

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: P939974

Luminaire Tested: **GALN-SB2D-827-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P939974
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB2D-827-U-T2-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12922 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

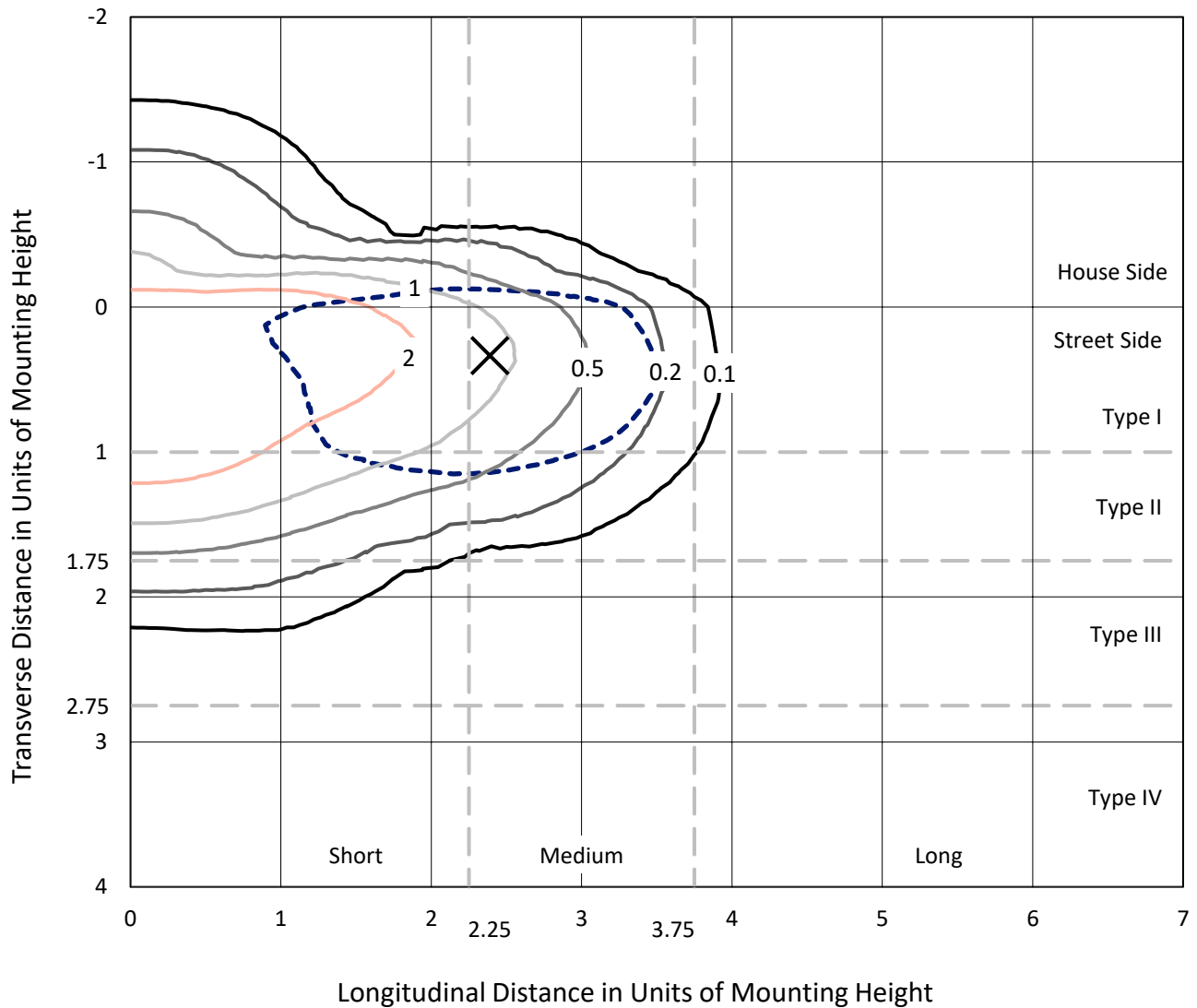
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

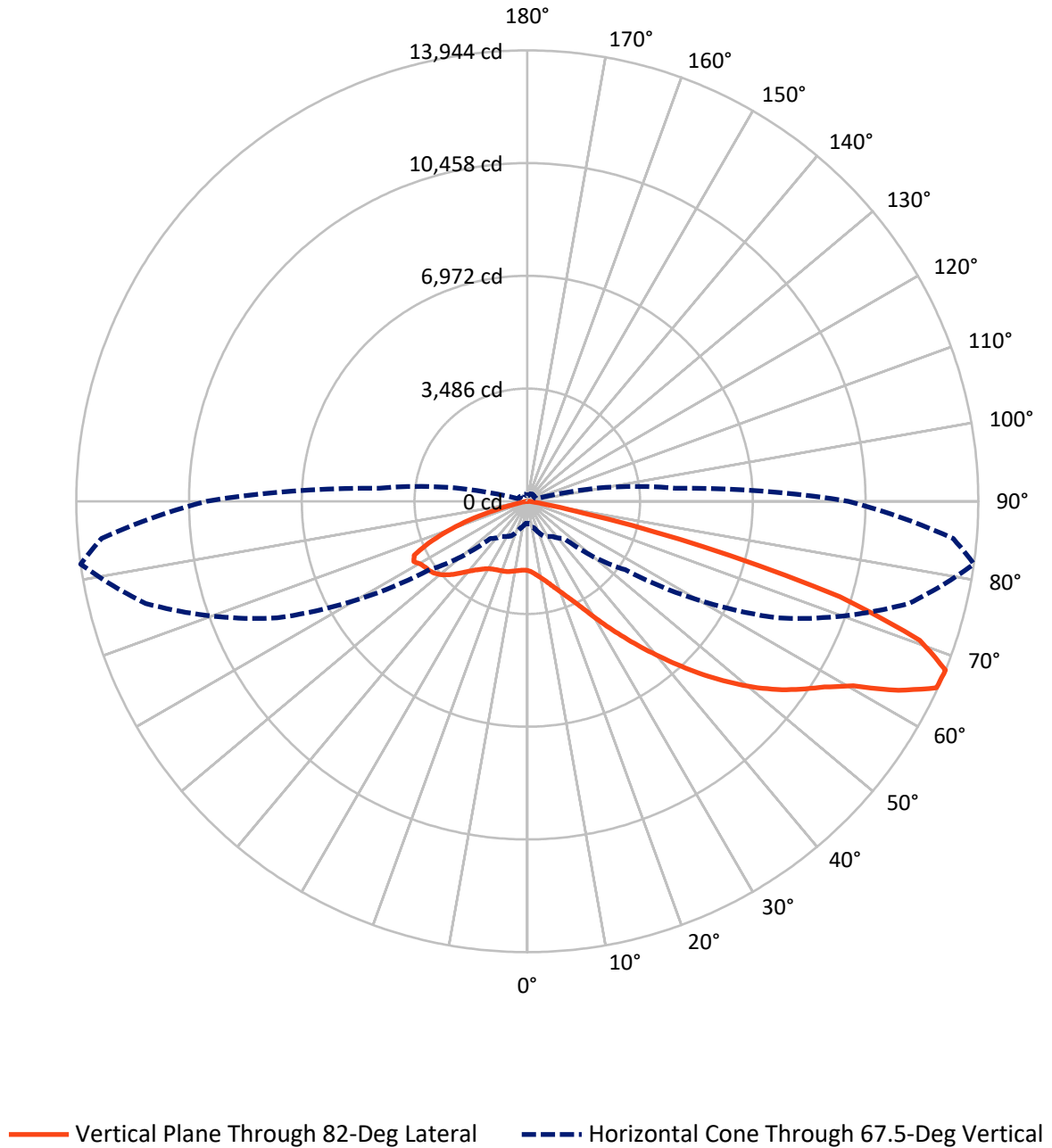
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 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 | 2340.7 | 0.0 | 2340.7 |
| | % Fixture | 18.1 | 0.0 | 18.1 |
| Street Side | Lumens | 10581.3 | 0.0 | 10581.3 |
| | % Fixture | 81.9 | 0.0 | 81.9 |
| Total | Lumens | 12922.0 | 0.0 | 12922.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 190.7 | 1.5 |
| 10°-20° | 495.6 | 3.8 |
| 20°-30° | 793.8 | 6.1 |
| 30°-40° | 1403.7 | 10.9 |
| 40°-50° | 2459.4 | 19.0 |
| 50°-60° | 3280.2 | 25.4 |
| 60°-70° | 3053.7 | 23.6 |
| 70°-80° | 1172.0 | 9.1 |
| 80°-90° | 72.8 | 0.6 |
| 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° | 12922.0 | 100.0 |
| 0°-180° | 12922.0 | 100.0 |

Coefficient of Utilization



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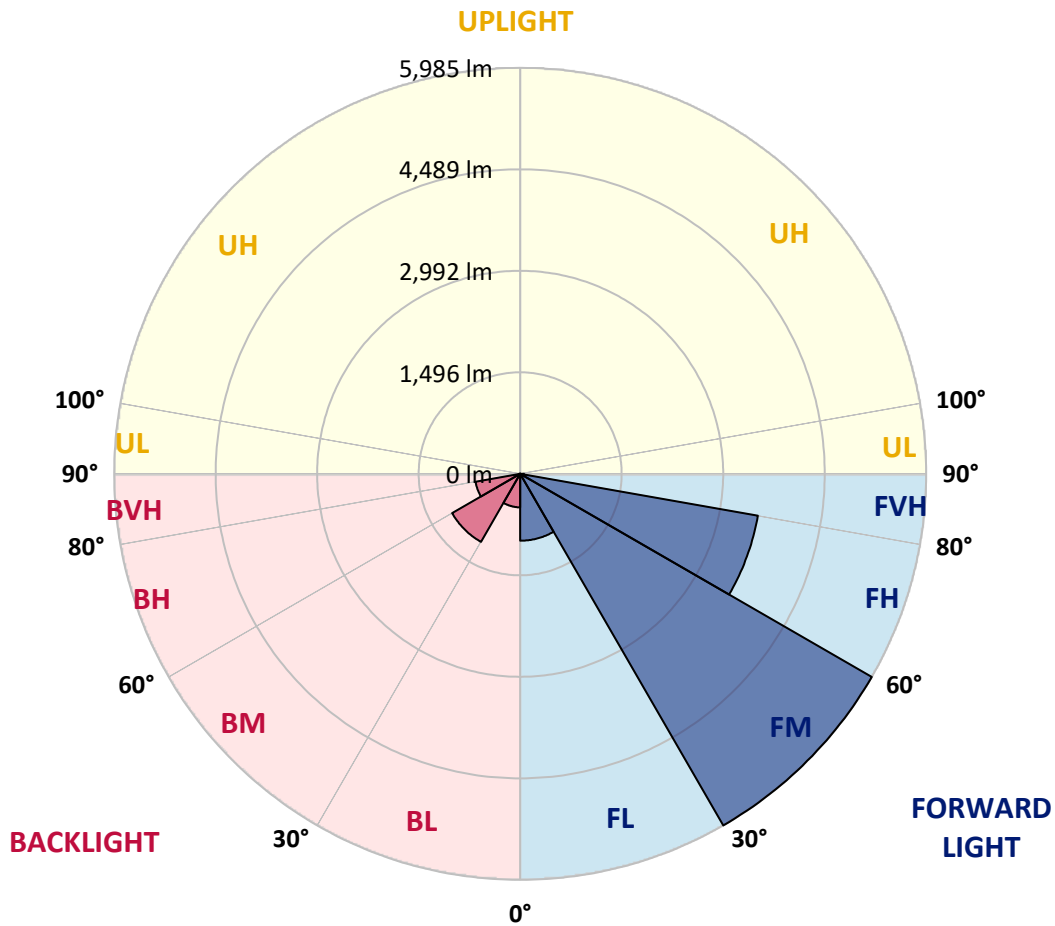
CATALOG NUMBER: GALN-SB2D-827-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 985.8 | 7.6 | | | |
