

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: P647185

Luminaire Tested: **GALN-SA9C-835-U-T2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P647185
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA9C-835-U-T2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3500K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 50188.7 lumens
Efficiency: N/A
Efficacy: 104.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B4 - U0 - G5

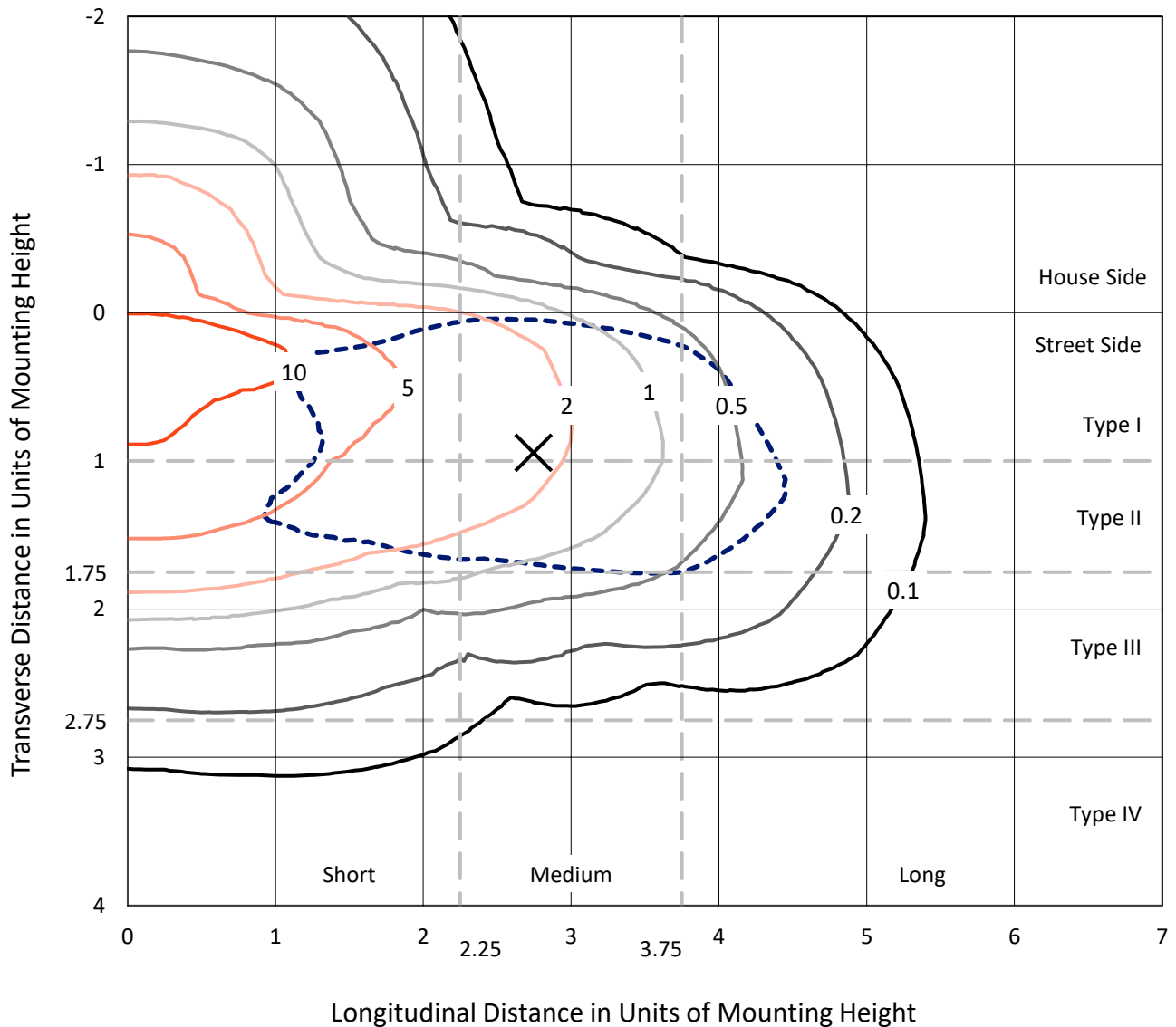
Input Watts (W): 481
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

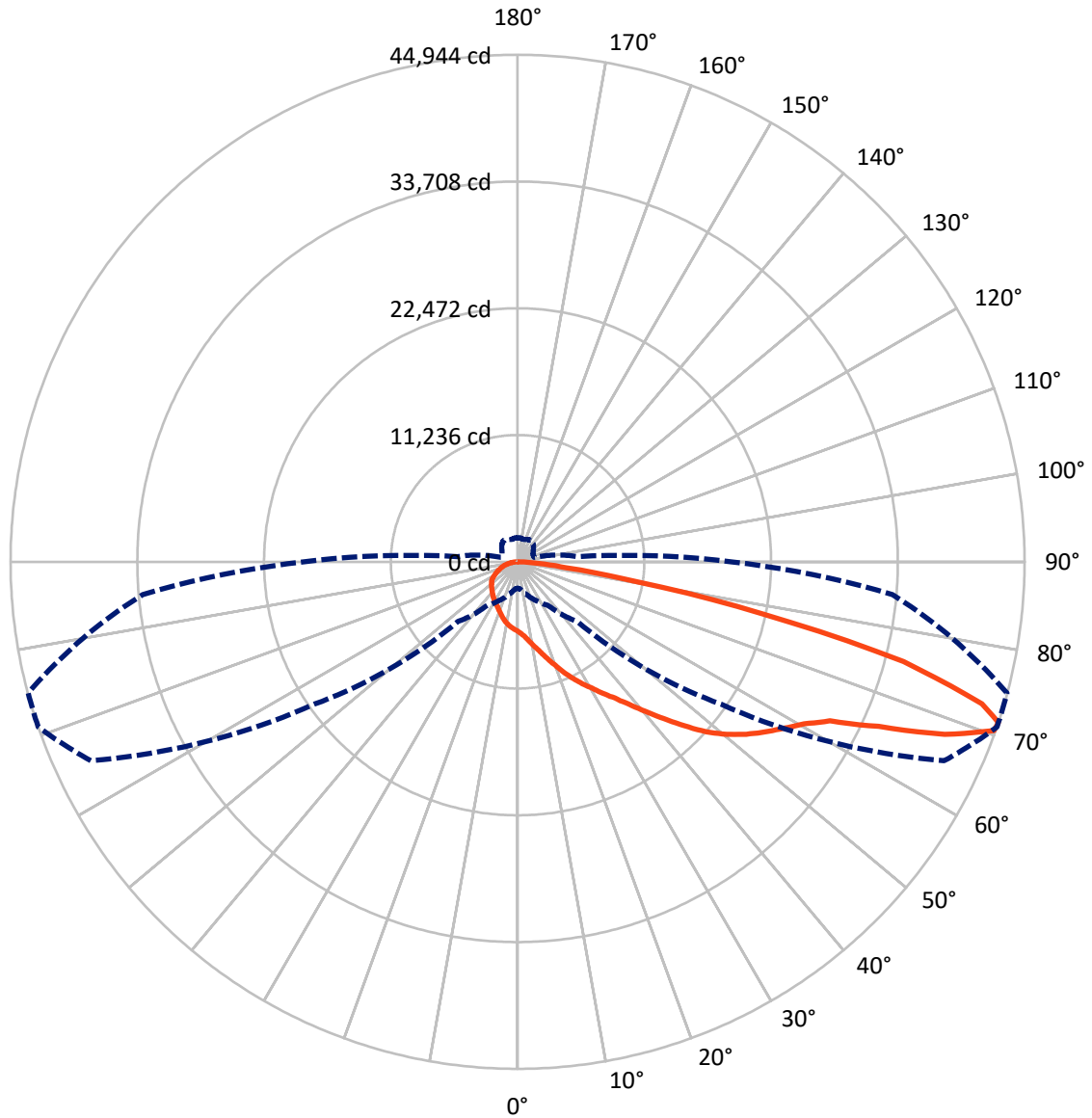
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 71-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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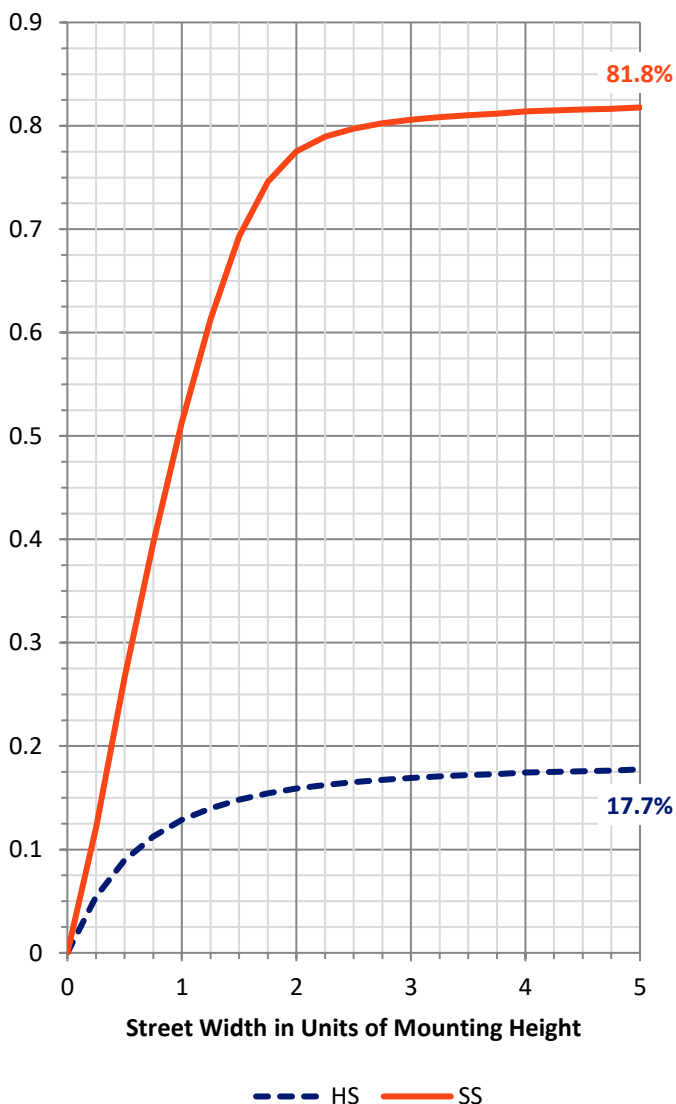
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9026.3 | 0.0 | 9026.3 |
| | % Fixture | 18.0 | 0.0 | 18.0 |
| Street Side | Lumens | 41162.4 | 0.0 | 41162.4 |
| | % Fixture | 82.0 | 0.0 | 82.0 |
| Total | Lumens | 50188.7 | 0.0 | 50188.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 618.5 | 1.2 |
| 10°-20° | 2009.4 | 4.0 |
| 20°-30° | 3511.5 | 7.0 |
| 30°-40° | 5223.0 | 10.4 |
| 40°-50° | 7695.4 | 15.3 |
| 50°-60° | 10773.6 | 21.5 |
| 60°-70° | 12049.9 | 24.0 |
