

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: P572833

Luminaire Tested: **ARCH-S-PA2-120-740-U-T2R-HSS**

Issue Date: 10/13/2021

Test Information

Test Method: LM-79-08
Report Number: P572833
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-PA2-120-740-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 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: 12026 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

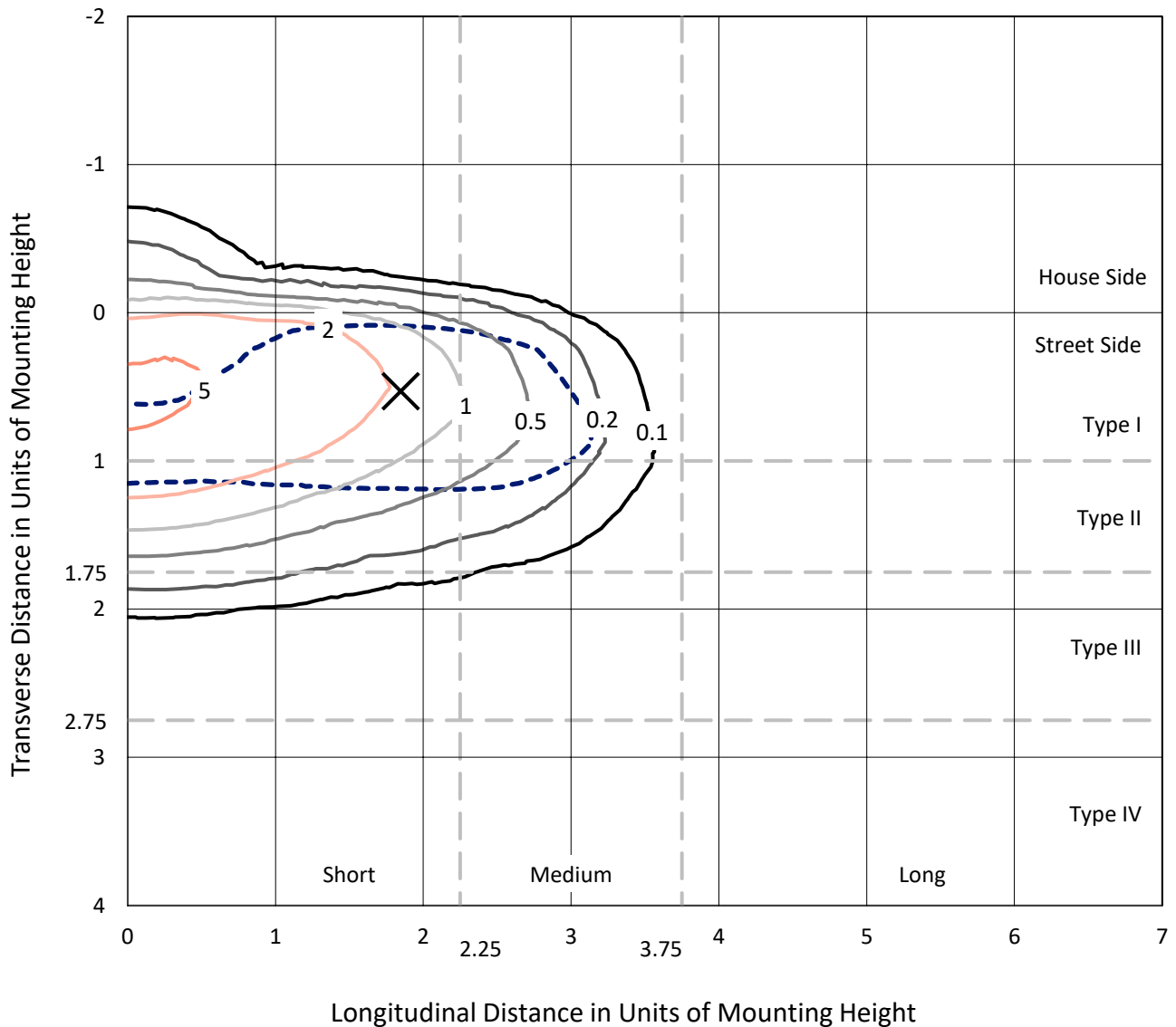
Input Watts (W): 122.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

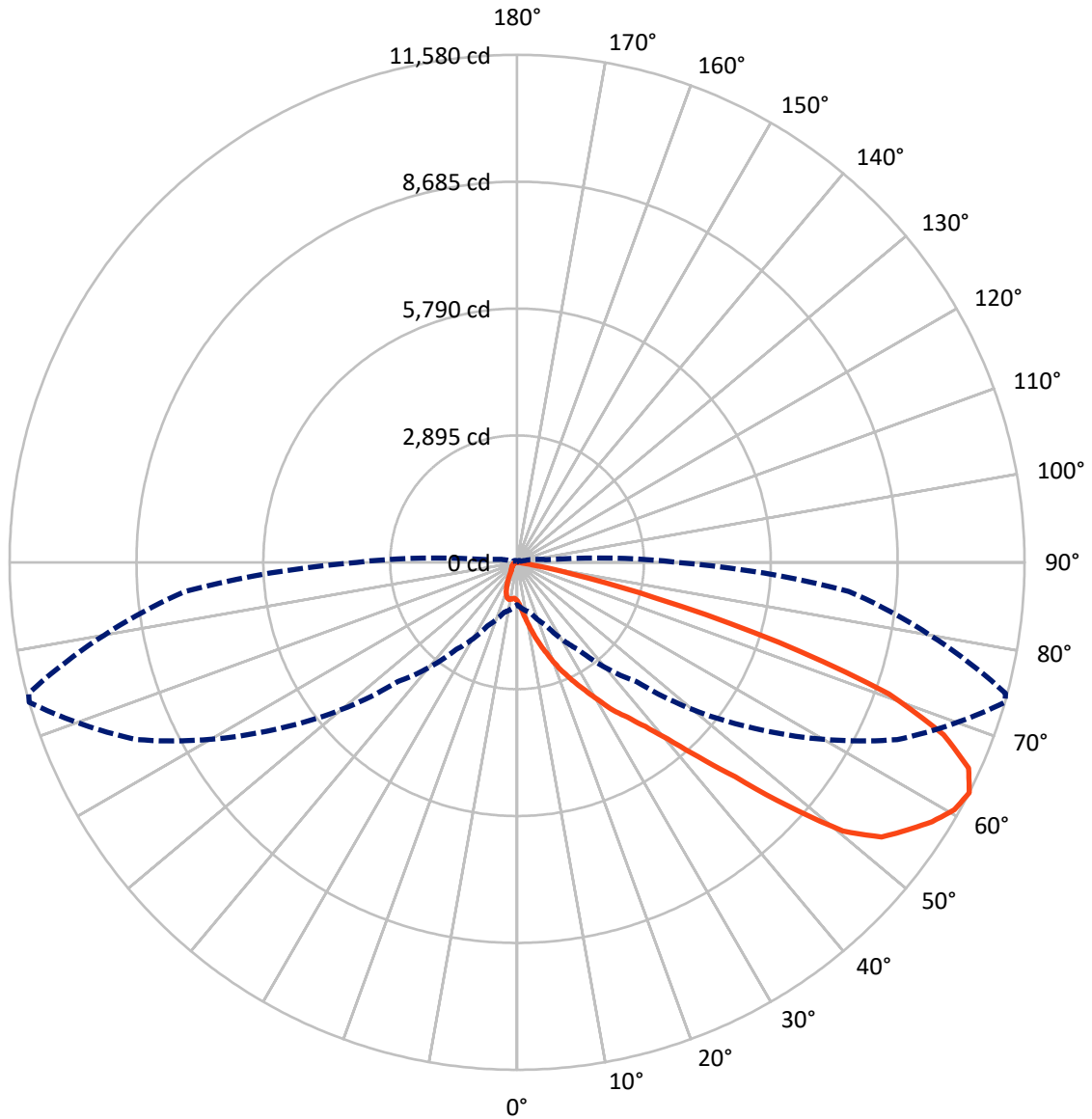
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 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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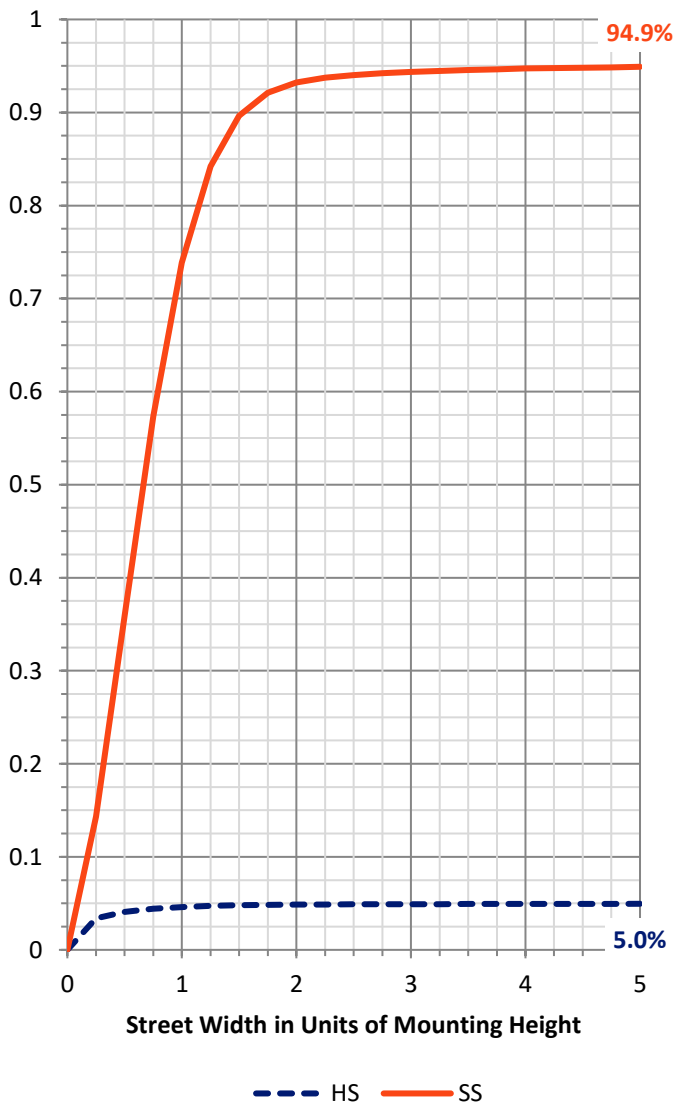
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 599.8 | 0.0 | 599.8 |
| | % Fixture | 5.0 | 0.0 | 5.0 |
| Street Side | Lumens | 11426.2 | 0.0 | 11426.2 |
| | % Fixture | 95.0 | 0.0 | 95.0 |
| Total | Lumens | 12026.0 | 0.0 | 12026.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 110.1 | 0.9 |
| 10°-20° | 462.5 | 3.8 |
| 20°-30° | 992.4 | 8.3 |
| 30°-40° | 1740.6 | 14.5 |
| 40°-50° | 2698.4 | 22.4 |
| 50°-60° | 3110.8 | 25.9 |
| 60°-70° | 2185.4 | 18.2 |
| 70°-80° | 680.9 | 5.7 |
