

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: P949684

Luminaire Tested: **GALN-SB4B-840-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P949684
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SB4B-840-U-AFL
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21954 lumens
Efficiency: N/A
Efficacy: 149.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G2

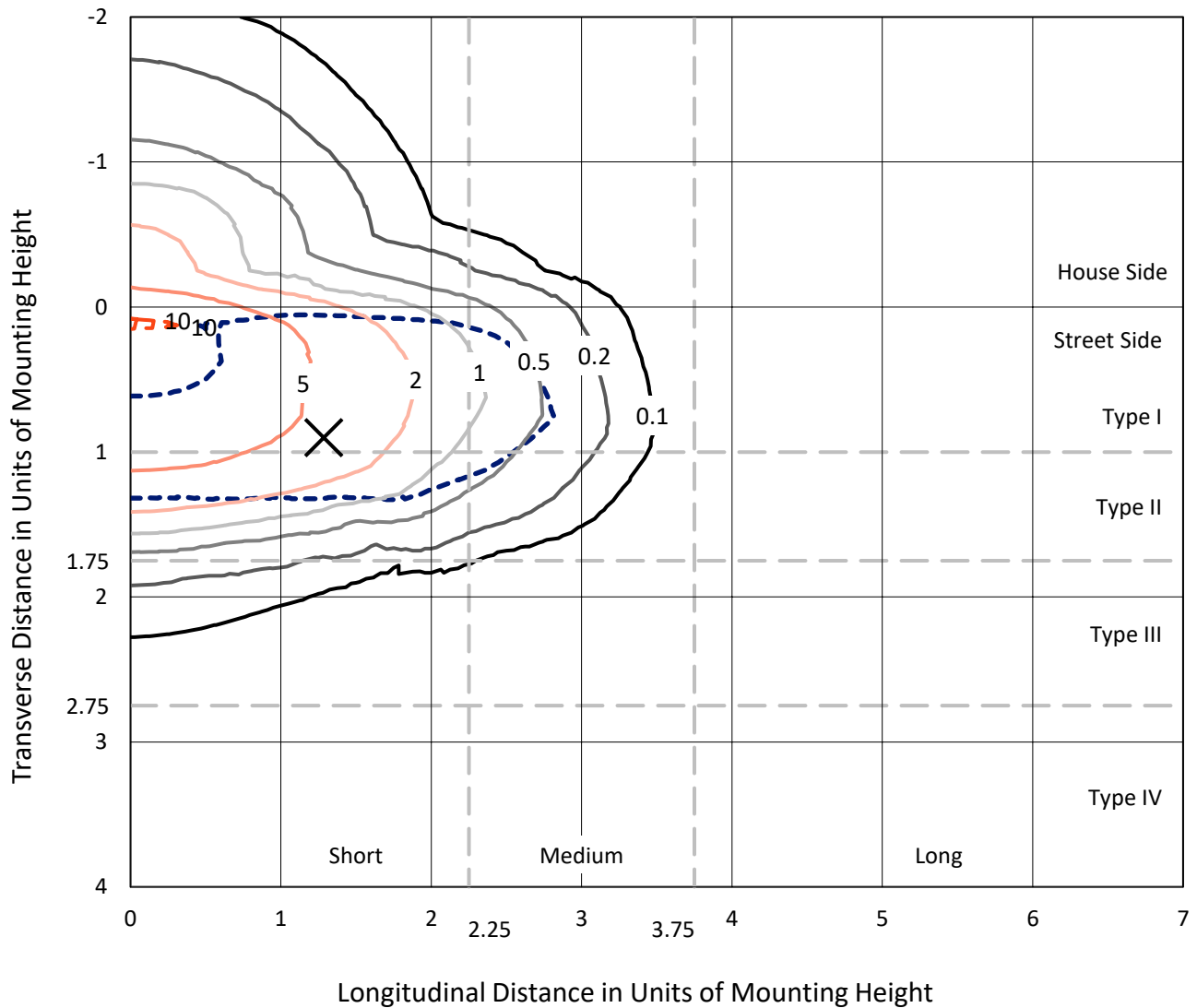
Input Watts (W): 147
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

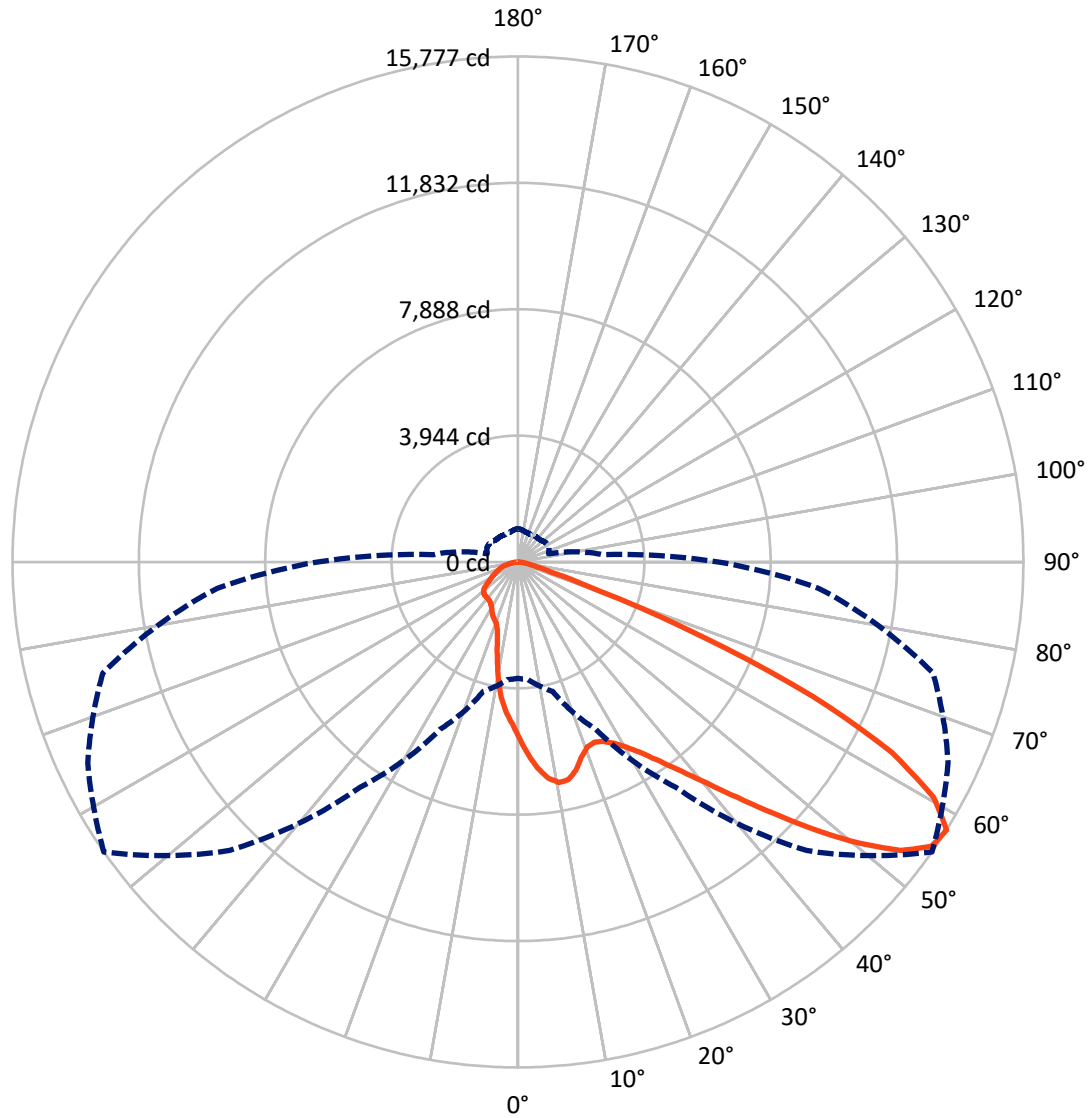
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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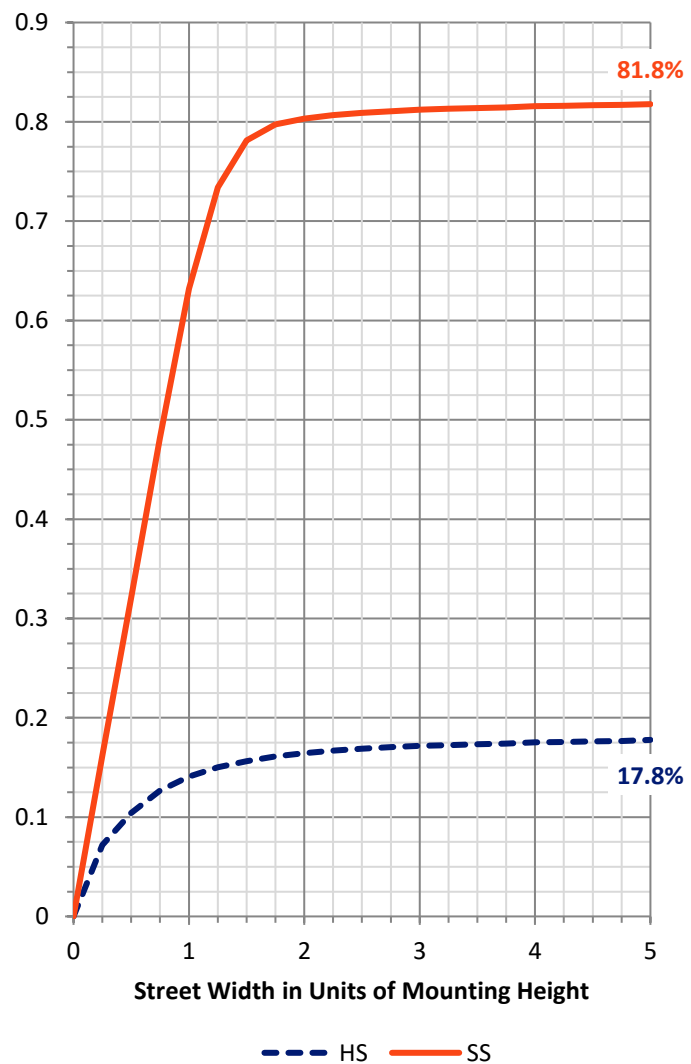
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3972.5 | 0.0 | 3972.5 |
| | % Fixture | 18.1 | 0.0 | 18.1 |
| Street Side | Lumens | 17981.5 | 0.0 | 17981.5 |
| | % Fixture | 81.9 | 0.0 | 81.9 |
| Total | Lumens | 21954.0 | 0.0 | 21954.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 510.5 | 2.3 |
| 10°-20° | 1288.4 | 5.9 |
| 20°-30° | 2055.9 | 9.4 |
| 30°-40° | 3255.1 | 14.8 |
| 40°-50° | 4982.2 | 22.7 |
| 50°-60° | 5336.4 | 24.3 |
| 60°-70° | 3357.2 | 15.3 |
| 70°-80° | 992.8 | 4.5 |
| 80°-90° | 175.5 | 0.8 |
| 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° | 21954.0 | 100.0 |
| 0°-180° | 21954.0 | 100.0 |

Coefficient of Utilization



