

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: P237459

Luminaire Tested: **ARCH-L-AF72-260-D-U-T4W-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P237459
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29625)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-260-D-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1110mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21319.3 lumens
Efficiency: N/A
Efficacy: 81.7 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B2 - U0 - G4

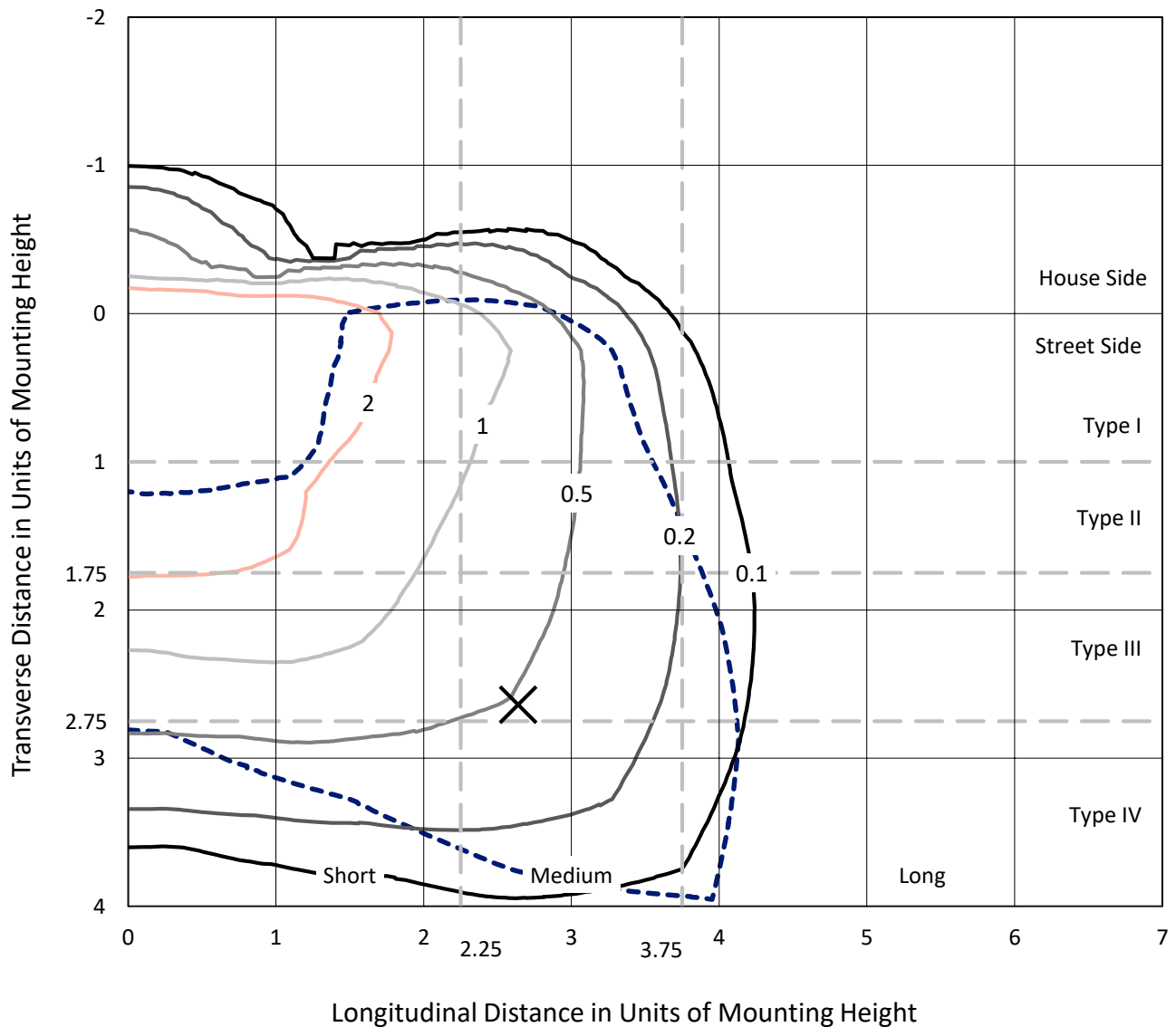
Input Watts (W): 261
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

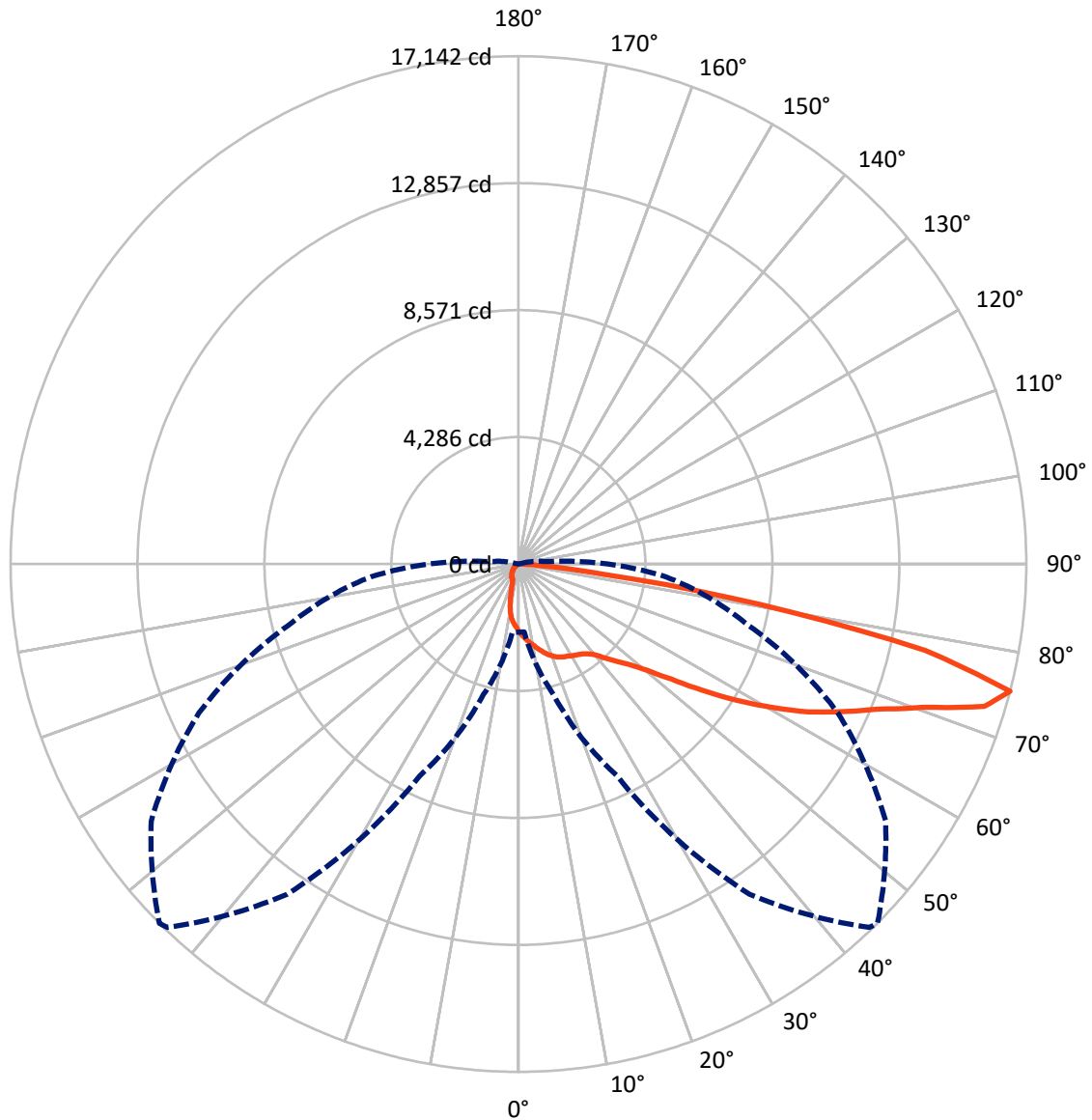


Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



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

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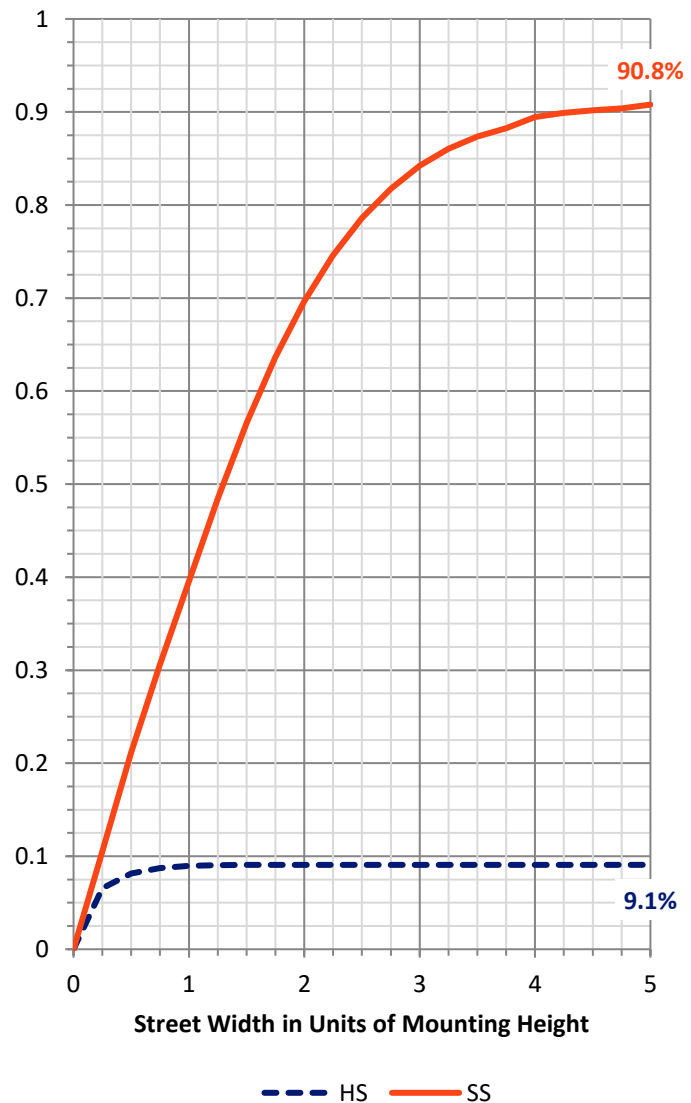
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1950.1 | 0.0 | 1950.1 |
| | % Fixture | 9.1 | 0.0 | 9.1 |
| Street Side | Lumens | 19369.3 | 0.0 | 19369.3 |
| | % Fixture | 90.9 | 0.0 | 90.9 |
| Total | Lumens | 21319.3 | 0.0 | 21319.3 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 215.2 | 1.0 |
| 10°-20° | 609.7 | 2.9 |
| 20°-30° | 1009.7 | 4.7 |
| 30°-40° | 1461.3 | 6.9 |
| 40°-50° | 2392.8 | 11.2 |
| 50°-60° | 4263.4 | 20.0 |
| 60°-70° | 6267.8 | 29.4 |