| 80°-90° | 45.0 | 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° | 12026.0 | 100.0 |
| 0°-180° | 12026.0 | 100.0 |

Coefficient of Utilization

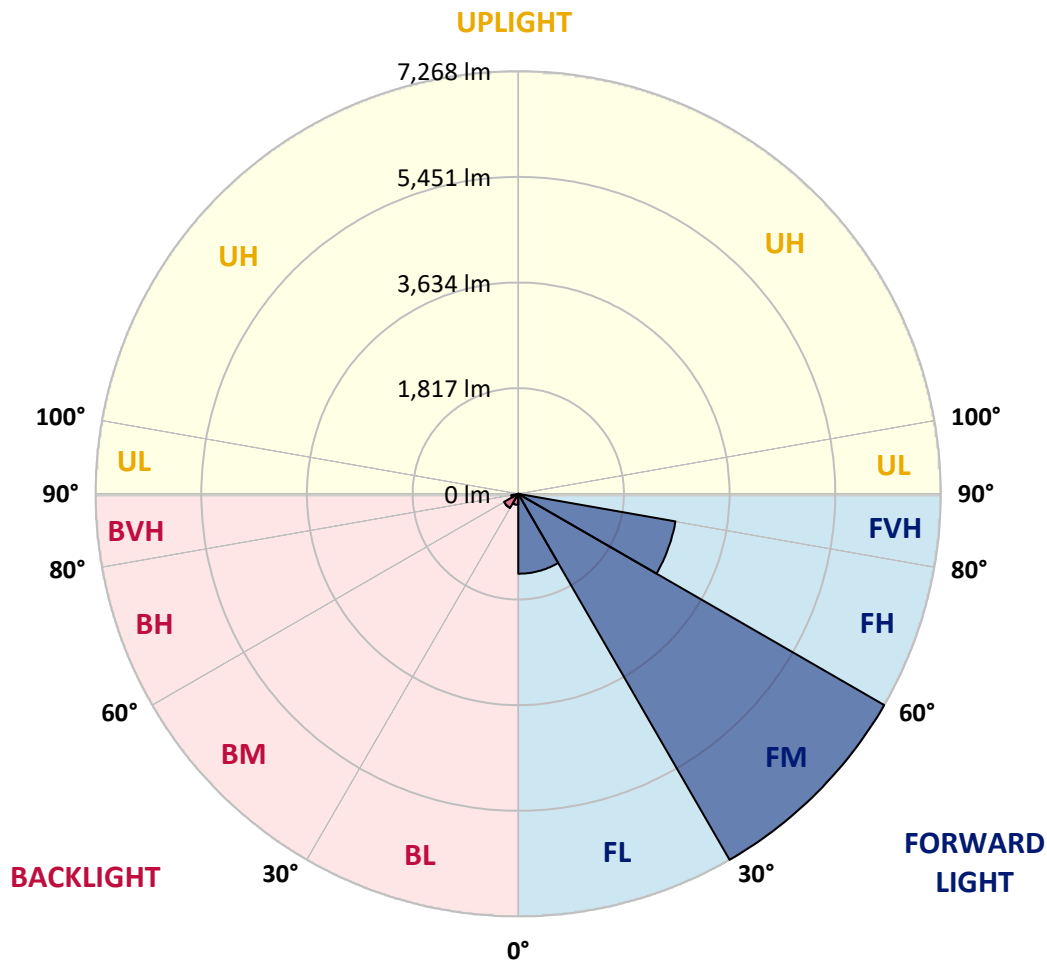


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1374.6 | 11.4 | | | |
| FM (30°-60°) | 7267.9 | 60.4 | | | |
| FH (60°-80°) | 2744.9 | 22.8 | | | G2/5000 |
| FVH (80°-90°) | 38.8 | 0.3 | | | G1/100 |
| BL (0°-30°) | 190.4 | 1.6 | B1/500 | | |
| BM (30°-60°) | 281.9 | 2.3 | B1/1000 | | |
| BH (60°-80°) | 121.4 | 1.0 | B1/500 | | G1/500 |
| BVH (80°-90°) | 6.2 | 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° | 880.3 | 880.3 | 880.3 | 880.3 | 880.3 | 880.3 | 880.3 | 880.3 | 880.3 | 880.3 | 880.3 |
| 2.5° | 1223.2 | 1202.0 | 1176.6 | 1155.4 | 1113.1 | 1083.5 | 1045.4 | 1003.1 | 956.5 | 952.3 | 914.2 |
| 5° | 1714.1 | 1650.6 | 1650.6 | 1595.6 | 1532.1 | 1417.9 | 1312.0 | 1180.8 | 1083.5 | 1075.0 | 973.5 |
| 7.5° | 2217.8 | 2167.0 | 2137.4 | 2052.7 | 1951.1 | 1824.2 | 1654.9 | 1434.8 | 1257.0 | 1227.4 | 1062.3 |
| 10° | 2687.6 | 2649.5 | 2594.5 | 2526.7 | 2437.9 | 2230.5 | 2018.9 | 1731.1 | 1447.5 | 1426.3 | 1168.1 |
| 12.5° | 3051.6 | 3005.0 | 2979.6 | 2950.0 | 2835.7 | 2670.6 | 2395.5 | 2031.6 | 1693.0 | 1646.4 | 1274.0 |
| 15° | 3326.7 | 3305.5 | 3280.1 | 3280.1 | 3220.9 | 3060.0 | 2776.5 | 2353.2 | 1930.0 | 1875.0 | 1409.4 |
