

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: STREETWORKS

Report Number: P650154

Luminaire Tested: **GLAN-SA9A-835-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P650154
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GLAN-SA9A-835-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 33082.5 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

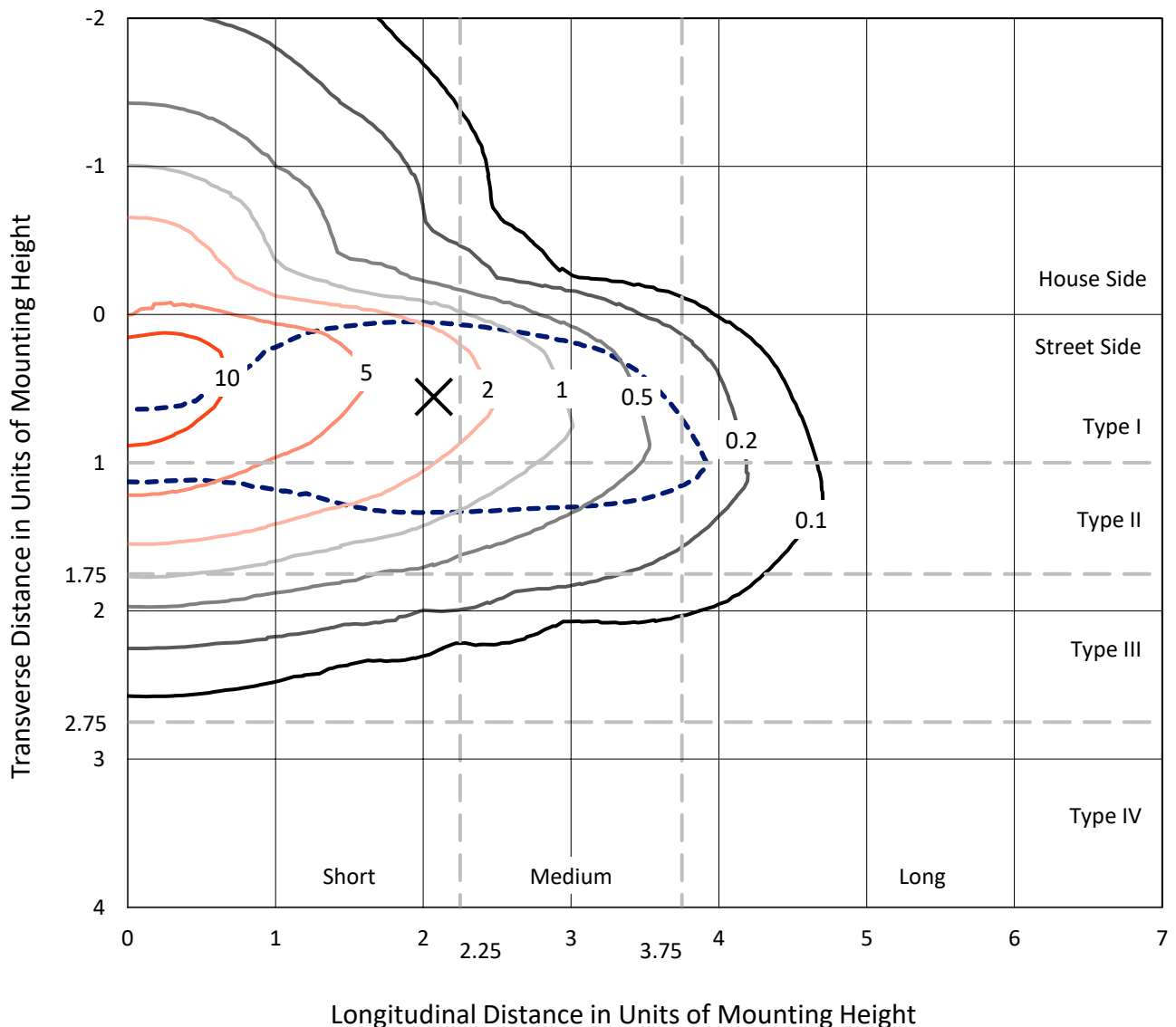
Input Watts (W): 274
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

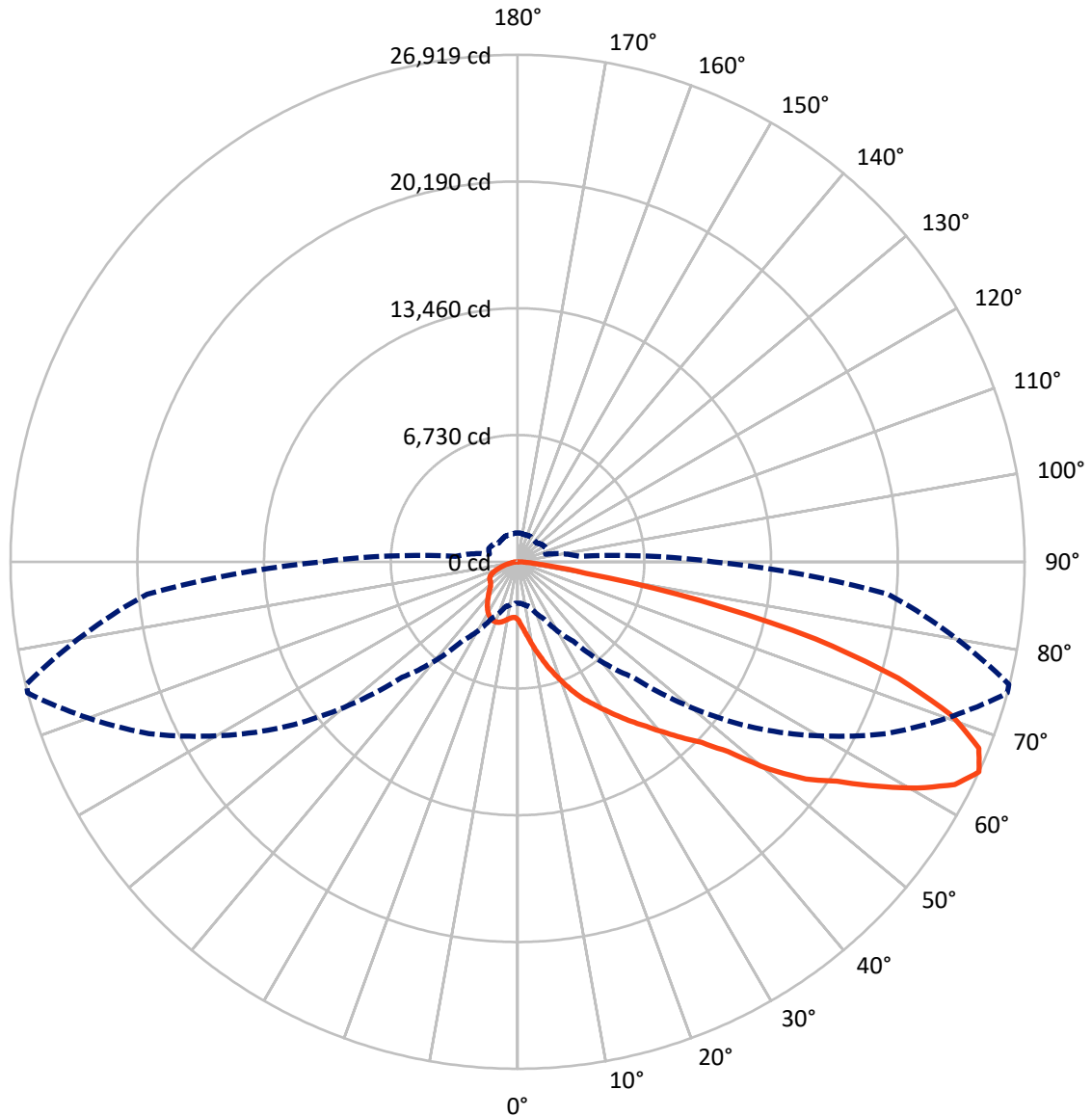
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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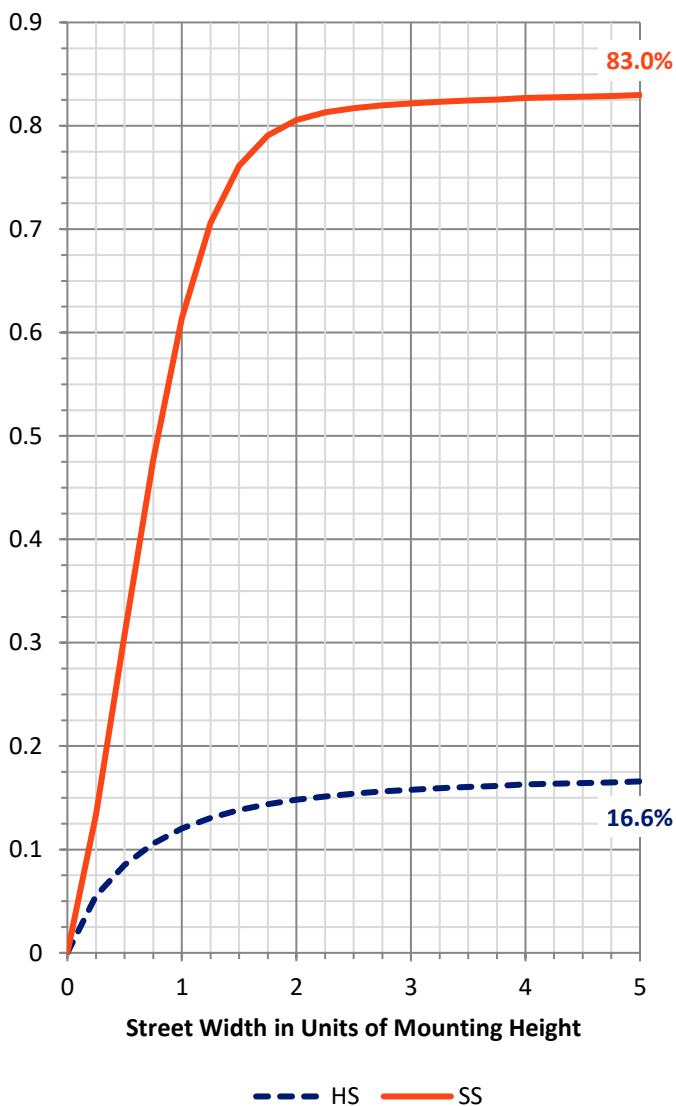
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5561.6 | 0.0 | 5561.6 |
| | % Fixture | 16.8 | 0.0 | 16.8 |
| Street Side | Lumens | 27520.9 | 0.0 | 27520.9 |
| | % Fixture | 83.2 | 0.0 | 83.2 |
| Total | Lumens | 33082.5 | 0.0 | 33082.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 373.5 | 1.1 |
| 10°-20° | 1462.8 | 4.4 |
| 20°-30° | 2825.6 | 8.5 |
| 30°-40° | 4589.6 | 13.9 |
| 40°-50° | 6313.4 | 19.1 |
| 50°-60° | 7454.0 | 22.5 |
| 60°-70° | 6530.9 | 19.7 |
| 70°-80° | 3117.9 | 9.4 |
| 80°-90° | 414.9 | 1.3 |
| 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° | 33082.5 | 100.0 |
| 0°-180° | 33082.5 | 100.0 |

Coefficient of Utilization



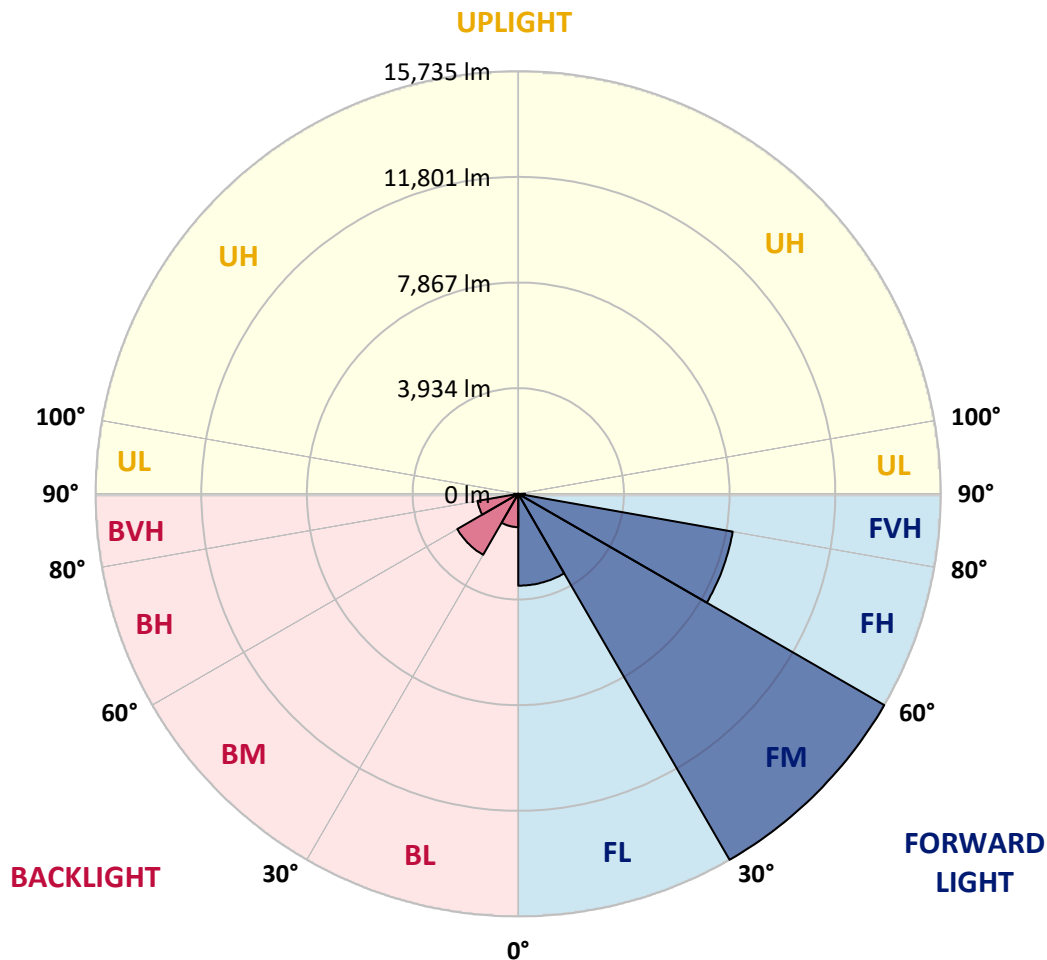
