

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: P237228

Luminaire Tested: **ARCH-L-AF72-150-D-U-T3-7050-HSS**

Issue Date: 2/14/2018

Test Information

Test Method: LM-79-08
Report Number: P237228
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29624)
Test Lab: INNOVATION CENTER-P2
Issue Date: 2/14/2018
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-AF72-150-D-U-T3-7050-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 665mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS
WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14633 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B1 - U0 - G3

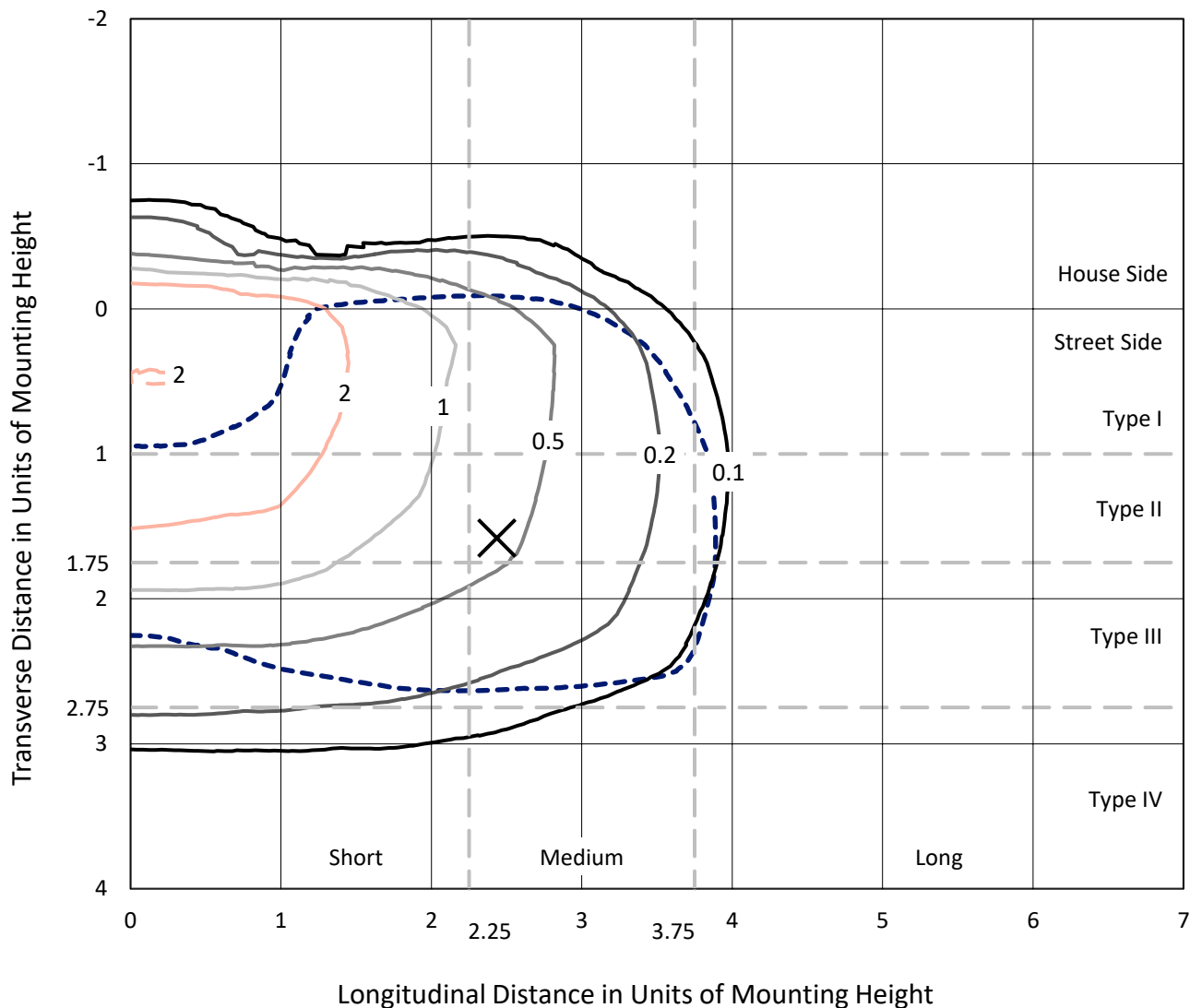
Input Watts (W): 153
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

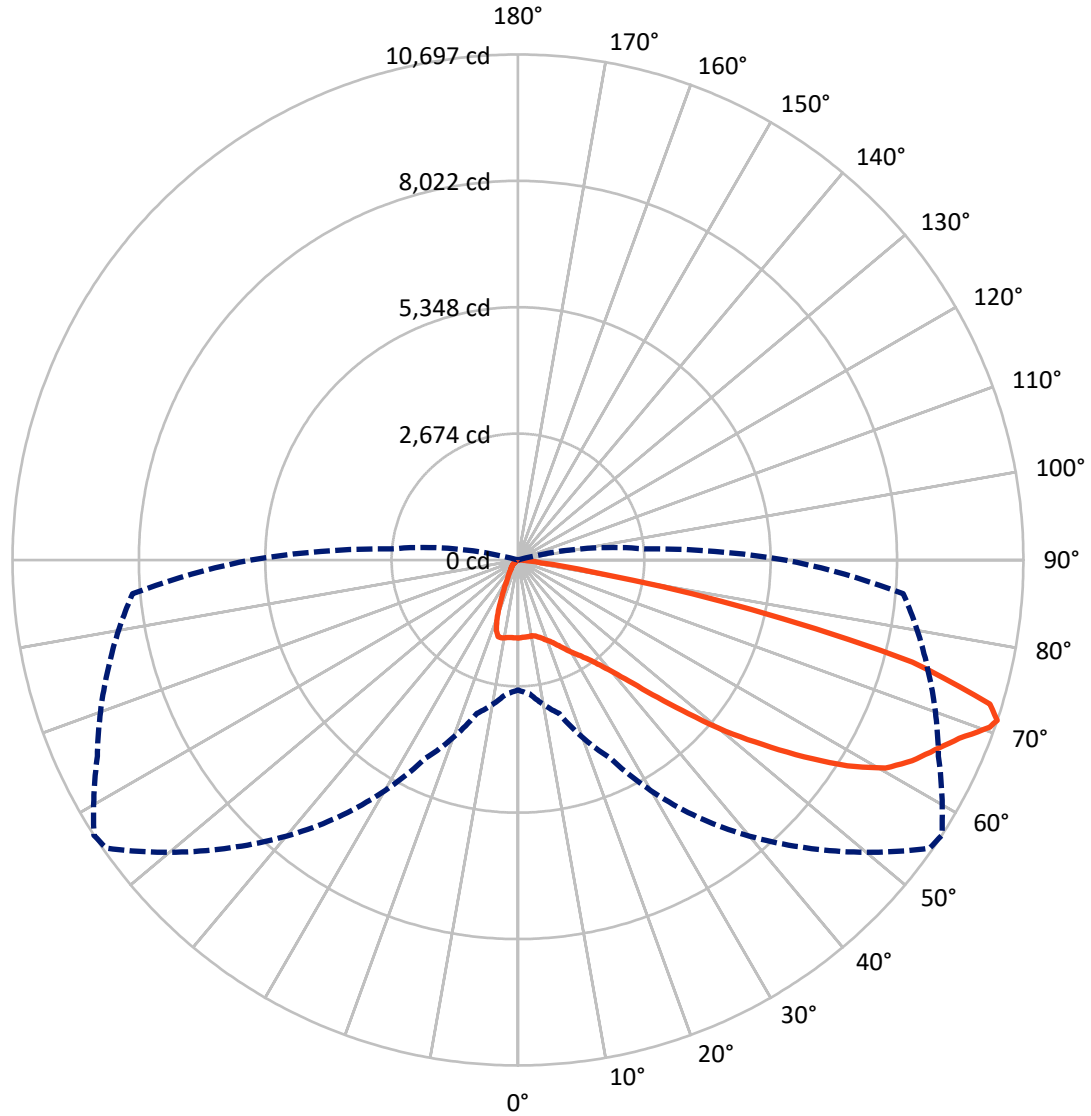
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.3 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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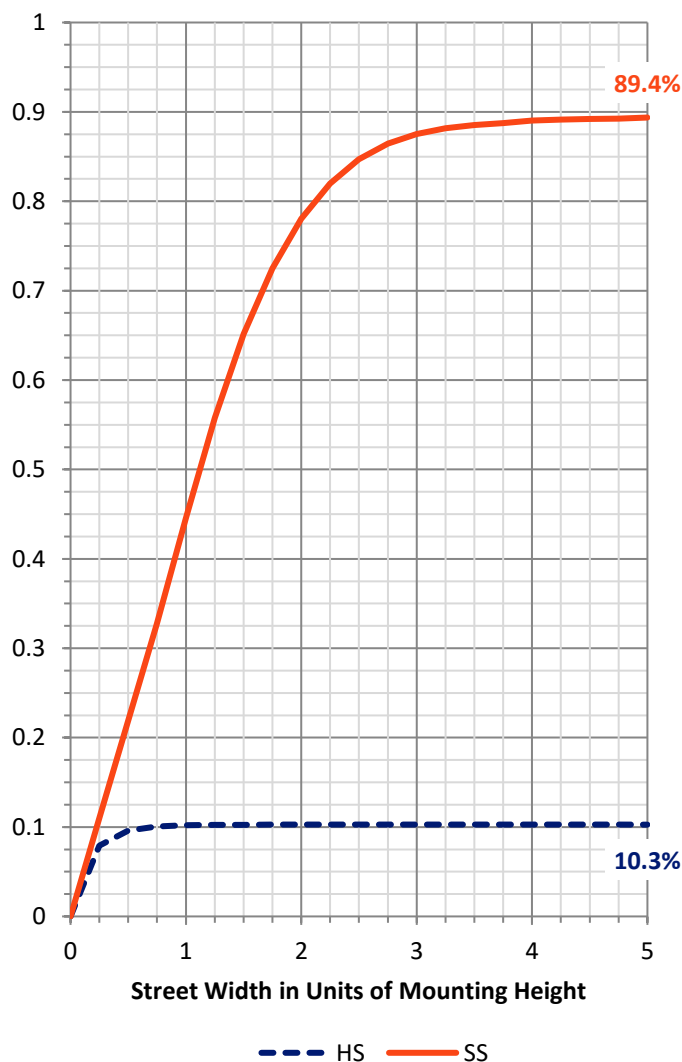
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 1516.4 | 0.0 | 1516.4 |
| | % Fixture | 10.4 | 0.0 | 10.4 |
| Street Side | Lumens | 13116.6 | 0.0 | 13116.6 |
| | % Fixture | 89.6 | 0.0 | 89.6 |
| Total | Lumens | 14633.0 | 0.0 | 14633.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 155.3 | 1.1 |
| 10°-20° | 415.3 | 2.8 |
| 20°-30° | 647.8 | 4.4 |
| 30°-40° | 1094.9 | 7.5 |