| 17.5° | 3546.8 | 3521.4 | 3517.1 | 3542.5 | 3525.6 | 3411.3 | 3144.7 | 2662.2 | 2175.5 | 2133.1 | 1549.1 |
| 20° | 3792.2 | 3758.4 | 3758.4 | 3779.5 | 3775.3 | 3711.8 | 3479.0 | 3017.7 | 2463.3 | 2387.1 | 1709.9 |
| 22.5° | 4139.3 | 4118.1 | 4101.2 | 4067.3 | 4041.9 | 3982.7 | 3779.5 | 3364.8 | 2738.4 | 2666.4 | 1875.0 |
| 25° | 4604.9 | 4579.5 | 4503.3 | 4444.0 | 4334.0 | 4245.1 | 4071.6 | 3673.7 | 3017.7 | 2937.3 | 2035.8 |
| 27.5° | 5057.7 | 5006.9 | 4935.0 | 4858.8 | 4736.1 | 4583.7 | 4367.8 | 3965.8 | 3309.7 | 3225.1 | 2200.9 |
| 30° | 5536.0 | 5497.9 | 5409.0 | 5286.3 | 5133.9 | 4964.6 | 4706.4 | 4317.1 | 3644.1 | 3551.0 | 2378.6 |
| 32.5° | 5916.9 | 5857.6 | 5777.2 | 5658.7 | 5502.1 | 5383.6 | 5104.3 | 4702.2 | 4029.2 | 3906.5 | 2564.8 |
| 35° | 6221.6 | 6175.1 | 6069.3 | 5955.0 | 5836.5 | 5802.6 | 5497.9 | 5015.4 | 4338.2 | 4223.9 | 2763.8 |
| 37.5° | 6416.3 | 6369.8 | 6280.9 | 6166.6 | 6120.1 | 6179.3 | 5980.4 | 5442.9 | 4753.0 | 4609.1 | 2992.3 |
| 40° | 6568.7 | 6513.7 | 6441.7 | 6390.9 | 6374.0 | 6539.1 | 6517.9 | 5997.3 | 5299.0 | 5214.3 | 3305.5 |
| 42.5° | 6678.7 | 6623.7 | 6577.2 | 6572.9 | 6683.0 | 7004.6 | 7241.6 | 6771.8 | 6060.8 | 5887.3 | 3707.6 |
| 45° | 6539.1 | 6492.5 | 6517.9 | 6666.0 | 6932.7 | 7440.6 | 8117.8 | 7868.0 | 6979.2 | 6856.5 | 4350.9 |
