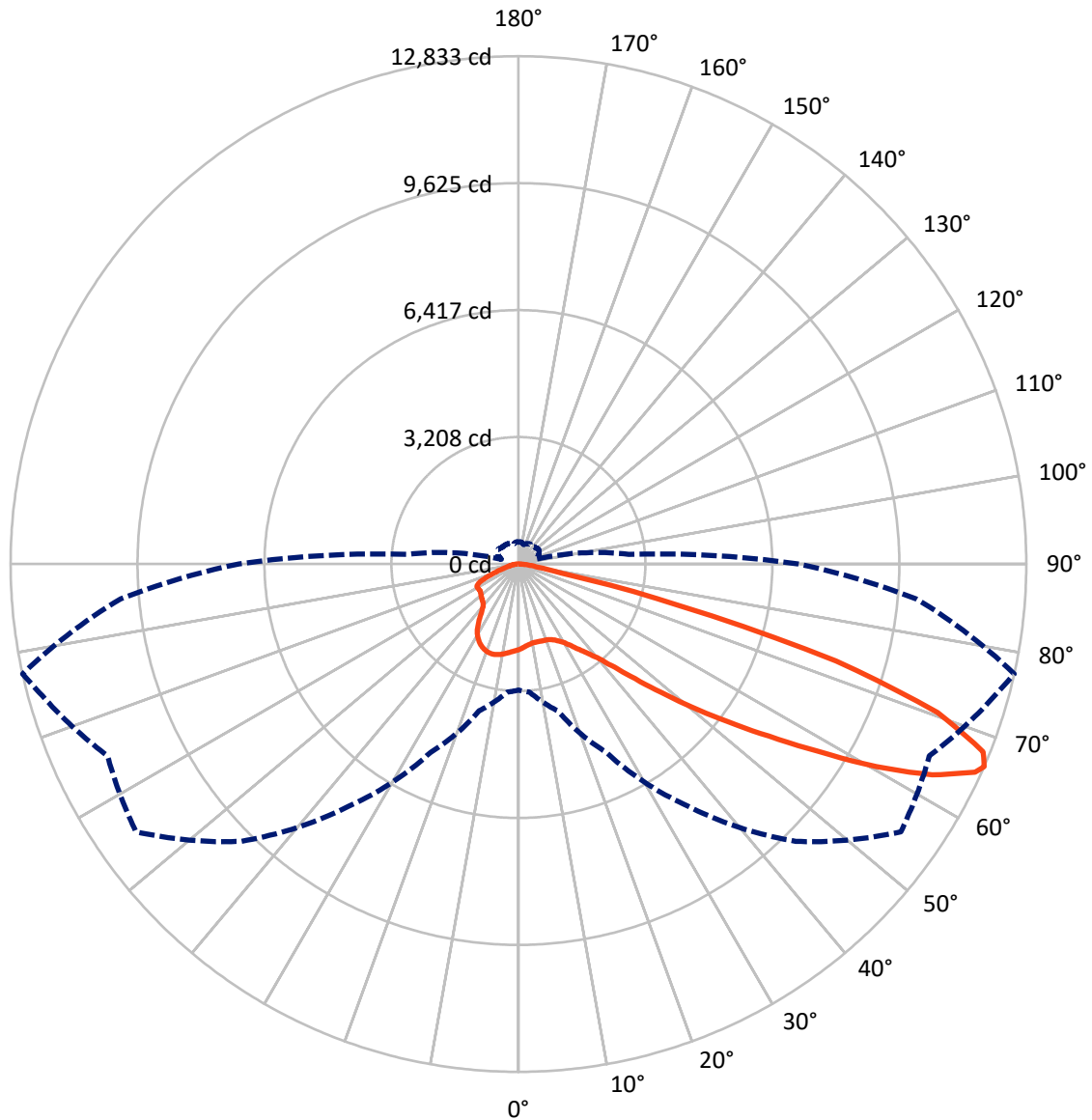
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 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 |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2590.2 | 0.0 | 2590.2 |
| | % Fixture | 17.1 | 0.0 | 17.1 |
| Street Side | Lumens | 12570.8 | 0.0 | 12570.8 |
| | % Fixture | 82.9 | 0.0 | 82.9 |
| Total | Lumens | 15161.0 | 0.0 | 15161.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 193.0 | 1.3 |
| 10°-20° | 544.6 | 3.6 |
| 20°-30° | 929.4 | 6.1 |
| 30°-40° | 1487.7 | 9.8 |
| 40°-50° | 2298.4 | 15.2 |
| 50°-60° | 3260.0 | 21.5 |
| 60°-70° | 4360.9 | 28.8 |
| 70°-80° | 1893.9 | 12.5 |
| 80°-90° | 193.1 | 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° | 15161.0 | 100.0 |
| 0°-180° | 15161.0 | 100.0 |



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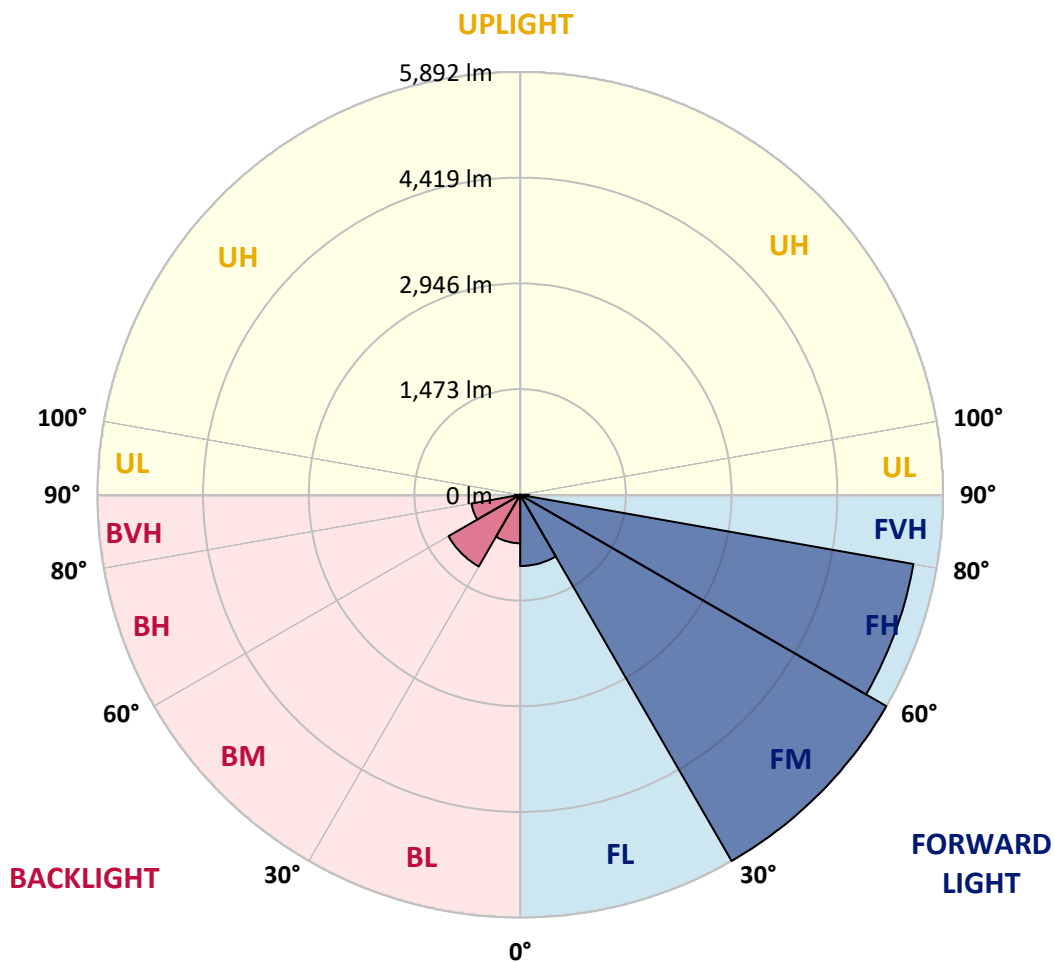
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 992.4 | 6.5 | | | |
| FM | (30°-60°) | 5892.4 | 38.9 | | | |
| FH | (60°-80°) | 5565.0 | 36.7 | | | G3/7500 |
| FVH | (80°-90°) | 121.1 | 0.8 | | | G2/225 |
| BL | (0°-30°) | 674.6 | 4.4 | B2/1000 | | |
| BM | (30°-60°) | 1153.8 | 7.6 | B2/2500 | | |
| BH | (60°-80°) | 689.8 | 4.5 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 72.0 | 0.5 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77.5° | 85° |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| 0° | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 |
| 2.5° | 1911.2 | 1924.1 | 1934.9 | 1944.9 | 1965.0 | 1997.9 | 2035.9 | 2066.7 | 2111.1 | 2119.7 | 2143.3 |
