

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: P400106

Luminaire Tested: **ARCH-L-PA3-230-827-U-T3**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400106
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-PA3-230-827-U-T3
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 80 CRI, 2700K, 980mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23326 lumens
Efficiency: N/A
Efficacy: 101.9 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

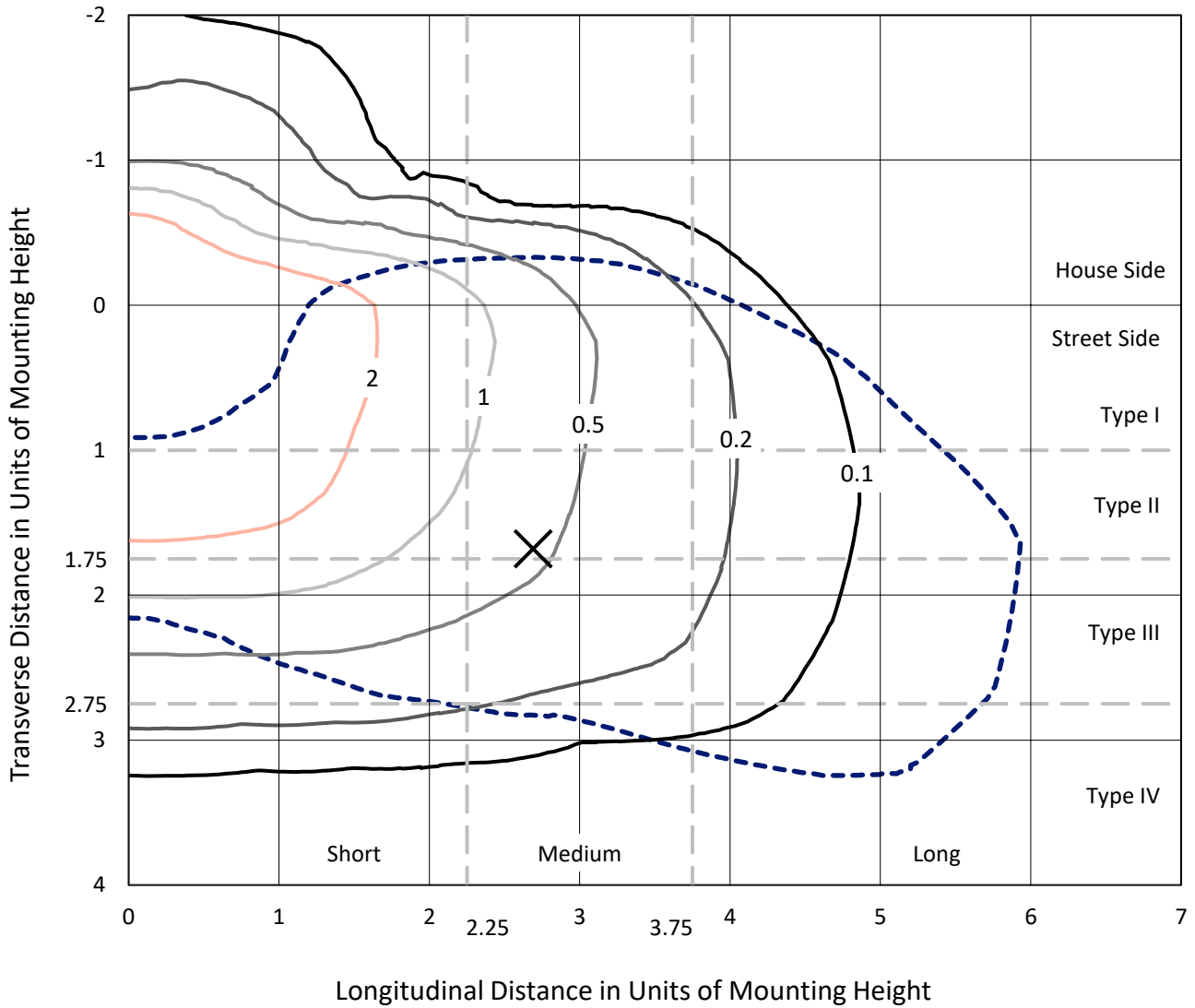
Input Watts (W): 229
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

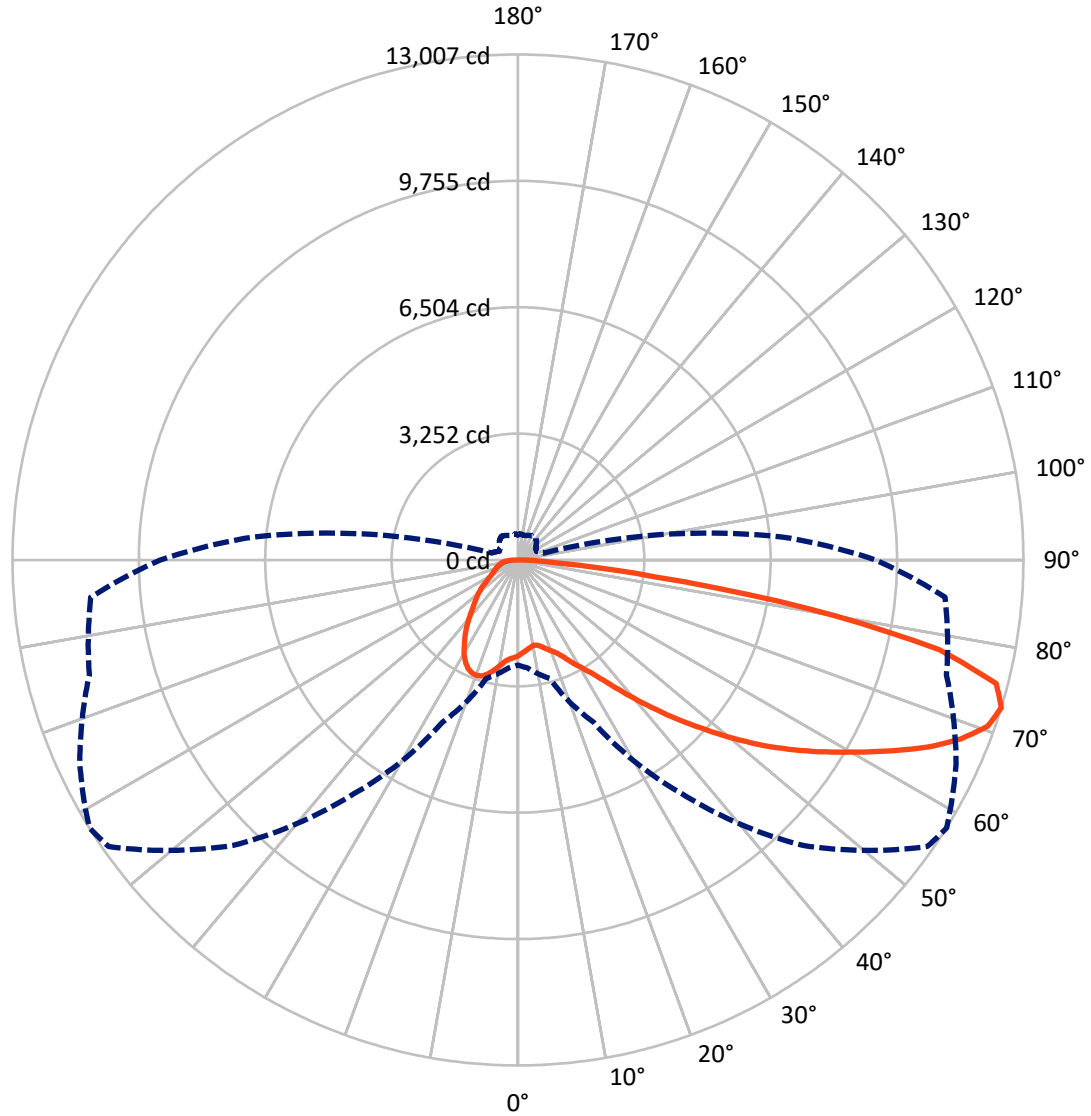
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.6 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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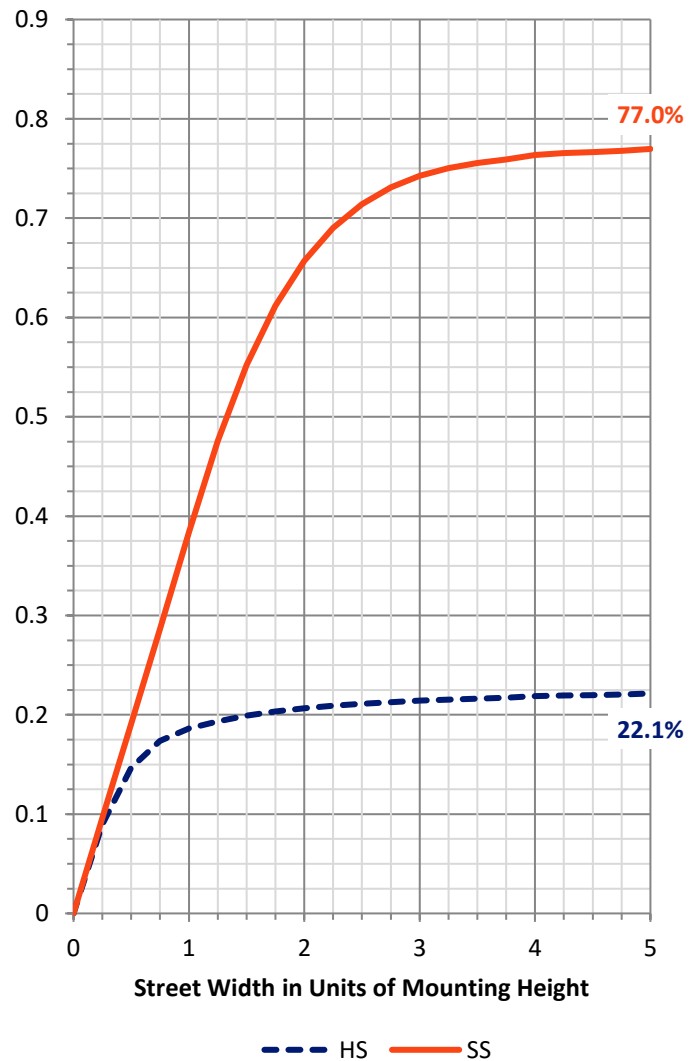
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5290.1 | 0.0 | 5290.1 |
| | % Fixture | 22.7 | 0.0 | 22.7 |
| Street Side | Lumens | 18035.9 | 0.0 | 18035.9 |
| | % Fixture | 77.3 | 0.0 | 77.3 |
| Total | Lumens | 23326.0 | 0.0 | 23326.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 237.0 | 1.0 |
| 10°-20° | 752.7 | 3.2 |
| 20°-30° | 1348.3 | 5.8 |
| 30°-40° | 2028.3 | 8.7 |
| 40°-50° | 3284.5 | 14.1 |
| 50°-60° | 4944.2 | 21.2 |
| 60°-70° | 5818.8 | 24.9 |
| 70°-80° | 4126.0 | 17.7 |
| 80°-90° | 786.2 | 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° | 23326.0 | 100.0 |