| FM (30°-60°) | 5984.9 | 46.3 | | | |
| FH (60°-80°) | 3557.6 | 27.5 | | | G2/5000 |
| FVH (80°-90°) | 52.9 | 0.4 | | | G1/100 |
| BL (0°-30°) | 494.4 | 3.8 | B1/500 | | |
| BM (30°-60°) | 1158.4 | 9.0 | B2/2500 | | |
| BH (60°-80°) | 668.1 | 5.2 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 19.9 | 0.2 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 82° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| 0° | 2140.7 | 2140.7 | 2140.7 | 2140.7 | 2140.7 | 2140.7 | 2140.7 | 2140.7 | 2140.7 | 2140.7 |
| 2.5° | 2262.6 | 2275.6 | 2268.2 | 2264.5 | 2258.0 | 2248.7 | 2241.2 | 2218.0 | 2193.8 | 2178.0 |
| 5° | 2308.2 | 2321.2 | 2320.3 | 2324.0 | 2328.7 | 2331.5 | 2329.6 | 2303.5 | 2269.1 | 2242.1 |
| 7.5° | 2269.1 | 2284.0 | 2296.1 | 2314.7 | 2347.3 | 2381.7 | 2398.4 | 2392.9 | 2357.5 | 2320.3 |
| 10° | 2158.4 | 2174.2 | 2203.1 | 2246.8 | 2315.6 | 2390.1 | 2452.4 | 2481.2 | 2458.9 | 2418.0 |
| 12.5° | 1955.6 | 1971.4 | 2028.2 | 2123.1 | 2238.4 | 2367.7 | 2486.8 | 2564.0 | 2569.6 | 2528.7 |
| 15° | 1727.7 | 1743.5 | 1804.0 | 1923.0 | 2098.9 | 2306.3 | 2505.4 | 2651.5 | 2700.8 | 2665.5 |
| 17.5° | 1586.2 | 1600.2 | 1645.8 | 1741.6 | 1924.9 | 2183.5 | 2498.9 | 2744.5 | 2857.1 | 2829.2 |
| 20° | 1543.5 | 1555.5 | 1576.9 | 1643.9 | 1796.5 | 2056.1 | 2456.1 | 2832.0 | 3025.5 | 3009.7 |