| 70°-80° | 4728.5 | 22.2 |
| 80°-90° | 371.0 | 1.7 |
| 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° | 21319.3 | 100.0 |
| 0°-180° | 21319.3 | 100.0 |



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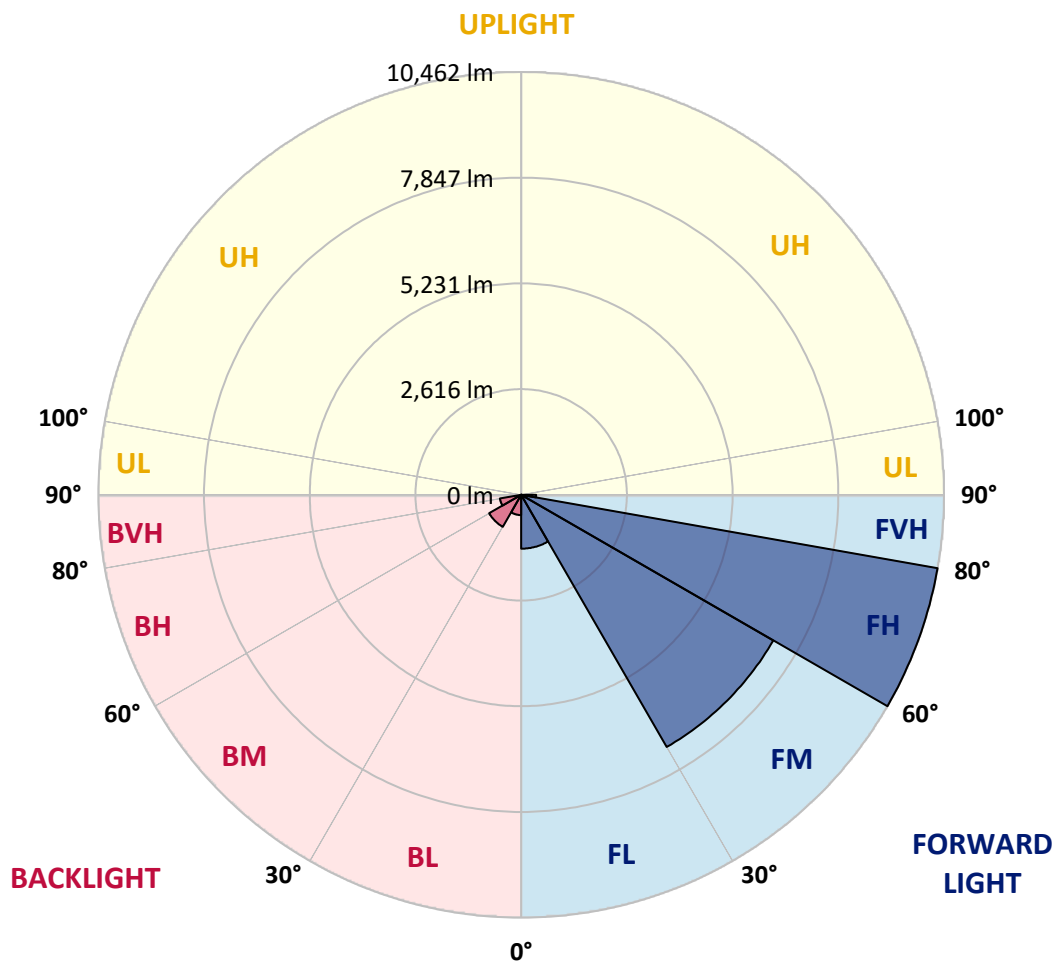
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 1333.5 | 6.3 | | | |
| FM | (30°-60°) | 7203.7 | 33.8 | | | |
| FH | (60°-80°) | 10462.2 | 49.1 | | | G4/12000 |
| FVH | (80°-90°) | 369.9 | 1.7 | | | G3/500 |
| BL | (0°-30°) | 501.1 | 2.4 | B2/1000 | | |
| BM | (30°-60°) | 913.8 | 4.3 | B1/1000 | | |
| BH | (60°-80°) | 534.1 | 2.5 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 1.0 | 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-G4

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 2280.3 | 2280.3 | 2280.3 | 2280.3 | 2280.3 | 2280.3 | 2280.3 | 2280.3 | 2280.3 | 2280.3 | 2280.3 |
| 2.5° | 2477.0 | 2477.0 | 2472.0 | 2466.8 | 2441.7 | 2416.4 | 2411.4 | 2396.3 | 2350.8 | 2320.6 | 2290.3 |
| 5° | 2683.8 | 2688.8 | 2678.7 | 2653.5 | 2598.0 | 2542.5 | 2537.5 | 2497.1 | 2411.4 | 2350.8 | 2285.3 |
| 7.5° | 2880.5 | 2890.7 | 2865.4 | 2820.0 | 2754.4 | 2673.7 | 2668.7 | 2593.0 | 2482.0 | 2396.3 | 2300.4 |
| 10° | 3047.1 | 3047.1 | 3011.7 | 2956.2 | 2885.5 | 2799.8 | 2789.7 | 2704.0 | 2577.8 | 2472.0 | 2345.8 |
| 12.5° | 3228.6 | 3223.6 | 3173.1 | 3097.5 | 3016.8 | 2936.1 | 2931.0 | 2825.1 | 2704.0 | 2567.8 | 2411.4 |
