

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: P258080

Luminaire Tested: **ARCH-L-AF72-240-D-U-T2U-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P258080
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-240-D-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1030mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19512.8 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G3

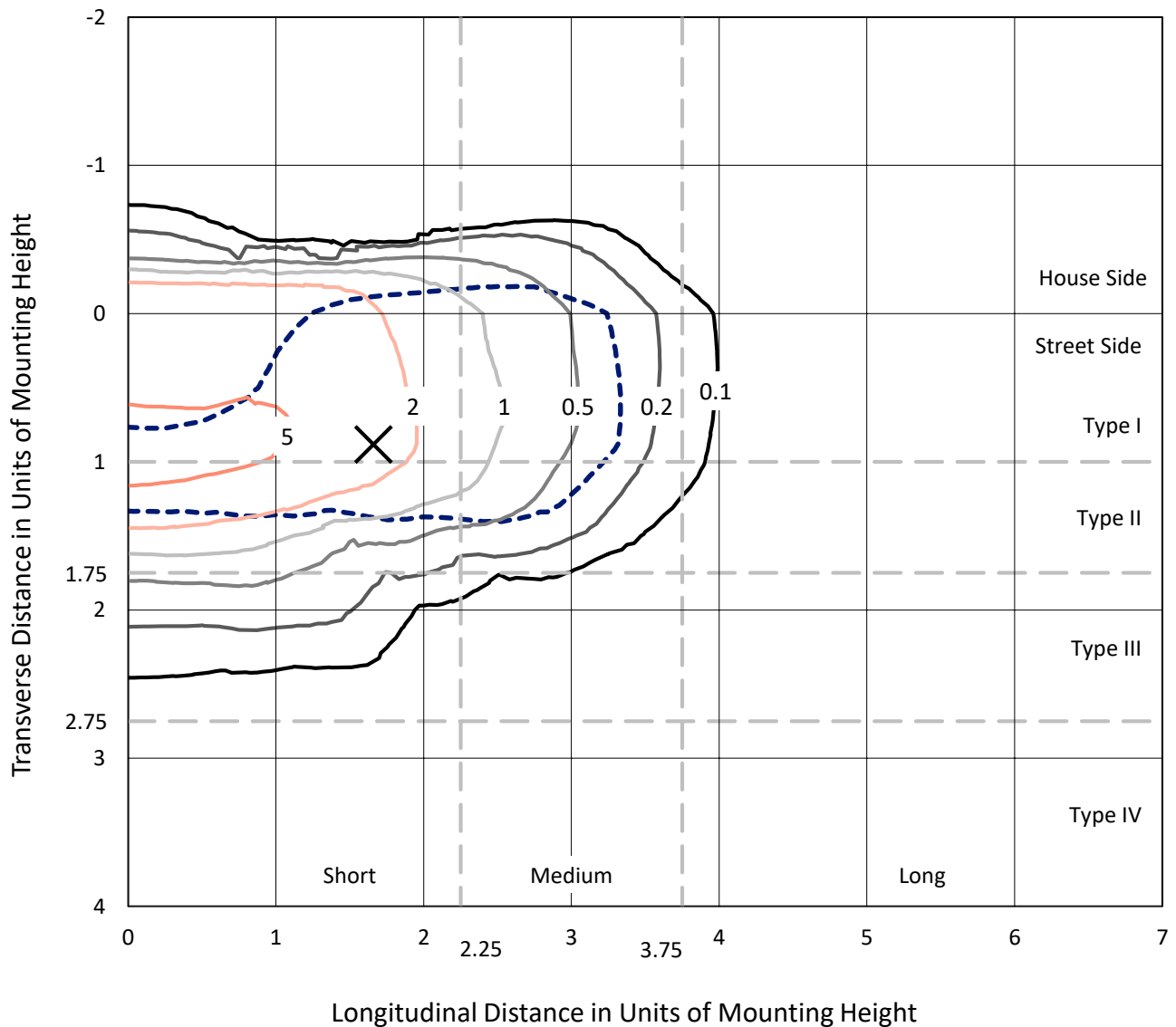
Input Watts (W): 242
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

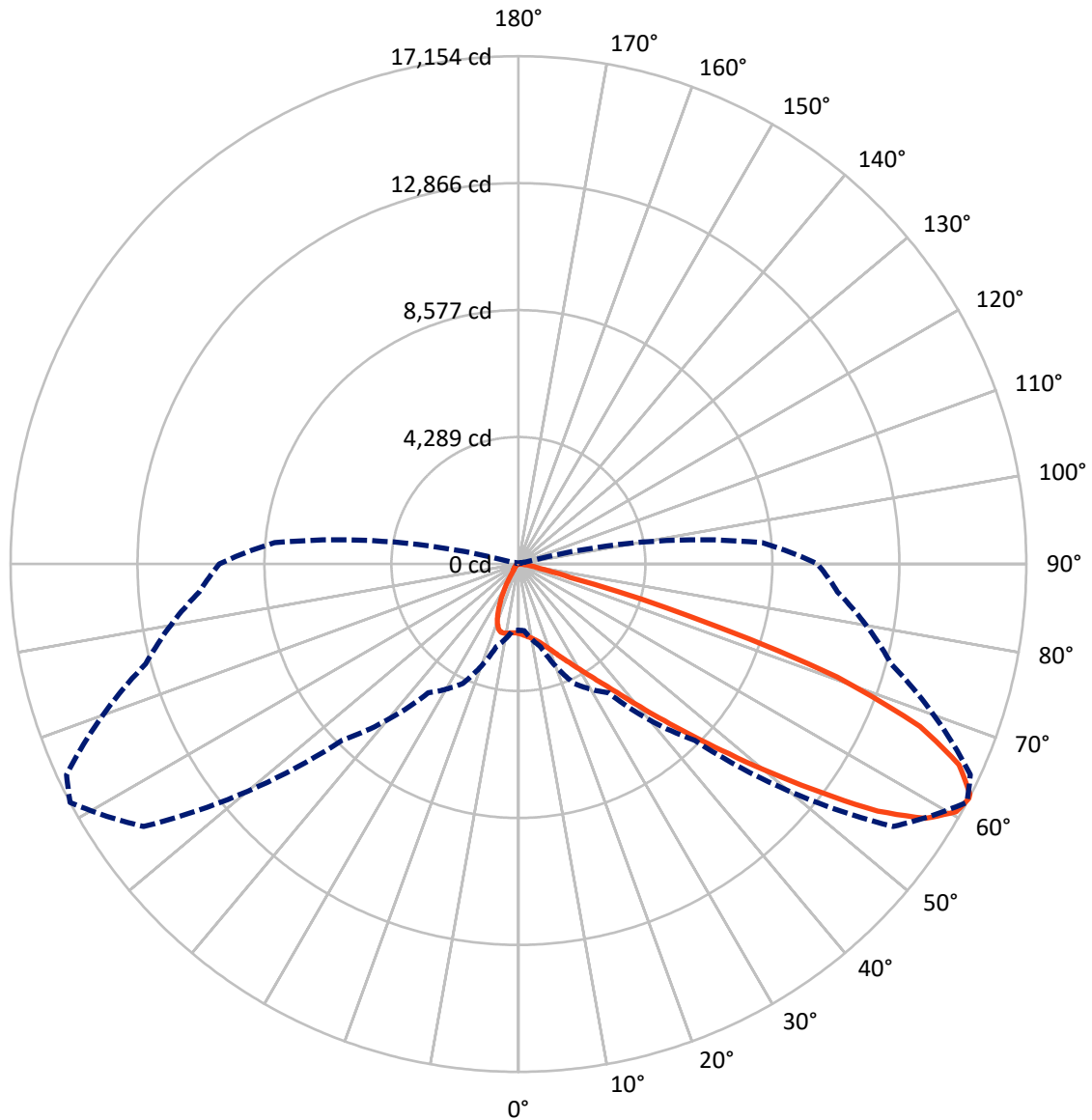
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral - - - Horizontal Cone Through 62-Deg Vertical

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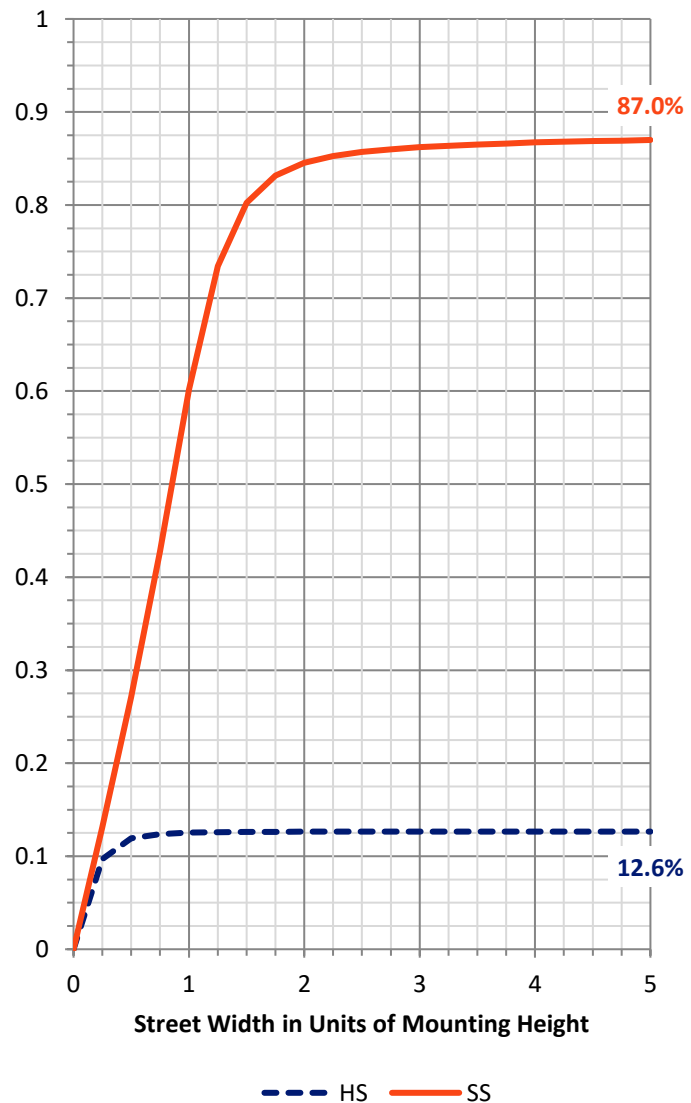
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2495.0 | 0.0 | 2495.0 |
| | % Fixture | 12.8 | 0.0 | 12.8 |
| Street Side | Lumens | 17017.8 | 0.0 | 17017.8 |
| | % Fixture | 87.2 | 0.0 | 87.2 |
| Total | Lumens | 19512.8 | 0.0 | 19512.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 226.2 | 1.2 |
| 10°-20° | 631.7 | 3.2 |
| 20°-30° | 1060.9 | 5.4 |
| 30°-40° | 2033.6 | 10.4 |
| 40°-50° | 4153.8 | 21.3 |
| 50°-60° | 5496.9 | 28.2 |
| 60°-70° | 4270.2 | 21.9 |
| 70°-80° | 1541.3 | 7.9 |
| 80°-90° | 98.2 | 0.5 |
| 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° | 19512.8 | 100.0 |
| 0°-180° | 19512.8 | 100.0 |