| 70°-80° | 7360.6 | 14.7 |
| 80°-90° | 946.9 | 1.9 |
| 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° | 50188.7 | 100.0 |
| 0°-180° | 50188.7 | 100.0 |

Coefficient of Utilization

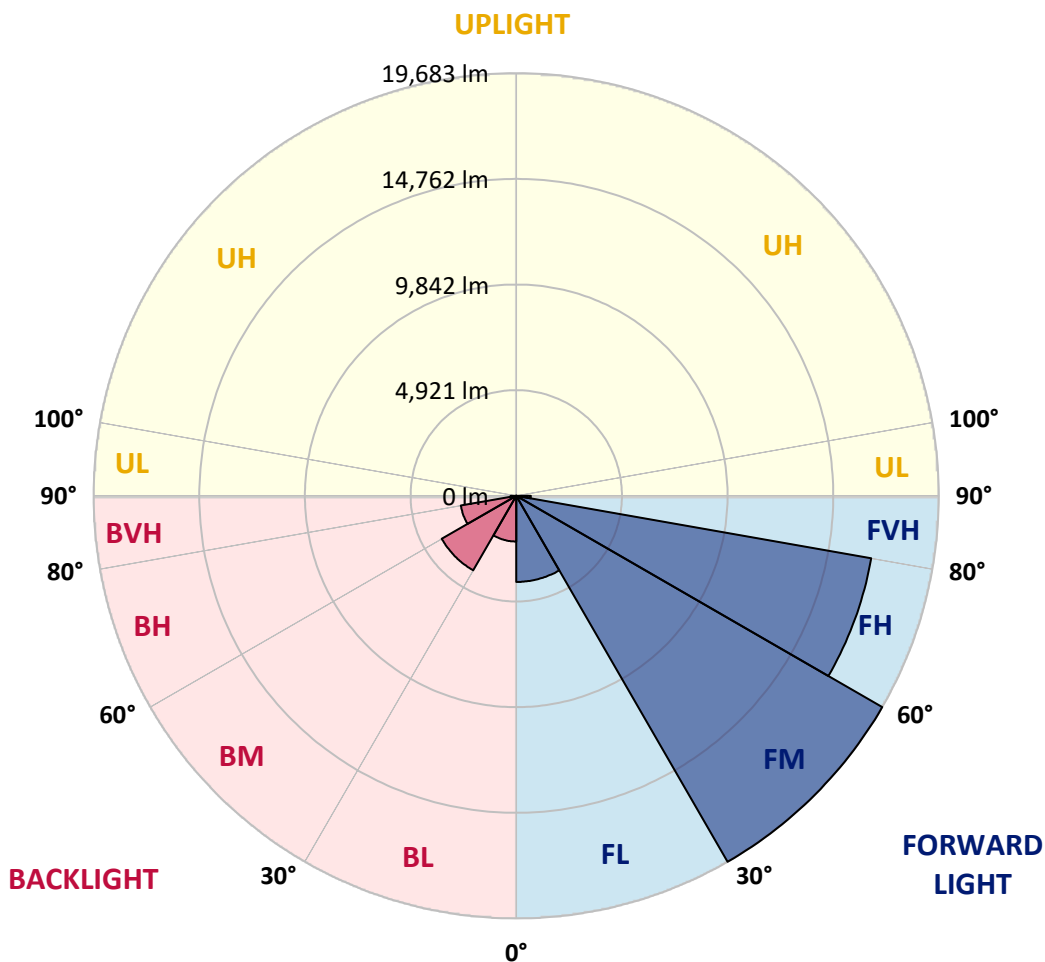


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 4010.1 | 8.0 | | | |
| FM (30°-60°) | 19683.0 | 39.2 | | | |
| FH (60°-80°) | 16788.0 | 33.4 | | | G5 |
| FVH (80°-90°) | 681.3 | 1.4 | | | G4/750 |
| BL (0°-30°) | 2129.3 | 4.2 | B3/2500 | | |
| BM (30°-60°) | 4008.9 | 8.0 | B3/5000 | | |
| BH (60°-80°) | 2622.5 | 5.2 | B4/5000 | | G4/5000 |
| BVH (80°-90°) | 265.6 | 0.5 | | | G3/500 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G5
 Type II Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 71° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 6159.7 | 6159.7 | 6159.7 | 6159.7 | 6159.7 | 6159.7 | 6159.7 | 6159.7 | 6159.7 | 6159.7 | 6159.7 |
| 2.5° | 6838.3 | 6805.1 | 6808.0 | 6761.0 | 6700.4 | 6634.1 | 6540.3 | 6457.6 | 6391.4 | 6352.8 | 6239.6 |
| 5° | 7577.6 | 7544.4 | 7503.0 | 7401.0 | 7356.8 | 7194.1 | 6987.3 | 6799.7 | 6656.2 | 6576.2 | 6350.0 |
| 7.5° | 8176.1 | 8167.9 | 8156.8 | 8098.9 | 7985.8 | 7759.6 | 7583.0 | 7257.5 | 7045.1 | 6893.5 | 6507.3 |
| 10° | 8545.7 | 8559.5 | 8567.8 | 8578.9 | 8532.0 | 8413.3 | 8170.6 | 7759.6 | 7489.2 | 7296.2 | 6711.4 |
