

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: P648461

Luminaire Tested: **GALN-SA5B-835-U-T4W-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P648461
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-27)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA5B-835-U-T4W-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 80 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16140.8 lumens
Efficiency: N/A
Efficacy: 79.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
BUG Rating: B1 - U0 - G3

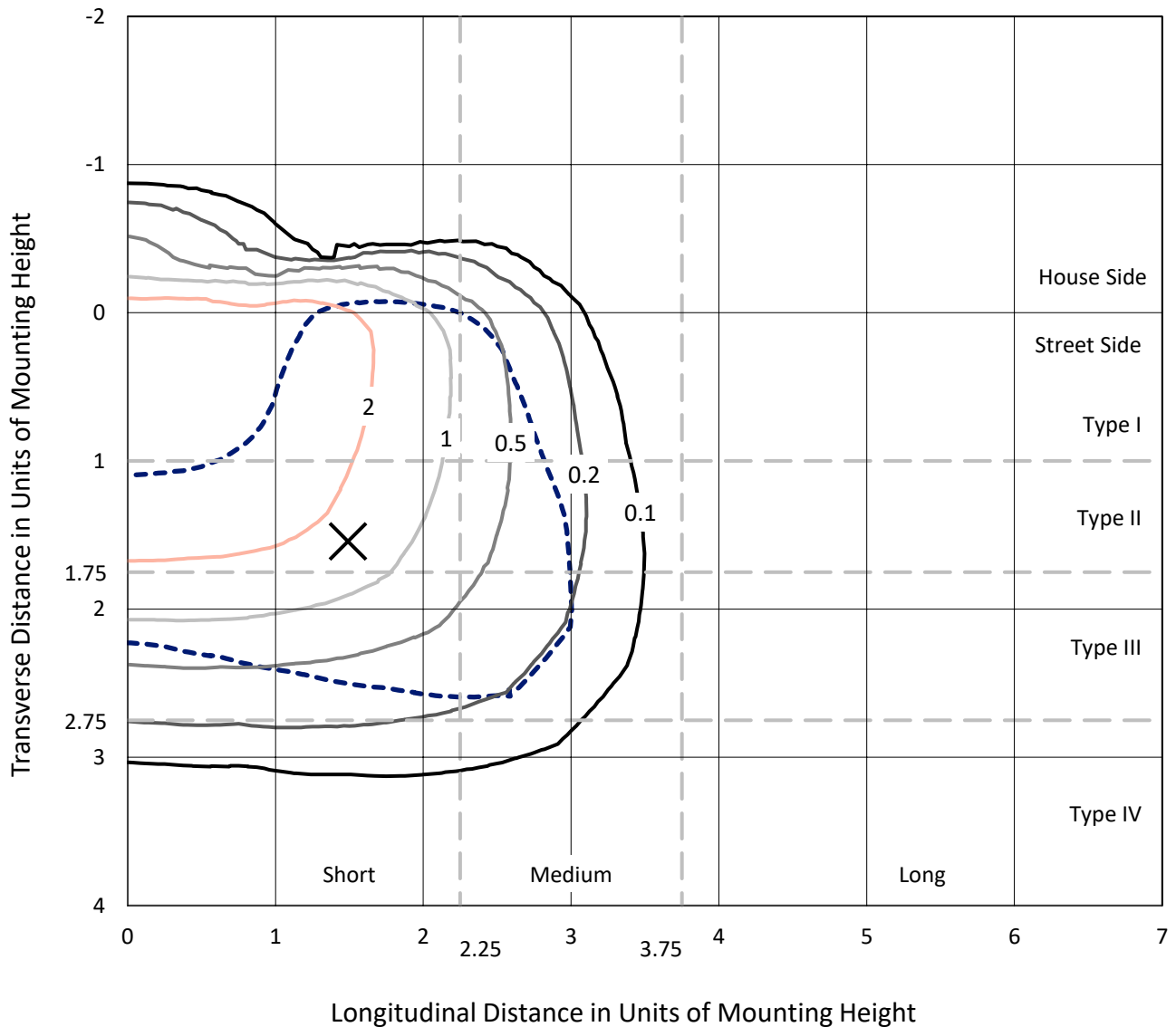
Input Watts (W): 204
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

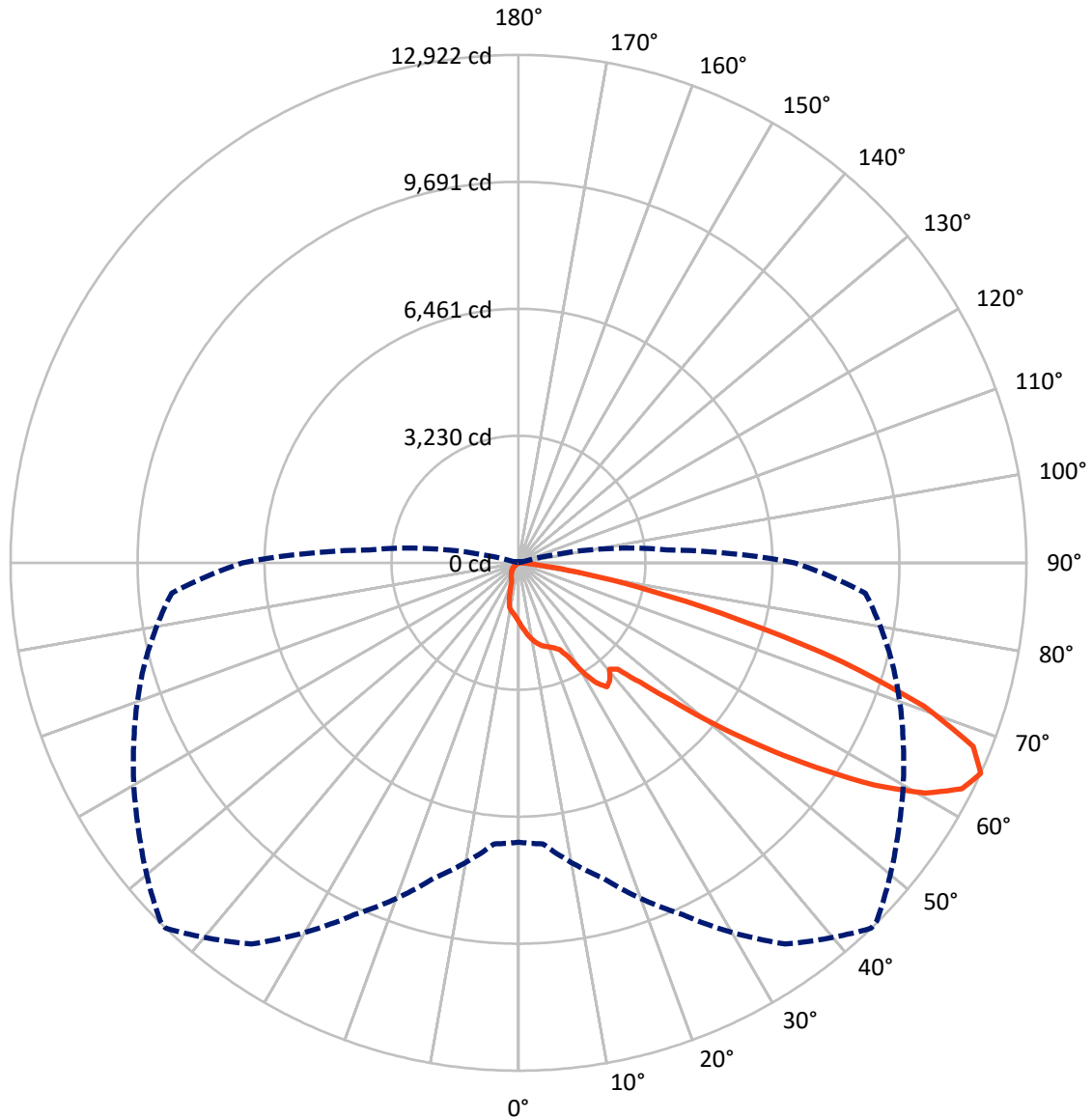
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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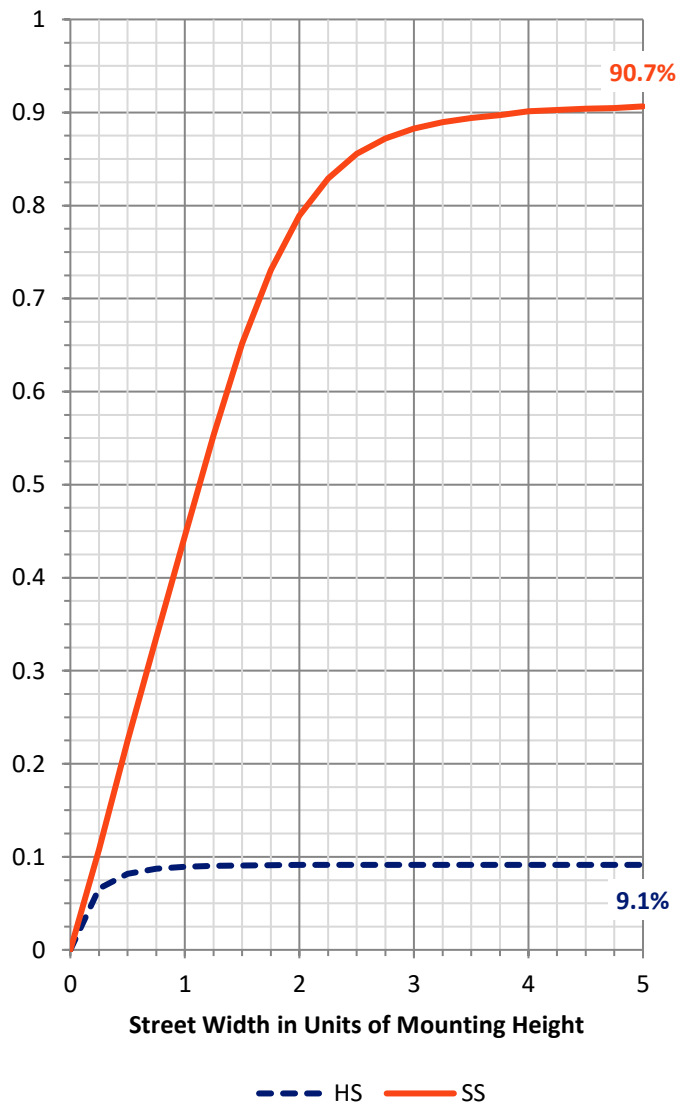
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1487.1 | 0.0 | 1487.1 |
| | % Fixture | 9.2 | 0.0 | 9.2 |
| Street Side | Lumens | 14653.6 | 0.0 | 14653.6 |
| | % Fixture | 90.8 | 0.0 | 90.8 |
| Total | Lumens | 16140.8 | 0.0 | 16140.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 149.4 | 0.9 |
| 10°-20° | 449.7 | 2.8 |
| 20°-30° | 762.5 | 4.7 |
| 30°-40° | 1267.8 | 7.9 |
| 40°-50° | 2213.6 | 13.7 |
| 50°-60° | 4324.5 | 26.8 |
| 60°-70° | 5017.5 | 31.1 |
| 70°-80° | 1827.1 | 11.3 |
