

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: P940017

Luminaire Tested: **GALN-SB2D-850-U-T3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P940017
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB2D-850-U-T3
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 5000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19479 lumens
Efficiency: N/A
Efficacy: 132.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G3

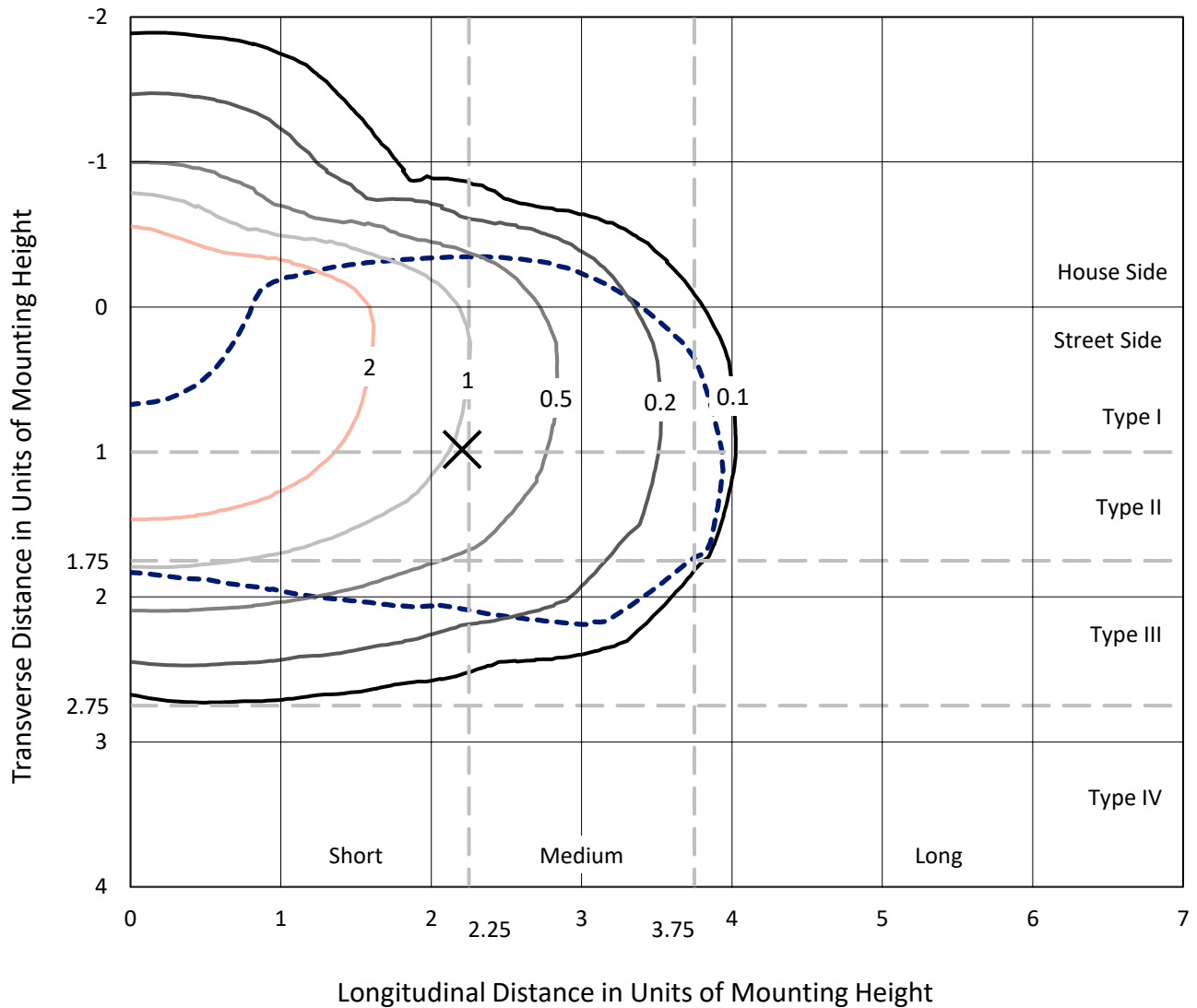
Input Watts (W): 147.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

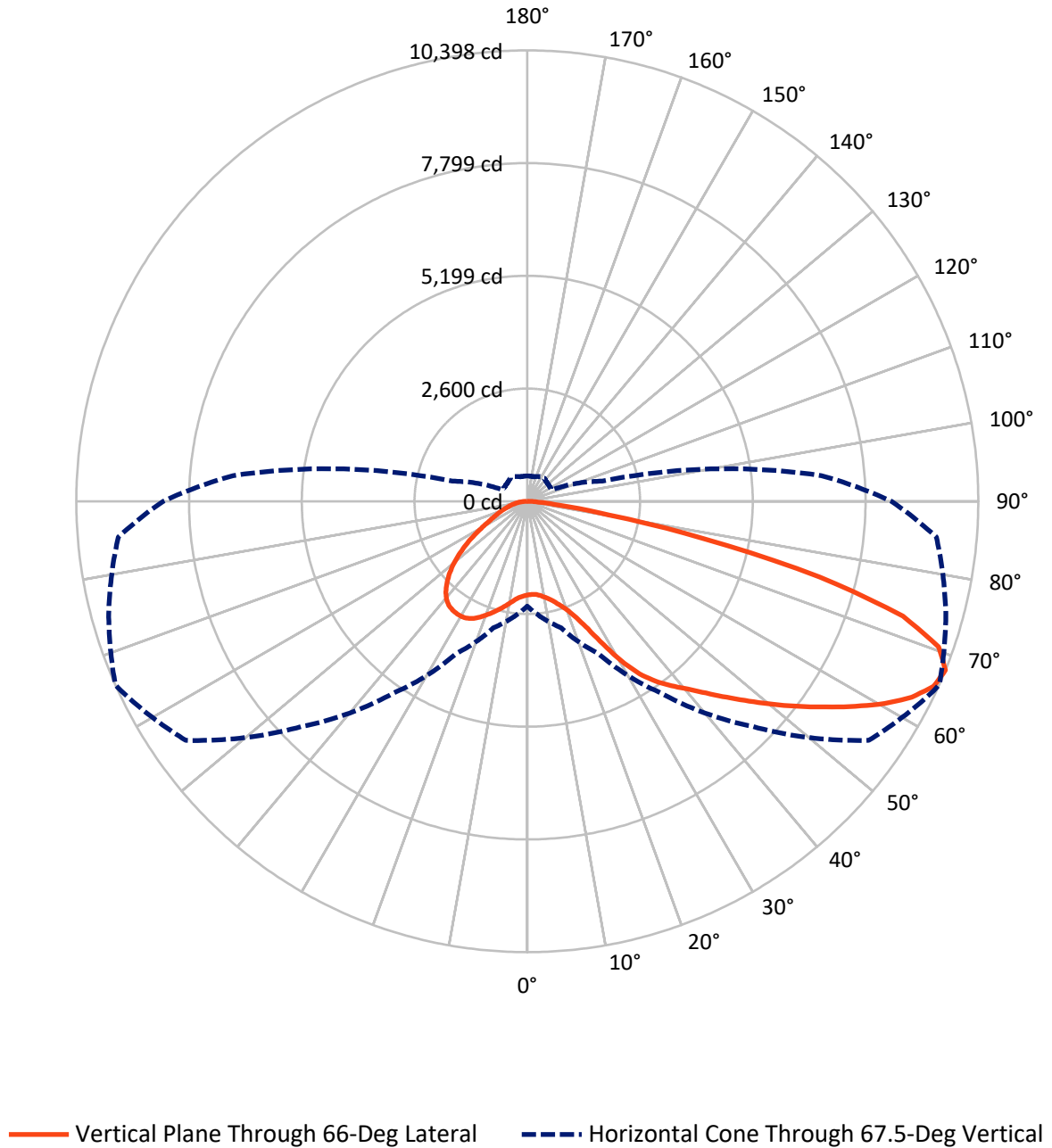
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4843.4 | 0.0 | 4843.4 |
| | % Fixture | 24.9 | 0.0 | 24.9 |
| Street Side | Lumens | 14635.6 | 0.0 | 14635.6 |
| | % Fixture | 75.1 | 0.0 | 75.1 |
| Total | Lumens | 19479.0 | 0.0 | 19479.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 214.2 | 1.1 |
| 10°-20° | 707.7 | 3.6 |
| 20°-30° | 1364.0 | 7.0 |
| 30°-40° | 2391.7 | 12.3 |
| 40°-50° | 3555.6 | 18.3 |
| 50°-60° | 4507.1 | 23.1 |
| 60°-70° | 4410.1 | 22.6 |
| 70°-80° | 2103.7 | 10.8 |
| 80°-90° | 224.8 | 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° | 19479.0 | 100.0 |
| 0°-180° | 19479.0 | 100.0 |

Coefficient of Utilization



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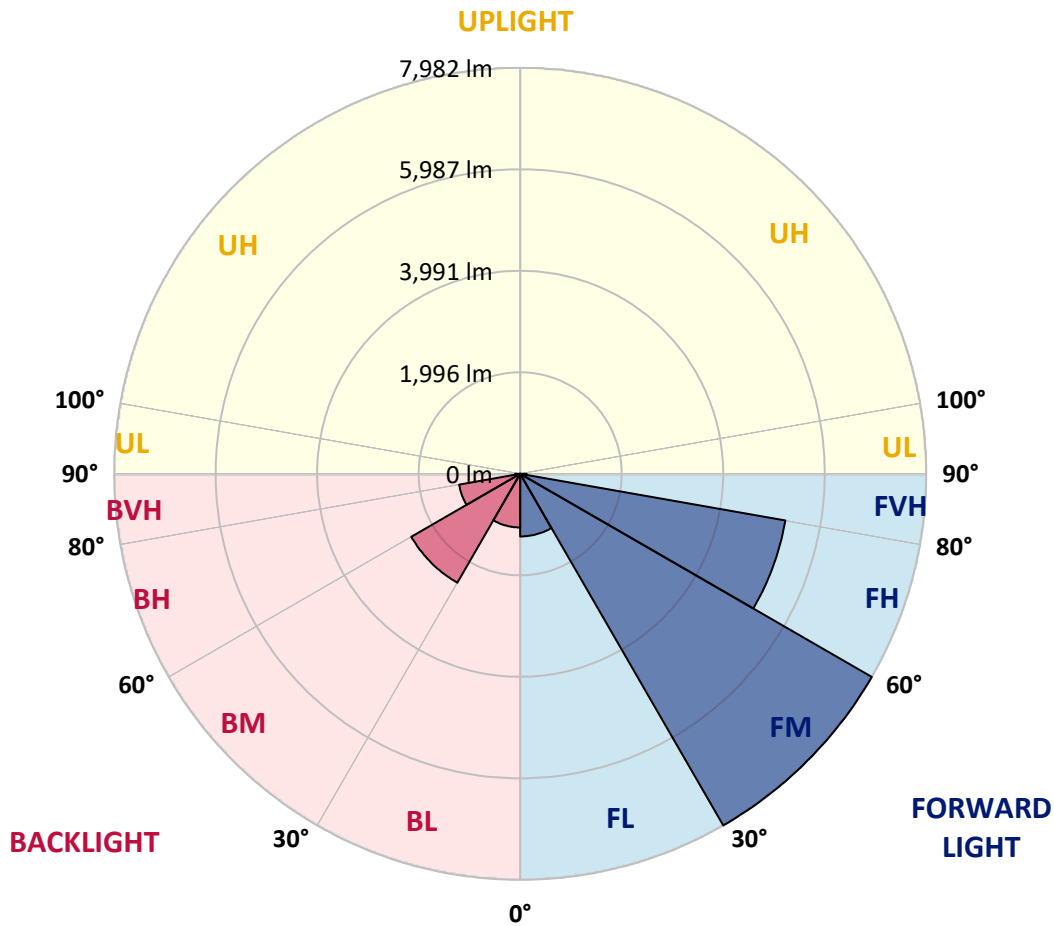
