

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: P676689

Luminaire Tested: **CCW-SA-1F-730-U-T4W-HSS**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P676689  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-1F-730-U-T4W-HSS  
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @1200mA w/  
T4W distribution lens and House Side Shield  
Light Source: (16) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

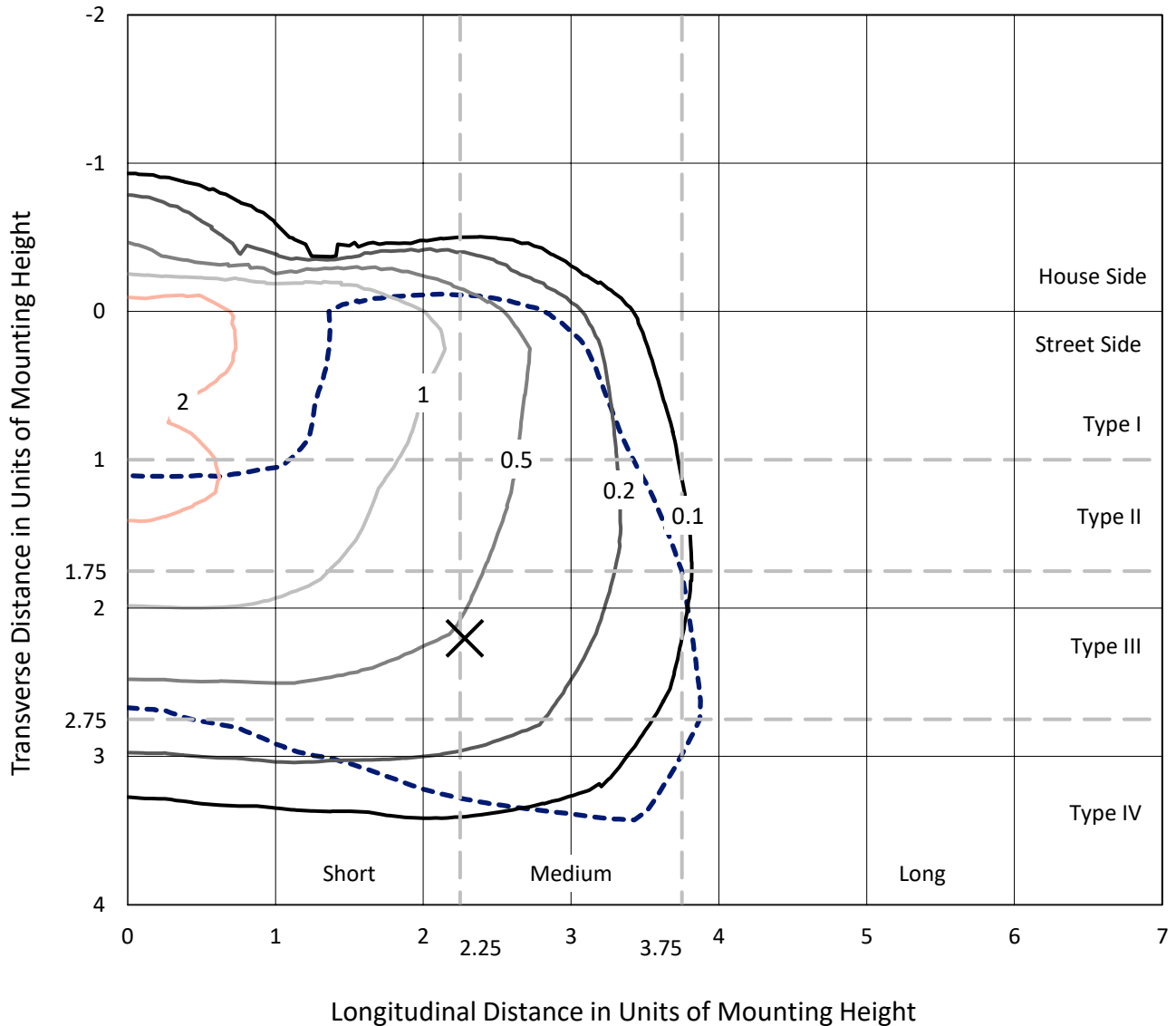
Lumens per Lamp: N/A  
Luminaire Lumens: 4925.8 lumens  
Efficiency: N/A  
Efficacy: 73.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G2

Input Watts (W): 67  
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

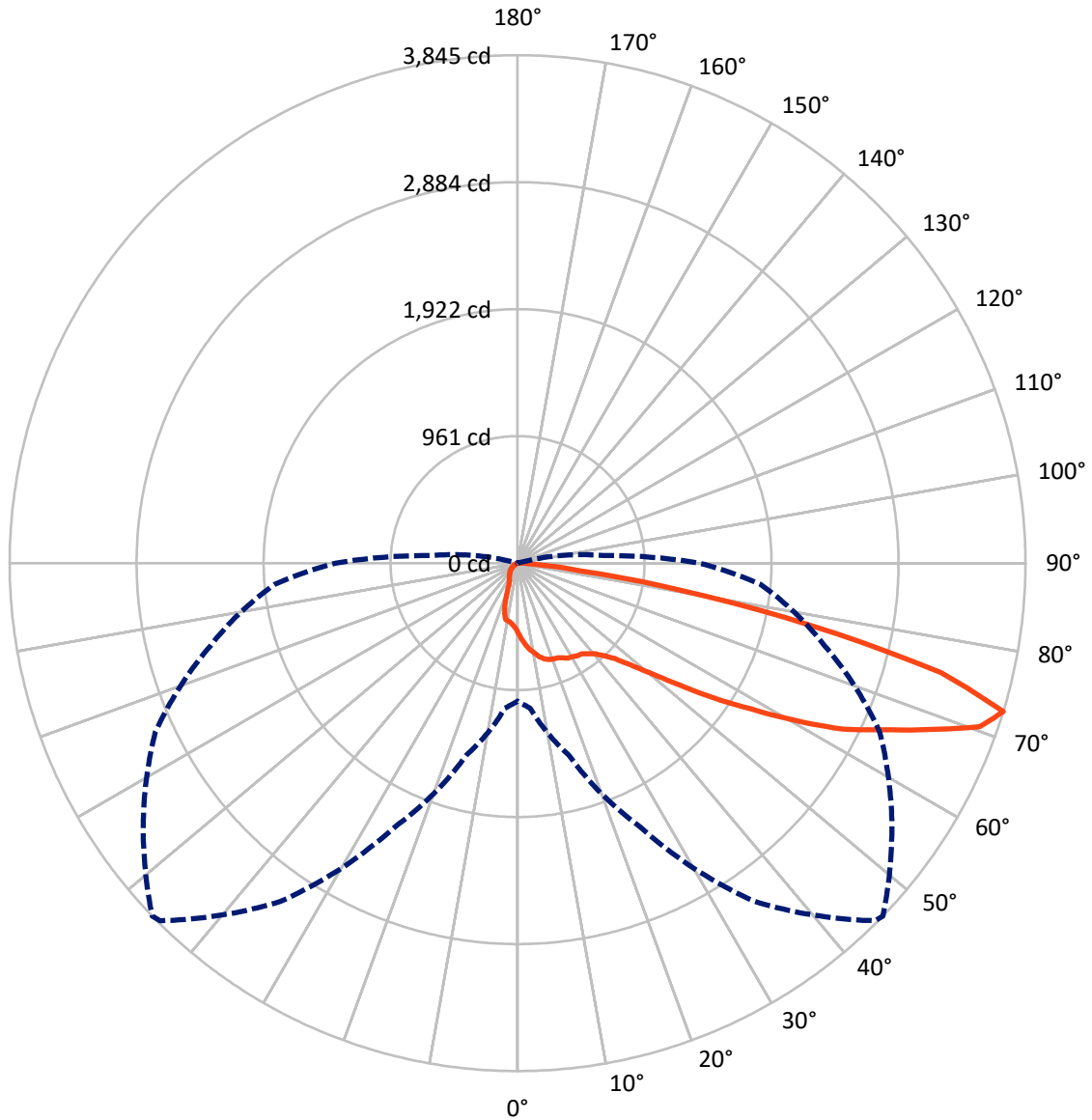
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.4 fc  
 Type IV - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 530.3    | 0.0    | 530.3  |
|                    | % Fixture | 10.8     | 0.0    | 10.8   |
| <b>Street Side</b> | Lumens    | 4395.5   | 0.0    | 4395.5 |
|                    | % Fixture | 89.2     | 0.0    | 89.2   |
| <b>Total</b>       | Lumens    | 4925.8   | 0.0    | 4925.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 52.7   | 1.1       |
| 10°-20°   | 159.1  | 3.2       |
| 20°-30°   | 249.0  | 5.1       |
| 30°-40°   | 348.8  | 7.1       |
| 40°-50°   | 575.1  | 11.7      |
| 50°-60°   | 1033.7 | 21.0      |
| 60°-70°   | 1498.2 | 30.4      |
| 70°-80°   | 935.0  | 19.0      |
| 80°-90°   | 74.1   | 1.5       |
| 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°    | 4925.8 | 100.0     |
| 0°-180°   | 4925.8 | 100.0     |

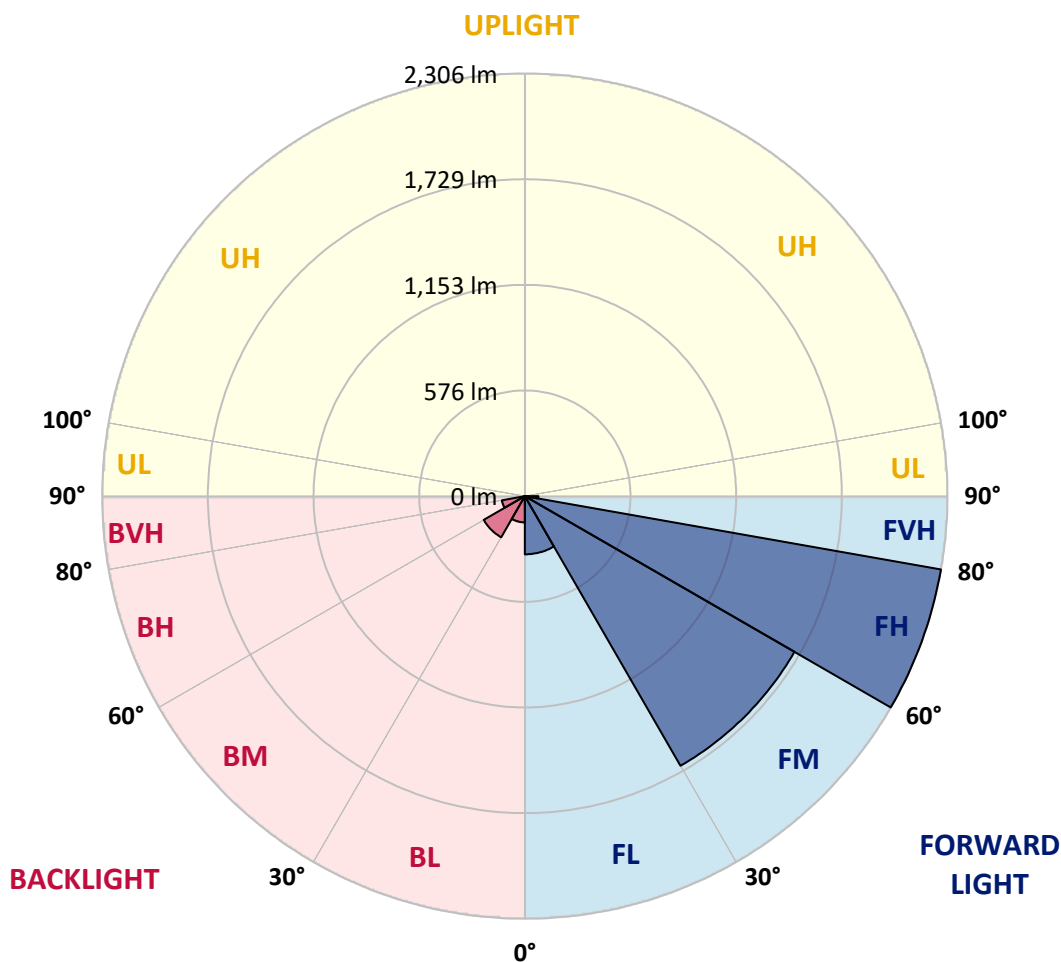


