

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: INVUE

Report Number: P674388

Luminaire Tested: **CCP-SA-2B-727-U-AFL-HSS**

Issue Date: 04/16/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P674388  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 04/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCP-SA-2B-727-U-AFL-HSS  
Description: INVUE CLEAR CURVE POLE MOUNT Light Square Luminaire @450mA w/ AFL distribution lens and House Side Shield  
Light Source: (32) 2700K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

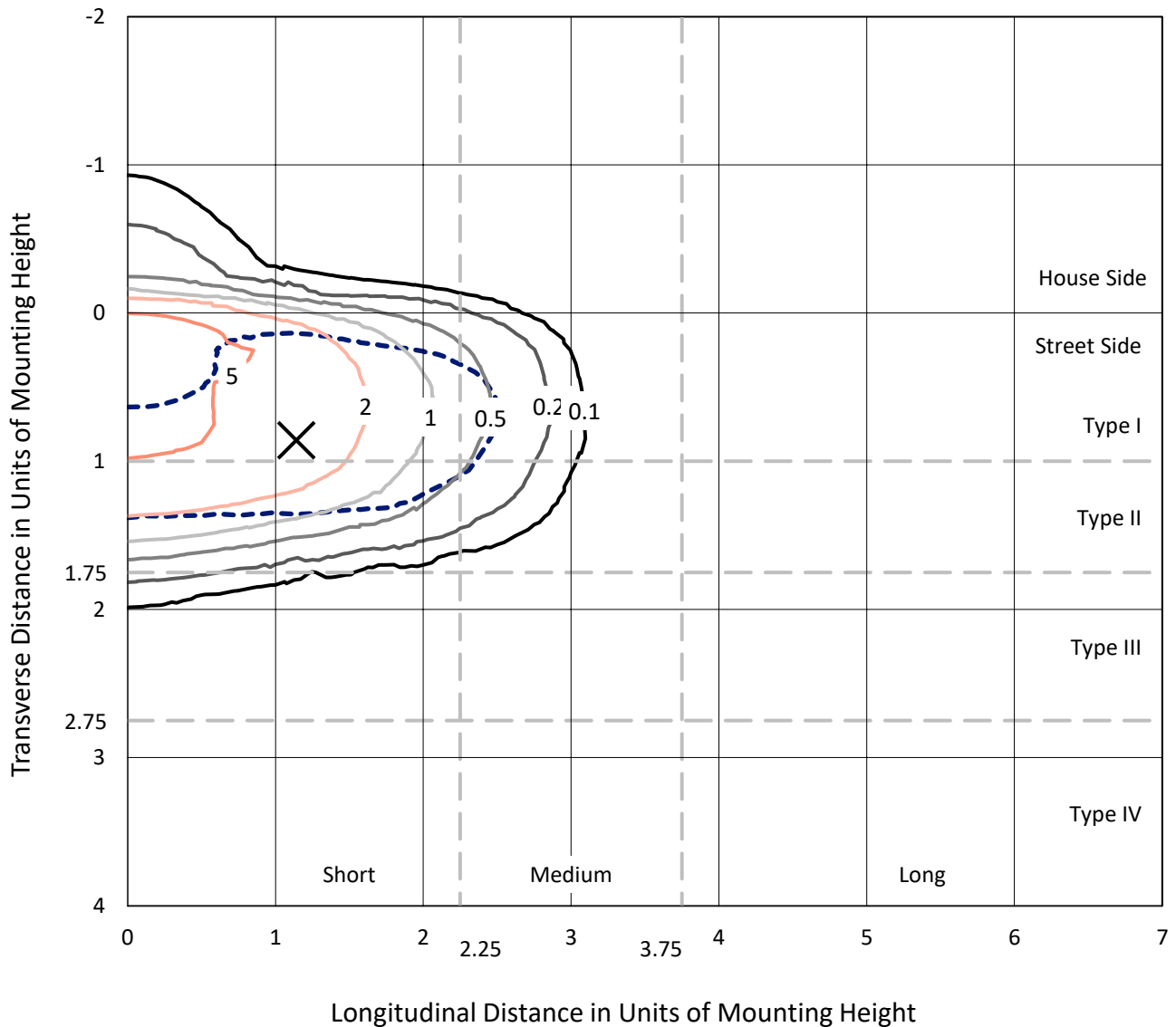
Lumens per Lamp: N/A  
Luminaire Lumens: 4789.5 lumens  
Efficiency: N/A  
Efficacy: 104.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 46  
Input Voltage (V): 120  
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: 25 FT

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### Iso-Footcandle Lines of Horizontal Illumination

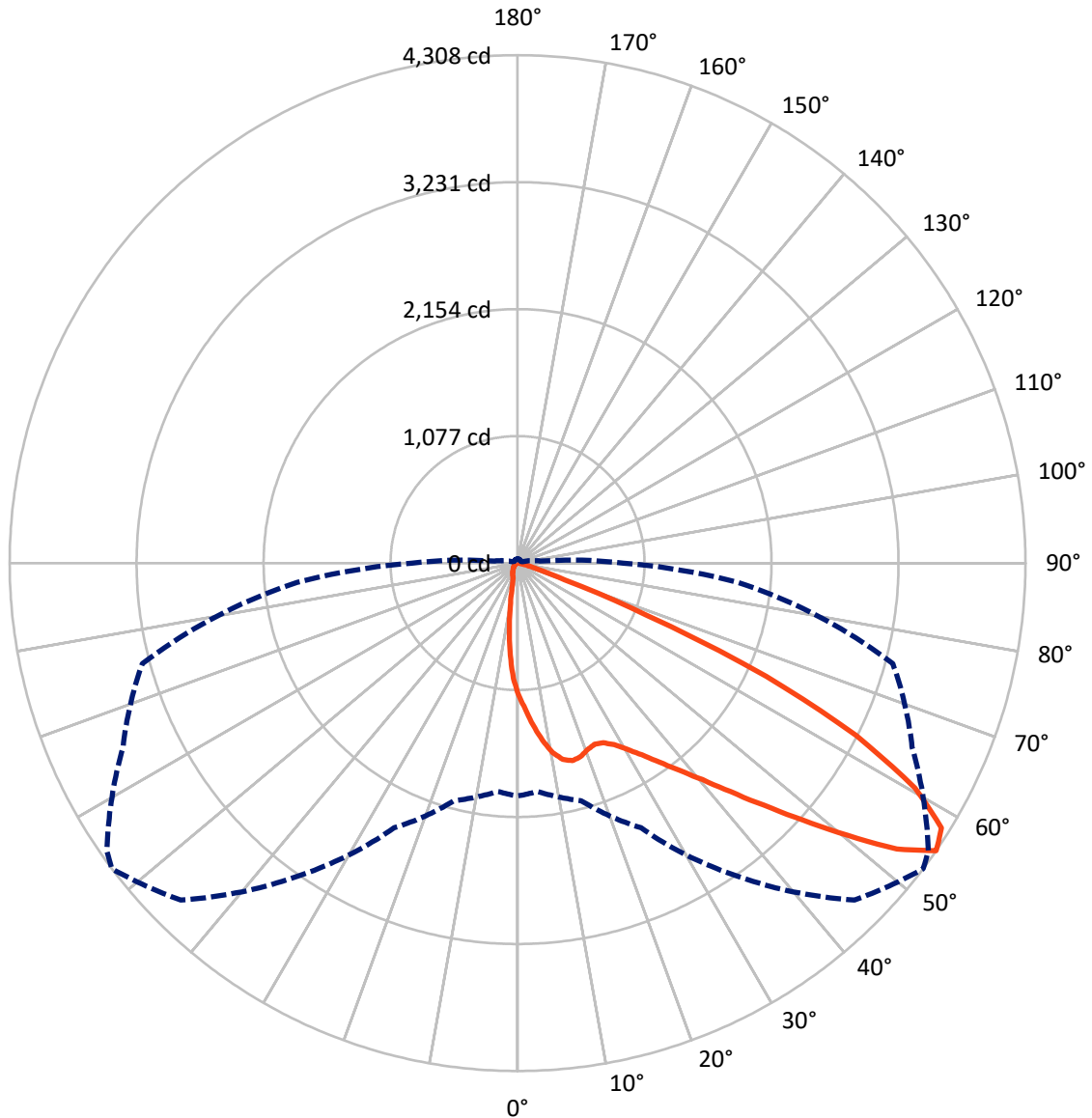
✕ Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 7.2 fc  
 Type II - Short - N/A

REPORT NUMBER: P674388  
CATALOG NUMBER: CCP-SA-2B-727-U-AFL-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 53-Deg Lateral    - - - Horizontal Cone Through 55-Deg Vertical

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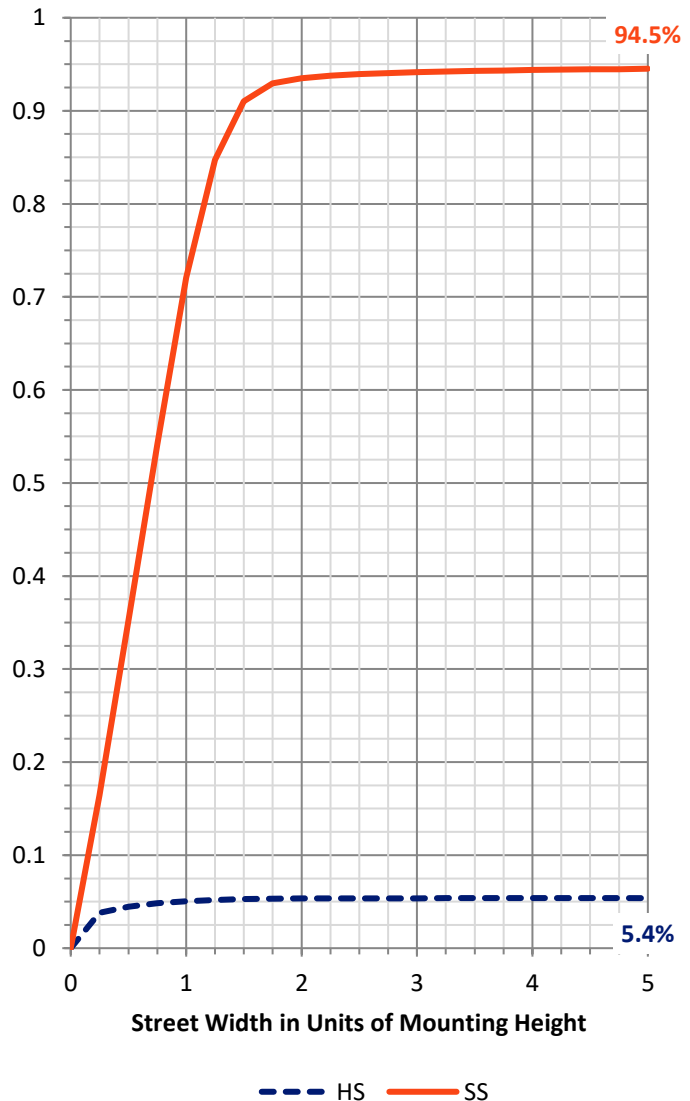
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 258.9    | 0.0    | 258.9  |
|                    | % Fixture | 5.4      | 0.0    | 5.4    |
| <b>Street Side</b> | Lumens    | 4530.6   | 0.0    | 4530.6 |
