

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: P237314

Luminaire Tested: **ARCH-L-AF72-210-D-U-T4W-7030**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P237314
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29615)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-210-D-U-T4W-7030
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 900mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24240.2 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

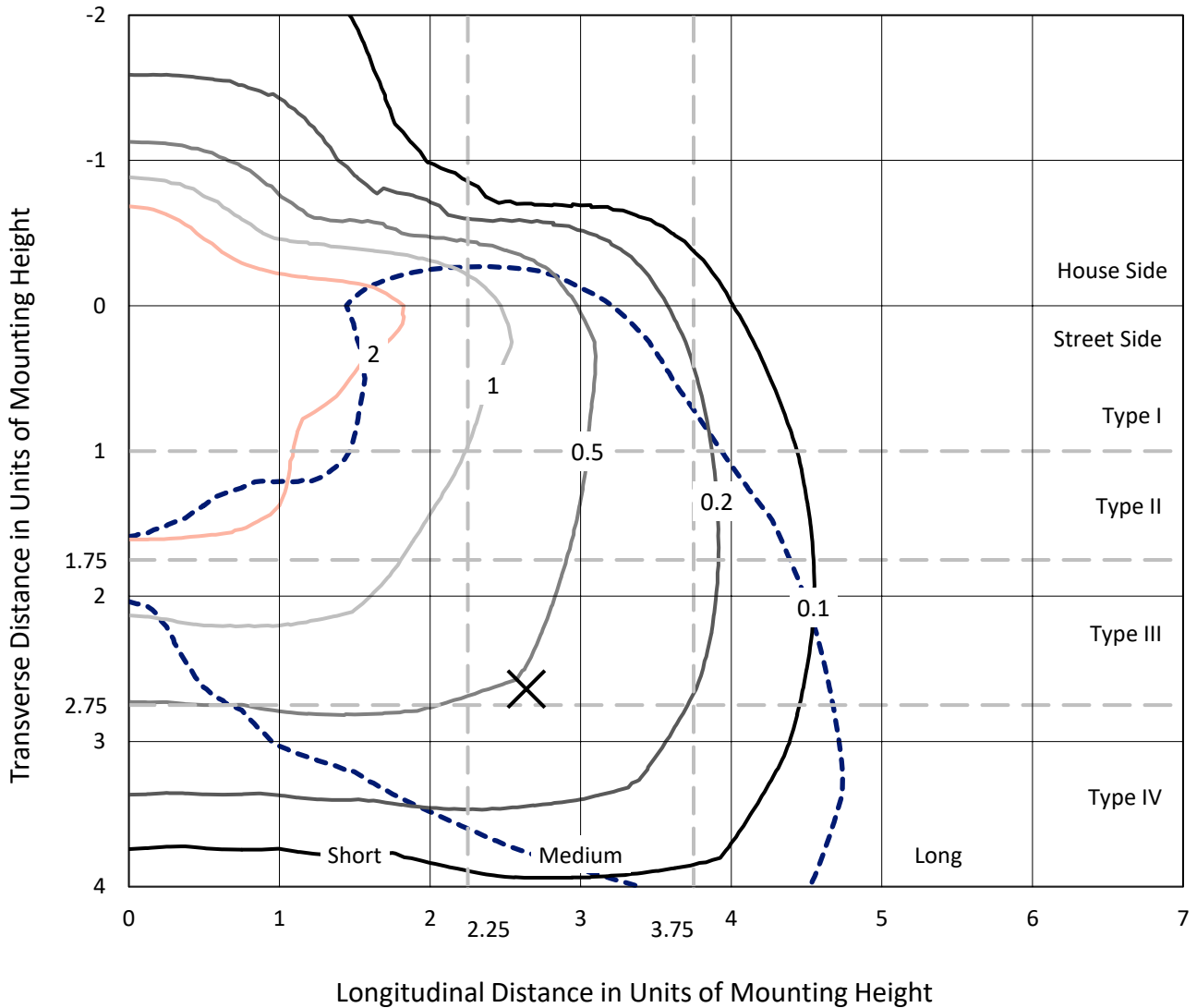
Input Watts (W): 211
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

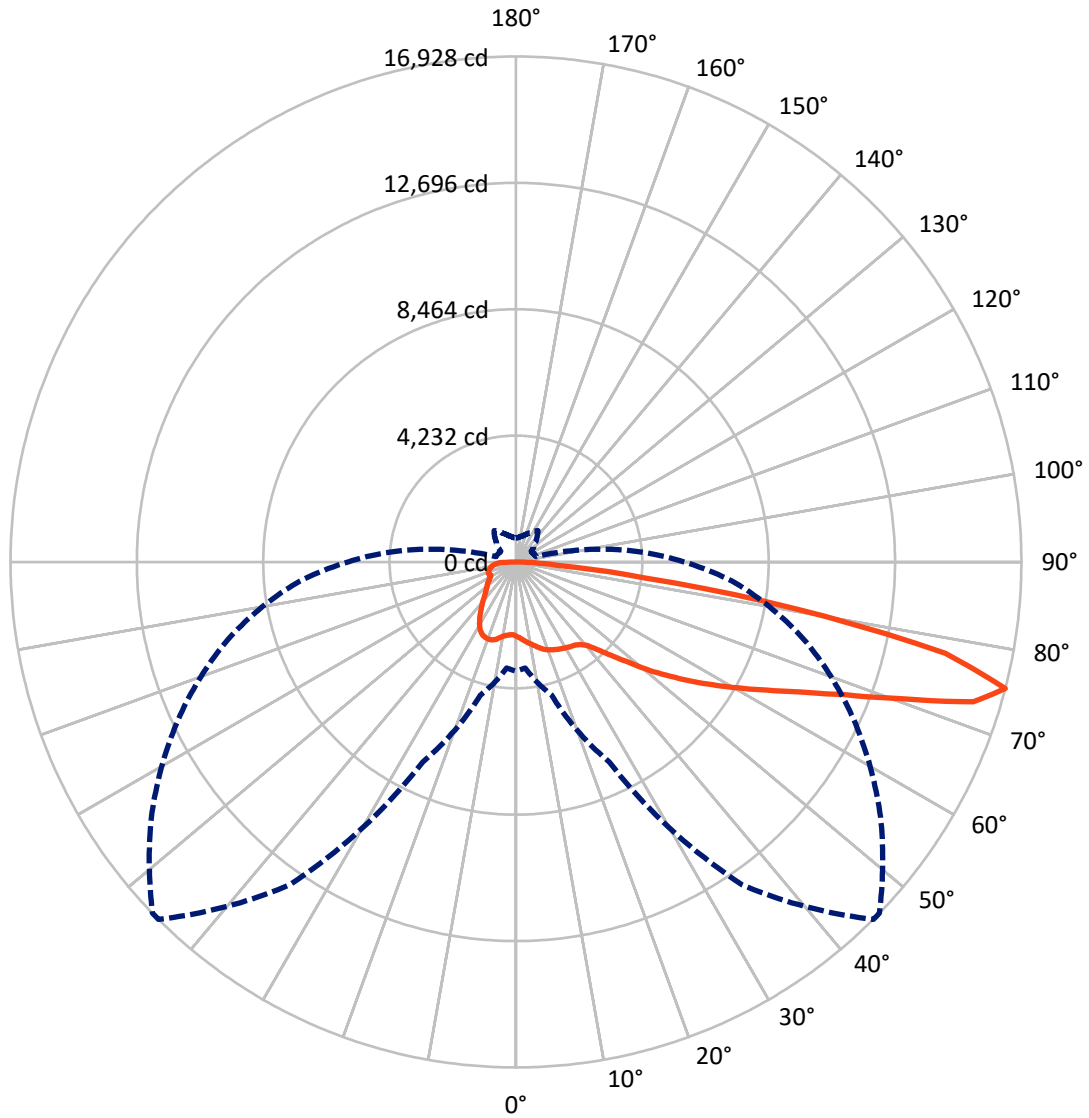
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical



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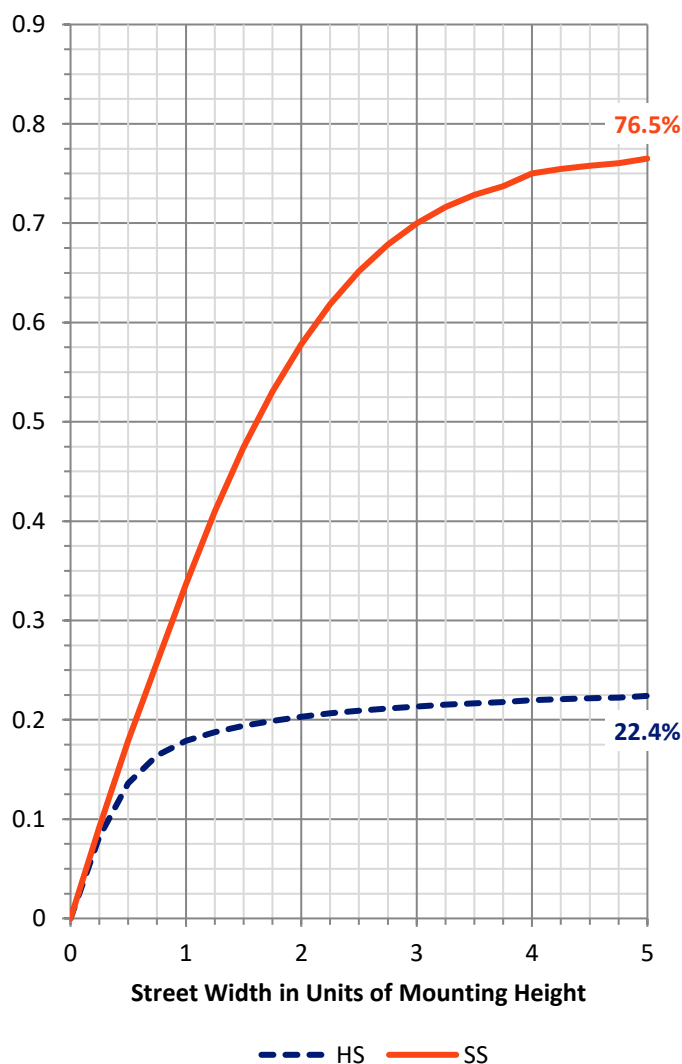
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5615.5 | 0.0 | 5615.5 |
| | % Fixture | 23.2 | 0.0 | 23.2 |
| Street Side | Lumens | 18624.8 | 0.0 | 18624.8 |
| | % Fixture | 76.8 | 0.0 | 76.8 |
| Total | Lumens | 24240.2 | 0.0 | 24240.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 246.3 | 1.0 |
| 10°-20° | 798.0 | 3.3 |
| 20°-30° | 1369.4 | 5.6 |
| 30°-40° | 1915.3 | 7.9 |
| 40°-50° | 2809.5 | 11.6 |
| 50°-60° | 4376.5 | 18.1 |
| 60°-70° | 6297.4 | 26.0 |
| 70°-80° | 5485.7 | 22.6 |
| 80°-90° | 942.1 | 3.9 |
| 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° | 24240.2 | 100.0 |
