

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: P573499

Luminaire Tested: **ARCH-S-PA2-80-760-U-T2R-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P573499
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-PA2-80-760-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5700K, 820mA 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: 9103 lumens
Efficiency: N/A
Efficacy: 109.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

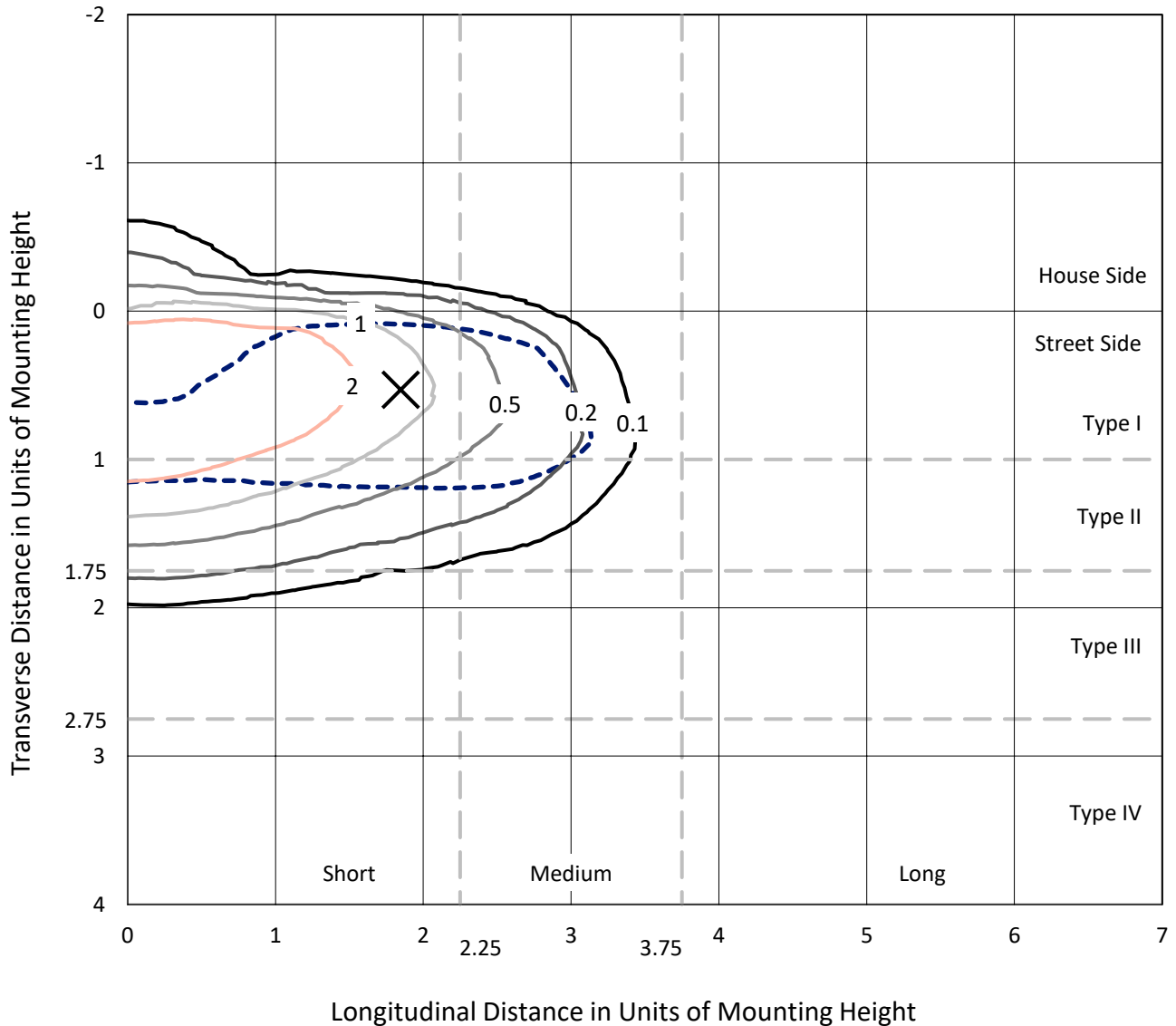
Input Watts (W): 83
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

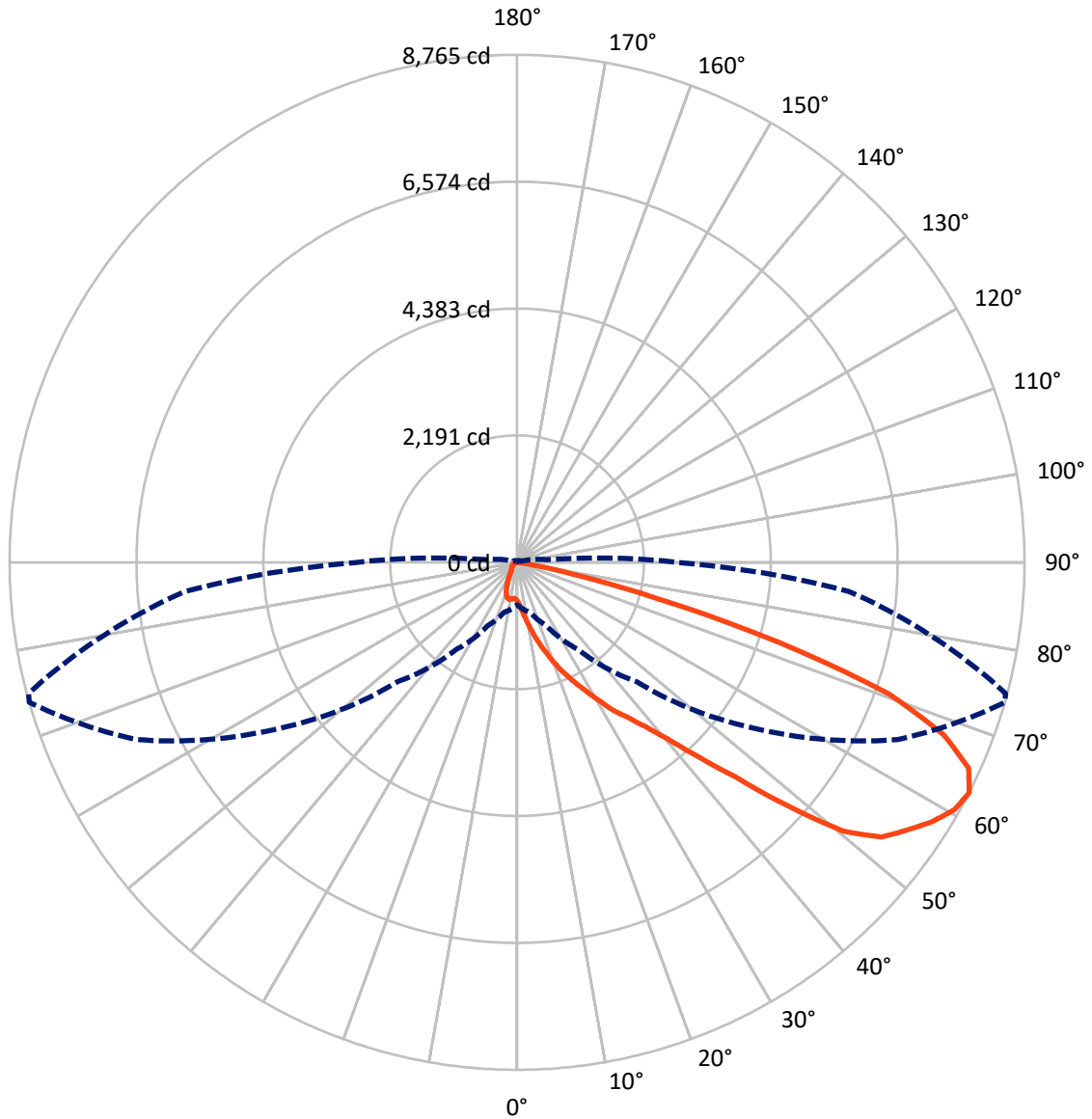
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 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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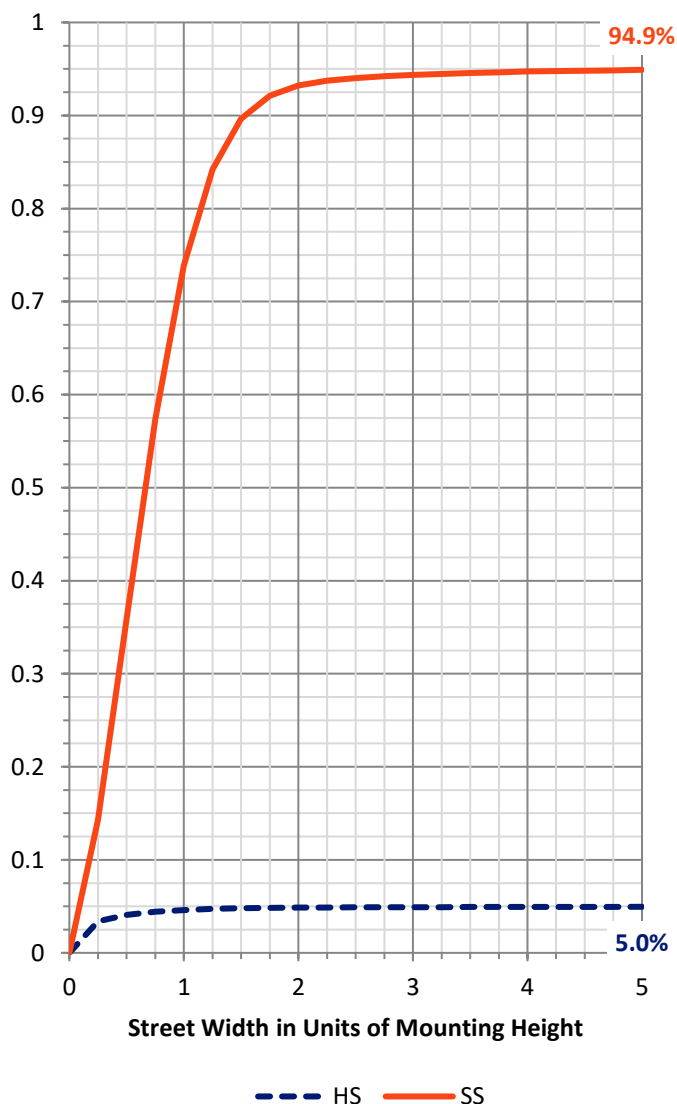
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 454.0 | 0.0 | 454.0 |
| | % Fixture | 5.0 | 0.0 | 5.0 |
| Street Side | Lumens | 8649.0 | 0.0 | 8649.0 |
| | % Fixture | 95.0 | 0.0 | 95.0 |
| Total | Lumens | 9103.0 | 0.0 | 9103.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 83.3 | 0.9 |
| 10°-20° | 350.1 | 3.8 |
| 20°-30° | 751.2 | 8.3 |
| 30°-40° | 1317.5 | 14.5 |
| 40°-50° | 2042.5 | 22.4 |
| 50°-60° | 2354.7 | 25.9 |
| 60°-70° | 1654.2 | 18.2 |
