

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: P258089

Luminaire Tested: **ARCH-L-AF72-130-D-U-T2U-7050-HSS**

Issue Date: 8/21/2018

**Test Information**

Test Method: LM-79-08  
Report Number: P258089  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1802-616-3)  
Test Lab: INNOVATIONS CENTER(G2)  
Issue Date: 8/21/2018  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-AF72-130-D-U-T2U-7050-HSS  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 70 CRI, 5000K, 575mA 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: 12284 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: B1 - U0 - G2

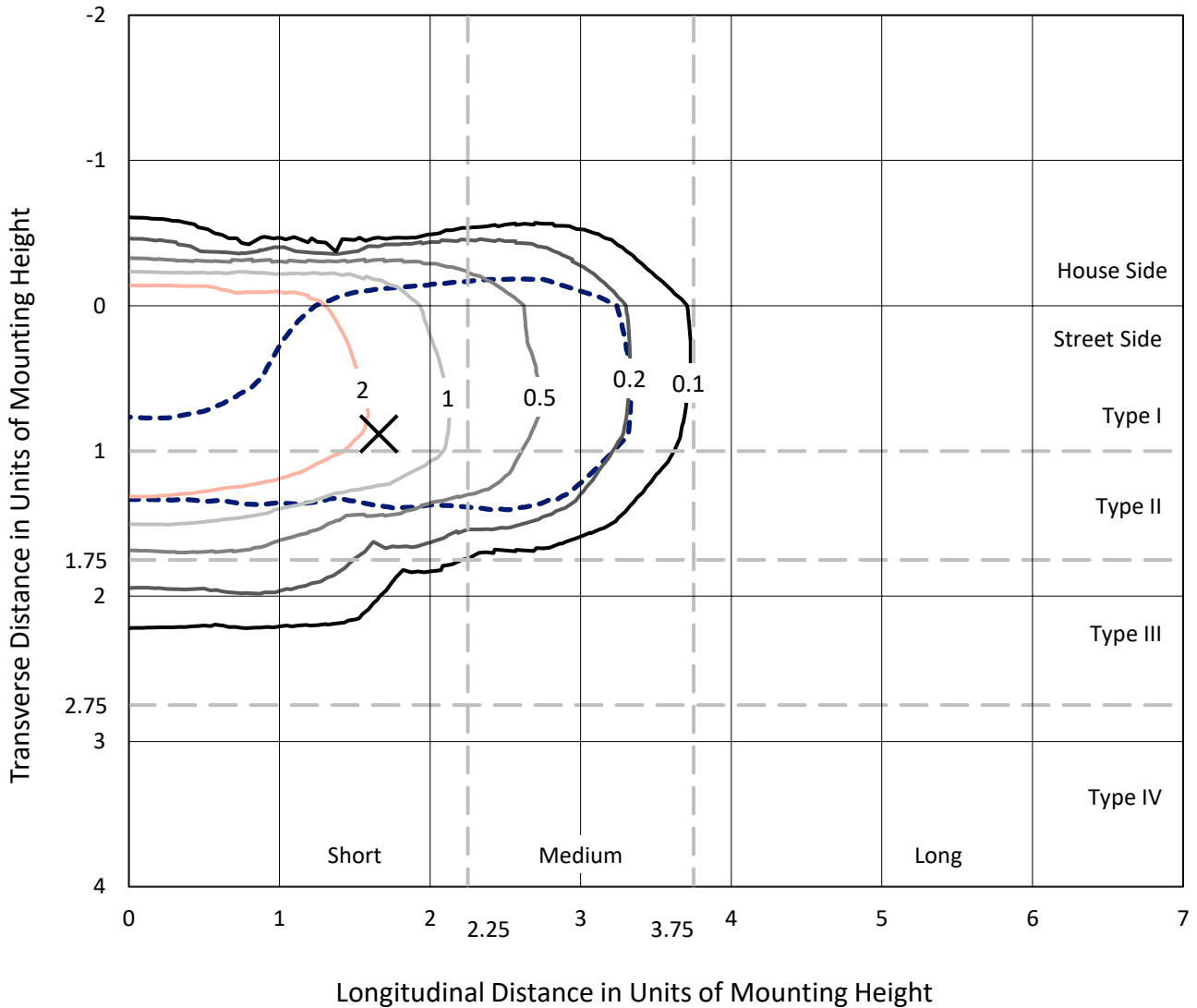
Input Watts (W): 133  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

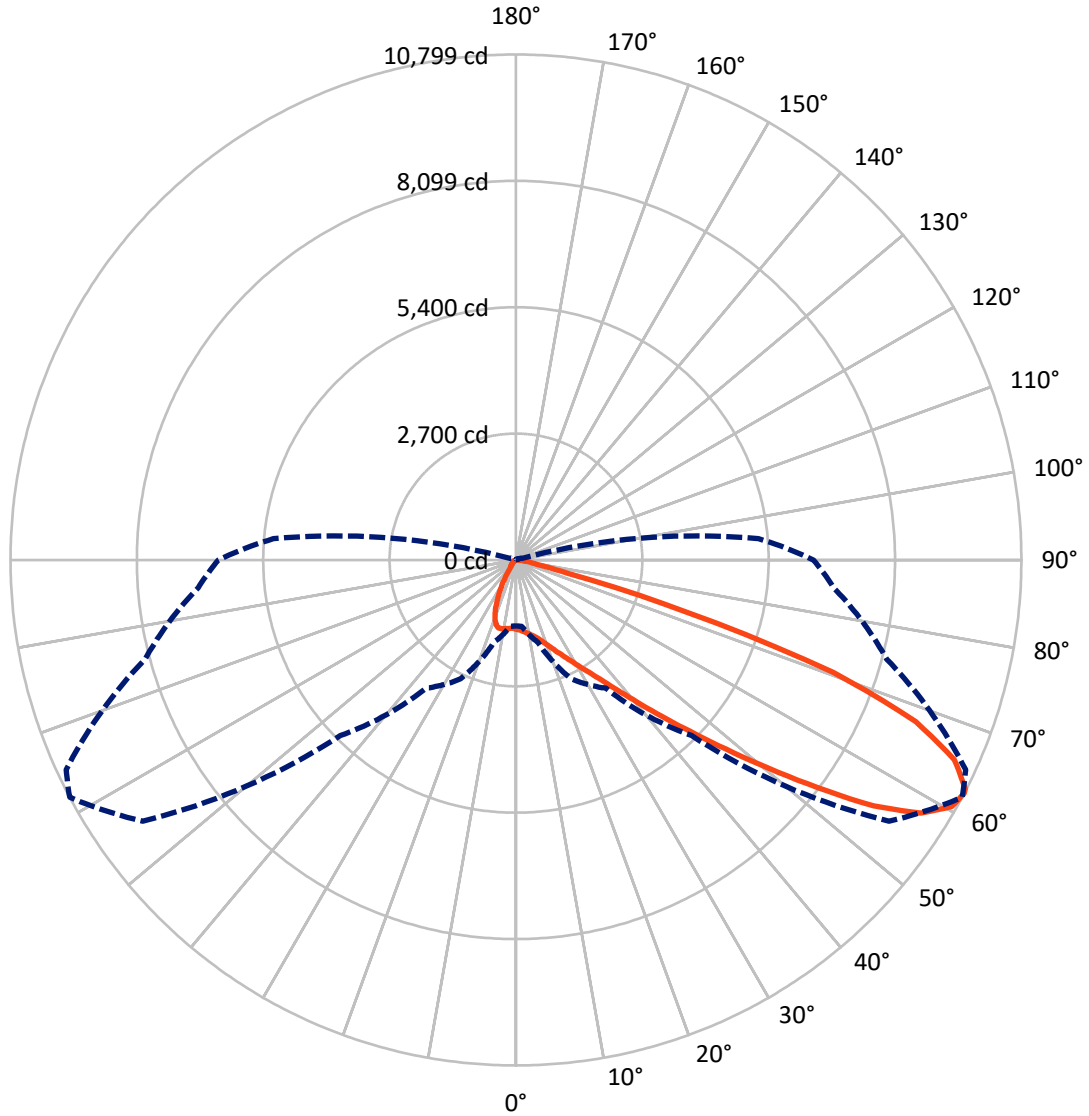
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.5 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 62-Deg Lateral    - - - Horizontal Cone Through 62-Deg Vertical

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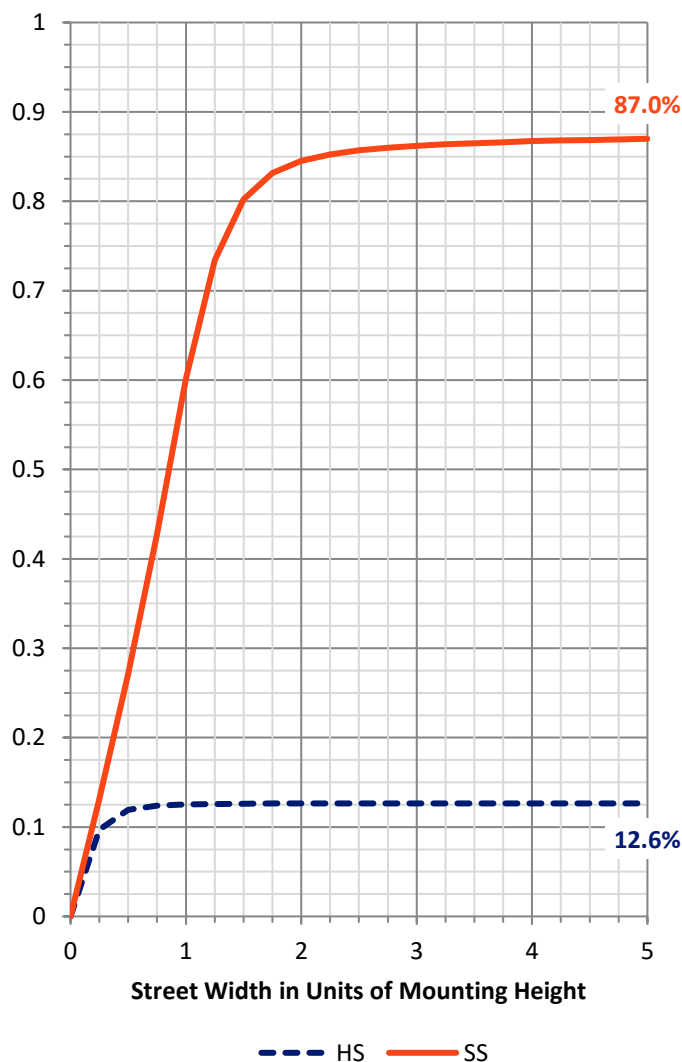
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1570.7   | 0.0    | 1570.7  |
|                    | % Fixture | 12.8     | 0.0    | 12.8    |
| <b>Street Side</b> | Lumens    | 10713.3  | 0.0    | 10713.3 |
|                    | % Fixture | 87.2     | 0.0    | 87.2    |
| <b>Total</b>       | Lumens    | 12284.0  | 0.0    | 12284.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 142.4   | 1.2       |
| 10°-20°   | 397.7   | 3.2       |
| 20°-30°   | 667.9   | 5.4       |
| 30°-40°   | 1280.3  | 10.4      |
