

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: P949658

Luminaire Tested: **GALN-SB4B-830-U-T4W-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P949658
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB4B-830-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15620 lumens
Efficiency: N/A
Efficacy: 106.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

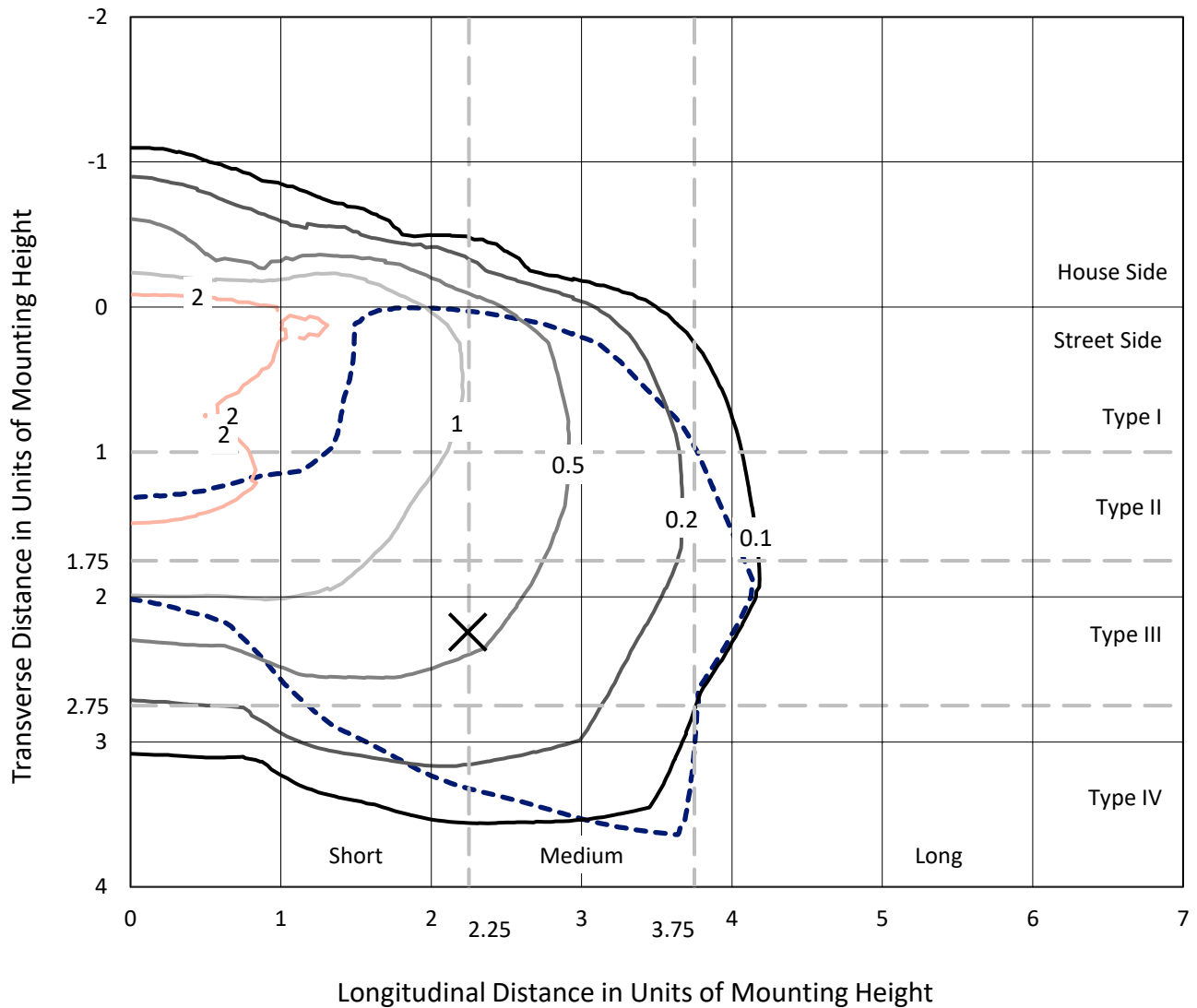
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

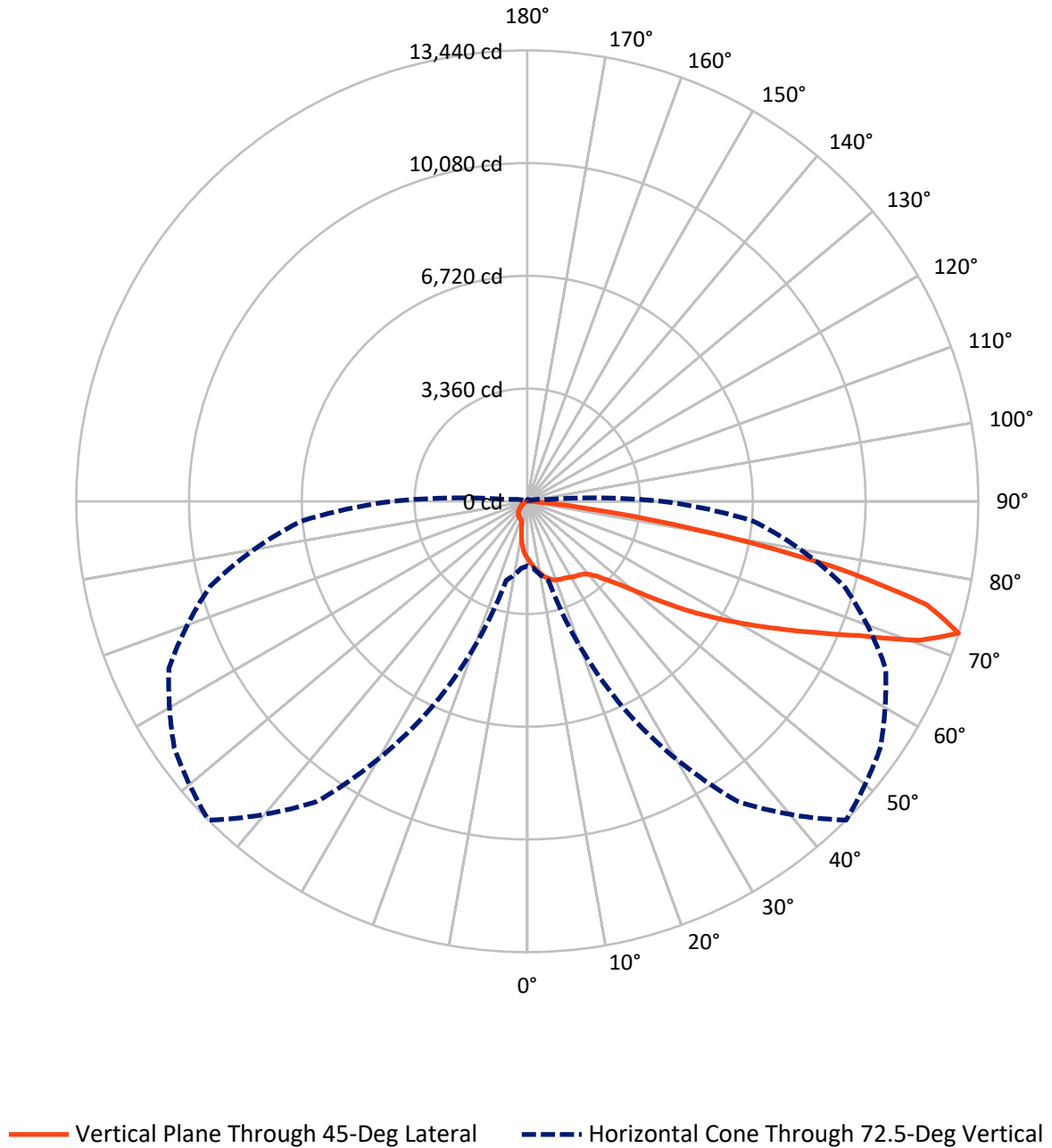
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1641.2 | 0.0 | 1641.2 |
| | % Fixture | 10.5 | 0.0 | 10.5 |
| Street Side | Lumens | 13978.8 | 0.0 | 13978.8 |
| | % Fixture | 89.5 | 0.0 | 89.5 |
| Total | Lumens | 15620.0 | 0.0 | 15620.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 161.2 | 1.0 |
| 10°-20° | 471.2 | 3.0 |
| 20°-30° | 773.8 | 5.0 |
| 30°-40° | 1097.4 | 7.0 |
| 40°-50° | 1813.9 | 11.6 |
| 50°-60° | 3258.5 | 20.9 |
| 60°-70° | 4524.6 | 29.0 |
| 70°-80° | 3282.0 | 21.0 |
| 80°-90° | 237.3 | 1.5 |
| 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° | 15620.0 | 100.0 |
| 0°-180° | 15620.0 | 100.0 |

Coefficient of Utilization



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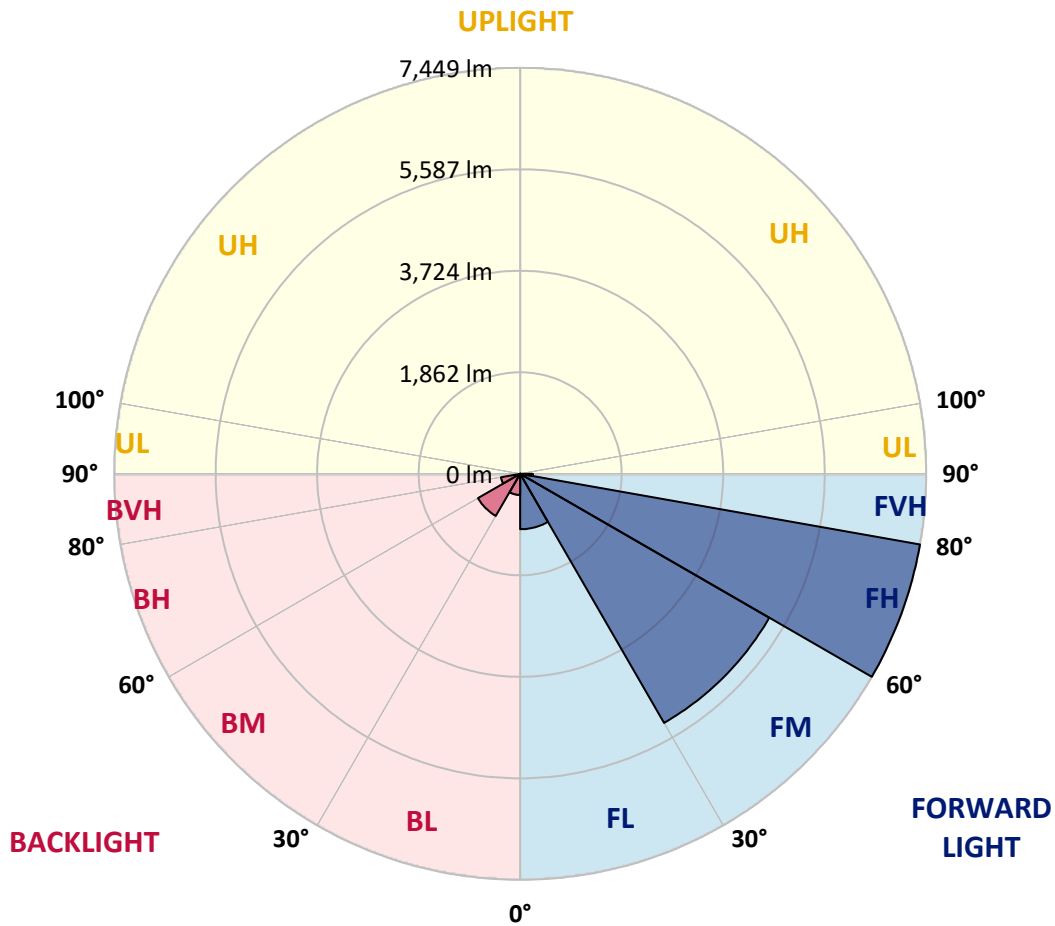
CATALOG NUMBER: GALN-SB4B-830-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1017.5 | 6.5 | | | |
