

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: P650785

Luminaire Tested: **GALN-SA3C-840-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P650785
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-SA3C-840-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17823.3 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

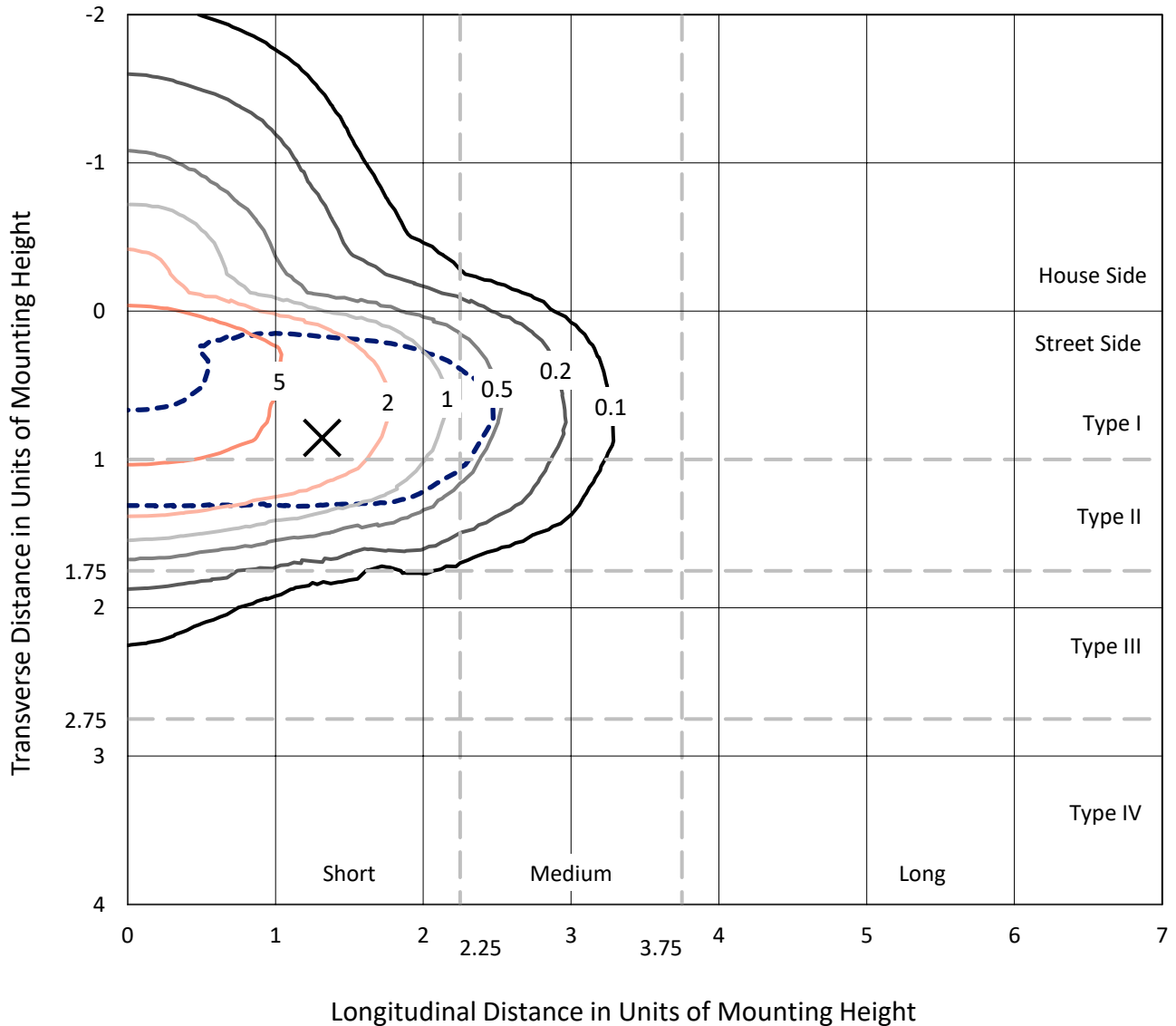
Input Watts (W): 160
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

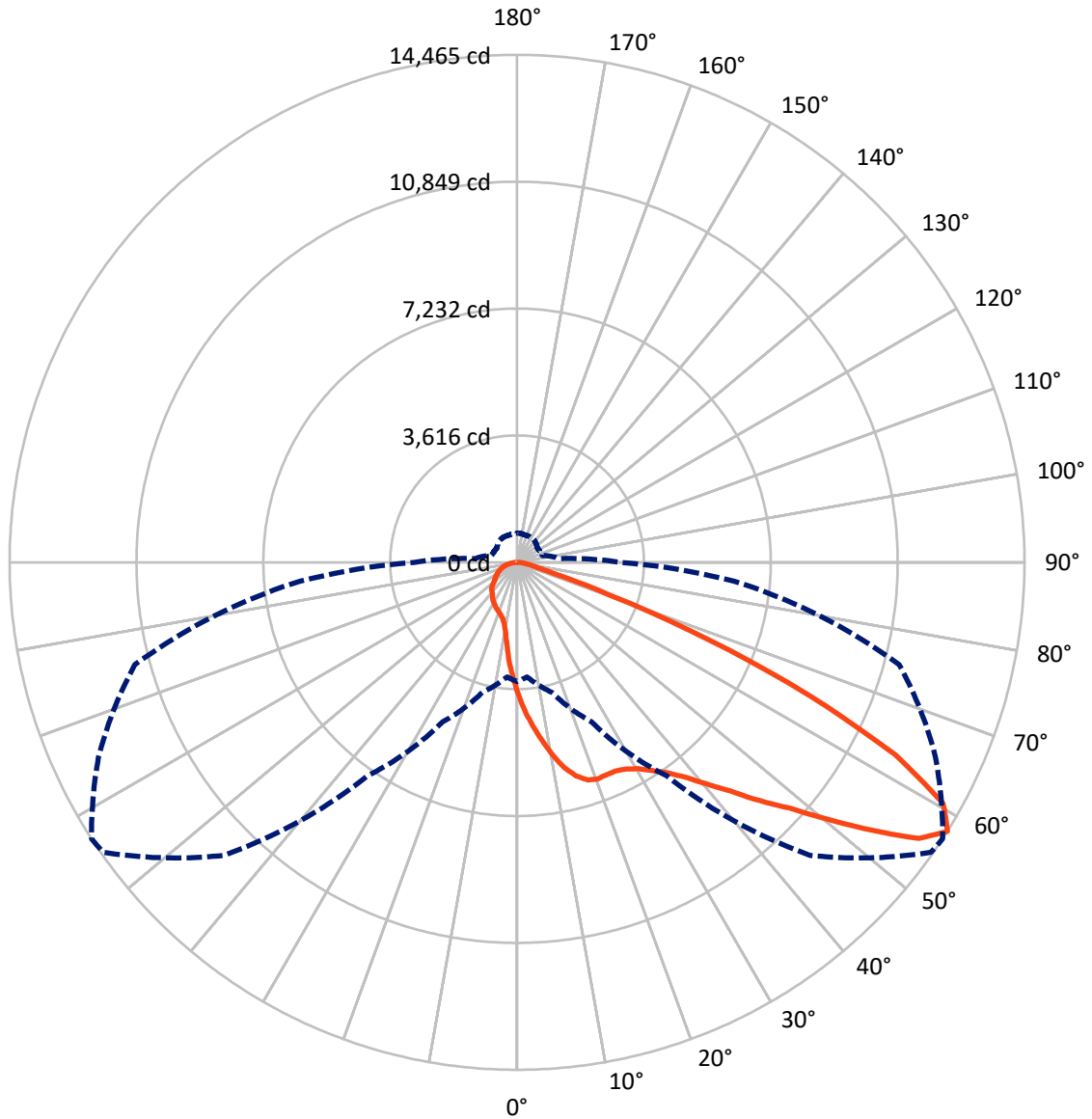
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 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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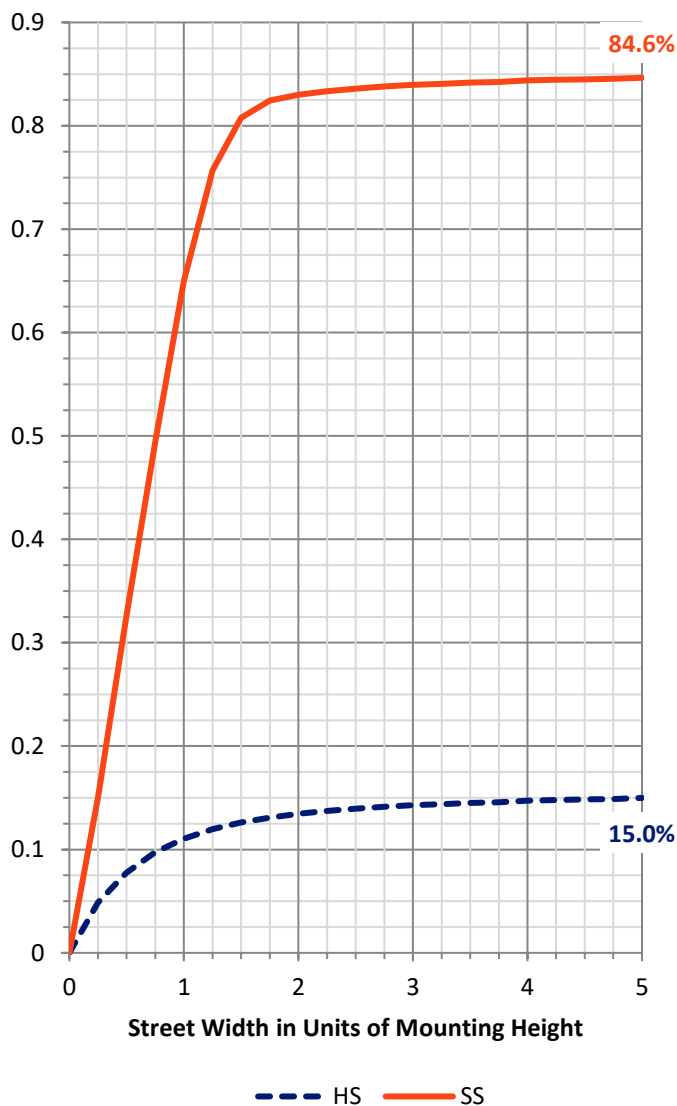
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2710.4 | 0.0 | 2710.4 |
| | % Fixture | 15.2 | 0.0 | 15.2 |
| Street Side | Lumens | 15112.9 | 0.0 | 15112.9 |
| | % Fixture | 84.8 | 0.0 | 84.8 |
| Total | Lumens | 17823.3 | 0.0 | 17823.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 359.9 | 2.0 |
| 10°-20° | 1060.6 | 6.0 |
| 20°-30° | 1761.1 | 9.9 |
| 30°-40° | 2652.8 | 14.9 |
| 40°-50° | 3982.9 | 22.3 |
| 50°-60° | 4464.3 | 25.0 |
| 60°-70° | 2612.7 | 14.7 |
| 70°-80° | 772.8 | 4.3 |
| 80°-90° | 156.2 | 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° | 17823.3 | 100.0 |
| 0°-180° | 17823.3 | 100.0 |

Coefficient of Utilization

