

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: P675163

Luminaire Tested: **CCW-SA-2C-827-U-T4FT**

Issue Date: 04/25/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P675163  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/25/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCW-SA-2C-827-U-T4FT  
Description: INVUE CLEAR CURVE Wall Pack MOUNT LIGHT SQUARE LUMINAIRE @615mA w/  
T4FT distribution lens  
Light Source: (32) 2700K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

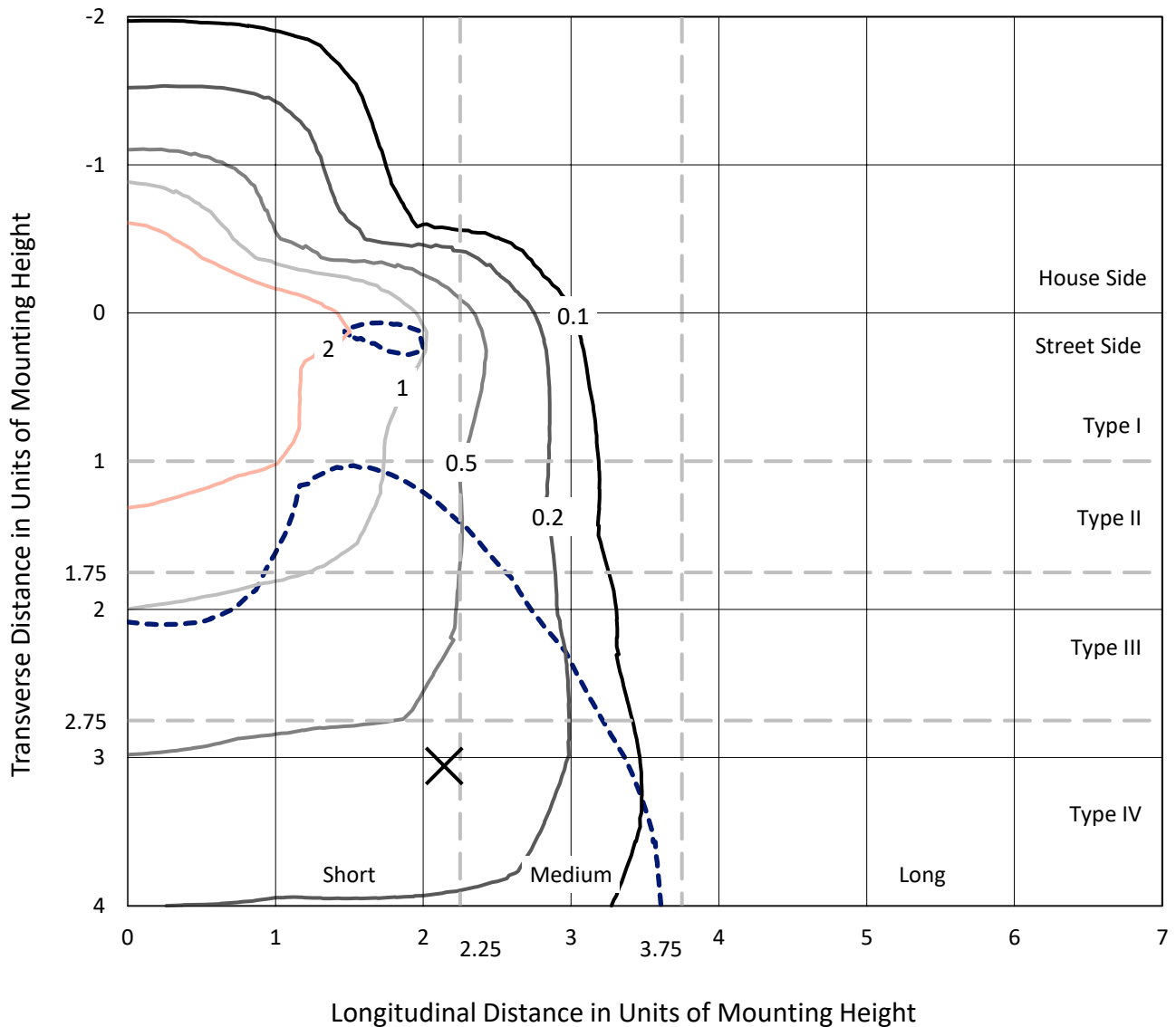
Lumens per Lamp: N/A  
Luminaire Lumens: 6642.3 lumens  
Efficiency: N/A  
Efficacy: 107.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 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

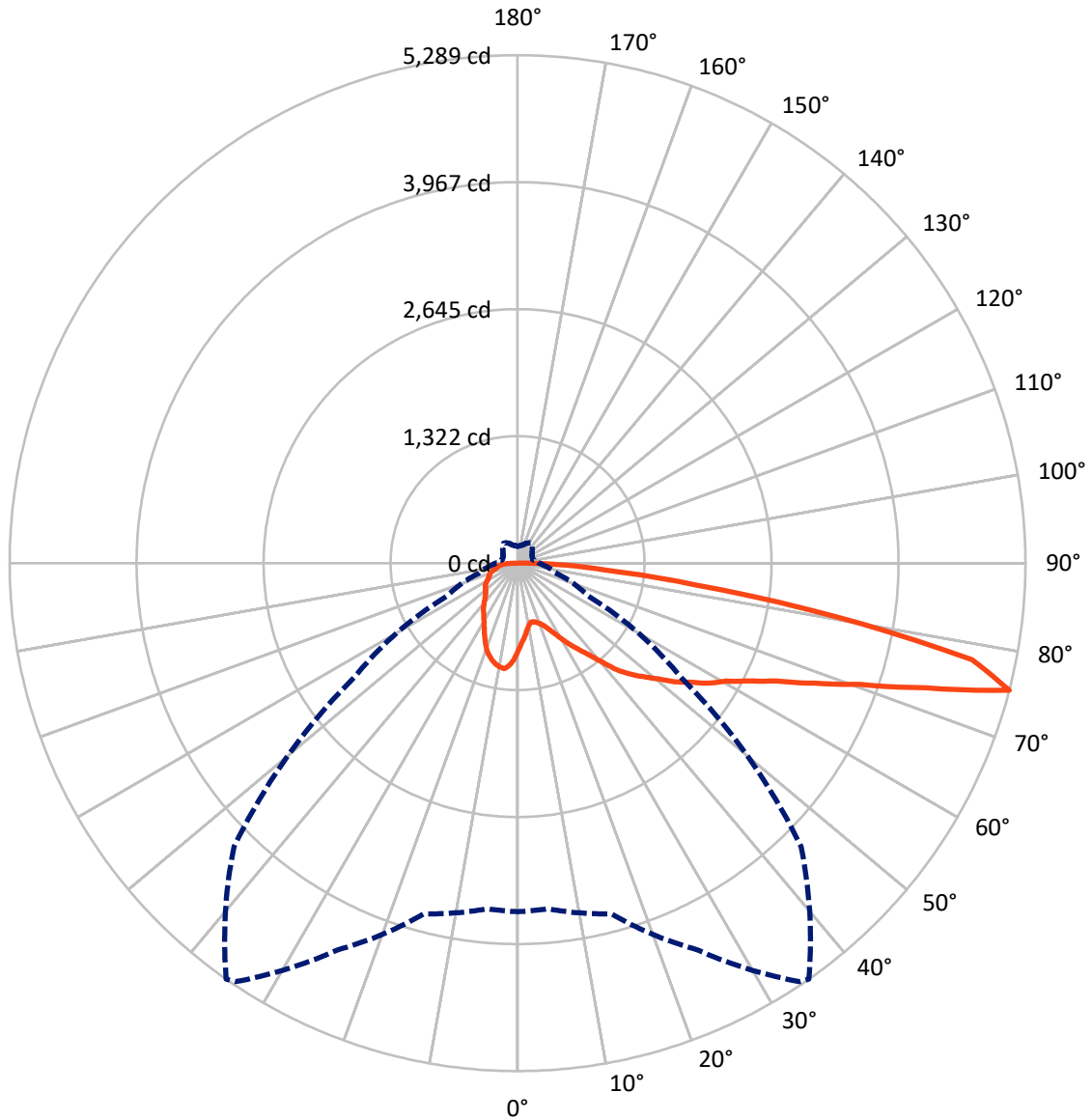
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 4.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1526.6   | 0.0    | 1526.6 |
|                    | % Fixture | 23.0     | 0.0    | 23.0   |
| <b>Street Side</b> | Lumens    | 5115.7   | 0.0    | 5115.7 |
|                    | % Fixture | 77.0     | 0.0    | 77.0   |
| <b>Total</b>       | Lumens    | 6642.3   | 0.0    | 6642.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 86.7   | 1.3       |
| 10°-20°   | 251.7  | 3.8       |
| 20°-30°   | 417.6  | 6.3       |
| 30°-40°   | 619.0  | 9.3       |
| 40°-50°   | 892.6  | 13.4      |
| 50°-60°   | 1227.4 | 18.5      |
| 60°-70°   | 1516.1 | 22.8      |
| 70°-80°   | 1387.0 | 20.9      |
