

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: P454428

Luminaire Tested: **GALN-SA5C-740-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454428
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-SA5C-740-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 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: 35552 lumens
Efficiency: N/A
Efficacy: 132.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

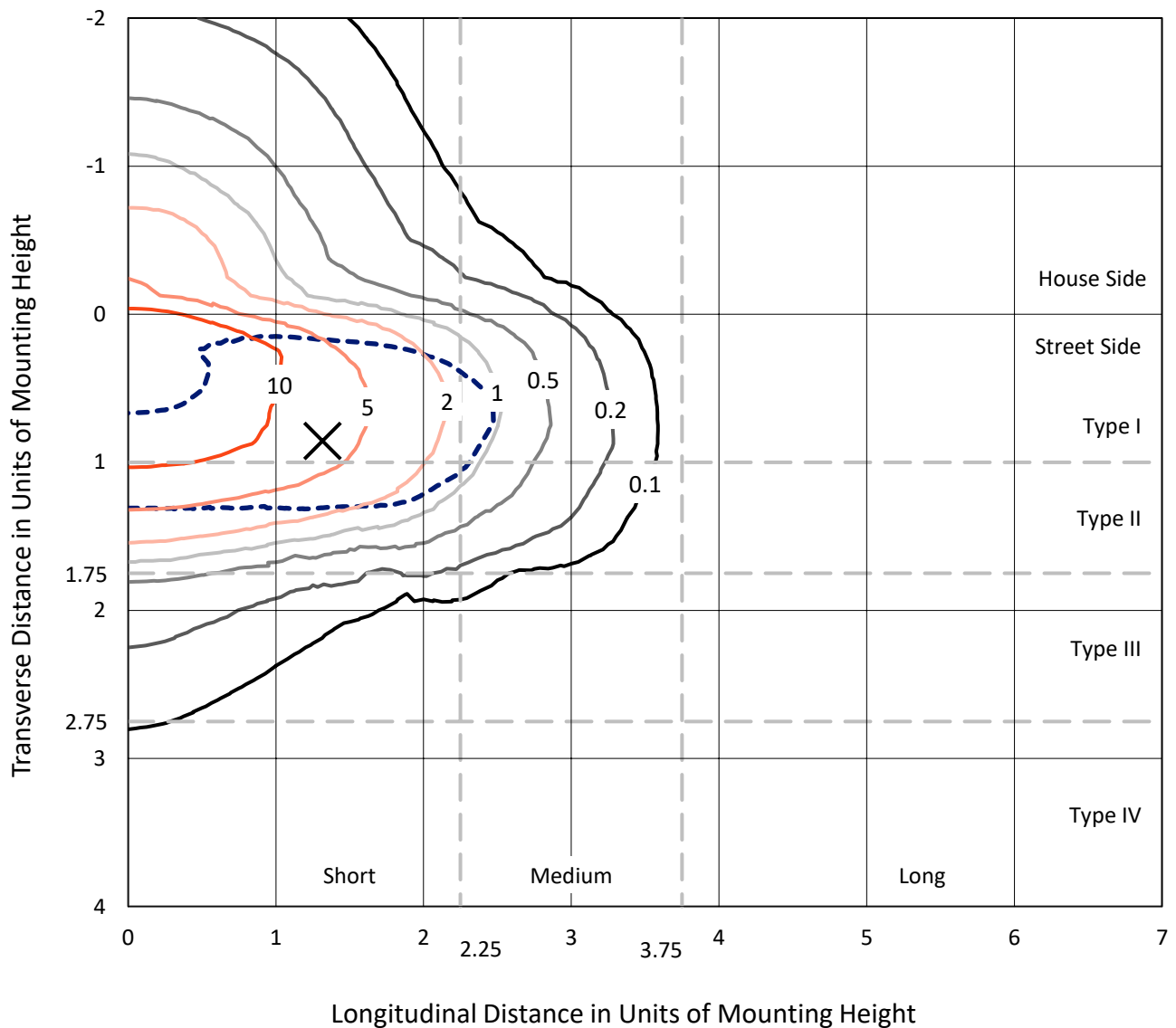
Input Watts (W): 269
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

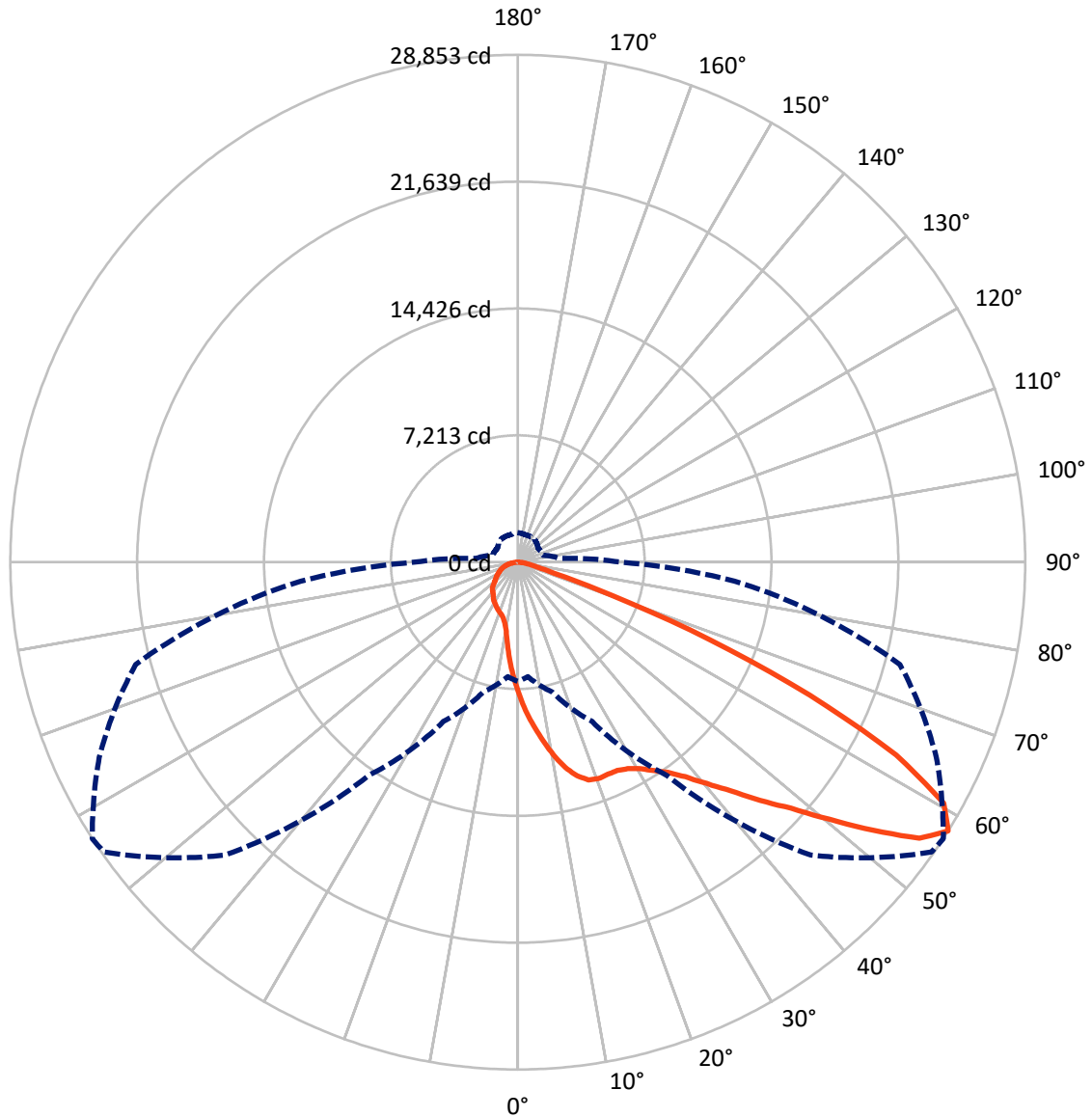
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 18.2 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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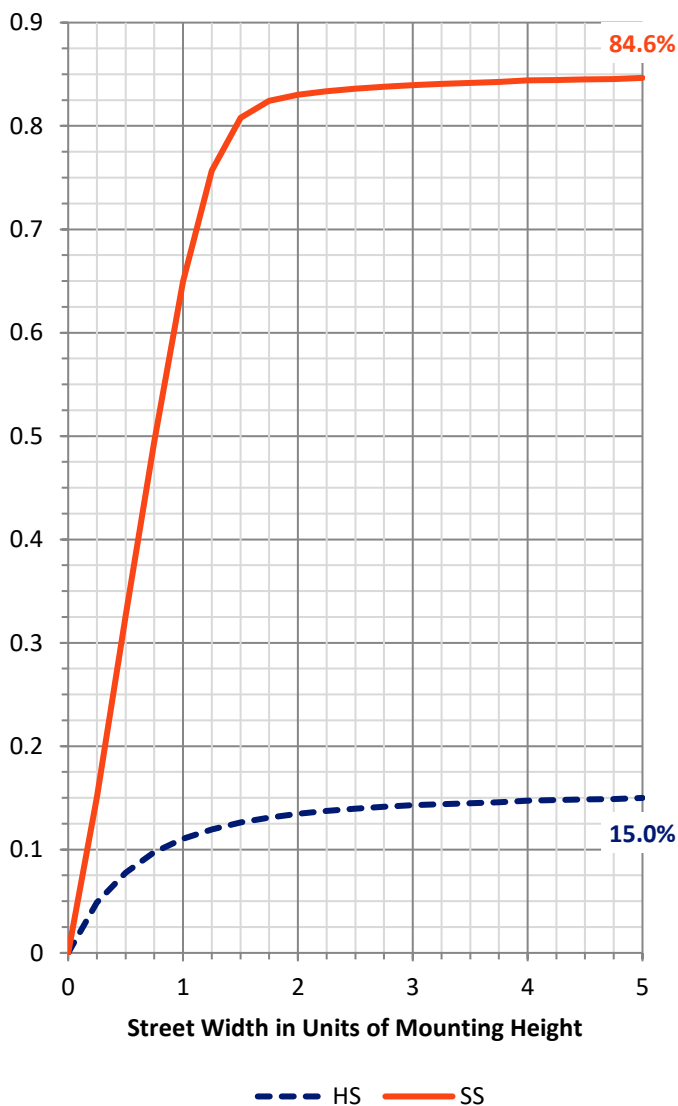
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5406.5 | 0.0 | 5406.5 |
| | % Fixture | 15.2 | 0.0 | 15.2 |
| Street Side | Lumens | 30145.5 | 0.0 | 30145.5 |
| | % Fixture | 84.8 | 0.0 | 84.8 |
| Total | Lumens | 35552.0 | 0.0 | 35552.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 717.8 | 2.0 |
| 10°-20° | 2115.5 | 6.0 |
| 20°-30° | 3512.9 | 9.9 |
| 30°-40° | 5291.4 | 14.9 |
| 40°-50° | 7944.6 | 22.3 |
| 50°-60° | 8904.9 | 25.0 |
| 60°-70° | 5211.6 | 14.7 |
| 70°-80° | 1541.5 | 4.3 |
| 80°-90° | 311.6 | 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° | 35552.0 | 100.0 |
| 0°-180° | 35552.0 | 100.0 |