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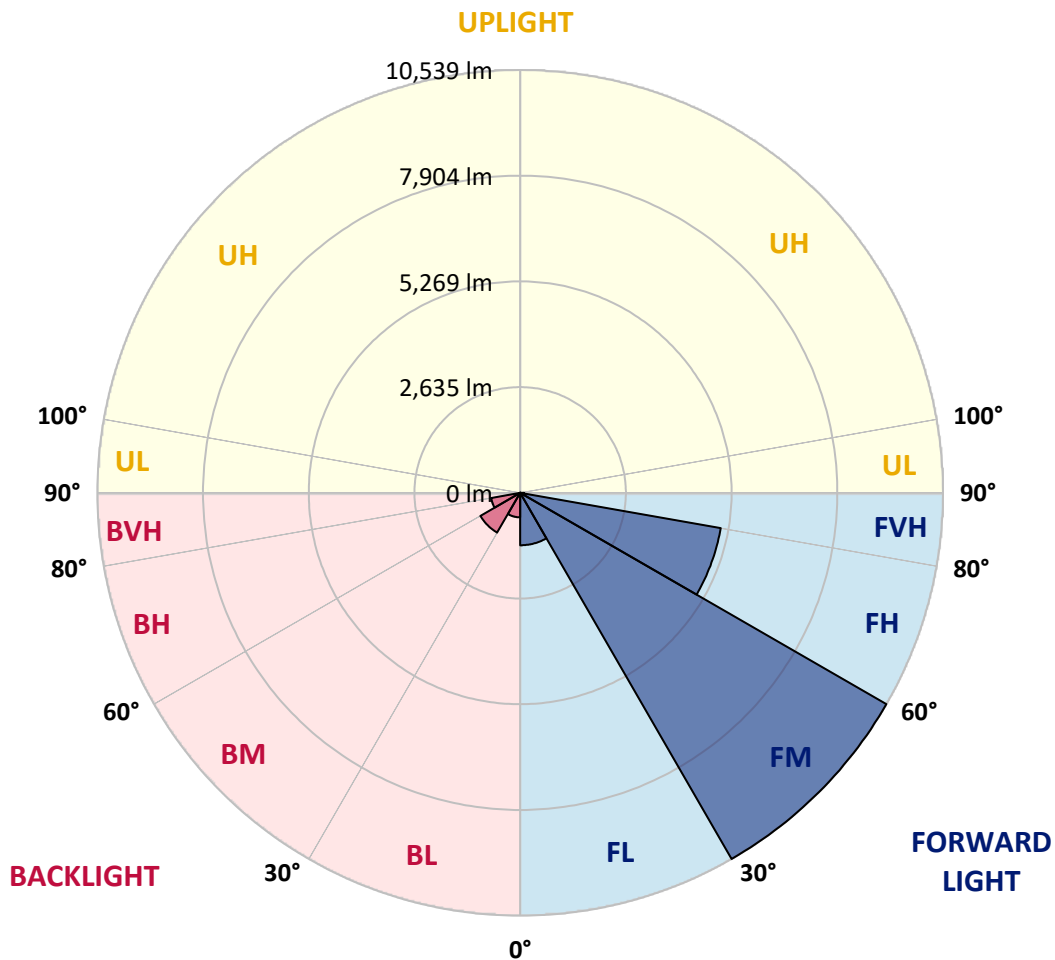
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1308.2 | 6.7 | | | |
| FM | (30°-60°) | 10538.9 | 54.0 | | | |
| FH | (60°-80°) | 5076.8 | 26.0 | | | G3/7500 |
| FVH | (80°-90°) | 94.0 | 0.5 | | | G1/100 |
| BL | (0°-30°) | 610.6 | 3.1 | B2/1000 | | |
| BM | (30°-60°) | 1145.4 | 5.9 | B2/2500 | | |
| BH | (60°-80°) | 734.7 | 3.8 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 4.3 | 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-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 62° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2350.5 | 2350.5 | 2350.5 | 2350.5 | 2350.5 | 2350.5 | 2350.5 | 2350.5 | 2350.5 | 2350.5 | 2350.5 |
| 2.5° | 2412.9 | 2408.1 | 2403.3 | 2398.5 | 2398.5 | 2393.7 | 2388.9 | 2379.4 | 2369.8 | 2360.2 | 2355.3 |
| 5° | 2456.1 | 2451.3 | 2446.5 | 2451.3 | 2446.5 | 2446.5 | 2441.7 | 2432.2 | 2422.6 | 2408.1 | 2393.7 |
| 7.5° | 2489.7 | 2484.8 | 2480.0 | 2484.8 | 2489.7 | 2494.5 | 2499.3 | 2489.7 | 2484.8 | 2465.7 | 2451.3 |
| 10° | 2532.8 | 2528.0 | 2523.3 | 2532.8 | 2532.8 | 2556.9 | 2561.7 | 2556.9 | 2552.1 | 2537.6 | 2513.7 |
| 12.5° | 2595.2 | 2600.0 | 2600.0 | 2609.6 | 2619.2 | 2648.0 | 2657.6 | 2643.2 | 2643.2 | 2624.0 | 2595.2 |
| 15° | 2710.3 | 2710.3 | 2710.3 | 2719.9 | 2724.7 | 2763.1 | 2772.7 | 2758.3 | 2767.9 | 2734.3 | 2705.6 |
