

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: P397995

Luminaire Tested: **ARCH-S-PA1-70-750-U-T2R-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P397995
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-PA1-70-750-U-T2R-HSS
Description: ARCHEON ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 930mA 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: 7804 lumens
Efficiency: N/A
Efficacy: 105.5 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

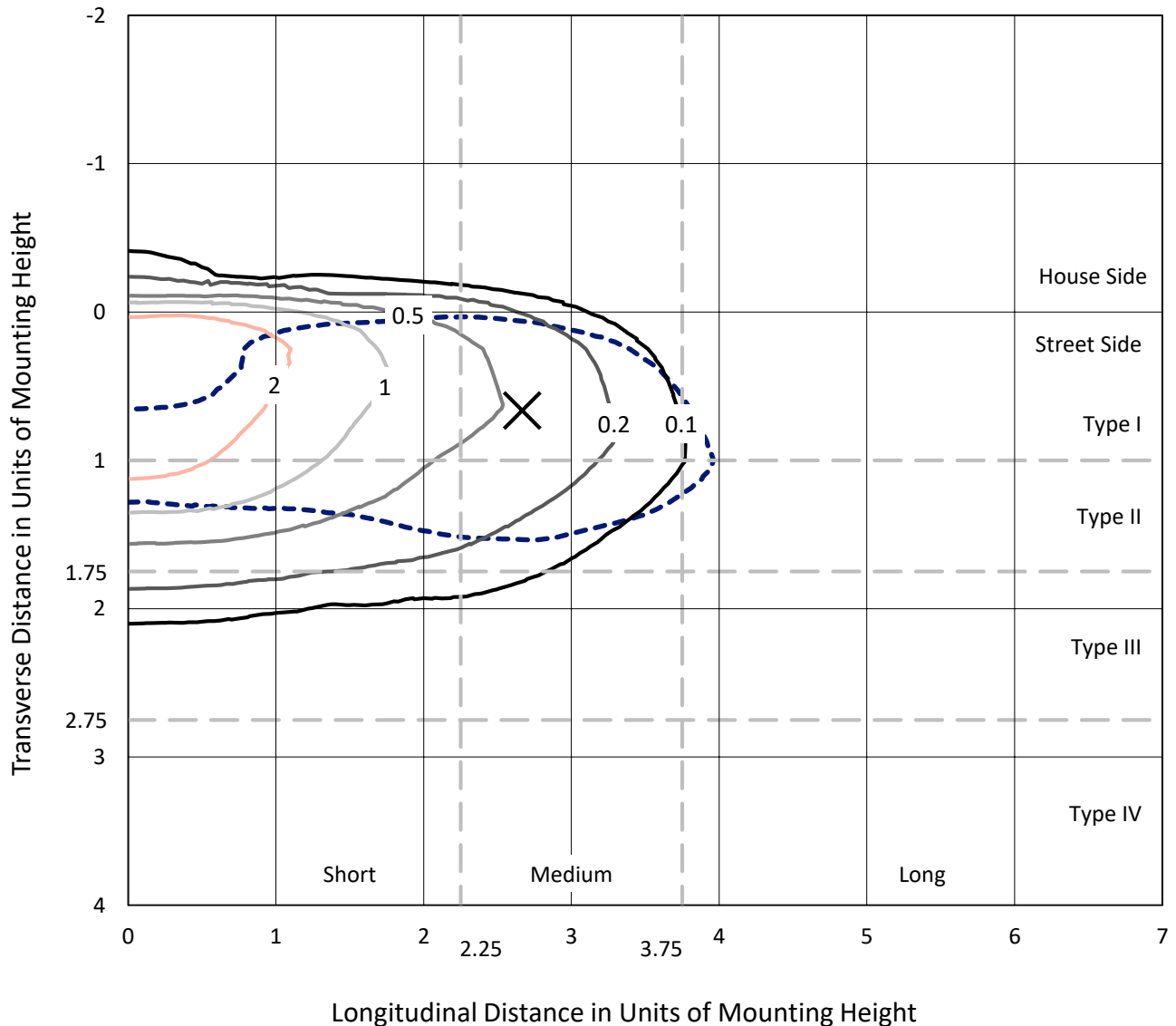
Input Watts (W): 74
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

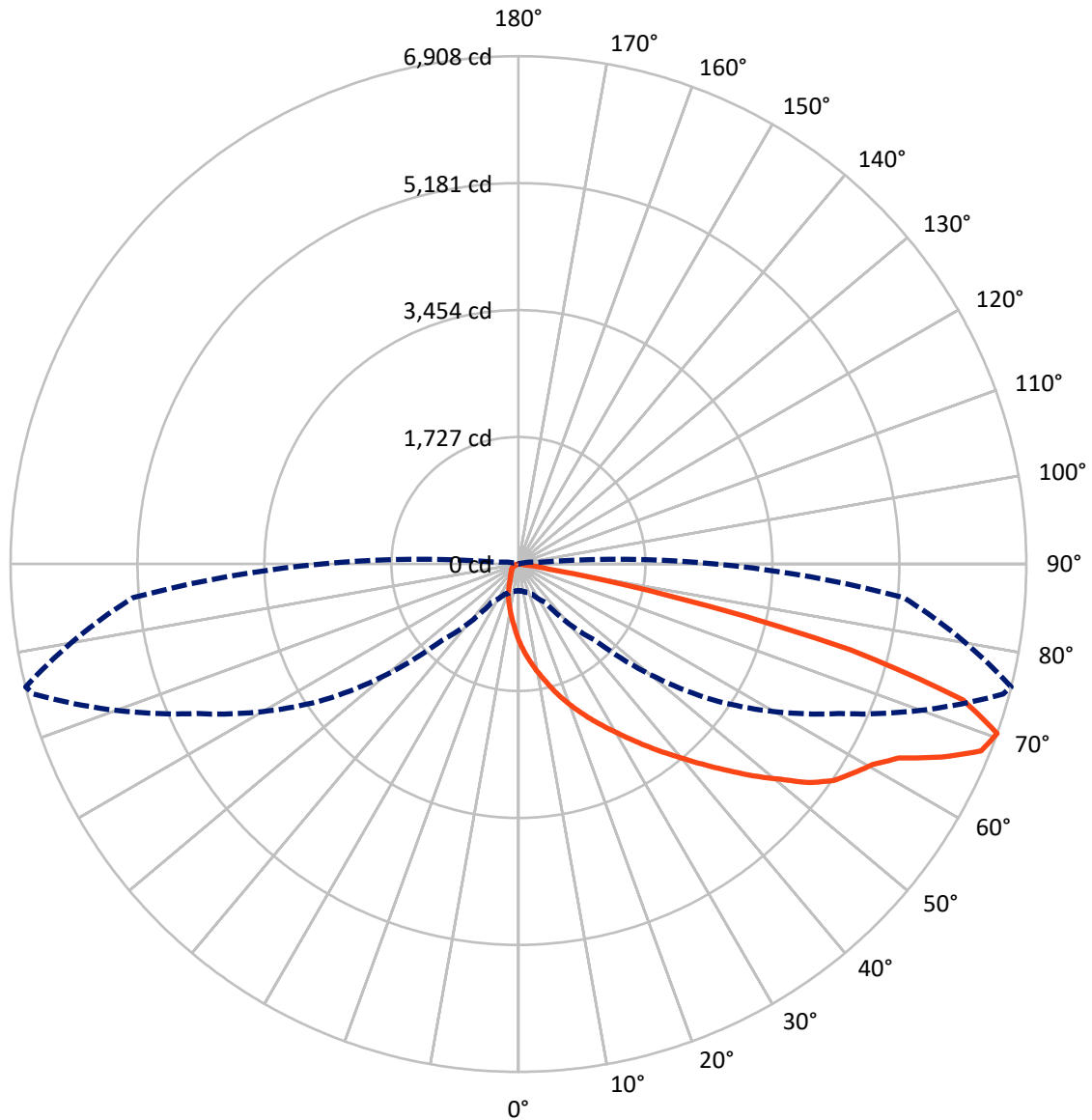
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.2 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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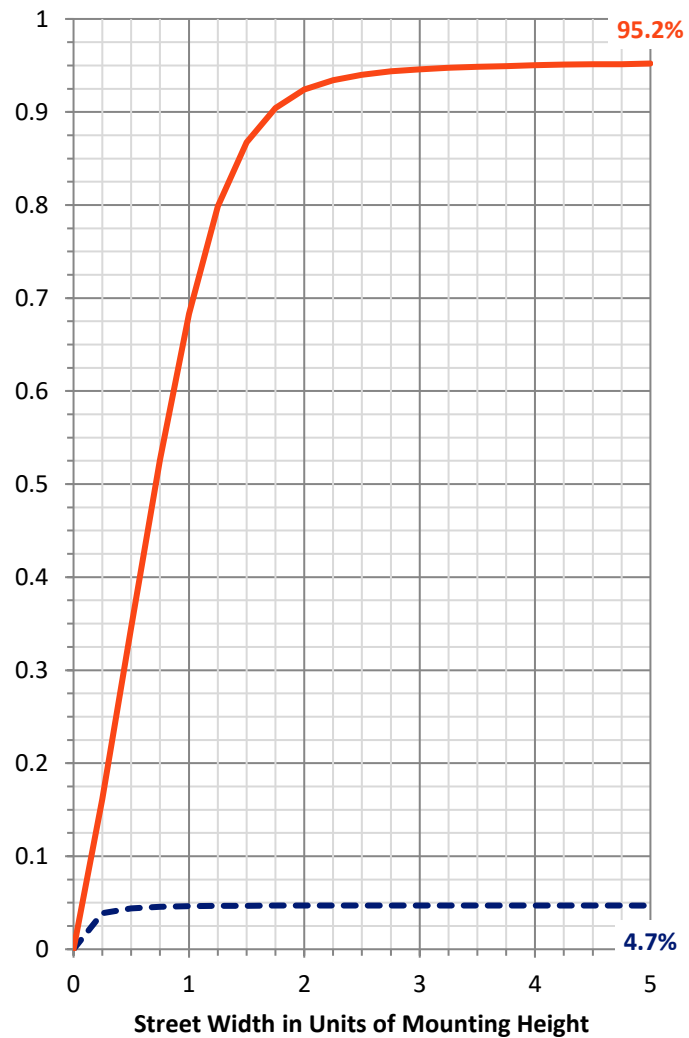
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 368.1 | 0.0 | 368.1 |
| | % Fixture | 4.7 | 0.0 | 4.7 |
| Street Side | Lumens | 7435.9 | 0.0 | 7435.9 |
| | % Fixture | 95.3 | 0.0 | 95.3 |
| Total | Lumens | 7804.0 | 0.0 | 7804.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 98.4 | 1.3 |
| 10°-20° | 317.6 | 4.1 |
| 20°-30° | 591.5 | 7.6 |
| 30°-40° | 1046.3 | 13.4 |
| 40°-50° | 1600.0 | 20.5 |
| 50°-60° | 1814.0 | 23.2 |
