

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: P400229

Luminaire Tested: **ARCH-L-PA3-250-750-U-T2U-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P400229
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-16)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-250-750-U-T2U-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1070mA 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: 23186 lumens
Efficiency: N/A
Efficacy: 92.4 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G3

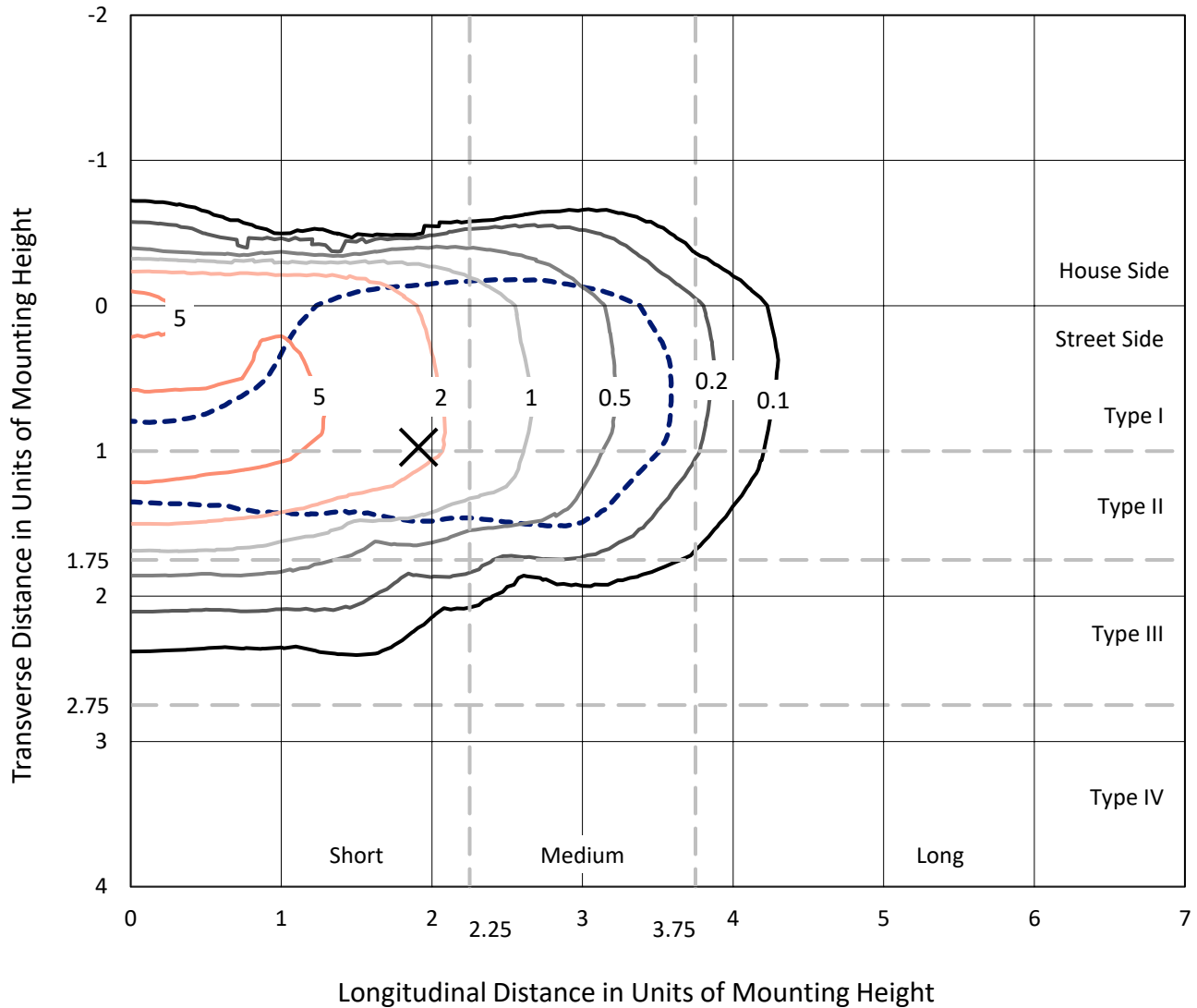
Input Watts (W): 251
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

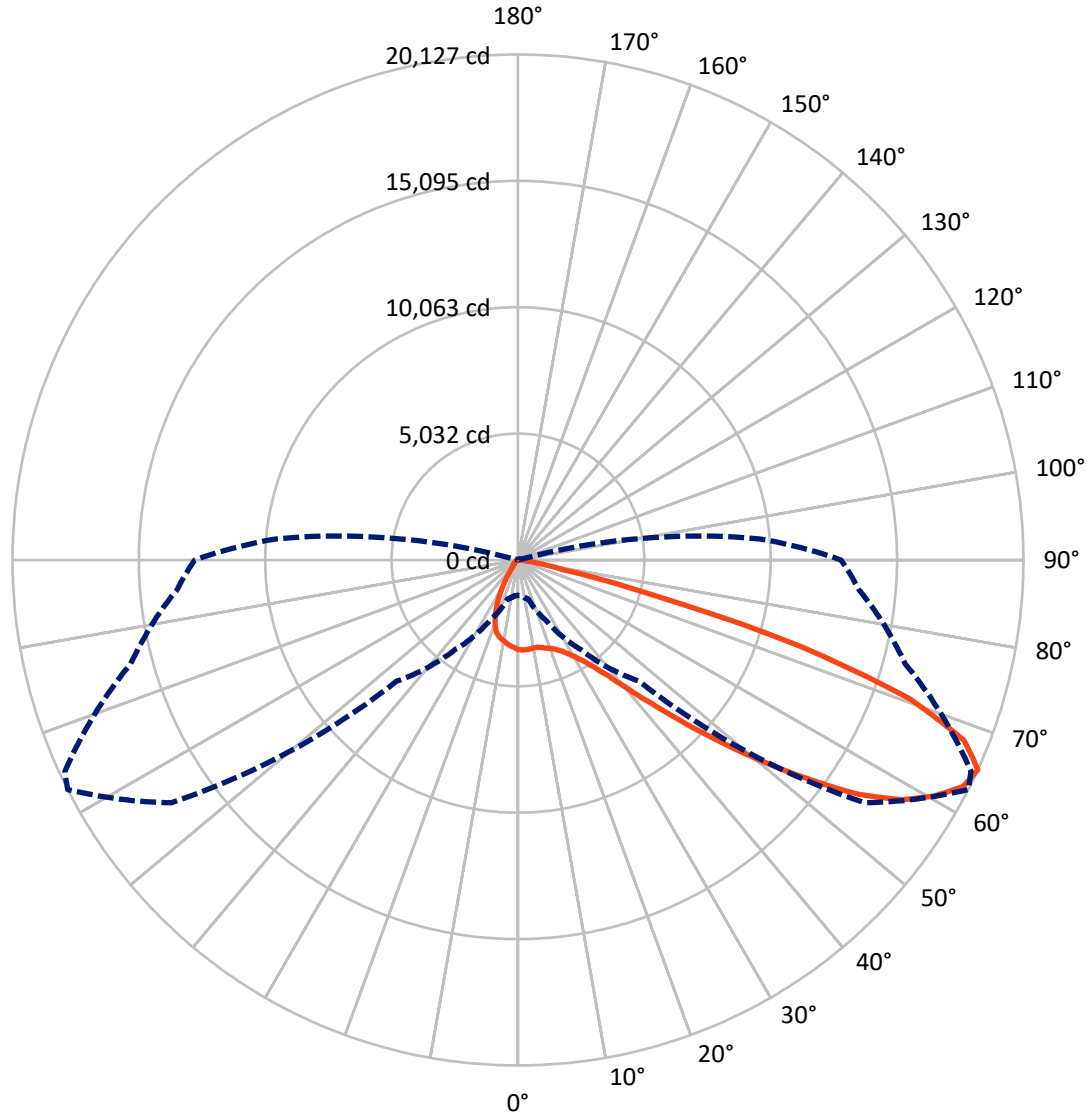
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 63-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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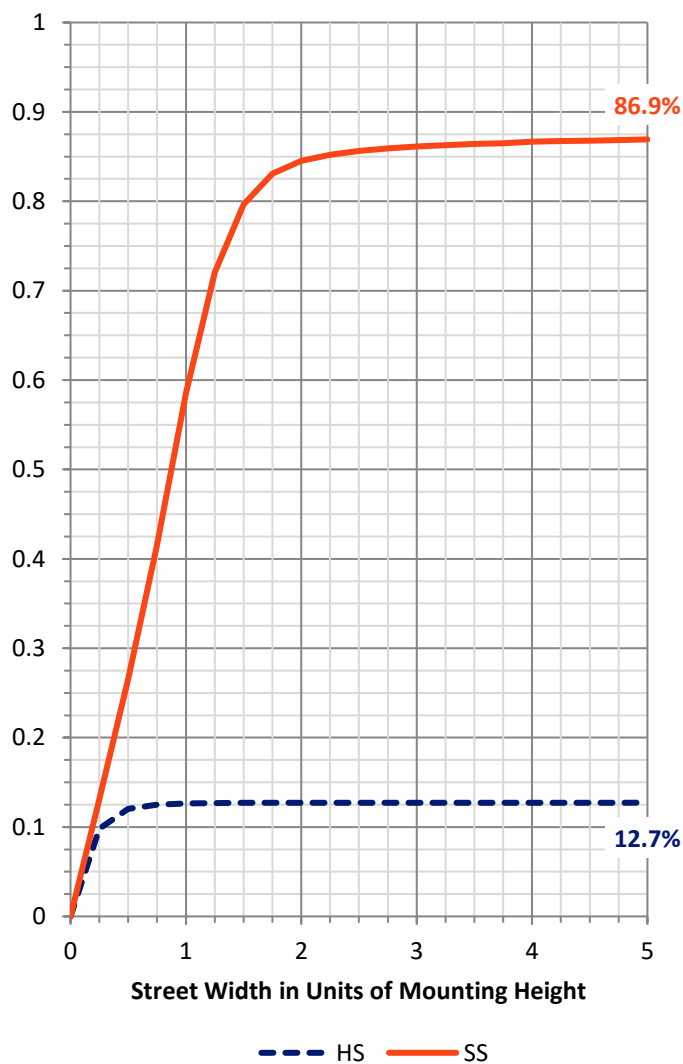
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2984.0 | 0.0 | 2984.0 |
| | % Fixture | 12.9 | 0.0 | 12.9 |
| Street Side | Lumens | 20202.0 | 0.0 | 20202.0 |
| | % Fixture | 87.1 | 0.0 | 87.1 |
| Total | Lumens | 23186.0 | 0.0 | 23186.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 325.9 | 1.4 |
| 10°-20° | 804.0 | 3.5 |
| 20°-30° | 1191.7 | 5.1 |
| 30°-40° | 2212.7 | 9.5 |
| 40°-50° | 4687.4 | 20.2 |
| 50°-60° | 6481.5 | 28.0 |
| 60°-70° | 5188.6 | 22.4 |
| 70°-80° | 2155.7 | 9.3 |
