

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: P572860

Luminaire Tested: **ARCH-S-PA2-120-827-U-T2R-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P572860
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-332-14)
Test Lab: INNOVATION CENTER
Issue Date: 10/13/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA2-120-827-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8841 lumens
Efficiency: N/A
Efficacy: 72.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

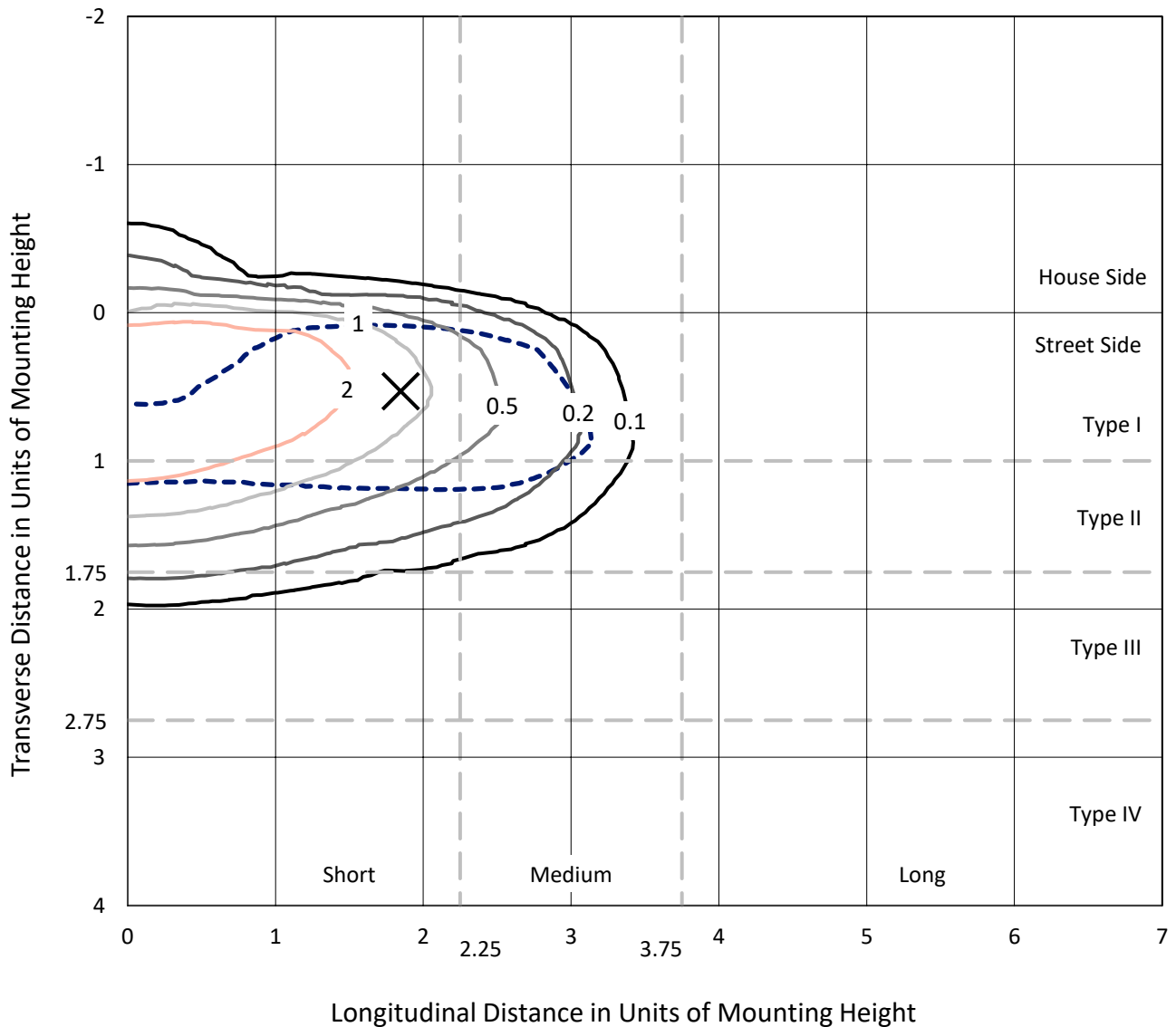
Input Watts (W): 122.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

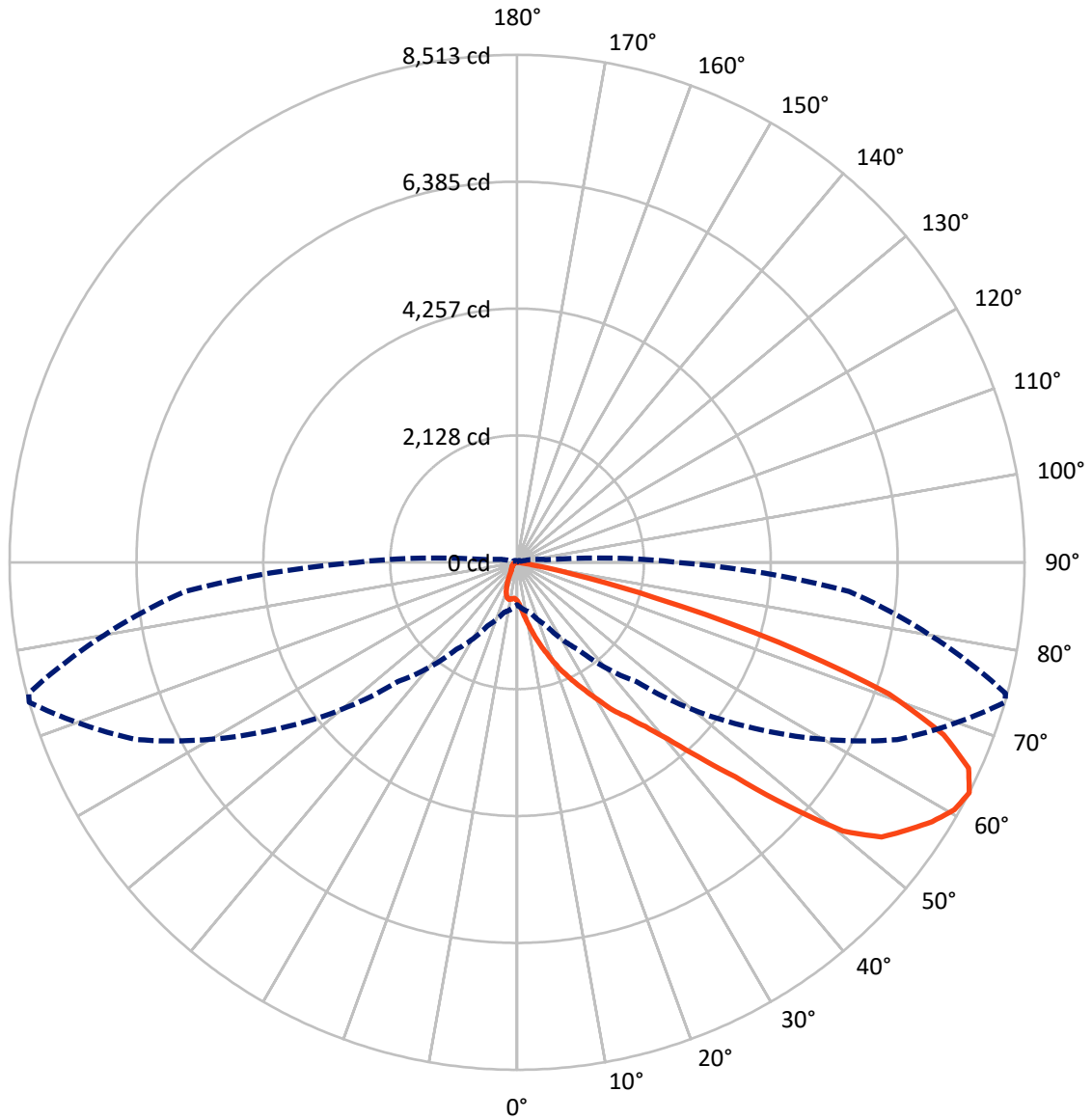
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.2 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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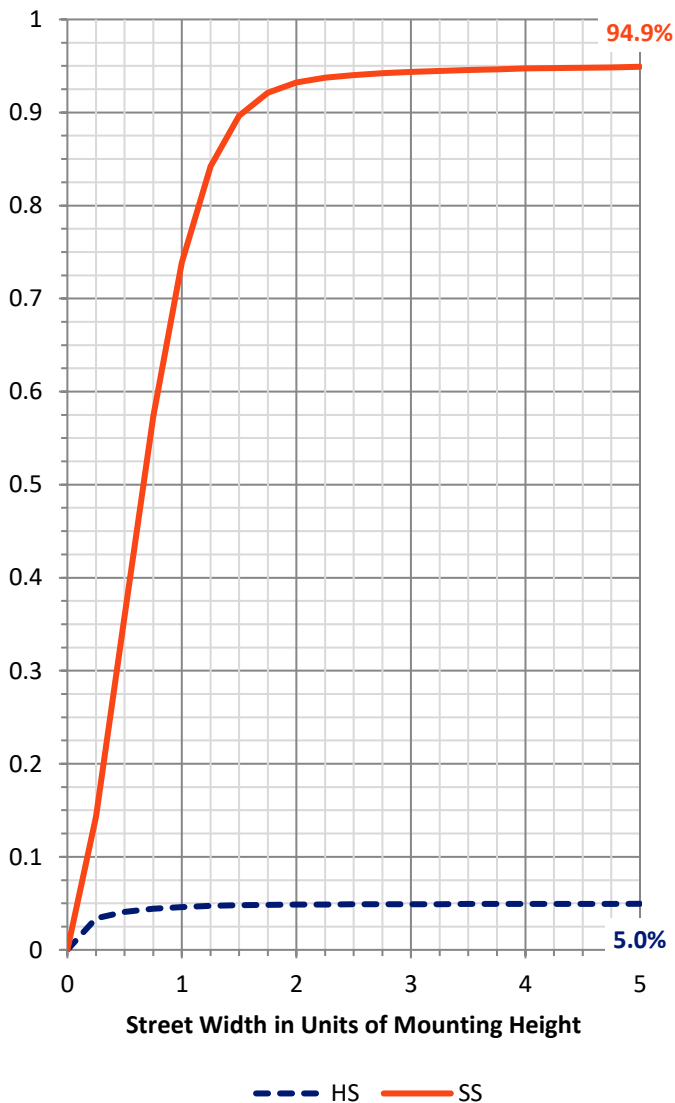
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 440.9 | 0.0 | 440.9 |
| | % Fixture | 5.0 | 0.0 | 5.0 |
| Street Side | Lumens | 8400.1 | 0.0 | 8400.1 |
| | % Fixture | 95.0 | 0.0 | 95.0 |
| Total | Lumens | 8841.0 | 0.0 | 8841.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 80.9 | 0.9 |
| 10°-20° | 340.0 | 3.8 |
| 20°-30° | 729.6 | 8.3 |
| 30°-40° | 1279.6 | 14.5 |
| 40°-50° | 1983.7 | 22.4 |
| 50°-60° | 2286.9 | 25.9 |
| 60°-70° | 1606.6 | 18.2 |
