

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: P399646

Luminaire Tested: **ARCH-L-PA3-170-740-U-T3-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399646
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-170-740-U-T3-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 750mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19073 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G4

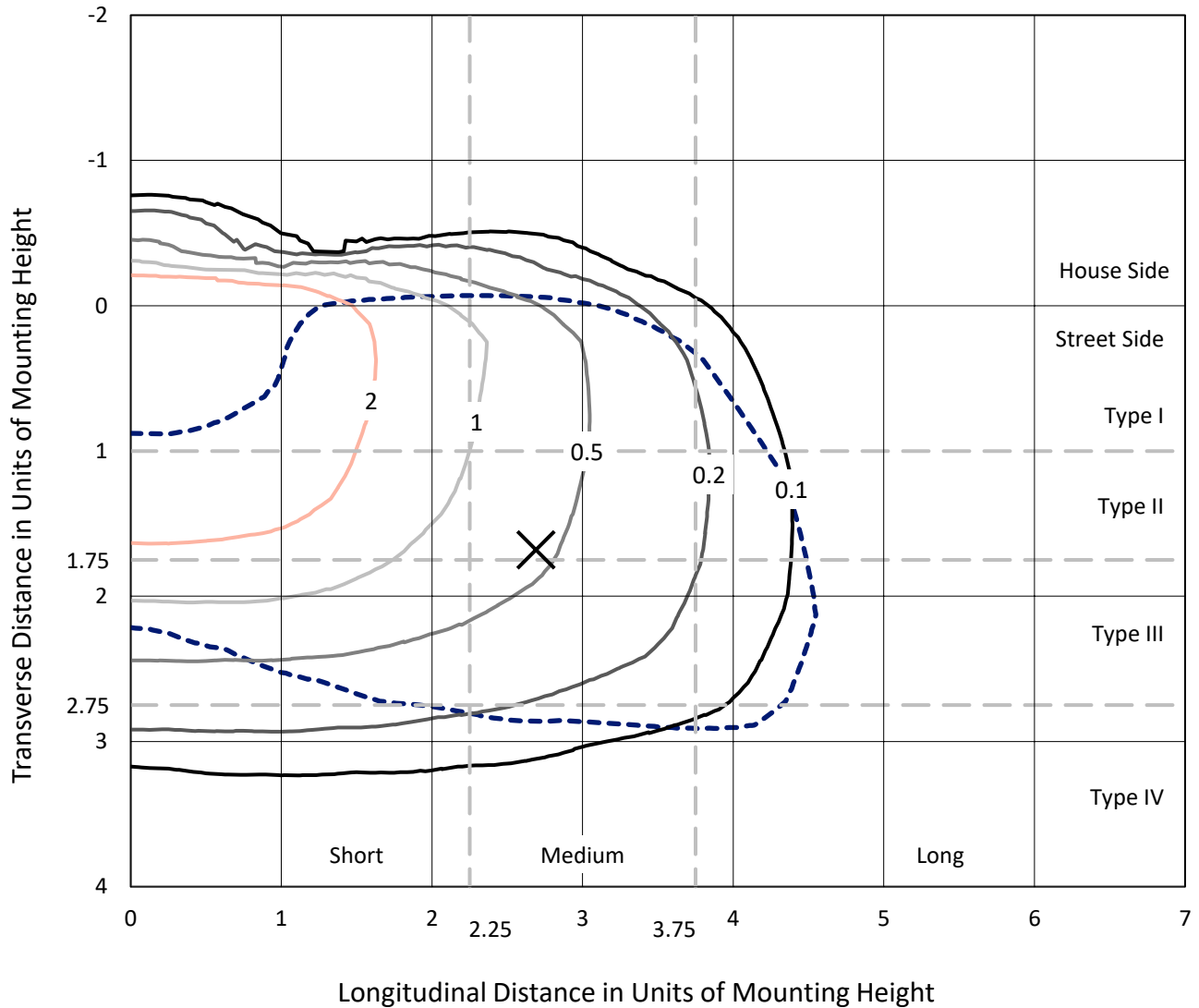
Input Watts (W): 173
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

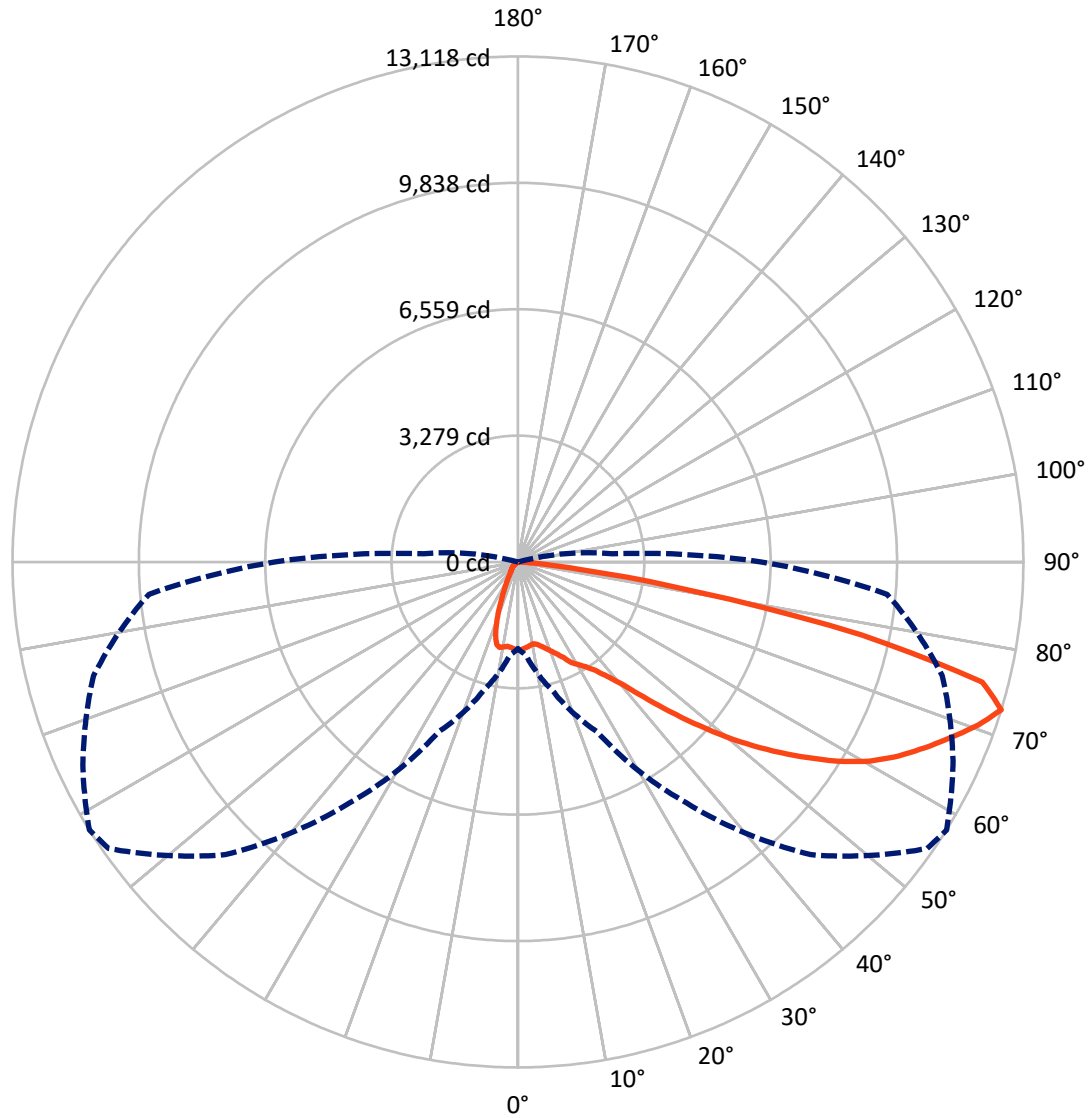
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical

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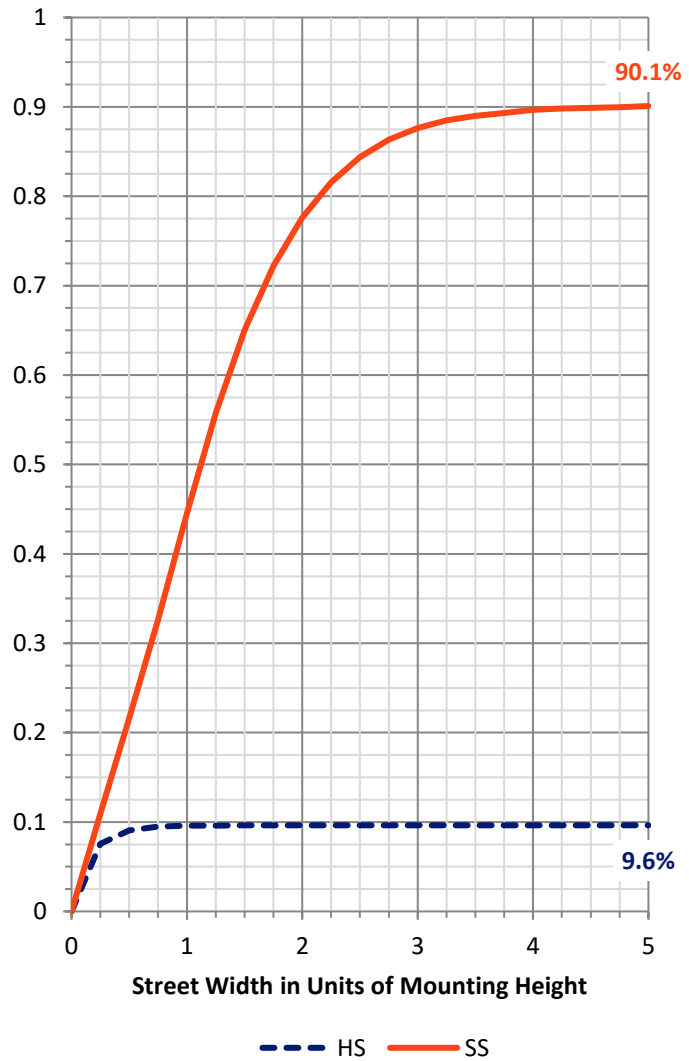
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1854.7 | 0.0 | 1854.7 |
| | % Fixture | 9.7 | 0.0 | 9.7 |
| Street Side | Lumens | 17218.3 | 0.0 | 17218.3 |
| | % Fixture | 90.3 | 0.0 | 90.3 |
| Total | Lumens | 19073.0 | 0.0 | 19073.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 210.0 | 1.1 |
| 10°-20° | 547.1 | 2.9 |
| 20°-30° | 859.4 | 4.5 |
| 30°-40° | 1482.1 | 7.8 |
| 40°-50° | 2819.8 | 14.8 |
| 50°-60° | 4465.7 | 23.4 |
| 60°-70° | 5211.0 | 27.3 |
| 70°-80° | 3263.7 | 17.1 |
| 80°-90° | 214.2 | 1.1 |
| 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° | 19073.0 | 100.0 |