| 80°-90° | 138.4 | 0.6 |
| 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° | 23186.0 | 100.0 |
| 0°-180° | 23186.0 | 100.0 |

Coefficient of Utilization



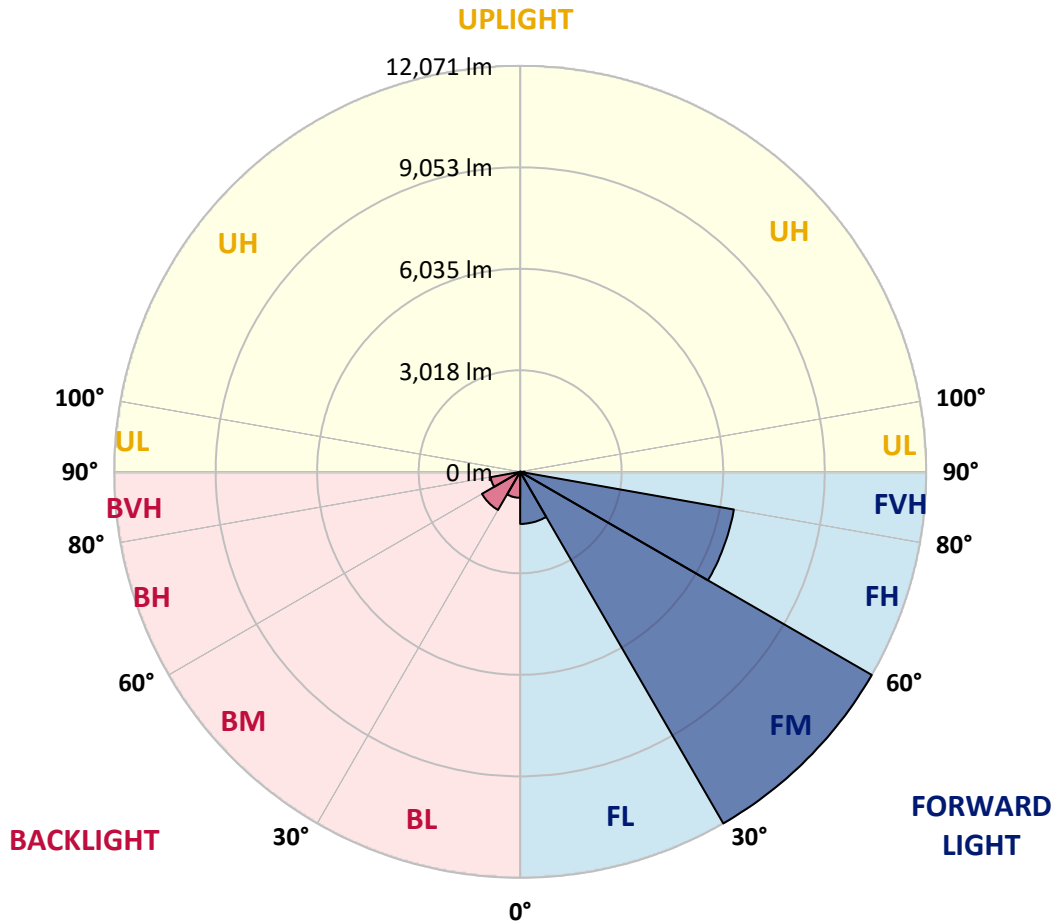
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1548.3 | 6.7 | | | |
| FM (30°-60°) | 12070.7 | 52.1 | | | |
| FH (60°-80°) | 6450.9 | 27.8 | | | G3/7500 |
| FVH (80°-90°) | 132.1 | 0.6 | | | G2/225 |
| BL (0°-30°) | 773.4 | 3.3 | B2/1000 | | |
| BM (30°-60°) | 1310.8 | 5.7 | B2/2500 | | |
| BH (60°-80°) | 893.5 | 3.9 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 6.3 | 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° | 63° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3571.8 | 3571.8 | 3571.8 | 3571.8 | 3571.8 | 3571.8 | 3571.8 | 3571.8 | 3571.8 | 3571.8 | 3571.8 |
| 2.5° | 3633.1 | 3624.3 | 3615.6 | 3611.2 | 3611.2 | 3606.8 | 3589.3 | 3584.9 | 3576.2 | 3567.4 | 3558.7 |
| 5° | 3598.1 | 3584.9 | 3580.6 | 3584.9 | 3589.3 | 3598.1 | 3589.3 | 3589.3 | 3580.6 | 3571.8 | 3554.3 |
| 7.5° | 3510.5 | 3501.8 | 3506.2 | 3519.3 | 3523.7 | 3554.3 | 3558.7 | 3571.8 | 3571.8 | 3563.1 | 3549.9 |
| 10° | 3405.5 | 3401.1 | 3401.1 | 3423.0 | 3444.9 | 3488.6 | 3519.3 | 3554.3 | 3558.7 | 3558.7 | 3536.8 |
| 12.5° | 3326.7 | 3322.3 | 3335.4 | 3361.7 | 3405.5 | 3462.4 | 3514.9 | 3567.4 | 3576.2 | 3580.6 | 3545.6 |