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 CATALOG NUMBER: GLAN-SA9A-835-U-T2R

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 3420.2 | 10.3 | | | |
| FM (30°-60°) | 15734.8 | 47.6 | | | |
| FH (60°-80°) | 8106.7 | 24.5 | | | G4/12000 |
| FVH (80°-90°) | 259.3 | 0.8 | | | G3/500 |
| BL (0°-30°) | 1241.6 | 3.8 | B3/2500 | | |
| BM (30°-60°) | 2622.3 | 7.9 | B3/5000 | | |
| BH (60°-80°) | 1542.1 | 4.7 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 155.6 | 0.5 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3073.8 | 3073.8 | 3073.8 | 3073.8 | 3073.8 | 3073.8 | 3073.8 | 3073.8 | 3073.8 | 3073.8 | 3073.8 |
| 2.5° | 4084.0 | 4057.1 | 4028.4 | 3949.5 | 3865.1 | 3770.0 | 3633.7 | 3502.7 | 3328.6 | 3323.2 | 3194.0 |
| 5° | 5216.3 | 5198.3 | 5070.9 | 4997.3 | 4801.7 | 4541.6 | 4320.9 | 3978.2 | 3660.5 | 3622.9 | 3371.7 |
| 7.5° | 6257.0 | 6187.0 | 6138.6 | 6005.8 | 5812.1 | 5478.3 | 5051.2 | 4588.2 | 4057.1 | 4006.8 | 3590.6 |
| 10° | 7041.2 | 7034.0 | 7008.9 | 6894.0 | 6748.7 | 6416.8 | 5943.0 | 5279.1 | 4559.6 | 4460.8 | 3856.1 |
| 12.5° | 7627.9 | 7633.3 | 7629.7 | 7627.9 | 7523.8 | 7242.1 | 6728.9 | 6029.2 | 5067.3 | 4997.3 | 4163.0 |
| 15° | 8013.8 | 8067.6 | 8089.1 | 8178.8 | 8187.8 | 7999.4 | 7558.0 | 6754.1 | 5639.8 | 5535.7 | 4493.2 |
| 17.5° | 8268.6 | 8295.4 | 8396.0 | 8548.5 | 8672.3 | 8638.2 | 8245.2 | 7425.2 | 6224.7 | 6050.7 | 4835.9 |