| 80°-90°   | 244.2  | 3.7       |
| 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°    | 6642.3 | 100.0     |
| 0°-180°   | 6642.3 | 100.0     |



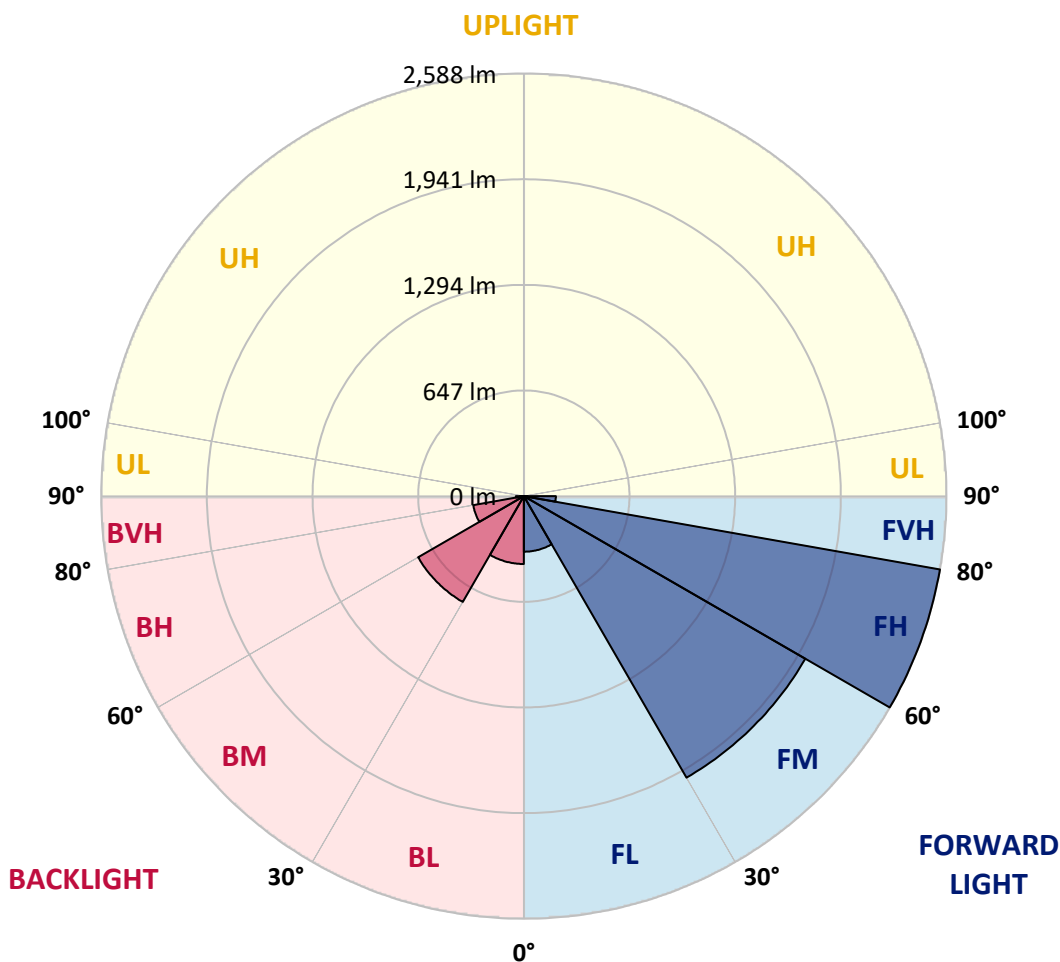
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 340.5  | 5.1       |                         |      |         |
| FM (30°-60°)   | 1991.0 | 30.0      |                         |      |         |
| FH (60°-80°)   | 2588.4 | 39.0      |                         |      | G2/5000 |
| FVH (80°-90°)  | 196.0  | 3.0       |                         |      | G2/225  |
| BL (0°-30°)    | 415.5  | 6.3       | B1/500                  |      |         |
| BM (30°-60°)   | 748.1  | 11.3      | B1/1000                 |      |         |
| BH (60°-80°)   | 314.8  | 4.7       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 48.2   | 0.7       |                         |      | G1/100  |
| 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°    | 34°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 910.0  | 910.0  | 910.0  | 910.0  | 910.0  | 910.0  | 910.0  | 910.0  | 910.0  | 910.0  | 910.0  |
| 2.5°  | 824.4  | 817.1  | 824.4  | 829.3  | 829.3  | 829.3  | 836.6  | 858.7  | 873.3  | 883.1  | 900.3  |
| 5°    | 738.8  | 741.2  | 746.1  | 758.4  | 765.7  | 770.6  | 782.8  | 809.7  | 831.8  | 863.6  | 900.3  |
| 7.5°  | 663.0  | 667.8  | 675.2  | 687.4  | 704.5  | 702.1  | 729.0  | 765.7  | 807.3  | 848.9  | 902.7  |
| 10°   | 623.8  | 633.6  | 636.0  | 638.5  | 655.6  | 655.6  | 692.3  | 733.9  | 785.3  | 839.1  | 902.7  |
