

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: P652545

Luminaire Tested: **GALN-SA8B-840-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P652545
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA8B-840-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 80 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39020.7 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

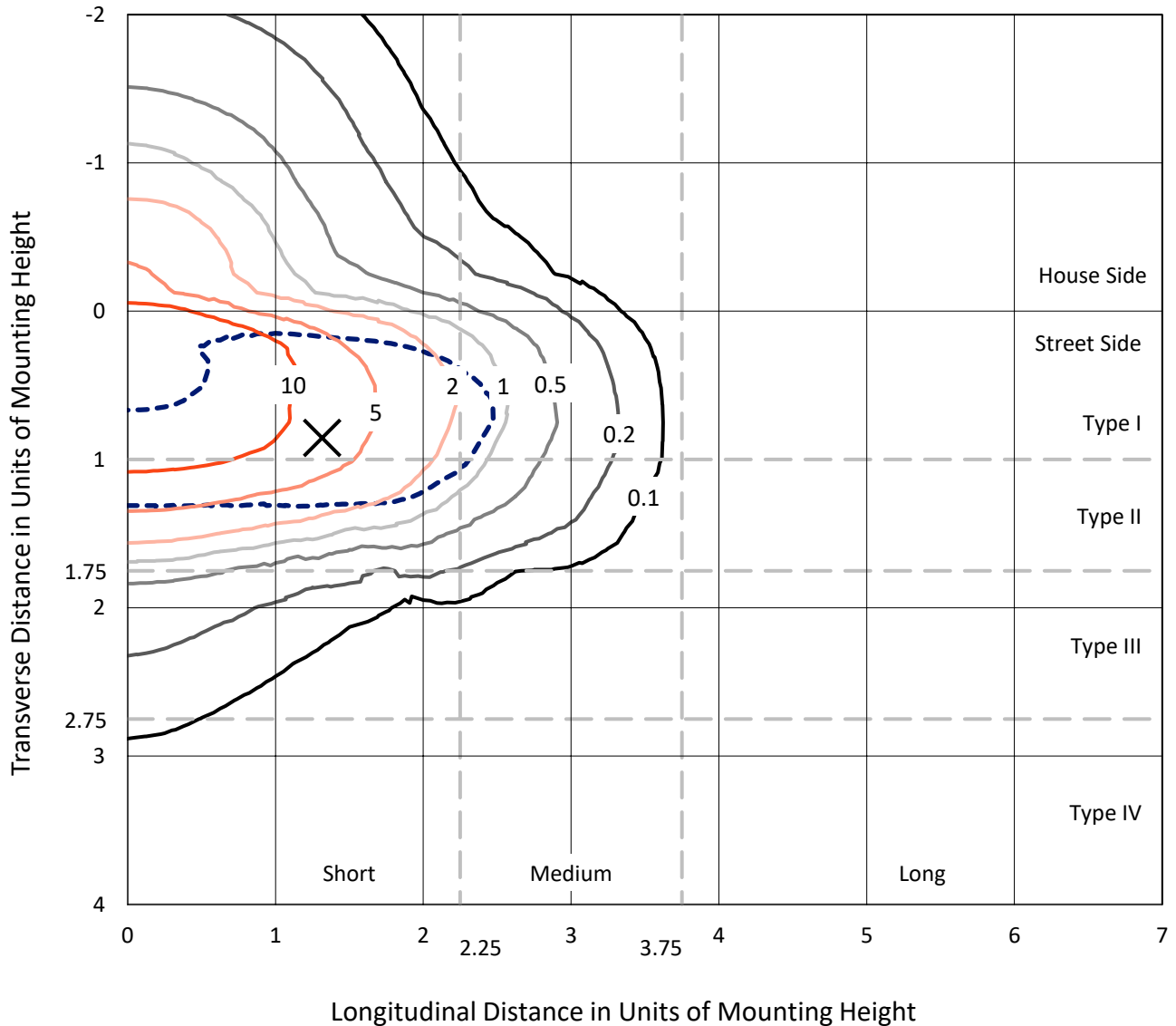
Input Watts (W): 325
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

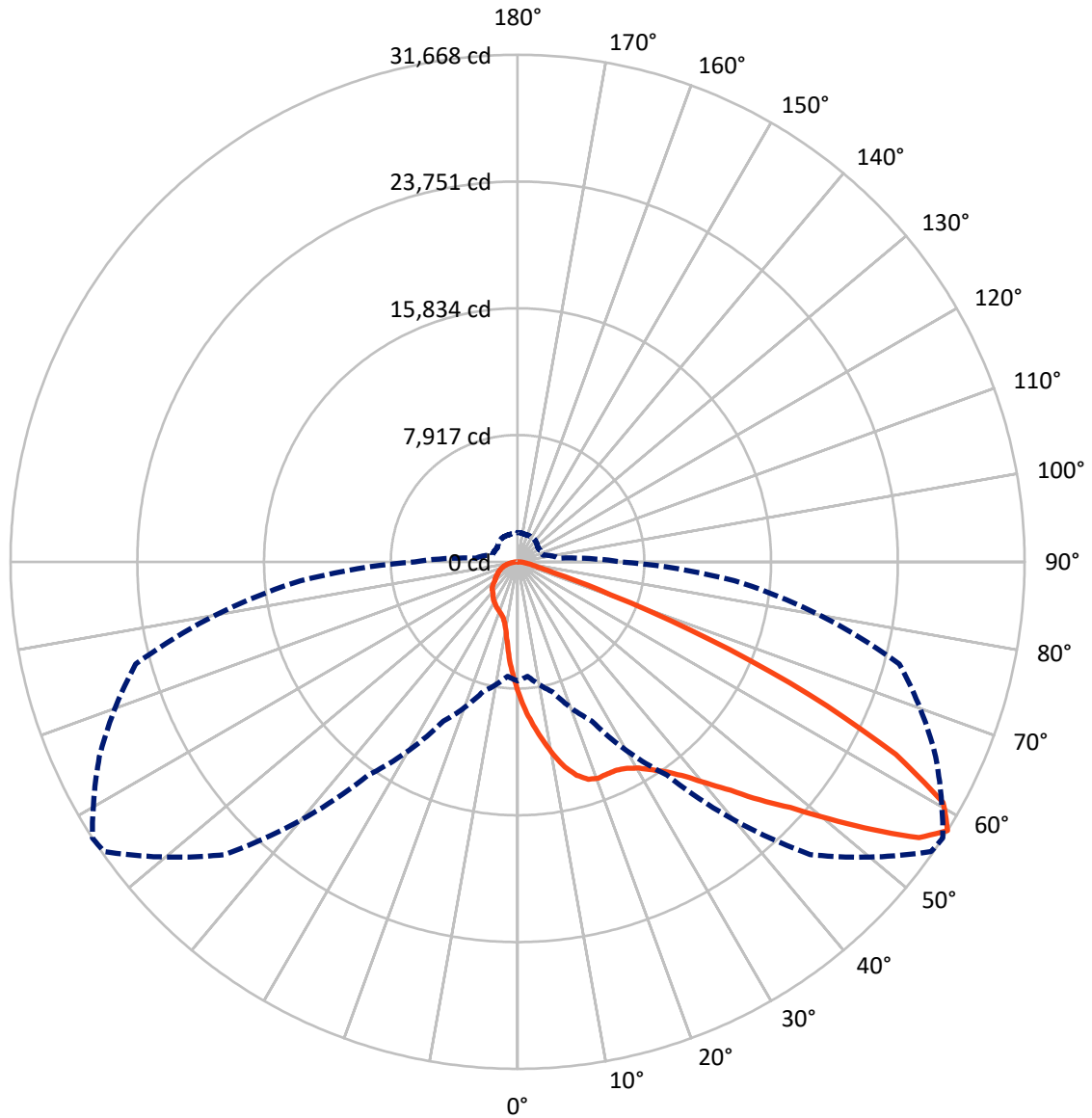
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 20 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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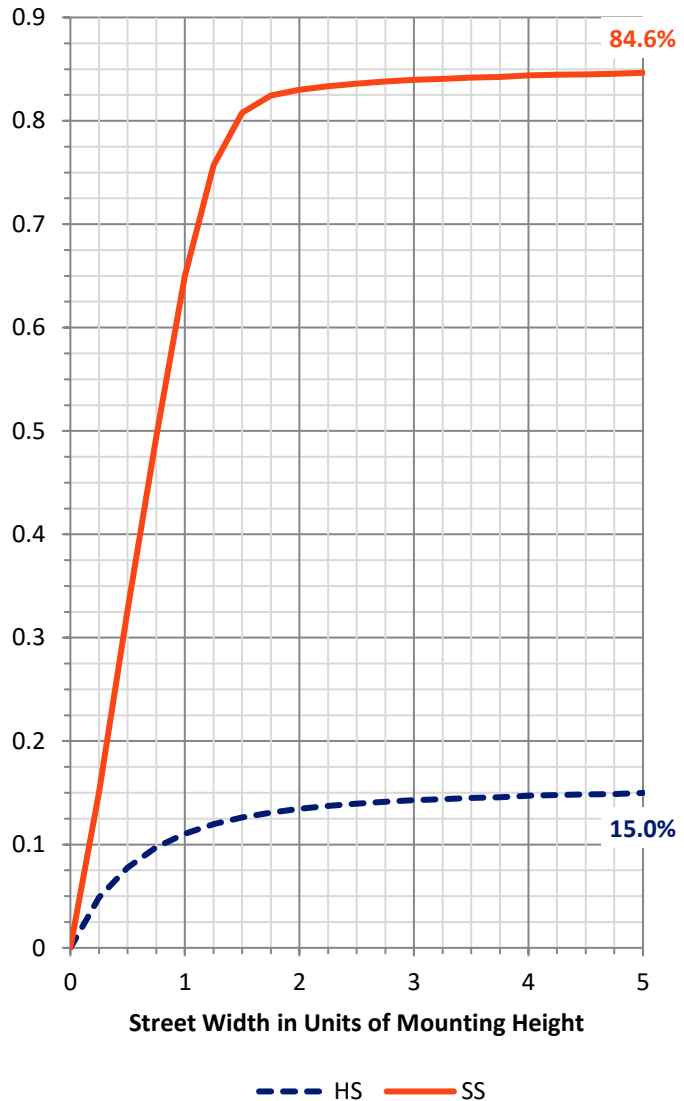
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5933.9 | 0.0 | 5933.9 |
| | % Fixture | 15.2 | 0.0 | 15.2 |
| Street Side | Lumens | 33086.8 | 0.0 | 33086.8 |
| | % Fixture | 84.8 | 0.0 | 84.8 |
| Total | Lumens | 39020.7 | 0.0 | 39020.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 787.9 | 2.0 |
| 10°-20° | 2322.0 | 6.0 |
| 20°-30° | 3855.6 | 9.9 |
| 30°-40° | 5807.7 | 14.9 |
| 40°-50° | 8719.7 | 22.3 |
| 50°-60° | 9773.7 | 25.0 |
| 60°-70° | 5720.1 | 14.7 |
| 70°-80° | 1692.0 | 4.3 |
| 80°-90° | 342.0 | 0.9 |
| 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° | 39020.7 | 100.0 |
| 0°-180° | 39020.7 | 100.0 |

Coefficient of Utilization