| 40°-50°   | 2614.9  | 21.3      |
| 50°-60°   | 3460.5  | 28.2      |
| 60°-70°   | 2688.2  | 21.9      |
| 70°-80°   | 970.3   | 7.9       |
| 80°-90°   | 61.8    | 0.5       |
| 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°    | 12284.0 | 100.0     |
| 0°-180°   | 12284.0 | 100.0     |

**Coefficient of Utilization**



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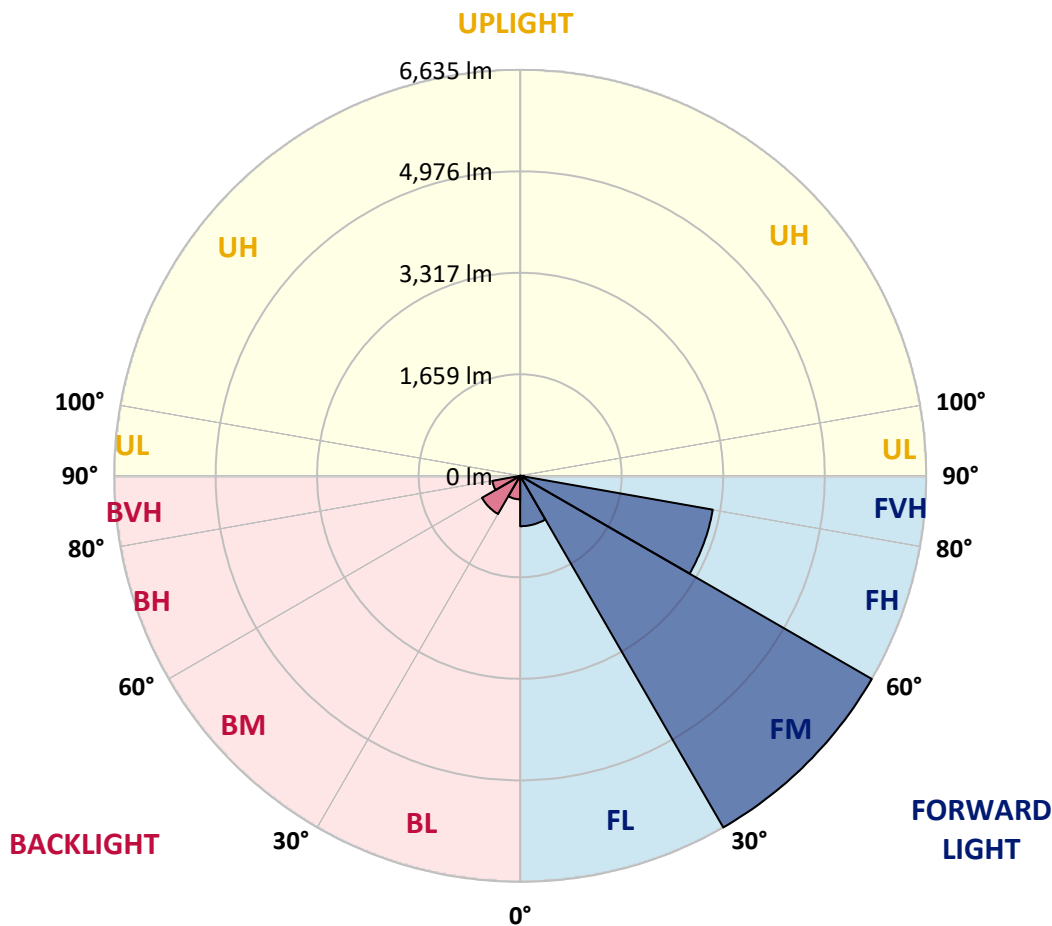
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 823.5  | 6.7       |                         |      |         |
| FM (30°-60°)   | 6634.6 | 54.0      |                         |      |         |
| FH (60°-80°)   | 3196.0 | 26.0      |                         |      | G2/5000 |
| FVH (80°-90°)  | 59.2   | 0.5       |                         |      | G1/100  |
| BL (0°-30°)    | 384.4  | 3.1       | B1/500                  |      |         |
| BM (30°-60°)   | 721.1  | 5.9       | B1/1000                 |      |         |
| BH (60°-80°)   | 462.5  | 3.8       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 2.7    | 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-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 62°     | 65°     | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|--------|--------|
| 0°    | 1479.8 | 1479.8 | 1479.8 | 1479.8 | 1479.8 | 1479.8 | 1479.8  | 1479.8  | 1479.8  | 1479.8 | 1479.8 |
| 2.5°  | 1519.0 | 1516.0 | 1513.0 | 1510.0 | 1510.0 | 1506.9 | 1503.9  | 1497.9  | 1491.8  | 1485.8 | 1482.8 |
| 5°    | 1546.2 | 1543.2 | 1540.2 | 1543.2 | 1540.2 | 1540.2 | 1537.1  | 1531.1  | 1525.1  | 1516.0 | 1506.9 |