| 12.5° | 8733.3 | 8747.1 | 8794.0 | 8896.1 | 8959.6 | 8945.8 | 8747.1 | 8344.4 | 7972.0 | 7718.2 | 6929.3 |
| 15° | 8849.2 | 8871.2 | 8954.0 | 9089.1 | 9301.6 | 9436.7 | 9340.2 | 8967.8 | 8559.5 | 8258.8 | 7188.6 |
| 17.5° | 8976.1 | 9000.9 | 9092.0 | 9285.0 | 9563.6 | 9856.0 | 9960.9 | 9640.8 | 9196.7 | 8838.2 | 7478.2 |
| 20° | 9047.8 | 9080.9 | 9210.6 | 9464.4 | 9789.8 | 10214.6 | 10562.2 | 10393.9 | 9908.5 | 9511.3 | 7812.0 |
| 22.5° | 9163.7 | 9191.2 | 9301.6 | 9571.9 | 9960.9 | 10493.2 | 11163.5 | 11127.7 | 10700.2 | 10187.1 | 8178.9 |
| 25° | 9478.1 | 9522.3 | 9577.4 | 9740.2 | 10115.3 | 10777.4 | 11662.9 | 11911.1 | 11467.0 | 10893.3 | 8515.4 |
| 27.5° | 10071.2 | 10107.0 | 10104.3 | 10126.4 | 10338.7 | 11022.8 | 12095.9 | 12686.2 | 12228.3 | 11607.7 | 8840.9 |
| 30° | 10747.0 | 10760.8 | 10771.9 | 10722.2 | 10769.1 | 11273.9 | 12493.2 | 13453.1 | 12995.2 | 12341.4 | 9125.0 |
| 32.5° | 11569.1 | 11596.6 | 11502.8 | 11376.0 | 11337.4 | 11646.3 | 12821.4 | 14219.9 | 13902.7 | 13086.2 | 9406.4 |
| 35° | 12540.1 | 12611.8 | 12421.4 | 12198.0 | 12040.7 | 12181.4 | 13262.8 | 15003.4 | 14832.3 | 14037.9 | 9778.8 |
| 37.5° | 13648.9 | 13737.2 | 13560.7 | 13122.1 | 12898.7 | 12937.3 | 13839.3 | 15971.6 | 16007.4 | 15122.0 | 10333.3 |