| 15° | 3278.5 | 3278.5 | 3296.1 | 3348.6 | 3409.9 | 3488.6 | 3549.9 | 3620.0 | 3628.7 | 3624.3 | 3576.2 |
| 17.5° | 3234.8 | 3239.1 | 3274.2 | 3361.7 | 3431.7 | 3536.8 | 3611.2 | 3690.0 | 3694.4 | 3690.0 | 3611.2 |
| 20° | 3217.3 | 3226.0 | 3278.5 | 3392.3 | 3471.1 | 3589.3 | 3685.6 | 3764.4 | 3768.8 | 3751.3 | 3646.2 |
| 22.5° | 3265.4 | 3269.8 | 3335.4 | 3458.0 | 3532.4 | 3663.7 | 3786.3 | 3860.7 | 3865.1 | 3838.8 | 3698.8 |
| 25° | 3431.7 | 3431.7 | 3488.6 | 3593.7 | 3659.4 | 3790.7 | 3922.0 | 4009.5 | 4009.5 | 3978.9 | 3816.9 |
| 27.5° | 3821.3 | 3786.3 | 3773.2 | 3803.8 | 3825.7 | 3965.8 | 4105.8 | 4215.3 | 4210.9 | 4167.1 | 3970.1 |
| 30° | 4574.2 | 4486.7 | 4346.6 | 4189.0 | 4110.2 | 4206.5 | 4337.8 | 4477.9 | 4473.5 | 4403.5 | 4158.4 |
| 32.5° | 5839.2 | 5712.3 | 5379.6 | 4963.8 | 4626.7 | 4517.3 | 4639.9 | 4793.1 | 4797.4 | 4714.3 | 4460.4 |
| 35° | 7612.0 | 7410.6 | 6815.3 | 6237.5 | 5467.2 | 5051.3 | 5086.3 | 5252.7 | 5305.2 | 5261.4 | 4968.2 |
| 37.5° | 9319.1 | 9135.3 | 8566.2 | 7765.2 | 6719.0 | 5869.9 | 5721.0 | 5865.5 | 5926.8 | 5926.8 | 5616.0 |
| 40° | 11039.4 | 10824.9 | 10321.5 | 9516.1 | 8413.0 | 7148.0 | 6614.0 | 6732.2 | 6797.8 | 6811.0 | 6403.9 |
| 42.5° | 12418.2 | 12278.1 | 11892.9 | 11267.0 | 10234.0 | 9389.1 | 7900.9 | 7835.2 | 7896.5 | 7848.4 | 7318.7 |
| 45° | 13372.4 | 13263.0 | 12996.0 | 12759.6 | 12256.2 | 11831.6 | 9621.1 | 9179.0 | 9218.4 | 9052.1 | 8347.4 |