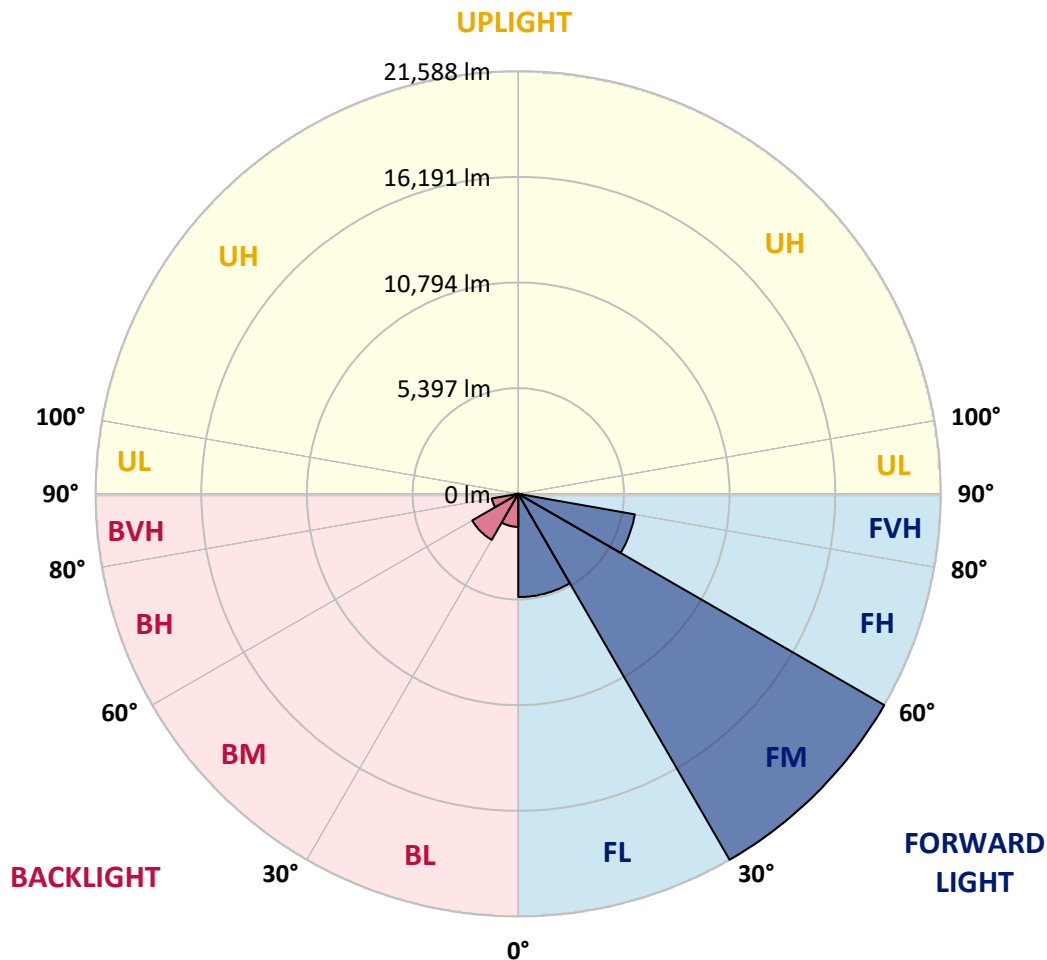
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 5274.7 | 13.5 | | | |
| FM (30°-60°) | 21588.0 | 55.3 | | | |
| FH (60°-80°) | 6046.6 | 15.5 | | | G3/7500 |
| FVH (80°-90°) | 177.4 | 0.5 | | | G2/225 |
| BL (0°-30°) | 1690.8 | 4.3 | B3/2500 | | |
| BM (30°-60°) | 2713.2 | 7.0 | B3/5000 | | |
| BH (60°-80°) | 1365.4 | 3.5 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 164.5 | 0.4 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 57° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 8197.8 | 8197.8 | 8197.8 | 8197.8 | 8197.8 | 8197.8 | 8197.8 | 8197.8 | 8197.8 | 8197.8 | 8197.8 |
| 2.5° | 10186.4 | 10075.3 | 9987.7 | 9910.8 | 9810.4 | 9539.2 | 9267.9 | 9263.6 | 9047.9 | 8714.7 | 8373.0 |
| 5° | 11846.0 | 11696.5 | 11715.7 | 11476.5 | 11237.3 | 10844.3 | 10269.7 | 10239.8 | 9780.6 | 9156.9 | 8522.4 |
| 7.5° | 12926.8 | 12928.9 | 12869.2 | 12732.4 | 12474.0 | 12027.6 | 11376.1 | 11228.7 | 10590.0 | 9643.8 | 8693.3 |
| 10° | 12871.3 | 12928.9 | 13029.4 | 13146.8 | 13225.8 | 13005.8 | 12412.1 | 12232.6 | 11401.8 | 10233.4 | 8883.5 |
| 12.5° | 12132.3 | 12221.9 | 12365.1 | 12659.8 | 13136.2 | 13499.2 | 13296.4 | 13151.1 | 12341.6 | 10820.7 | 9092.8 |
| 15° | 11670.9 | 11724.3 | 11803.3 | 12001.9 | 12514.6 | 13383.9 | 13909.4 | 13832.4 | 13228.0 | 11485.0 | 9327.7 |
| 17.5° | 11529.9 | 11583.3 | 11608.9 | 11730.7 | 12095.9 | 12986.6 | 14150.8 | 14287.4 | 14014.0 | 12095.9 | 9564.9 |