| 0°-180° | 24240.2 | 100.0 |

Coefficient of Utilization



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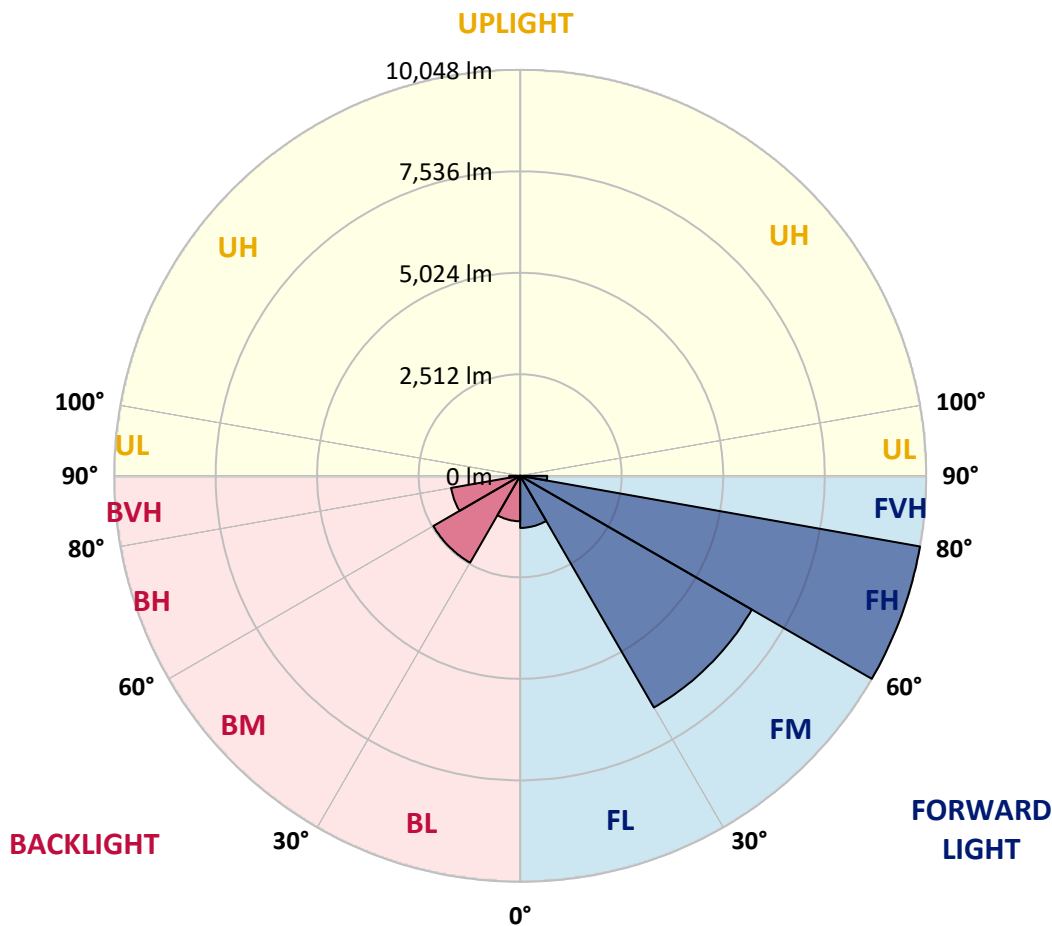
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1289.0 | 5.3 | | | |
| FM (30°-60°) | 6619.5 | 27.3 | | | |
| FH (60°-80°) | 10047.8 | 41.5 | | | G4/12000 |
| FVH (80°-90°) | 668.4 | 2.8 | | | G4/750 |
| BL (0°-30°) | 1124.7 | 4.6 | B3/2500 | | |
| BM (30°-60°) | 2481.7 | 10.2 | B2/2500 | | |
| BH (60°-80°) | 1735.4 | 7.2 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 273.7 | 1.1 | | | G3/500 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 46° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2485.0 | 2485.0 | 2485.0 | 2485.0 | 2485.0 | 2485.0 | 2485.0 | 2485.0 | 2485.0 | 2485.0 | 2485.0 |
| 2.5° | 2607.6 | 2588.7 | 2588.7 | 2574.5 | 2574.5 | 2550.9 | 2541.6 | 2536.9 | 2513.3 | 2499.1 | 2485.0 |
| 5° | 2758.5 | 2734.9 | 2730.2 | 2697.2 | 2683.0 | 2631.2 | 2626.5 | 2593.4 | 2550.9 | 2508.6 | 2475.5 |
| 7.5° | 2895.2 | 2881.0 | 2857.4 | 2824.5 | 2782.1 | 2715.9 | 2711.3 | 2659.5 | 2588.7 | 2532.1 | 2485.0 |
| 10° | 2994.2 | 2984.8 | 2951.7 | 2909.3 | 2862.1 | 2796.2 | 2791.5 | 2734.9 | 2650.0 | 2584.0 | 2518.0 |
| 12.5° | 3112.1 | 3097.9 | 3055.6 | 2998.9 | 2947.0 | 2885.7 | 2881.0 | 2833.8 | 2739.5 | 2654.7 | 2569.9 |
| 15° | 3225.3 | 3206.4 | 3154.6 | 3097.9 | 3041.3 | 2989.6 | 2989.6 | 2937.7 | 2838.7 | 2739.5 | 2640.6 |