| 60°-70° | 1555.1 | 19.9 |
| 70°-80° | 753.2 | 9.7 |
| 80°-90° | 27.9 | 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° | 7804.0 | 100.0 |
| 0°-180° | 7804.0 | 100.0 |



--- HS — SS

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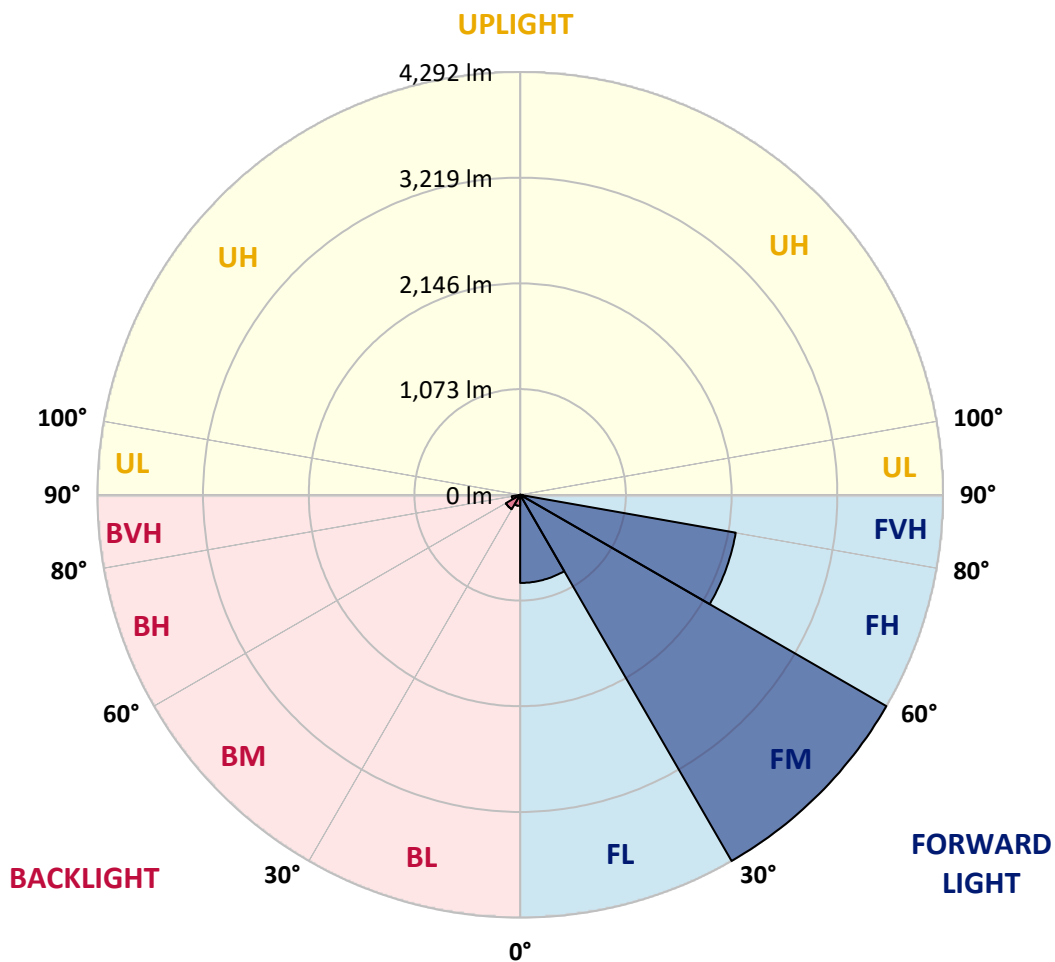
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 894.6 | 11.5 | | | |
| FM | (30°-60°) | 4292.3 | 55.0 | | | |
| FH | (60°-80°) | 2221.6 | 28.5 | | | G2/5000 |
| FVH | (80°-90°) | 27.5 | 0.4 | | | G1/100 |
| BL | (0°-30°) | 112.9 | 1.4 | B1/500 | | |
| BM | (30°-60°) | 168.0 | 2.2 | B0/220 | | |
| BH | (60°-80°) | 86.7 | 1.1 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 0.5 | 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° | 1044.6 | 1044.6 | 1044.6 | 1044.6 | 1044.6 | 1044.6 | 1044.6 | 1044.6 | 1044.6 | 1044.6 | 1044.6 |
| 2.5° | 1427.9 | 1420.1 | 1412.3 | 1382.4 | 1355.1 | 1330.5 | 1283.7 | 1222.6 | 1168.0 | 1156.4 | 1092.7 |
| 5° | 1677.4 | 1668.3 | 1656.6 | 1626.7 | 1591.6 | 1550.0 | 1481.2 | 1387.6 | 1291.5 | 1270.7 | 1152.5 |
| 7.5° | 1846.3 | 1838.5 | 1821.6 | 1807.3 | 1772.2 | 1731.9 | 1655.3 | 1546.1 | 1413.6 | 1387.6 | 1221.3 |
| 10° | 1961.9 | 1956.7 | 1954.1 | 1942.4 | 1916.4 | 1883.9 | 1807.3 | 1693.0 | 1537.0 | 1507.2 | 1294.1 |
