

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: P671299

Luminaire Tested: **CCP-SA-2D-830-U-SL2**

Issue Date: 04/16/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P671299  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCP-SA-2D-830-U-SL2  
Description: INVUE CLEAR CURVE POLE MOUNT LIGHT SQUARE LUMINAIRE @800mA w/ SL2  
distribution lens  
Light Source: (32) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8770.6 lumens  
Efficiency: N/A  
Efficacy: 108.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B2 - U0 - G3

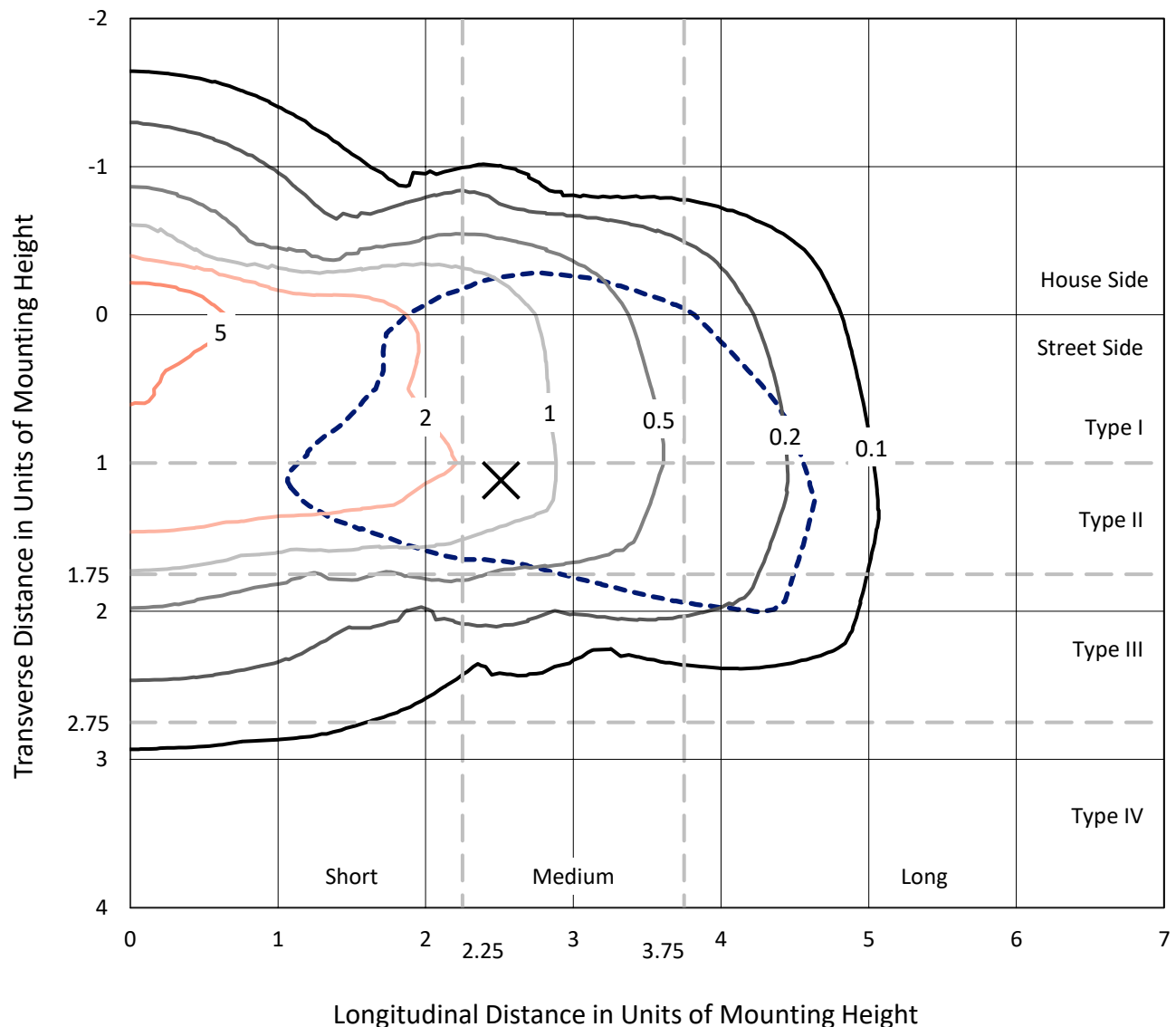
Input Watts (W): 80.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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## Iso-Footcandle Lines of Horizontal Illumination

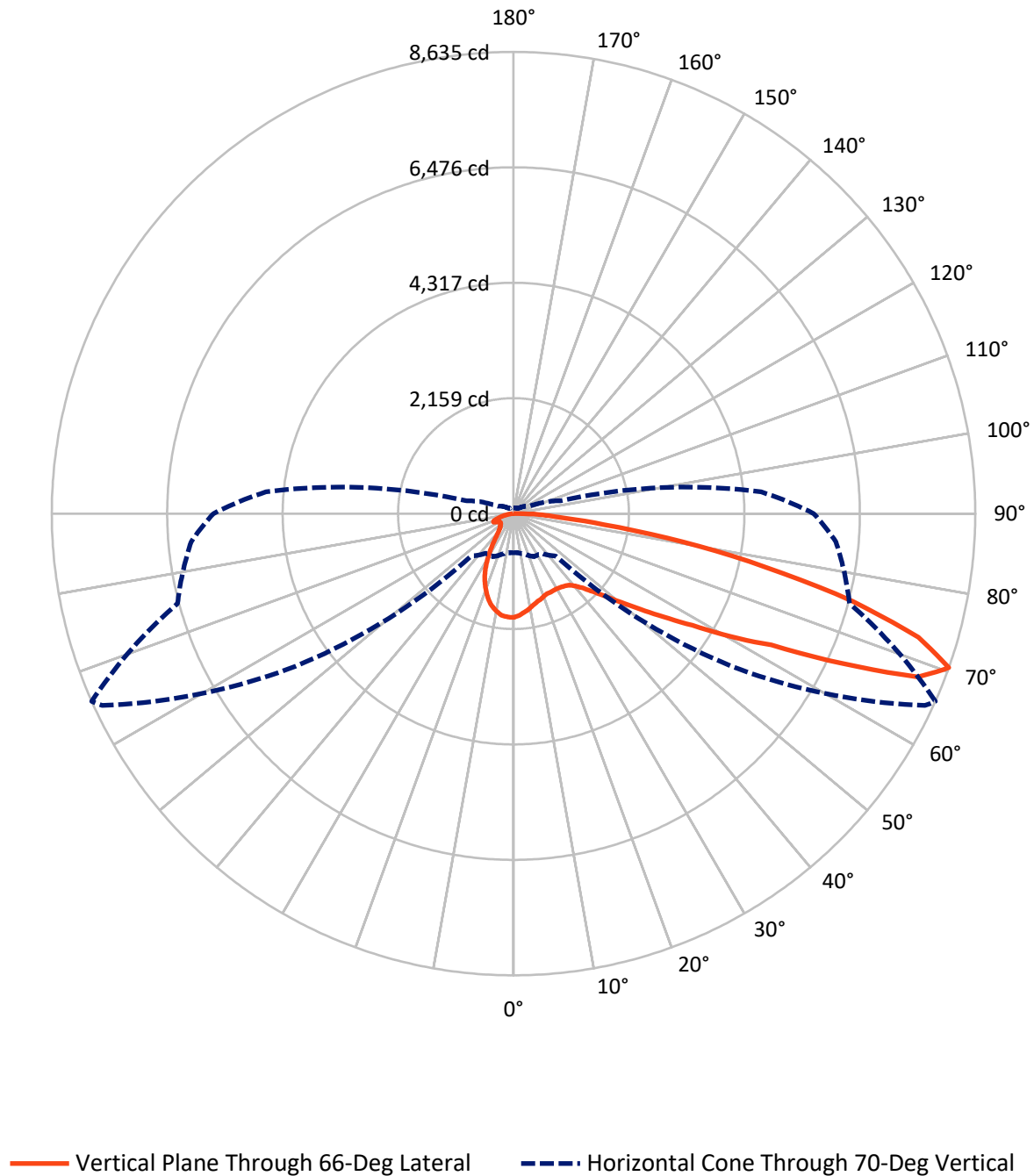
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 8.6 fc  
 Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1795.2   | 0.0    | 1795.2 |
|                    | % Fixture | 20.5     | 0.0    | 20.5   |
| <b>Street Side</b> | Lumens    | 6975.4   | 0.0    | 6975.4 |
|                    | % Fixture | 79.5     | 0.0    | 79.5   |
| <b>Total</b>       | Lumens    | 8770.6   | 0.0    | 8770.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 171.3  | 2.0       |
| 10°-20°   | 421.8  | 4.8       |
| 20°-30°   | 579.3  | 6.6       |
| 30°-40°   | 776.6  | 8.9       |
| 40°-50°   | 1126.8 | 12.8      |
| 50°-60°   | 1712.8 | 19.5      |
| 60°-70°   | 2115.4 | 24.1      |