| FM (30°-60°) | 5277.3 | 33.8 | | | |
| FH (60°-80°) | 7448.7 | 47.7 | | | G3/7500 |
| FVH (80°-90°) | 235.3 | 1.5 | | | G3/500 |
| BL (0°-30°) | 388.7 | 2.5 | B1/500 | | |
| BM (30°-60°) | 892.6 | 5.7 | B1/1000 | | |
| BH (60°-80°) | 357.9 | 2.3 | B1/500 | | G1/500 |
| BVH (80°-90°) | 2.0 | 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-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 46° | 55° | 65° | 75° |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0° | 1711.2 | 1711.2 | 1711.2 | 1711.2 | 1711.2 | 1711.2 | 1711.2 | 1711.2 | 1711.2 | 1711.2 |
| 2.5° | 1869.0 | 1872.2 | 1870.1 | 1857.3 | 1835.9 | 1824.2 | 1817.8 | 1796.5 | 1782.6 | 1758.1 |
| 5° | 2040.7 | 2053.4 | 2046.0 | 2020.4 | 1979.9 | 1951.1 | 1942.6 | 1898.9 | 1859.4 | 1813.6 |
| 7.5° | 2223.0 | 2229.4 | 2215.5 | 2182.5 | 2128.1 | 2079.0 | 2071.6 | 2010.8 | 1947.9 | 1877.5 |
| 10° | 2380.8 | 2388.2 | 2366.9 | 2318.9 | 2257.1 | 2196.3 | 2185.7 | 2118.5 | 2043.8 | 1957.5 |
| 12.5° | 2513.0 | 2520.4 | 2492.7 | 2435.1 | 2366.9 | 2304.0 | 2293.3 | 2223.0 | 2140.9 | 2044.9 |
| 15° | 2613.2 | 2627.0 | 2589.7 | 2527.9 | 2454.3 | 2391.4 | 2386.1 | 2316.8 | 2236.8 | 2130.2 |
| 17.5° | 2671.8 | 2685.7 | 2650.5 | 2575.9 | 2513.0 | 2459.7 | 2453.3 | 2395.7 | 2321.1 | 2218.7 |
| 20° | 2681.4 | 2694.2 | 2656.9 | 2591.9 | 2539.6 | 2497.0 | 2493.8 | 2452.2 | 2397.8 | 2299.7 |
