

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: P670753

Luminaire Tested: **CCP-SA-2A-850-U-T2**

Issue Date: 04/16/2023

**Test Information**

Test Method: LM-79-08  
Report Number: P670753  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCP-SA-2A-850-U-T2  
Description: INVUE CLEAR CURVE POLE MOUNT LIGHT SQUARE LUMINAIRE @350mA w/ T2  
distribution lens  
Light Source: (32) 5000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4762.6 lumens  
Efficiency: N/A  
Efficacy: 131.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B1 - U0 - G1

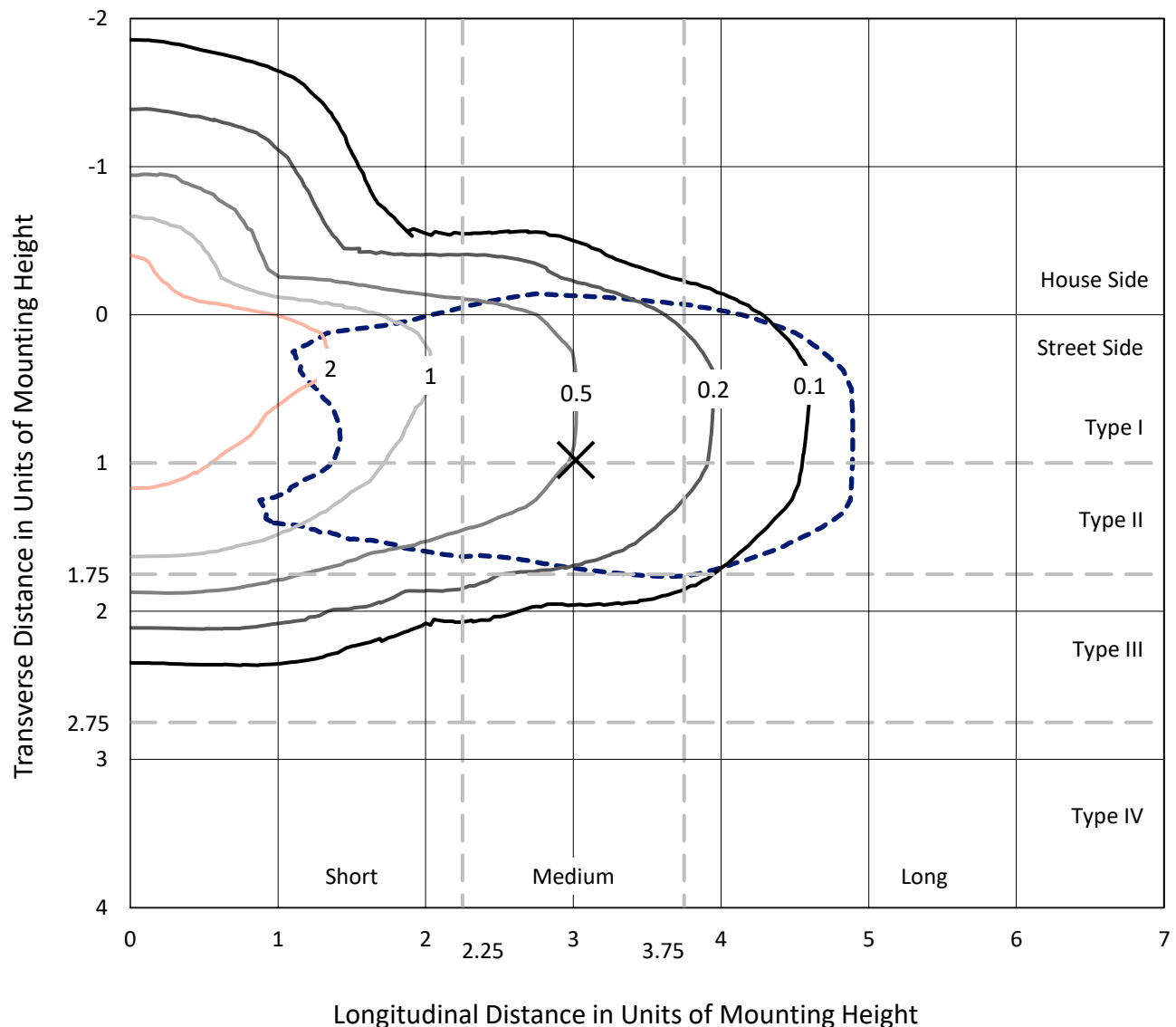
Input Watts (W): 36.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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## Iso-Footcandle Lines of Horizontal Illumination

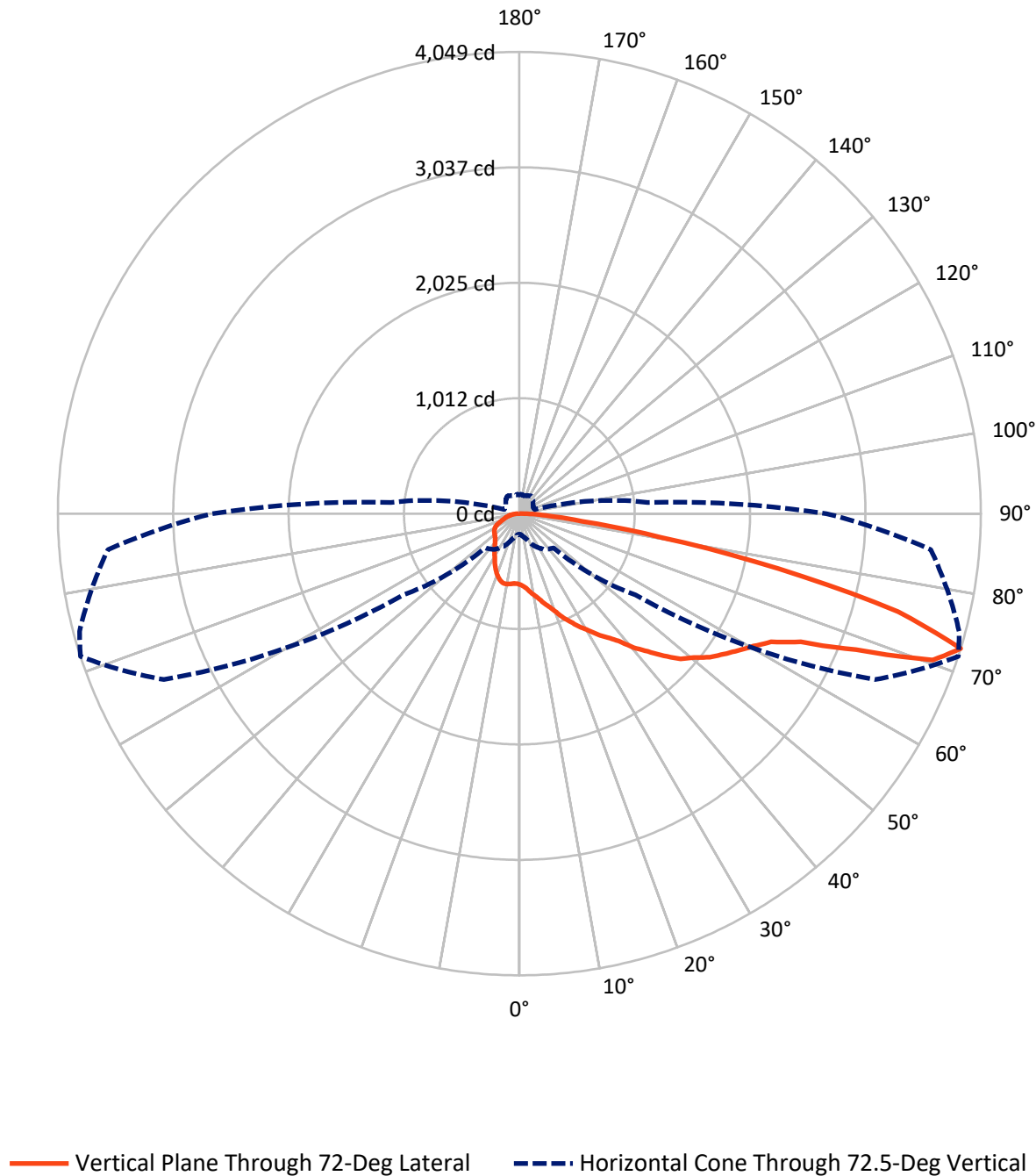
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 3.5 fc  
 Type II - Medium - N/A

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## Luminous Intensity Polar Plot



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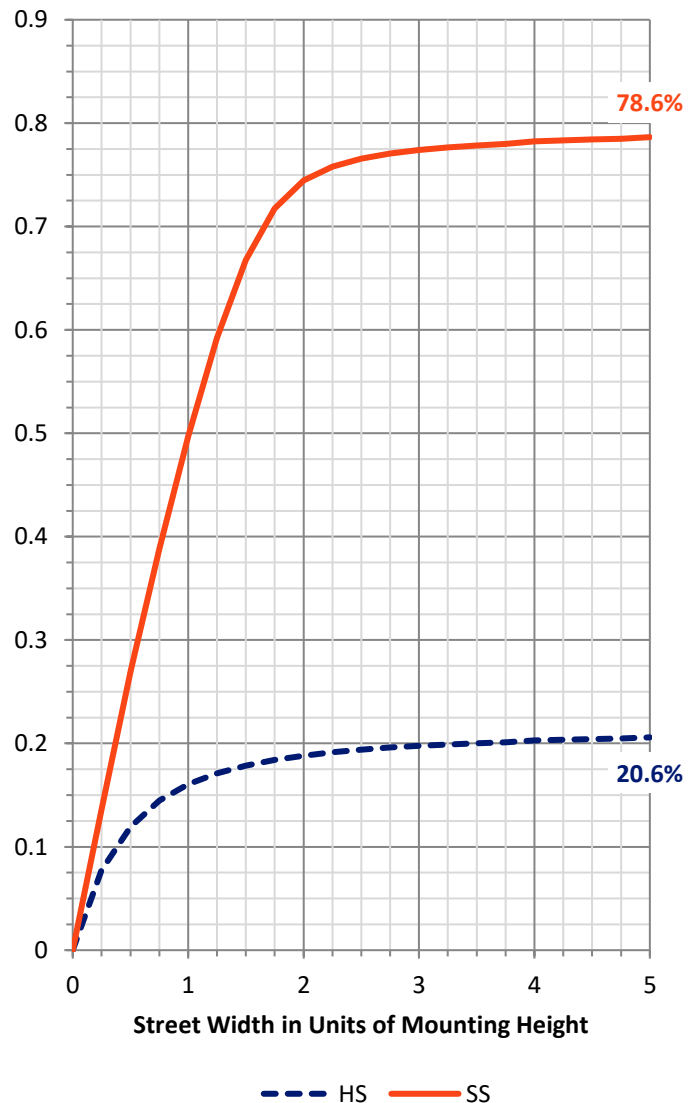
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1002.3   | 0.0    | 1002.3 |
|                    | % Fixture | 21.0     | 0.0    | 21.0   |
| <b>Street Side</b> | Lumens    | 3760.3   | 0.0    | 3760.3 |
|                    | % Fixture | 79.0     | 0.0    | 79.0   |
| <b>Total</b>       | Lumens    | 4762.6   | 0.0    | 4762.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 61.5   | 1.3       |