| 0°-180° | 19073.0 | 100.0 |

Coefficient of Utilization



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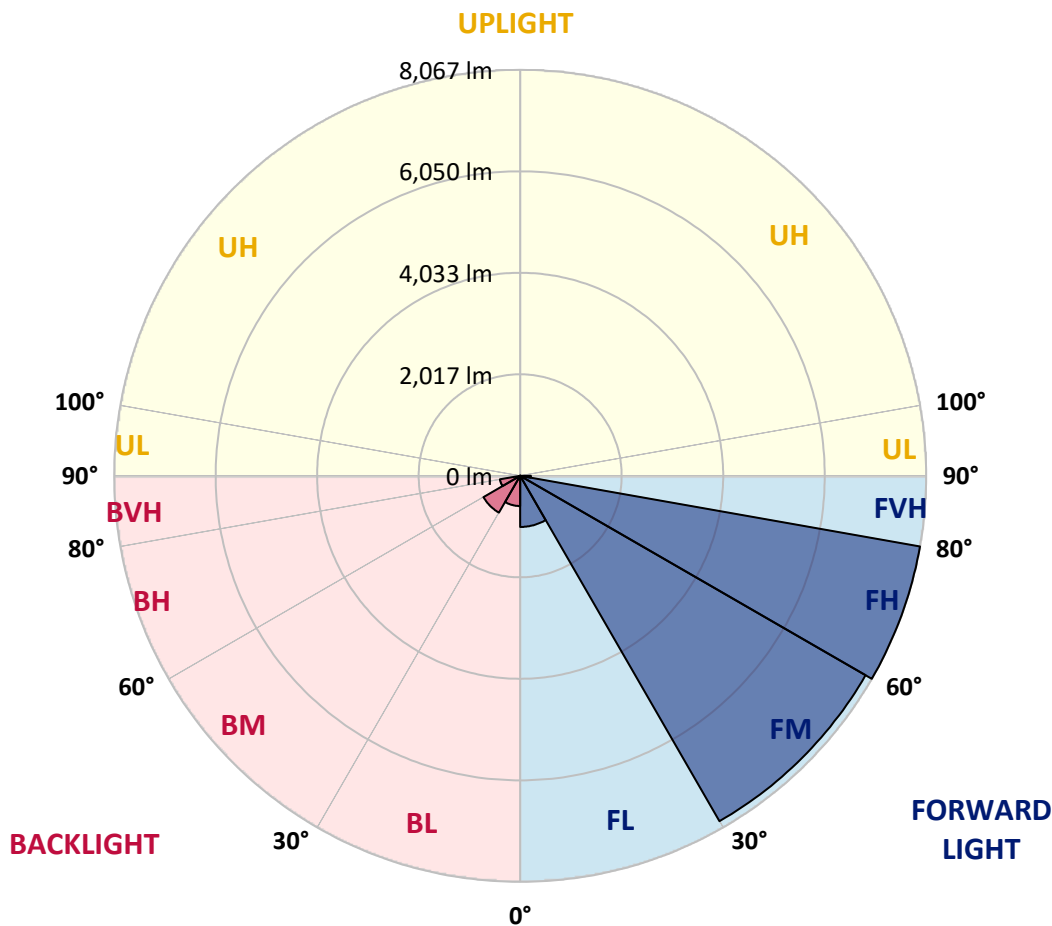
CATALOG NUMBER: ARCH-L-PA3-170-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1015.9 | 5.3 | | | |
| FM (30°-60°) | 7923.7 | 41.5 | | | |
| FH (60°-80°) | 8066.5 | 42.3 | | | G4/12000 |
| FVH (80°-90°) | 212.2 | 1.1 | | | G2/225 |
| BL (0°-30°) | 600.6 | 3.1 | B2/1000 | | |
| BM (30°-60°) | 843.9 | 4.4 | B1/1000 | | |
| BH (60°-80°) | 408.1 | 2.1 | B1/500 | | G1/500 |
| BVH (80°-90°) | 2.1 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 58° | 65° | 75° | 85° |
|-------|---------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2288.6 | 2288.6 | 2288.6 | 2288.6 | 2288.6 | 2288.6 | 2288.6 | 2288.6 | 2288.6 | 2288.6 | 2288.6 |
| 2.5° | 2278.4 | 2268.2 | 2264.8 | 2261.4 | 2264.8 | 2268.2 | 2257.9 | 2268.2 | 2261.4 | 2264.8 | 2271.6 |
| 5° | 2196.6 | 2186.3 | 2182.9 | 2186.3 | 2196.6 | 2213.6 | 2220.4 | 2230.7 | 2230.7 | 2240.9 | 2244.3 |
| 7.5° | 2104.5 | 2097.6 | 2094.2 | 2101.1 | 2121.5 | 2159.0 | 2179.5 | 2193.1 | 2206.8 | 2227.2 | 2247.7 |
| 10° | 2053.3 | 2049.9 | 2046.5 | 2056.7 | 2077.2 | 2111.3 | 2138.6 | 2159.0 | 2210.2 | 2268.2 | 2305.7 |
| 12.5° | 2019.2 | 2019.2 | 2026.0 | 2046.5 | 2073.8 | 2101.1 | 2165.9 | 2193.1 | 2271.6 | 2360.3 | 2411.4 |