| 70°-80° | 500.5 | 5.7 |
| 80°-90° | 33.1 | 0.4 |
| 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° | 8841.0 | 100.0 |
| 0°-180° | 8841.0 | 100.0 |

Coefficient of Utilization

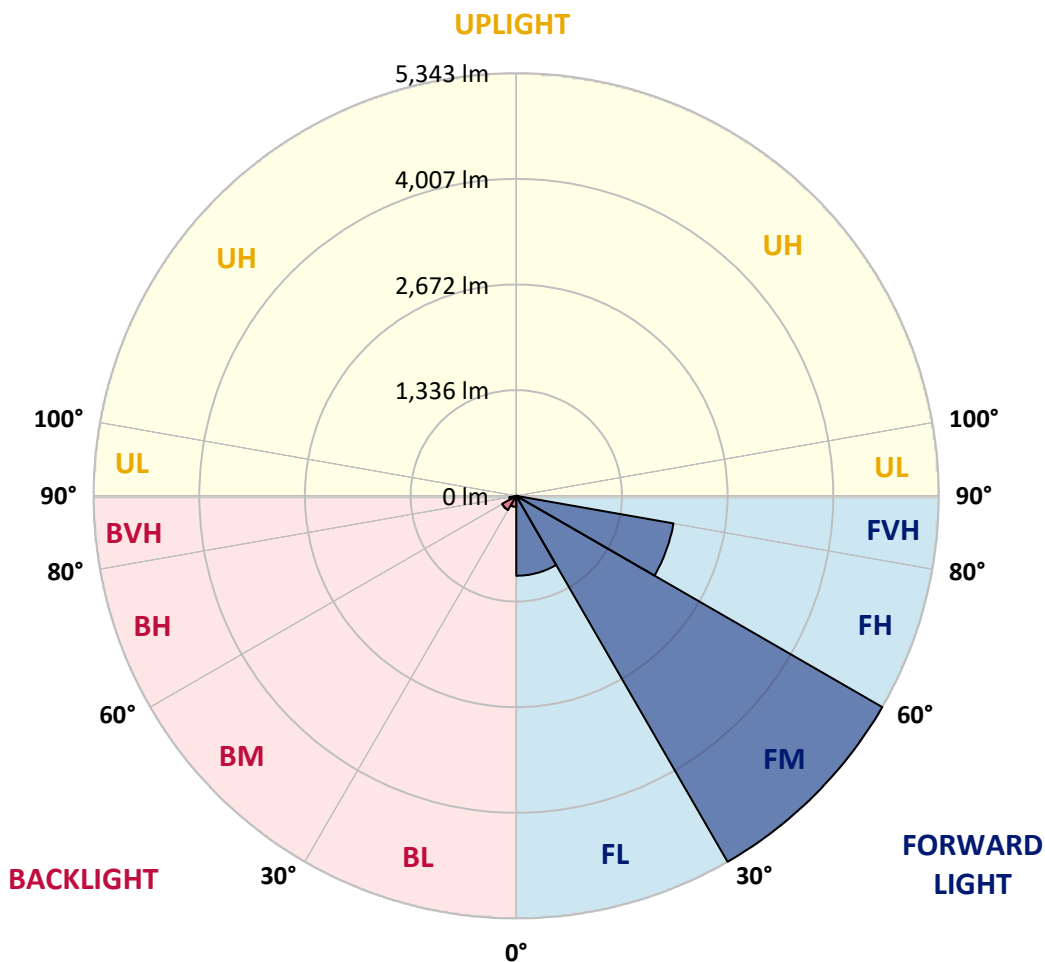


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1010.6 | 11.4 | | | |
| FM (30°-60°) | 5343.0 | 60.4 | | | |
| FH (60°-80°) | 2017.9 | 22.8 | | | G2/5000 |
| FVH (80°-90°) | 28.5 | 0.3 | | | G1/100 |
| BL (0°-30°) | 139.9 | 1.6 | B1/500 | | |
| BM (30°-60°) | 207.2 | 2.3 | B0/220 | | |
| BH (60°-80°) | 89.2 | 1.0 | B0/110 | | G0/110 |
| BVH (80°-90°) | 4.5 | 0.1 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2
 Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 74° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 647.2 | 647.2 | 647.2 | 647.2 | 647.2 | 647.2 | 647.2 | 647.2 | 647.2 | 647.2 | 647.2 |
| 2.5° | 899.2 | 883.7 | 865.0 | 849.4 | 818.3 | 796.5 | 768.5 | 737.4 | 703.2 | 700.1 | 672.1 |
| 5° | 1260.2 | 1213.5 | 1213.5 | 1173.0 | 1126.4 | 1042.3 | 964.6 | 868.1 | 796.5 | 790.3 | 715.6 |
| 7.5° | 1630.4 | 1593.1 | 1571.3 | 1509.1 | 1434.4 | 1341.0 | 1216.6 | 1054.8 | 924.1 | 902.3 | 781.0 |
| 10° | 1975.8 | 1947.8 | 1907.3 | 1857.6 | 1792.2 | 1639.8 | 1484.2 | 1272.6 | 1064.1 | 1048.6 | 858.8 |
