

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: P236827

Luminaire Tested: **ARCH-L-AF72-140-D-U-T2R-7030**

Issue Date: 8/23/2018

Test Information

Test Method: LM-79-08
Report Number: P236827
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29635)
Test Lab: INNOVATION CENTER-P2
Issue Date: 8/23/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-140-D-U-T2R-7030
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 620mA LIGHT ENGINES WITH 24 LEDS AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18421.1 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G3

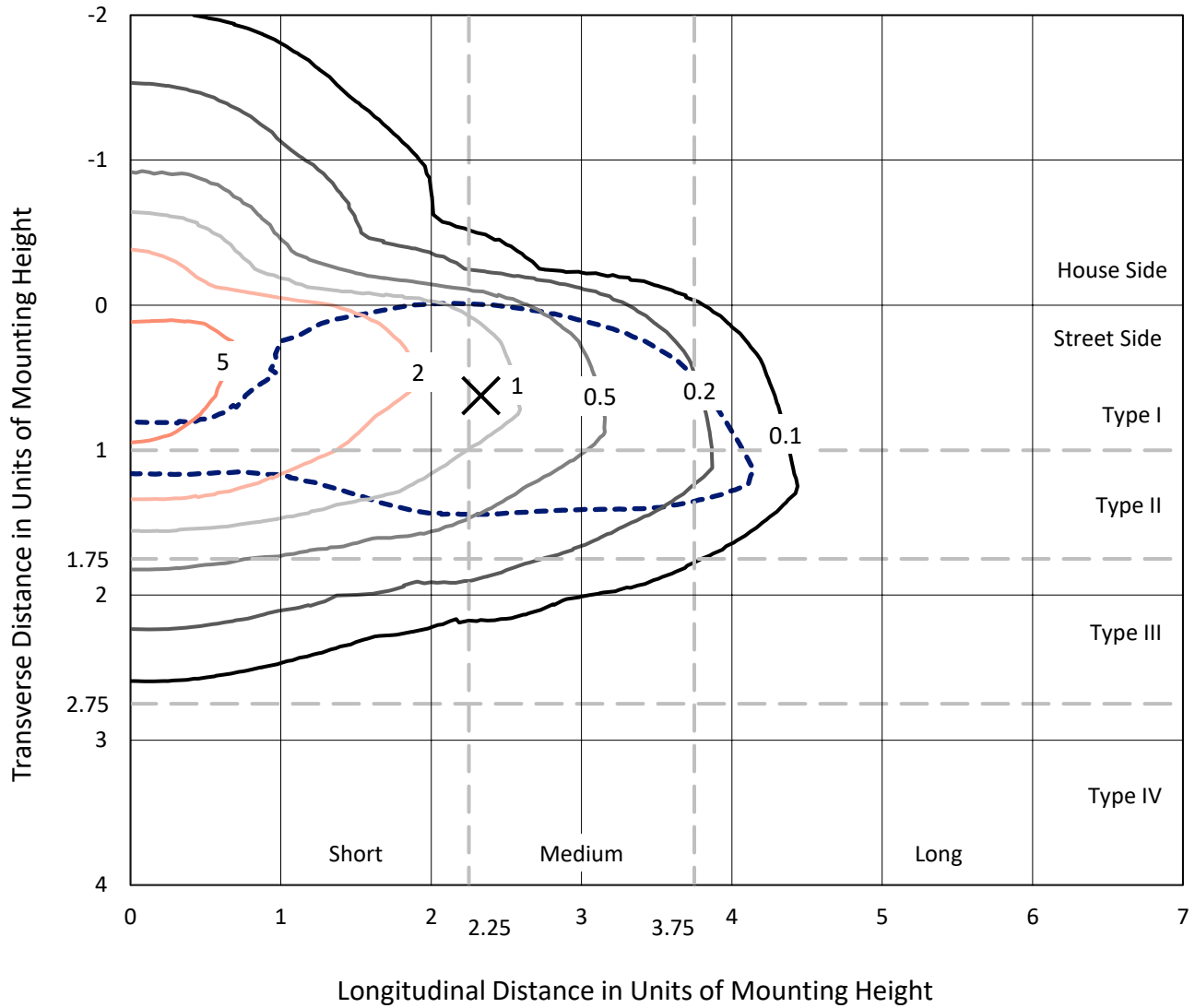
Input Watts (W): 143
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

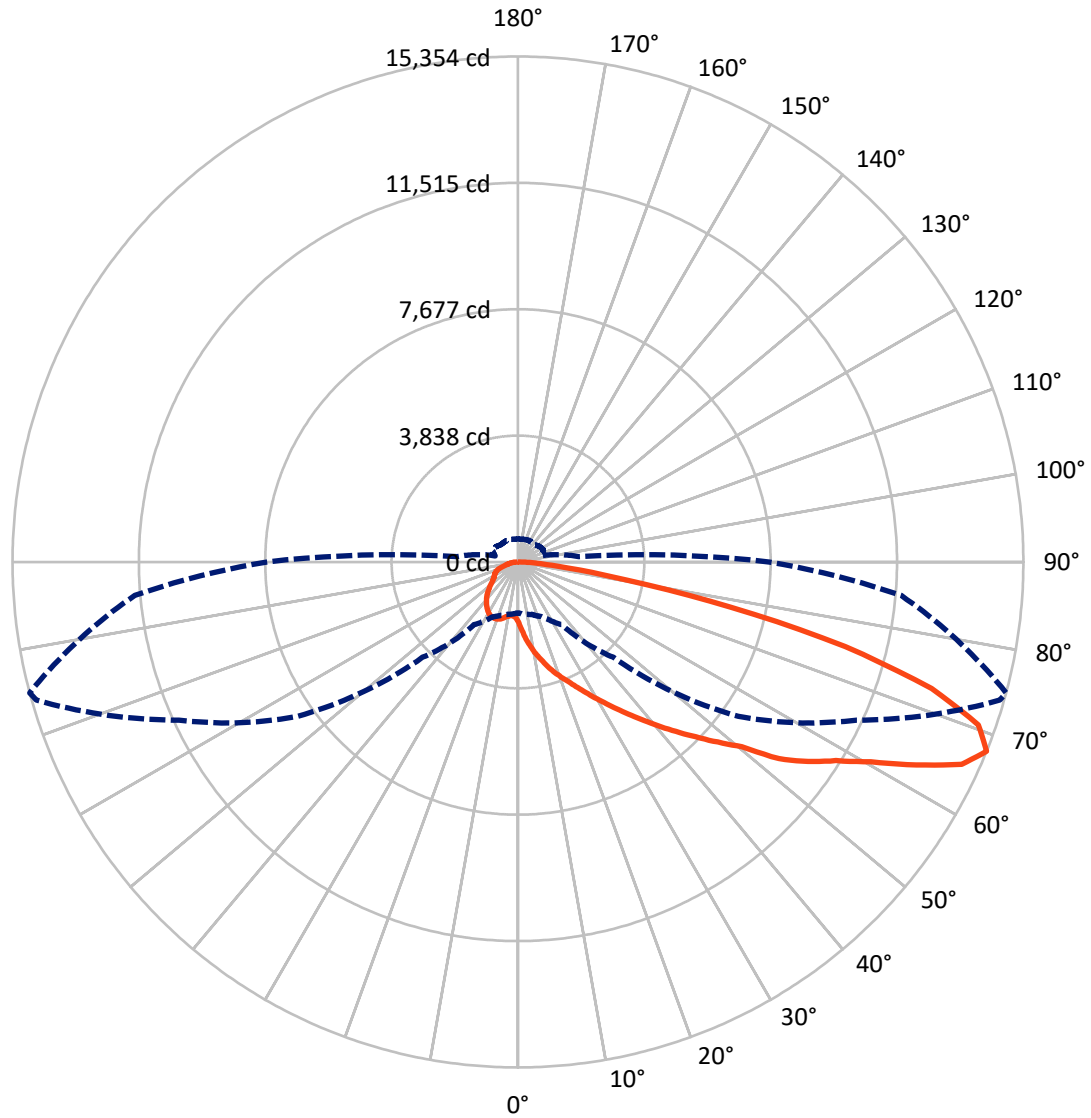
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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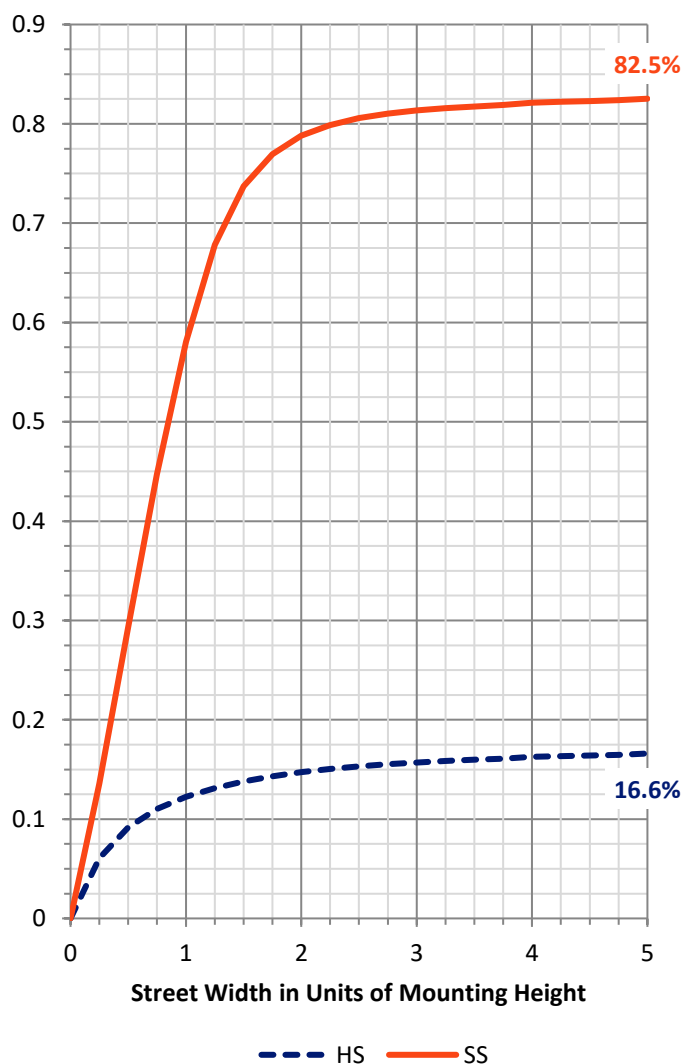
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3145.7 | 0.0 | 3145.7 |
| | % Fixture | 17.1 | 0.0 | 17.1 |
| Street Side | Lumens | 15275.5 | 0.0 | 15275.5 |
| | % Fixture | 82.9 | 0.0 | 82.9 |
| Total | Lumens | 18421.1 | 0.0 | 18421.1 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 214.4 | 1.2 |
| 10°-20° | 775.0 | 4.2 |
| 20°-30° | 1413.5 | 7.7 |
| 30°-40° | 2320.1 | 12.6 |
| 40°-50° | 3355.2 | 18.2 |
| 50°-60° | 3954.1 | 21.5 |
| 60°-70° | 3842.4 | 20.9 |
| 70°-80° | 2135.8 | 11.6 |