| 20° | 8512.5 | 8559.2 | 8636.4 | 8844.5 | 9063.5 | 9163.9 | 8887.6 | 8112.4 | 6804.3 | 6693.1 | 5214.5 |
| 22.5° | 9020.4 | 9086.8 | 9113.7 | 9219.6 | 9406.2 | 9583.8 | 9458.2 | 8770.9 | 7439.5 | 7288.8 | 5616.5 |
| 25° | 9879.9 | 9949.9 | 9874.5 | 9849.4 | 9910.4 | 9998.4 | 9971.4 | 9391.9 | 8038.8 | 7823.5 | 5996.8 |
| 27.5° | 10999.6 | 11008.6 | 10861.5 | 10721.5 | 10570.7 | 10525.9 | 10443.3 | 9942.7 | 8559.2 | 8379.8 | 6379.0 |
| 30° | 12201.8 | 12158.7 | 11914.8 | 11661.7 | 11406.9 | 11155.7 | 10918.9 | 10473.8 | 9138.8 | 8932.5 | 6754.1 |
| 32.5° | 13318.0 | 13294.6 | 13023.6 | 12630.7 | 12200.0 | 11963.1 | 11484.1 | 11010.4 | 9759.7 | 9560.5 | 7139.9 |
| 35° | 14154.1 | 14188.2 | 13890.3 | 13461.5 | 12991.4 | 12781.5 | 12176.7 | 11573.8 | 10402.1 | 10185.0 | 7559.8 |
| 37.5° | 14748.0 | 14730.1 | 14466.3 | 14094.9 | 13682.2 | 13499.2 | 12986.0 | 12189.3 | 11092.9 | 10884.7 | 8019.1 |
| 40° | 14959.8 | 14949.0 | 14753.4 | 14482.5 | 14220.5 | 14155.9 | 13832.9 | 12853.2 | 11884.2 | 11640.2 | 8571.8 |
| 42.5° | 14825.2 | 14848.6 | 14719.4 | 14645.8 | 14597.3 | 14644.0 | 14674.5 | 13723.5 | 12747.3 | 12523.0 | 9171.1 |
| 45° | 14412.5 | 14399.9 | 14382.0 | 14502.3 | 14775.0 | 15081.8 | 15507.1 | 14545.3 | 13685.8 | 13506.4 | 9975.0 |
| 47.5° | 13675.0 | 13764.7 | 13809.6 | 14141.5 | 14737.3 | 15464.0 | 16465.3 | 15647.1 | 15047.7 | 14891.6 | 11200.6 |
