

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: P236986

Luminaire Tested: **ARCH-L-AF72-130-D-U-T2R-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P236986
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29623)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-130-D-U-T2R-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 575mA LIGHT ENGINES 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: 14188 lumens
Efficiency: N/A
Efficacy: 106.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

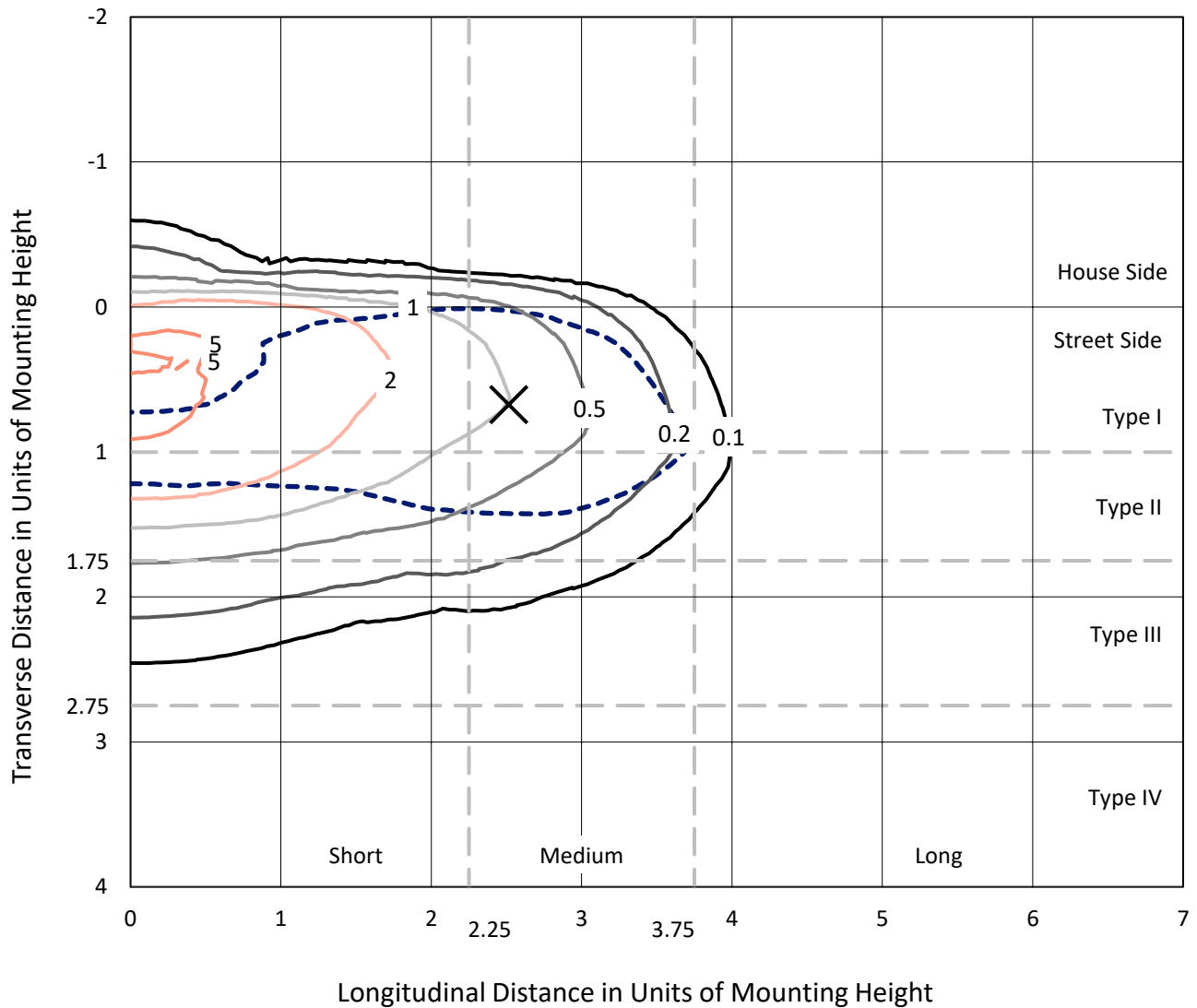
Input Watts (W): 133
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

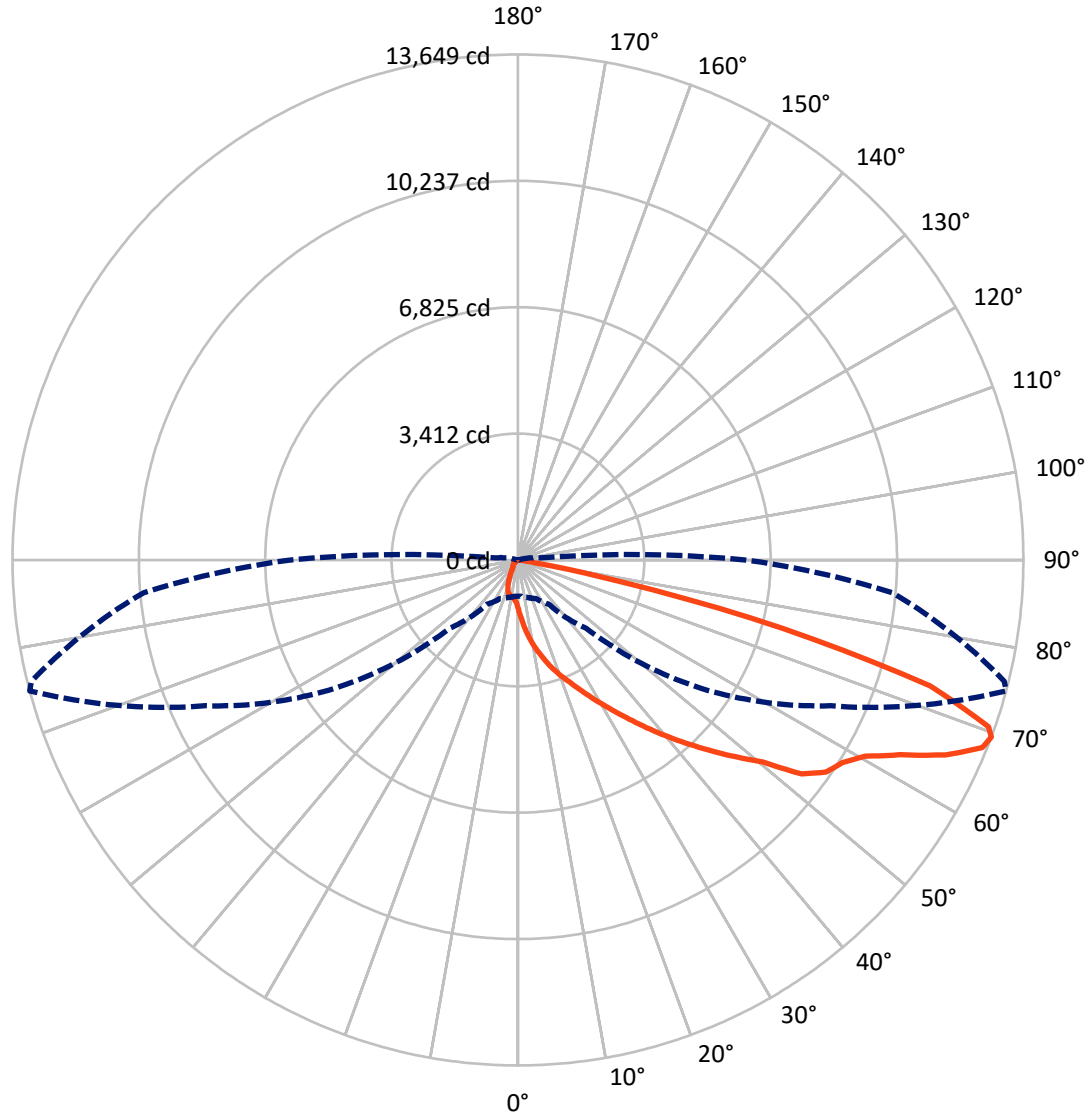
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.8 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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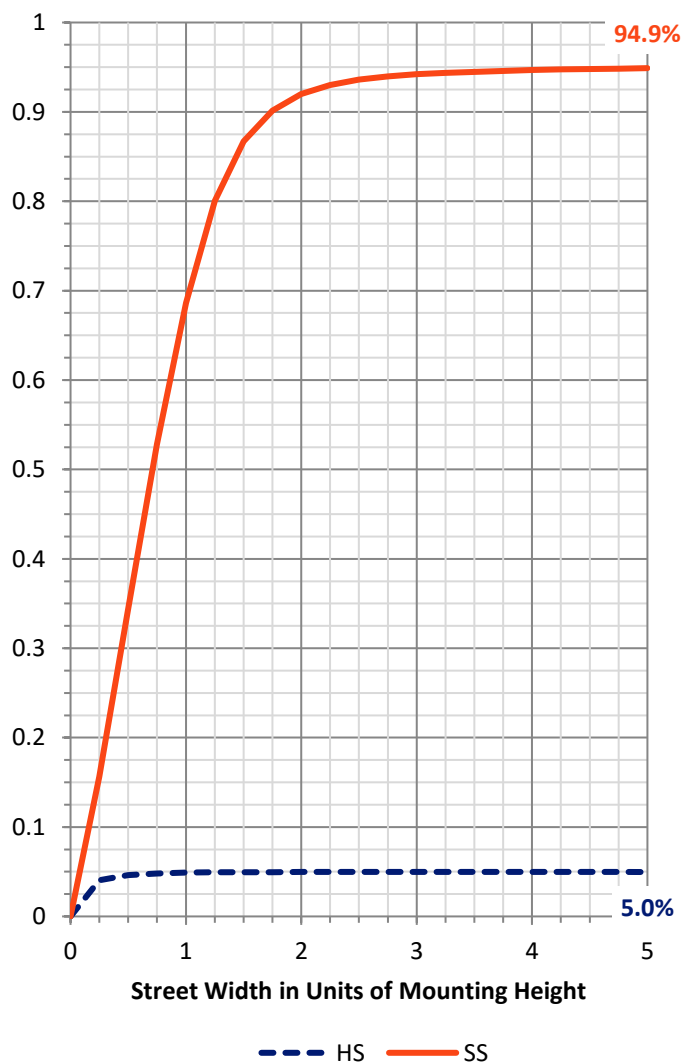
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 707.9 | 0.0 | 707.9 |
| | % Fixture | 5.0 | 0.0 | 5.0 |
| Street Side | Lumens | 13480.1 | 0.0 | 13480.1 |
| | % Fixture | 95.0 | 0.0 | 95.0 |
| Total | Lumens | 14188.0 | 0.0 | 14188.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 153.9 | 1.1 |
| 10°-20° | 550.4 | 3.9 |
| 20°-30° | 1050.7 | 7.4 |
| 30°-40° | 1884.7 | 13.3 |
| 40°-50° | 2887.5 | 20.4 |
| 50°-60° | 3356.0 | 23.7 |
| 60°-70° | 2971.8 | 20.9 |