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 317.5  | 6.4       |                         |      |         |
| FM (30°-60°)   | 1698.5 | 34.5      |                         |      |         |
| FH (60°-80°)   | 2305.8 | 46.8      |                         |      | G2/5000 |
| FVH (80°-90°)  | 73.7   | 1.5       |                         |      | G1/100  |
| BL (0°-30°)    | 143.3  | 2.9       | B1/500                  |      |         |
| BM (30°-60°)   | 259.1  | 5.3       | B1/1000                 |      |         |
| BH (60°-80°)   | 127.5  | 2.6       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 0.4    | 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 Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 46°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 526.5  | 526.5  | 526.5  | 526.5  | 526.5  | 526.5  | 526.5  | 526.5  | 526.5  | 526.5  | 526.5  |
| 2.5°  | 589.3  | 586.8  | 590.5  | 589.3  | 574.2  | 576.7  | 575.5  | 565.4  | 547.8  | 537.8  | 531.5  |
| 5°    | 657.1  | 663.4  | 658.4  | 647.1  | 638.3  | 620.7  | 618.2  | 601.8  | 574.2  | 556.6  | 537.8  |
| 7.5°  | 727.5  | 727.5  | 717.4  | 699.8  | 681.0  | 662.1  | 659.6  | 632.0  | 608.1  | 578.0  | 551.6  |
| 10°   | 780.3  | 774.0  | 766.4  | 747.6  | 726.2  | 701.1  | 688.5  | 668.4  | 642.0  | 605.6  | 571.7  |
| 12.5° | 826.7  | 816.7  | 804.1  | 776.5  | 751.4  | 723.7  | 726.2  | 693.6  | 676.0  | 643.3  | 593.0  |
| 15°   | 853.1  | 844.3  | 833.0  | 807.9  | 768.9  | 756.4  | 751.4  | 731.3  | 699.8  | 667.2  | 619.4  |
| 17.5° | 859.4  | 853.1  | 838.0  | 805.4  | 784.0  | 768.9  | 767.7  | 743.8  | 730.0  | 702.4  | 649.6  |