|                    | % Fixture | 94.6     | 0.0    | 94.6   |
| <b>Total</b>       | Lumens    | 4789.5   | 0.0    | 4789.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 100.2  | 2.1       |
| 10°-20°   | 261.9  | 5.5       |
| 20°-30°   | 438.3  | 9.2       |
| 30°-40°   | 717.0  | 15.0      |
| 40°-50°   | 1152.6 | 24.1      |
| 50°-60°   | 1301.3 | 27.2      |
| 60°-70°   | 694.1  | 14.5      |
| 70°-80°   | 114.1  | 2.4       |
| 80°-90°   | 10.2   | 0.2       |
| 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°    | 4789.5 | 100.0     |
| 0°-180°   | 4789.5 | 100.0     |



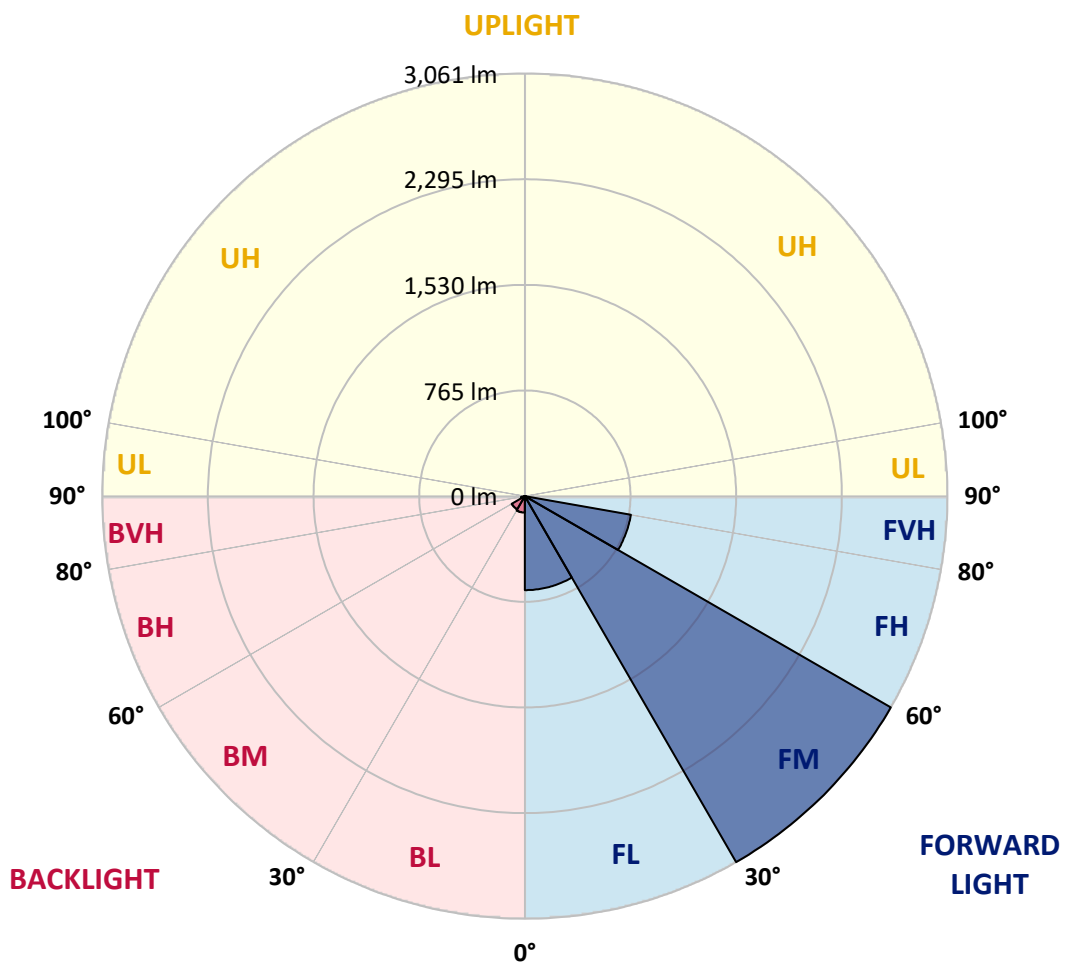
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 CATALOG NUMBER: CCP-SA-2B-727-U-AFL-HSS

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 680.9  | 14.2      |                         |      |         |
| FM (30°-60°)   | 3060.5 | 63.9      |                         |      |         |
| FH (60°-80°)   | 779.9  | 16.3      |                         |      | G1/1800 |
| FVH (80°-90°)  | 9.4    | 0.2       |                         |      | G0/10   |
| BL (0°-30°)    | 119.5  | 2.5       | B1/500                  |      |         |
| BM (30°-60°)   | 110.3  | 2.3       | B0/220                  |      |         |
| BH (60°-80°)   | 28.3   | 0.6       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 0.8    | 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-G1**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 53°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 |