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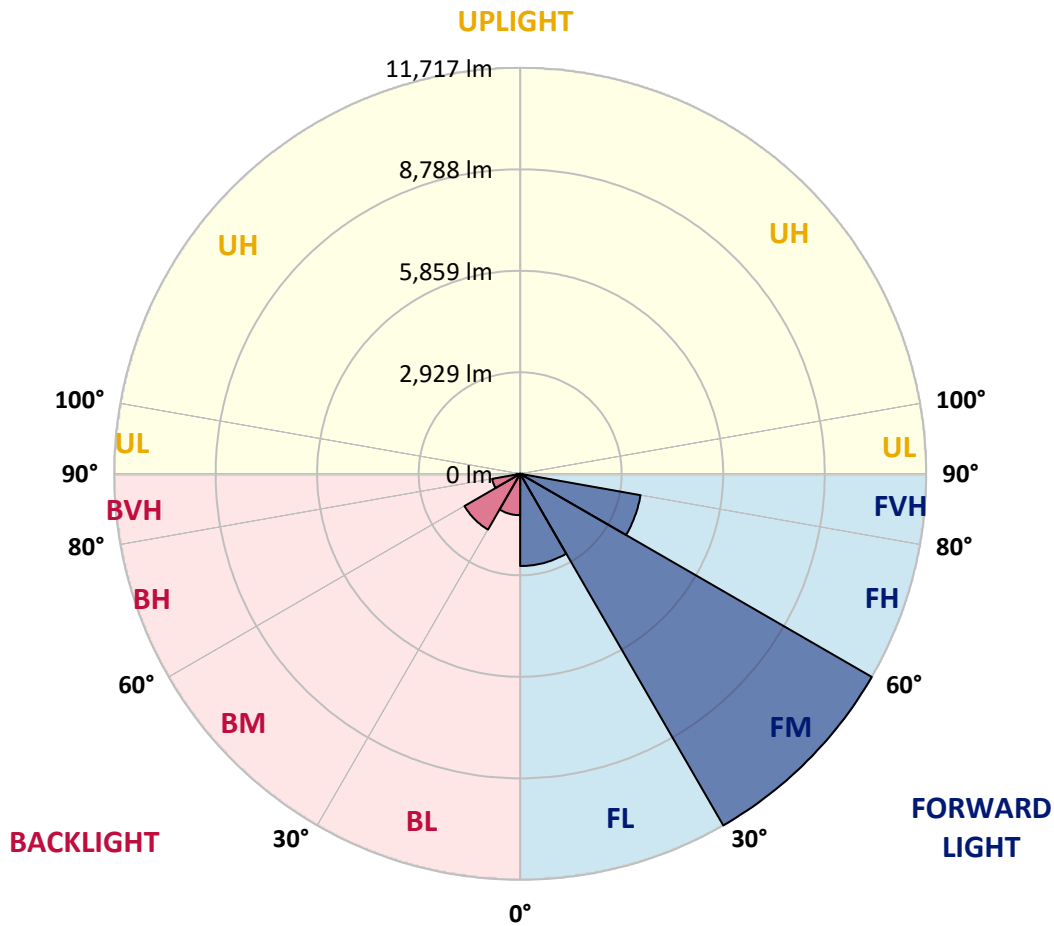
CATALOG NUMBER: GALN-SB4B-840-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2660.8 | 12.1 | | | |
| FM (30°-60°) | 11717.0 | 53.4 | | | |
| FH (60°-80°) | 3529.5 | 16.1 | | | G2/5000 |
| FVH (80°-90°) | 74.2 | 0.3 | | | G1/100 |
| BL (0°-30°) | 1194.0 | 5.4 | B3/2500 | | |
| BM (30°-60°) | 1856.7 | 8.5 | B2/2500 | | |
| BH (60°-80°) | 820.4 | 3.7 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 101.4 | 0.5 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0° | 5501.0 | 5501.0 | 5501.0 | 5501.0 | 5501.0 | 5501.0 | 5501.0 | 5501.0 | 5501.0 | 5501.0 |
| 2.5° | 6311.3 | 6306.8 | 6331.7 | 6246.6 | 6188.7 | 6110.4 | 6007.1 | 5875.5 | 5733.6 | 5583.8 |
| 5° | 6879.9 | 6840.2 | 6866.3 | 6802.7 | 6739.2 | 6621.1 | 6467.9 | 6253.4 | 5991.2 | 5692.8 |
| 7.5° | 6790.2 | 6763.0 | 6830.0 | 6886.7 | 6934.4 | 6919.6 | 6807.3 | 6582.5 | 6244.3 | 5810.8 |
| 10° | 6067.3 | 6036.6 | 6130.8 | 6327.2 | 6615.5 | 6866.3 | 7002.5 | 6862.9 | 6503.1 | 5940.2 |
| 12.5° | 5429.5 | 5414.7 | 5477.1 | 5636.0 | 5956.1 | 6437.3 | 6977.5 | 7108.0 | 6772.1 | 6093.4 |
| 15° | 5157.1 | 5138.9 | 5178.6 | 5259.2 | 5463.5 | 5911.8 | 6750.5 | 7276.0 | 7036.5 | 6270.4 |
| 17.5° | 5096.9 | 5076.5 | 5093.5 | 5135.5 | 5267.2 | 5608.8 | 6407.8 | 7358.8 | 7312.3 | 6467.9 |