| 17.5° | 3281.8 | 3272.5 | 3220.5 | 3159.2 | 3112.1 | 3074.3 | 3069.6 | 3022.5 | 2923.4 | 2819.8 | 2711.3 |
| 20° | 3300.7 | 3305.4 | 3258.3 | 3192.2 | 3159.2 | 3140.4 | 3135.6 | 3102.6 | 2994.2 | 2895.2 | 2791.5 |
| 22.5° | 3296.1 | 3310.1 | 3272.5 | 3201.8 | 3192.2 | 3192.2 | 3192.2 | 3154.6 | 3069.6 | 2970.6 | 2867.0 |
| 25° | 3314.8 | 3333.7 | 3305.4 | 3220.5 | 3220.5 | 3239.4 | 3239.4 | 3220.5 | 3145.1 | 3060.3 | 2956.5 |
| 27.5° | 3380.9 | 3395.0 | 3371.4 | 3253.5 | 3258.3 | 3286.6 | 3281.8 | 3286.6 | 3239.4 | 3159.2 | 3055.6 |
| 30° | 3461.0 | 3479.9 | 3451.6 | 3305.4 | 3300.7 | 3329.0 | 3329.0 | 3352.6 | 3319.7 | 3234.7 | 3149.8 |
| 32.5° | 3678.0 | 3673.2 | 3583.6 | 3362.0 | 3347.9 | 3376.1 | 3376.1 | 3399.7 | 3380.9 | 3314.8 | 3234.7 |
| 35° | 4323.9 | 4253.3 | 4055.1 | 3545.9 | 3404.4 | 3418.6 | 3418.6 | 3461.0 | 3470.5 | 3418.6 | 3347.9 |
| 37.5° | 4984.1 | 4960.5 | 4809.6 | 4036.2 | 3611.9 | 3508.2 | 3503.5 | 3564.8 | 3607.2 | 3564.8 | 3517.6 |
| 40° | 5648.9 | 5630.1 | 5597.1 | 4691.7 | 4045.8 | 3668.5 | 3654.4 | 3706.2 | 3781.7 | 3753.4 | 3725.0 |
| 42.5° | 6266.7 | 6257.2 | 6290.3 | 5337.8 | 4597.4 | 4012.8 | 3970.3 | 3909.0 | 4017.5 | 4008.0 | 4008.0 |
| 45° | 6752.3 | 6775.9 | 6794.8 | 5941.3 | 5196.3 | 4455.9 | 4404.1 | 4196.6 | 4342.8 | 4380.5 | 4408.8 |
| 47.5° | 7025.8 | 7044.7 | 7110.7 | 6530.8 | 5795.1 | 4969.9 | 4932.2 | 4592.7 | 4786.0 | 4899.1 | 4979.4 |
