

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: P400115

Luminaire Tested: **ARCH-L-PA3-230-830-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400115
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-230-830-U-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 3000K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25215 lumens
Efficiency: N/A
Efficacy: 110.1 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

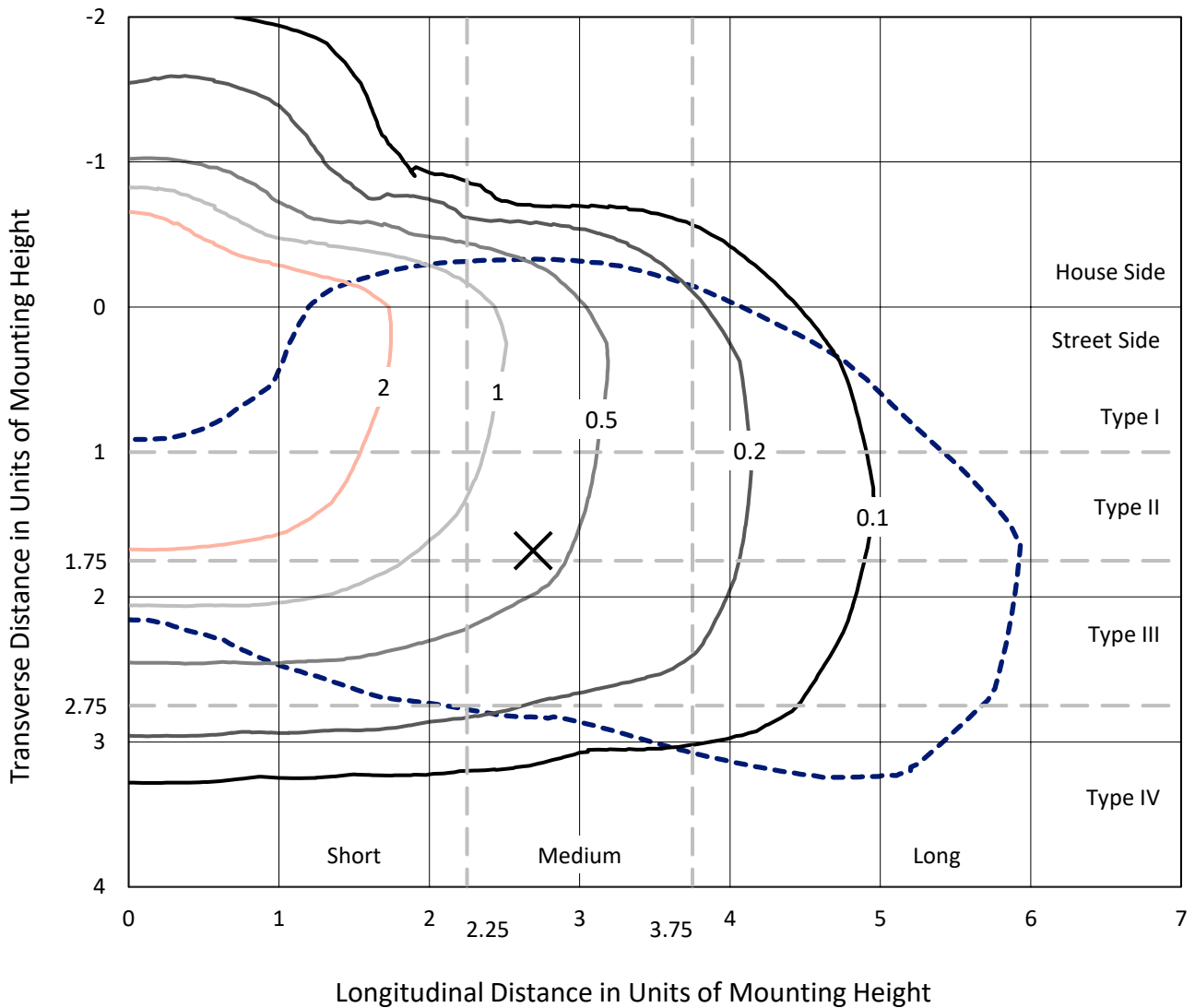
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

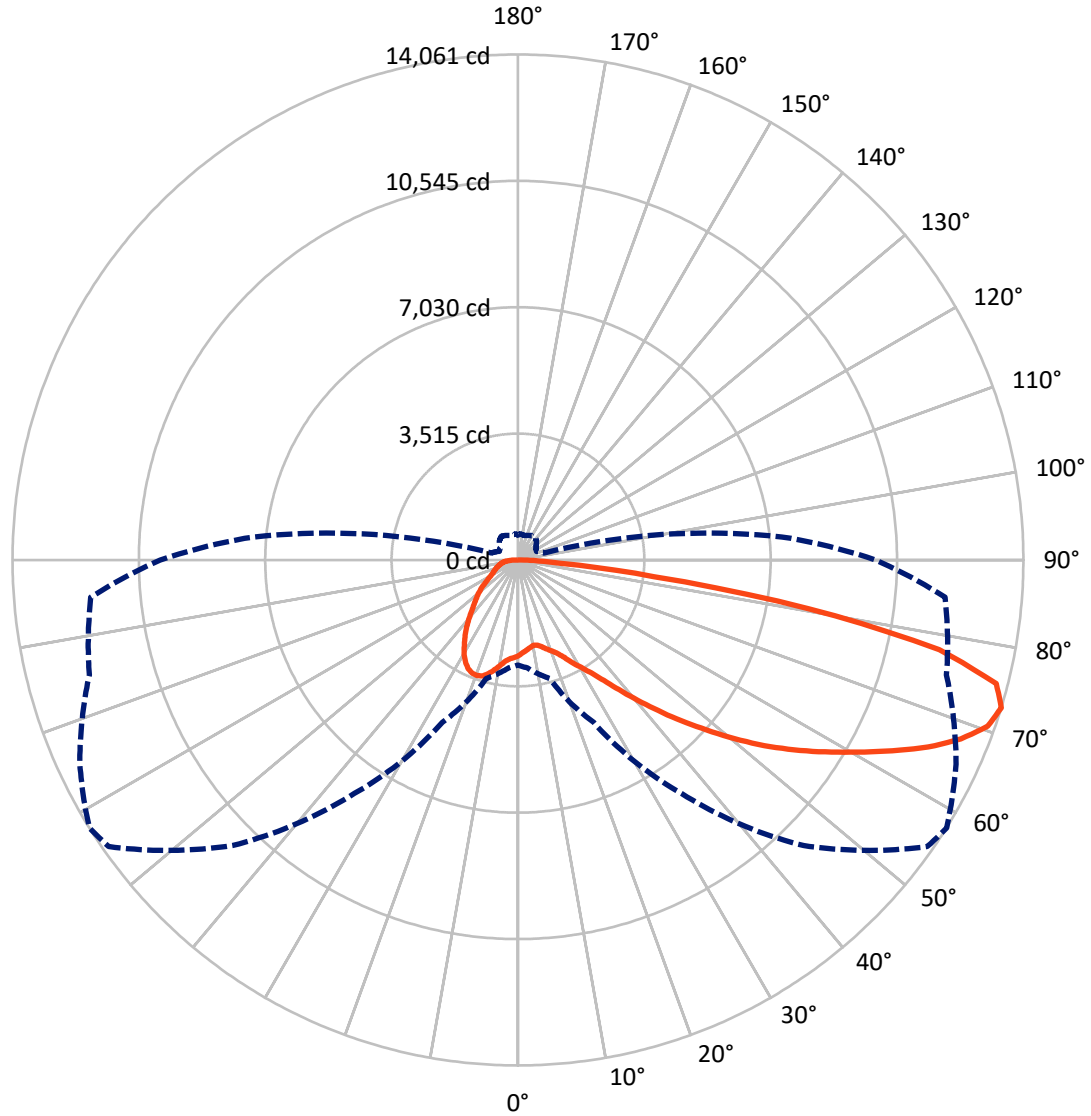
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 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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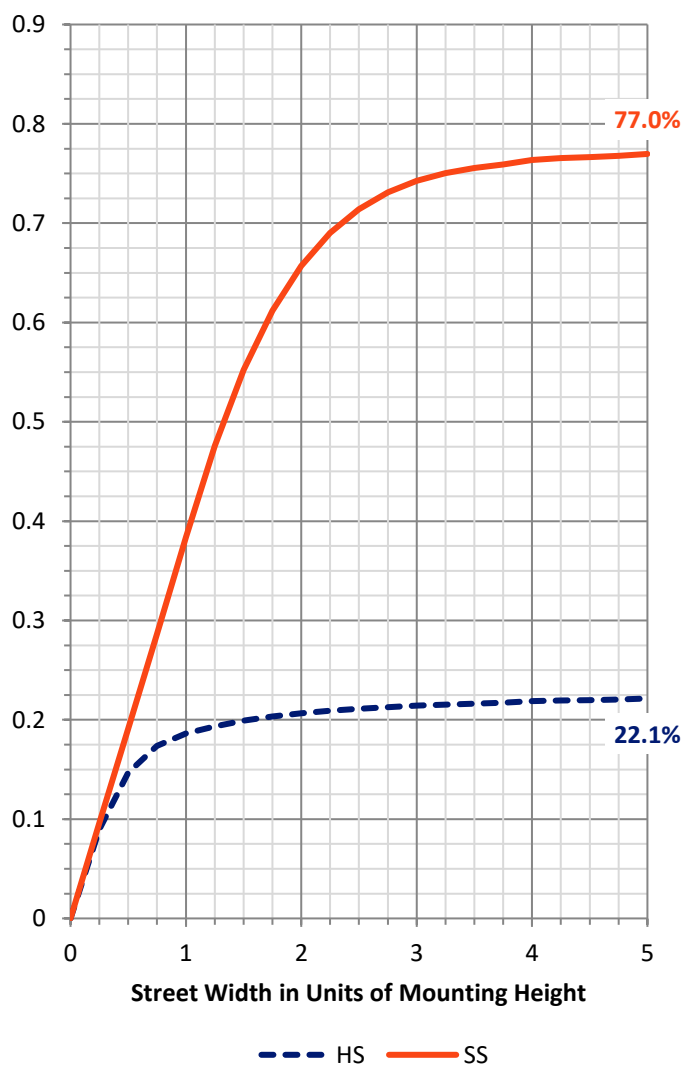
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5718.5 | 0.0 | 5718.5 |
| | % Fixture | 22.7 | 0.0 | 22.7 |
| Street Side | Lumens | 19496.5 | 0.0 | 19496.5 |
| | % Fixture | 77.3 | 0.0 | 77.3 |
| Total | Lumens | 25215.0 | 0.0 | 25215.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 256.2 | 1.0 |
| 10°-20° | 813.7 | 3.2 |
| 20°-30° | 1457.5 | 5.8 |
| 30°-40° | 2192.5 | 8.7 |
| 40°-50° | 3550.5 | 14.1 |
| 50°-60° | 5344.6 | 21.2 |
| 60°-70° | 6290.0 | 24.9 |
| 70°-80° | 4460.2 | 17.7 |
| 80°-90° | 849.9 | 3.4 |
| 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° | 25215.0 | 100.0 |
| 0°-180° | 25215.0 | 100.0 |