| 12.5° | 2243.4 | 2209.2 | 2190.5 | 2168.7 | 2084.7 | 1963.3 | 1761.1 | 1493.5 | 1244.6 | 1210.4 | 936.6 |
| 15° | 2445.6 | 2430.1 | 2411.4 | 2411.4 | 2367.8 | 2249.6 | 2041.1 | 1730.0 | 1418.8 | 1378.4 | 1036.1 |
| 17.5° | 2607.4 | 2588.8 | 2585.6 | 2604.3 | 2591.9 | 2507.9 | 2311.8 | 1957.1 | 1599.3 | 1568.2 | 1138.8 |
| 20° | 2787.9 | 2763.0 | 2763.0 | 2778.6 | 2775.4 | 2728.8 | 2557.6 | 2218.5 | 1810.9 | 1754.9 | 1257.0 |
| 22.5° | 3043.0 | 3027.5 | 3015.0 | 2990.1 | 2971.5 | 2927.9 | 2778.6 | 2473.6 | 2013.1 | 1960.2 | 1378.4 |
| 25° | 3385.3 | 3366.6 | 3310.6 | 3267.1 | 3186.2 | 3120.8 | 2993.2 | 2700.8 | 2218.5 | 2159.4 | 1496.6 |
| 27.5° | 3718.2 | 3680.9 | 3628.0 | 3572.0 | 3481.7 | 3369.7 | 3211.0 | 2915.5 | 2433.2 | 2370.9 | 1618.0 |
| 30° | 4069.8 | 4041.8 | 3976.5 | 3886.2 | 3774.2 | 3649.8 | 3460.0 | 3173.7 | 2679.0 | 2610.5 | 1748.7 |
| 32.5° | 4349.9 | 4306.3 | 4247.2 | 4160.1 | 4044.9 | 3957.8 | 3752.4 | 3456.9 | 2962.1 | 2871.9 | 1885.6 |
| 35° | 4573.9 | 4539.7 | 4461.9 | 4377.9 | 4290.7 | 4265.8 | 4041.8 | 3687.1 | 3189.3 | 3105.3 | 2031.8 |
| 37.5° | 4717.0 | 4682.8 | 4617.4 | 4533.4 | 4499.2 | 4542.8 | 4396.5 | 4001.4 | 3494.2 | 3388.4 | 2199.8 |
| 40° | 4829.0 | 4788.6 | 4735.7 | 4698.3 | 4685.9 | 4807.2 | 4791.7 | 4409.0 | 3895.6 | 3833.3 | 2430.1 |