| 15° | 1991.9 | 1991.9 | 2002.1 | 2039.7 | 2077.2 | 2142.0 | 2237.5 | 2268.2 | 2360.3 | 2469.4 | 2537.6 |
| 17.5° | 1971.4 | 1978.3 | 1985.1 | 2022.6 | 2094.2 | 2203.4 | 2315.9 | 2360.3 | 2472.8 | 2592.2 | 2667.2 |
| 20° | 1974.9 | 1981.7 | 1985.1 | 2022.6 | 2124.9 | 2275.0 | 2418.3 | 2469.4 | 2599.0 | 2725.2 | 2800.3 |
| 22.5° | 1995.3 | 2005.5 | 2009.0 | 2060.1 | 2179.5 | 2350.0 | 2534.2 | 2592.2 | 2732.0 | 2865.1 | 2923.1 |
| 25° | 2080.6 | 2087.4 | 2066.9 | 2111.3 | 2257.9 | 2466.0 | 2684.3 | 2745.7 | 2885.5 | 3008.3 | 3056.1 |
| 27.5° | 2370.5 | 2377.3 | 2264.8 | 2213.6 | 2319.3 | 2561.5 | 2868.5 | 2953.7 | 3127.7 | 3209.6 | 3216.4 |
| 30° | 2998.1 | 3004.9 | 2783.2 | 2541.0 | 2466.0 | 2643.4 | 2970.8 | 3090.2 | 3315.3 | 3407.4 | 3366.5 |
| 32.5° | 3806.4 | 3799.6 | 3496.1 | 3137.9 | 2813.9 | 2786.6 | 3117.5 | 3243.7 | 3489.2 | 3577.9 | 3547.2 |
| 35° | 4618.2 | 4628.4 | 4369.2 | 3830.3 | 3366.5 | 3056.1 | 3305.1 | 3451.7 | 3748.5 | 3874.7 | 3820.1 |
| 37.5° | 5174.2 | 5242.4 | 5129.8 | 4546.6 | 4045.2 | 3554.0 | 3608.6 | 3765.5 | 4137.3 | 4307.8 | 4191.9 |
| 40° | 5958.7 | 5941.6 | 5668.7 | 5239.0 | 4795.6 | 4290.8 | 4099.8 | 4174.8 | 4601.2 | 4829.7 | 4648.9 |
| 42.5° | 7012.6 | 6978.5 | 6514.6 | 6095.1 | 5600.5 | 5187.8 | 4799.0 | 4785.3 | 5133.2 | 5399.3 | 5136.7 |