| 0°-180° | 23326.0 | 100.0 |



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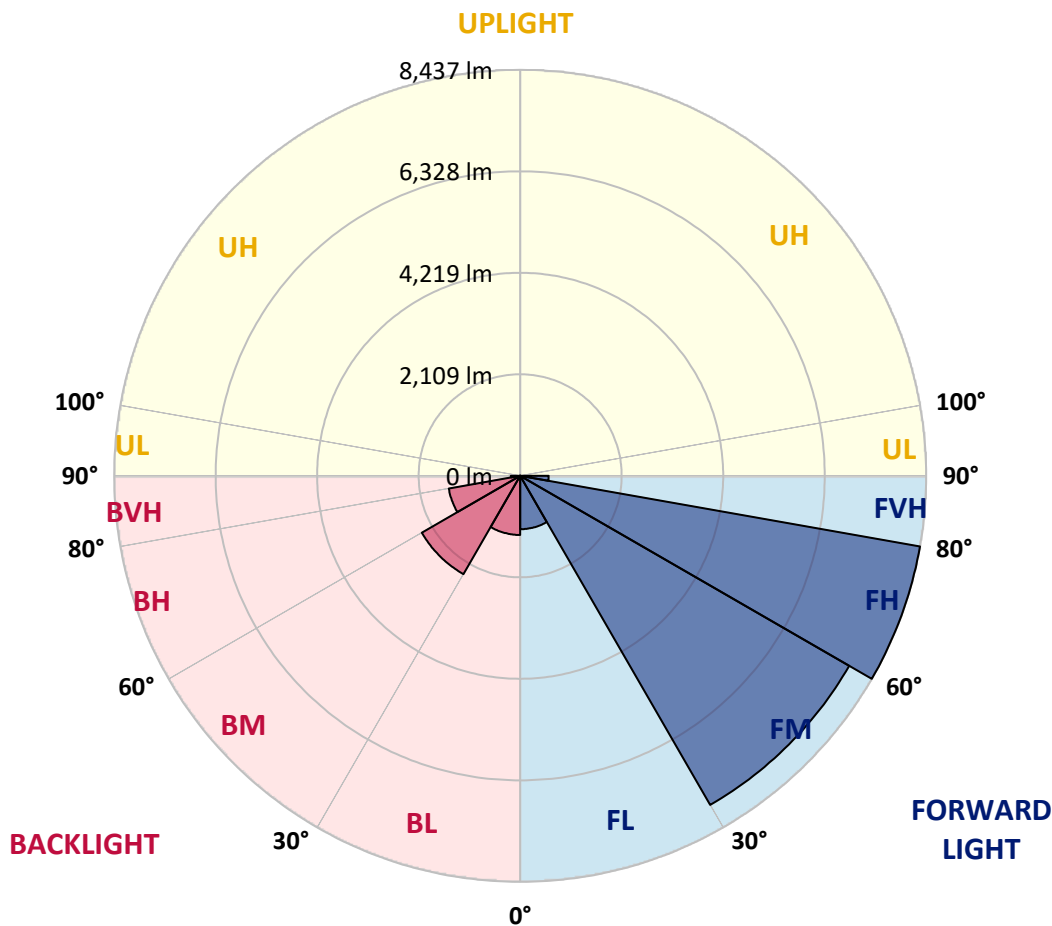
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1109.3 | 4.8 | | | |
| FM (30°-60°) | 7896.5 | 33.9 | | | |
| FH (60°-80°) | 8437.1 | 36.2 | | | G4/12000 |
| FVH (80°-90°) | 593.0 | 2.5 | | | G4/750 |
| BL (0°-30°) | 1228.8 | 5.3 | B3/2500 | | |
| BM (30°-60°) | 2360.4 | 10.1 | B2/2500 | | |
| BH (60°-80°) | 1507.7 | 6.5 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 193.2 | 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° | 2460.4 | 2460.4 | 2460.4 | 2460.4 | 2460.4 | 2460.4 | 2460.4 | 2460.4 | 2460.4 | 2460.4 | 2460.4 |
| 2.5° | 2368.0 | 2355.7 | 2358.8 | 2358.8 | 2371.1 | 2377.3 | 2380.3 | 2389.6 | 2395.7 | 2411.1 | 2432.7 |
| 5° | 2257.2 | 2247.9 | 2251.0 | 2254.1 | 2275.6 | 2297.2 | 2315.7 | 2328.0 | 2346.5 | 2371.1 | 2401.9 |
| 7.5° | 2177.1 | 2170.9 | 2174.0 | 2180.2 | 2198.7 | 2223.3 | 2254.1 | 2272.6 | 2300.3 | 2346.5 | 2398.8 |
| 10° | 2118.6 | 2118.6 | 2121.7 | 2134.0 | 2152.5 | 2183.3 | 2207.9 | 2229.4 | 2284.9 | 2368.0 | 2448.1 |
| 12.5° | 2072.4 | 2072.4 | 2081.6 | 2106.3 | 2137.1 | 2167.9 | 2226.4 | 2251.0 | 2324.9 | 2438.8 | 2534.3 |
| 15° | 2069.3 | 2072.4 | 2075.5 | 2097.0 | 2130.9 | 2198.7 | 2284.9 | 2321.8 | 2411.1 | 2546.6 | 2657.5 |