| 7.5°  | 1567.3 | 1564.3 | 1561.3 | 1564.3 | 1567.3 | 1570.4 | 1573.4  | 1567.3  | 1564.3  | 1552.2 | 1543.2 |
| 10°   | 1594.5 | 1591.5 | 1588.5 | 1594.5 | 1594.5 | 1609.6 | 1612.6  | 1609.6  | 1606.6  | 1597.5 | 1582.4 |
| 12.5° | 1633.8 | 1636.8 | 1636.8 | 1642.8 | 1648.9 | 1667.0 | 1673.0  | 1664.0  | 1664.0  | 1651.9 | 1633.8 |
| 15°   | 1706.3 | 1706.3 | 1706.3 | 1712.3 | 1715.3 | 1739.5 | 1745.5  | 1736.5  | 1742.5  | 1721.4 | 1703.2 |
| 17.5° | 1775.7 | 1778.7 | 1784.8 | 1796.9 | 1796.9 | 1818.0 | 1830.1  | 1830.1  | 1842.2  | 1815.0 | 1790.8 |
| 20°   | 1845.2 | 1848.2 | 1857.3 | 1884.4 | 1884.4 | 1911.6 | 1932.8  | 1941.8  | 1953.9  | 1926.7 | 1884.4 |
| 22.5° | 1920.7 | 1920.7 | 1935.8 | 1978.1 | 1969.0 | 2023.4 | 2062.6  | 2077.7  | 2089.8  | 2053.6 | 1987.1 |
| 25°   | 2035.4 | 2023.4 | 2035.4 | 2074.7 | 2068.7 | 2144.2 | 2216.6  | 2231.7  | 2246.8  | 2204.6 | 2104.9 |
| 27.5° | 2252.9 | 2234.8 | 2192.5 | 2195.5 | 2195.5 | 2283.1 | 2385.7  | 2406.9  | 2415.9  | 2379.7 | 2255.9 |
| 30°   | 2687.7 | 2687.7 | 2530.7 | 2425.0 | 2355.5 | 2434.1 | 2579.0  | 2615.3  | 2627.3  | 2573.0 | 2409.9 |
| 32.5° | 3445.7 | 3445.7 | 3155.8 | 2887.1 | 2624.3 | 2624.3 | 2790.4  | 2856.9  | 2868.9  | 2805.5 | 2615.3 |
| 35°   | 4412.1 | 4406.1 | 3971.2 | 3602.8 | 3089.4 | 2896.1 | 3038.1  | 3149.8  | 3186.0  | 3101.5 | 2881.0 |
| 37.5° | 5438.9 | 5399.6 | 4931.6 | 4508.8 | 3805.1 | 3331.0 | 3373.3  | 3521.2  | 3554.5  | 3485.0 | 3225.3 |
| 40°   | 6272.4 | 6227.1 | 5849.6 | 5496.3 | 4729.2 | 4025.6 | 3856.5  | 3992.4  | 4031.6  | 3935.0 | 3636.0 |
