

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: P237113

Luminaire Tested: **ARCH-L-AF72-200-D-U-T3-7050**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237113
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29465)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-200-D-U-T3-7050
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 860mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24420 lumens
Efficiency: N/A
Efficacy: 121.5 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

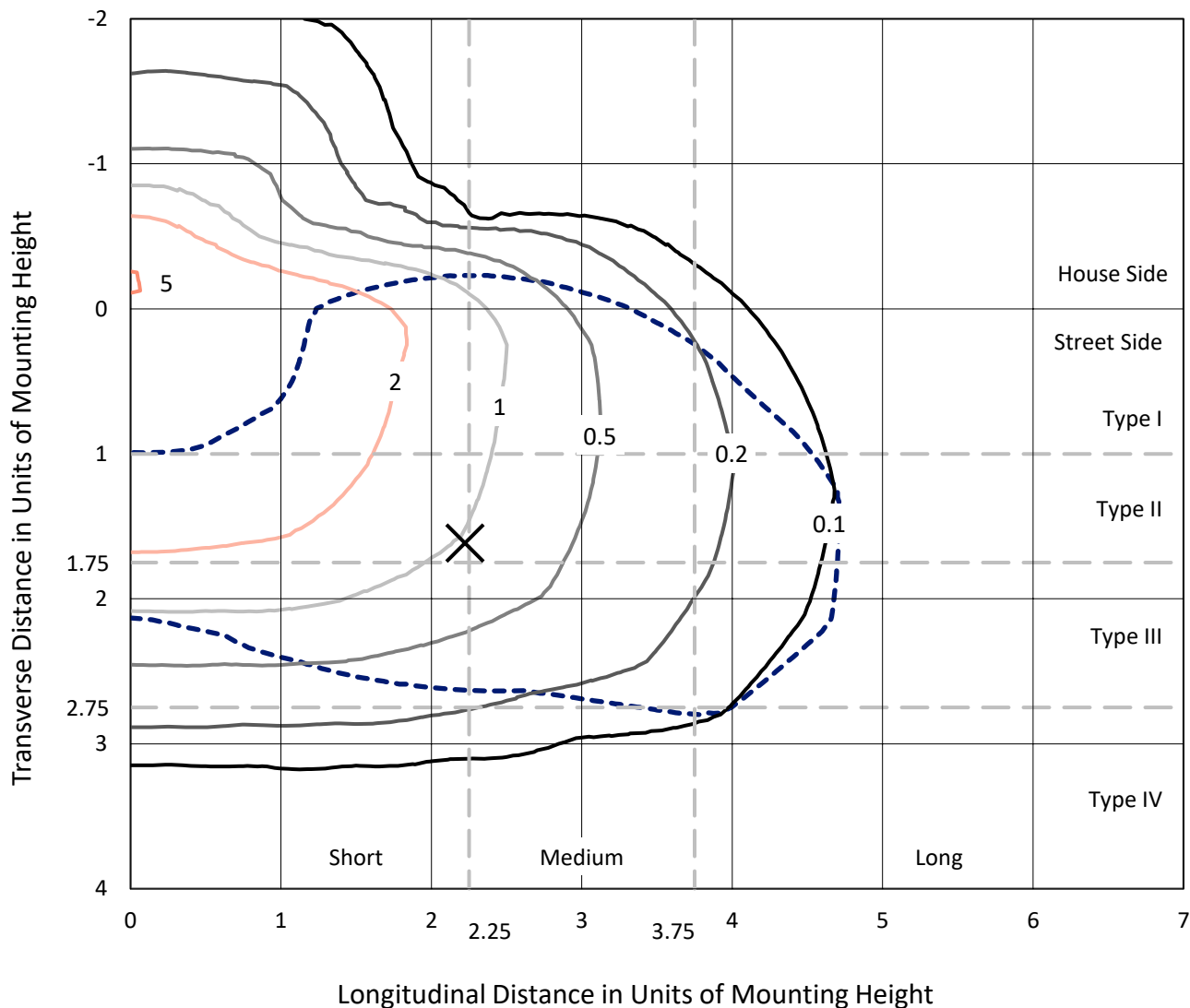
Input Watts (W): 201
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

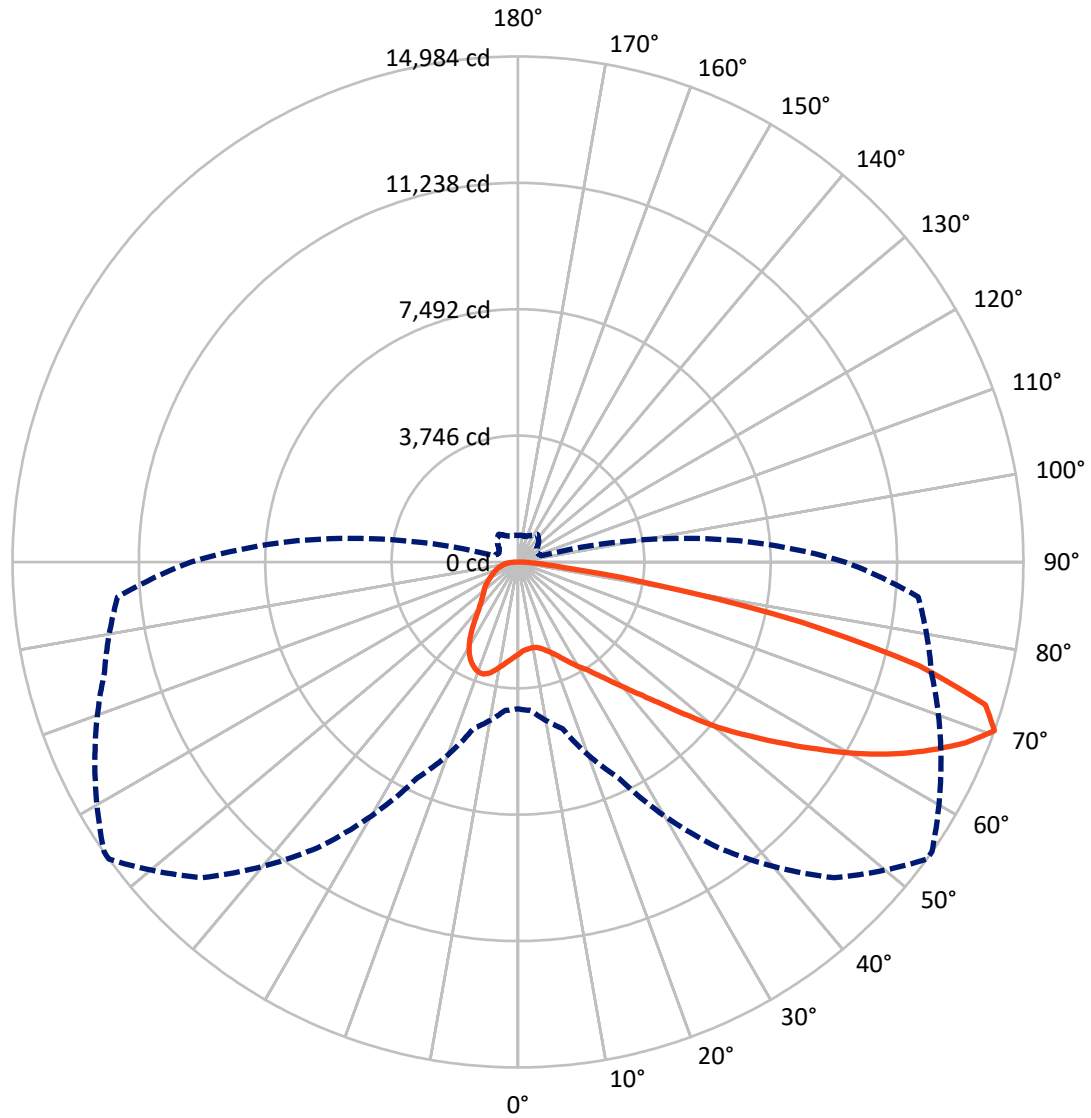
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 54-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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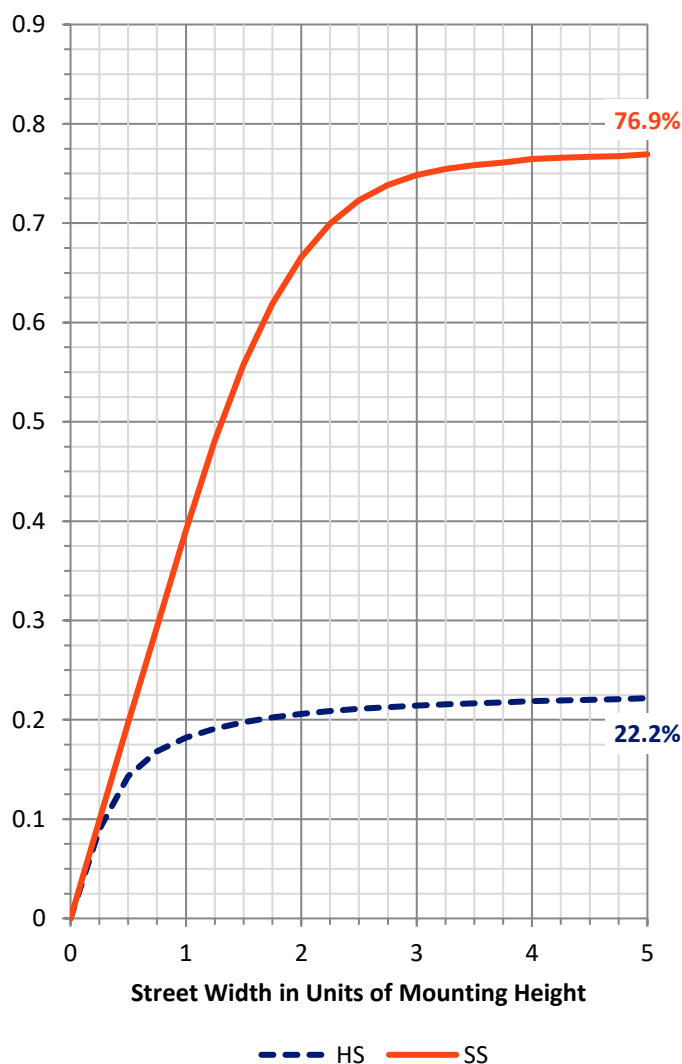
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5538.4 | 0.0 | 5538.4 |
| | % Fixture | 22.7 | 0.0 | 22.7 |
| Street Side | Lumens | 18881.6 | 0.0 | 18881.6 |
| | % Fixture | 77.3 | 0.0 | 77.3 |
| Total | Lumens | 24420.0 | 0.0 | 24420.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 268.1 | 1.1 |
| 10°-20° | 856.7 | 3.5 |
| 20°-30° | 1488.4 | 6.1 |
| 30°-40° | 2175.1 | 8.9 |
| 40°-50° | 3413.8 | 14.0 |
| 50°-60° | 5249.7 | 21.5 |
| 60°-70° | 6413.8 | 26.3 |
| 70°-80° | 3976.6 | 16.3 |
| 80°-90° | 577.7 | 2.4 |