| 15° | 3395.1 | 3385.0 | 3319.5 | 3248.8 | 3163.1 | 3077.2 | 3072.2 | 2966.3 | 2840.2 | 2678.7 | 2507.3 |
| 17.5° | 3485.9 | 3480.9 | 3420.3 | 3349.7 | 3279.1 | 3213.5 | 3208.5 | 3097.5 | 2961.2 | 2794.8 | 2603.1 |
| 20° | 3501.0 | 3506.1 | 3455.6 | 3395.1 | 3354.8 | 3319.5 | 3319.5 | 3218.5 | 3072.2 | 2895.7 | 2704.0 |
| 22.5° | 3506.1 | 3521.2 | 3485.9 | 3405.2 | 3395.1 | 3400.2 | 3410.2 | 3329.5 | 3178.2 | 3011.7 | 2809.9 |
| 25° | 3541.4 | 3561.6 | 3536.3 | 3440.5 | 3430.4 | 3465.8 | 3475.8 | 3440.5 | 3304.3 | 3137.8 | 2931.0 |
| 27.5° | 3612.0 | 3632.2 | 3612.0 | 3490.9 | 3475.8 | 3511.2 | 3521.2 | 3541.4 | 3440.5 | 3258.9 | 3057.1 |
| 30° | 3753.3 | 3758.3 | 3712.9 | 3561.6 | 3531.3 | 3576.7 | 3591.9 | 3647.3 | 3566.6 | 3374.9 | 3178.2 |
| 32.5° | 4000.5 | 3950.0 | 3813.8 | 3612.0 | 3586.8 | 3637.2 | 3652.3 | 3712.9 | 3682.6 | 3485.9 | 3304.3 |
| 35° | 4505.0 | 4242.6 | 3929.9 | 3682.6 | 3657.5 | 3707.9 | 3728.0 | 3813.8 | 3828.9 | 3642.3 | 3460.6 |
| 37.5° | 4499.9 | 4262.8 | 4202.3 | 3818.9 | 3783.6 | 3818.9 | 3844.0 | 3950.0 | 4010.6 | 3849.2 | 3687.7 |
| 40° | 4817.7 | 4716.8 | 4716.8 | 4076.2 | 3960.1 | 4010.6 | 4035.7 | 4141.7 | 4247.7 | 4121.6 | 3955.0 |
| 42.5° | 5816.6 | 5751.0 | 5680.3 | 4570.5 | 4207.3 | 4348.6 | 4363.7 | 4429.3 | 4555.4 | 4515.0 | 4318.3 |