| 22.5° | 2652.6 | 2668.6 | 2634.5 | 2582.3 | 2546.0 | 2523.6 | 2519.4 | 2495.9 | 2465.0 | 2381.8 |
| 25° | 2622.8 | 2635.6 | 2610.0 | 2564.1 | 2544.9 | 2542.8 | 2546.0 | 2541.8 | 2535.4 | 2465.0 |
| 27.5° | 2620.6 | 2634.5 | 2605.7 | 2562.0 | 2551.3 | 2573.7 | 2576.9 | 2597.2 | 2602.5 | 2540.7 |
| 30° | 2638.8 | 2648.4 | 2620.6 | 2574.8 | 2569.5 | 2620.6 | 2621.7 | 2658.0 | 2666.5 | 2604.7 |
| 32.5° | 2678.2 | 2688.9 | 2661.2 | 2594.0 | 2586.5 | 2658.0 | 2661.2 | 2709.1 | 2723.0 | 2672.9 |
| 35° | 2771.0 | 2783.8 | 2751.8 | 2647.3 | 2620.6 | 2693.1 | 2702.7 | 2759.3 | 2787.0 | 2745.4 |
| 37.5° | 3002.3 | 2965.0 | 2921.3 | 2755.0 | 2698.5 | 2748.6 | 2764.6 | 2830.7 | 2879.7 | 2831.7 |
| 40° | 3577.0 | 3459.7 | 3323.3 | 2938.4 | 2834.9 | 2866.9 | 2879.7 | 2945.8 | 3013.0 | 2966.1 |
| 42.5° | 4439.5 | 4300.9 | 4081.3 | 3360.6 | 3040.7 | 3056.7 | 3066.3 | 3123.9 | 3218.8 | 3181.5 |
| 45° | 5208.2 | 5158.1 | 4934.2 | 4081.3 | 3425.6 | 3346.7 | 3358.4 | 3388.3 | 3528.0 | 3514.1 |
| 47.5° | 5798.9 | 5770.1 | 5597.4 | 4908.7 | 4076.0 | 3701.7 | 3734.8 | 3748.7 | 3950.2 | 3999.2 |
| 50° | 6253.1 | 6242.4 | 6087.8 | 5644.3 | 4925.7 | 4225.2 | 4237.0 | 4207.1 | 4508.8 | 4630.4 |
| 52.5° | 6681.7 | 6717.9 | 6603.9 | 6327.7 | 5833.0 | 4910.8 | 4908.7 | 4767.9 | 5175.2 | 5358.6 |
| 55° | 7068.7 | 7081.5 | 7093.2 | 7025.0 | 6745.7 | 5691.2 | 5671.0 | 5440.7 | 5948.2 | 6137.9 |
