

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: P672051

Luminaire Tested: **CCP-SA-2C-850-U-AFL**

Issue Date: 04/16/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P672051  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 04/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCP-SA-2C-850-U-AFL  
Description: INVUE CLEAR CURVE POLE MOUNT LIGHT SQUARE LUMINAIRE @615mA w/ AFL  
distribution lens  
Light Source: (32) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7961.8 lumens  
Efficiency: N/A  
Efficacy: 128.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G1

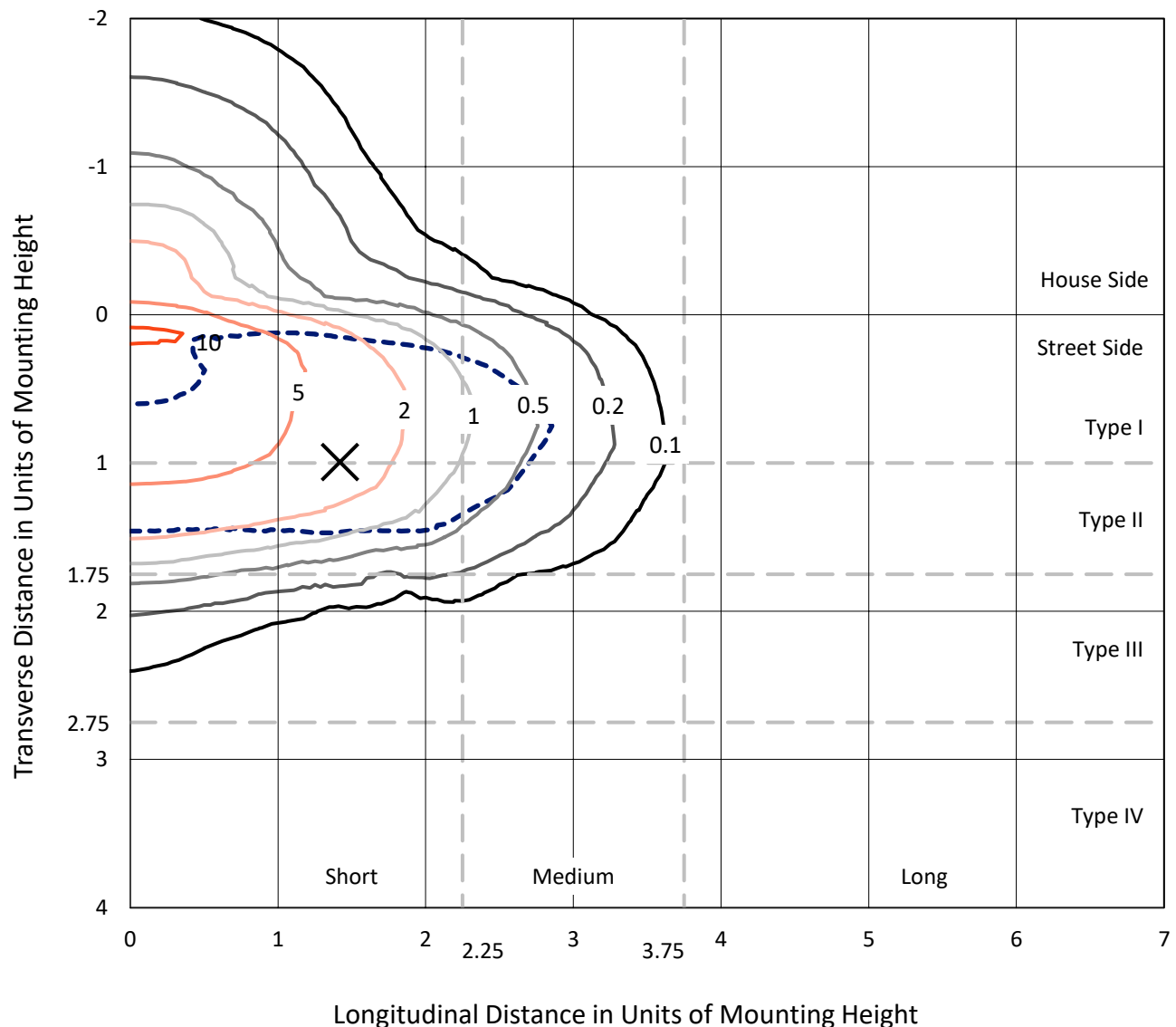
Input Watts (W): 62.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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## Iso-Footcandle Lines of Horizontal Illumination

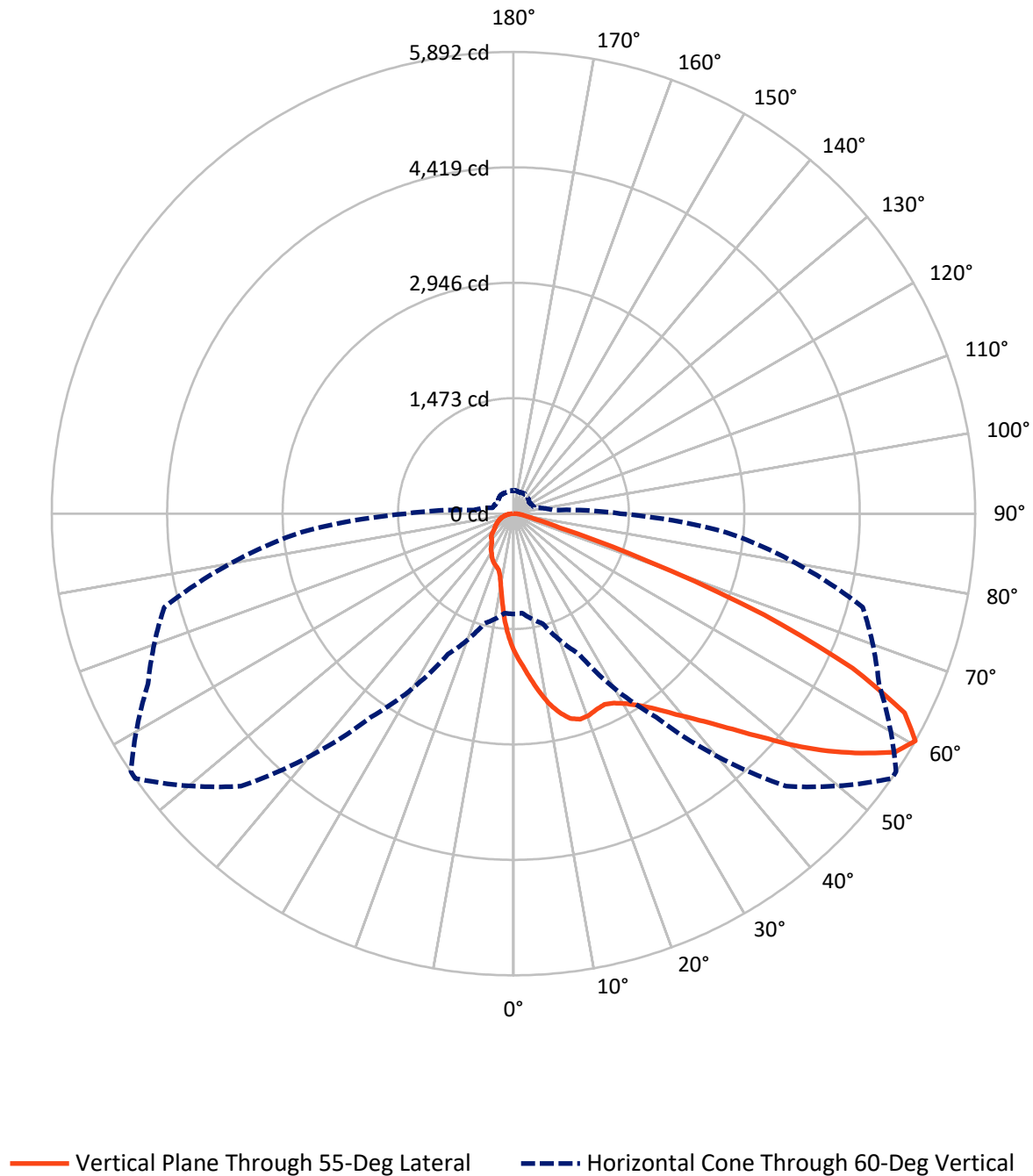
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 11 fc  
 Type II - Short - N/A

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## Luminous Intensity Polar Plot



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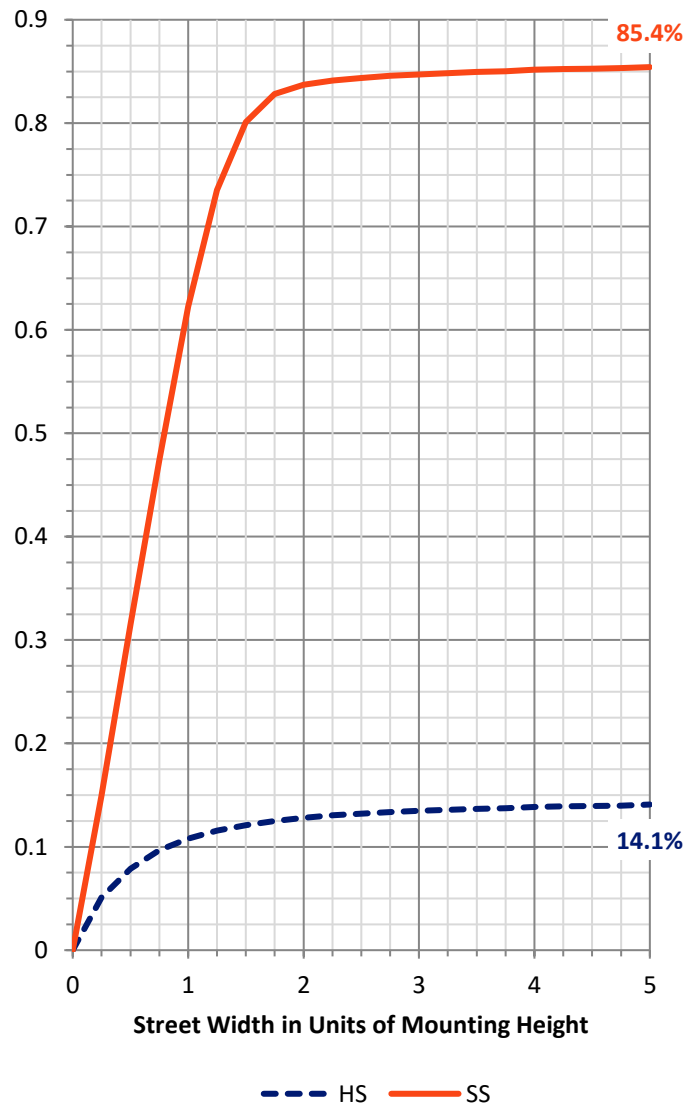
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1144.5   | 0.0    | 1144.5 |
|                    | % Fixture | 14.4     | 0.0    | 14.4   |
| <b>Street Side</b> | Lumens    | 6817.3   | 0.0    | 6817.3 |
|                    | % Fixture | 85.6     | 0.0    | 85.6   |
| <b>Total</b>       | Lumens    | 7961.8   | 0.0    | 7961.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 165.2  | 2.1       |