| 10°-20°   | 191.1  | 4.0       |
| 20°-30°   | 330.7  | 6.9       |
| 30°-40°   | 488.5  | 10.3      |
| 40°-50°   | 726.4  | 15.3      |
| 50°-60°   | 995.9  | 20.9      |
| 60°-70°   | 1080.3 | 22.7      |
| 70°-80°   | 761.6  | 16.0      |
| 80°-90°   | 126.5  | 2.7       |
| 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°    | 4762.6 | 100.0     |
| 0°-180°   | 4762.6 | 100.0     |

**Coefficient of Utilization**



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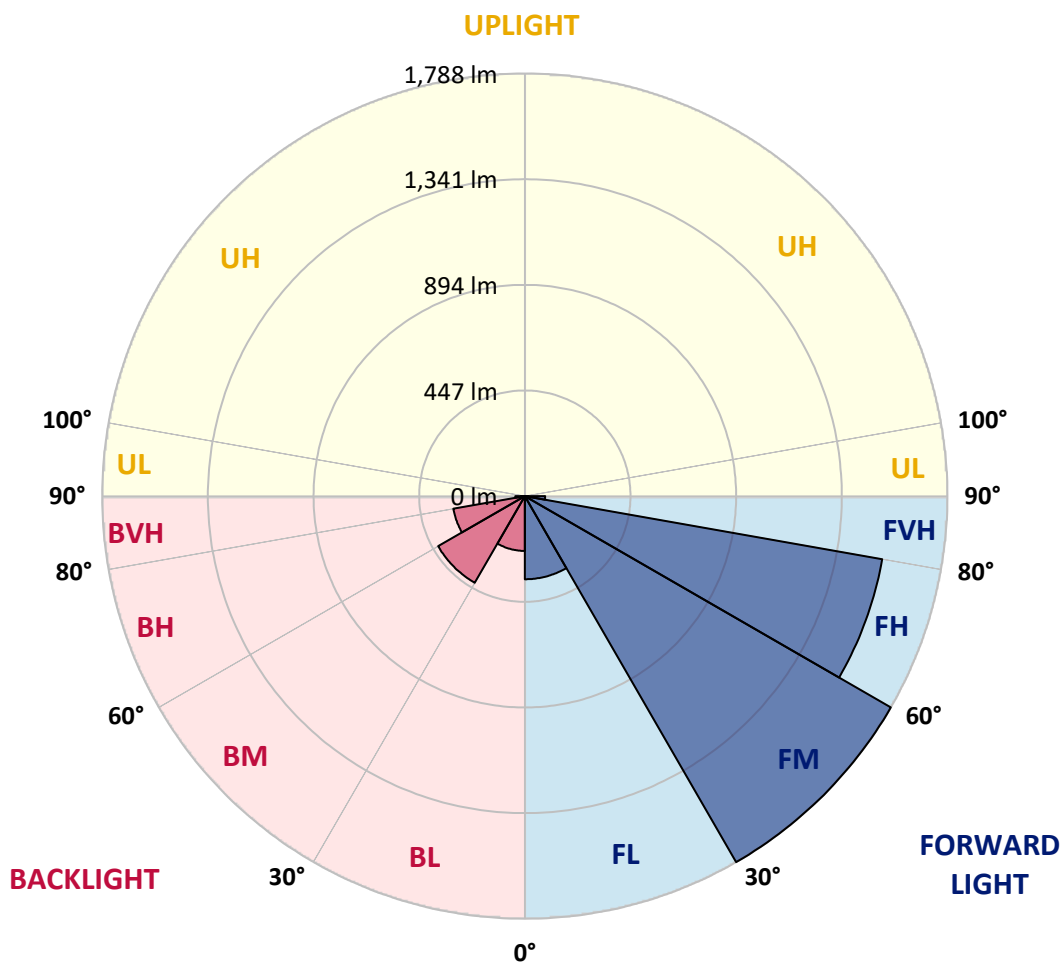
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 351.7  | 7.4       |                         |      |         |
| FM   | (30°-60°)   | 1787.5 | 37.5      |                         |      |         |
| FH   | (60°-80°)   | 1534.8 | 32.2      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 86.3   | 1.8       |                         |      | G1/100  |
| BL   | (0°-30°)    | 231.7  | 4.9       | B1/500                  |      |         |
| BM   | (30°-60°)   | 423.3  | 8.9       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 307.0  | 6.4       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 40.3   | 0.8       |                         |      | 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 Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 72°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 622.1  | 622.1  | 622.1  | 622.1  | 622.1  | 622.1  | 622.1  | 622.1  | 622.1  | 622.1  | 622.1  |