| 70°-80° | 515.4 | 5.7 |
| 80°-90° | 34.1 | 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° | 9103.0 | 100.0 |
| 0°-180° | 9103.0 | 100.0 |

Coefficient of Utilization

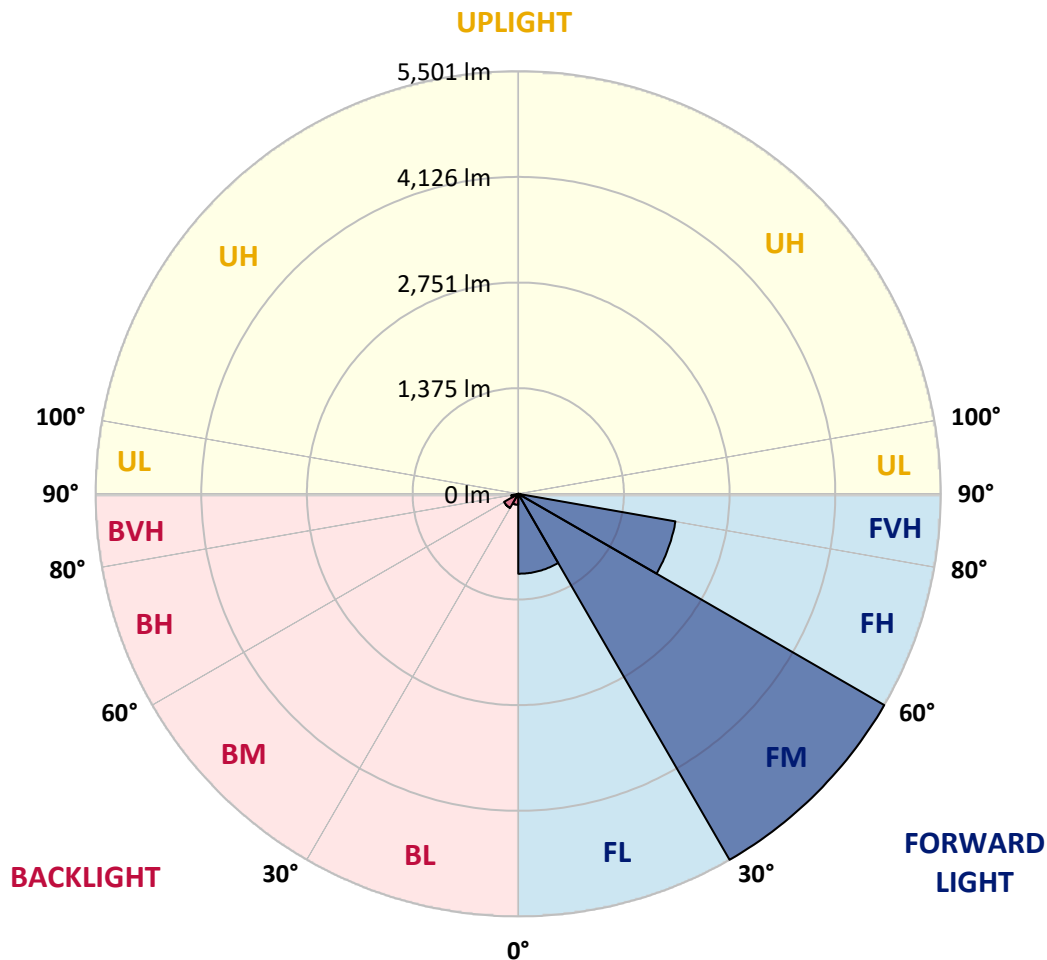


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1040.5 | 11.4 | | | |
| FM (30°-60°) | 5501.4 | 60.4 | | | |
| FH (60°-80°) | 2077.7 | 22.8 | | | G2/5000 |
| FVH (80°-90°) | 29.4 | 0.3 | | | G1/100 |
| BL (0°-30°) | 144.1 | 1.6 | B1/500 | | |
| BM (30°-60°) | 213.4 | 2.3 | B0/220 | | |
| BH (60°-80°) | 91.9 | 1.0 | B0/110 | | G0/110 |
| BVH (80°-90°) | 4.7 | 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° | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 |
| 2.5° | 925.9 | 909.8 | 890.6 | 874.6 | 842.6 | 820.1 | 791.3 | 759.3 | 724.0 | 720.8 | 692.0 |
| 5° | 1297.5 | 1249.4 | 1249.4 | 1207.8 | 1159.7 | 1073.2 | 993.1 | 893.8 | 820.1 | 813.7 | 736.8 |
| 7.5° | 1678.7 | 1640.3 | 1617.9 | 1553.8 | 1476.9 | 1380.8 | 1252.6 | 1086.1 | 951.5 | 929.1 | 804.1 |
| 10° | 2034.3 | 2005.5 | 1963.9 | 1912.6 | 1845.3 | 1688.3 | 1528.2 | 1310.3 | 1095.7 | 1079.6 | 884.2 |
| 12.5° | 2309.9 | 2274.6 | 2255.4 | 2233.0 | 2146.5 | 2021.5 | 1813.3 | 1537.8 | 1281.5 | 1246.2 | 964.3 |
| 15° | 2518.1 | 2502.1 | 2482.9 | 2482.9 | 2438.0 | 2316.3 | 2101.6 | 1781.3 | 1460.9 | 1419.2 | 1066.8 |
