

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: P397923

Luminaire Tested: **ARCH-S-PA1-60-750-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397923
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-13)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-S-PA1-60-750-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE II ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7000 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B0 - U0 - G2

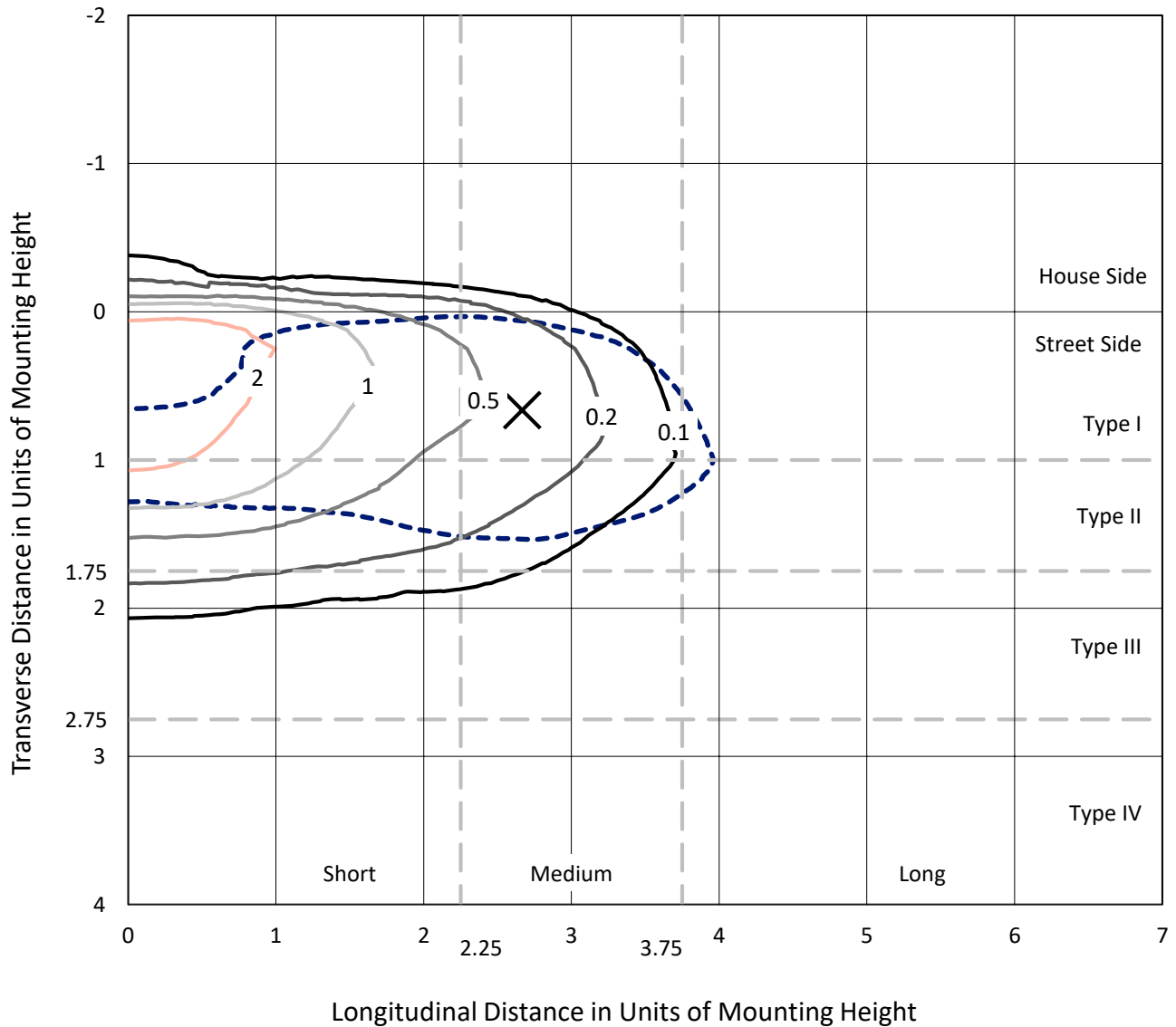
Input Watts (W): 64
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

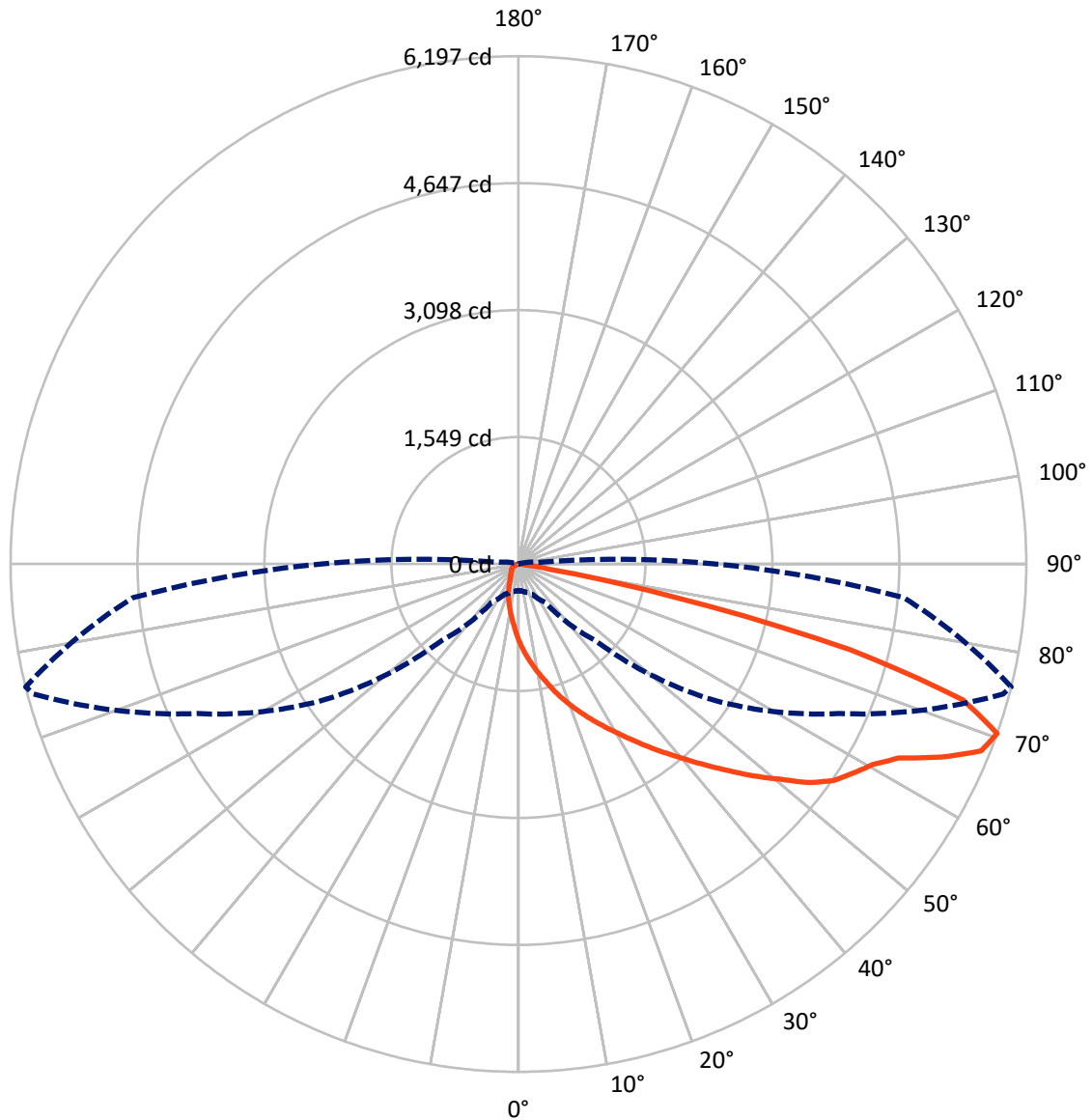
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.9 fc
 Type II - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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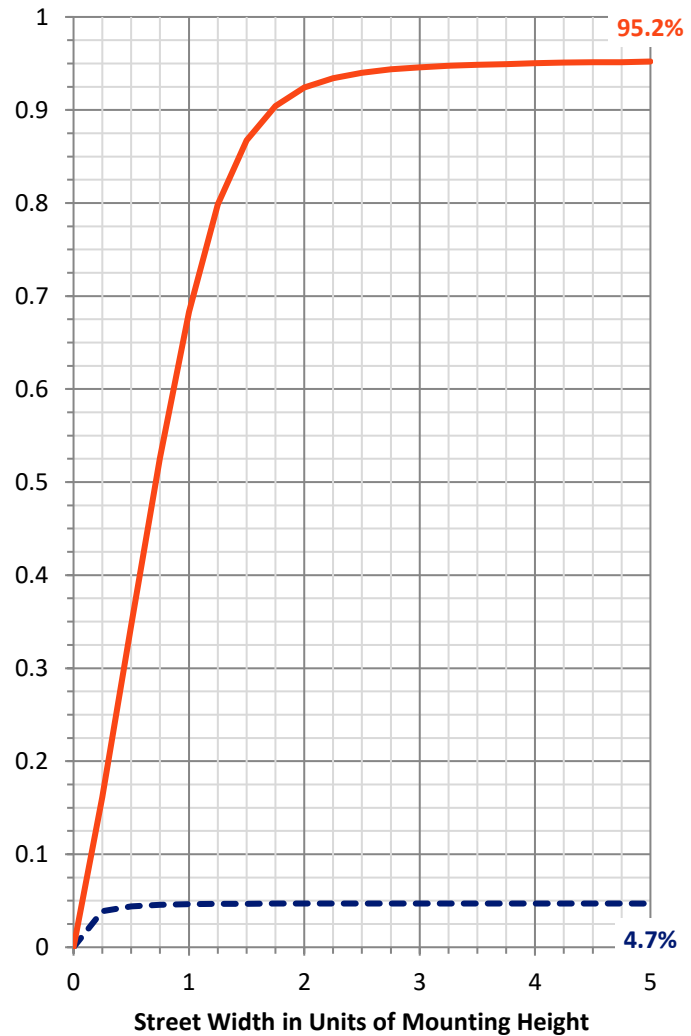
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 330.2 | 0.0 | 330.2 |
| | % Fixture | 4.7 | 0.0 | 4.7 |
| Street Side | Lumens | 6669.9 | 0.0 | 6669.9 |
| | % Fixture | 95.3 | 0.0 | 95.3 |
| Total | Lumens | 7000.0 | 0.0 | 7000.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 88.3 | 1.3 |
| 10°-20° | 284.9 | 4.1 |
| 20°-30° | 530.6 | 7.6 |
| 30°-40° | 938.5 | 13.4 |
| 40°-50° | 1435.2 | 20.5 |
| 50°-60° | 1627.1 | 23.2 |
| 60°-70° | 1394.8 | 19.9 |