Coefficient of Utilization



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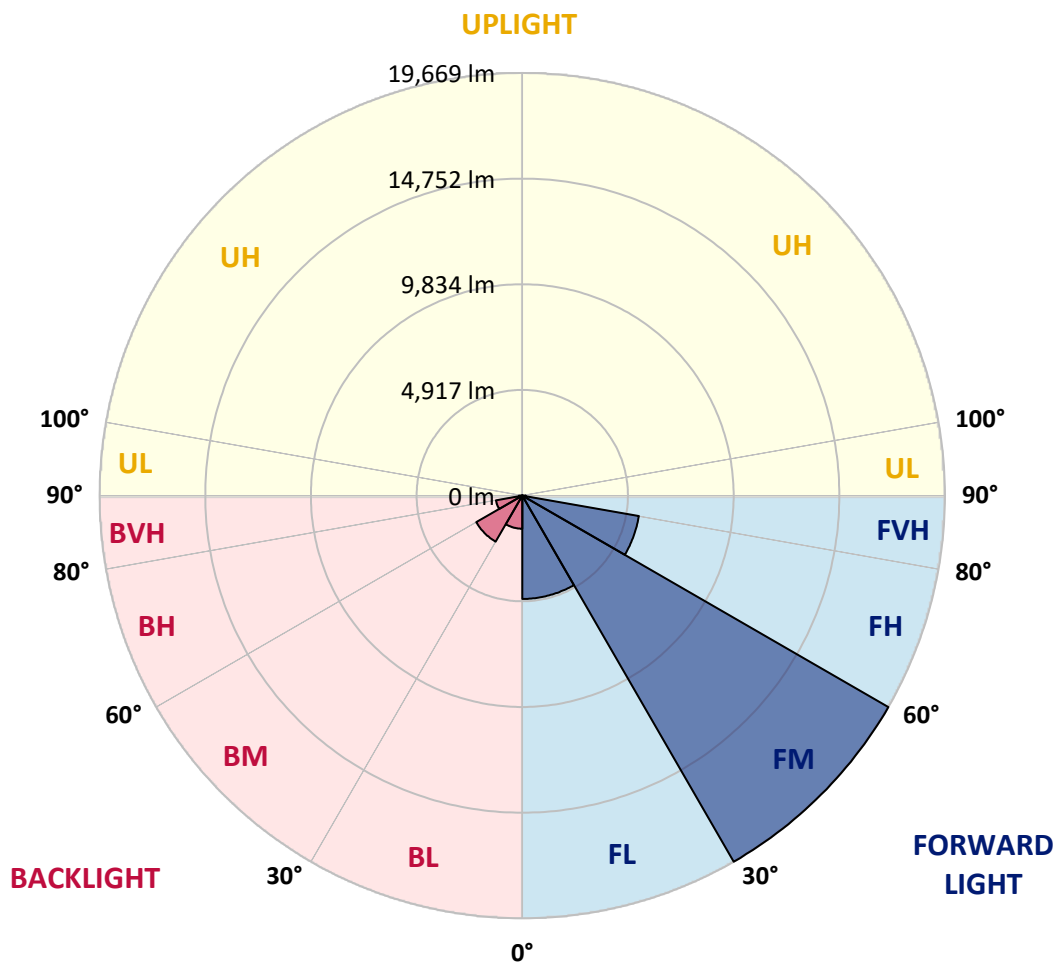
CATALOG NUMBER: GALN-SA5C-740-U-AFL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 4805.8 | 13.5 | | | |
| FM | (30°-60°) | 19668.9 | 55.3 | | | |
| FH | (60°-80°) | 5509.1 | 15.5 | | | G3/7500 |
| FVH | (80°-90°) | 161.7 | 0.5 | | | G2/225 |
| BL | (0°-30°) | 1540.5 | 4.3 | B3/2500 | | |
| BM | (30°-60°) | 2472.0 | 7.0 | B2/2500 | | |
| BH | (60°-80°) | 1244.0 | 3.5 | B3/2500 | | G3/2500 |
| BVH | (80°-90°) | 149.9 | 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° | 7469.1 | 7469.1 | 7469.1 | 7469.1 | 7469.1 | 7469.1 | 7469.1 | 7469.1 | 7469.1 | 7469.1 | 7469.1 |
| 2.5° | 9280.9 | 9179.7 | 9099.9 | 9029.8 | 8938.4 | 8691.2 | 8444.1 | 8440.2 | 8243.6 | 7940.0 | 7628.6 |
| 5° | 10793.0 | 10656.8 | 10674.3 | 10456.3 | 10238.3 | 9880.3 | 9356.8 | 9329.5 | 8911.1 | 8342.9 | 7764.9 |
| 7.5° | 11777.7 | 11779.6 | 11725.2 | 11600.6 | 11365.1 | 10958.4 | 10364.8 | 10230.6 | 9648.7 | 8786.6 | 7920.6 |
| 10° | 11727.1 | 11779.6 | 11871.1 | 11978.1 | 12050.1 | 11849.7 | 11308.7 | 11145.2 | 10388.2 | 9323.7 | 8093.8 |
| 12.5° | 11053.8 | 11135.5 | 11265.9 | 11534.4 | 11968.4 | 12299.2 | 12114.4 | 11982.0 | 11244.5 | 9858.9 | 8284.5 |
| 15° | 10633.4 | 10682.1 | 10754.1 | 10935.0 | 11402.1 | 12194.2 | 12672.9 | 12602.8 | 12052.1 | 10464.1 | 8498.5 |
