

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: P946062

Luminaire Tested: **GALN-SB1D-827-U-T2R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P946062
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB1D-827-U-T2R
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9016 lumens
Efficiency: N/A
Efficacy: 113.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

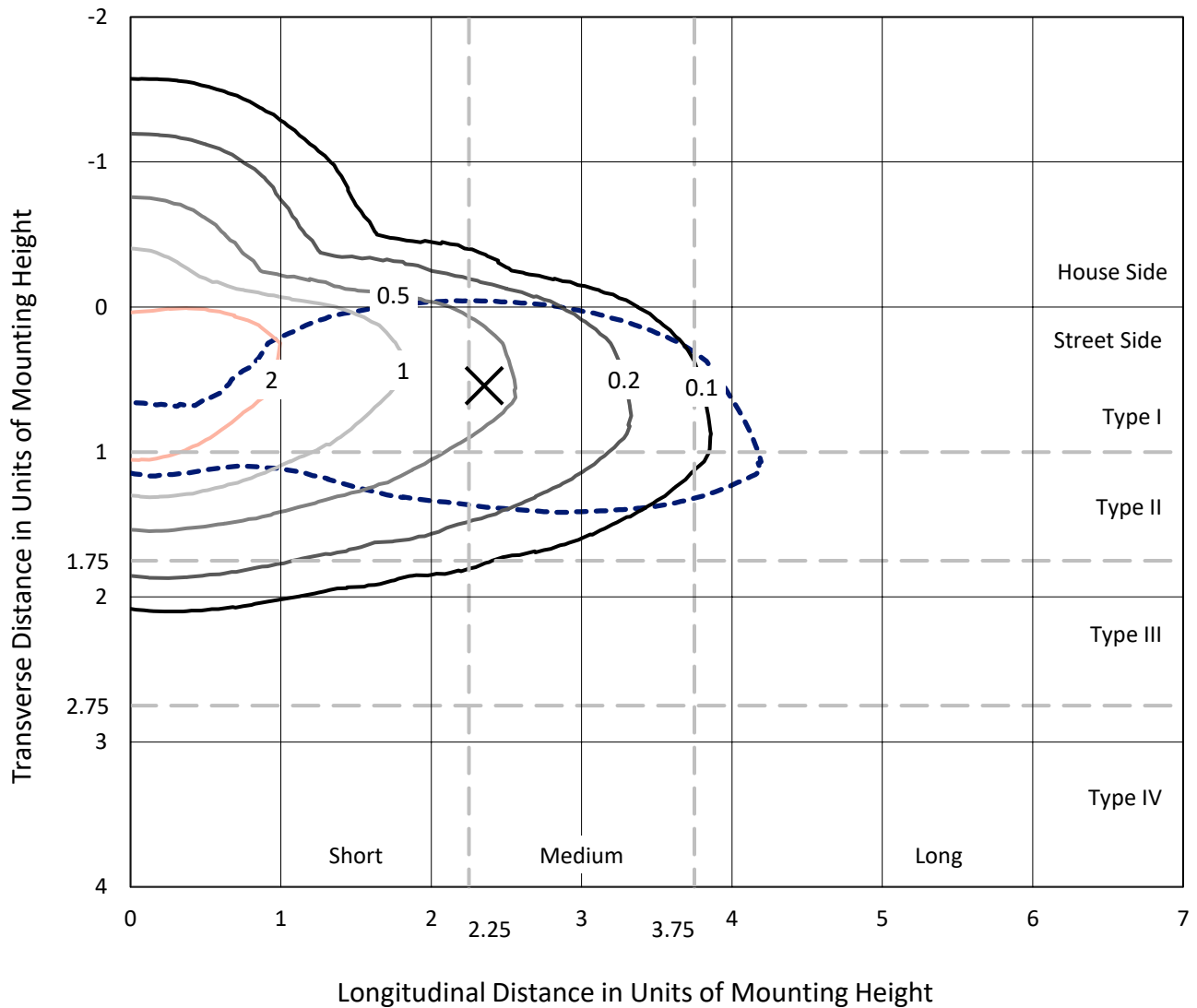
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

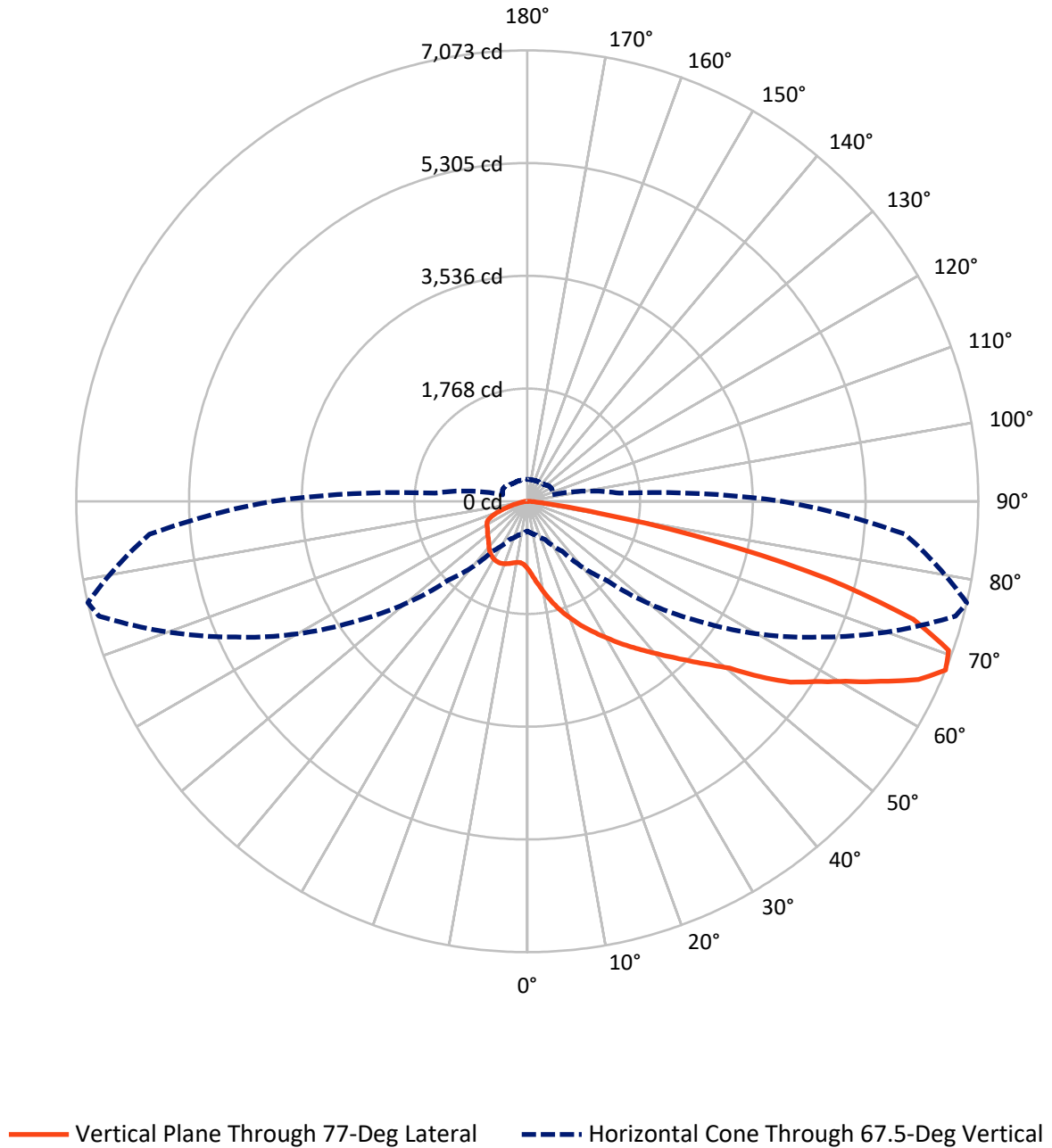
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1705.5 | 0.0 | 1705.5 |
| | % Fixture | 18.9 | 0.0 | 18.9 |
| Street Side | Lumens | 7310.5 | 0.0 | 7310.5 |
| | % Fixture | 81.1 | 0.0 | 81.1 |
| Total | Lumens | 9016.0 | 0.0 | 9016.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 113.4 | 1.3 |
| 10°-20° | 407.4 | 4.5 |
| 20°-30° | 769.1 | 8.5 |
| 30°-40° | 1239.1 | 13.7 |
| 40°-50° | 1694.8 | 18.8 |
| 50°-60° | 1911.8 | 21.2 |
| 60°-70° | 1784.4 | 19.8 |
| 70°-80° | 978.1 | 10.8 |
| 80°-90° | 118.0 | 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° | 9016.0 | 100.0 |
| 0°-180° | 9016.0 | 100.0 |

Coefficient of Utilization



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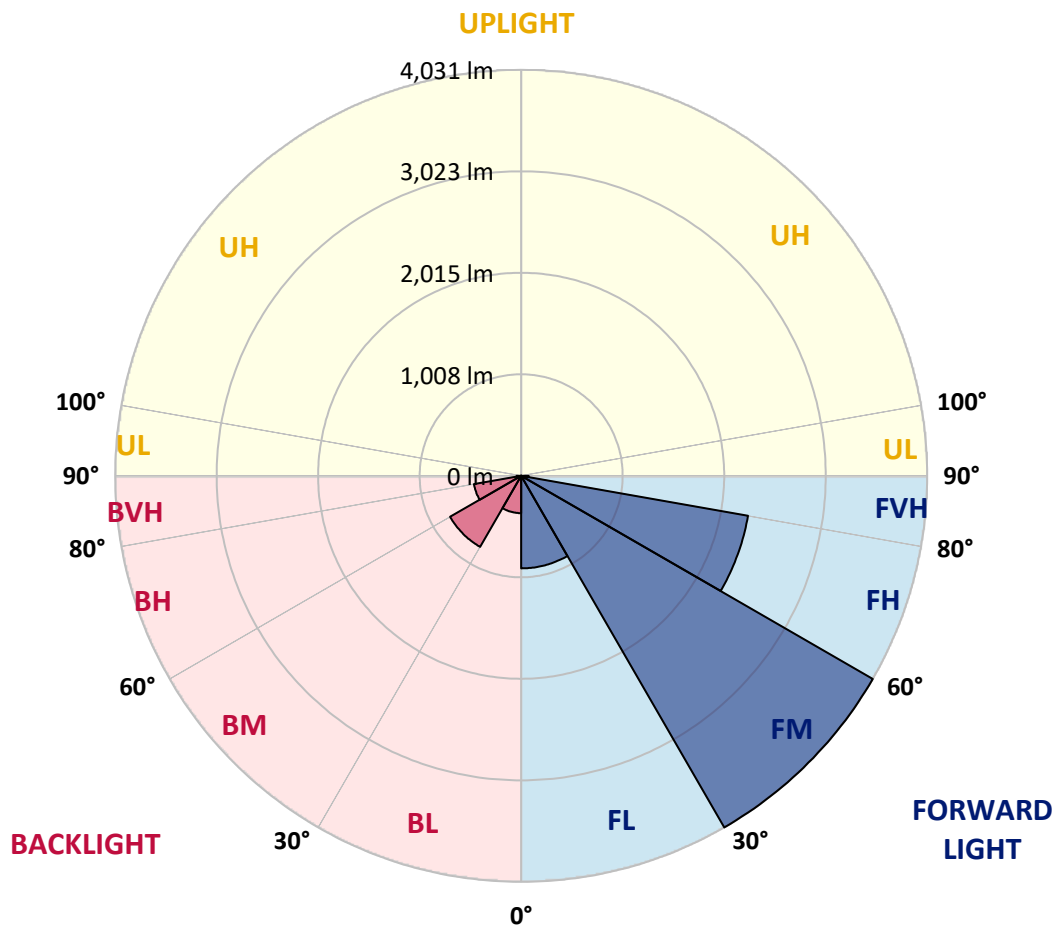
CATALOG NUMBER: GALN-SB1D-827-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 919.1 | 10.2 | | | |