| 70°-80° | 675.6 | 9.7 |
| 80°-90° | 25.1 | 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° | 7000.0 | 100.0 |
| 0°-180° | 7000.0 | 100.0 |



--- HS — SS

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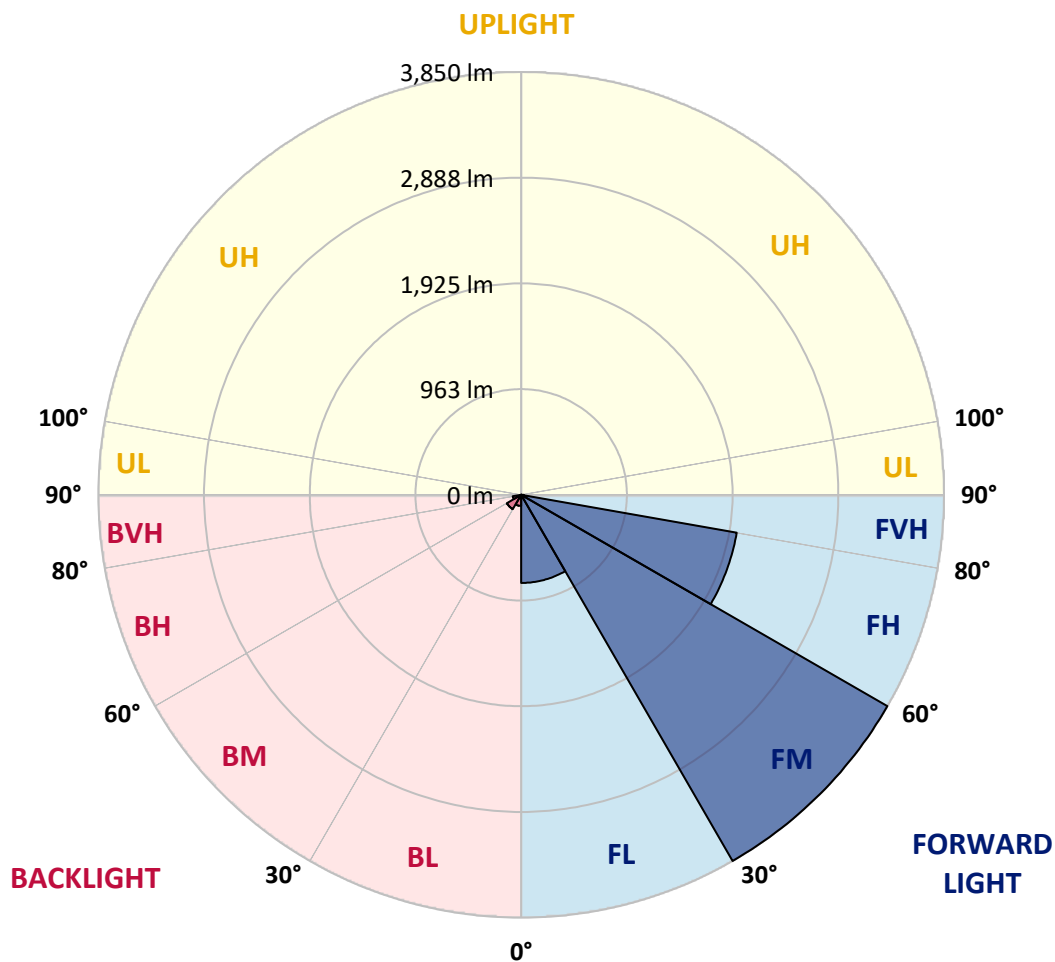
CATALOG NUMBER: ARCH-S-PA1-60-750-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 802.5 | 11.5 | | | |
| FM | (30°-60°) | 3850.1 | 55.0 | | | |
| FH | (60°-80°) | 1992.7 | 28.5 | | | G2/5000 |
| FVH | (80°-90°) | 24.6 | 0.4 | | | G1/100 |
| BL | (0°-30°) | 101.3 | 1.4 | B0/110 | | |
| BM | (30°-60°) | 150.7 | 2.2 | B0/220 | | |
| BH | (60°-80°) | 77.7 | 1.1 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 0.4 | 0.0 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B0-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 937.0 | 937.0 | 937.0 | 937.0 | 937.0 | 937.0 | 937.0 | 937.0 | 937.0 | 937.0 | 937.0 |
| 2.5° | 1280.8 | 1273.8 | 1266.8 | 1240.0 | 1215.5 | 1193.4 | 1151.4 | 1096.7 | 1047.7 | 1037.2 | 980.1 |
| 5° | 1504.6 | 1496.4 | 1485.9 | 1459.1 | 1427.6 | 1390.3 | 1328.6 | 1244.7 | 1158.4 | 1139.8 | 1033.7 |
| 7.5° | 1656.1 | 1649.1 | 1633.9 | 1621.1 | 1589.6 | 1553.5 | 1484.7 | 1386.8 | 1268.0 | 1244.7 | 1095.5 |
| 10° | 1759.8 | 1755.1 | 1752.8 | 1742.3 | 1719.0 | 1689.9 | 1621.1 | 1518.5 | 1378.7 | 1351.9 | 1160.8 |