| 40°-50° | 2126.6 | 14.5 |
| 50°-60° | 3571.2 | 24.4 |
| 60°-70° | 4261.8 | 29.1 |
| 70°-80° | 2246.0 | 15.3 |
| 80°-90° | 114.1 | 0.8 |
| 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° | 14633.0 | 100.0 |
| 0°-180° | 14633.0 | 100.0 |

Coefficient of Utilization



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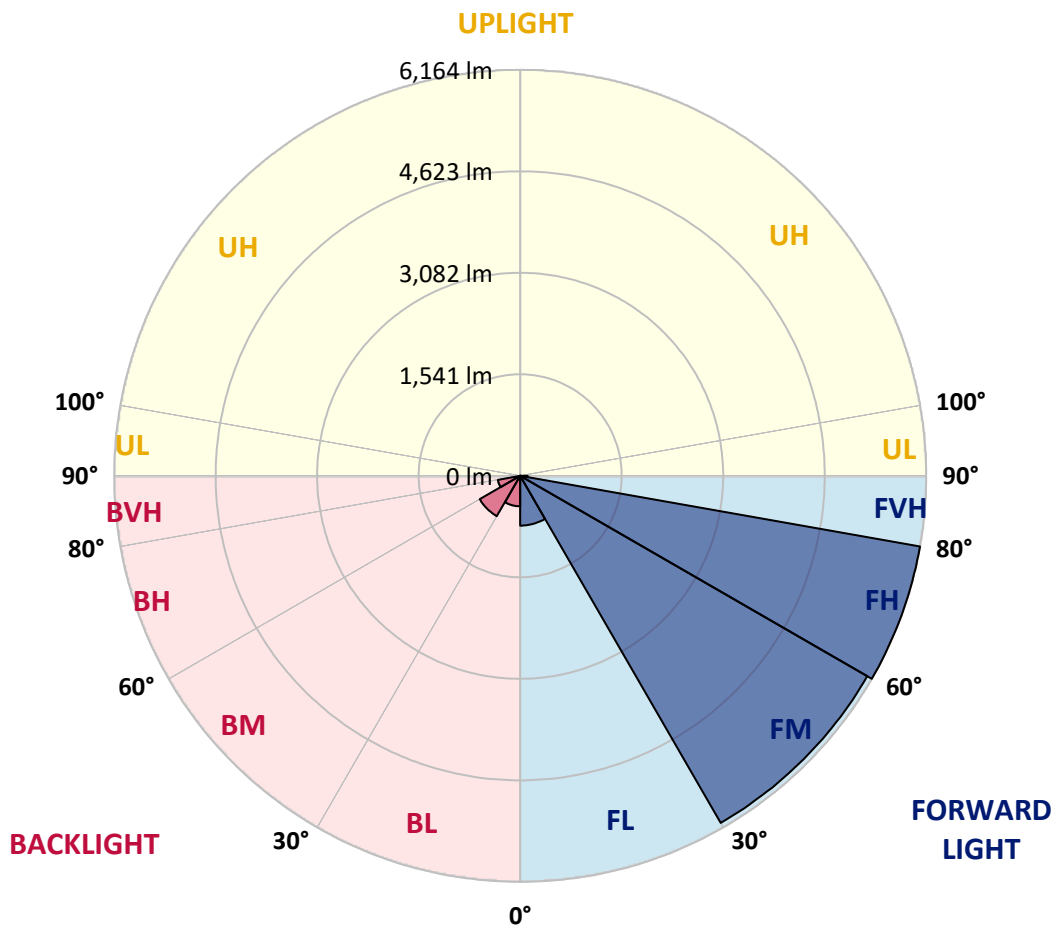
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 755.5 | 5.2 | | | |
| FM (30°-60°) | 6084.5 | 41.6 | | | |
| FH (60°-80°) | 6163.5 | 42.1 | | | G3/7500 |
| FVH (80°-90°) | 113.0 | 0.8 | | | G2/225 |
| BL (0°-30°) | 462.9 | 3.2 | B1/500 | | |
| BM (30°-60°) | 708.1 | 4.8 | B1/1000 | | |
| BH (60°-80°) | 344.4 | 2.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 1.1 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 57° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|--------|--------|--------|
| 0° | 1653.8 | 1653.8 | 1653.8 | 1653.8 | 1653.8 | 1653.8 | 1653.8 | 1653.8 | 1653.8 | 1653.8 | 1653.8 |
| 2.5° | 1629.9 | 1629.9 | 1629.9 | 1633.3 | 1636.7 | 1636.7 | 1643.5 | 1640.1 | 1640.1 | 1640.1 | 1646.9 |
| 5° | 1585.6 | 1589.0 | 1592.4 | 1599.2 | 1612.8 | 1623.1 | 1640.1 | 1640.1 | 1643.5 | 1650.3 | 1653.8 |
| 7.5° | 1524.2 | 1527.6 | 1537.8 | 1551.5 | 1578.7 | 1602.6 | 1629.9 | 1636.7 | 1646.9 | 1664.0 | 1670.8 |
| 10° | 1486.7 | 1493.5 | 1507.1 | 1524.2 | 1554.9 | 1585.6 | 1619.7 | 1629.9 | 1660.6 | 1691.3 | 1708.3 |