| 22.5° | 1589.0 | 1600.2 | 1606.7 | 1636.5 | 1732.3 | 1972.3 | 2402.2 | 2921.3 | 3220.9 | 3222.7 |
| 25° | 1694.2 | 1705.3 | 1697.9 | 1716.5 | 1758.4 | 1946.3 | 2381.7 | 3026.4 | 3466.5 | 3487.0 |
| 27.5° | 1867.2 | 1868.1 | 1850.5 | 1849.5 | 1856.1 | 1985.4 | 2403.1 | 3139.0 | 3776.3 | 3814.4 |
| 30° | 2214.2 | 2200.3 | 2132.4 | 2058.9 | 2025.4 | 2102.6 | 2462.6 | 3272.0 | 4141.9 | 4209.8 |
| 32.5° | 2749.2 | 2728.7 | 2604.1 | 2428.2 | 2251.4 | 2291.5 | 2569.6 | 3423.7 | 4540.1 | 4662.9 |
| 35° | 3329.7 | 3324.1 | 3193.9 | 2932.5 | 2623.6 | 2560.3 | 2743.6 | 3622.8 | 4974.6 | 5170.0 |
| 37.5° | 3869.3 | 3866.5 | 3792.1 | 3484.2 | 3108.3 | 2935.3 | 3022.7 | 3883.3 | 5439.8 | 5722.6 |
| 40° | 4362.4 | 4370.8 | 4296.4 | 4021.0 | 3642.3 | 3416.2 | 3402.3 | 4205.2 | 5957.0 | 6324.5 |
| 42.5° | 4788.5 | 4797.8 | 4722.5 | 4518.7 | 4169.8 | 3948.4 | 3868.4 | 4599.7 | 6462.2 | 6971.1 |
| 45° | 5077.9 | 5135.5 | 5124.4 | 4961.6 | 4711.3 | 4481.5 | 4428.5 | 5094.6 | 7038.1 | 7656.8 |
| 47.5° | 5159.7 | 5212.8 | 5296.5 | 5318.8 | 5166.2 | 4940.2 | 5003.4 | 5691.0 | 7620.5 | 8343.4 |
| 50° | 4957.8 | 5007.2 | 5181.1 | 5412.8 | 5518.8 | 5449.1 | 5562.6 | 6330.1 | 8216.9 | 9028.1 |
| 52.5° | 4559.7 | 4609.9 | 4829.5 | 5196.0 | 5628.6 | 5848.2 | 6123.6 | 6960.0 | 8794.6 | 9676.6 |
| 55° | 3983.8 | 4036.8 | 4318.7 | 4733.6 | 5419.3 | 6012.9 | 6591.5 | 7588.9 | 9324.0 | 10259.9 |