| 17.5° | 10505.0 | 10553.6 | 10577.0 | 10687.9 | 11020.7 | 11832.2 | 12892.8 | 13017.4 | 12768.3 | 11020.7 | 8714.6 |
| 20° | 10633.4 | 10656.8 | 10656.8 | 10722.9 | 10983.7 | 11620.1 | 12883.1 | 13134.1 | 13356.0 | 11688.2 | 8917.0 |
| 22.5° | 10970.1 | 10979.8 | 10966.2 | 10989.5 | 11184.1 | 11678.4 | 12791.6 | 13103.0 | 13830.8 | 12254.5 | 9074.6 |
| 25° | 11516.9 | 11532.5 | 11443.0 | 11388.5 | 11530.5 | 11935.3 | 12842.2 | 13128.3 | 14202.5 | 12795.5 | 9179.7 |
| 27.5° | 12137.7 | 12157.2 | 12048.2 | 11921.7 | 11987.9 | 12252.5 | 13040.7 | 13297.6 | 14480.8 | 13328.7 | 9245.8 |
| 30° | 12898.6 | 12906.4 | 12723.5 | 12571.7 | 12528.9 | 12725.4 | 13379.3 | 13618.7 | 14827.2 | 13957.3 | 9345.1 |
| 32.5° | 13677.1 | 13735.5 | 13500.0 | 13285.9 | 13213.9 | 13274.2 | 13879.5 | 14111.1 | 15239.8 | 14632.6 | 9504.7 |
| 35° | 14735.7 | 14745.5 | 14463.3 | 14202.5 | 13965.1 | 14042.9 | 14519.7 | 14687.1 | 15810.0 | 15413.0 | 9730.4 |
| 37.5° | 16057.1 | 16146.7 | 15757.4 | 15270.9 | 14979.0 | 14866.1 | 15294.3 | 15477.2 | 16609.8 | 16370.5 | 10071.0 |
| 40° | 17524.5 | 17557.6 | 17224.8 | 16921.2 | 16388.0 | 16061.0 | 16356.8 | 16555.3 | 17596.5 | 17512.8 | 10466.0 |
| 42.5° | 18446.9 | 18518.9 | 18544.2 | 18513.1 | 18112.2 | 17563.4 | 17676.3 | 17769.7 | 18764.1 | 18585.1 | 10870.8 |
| 45° | 18758.3 | 18865.3 | 19227.3 | 19994.1 | 20036.9 | 19495.9 | 19233.1 | 19322.7 | 20036.9 | 19667.1 | 11258.1 |