| 50° | 7417.2 | 7365.2 | 7421.9 | 7106.0 | 6516.6 | 5639.5 | 5535.7 | 5125.6 | 5370.7 | 5568.8 | 5757.4 |
| 52.5° | 7794.4 | 7709.6 | 7756.7 | 7770.8 | 7337.0 | 6295.0 | 6186.5 | 5752.7 | 6059.2 | 6370.4 | 6705.1 |
| 55° | 8134.0 | 8129.2 | 8176.3 | 8416.8 | 8129.2 | 6997.5 | 6874.9 | 6445.9 | 6889.2 | 7223.9 | 7789.7 |
| 57.5° | 8407.4 | 8454.6 | 8662.1 | 9166.6 | 9043.9 | 7761.4 | 7624.6 | 7252.2 | 7775.6 | 8110.4 | 9048.7 |
| 60° | 8728.0 | 8803.4 | 9147.7 | 9803.2 | 9878.5 | 8562.9 | 8421.6 | 8152.8 | 8685.6 | 9025.2 | 10505.8 |
| 62.5° | 8836.5 | 8944.9 | 9652.3 | 10472.7 | 10750.9 | 9440.1 | 9312.7 | 9133.5 | 9642.7 | 9949.3 | 11958.0 |
| 65° | 8115.0 | 8322.5 | 9930.5 | 10816.8 | 11689.2 | 10496.3 | 10387.9 | 10232.2 | 10595.3 | 10798.1 | 12943.5 |
| 67.5° | 7917.0 | 8011.3 | 9388.2 | 11312.0 | 12571.1 | 11854.3 | 11745.8 | 11477.0 | 11486.5 | 11401.6 | 13264.2 |
| 70° | 7638.9 | 7742.5 | 8831.8 | 11684.5 | 13834.7 | 13712.1 | 13580.1 | 12787.9 | 12302.3 | 11788.3 | 12632.3 |
| 72.5° | 6507.2 | 6474.1 | 7610.6 | 10680.2 | 14443.0 | 16013.2 | 15857.6 | 14197.8 | 12905.8 | 11453.5 | 10661.3 |
| 75° | 3654.4 | 3560.1 | 4616.3 | 7388.8 | 13188.6 | 16928.0 | 16923.2 | 14909.8 | 12481.4 | 9977.5 | 7256.9 |
| 77.5° | 1060.9 | 1032.6 | 1523.1 | 3097.9 | 8879.0 | 14707.1 | 14886.2 | 13448.0 | 10416.1 | 7167.3 | 3984.4 |
| 80° | 499.9 | 509.2 | 655.4 | 1023.2 | 3791.1 | 9491.9 | 10005.9 | 8855.4 | 6224.2 | 3305.4 | 1645.7 |