| 2.5°  | 1344.1 | 1336.1 | 1340.7 | 1328.6 | 1306.3 | 1278.6 | 1237.1 | 1239.2 | 1206.5 | 1177.9 | 1138.5 |
| 5°    | 1566.1 | 1557.7 | 1555.2 | 1524.1 | 1493.1 | 1443.1 | 1381.5 | 1371.4 | 1311.4 | 1238.8 | 1156.1 |
| 7.5°  | 1683.2 | 1676.0 | 1681.5 | 1670.2 | 1639.5 | 1594.2 | 1516.2 | 1508.6 | 1415.9 | 1305.9 | 1184.2 |
| 10°   | 1629.5 | 1626.9 | 1650.0 | 1676.9 | 1701.6 | 1696.2 | 1633.7 | 1621.9 | 1517.8 | 1379.8 | 1213.2 |
| 12.5° | 1485.1 | 1493.1 | 1522.5 | 1572.0 | 1648.3 | 1720.1 | 1710.0 | 1712.1 | 1621.9 | 1459.9 | 1245.1 |
| 15°   | 1400.3 | 1410.0 | 1426.8 | 1452.4 | 1546.4 | 1673.9 | 1739.0 | 1760.0 | 1721.8 | 1549.3 | 1282.8 |
| 17.5° | 1393.2 | 1401.2 | 1403.7 | 1413.3 | 1468.3 | 1599.7 | 1727.2 | 1767.1 | 1810.7 | 1633.7 | 1325.2 |
| 20°   | 1448.2 | 1451.5 | 1449.4 | 1442.3 | 1462.0 | 1559.4 | 1690.3 | 1747.4 | 1884.2 | 1723.5 | 1362.6 |
| 22.5° | 1551.8 | 1546.8 | 1540.5 | 1514.1 | 1512.8 | 1570.7 | 1670.2 | 1729.8 | 1927.8 | 1797.7 | 1387.3 |
| 25°   | 1680.2 | 1669.7 | 1660.9 | 1623.6 | 1606.0 | 1629.9 | 1688.2 | 1736.0 | 1967.3 | 1869.9 | 1405.0 |
| 27.5° | 1820.4 | 1823.8 | 1801.9 | 1751.6 | 1723.9 | 1718.8 | 1744.0 | 1779.7 | 2005.5 | 1934.5 | 1414.6 |
| 30°   | 1970.2 | 1971.9 | 1943.4 | 1891.3 | 1866.1 | 1833.8 | 1832.1 | 1853.5 | 2046.6 | 2008.8 | 1423.8 |
| 32.5° | 2141.0 | 2145.6 | 2099.0 | 2044.9 | 2000.8 | 1958.9 | 1938.3 | 1956.4 | 2120.4 | 2105.8 | 1442.7 |
| 35°   | 2387.7 | 2367.6 | 2304.7 | 2222.8 | 2160.3 | 2105.3 | 2073.9 | 2085.6 | 2218.6 | 2222.0 | 1480.5 |