| 47.5° | 6149.7 | 6120.1 | 6234.3 | 6505.2 | 7000.4 | 7707.2 | 8964.2 | 9070.0 | 8291.3 | 8105.1 | 5184.7 |
| 50° | 5540.2 | 5536.0 | 5718.0 | 6086.2 | 6788.8 | 7808.8 | 9391.7 | 10225.5 | 9637.2 | 9446.7 | 5861.9 |
| 52.5° | 4714.9 | 4698.0 | 4964.6 | 5476.7 | 6289.4 | 7618.3 | 9472.1 | 10686.8 | 10415.9 | 10191.6 | 6289.4 |
| 55° | 3779.5 | 3741.4 | 4058.9 | 4621.8 | 5552.9 | 7063.9 | 9256.3 | 10788.4 | 10788.4 | 10585.2 | 6606.8 |
| 57.5° | 2657.9 | 2717.2 | 2979.6 | 3656.8 | 4642.9 | 6234.3 | 8723.0 | 10695.3 | 11165.1 | 10991.6 | 7034.3 |
| 60° | 1676.0 | 1701.4 | 1989.2 | 2535.2 | 3521.4 | 5125.4 | 7770.7 | 10293.2 | 11465.6 | 11364.0 | 7377.1 |
| 62.5° | 965.0 | 1045.4 | 1189.3 | 1604.1 | 2429.4 | 3851.5 | 6594.1 | 9569.5 | 11579.9 | 11537.5 | 7601.4 |
| 65° | 588.3 | 596.8 | 664.5 | 905.7 | 1494.0 | 2628.3 | 5277.8 | 8562.2 | 11321.7 | 11359.8 | 7559.1 |
| 67.5° | 440.2 | 440.2 | 461.3 | 571.4 | 850.7 | 1671.8 | 3893.8 | 7339.0 | 10496.4 | 10619.1 | 7161.2 |
| 70° | 380.9 | 380.9 | 385.1 | 419.0 | 524.8 | 990.4 | 2573.3 | 5916.9 | 8998.1 | 8985.4 | 5916.9 |
| 72.5° | 300.5 | 313.2 | 338.6 | 355.5 | 397.8 | 579.8 | 1506.7 | 4135.1 | 6251.3 | 6399.4 | 3809.2 |
| 75° | 241.2 | 245.5 | 279.3 | 309.0 | 334.4 | 393.6 | 711.0 | 2298.2 | 3280.1 | 3280.1 | 1676.0 |
