

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: P671546

Luminaire Tested: **CCP-SA-1B-750-U-SL4**

Issue Date: 04/16/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P671546  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCP-SA-1B-750-U-SL4  
Description: INVUE CLEAR CURVE POLE MOUNT LIGHT SQUARE LUMINAIRE @450mA w/ SL4 distribution lens  
Light Source: (16) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

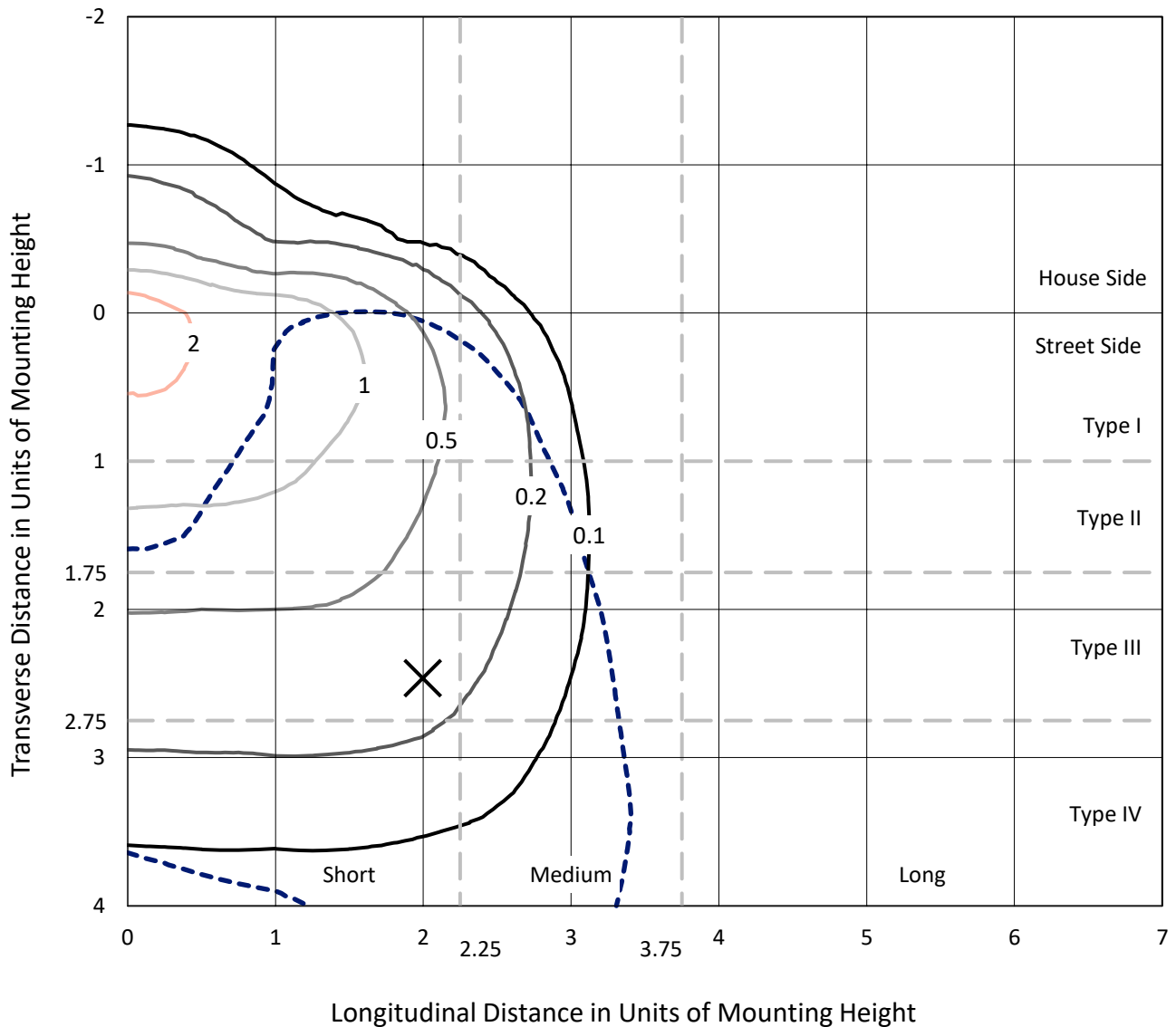
Lumens per Lamp: N/A  
Luminaire Lumens: 3461.7 lumens  
Efficiency: N/A  
Efficacy: 144.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G1