| 50° | 12643.3 | 12715.1 | 12980.6 | 13571.0 | 14459.2 | 15607.6 | 17401.9 | 17448.6 | 17319.4 | 17027.0 | 12532.0 |
| 52.5° | 11031.9 | 11143.1 | 11690.4 | 12772.5 | 13888.5 | 15548.3 | 17969.0 | 18993.6 | 19164.1 | 18945.2 | 13843.7 |
| 55° | 9228.5 | 9384.6 | 9962.4 | 11381.8 | 13102.6 | 15225.4 | 18360.2 | 19889.0 | 20569.1 | 20366.3 | 15107.0 |
| 57.5° | 7462.9 | 7627.9 | 8221.9 | 9596.4 | 11731.7 | 14511.2 | 18616.8 | 20886.7 | 22481.9 | 22218.1 | 16678.8 |
| 60° | 5593.1 | 5765.4 | 6275.0 | 7690.7 | 9779.4 | 13115.2 | 18442.7 | 21751.6 | 24392.9 | 24279.9 | 18252.5 |
| 62.5° | 3608.5 | 3798.7 | 4241.9 | 5413.7 | 7516.7 | 11207.7 | 17511.4 | 22228.9 | 26047.4 | 25911.0 | 19400.9 |
| 65° | 2198.1 | 2219.6 | 2463.7 | 3360.9 | 5144.5 | 8677.7 | 15381.5 | 21595.5 | 26919.4 | 26878.1 | 19750.8 |
| 67.5° | 1421.1 | 1455.3 | 1566.5 | 2013.3 | 3084.6 | 6027.4 | 12298.7 | 19505.0 | 26409.8 | 26395.4 | 19027.7 |
| 70° | 1200.4 | 1211.2 | 1261.5 | 1358.3 | 1792.6 | 3655.2 | 8636.4 | 16172.8 | 24473.7 | 24473.7 | 17289.0 |
| 72.5° | 1073.0 | 1087.4 | 1105.4 | 1135.8 | 1279.4 | 2070.7 | 5153.5 | 12589.4 | 21130.7 | 21270.7 | 14715.8 |
| 75° | 974.4 | 970.8 | 981.6 | 986.9 | 1091.0 | 1352.9 | 2664.6 | 9311.0 | 16346.8 | 16066.9 | 10656.9 |
| 77.5° | 834.4 | 839.8 | 834.4 | 857.7 | 963.6 | 1030.0 | 1352.9 | 6248.0 | 9906.8 | 9544.4 | 5349.1 |
| 80° | 685.4 | 694.4 | 703.4 | 717.8 | 823.6 | 782.4 | 812.8 | 2847.7 | 3664.1 | 3587.0 | 1652.6 |