| FM (30°-60°) | 4030.9 | 44.7 | | | |
| FH (60°-80°) | 2286.7 | 25.4 | | | G2/5000 |
| FVH (80°-90°) | 73.8 | 0.8 | | | G1/100 |
| BL (0°-30°) | 370.8 | 4.1 | B1/500 | | |
| BM (30°-60°) | 814.7 | 9.0 | B1/1000 | | |
| BH (60°-80°) | 475.8 | 5.3 | B1/500 | | G1/500 |
| BVH (80°-90°) | 44.2 | 0.5 | | | G1/100 |
| 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 Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 77° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1057.9 | 1057.9 | 1057.9 | 1057.9 | 1057.9 | 1057.9 | 1057.9 | 1057.9 | 1057.9 | 1057.9 |
| 2.5° | 1324.5 | 1333.8 | 1322.2 | 1322.2 | 1283.1 | 1262.6 | 1223.5 | 1193.8 | 1140.2 | 1130.9 |
| 5° | 1565.6 | 1577.2 | 1561.0 | 1554.0 | 1507.9 | 1465.5 | 1399.9 | 1335.2 | 1239.8 | 1230.1 |
| 7.5° | 1752.2 | 1767.1 | 1752.7 | 1745.3 | 1704.3 | 1656.8 | 1580.0 | 1489.7 | 1355.2 | 1336.2 |
| 10° | 1904.4 | 1906.7 | 1902.1 | 1904.9 | 1872.8 | 1833.7 | 1755.0 | 1649.8 | 1481.8 | 1455.8 |
| 12.5° | 1990.5 | 2001.2 | 2010.5 | 2027.3 | 2021.7 | 1997.5 | 1926.8 | 1801.1 | 1615.9 | 1582.4 |
| 15° | 2031.0 | 2049.6 | 2070.6 | 2109.2 | 2140.4 | 2146.4 | 2092.4 | 1963.5 | 1752.2 | 1711.7 |
| 17.5° | 2045.4 | 2063.1 | 2096.2 | 2152.0 | 2219.0 | 2264.2 | 2240.0 | 2121.3 | 1887.2 | 1840.7 |
| 20° | 2118.5 | 2123.6 | 2143.6 | 2196.7 | 2269.3 | 2344.2 | 2362.4 | 2273.0 | 2020.8 | 1968.2 |