| 2.5°  | 671.3  | 671.3  | 666.1  | 664.3  | 664.3  | 650.3  | 652.0  | 643.2  | 636.2  | 636.2  | 629.2  |
| 5°    | 706.5  | 703.0  | 703.0  | 703.0  | 694.2  | 688.9  | 687.2  | 671.3  | 659.0  | 660.8  | 639.7  |
| 7.5°  | 715.3  | 717.0  | 718.8  | 727.6  | 722.3  | 725.8  | 722.3  | 704.7  | 695.9  | 687.2  | 667.8  |
| 10°   | 720.5  | 724.1  | 724.1  | 736.4  | 736.4  | 745.2  | 750.4  | 743.4  | 727.6  | 718.8  | 687.2  |
| 12.5° | 732.9  | 727.6  | 734.6  | 743.4  | 752.2  | 768.0  | 783.8  | 776.8  | 766.2  | 755.7  | 720.5  |
| 15°   | 732.9  | 734.6  | 739.9  | 753.9  | 768.0  | 783.8  | 811.9  | 822.5  | 817.2  | 797.9  | 761.0  |
| 17.5° | 711.8  | 706.5  | 731.1  | 757.5  | 783.8  | 803.1  | 840.1  | 864.7  | 861.1  | 854.1  | 797.9  |
| 20°   | 713.5  | 718.8  | 727.6  | 750.4  | 792.6  | 827.8  | 873.4  | 913.9  | 922.7  | 919.1  | 847.1  |
| 22.5° | 745.2  | 746.9  | 755.7  | 766.2  | 799.6  | 845.3  | 913.9  | 978.9  | 994.7  | 985.9  | 901.6  |
| 25°   | 776.8  | 790.8  | 790.8  | 797.9  | 810.2  | 857.6  | 940.2  | 1031.6 | 1054.5 | 1056.2 | 957.8  |
| 27.5° | 827.8  | 831.3  | 841.8  | 845.3  | 855.9  | 884.0  | 970.1  | 1070.3 | 1123.0 | 1116.0 | 1008.8 |
| 30°   | 887.5  | 889.3  | 896.3  | 892.8  | 894.5  | 929.7  | 998.2  | 1114.2 | 1186.3 | 1188.0 | 1063.2 |
| 32.5° | 957.8  | 971.9  | 975.4  | 952.5  | 956.0  | 964.8  | 1042.2 | 1166.9 | 1265.4 | 1253.1 | 1110.7 |
| 35°   | 1061.5 | 1066.8 | 1056.2 | 1045.7 | 1019.3 | 1014.0 | 1087.9 | 1219.7 | 1333.9 | 1348.0 | 1181.0 |
