

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: P676590

Luminaire Tested: **CCW-SA-2A-760-U-T4FT-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676590  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-2A-760-U-T4FT-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @350mA w/  
T4FT distribution lens and House Side Shield  
Light Source: (32) 5700K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

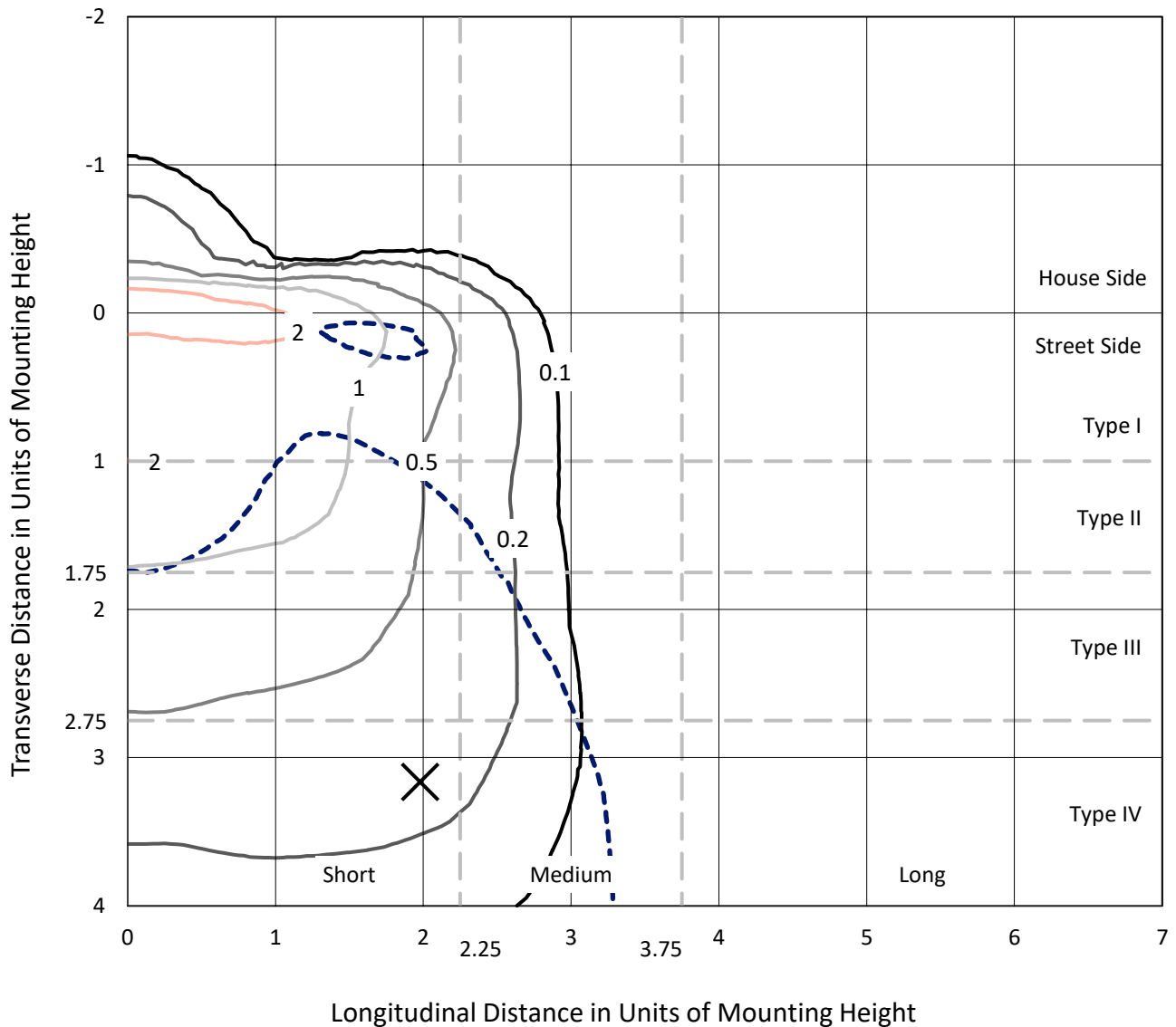
Lumens per Lamp: N/A  
Luminaire Lumens: 4018.9 lumens  
Efficiency: N/A  
Efficacy: 111.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 36.2  
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

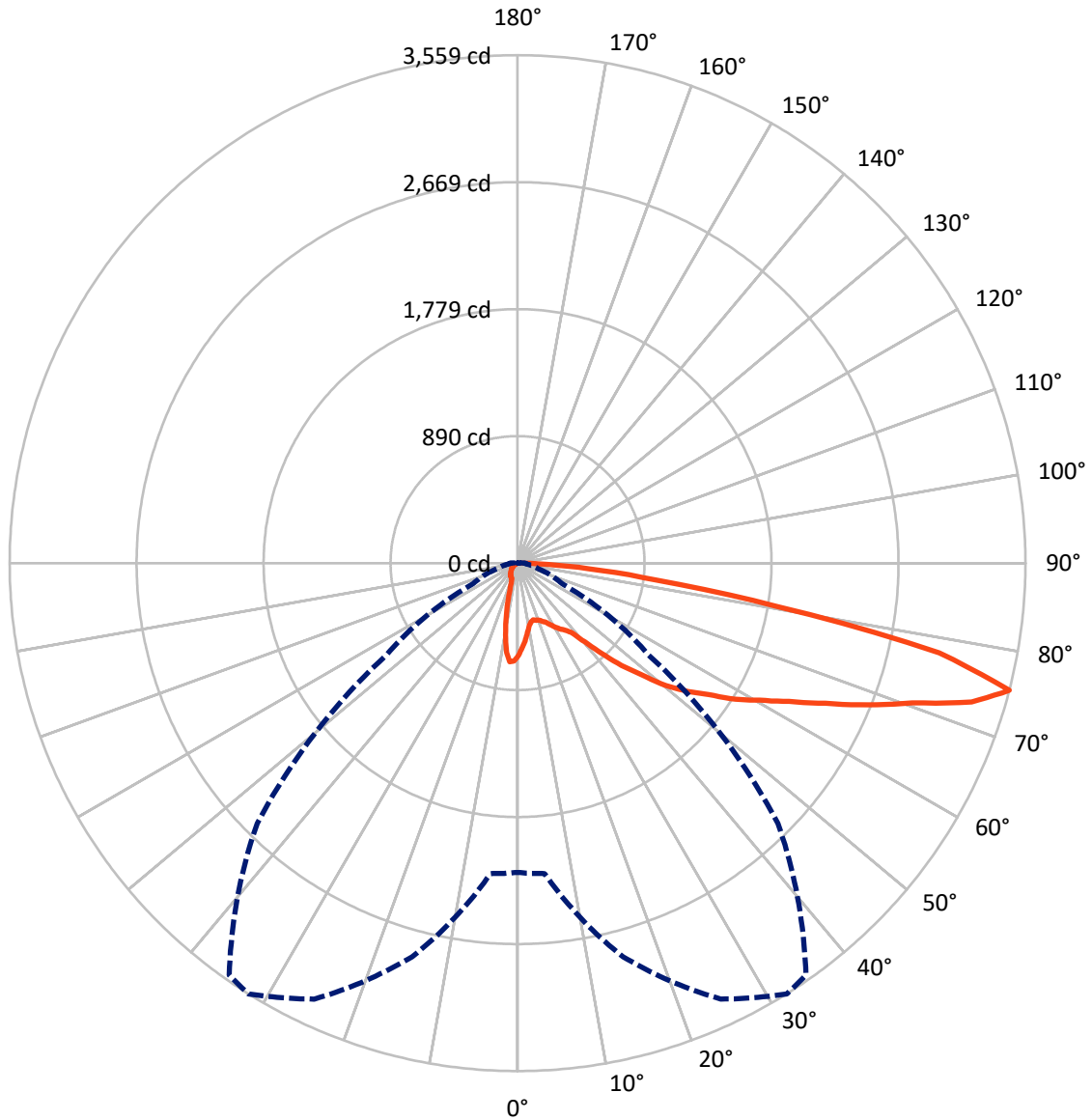
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral    - - - Horizontal Cone Through 75-Deg Vertical

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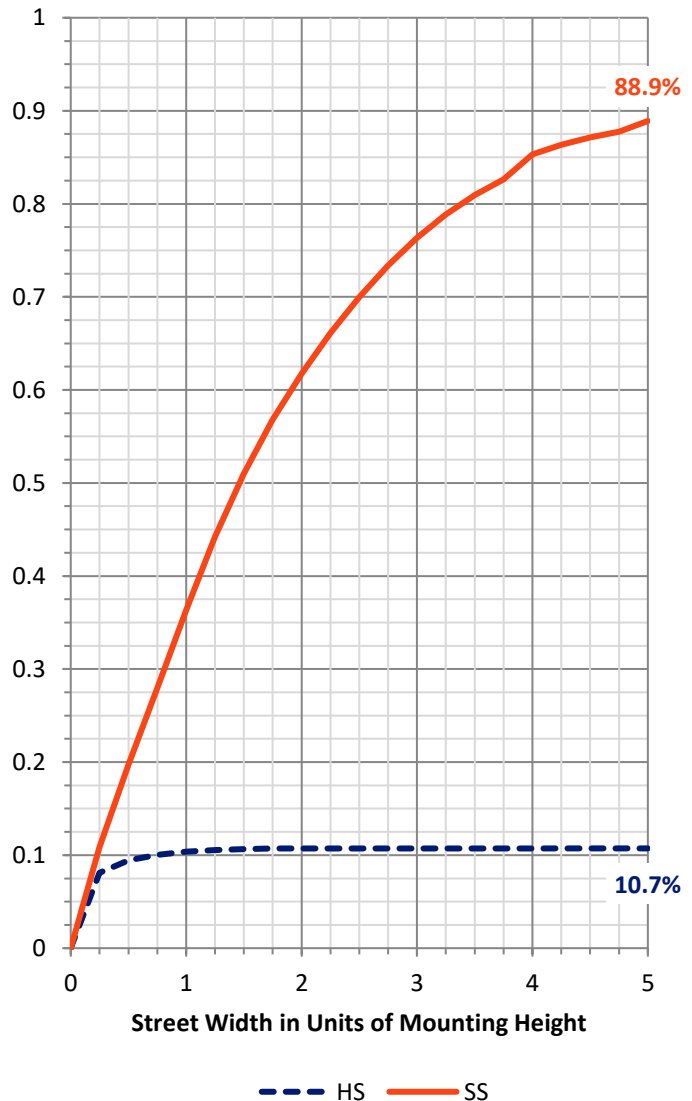
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 434.2    | 0.0    | 434.2  |
|                    | % Fixture | 10.8     | 0.0    | 10.8   |
| <b>Street Side</b> | Lumens    | 3584.7   | 0.0    | 3584.7 |
|                    | % Fixture | 89.2     | 0.0    | 89.2   |
| <b>Total</b>       | Lumens    | 4018.9   | 0.0    | 4018.9 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 57.0   | 1.4       |
| 10°-20°   | 129.5  | 3.2       |
| 20°-30°   | 193.8  | 4.8       |
| 30°-40°   | 297.6  | 7.4       |