| 42.5° | 4909.9 | 4869.5 | 4835.2 | 4832.1 | 4913.0 | 5149.5 | 5323.7 | 4978.4 | 4455.6 | 4328.1 | 2725.7 |
| 45° | 4807.2 | 4773.0 | 4791.7 | 4900.6 | 5096.6 | 5470.0 | 5967.8 | 5784.2 | 5130.8 | 5040.6 | 3198.6 |
| 47.5° | 4521.0 | 4499.2 | 4583.2 | 4782.3 | 5146.4 | 5666.0 | 6590.1 | 6667.9 | 6095.4 | 5958.5 | 3811.6 |
| 50° | 4072.9 | 4069.8 | 4203.6 | 4474.3 | 4990.8 | 5740.7 | 6904.4 | 7517.3 | 7084.8 | 6944.8 | 4309.4 |
| 52.5° | 3466.2 | 3453.7 | 3649.8 | 4026.3 | 4623.7 | 5600.7 | 6963.5 | 7856.5 | 7657.4 | 7492.4 | 4623.7 |
| 55° | 2778.6 | 2750.6 | 2983.9 | 3397.7 | 4082.3 | 5193.1 | 6804.8 | 7931.2 | 7931.2 | 7781.8 | 4857.0 |
| 57.5° | 1954.0 | 1997.6 | 2190.5 | 2688.3 | 3413.3 | 4583.2 | 6412.8 | 7862.7 | 8208.1 | 8080.5 | 5171.3 |
| 60° | 1232.1 | 1250.8 | 1462.4 | 1863.8 | 2588.8 | 3768.0 | 5712.7 | 7567.1 | 8429.0 | 8354.3 | 5423.3 |
| 62.5° | 709.4 | 768.5 | 874.3 | 1179.3 | 1786.0 | 2831.4 | 4847.7 | 7035.1 | 8513.0 | 8481.9 | 5588.2 |
| 65° | 432.5 | 438.7 | 488.5 | 665.9 | 1098.4 | 1932.2 | 3880.0 | 6294.5 | 8323.2 | 8351.2 | 5557.1 |
| 67.5° | 323.6 | 323.6 | 339.2 | 420.1 | 625.4 | 1229.0 | 2862.6 | 5395.3 | 7716.5 | 7806.7 | 5264.6 |
| 70° | 280.0 | 280.0 | 283.1 | 308.0 | 385.8 | 728.1 | 1891.8 | 4349.9 | 6615.0 | 6605.7 | 4349.9 |
| 72.5° | 220.9 | 230.2 | 248.9 | 261.4 | 292.5 | 426.3 | 1107.7 | 3039.9 | 4595.7 | 4704.6 | 2800.3 |