| 42.5° | 7027.4 | 6915.7 | 6655.9 | 6402.3 | 5792.2 | 5227.5 | 4499.7  | 4554.1  | 4596.3  | 4493.7 | 4098.1 |
| 45°   | 7574.0 | 7401.9 | 7269.0 | 7190.5 | 6867.3 | 6547.2 | 5333.2  | 5224.5  | 5239.6  | 5112.7 | 4602.4 |
| 47.5° | 7589.1 | 7468.3 | 7480.4 | 7685.7 | 7818.6 | 7806.5 | 6417.4  | 6030.8  | 5973.4  | 5762.0 | 5139.9 |
| 50°   | 6864.3 | 6933.8 | 7154.2 | 7740.1 | 8458.8 | 8893.7 | 7706.9  | 6985.1  | 6813.0  | 6432.5 | 5674.5 |
| 52.5° | 5656.3 | 5765.1 | 6178.8 | 7166.3 | 8552.5 | 9609.4 | 9044.7  | 8075.3  | 7767.3  | 7096.8 | 6085.2 |
| 55°   | 4430.2 | 4436.3 | 4871.2 | 5876.8 | 7927.3 | 9739.3 | 10113.8 | 9274.2  | 8803.1  | 7601.2 | 6357.0 |
| 57.5° | 3047.1 | 3213.2 | 3765.9 | 4442.3 | 6517.0 | 9093.0 | 10515.4 | 10204.4 | 9597.4  | 7912.2 | 6547.2 |
| 60°   | 1996.2 | 2005.2 | 2648.5 | 3430.6 | 4436.3 | 7398.8 | 10270.8 | 10696.6 | 10240.6 | 8096.4 | 6677.1 |
| 62°   | 1407.3 | 1422.4 | 1821.0 | 2802.5 | 3343.1 | 5303.0 | 9730.2  | 10799.3 | 10603.0 | 8205.2 | 6813.0 |
| 62.5° | 1304.6 | 1316.7 | 1651.9 | 2645.5 | 3140.7 | 4756.4 | 9537.0  | 10775.1 | 10657.3 | 8241.4 | 6861.3 |
| 65°   | 957.3  | 957.3  | 1081.1 | 1818.0 | 2301.2 | 2570.0 | 8081.3  | 10295.0 | 10584.9 | 8531.3 | 7042.5 |
| 67.5° | 739.9  | 745.9  | 788.2  | 1120.4 | 1736.5 | 1558.3 | 5158.0  | 9213.8  | 9829.9  | 8960.1 | 7145.2 |
| 70°   | 637.2  | 634.2  | 664.4  | 742.9  | 1253.3 | 1035.8 | 2271.0  | 7190.5  | 8232.3  | 8851.4 | 7051.5 |
| 72.5° | 471.1  | 474.1  | 543.6  | 652.3  | 872.8  | 673.4  | 1026.8  | 3817.2  | 5339.2  | 6927.7 | 6042.9 |