| 80°-90° | 128.7 | 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° | 16140.8 | 100.0 |
| 0°-180° | 16140.8 | 100.0 |

Coefficient of Utilization

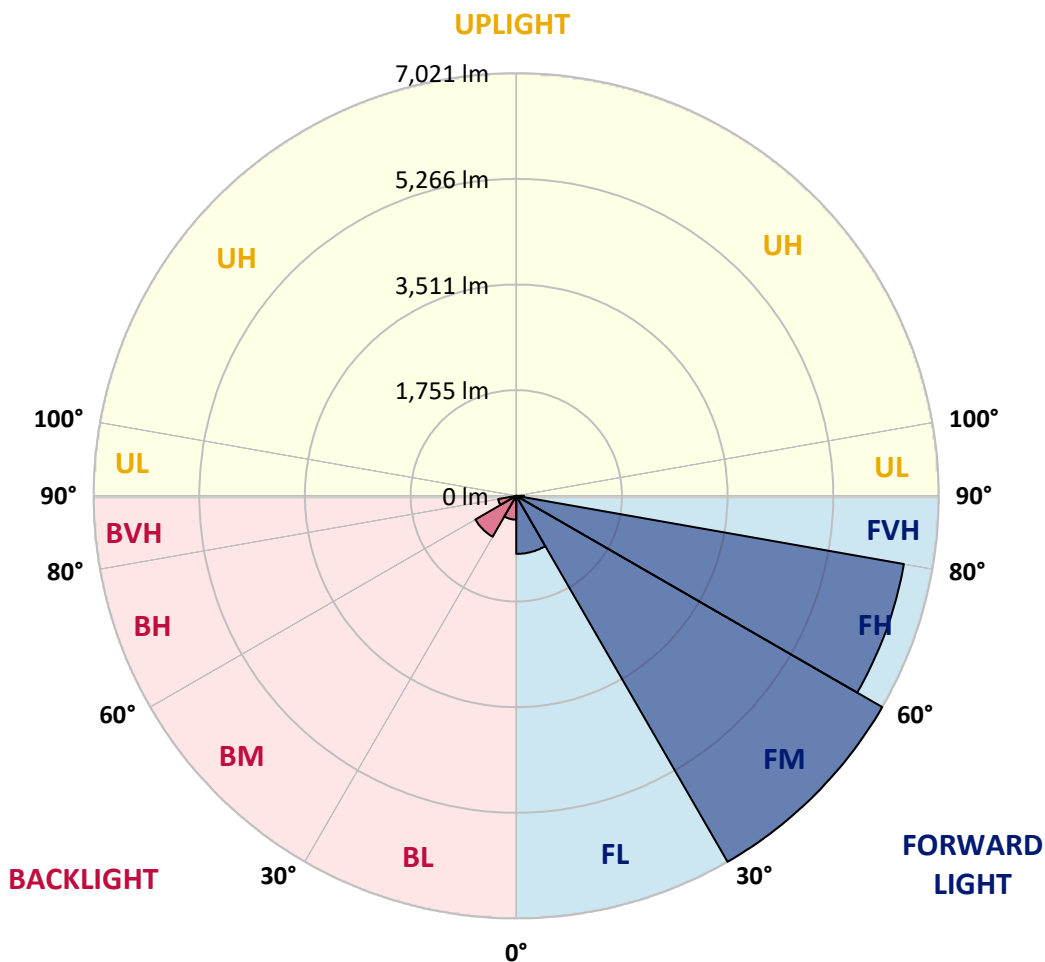


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 965.4 | 6.0 | | | |
| FM (30°-60°) | 7021.3 | 43.5 | | | |
| FH (60°-80°) | 6540.0 | 40.5 | | | G3/7500 |
| FVH (80°-90°) | 127.0 | 0.8 | | | G2/225 |
| BL (0°-30°) | 396.2 | 2.5 | B1/500 | | |
| BM (30°-60°) | 784.6 | 4.9 | B1/1000 | | |
| BH (60°-80°) | 304.5 | 1.9 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.8 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G3
 Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0° | 1502.2 | 1502.2 | 1502.2 | 1502.2 | 1502.2 | 1502.2 | 1502.2 | 1502.2 | 1502.2 | 1502.2 | 1502.2 |
| 2.5° | 1690.9 | 1683.5 | 1679.8 | 1660.1 | 1645.3 | 1626.8 | 1626.8 | 1603.3 | 1576.3 | 1546.7 | 1519.5 |
| 5° | 1879.6 | 1867.3 | 1851.2 | 1834.0 | 1799.5 | 1750.2 | 1750.2 | 1700.8 | 1644.1 | 1593.5 | 1538.0 |
| 7.5° | 2060.9 | 2049.8 | 2022.7 | 1989.4 | 1932.7 | 1880.8 | 1877.2 | 1805.6 | 1737.8 | 1661.3 | 1582.4 |
| 10° | 2220.0 | 2211.4 | 2187.9 | 2123.8 | 2064.6 | 1996.8 | 1995.6 | 1915.4 | 1836.4 | 1742.7 | 1645.3 |
| 12.5° | 2331.1 | 2332.2 | 2301.5 | 2239.8 | 2163.3 | 2099.1 | 2094.2 | 2015.3 | 1932.7 | 1831.5 | 1711.9 |