| 70°-80° | 1281.8 | 9.0 |
| 80°-90° | 51.4 | 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° | 14188.0 | 100.0 |
| 0°-180° | 14188.0 | 100.0 |

Coefficient of Utilization



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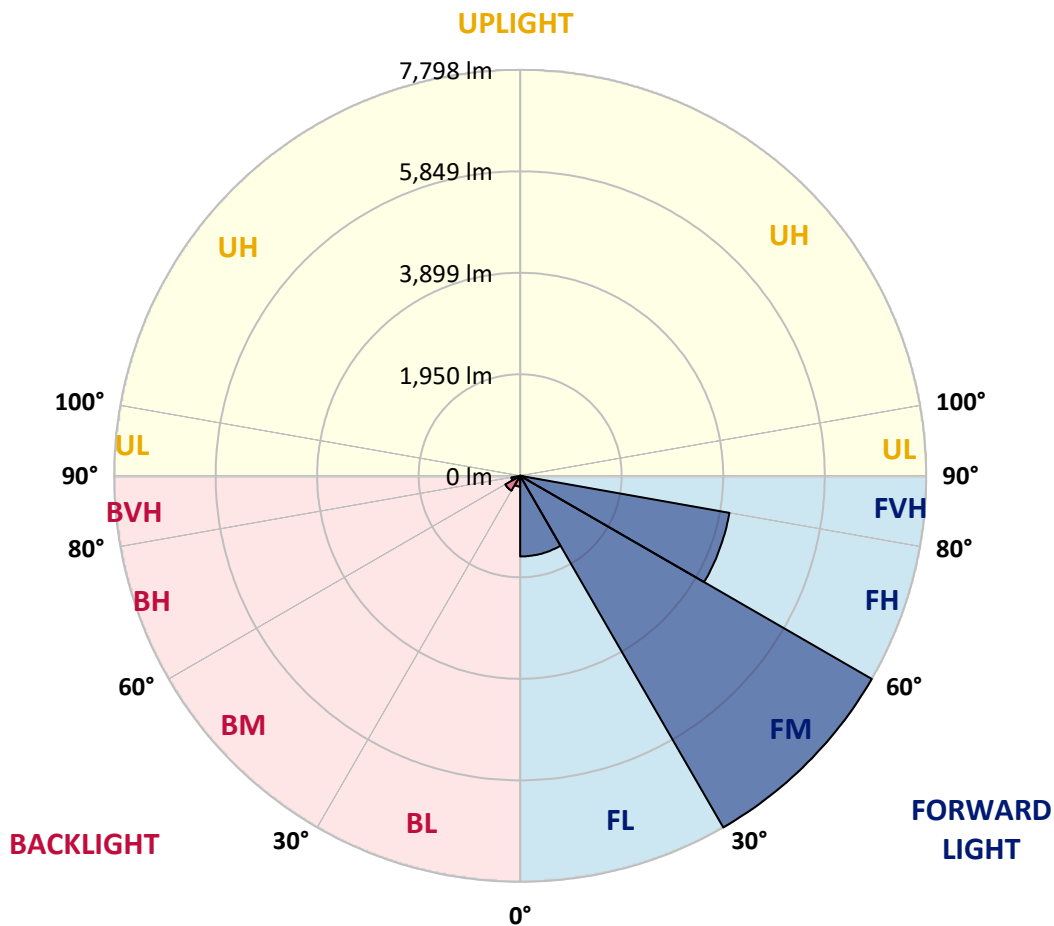
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1549.4 | 10.9 | | | |
| FM (30°-60°) | 7798.1 | 55.0 | | | |
| FH (60°-80°) | 4082.1 | 28.8 | | | G2/5000 |
| FVH (80°-90°) | 50.6 | 0.4 | | | G1/100 |
| BL (0°-30°) | 205.6 | 1.4 | B1/500 | | |
| BM (30°-60°) | 330.0 | 2.3 | B1/1000 | | |
| BH (60°-80°) | 171.5 | 1.2 | B1/500 | | G1/500 |
| BVH (80°-90°) | 0.7 | 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° | 1320.2 | 1320.2 | 1320.2 | 1320.2 | 1320.2 | 1320.2 | 1320.2 | 1320.2 | 1320.2 | 1320.2 | 1320.2 |
| 2.5° | 2174.8 | 2153.3 | 2131.9 | 2107.4 | 2052.3 | 1957.3 | 1837.8 | 1709.2 | 1549.9 | 1522.4 | 1393.7 |
| 5° | 2640.4 | 2631.2 | 2609.7 | 2576.1 | 2514.8 | 2410.6 | 2275.9 | 2086.0 | 1819.5 | 1773.5 | 1500.9 |
| 7.5° | 2968.1 | 2962.0 | 2943.6 | 2903.8 | 2848.7 | 2744.5 | 2603.6 | 2398.4 | 2089.0 | 2036.9 | 1635.7 |
| 10° | 3262.2 | 3259.1 | 3243.8 | 3207.0 | 3151.9 | 3038.6 | 2888.5 | 2674.1 | 2346.3 | 2288.1 | 1791.9 |
| 12.5° | 3528.7 | 3531.7 | 3525.6 | 3507.2 | 3467.4 | 3360.2 | 3188.7 | 2955.9 | 2594.4 | 2530.1 | 1978.8 |