| 5° | 1735.7 | 1735.7 | 1744.3 | 1759.4 | 1786.6 | 1836.0 | 1887.6 | 1956.4 | 2053.1 | 2076.0 | 2139.0 |
| 7.5° | 1650.5 | 1651.2 | 1656.2 | 1669.1 | 1692.7 | 1737.9 | 1794.5 | 1875.4 | 2006.5 | 2044.5 | 2151.9 |
| 10° | 1682.0 | 1674.8 | 1664.1 | 1657.6 | 1661.2 | 1687.7 | 1741.4 | 1831.7 | 1977.8 | 2026.6 | 2180.6 |
| 12.5° | 1858.2 | 1844.6 | 1807.4 | 1757.9 | 1710.6 | 1691.3 | 1722.8 | 1810.9 | 1965.7 | 2022.3 | 2218.5 |
| 15° | 2146.2 | 2140.5 | 2071.0 | 1968.5 | 1853.9 | 1757.9 | 1736.4 | 1803.1 | 1967.1 | 2027.3 | 2263.7 |
| 17.5° | 2507.2 | 2499.3 | 2407.7 | 2258.7 | 2071.7 | 1884.7 | 1784.4 | 1809.5 | 1972.1 | 2035.9 | 2307.4 |
| 20° | 2871.9 | 2847.5 | 2748.6 | 2571.0 | 2331.0 | 2057.4 | 1863.9 | 1826.0 | 1978.6 | 2045.2 | 2353.2 |
| 22.5° | 3144.1 | 3124.0 | 3035.2 | 2862.5 | 2586.0 | 2257.2 | 1970.7 | 1854.6 | 1999.3 | 2072.4 | 2409.8 |
| 25° | 3383.3 | 3384.8 | 3296.6 | 3129.7 | 2843.9 | 2469.3 | 2108.2 | 1931.3 | 2052.3 | 2128.3 | 2487.2 |
| 27.5° | 3679.2 | 3662.0 | 3579.6 | 3414.1 | 3098.9 | 2683.5 | 2274.4 | 2036.6 | 2131.1 | 2207.8 | 2588.9 |
| 30° | 4033.1 | 4020.9 | 3925.6 | 3737.9 | 3381.9 | 2913.4 | 2464.2 | 2159.1 | 2232.9 | 2312.4 | 2722.1 |
| 32.5° | 4449.3 | 4443.5 | 4344.7 | 4103.3 | 3708.5 | 3184.2 | 2687.0 | 2321.0 | 2384.7 | 2467.1 | 2913.4 |
| 35° | 4937.8 | 4938.5 | 4821.8 | 4531.6 | 4066.0 | 3499.4 | 2939.9 | 2529.4 | 2569.6 | 2655.5 | 3141.2 |
| 37.5° | 5238.7 | 5275.2 | 5231.5 | 4935.7 | 4470.7 | 3851.8 | 3268.0 | 2805.9 | 2780.2 | 2866.8 | 3385.5 |