| 47.5° | 13569.4 | 13446.8 | 13389.9 | 13718.2 | 14077.2 | 14182.2 | 11735.3 | 10776.7 | 10737.3 | 10369.6 | 9415.4 |
| 50° | 12711.5 | 12724.6 | 12934.7 | 13871.4 | 15368.4 | 16313.9 | 14186.6 | 12580.1 | 12435.7 | 11617.2 | 10409.0 |
| 52.5° | 10859.9 | 11070.0 | 11599.6 | 13118.5 | 15762.4 | 17863.5 | 16637.8 | 14493.0 | 14269.8 | 12829.6 | 11153.2 |
| 55° | 8496.2 | 8767.6 | 9638.6 | 11385.2 | 14939.5 | 18555.1 | 18703.9 | 16480.3 | 15972.5 | 13740.1 | 11731.0 |
| 57.5° | 6316.3 | 6399.5 | 7415.0 | 9008.3 | 12991.6 | 17876.6 | 19763.2 | 18012.3 | 17360.1 | 14466.7 | 12304.4 |
| 60° | 3935.1 | 3987.7 | 5060.1 | 6859.1 | 9840.0 | 15368.4 | 19763.2 | 19067.2 | 18445.6 | 15118.9 | 12829.6 |
| 62.5° | 2446.9 | 2464.4 | 2867.1 | 4701.1 | 6688.4 | 11398.3 | 18944.6 | 19885.7 | 19386.7 | 15587.3 | 13280.5 |
| 65° | 1409.5 | 1427.0 | 1615.2 | 2657.0 | 4351.0 | 6824.1 | 16852.3 | 20126.5 | 19903.2 | 15959.4 | 13630.7 |
| 67.5° | 1028.6 | 1037.4 | 1111.8 | 1492.6 | 2845.2 | 3506.2 | 12658.9 | 19159.1 | 19439.3 | 16143.2 | 13621.9 |
| 70° | 893.0 | 906.1 | 1002.4 | 1164.3 | 2052.9 | 2153.6 | 6443.3 | 16545.9 | 17329.4 | 15880.6 | 13214.8 |
| 72.5° | 687.2 | 704.7 | 849.2 | 1094.3 | 1505.8 | 1549.5 | 2333.1 | 11774.7 | 12961.0 | 14239.1 | 12098.7 |
| 75° | 472.7 | 490.2 | 634.7 | 901.7 | 1243.1 | 1160.0 | 1282.5 | 5419.0 | 6837.2 | 9551.1 | 9209.7 |