| 17.5° | 2820.7 | 2825.5 | 2835.1 | 2854.2 | 2854.2 | 2887.9 | 2907.0 | 2907.0 | 2926.3 | 2883.1 | 2844.6 |
| 20° | 2931.1 | 2935.8 | 2950.2 | 2993.4 | 2993.4 | 3036.5 | 3070.2 | 3084.5 | 3103.7 | 3060.6 | 2993.4 |
| 22.5° | 3051.0 | 3051.0 | 3074.9 | 3142.1 | 3127.7 | 3214.0 | 3276.4 | 3300.3 | 3319.6 | 3262.0 | 3156.5 |
| 25° | 3233.2 | 3214.0 | 3233.2 | 3295.6 | 3286.0 | 3405.9 | 3521.1 | 3545.0 | 3569.1 | 3501.9 | 3343.5 |
| 27.5° | 3578.6 | 3549.8 | 3482.6 | 3487.4 | 3487.4 | 3626.6 | 3789.7 | 3823.3 | 3837.7 | 3780.1 | 3583.4 |
| 30° | 4269.4 | 4269.4 | 4020.0 | 3852.0 | 3741.7 | 3866.4 | 4096.7 | 4154.3 | 4173.4 | 4087.1 | 3828.1 |
| 32.5° | 5473.5 | 5473.5 | 5013.0 | 4586.0 | 4168.6 | 4168.6 | 4432.5 | 4538.0 | 4557.2 | 4456.5 | 4154.3 |
| 35° | 7008.5 | 6998.9 | 6308.1 | 5722.9 | 4907.4 | 4600.4 | 4825.9 | 5003.4 | 5060.9 | 4926.6 | 4576.4 |
| 37.5° | 8639.5 | 8577.1 | 7833.7 | 7162.1 | 6044.3 | 5291.2 | 5358.3 | 5593.4 | 5646.2 | 5535.8 | 5123.2 |
| 40° | 9963.5 | 9891.6 | 9292.0 | 8730.7 | 7512.2 | 6394.5 | 6125.8 | 6341.8 | 6404.1 | 6250.6 | 5775.7 |
| 42.5° | 11162.8 | 10985.3 | 10572.8 | 10169.8 | 9200.8 | 8303.7 | 7147.7 | 7234.0 | 7301.1 | 7138.0 | 6509.6 |
| 45° | 12031.1 | 11757.7 | 11546.6 | 11421.9 | 10908.5 | 10400.0 | 8471.7 | 8299.0 | 8322.9 | 8121.4 | 7310.7 |