CATALOG NUMBER: GALN-SB2D-850-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1230.9 | 6.3 | | | |
| FM (30°-60°) | 7982.3 | 41.0 | | | |
| FH (60°-80°) | 5294.9 | 27.2 | | | G3/7500 |
| FVH (80°-90°) | 127.5 | 0.7 | | | G2/225 |
| BL (0°-30°) | 1055.1 | 5.4 | B3/2500 | | |
| BM (30°-60°) | 2472.1 | 12.7 | B2/2500 | | |
| BH (60°-80°) | 1218.9 | 6.3 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 97.4 | 0.5 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type III Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 66° | 75° |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|
| 0° | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 |
| 2.5° | 2138.0 | 2150.2 | 2147.2 | 2142.1 | 2141.0 | 2143.1 | 2146.2 | 2149.2 | 2148.2 | 2153.3 |
| 5° | 2131.8 | 2144.1 | 2143.1 | 2143.1 | 2147.2 | 2155.4 | 2160.5 | 2165.6 | 2160.5 | 2166.6 |
| 7.5° | 2135.9 | 2145.1 | 2149.2 | 2153.3 | 2163.5 | 2178.9 | 2191.2 | 2202.4 | 2196.3 | 2203.5 |
| 10° | 2188.1 | 2195.3 | 2199.4 | 2199.4 | 2206.5 | 2223.9 | 2236.2 | 2256.7 | 2251.6 | 2262.8 |
| 12.5° | 2283.3 | 2290.5 | 2290.5 | 2286.4 | 2291.5 | 2302.7 | 2306.8 | 2329.3 | 2320.1 | 2338.6 |
| 15° | 2400.0 | 2414.3 | 2403.0 | 2395.9 | 2397.9 | 2409.2 | 2408.2 | 2425.5 | 2416.3 | 2431.7 |
| 17.5° | 2528.9 | 2547.3 | 2528.9 | 2527.9 | 2523.8 | 2536.1 | 2537.1 | 2552.5 | 2536.1 | 2547.3 |
| 20° | 2681.4 | 2707.0 | 2691.6 | 2696.8 | 2687.5 | 2692.7 | 2697.8 | 2720.3 | 2694.7 | 2702.9 |