| 77.5° | 302.0 | 306.4 | 398.3 | 656.6 | 1072.4 | 822.9 | 879.8 | 1768.4 | 2481.9 | 4320.3 | 4346.6 |
| 80° | 201.4 | 205.7 | 245.1 | 424.6 | 735.4 | 761.6 | 542.8 | 818.5 | 897.3 | 1260.6 | 875.4 |
| 82.5° | 122.6 | 122.6 | 166.3 | 267.0 | 446.5 | 630.3 | 354.6 | 429.0 | 459.6 | 485.9 | 227.6 |
| 85° | 48.1 | 48.1 | 100.7 | 175.1 | 280.1 | 293.3 | 223.2 | 249.5 | 262.6 | 284.5 | 105.1 |
| 87.5° | 13.1 | 13.1 | 56.9 | 96.3 | 122.6 | 135.7 | 135.7 | 122.6 | 131.3 | 162.0 | 52.5 |
| 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° | 3571.8 | 3571.8 | 3571.8 | 3571.8 | 3571.8 | 3571.8 | 3571.8 | 3571.8 | 3571.8 | 3571.8 | 3571.8 |
| 2.5° | 3554.3 | 3541.2 | 3523.7 | 3506.2 | 3488.6 | 3475.5 | 3462.4 | 3462.4 | 3453.6 | 3440.5 | 3431.7 |
| 5° | 3545.6 | 3523.7 | 3484.3 | 3453.6 | 3405.5 | 3370.5 | 3344.2 | 3322.3 | 3309.2 | 3278.5 | 3274.2 |
| 7.5° | 3532.4 | 3506.2 | 3449.3 | 3388.0 | 3309.2 | 3247.9 | 3186.6 | 3142.8 | 3099.1 | 3064.1 | 3055.3 |
| 10° | 3510.5 | 3479.9 | 3396.7 | 3309.2 | 3199.8 | 3085.9 | 2941.5 | 2775.2 | 2622.0 | 2534.4 | 2508.2 |
| 12.5° | 3510.5 | 3471.1 | 3361.7 | 3243.5 | 3085.9 | 2805.8 | 2438.1 | 2070.4 | 1785.9 | 1659.0 | 1624.0 |
| 15° | 3532.4 | 3479.9 | 3335.4 | 3173.5 | 2880.2 | 2311.2 | 1715.9 | 1230.0 | 919.2 | 822.9 | 801.0 |