| 20° | 5208.2 | 5191.1 | 5193.4 | 5191.1 | 5283.1 | 5554.3 | 6169.4 | 7327.0 | 7552.9 | 6649.5 |
| 22.5° | 5477.1 | 5448.8 | 5449.9 | 5389.7 | 5439.7 | 5649.6 | 6107.0 | 7241.9 | 7767.4 | 6808.4 |
| 25° | 5915.2 | 5864.1 | 5874.3 | 5721.1 | 5707.5 | 5863.0 | 6204.6 | 7176.1 | 7980.8 | 6935.5 |
| 27.5° | 6514.4 | 6456.6 | 6425.9 | 6197.8 | 6088.8 | 6166.0 | 6403.2 | 7198.8 | 8182.8 | 7045.6 |
| 30° | 7263.5 | 7193.1 | 7130.7 | 6807.3 | 6609.8 | 6581.4 | 6711.9 | 7348.6 | 8421.1 | 7161.3 |
| 32.5° | 8181.6 | 8099.9 | 7986.4 | 7557.4 | 7279.4 | 7130.7 | 7111.4 | 7615.3 | 8700.3 | 7308.9 |
| 35° | 9274.6 | 9167.9 | 9006.7 | 8451.8 | 8099.9 | 7795.8 | 7638.0 | 8000.1 | 9082.8 | 7531.3 |
| 37.5° | 10400.4 | 10280.1 | 10132.6 | 9472.0 | 9039.6 | 8591.3 | 8280.4 | 8522.1 | 9592.3 | 7833.2 |
| 40° | 11438.9 | 11303.8 | 11166.5 | 10578.6 | 10114.4 | 9574.2 | 9066.9 | 9182.6 | 10215.4 | 8194.1 |
| 42.5° | 12051.7 | 11951.8 | 11899.6 | 11581.9 | 11223.2 | 10675.1 | 10045.2 | 9965.7 | 10915.7 | 8609.5 |
| 45° | 12024.5 | 11983.6 | 12144.8 | 12276.4 | 12191.3 | 11887.2 | 11191.5 | 10831.7 | 11618.2 | 8969.3 |
| 47.5° | 11382.1 | 11409.4 | 11769.1 | 12509.1 | 12834.8 | 12993.7 | 12496.6 | 11681.7 | 12228.8 | 9238.3 |
| 50° | 9634.3 | 9657.0 | 10490.1 | 12085.8 | 13000.5 | 13896.0 | 13791.6 | 12511.4 | 12702.0 | 9402.8 |