| 20° | 11670.9 | 11696.5 | 11696.5 | 11769.1 | 12055.3 | 12753.8 | 14140.1 | 14415.6 | 14659.1 | 12828.5 | 9787.0 |
| 22.5° | 12040.4 | 12051.1 | 12036.1 | 12061.8 | 12275.3 | 12817.8 | 14039.7 | 14381.4 | 15180.2 | 13450.1 | 9960.0 |
| 25° | 12640.6 | 12657.7 | 12559.4 | 12499.6 | 12655.5 | 13099.8 | 14095.2 | 14409.2 | 15588.2 | 14043.9 | 10075.3 |
| 27.5° | 13321.9 | 13343.3 | 13223.7 | 13084.9 | 13157.5 | 13448.0 | 14313.1 | 14595.0 | 15893.6 | 14629.2 | 10147.9 |
| 30° | 14157.1 | 14165.6 | 13964.9 | 13798.3 | 13751.3 | 13967.0 | 14684.7 | 14947.4 | 16273.9 | 15319.1 | 10256.8 |
| 32.5° | 15011.5 | 15075.6 | 14817.2 | 14582.2 | 14503.1 | 14569.4 | 15233.6 | 15487.9 | 16726.6 | 16060.2 | 10432.0 |
| 35° | 16173.4 | 16184.1 | 15874.5 | 15588.2 | 15327.6 | 15413.1 | 15936.4 | 16120.0 | 17352.5 | 16916.8 | 10679.8 |
| 37.5° | 17623.8 | 17722.1 | 17294.8 | 16760.9 | 16440.5 | 16316.6 | 16786.5 | 16987.3 | 18230.4 | 17967.7 | 11053.6 |
| 40° | 19234.3 | 19270.6 | 18905.3 | 18572.1 | 17986.9 | 17628.0 | 17952.7 | 18170.6 | 19313.3 | 19221.5 | 11487.2 |
| 42.5° | 20246.7 | 20325.8 | 20353.5 | 20319.4 | 19879.4 | 19277.0 | 19400.9 | 19503.5 | 20594.9 | 20398.4 | 11931.4 |
| 45° | 20588.5 | 20706.0 | 21103.3 | 21944.8 | 21991.8 | 21398.1 | 21109.7 | 21207.9 | 21991.8 | 21586.0 | 12356.5 |
| 47.5° | 20022.4 | 20223.3 | 20955.9 | 22681.8 | 23974.0 | 24018.9 | 23149.5 | 22933.8 | 23264.8 | 22570.7 | 12664.1 |