| 75°   | 302.0  | 305.0  | 383.5  | 513.4  | 628.1  | 440.9  | 591.9   | 1138.5  | 2186.4  | 3841.4 | 3696.4 |
| 77.5° | 202.3  | 208.4  | 250.7  | 359.4  | 549.6  | 274.8  | 371.5   | 477.1   | 658.3   | 1440.5 | 1325.8 |
| 80°   | 135.9  | 135.9  | 160.1  | 241.6  | 347.3  | 229.5  | 199.3   | 317.1   | 341.3   | 447.0  | 223.5  |
| 82.5° | 90.6   | 90.6   | 105.7  | 160.1  | 226.5  | 205.4  | 120.8   | 172.1   | 199.3   | 223.5  | 78.5   |
| 85°   | 54.4   | 54.4   | 72.5   | 99.7   | 148.0  | 114.8  | 78.5    | 96.6    | 102.7   | 141.9  | 42.3   |
| 87.5° | 33.2   | 30.2   | 48.3   | 69.5   | 78.5   | 69.5   | 51.3    | 51.3    | 54.4    | 78.5   | 21.1   |
| 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°    | 1479.8 | 1479.8 | 1479.8 | 1479.8 | 1479.8 | 1479.8 | 1479.8 | 1479.8 | 1479.8 | 1479.8 | 1479.8 |
| 2.5°  | 1476.7 | 1473.7 | 1470.7 | 1464.7 | 1455.6 | 1449.6 | 1443.5 | 1437.5 | 1431.4 | 1431.4 | 1440.5 |
| 5°    | 1503.9 | 1494.9 | 1482.8 | 1470.7 | 1452.6 | 1440.5 | 1431.4 | 1419.4 | 1413.3 | 1413.3 | 1416.3 |
| 7.5°  | 1537.1 | 1528.1 | 1506.9 | 1485.8 | 1458.6 | 1437.5 | 1416.3 | 1389.2 | 1368.0 | 1359.0 | 1368.0 |
| 10°   | 1573.4 | 1561.3 | 1531.1 | 1497.9 | 1467.7 | 1413.3 | 1343.9 | 1259.3 | 1186.8 | 1153.6 | 1168.7 |
| 12.5° | 1618.7 | 1603.6 | 1567.3 | 1522.0 | 1452.6 | 1319.7 | 1147.6 | 951.3  | 827.5  | 770.1  | 782.2  |
| 15°   | 1685.1 | 1664.0 | 1612.6 | 1543.2 | 1389.2 | 1102.3 | 821.4  | 594.9  | 480.2  | 431.9  | 437.9  |
| 17.5° | 1763.6 | 1736.5 | 1667.0 | 1537.1 | 1226.1 | 794.2  | 489.2  | 347.3  | 299.0  | 286.9  | 286.9  |
