

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: P398130

Luminaire Tested: **ARCH-S-PA1-90-740-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P398130
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-PA1-90-740-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 1180mA 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: 9040 lumens
Efficiency: N/A
Efficacy: 96.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.75' x H: 0')
IES Classification: Type II - Medium - Full Cutoff
BUG Rating: B1 - U0 - G2

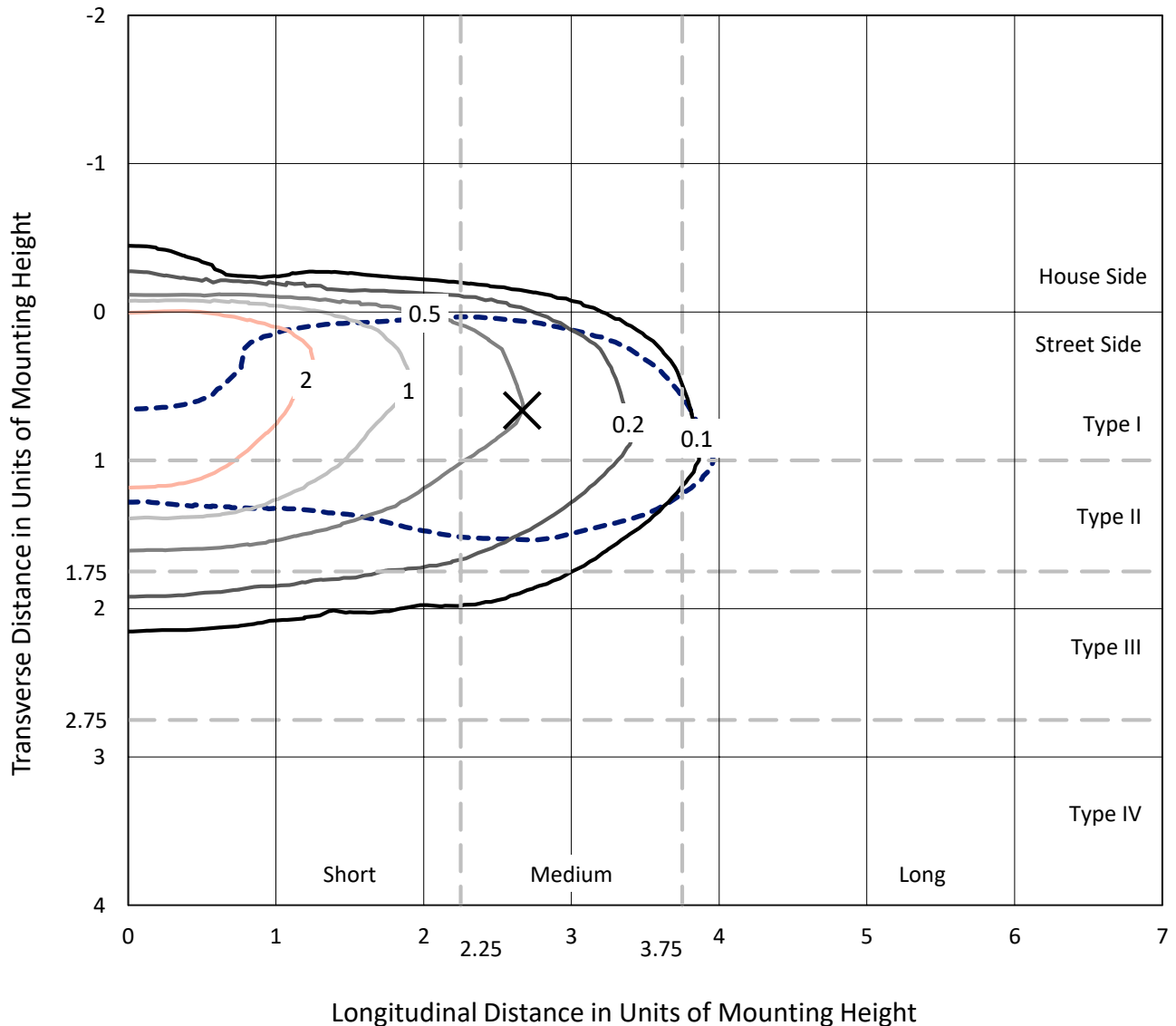
Input Watts (W): 94
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

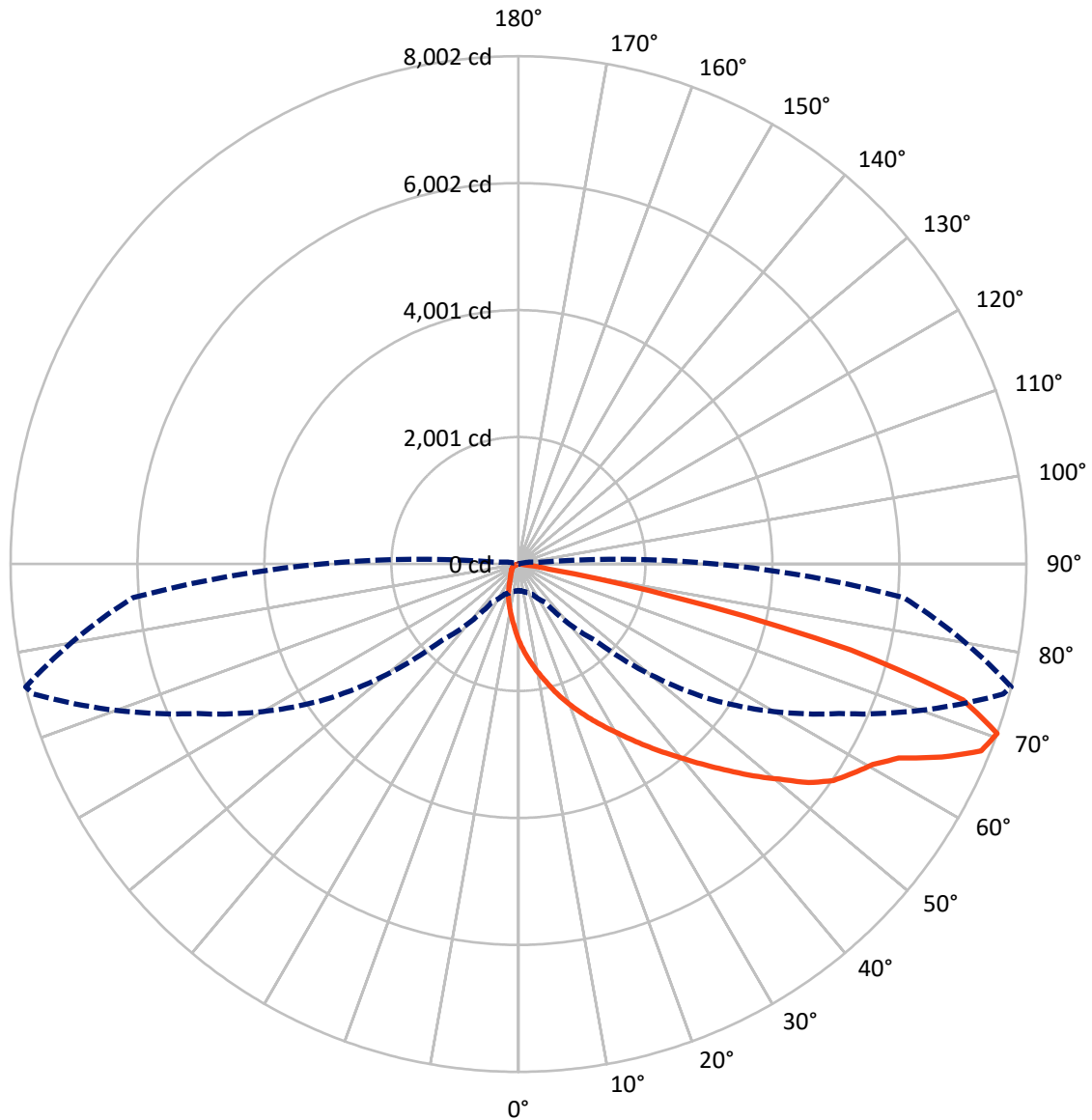
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 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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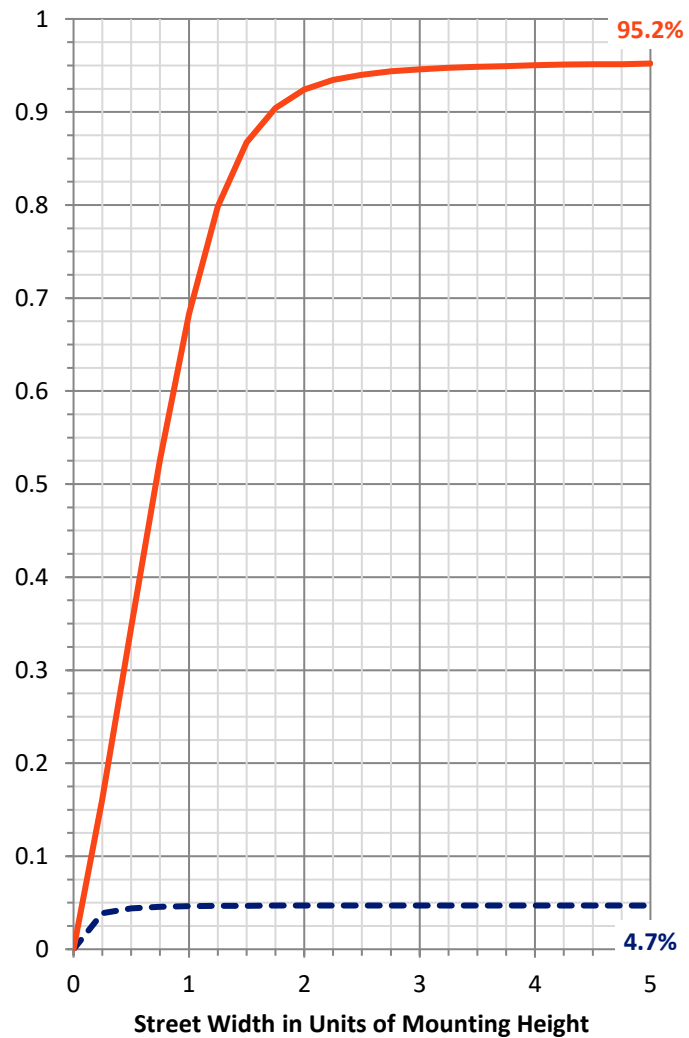
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 426.3 | 0.0 | 426.3 |
| | % Fixture | 4.7 | 0.0 | 4.7 |
| Street Side | Lumens | 8613.6 | 0.0 | 8613.6 |
| | % Fixture | 95.3 | 0.0 | 95.3 |
| Total | Lumens | 9040.0 | 0.0 | 9040.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 114.0 | 1.3 |
| 10°-20° | 367.9 | 4.1 |
| 20°-30° | 685.2 | 7.6 |
| 30°-40° | 1212.0 | 13.4 |
| 40°-50° | 1853.4 | 20.5 |
| 50°-60° | 2101.3 | 23.2 |
