

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: P400545

Luminaire Tested: **ARCH-L-PA3-90-830-U-T2U**

Issue Date: 5/19/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400545  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/19/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH-L-PA3-90-830-U-T2U  
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE  
(3) 80 CRI, 3000K, 400mA LIGHT ENGINES WITH 24 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12309 lumens  
Efficiency: N/A  
Efficacy: 132.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

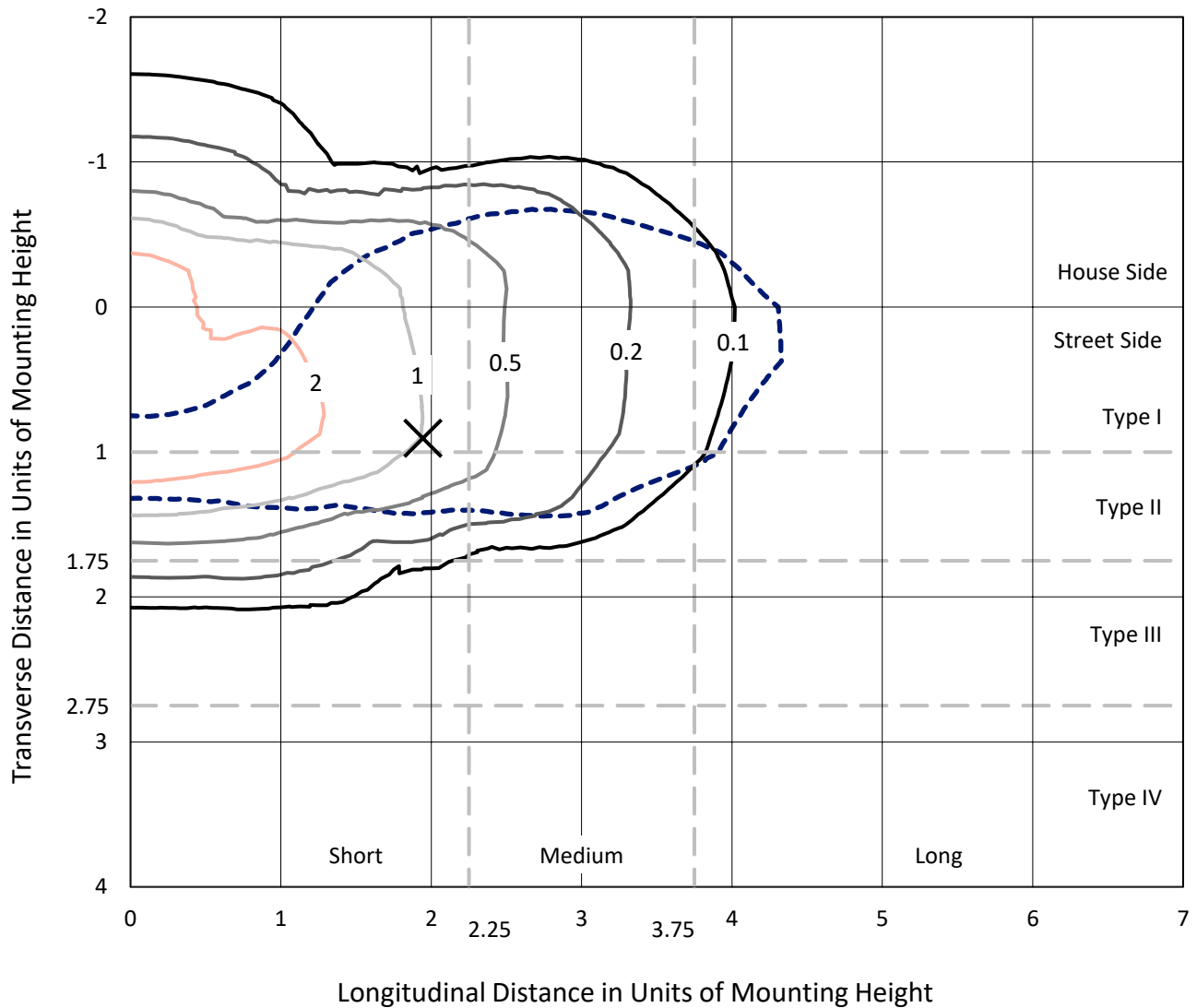
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

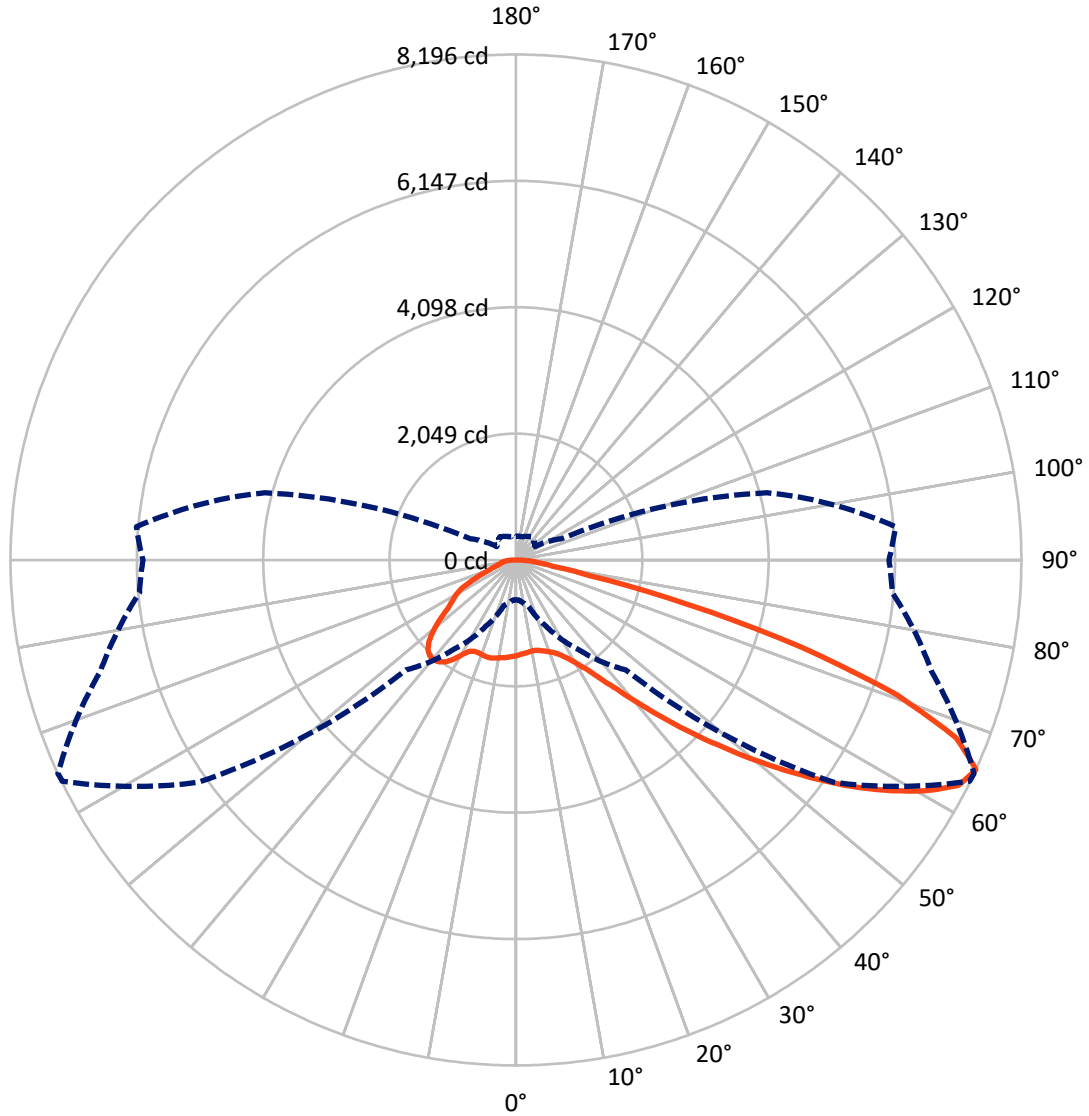
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



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

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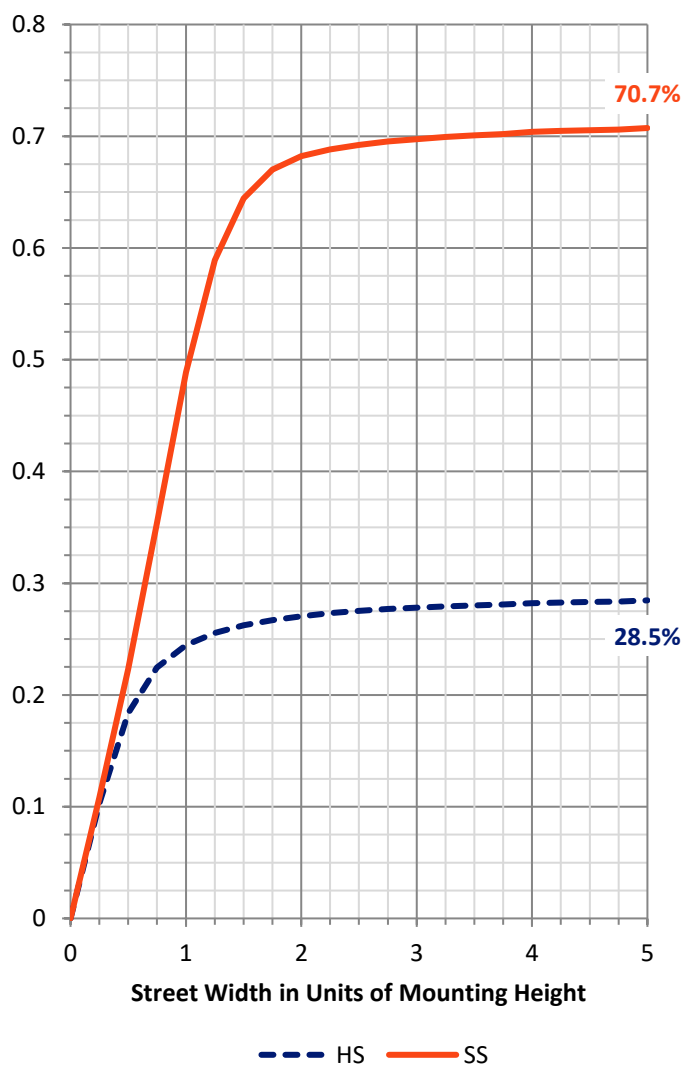
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3558.7   | 0.0    | 3558.7  |
|                    | % Fixture | 28.9     | 0.0    | 28.9    |
| <b>Street Side</b> | Lumens    | 8750.3   | 0.0    | 8750.3  |
|                    | % Fixture | 71.1     | 0.0    | 71.1    |
| <b>Total</b>       | Lumens    | 12309.0  | 0.0    | 12309.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 148.2   | 1.2       |
| 10°-20°   | 442.4   | 3.6       |
| 20°-30°   | 785.8   | 6.4       |
| 30°-40°   | 1329.5  | 10.8      |
| 40°-50°   | 2314.3  | 18.8      |
| 50°-60°   | 2990.9  | 24.3      |