| 82.5° | 316.0 | 320.6 | 448.0 | 660.2 | 1603.2 | 4309.8 | 4734.2 | 3984.4 | 2466.1 | 1428.8 | 726.1 |
| 85° | 198.1 | 198.1 | 297.0 | 433.8 | 957.2 | 1376.8 | 1494.7 | 1358.0 | 1056.2 | 778.0 | 396.1 |
| 87.5° | 108.5 | 108.5 | 179.1 | 249.8 | 523.4 | 443.3 | 457.4 | 542.3 | 660.2 | 476.3 | 198.1 |
| 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° | 2485.0 | 2485.0 | 2485.0 | 2485.0 | 2485.0 | 2485.0 | 2485.0 | 2485.0 | 2485.0 | 2485.0 | 2485.0 |
| 2.5° | 2480.3 | 2470.8 | 2456.7 | 2452.0 | 2447.3 | 2442.5 | 2447.3 | 2456.7 | 2447.3 | 2447.3 | 2452.0 |
| 5° | 2466.1 | 2456.7 | 2437.8 | 2437.8 | 2442.5 | 2447.3 | 2470.8 | 2485.0 | 2489.7 | 2489.7 | 2489.7 |
| 7.5° | 2466.1 | 2452.0 | 2437.8 | 2442.5 | 2452.0 | 2470.8 | 2508.6 | 2532.1 | 2550.9 | 2555.7 | 2555.7 |
| 10° | 2489.7 | 2470.8 | 2461.4 | 2470.8 | 2499.1 | 2513.3 | 2550.9 | 2588.7 | 2612.3 | 2621.6 | 2621.6 |
| 12.5° | 2532.1 | 2513.3 | 2513.3 | 2532.1 | 2569.9 | 2588.7 | 2621.6 | 2650.0 | 2678.3 | 2692.4 | 2692.4 |
| 15° | 2602.9 | 2579.3 | 2584.0 | 2617.0 | 2659.5 | 2678.3 | 2701.9 | 2711.3 | 2734.9 | 2753.8 | 2753.8 |
| 17.5° | 2668.8 | 2645.2 | 2654.7 | 2692.4 | 2720.8 | 2730.2 | 2744.3 | 2739.5 | 2749.1 | 2763.1 | 2767.9 |
| 20° | 2744.3 | 2720.8 | 2725.5 | 2749.1 | 2753.8 | 2744.3 | 2744.3 | 2730.2 | 2725.5 | 2749.1 | 2758.5 |
| 22.5° | 2819.8 | 2796.2 | 2791.5 | 2777.4 | 2753.8 | 2730.2 | 2715.9 | 2701.9 | 2692.4 | 2715.9 | 2725.5 |