| 22.5° | 2274.9 | 2264.6 | 2270.2 | 2294.4 | 2346.6 | 2419.2 | 2460.6 | 2407.1 | 2158.1 | 2097.6 |
| 25° | 2533.2 | 2503.4 | 2473.6 | 2445.7 | 2472.2 | 2513.2 | 2560.2 | 2541.1 | 2301.9 | 2225.1 |
| 27.5° | 2859.4 | 2823.1 | 2757.5 | 2665.8 | 2633.7 | 2648.1 | 2669.1 | 2665.4 | 2435.0 | 2357.3 |
| 30° | 3180.6 | 3138.2 | 3060.0 | 2927.4 | 2842.7 | 2804.5 | 2788.7 | 2778.0 | 2579.7 | 2496.9 |
| 32.5° | 3437.0 | 3403.5 | 3326.7 | 3178.2 | 3055.4 | 2990.2 | 2937.6 | 2899.4 | 2731.0 | 2648.1 |
| 35° | 3661.3 | 3630.1 | 3542.2 | 3380.2 | 3246.6 | 3177.3 | 3108.4 | 3027.0 | 2888.3 | 2804.5 |
| 37.5° | 3866.1 | 3834.9 | 3714.4 | 3545.9 | 3411.4 | 3363.5 | 3302.0 | 3163.8 | 3046.1 | 2966.9 |
| 40° | 3995.5 | 3988.5 | 3875.9 | 3685.0 | 3545.4 | 3521.7 | 3501.2 | 3322.5 | 3221.0 | 3147.5 |
| 42.5° | 4028.5 | 4043.9 | 3954.5 | 3797.7 | 3664.6 | 3645.5 | 3693.4 | 3502.1 | 3417.4 | 3347.2 |
| 45° | 3948.9 | 3993.1 | 3934.5 | 3827.9 | 3749.3 | 3739.0 | 3863.8 | 3698.5 | 3634.8 | 3570.6 |
| 47.5° | 3747.4 | 3822.3 | 3798.1 | 3783.2 | 3772.1 | 3816.3 | 4013.6 | 3907.0 | 3881.0 | 3825.1 |
| 50° | 3340.6 | 3482.6 | 3524.9 | 3619.0 | 3726.9 | 3876.3 | 4150.0 | 4134.6 | 4168.6 | 4112.3 |
| 52.5° | 2637.4 | 2832.9 | 3078.6 | 3314.1 | 3588.2 | 3856.3 | 4299.8 | 4461.3 | 4604.7 | 4574.0 |