| 80°-90° | 410.7 | 2.2 |
| 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° | 18421.1 | 100.0 |
| 0°-180° | 18421.1 | 100.0 |

Coefficient of Utilization

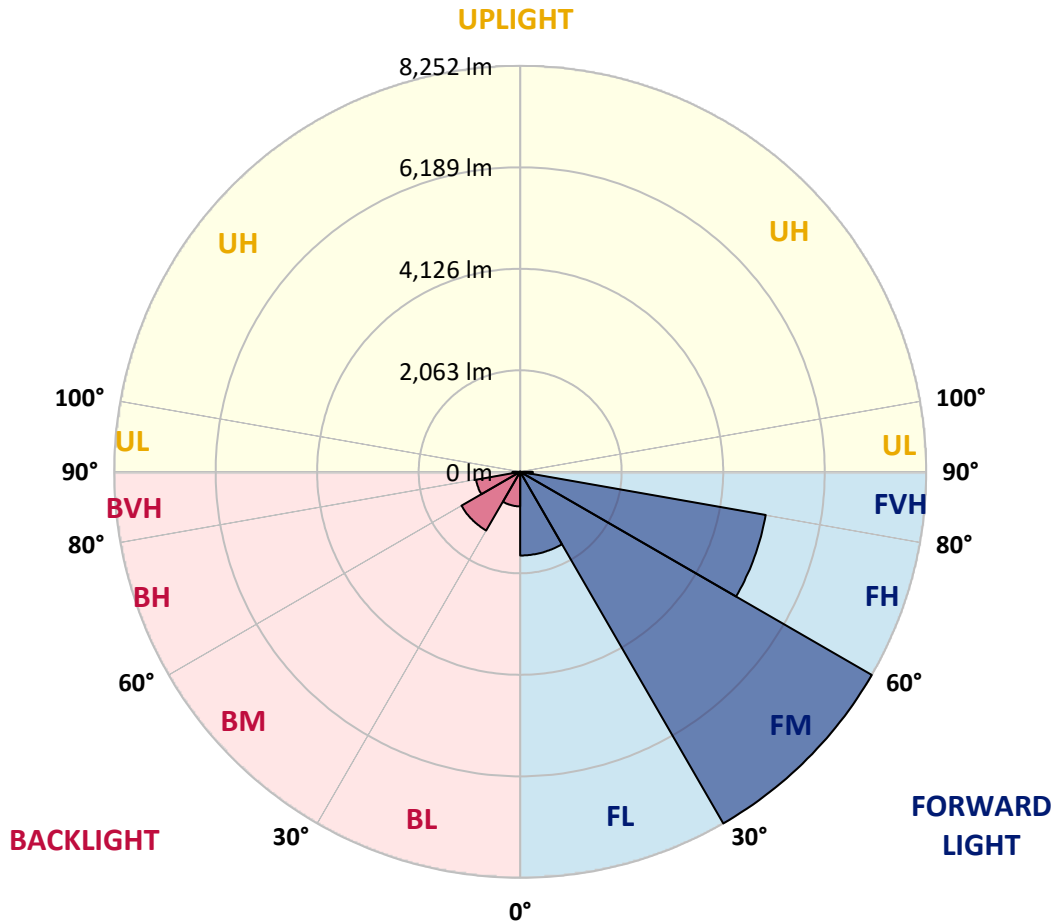


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1700.8 | 9.2 | | | |
| FM (30°-60°) | 8251.7 | 44.8 | | | |
| FH (60°-80°) | 5067.4 | 27.5 | | | G3/7500 |
| FVH (80°-90°) | 255.6 | 1.4 | | | G3/500 |
| BL (0°-30°) | 702.1 | 3.8 | B2/1000 | | |
| BM (30°-60°) | 1377.6 | 7.5 | B2/2500 | | |
| BH (60°-80°) | 910.8 | 4.9 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 155.1 | 0.8 | | | G2/225 |
| 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 Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 74° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| 0° | 1825.4 | 1825.4 | 1825.4 | 1825.4 | 1825.4 | 1825.4 | 1825.4 | 1825.4 | 1825.4 | 1825.4 | 1825.4 |
| 2.5° | 2587.8 | 2595.6 | 2580.1 | 2545.5 | 2495.4 | 2403.0 | 2322.1 | 2179.6 | 2052.6 | 2037.1 | 1902.4 |
| 5° | 3042.3 | 3050.0 | 3030.8 | 2988.3 | 2934.3 | 2834.3 | 2722.6 | 2537.8 | 2333.7 | 2295.2 | 2010.2 |
| 7.5° | 3354.2 | 3358.1 | 3334.9 | 3292.5 | 3250.3 | 3150.1 | 3038.4 | 2830.5 | 2580.1 | 2549.3 | 2148.8 |
| 10° | 3619.9 | 3627.6 | 3596.9 | 3569.8 | 3523.6 | 3423.5 | 3308.0 | 3088.4 | 2830.5 | 2788.1 | 2291.2 |
| 12.5° | 3866.3 | 3874.0 | 3854.7 | 3831.7 | 3816.3 | 3723.9 | 3596.9 | 3334.9 | 3057.6 | 3011.4 | 2460.7 |