| 10°-20°   | 468.2  | 5.9       |
| 20°-30°   | 762.3  | 9.6       |
| 30°-40°   | 1139.3 | 14.3      |
| 40°-50°   | 1674.5 | 21.0      |
| 50°-60°   | 1962.6 | 24.6      |
| 60°-70°   | 1294.0 | 16.3      |
| 70°-80°   | 412.0  | 5.2       |
| 80°-90°   | 83.8   | 1.1       |
| 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°    | 7961.8 | 100.0     |
| 0°-180°   | 7961.8 | 100.0     |

**Coefficient of Utilization**



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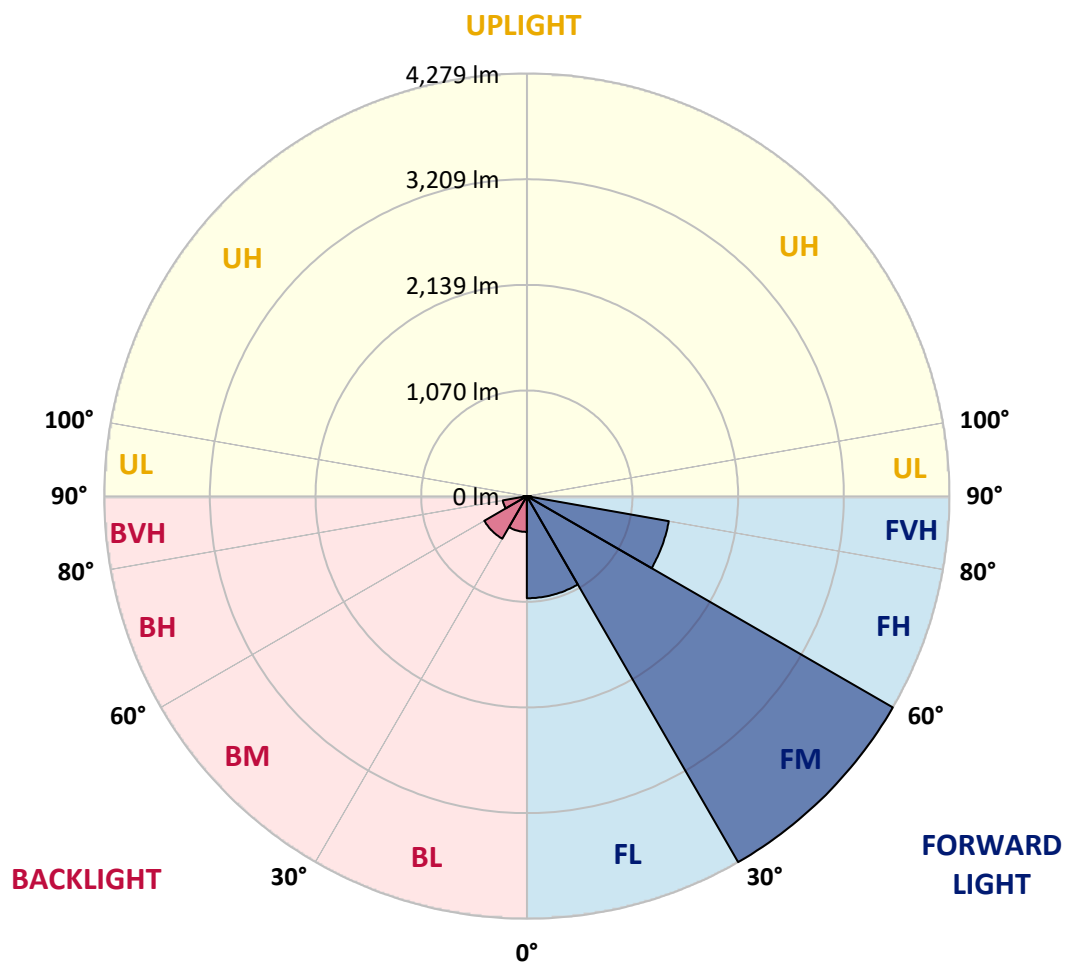
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1033.4 | 13.0      |                         |      |         |
| FM   | (30°-60°)   | 4278.9 | 53.7      |                         |      |         |
| FH   | (60°-80°)   | 1459.1 | 18.3      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 46.0   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 362.3  | 4.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 497.4  | 6.2       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 247.0  | 3.1       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 37.8   | 0.5       |                         |      | G1/100  |
| 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°    | 55°    | 56°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1765.8 | 1765.8 | 1765.8 | 1765.8 | 1765.8 | 1765.8 | 1765.8 | 1765.8 | 1765.8 | 1765.8 | 1765.8 |
| 2.5°  | 2054.9 | 2047.4 | 2047.4 | 2028.3 | 2000.0 | 1960.8 | 1914.1 | 1902.5 | 1884.6 | 1839.0 | 1780.2 |