| 12.5° | 631.2  | 631.2  | 623.8  | 621.4  | 631.2  | 628.7  | 660.5  | 709.4  | 765.7  | 841.5  | 912.5  |
| 15°   | 653.2  | 653.2  | 638.5  | 623.8  | 638.5  | 633.6  | 660.5  | 699.7  | 765.7  | 844.0  | 932.1  |
| 17.5° | 682.5  | 685.0  | 667.8  | 643.4  | 648.3  | 650.7  | 670.3  | 707.0  | 765.7  | 848.9  | 959.0  |
| 20°   | 741.2  | 729.0  | 702.1  | 663.0  | 680.1  | 672.7  | 702.1  | 733.9  | 780.4  | 868.4  | 998.1  |
| 22.5° | 792.6  | 792.6  | 741.2  | 707.0  | 709.4  | 709.4  | 736.3  | 763.3  | 802.4  | 895.4  | 1027.5 |
| 25°   | 875.8  | 870.9  | 807.3  | 755.9  | 760.8  | 763.3  | 777.9  | 809.7  | 839.1  | 910.0  | 1064.2 |
| 27.5° | 981.0  | 968.7  | 905.1  | 846.4  | 826.9  | 834.2  | 841.5  | 866.0  | 873.3  | 934.5  | 1108.2 |
| 30°   | 1093.5 | 1076.4 | 1022.6 | 929.6  | 919.8  | 922.3  | 910.0  | 924.7  | 914.9  | 973.6  | 1152.2 |
| 32.5° | 1164.5 | 1164.5 | 1113.1 | 1044.6 | 1017.7 | 1017.7 | 976.1  | 985.9  | 985.9  | 1010.3 | 1230.5 |
| 35°   | 1225.6 | 1220.7 | 1186.5 | 1135.1 | 1118.0 | 1108.2 | 1066.6 | 1081.3 | 1056.8 | 1081.3 | 1340.6 |
| 37.5° | 1318.6 | 1303.9 | 1289.2 | 1255.0 | 1220.7 | 1213.4 | 1191.4 | 1201.2 | 1166.9 | 1154.7 | 1465.4 |
| 40°   | 1426.2 | 1418.9 | 1404.2 | 1389.5 | 1355.3 | 1352.8 | 1328.4 | 1338.1 | 1301.5 | 1255.0 | 1590.1 |
| 42.5° | 1585.2 | 1563.2 | 1516.7 | 1504.5 | 1511.8 | 1521.6 | 1511.8 | 1494.7 | 1428.7 | 1369.9 | 1724.7 |