| 22.5° | 2896.3 | 2927.0 | 2910.7 | 2930.1 | 2924.0 | 2919.9 | 2918.8 | 2958.8 | 2918.8 | 2921.9 |
| 25° | 3209.5 | 3246.3 | 3217.7 | 3244.3 | 3244.3 | 3257.6 | 3273.0 | 3324.1 | 3257.6 | 3238.2 |
| 27.5° | 3672.1 | 3708.9 | 3652.7 | 3669.0 | 3663.9 | 3696.7 | 3680.3 | 3807.2 | 3735.6 | 3703.8 |
| 30° | 4228.8 | 4294.3 | 4187.9 | 4183.8 | 4178.7 | 4230.9 | 4254.4 | 4338.4 | 4265.7 | 4234.0 |
| 32.5° | 4830.6 | 4899.2 | 4772.3 | 4735.4 | 4716.0 | 4747.7 | 4728.3 | 4795.8 | 4745.7 | 4696.6 |
| 35° | 5467.2 | 5534.8 | 5414.0 | 5342.3 | 5264.6 | 5198.0 | 5128.4 | 5145.8 | 5098.8 | 5024.1 |
| 37.5° | 6069.0 | 6192.8 | 6064.9 | 5988.1 | 5844.9 | 5714.9 | 5520.4 | 5439.6 | 5395.6 | 5327.0 |
| 40° | 6682.0 | 6752.6 | 6655.4 | 6589.9 | 6434.4 | 6230.7 | 5919.6 | 5748.7 | 5689.3 | 5622.8 |
| 42.5° | 7133.4 | 7200.9 | 7148.7 | 7103.7 | 6981.9 | 6745.5 | 6343.3 | 6129.4 | 6043.4 | 5968.7 |
| 45° | 7491.6 | 7541.7 | 7509.0 | 7525.3 | 7473.1 | 7243.9 | 6782.3 | 6537.7 | 6448.7 | 6357.6 |
| 47.5° | 7635.9 | 7689.1 | 7741.3 | 7838.5 | 7927.6 | 7758.7 | 7254.1 | 6979.9 | 6885.7 | 6792.6 |
| 50° | 7619.5 | 7673.7 | 7825.2 | 8031.9 | 8308.3 | 8252.0 | 7751.5 | 7450.6 | 7363.6 | 7257.2 |
| 52.5° | 7488.5 | 7549.9 | 7744.4 | 8088.2 | 8528.3 | 8621.4 | 8258.1 | 7936.8 | 7854.9 | 7728.0 |
| 55° | 7144.6 | 7181.5 | 7473.1 | 7960.3 | 8580.5 | 8879.4 | 8754.5 | 8454.6 | 8372.7 | 8195.7 |