| 40°-50°   | 520.4  | 12.9      |
| 50°-60°   | 813.4  | 20.2      |
| 60°-70°   | 1051.6 | 26.2      |
| 70°-80°   | 856.5  | 21.3      |
| 80°-90°   | 99.1   | 2.5       |
| 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°    | 4018.9 | 100.0     |
| 0°-180°   | 4018.9 | 100.0     |



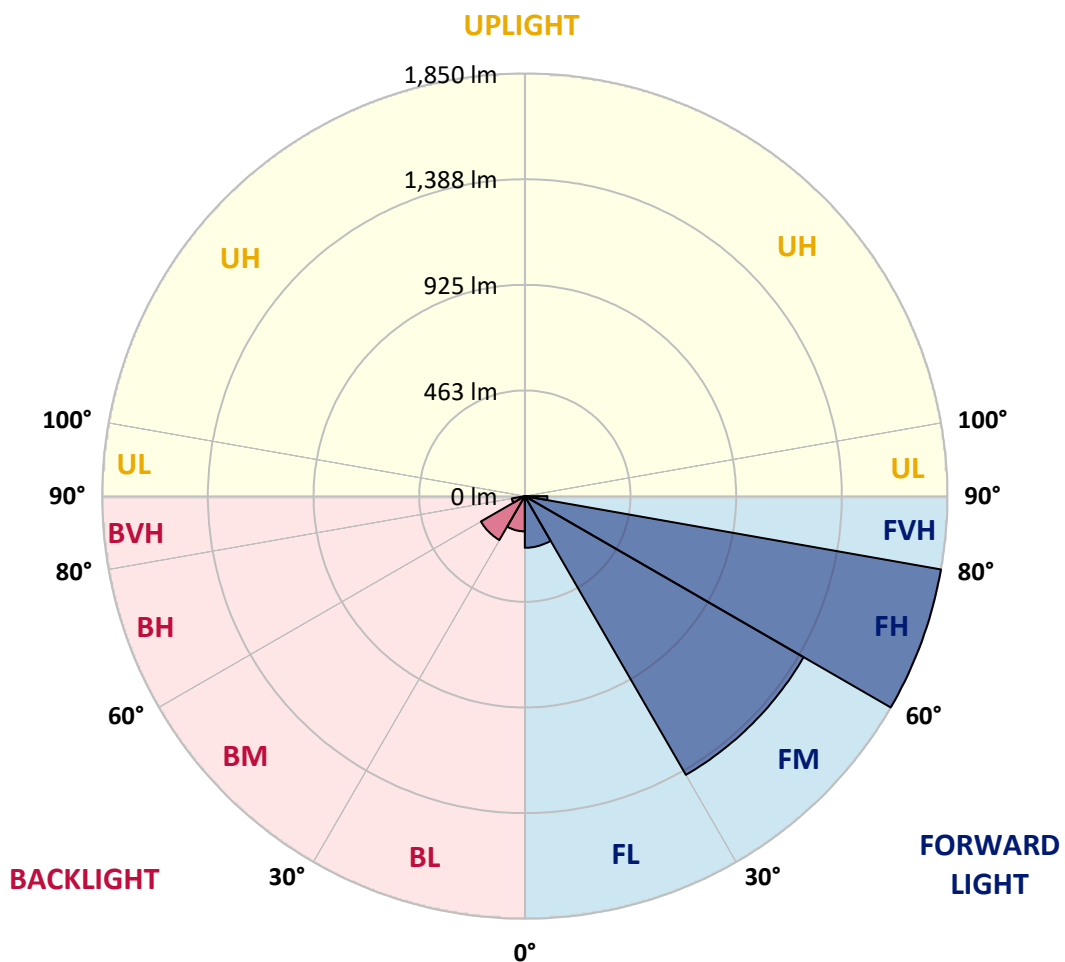
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 226.1  | 5.6       |                         |      |         |
| FM (30°-60°)   | 1409.2 | 35.1      |                         |      |         |
| FH (60°-80°)   | 1850.3 | 46.0      |                         |      | G2/5000 |
| FVH (80°-90°)  | 99.1   | 2.5       |                         |      | G1/100  |
| BL (0°-30°)    | 154.2  | 3.8       | B1/500                  |      |         |
| BM (30°-60°)   | 222.1  | 5.5       | B1/1000                 |      |         |
| BH (60°-80°)   | 57.7   | 1.4       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 0.1    | 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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 32°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 648.9  | 648.9  | 648.9  | 648.9  | 648.9  | 648.9  | 648.9  | 648.9  | 648.9  | 648.9  | 648.9  |
| 2.5°  | 582.0  | 590.2  | 589.2  | 594.3  | 595.4  | 598.4  | 605.7  | 605.7  | 626.3  | 640.7  | 650.0  |
| 5°    | 529.4  | 524.3  | 526.3  | 532.5  | 548.0  | 546.9  | 564.5  | 573.7  | 598.4  | 619.1  | 640.7  |