| 47.5° | 12055.1 | 11863.2 | 11882.4 | 12208.6 | 12419.6 | 12400.4 | 10193.8 | 9579.7 | 9488.6 | 9152.9 | 8164.7 |
| 50° | 10903.7 | 11014.1 | 11364.3 | 12294.9 | 13436.7 | 14127.4 | 12242.2 | 11095.6 | 10822.2 | 10217.7 | 9013.7 |
| 52.5° | 8984.9 | 9157.7 | 9814.8 | 11383.5 | 13585.3 | 15264.3 | 14367.2 | 12827.4 | 12338.1 | 11273.1 | 9666.1 |
| 55° | 7037.3 | 7046.9 | 7737.7 | 9335.1 | 12592.3 | 15470.6 | 16065.4 | 14731.8 | 13983.5 | 12074.3 | 10097.9 |
| 57.5° | 4840.3 | 5104.1 | 5981.9 | 7056.5 | 10352.1 | 14444.0 | 16703.5 | 16209.4 | 15245.1 | 12568.4 | 10400.0 |
| 60° | 3170.8 | 3185.3 | 4207.1 | 5449.5 | 7046.9 | 11752.9 | 16314.8 | 16991.2 | 16266.9 | 12860.9 | 10606.4 |
| 62° | 2235.5 | 2259.4 | 2892.6 | 4451.7 | 5310.3 | 8423.7 | 15456.2 | 17154.4 | 16842.6 | 13033.6 | 10822.2 |
| 62.5° | 2072.3 | 2091.5 | 2624.0 | 4202.3 | 4988.9 | 7555.4 | 15149.2 | 17116.0 | 16928.9 | 13091.2 | 10898.9 |
| 65° | 1520.7 | 1520.7 | 1717.3 | 2887.9 | 3655.4 | 4082.3 | 12837.0 | 16353.2 | 16813.7 | 13551.7 | 11186.8 |
| 67.5° | 1175.3 | 1184.9 | 1252.0 | 1779.7 | 2758.3 | 2475.3 | 8193.4 | 14635.9 | 15614.5 | 14232.9 | 11349.8 |
| 70° | 1012.2 | 1007.4 | 1055.4 | 1180.1 | 1990.8 | 1645.4 | 3607.4 | 11421.9 | 13076.9 | 14060.3 | 11201.2 |
| 72.5° | 748.4 | 753.1 | 863.5 | 1036.1 | 1386.4 | 1069.7 | 1631.0 | 6063.5 | 8481.3 | 11004.5 | 9599.0 |
| 75° | 479.7 | 484.5 | 609.3 | 815.5 | 997.8 | 700.4 | 940.2 | 1808.5 | 3473.1 | 6101.9 | 5871.6 |