| 37.5° | 1189.8 | 1203.8 | 1189.8 | 1133.5 | 1105.4 | 1084.3 | 1144.1 | 1277.7 | 1416.5 | 1463.9 | 1251.3 |
| 40°   | 1309.3 | 1307.5 | 1293.5 | 1242.5 | 1193.3 | 1177.5 | 1224.9 | 1358.5 | 1544.8 | 1590.5 | 1353.2 |
| 42.5° | 1405.9 | 1400.7 | 1391.9 | 1353.2 | 1307.5 | 1281.2 | 1318.1 | 1442.9 | 1652.0 | 1739.9 | 1471.0 |
| 45°   | 1490.3 | 1483.3 | 1485.0 | 1441.1 | 1397.2 | 1411.2 | 1411.2 | 1539.5 | 1778.5 | 1887.5 | 1606.3 |
| 47.5° | 1569.4 | 1572.9 | 1567.6 | 1534.2 | 1500.9 | 1537.8 | 1518.4 | 1650.2 | 1903.3 | 2024.6 | 1720.5 |
| 50°   | 1660.8 | 1667.8 | 1650.2 | 1629.1 | 1599.3 | 1636.2 | 1611.6 | 1753.9 | 1984.1 | 2149.3 | 1857.6 |
| 52.5° | 1746.9 | 1753.9 | 1769.7 | 1743.4 | 1713.5 | 1743.4 | 1687.1 | 1850.6 | 2091.3 | 2270.6 | 1963.1 |
| 55°   | 1768.0 | 1764.5 | 1852.3 | 1880.5 | 1896.3 | 1806.6 | 1753.9 | 1933.2 | 2175.7 | 2347.9 | 2082.6 |
| 57.5° | 1671.3 | 1680.1 | 1799.6 | 1880.5 | 2049.2 | 1971.8 | 1829.5 | 2029.8 | 2263.6 | 2449.9 | 2193.3 |
| 60°   | 1430.6 | 1435.8 | 1585.2 | 1776.8 | 2022.8 | 2126.5 | 2033.4 | 2154.6 | 2360.2 | 2536.0 | 2318.1 |
| 62.5° | 956.0  | 996.5  | 1182.8 | 1483.3 | 1836.5 | 2168.7 | 2358.5 | 2365.5 | 2478.0 | 2644.9 | 2488.5 |
| 65°   | 504.4  | 523.7  | 669.6  | 912.1  | 1391.9 | 2022.8 | 2664.3 | 2783.8 | 2713.5 | 2845.3 | 2734.6 |
| 67.5° | 330.4  | 337.4  | 416.5  | 553.6  | 803.1  | 1476.2 | 2699.4 | 3509.6 | 3186.2 | 3226.7 | 3128.2 |
| 70°   | 246.0  | 249.6  | 307.6  | 409.5  | 497.4  | 789.1  | 2212.6 | 3848.8 | 3847.0 | 3739.8 | 3595.7 |