| 45° | 6931.4 | 6871.0 | 6598.5 | 5407.9 | 4631.1 | 4656.3 | 4691.6 | 4797.5 | 4979.1 | 5054.8 | 4822.8 |
| 47.5° | 7804.2 | 7743.6 | 7511.6 | 6416.9 | 5291.9 | 5069.9 | 5069.9 | 5276.8 | 5559.3 | 5751.0 | 5529.0 |
| 50° | 8505.4 | 8434.7 | 8293.6 | 7491.4 | 6376.6 | 5665.2 | 5634.9 | 5877.1 | 6295.9 | 6593.4 | 6442.1 |
| 52.5° | 9186.4 | 8979.6 | 8893.8 | 8601.3 | 7602.4 | 6527.9 | 6447.1 | 6618.7 | 7198.8 | 7567.1 | 7440.9 |
| 55° | 9640.5 | 9610.2 | 9519.4 | 9620.3 | 8888.8 | 7577.2 | 7506.5 | 7541.9 | 8268.3 | 8515.5 | 8359.1 |
| 57.5° | 10064.2 | 10059.2 | 10261.0 | 10730.1 | 10291.2 | 8777.8 | 8666.8 | 8611.3 | 9302.5 | 9242.0 | 9378.1 |
| 60° | 10588.9 | 10498.0 | 10967.3 | 11638.2 | 11577.7 | 9948.2 | 9822.1 | 9711.1 | 10094.5 | 9922.9 | 10599.0 |
| 62.5° | 10614.1 | 10588.9 | 11542.4 | 12505.9 | 12854.0 | 11138.7 | 10992.4 | 10593.9 | 10785.6 | 10588.9 | 11764.3 |
| 65° | 9650.5 | 9776.6 | 11784.5 | 12965.0 | 13923.5 | 12183.0 | 12006.5 | 11386.0 | 11401.1 | 11270.0 | 13136.4 |
| 67.5° | 9433.7 | 9499.2 | 11118.6 | 13459.4 | 14695.3 | 13237.4 | 13070.9 | 12299.0 | 12117.5 | 12127.5 | 13948.7 |
| 70° | 8893.8 | 8994.7 | 10291.2 | 13424.0 | 15305.7 | 14644.9 | 14478.3 | 13640.9 | 13202.1 | 12712.7 | 13323.1 |
| 72.5° | 6795.3 | 6966.8 | 8671.9 | 11769.4 | 15139.3 | 16486.2 | 16440.8 | 15341.0 | 13635.9 | 11673.5 | 10079.3 |