| 15° | 2410.0 | 2410.0 | 2377.9 | 2308.8 | 2239.8 | 2183.0 | 2178.1 | 2109.0 | 2023.9 | 1914.2 | 1784.7 |
| 17.5° | 2432.2 | 2439.6 | 2405.1 | 2343.4 | 2287.8 | 2238.5 | 2237.3 | 2179.3 | 2111.5 | 2005.4 | 1858.7 |
| 20° | 2423.5 | 2430.9 | 2403.8 | 2355.7 | 2317.4 | 2289.1 | 2285.4 | 2261.9 | 2199.1 | 2099.1 | 1937.6 |
| 22.5° | 2405.1 | 2412.4 | 2392.7 | 2364.3 | 2345.9 | 2354.5 | 2348.3 | 2368.0 | 2334.7 | 2213.9 | 2031.3 |
| 25° | 2408.7 | 2416.1 | 2401.3 | 2385.3 | 2401.3 | 2454.4 | 2470.4 | 2555.5 | 2525.9 | 2359.4 | 2132.5 |
| 27.5° | 2524.7 | 2539.5 | 2518.5 | 2525.9 | 2582.6 | 2706.0 | 2736.8 | 2883.6 | 2752.9 | 2544.4 | 2290.4 |
| 30° | 2782.5 | 2772.6 | 2733.1 | 2768.8 | 2966.2 | 3227.7 | 3219.1 | 3195.6 | 2990.9 | 2757.8 | 2477.8 |
| 32.5° | 3016.7 | 3008.1 | 3005.7 | 3159.9 | 3517.5 | 3644.6 | 3638.4 | 3411.5 | 3204.3 | 3001.9 | 2662.8 |
| 35° | 3111.7 | 3078.4 | 3071.1 | 3444.7 | 4042.9 | 3875.2 | 3836.9 | 3500.2 | 3463.3 | 3268.4 | 2851.5 |
| 37.5° | 3397.9 | 3374.4 | 3259.8 | 3491.6 | 3833.3 | 3777.7 | 3748.1 | 3653.2 | 3739.5 | 3503.9 | 3064.9 |
| 40° | 3987.4 | 3922.0 | 3818.5 | 3591.5 | 3536.0 | 3559.4 | 3589.0 | 3849.3 | 4066.4 | 3825.9 | 3349.8 |
| 42.5° | 4720.0 | 4705.2 | 4512.8 | 4089.8 | 3674.1 | 3706.3 | 3744.5 | 4258.7 | 4536.2 | 4310.6 | 3814.8 |
| 45° | 5599.4 | 5620.4 | 5342.9 | 4843.4 | 4298.2 | 4325.4 | 4380.9 | 4863.1 | 5172.7 | 5064.1 | 4546.2 |