| 70°-80°   | 1573.1 | 17.9      |
| 80°-90°   | 293.4  | 3.3       |
| 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°    | 8770.6 | 100.0     |
| 0°-180°   | 8770.6 | 100.0     |

**Coefficient of Utilization**



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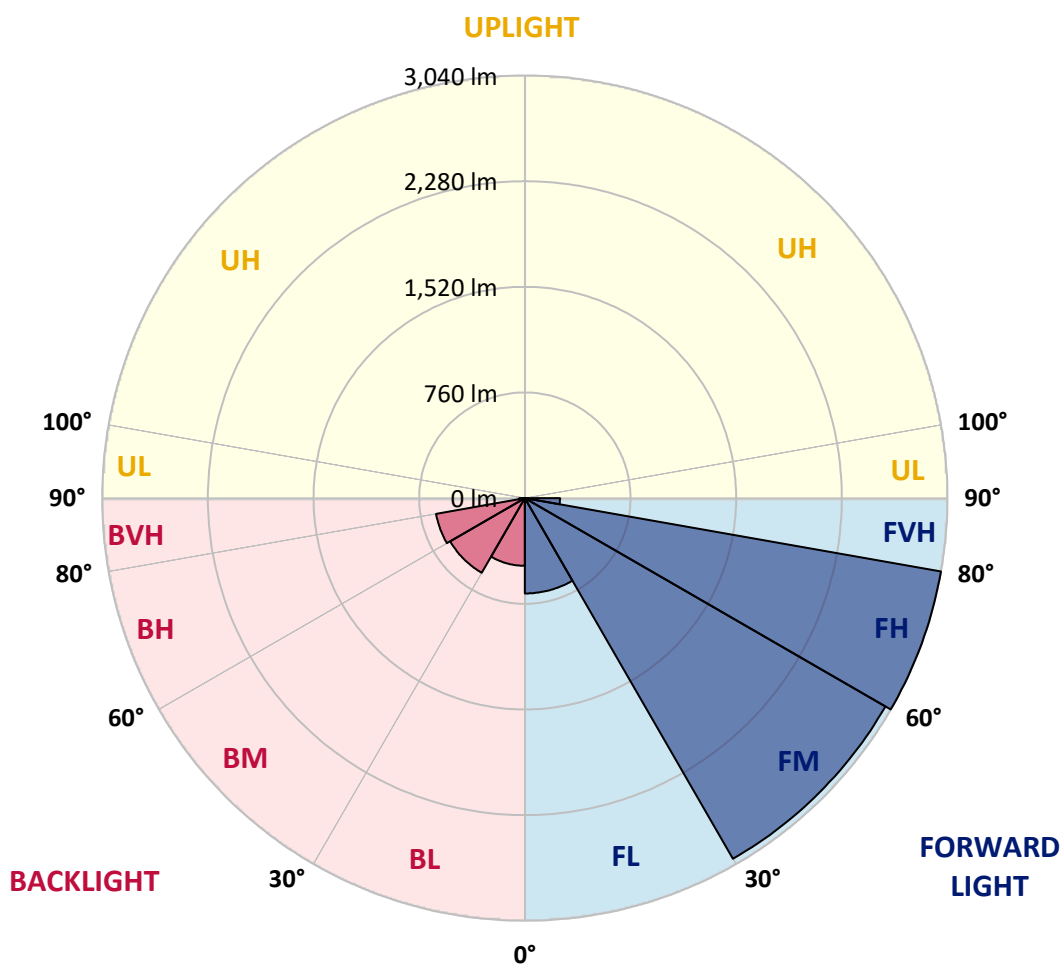
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 685.8  | 7.8       |                         |      |         |
| FM   | (30°-60°)   | 2996.2 | 34.2      |                         |      |         |
| FH   | (60°-80°)   | 3040.5 | 34.7      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 252.9  | 2.9       |                         |      | G3/500  |
| BL   | (0°-30°)    | 486.6  | 5.5       | B1/500                  |      |         |
| BM   | (30°-60°)   | 620.1  | 7.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 648.1  | 7.4       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 40.5   | 0.5       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G3**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 66°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1937.7 | 1937.7 | 1937.7 | 1937.7 | 1937.7 | 1937.7 | 1937.7 | 1937.7 | 1937.7 | 1937.7 | 1937.7 |
| 2.5°  | 1843.1 | 1852.9 | 1856.1 | 1862.7 | 1879.0 | 1892.0 | 1911.6 | 1921.4 | 1911.6 | 1924.7 | 1924.7 |
| 5°    | 1715.9 | 1702.8 | 1735.5 | 1748.5 | 1768.1 | 1794.2 | 1839.8 | 1875.7 | 1865.9 | 1905.1 | 1937.7 |
| 7.5°  | 1608.2 | 1608.2 | 1618.0 | 1647.4 | 1670.2 | 1709.4 | 1758.3 | 1813.7 | 1830.1 | 1882.2 | 1931.2 |