| 7.5°  | 464.5  | 463.5  | 467.6  | 482.1  | 493.4  | 502.7  | 521.2  | 544.9  | 577.8  | 608.8  | 646.9  |
| 10°   | 423.3  | 421.3  | 429.5  | 433.6  | 447.0  | 453.2  | 482.1  | 519.1  | 558.3  | 602.6  | 646.9  |
| 12.5° | 414.1  | 406.9  | 411.0  | 410.0  | 422.3  | 425.4  | 453.2  | 498.5  | 545.9  | 600.5  | 655.1  |
| 15°   | 419.2  | 414.1  | 410.0  | 410.0  | 413.0  | 415.1  | 445.0  | 485.1  | 538.7  | 603.6  | 673.6  |
| 17.5° | 435.7  | 432.6  | 420.3  | 407.9  | 421.3  | 421.3  | 439.8  | 482.1  | 539.7  | 612.9  | 696.3  |
| 20°   | 455.3  | 452.2  | 430.6  | 416.1  | 425.4  | 435.7  | 455.3  | 489.3  | 542.8  | 620.1  | 731.3  |
| 22.5° | 476.9  | 476.9  | 447.0  | 430.6  | 442.9  | 443.9  | 479.0  | 511.9  | 555.2  | 638.6  | 754.0  |
| 25°   | 503.7  | 501.6  | 472.8  | 454.2  | 458.4  | 469.7  | 501.6  | 536.6  | 577.8  | 664.4  | 796.2  |
| 27.5° | 538.7  | 535.6  | 501.6  | 483.1  | 488.2  | 500.6  | 536.6  | 571.7  | 598.4  | 674.7  | 832.3  |
| 30°   | 567.5  | 564.5  | 536.6  | 508.8  | 520.2  | 531.5  | 573.7  | 604.6  | 624.2  | 694.2  | 873.5  |
| 32.5° | 573.7  | 568.6  | 550.0  | 537.7  | 550.0  | 571.7  | 604.6  | 636.6  | 666.4  | 743.7  | 951.8  |
| 35°   | 644.8  | 626.3  | 577.8  | 558.3  | 576.8  | 584.0  | 638.6  | 695.3  | 724.1  | 782.8  | 1039.3 |
| 37.5° | 780.8  | 763.3  | 699.4  | 644.8  | 619.1  | 627.3  | 698.4  | 768.4  | 796.2  | 856.0  | 1135.1 |