| 55° | 2177.1 | 2265.1 | 2454.1 | 2886.0 | 3319.2 | 3772.1 | 4367.3 | 4725.2 | 5037.5 | 5010.0 |
| 57.5° | 1823.4 | 1902.1 | 2018.4 | 2379.1 | 2912.5 | 3580.8 | 4409.2 | 4886.2 | 5334.0 | 5331.2 |
| 60° | 1444.1 | 1527.4 | 1646.6 | 1902.1 | 2437.3 | 3250.4 | 4399.9 | 5069.6 | 5712.3 | 5735.6 |
| 62.5° | 1016.0 | 1107.7 | 1239.8 | 1478.1 | 1951.9 | 2822.2 | 4210.0 | 5202.3 | 6157.7 | 6221.0 |
| 65° | 667.9 | 728.4 | 827.9 | 1033.7 | 1454.4 | 2271.6 | 3847.5 | 5219.5 | 6634.3 | 6741.3 |
| 67.5° | 468.2 | 491.5 | 550.1 | 661.8 | 958.7 | 1742.0 | 3269.9 | 5041.2 | 6952.2 | 7072.7 |
| 70° | 365.3 | 377.0 | 406.8 | 451.4 | 602.2 | 1171.4 | 2505.7 | 4577.7 | 6884.2 | 7009.9 |
| 72.5° | 315.5 | 326.7 | 337.9 | 343.5 | 404.0 | 723.2 | 1697.3 | 3827.5 | 6244.3 | 6329.5 |
| 75° | 286.2 | 289.0 | 298.3 | 296.5 | 308.1 | 469.1 | 979.7 | 2788.7 | 4926.7 | 4897.4 |
| 77.5° | 240.6 | 244.3 | 259.7 | 257.4 | 273.7 | 320.7 | 508.7 | 1799.7 | 3194.0 | 2994.9 |
| 80° | 203.8 | 205.7 | 222.5 | 219.7 | 237.8 | 232.2 | 259.7 | 917.3 | 1354.8 | 1147.7 |
| 82.5° | 70.7 | 87.5 | 169.9 | 175.0 | 181.5 | 140.6 | 149.9 | 374.2 | 413.7 | 316.9 |
| 85° | 34.4 | 36.8 | 86.6 | 122.9 | 122.4 | 70.7 | 73.1 | 133.6 | 130.3 | 102.4 |
| 87.5° | 5.6 | 7.0 | 10.2 | 47.9 | 38.2 | 18.6 | 25.1 | 26.1 | 27.0 | 23.3 |
| 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° |