| 60°-70° | 1801.3 | 19.9 |
| 70°-80° | 872.5 | 9.7 |
| 80°-90° | 32.4 | 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° | 9040.0 | 100.0 |
| 0°-180° | 9040.0 | 100.0 |



--- HS — SS

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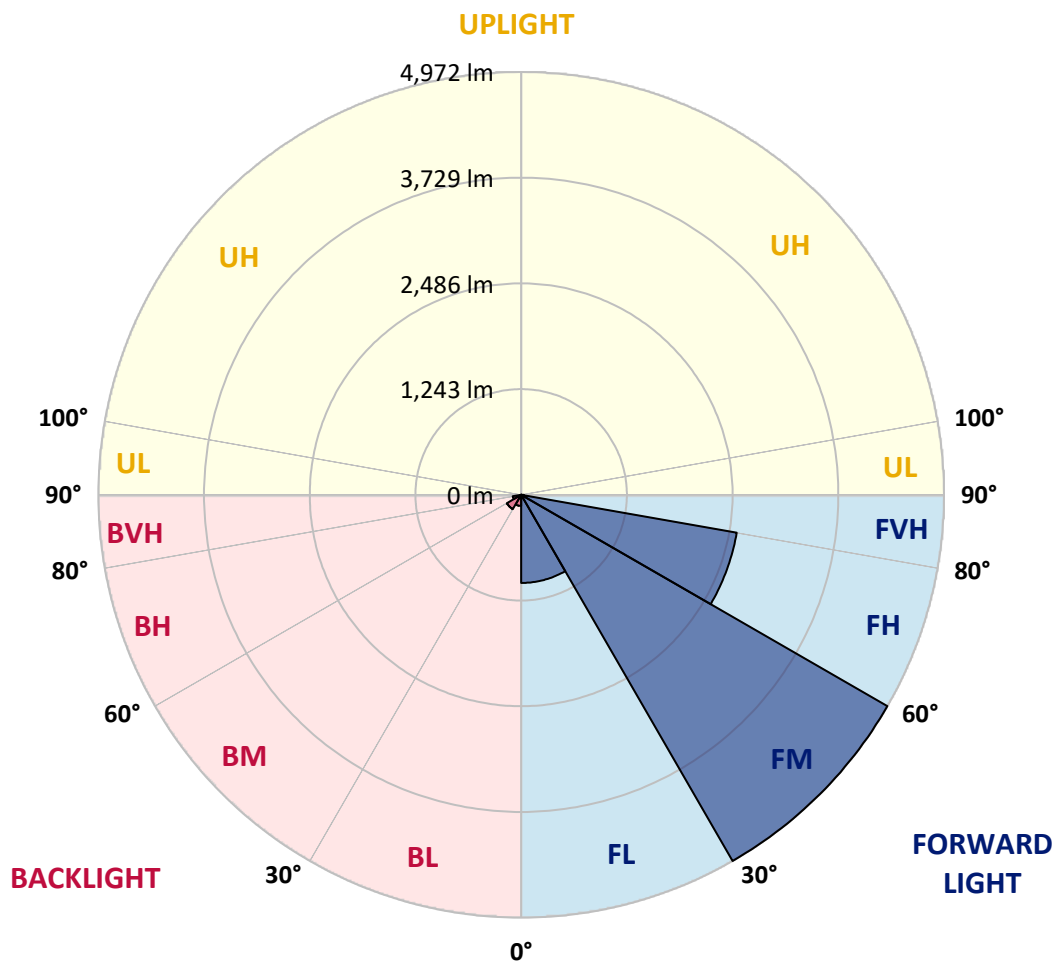
CATALOG NUMBER: ARCH-S-PA1-90-740-U-T2R-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1036.3 | 11.5 | | | |
| FM | (30°-60°) | 4972.1 | 55.0 | | | |
| FH | (60°-80°) | 2573.4 | 28.5 | | | G2/5000 |
| FVH | (80°-90°) | 31.8 | 0.4 | | | G1/100 |
| BL | (0°-30°) | 130.8 | 1.4 | B1/500 | | |
| BM | (30°-60°) | 194.6 | 2.2 | B0/220 | | |
| BH | (60°-80°) | 100.4 | 1.1 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 0.6 | 0.0 | | | 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 Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1210.1 | 1210.1 | 1210.1 | 1210.1 | 1210.1 | 1210.1 | 1210.1 | 1210.1 | 1210.1 | 1210.1 | 1210.1 |
| 2.5° | 1654.1 | 1645.0 | 1636.0 | 1601.4 | 1569.8 | 1541.2 | 1487.0 | 1416.3 | 1353.0 | 1339.5 | 1265.7 |
| 5° | 1943.0 | 1932.5 | 1918.9 | 1884.3 | 1843.7 | 1795.5 | 1715.8 | 1607.4 | 1496.0 | 1471.9 | 1335.0 |
| 7.5° | 2138.7 | 2129.6 | 2110.1 | 2093.5 | 2052.9 | 2006.2 | 1917.4 | 1791.0 | 1637.5 | 1607.4 | 1414.7 |