| 12.5° | 1797.1 | 1797.1 | 1808.7 | 1826.2 | 1829.7 | 1820.4 | 1757.4 | 1654.9 | 1495.2 | 1467.3 | 1237.7 |
| 15° | 1747.0 | 1752.8 | 1778.4 | 1834.4 | 1892.6 | 1931.1 | 1891.5 | 1795.9 | 1623.4 | 1593.1 | 1328.6 |
| 17.5° | 1733.0 | 1738.8 | 1756.3 | 1805.2 | 1883.3 | 1985.9 | 2005.7 | 1932.3 | 1744.6 | 1719.0 | 1421.8 |
| 20° | 1772.6 | 1778.4 | 1793.6 | 1835.5 | 1895.0 | 1998.7 | 2081.4 | 2064.0 | 1872.8 | 1846.0 | 1516.2 |
| 22.5° | 1867.0 | 1870.5 | 1870.5 | 1903.1 | 1955.6 | 2032.5 | 2129.2 | 2188.7 | 2004.5 | 1975.4 | 1609.4 |
| 25° | 2069.8 | 2062.8 | 2034.8 | 2018.5 | 2052.3 | 2115.2 | 2189.8 | 2298.2 | 2151.4 | 2111.7 | 1709.7 |
| 27.5° | 2335.5 | 2358.8 | 2291.2 | 2213.1 | 2187.5 | 2223.6 | 2274.9 | 2394.9 | 2293.5 | 2251.6 | 1800.6 |
| 30° | 2695.6 | 2686.3 | 2597.7 | 2485.8 | 2375.1 | 2362.3 | 2379.8 | 2477.7 | 2435.7 | 2396.1 | 1902.0 |
| 32.5° | 2991.6 | 3009.1 | 2915.9 | 2779.5 | 2614.0 | 2535.9 | 2517.3 | 2576.7 | 2587.2 | 2561.6 | 2022.0 |
| 35° | 3295.8 | 3314.4 | 3223.5 | 3072.0 | 2875.1 | 2744.6 | 2690.9 | 2699.1 | 2774.9 | 2742.2 | 2147.9 |
| 37.5° | 3568.5 | 3584.8 | 3495.1 | 3340.1 | 3143.1 | 2983.5 | 2906.5 | 2843.6 | 2956.7 | 2927.5 | 2280.7 |
| 40° | 3775.9 | 3778.3 | 3717.7 | 3579.0 | 3392.5 | 3227.0 | 3139.6 | 3016.1 | 3149.0 | 3129.1 | 2419.4 |