Coefficient of Utilization



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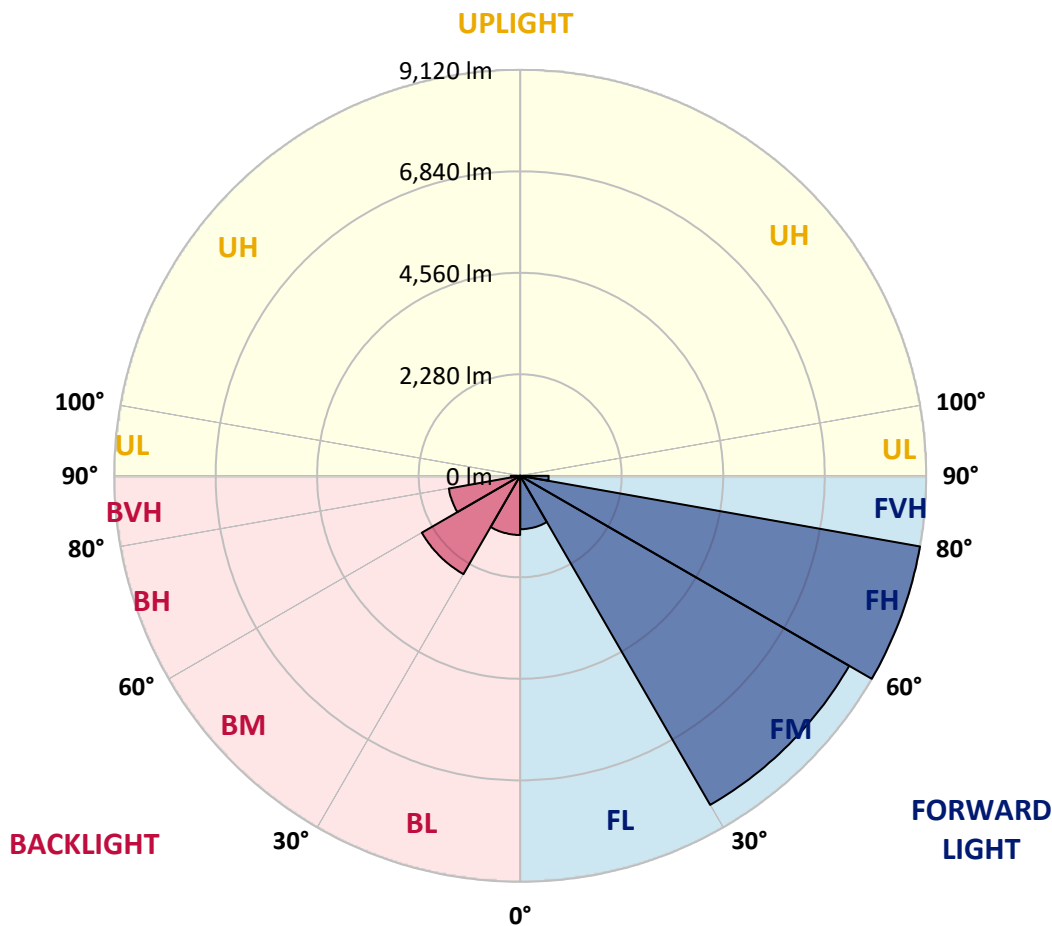
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1199.1 | 4.8 | | | |
| FM (30°-60°) | 8536.0 | 33.9 | | | |
| FH (60°-80°) | 9120.4 | 36.2 | | | G4/12000 |
| FVH (80°-90°) | 641.1 | 2.5 | | | G4/750 |
| BL (0°-30°) | 1328.3 | 5.3 | B3/2500 | | |
| BM (30°-60°) | 2551.5 | 10.1 | B3/5000 | | |
| BH (60°-80°) | 1629.8 | 6.5 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 208.8 | 0.8 | | | 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 IV Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 58° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2659.6 | 2659.6 | 2659.6 | 2659.6 | 2659.6 | 2659.6 | 2659.6 | 2659.6 | 2659.6 | 2659.6 | 2659.6 |
| 2.5° | 2559.8 | 2546.5 | 2549.8 | 2549.8 | 2563.1 | 2569.8 | 2573.1 | 2583.1 | 2589.7 | 2606.4 | 2629.7 |
| 5° | 2440.0 | 2430.0 | 2433.3 | 2436.6 | 2459.9 | 2483.2 | 2503.2 | 2516.5 | 2536.5 | 2563.1 | 2596.4 |
| 7.5° | 2353.4 | 2346.7 | 2350.1 | 2356.7 | 2376.7 | 2403.3 | 2436.6 | 2456.6 | 2486.6 | 2536.5 | 2593.1 |
| 10° | 2290.2 | 2290.2 | 2293.5 | 2306.8 | 2326.8 | 2360.1 | 2386.7 | 2410.0 | 2469.9 | 2559.8 | 2646.3 |
| 12.5° | 2240.2 | 2240.2 | 2250.2 | 2276.8 | 2310.1 | 2343.4 | 2406.7 | 2433.3 | 2513.2 | 2636.3 | 2739.5 |
| 15° | 2236.9 | 2240.2 | 2243.6 | 2266.9 | 2303.5 | 2376.7 | 2469.9 | 2509.9 | 2606.4 | 2752.9 | 2872.7 |