| 17.5° | 2118.6 | 2121.7 | 2109.4 | 2115.5 | 2155.5 | 2251.0 | 2364.9 | 2408.0 | 2522.0 | 2669.8 | 2783.7 |
| 20° | 2269.5 | 2269.5 | 2232.5 | 2198.7 | 2226.4 | 2331.1 | 2460.4 | 2503.5 | 2629.8 | 2793.0 | 2906.9 |
| 22.5° | 2577.4 | 2592.8 | 2506.6 | 2432.7 | 2389.6 | 2448.1 | 2565.1 | 2611.3 | 2752.9 | 2928.5 | 3042.4 |
| 25° | 2950.0 | 2965.4 | 2848.4 | 2743.7 | 2663.6 | 2654.4 | 2731.4 | 2780.6 | 2897.7 | 3079.3 | 3174.8 |
| 27.5° | 3310.3 | 3282.6 | 3174.8 | 3076.3 | 2974.6 | 2891.5 | 2950.0 | 2993.1 | 3128.6 | 3267.2 | 3325.7 |
| 30° | 3593.6 | 3572.0 | 3467.3 | 3396.5 | 3301.1 | 3193.3 | 3159.4 | 3205.6 | 3316.5 | 3445.8 | 3476.6 |
| 32.5° | 3907.7 | 3892.3 | 3787.6 | 3695.2 | 3615.2 | 3513.5 | 3439.6 | 3461.2 | 3522.8 | 3615.2 | 3633.6 |
| 35° | 4308.0 | 4341.9 | 4231.0 | 4043.2 | 3953.9 | 3855.3 | 3803.0 | 3809.2 | 3855.3 | 3913.8 | 3883.1 |
| 37.5° | 4729.9 | 4769.9 | 4776.1 | 4480.4 | 4360.4 | 4271.1 | 4215.6 | 4237.2 | 4292.6 | 4332.6 | 4237.2 |
| 40° | 5512.0 | 5472.0 | 5311.9 | 5093.2 | 4908.5 | 4822.3 | 4745.3 | 4742.2 | 4782.2 | 4853.0 | 4680.6 |
| 42.5° | 6549.8 | 6512.8 | 6189.5 | 5906.2 | 5613.6 | 5515.1 | 5364.2 | 5299.6 | 5318.0 | 5407.3 | 5167.1 |
| 45° | 7544.4 | 7529.0 | 7270.3 | 6940.8 | 6589.8 | 6398.9 | 6054.0 | 5896.9 | 5881.6 | 5952.4 | 5666.0 |
| 47.5° | 8428.2 | 8360.4 | 8172.6 | 7917.0 | 7880.0 | 7381.2 | 6746.8 | 6534.4 | 6460.5 | 6500.5 | 6180.2 |