| 20°   | 846.8  | 835.5  | 824.2  | 802.9  | 782.8  | 777.7  | 774.0  | 774.0  | 756.4  | 719.9  | 668.4  |
| 22.5° | 825.5  | 812.9  | 806.6  | 794.1  | 777.7  | 776.5  | 779.0  | 776.5  | 762.7  | 738.8  | 688.5  |
| 25°   | 809.2  | 802.9  | 792.8  | 789.0  | 779.0  | 797.8  | 794.1  | 790.3  | 786.5  | 758.9  | 719.9  |
| 27.5° | 814.2  | 812.9  | 805.4  | 790.3  | 782.8  | 802.9  | 814.2  | 815.4  | 814.2  | 786.5  | 748.8  |
| 30°   | 816.7  | 810.4  | 802.9  | 799.1  | 801.6  | 821.7  | 821.7  | 849.4  | 838.0  | 810.4  | 777.7  |
| 32.5° | 845.6  | 841.8  | 816.7  | 807.9  | 809.2  | 833.0  | 834.3  | 861.9  | 858.2  | 839.3  | 802.9  |
| 35°   | 907.2  | 882.0  | 845.6  | 820.5  | 820.5  | 851.9  | 841.8  | 882.0  | 892.1  | 861.9  | 820.5  |
| 37.5° | 998.9  | 980.0  | 914.7  | 858.2  | 836.8  | 859.4  | 869.5  | 892.1  | 922.2  | 895.8  | 855.6  |
| 40°   | 1181.1 | 1177.3 | 1084.3 | 962.4  | 878.3  | 898.4  | 902.1  | 937.3  | 957.4  | 921.0  | 909.7  |
| 42.5° | 1447.4 | 1428.6 | 1341.9 | 1149.6 | 953.6  | 944.8  | 958.7  | 981.3  | 1029.0 | 998.9  | 971.2  |
| 45°   | 1707.5 | 1698.7 | 1612.0 | 1397.2 | 1090.6 | 1037.8 | 1030.3 | 1070.5 | 1140.9 | 1108.2 | 1086.8 |
| 47.5° | 1896.0 | 1878.4 | 1829.4 | 1648.5 | 1291.6 | 1147.1 | 1152.2 | 1192.4 | 1281.6 | 1256.4 | 1262.7 |
| 50°   | 2040.5 | 2031.7 | 1980.2 | 1880.9 | 1545.4 | 1319.3 | 1309.2 | 1349.4 | 1470.0 | 1486.4 | 1504.0 |
| 52.5° | 2198.8 | 2215.1 | 2146.0 | 2061.8 | 1845.7 | 1550.5 | 1527.8 | 1541.7 | 1697.5 | 1735.2 | 1784.2 |
| 55°   | 2350.8 | 2377.2 | 2308.1 | 2296.8 | 2159.8 | 1806.8 | 1803.0 | 1770.3 | 1971.4 | 1976.4 | 2002.8 |