| 10°   | 1510.4 | 1523.4 | 1523.4 | 1569.1 | 1582.1 | 1627.8 | 1709.4 | 1777.9 | 1781.1 | 1869.2 | 1937.7 |
| 12.5° | 1458.2 | 1451.6 | 1484.3 | 1497.3 | 1536.5 | 1582.1 | 1647.4 | 1732.2 | 1735.5 | 1830.1 | 1924.7 |
| 15°   | 1415.8 | 1422.3 | 1438.6 | 1471.2 | 1507.1 | 1543.0 | 1605.0 | 1683.3 | 1699.6 | 1810.5 | 1918.1 |
| 17.5° | 1419.0 | 1422.3 | 1422.3 | 1445.1 | 1474.5 | 1516.9 | 1575.6 | 1666.9 | 1676.7 | 1784.4 | 1908.3 |
| 20°   | 1438.6 | 1425.5 | 1435.3 | 1445.1 | 1464.7 | 1503.8 | 1552.8 | 1631.1 | 1640.8 | 1781.1 | 1931.2 |
| 22.5° | 1481.0 | 1471.2 | 1468.0 | 1464.7 | 1461.4 | 1484.3 | 1546.2 | 1611.5 | 1621.3 | 1764.8 | 1941.0 |
| 25°   | 1549.5 | 1546.2 | 1523.4 | 1500.6 | 1484.3 | 1484.3 | 1533.2 | 1627.8 | 1624.5 | 1764.8 | 1947.5 |
| 27.5° | 1631.1 | 1631.1 | 1627.8 | 1585.4 | 1536.5 | 1510.4 | 1543.0 | 1621.3 | 1618.0 | 1764.8 | 1963.8 |
| 30°   | 1742.0 | 1742.0 | 1732.2 | 1693.0 | 1605.0 | 1529.9 | 1549.5 | 1614.8 | 1624.5 | 1751.8 | 1950.8 |
| 32.5° | 1862.7 | 1859.4 | 1869.2 | 1833.3 | 1742.0 | 1621.3 | 1588.7 | 1627.8 | 1637.6 | 1764.8 | 1954.0 |
| 35°   | 1950.8 | 1970.3 | 2002.9 | 1970.3 | 1879.0 | 1715.9 | 1644.1 | 1653.9 | 1660.4 | 1768.1 | 1967.1 |
| 37.5° | 2051.9 | 2074.7 | 2120.4 | 2146.5 | 2048.6 | 1859.4 | 1732.2 | 1696.3 | 1696.3 | 1810.5 | 1970.3 |
| 40°   | 2198.7 | 2175.8 | 2254.1 | 2299.8 | 2260.7 | 2035.6 | 1869.2 | 1774.6 | 1777.9 | 1865.9 | 2012.7 |
| 42.5° | 2306.3 | 2329.2 | 2410.7 | 2492.3 | 2443.3 | 2250.9 | 2019.3 | 1901.8 | 1901.8 | 1947.5 | 2078.0 |