| 47.5° | 6398.6 | 6382.6 | 6288.9 | 5769.6 | 5266.4 | 5206.0 | 5296.1 | 5638.9 | 6053.3 | 6070.6 | 5453.9 |
| 50° | 7202.8 | 7287.9 | 7148.5 | 6945.0 | 6571.3 | 6444.2 | 6411.0 | 6578.7 | 7210.2 | 7127.6 | 6544.2 |
| 52.5° | 8358.4 | 8402.8 | 8141.4 | 8089.6 | 8174.7 | 7762.7 | 7729.4 | 7770.1 | 8335.0 | 8051.4 | 7360.7 |
| 55° | 9084.9 | 9059.0 | 8961.5 | 9366.1 | 9702.8 | 9188.5 | 9146.5 | 8982.5 | 9268.7 | 8703.7 | 8146.3 |
| 57.5° | 9314.3 | 9351.3 | 9578.2 | 10309.6 | 11106.3 | 10669.7 | 10593.3 | 10127.1 | 9942.1 | 9311.8 | 8869.0 |
| 60° | 9211.9 | 9279.7 | 9769.4 | 10857.2 | 11962.3 | 11896.9 | 11831.5 | 11048.4 | 10425.6 | 9819.9 | 9376.0 |
| 62.5° | 8483.0 | 8578.0 | 9361.2 | 10759.8 | 12252.1 | 12660.3 | 12579.0 | 11623.1 | 10747.5 | 10066.6 | 9464.7 |
| 65° | 7109.0 | 7179.3 | 8304.2 | 9875.4 | 11840.2 | 12921.8 | 12892.3 | 11803.2 | 10798.0 | 9840.9 | 8856.7 |
| 67.5° | 5067.8 | 5307.1 | 6349.3 | 8322.7 | 10621.6 | 12475.4 | 12526.0 | 11587.4 | 10323.2 | 8865.4 | 7334.8 |
| 70° | 3185.7 | 3348.6 | 4096.0 | 5958.3 | 8515.0 | 10944.8 | 11111.2 | 10599.5 | 8959.1 | 6910.4 | 4910.0 |
| 72.5° | 1519.5 | 1640.4 | 2173.1 | 3771.6 | 6010.2 | 8611.3 | 8743.2 | 8701.3 | 6927.7 | 4353.7 | 2533.3 |
| 75° | 677.1 | 722.7 | 1037.2 | 1925.2 | 3880.2 | 5788.1 | 6129.8 | 6186.5 | 4329.1 | 2130.0 | 985.5 |