| 72.5° | 181.0  | 186.3  | 226.7  | 312.8  | 383.1  | 425.3  | 1244.3 | 3442.8 | 4049.1 | 3994.7 | 3623.8 |
| 75°   | 142.4  | 145.9  | 167.0  | 242.5  | 309.3  | 279.4  | 630.9  | 2550.0 | 3434.0 | 3695.9 | 3316.3 |
| 77.5° | 116.0  | 119.5  | 131.8  | 175.7  | 247.8  | 216.2  | 302.3  | 1645.0 | 2328.6 | 2660.8 | 2537.7 |
| 80°   | 96.7   | 96.7   | 105.4  | 124.8  | 191.6  | 163.4  | 179.3  | 924.4  | 1254.8 | 1384.9 | 1151.1 |
| 82.5° | 82.6   | 80.8   | 87.9   | 91.4   | 142.4  | 117.7  | 116.0  | 418.3  | 551.8  | 585.2  | 432.3  |
| 85°   | 52.7   | 54.5   | 82.6   | 79.1   | 93.1   | 80.8   | 65.0   | 198.6  | 260.1  | 265.4  | 161.7  |
| 87.5° | 21.1   | 21.1   | 35.1   | 43.9   | 52.7   | 49.2   | 31.6   | 89.6   | 114.2  | 114.2  | 45.7   |
| 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°    | 622.1  | 622.1  | 622.1 | 622.1 | 622.1 | 622.1 | 622.1 | 622.1 | 622.1 | 622.1 | 622.1 |
| 2.5°  | 627.4  | 620.4  | 615.1 | 611.6 | 602.8 | 594.0 | 595.8 | 594.0 | 587.0 | 583.5 | 583.5 |
| 5°    | 634.4  | 627.4  | 618.6 | 604.6 | 595.8 | 585.2 | 588.7 | 581.7 | 574.7 | 580.0 | 571.2 |
| 7.5°  | 652.0  | 639.7  | 627.4 | 606.3 | 592.3 | 576.4 | 569.4 | 565.9 | 560.6 | 557.1 | 557.1 |
| 10°   | 676.6  | 659.0  | 636.2 | 604.6 | 581.7 | 557.1 | 553.6 | 546.6 | 541.3 | 541.3 | 539.5 |
| 12.5° | 701.2  | 681.9  | 643.2 | 592.3 | 553.6 | 536.0 | 534.3 | 536.0 | 539.5 | 541.3 | 543.0 |
| 15°   | 732.9  | 701.2  | 641.5 | 569.4 | 530.7 | 523.7 | 532.5 | 539.5 | 546.6 | 553.6 | 551.8 |