| 15° | 4032.0 | 4039.7 | 4043.4 | 4074.3 | 4093.6 | 4028.1 | 3901.0 | 3616.1 | 3304.1 | 3261.7 | 2661.0 |
| 17.5° | 3985.8 | 4005.0 | 4062.8 | 4174.5 | 4293.8 | 4297.7 | 4193.7 | 3893.4 | 3546.8 | 3500.5 | 2865.1 |
| 20° | 3851.0 | 3866.3 | 3935.6 | 4105.1 | 4340.0 | 4474.8 | 4467.1 | 4174.5 | 3774.0 | 3723.9 | 3053.8 |
| 22.5° | 3962.7 | 3981.9 | 3981.9 | 4085.9 | 4317.0 | 4567.2 | 4667.3 | 4451.7 | 4001.2 | 3954.9 | 3242.5 |
| 25° | 4440.2 | 4451.7 | 4370.8 | 4328.6 | 4413.2 | 4644.3 | 4833.0 | 4752.1 | 4278.4 | 4224.5 | 3446.6 |
| 27.5° | 5106.3 | 5087.1 | 4987.0 | 4817.6 | 4725.1 | 4786.7 | 4979.3 | 5037.1 | 4598.0 | 4532.6 | 3658.4 |
| 30° | 5768.8 | 5757.2 | 5641.6 | 5414.5 | 5206.5 | 5075.5 | 5140.9 | 5291.2 | 4944.6 | 4867.6 | 3862.6 |
| 32.5° | 6388.7 | 6369.5 | 6242.4 | 5976.7 | 5741.8 | 5499.1 | 5372.1 | 5522.3 | 5314.3 | 5225.8 | 4089.7 |
| 35° | 6958.7 | 6908.6 | 6781.5 | 6504.3 | 6261.6 | 6030.6 | 5718.6 | 5741.8 | 5714.8 | 5622.4 | 4340.0 |
| 37.5° | 7420.8 | 7382.3 | 7243.7 | 6985.6 | 6727.6 | 6508.1 | 6180.8 | 5992.1 | 6146.2 | 6057.6 | 4628.9 |
| 40° | 7829.0 | 7786.6 | 7644.1 | 7386.2 | 7147.4 | 6939.4 | 6681.4 | 6296.3 | 6631.4 | 6531.2 | 4952.2 |
| 42.5° | 8137.1 | 8106.3 | 7990.6 | 7736.5 | 7505.4 | 7316.8 | 7189.7 | 6681.4 | 7135.8 | 7039.6 | 5306.6 |
| 45° | 8302.6 | 8271.8 | 8210.2 | 8006.1 | 7794.3 | 7648.0 | 7659.5 | 7139.6 | 7663.5 | 7582.5 | 5726.4 |