| 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° | 24420.0 | 100.0 |
| 0°-180° | 24420.0 | 100.0 |

Coefficient of Utilization



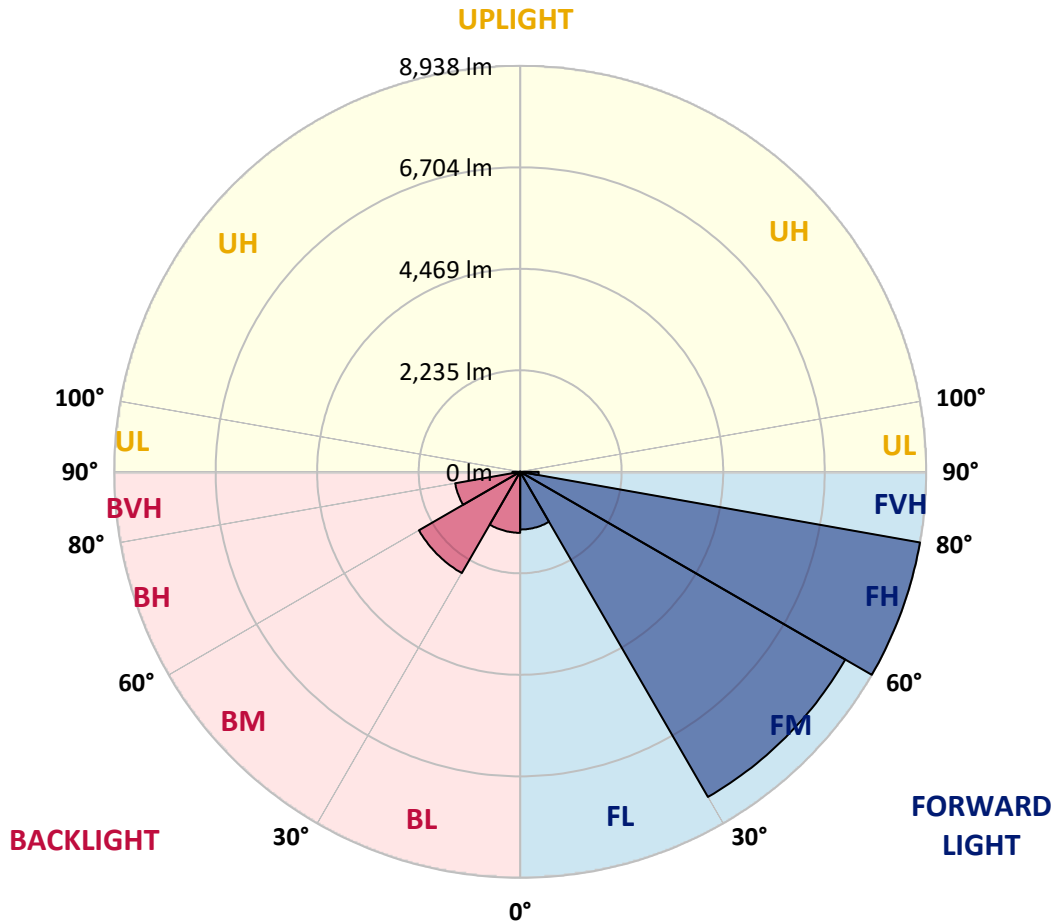
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1270.6 | 5.2 | | | |
| FM (30°-60°) | 8265.1 | 33.8 | | | |
| FH (60°-80°) | 8938.1 | 36.6 | | | G4/12000 |
| FVH (80°-90°) | 407.9 | 1.7 | | | G3/500 |
| BL (0°-30°) | 1342.7 | 5.5 | B3/2500 | | |
| BM (30°-60°) | 2573.6 | 10.5 | B3/5000 | | |
| BH (60°-80°) | 1452.3 | 5.9 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 169.8 | 0.7 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 54° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2732.1 | 2732.1 | 2732.1 | 2732.1 | 2732.1 | 2732.1 | 2732.1 | 2732.1 | 2732.1 | 2732.1 | 2732.1 |
| 2.5° | 2624.8 | 2615.8 | 2615.8 | 2629.3 | 2633.7 | 2647.1 | 2647.1 | 2651.6 | 2665.0 | 2687.4 | 2714.2 |
| 5° | 2544.3 | 2539.8 | 2544.3 | 2562.2 | 2571.1 | 2598.0 | 2606.9 | 2611.4 | 2638.2 | 2674.0 | 2714.2 |
| 7.5° | 2463.8 | 2459.3 | 2468.3 | 2495.1 | 2521.9 | 2562.2 | 2584.5 | 2589.0 | 2629.3 | 2678.4 | 2732.1 |
| 10° | 2437.0 | 2432.5 | 2445.9 | 2468.3 | 2495.1 | 2539.8 | 2575.6 | 2580.1 | 2638.2 | 2696.3 | 2772.3 |
| 12.5° | 2472.8 | 2468.3 | 2481.7 | 2504.1 | 2530.9 | 2562.2 | 2602.4 | 2606.9 | 2682.9 | 2758.9 | 2839.4 |
| 15° | 2562.2 | 2562.2 | 2566.7 | 2580.1 | 2606.9 | 2633.7 | 2669.5 | 2674.0 | 2754.5 | 2843.9 | 2924.4 |