| 37.5° | 2642.0 | 2640.0 | 2570.3 | 2452.4 | 2350.0 | 2281.6 | 2227.9 | 2247.2 | 2356.7 | 2377.7 | 1540.9 |
| 40°   | 2879.1 | 2884.6 | 2824.2 | 2721.4 | 2589.6 | 2472.1 | 2414.6 | 2427.6 | 2540.1 | 2566.5 | 1614.4 |
| 42.5° | 3034.0 | 3031.1 | 3035.7 | 3006.3 | 2874.1 | 2735.6 | 2649.2 | 2656.3 | 2753.3 | 2767.1 | 1706.3 |
| 45°   | 3105.3 | 3094.0 | 3133.4 | 3226.6 | 3174.2 | 3028.5 | 2929.9 | 2921.1 | 2974.4 | 2970.6 | 1789.8 |
| 47.5° | 3043.6 | 3022.7 | 3113.3 | 3337.8 | 3439.4 | 3395.3 | 3254.3 | 3238.4 | 3193.0 | 3162.8 | 1876.6 |
| 50°   | 2736.9 | 2727.7 | 2921.5 | 3284.9 | 3606.0 | 3734.4 | 3630.7 | 3571.6 | 3388.2 | 3304.7 | 1922.4 |
| 52.5° | 2445.2 | 2419.6 | 2550.6 | 3015.1 | 3531.7 | 4007.1 | 4028.5 | 3923.2 | 3550.1 | 3345.4 | 1906.8 |
| 55°   | 1975.2 | 1943.8 | 2086.4 | 2477.1 | 3237.5 | 4042.0 | 4308.0 | 4253.0 | 3692.0 | 3295.0 | 1875.4 |
| 57.5° | 1199.7 | 1168.7 | 1378.5 | 1774.2 | 2589.2 | 3752.4 | 4239.2 | 4295.0 | 3801.1 | 3239.6 | 1854.8 |
| 60°   | 504.4  | 484.7  | 566.9  | 846.8  | 1653.4 | 3083.9 | 3874.1 | 4013.4 | 3821.7 | 3163.7 | 1863.2 |
| 62.5° | 262.3  | 253.5  | 258.1  | 339.1  | 668.5  | 2030.6 | 3224.5 | 3467.1 | 3614.4 | 3130.1 | 1871.6 |
| 65°   | 196.8  | 190.1  | 175.4  | 186.3  | 259.8  | 877.9  | 2317.2 | 2642.0 | 3164.9 | 3044.9 | 1814.9 |
| 67.5° | 161.6  | 155.3  | 144.8  | 141.4  | 153.2  | 304.7  | 1183.0 | 1605.1 | 2480.1 | 2681.9 | 1611.8 |
| 70°   | 128.8  | 126.7  | 123.4  | 117.1  | 115.0  | 147.7  | 424.3  | 654.2  | 1640.0 | 1891.3 | 1168.3 |
| 72.5° | 107.4  | 107.8  | 104.1  | 98.6   | 91.1   | 95.3   | 169.1  | 223.7  | 793.5  | 906.8  | 489.3  |