| 57.5° | 3200.4 | 3239.5 | 3532.5 | 4113.1 | 4892.7 | 5849.1 | 6936.7 | 8275.5 | 9822.6 | 10833.0 |
| 60° | 2085.8 | 2120.3 | 2460.8 | 3108.3 | 4020.0 | 5302.1 | 7005.5 | 9041.2 | 10485.1 | 11578.2 |
| 62.5° | 1387.2 | 1410.4 | 1612.3 | 2087.7 | 2831.1 | 4251.7 | 6602.7 | 9652.4 | 11456.3 | 12875.1 |
| 65° | 951.7 | 975.0 | 1176.9 | 1508.1 | 1829.1 | 2812.5 | 5444.4 | 9571.5 | 12336.5 | 13905.0 |
| 67.5° | 679.2 | 698.7 | 869.9 | 1182.5 | 1323.9 | 1633.7 | 3690.7 | 8536.9 | 12209.9 | 13944.1 |
| 70° | 486.6 | 497.7 | 639.2 | 921.0 | 1052.2 | 981.5 | 2052.4 | 6529.2 | 10690.7 | 12876.1 |
| 72.5° | 340.5 | 344.2 | 443.8 | 701.5 | 847.5 | 716.4 | 976.9 | 4353.1 | 8085.7 | 10106.4 |
| 75° | 230.7 | 235.4 | 298.6 | 514.5 | 680.1 | 547.0 | 517.3 | 2334.3 | 4746.7 | 5594.2 |
| 77.5° | 141.4 | 143.3 | 192.6 | 351.7 | 508.9 | 416.8 | 333.1 | 989.0 | 1836.5 | 1803.0 |
| 80° | 80.0 | 80.0 | 122.8 | 218.6 | 347.0 | 268.9 | 233.5 | 420.5 | 581.5 | 510.8 |
| 82.5° | 44.7 | 45.6 | 89.3 | 135.8 | 229.8 | 159.1 | 128.4 | 194.4 | 251.2 | 222.4 |
| 85° | 18.6 | 20.5 | 54.9 | 64.2 | 109.8 | 79.1 | 52.1 | 81.9 | 93.0 | 82.8 |
| 87.5° | 1.9 | 2.8 | 16.7 | 12.1 | 13.0 | 15.8 | 7.4 | 15.8 | 13.0 | 13.0 |
| 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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CANDELA DISTRIBUTION (continued):