| 40° | 5303.1 | 5347.6 | 5485.8 | 5335.4 | 4923.5 | 4240.1 | 3558.8 | 3071.7 | 3039.5 | 3145.5 | 3700.0 |
| 42.5° | 5212.9 | 5274.5 | 5566.8 | 5672.8 | 5404.2 | 4718.6 | 3950.0 | 3466.4 | 3425.6 | 3568.1 | 4091.1 |
| 45° | 5159.2 | 5205.0 | 5543.1 | 5848.3 | 5821.1 | 5259.4 | 4447.8 | 3962.1 | 3947.1 | 4134.1 | 4542.4 |
| 47.5° | 5066.0 | 5107.6 | 5432.8 | 5889.1 | 6066.1 | 5755.2 | 5046.0 | 4568.2 | 4597.5 | 4842.5 | 5051.7 |
| 50° | 5116.2 | 5133.4 | 5309.6 | 5785.3 | 6137.0 | 6118.4 | 5714.3 | 5270.2 | 5370.5 | 5676.4 | 5628.4 |
| 52.5° | 5109.0 | 5153.4 | 5295.3 | 5614.8 | 6146.3 | 6342.6 | 6372.7 | 6053.2 | 6264.5 | 6615.5 | 6268.1 |
| 55° | 4130.5 | 4212.1 | 5126.9 | 5571.8 | 6179.2 | 6562.5 | 6958.6 | 6878.4 | 7272.4 | 7681.4 | 6990.2 |
| 57.5° | 3944.2 | 3995.8 | 4503.0 | 5662.0 | 6354.0 | 6982.3 | 7610.5 | 7786.7 | 8445.8 | 8920.7 | 7869.8 |
| 60° | 3907.7 | 3971.4 | 4496.5 | 5772.4 | 6708.6 | 7666.4 | 8576.9 | 8886.3 | 9873.5 | 10393.5 | 8889.9 |
| 62.5° | 3793.8 | 3862.6 | 4454.3 | 5758.0 | 7212.2 | 8612.7 | 9814.0 | 10055.4 | 11227.4 | 11733.1 | 9743.1 |
| 65° | 3432.8 | 3497.2 | 4109.7 | 5526.6 | 7551.8 | 9622.7 | 11278.2 | 11127.1 | 12296.2 | 12676.5 | 10168.6 |
| 66° | 3185.6 | 3248.7 | 3838.2 | 5254.4 | 7473.0 | 9909.3 | 11796.9 | 11458.8 | 12535.4 | 12833.4 | 10085.5 |
| 67.5° | 2733.6 | 2783.0 | 3311.0 | 4644.8 | 7053.9 | 9989.5 | 12233.1 | 11708.0 | 12560.5 | 12665.8 | 9610.6 |