| 77.5° | 345.3 | 346.6 | 485.9 | 932.4 | 1937.6 | 3453.4 | 3521.2 | 3719.8 | 2347.0 | 938.6 | 342.9 |
| 80° | 183.8 | 196.1 | 257.8 | 440.3 | 1005.2 | 1700.8 | 1692.1 | 1859.9 | 1040.9 | 460.0 | 114.7 |
| 82.5° | 82.6 | 91.3 | 145.6 | 230.7 | 490.9 | 645.0 | 695.6 | 761.0 | 446.5 | 293.5 | 50.6 |
| 85° | 24.7 | 29.6 | 71.6 | 116.0 | 177.6 | 186.2 | 208.4 | 268.9 | 252.8 | 208.4 | 25.9 |
| 87.5° | 3.7 | 3.7 | 29.6 | 32.1 | 25.9 | 33.3 | 34.5 | 38.2 | 81.4 | 76.5 | 13.5 |
| 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° | 1502.2 | 1502.2 | 1502.2 | 1502.2 | 1502.2 | 1502.2 | 1502.2 | 1502.2 | 1502.2 | 1502.2 | 1502.2 |
| 2.5° | 1504.7 | 1496.1 | 1465.2 | 1439.3 | 1417.2 | 1403.5 | 1387.6 | 1377.7 | 1372.8 | 1369.0 | 1370.2 |
| 5° | 1510.9 | 1489.9 | 1436.9 | 1394.9 | 1362.9 | 1328.4 | 1304.9 | 1291.3 | 1285.1 | 1275.3 | 1275.3 |
| 7.5° | 1545.4 | 1512.1 | 1438.1 | 1373.9 | 1318.4 | 1271.6 | 1227.2 | 1211.1 | 1200.0 | 1197.6 | 1195.1 |
| 10° | 1594.7 | 1552.8 | 1451.7 | 1362.9 | 1283.9 | 1219.8 | 1156.9 | 1101.4 | 1058.2 | 1032.3 | 1028.6 |
| 12.5° | 1656.4 | 1596.0 | 1472.6 | 1355.5 | 1254.3 | 1140.8 | 974.4 | 862.1 | 786.9 | 763.4 | 767.2 |
| 15° | 1713.1 | 1647.7 | 1493.6 | 1349.3 | 1200.0 | 946.0 | 757.3 | 629.0 | 590.8 | 587.1 | 588.3 |