| 45°   | 1744.2 | 1710.0 | 1621.9 | 1602.3 | 1658.6 | 1651.3 | 1692.9 | 1685.5 | 1577.9 | 1484.9 | 1866.6 |
| 47.5° | 1847.0 | 1817.6 | 1746.7 | 1734.5 | 1758.9 | 1768.7 | 1893.5 | 1871.4 | 1700.2 | 1590.1 | 2003.5 |
| 50°   | 1920.4 | 1922.8 | 1829.9 | 1861.7 | 1893.5 | 1893.5 | 2050.0 | 2047.6 | 1849.4 | 1719.8 | 2182.1 |
| 52.5° | 2028.0 | 1993.8 | 1954.6 | 1984.0 | 2028.0 | 2052.5 | 2245.7 | 2191.9 | 1942.4 | 1829.9 | 2382.7 |
| 55°   | 2084.3 | 2069.6 | 2035.4 | 2086.7 | 2179.7 | 2191.9 | 2397.4 | 2355.8 | 2047.6 | 1959.5 | 2588.2 |
| 57.5° | 2106.3 | 2118.5 | 2174.8 | 2196.8 | 2326.5 | 2358.3 | 2534.4 | 2475.7 | 2145.4 | 2121.0 | 2747.2 |
| 60°   | 2204.1 | 2187.0 | 2262.9 | 2350.9 | 2475.7 | 2492.8 | 2705.6 | 2578.4 | 2240.8 | 2226.2 | 2798.6 |
| 62.5° | 2402.3 | 2358.3 | 2399.9 | 2505.0 | 2678.7 | 2700.8 | 2886.7 | 2715.4 | 2282.4 | 2297.1 | 2796.2 |
| 65°   | 2691.0 | 2659.2 | 2598.0 | 2681.2 | 2925.8 | 2957.6 | 3099.5 | 2832.9 | 2270.2 | 2272.6 | 2598.0 |
| 67.5° | 3031.0 | 2979.6 | 2916.0 | 2967.4 | 3265.9 | 3339.2 | 3358.8 | 2884.2 | 2184.6 | 2135.7 | 2113.6 |
| 70°   | 3329.5 | 3295.2 | 3253.6 | 3341.7 | 3757.6 | 3784.5 | 3681.7 | 2852.4 | 1947.3 | 1714.9 | 1409.1 |
| 72.5° | 3608.3 | 3591.2 | 3615.7 | 3945.9 | 4423.0 | 4440.1 | 3985.1 | 2651.8 | 1538.7 | 1039.7 | 655.6  |
| 75°   | 3630.4 | 3613.2 | 3782.0 | 4445.0 | 5257.2 | 5289.0 | 4173.4 | 2079.4 | 812.2  | 423.2  | 276.4  |
| 77.5° | 2458.6 | 2509.9 | 2825.5 | 3892.1 | 4829.1 | 4836.4 | 3412.6 | 966.3  | 335.1  | 249.5  | 193.3  |