Input Watts (W): 24  
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

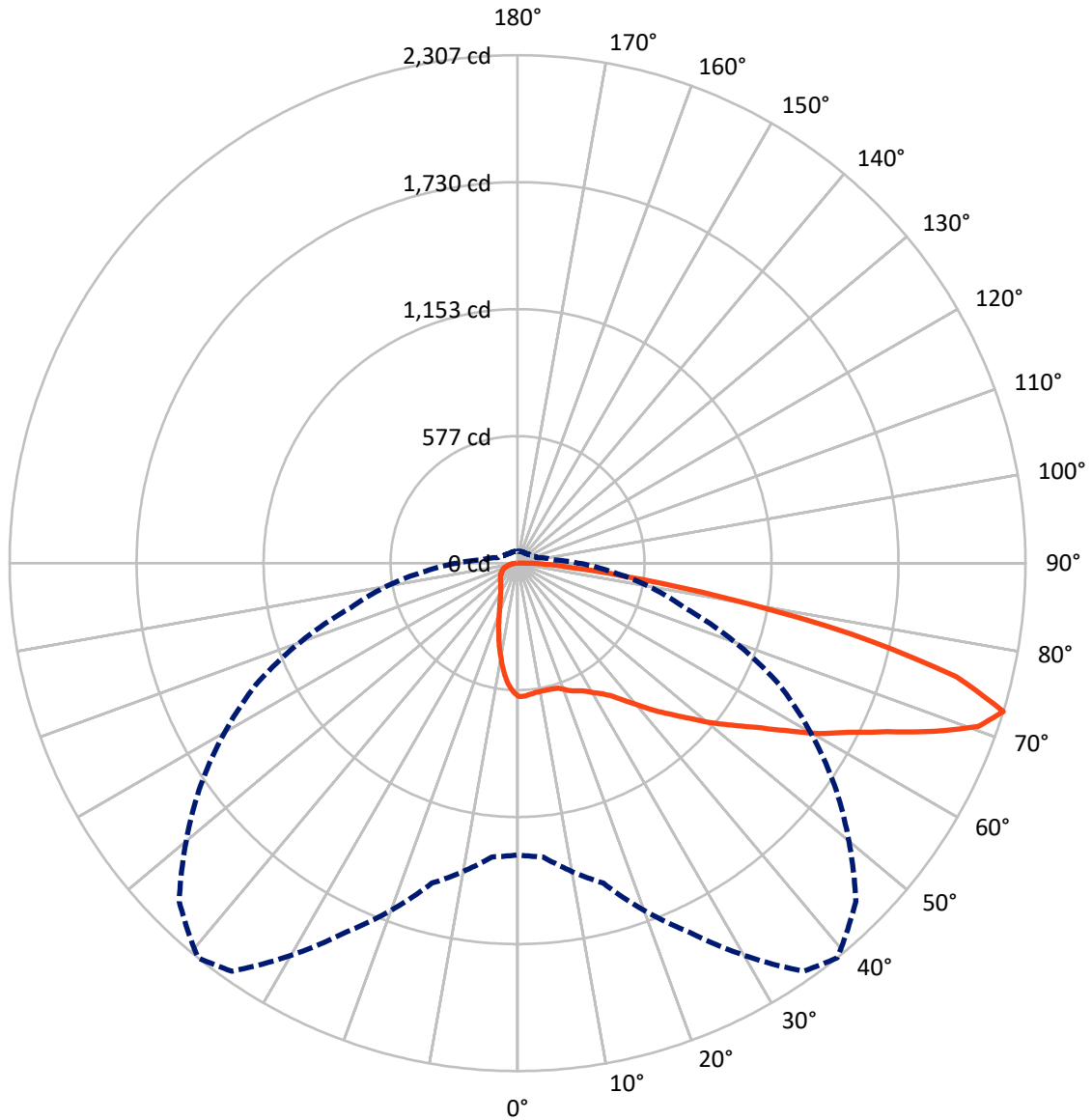
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 2.7 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 72.5-Deg Vertical