| 57.5° | 2450.1 | 2441.3 | 2436.2 | 2497.8 | 2473.9 | 2100.8 | 2081.9 | 2049.3 | 2231.4 | 2198.8 | 2277.9 |
| 60°   | 2457.6 | 2482.7 | 2566.9 | 2718.9 | 2761.7 | 2446.3 | 2418.7 | 2329.4 | 2456.4 | 2378.5 | 2529.2 |
| 62.5° | 2514.1 | 2534.2 | 2690.0 | 2899.9 | 2955.2 | 2750.4 | 2769.2 | 2543.0 | 2648.6 | 2587.0 | 2808.2 |
| 65°   | 2370.9 | 2433.7 | 2746.6 | 3040.6 | 3209.0 | 3058.2 | 3039.3 | 2818.2 | 2845.8 | 2788.1 | 3083.3 |
| 67.5° | 2241.5 | 2265.4 | 2592.0 | 3083.3 | 3410.0 | 3367.3 | 3359.7 | 3062.0 | 3049.4 | 2942.6 | 3161.2 |
| 70°   | 1821.8 | 1850.7 | 2173.7 | 2864.7 | 3477.8 | 3727.9 | 3710.3 | 3403.7 | 3187.6 | 2858.4 | 2761.7 |
| 72.5° | 1044.1 | 1101.9 | 1506.5 | 2206.3 | 3124.8 | 3828.4 | 3844.7 | 3459.0 | 3024.3 | 2403.6 | 1844.5 |
| 75°   | 341.8  | 358.1  | 625.7  | 1250.2 | 2337.0 | 3339.6 | 3310.7 | 2972.7 | 2440.0 | 1586.9 | 833.0  |
| 77.5° | 115.6  | 118.1  | 184.7  | 452.3  | 1295.4 | 2256.6 | 2272.9 | 2124.6 | 1498.9 | 659.6  | 229.9  |
| 80°   | 59.1   | 62.8   | 90.5   | 169.6  | 532.7  | 1228.8 | 1255.2 | 1211.2 | 628.2  | 194.7  | 55.3   |
| 82.5° | 27.6   | 28.9   | 52.8   | 94.2   | 243.8  | 482.5  | 482.5  | 530.2  | 222.4  | 109.3  | 22.6   |
| 85°   | 10.1   | 10.1   | 27.6   | 54.0   | 103.0  | 160.8  | 162.1  | 163.3  | 116.8  | 81.7   | 10.1   |
| 87.5° | 3.8    | 3.8    | 13.8   | 22.6   | 37.7   | 49.0   | 49.0   | 38.9   | 59.1   | 54.0   | 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°    | 526.5  | 526.5  | 526.5 | 526.5 | 526.5 | 526.5 | 526.5 | 526.5 | 526.5 | 526.5 | 526.5 |
| 2.5°  | 529.0  | 521.4  | 515.1 | 506.3 | 495.0 | 488.8 | 490.0 | 482.5 | 482.5 | 478.7 | 477.4 |