| 12.5° | 1476.4 | 1479.9 | 1493.5 | 1520.8 | 1558.3 | 1595.8 | 1640.1 | 1650.3 | 1694.7 | 1742.4 | 1769.7 |
| 15° | 1493.5 | 1496.9 | 1503.7 | 1534.4 | 1578.7 | 1626.5 | 1684.4 | 1698.1 | 1752.6 | 1807.2 | 1841.3 |
| 17.5° | 1524.2 | 1524.2 | 1531.0 | 1558.3 | 1606.0 | 1660.6 | 1735.6 | 1756.0 | 1817.4 | 1878.8 | 1916.3 |
| 20° | 1544.6 | 1544.6 | 1554.9 | 1582.1 | 1636.7 | 1708.3 | 1797.0 | 1824.2 | 1892.4 | 1960.6 | 1994.7 |
| 22.5° | 1565.1 | 1568.5 | 1578.7 | 1609.4 | 1670.8 | 1769.7 | 1872.0 | 1899.3 | 1977.7 | 2049.3 | 2083.4 |
| 25° | 1623.1 | 1619.7 | 1623.1 | 1650.3 | 1721.9 | 1844.7 | 1974.3 | 2008.4 | 2090.2 | 2168.6 | 2185.7 |
| 27.5° | 1783.3 | 1776.5 | 1732.2 | 1715.1 | 1769.7 | 1923.1 | 2103.8 | 2137.9 | 2233.4 | 2311.8 | 2311.8 |
| 30° | 2151.6 | 2137.9 | 2028.8 | 1889.0 | 1844.7 | 1994.7 | 2226.6 | 2274.3 | 2397.1 | 2465.3 | 2444.8 |
| 32.5° | 2618.7 | 2588.0 | 2448.2 | 2209.5 | 2032.2 | 2090.2 | 2356.2 | 2410.7 | 2567.6 | 2625.5 | 2581.2 |
| 35° | 3130.2 | 3126.8 | 2952.9 | 2646.0 | 2393.7 | 2288.0 | 2523.2 | 2588.0 | 2785.8 | 2836.9 | 2765.3 |
| 37.5° | 3672.3 | 3686.0 | 3570.1 | 3147.2 | 2850.6 | 2611.9 | 2744.9 | 2819.9 | 3062.0 | 3123.4 | 3055.2 |
| 40° | 4275.9 | 4272.5 | 4228.1 | 3726.9 | 3399.6 | 3072.2 | 3065.4 | 3133.6 | 3426.8 | 3522.3 | 3426.8 |
| 42.5° | 5039.7 | 5032.9 | 4872.6 | 4422.5 | 4064.5 | 3672.3 | 3532.5 | 3556.4 | 3883.8 | 4040.6 | 3900.8 |