| 70° | 1727.1 | 1741.4 | 2151.9 | 3206.4 | 5339.7 | 8663.5 | 11569.1 | 11089.1 | 11524.7 | 11239.5 | 8056.8 |
| 72.5° | 749.3 | 744.3 | 1033.0 | 1631.1 | 3023.0 | 5813.2 | 9358.4 | 9150.0 | 9040.3 | 8389.9 | 5639.8 |
| 75° | 416.9 | 422.6 | 536.5 | 757.2 | 1228.5 | 2855.4 | 6121.9 | 5858.3 | 4946.4 | 4220.7 | 2557.4 |
| 77.5° | 334.5 | 342.4 | 444.9 | 537.3 | 551.6 | 995.7 | 2864.7 | 2331.0 | 1403.3 | 1126.1 | 710.6 |
| 80° | 264.3 | 278.7 | 388.3 | 418.3 | 371.8 | 410.5 | 925.5 | 740.0 | 555.2 | 509.3 | 368.2 |
| 82.5° | 209.2 | 219.2 | 333.1 | 316.6 | 260.0 | 276.5 | 443.4 | 432.0 | 361.0 | 328.8 | 212.8 |
| 85° | 150.4 | 169.1 | 273.6 | 238.5 | 170.5 | 186.3 | 294.4 | 282.2 | 207.0 | 169.1 | 93.8 |
| 87.5° | 61.6 | 80.2 | 193.4 | 158.3 | 95.3 | 86.7 | 146.9 | 138.3 | 98.1 | 71.6 | 46.6 |
| 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° | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 |
| 2.5° | 2158.4 | 2175.6 | 2197.8 | 2211.4 | 2218.5 | 2223.6 | 2231.4 | 2230.7 | 2232.9 | 2233.6 | 2236.4 |
| 5° | 2172.7 | 2201.3 | 2233.6 | 2242.2 | 2242.2 | 2234.3 | 2226.4 | 2213.5 | 2208.5 | 2207.1 | 2208.5 |
| 7.5° | 2209.9 | 2241.5 | 2269.4 | 2259.4 | 2237.9 | 2206.4 | 2165.5 | 2129.7 | 2110.4 | 2103.9 | 2102.5 |
| 10° | 2257.2 | 2295.2 | 2306.7 | 2268.7 | 2205.6 | 2129.7 | 2048.8 | 1990.0 | 1956.4 | 1947.0 | 1944.2 |
| 12.5° | 2314.5 | 2350.3 | 2334.6 | 2254.4 | 2137.6 | 2015.1 | 1903.3 | 1809.5 | 1739.3 | 1717.1 | 1715.7 |
| 15° | 2377.6 | 2405.5 | 2350.3 | 2209.9 | 2035.9 | 1855.3 | 1656.2 | 1494.3 | 1406.9 | 1379.0 | 1376.8 |