| 57.5° | 7432.3 | 7437.6 | 7542.1 | 7681.8 | 7695.6 | 6529.2 | 6491.9 | 6215.8 | 6792.6 | 6928.0 |
| 60° | 7676.4 | 7701.0 | 7921.6 | 8309.7 | 8479.3 | 7393.9 | 7373.6 | 7092.2 | 7651.9 | 7714.8 |
| 62.5° | 7324.6 | 7473.9 | 8030.4 | 8800.2 | 9219.2 | 8352.4 | 8342.8 | 8078.4 | 8556.0 | 8504.8 |
| 65° | 5929.0 | 6181.7 | 7160.4 | 9131.8 | 9945.2 | 9422.8 | 9436.7 | 9155.2 | 9484.7 | 9318.3 |
| 67.5° | 4147.4 | 4413.9 | 5571.8 | 9158.4 | 10756.6 | 10679.8 | 10759.8 | 10318.4 | 10470.9 | 10097.7 |
| 70° | 2868.0 | 3005.5 | 3759.3 | 8584.8 | 11388.8 | 12411.3 | 12409.2 | 11747.1 | 11451.7 | 10452.7 |
| 72.5° | 1928.7 | 2000.1 | 2441.5 | 6810.7 | 10924.0 | 13440.1 | 13378.3 | 12838.8 | 11782.3 | 9775.7 |
| 75° | 813.5 | 865.7 | 1130.1 | 3827.6 | 8642.4 | 12296.1 | 12128.8 | 11346.2 | 10468.7 | 7697.8 |
| 77.5° | 258.0 | 280.4 | 445.7 | 1370.0 | 4760.5 | 9242.6 | 9065.7 | 7085.8 | 7016.5 | 3861.7 |
| 80° | 122.6 | 142.9 | 250.6 | 550.1 | 1873.3 | 5027.0 | 5002.5 | 3214.5 | 3018.3 | 1042.7 |
| 82.5° | 53.3 | 62.9 | 138.6 | 294.3 | 838.0 | 1793.3 | 1829.5 | 1093.9 | 905.2 | 395.5 |
| 85° | 17.1 | 22.4 | 64.0 | 135.4 | 354.0 | 445.7 | 440.3 | 260.1 | 364.6 | 215.4 |
| 87.5° | 0.0 | 0.0 | 21.3 | 30.9 | 36.2 | 25.6 | 28.8 | 22.4 | 101.3 | 59.7 |
| 90° | 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):