| 10° | 2272.6 | 2266.6 | 2263.6 | 2250.1 | 2220.0 | 2182.3 | 2093.5 | 1961.1 | 1780.5 | 1745.9 | 1499.0 |
| 12.5° | 2320.8 | 2320.8 | 2335.8 | 2358.4 | 2362.9 | 2350.9 | 2269.6 | 2137.2 | 1931.0 | 1894.9 | 1598.4 |
| 15° | 2256.1 | 2263.6 | 2296.7 | 2369.0 | 2444.2 | 2493.9 | 2442.7 | 2319.3 | 2096.5 | 2057.4 | 1715.8 |
| 17.5° | 2238.0 | 2245.5 | 2268.1 | 2331.3 | 2432.2 | 2564.6 | 2590.2 | 2495.4 | 2253.1 | 2220.0 | 1836.2 |
| 20° | 2289.2 | 2296.7 | 2316.3 | 2370.5 | 2447.2 | 2581.2 | 2688.0 | 2665.4 | 2418.6 | 2384.0 | 1958.1 |
| 22.5° | 2411.1 | 2415.6 | 2415.6 | 2457.8 | 2525.5 | 2624.8 | 2749.7 | 2826.5 | 2588.7 | 2551.1 | 2078.5 |
| 25° | 2673.0 | 2663.9 | 2627.8 | 2606.8 | 2650.4 | 2731.7 | 2828.0 | 2968.0 | 2778.3 | 2727.2 | 2207.9 |
| 27.5° | 3016.1 | 3046.2 | 2958.9 | 2858.1 | 2825.0 | 2871.6 | 2937.9 | 3092.9 | 2961.9 | 2907.8 | 2325.3 |
| 30° | 3481.2 | 3469.1 | 3354.8 | 3210.3 | 3067.3 | 3050.7 | 3073.3 | 3199.7 | 3145.6 | 3094.4 | 2456.2 |
| 32.5° | 3863.5 | 3886.0 | 3765.6 | 3589.5 | 3375.8 | 3275.0 | 3250.9 | 3327.7 | 3341.2 | 3308.1 | 2611.3 |
| 35° | 4256.3 | 4280.4 | 4163.0 | 3967.3 | 3713.0 | 3544.4 | 3475.2 | 3485.7 | 3583.5 | 3541.4 | 2773.8 |
| 37.5° | 4608.5 | 4629.5 | 4513.7 | 4313.5 | 4059.1 | 3852.9 | 3753.6 | 3672.3 | 3818.3 | 3780.7 | 2945.4 |
| 40° | 4876.4 | 4879.4 | 4801.1 | 4622.0 | 4381.2 | 4167.5 | 4054.6 | 3895.1 | 4066.7 | 4041.1 | 3124.5 |