| 60°-70°   | 2617.2  | 21.3      |
| 70°-80°   | 1423.5  | 11.6      |
| 80°-90°   | 257.2   | 2.1       |
| 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°    | 12309.0 | 100.0     |
| 0°-180°   | 12309.0 | 100.0     |

**Coefficient of Utilization**



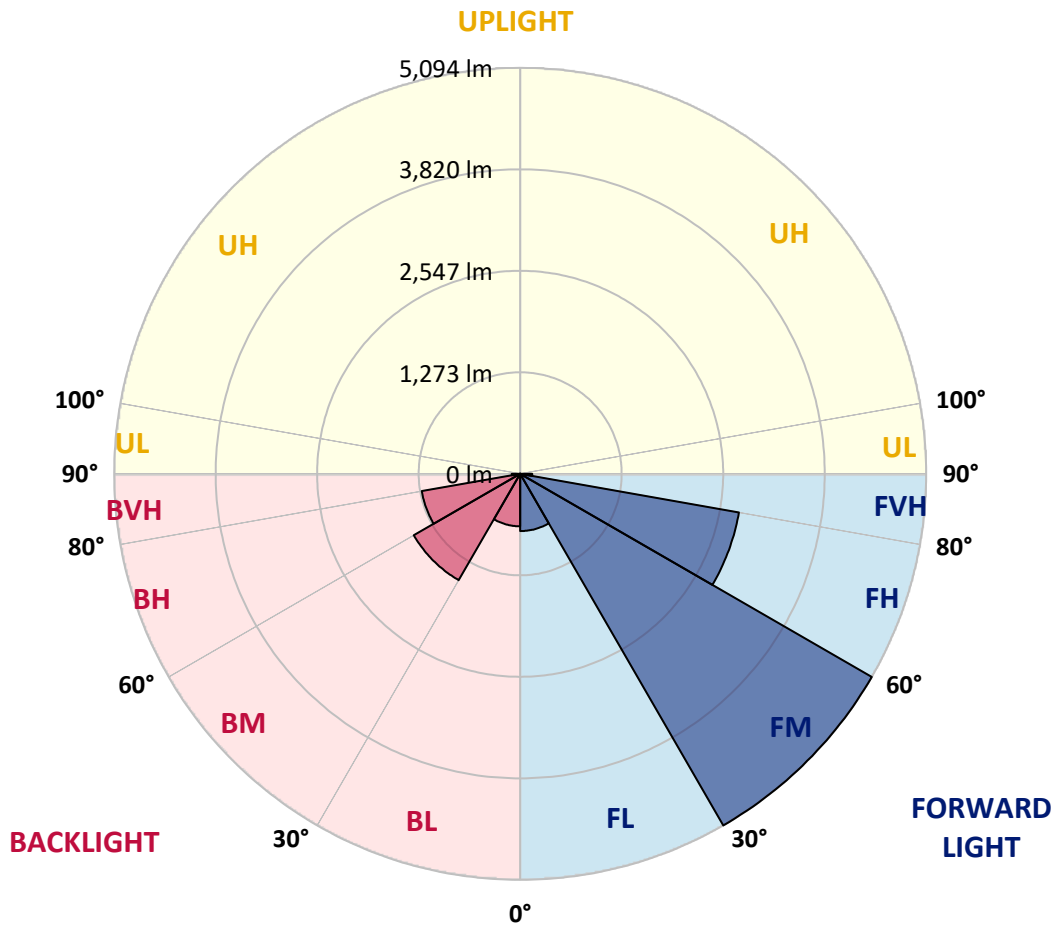
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 718.2  | 5.8       |                         |      |         |
| FM (30°-60°)   | 5093.8 | 41.4      |                         |      |         |
| FH (60°-80°)   | 2786.9 | 22.6      |                         |      | G2/5000 |
| FVH (80°-90°)  | 151.4  | 1.2       |                         |      | G2/225  |
| BL (0°-30°)    | 658.2  | 5.3       | B2/1000                 |      |         |
| BM (30°-60°)   | 1540.8 | 12.5      | B2/2500                 |      |         |
| BH (60°-80°)   | 1253.8 | 10.2      | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 105.8  | 0.9       |                         |      | G2/225  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 64°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1555.4 | 1555.4 | 1555.4 | 1555.4 | 1555.4 | 1555.4 | 1555.4 | 1555.4 | 1555.4 | 1555.4 | 1555.4 |
| 2.5°  | 1527.8 | 1526.2 | 1523.0 | 1526.2 | 1527.8 | 1531.1 | 1529.4 | 1532.7 | 1531.1 | 1535.9 | 1544.0 |
| 5°    | 1488.9 | 1485.7 | 1484.1 | 1492.2 | 1497.0 | 1505.1 | 1508.4 | 1519.7 | 1518.1 | 1526.2 | 1539.2 |
| 7.5°  | 1445.2 | 1445.2 | 1443.6 | 1453.3 | 1459.8 | 1474.4 | 1485.7 | 1505.1 | 1506.8 | 1521.3 | 1535.9 |