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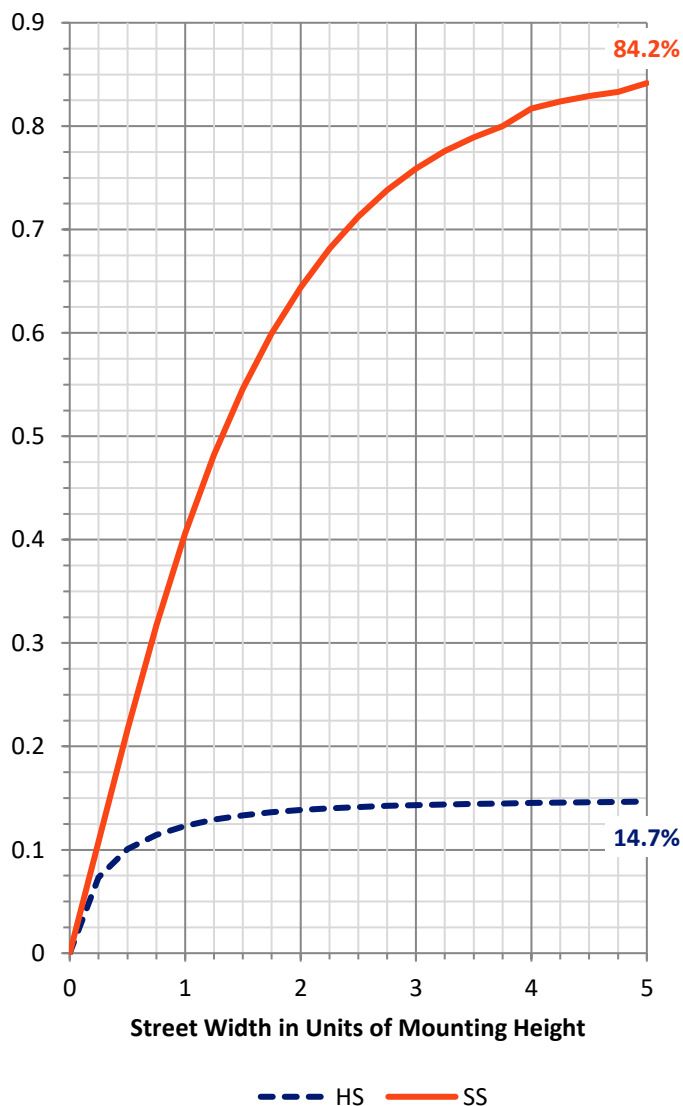
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 514.4    | 0.0    | 514.4  |
|                    | % Fixture | 14.9     | 0.0    | 14.9   |
| <b>Street Side</b> | Lumens    | 2947.3   | 0.0    | 2947.3 |
|                    | % Fixture | 85.1     | 0.0    | 85.1   |
| <b>Total</b>       | Lumens    | 3461.7   | 0.0    | 3461.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 53.5   | 1.5       |
| 10°-20°   | 136.7  | 3.9       |
| 20°-30°   | 208.2  | 6.0       |
| 30°-40°   | 304.6  | 8.8       |
| 40°-50°   | 466.3  | 13.5      |
| 50°-60°   | 683.9  | 19.8      |
| 60°-70°   | 872.2  | 25.2      |
| 70°-80°   | 630.1  | 18.2      |
| 80°-90°   | 106.3  | 3.1       |
| 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°    | 3461.7 | 100.0     |
| 0°-180°   | 3461.7 | 100.0     |