| 17.5° | 3554.3 | 3479.9 | 3296.1 | 3077.2 | 2503.8 | 1676.5 | 976.1 | 647.8 | 547.2 | 525.3 | 525.3 |
| 20° | 3563.1 | 3471.1 | 3243.5 | 2897.7 | 2000.4 | 1041.8 | 582.2 | 485.9 | 446.5 | 433.3 | 433.3 |
| 22.5° | 3598.1 | 3475.5 | 3204.1 | 2639.5 | 1453.2 | 612.8 | 459.6 | 407.1 | 367.7 | 354.6 | 354.6 |
| 25° | 3685.6 | 3528.0 | 3212.9 | 2311.2 | 932.3 | 464.0 | 389.6 | 337.0 | 297.7 | 280.1 | 280.1 |
| 27.5° | 3825.7 | 3646.2 | 3261.0 | 1930.4 | 586.5 | 398.3 | 328.3 | 271.4 | 240.7 | 223.2 | 223.2 |
| 30° | 3983.3 | 3777.5 | 3282.9 | 1492.6 | 437.7 | 337.0 | 267.0 | 214.5 | 192.6 | 179.5 | 175.1 |
| 32.5° | 4259.0 | 4005.2 | 3265.4 | 1024.3 | 358.9 | 284.5 | 214.5 | 170.7 | 153.2 | 148.8 | 148.8 |
| 35° | 4701.1 | 4403.5 | 3230.4 | 643.5 | 297.7 | 227.6 | 170.7 | 140.1 | 126.9 | 122.6 | 118.2 |
| 37.5° | 5300.8 | 4985.7 | 3125.3 | 424.6 | 245.1 | 179.5 | 140.1 | 118.2 | 105.1 | 100.7 | 100.7 |
| 40° | 6031.8 | 5651.0 | 2924.0 | 323.9 | 210.1 | 144.4 | 118.2 | 100.7 | 91.9 | 87.5 | 87.5 |
| 42.5° | 6867.9 | 6390.7 | 2604.4 | 280.1 | 175.1 | 122.6 | 100.7 | 83.2 | 78.8 | 74.4 | 74.4 |
| 45° | 7782.7 | 7165.5 | 2162.3 | 249.5 | 148.8 | 100.7 | 83.2 | 74.4 | 65.7 | 65.7 | 61.3 |
| 47.5° | 8754.5 | 7944.7 | 1663.3 | 218.9 | 126.9 | 87.5 | 74.4 | 61.3 | 56.9 | 52.5 | 52.5 |
| 50° | 9691.2 | 8640.6 | 1168.7 | 188.2 | 105.1 | 74.4 | 61.3 | 52.5 | 48.1 | 43.8 | 43.8 |