| 17.5° | 762.7  | 725.8  | 625.6 | 541.3 | 511.4 | 513.2 | 529.0 | 543.0 | 557.1 | 564.1 | 565.9 |
| 20°   | 803.1  | 748.7  | 602.8 | 507.9 | 492.1 | 507.9 | 529.0 | 546.6 | 562.4 | 571.2 | 572.9 |
| 22.5° | 848.8  | 775.0  | 572.9 | 478.0 | 476.3 | 492.1 | 513.2 | 539.5 | 557.1 | 572.9 | 571.2 |
| 25°   | 889.3  | 792.6  | 534.3 | 453.4 | 456.9 | 467.5 | 492.1 | 520.2 | 537.8 | 555.3 | 550.1 |
| 27.5° | 915.6  | 796.1  | 493.8 | 435.8 | 435.8 | 446.4 | 469.2 | 486.8 | 502.6 | 516.7 | 518.4 |
| 30°   | 945.5  | 789.1  | 448.1 | 413.0 | 413.0 | 427.1 | 435.8 | 446.4 | 455.2 | 458.7 | 462.2 |
| 32.5° | 980.6  | 773.3  | 420.0 | 395.4 | 395.4 | 406.0 | 411.2 | 407.7 | 406.0 | 397.2 | 402.5 |
| 35°   | 1014.0 | 750.4  | 388.4 | 372.6 | 379.6 | 384.9 | 383.1 | 372.6 | 362.0 | 346.2 | 340.9 |
| 37.5° | 1054.5 | 727.6  | 360.3 | 348.0 | 360.3 | 362.0 | 362.0 | 349.7 | 335.7 | 316.3 | 316.3 |
| 40°   | 1116.0 | 710.0  | 337.4 | 332.2 | 344.5 | 342.7 | 333.9 | 325.1 | 330.4 | 319.9 | 319.9 |
| 42.5° | 1181.0 | 703.0  | 316.3 | 318.1 | 323.4 | 325.1 | 316.3 | 305.8 | 326.9 | 314.6 | 316.3 |
| 45°   | 1261.8 | 708.2  | 302.3 | 300.5 | 312.8 | 311.1 | 305.8 | 297.0 | 304.0 | 272.4 | 263.6 |
| 47.5° | 1337.4 | 718.8  | 295.2 | 288.2 | 302.3 | 305.8 | 298.8 | 279.4 | 268.9 | 249.6 | 246.0 |
| 50°   | 1405.9 | 741.6  | 288.2 | 274.2 | 288.2 | 295.2 | 282.9 | 261.9 | 249.6 | 237.3 | 237.3 |
| 52.5° | 1471.0 | 775.0  | 284.7 | 258.3 | 270.6 | 279.4 | 272.4 | 251.3 | 237.3 | 232.0 | 226.7 |