| 17.5° | 2436.3 | 2450.6 | 2341.0 | 2132.6 | 1886.2 | 1593.9 | 1329.5 | 1204.9 | 1174.8 | 1182.0 | 1183.4 |
| 20° | 2486.5 | 2486.5 | 2309.5 | 2021.5 | 1650.5 | 1249.3 | 1082.4 | 1080.3 | 1101.7 | 1123.2 | 1127.5 |
| 22.5° | 2541.6 | 2508.7 | 2254.4 | 1864.7 | 1316.7 | 1022.2 | 997.9 | 1017.9 | 1042.3 | 1065.9 | 1069.5 |
| 25° | 2609.7 | 2526.6 | 2177.7 | 1626.8 | 1035.1 | 928.4 | 937.7 | 954.2 | 966.4 | 981.4 | 983.5 |
| 27.5° | 2685.6 | 2549.5 | 2076.7 | 1299.5 | 898.3 | 869.7 | 876.8 | 882.5 | 881.1 | 886.8 | 888.3 |
| 30° | 2776.6 | 2576.0 | 1938.4 | 1015.8 | 841.7 | 819.5 | 806.6 | 801.6 | 801.6 | 810.9 | 814.5 |
| 32.5° | 2898.4 | 2615.4 | 1740.0 | 870.4 | 814.5 | 783.7 | 742.1 | 723.5 | 730.7 | 762.2 | 769.4 |
| 35° | 3032.3 | 2657.7 | 1471.4 | 820.9 | 808.8 | 767.2 | 702.7 | 668.4 | 669.1 | 698.4 | 707.8 |
| 37.5° | 3178.4 | 2711.4 | 1177.0 | 811.6 | 821.7 | 767.9 | 682.0 | 634.7 | 615.3 | 615.3 | 618.9 |
| 40° | 3365.4 | 2766.5 | 952.7 | 818.1 | 848.9 | 776.5 | 671.2 | 608.2 | 553.7 | 555.2 | 558.0 |
| 42.5° | 3609.0 | 2813.8 | 832.4 | 831.7 | 881.8 | 788.0 | 670.5 | 573.1 | 525.8 | 558.0 | 587.4 |
| 45° | 3879.8 | 2837.5 | 779.4 | 843.9 | 908.3 | 795.1 | 659.0 | 567.3 | 529.4 | 625.4 | 681.2 |
| 47.5° | 4191.4 | 2823.9 | 750.0 | 848.2 | 914.8 | 795.1 | 646.1 | 581.0 | 554.5 | 724.2 | 789.4 |
| 50° | 4533.1 | 2784.5 | 721.4 | 839.6 | 912.6 | 793.7 | 658.3 | 594.6 | 563.8 | 741.4 | 786.6 |
| 52.5° | 4934.9 | 2751.5 | 691.3 | 820.9 | 897.6 | 785.8 | 672.7 | 588.8 | 534.4 | 674.1 | 705.6 |