| 17.5° | 2290.2 | 2293.5 | 2280.2 | 2286.8 | 2330.1 | 2433.3 | 2556.5 | 2603.1 | 2726.2 | 2886.0 | 3009.2 |
| 20° | 2453.3 | 2453.3 | 2413.3 | 2376.7 | 2406.7 | 2519.8 | 2659.6 | 2706.2 | 2842.7 | 3019.1 | 3142.3 |
| 22.5° | 2786.1 | 2802.8 | 2709.6 | 2629.7 | 2583.1 | 2646.3 | 2772.8 | 2822.8 | 2975.9 | 3165.6 | 3288.8 |
| 25° | 3188.9 | 3205.6 | 3079.1 | 2965.9 | 2879.3 | 2869.4 | 2952.6 | 3005.8 | 3132.3 | 3328.7 | 3431.9 |
| 27.5° | 3578.4 | 3548.4 | 3431.9 | 3325.4 | 3215.5 | 3125.7 | 3188.9 | 3235.5 | 3382.0 | 3531.8 | 3595.0 |
| 30° | 3884.6 | 3861.3 | 3748.1 | 3671.6 | 3568.4 | 3451.9 | 3415.3 | 3465.2 | 3585.0 | 3724.8 | 3758.1 |
| 32.5° | 4224.1 | 4207.5 | 4094.3 | 3994.5 | 3907.9 | 3798.1 | 3718.2 | 3741.5 | 3808.1 | 3907.9 | 3927.9 |
| 35° | 4656.9 | 4693.5 | 4573.7 | 4370.6 | 4274.1 | 4167.6 | 4111.0 | 4117.6 | 4167.6 | 4230.8 | 4197.5 |
| 37.5° | 5112.9 | 5156.2 | 5162.8 | 4843.3 | 4713.5 | 4616.9 | 4557.0 | 4580.3 | 4640.2 | 4683.5 | 4580.3 |
| 40° | 5958.4 | 5915.1 | 5742.0 | 5505.7 | 5306.0 | 5212.8 | 5129.6 | 5126.2 | 5169.5 | 5246.1 | 5059.7 |
| 42.5° | 7080.2 | 7040.2 | 6690.7 | 6384.5 | 6068.3 | 5961.7 | 5798.6 | 5728.7 | 5748.7 | 5845.2 | 5585.6 |
| 45° | 8155.4 | 8138.7 | 7859.1 | 7502.9 | 7123.5 | 6917.1 | 6544.3 | 6374.5 | 6357.9 | 6434.4 | 6124.8 |
| 47.5° | 9110.7 | 9037.5 | 8834.4 | 8558.1 | 8518.2 | 7978.9 | 7293.2 | 7063.5 | 6983.7 | 7026.9 | 6680.7 |