| 85° | | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|---------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2140.7 | 0° | 2140.7 | 2140.7 | 2140.7 | 2140.7 | 2140.7 | 2140.7 | 2140.7 | 2140.7 | 2140.7 | 2140.7 |
| 2172.4 | 2.5° | 2154.7 | 2140.7 | 2105.4 | 2064.4 | 2010.5 | 1984.4 | 1949.1 | 1924.9 | 1904.4 | 1906.3 |
| 2226.3 | 5° | 2196.6 | 2161.2 | 2082.1 | 1983.5 | 1860.7 | 1773.2 | 1680.2 | 1616.0 | 1563.9 | 1552.8 |
| 2300.8 | 7.5° | 2254.2 | 2198.4 | 2059.8 | 1882.1 | 1674.6 | 1517.4 | 1376.9 | 1286.7 | 1222.5 | 1202.0 |
| 2391.0 | 10° | 2328.7 | 2247.7 | 2031.0 | 1754.6 | 1456.0 | 1256.0 | 1105.3 | 1034.6 | 990.8 | 975.9 |
| 2497.1 | 12.5° | 2415.2 | 2304.5 | 1992.8 | 1599.3 | 1230.9 | 1038.3 | 942.4 | 907.1 | 893.1 | 888.5 |
| 2627.3 | 15° | 2524.0 | 2375.2 | 1935.1 | 1415.1 | 1040.1 | 905.2 | 864.3 | 859.6 | 861.5 | 859.6 |
| 2783.6 | 17.5° | 2653.4 | 2452.4 | 1841.2 | 1225.3 | 911.7 | 837.3 | 822.4 | 826.2 | 830.8 | 829.9 |
| 2958.5 | 20° | 2794.8 | 2528.7 | 1721.1 | 1056.9 | 824.3 | 788.9 | 780.6 | 784.3 | 788.0 | 786.1 |
| 3160.4 | 22.5° | 2955.7 | 2610.6 | 1588.1 | 925.7 | 765.7 | 744.3 | 735.0 | 735.9 | 735.9 | 732.2 |
| 3416.2 | 25° | 3148.3 | 2700.8 | 1448.6 | 832.7 | 721.0 | 704.3 | 693.1 | 689.4 | 683.8 | 672.6 |
| 3727.0 | 27.5° | 3378.1 | 2796.6 | 1314.6 | 767.5 | 685.7 | 669.9 | 656.8 | 647.5 | 633.6 | 615.0 |
| 4100.1 | 30° | 3636.7 | 2912.9 | 1201.1 | 726.6 | 657.8 | 641.9 | 627.1 | 613.1 | 592.6 | 569.4 |