| 15° | 3684.9 | 3694.1 | 3718.6 | 3755.3 | 3767.6 | 3681.8 | 3504.2 | 3246.9 | 2848.7 | 2793.5 | 2193.2 |
| 17.5° | 3632.8 | 3642.0 | 3718.6 | 3844.2 | 3963.6 | 3975.9 | 3816.6 | 3522.5 | 3099.8 | 3044.7 | 2404.5 |
| 20° | 3507.2 | 3519.5 | 3599.1 | 3770.7 | 4003.4 | 4165.8 | 4101.5 | 3822.7 | 3338.8 | 3271.4 | 2606.7 |
| 22.5° | 3648.1 | 3648.1 | 3672.6 | 3776.8 | 3988.1 | 4242.4 | 4328.1 | 4122.9 | 3583.8 | 3501.1 | 2808.8 |
| 25° | 4132.1 | 4122.9 | 4070.8 | 4028.0 | 4095.3 | 4322.0 | 4499.7 | 4429.2 | 3871.7 | 3776.8 | 3023.3 |
| 27.5° | 4744.7 | 4787.6 | 4689.6 | 4533.4 | 4380.2 | 4478.2 | 4652.8 | 4732.5 | 4190.3 | 4092.3 | 3243.8 |
| 30° | 5430.8 | 5449.2 | 5332.8 | 5124.5 | 4855.0 | 4760.0 | 4833.5 | 4992.8 | 4536.4 | 4429.2 | 3473.5 |
| 32.5° | 6049.6 | 6034.3 | 5936.3 | 5718.8 | 5384.9 | 5179.7 | 5066.3 | 5201.1 | 4913.2 | 4790.7 | 3709.4 |
| 35° | 6597.9 | 6610.1 | 6490.7 | 6239.5 | 5911.7 | 5694.3 | 5424.7 | 5437.0 | 5335.9 | 5195.0 | 3982.0 |
| 37.5° | 7091.0 | 7069.6 | 6956.3 | 6705.1 | 6408.0 | 6172.1 | 5887.2 | 5682.0 | 5798.4 | 5651.4 | 4288.3 |
| 40° | 7492.3 | 7470.9 | 7351.4 | 7106.3 | 6827.6 | 6634.6 | 6411.0 | 6009.8 | 6285.4 | 6117.0 | 4616.1 |
| 42.5° | 7810.9 | 7786.4 | 7685.3 | 7449.4 | 7179.9 | 7008.3 | 6901.1 | 6414.1 | 6806.2 | 6637.7 | 4983.6 |