| 50° | 18559.4 | 18602.1 | 19723.5 | 22222.5 | 24903.1 | 26524.3 | 25625.1 | 25223.5 | 24473.8 | 23299.1 | 12875.5 |
| 52.5° | 16295.2 | 16344.3 | 17284.1 | 20088.7 | 24330.7 | 28275.8 | 28521.4 | 27803.8 | 25702.0 | 23865.1 | 13014.4 |
| 55° | 12095.9 | 12380.0 | 13413.8 | 16124.3 | 21618.0 | 28111.4 | 30824.0 | 30416.0 | 27186.5 | 24313.6 | 13232.3 |
| 57.5° | 7437.4 | 7176.8 | 8402.9 | 10970.3 | 16258.9 | 25851.5 | 31535.3 | 31667.7 | 28820.5 | 24689.6 | 13597.5 |
| 60° | 3421.8 | 3473.1 | 3979.3 | 5658.2 | 9910.8 | 20223.3 | 29702.6 | 30539.9 | 29724.0 | 24676.7 | 13689.4 |
| 62.5° | 2358.1 | 2311.1 | 2183.0 | 2484.1 | 4519.7 | 12790.1 | 25089.0 | 26507.2 | 27912.7 | 23909.9 | 13324.1 |
| 65° | 2108.2 | 2061.2 | 1813.4 | 1730.1 | 2076.2 | 5574.8 | 18238.9 | 20028.8 | 23501.9 | 21974.7 | 12414.2 |
| 67.5° | 1969.4 | 1905.3 | 1648.9 | 1486.6 | 1482.3 | 2219.2 | 10754.5 | 12909.8 | 17431.6 | 18578.5 | 10756.6 |
| 70° | 1824.1 | 1772.8 | 1518.7 | 1339.2 | 1262.3 | 1394.8 | 4726.8 | 6187.9 | 11318.4 | 13388.2 | 8379.4 |
| 72.5° | 1678.9 | 1619.1 | 1390.5 | 1198.3 | 1097.8 | 1044.5 | 1811.3 | 2356.0 | 6395.0 | 8026.9 | 5137.0 |
| 75° | 1467.4 | 1437.5 | 1243.2 | 1085.1 | 976.1 | 843.7 | 1149.1 | 1311.5 | 3058.7 | 3686.7 | 2578.1 |
| 77.5° | 1283.7 | 1251.7 | 1104.3 | 948.4 | 869.3 | 685.7 | 815.9 | 890.7 | 1290.1 | 1495.1 | 1164.1 |