| 77.5° | 186.2 | 194.7 | 215.9 | 245.5 | 279.3 | 279.3 | 296.3 | 888.8 | 1269.7 | 1227.4 | 495.2 |
| 80° | 118.5 | 122.7 | 156.6 | 194.7 | 232.8 | 198.9 | 160.8 | 296.3 | 347.1 | 334.4 | 135.4 |
| 82.5° | 72.0 | 76.2 | 101.6 | 156.6 | 156.6 | 110.0 | 101.6 | 122.7 | 110.0 | 101.6 | 55.0 |
| 85° | 21.2 | 25.4 | 72.0 | 101.6 | 88.9 | 42.3 | 50.8 | 55.0 | 50.8 | 46.6 | 29.6 |
| 87.5° | 4.2 | 4.2 | 21.2 | 25.4 | 21.2 | 21.2 | 16.9 | 21.2 | 21.2 | 21.2 | 12.7 |
| 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° | 880.3 | 880.3 | 880.3 | 880.3 | 880.3 | 880.3 | 880.3 | 880.3 | 880.3 | 880.3 | 880.3 |
| 2.5° | 893.0 | 876.1 | 842.2 | 816.9 | 795.7 | 774.5 | 757.6 | 753.4 | 744.9 | 744.9 | 740.7 |
| 5° | 931.1 | 893.0 | 829.6 | 787.2 | 753.4 | 723.7 | 698.3 | 673.0 | 664.5 | 656.0 | 660.3 |
| 7.5° | 990.4 | 931.1 | 842.2 | 778.8 | 719.5 | 651.8 | 596.8 | 550.2 | 516.4 | 507.9 | 495.2 |
| 10° | 1066.6 | 977.7 | 863.4 | 761.8 | 651.8 | 533.3 | 457.1 | 410.5 | 393.6 | 372.5 | 376.7 |
| 12.5° | 1142.7 | 1032.7 | 880.3 | 715.3 | 537.5 | 419.0 | 355.5 | 325.9 | 313.2 | 309.0 | 313.2 |
| 15° | 1231.6 | 1092.0 | 871.9 | 630.6 | 431.7 | 338.6 | 300.5 | 287.8 | 279.3 | 279.3 | 275.1 |
| 17.5° | 1320.5 | 1142.7 | 842.2 | 520.6 | 347.1 | 287.8 | 270.9 | 258.2 | 249.7 | 245.5 | 245.5 |