| 40° | 14556.4 | 14672.3 | 14677.9 | 14057.2 | 13717.9 | 13762.0 | 14570.3 | 17014.3 | 17425.3 | 16462.6 | 10987.0 |
| 42.5° | 15155.0 | 15268.2 | 15386.8 | 15022.6 | 14666.8 | 14917.9 | 15422.7 | 18145.2 | 19019.7 | 18090.1 | 11900.0 |
| 45° | 15811.6 | 15913.6 | 15979.9 | 15814.3 | 15615.8 | 16266.7 | 16451.5 | 19347.9 | 20718.9 | 19907.9 | 12898.7 |
| 47.5° | 16572.9 | 16686.0 | 16749.5 | 16592.2 | 16517.8 | 17450.1 | 17560.5 | 20470.7 | 22534.0 | 21673.4 | 14002.0 |
| 50° | 17588.1 | 17673.6 | 17640.4 | 17541.2 | 17524.6 | 18357.7 | 18625.2 | 21521.6 | 24031.8 | 23573.9 | 15146.8 |
| 52.5° | 18851.4 | 18953.5 | 18989.3 | 18848.7 | 18785.2 | 19005.9 | 19483.2 | 22478.8 | 25394.6 | 25207.0 | 16368.8 |
| 55° | 19615.6 | 19778.3 | 20324.5 | 20545.1 | 20696.9 | 19844.5 | 20407.2 | 23535.3 | 26616.5 | 26928.2 | 17681.9 |
| 57.5° | 18636.3 | 18845.9 | 20067.9 | 21171.3 | 22597.5 | 21940.9 | 21717.4 | 24638.7 | 27838.5 | 28597.1 | 19254.1 |
| 60° | 16247.4 | 16294.3 | 17869.4 | 19902.4 | 22771.2 | 24635.9 | 24451.1 | 26393.1 | 29162.6 | 30279.8 | 21325.8 |
| 62.5° | 11271.1 | 11370.4 | 13232.4 | 16476.4 | 20625.2 | 25606.9 | 29101.9 | 29421.9 | 31060.4 | 32798.3 | 24362.9 |
| 65° | 5812.1 | 5682.5 | 7378.9 | 10355.3 | 15549.5 | 23300.8 | 32870.0 | 34991.3 | 35176.1 | 36737.4 | 28638.5 |