| 5°    | 2368.2 | 2360.1 | 2349.1 | 2315.7 | 2263.2 | 2184.7 | 2086.0 | 2068.1 | 2004.1 | 1910.0 | 1803.8 |
| 7.5°  | 2575.3 | 2570.7 | 2567.3 | 2538.4 | 2486.5 | 2409.2 | 2277.0 | 2256.8 | 2148.3 | 1992.5 | 1826.3 |
| 10°   | 2554.0 | 2567.8 | 2592.1 | 2612.3 | 2622.7 | 2582.9 | 2458.8 | 2435.1 | 2300.7 | 2088.3 | 1859.8 |
| 12.5° | 2353.8 | 2373.4 | 2418.4 | 2500.9 | 2596.1 | 2672.9 | 2602.5 | 2589.2 | 2463.4 | 2189.9 | 1901.9 |
| 15°   | 2204.9 | 2213.0 | 2234.9 | 2296.1 | 2438.0 | 2642.9 | 2713.8 | 2701.7 | 2615.2 | 2320.3 | 1950.4 |
| 17.5° | 2158.7 | 2162.2 | 2167.4 | 2187.6 | 2284.5 | 2525.7 | 2759.4 | 2771.0 | 2762.3 | 2455.9 | 2005.2 |
| 20°   | 2181.8 | 2184.1 | 2184.7 | 2188.2 | 2234.3 | 2427.6 | 2747.3 | 2766.9 | 2891.6 | 2591.5 | 2059.5 |
| 22.5° | 2270.7 | 2267.8 | 2263.7 | 2250.5 | 2276.4 | 2410.3 | 2715.0 | 2746.2 | 2991.4 | 2715.0 | 2109.7 |
| 25°   | 2425.9 | 2421.9 | 2393.6 | 2365.9 | 2376.8 | 2472.6 | 2697.7 | 2731.2 | 3069.3 | 2831.6 | 2146.6 |
| 27.5° | 2610.5 | 2606.5 | 2577.7 | 2525.1 | 2513.6 | 2576.5 | 2738.1 | 2758.8 | 3126.4 | 2934.8 | 2162.8 |
| 30°   | 2802.1 | 2802.1 | 2766.4 | 2705.8 | 2668.8 | 2695.4 | 2812.5 | 2829.2 | 3169.7 | 3034.7 | 2173.1 |
| 32.5° | 3011.0 | 3016.8 | 2961.4 | 2892.1 | 2851.2 | 2835.6 | 2917.0 | 2931.4 | 3232.6 | 3152.4 | 2195.1 |
| 35°   | 3279.3 | 3266.6 | 3199.1 | 3108.0 | 3042.2 | 3007.0 | 3046.2 | 3063.0 | 3324.9 | 3299.0 | 2230.3 |
| 37.5° | 3581.1 | 3558.6 | 3475.5 | 3366.5 | 3251.6 | 3192.8 | 3218.8 | 3222.8 | 3461.7 | 3490.0 | 2294.3 |
| 40°   | 3830.4 | 3826.4 | 3756.0 | 3652.7 | 3507.9 | 3428.8 | 3416.1 | 3418.4 | 3651.5 | 3716.2 | 2391.3 |