| 82.5° | 515.0 | 527.6 | 541.9 | 576.0 | 647.8 | 516.8 | 513.2 | 1216.6 | 1322.5 | 1211.2 | 608.3 |
| 85° | 208.1 | 245.9 | 371.5 | 405.5 | 407.3 | 283.5 | 315.8 | 507.8 | 540.1 | 527.6 | 238.7 |
| 87.5° | 48.5 | 57.4 | 120.2 | 181.3 | 166.9 | 105.9 | 116.7 | 165.1 | 188.4 | 174.1 | 80.7 |
| 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° | 3073.8 | 3073.8 | 3073.8 | 3073.8 | 3073.8 | 3073.8 | 3073.8 | 3073.8 | 3073.8 | 3073.8 | 3073.8 |
| 2.5° | 3134.8 | 3072.0 | 2964.4 | 2881.8 | 2822.6 | 2770.6 | 2738.2 | 2718.5 | 2711.3 | 2709.5 | 2711.3 |
| 5° | 3240.7 | 3129.4 | 2959.0 | 2851.3 | 2792.1 | 2758.0 | 2738.2 | 2736.4 | 2738.2 | 2740.0 | 2734.6 |
| 7.5° | 3386.0 | 3226.3 | 3003.8 | 2903.3 | 2858.4 | 2833.4 | 2824.4 | 2820.8 | 2822.6 | 2820.8 | 2820.8 |
| 10° | 3579.8 | 3360.9 | 3091.8 | 2987.7 | 2950.0 | 2921.3 | 2906.9 | 2898.0 | 2890.8 | 2883.6 | 2880.0 |
| 12.5° | 3793.3 | 3509.8 | 3186.8 | 3086.4 | 3032.5 | 2987.7 | 2955.4 | 2932.0 | 2915.9 | 2899.8 | 2896.2 |
| 15° | 4032.0 | 3667.7 | 3292.7 | 3152.7 | 3075.5 | 3009.2 | 2953.6 | 2915.9 | 2887.2 | 2863.8 | 2862.0 |
| 17.5° | 4259.9 | 3816.7 | 3364.5 | 3183.2 | 3070.2 | 2976.9 | 2903.3 | 2851.3 | 2815.4 | 2784.9 | 2781.3 |
| 20° | 4503.9 | 3958.5 | 3396.8 | 3163.5 | 3016.4 | 2903.3 | 2806.4 | 2743.6 | 2702.4 | 2668.2 | 2662.9 |
| 22.5° | 4749.8 | 4078.6 | 3393.2 | 3100.7 | 2923.1 | 2790.3 | 2688.0 | 2621.6 | 2573.2 | 2539.0 | 2526.5 |