| 45°   | 2427.0 | 2453.1 | 2567.3 | 2665.2 | 2701.0 | 2508.6 | 2224.8 | 2084.5 | 2078.0 | 2107.3 | 2195.4 |
| 47.5° | 2560.8 | 2596.7 | 2727.1 | 2841.3 | 2935.9 | 2776.1 | 2489.0 | 2306.3 | 2303.1 | 2325.9 | 2391.1 |
| 50°   | 2714.1 | 2727.1 | 2834.8 | 3043.6 | 3232.8 | 3131.6 | 2812.0 | 2619.5 | 2603.2 | 2613.0 | 2701.0 |
| 52.5° | 2759.8 | 2750.0 | 2873.9 | 3099.0 | 3444.8 | 3565.5 | 3252.3 | 2975.1 | 2968.5 | 2945.7 | 3059.9 |
| 55°   | 2593.4 | 2626.0 | 2746.7 | 3033.8 | 3617.7 | 4077.7 | 3735.1 | 3461.1 | 3402.4 | 3340.4 | 3477.4 |
| 57.5° | 2260.7 | 2263.9 | 2400.9 | 2740.2 | 3484.0 | 4501.7 | 4553.9 | 3937.4 | 3940.6 | 3774.3 | 3930.9 |
| 60°   | 1758.3 | 1748.5 | 1856.1 | 2162.8 | 3102.3 | 4632.2 | 5447.8 | 4697.5 | 4664.8 | 4208.1 | 4351.7 |
| 62.5° | 1269.0 | 1249.4 | 1272.2 | 1451.6 | 2319.4 | 4433.2 | 6325.3 | 5548.9 | 5411.9 | 4651.8 | 4762.7 |
| 65°   | 1043.9 | 1053.7 | 1063.5 | 1073.2 | 1301.6 | 3656.8 | 6596.0 | 6938.5 | 6755.9 | 5170.5 | 5216.1 |
| 67.5° | 864.5  | 871.0  | 913.4  | 972.1  | 965.6  | 2159.5 | 6282.9 | 8223.8 | 8155.3 | 5813.1 | 5607.6 |
| 70°   | 734.0  | 730.7  | 779.6  | 887.3  | 903.6  | 1122.2 | 4974.7 | 8488.1 | 8634.8 | 6504.7 | 6051.2 |
| 72.5° | 587.2  | 593.7  | 636.1  | 779.6  | 887.3  | 946.0  | 2864.1 | 7920.4 | 7917.2 | 7036.4 | 5813.1 |
| 75°   | 420.8  | 420.8  | 479.5  | 645.9  | 857.9  | 936.2  | 1585.4 | 6429.7 | 6550.3 | 6612.3 | 5043.2 |