| 42.5° | 4040.5 | 4025.5 | 4012.8 | 3976.4 | 3822.9 | 3693.1 | 3641.1 | 3641.7 | 3857.5 | 3949.9 | 2488.8 |
| 45°   | 4133.4 | 4130.5 | 4168.0 | 4261.5 | 4151.3 | 3998.3 | 3924.5 | 3934.9 | 4093.6 | 4189.9 | 2582.9 |
| 47.5° | 4093.6 | 4095.9 | 4196.3 | 4441.5 | 4506.7 | 4389.6 | 4258.6 | 4252.2 | 4322.1 | 4374.0 | 2665.9 |
| 50°   | 3738.1 | 3775.6 | 4047.4 | 4458.2 | 4739.8 | 4798.1 | 4650.4 | 4626.7 | 4522.3 | 4520.6 | 2716.7 |
| 52.5° | 3469.8 | 3468.0 | 3634.8 | 4288.0 | 4822.4 | 5166.9 | 5034.1 | 4981.0 | 4687.9 | 4603.1 | 2720.8 |
| 55°   | 3107.4 | 3105.1 | 3229.1 | 3790.0 | 4658.5 | 5424.2 | 5395.9 | 5329.6 | 4839.7 | 4630.2 | 2693.1 |
| 57.5° | 2353.2 | 2397.0 | 2520.5 | 3034.1 | 4139.1 | 5383.2 | 5741.6 | 5686.2 | 4988.0 | 4618.1 | 2687.9 |
| 60°   | 1280.5 | 1275.3 | 1454.2 | 1977.5 | 3169.1 | 4918.1 | 5892.2 | 5889.3 | 5145.5 | 4613.5 | 2719.6 |
| 62.5° | 590.3  | 584.5  | 620.3  | 880.6  | 1817.1 | 3940.1 | 5601.4 | 5642.9 | 5291.5 | 4571.3 | 2716.7 |
| 65°   | 441.4  | 426.4  | 378.0  | 409.7  | 695.3  | 2352.0 | 4757.7 | 4868.5 | 5066.4 | 4398.2 | 2590.9 |
| 67.5° | 393.5  | 379.1  | 322.6  | 302.4  | 349.1  | 829.8  | 3451.3 | 3553.4 | 4236.7 | 4073.9 | 2387.2 |
| 70°   | 360.7  | 348.0  | 291.4  | 259.7  | 262.0  | 367.6  | 1806.7 | 2007.5 | 3105.1 | 3399.9 | 2034.7 |
| 72.5° | 328.9  | 318.0  | 266.6  | 228.5  | 220.4  | 242.9  | 615.7  | 742.7  | 1931.4 | 2477.8 | 1517.0 |
| 75°   | 295.4  | 285.1  | 240.1  | 204.9  | 189.3  | 180.0  | 293.1  | 315.6  | 1021.4 | 1368.2 | 814.2  |