|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1057.9 | 0° | 1057.9 | 1057.9 | 1057.9 | 1057.9 | 1057.9 | 1057.9 | 1057.9 | 1057.9 | 1057.9 | 1057.9 |
| 1095.6 | 2.5° | 1069.5 | 1046.2 | 997.4 | 952.2 | 916.8 | 882.9 | 863.8 | 847.5 | 838.2 | 836.3 |
| 1146.7 | 5° | 1098.3 | 1050.4 | 961.5 | 886.6 | 837.7 | 801.4 | 782.3 | 770.2 | 764.2 | 760.5 |
| 1215.6 | 7.5° | 1139.8 | 1069.5 | 942.9 | 857.7 | 806.5 | 780.5 | 770.7 | 768.8 | 768.4 | 768.8 |
| 1298.9 | 10° | 1197.0 | 1100.7 | 941.0 | 850.8 | 807.9 | 793.5 | 793.0 | 793.5 | 795.4 | 795.8 |
| 1389.7 | 12.5° | 1258.9 | 1132.8 | 948.5 | 856.8 | 825.6 | 817.7 | 816.3 | 815.8 | 817.2 | 818.2 |
| 1481.4 | 15° | 1326.4 | 1175.1 | 961.1 | 869.8 | 845.2 | 836.8 | 835.4 | 832.6 | 832.1 | 831.7 |
| 1577.7 | 17.5° | 1395.7 | 1217.0 | 975.0 | 883.8 | 857.7 | 846.1 | 841.0 | 834.5 | 829.3 | 827.9 |
| 1677.3 | 20° | 1466.0 | 1258.4 | 984.8 | 890.8 | 858.7 | 842.4 | 832.1 | 821.0 | 812.1 | 807.0 |
| 1777.8 | 22.5° | 1540.9 | 1301.7 | 990.8 | 888.9 | 850.3 | 827.9 | 809.3 | 796.3 | 782.8 | 774.0 |
| 1879.3 | 25° | 1614.0 | 1339.4 | 990.4 | 879.1 | 834.0 | 805.6 | 781.9 | 765.1 | 746.5 | 737.2 |
| 1984.0 | 27.5° | 1684.3 | 1373.4 | 978.7 | 861.9 | 810.7 | 779.1 | 750.7 | 730.7 | 712.5 | 703.7 |
| 2089.7 | 30° | 1756.9 | 1401.8 | 960.6 | 836.8 | 783.3 | 748.4 | 717.2 | 700.0 | 683.7 | 675.3 |