| 75° | 177.4 | 180.5 | 205.4 | 227.1 | 245.8 | 289.4 | 522.7 | 1689.5 | 2411.4 | 2411.4 | 1232.1 |
| 77.5° | 136.9 | 143.1 | 158.7 | 180.5 | 205.4 | 205.4 | 217.8 | 653.4 | 933.4 | 902.3 | 364.0 |
| 80° | 87.1 | 90.2 | 115.1 | 143.1 | 171.1 | 146.2 | 118.2 | 217.8 | 255.1 | 245.8 | 99.6 |
| 82.5° | 52.9 | 56.0 | 74.7 | 115.1 | 115.1 | 80.9 | 74.7 | 90.2 | 80.9 | 74.7 | 40.4 |
| 85° | 15.6 | 18.7 | 52.9 | 74.7 | 65.3 | 31.1 | 37.3 | 40.4 | 37.3 | 34.2 | 21.8 |
| 87.5° | 3.1 | 3.1 | 15.6 | 18.7 | 15.6 | 15.6 | 12.4 | 15.6 | 15.6 | 15.6 | 9.3 |
| 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° | 647.2 | 647.2 | 647.2 | 647.2 | 647.2 | 647.2 | 647.2 | 647.2 | 647.2 | 647.2 | 647.2 |
| 2.5° | 656.5 | 644.1 | 619.2 | 600.5 | 585.0 | 569.4 | 557.0 | 553.8 | 547.6 | 547.6 | 544.5 |
| 5° | 684.5 | 656.5 | 609.9 | 578.7 | 553.8 | 532.1 | 513.4 | 494.7 | 488.5 | 482.3 | 485.4 |
| 7.5° | 728.1 | 684.5 | 619.2 | 572.5 | 529.0 | 479.2 | 438.7 | 404.5 | 379.6 | 373.4 | 364.0 |
| 10° | 784.1 | 718.8 | 634.7 | 560.1 | 479.2 | 392.0 | 336.0 | 301.8 | 289.4 | 273.8 | 276.9 |
| 12.5° | 840.1 | 759.2 | 647.2 | 525.8 | 395.2 | 308.0 | 261.4 | 239.6 | 230.2 | 227.1 | 230.2 |
| 15° | 905.4 | 802.8 | 641.0 | 463.6 | 317.4 | 248.9 | 220.9 | 211.6 | 205.4 | 205.4 | 202.2 |