| 45° | 7967.6 | 7916.5 | 7599.3 | 7193.4 | 6651.1 | 6177.0 | 5651.7 | 5532.3 | 5774.5 | 5999.6 | 5692.6 |
| 47.5° | 8728.2 | 8643.0 | 8417.8 | 8203.0 | 8069.9 | 7333.2 | 6545.3 | 6364.5 | 6487.3 | 6654.5 | 6221.3 |
| 50° | 9628.7 | 9393.3 | 9065.9 | 8936.3 | 9212.6 | 8643.0 | 7404.8 | 7230.9 | 7224.1 | 7319.6 | 6767.0 |
| 52.5° | 10038.0 | 9611.6 | 9427.4 | 9536.6 | 10024.3 | 9860.6 | 8332.6 | 8083.6 | 7984.7 | 7994.9 | 7275.2 |
| 55° | 9543.4 | 9495.7 | 9594.6 | 9935.6 | 10573.5 | 10478.0 | 9222.8 | 8915.8 | 8769.2 | 8585.0 | 7763.0 |
| 57.5° | 8980.6 | 9127.3 | 9519.5 | 10171.0 | 11269.3 | 11122.6 | 10099.4 | 9751.5 | 9482.0 | 9059.1 | 8305.3 |
| 60° | 8462.2 | 8612.3 | 9260.3 | 10225.6 | 11651.3 | 11743.4 | 10829.3 | 10498.4 | 10099.4 | 9543.4 | 8902.2 |
| 62.5° | 7674.3 | 7790.3 | 8700.9 | 10147.1 | 11484.1 | 12104.9 | 11337.5 | 11088.5 | 10716.7 | 10003.9 | 9587.7 |
| 65° | 6787.5 | 6862.5 | 7763.0 | 9519.5 | 11156.7 | 12064.0 | 11757.0 | 11617.2 | 11255.6 | 10484.8 | 10266.5 |
| 67.5° | 5815.4 | 5904.1 | 6654.5 | 8390.6 | 10515.5 | 11873.0 | 12152.7 | 12139.0 | 11726.3 | 11016.9 | 10757.6 |
| 70° | 4696.7 | 4703.5 | 5324.3 | 6958.0 | 9396.7 | 11491.0 | 12643.8 | 12674.5 | 12176.5 | 11415.9 | 10778.1 |
| 72.5° | 2247.7 | 2431.9 | 3451.7 | 4857.0 | 7636.8 | 10740.6 | 12964.4 | 13117.9 | 12459.6 | 11402.3 | 9615.0 |