| 12.5° | 2003.5 | 2003.5 | 2016.5 | 2036.0 | 2039.9 | 2029.5 | 1959.3 | 1845.0 | 1667.0 | 1635.8 | 1379.8 |
| 15° | 1947.6 | 1954.1 | 1982.7 | 2045.1 | 2110.0 | 2152.9 | 2108.7 | 2002.2 | 1809.9 | 1776.1 | 1481.2 |
| 17.5° | 1932.0 | 1938.5 | 1958.0 | 2012.6 | 2099.6 | 2214.0 | 2236.0 | 2154.2 | 1945.0 | 1916.4 | 1585.1 |
| 20° | 1976.2 | 1982.7 | 1999.6 | 2046.4 | 2112.6 | 2228.3 | 2320.5 | 2301.0 | 2087.9 | 2058.0 | 1690.4 |
| 22.5° | 2081.4 | 2085.3 | 2085.3 | 2121.7 | 2180.2 | 2265.9 | 2373.8 | 2440.0 | 2234.7 | 2202.3 | 1794.3 |
| 25° | 2307.5 | 2299.7 | 2268.5 | 2250.3 | 2288.0 | 2358.2 | 2441.3 | 2562.2 | 2398.5 | 2354.3 | 1906.0 |
| 27.5° | 2603.7 | 2629.7 | 2554.4 | 2467.3 | 2438.7 | 2479.0 | 2536.2 | 2670.0 | 2557.0 | 2510.2 | 2007.4 |
| 30° | 3005.2 | 2994.8 | 2896.1 | 2771.3 | 2647.9 | 2633.6 | 2653.1 | 2762.3 | 2715.5 | 2671.3 | 2120.4 |
| 32.5° | 3335.2 | 3354.7 | 3250.8 | 3098.8 | 2914.3 | 2827.2 | 2806.4 | 2872.7 | 2884.4 | 2855.8 | 2254.2 |
| 35° | 3674.3 | 3695.1 | 3593.8 | 3424.9 | 3205.3 | 3059.8 | 3000.0 | 3009.1 | 3093.6 | 3057.2 | 2394.6 |
| 37.5° | 3978.4 | 3996.6 | 3896.5 | 3723.7 | 3504.1 | 3326.1 | 3240.4 | 3170.2 | 3296.3 | 3263.8 | 2542.7 |
| 40° | 4209.6 | 4212.2 | 4144.7 | 3990.1 | 3782.2 | 3597.7 | 3500.2 | 3362.5 | 3510.6 | 3488.5 | 2697.3 |