| 45° | 7967.1 | 7945.6 | 7884.4 | 7706.7 | 7470.9 | 7320.8 | 7372.8 | 6879.7 | 7363.6 | 7222.7 | 5388.0 |
| 47.5° | 7783.3 | 7774.1 | 7844.6 | 7813.9 | 7679.1 | 7599.5 | 7780.2 | 7388.2 | 7948.7 | 7810.9 | 5853.5 |
| 50° | 7225.8 | 7241.1 | 7446.4 | 7700.6 | 7764.9 | 7859.9 | 8114.1 | 7924.2 | 8576.6 | 8429.6 | 6389.6 |
| 52.5° | 5850.5 | 5954.6 | 6573.4 | 7186.0 | 7660.8 | 8019.1 | 8506.2 | 8690.0 | 9599.7 | 9455.7 | 7225.8 |
| 55° | 4368.0 | 4410.8 | 5084.7 | 6132.3 | 7241.1 | 8006.9 | 8797.2 | 9140.2 | 10105.1 | 9958.1 | 7446.4 |
| 57.5° | 3464.3 | 3479.7 | 3813.5 | 4882.6 | 6377.3 | 7731.2 | 8950.3 | 9302.6 | 10325.6 | 10203.1 | 7774.1 |
| 60° | 2720.0 | 2738.4 | 2980.4 | 3715.5 | 5161.3 | 6986.9 | 8729.8 | 9443.5 | 10757.5 | 10659.5 | 8346.9 |
| 62.5° | 2116.6 | 2135.0 | 2282.0 | 2713.9 | 3871.7 | 5841.3 | 8285.6 | 9670.1 | 11578.4 | 11532.5 | 9284.2 |
| 65° | 1638.7 | 1644.9 | 1746.0 | 1948.1 | 2735.3 | 4600.7 | 7743.5 | 9881.5 | 12687.3 | 12647.5 | 10043.8 |
| 67.5° | 1209.9 | 1219.1 | 1289.6 | 1415.1 | 1847.0 | 3305.1 | 6855.2 | 9719.2 | 13523.5 | 13407.1 | 10319.5 |
| 69° | 977.1 | 986.3 | 1047.6 | 1148.7 | 1458.0 | 2603.6 | 6043.5 | 9317.9 | 13649.1 | 13538.8 | 10144.9 |
| 70° | 836.2 | 842.3 | 903.6 | 989.4 | 1243.6 | 2211.5 | 5400.2 | 8971.8 | 13483.7 | 13376.5 | 9746.7 |
| 72.5° | 536.0 | 566.7 | 627.9 | 683.1 | 824.0 | 1464.2 | 3645.1 | 7440.2 | 11633.6 | 11449.8 | 7633.2 |