| 2201.3 | 32.5° | 1829.0 | 1427.9 | 935.0 | 805.6 | 751.6 | 718.1 | 687.4 | 671.6 | 661.8 | 661.8 |
| 2321.4 | 35° | 1905.4 | 1446.0 | 901.0 | 769.3 | 718.1 | 686.0 | 661.8 | 652.5 | 651.6 | 646.0 |
| 2448.5 | 37.5° | 1985.9 | 1457.6 | 859.6 | 732.1 | 685.1 | 654.8 | 647.4 | 636.2 | 626.9 | 614.8 |
| 2588.1 | 40° | 2070.6 | 1469.3 | 809.8 | 693.4 | 650.2 | 633.4 | 630.2 | 615.3 | 588.7 | 558.9 |
| 2746.3 | 42.5° | 2173.4 | 1477.2 | 758.1 | 654.8 | 613.4 | 607.8 | 612.5 | 586.9 | 544.5 | 522.2 |
| 2937.1 | 45° | 2292.6 | 1490.2 | 710.7 | 616.7 | 575.7 | 575.7 | 595.2 | 561.7 | 526.8 | 512.9 |
| 3155.0 | 47.5° | 2447.1 | 1520.5 | 666.5 | 574.8 | 540.8 | 550.1 | 557.1 | 531.5 | 511.9 | 494.7 |
| 3420.2 | 50° | 2670.5 | 1593.1 | 620.8 | 532.4 | 514.3 | 532.9 | 523.1 | 508.2 | 485.4 | 471.5 |
| 3841.9 | 52.5° | 2947.9 | 1635.9 | 580.4 | 494.3 | 491.5 | 510.1 | 496.1 | 482.2 | 464.9 | 446.3 |
| 4161.6 | 55° | 3136.8 | 1643.8 | 546.4 | 466.3 | 476.1 | 474.2 | 469.1 | 456.6 | 447.3 | 422.6 |
| 4477.2 | 57.5° | 3348.1 | 1659.6 | 518.5 | 449.6 | 466.3 | 445.9 | 444.0 | 433.3 | 421.2 | 404.4 |
| 4862.0 | 60° | 3600.8 | 1684.3 | 494.3 | 443.1 | 458.0 | 427.2 | 417.9 | 413.7 | 401.6 | 393.3 |
| 5325.1 | 62.5° | 3876.3 | 1706.6 | 469.6 | 444.0 | 448.2 | 409.1 | 395.1 | 393.7 | 386.3 | 383.5 |
| 5759.8 | 65° | 4064.3 | 1645.7 | 438.9 | 443.1 | 432.8 | 390.5 | 372.8 | 372.3 | 366.3 | 365.3 |