| 42.5° | 4373.4 | 4378.6 | 4329.2 | 4196.7 | 4004.4 | 3832.9 | 3753.6 | 3589.9 | 3757.5 | 3738.0 | 2876.6 |
| 45° | 4450.0 | 4459.1 | 4453.9 | 4331.8 | 4172.0 | 4023.8 | 3997.9 | 3831.6 | 4027.7 | 4009.6 | 3083.2 |
| 47.5° | 4377.3 | 4377.3 | 4443.5 | 4426.6 | 4279.8 | 4181.1 | 4210.9 | 4083.6 | 4321.4 | 4304.5 | 3293.7 |
| 50° | 4074.5 | 4078.4 | 4213.5 | 4407.1 | 4321.4 | 4299.3 | 4392.8 | 4330.5 | 4587.7 | 4598.1 | 3545.7 |
| 52.5° | 3279.4 | 3272.9 | 3728.9 | 4100.5 | 4292.8 | 4352.6 | 4560.4 | 4582.5 | 4907.4 | 4938.5 | 3796.5 |
| 55° | 2450.4 | 2446.5 | 2883.1 | 3557.4 | 4092.7 | 4325.3 | 4654.0 | 4807.3 | 5180.2 | 5199.7 | 3983.6 |
| 57.5° | 1939.8 | 1929.4 | 2169.8 | 2867.5 | 3640.6 | 4203.1 | 4657.9 | 4850.2 | 5332.2 | 5366.0 | 4165.5 |
| 60° | 1491.6 | 1482.5 | 1661.8 | 2133.4 | 3000.0 | 3878.3 | 4546.2 | 4852.8 | 5479.0 | 5538.8 | 4409.7 |
| 62.5° | 1066.7 | 1077.1 | 1214.8 | 1530.5 | 2307.5 | 3419.7 | 4400.6 | 4889.2 | 5740.2 | 5807.8 | 4756.6 |
| 65° | 719.8 | 714.6 | 828.9 | 1042.0 | 1641.0 | 2802.5 | 4177.2 | 4965.8 | 6210.5 | 6328.8 | 5172.4 |
| 67.5° | 500.2 | 504.1 | 556.1 | 678.2 | 1042.0 | 2151.6 | 3805.6 | 5008.7 | 6696.5 | 6788.7 | 5463.4 |
| 70° | 361.2 | 366.4 | 395.0 | 456.0 | 636.6 | 1459.1 | 3217.0 | 4812.5 | 6827.7 | 6908.2 | 5260.8 |