| 20° | 1417.9 | 1189.3 | 774.5 | 414.8 | 287.8 | 262.4 | 245.5 | 228.5 | 220.1 | 220.1 | 220.1 |
| 22.5° | 1519.4 | 1223.2 | 685.6 | 330.1 | 258.2 | 232.8 | 215.9 | 203.2 | 194.7 | 194.7 | 194.7 |
| 25° | 1608.3 | 1240.1 | 579.8 | 275.1 | 237.0 | 211.6 | 194.7 | 182.0 | 177.8 | 173.5 | 173.5 |
| 27.5° | 1693.0 | 1235.9 | 469.8 | 241.2 | 211.6 | 190.5 | 173.5 | 165.1 | 156.6 | 156.6 | 156.6 |
| 30° | 1777.6 | 1210.5 | 372.5 | 220.1 | 194.7 | 169.3 | 156.6 | 148.1 | 143.9 | 139.7 | 139.7 |
| 32.5° | 1849.6 | 1168.1 | 292.0 | 203.2 | 177.8 | 152.4 | 139.7 | 131.2 | 131.2 | 127.0 | 127.0 |
| 35° | 1921.5 | 1104.7 | 245.5 | 190.5 | 160.8 | 139.7 | 127.0 | 122.7 | 118.5 | 118.5 | 118.5 |
| 37.5° | 1997.7 | 1024.2 | 215.9 | 173.5 | 143.9 | 127.0 | 118.5 | 114.3 | 110.0 | 105.8 | 105.8 |
| 40° | 2090.8 | 943.8 | 203.2 | 160.8 | 131.2 | 114.3 | 105.8 | 101.6 | 97.3 | 97.3 | 97.3 |
| 42.5° | 2238.9 | 876.1 | 190.5 | 143.9 | 118.5 | 105.8 | 97.3 | 88.9 | 88.9 | 84.6 | 84.6 |
| 45° | 2518.3 | 850.7 | 177.8 | 131.2 | 110.0 | 93.1 | 88.9 | 80.4 | 76.2 | 76.2 | 76.2 |
| 47.5° | 2882.3 | 854.9 | 165.1 | 118.5 | 101.6 | 84.6 | 80.4 | 76.2 | 67.7 | 67.7 | 67.7 |
| 50° | 3182.8 | 833.8 | 152.4 | 110.0 | 88.9 | 80.4 | 72.0 | 67.7 | 63.5 | 63.5 | 63.5 |