| 75°   | 89.8   | 89.8   | 91.1   | 83.5   | 76.0   | 65.5   | 94.0   | 109.1  | 254.7  | 209.4  | 104.5  |
| 77.5° | 70.5   | 71.3   | 76.8   | 70.5   | 60.8   | 41.1   | 51.2   | 58.3   | 75.5   | 60.4   | 38.2   |
| 80°   | 56.2   | 55.4   | 53.3   | 63.4   | 54.6   | 29.0   | 24.3   | 26.9   | 35.2   | 29.0   | 18.9   |
| 82.5° | 39.4   | 39.0   | 37.3   | 42.8   | 42.4   | 21.4   | 15.9   | 16.4   | 21.4   | 18.5   | 11.7   |
| 85°   | 9.7    | 11.3   | 23.9   | 20.1   | 17.6   | 12.6   | 9.7    | 10.5   | 13.8   | 12.2   | 6.3    |
| 87.5° | 4.2    | 4.2    | 10.9   | 13.0   | 8.4    | 5.5    | 4.2    | 4.6    | 7.1    | 7.1    | 3.8    |
| 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°    | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 | 1120.9 |
| 2.5°  | 1124.6 | 1097.4 | 1062.9 | 1026.4 | 989.1  | 944.2  | 915.7  | 892.2  | 873.7  | 859.4  | 854.4  |
| 5°    | 1128.8 | 1076.4 | 998.3  | 901.4  | 802.8  | 710.4  | 639.1  | 586.2  | 542.6  | 518.7  | 508.2  |
| 7.5°  | 1128.4 | 1058.8 | 917.8  | 755.4  | 595.0  | 462.0  | 367.6  | 309.3  | 270.2  | 254.3  | 244.6  |
| 10°   | 1128.0 | 1035.7 | 825.9  | 593.4  | 397.8  | 267.7  | 197.2  | 164.5  | 150.2  | 144.8  | 143.9  |
| 12.5° | 1140.2 | 1009.2 | 723.0  | 436.8  | 249.7  | 166.6  | 137.2  | 129.7  | 126.3  | 124.6  | 124.2  |
| 15°   | 1146.9 | 984.9  | 614.8  | 308.4  | 168.3  | 131.8  | 122.5  | 119.2  | 117.9  | 117.1  | 116.7  |
| 17.5° | 1154.0 | 947.1  | 512.0  | 223.2  | 134.7  | 119.6  | 114.1  | 112.0  | 111.2  | 111.2  | 111.2  |