| 55°   | 1537.8 | 804.9  | 279.4 | 247.8 | 251.3 | 268.9 | 267.1 | 239.0 | 225.0 | 225.0 | 223.2 |
| 57.5° | 1632.7 | 845.3  | 272.4 | 230.2 | 237.3 | 256.6 | 256.6 | 233.7 | 217.9 | 219.7 | 221.4 |
| 60°   | 1729.3 | 892.8  | 265.4 | 212.6 | 217.9 | 244.3 | 247.8 | 226.7 | 212.6 | 214.4 | 212.6 |
| 62.5° | 1884.0 | 980.6  | 251.3 | 191.6 | 202.1 | 228.5 | 237.3 | 217.9 | 205.6 | 209.1 | 209.1 |
| 65°   | 2117.7 | 1131.8 | 221.4 | 174.0 | 186.3 | 214.4 | 226.7 | 209.1 | 195.1 | 205.6 | 202.1 |
| 67.5° | 2493.8 | 1339.2 | 186.3 | 159.9 | 175.7 | 200.3 | 214.4 | 198.6 | 186.3 | 202.1 | 196.8 |
| 70°   | 2831.2 | 1441.1 | 159.9 | 147.6 | 159.9 | 184.5 | 200.3 | 188.0 | 175.7 | 191.6 | 184.5 |
| 72.5° | 2694.1 | 1130.0 | 138.8 | 133.6 | 145.9 | 167.0 | 186.3 | 174.0 | 161.7 | 170.5 | 163.4 |
| 75°   | 2325.1 | 899.8  | 121.3 | 119.5 | 130.1 | 151.1 | 170.5 | 161.7 | 149.4 | 152.9 | 149.4 |
| 77.5° | 1762.7 | 743.4  | 103.7 | 101.9 | 110.7 | 135.3 | 152.9 | 145.9 | 133.6 | 131.8 | 131.8 |
| 80°   | 787.3  | 365.5  | 86.1  | 86.1  | 91.4  | 116.0 | 130.1 | 126.5 | 114.2 | 112.5 | 110.7 |
| 82.5° | 258.3  | 138.8  | 70.3  | 66.8  | 73.8  | 96.7  | 116.0 | 112.5 | 100.2 | 96.7  | 93.1  |
| 85°   | 103.7  | 66.8   | 51.0  | 51.0  | 58.0  | 80.8  | 103.7 | 96.7  | 80.8  | 72.1  | 72.1  |
| 87.5° | 35.1   | 28.1   | 26.4  | 26.4  | 36.9  | 54.5  | 77.3  | 65.0  | 58.0  | 51.0  | 52.7  |
| 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)