| 20°   | 1848.2 | 1812.0 | 1721.4 | 1491.8 | 978.5  | 498.3  | 305.0  | 265.8  | 247.6  | 238.6  | 238.6  |
| 22.5° | 1935.8 | 1887.5 | 1766.7 | 1386.1 | 697.6  | 311.1  | 250.7  | 223.5  | 202.3  | 193.3  | 193.3  |
| 25°   | 2041.5 | 1978.1 | 1812.0 | 1201.9 | 443.9  | 250.7  | 214.4  | 187.2  | 166.1  | 154.0  | 157.0  |
| 27.5° | 2165.3 | 2083.8 | 1851.2 | 972.4  | 286.9  | 217.4  | 178.2  | 151.0  | 132.9  | 126.8  | 126.8  |
| 30°   | 2295.2 | 2198.5 | 1860.3 | 727.8  | 232.5  | 187.2  | 148.0  | 123.8  | 111.7  | 105.7  | 105.7  |
| 32.5° | 2473.3 | 2346.5 | 1833.1 | 483.2  | 196.3  | 157.0  | 123.8  | 102.7  | 93.6   | 90.6   | 90.6   |
| 35°   | 2708.9 | 2539.8 | 1769.7 | 299.0  | 166.1  | 129.9  | 102.7  | 90.6   | 81.5   | 78.5   | 78.5   |
| 37.5° | 3007.9 | 2808.5 | 1657.9 | 205.4  | 141.9  | 105.7  | 87.6   | 78.5   | 72.5   | 69.5   | 69.5   |
| 40°   | 3406.5 | 3134.7 | 1513.0 | 178.2  | 120.8  | 90.6   | 75.5   | 69.5   | 63.4   | 63.4   | 63.4   |
| 42.5° | 3829.3 | 3530.3 | 1325.8 | 157.0  | 102.7  | 78.5   | 66.4   | 60.4   | 57.4   | 54.4   | 54.4   |
| 45°   | 4291.3 | 3935.0 | 1093.2 | 138.9  | 87.6   | 69.5   | 60.4   | 51.3   | 48.3   | 48.3   | 48.3   |
| 47.5° | 4750.4 | 4351.7 | 839.5  | 120.8  | 75.5   | 60.4   | 51.3   | 45.3   | 42.3   | 39.3   | 39.3   |
| 50°   | 5221.5 | 4729.2 | 616.1  | 105.7  | 66.4   | 54.4   | 45.3   | 39.3   | 33.2   | 30.2   | 30.2   |
| 52.5° | 5562.7 | 4955.7 | 450.0  | 90.6   | 57.4   | 45.3   | 36.2   | 30.2   | 24.2   | 21.1   | 21.1   |
| 55°   | 5813.4 | 5094.6 | 329.2  | 75.5   | 51.3   | 39.3   | 30.2   | 24.2   | 18.1   | 18.1   | 15.1   |