| 47.5° | 18242.6 | 18425.5 | 19093.0 | 20665.5 | 21842.8 | 21883.7 | 21091.7 | 20895.1 | 21196.7 | 20564.3 | 11538.3 |
| 50° | 16909.5 | 16948.4 | 17970.1 | 20247.1 | 22689.4 | 24166.5 | 23347.2 | 22981.3 | 22298.2 | 21227.9 | 11731.0 |
| 52.5° | 14846.7 | 14891.4 | 15747.7 | 18302.9 | 22167.8 | 25762.3 | 25986.1 | 25332.2 | 23417.2 | 21743.6 | 11857.5 |
| 55° | 11020.7 | 11279.5 | 12221.4 | 14691.0 | 19696.3 | 25612.4 | 28083.9 | 27712.2 | 24769.8 | 22152.3 | 12056.0 |
| 57.5° | 6776.3 | 6538.8 | 7655.9 | 9995.1 | 14813.6 | 23553.4 | 28732.0 | 28852.6 | 26258.5 | 22494.8 | 12388.8 |
| 60° | 3117.6 | 3164.3 | 3625.6 | 5155.2 | 9029.8 | 18425.5 | 27062.2 | 27825.1 | 27081.7 | 22483.1 | 12472.4 |
| 62.5° | 2148.5 | 2105.7 | 1988.9 | 2263.3 | 4117.9 | 11653.1 | 22858.7 | 24150.9 | 25431.4 | 21784.5 | 12139.7 |
| 65° | 1920.8 | 1878.0 | 1652.2 | 1576.3 | 1891.6 | 5079.3 | 16617.6 | 18248.4 | 21412.8 | 20021.3 | 11310.6 |
| 67.5° | 1794.3 | 1735.9 | 1502.4 | 1354.5 | 1350.6 | 2022.0 | 9798.5 | 11762.1 | 15882.0 | 16927.0 | 9800.5 |
| 70° | 1662.0 | 1615.2 | 1383.7 | 1220.2 | 1150.1 | 1270.8 | 4306.7 | 5637.8 | 10312.3 | 12198.1 | 7634.5 |
| 72.5° | 1529.6 | 1475.1 | 1266.9 | 1091.8 | 1000.3 | 951.6 | 1650.3 | 2146.5 | 5826.6 | 7313.4 | 4680.3 |
| 75° | 1337.0 | 1309.7 | 1132.6 | 988.6 | 889.4 | 768.7 | 1047.0 | 1194.9 | 2786.8 | 3358.9 | 2348.9 |
| 77.5° | 1169.6 | 1140.4 | 1006.1 | 864.1 | 792.1 | 624.7 | 743.4 | 811.5 | 1175.4 | 1362.3 | 1060.6 |