| 17.5° | 2684.7 | 2665.5 | 2662.3 | 2681.5 | 2668.7 | 2582.2 | 2380.3 | 2015.1 | 1646.7 | 1614.7 | 1172.6 |
| 20° | 2870.5 | 2844.9 | 2844.9 | 2860.9 | 2857.7 | 2809.6 | 2633.4 | 2284.2 | 1864.5 | 1806.9 | 1294.3 |
| 22.5° | 3133.2 | 3117.2 | 3104.4 | 3078.7 | 3059.5 | 3014.7 | 2860.9 | 2546.9 | 2072.8 | 2018.3 | 1419.2 |
| 25° | 3485.6 | 3466.4 | 3408.7 | 3363.9 | 3280.6 | 3213.3 | 3081.9 | 2780.8 | 2284.2 | 2223.4 | 1541.0 |
| 27.5° | 3828.4 | 3790.0 | 3735.5 | 3677.8 | 3584.9 | 3469.6 | 3306.2 | 3001.9 | 2505.3 | 2441.2 | 1665.9 |
| 30° | 4190.4 | 4161.6 | 4094.3 | 4001.4 | 3886.1 | 3757.9 | 3562.5 | 3267.8 | 2758.4 | 2687.9 | 1800.5 |
| 32.5° | 4478.8 | 4433.9 | 4373.0 | 4283.3 | 4164.8 | 4075.1 | 3863.6 | 3559.3 | 3049.9 | 2957.0 | 1941.4 |
| 35° | 4709.4 | 4674.2 | 4594.1 | 4507.6 | 4417.9 | 4392.3 | 4161.6 | 3796.4 | 3283.8 | 3197.3 | 2092.0 |
| 37.5° | 4856.8 | 4821.6 | 4754.3 | 4667.8 | 4632.5 | 4677.4 | 4526.8 | 4119.9 | 3597.7 | 3488.8 | 2265.0 |
| 40° | 4972.1 | 4930.5 | 4876.0 | 4837.6 | 4824.8 | 4949.7 | 4933.7 | 4539.6 | 4011.0 | 3946.9 | 2502.1 |
| 42.5° | 5055.4 | 5013.8 | 4978.5 | 4975.3 | 5058.6 | 5302.1 | 5481.5 | 5125.9 | 4587.7 | 4456.3 | 2806.4 |