| 50° | 9373.5 | 9142.6 | 8883.9 | 8726.9 | 8994.8 | 8529.8 | 7445.9 | 7224.1 | 7042.5 | 7070.2 | 6737.6 |
| 52.5° | 9875.5 | 9487.5 | 9318.1 | 9364.3 | 9724.6 | 9546.0 | 8206.5 | 7935.5 | 7642.9 | 7683.0 | 7291.9 |
| 55° | 9444.4 | 9441.3 | 9515.2 | 9801.6 | 10303.5 | 10097.2 | 8930.1 | 8625.2 | 8305.0 | 8314.2 | 7929.3 |
| 57.5° | 8853.1 | 8973.2 | 9355.1 | 9986.3 | 11021.0 | 10676.1 | 9641.4 | 9318.1 | 9025.6 | 8979.4 | 8653.0 |
| 60° | 8314.2 | 8446.6 | 9000.9 | 9955.5 | 11270.4 | 11205.7 | 10318.9 | 10035.6 | 9798.5 | 9663.0 | 9413.6 |
| 62.5° | 7495.1 | 7593.7 | 8378.9 | 9758.4 | 11061.0 | 11587.6 | 11005.6 | 10811.6 | 10633.0 | 10352.8 | 10232.7 |
| 65° | 6531.3 | 6565.2 | 7393.5 | 9108.7 | 10799.3 | 11735.4 | 11689.2 | 11603.0 | 11430.5 | 11017.9 | 11042.5 |
| 67.5° | 5487.4 | 5555.1 | 6281.9 | 8071.0 | 10226.5 | 11667.6 | 12218.8 | 12289.7 | 12086.4 | 11467.5 | 11559.9 |
| 70° | 4375.8 | 4458.9 | 5010.1 | 6636.0 | 9253.4 | 11375.1 | 12708.5 | 12822.4 | 12431.3 | 11615.3 | 11655.3 |
| 72.5° | 2706.7 | 2786.8 | 3156.3 | 4609.8 | 7335.0 | 10392.8 | 12859.3 | 13007.2 | 12440.6 | 11418.2 | 11033.3 |
| 75° | 936.1 | 945.4 | 1234.8 | 2211.0 | 4354.2 | 7846.2 | 12366.7 | 12714.6 | 12049.5 | 10700.7 | 9601.4 |
| 77.5° | 428.0 | 443.4 | 548.1 | 911.5 | 1930.7 | 4234.1 | 10211.1 | 11082.6 | 10860.9 | 9579.8 | 7390.4 |
| 80° | 295.6 | 301.8 | 378.8 | 545.0 | 1114.7 | 1490.4 | 6445.1 | 7581.3 | 7969.3 | 7418.1 | 4736.0 |