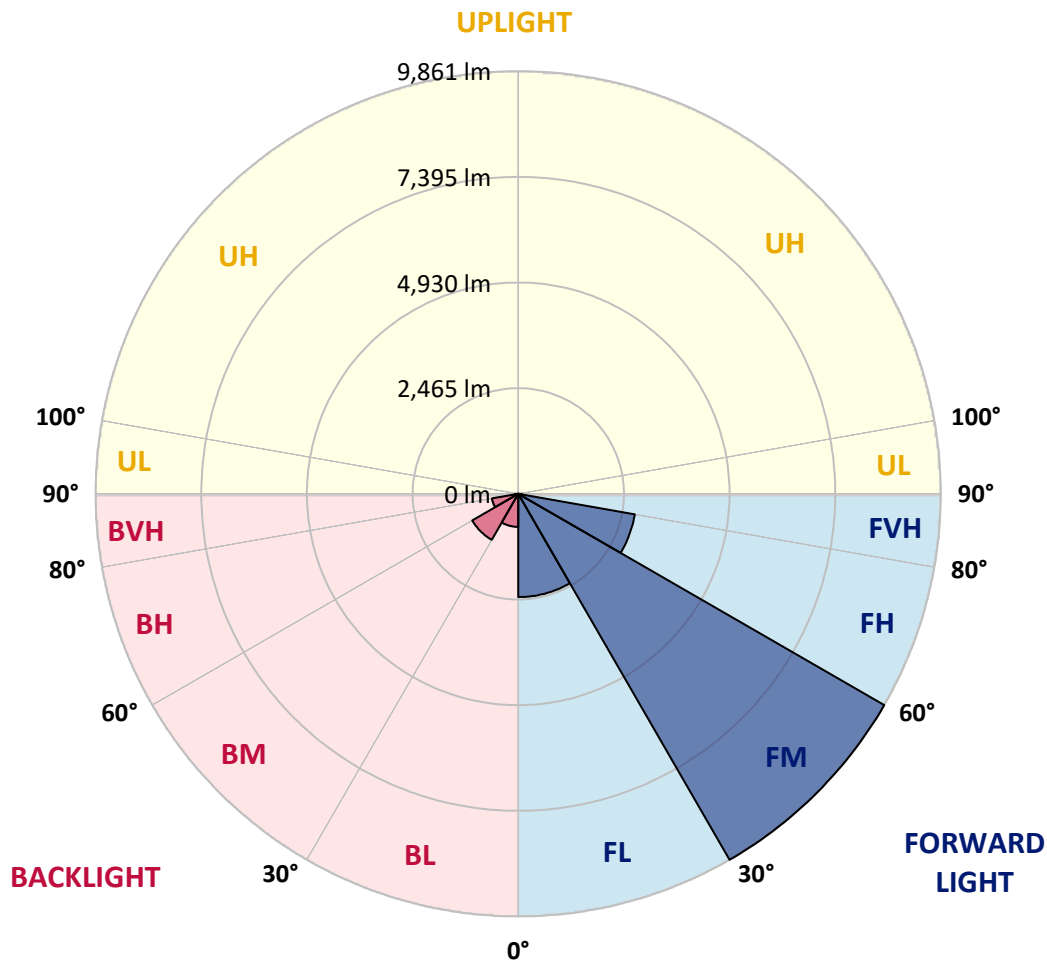


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2409.3 | 13.5 | | | |
| FM (30°-60°) | 9860.6 | 55.3 | | | |
| FH (60°-80°) | 2761.9 | 15.5 | | | G2/5000 |
| FVH (80°-90°) | 81.0 | 0.5 | | | G1/100 |
| BL (0°-30°) | 772.3 | 4.3 | B2/1000 | | |
| BM (30°-60°) | 1239.3 | 7.0 | B2/2500 | | |
| BH (60°-80°) | 623.7 | 3.5 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 75.2 | 0.4 | | | 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 Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 57° | 65° | 75° | 85° |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0° | 3744.5 | 3744.5 | 3744.5 | 3744.5 | 3744.5 | 3744.5 | 3744.5 | 3744.5 | 3744.5 | 3744.5 | 3744.5 |
| 2.5° | 4652.7 | 4602.0 | 4562.1 | 4526.9 | 4481.1 | 4357.1 | 4233.3 | 4231.3 | 4132.8 | 3980.5 | 3824.4 |
| 5° | 5410.8 | 5342.5 | 5351.4 | 5242.0 | 5132.8 | 4953.3 | 4690.8 | 4677.1 | 4467.4 | 4182.5 | 3892.7 |
| 7.5° | 5904.5 | 5905.5 | 5878.2 | 5815.8 | 5697.7 | 5493.7 | 5196.2 | 5128.9 | 4837.2 | 4405.0 | 3970.8 |
| 10° | 5879.2 | 5905.5 | 5951.3 | 6005.0 | 6041.1 | 5940.7 | 5669.4 | 5587.4 | 5207.9 | 4674.3 | 4057.7 |
| 12.5° | 5541.6 | 5582.6 | 5647.9 | 5782.5 | 6000.1 | 6166.0 | 6073.3 | 6006.9 | 5637.2 | 4942.6 | 4153.3 |
| 15° | 5330.8 | 5355.2 | 5391.3 | 5482.1 | 5716.2 | 6113.3 | 6353.3 | 6318.2 | 6042.1 | 5246.0 | 4260.6 |