| 47.5° | 8098.6 | 8121.7 | 8175.6 | 8137.1 | 8006.1 | 7936.8 | 8079.2 | 7613.3 | 8252.6 | 8175.6 | 6180.8 |
| 50° | 7551.7 | 7574.8 | 7790.5 | 8056.2 | 8102.4 | 8187.2 | 8456.6 | 8160.1 | 8876.4 | 8814.8 | 6743.1 |
| 52.5° | 6207.8 | 6334.9 | 6931.7 | 7567.1 | 8002.2 | 8352.8 | 8876.4 | 8972.7 | 9927.8 | 9927.8 | 7736.5 |
| 55° | 4690.5 | 4802.2 | 5483.7 | 6592.8 | 7613.3 | 8368.1 | 9184.6 | 9523.4 | 10686.4 | 10701.8 | 8256.4 |
| 57.5° | 3800.9 | 3870.2 | 4205.3 | 5341.2 | 6796.9 | 8175.6 | 9550.4 | 9997.1 | 11317.9 | 11387.2 | 8926.5 |
| 60° | 3084.6 | 3123.1 | 3342.7 | 4132.0 | 5668.6 | 7655.7 | 9812.2 | 10674.8 | 12219.1 | 12315.3 | 9781.4 |
| 62.5° | 2479.9 | 2518.5 | 2664.9 | 3138.5 | 4447.8 | 6681.4 | 9766.0 | 11379.6 | 13420.6 | 13578.4 | 10902.0 |
| 65° | 1979.3 | 2021.8 | 2118.0 | 2410.7 | 3296.5 | 5472.2 | 9292.4 | 11741.5 | 14664.4 | 14818.5 | 11645.3 |
| 67.5° | 1544.3 | 1582.7 | 1648.1 | 1840.8 | 2322.1 | 4093.6 | 8171.7 | 11360.3 | 15222.8 | 15353.7 | 11683.7 |
| 70° | 1166.9 | 1186.1 | 1240.0 | 1363.2 | 1659.7 | 2718.8 | 6396.5 | 10081.8 | 14722.1 | 14841.6 | 10913.6 |
| 72.5° | 905.0 | 901.2 | 932.0 | 993.5 | 1159.1 | 1871.6 | 4240.0 | 8198.7 | 13016.3 | 13139.4 | 9311.6 |
| 75° | 739.3 | 735.6 | 754.8 | 774.0 | 839.5 | 1255.4 | 2503.1 | 6173.0 | 10505.4 | 10270.5 | 6985.6 |
| 77.5° | 623.9 | 620.0 | 639.2 | 643.1 | 670.1 | 866.4 | 1424.8 | 4062.8 | 7008.8 | 6604.4 | 3935.6 |