| 75° | 2300.4 | 2295.4 | 4555.4 | 7905.1 | 13600.5 | 17051.2 | 17142.0 | 15129.1 | 11895.5 | 8051.3 | 5004.4 |
| 77.5° | 494.4 | 499.4 | 938.4 | 3203.4 | 9035.1 | 13691.4 | 14039.5 | 11411.2 | 7673.1 | 3586.8 | 1145.2 |
| 80° | 242.1 | 247.1 | 388.4 | 847.5 | 3612.0 | 7678.1 | 8222.9 | 5867.0 | 2835.1 | 716.4 | 191.7 |
| 82.5° | 121.1 | 126.1 | 201.8 | 449.0 | 1336.9 | 2729.2 | 2915.8 | 2159.1 | 812.2 | 403.6 | 95.9 |
| 85° | 45.4 | 45.4 | 100.9 | 267.4 | 610.4 | 640.7 | 787.0 | 625.5 | 489.4 | 328.0 | 25.3 |
| 87.5° | 10.1 | 10.1 | 55.4 | 131.1 | 272.4 | 201.8 | 201.8 | 191.7 | 297.7 | 222.0 | 10.1 |
| 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° | 2280.3 | 2280.3 | 2280.3 | 2280.3 | 2280.3 | 2280.3 | 2280.3 | 2280.3 | 2280.3 | 2280.3 | 2280.3 |
| 2.5° | 2275.1 | 2255.0 | 2219.7 | 2184.4 | 2159.1 | 2128.9 | 2113.7 | 2098.6 | 2093.6 | 2088.6 | 2098.6 |
| 5° | 2250.0 | 2219.7 | 2154.1 | 2098.6 | 2048.2 | 2007.8 | 1977.6 | 1947.3 | 1932.1 | 1922.0 | 1927.0 |
| 7.5° | 2250.0 | 2204.6 | 2108.7 | 2022.9 | 1942.2 | 1856.5 | 1770.7 | 1705.2 | 1654.6 | 1624.4 | 1629.5 |
| 10° | 2275.1 | 2214.6 | 2088.6 | 1972.5 | 1821.2 | 1639.6 | 1452.9 | 1311.6 | 1215.8 | 1160.3 | 1160.3 |
| 12.5° | 2330.7 | 2250.0 | 2093.6 | 1912.0 | 1654.6 | 1336.9 | 1054.4 | 882.8 | 812.2 | 771.8 | 776.9 |
| 15° | 2406.3 | 2310.4 | 2118.7 | 1831.3 | 1422.6 | 993.8 | 736.5 | 625.5 | 625.5 | 635.7 | 640.7 |