| 75° | 297.1 | 306.3 | 416.6 | 484.0 | 548.3 | 952.6 | 2027.8 | 4640.6 | 7400.4 | 7271.8 | 4083.1 |
| 77.5° | 245.0 | 251.2 | 294.1 | 367.6 | 367.6 | 533.0 | 765.8 | 1828.7 | 2815.0 | 2539.3 | 1105.8 |
| 80° | 171.5 | 177.7 | 223.6 | 242.0 | 263.4 | 300.2 | 248.1 | 401.3 | 435.0 | 385.9 | 165.4 |
| 82.5° | 119.5 | 125.6 | 153.2 | 199.1 | 211.4 | 140.9 | 91.9 | 119.5 | 125.6 | 125.6 | 64.3 |
| 85° | 21.4 | 30.6 | 113.3 | 165.4 | 125.6 | 42.9 | 52.1 | 42.9 | 39.8 | 42.9 | 15.3 |
| 87.5° | 0.0 | 0.0 | 70.5 | 79.6 | 67.4 | 18.4 | 21.4 | 15.3 | 9.2 | 12.3 | 6.1 |
| 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° | 1320.2 | 1320.2 | 1320.2 | 1320.2 | 1320.2 | 1320.2 | 1320.2 | 1320.2 | 1320.2 | 1320.2 | 1320.2 |
| 2.5° | 1329.4 | 1265.1 | 1154.8 | 1075.1 | 1007.8 | 955.7 | 934.2 | 900.5 | 876.0 | 888.3 | 873.0 |
| 5° | 1366.1 | 1252.8 | 1075.1 | 961.8 | 882.2 | 814.8 | 759.6 | 716.8 | 683.1 | 676.9 | 670.8 |
| 7.5° | 1424.3 | 1262.0 | 1029.2 | 888.3 | 768.8 | 664.7 | 578.9 | 514.6 | 465.6 | 465.6 | 447.2 |
| 10° | 1504.0 | 1286.5 | 1001.6 | 814.8 | 637.1 | 496.2 | 410.5 | 349.2 | 324.7 | 321.6 | 315.5 |
| 12.5° | 1614.2 | 1332.4 | 980.2 | 719.8 | 496.2 | 361.4 | 309.4 | 287.9 | 278.7 | 275.7 | 272.6 |
| 15° | 1764.3 | 1399.8 | 955.7 | 603.4 | 376.8 | 297.1 | 275.7 | 257.3 | 248.1 | 245.0 | 242.0 |