| 77.5° | 256.8  | 251.0  | 214.1  | 180.6  | 167.3  | 136.2  | 195.0  | 204.9  | 437.4  | 537.2  | 387.8  |
| 80°   | 223.3  | 218.7  | 191.0  | 163.9  | 150.0  | 105.0  | 134.5  | 141.4  | 215.8  | 268.3  | 217.0  |
| 82.5° | 145.4  | 157.0  | 158.1  | 140.8  | 132.1  | 84.2   | 88.9   | 94.1   | 143.1  | 158.1  | 94.6   |
| 85°   | 60.0   | 72.7   | 109.1  | 96.9   | 91.8   | 71.6   | 58.9   | 60.0   | 87.7   | 92.3   | 34.0   |
| 87.5° | 27.1   | 30.0   | 53.7   | 54.2   | 47.3   | 27.1   | 29.4   | 32.3   | 45.0   | 44.4   | 15.0   |
| 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°    | 1765.8 | 1765.8 | 1765.8 | 1765.8 | 1765.8 | 1765.8 | 1765.8 | 1765.8 | 1765.8 | 1765.8 | 1765.8 |
| 2.5°  | 1764.0 | 1737.5 | 1690.2 | 1629.6 | 1586.3 | 1554.6 | 1519.9 | 1494.5 | 1466.3 | 1441.5 | 1445.5 |
| 5°    | 1760.0 | 1708.6 | 1602.5 | 1489.9 | 1380.3 | 1290.3 | 1215.3 | 1159.9 | 1102.7 | 1080.2 | 1077.3 |
| 7.5°  | 1763.4 | 1676.3 | 1502.0 | 1318.0 | 1151.2 | 1036.4 | 949.2  | 896.7  | 863.8  | 844.8  | 845.9  |
| 10°   | 1762.3 | 1645.7 | 1393.6 | 1139.7 | 957.3  | 852.3  | 799.2  | 781.9  | 779.0  | 781.3  | 784.8  |
| 12.5° | 1764.0 | 1604.2 | 1271.8 | 979.2  | 818.2  | 764.6  | 766.9  | 782.5  | 792.3  | 798.6  | 802.7  |
| 15°   | 1771.5 | 1570.1 | 1147.2 | 852.9  | 745.5  | 747.3  | 772.1  | 796.3  | 810.7  | 817.7  | 821.1  |
| 17.5° | 1782.5 | 1527.4 | 1036.4 | 757.1  | 715.0  | 741.5  | 773.8  | 799.8  | 810.7  | 814.8  | 817.7  |