| 52.5° | 8250.9 | 8265.6 | 8623.1 | 10830.5 | 12453.5 | 14349.9 | 14958.3 | 13293.3 | 13048.2 | 9448.2 |
| 55° | 6214.8 | 6265.9 | 6666.5 | 8497.1 | 11030.3 | 13990.2 | 15668.7 | 14099.1 | 13267.2 | 9452.8 |
| 57.5° | 3630.6 | 3686.2 | 4181.0 | 5767.7 | 8573.2 | 12736.1 | 15776.5 | 14814.1 | 13415.9 | 9416.4 |
| 60° | 1778.4 | 1802.3 | 2017.9 | 3031.4 | 5286.5 | 10319.8 | 14909.5 | 15160.3 | 13498.7 | 9397.1 |
| 62.5° | 1198.5 | 1195.1 | 1204.2 | 1495.8 | 2604.6 | 6630.2 | 13102.7 | 14554.2 | 13454.5 | 9323.4 |
| 65° | 1030.5 | 1018.0 | 984.0 | 1049.8 | 1349.4 | 3032.5 | 10123.5 | 12745.2 | 13117.4 | 9138.4 |
| 67.5° | 890.9 | 892.0 | 893.2 | 872.8 | 963.5 | 1399.4 | 6186.5 | 10039.5 | 11907.6 | 8262.2 |
| 70° | 737.7 | 747.9 | 752.5 | 752.5 | 785.4 | 918.2 | 2641.0 | 6881.0 | 9392.6 | 6478.1 |
| 72.5° | 671.9 | 650.3 | 652.6 | 641.2 | 641.2 | 699.1 | 1063.4 | 3900.7 | 5917.5 | 3644.2 |
| 75° | 548.2 | 561.8 | 564.1 | 556.1 | 530.0 | 533.4 | 631.0 | 1636.6 | 2532.0 | 1511.7 |
| 77.5° | 473.3 | 473.3 | 477.8 | 472.1 | 451.7 | 399.5 | 421.1 | 634.4 | 861.4 | 619.7 |
| 80° | 380.2 | 379.1 | 398.4 | 409.7 | 377.9 | 295.1 | 269.0 | 350.7 | 382.5 | 272.4 |
| 82.5° | 185.0 | 196.3 | 273.5 | 312.1 | 287.1 | 213.4 | 164.6 | 217.9 | 204.3 | 120.3 |
| 85° | 107.8 | 102.1 | 122.6 | 173.6 | 164.6 | 118.0 | 79.4 | 113.5 | 106.7 | 61.3 |