| 72.5° | 237.8 | 248.2 | 291.0 | 323.5 | 406.7 | 913.4 | 2369.9 | 4146.0 | 6262.5 | 6322.3 | 4413.6 |
| 75° | 128.6 | 131.2 | 187.1 | 241.7 | 289.7 | 569.1 | 1413.6 | 2796.0 | 4685.2 | 4665.7 | 2910.4 |
| 77.5° | 100.0 | 103.9 | 115.6 | 172.8 | 194.9 | 313.1 | 558.7 | 1262.9 | 2219.2 | 2159.4 | 992.6 |
| 80° | 61.1 | 63.7 | 80.6 | 102.6 | 136.4 | 181.9 | 163.7 | 343.0 | 450.8 | 422.3 | 145.5 |
| 82.5° | 36.4 | 39.0 | 48.1 | 85.8 | 107.8 | 85.8 | 57.2 | 83.2 | 84.5 | 83.2 | 36.4 |
| 85° | 6.5 | 6.5 | 33.8 | 59.8 | 57.2 | 24.7 | 33.8 | 27.3 | 24.7 | 26.0 | 7.8 |
| 87.5° | 0.0 | 0.0 | 13.0 | 18.2 | 26.0 | 9.1 | 13.0 | 6.5 | 6.5 | 6.5 | 3.9 |
| 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° | 1044.6 | 1044.6 | 1044.6 | 1044.6 | 1044.6 | 1044.6 | 1044.6 | 1044.6 | 1044.6 | 1044.6 | 1044.6 |
| 2.5° | 1053.7 | 1009.5 | 918.6 | 839.3 | 760.1 | 701.6 | 657.4 | 612.0 | 596.4 | 576.9 | 566.5 |
| 5° | 1071.9 | 984.8 | 804.3 | 660.0 | 537.9 | 444.4 | 384.6 | 348.2 | 324.8 | 307.9 | 304.0 |
| 7.5° | 1099.2 | 965.4 | 712.0 | 517.1 | 383.3 | 289.7 | 240.4 | 215.7 | 202.7 | 194.9 | 192.3 |
| 10° | 1131.7 | 948.5 | 621.1 | 402.8 | 270.2 | 204.0 | 176.7 | 166.3 | 161.1 | 158.5 | 157.2 |
| 12.5° | 1177.1 | 942.0 | 544.4 | 310.5 | 204.0 | 167.6 | 153.3 | 146.8 | 142.9 | 139.0 | 137.7 |