| 77.5° | 277.3  | 290.3  | 336.0  | 482.8  | 805.7  | 916.7  | 1004.7 | 4674.6 | 4824.7 | 4945.4 | 3859.1 |
| 80°   | 189.2  | 195.7  | 225.1  | 336.0  | 681.8  | 923.2  | 822.1  | 3144.7 | 3203.4 | 2730.4 | 1565.8 |
| 82.5° | 114.2  | 117.4  | 150.1  | 234.9  | 489.3  | 877.5  | 773.1  | 1735.5 | 1699.6 | 825.3  | 450.2  |
| 85°   | 62.0   | 65.2   | 94.6   | 156.6  | 323.0  | 766.6  | 760.1  | 851.4  | 792.7  | 303.4  | 189.2  |
| 87.5° | 22.8   | 22.8   | 42.4   | 78.3   | 185.9  | 525.2  | 662.2  | 505.6  | 473.0  | 153.3  | 88.1   |
| 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°    | 1937.7 | 1937.7 | 1937.7 | 1937.7 | 1937.7 | 1937.7 | 1937.7 | 1937.7 | 1937.7 | 1937.7 | 1937.7 |
| 2.5°  | 1941.0 | 1941.0 | 1941.0 | 1941.0 | 1937.7 | 1924.7 | 1934.4 | 1931.2 | 1911.6 | 1914.9 | 1901.8 |
| 5°    | 1934.4 | 1950.8 | 1941.0 | 1927.9 | 1911.6 | 1872.5 | 1859.4 | 1849.6 | 1823.5 | 1813.7 | 1823.5 |
| 7.5°  | 1950.8 | 1937.7 | 1931.2 | 1908.3 | 1843.1 | 1807.2 | 1761.5 | 1706.1 | 1666.9 | 1657.2 | 1666.9 |
| 10°   | 1947.5 | 1947.5 | 1918.1 | 1852.9 | 1790.9 | 1686.5 | 1627.8 | 1529.9 | 1474.5 | 1458.2 | 1461.4 |
| 12.5° | 1934.4 | 1944.2 | 1898.6 | 1794.2 | 1676.7 | 1549.5 | 1441.9 | 1337.5 | 1239.6 | 1200.5 | 1193.9 |
| 15°   | 1947.5 | 1937.7 | 1856.1 | 1722.4 | 1559.3 | 1383.1 | 1226.6 | 1073.2 | 981.9  | 923.2  | 910.1  |
| 17.5° | 1927.9 | 1918.1 | 1800.7 | 1624.5 | 1406.0 | 1180.9 | 985.2  | 818.8  | 727.5  | 704.6  | 704.6  |
| 20°   | 1950.8 | 1888.8 | 1735.5 | 1507.1 | 1246.1 | 959.1  | 737.2  | 613.3  | 590.4  | 590.4  | 597.0  |