| 87.5° | 34.0 | 31.8 | 25.0 | 59.0 | 47.7 | 32.9 | 21.6 | 32.9 | 29.5 | 13.6 |
| 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):

| 90° | | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 5501.0 | 0° | 5501.0 | 5501.0 | 5501.0 | 5501.0 | 5501.0 | 5501.0 | 5501.0 | 5501.0 | 5501.0 | 5501.0 |
| 5519.1 | 2.5° | 5438.5 | 5304.6 | 5171.8 | 5050.4 | 4976.6 | 4929.0 | 4881.3 | 4828.0 | 4807.5 | 4776.9 |
| 5533.9 | 5° | 5384.1 | 5125.3 | 4894.9 | 4696.3 | 4515.8 | 4374.0 | 4231.0 | 4115.2 | 4063.0 | 4098.2 |
| 5580.4 | 7.5° | 5352.3 | 4977.8 | 4622.5 | 4258.2 | 3907.5 | 3627.2 | 3383.2 | 3211.8 | 3134.7 | 3153.9 |
| 5625.8 | 10° | 5323.9 | 4810.9 | 4269.6 | 3694.2 | 3190.3 | 2843.0 | 2593.3 | 2462.8 | 2414.0 | 2424.2 |
| 5687.1 | 12.5° | 5297.8 | 4623.7 | 3844.0 | 3087.0 | 2551.3 | 2322.0 | 2250.5 | 2251.7 | 2260.8 | 2267.6 |
| 5784.7 | 15° | 5293.3 | 4397.8 | 3368.4 | 2555.8 | 2206.3 | 2191.5 | 2268.7 | 2317.5 | 2343.6 | 2351.6 |
| 5866.4 | 17.5° | 5286.5 | 4127.7 | 2883.8 | 2193.8 | 2122.3 | 2222.2 | 2293.7 | 2325.5 | 2345.9 | 2347.0 |
| 5945.8 | 20° | 5259.2 | 3785.0 | 2436.7 | 2021.3 | 2104.1 | 2190.4 | 2234.7 | 2259.6 | 2276.7 | 2282.3 |
| 6006.0 | 22.5° | 5175.2 | 3403.6 | 2088.3 | 1944.1 | 2031.5 | 2100.7 | 2152.9 | 2181.3 | 2191.5 | 2198.3 |
| 6017.3 | 25° | 5024.3 | 2976.9 | 1847.7 | 1870.3 | 1930.5 | 2017.9 | 2059.9 | 2065.6 | 2062.2 | 2072.4 |