| 55° | 5393.4 | 2760.8 | 657.6 | 794.4 | 873.9 | 770.8 | 667.6 | 565.9 | 503.6 | 593.9 | 613.2 |
| 57.5° | 5979.4 | 2871.9 | 617.5 | 760.8 | 841.7 | 745.7 | 649.7 | 555.2 | 494.3 | 538.7 | 550.2 |
| 60° | 6633.4 | 3065.3 | 567.3 | 727.1 | 801.6 | 705.6 | 636.1 | 560.2 | 498.6 | 534.4 | 540.1 |
| 62.5° | 7113.4 | 3177.7 | 524.4 | 677.7 | 747.2 | 661.2 | 618.9 | 566.6 | 510.0 | 549.4 | 548.0 |
| 65° | 7243.7 | 2992.9 | 470.6 | 605.3 | 673.4 | 614.6 | 597.4 | 573.8 | 515.1 | 561.6 | 555.2 |
| 66° | 7061.1 | 2793.8 | 447.0 | 571.6 | 636.1 | 591.7 | 586.7 | 573.1 | 512.9 | 563.1 | 552.3 |
| 67.5° | 6617.7 | 2385.4 | 406.2 | 522.2 | 576.7 | 557.3 | 569.5 | 566.6 | 507.2 | 561.6 | 546.6 |
| 70° | 5397.0 | 1627.5 | 347.4 | 434.8 | 480.0 | 490.7 | 536.5 | 543.7 | 488.6 | 536.5 | 503.6 |
| 72.5° | 3770.9 | 991.4 | 307.3 | 337.4 | 388.3 | 418.3 | 491.4 | 512.2 | 463.5 | 468.5 | 437.0 |
| 75° | 1822.4 | 526.5 | 278.7 | 261.5 | 301.6 | 349.6 | 437.0 | 469.2 | 424.1 | 391.8 | 380.4 |
| 77.5° | 568.1 | 321.6 | 236.4 | 210.6 | 236.4 | 282.2 | 365.3 | 411.2 | 377.5 | 328.1 | 323.8 |
| 80° | 305.2 | 236.4 | 182.0 | 169.1 | 187.0 | 221.4 | 287.3 | 343.1 | 324.5 | 294.4 | 262.9 |
| 82.5° | 201.3 | 153.3 | 134.7 | 131.1 | 142.6 | 169.1 | 213.5 | 284.4 | 284.4 | 252.2 | 183.4 |
| 85° | 103.9 | 93.8 | 92.4 | 92.4 | 99.6 | 112.5 | 145.4 | 219.2 | 233.5 | 133.2 | 110.3 |
| 87.5° | 51.6 | 53.7 | 50.1 | 52.3 | 55.9 | 55.2 | 69.5 | 110.3 | 131.8 | 80.9 | 67.3 |
| 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)