| 45° | 4949.7 | 4914.5 | 4933.7 | 5045.8 | 5247.6 | 5632.1 | 6144.7 | 5955.7 | 5282.9 | 5190.0 | 3293.4 |
| 47.5° | 4655.0 | 4632.5 | 4719.0 | 4924.1 | 5298.9 | 5833.9 | 6785.4 | 6865.5 | 6276.0 | 6135.1 | 3924.5 |
| 50° | 4193.6 | 4190.4 | 4328.2 | 4606.9 | 5138.7 | 5910.8 | 7109.0 | 7740.1 | 7294.8 | 7150.6 | 4437.1 |
| 52.5° | 3568.9 | 3556.1 | 3757.9 | 4145.6 | 4760.7 | 5766.6 | 7169.9 | 8089.3 | 7884.3 | 7714.5 | 4760.7 |
| 55° | 2860.9 | 2832.1 | 3072.3 | 3498.4 | 4203.2 | 5347.0 | 7006.5 | 8166.2 | 8166.2 | 8012.4 | 5001.0 |
| 57.5° | 2011.9 | 2056.8 | 2255.4 | 2768.0 | 3514.4 | 4719.0 | 6602.8 | 8095.7 | 8451.3 | 8320.0 | 5324.5 |
| 60° | 1268.7 | 1287.9 | 1505.7 | 1919.0 | 2665.5 | 3879.7 | 5882.0 | 7791.4 | 8678.8 | 8601.9 | 5584.0 |
| 62.5° | 730.4 | 791.3 | 900.2 | 1214.2 | 1838.9 | 2915.4 | 4991.3 | 7243.5 | 8765.3 | 8733.3 | 5753.8 |
| 65° | 445.3 | 451.7 | 503.0 | 685.6 | 1130.9 | 1989.5 | 3995.0 | 6481.1 | 8569.9 | 8598.7 | 5721.8 |
| 67.5° | 333.2 | 333.2 | 349.2 | 432.5 | 643.9 | 1265.5 | 2947.4 | 5555.2 | 7945.2 | 8038.1 | 5420.6 |
| 70° | 288.3 | 288.3 | 291.5 | 317.2 | 397.3 | 749.7 | 1947.8 | 4478.8 | 6811.0 | 6801.4 | 4478.8 |
| 72.5° | 227.5 | 237.1 | 256.3 | 269.1 | 301.1 | 438.9 | 1140.5 | 3130.0 | 4731.8 | 4844.0 | 2883.3 |