| 25° | 2909.3 | 2876.4 | 2852.8 | 2791.5 | 2730.2 | 2687.8 | 2668.8 | 2659.5 | 2654.7 | 2678.3 | 2687.8 |
| 27.5° | 3008.4 | 2975.3 | 2904.6 | 2772.6 | 2673.6 | 2602.9 | 2588.7 | 2588.7 | 2598.1 | 2612.3 | 2621.6 |
| 30° | 3102.6 | 3069.6 | 2942.4 | 2730.2 | 2574.5 | 2470.8 | 2456.7 | 2470.8 | 2494.4 | 2508.6 | 2522.7 |
| 32.5° | 3197.0 | 3163.9 | 2966.0 | 2664.2 | 2428.4 | 2296.4 | 2286.9 | 2310.5 | 2348.2 | 2357.7 | 2367.1 |
| 35° | 3324.3 | 3291.3 | 2994.2 | 2569.9 | 2244.5 | 2103.0 | 2093.6 | 2107.7 | 2140.7 | 2154.9 | 2169.1 |
| 37.5° | 3503.5 | 3484.6 | 3036.7 | 2466.1 | 2074.8 | 1919.1 | 1890.8 | 1881.5 | 1900.2 | 1895.5 | 1914.4 |
| 40° | 3739.3 | 3753.4 | 3112.1 | 2329.4 | 1909.8 | 1749.4 | 1688.0 | 1659.7 | 1641.0 | 1603.2 | 1622.1 |
| 42.5° | 4083.4 | 4092.9 | 3197.0 | 2173.7 | 1768.3 | 1589.0 | 1508.9 | 1457.1 | 1419.3 | 1358.0 | 1367.5 |
| 45° | 4588.1 | 4507.8 | 3296.1 | 2008.7 | 1641.0 | 1461.8 | 1367.5 | 1306.2 | 1254.3 | 1202.4 | 1207.1 |
| 47.5° | 5257.5 | 5012.4 | 3404.4 | 1871.9 | 1513.6 | 1358.0 | 1273.1 | 1202.4 | 1141.1 | 1098.7 | 1103.4 |
| 50° | 6082.8 | 5639.5 | 3512.9 | 1744.7 | 1386.3 | 1277.9 | 1202.4 | 1127.0 | 1065.8 | 1023.2 | 1018.6 |
| 52.5° | 7172.0 | 6394.0 | 3583.6 | 1603.2 | 1259.0 | 1207.1 | 1141.1 | 1070.4 | 995.0 | 943.0 | 938.3 |
| 55° | 8303.7 | 7270.9 | 3644.9 | 1433.5 | 1136.4 | 1127.0 | 1093.9 | 1013.8 | 924.3 | 858.2 | 848.7 |