| 4528.9 | 32.5° | 3941.0 | 3037.6 | 1118.3 | 699.6 | 632.6 | 615.9 | 598.2 | 581.5 | 559.1 | 535.9 |
| 5010.9 | 35° | 4303.8 | 3188.3 | 1069.9 | 681.0 | 613.1 | 590.8 | 571.2 | 552.6 | 535.9 | 515.4 |
| 5534.7 | 37.5° | 4697.3 | 3348.3 | 1055.0 | 671.7 | 600.1 | 565.7 | 543.3 | 530.3 | 528.4 | 516.3 |
| 6101.2 | 40° | 5128.1 | 3538.1 | 1066.2 | 666.1 | 586.1 | 541.5 | 517.3 | 514.5 | 519.1 | 497.7 |
| 6706.9 | 42.5° | 5584.0 | 3763.3 | 1084.8 | 659.6 | 566.6 | 517.3 | 494.0 | 494.0 | 490.3 | 460.5 |
| 7347.0 | 45° | 6077.1 | 4022.8 | 1103.4 | 643.8 | 543.3 | 493.1 | 475.4 | 468.9 | 453.1 | 424.2 |
| 7990.8 | 47.5° | 6573.9 | 4287.1 | 1117.4 | 615.0 | 515.4 | 472.6 | 456.8 | 441.9 | 418.7 | 392.6 |
| 8622.5 | 50° | 7045.5 | 4524.3 | 1102.5 | 572.2 | 483.8 | 453.1 | 436.3 | 415.9 | 390.7 | 373.1 |
| 9220.7 | 52.5° | 7467.0 | 4729.9 | 1039.2 | 521.9 | 450.3 | 432.6 | 417.7 | 396.3 | 375.9 | 357.3 |
| 9760.3 | 55° | 7833.6 | 4896.4 | 927.6 | 474.5 | 420.5 | 414.9 | 400.1 | 373.1 | 345.2 | 329.3 |
| 10295.3 | 57.5° | 8185.2 | 5023.0 | 788.0 | 435.4 | 393.5 | 395.4 | 373.1 | 348.9 | 322.8 | 306.1 |
| 11016.3 | 60° | 8653.2 | 5192.3 | 646.6 | 399.1 | 364.7 | 370.3 | 346.1 | 328.4 | 295.9 | 274.5 |
| 12252.7 | 62.5° | 9401.2 | 5455.6 | 513.6 | 354.5 | 331.2 | 333.1 | 322.8 | 301.4 | 262.4 | 237.2 |