| 17.5° | 5266.4 | 5290.8 | 5302.6 | 5358.2 | 5525.0 | 5931.8 | 6463.6 | 6526.0 | 6401.1 | 5525.0 | 4368.9 |
| 20° | 5330.8 | 5342.5 | 5342.5 | 5375.8 | 5506.4 | 5825.5 | 6458.7 | 6584.5 | 6695.8 | 5859.7 | 4470.3 |
| 22.5° | 5499.6 | 5504.5 | 5497.7 | 5509.4 | 5606.9 | 5854.8 | 6412.8 | 6569.0 | 6933.8 | 6143.6 | 4549.4 |
| 25° | 5773.8 | 5781.6 | 5736.7 | 5709.4 | 5780.6 | 5983.5 | 6438.2 | 6581.6 | 7120.2 | 6414.8 | 4602.0 |
| 27.5° | 6085.1 | 6094.8 | 6040.1 | 5976.7 | 6009.9 | 6142.6 | 6537.7 | 6666.5 | 7259.7 | 6682.1 | 4635.3 |
| 30° | 6466.4 | 6470.4 | 6378.6 | 6302.5 | 6281.1 | 6379.7 | 6707.5 | 6827.5 | 7433.3 | 6997.2 | 4685.0 |
| 32.5° | 6856.8 | 6886.0 | 6767.9 | 6660.6 | 6624.6 | 6654.7 | 6958.2 | 7074.3 | 7640.1 | 7335.8 | 4765.0 |
| 35° | 7387.5 | 7392.4 | 7250.9 | 7120.2 | 7001.2 | 7040.2 | 7279.2 | 7363.1 | 7926.0 | 7727.0 | 4878.1 |
| 37.5° | 8050.0 | 8094.8 | 7899.7 | 7655.8 | 7509.5 | 7452.9 | 7667.5 | 7759.2 | 8327.0 | 8207.0 | 5048.9 |
| 40° | 8785.6 | 8802.2 | 8635.3 | 8483.1 | 8215.8 | 8051.9 | 8200.2 | 8299.7 | 8821.7 | 8779.7 | 5246.9 |
| 42.5° | 9248.0 | 9284.1 | 9296.8 | 9281.2 | 9080.2 | 8805.1 | 8861.7 | 8908.5 | 9407.0 | 9317.3 | 5449.8 |
| 45° | 9404.1 | 9457.8 | 9639.2 | 10023.6 | 10045.1 | 9773.8 | 9642.1 | 9687.1 | 10045.1 | 9859.7 | 5644.0 |
| 47.5° | 9145.5 | 9237.3 | 9571.9 | 10360.2 | 10950.5 | 10971.0 | 10573.9 | 10475.3 | 10626.5 | 10309.5 | 5784.5 |