| 22.5° | 1947.5 | 1882.2 | 1680.0 | 1392.9 | 1053.7 | 724.2  | 548.0  | 512.2  | 515.4  | 541.5  | 538.3  |
| 25°   | 1927.9 | 1869.2 | 1601.7 | 1265.7 | 851.4  | 544.8  | 453.4  | 443.6  | 466.5  | 495.8  | 492.6  |
| 27.5° | 1924.7 | 1833.3 | 1529.9 | 1115.6 | 649.2  | 430.6  | 394.7  | 394.7  | 417.6  | 443.6  | 440.4  |
| 30°   | 1905.1 | 1804.0 | 1441.9 | 946.0  | 489.3  | 375.1  | 362.1  | 362.1  | 371.9  | 384.9  | 384.9  |
| 32.5° | 1901.8 | 1764.8 | 1344.0 | 769.9  | 391.5  | 339.3  | 332.7  | 336.0  | 336.0  | 342.5  | 339.3  |
| 35°   | 1875.7 | 1712.6 | 1242.9 | 597.0  | 339.3  | 319.7  | 313.2  | 309.9  | 309.9  | 306.6  | 306.6  |
| 37.5° | 1865.9 | 1680.0 | 1138.5 | 463.2  | 316.4  | 303.4  | 296.9  | 287.1  | 283.8  | 283.8  | 280.5  |
| 40°   | 1875.7 | 1647.4 | 1037.4 | 375.1  | 296.9  | 290.3  | 280.5  | 267.5  | 264.2  | 264.2  | 264.2  |
| 42.5° | 1911.6 | 1644.1 | 933.0  | 326.2  | 287.1  | 277.3  | 264.2  | 251.2  | 247.9  | 251.2  | 247.9  |
| 45°   | 1993.2 | 1670.2 | 831.8  | 303.4  | 274.0  | 264.2  | 247.9  | 238.1  | 234.9  | 238.1  | 238.1  |
| 47.5° | 2126.9 | 1742.0 | 740.5  | 290.3  | 264.2  | 251.2  | 234.9  | 225.1  | 225.1  | 225.1  | 225.1  |
| 50°   | 2348.7 | 1879.0 | 652.4  | 280.5  | 257.7  | 241.4  | 225.1  | 212.0  | 208.8  | 208.8  | 212.0  |
| 52.5° | 2681.5 | 2113.9 | 580.7  | 274.0  | 247.9  | 228.3  | 212.0  | 202.3  | 195.7  | 192.5  | 195.7  |
| 55°   | 3082.7 | 2456.4 | 557.8  | 267.5  | 234.9  | 218.6  | 202.3  | 189.2  | 182.7  | 182.7  | 179.4  |