| 5948.3 | 67.5° | 3998.7 | 1452.5 | 397.5 | 430.0 | 417.0 | 371.9 | 352.3 | 350.4 | 342.5 | 343.0 |
| 5751.4 | 70° | 3670.2 | 1177.0 | 340.2 | 397.9 | 397.5 | 355.1 | 330.9 | 324.9 | 314.1 | 316.0 |
| 5000.7 | 72.5° | 3054.0 | 872.2 | 263.4 | 344.4 | 366.3 | 339.7 | 306.2 | 296.5 | 283.0 | 284.8 |
| 3691.6 | 75° | 2205.5 | 592.9 | 191.7 | 262.0 | 318.8 | 321.6 | 282.0 | 265.3 | 249.0 | 251.8 |
| 2054.7 | 77.5° | 1128.6 | 336.0 | 141.0 | 180.6 | 250.4 | 292.3 | 260.2 | 237.8 | 234.1 | 260.2 |
| 592.5 | 80° | 368.1 | 168.5 | 97.7 | 126.6 | 164.3 | 239.2 | 228.0 | 202.4 | 201.5 | 207.6 |
| 124.3 | 82.5° | 109.8 | 71.2 | 62.8 | 83.3 | 90.8 | 183.4 | 196.9 | 153.1 | 131.7 | 138.7 |
| 41.4 | 85° | 37.7 | 34.4 | 35.8 | 41.4 | 43.3 | 107.5 | 137.8 | 101.5 | 95.9 | 105.6 |
| 9.3 | 87.5° | 8.8 | 12.1 | 10.2 | 9.3 | 9.3 | 26.1 | 53.5 | 42.4 | 58.6 | 39.1 |
| 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> |
|-------------|
| 1057.9 |
| 836.3 |
| 760.0 |
| 770.2 |
| 796.3 |
| 818.6 |
| 831.2 |
| 829.3 |
| 808.9 |
| 774.4 |
| 737.2 |
| 703.2 |
| 674.8 |
| 662.3 |
| 644.6 |
| 612.9 |
| 554.8 |
| 522.6 |
| 515.2 |
| 494.3 |
| 470.1 |
| 442.6 |
| 423.0 |
| 398.8 |
| 395.6 |
| 383.5 |
| 364.9 |
| 343.0 |
| 317.9 |
| 284.4 |
| 252.7 |
| 256.4 |
| 178.2 |
| 143.3 |
| 104.2 |
| 37.7 |
| 0.0 |

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