| 42.5° | 3922.8 | 3927.5 | 3883.2 | 3764.3 | 3591.8 | 3438.0 | 3366.9 | 3220.0 | 3370.4 | 3352.9 | 2580.2 |
| 45° | 3991.6 | 3999.7 | 3995.0 | 3885.5 | 3742.2 | 3609.3 | 3586.0 | 3436.8 | 3612.8 | 3596.5 | 2765.5 |
| 47.5° | 3926.3 | 3926.3 | 3985.7 | 3970.6 | 3838.9 | 3750.3 | 3777.1 | 3662.9 | 3876.2 | 3861.0 | 2954.3 |
| 50° | 3654.7 | 3658.2 | 3779.4 | 3953.1 | 3876.2 | 3856.4 | 3940.3 | 3884.3 | 4115.1 | 4124.4 | 3180.4 |
| 52.5° | 2941.5 | 2935.7 | 3344.7 | 3678.1 | 3850.5 | 3904.1 | 4090.6 | 4110.4 | 4401.8 | 4429.7 | 3405.3 |
| 55° | 2198.0 | 2194.5 | 2586.1 | 3190.9 | 3671.1 | 3879.7 | 4174.5 | 4312.0 | 4646.5 | 4664.0 | 3573.2 |
| 57.5° | 1740.0 | 1730.6 | 1946.2 | 2572.1 | 3265.5 | 3770.1 | 4178.0 | 4350.5 | 4782.9 | 4813.2 | 3736.3 |
| 60° | 1337.9 | 1329.7 | 1490.6 | 1913.6 | 2690.9 | 3478.8 | 4077.8 | 4352.8 | 4914.6 | 4968.2 | 3955.4 |
| 62.5° | 956.8 | 966.1 | 1089.7 | 1372.9 | 2069.8 | 3067.4 | 3947.3 | 4385.5 | 5148.8 | 5209.4 | 4266.6 |
| 65° | 645.6 | 641.0 | 743.5 | 934.7 | 1471.9 | 2513.8 | 3746.8 | 4454.2 | 5570.7 | 5676.7 | 4639.5 |
| 67.5° | 448.7 | 452.2 | 498.8 | 608.3 | 934.7 | 1929.9 | 3413.5 | 4492.7 | 6006.6 | 6089.3 | 4900.6 |
| 70° | 324.0 | 328.6 | 354.3 | 409.1 | 571.1 | 1308.8 | 2885.6 | 4316.7 | 6124.3 | 6196.5 | 4718.8 |