| 80°   | 604.2  | 670.3  | 1064.2 | 2013.3 | 3256.1 | 3336.8 | 1869.0 | 325.4  | 220.2  | 190.8  | 144.3  |
| 82.5° | 220.2  | 239.7  | 433.0  | 910.0  | 1829.9 | 1861.7 | 653.2  | 176.1  | 159.0  | 146.8  | 105.2  |
| 85°   | 105.2  | 107.6  | 205.5  | 447.7  | 924.7  | 914.9  | 234.8  | 105.2  | 115.0  | 100.3  | 63.6   |
| 87.5° | 44.0   | 44.0   | 90.5   | 207.9  | 408.5  | 396.3  | 75.8   | 48.9   | 66.1   | 58.7   | 31.8   |
| 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°    | 910.0  | 910.0  | 910.0  | 910.0  | 910.0  | 910.0  | 910.0  | 910.0  | 910.0  | 910.0  | 910.0  |
| 2.5°  | 912.5  | 917.4  | 936.9  | 951.6  | 966.3  | 978.5  | 998.1  | 998.1  | 1010.3 | 1010.3 | 1010.3 |
| 5°    | 910.0  | 936.9  | 968.7  | 1003.0 | 1025.0 | 1047.0 | 1066.6 | 1069.0 | 1076.4 | 1086.2 | 1088.6 |
| 7.5°  | 919.8  | 946.7  | 998.1  | 1047.0 | 1073.9 | 1083.7 | 1108.2 | 1100.9 | 1100.9 | 1100.9 | 1108.2 |
| 10°   | 939.4  | 968.7  | 1039.7 | 1083.7 | 1103.3 | 1105.7 | 1098.4 | 1093.5 | 1078.8 | 1073.9 | 1066.6 |
| 12.5° | 954.1  | 1005.4 | 1076.4 | 1110.6 | 1103.3 | 1096.0 | 1078.8 | 1054.4 | 1037.2 | 1032.4 | 1032.4 |
| 15°   | 990.8  | 1042.1 | 1108.2 | 1120.4 | 1108.2 | 1069.0 | 1047.0 | 1020.1 | 1005.4 | 983.4  | 993.2  |
| 17.5° | 1022.6 | 1081.3 | 1140.0 | 1125.3 | 1100.9 | 1039.7 | 1007.9 | 968.7  | 949.2  | 924.7  | 924.7  |
| 20°   | 1064.2 | 1118.0 | 1169.3 | 1130.2 | 1076.4 | 1010.3 | 959.0  | 910.0  | 883.1  | 858.7  | 863.6  |