| 57.5° | 9548.5 | 8209.4 | 3692.1 | 1268.4 | 1042.2 | 1060.9 | 1051.5 | 957.2 | 858.2 | 796.9 | 792.1 |
| 60° | 10680.2 | 9180.7 | 3541.2 | 1122.2 | 957.2 | 995.0 | 1004.3 | 924.3 | 872.3 | 886.5 | 891.2 |
| 62.5° | 11821.3 | 9930.5 | 2966.0 | 1013.8 | 900.7 | 952.5 | 1032.6 | 1027.9 | 1004.3 | 1027.9 | 1032.6 |
| 65° | 12231.6 | 10086.0 | 2103.0 | 924.3 | 844.0 | 971.4 | 1122.2 | 1112.8 | 1004.3 | 961.9 | 952.5 |
| 67.5° | 12000.5 | 9624.0 | 1414.6 | 853.5 | 801.6 | 995.0 | 1216.6 | 1112.8 | 966.6 | 910.0 | 891.2 |
| 70° | 10901.8 | 8487.6 | 1037.4 | 782.8 | 763.8 | 990.2 | 1268.4 | 1108.1 | 947.9 | 886.5 | 862.9 |
| 72.5° | 8695.1 | 6549.5 | 834.6 | 716.7 | 707.4 | 966.6 | 1296.7 | 1098.7 | 928.9 | 862.9 | 834.6 |
| 75° | 5630.1 | 4074.1 | 702.5 | 650.7 | 622.4 | 928.9 | 1282.6 | 1070.4 | 905.3 | 820.4 | 801.6 |
| 77.5° | 2612.3 | 1754.0 | 598.8 | 575.2 | 542.3 | 872.3 | 1240.1 | 1013.8 | 853.5 | 773.3 | 749.7 |
| 80° | 1216.6 | 830.0 | 504.6 | 499.9 | 485.6 | 825.1 | 1183.5 | 947.9 | 792.1 | 726.1 | 688.5 |
| 82.5° | 650.7 | 499.9 | 410.3 | 410.3 | 424.4 | 768.6 | 1112.8 | 867.6 | 712.1 | 679.0 | 579.9 |
| 85° | 344.1 | 287.7 | 297.0 | 320.6 | 363.1 | 679.0 | 1018.6 | 782.8 | 622.4 | 518.7 | 504.6 |
| 87.5° | 174.5 | 183.9 | 183.9 | 216.9 | 278.2 | 551.6 | 839.3 | 646.0 | 528.2 | 424.4 | 414.9 |
| 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)