| 57.5° | 3513.3 | 2834.8 | 597.0  | 261.0  | 225.1  | 205.5  | 189.2  | 176.2  | 169.6  | 166.4  | 166.4  |
| 60°   | 3979.8 | 3281.7 | 740.5  | 257.7  | 215.3  | 192.5  | 176.2  | 166.4  | 156.6  | 153.3  | 153.3  |
| 62.5° | 4403.9 | 3686.2 | 998.2  | 254.4  | 208.8  | 179.4  | 163.1  | 150.1  | 143.5  | 140.3  | 140.3  |
| 65°   | 4886.7 | 4136.4 | 1249.4 | 267.5  | 205.5  | 169.6  | 150.1  | 137.0  | 130.5  | 127.2  | 127.2  |
| 67.5° | 5307.5 | 4527.8 | 1396.2 | 300.1  | 215.3  | 156.6  | 133.7  | 124.0  | 120.7  | 117.4  | 117.4  |
| 70°   | 5614.1 | 4648.5 | 936.2  | 329.5  | 231.6  | 146.8  | 120.7  | 114.2  | 107.7  | 107.7  | 107.7  |
| 72.5° | 5203.1 | 4149.4 | 554.6  | 309.9  | 218.6  | 137.0  | 107.7  | 101.1  | 97.9   | 97.9   | 94.6   |
| 75°   | 4449.5 | 3532.9 | 427.3  | 251.2  | 176.2  | 117.4  | 94.6   | 88.1   | 84.8   | 84.8   | 81.6   |
| 77.5° | 3285.0 | 2531.4 | 316.4  | 199.0  | 137.0  | 94.6   | 81.6   | 78.3   | 75.0   | 71.8   | 71.8   |
| 80°   | 1285.3 | 1109.1 | 215.3  | 146.8  | 101.1  | 75.0   | 68.5   | 65.2   | 62.0   | 58.7   | 58.7   |
| 82.5° | 398.0  | 336.0  | 124.0  | 97.9   | 71.8   | 58.7   | 55.5   | 52.2   | 48.9   | 45.7   | 45.7   |
| 85°   | 172.9  | 166.4  | 81.6   | 62.0   | 48.9   | 39.1   | 39.1   | 35.9   | 32.6   | 29.4   | 29.4   |
| 87.5° | 84.8   | 81.6   | 45.7   | 29.4   | 26.1   | 19.6   | 19.6   | 16.3   | 13.0   | 13.0   | 13.0   |
| 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)