| 42.5° | 5066.0 | 5072.0 | 5014.8 | 4861.3 | 4638.6 | 4439.9 | 4348.1 | 4158.5 | 4352.6 | 4330.0 | 3332.2 |
| 45° | 5154.8 | 5165.3 | 5159.3 | 5017.8 | 4832.7 | 4661.1 | 4631.0 | 4438.4 | 4665.7 | 4644.6 | 3571.5 |
| 47.5° | 5070.5 | 5070.5 | 5147.3 | 5127.7 | 4957.6 | 4843.3 | 4877.9 | 4730.4 | 5005.8 | 4986.2 | 3815.3 |
| 50° | 4719.8 | 4724.4 | 4880.9 | 5105.1 | 5005.8 | 4980.2 | 5088.6 | 5016.3 | 5314.3 | 5326.4 | 4107.3 |
| 52.5° | 3798.8 | 3791.2 | 4319.5 | 4749.9 | 4972.7 | 5041.9 | 5282.7 | 5308.3 | 5684.6 | 5720.7 | 4397.8 |
| 55° | 2838.5 | 2834.0 | 3339.7 | 4120.8 | 4740.9 | 5010.3 | 5391.1 | 5568.7 | 6000.6 | 6023.2 | 4614.5 |
| 57.5° | 2247.0 | 2235.0 | 2513.4 | 3321.7 | 4217.2 | 4868.8 | 5395.6 | 5618.4 | 6176.7 | 6215.9 | 4825.2 |
| 60° | 1727.8 | 1717.3 | 1925.0 | 2471.3 | 3475.2 | 4492.6 | 5266.2 | 5621.4 | 6346.8 | 6416.0 | 5108.1 |
| 62.5° | 1235.6 | 1247.7 | 1407.2 | 1773.0 | 2673.0 | 3961.3 | 5097.6 | 5663.5 | 6649.3 | 6727.6 | 5510.0 |
| 65° | 833.8 | 827.8 | 960.2 | 1207.1 | 1900.9 | 3246.4 | 4838.7 | 5752.3 | 7194.2 | 7331.1 | 5991.6 |
| 67.5° | 579.4 | 584.0 | 644.2 | 785.6 | 1207.1 | 2492.4 | 4408.3 | 5802.0 | 7757.0 | 7863.9 | 6328.7 |
| 70° | 418.4 | 424.4 | 457.5 | 528.3 | 737.5 | 1690.2 | 3726.5 | 5574.7 | 7909.0 | 8002.4 | 6094.0 |