| 67.5° | 3577.8 | 3635.7 | 4430.1 | 6046.6 | 9194.0 | 16934.3 | 32475.6 | 41796.5 | 40822.7 | 41573.0 | 32608.0 |
| 70° | 2686.8 | 2758.5 | 3304.7 | 4137.7 | 5605.3 | 9682.3 | 26117.3 | 43446.0 | 44805.9 | 44612.8 | 33816.1 |
| 71° | 2336.4 | 2410.9 | 2979.2 | 3765.3 | 4708.7 | 7472.7 | 22004.3 | 41719.2 | 44943.9 | 44910.8 | 33361.0 |
| 72.5° | 1991.6 | 2038.5 | 2482.7 | 3188.8 | 3969.4 | 5238.3 | 16531.6 | 37416.0 | 43026.7 | 44127.4 | 31736.2 |
| 75° | 1564.0 | 1599.9 | 1798.6 | 2432.9 | 3125.3 | 3216.4 | 8871.2 | 28051.0 | 35338.8 | 37435.3 | 26420.7 |
| 77.5° | 1274.4 | 1299.2 | 1401.3 | 1806.8 | 2410.9 | 2278.5 | 4653.5 | 18258.4 | 22139.6 | 24249.7 | 15563.3 |
| 80° | 1012.3 | 1040.0 | 1100.7 | 1224.8 | 1806.8 | 1624.7 | 2220.6 | 9251.9 | 10694.6 | 10672.5 | 6212.1 |
| 82.5° | 786.1 | 794.4 | 866.2 | 899.3 | 1235.8 | 1153.0 | 1202.7 | 3917.0 | 4339.1 | 4482.5 | 2242.7 |
| 85° | 496.5 | 521.3 | 766.9 | 689.6 | 739.3 | 675.8 | 593.0 | 1555.7 | 1917.2 | 1889.5 | 896.5 |
| 87.5° | 151.7 | 160.0 | 259.3 | 292.4 | 328.2 | 295.2 | 217.9 | 457.9 | 560.0 | 606.9 | 223.5 |
| 90° | 0.0 | 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° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 6159.7 | 6159.7 | 6159.7 | 6159.7 | 6159.7 | 6159.7 | 6159.7 | 6159.7 | 6159.7 | 6159.7 | 6159.7 |