| 80° | 939.8 | 971.9 | 931.2 | 837.3 | 775.3 | 538.2 | 548.9 | 610.9 | 766.8 | 848.0 | 711.2 |
| 82.5° | 595.9 | 655.7 | 717.7 | 645.0 | 587.4 | 425.0 | 380.2 | 403.7 | 523.3 | 555.3 | 316.1 |
| 85° | 249.9 | 254.2 | 416.5 | 393.0 | 335.3 | 252.0 | 228.6 | 241.4 | 279.8 | 292.7 | 147.3 |
| 87.5° | 96.1 | 94.0 | 147.3 | 136.7 | 104.6 | 72.7 | 72.7 | 81.2 | 111.1 | 102.5 | 47.0 |
| 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° | 8197.8 | 8197.8 | 8197.8 | 8197.8 | 8197.8 | 8197.8 | 8197.8 | 8197.8 | 8197.8 | 8197.8 | 8197.8 |
| 2.5° | 8225.6 | 8073.9 | 7772.8 | 7398.9 | 7125.5 | 6818.0 | 6546.7 | 6352.3 | 6279.7 | 6245.5 | 6181.4 |
| 5° | 8219.2 | 7920.1 | 7296.4 | 6642.8 | 6117.3 | 5579.1 | 5124.1 | 4829.4 | 4803.8 | 4607.3 | 4588.1 |
| 7.5° | 8221.3 | 7764.2 | 6771.0 | 5809.8 | 5008.8 | 4457.7 | 4081.8 | 3983.6 | 3866.1 | 3836.2 | 3851.1 |
| 10° | 8227.7 | 7565.6 | 6207.1 | 4985.4 | 4210.0 | 3849.0 | 3708.1 | 3669.5 | 3673.8 | 3686.7 | 3688.8 |
| 12.5° | 8236.2 | 7373.3 | 5621.8 | 4359.5 | 3761.5 | 3611.9 | 3597.0 | 3631.1 | 3667.4 | 3695.2 | 3701.6 |
| 15° | 8246.9 | 7153.3 | 5051.6 | 3855.4 | 3537.2 | 3524.3 | 3573.5 | 3631.1 | 3682.4 | 3722.9 | 3729.4 |
| 17.5° | 8234.1 | 6897.0 | 4573.1 | 3545.7 | 3413.3 | 3475.2 | 3556.3 | 3629.0 | 3676.0 | 3714.4 | 3718.7 |
| 20° | 8204.2 | 6610.8 | 4111.7 | 3327.8 | 3336.3 | 3436.7 | 3524.3 | 3592.7 | 3644.0 | 3663.1 | 3678.1 |
| 22.5° | 8088.9 | 6269.1 | 3710.2 | 3159.0 | 3244.5 | 3383.3 | 3488.0 | 3528.6 | 3470.9 | 3430.4 | 3441.0 |