| 72.5° | 213.3 | 222.6 | 261.1 | 290.2 | 364.8 | 819.3 | 2125.7 | 3718.8 | 5617.3 | 5670.9 | 3958.9 |
| 75° | 115.4 | 117.7 | 167.8 | 216.8 | 259.9 | 510.5 | 1268.0 | 2508.0 | 4202.5 | 4185.0 | 2610.5 |
| 77.5° | 89.7 | 93.2 | 103.7 | 155.0 | 174.8 | 280.9 | 501.1 | 1132.8 | 1990.5 | 1936.9 | 890.4 |
| 80° | 54.8 | 57.1 | 72.3 | 92.1 | 122.4 | 163.2 | 146.8 | 307.7 | 404.4 | 378.8 | 130.5 |
| 82.5° | 32.6 | 35.0 | 43.1 | 76.9 | 96.7 | 76.9 | 51.3 | 74.6 | 75.8 | 74.6 | 32.6 |
| 85° | 5.8 | 5.8 | 30.3 | 53.6 | 51.3 | 22.1 | 30.3 | 24.5 | 22.1 | 23.3 | 7.0 |
| 87.5° | 0.0 | 0.0 | 11.7 | 16.3 | 23.3 | 8.2 | 11.7 | 5.8 | 5.8 | 5.8 | 3.5 |
| 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° | 937.0 | 937.0 | 937.0 | 937.0 | 937.0 | 937.0 | 937.0 | 937.0 | 937.0 | 937.0 | 937.0 |
| 2.5° | 945.2 | 905.5 | 823.9 | 752.9 | 681.8 | 629.3 | 589.7 | 548.9 | 534.9 | 517.4 | 508.1 |
| 5° | 961.5 | 883.4 | 721.4 | 592.0 | 482.5 | 398.6 | 345.0 | 312.3 | 291.4 | 276.2 | 272.7 |
| 7.5° | 985.9 | 865.9 | 638.6 | 463.8 | 343.8 | 259.9 | 215.6 | 193.5 | 181.8 | 174.8 | 172.5 |
| 10° | 1015.1 | 850.8 | 557.1 | 361.3 | 242.4 | 183.0 | 158.5 | 149.2 | 144.5 | 142.2 | 141.0 |
| 12.5° | 1055.9 | 844.9 | 488.3 | 278.5 | 183.0 | 150.3 | 137.5 | 131.7 | 128.2 | 124.7 | 123.5 |