| 57.5° | 6507.0 | 6560.2 | 6985.0 | 7615.4 | 8449.5 | 9054.4 | 9190.5 | 8999.1 | 8920.3 | 8665.5 |
| 60° | 5675.0 | 5759.9 | 6246.0 | 7036.1 | 8115.9 | 9053.3 | 9586.5 | 9534.4 | 9468.9 | 9128.0 |
| 62.5° | 4733.4 | 4831.7 | 5299.4 | 6217.4 | 7532.5 | 8796.5 | 9834.2 | 9982.6 | 9948.8 | 9554.8 |
| 65° | 3635.3 | 3702.8 | 4168.5 | 5158.1 | 6624.7 | 8244.8 | 9862.9 | 10288.6 | 10294.8 | 9879.3 |
| 67.5° | 2420.4 | 2614.9 | 3019.1 | 3870.6 | 5408.9 | 7343.2 | 9611.1 | 10338.8 | 10398.1 | 9990.8 |
| 70° | 1181.0 | 1436.9 | 1833.0 | 2515.6 | 3870.6 | 5960.5 | 8953.0 | 9927.4 | 10059.4 | 9665.4 |
| 72.5° | 490.2 | 573.1 | 789.1 | 1241.4 | 2221.9 | 4022.1 | 7630.8 | 8811.8 | 9056.4 | 8564.1 |
| 75° | 330.6 | 358.2 | 451.3 | 636.6 | 1012.2 | 1983.4 | 5503.0 | 6570.5 | 6964.5 | 6468.1 |
| 77.5° | 254.8 | 272.2 | 328.5 | 445.2 | 601.8 | 750.2 | 2945.5 | 3959.7 | 4163.3 | 3854.3 |
| 80° | 200.6 | 213.9 | 245.6 | 324.4 | 426.8 | 401.2 | 1004.0 | 1794.1 | 1911.8 | 1603.7 |
| 82.5° | 174.0 | 179.1 | 176.0 | 220.0 | 283.5 | 234.4 | 329.5 | 662.2 | 730.7 | 530.1 |
| 85° | 125.9 | 140.2 | 146.4 | 136.1 | 150.4 | 118.7 | 135.1 | 234.4 | 257.9 | 230.3 |
| 87.5° | 51.2 | 75.7 | 93.1 | 88.0 | 55.3 | 33.8 | 42.0 | 68.6 | 78.8 | 86.0 |
| 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° |
|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 2160.5 | 0° | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 | 2160.5 |