| 72.5° | 275.4 | 287.5 | 337.1 | 374.8 | 471.1 | 1058.1 | 2745.2 | 4802.6 | 7254.4 | 7323.6 | 5112.7 |
| 75° | 149.0 | 152.0 | 216.7 | 279.9 | 335.6 | 659.2 | 1637.5 | 3238.9 | 5427.2 | 5404.6 | 3371.3 |
| 77.5° | 115.9 | 120.4 | 133.9 | 200.2 | 225.8 | 362.7 | 647.2 | 1462.9 | 2570.6 | 2501.4 | 1149.9 |
| 80° | 70.7 | 73.7 | 93.3 | 118.9 | 158.0 | 210.7 | 189.6 | 397.3 | 522.3 | 489.1 | 168.6 |
| 82.5° | 42.1 | 45.2 | 55.7 | 99.3 | 124.9 | 99.3 | 66.2 | 96.3 | 97.8 | 96.3 | 42.1 |
| 85° | 7.5 | 7.5 | 39.1 | 69.2 | 66.2 | 28.6 | 39.1 | 31.6 | 28.6 | 30.1 | 9.0 |
| 87.5° | 0.0 | 0.0 | 15.1 | 21.1 | 30.1 | 10.5 | 15.1 | 7.5 | 7.5 | 7.5 | 4.5 |
| 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° | 1210.1 | 1210.1 | 1210.1 | 1210.1 | 1210.1 | 1210.1 | 1210.1 | 1210.1 | 1210.1 | 1210.1 | 1210.1 |
| 2.5° | 1220.6 | 1169.4 | 1064.1 | 972.3 | 880.5 | 812.7 | 761.6 | 708.9 | 690.8 | 668.2 | 656.2 |
| 5° | 1241.7 | 1140.8 | 931.6 | 764.6 | 623.1 | 514.7 | 445.5 | 403.4 | 376.3 | 356.7 | 352.2 |
| 7.5° | 1273.3 | 1118.3 | 824.8 | 599.0 | 444.0 | 335.6 | 278.4 | 249.8 | 234.8 | 225.8 | 222.7 |
| 10° | 1310.9 | 1098.7 | 719.4 | 466.6 | 313.1 | 236.3 | 204.7 | 192.6 | 186.6 | 183.6 | 182.1 |
| 12.5° | 1363.6 | 1091.2 | 630.6 | 359.7 | 236.3 | 194.2 | 177.6 | 170.1 | 165.6 | 161.0 | 159.5 |