| 85° | | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1711.2 | 0° | 1711.2 | 1711.2 | 1711.2 | 1711.2 | 1711.2 | 1711.2 | 1711.2 | 1711.2 | 1711.2 | 1711.2 |
| 1732.5 | 2.5° | 1719.7 | 1702.7 | 1672.8 | 1645.1 | 1620.6 | 1596.1 | 1581.1 | 1559.8 | 1557.7 | 1557.7 |
| 1760.2 | 5° | 1731.5 | 1703.7 | 1650.4 | 1593.9 | 1528.9 | 1467.1 | 1405.2 | 1345.5 | 1326.3 | 1312.5 |
| 1805.0 | 7.5° | 1765.6 | 1721.9 | 1637.6 | 1530.0 | 1406.3 | 1270.9 | 1176.0 | 1073.6 | 1034.2 | 1012.9 |
| 1864.7 | 10° | 1814.6 | 1754.9 | 1627.0 | 1438.3 | 1237.8 | 1053.4 | 918.0 | 807.1 | 764.4 | 746.3 |
| 1929.8 | 12.5° | 1869.0 | 1795.4 | 1607.8 | 1324.2 | 1053.4 | 832.7 | 700.5 | 649.3 | 642.9 | 642.9 |
| 2007.6 | 15° | 1934.0 | 1844.5 | 1574.7 | 1189.8 | 860.4 | 658.9 | 612.0 | 614.1 | 620.5 | 624.8 |
| 2083.3 | 17.5° | 2001.2 | 1896.7 | 1522.5 | 1039.5 | 689.8 | 592.8 | 593.9 | 597.1 | 602.4 | 606.7 |
| 2165.4 | 20° | 2073.7 | 1949.0 | 1453.2 | 879.6 | 591.7 | 573.6 | 576.8 | 580.0 | 584.3 | 586.4 |
| 2242.2 | 22.5° | 2151.5 | 1998.0 | 1371.1 | 722.9 | 558.7 | 557.6 | 558.7 | 561.9 | 567.2 | 567.2 |
| 2331.7 | 25° | 2234.7 | 2052.4 | 1277.3 | 608.8 | 541.6 | 541.6 | 543.7 | 545.9 | 550.1 | 550.1 |
| 2418.1 | 27.5° | 2320.0 | 2102.5 | 1178.1 | 549.1 | 526.7 | 525.6 | 525.6 | 528.8 | 531.0 | 532.0 |
| 2503.4 | 30° | 2413.8 | 2161.1 | 1079.0 | 536.3 | 515.0 | 509.6 | 506.4 | 508.6 | 510.7 | 511.8 |