| 25° | 4984.8 | 4175.5 | 3348.3 | 3000.2 | 2793.8 | 2655.7 | 2551.6 | 2490.6 | 2447.6 | 2406.2 | 2406.2 |
| 27.5° | 5196.5 | 4233.0 | 3264.0 | 2878.2 | 2661.1 | 2515.7 | 2433.2 | 2377.6 | 2338.1 | 2311.2 | 2295.1 |
| 30° | 5404.7 | 4259.9 | 3149.1 | 2723.9 | 2521.1 | 2397.3 | 2330.9 | 2298.6 | 2262.7 | 2232.3 | 2228.7 |
| 32.5° | 5591.3 | 4254.5 | 3005.6 | 2573.2 | 2388.3 | 2300.4 | 2273.5 | 2248.4 | 2210.7 | 2167.7 | 2156.9 |
| 35° | 5772.5 | 4218.6 | 2835.2 | 2408.0 | 2277.0 | 2243.0 | 2250.2 | 2214.2 | 2146.1 | 2092.3 | 2083.2 |
| 37.5° | 5969.9 | 4154.0 | 2648.5 | 2273.5 | 2183.8 | 2216.0 | 2234.0 | 2155.1 | 2043.8 | 1959.5 | 1939.7 |
| 40° | 6197.8 | 4080.4 | 2454.7 | 2138.9 | 2110.2 | 2190.9 | 2190.9 | 2045.6 | 1893.1 | 1841.1 | 1826.7 |
| 42.5° | 6465.2 | 4019.5 | 2293.3 | 2025.9 | 2049.2 | 2129.9 | 2121.0 | 1900.3 | 1837.5 | 1810.5 | 1803.3 |
| 45° | 6888.7 | 3997.9 | 2126.3 | 1927.2 | 1998.9 | 2058.2 | 1984.6 | 1850.0 | 1814.1 | 1792.6 | 1785.4 |
| 47.5° | 7558.0 | 4023.1 | 1979.2 | 1853.6 | 1941.5 | 1986.4 | 1832.1 | 1815.9 | 1790.8 | 1760.3 | 1756.7 |
| 50° | 8178.8 | 3999.7 | 1875.1 | 1812.3 | 1891.3 | 1900.3 | 1769.3 | 1774.7 | 1760.3 | 1726.2 | 1719.0 |
| 52.5° | 8686.6 | 3926.1 | 1808.7 | 1790.8 | 1848.2 | 1749.5 | 1710.1 | 1729.8 | 1724.4 | 1681.3 | 1674.1 |
| 55° | 9244.6 | 3881.3 | 1776.5 | 1790.8 | 1819.5 | 1618.5 | 1654.4 | 1683.1 | 1675.9 | 1645.5 | 1643.7 |