| 17.5° | 2700.8 | 2691.9 | 2691.9 | 2687.4 | 2705.3 | 2718.7 | 2763.4 | 2767.9 | 2852.8 | 2933.3 | 3013.8 |
| 20° | 2870.7 | 2866.3 | 2848.4 | 2826.0 | 2821.5 | 2830.5 | 2875.2 | 2879.7 | 2964.6 | 3031.7 | 3107.7 |
| 22.5° | 3076.4 | 3080.9 | 3040.6 | 2991.5 | 2969.1 | 2982.5 | 3022.8 | 3027.2 | 3089.8 | 3148.0 | 3215.0 |
| 25° | 3349.2 | 3335.8 | 3277.6 | 3206.1 | 3161.4 | 3161.4 | 3201.6 | 3201.6 | 3259.7 | 3295.5 | 3340.2 |
| 27.5° | 3608.5 | 3581.7 | 3528.0 | 3425.2 | 3353.6 | 3367.1 | 3407.3 | 3407.3 | 3461.0 | 3474.4 | 3496.7 |
| 30° | 3890.2 | 3863.4 | 3796.3 | 3666.7 | 3572.8 | 3563.8 | 3613.0 | 3608.5 | 3680.1 | 3675.6 | 3657.7 |
| 32.5° | 4234.5 | 4221.1 | 4109.3 | 3943.9 | 3818.7 | 3787.4 | 3832.1 | 3836.6 | 3881.3 | 3867.9 | 3809.7 |
| 35° | 4717.5 | 4713.0 | 4610.1 | 4319.5 | 4154.1 | 4095.9 | 4122.8 | 4122.8 | 4154.1 | 4118.3 | 4019.9 |
| 37.5° | 5325.6 | 5334.5 | 5245.1 | 4815.8 | 4583.3 | 4484.9 | 4489.4 | 4484.9 | 4493.9 | 4453.6 | 4350.8 |
| 40° | 5933.7 | 5956.1 | 5951.6 | 5432.9 | 5137.8 | 4967.9 | 4905.3 | 4896.3 | 4918.7 | 4900.8 | 4802.4 |
| 42.5° | 6734.1 | 6787.8 | 6662.6 | 6193.1 | 5862.2 | 5576.0 | 5406.1 | 5383.7 | 5432.9 | 5455.3 | 5361.4 |
| 45° | 7565.8 | 7547.9 | 7351.2 | 7011.4 | 6711.8 | 6345.1 | 6023.2 | 5987.4 | 6023.2 | 6090.2 | 5991.9 |
| 47.5° | 7999.6 | 7986.2 | 7937.0 | 7767.0 | 7722.3 | 7302.0 | 6814.6 | 6783.3 | 6716.2 | 6810.1 | 6693.9 |