| 2161.5 | 2.5° | 2162.5 | 2169.7 | 2174.8 | 2180.9 | 2185.0 | 2191.2 | 2203.5 | 2210.6 | 2211.7 | 2216.8 |
| 2177.9 | 5° | 2182.0 | 2192.2 | 2203.5 | 2219.8 | 2238.3 | 2253.6 | 2277.2 | 2293.5 | 2299.7 | 2304.8 |
| 2217.8 | 7.5° | 2223.9 | 2238.3 | 2258.7 | 2287.4 | 2314.0 | 2334.5 | 2363.1 | 2382.6 | 2402.0 | 2409.2 |
| 2281.2 | 10° | 2286.4 | 2306.8 | 2336.5 | 2375.4 | 2404.1 | 2430.7 | 2460.3 | 2476.7 | 2496.2 | 2504.4 |
| 2357.0 | 12.5° | 2364.1 | 2385.6 | 2424.5 | 2478.8 | 2505.4 | 2523.8 | 2534.0 | 2529.9 | 2534.0 | 2541.2 |
| 2448.1 | 15° | 2453.2 | 2476.7 | 2520.7 | 2579.1 | 2597.5 | 2581.1 | 2558.6 | 2538.1 | 2535.1 | 2537.1 |
| 2558.6 | 17.5° | 2558.6 | 2576.0 | 2627.2 | 2676.3 | 2663.0 | 2595.4 | 2546.3 | 2513.6 | 2497.2 | 2492.1 |
| 2699.8 | 20° | 2706.0 | 2706.0 | 2747.9 | 2778.6 | 2689.6 | 2575.0 | 2498.2 | 2445.0 | 2411.2 | 2396.9 |
| 2892.2 | 22.5° | 2885.1 | 2868.7 | 2895.3 | 2873.8 | 2684.5 | 2517.7 | 2411.2 | 2319.1 | 2267.9 | 2247.5 |
| 3161.4 | 25° | 3112.3 | 3092.8 | 3085.7 | 2952.6 | 2647.6 | 2426.6 | 2253.6 | 2142.1 | 2097.0 | 2085.8 |
| 3549.3 | 27.5° | 3455.1 | 3406.0 | 3312.9 | 2995.6 | 2580.1 | 2283.3 | 2069.4 | 1966.0 | 1940.4 | 1941.5 |
| 4047.7 | 30° | 3911.6 | 3813.3 | 3585.1 | 3002.8 | 2469.6 | 2080.7 | 1881.1 | 1807.4 | 1795.1 | 1800.2 |
| 4466.3 | 32.5° | 4334.3 | 4241.1 | 3863.5 | 2970.0 | 2299.7 | 1882.1 | 1712.2 | 1663.1 | 1644.7 | 1650.8 |