| 20°   | 1783.6 | 1478.4 | 924.4  | 691.3  | 694.8  | 729.4  | 757.7  | 778.4  | 792.3  | 796.9  | 799.2  |
| 22.5° | 1778.5 | 1412.0 | 809.6  | 643.4  | 671.7  | 706.3  | 730.5  | 754.2  | 735.7  | 720.7  | 716.7  |
| 25°   | 1756.5 | 1328.4 | 711.5  | 604.2  | 642.8  | 675.1  | 702.8  | 676.9  | 668.2  | 656.7  | 657.8  |
| 27.5° | 1709.2 | 1223.9 | 619.2  | 567.2  | 608.8  | 654.9  | 634.7  | 631.3  | 620.3  | 608.8  | 608.8  |
| 30°   | 1646.9 | 1113.7 | 541.8  | 528.6  | 567.8  | 590.9  | 595.5  | 590.3  | 584.0  | 569.0  | 570.1  |
| 32.5° | 1590.9 | 997.1  | 487.0  | 496.3  | 541.8  | 541.8  | 562.0  | 562.0  | 539.0  | 496.8  | 496.8  |
| 35°   | 1535.5 | 887.5  | 446.6  | 469.1  | 499.1  | 509.0  | 536.7  | 500.3  | 467.4  | 448.4  | 447.2  |
| 37.5° | 1492.2 | 794.0  | 420.1  | 446.1  | 457.6  | 482.4  | 483.0  | 456.4  | 445.5  | 428.2  | 426.4  |
| 40°   | 1466.8 | 715.5  | 403.9  | 434.5  | 435.7  | 458.8  | 420.7  | 428.2  | 425.9  | 412.6  | 410.9  |
| 42.5° | 1453.0 | 654.9  | 391.8  | 424.7  | 418.9  | 396.4  | 389.5  | 402.2  | 406.2  | 399.3  | 396.4  |
| 45°   | 1442.0 | 607.6  | 382.0  | 390.7  | 405.7  | 364.7  | 361.8  | 371.6  | 380.3  | 379.7  | 377.4  |
| 47.5° | 1436.3 | 574.7  | 373.3  | 369.3  | 372.2  | 345.6  | 339.9  | 344.5  | 355.5  | 362.4  | 361.8  |
| 50°   | 1413.8 | 549.3  | 360.7  | 347.4  | 328.9  | 328.9  | 326.0  | 326.0  | 339.3  | 353.2  | 354.3  |
| 52.5° | 1373.9 | 519.3  | 342.2  | 326.6  | 305.3  | 314.5  | 315.6  | 313.3  | 327.2  | 342.2  | 343.3  |