| 15° | 1236.9 | 944.6 | 474.2 | 240.4 | 168.9 | 149.4 | 137.7 | 131.2 | 126.0 | 122.1 | 122.1 |
| 17.5° | 1299.3 | 948.5 | 405.4 | 194.9 | 153.3 | 136.4 | 123.4 | 114.3 | 110.4 | 106.5 | 105.2 |
| 20° | 1357.7 | 947.2 | 339.1 | 166.3 | 139.0 | 122.1 | 109.1 | 100.0 | 93.5 | 89.6 | 89.6 |
| 22.5° | 1413.6 | 939.4 | 276.7 | 149.4 | 127.3 | 107.8 | 93.5 | 84.5 | 79.3 | 75.4 | 75.4 |
| 25° | 1473.4 | 923.8 | 226.1 | 136.4 | 113.0 | 94.8 | 80.6 | 71.5 | 67.6 | 63.7 | 63.7 |
| 27.5° | 1520.1 | 897.8 | 184.5 | 124.7 | 100.0 | 81.9 | 68.9 | 61.1 | 57.2 | 54.6 | 54.6 |
| 30° | 1570.8 | 860.1 | 153.3 | 111.7 | 87.1 | 70.2 | 58.5 | 52.0 | 48.1 | 46.8 | 46.8 |
| 32.5° | 1626.7 | 818.5 | 131.2 | 98.7 | 74.1 | 59.8 | 49.4 | 45.5 | 41.6 | 40.3 | 40.3 |
| 35° | 1691.7 | 782.2 | 118.2 | 85.8 | 65.0 | 50.7 | 42.9 | 39.0 | 36.4 | 36.4 | 36.4 |
| 37.5° | 1765.7 | 744.5 | 106.5 | 75.4 | 55.9 | 42.9 | 36.4 | 35.1 | 33.8 | 32.5 | 32.5 |
| 40° | 1846.3 | 704.2 | 96.1 | 66.3 | 48.1 | 36.4 | 31.2 | 31.2 | 29.9 | 29.9 | 29.9 |
| 42.5° | 1937.2 | 669.1 | 87.1 | 58.5 | 41.6 | 31.2 | 27.3 | 27.3 | 26.0 | 26.0 | 26.0 |
| 45° | 2036.0 | 636.6 | 79.3 | 52.0 | 36.4 | 27.3 | 24.7 | 23.4 | 22.1 | 22.1 | 22.1 |
| 47.5° | 2152.9 | 618.5 | 72.8 | 45.5 | 31.2 | 23.4 | 20.8 | 19.5 | 18.2 | 16.9 | 16.9 |