| 15° | 1432.8 | 1094.2 | 549.3 | 278.4 | 195.7 | 173.1 | 159.5 | 152.0 | 146.0 | 141.5 | 141.5 |
| 17.5° | 1505.1 | 1098.7 | 469.6 | 225.8 | 177.6 | 158.0 | 143.0 | 132.4 | 127.9 | 123.4 | 121.9 |
| 20° | 1572.8 | 1097.2 | 392.8 | 192.6 | 161.0 | 141.5 | 126.4 | 115.9 | 108.4 | 103.8 | 103.8 |
| 22.5° | 1637.5 | 1088.2 | 320.6 | 173.1 | 147.5 | 124.9 | 108.4 | 97.8 | 91.8 | 87.3 | 87.3 |
| 25° | 1706.7 | 1070.1 | 261.9 | 158.0 | 130.9 | 109.9 | 93.3 | 82.8 | 78.3 | 73.7 | 73.7 |
| 27.5° | 1760.9 | 1040.0 | 213.7 | 144.5 | 115.9 | 94.8 | 79.8 | 70.7 | 66.2 | 63.2 | 63.2 |
| 30° | 1819.6 | 996.3 | 177.6 | 129.4 | 100.8 | 81.3 | 67.7 | 60.2 | 55.7 | 54.2 | 54.2 |
| 32.5° | 1884.3 | 948.2 | 152.0 | 114.4 | 85.8 | 69.2 | 57.2 | 52.7 | 48.2 | 46.7 | 46.7 |
| 35° | 1959.6 | 906.0 | 137.0 | 99.3 | 75.3 | 58.7 | 49.7 | 45.2 | 42.1 | 42.1 | 42.1 |
| 37.5° | 2045.4 | 862.4 | 123.4 | 87.3 | 64.7 | 49.7 | 42.1 | 40.6 | 39.1 | 37.6 | 37.6 |
| 40° | 2138.7 | 815.7 | 111.4 | 76.8 | 55.7 | 42.1 | 36.1 | 36.1 | 34.6 | 34.6 | 34.6 |
| 42.5° | 2244.0 | 775.1 | 100.8 | 67.7 | 48.2 | 36.1 | 31.6 | 31.6 | 30.1 | 30.1 | 30.1 |
| 45° | 2358.4 | 737.5 | 91.8 | 60.2 | 42.1 | 31.6 | 28.6 | 27.1 | 25.6 | 25.6 | 25.6 |
| 47.5° | 2493.9 | 716.4 | 84.3 | 52.7 | 36.1 | 27.1 | 24.1 | 22.6 | 21.1 | 19.6 | 19.6 |