| 45° | 5817.1 | 5769.4 | 5585.2 | 5196.5 | 4879.4 | 4415.7 | 4149.7 | 4149.7 | 4429.3 | 4644.1 | 4425.9 |
| 47.5° | 6250.2 | 6202.4 | 6127.4 | 5912.6 | 5817.1 | 5298.8 | 4906.7 | 4859.0 | 5077.2 | 5295.4 | 4988.5 |
| 50° | 6819.6 | 6819.6 | 6632.1 | 6550.2 | 6713.9 | 6349.0 | 5742.1 | 5694.4 | 5800.1 | 5974.0 | 5571.6 |
| 52.5° | 7269.7 | 7187.8 | 7054.9 | 7126.5 | 7593.6 | 7426.5 | 6577.5 | 6485.4 | 6567.3 | 6611.6 | 6079.7 |
| 55° | 7457.2 | 7378.8 | 7368.6 | 7631.1 | 8354.0 | 8122.1 | 7433.4 | 7351.5 | 7344.7 | 7126.5 | 6522.9 |
| 57.5° | 7494.7 | 7426.5 | 7556.1 | 8016.4 | 9093.9 | 8691.6 | 8285.8 | 8224.4 | 8033.5 | 7487.9 | 6976.4 |
| 60° | 7177.6 | 7211.7 | 7525.4 | 8227.8 | 9530.4 | 9186.0 | 9005.3 | 8940.5 | 8500.6 | 7794.8 | 7481.1 |
| 62.5° | 6526.3 | 6608.2 | 7194.7 | 8248.3 | 9370.1 | 9387.2 | 9404.2 | 9359.9 | 8862.1 | 8074.4 | 7989.2 |
| 65° | 5755.7 | 5779.6 | 6485.4 | 7965.3 | 9090.5 | 9325.8 | 9697.5 | 9694.0 | 9138.3 | 8388.1 | 8562.0 |
| 67.5° | 4743.0 | 4783.9 | 5394.3 | 7010.5 | 8531.3 | 9298.5 | 10082.8 | 10072.5 | 9452.0 | 8746.1 | 8903.0 |
| 70° | 3529.1 | 3580.3 | 4074.7 | 5452.3 | 7283.3 | 8957.5 | 10587.4 | 10594.2 | 9782.7 | 9018.9 | 8667.7 |
| 71° | 2751.7 | 2843.8 | 3362.1 | 4630.5 | 6645.7 | 8613.1 | 10635.2 | 10696.5 | 9820.2 | 8981.4 | 8183.5 |