| 50° | 8477.3 | 8496.8 | 9009.0 | 10150.4 | 11374.9 | 12115.4 | 11704.6 | 11521.2 | 11178.8 | 10642.2 | 5881.1 |
| 52.5° | 7443.1 | 7465.6 | 7894.8 | 9175.8 | 11113.4 | 12915.4 | 13027.6 | 12699.8 | 11739.8 | 10900.7 | 5944.5 |
| 55° | 5525.0 | 5654.8 | 6126.9 | 7365.1 | 9874.3 | 12840.3 | 14079.3 | 13893.0 | 12417.9 | 11105.6 | 6044.0 |
| 57.5° | 3397.1 | 3278.1 | 3838.2 | 5010.8 | 7426.5 | 11808.1 | 14404.2 | 14464.7 | 13164.2 | 11277.3 | 6210.9 |
| 60° | 1563.0 | 1586.4 | 1817.6 | 2584.5 | 4526.9 | 9237.3 | 13567.1 | 13949.6 | 13576.9 | 11271.5 | 6252.8 |
| 62.5° | 1077.1 | 1055.6 | 997.1 | 1134.7 | 2064.4 | 5842.1 | 11459.8 | 12107.6 | 12749.6 | 10921.2 | 6086.0 |
| 65° | 962.9 | 941.5 | 828.3 | 790.3 | 948.3 | 2546.4 | 8330.9 | 9148.5 | 10734.9 | 10037.3 | 5670.4 |
| 67.5° | 899.5 | 870.3 | 753.2 | 679.0 | 677.1 | 1013.7 | 4912.3 | 5896.8 | 7962.2 | 8486.0 | 4913.3 |
| 70° | 833.2 | 809.8 | 693.7 | 611.7 | 576.6 | 637.1 | 2159.1 | 2826.4 | 5169.9 | 6115.2 | 3827.4 |
| 72.5° | 766.8 | 739.5 | 635.1 | 547.3 | 501.5 | 477.1 | 827.4 | 1076.1 | 2921.0 | 3666.4 | 2346.4 |
| 75° | 670.3 | 656.6 | 567.8 | 495.6 | 445.9 | 385.3 | 524.9 | 599.0 | 1397.1 | 1683.9 | 1177.6 |
| 77.5° | 586.3 | 571.7 | 504.4 | 433.2 | 397.1 | 313.2 | 372.7 | 406.9 | 589.3 | 683.0 | 531.7 |
| 80° | 429.2 | 443.9 | 425.4 | 382.5 | 354.1 | 245.8 | 250.7 | 279.0 | 350.3 | 387.4 | 324.9 |