| 17.5° | 2492.1 | 2386.1 | 2139.0 | 1710.2 | 1124.9 | 711.3 | 580.1 | 570.1 | 585.2 | 610.4 | 610.4 |
| 20° | 2577.8 | 2461.8 | 2149.0 | 1518.5 | 842.5 | 565.0 | 549.8 | 549.8 | 560.0 | 585.2 | 590.2 |
| 22.5° | 2683.8 | 2557.7 | 2139.0 | 1281.3 | 630.5 | 534.7 | 529.7 | 529.7 | 529.7 | 560.0 | 560.0 |
| 25° | 2794.8 | 2668.7 | 2098.6 | 1029.1 | 534.7 | 514.5 | 509.5 | 504.5 | 504.5 | 529.7 | 534.7 |
| 27.5° | 2920.9 | 2784.7 | 2002.7 | 787.0 | 504.5 | 494.4 | 489.4 | 479.3 | 479.3 | 499.4 | 499.4 |
| 30° | 3047.1 | 2915.8 | 1856.5 | 595.3 | 479.3 | 474.2 | 464.1 | 454.0 | 444.0 | 464.1 | 464.1 |
| 32.5° | 3183.2 | 3052.1 | 1664.8 | 474.2 | 444.0 | 444.0 | 438.8 | 423.7 | 413.7 | 423.7 | 428.8 |
| 35° | 3364.8 | 3208.5 | 1447.9 | 413.7 | 398.5 | 398.5 | 398.5 | 393.5 | 373.3 | 383.4 | 383.4 |
| 37.5° | 3607.0 | 3425.4 | 1195.6 | 383.4 | 363.2 | 353.1 | 353.1 | 353.1 | 338.0 | 343.0 | 343.0 |
| 40° | 3914.7 | 3677.6 | 953.5 | 358.1 | 338.0 | 312.8 | 302.7 | 307.7 | 297.7 | 297.7 | 292.6 |
| 42.5° | 4333.4 | 3950.0 | 716.4 | 338.0 | 317.8 | 282.5 | 262.3 | 257.3 | 247.1 | 242.1 | 242.1 |
| 45° | 4933.8 | 4283.0 | 514.5 | 317.8 | 302.7 | 247.1 | 227.0 | 211.9 | 186.7 | 171.5 | 171.5 |
| 47.5° | 5710.6 | 4661.3 | 383.4 | 297.7 | 287.6 | 217.0 | 191.7 | 161.4 | 126.1 | 116.0 | 116.0 |