| 25° | 7892.4 | 5824.8 | 3336.3 | 3022.4 | 3161.2 | 3308.6 | 3415.4 | 3317.2 | 3270.1 | 3253.1 | 3261.6 |
| 27.5° | 7646.7 | 5337.7 | 3054.4 | 2879.2 | 3054.4 | 3225.3 | 3195.4 | 3178.3 | 3156.9 | 3129.2 | 3135.6 |
| 30° | 7381.9 | 4861.4 | 2815.2 | 2768.2 | 2939.0 | 3037.4 | 3050.1 | 3077.9 | 3054.4 | 3011.7 | 3028.8 |
| 32.5° | 7136.2 | 4412.9 | 2633.7 | 2674.2 | 2857.9 | 2843.0 | 2939.0 | 2971.1 | 2862.2 | 2719.0 | 2725.5 |
| 35° | 6926.9 | 3996.3 | 2496.9 | 2582.4 | 2719.0 | 2725.5 | 2821.6 | 2710.5 | 2593.1 | 2524.7 | 2529.0 |
| 37.5° | 6768.9 | 3671.7 | 2407.2 | 2503.3 | 2541.8 | 2623.0 | 2571.7 | 2514.0 | 2499.0 | 2452.1 | 2454.2 |
| 40° | 6674.8 | 3387.6 | 2349.6 | 2441.4 | 2435.0 | 2490.5 | 2326.0 | 2383.7 | 2405.1 | 2390.1 | 2392.3 |
| 42.5° | 6580.9 | 3186.9 | 2289.7 | 2356.0 | 2353.8 | 2244.9 | 2208.6 | 2257.7 | 2313.3 | 2319.6 | 2315.4 |
| 45° | 6506.1 | 3031.0 | 2227.8 | 2225.7 | 2268.3 | 2097.5 | 2086.9 | 2116.7 | 2195.8 | 2234.2 | 2232.1 |
| 47.5° | 6422.8 | 2900.6 | 2133.8 | 2074.0 | 2086.9 | 2005.7 | 1988.5 | 2001.4 | 2097.5 | 2159.4 | 2176.5 |
| 50° | 6318.2 | 2770.3 | 2016.4 | 1935.1 | 1881.7 | 1920.3 | 1924.5 | 1926.6 | 2022.8 | 2093.2 | 2108.2 |
| 52.5° | 6234.8 | 2672.1 | 1881.7 | 1821.9 | 1757.9 | 1843.3 | 1875.3 | 1879.6 | 1937.3 | 1995.0 | 2005.7 |
| 55° | 6284.0 | 2616.5 | 1749.4 | 1706.6 | 1648.9 | 1764.3 | 1826.2 | 1834.8 | 1847.6 | 1890.3 | 1896.7 |