| 17.5° | 970.8 | 840.1 | 619.2 | 382.7 | 255.1 | 211.6 | 199.1 | 189.8 | 183.6 | 180.5 | 180.5 |
| 20° | 1042.3 | 874.3 | 569.4 | 304.9 | 211.6 | 192.9 | 180.5 | 168.0 | 161.8 | 161.8 | 161.8 |
| 22.5° | 1117.0 | 899.2 | 504.1 | 242.7 | 189.8 | 171.1 | 158.7 | 149.4 | 143.1 | 143.1 | 143.1 |
| 25° | 1182.4 | 911.7 | 426.3 | 202.2 | 174.2 | 155.6 | 143.1 | 133.8 | 130.7 | 127.6 | 127.6 |
| 27.5° | 1244.6 | 908.6 | 345.4 | 177.4 | 155.6 | 140.0 | 127.6 | 121.3 | 115.1 | 115.1 | 115.1 |
| 30° | 1306.8 | 889.9 | 273.8 | 161.8 | 143.1 | 124.5 | 115.1 | 108.9 | 105.8 | 102.7 | 102.7 |
| 32.5° | 1359.7 | 858.8 | 214.7 | 149.4 | 130.7 | 112.0 | 102.7 | 96.5 | 96.5 | 93.3 | 93.3 |
| 35° | 1412.6 | 812.1 | 180.5 | 140.0 | 118.2 | 102.7 | 93.3 | 90.2 | 87.1 | 87.1 | 87.1 |
| 37.5° | 1468.6 | 753.0 | 158.7 | 127.6 | 105.8 | 93.3 | 87.1 | 84.0 | 80.9 | 77.8 | 77.8 |
| 40° | 1537.1 | 693.9 | 149.4 | 118.2 | 96.5 | 84.0 | 77.8 | 74.7 | 71.6 | 71.6 | 71.6 |
| 42.5° | 1646.0 | 644.1 | 140.0 | 105.8 | 87.1 | 77.8 | 71.6 | 65.3 | 65.3 | 62.2 | 62.2 |
| 45° | 1851.3 | 625.4 | 130.7 | 96.5 | 80.9 | 68.5 | 65.3 | 59.1 | 56.0 | 56.0 | 56.0 |
| 47.5° | 2118.9 | 628.5 | 121.3 | 87.1 | 74.7 | 62.2 | 59.1 | 56.0 | 49.8 | 49.8 | 49.8 |
| 50° | 2339.8 | 613.0 | 112.0 | 80.9 | 65.3 | 59.1 | 52.9 | 49.8 | 46.7 | 46.7 | 46.7 |