| 5989.0 | 27.5° | 4826.8 | 2519.5 | 1697.8 | 1770.5 | 1847.7 | 1922.6 | 1945.3 | 1941.8 | 1935.0 | 1946.4 |
| 5940.2 | 30° | 4588.5 | 2108.7 | 1602.5 | 1658.1 | 1763.7 | 1831.8 | 1852.2 | 1844.2 | 1830.6 | 1843.1 |
| 5915.2 | 32.5° | 4336.5 | 1772.7 | 1524.2 | 1579.8 | 1694.4 | 1761.4 | 1781.8 | 1773.9 | 1763.7 | 1773.9 |
| 5943.6 | 35° | 4101.6 | 1537.8 | 1451.6 | 1527.6 | 1640.0 | 1705.8 | 1731.9 | 1733.0 | 1733.0 | 1745.5 |
| 6018.5 | 37.5° | 3886.0 | 1400.5 | 1391.4 | 1494.7 | 1602.5 | 1661.5 | 1699.0 | 1701.2 | 1652.4 | 1655.8 |
| 6145.6 | 40° | 3686.2 | 1342.6 | 1364.2 | 1473.1 | 1566.2 | 1622.9 | 1625.2 | 1498.1 | 1408.4 | 1406.2 |
| 6290.9 | 42.5° | 3522.8 | 1331.3 | 1372.1 | 1470.9 | 1540.1 | 1542.4 | 1382.3 | 1283.6 | 1258.6 | 1259.8 |
| 6424.8 | 45° | 3369.6 | 1327.9 | 1390.3 | 1470.9 | 1501.5 | 1332.4 | 1224.6 | 1198.5 | 1200.7 | 1209.8 |
| 6484.9 | 47.5° | 3198.2 | 1314.2 | 1393.7 | 1450.4 | 1390.3 | 1184.9 | 1153.1 | 1141.7 | 1137.2 | 1139.5 |
| 6471.3 | 50° | 3010.9 | 1265.4 | 1350.6 | 1409.6 | 1199.6 | 1121.3 | 1081.6 | 1078.2 | 1083.8 | 1087.3 |
| 6395.3 | 52.5° | 2813.5 | 1186.0 | 1276.8 | 1335.8 | 1112.2 | 1065.7 | 1021.4 | 1029.4 | 1054.3 | 1062.3 |
| 6315.8 | 55° | 2684.1 | 1092.9 | 1179.2 | 1188.3 | 1050.9 | 1013.5 | 976.0 | 994.2 | 1040.7 | 1055.5 |