| 50° | 10132.6 | 9883.0 | 9603.4 | 9433.6 | 9723.2 | 9220.6 | 8048.8 | 7809.2 | 7612.8 | 7642.7 | 7283.2 |
| 52.5° | 10675.2 | 10255.8 | 10072.7 | 10122.6 | 10512.1 | 10319.0 | 8871.0 | 8578.1 | 8261.9 | 8305.2 | 7882.4 |
| 55° | 10209.2 | 10205.9 | 10285.7 | 10595.3 | 11137.9 | 10914.9 | 9653.3 | 9323.7 | 8977.6 | 8987.5 | 8571.5 |
| 57.5° | 9570.1 | 9699.9 | 10112.6 | 10795.0 | 11913.5 | 11540.7 | 10422.2 | 10072.7 | 9756.5 | 9706.5 | 9353.7 |
| 60° | 8987.5 | 9130.7 | 9729.8 | 10761.7 | 12183.1 | 12113.2 | 11154.5 | 10848.3 | 10592.0 | 10445.5 | 10175.9 |
| 62.5° | 8102.1 | 8208.6 | 9057.4 | 10548.7 | 11956.8 | 12526.0 | 11896.8 | 11687.1 | 11494.1 | 11191.2 | 11061.3 |
| 65° | 7060.2 | 7096.8 | 7992.3 | 9846.4 | 11673.8 | 12685.7 | 12635.8 | 12542.6 | 12356.2 | 11910.2 | 11936.8 |
| 67.5° | 5931.8 | 6005.0 | 6790.6 | 8724.6 | 11054.7 | 12612.5 | 13208.4 | 13284.9 | 13065.2 | 12396.1 | 12496.0 |
| 70° | 4730.1 | 4820.0 | 5415.8 | 7173.4 | 10002.8 | 12296.3 | 13737.6 | 13860.8 | 13438.0 | 12555.9 | 12599.2 |
| 72.5° | 2925.9 | 3012.5 | 3411.9 | 4983.1 | 7929.0 | 11234.4 | 13900.7 | 14060.5 | 13448.0 | 12342.9 | 11926.8 |
| 75° | 1011.9 | 1021.9 | 1334.8 | 2390.0 | 4706.8 | 8481.6 | 13368.1 | 13744.3 | 13025.3 | 11567.3 | 10378.9 |
| 77.5° | 462.7 | 479.3 | 592.5 | 985.3 | 2087.1 | 4577.0 | 11038.0 | 11980.1 | 11740.4 | 10355.6 | 7988.9 |