| 20°   | 1155.3 | 906.4  | 410.0  | 164.5  | 119.6  | 111.6  | 106.2  | 104.1  | 102.8  | 102.0  | 102.0  |
| 22.5° | 1146.0 | 858.2  | 322.3  | 133.4  | 110.8  | 104.1  | 98.2   | 94.8   | 92.7   | 92.3   | 92.3   |
| 25°   | 1123.0 | 789.8  | 247.2  | 117.1  | 103.7  | 96.5   | 89.4   | 85.6   | 83.9   | 83.9   | 83.9   |
| 27.5° | 1089.8 | 709.2  | 190.9  | 104.1  | 94.4   | 87.3   | 81.0   | 77.6   | 77.2   | 76.8   | 77.2   |
| 30°   | 1052.0 | 631.6  | 146.0  | 92.3   | 83.5   | 77.6   | 72.6   | 70.9   | 71.8   | 71.8   | 72.2   |
| 32.5° | 1014.3 | 553.9  | 114.1  | 83.1   | 73.9   | 68.8   | 66.3   | 66.3   | 67.6   | 67.6   | 67.6   |
| 35°   | 982.0  | 478.0  | 95.7   | 75.5   | 67.1   | 62.9   | 61.7   | 62.9   | 63.8   | 64.2   | 64.2   |
| 37.5° | 963.9  | 412.5  | 84.3   | 68.8   | 61.7   | 58.3   | 57.9   | 59.2   | 60.8   | 62.1   | 62.5   |
| 40°   | 957.2  | 362.1  | 77.6   | 63.8   | 56.7   | 54.6   | 54.1   | 55.8   | 58.7   | 60.8   | 61.3   |
| 42.5° | 957.6  | 317.7  | 71.8   | 58.7   | 53.3   | 50.4   | 50.4   | 52.9   | 55.8   | 57.9   | 57.9   |
| 45°   | 960.6  | 279.5  | 65.9   | 53.7   | 50.4   | 45.3   | 45.7   | 49.1   | 51.2   | 53.3   | 53.3   |
| 47.5° | 963.1  | 248.8  | 59.6   | 48.3   | 43.6   | 41.1   | 42.0   | 44.5   | 47.4   | 50.8   | 50.8   |
| 50°   | 948.4  | 227.0  | 53.3   | 42.4   | 38.2   | 37.3   | 39.0   | 41.1   | 45.3   | 48.7   | 49.1   |
| 52.5° | 913.1  | 207.3  | 47.8   | 37.8   | 34.4   | 34.8   | 36.9   | 38.2   | 41.5   | 42.0   | 42.4   |