| 50° | 8715.0 | 8728.4 | 8527.2 | 8509.3 | 8697.1 | 8464.6 | 7708.9 | 7637.4 | 7516.6 | 7592.7 | 7494.3 |
| 52.5° | 9233.7 | 9175.6 | 9050.4 | 9206.9 | 9792.7 | 9667.4 | 8549.6 | 8518.3 | 8406.5 | 8388.6 | 8343.9 |
| 55° | 9443.9 | 9443.9 | 9466.2 | 9828.4 | 10664.6 | 10499.2 | 9461.8 | 9493.1 | 9341.0 | 9215.8 | 9274.0 |
| 57.5° | 9506.5 | 9533.3 | 9725.6 | 10324.8 | 11688.6 | 11147.5 | 10467.9 | 10512.6 | 10293.5 | 10043.1 | 10226.4 |
| 60° | 9197.9 | 9278.4 | 9739.0 | 10606.5 | 12265.4 | 11836.1 | 11527.6 | 11541.0 | 11223.5 | 10856.9 | 11178.8 |
| 62.5° | 8406.5 | 8504.8 | 9327.6 | 10722.7 | 12171.5 | 12542.6 | 12529.2 | 12560.5 | 12126.8 | 11670.7 | 12073.1 |
| 65° | 7436.2 | 7534.5 | 8410.9 | 10396.3 | 12100.0 | 13047.9 | 13445.9 | 13530.8 | 12971.9 | 12359.3 | 12632.1 |
| 67.5° | 6009.7 | 6139.4 | 6971.1 | 9296.3 | 11751.2 | 13463.8 | 14304.4 | 14393.9 | 13624.8 | 12717.0 | 12582.9 |
| 70° | 4355.3 | 4417.9 | 5115.4 | 7065.0 | 10329.2 | 13235.7 | 14984.1 | 14979.6 | 13839.4 | 12690.2 | 11912.2 |
| 72.5° | 2097.1 | 2146.3 | 2750.0 | 4386.6 | 7387.0 | 11232.5 | 14492.2 | 14577.2 | 13544.3 | 12301.2 | 10378.4 |
| 75° | 863.0 | 912.2 | 1113.4 | 1851.2 | 3876.8 | 7422.7 | 12283.3 | 12484.5 | 12301.2 | 11040.2 | 8120.3 |
| 77.5° | 536.6 | 554.5 | 652.8 | 956.9 | 1770.7 | 3465.4 | 8598.8 | 8871.5 | 9747.9 | 8844.7 | 5361.4 |