| 82.5° | 272.2 | 299.5 | 327.8 | 294.6 | 268.3 | 194.2 | 173.7 | 184.4 | 239.0 | 253.6 | 144.4 |
| 85° | 114.1 | 116.1 | 190.2 | 179.6 | 153.1 | 115.1 | 104.4 | 110.3 | 127.8 | 133.6 | 67.3 |
| 87.5° | 43.9 | 42.9 | 67.3 | 62.4 | 47.8 | 33.1 | 33.1 | 37.1 | 50.7 | 46.8 | 21.4 |
| 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° | 3744.5 | 3744.5 | 3744.5 | 3744.5 | 3744.5 | 3744.5 | 3744.5 | 3744.5 | 3744.5 | 3744.5 | 3744.5 |
| 2.5° | 3757.2 | 3687.9 | 3550.3 | 3379.6 | 3254.7 | 3114.2 | 2990.3 | 2901.5 | 2868.4 | 2852.8 | 2823.5 |
| 5° | 3754.2 | 3617.6 | 3332.8 | 3034.2 | 2794.2 | 2548.3 | 2340.5 | 2205.9 | 2194.2 | 2104.4 | 2095.7 |
| 7.5° | 3755.2 | 3546.4 | 3092.8 | 2653.7 | 2287.9 | 2036.1 | 1864.4 | 1819.6 | 1765.9 | 1752.2 | 1759.0 |
| 10° | 3758.1 | 3455.7 | 2835.2 | 2277.1 | 1922.9 | 1758.1 | 1693.7 | 1676.1 | 1678.0 | 1683.9 | 1684.9 |
| 12.5° | 3762.0 | 3367.9 | 2567.8 | 1991.2 | 1718.1 | 1649.8 | 1643.0 | 1658.5 | 1675.2 | 1687.8 | 1690.7 |
| 15° | 3766.9 | 3267.4 | 2307.4 | 1761.1 | 1615.6 | 1609.8 | 1632.2 | 1658.5 | 1682.0 | 1700.5 | 1703.4 |
| 17.5° | 3761.0 | 3150.3 | 2088.8 | 1619.5 | 1559.0 | 1587.4 | 1624.4 | 1657.6 | 1679.1 | 1696.6 | 1698.6 |
| 20° | 3747.4 | 3019.6 | 1878.1 | 1520.0 | 1524.0 | 1569.8 | 1609.8 | 1641.0 | 1664.4 | 1673.2 | 1680.1 |