| 40°   | 947.6  | 918.8  | 850.8  | 777.7  | 725.1  | 714.8  | 761.2  | 864.2  | 891.0  | 947.6  | 1260.8 |
| 42.5° | 1138.2 | 1110.4 | 1005.3 | 918.8  | 865.2  | 851.8  | 859.0  | 975.4  | 998.1  | 1032.1 | 1343.2 |
| 45°   | 1275.2 | 1260.8 | 1142.3 | 1065.1 | 1022.8 | 1008.4 | 990.9  | 1097.0 | 1125.8 | 1137.2 | 1462.6 |
| 47.5° | 1354.5 | 1344.2 | 1278.3 | 1225.7 | 1169.1 | 1153.6 | 1165.0 | 1265.9 | 1246.3 | 1255.6 | 1577.0 |
| 50°   | 1460.6 | 1433.8 | 1344.2 | 1360.7 | 1349.3 | 1345.2 | 1364.8 | 1409.1 | 1380.2 | 1353.5 | 1701.6 |
| 52.5° | 1546.1 | 1498.7 | 1435.9 | 1476.0 | 1493.5 | 1509.0 | 1578.0 | 1611.0 | 1482.2 | 1441.0 | 1782.0 |
| 55°   | 1598.6 | 1553.3 | 1569.8 | 1606.9 | 1625.4 | 1696.5 | 1777.8 | 1753.1 | 1549.2 | 1511.1 | 1889.1 |
| 57.5° | 1646.0 | 1649.1 | 1693.4 | 1704.7 | 1799.5 | 1811.8 | 1968.4 | 1888.1 | 1596.6 | 1574.9 | 1931.3 |
| 60°   | 1760.3 | 1749.0 | 1785.0 | 1858.2 | 1948.8 | 2017.8 | 2167.2 | 1978.7 | 1620.2 | 1607.9 | 1920.0 |
| 62.5° | 1966.3 | 1896.3 | 1908.7 | 2001.4 | 2134.2 | 2209.4 | 2281.5 | 2019.9 | 1614.1 | 1613.0 | 1886.0 |
| 65°   | 2228.0 | 2147.6 | 2110.5 | 2197.1 | 2369.1 | 2475.2 | 2410.3 | 2066.2 | 1572.9 | 1601.7 | 1759.3 |
| 67.5° | 2445.3 | 2446.3 | 2377.3 | 2425.7 | 2650.3 | 2672.9 | 2531.8 | 2057.0 | 1503.8 | 1512.1 | 1450.3 |
| 70°   | 2695.6 | 2729.6 | 2668.8 | 2820.2 | 2932.5 | 2946.9 | 2670.9 | 1980.8 | 1355.5 | 1140.2 | 833.3  |