| 17.5° | 1780.9 | 1703.3 | 1518.2 | 1340.7 | 1050.8 | 722.7 | 562.4 | 527.9 | 535.3 | 547.6 | 546.4 |
| 20° | 1851.2 | 1762.5 | 1547.8 | 1288.8 | 838.7 | 543.9 | 497.0 | 500.7 | 511.8 | 523.0 | 525.4 |
| 22.5° | 1926.5 | 1830.3 | 1582.4 | 1164.3 | 640.1 | 473.6 | 471.1 | 476.1 | 487.2 | 499.5 | 502.0 |
| 25° | 2030.1 | 1915.4 | 1608.3 | 1001.5 | 484.7 | 437.9 | 442.8 | 451.4 | 461.3 | 474.8 | 477.3 |
| 27.5° | 2163.3 | 2030.1 | 1621.8 | 789.3 | 419.4 | 405.8 | 407.0 | 419.4 | 431.7 | 444.0 | 444.0 |
| 30° | 2336.0 | 2167.0 | 1594.7 | 597.0 | 387.3 | 374.9 | 370.0 | 377.4 | 393.5 | 405.8 | 407.0 |
| 32.5° | 2490.2 | 2296.5 | 1523.2 | 456.3 | 363.9 | 346.6 | 334.3 | 335.4 | 341.6 | 349.1 | 350.2 |
| 35° | 2644.3 | 2422.3 | 1401.1 | 383.6 | 339.2 | 319.5 | 300.9 | 291.0 | 286.1 | 282.4 | 286.1 |
| 37.5° | 2841.7 | 2579.0 | 1238.3 | 349.1 | 318.2 | 293.5 | 267.6 | 246.6 | 229.4 | 218.3 | 220.8 |
| 40° | 3095.7 | 2796.0 | 1045.9 | 326.8 | 298.5 | 268.9 | 234.4 | 207.2 | 177.6 | 167.7 | 162.8 |
| 42.5° | 3515.0 | 3125.3 | 843.6 | 308.3 | 278.7 | 243.0 | 199.8 | 162.8 | 135.7 | 125.8 | 128.3 |
| 45° | 4177.4 | 3541.0 | 650.0 | 288.6 | 259.0 | 214.6 | 167.7 | 128.3 | 106.1 | 101.2 | 103.6 |
| 47.5° | 5055.5 | 4078.7 | 500.7 | 266.4 | 234.4 | 183.8 | 131.9 | 101.2 | 87.5 | 86.4 | 85.1 |
| 50° | 5881.9 | 4579.5 | 418.1 | 241.7 | 204.8 | 152.9 | 108.5 | 85.1 | 76.5 | 75.2 | 75.2 |