| 80° | 402.4 | 415.9 | 487.4 | 670.7 | 1117.9 | 1278.9 | 4270.3 | 4614.6 | 5906.9 | 5075.2 | 2428.0 |
| 82.5° | 335.4 | 339.8 | 389.0 | 487.4 | 760.2 | 733.3 | 1368.3 | 1524.8 | 2754.5 | 1936.2 | 836.2 |
| 85° | 313.0 | 322.0 | 348.8 | 348.8 | 482.9 | 460.6 | 567.9 | 594.7 | 800.4 | 661.8 | 290.6 |
| 87.5° | 161.0 | 152.0 | 308.5 | 272.8 | 250.4 | 223.6 | 241.5 | 259.3 | 299.6 | 317.5 | 129.7 |
| 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° | 2732.1 | 2732.1 | 2732.1 | 2732.1 | 2732.1 | 2732.1 | 2732.1 | 2732.1 | 2732.1 | 2732.1 | 2732.1 |
| 2.5° | 2723.2 | 2736.6 | 2758.9 | 2781.3 | 2808.1 | 2839.4 | 2857.3 | 2879.7 | 2897.6 | 2888.6 | 2884.1 |
| 5° | 2736.6 | 2758.9 | 2808.1 | 2852.8 | 2906.5 | 2969.1 | 3009.3 | 3054.1 | 3089.8 | 3098.8 | 3085.4 |
| 7.5° | 2758.9 | 2799.2 | 2866.3 | 2946.7 | 3018.3 | 3098.8 | 3161.4 | 3224.0 | 3268.7 | 3277.6 | 3277.6 |
| 10° | 2812.6 | 2857.3 | 2946.7 | 3054.1 | 3139.0 | 3224.0 | 3295.5 | 3344.7 | 3384.9 | 3402.8 | 3402.8 |
| 12.5° | 2888.6 | 2942.3 | 3049.6 | 3179.3 | 3273.2 | 3353.6 | 3393.9 | 3416.2 | 3434.1 | 3452.0 | 3456.5 |
| 15° | 2978.0 | 3036.2 | 3165.8 | 3304.5 | 3402.8 | 3443.1 | 3443.1 | 3438.6 | 3438.6 | 3447.5 | 3456.5 |
| 17.5° | 3067.5 | 3130.1 | 3264.2 | 3411.8 | 3474.4 | 3452.0 | 3420.7 | 3407.3 | 3398.4 | 3393.9 | 3407.3 |
| 20° | 3161.4 | 3224.0 | 3358.1 | 3496.7 | 3478.9 | 3384.9 | 3340.2 | 3308.9 | 3282.1 | 3268.7 | 3286.6 |