| 72.5° | 2759.5 | 2777.0 | 2966.5 | 3199.3 | 3326.0 | 3330.1 | 2807.9 | 1726.3 | 892.0  | 503.7  | 258.5  |
| 75°   | 2167.2 | 2183.7 | 2855.3 | 3370.3 | 3558.8 | 3522.7 | 2579.2 | 1120.7 | 347.1  | 147.3  | 61.8   |
| 77.5° | 1209.3 | 1214.4 | 1772.7 | 2724.4 | 3019.0 | 2873.8 | 1806.7 | 436.7  | 140.1  | 84.5   | 28.8   |
| 80°   | 330.6  | 388.3  | 657.2  | 1343.2 | 1843.8 | 1809.8 | 860.1  | 142.1  | 90.6   | 65.9   | 13.4   |
| 82.5° | 79.3   | 85.5   | 211.2  | 594.3  | 974.4  | 1016.6 | 256.5  | 72.1   | 62.8   | 54.6   | 7.2    |
| 85°   | 28.8   | 31.9   | 64.9   | 289.4  | 500.6  | 459.4  | 77.3   | 36.1   | 46.4   | 42.2   | 3.1    |
| 87.5° | 10.3   | 10.3   | 20.6   | 94.8   | 146.3  | 110.2  | 25.8   | 12.4   | 23.7   | 25.8   | 1.0    |
| 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°    | 648.9  | 648.9  | 648.9 | 648.9 | 648.9 | 648.9 | 648.9 | 648.9 | 648.9 | 648.9 | 648.9 |
| 2.5°  | 651.0  | 651.0  | 665.4 | 677.8 | 681.9 | 687.0 | 681.9 | 693.2 | 692.2 | 687.0 | 689.1 |
| 5°    | 652.0  | 670.6  | 682.9 | 691.2 | 695.3 | 694.2 | 696.3 | 683.9 | 676.7 | 671.6 | 666.4 |
| 7.5°  | 657.2  | 674.7  | 697.3 | 695.3 | 683.9 | 660.3 | 641.7 | 608.8 | 576.8 | 575.8 | 570.6 |
| 10°   | 674.7  | 690.1  | 703.5 | 695.3 | 654.1 | 582.0 | 523.3 | 479.0 | 438.8 | 420.3 | 422.3 |
| 12.5° | 687.0  | 715.9  | 709.7 | 667.5 | 582.0 | 487.2 | 400.7 | 335.8 | 299.7 | 265.7 | 265.7 |