| 10°   | 1411.2 | 1412.8 | 1411.2 | 1419.3 | 1429.0 | 1446.8 | 1466.3 | 1493.8 | 1495.4 | 1516.5 | 1531.1 |
| 12.5° | 1398.2 | 1398.2 | 1398.2 | 1409.5 | 1422.5 | 1446.8 | 1469.5 | 1498.7 | 1501.9 | 1524.6 | 1537.5 |
| 15°   | 1416.0 | 1417.6 | 1414.4 | 1425.7 | 1440.3 | 1469.5 | 1490.6 | 1521.3 | 1524.6 | 1545.6 | 1553.7 |
| 17.5° | 1479.2 | 1485.7 | 1477.6 | 1484.1 | 1480.8 | 1503.5 | 1523.0 | 1553.7 | 1555.4 | 1573.2 | 1576.4 |
| 20°   | 1604.0 | 1610.4 | 1597.5 | 1589.4 | 1560.2 | 1558.6 | 1566.7 | 1591.0 | 1591.0 | 1602.3 | 1594.2 |
| 22.5° | 1796.8 | 1803.2 | 1780.6 | 1749.8 | 1680.1 | 1646.1 | 1628.3 | 1639.6 | 1638.0 | 1642.8 | 1621.8 |
| 25°   | 2052.8 | 2051.1 | 2023.6 | 1966.9 | 1855.1 | 1772.5 | 1728.7 | 1710.9 | 1710.9 | 1701.2 | 1675.3 |
| 27.5° | 2370.3 | 2346.0 | 2297.4 | 2229.4 | 2073.8 | 1958.8 | 1864.8 | 1819.4 | 1811.3 | 1782.2 | 1733.6 |
| 30°   | 2708.9 | 2691.1 | 2621.4 | 2522.6 | 2342.8 | 2195.3 | 2039.8 | 1949.1 | 1944.2 | 1881.0 | 1808.1 |
| 32.5° | 3107.5 | 3078.3 | 3000.6 | 2882.3 | 2666.8 | 2459.4 | 2265.0 | 2127.3 | 2119.2 | 2018.7 | 1918.3 |
| 35°   | 3619.5 | 3595.2 | 3444.5 | 3326.2 | 3049.2 | 2777.0 | 2546.9 | 2363.8 | 2357.3 | 2234.2 | 2106.2 |
| 37.5° | 4233.5 | 4170.3 | 4024.5 | 3802.5 | 3510.9 | 3188.5 | 2896.9 | 2666.8 | 2658.7 | 2522.6 | 2360.6 |
| 40°   | 4781.1 | 4724.4 | 4594.8 | 4390.7 | 4078.0 | 3719.9 | 3324.6 | 3045.9 | 3037.8 | 2872.6 | 2668.4 |
| 42.5° | 5186.2 | 5147.3 | 5063.0 | 4944.8 | 4721.2 | 4504.1 | 3870.6 | 3504.4 | 3489.8 | 3276.0 | 3021.6 |