| 82.5° | 221.7 | 227.9 | 292.5 | 369.5 | 803.7 | 723.6 | 2454.2 | 3522.8 | 4378.8 | 4298.8 | 1980.0 |
| 85° | 212.5 | 209.4 | 227.9 | 246.3 | 535.8 | 431.1 | 794.5 | 1090.1 | 1709.0 | 1462.7 | 498.9 |
| 87.5° | 92.4 | 101.6 | 234.0 | 138.6 | 280.2 | 200.2 | 344.9 | 403.4 | 520.4 | 452.7 | 178.6 |
| 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° | 2460.4 | 2460.4 | 2460.4 | 2460.4 | 2460.4 | 2460.4 | 2460.4 | 2460.4 | 2460.4 | 2460.4 | 2460.4 |
| 2.5° | 2441.9 | 2448.1 | 2466.6 | 2494.3 | 2509.7 | 2540.5 | 2562.0 | 2574.3 | 2583.6 | 2586.7 | 2586.7 |
| 5° | 2420.4 | 2432.7 | 2472.7 | 2518.9 | 2562.0 | 2626.7 | 2685.2 | 2719.1 | 2743.7 | 2752.9 | 2756.0 |
| 7.5° | 2426.5 | 2457.3 | 2515.8 | 2583.6 | 2639.0 | 2722.1 | 2793.0 | 2860.7 | 2916.1 | 2937.7 | 2937.7 |
| 10° | 2485.0 | 2528.1 | 2608.2 | 2697.5 | 2768.3 | 2854.6 | 2928.5 | 2987.0 | 3051.6 | 3088.6 | 3094.7 |
| 12.5° | 2574.3 | 2626.7 | 2731.4 | 2829.9 | 2910.0 | 2977.7 | 3045.5 | 3088.6 | 3119.4 | 3147.1 | 3153.2 |
| 15° | 2700.6 | 2765.3 | 2870.0 | 2971.6 | 3042.4 | 3085.5 | 3104.0 | 3104.0 | 3100.9 | 3104.0 | 3110.1 |
| 17.5° | 2826.8 | 2888.4 | 2993.1 | 3094.7 | 3128.6 | 3104.0 | 3082.4 | 3076.3 | 3073.2 | 3067.0 | 3070.1 |
| 20° | 2950.0 | 3008.5 | 3097.8 | 3174.8 | 3147.1 | 3060.9 | 3033.2 | 3030.1 | 3020.8 | 3014.7 | 3008.5 |