| 80° | 527.6 | 523.7 | 546.9 | 554.5 | 573.8 | 635.5 | 820.2 | 2198.9 | 3519.8 | 3334.9 | 1879.3 |
| 82.5° | 396.6 | 412.0 | 454.4 | 473.6 | 496.8 | 469.9 | 508.3 | 970.4 | 1632.8 | 1559.6 | 816.3 |
| 85° | 192.6 | 227.3 | 342.7 | 381.2 | 408.2 | 296.5 | 346.6 | 458.3 | 735.6 | 700.9 | 331.2 |
| 87.5° | 65.4 | 57.8 | 204.1 | 242.5 | 265.7 | 134.8 | 192.6 | 254.1 | 304.2 | 277.3 | 104.1 |
| 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° | 1825.4 | 1825.4 | 1825.4 | 1825.4 | 1825.4 | 1825.4 | 1825.4 | 1825.4 | 1825.4 | 1825.4 | 1825.4 |
| 2.5° | 1844.7 | 1786.8 | 1702.2 | 1636.7 | 1594.3 | 1559.6 | 1544.3 | 1540.3 | 1532.7 | 1528.9 | 1528.9 |
| 5° | 1883.1 | 1779.2 | 1648.1 | 1578.9 | 1559.6 | 1544.3 | 1551.9 | 1555.8 | 1555.8 | 1555.8 | 1555.8 |
| 7.5° | 1940.9 | 1794.6 | 1636.7 | 1590.5 | 1586.6 | 1586.6 | 1609.7 | 1621.3 | 1628.9 | 1628.9 | 1628.9 |
| 10° | 2017.9 | 1821.5 | 1656.0 | 1617.4 | 1628.9 | 1636.7 | 1663.6 | 1679.0 | 1686.8 | 1690.6 | 1694.4 |
| 12.5° | 2122.0 | 1879.3 | 1694.4 | 1663.6 | 1679.0 | 1682.9 | 1702.2 | 1709.8 | 1717.5 | 1721.4 | 1721.4 |
| 15° | 2260.5 | 1963.9 | 1756.1 | 1717.5 | 1721.4 | 1717.5 | 1717.5 | 1709.8 | 1706.0 | 1706.0 | 1713.6 |
| 17.5° | 2403.0 | 2044.9 | 1810.0 | 1756.1 | 1740.6 | 1709.8 | 1686.8 | 1667.6 | 1656.0 | 1648.1 | 1652.1 |
| 20° | 2545.5 | 2118.0 | 1840.8 | 1763.8 | 1721.4 | 1671.3 | 1628.9 | 1602.0 | 1586.6 | 1571.1 | 1578.9 |