| 2.5° | 6195.6 | 6165.2 | 6057.6 | 5969.4 | 5886.6 | 5795.5 | 5718.3 | 5696.2 | 5676.9 | 5668.7 | 5665.9 |
| 5° | 6253.4 | 6162.4 | 5950.0 | 5776.3 | 5638.3 | 5511.5 | 5431.4 | 5395.6 | 5359.7 | 5359.7 | 5370.8 |
| 7.5° | 6336.2 | 6170.7 | 5842.4 | 5583.2 | 5409.4 | 5290.7 | 5232.9 | 5227.3 | 5235.6 | 5243.8 | 5246.6 |
| 10° | 6427.3 | 6165.2 | 5685.2 | 5362.5 | 5208.0 | 5152.8 | 5155.6 | 5202.5 | 5246.6 | 5279.7 | 5285.2 |
| 12.5° | 6515.5 | 6132.1 | 5500.4 | 5155.6 | 5056.3 | 5067.3 | 5144.5 | 5249.4 | 5334.9 | 5381.8 | 5384.5 |
| 15° | 6614.9 | 6079.7 | 5277.0 | 4959.8 | 4926.6 | 5012.1 | 5155.6 | 5315.6 | 5445.2 | 5522.5 | 5530.7 |
| 17.5° | 6697.5 | 5991.4 | 5042.5 | 4769.4 | 4810.8 | 4968.0 | 5166.6 | 5373.5 | 5530.7 | 5627.3 | 5643.9 |
| 20° | 6791.4 | 5878.3 | 4799.7 | 4587.4 | 4706.0 | 4918.3 | 5144.5 | 5368.0 | 5530.7 | 5624.5 | 5646.6 |
| 22.5° | 6865.8 | 5718.3 | 4568.0 | 4438.4 | 4612.2 | 4857.7 | 5070.1 | 5249.4 | 5381.8 | 5431.4 | 5464.6 |
| 25° | 6896.2 | 5516.9 | 4350.1 | 4317.0 | 4537.7 | 4758.4 | 4901.8 | 5003.8 | 5045.3 | 5039.7 | 5053.6 |
| 27.5° | 6879.7 | 5285.2 | 4162.5 | 4220.4 | 4443.9 | 4603.9 | 4675.6 | 4667.3 | 4592.8 | 4523.9 | 4557.0 |
| 30° | 6810.7 | 5009.4 | 4005.3 | 4121.2 | 4322.6 | 4410.8 | 4399.8 | 4292.2 | 4151.5 | 4021.9 | 4030.1 |