| 57.5° | 6431.4 | 2629.4 | 1642.6 | 1587.1 | 1544.3 | 1670.3 | 1775.0 | 1781.4 | 1772.8 | 1824.1 | 1832.6 |
| 60° | 6476.2 | 2623.0 | 1563.5 | 1454.6 | 1428.9 | 1569.9 | 1700.2 | 1713.0 | 1710.9 | 1785.7 | 1800.6 |
| 62.5° | 6288.2 | 2541.8 | 1484.4 | 1343.5 | 1326.4 | 1467.4 | 1595.5 | 1646.8 | 1657.5 | 1764.3 | 1783.5 |
| 65° | 5846.1 | 2375.2 | 1379.8 | 1226.0 | 1226.0 | 1358.5 | 1495.1 | 1565.7 | 1595.5 | 1738.7 | 1760.0 |
| 67.5° | 5263.0 | 2178.7 | 1273.0 | 1125.7 | 1121.4 | 1253.8 | 1388.4 | 1461.0 | 1508.0 | 1702.4 | 1715.1 |
| 70° | 4368.1 | 1913.8 | 1140.6 | 1016.7 | 1016.7 | 1136.4 | 1258.1 | 1345.7 | 1414.0 | 1634.0 | 1634.0 |
| 72.5° | 2992.4 | 1591.3 | 980.4 | 892.8 | 895.0 | 1006.0 | 1129.9 | 1228.2 | 1309.4 | 1497.3 | 1501.6 |
| 75° | 1892.4 | 1243.2 | 805.3 | 760.4 | 768.9 | 873.6 | 1001.8 | 1104.3 | 1266.6 | 1480.2 | 1486.6 |
| 77.5° | 1006.0 | 873.6 | 640.8 | 630.1 | 640.8 | 736.9 | 880.0 | 1021.0 | 1270.9 | 1283.7 | 1262.3 |
| 80° | 651.4 | 619.4 | 506.2 | 484.8 | 489.1 | 593.8 | 783.9 | 969.8 | 1021.0 | 1033.8 | 986.8 |
| 82.5° | 354.6 | 393.0 | 358.9 | 337.5 | 337.5 | 463.5 | 668.6 | 771.1 | 732.6 | 608.7 | 581.0 |
| 85° | 151.6 | 183.7 | 185.9 | 162.3 | 155.9 | 286.2 | 448.6 | 420.8 | 390.9 | 373.8 | 369.5 |
| 87.5° | 42.7 | 59.8 | 59.8 | 44.8 | 34.1 | 79.1 | 89.7 | 25.7 | 0.0 | 2.1 | 4.3 |
| 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)