| 22.5° | 3264.2 | 3322.3 | 3461.0 | 3554.9 | 3420.7 | 3277.6 | 3192.7 | 3143.5 | 3098.8 | 3071.9 | 3089.8 |
| 25° | 3384.9 | 3443.1 | 3577.2 | 3572.8 | 3317.9 | 3116.7 | 2982.5 | 2902.0 | 2852.8 | 2826.0 | 2826.0 |
| 27.5° | 3528.0 | 3577.2 | 3706.9 | 3528.0 | 3174.8 | 2902.0 | 2705.3 | 2629.3 | 2615.8 | 2593.5 | 2593.5 |
| 30° | 3675.6 | 3715.8 | 3827.6 | 3425.2 | 2978.0 | 2620.3 | 2405.7 | 2369.9 | 2374.4 | 2352.0 | 2356.5 |
| 32.5° | 3827.6 | 3867.9 | 3899.2 | 3273.2 | 2723.2 | 2302.8 | 2159.7 | 2132.9 | 2128.4 | 2110.6 | 2092.7 |
| 35° | 4042.3 | 4100.4 | 3908.1 | 3067.5 | 2414.6 | 2039.0 | 1936.2 | 1909.3 | 1882.5 | 1819.9 | 1819.9 |
| 37.5° | 4368.7 | 4431.3 | 3885.8 | 2812.6 | 2097.1 | 1833.3 | 1739.4 | 1703.7 | 1658.9 | 1596.3 | 1574.0 |
| 40° | 4815.8 | 4815.8 | 3836.6 | 2526.4 | 1842.3 | 1667.9 | 1578.5 | 1533.7 | 1484.5 | 1421.9 | 1408.5 |
| 42.5° | 5343.5 | 5218.3 | 3760.6 | 2235.8 | 1654.5 | 1556.1 | 1475.6 | 1426.4 | 1368.3 | 1296.7 | 1287.8 |
| 45° | 5960.5 | 5620.7 | 3653.2 | 1976.4 | 1515.8 | 1489.0 | 1439.8 | 1354.9 | 1256.5 | 1180.5 | 1167.1 |
| 47.5° | 6559.7 | 5982.9 | 3550.4 | 1793.1 | 1399.6 | 1462.2 | 1421.9 | 1278.9 | 1144.7 | 1037.4 | 1024.0 |
| 50° | 7217.0 | 6304.9 | 3429.7 | 1641.1 | 1310.2 | 1444.3 | 1399.6 | 1167.1 | 1019.5 | 943.5 | 934.5 |
| 52.5° | 7874.4 | 6631.3 | 3300.0 | 1480.1 | 1234.1 | 1408.5 | 1345.9 | 1086.6 | 1015.0 | 912.2 | 898.8 |