| 52.5° | 10352.1 | 9060.9 | 827.3 | 162.0 | 87.5 | 65.7 | 48.1 | 39.4 | 35.0 | 35.0 | 35.0 |
| 55° | 10881.8 | 9323.5 | 577.8 | 135.7 | 74.4 | 56.9 | 39.4 | 30.6 | 30.6 | 26.3 | 26.3 |
| 57.5° | 11380.8 | 9494.2 | 424.6 | 113.8 | 61.3 | 43.8 | 30.6 | 21.9 | 21.9 | 17.5 | 17.5 |
| 60° | 11897.3 | 9586.1 | 323.9 | 91.9 | 52.5 | 35.0 | 21.9 | 17.5 | 13.1 | 13.1 | 13.1 |
| 62.5° | 12418.2 | 9643.0 | 249.5 | 74.4 | 43.8 | 26.3 | 17.5 | 13.1 | 8.8 | 4.4 | 4.4 |
| 65° | 12873.4 | 9660.5 | 192.6 | 56.9 | 35.0 | 17.5 | 13.1 | 4.4 | 0.0 | 0.0 | 0.0 |
| 67.5° | 13009.1 | 9459.2 | 148.8 | 43.8 | 26.3 | 13.1 | 8.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 12641.4 | 8925.2 | 113.8 | 35.0 | 21.9 | 8.8 | 4.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 11218.8 | 7485.1 | 87.5 | 21.9 | 17.5 | 8.8 | 4.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 8027.8 | 3992.0 | 61.3 | 17.5 | 13.1 | 4.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 3694.4 | 1545.2 | 43.8 | 13.1 | 8.8 | 4.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 722.2 | 385.2 | 17.5 | 8.8 | 4.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 166.3 | 65.7 | 8.8 | 8.8 | 4.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 56.9 | 21.9 | 4.4 | 4.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 21.9 | 8.8 | 4.4 | 0.0 | 0.0 | 0.0 | 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)