| 6268.2 | 57.5° | 2650.0 | 994.2 | 1068.0 | 1057.7 | 972.6 | 968.1 | 945.4 | 961.3 | 1020.3 | 1041.9 |
| 6265.9 | 60° | 2639.8 | 905.7 | 959.0 | 951.1 | 896.6 | 918.2 | 912.5 | 920.4 | 940.8 | 947.7 |
| 6243.2 | 62.5° | 2560.4 | 835.3 | 861.4 | 850.1 | 828.5 | 865.9 | 879.6 | 862.5 | 878.4 | 886.4 |
| 6087.7 | 65° | 2358.4 | 778.6 | 766.1 | 758.1 | 767.2 | 801.3 | 828.5 | 794.4 | 809.2 | 831.9 |
| 5488.5 | 67.5° | 2024.7 | 701.4 | 667.3 | 676.4 | 704.8 | 722.9 | 758.1 | 719.5 | 732.0 | 770.6 |
| 4420.5 | 70° | 1637.7 | 603.8 | 573.1 | 599.2 | 626.5 | 663.9 | 669.6 | 643.5 | 673.0 | 716.1 |
| 2697.7 | 72.5° | 1158.8 | 505.0 | 483.5 | 536.8 | 545.9 | 594.7 | 582.2 | 569.7 | 610.6 | 625.3 |
| 1333.5 | 75° | 803.5 | 407.4 | 395.0 | 435.8 | 468.7 | 510.7 | 501.6 | 516.4 | 602.6 | 609.5 |
| 666.2 | 77.5° | 508.4 | 316.6 | 308.7 | 334.8 | 380.2 | 426.7 | 441.5 | 609.5 | 1029.4 | 1070.2 |
| 346.2 | 80° | 295.1 | 236.1 | 227.0 | 247.4 | 287.1 | 330.3 | 425.6 | 747.9 | 678.7 | 670.7 |
| 155.5 | 82.5° | 164.6 | 162.3 | 150.9 | 156.6 | 191.8 | 238.3 | 601.5 | 526.6 | 427.9 | 441.5 |
| 62.4 | 85° | 77.2 | 95.3 | 81.7 | 78.3 | 107.8 | 279.2 | 401.8 | 300.8 | 199.7 | 195.2 |
| 13.6 | 87.5° | 20.4 | 18.2 | 18.2 | 20.4 | 45.4 | 240.6 | 160.0 | 128.2 | 76.0 | 73.8 |
| 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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