| 32.5° | 6686.6 | 4711.5 | 3859.1 | 4008.1 | 4151.5 | 4190.1 | 4115.7 | 3975.0 | 3773.6 | 3605.3 | 3580.5 |
| 35° | 6581.7 | 4427.3 | 3729.4 | 3878.4 | 3980.5 | 3961.2 | 3889.5 | 3707.4 | 3525.3 | 3376.4 | 3351.6 |
| 37.5° | 6565.1 | 4184.6 | 3605.3 | 3732.2 | 3790.1 | 3762.5 | 3674.3 | 3519.8 | 3453.6 | 3340.5 | 3326.7 |
| 40° | 6653.5 | 4013.6 | 3478.5 | 3577.8 | 3605.3 | 3583.2 | 3486.7 | 3398.5 | 3459.1 | 3431.6 | 3431.6 |
| 42.5° | 6893.5 | 3922.5 | 3365.3 | 3423.3 | 3445.4 | 3461.9 | 3392.9 | 3318.4 | 3392.9 | 3266.0 | 3224.6 |
| 45° | 7274.1 | 3925.3 | 3263.3 | 3271.5 | 3337.8 | 3395.7 | 3348.8 | 3238.5 | 3199.8 | 2946.0 | 2896.4 |
| 47.5° | 7834.1 | 4019.1 | 3180.5 | 3128.1 | 3246.7 | 3343.3 | 3277.1 | 3117.0 | 2946.0 | 2777.8 | 2747.5 |
| 50° | 8487.8 | 4187.4 | 3106.1 | 2979.2 | 3125.3 | 3277.1 | 3227.4 | 3039.8 | 2863.3 | 2761.2 | 2741.9 |
| 52.5° | 9213.3 | 4399.8 | 3015.0 | 2813.6 | 2976.4 | 3246.7 | 3238.5 | 3028.8 | 2786.1 | 2717.1 | 2700.6 |
| 55° | 10109.8 | 4609.4 | 2902.0 | 2620.5 | 2844.0 | 3221.9 | 3208.1 | 2937.8 | 2769.5 | 2719.8 | 2714.3 |
| 57.5° | 11152.5 | 4912.9 | 2739.2 | 2424.7 | 2692.3 | 3119.9 | 3089.5 | 2882.6 | 2714.3 | 2678.5 | 2675.7 |
| 60° | 12832.4 | 5384.5 | 2507.5 | 2245.4 | 2537.8 | 2940.6 | 2979.2 | 2788.8 | 2626.1 | 2617.8 | 2615.1 |