| 80° | 319.6 | 326.2 | 409.4 | 589.2 | 1205.0 | 1611.1 | 6967.0 | 8195.3 | 8614.7 | 8018.9 | 5119.6 |
| 82.5° | 239.7 | 246.3 | 316.2 | 399.4 | 868.8 | 782.2 | 2653.0 | 3808.1 | 4733.4 | 4646.9 | 2140.4 |
| 85° | 229.7 | 226.4 | 246.3 | 266.3 | 579.2 | 466.0 | 858.8 | 1178.4 | 1847.4 | 1581.1 | 539.3 |
| 87.5° | 99.9 | 109.8 | 253.0 | 149.8 | 302.9 | 216.4 | 372.8 | 436.1 | 562.6 | 489.3 | 193.1 |
| 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° | 2659.6 | 2659.6 | 2659.6 | 2659.6 | 2659.6 | 2659.6 | 2659.6 | 2659.6 | 2659.6 | 2659.6 | 2659.6 |
| 2.5° | 2639.7 | 2646.3 | 2666.3 | 2696.3 | 2712.9 | 2746.2 | 2769.5 | 2782.8 | 2792.8 | 2796.1 | 2796.1 |
| 5° | 2616.4 | 2629.7 | 2673.0 | 2722.9 | 2769.5 | 2839.4 | 2902.6 | 2939.3 | 2965.9 | 2975.9 | 2979.2 |
| 7.5° | 2623.0 | 2656.3 | 2719.6 | 2792.8 | 2852.7 | 2942.6 | 3019.1 | 3092.4 | 3152.3 | 3175.6 | 3175.6 |
| 10° | 2686.3 | 2732.9 | 2819.4 | 2916.0 | 2992.5 | 3085.7 | 3165.6 | 3228.9 | 3298.8 | 3338.7 | 3345.4 |
| 12.5° | 2782.8 | 2839.4 | 2952.6 | 3059.1 | 3145.6 | 3218.9 | 3292.1 | 3338.7 | 3372.0 | 3402.0 | 3408.6 |
| 15° | 2919.3 | 2989.2 | 3102.4 | 3212.2 | 3288.8 | 3335.4 | 3355.3 | 3355.3 | 3352.0 | 3355.3 | 3362.0 |
| 17.5° | 3055.8 | 3122.3 | 3235.5 | 3345.4 | 3382.0 | 3355.3 | 3332.0 | 3325.4 | 3322.1 | 3315.4 | 3318.7 |
| 20° | 3188.9 | 3252.2 | 3348.7 | 3431.9 | 3402.0 | 3308.7 | 3278.8 | 3275.5 | 3265.5 | 3258.8 | 3252.2 |