| 2592.9 | 32.5° | 2509.8 | 2217.6 | 990.5 | 541.6 | 503.2 | 493.6 | 483.0 | 480.8 | 480.8 | 485.1 |
| 2685.7 | 35° | 2616.4 | 2279.5 | 922.2 | 559.7 | 496.8 | 470.2 | 453.1 | 443.5 | 444.6 | 451.0 |
| 2796.6 | 37.5° | 2744.3 | 2354.1 | 872.1 | 575.7 | 492.6 | 443.5 | 415.8 | 404.1 | 396.6 | 404.1 |
| 2949.0 | 40° | 2911.7 | 2463.9 | 835.9 | 588.5 | 487.2 | 412.6 | 375.3 | 356.1 | 342.2 | 346.5 |
| 3185.7 | 42.5° | 3158.0 | 2636.6 | 822.0 | 589.6 | 475.5 | 376.4 | 333.7 | 308.1 | 287.9 | 288.9 |
| 3541.8 | 45° | 3503.4 | 2909.6 | 893.5 | 575.7 | 449.9 | 336.9 | 290.0 | 255.9 | 243.1 | 239.9 |
| 4073.8 | 47.5° | 3976.8 | 3307.3 | 1058.7 | 546.9 | 412.6 | 298.5 | 247.4 | 218.6 | 209.0 | 203.6 |
| 4772.2 | 50° | 4611.2 | 3818.0 | 1242.1 | 515.0 | 375.3 | 262.3 | 212.2 | 194.0 | 187.6 | 182.3 |
| 5600.6 | 52.5° | 5346.8 | 4336.1 | 1392.4 | 483.0 | 338.0 | 230.3 | 189.8 | 179.1 | 173.8 | 169.5 |
| 6400.2 | 55° | 6021.7 | 4693.3 | 1383.9 | 448.9 | 301.7 | 204.7 | 173.8 | 167.4 | 161.0 | 156.7 |
| 7089.0 | 57.5° | 6441.8 | 4743.4 | 1140.8 | 411.5 | 260.1 | 184.4 | 158.9 | 154.6 | 147.1 | 141.8 |
| 7685.0 | 60° | 6634.8 | 4457.7 | 799.6 | 362.5 | 218.6 | 165.3 | 142.9 | 140.7 | 131.1 | 123.7 |
| 8249.0 | 62.5° | 6670.0 | 3926.7 | 533.1 | 301.7 | 182.3 | 147.1 | 126.9 | 123.7 | 110.9 | 98.1 |
| 8707.4 | 65° | 6527.1 | 3167.6 | 368.9 | 235.6 | 155.7 | 127.9 | 108.7 | 102.4 | 88.5 | 75.7 |