| 75° | 182.6 | 185.8 | 211.4 | 233.9 | 253.1 | 297.9 | 538.2 | 1739.6 | 2482.9 | 2482.9 | 1268.7 |
| 77.5° | 141.0 | 147.4 | 163.4 | 185.8 | 211.4 | 211.4 | 224.3 | 672.8 | 961.1 | 929.1 | 374.8 |
| 80° | 89.7 | 92.9 | 118.5 | 147.4 | 176.2 | 150.6 | 121.7 | 224.3 | 262.7 | 253.1 | 102.5 |
| 82.5° | 54.5 | 57.7 | 76.9 | 118.5 | 118.5 | 83.3 | 76.9 | 92.9 | 83.3 | 76.9 | 41.6 |
| 85° | 16.0 | 19.2 | 54.5 | 76.9 | 67.3 | 32.0 | 38.4 | 41.6 | 38.4 | 35.2 | 22.4 |
| 87.5° | 3.2 | 3.2 | 16.0 | 19.2 | 16.0 | 16.0 | 12.8 | 16.0 | 16.0 | 16.0 | 9.6 |
| 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° | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 | 666.4 |
| 2.5° | 676.0 | 663.2 | 637.5 | 618.3 | 602.3 | 586.3 | 573.5 | 570.3 | 563.8 | 563.8 | 560.6 |
| 5° | 704.8 | 676.0 | 627.9 | 595.9 | 570.3 | 547.8 | 528.6 | 509.4 | 503.0 | 496.6 | 499.8 |
| 7.5° | 749.7 | 704.8 | 637.5 | 589.5 | 544.6 | 493.4 | 451.7 | 416.5 | 390.9 | 384.4 | 374.8 |
| 10° | 807.3 | 740.1 | 653.6 | 576.7 | 493.4 | 403.7 | 346.0 | 310.8 | 297.9 | 281.9 | 285.1 |
| 12.5° | 865.0 | 781.7 | 666.4 | 541.4 | 406.9 | 317.2 | 269.1 | 246.7 | 237.1 | 233.9 | 237.1 |
| 15° | 932.3 | 826.6 | 660.0 | 477.3 | 326.8 | 256.3 | 227.5 | 217.9 | 211.4 | 211.4 | 208.2 |
| 17.5° | 999.6 | 865.0 | 637.5 | 394.1 | 262.7 | 217.9 | 205.0 | 195.4 | 189.0 | 185.8 | 185.8 |