| 72.5° | 1350.3 | 1459.4 | 2110.7 | 3259.8 | 5469.3 | 7842.5 | 10321.5 | 10440.8 | 9584.9 | 8514.3 | 6996.9 |
| 75° | 351.2 | 371.7 | 630.8 | 1333.2 | 2932.4 | 5196.5 | 8323.3 | 8626.8 | 7835.7 | 6482.0 | 4275.9 |
| 77.5° | 221.6 | 228.5 | 296.7 | 518.3 | 1098.0 | 1974.3 | 4889.6 | 5039.7 | 4477.1 | 3283.6 | 1507.1 |
| 80° | 156.9 | 160.3 | 187.5 | 334.2 | 641.0 | 576.3 | 1759.5 | 1824.2 | 1619.7 | 869.5 | 269.4 |
| 82.5° | 95.5 | 95.5 | 136.4 | 214.8 | 395.5 | 313.7 | 463.7 | 494.4 | 436.5 | 242.1 | 88.7 |
| 85° | 54.6 | 58.0 | 85.2 | 146.6 | 187.5 | 153.4 | 173.9 | 184.1 | 187.5 | 160.3 | 37.5 |
| 87.5° | 44.3 | 47.7 | 75.0 | 122.8 | 102.3 | 75.0 | 75.0 | 78.4 | 81.8 | 95.5 | 17.0 |
| 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° | 1653.8 | 1653.8 | 1653.8 | 1653.8 | 1653.8 | 1653.8 | 1653.8 | 1653.8 | 1653.8 | 1653.8 | 1653.8 |
| 2.5° | 1646.9 | 1646.9 | 1650.3 | 1646.9 | 1646.9 | 1646.9 | 1650.3 | 1650.3 | 1650.3 | 1657.2 | 1660.6 |
| 5° | 1653.8 | 1653.8 | 1653.8 | 1650.3 | 1646.9 | 1646.9 | 1653.8 | 1657.2 | 1657.2 | 1667.4 | 1667.4 |
| 7.5° | 1670.8 | 1670.8 | 1664.0 | 1657.2 | 1650.3 | 1640.1 | 1643.5 | 1646.9 | 1643.5 | 1646.9 | 1646.9 |
| 10° | 1708.3 | 1708.3 | 1698.1 | 1684.4 | 1664.0 | 1633.3 | 1592.4 | 1541.2 | 1493.5 | 1476.4 | 1469.6 |
| 12.5° | 1769.7 | 1766.3 | 1745.8 | 1721.9 | 1677.6 | 1571.9 | 1418.5 | 1237.8 | 1087.7 | 1046.8 | 1033.2 |
| 15° | 1837.9 | 1831.1 | 1807.2 | 1766.3 | 1646.9 | 1367.3 | 1046.8 | 814.9 | 671.7 | 637.6 | 630.8 |