| 45°   | 5421.1 | 5390.3 | 5341.7 | 5370.9 | 5367.6 | 5327.1 | 4521.9 | 4050.4 | 4003.4 | 3726.4 | 3415.3 |
| 47.5° | 5364.4 | 5336.8 | 5356.3 | 5583.1 | 5895.8 | 6130.7 | 5280.1 | 4609.4 | 4546.2 | 4184.9 | 3834.9 |
| 50°   | 4954.5 | 4965.8 | 5067.9 | 5502.1 | 6203.6 | 6725.3 | 6121.0 | 5246.1 | 5161.9 | 4646.6 | 4233.5 |
| 52.5° | 4207.6 | 4235.1 | 4483.0 | 5090.6 | 6169.6 | 7110.9 | 6880.9 | 5903.9 | 5792.1 | 5097.0 | 4596.4 |
| 55°   | 3342.4 | 3412.1 | 3732.9 | 4371.2 | 5725.7 | 7138.5 | 7454.4 | 6564.9 | 6441.8 | 5519.9 | 4912.3 |
| 57.5° | 2472.4 | 2576.1 | 2947.1 | 3533.6 | 4875.1 | 6702.6 | 7741.2 | 7196.8 | 7047.7 | 5939.5 | 5246.1 |
| 60°   | 1568.3 | 1631.5 | 2059.2 | 2751.0 | 3731.2 | 5636.6 | 7703.9 | 7734.7 | 7605.1 | 6357.5 | 5594.4 |
| 62.5° | 1001.3 | 1032.0 | 1247.5 | 1962.0 | 2608.5 | 4173.6 | 7297.2 | 8141.3 | 8053.9 | 6738.3 | 5925.0 |
| 65°   | 643.2  | 656.2  | 766.3  | 1207.0 | 1775.7 | 2519.4 | 6284.6 | 8185.1 | 8196.4 | 6976.4 | 6129.1 |
| 67.5° | 523.3  | 529.8  | 570.3  | 745.3  | 1255.6 | 1391.7 | 4377.7 | 7562.9 | 7700.7 | 6914.9 | 6059.4 |
| 70°   | 476.3  | 484.4  | 526.6  | 594.6  | 972.1  | 960.8  | 2119.2 | 6328.4 | 6553.6 | 6560.1 | 5750.0 |
| 72.5° | 401.8  | 413.1  | 469.8  | 562.2  | 751.8  | 758.2  | 897.6  | 4507.3 | 4839.4 | 5863.4 | 5285.0 |
| 75°   | 335.4  | 341.9  | 390.5  | 495.8  | 636.7  | 605.9  | 630.2  | 2389.7 | 2869.3 | 4701.7 | 4790.8 |