| 15°   | 712.8  | 723.1  | 721.0 | 627.3 | 493.4 | 380.1 | 275.0 | 209.1 | 171.0 | 155.5 | 153.5 |
| 17.5° | 737.5  | 748.8  | 713.8 | 566.5 | 405.8 | 255.4 | 166.9 | 129.8 | 124.6 | 122.6 | 123.6 |
| 20°   | 768.4  | 769.4  | 707.6 | 505.7 | 304.9 | 161.7 | 119.5 | 116.4 | 117.4 | 116.4 | 116.4 |
| 22.5° | 801.4  | 808.6  | 686.0 | 420.3 | 202.9 | 117.4 | 111.2 | 112.3 | 112.3 | 112.3 | 115.4 |
| 25°   | 844.6  | 833.3  | 652.0 | 338.9 | 132.9 | 108.2 | 108.2 | 109.2 | 109.2 | 109.2 | 110.2 |
| 27.5° | 873.5  | 858.0  | 608.8 | 244.1 | 104.0 | 102.0 | 104.0 | 104.0 | 106.1 | 106.1 | 106.1 |
| 30°   | 933.2  | 893.0  | 554.2 | 157.6 | 93.7  | 96.8  | 98.9  | 100.9 | 102.0 | 104.0 | 105.1 |
| 32.5° | 979.6  | 923.9  | 486.2 | 105.1 | 85.5  | 87.6  | 92.7  | 96.8  | 100.9 | 99.9  | 99.9  |
| 35°   | 1064.0 | 974.4  | 423.3 | 83.4  | 78.3  | 78.3  | 83.4  | 90.6  | 96.8  | 98.9  | 98.9  |
| 37.5° | 1160.8 | 1015.6 | 335.8 | 76.2  | 72.1  | 72.1  | 75.2  | 83.4  | 91.7  | 95.8  | 93.7  |
| 40°   | 1241.2 | 1063.0 | 248.2 | 71.1  | 67.0  | 67.0  | 69.0  | 75.2  | 84.5  | 91.7  | 92.7  |
| 42.5° | 1297.8 | 1098.0 | 167.9 | 65.9  | 62.8  | 61.8  | 64.9  | 68.0  | 75.2  | 85.5  | 87.6  |
| 45°   | 1349.3 | 1116.6 | 104.0 | 60.8  | 58.7  | 58.7  | 58.7  | 61.8  | 67.0  | 76.2  | 78.3  |
| 47.5° | 1441.0 | 1137.2 | 75.2  | 56.7  | 53.6  | 54.6  | 55.6  | 56.7  | 60.8  | 62.8  | 63.9  |