| 17.5° | 1909.5 | 1899.3 | 1865.2 | 1783.3 | 1507.1 | 1016.1 | 675.1 | 511.5 | 433.0 | 426.2 | 429.6 |
| 20° | 1984.5 | 1970.9 | 1923.1 | 1749.2 | 1217.3 | 678.5 | 436.5 | 395.5 | 388.7 | 388.7 | 392.1 |
| 22.5° | 2069.7 | 2052.7 | 1987.9 | 1626.5 | 886.5 | 450.1 | 375.1 | 371.7 | 368.3 | 364.8 | 364.8 |
| 25° | 2168.6 | 2148.2 | 2049.3 | 1404.8 | 610.4 | 368.3 | 358.0 | 347.8 | 341.0 | 334.2 | 330.8 |
| 27.5° | 2288.0 | 2260.7 | 2097.0 | 1132.1 | 419.4 | 344.4 | 337.6 | 320.5 | 306.9 | 293.2 | 293.2 |
| 30° | 2407.3 | 2373.2 | 2083.4 | 852.4 | 341.0 | 320.5 | 306.9 | 286.4 | 266.0 | 252.3 | 248.9 |
| 32.5° | 2533.5 | 2499.4 | 1994.7 | 572.8 | 310.3 | 293.2 | 276.2 | 245.5 | 221.6 | 204.6 | 201.2 |
| 35° | 2721.0 | 2693.7 | 1820.8 | 378.5 | 279.6 | 259.1 | 235.3 | 204.6 | 173.9 | 156.9 | 153.4 |
| 37.5° | 3000.6 | 2966.5 | 1606.0 | 289.8 | 245.5 | 214.8 | 194.4 | 160.3 | 129.6 | 112.5 | 109.1 |
| 40° | 3375.7 | 3273.4 | 1350.3 | 255.7 | 214.8 | 177.3 | 150.0 | 115.9 | 92.1 | 81.8 | 81.8 |
| 42.5° | 3812.2 | 3570.1 | 1074.1 | 231.9 | 190.9 | 146.6 | 109.1 | 78.4 | 64.8 | 61.4 | 61.4 |
| 45° | 4275.9 | 3846.2 | 797.9 | 214.8 | 167.1 | 115.9 | 78.4 | 54.6 | 47.7 | 44.3 | 44.3 |
| 47.5° | 4753.3 | 4071.3 | 555.8 | 194.4 | 139.8 | 88.7 | 54.6 | 40.9 | 34.1 | 30.7 | 30.7 |
| 50° | 5199.9 | 4217.9 | 392.1 | 173.9 | 119.3 | 64.8 | 40.9 | 30.7 | 23.9 | 23.9 | 23.9 |