| 77.5° | 272.2  | 278.7  | 314.3  | 395.3  | 565.4  | 471.5  | 495.8  | 989.9  | 1223.2 | 3191.7 | 3915.9 |
| 80°   | 194.4  | 200.9  | 241.4  | 307.8  | 427.7  | 424.5  | 367.8  | 546.0  | 593.0  | 1725.5 | 2543.7 |
| 82.5° | 139.3  | 144.2  | 183.1  | 220.3  | 296.5  | 426.1  | 277.0  | 371.0  | 388.8  | 764.7  | 1025.6 |
| 85°   | 94.0   | 94.0   | 126.4  | 145.8  | 191.2  | 268.9  | 223.6  | 251.1  | 262.5  | 362.9  | 277.0  |
| 87.5° | 40.5   | 40.5   | 68.0   | 74.5   | 100.5  | 124.8  | 166.9  | 126.4  | 129.6  | 196.0  | 113.4  |
| 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°    | 1555.4 | 1555.4 | 1555.4 | 1555.4 | 1555.4 | 1555.4 | 1555.4 | 1555.4 | 1555.4 | 1555.4 | 1555.4 |
| 2.5°  | 1548.9 | 1550.5 | 1553.7 | 1563.5 | 1569.9 | 1579.7 | 1584.5 | 1591.0 | 1591.0 | 1587.8 | 1589.4 |
| 5°    | 1545.6 | 1550.5 | 1561.8 | 1579.7 | 1591.0 | 1608.8 | 1621.8 | 1631.5 | 1634.7 | 1631.5 | 1633.1 |
| 7.5°  | 1544.0 | 1552.1 | 1571.6 | 1597.5 | 1613.7 | 1636.4 | 1654.2 | 1665.5 | 1673.6 | 1670.4 | 1672.0 |
| 10°   | 1539.2 | 1552.1 | 1576.4 | 1608.8 | 1633.1 | 1655.8 | 1672.0 | 1676.9 | 1681.7 | 1678.5 | 1676.9 |
| 12.5° | 1545.6 | 1560.2 | 1586.1 | 1625.0 | 1652.6 | 1670.4 | 1675.3 | 1667.2 | 1655.8 | 1649.3 | 1647.7 |
| 15°   | 1558.6 | 1573.2 | 1599.1 | 1639.6 | 1663.9 | 1670.4 | 1659.1 | 1633.1 | 1607.2 | 1592.6 | 1591.0 |
| 17.5° | 1576.4 | 1586.1 | 1607.2 | 1642.8 | 1662.3 | 1654.2 | 1631.5 | 1600.7 | 1581.3 | 1569.9 | 1571.6 |
| 20°   | 1587.8 | 1587.8 | 1604.0 | 1631.5 | 1647.7 | 1641.2 | 1613.7 | 1579.7 | 1548.9 | 1534.3 | 1529.4 |