| 52.5° | 2427.0 | 585.0 | 102.7 | 74.7 | 62.2 | 52.9 | 49.8 | 46.7 | 43.6 | 43.6 | 43.6 |
| 55° | 2514.1 | 572.5 | 93.3 | 65.3 | 56.0 | 52.9 | 46.7 | 43.6 | 40.4 | 37.3 | 37.3 |
| 57.5° | 2672.8 | 578.7 | 84.0 | 62.2 | 52.9 | 49.8 | 43.6 | 37.3 | 31.1 | 28.0 | 28.0 |
| 60° | 2756.8 | 557.0 | 77.8 | 56.0 | 49.8 | 46.7 | 37.3 | 28.0 | 21.8 | 18.7 | 18.7 |
| 62.5° | 2685.2 | 494.7 | 71.6 | 52.9 | 46.7 | 40.4 | 28.0 | 21.8 | 15.6 | 9.3 | 9.3 |
| 65° | 2486.1 | 407.6 | 65.3 | 49.8 | 40.4 | 31.1 | 24.9 | 15.6 | 9.3 | 6.2 | 6.2 |
| 67.5° | 2234.0 | 320.5 | 59.1 | 46.7 | 37.3 | 28.0 | 21.8 | 12.4 | 6.2 | 3.1 | 3.1 |
| 70° | 1804.7 | 230.2 | 56.0 | 43.6 | 34.2 | 24.9 | 18.7 | 12.4 | 6.2 | 3.1 | 3.1 |
| 72.5° | 1163.7 | 149.4 | 49.8 | 40.4 | 31.1 | 24.9 | 15.6 | 9.3 | 6.2 | 3.1 | 3.1 |
| 75° | 538.3 | 99.6 | 46.7 | 37.3 | 31.1 | 21.8 | 15.6 | 12.4 | 6.2 | 3.1 | 3.1 |
| 77.5° | 158.7 | 71.6 | 43.6 | 34.2 | 28.0 | 21.8 | 15.6 | 12.4 | 6.2 | 3.1 | 3.1 |
| 80° | 65.3 | 49.8 | 34.2 | 31.1 | 28.0 | 21.8 | 15.6 | 12.4 | 6.2 | 3.1 | 3.1 |
| 82.5° | 31.1 | 21.8 | 15.6 | 12.4 | 15.6 | 15.6 | 12.4 | 12.4 | 6.2 | 3.1 | 3.1 |
| 85° | 15.6 | 9.3 | 6.2 | 6.2 | 6.2 | 3.1 | 3.1 | 6.2 | 6.2 | 3.1 | 3.1 |
| 87.5° | 9.3 | 6.2 | 6.2 | 6.2 | 3.1 | 3.1 | 3.1 | 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)