| 50° | 2667.0 | 725.4 | 76.8 | 43.6 | 31.6 | 22.6 | 19.6 | 18.1 | 16.6 | 15.1 | 15.1 |
| 52.5° | 2803.9 | 720.9 | 66.2 | 37.6 | 25.6 | 18.1 | 15.1 | 13.5 | 12.0 | 10.5 | 10.5 |
| 55° | 2903.2 | 702.9 | 57.2 | 31.6 | 19.6 | 15.1 | 12.0 | 9.0 | 7.5 | 7.5 | 7.5 |
| 57.5° | 3001.1 | 684.8 | 48.2 | 25.6 | 15.1 | 10.5 | 7.5 | 6.0 | 6.0 | 6.0 | 6.0 |
| 60° | 3153.1 | 659.2 | 42.1 | 21.1 | 12.0 | 7.5 | 4.5 | 4.5 | 3.0 | 3.0 | 3.0 |
| 62.5° | 3338.2 | 627.6 | 34.6 | 18.1 | 9.0 | 6.0 | 3.0 | 3.0 | 0.0 | 0.0 | 0.0 |
| 65° | 3541.4 | 571.9 | 28.6 | 13.5 | 7.5 | 4.5 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 3494.7 | 459.0 | 24.1 | 9.0 | 6.0 | 3.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 3091.4 | 310.0 | 19.6 | 7.5 | 4.5 | 3.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 2421.6 | 183.6 | 13.5 | 6.0 | 3.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 1550.2 | 91.8 | 9.0 | 4.5 | 3.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 519.2 | 45.2 | 6.0 | 3.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 73.7 | 15.1 | 3.0 | 1.5 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 16.6 | 6.0 | 1.5 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 6.0 | 3.0 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 3.0 | 1.5 | 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)