| 80° | 856.3 | 885.5 | 848.5 | 762.9 | 706.4 | 490.4 | 500.1 | 556.6 | 698.6 | 772.6 | 648.0 |
| 82.5° | 543.0 | 597.4 | 653.9 | 587.7 | 535.2 | 387.3 | 346.4 | 367.8 | 476.8 | 506.0 | 288.0 |
| 85° | 227.7 | 231.6 | 379.5 | 358.1 | 305.5 | 229.6 | 208.2 | 219.9 | 254.9 | 266.6 | 134.3 |
| 87.5° | 87.6 | 85.6 | 134.3 | 124.5 | 95.4 | 66.2 | 66.2 | 74.0 | 101.2 | 93.4 | 42.8 |
| 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° | 7469.1 | 7469.1 | 7469.1 | 7469.1 | 7469.1 | 7469.1 | 7469.1 | 7469.1 | 7469.1 | 7469.1 | 7469.1 |
| 2.5° | 7494.4 | 7356.2 | 7081.8 | 6741.2 | 6492.1 | 6211.9 | 5964.7 | 5787.7 | 5721.5 | 5690.3 | 5632.0 |
| 5° | 7488.5 | 7216.1 | 6647.8 | 6052.3 | 5573.6 | 5083.2 | 4668.7 | 4400.1 | 4376.7 | 4197.7 | 4180.2 |
| 7.5° | 7490.5 | 7074.0 | 6169.1 | 5293.3 | 4563.6 | 4061.5 | 3719.0 | 3629.4 | 3522.4 | 3495.2 | 3508.8 |
| 10° | 7496.3 | 6893.0 | 5655.3 | 4542.2 | 3835.7 | 3506.8 | 3378.4 | 3343.4 | 3347.3 | 3358.9 | 3360.9 |
| 12.5° | 7504.1 | 6717.9 | 5122.1 | 3972.0 | 3427.1 | 3290.8 | 3277.2 | 3308.3 | 3341.4 | 3366.7 | 3372.6 |
| 15° | 7513.8 | 6517.4 | 4602.5 | 3512.7 | 3222.7 | 3211.0 | 3255.8 | 3308.3 | 3355.0 | 3392.0 | 3397.9 |
| 17.5° | 7502.2 | 6283.9 | 4166.6 | 3230.5 | 3109.8 | 3166.3 | 3240.2 | 3306.4 | 3349.2 | 3384.2 | 3388.1 |
| 20° | 7474.9 | 6023.1 | 3746.2 | 3032.0 | 3039.8 | 3131.2 | 3211.0 | 3273.3 | 3320.0 | 3337.5 | 3351.2 |