| 50° | 2302.3 | 626.2 | 66.3 | 37.7 | 27.3 | 19.5 | 16.9 | 15.6 | 14.3 | 13.0 | 13.0 |
| 52.5° | 2420.5 | 622.4 | 57.2 | 32.5 | 22.1 | 15.6 | 13.0 | 11.7 | 10.4 | 9.1 | 9.1 |
| 55° | 2506.3 | 606.8 | 49.4 | 27.3 | 16.9 | 13.0 | 10.4 | 7.8 | 6.5 | 6.5 | 6.5 |
| 57.5° | 2590.8 | 591.2 | 41.6 | 22.1 | 13.0 | 9.1 | 6.5 | 5.2 | 5.2 | 5.2 | 5.2 |
| 60° | 2722.0 | 569.1 | 36.4 | 18.2 | 10.4 | 6.5 | 3.9 | 3.9 | 2.6 | 2.6 | 2.6 |
| 62.5° | 2881.8 | 541.8 | 29.9 | 15.6 | 7.8 | 5.2 | 2.6 | 2.6 | 0.0 | 0.0 | 0.0 |
| 65° | 3057.2 | 493.7 | 24.7 | 11.7 | 6.5 | 3.9 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 3016.9 | 396.3 | 20.8 | 7.8 | 5.2 | 2.6 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 2668.7 | 267.7 | 16.9 | 6.5 | 3.9 | 2.6 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 2090.5 | 158.5 | 11.7 | 5.2 | 2.6 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 1338.3 | 79.3 | 7.8 | 3.9 | 2.6 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 448.2 | 39.0 | 5.2 | 2.6 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 63.7 | 13.0 | 2.6 | 1.3 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 14.3 | 5.2 | 1.3 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 5.2 | 2.6 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 2.6 | 1.3 | 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)