| 22.5° | 3694.7 | 2863.4 | 1694.7 | 1443.0 | 1482.0 | 1545.4 | 1593.2 | 1611.8 | 1585.4 | 1566.9 | 1571.7 |
| 25° | 3604.9 | 2660.6 | 1524.0 | 1380.5 | 1443.9 | 1511.3 | 1560.1 | 1515.1 | 1493.7 | 1485.9 | 1489.7 |
| 27.5° | 3492.8 | 2438.1 | 1395.1 | 1315.2 | 1395.1 | 1473.2 | 1459.6 | 1451.7 | 1442.0 | 1429.3 | 1432.2 |
| 30° | 3371.8 | 2220.6 | 1285.9 | 1264.4 | 1342.5 | 1387.3 | 1393.2 | 1405.9 | 1395.1 | 1375.6 | 1383.4 |
| 32.5° | 3259.5 | 2015.6 | 1203.0 | 1221.5 | 1305.4 | 1298.6 | 1342.5 | 1357.1 | 1307.3 | 1242.0 | 1244.9 |
| 35° | 3164.0 | 1825.4 | 1140.5 | 1179.5 | 1242.0 | 1244.9 | 1288.8 | 1238.0 | 1184.4 | 1153.2 | 1155.1 |
| 37.5° | 3091.8 | 1677.1 | 1099.5 | 1143.4 | 1161.0 | 1198.1 | 1174.6 | 1148.3 | 1141.5 | 1120.0 | 1121.0 |
| 40° | 3048.9 | 1547.4 | 1073.2 | 1115.2 | 1112.2 | 1137.6 | 1062.4 | 1088.8 | 1098.6 | 1091.7 | 1092.7 |
| 42.5° | 3005.9 | 1455.6 | 1045.9 | 1076.1 | 1075.1 | 1025.3 | 1008.8 | 1031.2 | 1056.6 | 1059.6 | 1057.6 |
| 45° | 2971.8 | 1384.5 | 1017.6 | 1016.6 | 1036.1 | 958.1 | 953.2 | 966.8 | 1003.0 | 1020.5 | 1019.5 |
| 47.5° | 2933.7 | 1324.9 | 974.6 | 947.3 | 953.2 | 916.1 | 908.3 | 914.2 | 958.1 | 986.3 | 994.1 |
| 50° | 2885.9 | 1265.4 | 921.0 | 883.9 | 859.5 | 877.1 | 879.0 | 880.0 | 923.9 | 956.1 | 962.9 |
| 52.5° | 2847.9 | 1220.5 | 859.5 | 832.3 | 803.0 | 842.0 | 856.6 | 858.6 | 884.9 | 911.2 | 916.1 |