| 55°   | 897.6  | 197.2  | 43.6   | 34.4   | 31.5   | 32.7   | 34.0   | 34.4   | 33.6   | 31.5   | 31.5   |
| 57.5° | 894.3  | 190.5  | 39.4   | 31.1   | 29.0   | 30.6   | 30.2   | 27.7   | 25.2   | 22.7   | 22.2   |
| 60°   | 897.6  | 181.3  | 36.1   | 26.9   | 26.4   | 26.9   | 25.6   | 21.0   | 17.6   | 15.9   | 15.1   |
| 62.5° | 878.3  | 167.9  | 33.2   | 23.1   | 23.1   | 22.7   | 19.3   | 14.3   | 11.3   | 10.1   | 9.7    |
| 65°   | 814.5  | 141.4  | 30.2   | 19.3   | 18.9   | 18.0   | 13.0   | 9.7    | 7.6    | 6.3    | 5.9    |
| 67.5° | 689.0  | 109.5  | 27.3   | 15.9   | 15.1   | 12.6   | 8.4    | 6.3    | 4.2    | 3.8    | 3.4    |
| 70°   | 470.0  | 68.0   | 23.1   | 12.6   | 11.3   | 8.0    | 5.0    | 3.8    | 2.5    | 2.1    | 1.7    |
| 72.5° | 170.4  | 39.4   | 19.3   | 9.7    | 7.6    | 5.0    | 2.9    | 1.7    | 1.3    | 1.3    | 0.8    |
| 75°   | 40.3   | 27.7   | 14.7   | 7.1    | 5.0    | 2.9    | 1.7    | 1.3    | 0.8    | 0.8    | 0.4    |
| 77.5° | 18.5   | 21.4   | 9.7    | 4.2    | 3.4    | 2.1    | 1.3    | 0.8    | 0.4    | 0.4    | 0.0    |
| 80°   | 10.5   | 15.1   | 4.6    | 2.9    | 2.5    | 1.7    | 0.8    | 0.4    | 0.4    | 0.0    | 0.0    |
| 82.5° | 5.5    | 8.4    | 3.4    | 2.5    | 2.1    | 1.3    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 3.8    | 4.2    | 2.5    | 2.1    | 1.7    | 1.3    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 2.9    | 2.9    | 2.5    | 2.1    | 1.7    | 1.3    | 0.4    | 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)