| 22.5° | 2688.0 | 2187.4 | 1852.3 | 1740.6 | 1679.0 | 1605.9 | 1559.6 | 1517.3 | 1482.6 | 1459.4 | 1463.3 |
| 25° | 2845.8 | 2264.4 | 1852.3 | 1713.6 | 1621.3 | 1544.3 | 1486.5 | 1417.2 | 1367.1 | 1347.8 | 1355.6 |
| 27.5° | 3003.7 | 2329.9 | 1833.1 | 1663.6 | 1555.8 | 1478.8 | 1394.0 | 1313.2 | 1282.3 | 1270.8 | 1274.6 |
| 30° | 3161.6 | 2379.8 | 1790.6 | 1602.0 | 1486.5 | 1401.8 | 1290.1 | 1236.2 | 1197.7 | 1166.9 | 1170.7 |
| 32.5° | 3319.6 | 2414.5 | 1733.0 | 1524.9 | 1413.3 | 1305.4 | 1213.0 | 1151.5 | 1082.1 | 1043.7 | 1047.5 |
| 35° | 3500.5 | 2441.5 | 1663.6 | 1447.9 | 1332.4 | 1220.8 | 1151.5 | 1051.3 | 978.1 | 947.4 | 939.6 |
| 37.5° | 3689.2 | 2460.7 | 1590.5 | 1363.2 | 1251.6 | 1159.1 | 1089.9 | 966.6 | 897.2 | 855.0 | 851.0 |
| 40° | 3893.4 | 2468.5 | 1501.9 | 1274.6 | 1174.5 | 1120.7 | 1008.9 | 916.5 | 797.1 | 770.2 | 770.2 |
| 42.5° | 4135.9 | 2464.6 | 1413.3 | 1186.1 | 1089.9 | 1032.1 | 951.2 | 908.8 | 804.8 | 777.9 | 762.5 |
| 45° | 4413.2 | 2464.6 | 1317.0 | 1082.1 | 1005.0 | 920.4 | 885.8 | 858.8 | 789.4 | 801.0 | 808.7 |
| 47.5° | 4729.0 | 2456.9 | 1201.6 | 997.4 | 935.8 | 862.6 | 843.4 | 785.6 | 758.6 | 766.4 | 774.0 |
| 50° | 5164.1 | 2468.5 | 1097.5 | 928.0 | 885.8 | 824.2 | 801.0 | 770.2 | 758.6 | 762.5 | 758.6 |
| 52.5° | 5768.8 | 2429.9 | 997.4 | 885.8 | 847.2 | 766.4 | 766.4 | 762.5 | 766.4 | 762.5 | 762.5 |