| 77.5° | 321.4 | 331.0 | 398.1 | 570.8 | 873.1 | 436.5 | 590.0 | 757.9 | 1045.8 | 2288.2 | 2105.9 |
| 80° | 215.8 | 215.8 | 254.2 | 383.8 | 551.7 | 364.6 | 316.6 | 503.7 | 542.1 | 709.9 | 355.0 |
| 82.5° | 143.9 | 143.9 | 167.9 | 254.2 | 359.8 | 326.2 | 191.9 | 273.4 | 316.6 | 355.0 | 124.7 |
| 85° | 86.3 | 86.3 | 115.1 | 158.4 | 235.1 | 182.3 | 124.7 | 153.5 | 163.1 | 225.5 | 67.2 |
| 87.5° | 52.8 | 48.0 | 76.7 | 110.4 | 124.7 | 110.4 | 81.5 | 81.5 | 86.3 | 124.7 | 33.6 |
| 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° | 2350.5 | 2350.5 | 2350.5 | 2350.5 | 2350.5 | 2350.5 | 2350.5 | 2350.5 | 2350.5 | 2350.5 | 2350.5 |
| 2.5° | 2345.7 | 2341.0 | 2336.2 | 2326.6 | 2312.2 | 2302.6 | 2293.0 | 2283.4 | 2273.8 | 2273.8 | 2288.2 |
| 5° | 2388.9 | 2374.6 | 2355.3 | 2336.2 | 2307.4 | 2288.2 | 2273.8 | 2254.6 | 2245.1 | 2245.1 | 2249.9 |
| 7.5° | 2441.7 | 2427.4 | 2393.7 | 2360.2 | 2317.0 | 2283.4 | 2249.9 | 2206.6 | 2173.1 | 2158.7 | 2173.1 |
| 10° | 2499.3 | 2480.0 | 2432.2 | 2379.4 | 2331.4 | 2245.1 | 2134.7 | 2000.4 | 1885.3 | 1832.5 | 1856.5 |
| 12.5° | 2571.2 | 2547.2 | 2489.7 | 2417.7 | 2307.4 | 2096.3 | 1822.9 | 1511.1 | 1314.4 | 1223.2 | 1242.5 |
| 15° | 2676.8 | 2643.2 | 2561.7 | 2451.3 | 2206.6 | 1751.0 | 1304.8 | 945.0 | 762.7 | 686.0 | 695.6 |
| 17.5° | 2801.5 | 2758.3 | 2648.0 | 2441.7 | 1947.6 | 1261.6 | 777.1 | 551.7 | 475.0 | 455.7 | 455.7 |