| 22.5° | 7369.8 | 5711.8 | 3380.3 | 2878.3 | 2956.1 | 3082.6 | 3178.0 | 3214.9 | 3162.4 | 3125.4 | 3135.1 |
| 25° | 7190.8 | 5307.0 | 3039.8 | 2753.7 | 2880.2 | 3014.5 | 3111.8 | 3022.3 | 2979.5 | 2963.9 | 2971.7 |
| 27.5° | 6967.0 | 4863.3 | 2782.9 | 2623.3 | 2782.9 | 2938.6 | 2911.3 | 2895.8 | 2876.3 | 2851.0 | 2856.9 |
| 30° | 6725.7 | 4429.3 | 2564.9 | 2522.1 | 2677.8 | 2767.3 | 2779.0 | 2804.3 | 2782.9 | 2744.0 | 2759.5 |
| 32.5° | 6501.9 | 4020.6 | 2399.5 | 2436.5 | 2603.9 | 2590.2 | 2677.8 | 2707.0 | 2607.8 | 2477.4 | 2483.2 |
| 35° | 6311.1 | 3641.1 | 2275.0 | 2352.8 | 2477.4 | 2483.2 | 2570.8 | 2469.6 | 2362.5 | 2300.3 | 2304.2 |
| 37.5° | 6167.1 | 3345.3 | 2193.2 | 2280.8 | 2315.8 | 2389.8 | 2343.1 | 2290.5 | 2276.9 | 2234.1 | 2236.0 |
| 40° | 6081.5 | 3086.5 | 2140.7 | 2224.4 | 2218.5 | 2269.1 | 2119.3 | 2171.8 | 2191.3 | 2177.7 | 2179.6 |
| 42.5° | 5995.9 | 2903.6 | 2086.2 | 2146.5 | 2144.6 | 2045.3 | 2012.3 | 2057.0 | 2107.6 | 2113.4 | 2109.6 |
| 45° | 5927.8 | 2761.5 | 2029.8 | 2027.8 | 2066.7 | 1911.1 | 1901.3 | 1928.6 | 2000.6 | 2035.6 | 2033.7 |
| 47.5° | 5851.9 | 2642.8 | 1944.1 | 1889.6 | 1901.3 | 1827.4 | 1811.8 | 1823.5 | 1911.1 | 1967.5 | 1983.1 |
| 50° | 5756.5 | 2524.1 | 1837.1 | 1763.2 | 1714.5 | 1749.5 | 1753.4 | 1755.4 | 1842.9 | 1907.2 | 1920.8 |
| 52.5° | 5680.6 | 2434.6 | 1714.5 | 1660.0 | 1601.6 | 1679.5 | 1708.7 | 1712.6 | 1765.1 | 1817.6 | 1827.4 |
| 55° | 5725.4 | 2384.0 | 1593.8 | 1554.9 | 1502.4 | 1607.5 | 1663.9 | 1671.7 | 1683.4 | 1722.3 | 1728.1 |