| 50°   | 1518.3 | 1152.6 | 61.8  | 52.5  | 50.5  | 51.5  | 51.5  | 51.5  | 53.6  | 50.5  | 50.5  |
| 52.5° | 1577.0 | 1137.2 | 52.5  | 48.4  | 46.4  | 47.4  | 46.4  | 46.4  | 44.3  | 40.2  | 40.2  |
| 55°   | 1620.2 | 1109.3 | 42.2  | 44.3  | 44.3  | 44.3  | 42.2  | 39.1  | 35.0  | 31.9  | 31.9  |
| 57.5° | 1631.6 | 1062.0 | 33.0  | 37.1  | 40.2  | 40.2  | 36.1  | 31.9  | 26.8  | 23.7  | 22.7  |
| 60°   | 1614.1 | 959.0  | 24.7  | 26.8  | 30.9  | 31.9  | 28.8  | 23.7  | 18.5  | 15.5  | 15.5  |
| 62.5° | 1551.2 | 877.6  | 19.6  | 17.5  | 22.7  | 23.7  | 20.6  | 15.5  | 10.3  | 7.2   | 6.2   |
| 65°   | 1431.7 | 751.9  | 14.4  | 12.4  | 15.5  | 16.5  | 13.4  | 7.2   | 3.1   | 1.0   | 0.0   |
| 67.5° | 1148.5 | 566.5  | 9.3   | 8.2   | 10.3  | 10.3  | 6.2   | 2.1   | 0.0   | 0.0   | 0.0   |
| 70°   | 635.5  | 318.3  | 6.2   | 4.1   | 5.2   | 3.1   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 183.3  | 90.6   | 3.1   | 2.1   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 49.4   | 21.6   | 2.1   | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 21.6   | 8.2    | 1.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 9.3    | 3.1    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 5.2    | 1.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 2.1    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 1.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 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)