| 22.5° | 3322.1 | 3368.7 | 3448.6 | 3478.5 | 3358.7 | 3225.5 | 3188.9 | 3168.9 | 3155.6 | 3139.0 | 3122.3 |
| 25° | 3475.2 | 3488.5 | 3548.4 | 3501.8 | 3252.2 | 3072.4 | 3019.1 | 2989.2 | 2975.9 | 2959.2 | 2945.9 |
| 27.5° | 3618.3 | 3618.3 | 3628.3 | 3465.2 | 3095.7 | 2869.4 | 2789.5 | 2736.2 | 2732.9 | 2729.5 | 2726.2 |
| 30° | 3748.1 | 3731.5 | 3698.2 | 3355.3 | 2892.7 | 2619.7 | 2499.9 | 2446.6 | 2466.6 | 2483.2 | 2486.6 |
| 32.5° | 3901.3 | 3868.0 | 3774.8 | 3205.6 | 2649.7 | 2340.1 | 2193.6 | 2170.3 | 2193.6 | 2213.6 | 2200.3 |
| 35° | 4140.9 | 4081.0 | 3854.7 | 3032.5 | 2416.6 | 2083.8 | 1944.0 | 1910.7 | 1904.0 | 1900.7 | 1874.1 |
| 37.5° | 4483.8 | 4380.6 | 3917.9 | 2846.1 | 2187.0 | 1857.4 | 1754.2 | 1684.3 | 1621.1 | 1554.5 | 1544.5 |
| 40° | 4903.2 | 4726.8 | 3961.2 | 2633.0 | 1944.0 | 1667.7 | 1557.8 | 1468.0 | 1361.4 | 1244.9 | 1231.6 |
| 42.5° | 5362.6 | 5099.6 | 3981.1 | 2396.7 | 1730.9 | 1511.2 | 1374.8 | 1261.6 | 1141.8 | 1051.9 | 1035.2 |
| 45° | 5858.5 | 5502.4 | 3964.5 | 2170.3 | 1557.8 | 1378.1 | 1225.0 | 1101.8 | 1005.3 | 942.0 | 928.7 |
| 47.5° | 6341.2 | 5965.1 | 3917.9 | 1990.6 | 1424.7 | 1264.9 | 1108.5 | 995.3 | 922.1 | 852.2 | 835.5 |
| 50° | 6960.4 | 6407.8 | 3861.3 | 1850.8 | 1278.2 | 1151.7 | 1035.2 | 915.4 | 832.2 | 798.9 | 792.2 |
| 52.5° | 7646.1 | 6850.5 | 3794.7 | 1674.3 | 1135.1 | 1061.9 | 988.6 | 882.1 | 855.5 | 792.2 | 782.2 |