| 15° | 1109.5 | 847.3 | 425.4 | 215.6 | 151.5 | 134.0 | 123.5 | 117.7 | 113.0 | 109.5 | 109.5 |
| 17.5° | 1165.4 | 850.8 | 363.6 | 174.8 | 137.5 | 122.4 | 110.7 | 102.6 | 99.1 | 95.6 | 94.4 |
| 20° | 1217.9 | 849.6 | 304.2 | 149.2 | 124.7 | 109.5 | 97.9 | 89.7 | 83.9 | 80.4 | 80.4 |
| 22.5° | 1268.0 | 842.6 | 248.2 | 134.0 | 114.2 | 96.7 | 83.9 | 75.8 | 71.1 | 67.6 | 67.6 |
| 25° | 1321.6 | 828.6 | 202.8 | 122.4 | 101.4 | 85.1 | 72.3 | 64.1 | 60.6 | 57.1 | 57.1 |
| 27.5° | 1363.5 | 805.3 | 165.5 | 111.9 | 89.7 | 73.4 | 61.8 | 54.8 | 51.3 | 48.9 | 48.9 |
| 30° | 1409.0 | 771.5 | 137.5 | 100.2 | 78.1 | 62.9 | 52.4 | 46.6 | 43.1 | 42.0 | 42.0 |
| 32.5° | 1459.1 | 734.2 | 117.7 | 88.6 | 66.4 | 53.6 | 44.3 | 40.8 | 37.3 | 36.1 | 36.1 |
| 35° | 1517.4 | 701.6 | 106.1 | 76.9 | 58.3 | 45.5 | 38.5 | 35.0 | 32.6 | 32.6 | 32.6 |
| 37.5° | 1583.8 | 667.8 | 95.6 | 67.6 | 50.1 | 38.5 | 32.6 | 31.5 | 30.3 | 29.1 | 29.1 |
| 40° | 1656.1 | 631.7 | 86.2 | 59.4 | 43.1 | 32.6 | 28.0 | 28.0 | 26.8 | 26.8 | 26.8 |
| 42.5° | 1737.6 | 600.2 | 78.1 | 52.4 | 37.3 | 28.0 | 24.5 | 24.5 | 23.3 | 23.3 | 23.3 |
| 45° | 1826.2 | 571.1 | 71.1 | 46.6 | 32.6 | 24.5 | 22.1 | 21.0 | 19.8 | 19.8 | 19.8 |
| 47.5° | 1931.1 | 554.7 | 65.3 | 40.8 | 28.0 | 21.0 | 18.6 | 17.5 | 16.3 | 15.2 | 15.2 |
| 50° | 2065.1 | 561.7 | 59.4 | 33.8 | 24.5 | 17.5 | 15.2 | 14.0 | 12.8 | 11.7 | 11.7 |