| 5°    | 529.0  | 521.4  | 505.1 | 490.0 | 480.0 | 467.4 | 461.1 | 456.1 | 456.1 | 453.6 | 454.8 |
| 7.5°  | 532.7  | 521.4  | 498.8 | 478.7 | 462.4 | 449.8 | 439.8 | 438.5 | 436.0 | 429.7 | 434.7 |
| 10°   | 555.3  | 539.0  | 501.3 | 473.7 | 454.8 | 441.0 | 423.4 | 418.4 | 410.9 | 399.5 | 400.8 |
| 12.5° | 574.2  | 552.8  | 518.9 | 481.2 | 457.3 | 434.7 | 394.5 | 350.5 | 331.7 | 311.6 | 312.9 |
| 15°   | 601.8  | 571.7  | 525.2 | 491.3 | 457.3 | 384.5 | 311.6 | 255.1 | 224.9 | 209.8 | 209.8 |
| 17.5° | 616.9  | 591.8  | 542.8 | 497.6 | 420.9 | 312.9 | 221.1 | 172.1 | 167.1 | 169.6 | 169.6 |
| 20°   | 648.3  | 614.4  | 562.9 | 502.6 | 360.6 | 222.4 | 162.1 | 157.1 | 159.6 | 164.6 | 163.3 |
| 22.5° | 668.4  | 634.5  | 578.0 | 480.0 | 278.9 | 159.6 | 152.0 | 149.5 | 152.0 | 158.3 | 158.3 |
| 25°   | 684.8  | 663.4  | 601.8 | 424.7 | 197.3 | 144.5 | 142.0 | 144.5 | 147.0 | 149.5 | 153.3 |
| 27.5° | 725.0  | 688.5  | 618.2 | 353.1 | 142.0 | 134.4 | 137.0 | 138.2 | 138.2 | 142.0 | 143.2 |
| 30°   | 751.4  | 722.5  | 630.7 | 272.6 | 125.6 | 124.4 | 126.9 | 128.2 | 129.4 | 133.2 | 134.4 |
| 32.5° | 776.5  | 766.4  | 614.4 | 184.7 | 118.1 | 115.6 | 114.3 | 115.6 | 120.6 | 124.4 | 123.1 |
| 35°   | 812.9  | 806.6  | 590.5 | 128.2 | 110.6 | 105.5 | 103.0 | 104.3 | 108.1 | 111.8 | 110.6 |
| 37.5° | 856.9  | 863.2  | 532.7 | 111.8 | 103.0 | 96.7  | 91.7  | 91.7  | 93.0  | 96.7  | 98.0  |
| 40°   | 908.4  | 924.7  | 464.9 | 104.3 | 98.0  | 90.5  | 85.4  | 79.2  | 77.9  | 76.6  | 77.9  |
| 42.5° | 1002.6 | 1021.5 | 388.2 | 99.3  | 90.5  | 81.7  | 74.1  | 66.6  | 60.3  | 56.5  | 56.5  |