| 22.5° | 1110.6 | 1159.6 | 1186.5 | 1110.6 | 1039.7 | 963.9  | 892.9  | 846.4  | 812.2  | 797.5  | 802.4  |
| 25°   | 1147.3 | 1201.2 | 1196.3 | 1078.8 | 995.7  | 905.1  | 826.9  | 782.8  | 775.5  | 760.8  | 760.8  |
| 27.5° | 1193.8 | 1250.1 | 1188.9 | 1039.7 | 922.3  | 812.2  | 763.3  | 746.1  | 746.1  | 738.8  | 743.7  |
| 30°   | 1255.0 | 1294.1 | 1171.8 | 983.4  | 829.3  | 729.0  | 704.5  | 714.3  | 731.5  | 724.1  | 726.6  |
| 32.5° | 1355.3 | 1350.4 | 1157.1 | 919.8  | 731.5  | 648.3  | 665.4  | 685.0  | 699.7  | 707.0  | 711.9  |
| 35°   | 1453.1 | 1421.3 | 1140.0 | 834.2  | 640.9  | 609.1  | 623.8  | 645.8  | 672.7  | 680.1  | 682.5  |
| 37.5° | 1551.0 | 1494.7 | 1110.6 | 729.0  | 584.7  | 574.9  | 589.6  | 601.8  | 623.8  | 628.7  | 633.6  |
| 40°   | 1653.7 | 1543.6 | 1059.3 | 626.3  | 538.2  | 538.2  | 548.0  | 550.4  | 562.7  | 570.0  | 574.9  |
| 42.5° | 1744.2 | 1590.1 | 966.3  | 530.9  | 489.3  | 506.4  | 508.8  | 503.9  | 494.2  | 499.1  | 501.5  |
| 45°   | 1854.3 | 1641.5 | 858.7  | 462.4  | 452.6  | 474.6  | 479.5  | 459.9  | 442.8  | 433.0  | 428.1  |
| 47.5° | 1962.0 | 1695.3 | 765.7  | 406.1  | 418.3  | 452.6  | 452.6  | 430.6  | 401.2  | 376.7  | 367.0  |
| 50°   | 2059.8 | 1749.1 | 689.9  | 371.8  | 384.1  | 435.4  | 440.3  | 398.8  | 367.0  | 337.6  | 332.7  |
| 52.5° | 2223.7 | 1839.6 | 611.6  | 344.9  | 364.5  | 423.2  | 420.8  | 384.1  | 342.5  | 310.7  | 308.2  |
| 55°   | 2368.1 | 1930.2 | 508.8  | 318.0  | 344.9  | 406.1  | 413.4  | 369.4  | 313.1  | 283.8  | 278.9  |