| 57.5° | 6009.7 | 5161.1 | 247.6  | 66.4   | 45.3   | 33.2   | 24.2   | 18.1   | 15.1   | 12.1   | 12.1   |
| 60°   | 6160.7 | 5164.1 | 184.2  | 54.4   | 39.3   | 27.2   | 18.1   | 12.1   | 9.1    | 9.1    | 9.1    |
| 62°   | 6360.0 | 5203.3 | 151.0  | 45.3   | 36.2   | 24.2   | 15.1   | 9.1    | 6.0    | 3.0    | 3.0    |
| 62.5° | 6417.4 | 5218.4 | 145.0  | 45.3   | 33.2   | 21.1   | 12.1   | 9.1    | 6.0    | 3.0    | 3.0    |
| 65°   | 6683.1 | 5245.6 | 111.7  | 36.2   | 27.2   | 18.1   | 9.1    | 6.0    | 0.0    | 0.0    | 0.0    |
| 67.5° | 6924.7 | 5203.3 | 81.5   | 27.2   | 21.1   | 12.1   | 9.1    | 3.0    | 0.0    | 0.0    | 0.0    |
| 70°   | 6900.6 | 4913.4 | 57.4   | 18.1   | 15.1   | 9.1    | 6.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 72.5° | 5686.5 | 3678.3 | 39.3   | 15.1   | 9.1    | 6.0    | 3.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 3433.7 | 1609.6 | 27.2   | 9.1    | 9.1    | 6.0    | 3.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 1126.4 | 582.8  | 18.1   | 6.0    | 6.0    | 3.0    | 3.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 184.2  | 96.6   | 9.1    | 6.0    | 6.0    | 3.0    | 3.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 57.4   | 24.2   | 6.0    | 6.0    | 3.0    | 3.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 21.1   | 9.1    | 6.0    | 6.0    | 3.0    | 3.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 9.1    | 6.0    | 6.0    | 6.0    | 3.0    | 3.0    | 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)