| 45°   | 1134.6 | 1119.5 | 287.7 | 94.2  | 86.7  | 74.1  | 62.8  | 54.0  | 45.2  | 41.5  | 41.5  |
| 47.5° | 1316.8 | 1265.2 | 197.3 | 89.2  | 80.4  | 65.3  | 52.8  | 41.5  | 33.9  | 30.2  | 30.2  |
| 50°   | 1569.3 | 1399.7 | 128.2 | 84.2  | 76.6  | 56.5  | 42.7  | 30.2  | 25.1  | 23.9  | 25.1  |
| 52.5° | 1808.0 | 1536.6 | 101.8 | 77.9  | 69.1  | 49.0  | 32.7  | 25.1  | 22.6  | 21.4  | 21.4  |
| 55°   | 2027.9 | 1605.7 | 90.5  | 71.6  | 62.8  | 40.2  | 27.6  | 21.4  | 20.1  | 18.8  | 18.8  |
| 57.5° | 2213.9 | 1629.6 | 77.9  | 62.8  | 50.3  | 31.4  | 22.6  | 18.8  | 16.3  | 15.1  | 15.1  |
| 60°   | 2374.7 | 1635.9 | 60.3  | 50.3  | 36.4  | 23.9  | 18.8  | 16.3  | 13.8  | 11.3  | 11.3  |
| 62.5° | 2502.8 | 1591.9 | 42.7  | 35.2  | 25.1  | 18.8  | 16.3  | 11.3  | 7.5   | 5.0   | 3.8   |
| 65°   | 2604.6 | 1504.0 | 28.9  | 23.9  | 16.3  | 13.8  | 10.1  | 5.0   | 1.3   | 0.0   | 0.0   |
| 67.5° | 2485.2 | 1304.2 | 22.6  | 17.6  | 11.3  | 8.8   | 5.0   | 1.3   | 0.0   | 0.0   | 0.0   |
| 70°   | 2026.6 | 1011.4 | 16.3  | 11.3  | 7.5   | 2.5   | 1.3   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 1379.6 | 652.1  | 12.6  | 7.5   | 3.8   | 1.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 619.4  | 233.7  | 8.8   | 5.0   | 1.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 150.8  | 55.3   | 6.3   | 2.5   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 40.2   | 13.8   | 3.8   | 1.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 15.1   | 5.0    | 1.3   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 6.3    | 2.5    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 2.5    | 1.3    | 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)