| 52.5° | 3301.3 | 795.7 | 139.7 | 101.6 | 84.6 | 72.0 | 67.7 | 63.5 | 59.3 | 59.3 | 59.3 |
| 55° | 3419.8 | 778.8 | 127.0 | 88.9 | 76.2 | 72.0 | 63.5 | 59.3 | 55.0 | 50.8 | 50.8 |
| 57.5° | 3635.6 | 787.2 | 114.3 | 84.6 | 72.0 | 67.7 | 59.3 | 50.8 | 42.3 | 38.1 | 38.1 |
| 60° | 3749.9 | 757.6 | 105.8 | 76.2 | 67.7 | 63.5 | 50.8 | 38.1 | 29.6 | 25.4 | 25.4 |
| 62.5° | 3652.6 | 673.0 | 97.3 | 72.0 | 63.5 | 55.0 | 38.1 | 29.6 | 21.2 | 12.7 | 12.7 |
| 65° | 3381.7 | 554.4 | 88.9 | 67.7 | 55.0 | 42.3 | 33.9 | 21.2 | 12.7 | 8.5 | 8.5 |
| 67.5° | 3038.9 | 435.9 | 80.4 | 63.5 | 50.8 | 38.1 | 29.6 | 16.9 | 8.5 | 4.2 | 4.2 |
| 70° | 2454.8 | 313.2 | 76.2 | 59.3 | 46.6 | 33.9 | 25.4 | 16.9 | 8.5 | 4.2 | 4.2 |
| 72.5° | 1582.9 | 203.2 | 67.7 | 55.0 | 42.3 | 33.9 | 21.2 | 12.7 | 8.5 | 4.2 | 4.2 |
| 75° | 732.2 | 135.4 | 63.5 | 50.8 | 42.3 | 29.6 | 21.2 | 16.9 | 8.5 | 4.2 | 4.2 |
| 77.5° | 215.9 | 97.3 | 59.3 | 46.6 | 38.1 | 29.6 | 21.2 | 16.9 | 8.5 | 4.2 | 4.2 |
| 80° | 88.9 | 67.7 | 46.6 | 42.3 | 38.1 | 29.6 | 21.2 | 16.9 | 8.5 | 4.2 | 4.2 |
| 82.5° | 42.3 | 29.6 | 21.2 | 16.9 | 21.2 | 21.2 | 16.9 | 16.9 | 8.5 | 4.2 | 4.2 |
| 85° | 21.2 | 12.7 | 8.5 | 8.5 | 8.5 | 4.2 | 4.2 | 8.5 | 8.5 | 4.2 | 4.2 |
| 87.5° | 12.7 | 8.5 | 8.5 | 8.5 | 4.2 | 4.2 | 4.2 | 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)