| 75° | 515.0 | 532.1 | 1006.2 | 2309.1 | 4478.4 | 8243.9 | 12162.9 | 12449.4 | 11770.7 | 9860.6 | 6773.8 |
| 77.5° | 187.6 | 197.8 | 283.1 | 675.3 | 1722.5 | 4260.1 | 8704.4 | 9123.9 | 8700.9 | 6374.8 | 3202.7 |
| 80° | 126.2 | 122.8 | 146.7 | 300.2 | 791.3 | 1207.4 | 4451.1 | 4700.1 | 4290.8 | 2176.1 | 767.4 |
| 82.5° | 64.8 | 68.2 | 102.3 | 167.1 | 532.1 | 419.5 | 1487.1 | 1616.7 | 1330.2 | 436.6 | 143.3 |
| 85° | 30.7 | 30.7 | 58.0 | 105.7 | 225.1 | 146.7 | 330.8 | 399.1 | 358.1 | 191.0 | 47.8 |
| 87.5° | 30.7 | 30.7 | 54.6 | 68.2 | 116.0 | 61.4 | 81.9 | 102.3 | 95.5 | 102.3 | 17.1 |
| 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° | 2288.6 | 2288.6 | 2288.6 | 2288.6 | 2288.6 | 2288.6 | 2288.6 | 2288.6 | 2288.6 | 2288.6 | 2288.6 |
| 2.5° | 2271.6 | 2268.2 | 2264.8 | 2271.6 | 2268.2 | 2275.0 | 2275.0 | 2281.8 | 2281.8 | 2275.0 | 2271.6 |
| 5° | 2240.9 | 2234.1 | 2227.2 | 2227.2 | 2223.8 | 2230.7 | 2251.1 | 2268.2 | 2271.6 | 2261.4 | 2257.9 |
| 7.5° | 2244.3 | 2244.3 | 2237.5 | 2223.8 | 2200.0 | 2200.0 | 2200.0 | 2220.4 | 2230.7 | 2223.8 | 2220.4 |
| 10° | 2305.7 | 2309.1 | 2292.1 | 2261.4 | 2220.4 | 2182.9 | 2111.3 | 2005.5 | 1906.6 | 1879.3 | 1869.1 |
| 12.5° | 2411.4 | 2414.8 | 2380.7 | 2326.2 | 2240.9 | 2019.2 | 1746.3 | 1493.9 | 1299.5 | 1244.9 | 1234.7 |
| 15° | 2537.6 | 2541.0 | 2479.6 | 2391.0 | 2131.7 | 1616.7 | 1210.8 | 924.3 | 753.8 | 712.9 | 709.4 |