| 55° | 2870.3 | 1195.1 | 799.0 | 779.5 | 753.2 | 805.8 | 834.2 | 838.1 | 843.9 | 863.5 | 866.4 |
| 57.5° | 2937.6 | 1201.0 | 750.3 | 724.9 | 705.3 | 763.0 | 810.7 | 813.7 | 809.8 | 833.2 | 837.1 |
| 60° | 2958.1 | 1198.1 | 714.2 | 664.4 | 652.7 | 717.1 | 776.6 | 782.5 | 781.5 | 815.6 | 822.5 |
| 62.5° | 2872.3 | 1161.0 | 678.1 | 613.7 | 605.9 | 670.3 | 728.8 | 752.2 | 757.1 | 805.8 | 814.7 |
| 65° | 2670.3 | 1084.9 | 630.2 | 560.0 | 560.0 | 620.5 | 683.0 | 715.1 | 728.8 | 794.2 | 803.9 |
| 67.5° | 2403.9 | 995.2 | 581.5 | 514.2 | 512.2 | 572.7 | 634.2 | 667.3 | 688.8 | 777.6 | 783.4 |
| 70° | 1995.2 | 874.1 | 521.0 | 464.4 | 464.4 | 519.1 | 574.7 | 614.7 | 645.9 | 746.4 | 746.4 |
| 72.5° | 1366.9 | 726.9 | 447.8 | 407.8 | 408.8 | 459.5 | 516.1 | 560.9 | 598.0 | 683.9 | 685.8 |
| 75° | 864.4 | 567.8 | 367.9 | 347.3 | 351.2 | 399.1 | 457.6 | 504.4 | 578.5 | 676.1 | 679.0 |
| 77.5° | 459.5 | 399.1 | 292.7 | 287.8 | 292.7 | 336.6 | 402.0 | 466.3 | 580.5 | 586.3 | 576.6 |
| 80° | 297.5 | 282.9 | 231.2 | 221.4 | 223.5 | 271.2 | 358.1 | 443.0 | 466.3 | 472.2 | 450.8 |
| 82.5° | 162.0 | 179.6 | 163.9 | 154.2 | 154.2 | 211.7 | 305.4 | 352.2 | 334.6 | 278.0 | 265.3 |
| 85° | 69.3 | 83.9 | 84.9 | 74.2 | 71.2 | 130.8 | 204.9 | 192.2 | 178.5 | 170.7 | 168.8 |
| 87.5° | 19.5 | 27.3 | 27.3 | 20.5 | 15.6 | 36.1 | 41.0 | 11.7 | 0.0 | 1.0 | 1.9 |
| 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)