| 50° | 6659.0 | 5085.1 | 322.8 | 267.4 | 262.3 | 191.7 | 151.3 | 106.0 | 70.6 | 60.6 | 65.6 |
| 52.5° | 7582.2 | 5483.6 | 287.6 | 237.1 | 232.1 | 166.4 | 111.0 | 55.4 | 30.3 | 30.3 | 30.3 |
| 55° | 8359.1 | 5766.2 | 262.3 | 211.9 | 201.8 | 131.1 | 60.6 | 25.3 | 15.1 | 15.1 | 15.1 |
| 57.5° | 9060.4 | 5927.6 | 237.1 | 186.7 | 161.4 | 90.8 | 25.3 | 10.1 | 10.1 | 5.0 | 5.0 |
| 60° | 9701.1 | 6023.4 | 206.8 | 161.4 | 126.1 | 50.4 | 10.1 | 5.0 | 5.0 | 0.0 | 0.0 |
| 62.5° | 10331.6 | 6094.0 | 176.6 | 131.1 | 95.9 | 20.2 | 5.0 | 5.0 | 0.0 | 0.0 | 0.0 |
| 65° | 10810.9 | 6068.8 | 141.3 | 106.0 | 60.6 | 10.1 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 10795.7 | 5725.8 | 106.0 | 80.7 | 30.3 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 9655.6 | 4822.8 | 70.6 | 50.4 | 10.1 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 6850.7 | 3092.4 | 45.4 | 30.3 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 3016.8 | 938.4 | 25.3 | 15.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 590.2 | 217.0 | 15.1 | 10.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 141.3 | 25.3 | 5.0 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 60.6 | 10.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 15.1 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 10.1 | 5.0 | 0.0 | 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)