| 13169.1 | 65° | 9994.8 | 5358.8 | 404.7 | 306.1 | 293.1 | 295.9 | 295.9 | 272.6 | 230.7 | 201.9 |
| 13218.4 | 67.5° | 9927.8 | 4588.5 | 322.8 | 258.6 | 256.8 | 258.6 | 265.2 | 245.6 | 204.7 | 181.4 |
| 12211.8 | 70° | 9145.4 | 3649.8 | 258.6 | 214.9 | 223.3 | 218.6 | 237.2 | 224.2 | 184.2 | 161.0 |
| 9467.3 | 72.5° | 7462.3 | 2629.2 | 197.2 | 177.7 | 171.2 | 178.6 | 214.0 | 201.9 | 153.5 | 127.5 |
| 5014.6 | 75° | 4360.6 | 1403.0 | 147.0 | 140.5 | 123.7 | 148.9 | 189.8 | 172.1 | 117.2 | 94.0 |
| 1536.9 | 77.5° | 1419.7 | 489.4 | 107.9 | 103.3 | 92.1 | 120.0 | 161.9 | 145.1 | 95.8 | 74.4 |
| 450.3 | 80° | 380.5 | 147.9 | 73.5 | 67.9 | 59.5 | 89.3 | 128.4 | 115.4 | 68.8 | 48.4 |
| 193.5 | 82.5° | 152.6 | 62.3 | 42.8 | 38.1 | 32.6 | 61.4 | 101.4 | 93.0 | 51.2 | 30.7 |
| 60.5 | 85° | 49.3 | 20.5 | 15.8 | 12.1 | 14.9 | 38.1 | 60.5 | 63.3 | 36.3 | 15.8 |
| 9.3 | 87.5° | 6.5 | 2.8 | 2.8 | 3.7 | 2.8 | 6.5 | 18.6 | 17.7 | 10.2 | 1.9 |
| 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> |
| 2140.7 |
| 1887.7 |
| 1527.6 |
| 1181.5 |
| 964.8 |
| 885.7 |
| 858.7 |
| 828.0 |
| 785.2 |
| 730.3 |
| 670.8 |
| 613.1 |
| 567.5 |
| 536.8 |
| 513.6 |
| 515.4 |
| 498.7 |
| 460.5 |
| 423.3 |
| 391.7 |
| 370.3 |
| 355.4 |
| 327.5 |
| 304.2 |
| 271.7 |
| 235.4 |
| 199.1 |
| 177.7 |
| 158.2 |
| 124.7 |
| 91.2 |
| 71.6 |
| 47.4 |
| 30.7 |
| 12.1 |
| 0.0 |
| 0.0 |

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