| 22.5° | 1604.0 | 1595.9 | 1597.5 | 1621.8 | 1644.5 | 1634.7 | 1576.4 | 1516.5 | 1472.7 | 1456.5 | 1454.9 |
| 25°   | 1647.7 | 1625.0 | 1610.4 | 1625.0 | 1678.5 | 1599.1 | 1482.5 | 1412.8 | 1372.3 | 1357.7 | 1359.3 |
| 27.5° | 1701.2 | 1670.4 | 1639.6 | 1663.9 | 1706.0 | 1518.1 | 1362.6 | 1283.2 | 1258.9 | 1247.5 | 1252.4 |
| 30°   | 1754.6 | 1714.1 | 1673.6 | 1761.1 | 1686.6 | 1391.7 | 1208.6 | 1130.9 | 1109.8 | 1101.7 | 1108.2 |
| 32.5° | 1853.5 | 1787.0 | 1738.4 | 1890.7 | 1626.6 | 1247.5 | 1041.8 | 970.5  | 951.0  | 941.3  | 938.1  |
| 35°   | 2018.7 | 1934.5 | 1885.9 | 2004.1 | 1542.4 | 1087.1 | 889.5  | 839.2  | 818.2  | 797.1  | 793.9  |
| 37.5° | 2256.9 | 2154.8 | 2111.1 | 2069.0 | 1424.1 | 928.4  | 772.8  | 738.8  | 708.0  | 675.6  | 674.0  |
| 40°   | 2542.0 | 2409.2 | 2376.8 | 2098.1 | 1260.5 | 779.3  | 691.8  | 659.4  | 620.5  | 589.7  | 591.4  |
| 42.5° | 2870.9 | 2700.8 | 2631.2 | 2090.0 | 1058.0 | 699.9  | 633.5  | 597.8  | 563.8  | 536.3  | 534.7  |
| 45°   | 3222.5 | 3029.7 | 2869.3 | 2033.3 | 857.1  | 644.8  | 597.8  | 555.7  | 521.7  | 490.9  | 487.7  |
| 47.5° | 3611.4 | 3395.9 | 3089.7 | 1923.1 | 708.0  | 605.9  | 576.8  | 516.8  | 486.1  | 466.6  | 466.6  |
| 50°   | 4003.4 | 3745.8 | 3292.2 | 1756.3 | 620.5  | 576.8  | 546.0  | 495.8  | 471.5  | 455.3  | 455.3  |
| 52.5° | 4338.8 | 4110.4 | 3459.1 | 1557.0 | 565.4  | 552.5  | 524.9  | 486.1  | 460.1  | 445.5  | 443.9  |
| 55°   | 4664.5 | 4449.0 | 3608.1 | 1359.3 | 520.1  | 520.1  | 520.1  | 477.9  | 448.8  | 435.8  | 434.2  |