| 20° | 1073.2 | 900.2 | 586.3 | 314.0 | 217.9 | 198.6 | 185.8 | 173.0 | 166.6 | 166.6 | 166.6 |
| 22.5° | 1150.1 | 925.9 | 519.0 | 249.9 | 195.4 | 176.2 | 163.4 | 153.8 | 147.4 | 147.4 | 147.4 |
| 25° | 1217.4 | 938.7 | 438.9 | 208.2 | 179.4 | 160.2 | 147.4 | 137.8 | 134.6 | 131.4 | 131.4 |
| 27.5° | 1281.5 | 935.5 | 355.6 | 182.6 | 160.2 | 144.2 | 131.4 | 124.9 | 118.5 | 118.5 | 118.5 |
| 30° | 1345.5 | 916.3 | 281.9 | 166.6 | 147.4 | 128.1 | 118.5 | 112.1 | 108.9 | 105.7 | 105.7 |
| 32.5° | 1400.0 | 884.2 | 221.1 | 153.8 | 134.6 | 115.3 | 105.7 | 99.3 | 99.3 | 96.1 | 96.1 |
| 35° | 1454.5 | 836.2 | 185.8 | 144.2 | 121.7 | 105.7 | 96.1 | 92.9 | 89.7 | 89.7 | 89.7 |
| 37.5° | 1512.1 | 775.3 | 163.4 | 131.4 | 108.9 | 96.1 | 89.7 | 86.5 | 83.3 | 80.1 | 80.1 |
| 40° | 1582.6 | 714.4 | 153.8 | 121.7 | 99.3 | 86.5 | 80.1 | 76.9 | 73.7 | 73.7 | 73.7 |
| 42.5° | 1694.8 | 663.2 | 144.2 | 108.9 | 89.7 | 80.1 | 73.7 | 67.3 | 67.3 | 64.1 | 64.1 |
| 45° | 1906.2 | 643.9 | 134.6 | 99.3 | 83.3 | 70.5 | 67.3 | 60.9 | 57.7 | 57.7 | 57.7 |
| 47.5° | 2181.7 | 647.1 | 124.9 | 89.7 | 76.9 | 64.1 | 60.9 | 57.7 | 51.3 | 51.3 | 51.3 |
| 50° | 2409.2 | 631.1 | 115.3 | 83.3 | 67.3 | 60.9 | 54.5 | 51.3 | 48.1 | 48.1 | 48.1 |