| 57.5° | 5859.7 | 2395.6 | 1496.5 | 1445.9 | 1407.0 | 1521.8 | 1617.2 | 1623.0 | 1615.2 | 1662.0 | 1669.7 |
| 60° | 5900.5 | 2389.8 | 1424.5 | 1325.3 | 1301.9 | 1430.4 | 1549.1 | 1560.8 | 1558.8 | 1626.9 | 1640.5 |
| 62.5° | 5729.3 | 2315.8 | 1352.5 | 1224.1 | 1208.5 | 1337.0 | 1453.7 | 1500.4 | 1510.2 | 1607.5 | 1625.0 |
| 65° | 5326.4 | 2164.0 | 1257.2 | 1117.1 | 1117.1 | 1237.7 | 1362.3 | 1426.5 | 1453.7 | 1584.1 | 1603.6 |
| 67.5° | 4795.1 | 1985.0 | 1159.9 | 1025.6 | 1021.7 | 1142.4 | 1265.0 | 1331.1 | 1373.9 | 1551.0 | 1562.7 |
| 70° | 3979.7 | 1743.7 | 1039.2 | 926.3 | 926.3 | 1035.3 | 1146.2 | 1226.0 | 1288.3 | 1488.8 | 1488.8 |
| 72.5° | 2726.5 | 1449.8 | 893.3 | 813.5 | 815.4 | 916.6 | 1029.5 | 1119.0 | 1192.9 | 1364.2 | 1368.1 |
| 75° | 1724.2 | 1132.6 | 733.7 | 692.8 | 700.6 | 795.9 | 912.7 | 1006.1 | 1154.0 | 1348.6 | 1354.5 |
| 77.5° | 916.6 | 795.9 | 583.8 | 574.1 | 583.8 | 671.4 | 801.8 | 930.2 | 1157.9 | 1169.6 | 1150.1 |
| 80° | 593.6 | 564.4 | 461.2 | 441.8 | 445.7 | 541.0 | 714.2 | 883.5 | 930.2 | 941.9 | 899.1 |
| 82.5° | 323.0 | 358.1 | 326.9 | 307.5 | 307.5 | 422.3 | 609.1 | 702.5 | 667.5 | 554.6 | 529.3 |
| 85° | 138.2 | 167.4 | 169.3 | 147.9 | 142.1 | 260.8 | 408.7 | 383.4 | 356.1 | 340.6 | 336.7 |
| 87.5° | 38.9 | 54.5 | 54.5 | 40.9 | 31.1 | 72.0 | 81.7 | 23.4 | 0.0 | 1.9 | 3.9 |
| 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)