| 55° | 6100.0 | 2345.2 | 924.3 | 862.6 | 820.2 | 739.3 | 754.8 | 762.5 | 770.2 | 766.4 | 766.4 |
| 57.5° | 6569.8 | 2287.5 | 866.4 | 847.2 | 804.8 | 731.7 | 747.2 | 762.5 | 766.4 | 762.5 | 762.5 |
| 60° | 7124.2 | 2249.0 | 827.9 | 851.0 | 793.3 | 731.7 | 750.9 | 762.5 | 758.6 | 754.8 | 754.8 |
| 62.5° | 7767.4 | 2233.6 | 801.0 | 862.6 | 781.7 | 735.6 | 750.9 | 762.5 | 747.2 | 743.2 | 743.2 |
| 65° | 8010.1 | 2094.9 | 766.4 | 870.4 | 789.4 | 735.6 | 747.2 | 750.9 | 731.7 | 727.7 | 724.0 |
| 67.5° | 7636.4 | 1856.2 | 716.3 | 855.0 | 812.6 | 735.6 | 735.6 | 731.7 | 708.5 | 704.7 | 697.1 |
| 70° | 6800.8 | 1540.3 | 639.2 | 804.8 | 827.9 | 739.3 | 720.1 | 700.9 | 677.7 | 677.7 | 662.3 |
| 72.5° | 5568.5 | 1213.0 | 539.0 | 716.3 | 816.3 | 750.9 | 689.3 | 662.3 | 635.5 | 635.5 | 620.0 |
| 75° | 4012.6 | 905.0 | 431.3 | 596.9 | 766.4 | 747.2 | 650.8 | 616.1 | 585.3 | 581.5 | 562.2 |
| 77.5° | 2287.5 | 635.5 | 350.4 | 466.0 | 681.7 | 727.7 | 616.1 | 562.2 | 527.6 | 516.0 | 504.4 |
| 80° | 1174.5 | 427.4 | 284.9 | 365.8 | 566.1 | 673.9 | 589.2 | 500.6 | 462.1 | 442.8 | 423.6 |
| 82.5° | 558.5 | 284.9 | 219.5 | 269.6 | 427.4 | 589.2 | 554.5 | 431.3 | 389.0 | 365.8 | 342.7 |
| 85° | 250.3 | 169.5 | 146.3 | 173.2 | 304.2 | 458.3 | 489.1 | 354.3 | 304.2 | 381.2 | 281.2 |
| 87.5° | 80.9 | 77.0 | 77.0 | 80.9 | 146.3 | 200.3 | 358.2 | 261.9 | 242.5 | 200.3 | 169.5 |
| 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)