| 17.5° | 2667.2 | 2660.4 | 2568.3 | 2397.8 | 1807.7 | 1146.0 | 736.7 | 590.1 | 545.7 | 535.5 | 538.9 |
| 20° | 2793.4 | 2773.0 | 2646.8 | 2271.6 | 1391.6 | 750.4 | 538.9 | 504.8 | 494.6 | 487.7 | 487.7 |
| 22.5° | 2909.4 | 2868.5 | 2711.6 | 2022.6 | 975.5 | 538.9 | 480.9 | 474.1 | 460.5 | 450.2 | 446.8 |
| 25° | 3025.4 | 2967.4 | 2752.5 | 1698.6 | 654.9 | 470.7 | 453.6 | 440.0 | 422.9 | 409.3 | 405.9 |
| 27.5° | 3165.2 | 3083.4 | 2732.0 | 1289.3 | 491.2 | 436.6 | 422.9 | 402.5 | 378.6 | 358.1 | 351.3 |
| 30° | 3298.2 | 3206.1 | 2616.1 | 890.2 | 419.5 | 402.5 | 382.0 | 351.3 | 320.6 | 296.7 | 289.9 |
| 32.5° | 3465.4 | 3359.6 | 2408.0 | 583.2 | 365.0 | 351.3 | 330.8 | 293.3 | 252.4 | 225.1 | 218.3 |
| 35° | 3704.1 | 3584.7 | 2142.0 | 409.3 | 320.6 | 296.7 | 269.5 | 228.5 | 184.2 | 163.7 | 160.3 |
| 37.5° | 4038.4 | 3878.1 | 1807.7 | 330.8 | 283.1 | 249.0 | 208.1 | 167.1 | 136.4 | 119.4 | 116.0 |
| 40° | 4447.7 | 4202.1 | 1435.9 | 293.3 | 252.4 | 208.1 | 156.9 | 119.4 | 98.9 | 85.3 | 85.3 |
| 42.5° | 4891.1 | 4505.7 | 1057.3 | 269.5 | 221.7 | 170.5 | 116.0 | 85.3 | 71.6 | 64.8 | 61.4 |
| 45° | 5348.1 | 4775.1 | 712.9 | 249.0 | 194.4 | 129.6 | 81.9 | 58.0 | 47.8 | 47.8 | 44.3 |
| 47.5° | 5822.2 | 4955.9 | 460.5 | 225.1 | 163.7 | 95.5 | 54.6 | 40.9 | 34.1 | 34.1 | 34.1 |