| 22.5° | 3073.2 | 3116.3 | 3190.2 | 3217.9 | 3107.1 | 2983.9 | 2950.0 | 2931.5 | 2919.2 | 2903.8 | 2888.4 |
| 25° | 3214.8 | 3227.2 | 3282.6 | 3239.5 | 3008.5 | 2842.2 | 2793.0 | 2765.3 | 2752.9 | 2737.5 | 2725.2 |
| 27.5° | 3347.2 | 3347.2 | 3356.5 | 3205.6 | 2863.8 | 2654.4 | 2580.5 | 2531.2 | 2528.1 | 2525.1 | 2522.0 |
| 30° | 3467.3 | 3451.9 | 3421.2 | 3104.0 | 2676.0 | 2423.4 | 2312.6 | 2263.3 | 2281.8 | 2297.2 | 2300.3 |
| 32.5° | 3609.0 | 3578.2 | 3492.0 | 2965.4 | 2451.2 | 2164.8 | 2029.3 | 2007.7 | 2029.3 | 2047.8 | 2035.4 |
| 35° | 3830.7 | 3775.3 | 3565.9 | 2805.3 | 2235.6 | 1927.7 | 1798.3 | 1767.5 | 1761.4 | 1758.3 | 1733.7 |
| 37.5° | 4147.9 | 4052.4 | 3624.4 | 2632.8 | 2023.1 | 1718.3 | 1622.8 | 1558.1 | 1499.6 | 1438.1 | 1428.8 |
| 40° | 4535.9 | 4372.7 | 3664.4 | 2435.8 | 1798.3 | 1542.8 | 1441.1 | 1358.0 | 1259.5 | 1151.7 | 1139.4 |
| 42.5° | 4960.8 | 4717.6 | 3682.9 | 2217.1 | 1601.3 | 1398.0 | 1271.8 | 1167.1 | 1056.2 | 973.1 | 957.7 |
| 45° | 5419.6 | 5090.2 | 3667.5 | 2007.7 | 1441.1 | 1274.8 | 1133.2 | 1019.3 | 930.0 | 871.5 | 859.1 |
| 47.5° | 5866.2 | 5518.2 | 3624.4 | 1841.4 | 1318.0 | 1170.2 | 1025.4 | 920.7 | 853.0 | 788.3 | 772.9 |
| 50° | 6438.9 | 5927.7 | 3572.0 | 1712.1 | 1182.5 | 1065.5 | 957.7 | 846.8 | 769.8 | 739.0 | 732.9 |
| 52.5° | 7073.3 | 6337.3 | 3510.5 | 1548.9 | 1050.1 | 982.3 | 914.6 | 816.0 | 791.4 | 732.9 | 723.6 |
| 55° | 7760.0 | 6823.8 | 3498.1 | 1342.6 | 933.0 | 923.8 | 871.5 | 843.7 | 849.9 | 732.9 | 717.5 |