| 52.5° | 5510.2 | 4204.3 | 283.0 | 150.0 | 92.1 | 44.3 | 27.3 | 20.5 | 20.5 | 20.5 | 20.5 |
| 55° | 5783.0 | 4153.1 | 221.6 | 129.6 | 71.6 | 30.7 | 20.5 | 17.0 | 17.0 | 13.6 | 13.6 |
| 57.5° | 6014.9 | 4071.3 | 187.5 | 105.7 | 51.1 | 23.9 | 13.6 | 13.6 | 10.2 | 10.2 | 10.2 |
| 60° | 6212.6 | 3969.0 | 156.9 | 88.7 | 34.1 | 17.0 | 10.2 | 6.8 | 6.8 | 3.4 | 6.8 |
| 62.5° | 6482.0 | 3904.2 | 136.4 | 68.2 | 23.9 | 10.2 | 6.8 | 3.4 | 3.4 | 0.0 | 0.0 |
| 65° | 6679.8 | 3781.5 | 115.9 | 47.7 | 13.6 | 6.8 | 3.4 | 3.4 | 0.0 | 0.0 | 0.0 |
| 67.5° | 6686.6 | 3559.8 | 85.2 | 27.3 | 10.2 | 6.8 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 6147.9 | 3034.7 | 54.6 | 13.6 | 6.8 | 3.4 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| 71° | 5653.4 | 2686.9 | 44.3 | 10.2 | 6.8 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 4657.8 | 1974.3 | 34.1 | 10.2 | 3.4 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 2567.6 | 716.1 | 17.0 | 6.8 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 821.8 | 218.2 | 10.2 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 139.8 | 34.1 | 6.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 47.7 | 13.6 | 3.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 13.6 | 6.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 6.8 | 3.4 | 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)