| 62.5° | 15042.0 | 6046.6 | 2267.5 | 2060.5 | 2358.5 | 2708.8 | 2819.2 | 2662.0 | 2532.3 | 2573.6 | 2579.2 |
| 65° | 18092.9 | 6603.8 | 2019.2 | 1903.3 | 2159.9 | 2485.4 | 2667.4 | 2543.3 | 2427.5 | 2507.5 | 2507.5 |
| 67.5° | 20081.7 | 6614.9 | 1793.0 | 1740.6 | 1958.5 | 2297.8 | 2507.5 | 2402.6 | 2292.3 | 2427.5 | 2432.9 |
| 70° | 19667.9 | 5795.5 | 1605.5 | 1569.6 | 1762.7 | 2096.4 | 2330.9 | 2248.1 | 2121.3 | 2242.7 | 2198.5 |
| 71° | 19000.4 | 5340.4 | 1530.9 | 1503.4 | 1685.4 | 1999.9 | 2248.1 | 2179.2 | 2052.3 | 2132.3 | 2107.4 |
| 72.5° | 17935.6 | 4637.0 | 1409.6 | 1415.1 | 1569.6 | 1878.5 | 2132.3 | 2060.5 | 1933.7 | 1977.9 | 1969.6 |
| 75° | 15160.6 | 4049.4 | 1205.4 | 1230.2 | 1348.9 | 1671.6 | 1900.6 | 1845.5 | 1715.8 | 1715.8 | 1707.5 |
| 77.5° | 9478.1 | 2830.2 | 1001.3 | 1015.1 | 1144.7 | 1431.6 | 1633.0 | 1586.1 | 1462.0 | 1420.6 | 1409.6 |
| 80° | 3536.3 | 1462.0 | 783.4 | 800.0 | 879.9 | 1128.2 | 1351.6 | 1307.5 | 1180.6 | 1133.7 | 1089.6 |
| 82.5° | 1337.8 | 733.7 | 576.5 | 562.7 | 648.2 | 860.7 | 1059.2 | 1006.9 | 907.6 | 794.4 | 761.3 |
| 85° | 504.8 | 364.1 | 353.1 | 342.0 | 380.7 | 510.3 | 656.5 | 645.5 | 540.7 | 460.6 | 452.4 |
| 87.5° | 132.4 | 118.6 | 137.9 | 102.0 | 107.6 | 96.5 | 99.3 | 41.3 | 19.3 | 8.3 | 5.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)