| 57.5° | 2473.2 | 1952.2 | 406.1  | 291.1  | 325.4  | 386.5  | 396.3  | 340.0  | 293.6  | 269.1  | 266.7  |
| 60°   | 2492.8 | 1866.6 | 330.3  | 269.1  | 298.5  | 359.6  | 367.0  | 322.9  | 278.9  | 259.3  | 254.4  |
| 62.5° | 2402.3 | 1702.6 | 281.3  | 249.5  | 276.4  | 332.7  | 347.4  | 303.3  | 264.2  | 247.1  | 244.6  |
| 65°   | 2196.8 | 1462.9 | 247.1  | 232.4  | 261.8  | 313.1  | 330.3  | 288.7  | 252.0  | 237.3  | 234.8  |
| 67.5° | 1739.3 | 1122.9 | 220.2  | 220.2  | 242.2  | 293.6  | 318.0  | 278.9  | 239.7  | 230.0  | 227.5  |
| 70°   | 1137.5 | 675.2  | 200.6  | 203.0  | 227.5  | 276.4  | 303.3  | 266.7  | 225.1  | 222.6  | 217.7  |
| 72.5° | 489.3  | 310.7  | 178.6  | 185.9  | 205.5  | 247.1  | 281.3  | 249.5  | 207.9  | 200.6  | 193.3  |
| 75°   | 225.1  | 188.4  | 161.5  | 166.4  | 183.5  | 217.7  | 254.4  | 230.0  | 193.3  | 181.0  | 173.7  |
| 77.5° | 159.0  | 137.0  | 134.5  | 144.3  | 156.6  | 188.4  | 225.1  | 215.3  | 178.6  | 168.8  | 163.9  |
| 80°   | 117.4  | 105.2  | 112.5  | 122.3  | 129.7  | 173.7  | 212.8  | 198.2  | 163.9  | 149.2  | 141.9  |
| 82.5° | 83.2   | 78.3   | 88.1   | 97.9   | 105.2  | 151.7  | 195.7  | 173.7  | 137.0  | 124.8  | 112.5  |
| 85°   | 48.9   | 51.4   | 61.2   | 66.1   | 73.4   | 112.5  | 163.9  | 139.4  | 105.2  | 80.7   | 78.3   |
| 87.5° | 22.0   | 22.0   | 29.4   | 31.8   | 36.7   | 66.1   | 110.1  | 88.1   | 66.1   | 51.4   | 48.9   |
| 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)