| 17.5° | 1908.3 | 1461.1 | 903.6 | 484.0 | 306.3 | 269.6 | 245.0 | 229.7 | 217.5 | 214.4 | 214.4 |
| 20° | 2043.1 | 1513.2 | 814.8 | 376.8 | 275.7 | 242.0 | 217.5 | 199.1 | 186.8 | 183.8 | 183.8 |
| 22.5° | 2184.0 | 1556.0 | 704.5 | 306.3 | 251.2 | 214.4 | 189.9 | 171.5 | 159.3 | 156.2 | 153.2 |
| 25° | 2334.1 | 1586.7 | 578.9 | 272.6 | 226.7 | 189.9 | 162.3 | 147.0 | 137.8 | 134.8 | 131.7 |
| 27.5° | 2496.4 | 1598.9 | 459.5 | 248.1 | 199.1 | 165.4 | 140.9 | 125.6 | 119.5 | 116.4 | 116.4 |
| 30° | 2643.4 | 1586.7 | 355.3 | 220.5 | 174.6 | 144.0 | 122.5 | 110.3 | 104.1 | 101.1 | 101.1 |
| 32.5° | 2796.6 | 1556.0 | 284.9 | 196.0 | 153.2 | 122.5 | 104.1 | 95.0 | 91.9 | 88.8 | 88.8 |
| 35° | 2958.9 | 1516.2 | 245.0 | 174.6 | 131.7 | 107.2 | 91.9 | 85.8 | 82.7 | 79.6 | 79.6 |
| 37.5° | 3148.8 | 1467.2 | 223.6 | 156.2 | 116.4 | 95.0 | 79.6 | 76.6 | 73.5 | 73.5 | 73.5 |
| 40° | 3363.3 | 1406.0 | 208.3 | 140.9 | 104.1 | 82.7 | 70.5 | 67.4 | 64.3 | 64.3 | 64.3 |
| 42.5° | 3589.9 | 1335.5 | 193.0 | 125.6 | 91.9 | 70.5 | 61.3 | 61.3 | 58.2 | 58.2 | 55.1 |
| 45° | 3844.2 | 1265.1 | 177.7 | 110.3 | 79.6 | 61.3 | 52.1 | 49.0 | 49.0 | 45.9 | 45.9 |
| 47.5° | 4144.3 | 1200.7 | 162.3 | 98.0 | 70.5 | 52.1 | 45.9 | 42.9 | 39.8 | 36.8 | 36.8 |
| 50° | 4567.1 | 1194.6 | 144.0 | 85.8 | 64.3 | 42.9 | 36.8 | 33.7 | 30.6 | 27.6 | 27.6 |