| 4785.6 | 35° | 4665.9 | 4640.3 | 4121.4 | 2924.0 | 2090.9 | 1695.8 | 1560.7 | 1518.8 | 1483.0 | 1474.8 |
| 5086.5 | 37.5° | 4979.0 | 4968.8 | 4314.8 | 2859.5 | 1884.2 | 1563.8 | 1439.0 | 1383.7 | 1331.5 | 1302.8 |
| 5419.1 | 40° | 5322.9 | 5312.7 | 4441.7 | 2760.2 | 1701.0 | 1449.2 | 1329.4 | 1256.8 | 1192.3 | 1140.1 |
| 5795.7 | 42.5° | 5709.8 | 5649.4 | 4502.1 | 2618.0 | 1545.4 | 1352.0 | 1240.4 | 1142.2 | 1057.2 | 1009.1 |
| 6221.5 | 45° | 6132.4 | 5996.3 | 4501.1 | 2436.8 | 1414.4 | 1262.9 | 1145.2 | 1006.0 | 927.2 | 882.2 |
| 6658.5 | 47.5° | 6580.7 | 6327.9 | 4445.8 | 2236.2 | 1287.5 | 1164.7 | 997.9 | 891.4 | 839.2 | 811.6 |
| 7133.4 | 50° | 7043.3 | 6638.0 | 4351.7 | 2005.9 | 1157.5 | 1053.1 | 905.7 | 833.1 | 793.2 | 767.6 |
| 7604.1 | 52.5° | 7478.3 | 6919.5 | 4238.1 | 1745.0 | 1025.5 | 944.6 | 864.8 | 808.5 | 766.6 | 737.9 |
| 8060.6 | 55° | 7882.5 | 7162.0 | 4077.4 | 1477.8 | 918.0 | 872.0 | 845.4 | 798.3 | 750.2 | 716.4 |
| 8524.2 | 57.5° | 8241.7 | 7319.6 | 3800.0 | 1227.1 | 841.3 | 821.8 | 824.9 | 780.9 | 725.6 | 697.0 |
| 8980.7 | 60° | 8540.6 | 7435.3 | 3389.6 | 994.8 | 778.8 | 772.7 | 793.2 | 748.1 | 683.7 | 650.9 |
| 9366.5 | 62.5° | 8719.7 | 7433.2 | 2886.1 | 814.7 | 725.6 | 727.7 | 751.2 | 707.2 | 641.7 | 611.0 |
| 9568.1 | 65° | 8704.3 | 7251.1 | 2333.4 | 697.0 | 674.4 | 676.5 | 707.2 | 662.2 | 606.9 | 588.5 |