| 55°   | 1330.1 | 496.8  | 317.4  | 307.6  | 285.6  | 301.2  | 306.4  | 304.1  | 313.3  | 323.7  | 323.1  |
| 57.5° | 1330.7 | 496.3  | 296.0  | 288.5  | 267.2  | 284.5  | 297.2  | 297.8  | 297.2  | 304.7  | 304.7  |
| 60°   | 1364.1 | 507.8  | 279.3  | 263.1  | 245.8  | 266.6  | 287.4  | 287.4  | 283.3  | 294.3  | 295.4  |
| 62.5° | 1373.9 | 506.6  | 268.9  | 238.9  | 226.8  | 250.4  | 272.9  | 276.4  | 273.5  | 289.1  | 290.8  |
| 65°   | 1287.4 | 479.5  | 258.5  | 217.0  | 209.5  | 232.5  | 255.1  | 264.9  | 262.0  | 282.2  | 284.5  |
| 67.5° | 1167.4 | 444.3  | 242.4  | 197.3  | 191.6  | 215.2  | 236.6  | 247.0  | 246.4  | 272.9  | 274.1  |
| 70°   | 1006.4 | 401.0  | 222.2  | 177.2  | 174.3  | 195.0  | 214.1  | 225.0  | 230.2  | 260.8  | 260.2  |
| 72.5° | 779.6  | 343.9  | 191.6  | 155.8  | 155.2  | 174.3  | 191.0  | 203.1  | 212.9  | 242.4  | 242.4  |
| 75°   | 502.6  | 270.6  | 156.4  | 135.0  | 132.7  | 150.6  | 167.9  | 181.8  | 211.8  | 258.5  | 257.9  |
| 77.5° | 307.0  | 206.6  | 125.8  | 112.5  | 111.9  | 128.1  | 145.4  | 169.1  | 231.4  | 230.2  | 223.9  |
| 80°   | 184.1  | 148.3  | 100.4  | 90.0   | 90.0   | 105.0  | 124.1  | 181.2  | 192.2  | 219.3  | 207.2  |
| 82.5° | 95.8   | 91.2   | 75.0   | 66.4   | 69.2   | 82.5   | 113.1  | 144.8  | 157.0  | 133.3  | 122.3  |
| 85°   | 39.2   | 48.5   | 46.2   | 42.1   | 43.9   | 57.1   | 109.1  | 116.0  | 92.9   | 97.5   | 98.1   |
| 87.5° | 13.3   | 21.4   | 21.4   | 16.7   | 18.5   | 40.4   | 64.6   | 38.7   | 46.7   | 27.7   | 20.8   |
| 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)