| 57.5° | 9921.2 | 3890.3 | 1753.1 | 1796.2 | 1790.8 | 1552.1 | 1598.8 | 1632.9 | 1631.1 | 1622.1 | 1622.1 |
| 60° | 10613.8 | 3893.9 | 1717.2 | 1794.4 | 1756.7 | 1500.1 | 1541.4 | 1589.8 | 1593.4 | 1598.8 | 1598.8 |
| 62.5° | 10843.5 | 3737.7 | 1647.3 | 1762.1 | 1681.3 | 1449.9 | 1487.5 | 1553.9 | 1550.3 | 1564.7 | 1566.5 |
| 65° | 10414.6 | 3305.3 | 1543.1 | 1688.5 | 1584.5 | 1413.9 | 1446.3 | 1507.3 | 1487.5 | 1525.2 | 1532.4 |
| 67.5° | 9479.8 | 2734.6 | 1381.7 | 1555.7 | 1476.8 | 1376.3 | 1419.3 | 1442.7 | 1406.8 | 1480.3 | 1482.1 |
| 70° | 8193.2 | 2135.3 | 1177.1 | 1367.4 | 1354.7 | 1336.8 | 1397.8 | 1362.0 | 1311.7 | 1401.4 | 1383.5 |
| 72.5° | 6850.9 | 1631.1 | 940.2 | 1117.9 | 1191.5 | 1277.6 | 1360.1 | 1257.9 | 1187.9 | 1214.8 | 1182.5 |
| 75° | 5146.3 | 1205.8 | 755.4 | 875.6 | 992.3 | 1193.3 | 1326.1 | 1132.3 | 1024.6 | 999.5 | 992.3 |
| 77.5° | 2623.4 | 787.7 | 565.2 | 655.0 | 744.6 | 1078.4 | 1279.4 | 985.1 | 848.8 | 809.2 | 791.3 |
| 80° | 936.7 | 489.8 | 398.4 | 452.2 | 502.5 | 927.7 | 1117.9 | 814.6 | 658.5 | 651.4 | 658.5 |
| 82.5° | 434.3 | 315.8 | 267.4 | 296.1 | 297.9 | 619.0 | 852.3 | 608.3 | 500.7 | 760.8 | 642.4 |
| 85° | 186.6 | 157.9 | 150.7 | 147.1 | 136.4 | 276.3 | 479.1 | 326.6 | 509.6 | 227.9 | 209.9 |
| 87.5° | 55.6 | 62.8 | 55.6 | 41.3 | 30.5 | 30.5 | 48.5 | 17.9 | 12.5 | 9.0 | 9.0 |
| 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)