| 55° | 8567.5 | 7011.4 | 3148.0 | 1301.2 | 1144.7 | 1337.0 | 1274.4 | 1082.1 | 1046.3 | 912.2 | 880.9 |
| 57.5° | 9242.7 | 7431.7 | 2902.0 | 1126.8 | 1046.3 | 1229.7 | 1247.6 | 1055.3 | 979.3 | 903.2 | 867.5 |
| 60° | 9989.4 | 7878.8 | 2495.1 | 979.3 | 961.4 | 1140.2 | 1211.8 | 997.2 | 903.2 | 876.4 | 858.5 |
| 62.5° | 10588.6 | 8281.3 | 1949.6 | 876.4 | 889.8 | 1068.7 | 1167.1 | 961.4 | 871.9 | 849.6 | 845.1 |
| 65° | 10847.9 | 8290.2 | 1399.6 | 787.0 | 818.3 | 1001.6 | 1122.4 | 930.1 | 845.1 | 836.2 | 831.7 |
| 67.5° | 10575.2 | 7834.1 | 983.7 | 702.0 | 742.3 | 939.0 | 1064.2 | 898.8 | 818.3 | 822.8 | 813.8 |
| 70° | 9694.3 | 6872.7 | 719.9 | 621.5 | 670.7 | 871.9 | 1001.6 | 858.5 | 787.0 | 795.9 | 782.5 |
| 72.5° | 8111.4 | 5356.9 | 576.8 | 554.5 | 612.6 | 800.4 | 939.0 | 813.8 | 737.8 | 742.3 | 715.4 |
| 75° | 5991.9 | 3550.4 | 482.9 | 496.3 | 545.5 | 733.3 | 858.5 | 755.7 | 684.1 | 666.3 | 648.4 |
| 77.5° | 3563.8 | 1824.4 | 398.0 | 433.7 | 487.4 | 652.8 | 769.1 | 684.1 | 626.0 | 594.7 | 581.3 |
| 80° | 1471.1 | 737.8 | 326.4 | 366.7 | 424.8 | 581.3 | 679.7 | 599.2 | 558.9 | 527.6 | 509.8 |
| 82.5° | 585.8 | 362.2 | 259.3 | 299.6 | 357.7 | 505.3 | 594.7 | 527.6 | 487.4 | 465.0 | 415.9 |
| 85° | 223.6 | 178.9 | 174.4 | 210.2 | 268.3 | 389.0 | 491.9 | 442.7 | 411.4 | 353.3 | 339.8 |
| 87.5° | 89.4 | 80.5 | 80.5 | 102.8 | 152.0 | 245.9 | 353.3 | 308.5 | 322.0 | 254.9 | 259.3 |
| 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)