| 52.5° | 4986.7 | 1139.5 | 122.5 | 70.5 | 52.1 | 36.8 | 27.6 | 24.5 | 21.4 | 21.4 | 18.4 |
| 55° | 5081.7 | 1047.6 | 107.2 | 61.3 | 39.8 | 27.6 | 21.4 | 15.3 | 15.3 | 12.3 | 12.3 |
| 57.5° | 5289.9 | 1004.7 | 91.9 | 49.0 | 30.6 | 21.4 | 12.3 | 9.2 | 9.2 | 9.2 | 9.2 |
| 60° | 5700.4 | 992.4 | 79.6 | 42.9 | 21.4 | 15.3 | 9.2 | 6.1 | 6.1 | 3.1 | 3.1 |
| 62.5° | 6267.1 | 980.2 | 67.4 | 36.8 | 15.3 | 9.2 | 6.1 | 3.1 | 0.0 | 0.0 | 0.0 |
| 65° | 6579.5 | 897.5 | 55.1 | 27.6 | 12.3 | 9.2 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 6496.8 | 741.3 | 49.0 | 18.4 | 9.2 | 6.1 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 69° | 6150.7 | 624.9 | 39.8 | 15.3 | 9.2 | 6.1 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 5734.1 | 539.1 | 36.8 | 12.3 | 6.1 | 3.1 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 4070.8 | 281.8 | 24.5 | 9.2 | 6.1 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 1902.2 | 125.6 | 15.3 | 6.1 | 3.1 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 419.6 | 58.2 | 9.2 | 6.1 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 79.6 | 21.4 | 6.1 | 3.1 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 27.6 | 9.2 | 3.1 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 9.2 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 3.1 | 0.0 | 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)