| 20° | 2935.8 | 2878.3 | 2734.3 | 2369.8 | 1554.3 | 791.6 | 484.5 | 422.2 | 393.3 | 379.0 | 379.0 |
| 22.5° | 3074.9 | 2998.2 | 2806.3 | 2201.9 | 1108.2 | 494.1 | 398.1 | 355.0 | 321.4 | 307.0 | 307.0 |
| 25° | 3242.9 | 3142.1 | 2878.3 | 1909.2 | 705.1 | 398.1 | 340.6 | 297.4 | 263.8 | 244.7 | 249.5 |
| 27.5° | 3439.5 | 3310.0 | 2940.6 | 1544.7 | 455.7 | 345.3 | 283.1 | 239.9 | 211.0 | 201.5 | 201.5 |
| 30° | 3645.8 | 3492.3 | 2955.0 | 1156.1 | 369.4 | 297.4 | 235.1 | 196.7 | 177.5 | 167.9 | 167.9 |
| 32.5° | 3928.8 | 3727.3 | 2911.8 | 767.5 | 311.8 | 249.5 | 196.7 | 163.1 | 148.7 | 143.9 | 143.9 |
| 35° | 4302.9 | 4034.3 | 2811.1 | 475.0 | 263.8 | 206.2 | 163.1 | 143.9 | 129.5 | 124.7 | 124.7 |
| 37.5° | 4777.9 | 4461.3 | 2633.6 | 326.2 | 225.5 | 167.9 | 139.1 | 124.7 | 115.1 | 110.4 | 110.4 |
| 40° | 5411.1 | 4979.4 | 2403.3 | 283.1 | 191.9 | 143.9 | 119.9 | 110.4 | 100.8 | 100.8 | 100.8 |
| 42.5° | 6082.7 | 5607.8 | 2105.9 | 249.5 | 163.1 | 124.7 | 105.6 | 96.0 | 91.1 | 86.3 | 86.3 |
| 45° | 6816.6 | 6250.6 | 1736.6 | 220.7 | 139.1 | 110.4 | 96.0 | 81.5 | 76.7 | 76.7 | 76.7 |
| 47.5° | 7545.8 | 6912.6 | 1333.6 | 191.9 | 119.9 | 96.0 | 81.5 | 71.9 | 67.2 | 62.4 | 62.4 |
| 50° | 8294.2 | 7512.2 | 978.6 | 167.9 | 105.6 | 86.3 | 71.9 | 62.4 | 52.8 | 48.0 | 48.0 |
| 52.5° | 8836.2 | 7872.0 | 714.7 | 143.9 | 91.1 | 71.9 | 57.6 | 48.0 | 38.4 | 33.6 | 33.6 |