| 52.5° | 6629.3 | 4938.4 | 340.4 | 213.4 | 172.7 | 125.8 | 91.3 | 75.2 | 67.8 | 64.1 | 64.1 |
| 55° | 7294.0 | 5172.7 | 276.2 | 178.8 | 135.7 | 99.9 | 78.9 | 67.8 | 59.2 | 54.3 | 53.0 |
| 57.5° | 7796.0 | 5201.1 | 207.2 | 143.1 | 101.2 | 77.7 | 67.8 | 59.2 | 49.3 | 43.1 | 40.7 |
| 60° | 8010.6 | 4955.6 | 152.9 | 108.5 | 75.2 | 61.7 | 54.3 | 48.1 | 37.0 | 30.9 | 29.6 |
| 62.5° | 7794.8 | 4478.3 | 113.5 | 82.6 | 57.9 | 45.6 | 38.2 | 35.8 | 25.9 | 18.5 | 17.3 |
| 65° | 7021.5 | 3788.9 | 90.0 | 62.9 | 43.1 | 33.3 | 24.7 | 23.4 | 16.1 | 8.6 | 7.4 |
| 67.5° | 5625.3 | 2967.4 | 71.6 | 46.9 | 30.9 | 22.2 | 16.1 | 14.8 | 8.6 | 2.5 | 2.5 |
| 70° | 3658.1 | 1896.9 | 57.9 | 34.5 | 19.7 | 14.8 | 9.9 | 7.4 | 4.9 | 1.3 | 0.0 |
| 72.5° | 1809.4 | 886.7 | 46.9 | 27.2 | 13.5 | 7.4 | 3.7 | 2.5 | 3.7 | 0.0 | 0.0 |
| 75° | 701.8 | 315.7 | 34.5 | 18.5 | 7.4 | 3.7 | 2.5 | 0.0 | 1.3 | 0.0 | 0.0 |
| 77.5° | 233.1 | 104.8 | 21.0 | 9.9 | 4.9 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 86.4 | 40.7 | 11.1 | 6.2 | 2.5 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 34.5 | 16.1 | 7.4 | 4.9 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 17.3 | 9.9 | 4.9 | 3.7 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 12.4 | 7.4 | 4.9 | 3.7 | 2.5 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)