| 57.5° | 4988.5 | 4805.4 | 3763.6 | 1229.7 | 479.6  | 492.5  | 510.4  | 468.2  | 439.1  | 427.7  | 426.1  |
| 60°   | 5354.7 | 5233.1 | 3943.5 | 1139.0 | 443.9  | 463.4  | 497.4  | 456.9  | 422.9  | 413.1  | 411.5  |
| 62.5° | 5743.5 | 5743.5 | 4107.1 | 1011.0 | 411.5  | 439.1  | 477.9  | 442.3  | 408.3  | 400.2  | 398.6  |
| 65°   | 6048.1 | 6179.3 | 4212.4 | 819.8  | 379.1  | 414.8  | 455.3  | 422.9  | 388.8  | 387.2  | 384.0  |
| 67.5° | 6083.7 | 6289.5 | 4146.0 | 618.9  | 350.0  | 388.8  | 432.6  | 401.8  | 369.4  | 369.4  | 364.5  |
| 70°   | 5827.7 | 6036.7 | 3938.6 | 463.4  | 328.9  | 362.9  | 403.4  | 375.9  | 345.1  | 348.3  | 340.2  |
| 72.5° | 5400.0 | 5451.9 | 3423.4 | 366.2  | 304.6  | 335.4  | 367.8  | 346.7  | 319.2  | 319.2  | 307.8  |
| 75°   | 4836.2 | 4547.8 | 2487.0 | 306.2  | 275.4  | 303.0  | 332.1  | 314.3  | 290.0  | 281.9  | 275.4  |
| 77.5° | 3849.5 | 3295.4 | 1445.2 | 264.1  | 251.1  | 272.2  | 291.6  | 278.7  | 257.6  | 239.8  | 239.8  |
| 80°   | 2346.0 | 1931.2 | 638.3  | 228.4  | 222.0  | 238.2  | 251.1  | 236.5  | 218.7  | 200.9  | 196.0  |
| 82.5° | 892.7  | 745.3  | 309.5  | 196.0  | 194.4  | 204.1  | 213.9  | 199.3  | 186.3  | 178.2  | 153.9  |
| 85°   | 244.6  | 225.2  | 212.2  | 163.6  | 160.4  | 158.8  | 170.1  | 163.6  | 145.8  | 119.9  | 106.9  |
| 87.5° | 92.3   | 105.3  | 115.0  | 100.5  | 106.9  | 98.8   | 113.4  | 103.7  | 92.3   | 59.9   | 53.5   |
| 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)