| 52.5° | 2171.2 | 558.2 | 51.3 | 29.1 | 19.8 | 14.0 | 11.7 | 10.5 | 9.3 | 8.2 | 8.2 |
| 55° | 2248.1 | 544.2 | 44.3 | 24.5 | 15.2 | 11.7 | 9.3 | 7.0 | 5.8 | 5.8 | 5.8 |
| 57.5° | 2323.8 | 530.3 | 37.3 | 19.8 | 11.7 | 8.2 | 5.8 | 4.7 | 4.7 | 4.7 | 4.7 |
| 60° | 2441.5 | 510.5 | 32.6 | 16.3 | 9.3 | 5.8 | 3.5 | 3.5 | 2.3 | 2.3 | 2.3 |
| 62.5° | 2584.9 | 486.0 | 26.8 | 14.0 | 7.0 | 4.7 | 2.3 | 2.3 | 0.0 | 0.0 | 0.0 |
| 65° | 2742.2 | 442.9 | 22.1 | 10.5 | 5.8 | 3.5 | 2.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 2706.1 | 355.5 | 18.6 | 7.0 | 4.7 | 2.3 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 2393.8 | 240.1 | 15.2 | 5.8 | 3.5 | 2.3 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 1875.2 | 142.2 | 10.5 | 4.7 | 2.3 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 1200.4 | 71.1 | 7.0 | 3.5 | 2.3 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 402.1 | 35.0 | 4.7 | 2.3 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 57.1 | 11.7 | 2.3 | 1.2 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 12.8 | 4.7 | 1.2 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 4.7 | 2.3 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 2.3 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 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)