| 8816.2 | 67.5° | 6075.0 | 2224.0 | 256.9 | 169.5 | 132.2 | 101.3 | 86.4 | 84.2 | 73.6 | 62.9 |
| 8261.8 | 70° | 5246.6 | 1267.7 | 171.7 | 126.9 | 104.5 | 69.3 | 68.2 | 70.4 | 59.7 | 51.2 |
| 6749.9 | 72.5° | 4022.7 | 580.0 | 106.6 | 92.8 | 71.4 | 46.9 | 54.4 | 55.4 | 45.8 | 38.4 |
| 4211.4 | 75° | 2368.0 | 248.4 | 67.2 | 59.7 | 36.2 | 30.9 | 39.4 | 40.5 | 30.9 | 24.5 |
| 1539.6 | 77.5° | 806.0 | 93.8 | 42.6 | 35.2 | 18.1 | 17.1 | 25.6 | 25.6 | 17.1 | 9.6 |
| 309.2 | 80° | 183.4 | 35.2 | 21.3 | 13.9 | 8.5 | 7.5 | 8.5 | 7.5 | 4.3 | 1.1 |
| 94.9 | 82.5° | 52.2 | 13.9 | 8.5 | 5.3 | 3.2 | 3.2 | 1.1 | 0.0 | 0.0 | 0.0 |
| 33.1 | 85° | 14.9 | 6.4 | 2.1 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 11.7 | 87.5° | 6.4 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 0.0 | 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

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|-------------|
| <u>180°</u> |
| 1711.2 |
| 1563.0 |
| 1318.9 |
| 1016.1 |
| 746.3 |
| 642.9 |
| 624.8 |
| 606.7 |
| 587.5 |
| 569.3 |
| 551.2 |
| 533.1 |
| 513.9 |
| 488.3 |
| 454.2 |
| 401.9 |
| 344.4 |
| 284.7 |
| 235.6 |
| 200.4 |
| 181.2 |
| 168.5 |
| 154.6 |
| 140.7 |
| 121.5 |
| 91.7 |
| 71.4 |
| 59.7 |
| 46.9 |
| 34.1 |
| 21.3 |
| 7.5 |
| 0.0 |
| 0.0 |
| 0.0 |
| 0.0 |
| 0.0 |

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