| 55° | 9234.4 | 8092.7 | 522.9 | 119.9 | 81.5 | 62.4 | 48.0 | 38.4 | 28.7 | 28.7 | 23.9 |
| 57.5° | 9546.2 | 8198.2 | 393.3 | 105.6 | 71.9 | 52.8 | 38.4 | 28.7 | 23.9 | 19.2 | 19.2 |
| 60° | 9786.1 | 8203.0 | 292.7 | 86.3 | 62.4 | 43.2 | 28.7 | 19.2 | 14.4 | 14.4 | 14.4 |
| 62° | 10102.7 | 8265.3 | 239.9 | 71.9 | 57.6 | 38.4 | 23.9 | 14.4 | 9.6 | 4.8 | 4.8 |
| 62.5° | 10193.8 | 8289.4 | 230.3 | 71.9 | 52.8 | 33.6 | 19.2 | 14.4 | 9.6 | 4.8 | 4.8 |
| 65° | 10616.0 | 8332.5 | 177.5 | 57.6 | 43.2 | 28.7 | 14.4 | 9.6 | 0.0 | 0.0 | 0.0 |
| 67.5° | 10999.7 | 8265.3 | 129.5 | 43.2 | 33.6 | 19.2 | 14.4 | 4.8 | 0.0 | 0.0 | 0.0 |
| 70° | 10961.3 | 7804.8 | 91.1 | 28.7 | 23.9 | 14.4 | 9.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 9032.9 | 5842.9 | 62.4 | 23.9 | 14.4 | 9.6 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 5454.3 | 2556.9 | 43.2 | 14.4 | 14.4 | 9.6 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 1789.3 | 925.9 | 28.7 | 9.6 | 9.6 | 4.8 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 292.7 | 153.5 | 14.4 | 9.6 | 9.6 | 4.8 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 91.1 | 38.4 | 9.6 | 9.6 | 4.8 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 33.6 | 14.4 | 9.6 | 9.6 | 4.8 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 14.4 | 9.6 | 9.6 | 9.6 | 4.8 | 4.8 | 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)