| 9466.8 | 67.5° | 8396.3 | 6806.9 | 1790.0 | 620.2 | 618.2 | 627.4 | 663.2 | 631.5 | 585.4 | 583.4 |
| 8863.0 | 70° | 7562.2 | 5884.8 | 1289.5 | 558.8 | 559.8 | 573.1 | 620.2 | 612.0 | 574.1 | 578.2 |
| 7451.7 | 72.5° | 6063.9 | 4486.8 | 865.8 | 494.3 | 495.3 | 516.8 | 579.3 | 596.7 | 562.9 | 617.1 |
| 5287.1 | 75° | 4038.5 | 2798.1 | 556.8 | 425.8 | 426.8 | 454.4 | 543.4 | 567.0 | 532.2 | 615.1 |
| 2751.0 | 77.5° | 1940.4 | 1257.8 | 403.2 | 358.2 | 358.2 | 383.8 | 469.8 | 507.6 | 453.4 | 477.9 |
| 884.3 | 80° | 670.4 | 472.8 | 317.3 | 288.6 | 282.5 | 299.9 | 396.1 | 440.1 | 391.0 | 360.3 |
| 288.6 | 82.5° | 264.0 | 245.6 | 254.8 | 224.1 | 203.7 | 214.9 | 308.1 | 363.3 | 287.6 | 260.0 |
| 162.7 | 85° | 151.5 | 159.7 | 180.1 | 148.4 | 117.7 | 132.0 | 226.2 | 261.0 | 217.0 | 191.4 |
| 53.2 | 87.5° | 40.9 | 56.3 | 82.9 | 76.8 | 53.2 | 56.3 | 107.5 | 144.3 | 124.9 | 96.2 |
| 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> |
|-------------|
| 2160.5 |
| 2215.7 |
| 2303.8 |
| 2410.2 |
| 2508.4 |
| 2543.2 |
| 2544.3 |
| 2499.2 |
| 2393.8 |
| 2244.4 |
| 2087.8 |
| 1944.5 |
| 1817.6 |
| 1659.0 |
| 1480.9 |
| 1303.9 |
| 1145.2 |
| 1012.2 |
| 880.2 |
| 805.4 |
| 758.4 |
| 725.6 |
| 703.1 |
| 678.5 |
| 636.6 |
| 601.8 |
| 587.5 |
| 586.4 |
| 577.2 |
| 625.3 |
| 620.2 |
| 438.0 |
| 337.7 |
| 258.9 |
| 195.5 |
| 99.3 |
| 0.0 |

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