| 55° | 8388.4 | 7376.4 | 3781.4 | 1451.3 | 1008.6 | 998.6 | 942.0 | 912.1 | 918.7 | 792.2 | 775.6 |
| 57.5° | 9170.6 | 7939.0 | 3811.4 | 1228.3 | 905.4 | 942.0 | 962.0 | 938.7 | 928.7 | 808.9 | 775.6 |
| 60° | 9986.2 | 8481.6 | 3721.5 | 1021.9 | 825.5 | 895.4 | 985.3 | 925.4 | 852.2 | 802.2 | 778.9 |
| 62.5° | 10778.4 | 8937.6 | 3332.0 | 875.5 | 765.6 | 882.1 | 972.0 | 875.5 | 792.2 | 792.2 | 782.2 |
| 65° | 11354.3 | 9140.7 | 2606.4 | 768.9 | 725.7 | 865.5 | 948.7 | 842.2 | 775.6 | 798.9 | 785.6 |
| 67.5° | 11420.8 | 8931.0 | 1750.9 | 685.7 | 692.4 | 835.5 | 895.4 | 812.2 | 758.9 | 818.9 | 798.9 |
| 70° | 11011.4 | 8385.0 | 1071.8 | 622.5 | 649.1 | 782.2 | 848.8 | 782.2 | 735.6 | 802.2 | 772.3 |
| 72.5° | 9949.5 | 7366.5 | 755.6 | 569.2 | 602.5 | 732.3 | 805.5 | 755.6 | 702.4 | 725.7 | 695.7 |
| 75° | 8162.0 | 5708.8 | 599.2 | 519.3 | 555.9 | 685.7 | 768.9 | 715.7 | 662.4 | 652.4 | 632.5 |
| 77.5° | 5782.0 | 3658.3 | 482.7 | 479.3 | 506.0 | 629.1 | 719.0 | 669.1 | 615.8 | 595.8 | 582.5 |
| 80° | 3325.4 | 1794.2 | 416.1 | 432.7 | 459.4 | 572.5 | 659.1 | 615.8 | 565.9 | 535.9 | 516.0 |
| 82.5° | 1271.6 | 625.8 | 366.2 | 376.1 | 406.1 | 512.6 | 599.2 | 562.6 | 512.6 | 539.3 | 452.7 |
| 85° | 412.8 | 342.9 | 299.6 | 309.6 | 339.5 | 426.1 | 529.3 | 499.3 | 442.7 | 392.8 | 362.8 |
| 87.5° | 183.1 | 186.4 | 159.8 | 176.4 | 213.0 | 282.9 | 386.1 | 366.2 | 322.9 | 269.6 | 259.6 |
| 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)