| 50° | 6292.9 | 5051.4 | 327.4 | 204.6 | 133.0 | 64.8 | 40.9 | 30.7 | 27.3 | 27.3 | 27.3 |
| 52.5° | 6634.0 | 4990.0 | 262.6 | 177.4 | 102.3 | 47.8 | 30.7 | 23.9 | 20.5 | 20.5 | 20.5 |
| 55° | 6930.7 | 4884.3 | 228.5 | 153.5 | 75.0 | 34.1 | 23.9 | 20.5 | 17.1 | 17.1 | 17.1 |
| 57.5° | 7234.3 | 4747.8 | 204.6 | 129.6 | 54.6 | 23.9 | 17.1 | 13.6 | 13.6 | 13.6 | 13.6 |
| 60° | 7510.6 | 4515.9 | 177.4 | 102.3 | 37.5 | 17.1 | 13.6 | 10.2 | 10.2 | 10.2 | 10.2 |
| 62.5° | 7780.0 | 4318.1 | 153.5 | 78.4 | 27.3 | 13.6 | 6.8 | 6.8 | 3.4 | 3.4 | 3.4 |
| 65° | 7933.5 | 4052.0 | 122.8 | 51.2 | 17.1 | 10.2 | 3.4 | 3.4 | 0.0 | 0.0 | 0.0 |
| 67.5° | 7885.8 | 3734.8 | 85.3 | 30.7 | 10.2 | 6.8 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 7554.9 | 3308.5 | 51.2 | 17.1 | 10.2 | 6.8 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 6327.0 | 2449.0 | 30.7 | 13.6 | 6.8 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 4226.0 | 1125.6 | 17.1 | 10.2 | 3.4 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 1933.9 | 337.7 | 10.2 | 6.8 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 388.8 | 88.7 | 6.8 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 81.9 | 17.1 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 17.1 | 6.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 6.8 | 3.4 | 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)