| 57.5° | 8483.6 | 7344.2 | 3525.9 | 1136.3 | 837.6 | 871.5 | 889.9 | 868.4 | 859.1 | 748.3 | 717.5 |
| 60° | 9238.0 | 7846.2 | 3442.7 | 945.4 | 763.7 | 828.3 | 911.5 | 856.1 | 788.3 | 742.1 | 720.6 |
| 62.5° | 9970.9 | 8268.0 | 3082.4 | 809.9 | 708.2 | 816.0 | 899.2 | 809.9 | 732.9 | 732.9 | 723.6 |
| 65° | 10503.6 | 8455.9 | 2411.1 | 711.3 | 671.3 | 800.6 | 877.6 | 779.1 | 717.5 | 739.0 | 726.7 |
| 67.5° | 10565.2 | 8261.9 | 1619.7 | 634.3 | 640.5 | 772.9 | 828.3 | 751.4 | 702.1 | 757.5 | 739.0 |
| 70° | 10186.5 | 7756.9 | 991.5 | 575.8 | 600.5 | 723.6 | 785.2 | 723.6 | 680.5 | 742.1 | 714.4 |
| 72.5° | 9204.2 | 6814.6 | 699.0 | 526.6 | 557.4 | 677.5 | 745.2 | 699.0 | 649.7 | 671.3 | 643.6 |
| 75° | 7550.6 | 5281.1 | 554.3 | 480.4 | 514.3 | 634.3 | 711.3 | 662.1 | 612.8 | 603.6 | 585.1 |
| 77.5° | 5348.8 | 3384.2 | 446.5 | 443.4 | 468.1 | 582.0 | 665.1 | 618.9 | 569.7 | 551.2 | 538.9 |
| 80° | 3076.3 | 1659.8 | 384.9 | 400.3 | 424.9 | 529.6 | 609.7 | 569.7 | 523.5 | 495.8 | 477.3 |
| 82.5° | 1176.3 | 578.9 | 338.7 | 348.0 | 375.7 | 474.2 | 554.3 | 520.4 | 474.2 | 498.9 | 418.8 |
| 85° | 381.8 | 317.2 | 277.1 | 286.4 | 314.1 | 394.2 | 489.6 | 461.9 | 409.6 | 363.4 | 335.6 |
| 87.5° | 169.4 | 172.4 | 147.8 | 163.2 | 197.1 | 261.7 | 357.2 | 338.7 | 298.7 | 249.4 | 240.2 |
| 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)