| 52.5° | 2498.9 | 602.3 | 105.7 | 76.9 | 64.1 | 54.5 | 51.3 | 48.1 | 44.9 | 44.9 | 44.9 |
| 55° | 2588.6 | 589.5 | 96.1 | 67.3 | 57.7 | 54.5 | 48.1 | 44.9 | 41.6 | 38.4 | 38.4 |
| 57.5° | 2752.0 | 595.9 | 86.5 | 64.1 | 54.5 | 51.3 | 44.9 | 38.4 | 32.0 | 28.8 | 28.8 |
| 60° | 2838.5 | 573.5 | 80.1 | 57.7 | 51.3 | 48.1 | 38.4 | 28.8 | 22.4 | 19.2 | 19.2 |
| 62.5° | 2764.8 | 509.4 | 73.7 | 54.5 | 48.1 | 41.6 | 28.8 | 22.4 | 16.0 | 9.6 | 9.6 |
| 65° | 2559.7 | 419.7 | 67.3 | 51.3 | 41.6 | 32.0 | 25.6 | 16.0 | 9.6 | 6.4 | 6.4 |
| 67.5° | 2300.2 | 330.0 | 60.9 | 48.1 | 38.4 | 28.8 | 22.4 | 12.8 | 6.4 | 3.2 | 3.2 |
| 70° | 1858.1 | 237.1 | 57.7 | 44.9 | 35.2 | 25.6 | 19.2 | 12.8 | 6.4 | 3.2 | 3.2 |
| 72.5° | 1198.2 | 153.8 | 51.3 | 41.6 | 32.0 | 25.6 | 16.0 | 9.6 | 6.4 | 3.2 | 3.2 |
| 75° | 554.2 | 102.5 | 48.1 | 38.4 | 32.0 | 22.4 | 16.0 | 12.8 | 6.4 | 3.2 | 3.2 |
| 77.5° | 163.4 | 73.7 | 44.9 | 35.2 | 28.8 | 22.4 | 16.0 | 12.8 | 6.4 | 3.2 | 3.2 |
| 80° | 67.3 | 51.3 | 35.2 | 32.0 | 28.8 | 22.4 | 16.0 | 12.8 | 6.4 | 3.2 | 3.2 |
| 82.5° | 32.0 | 22.4 | 16.0 | 12.8 | 16.0 | 16.0 | 12.8 | 12.8 | 6.4 | 3.2 | 3.2 |
| 85° | 16.0 | 9.6 | 6.4 | 6.4 | 6.4 | 3.2 | 3.2 | 6.4 | 6.4 | 3.2 | 3.2 |
| 87.5° | 9.6 | 6.4 | 6.4 | 6.4 | 3.2 | 3.2 | 3.2 | 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)