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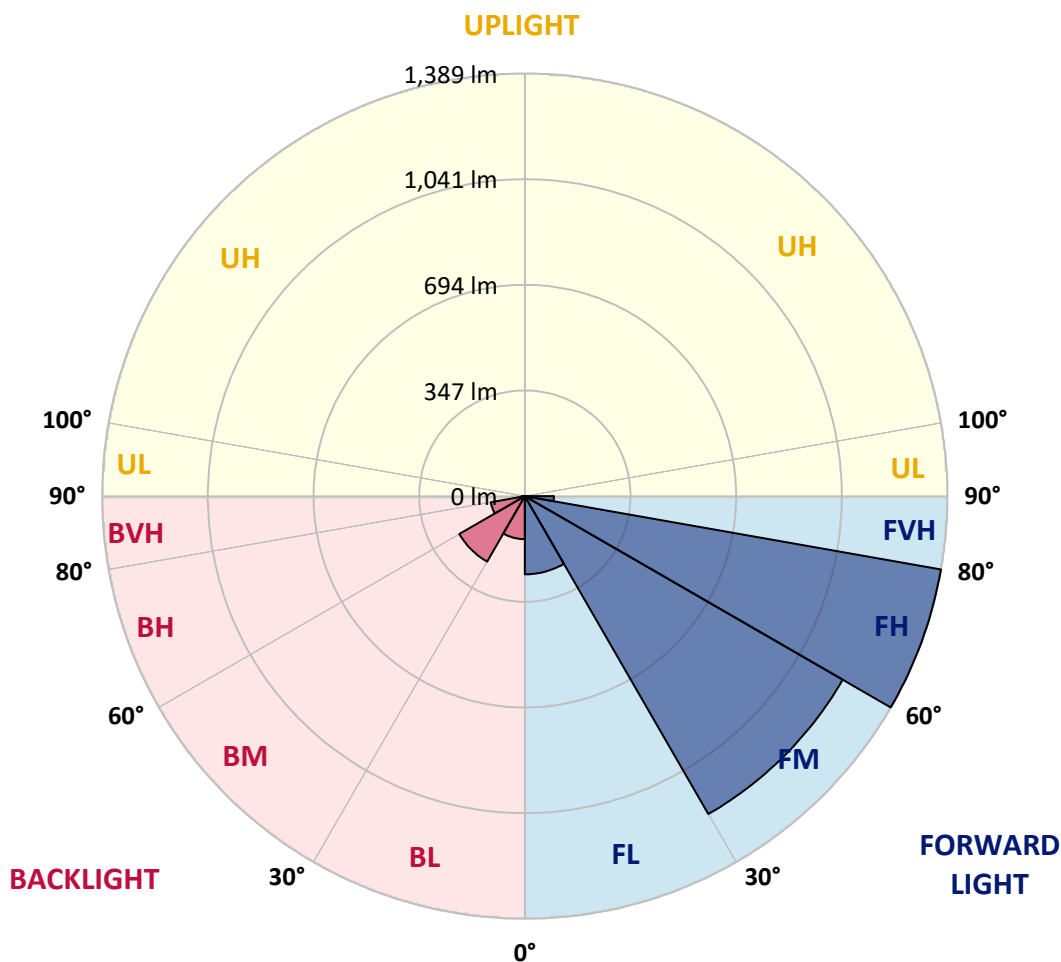
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 256.9  | 7.4       |                         |      |         |
| FM (30°-60°)   | 1206.2 | 34.8      |                         |      |         |
| FH (60°-80°)   | 1388.7 | 40.1      |                         |      | G1/1800 |
| FVH (80°-90°)  | 95.5   | 2.8       |                         |      | G1/100  |
| BL (0°-30°)    | 141.5  | 4.1       | B1/500                  |      |         |
| BM (30°-60°)   | 248.5  | 7.2       | B1/1000                 |      |         |
| BH (60°-80°)   | 113.7  | 3.3       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 10.8   | 0.3       |                         |      | 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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 39°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 606.0  | 606.0  | 606.0  | 606.0  | 606.0  | 606.0  | 606.0  | 606.0  | 606.0  | 606.0  | 606.0  |
| 2.5°  | 615.1  | 616.4  | 613.8  | 611.2  | 609.9  | 604.7  | 609.9  | 607.3  | 604.7  | 604.7  | 604.7  |
| 5°    | 607.3  | 608.6  | 608.6  | 606.0  | 607.3  | 598.2  | 596.9  | 598.2  | 594.3  | 591.7  | 590.4  |
| 7.5°  | 595.6  | 598.2  | 603.4  | 602.1  | 596.9  | 593.0  | 594.3  | 593.0  | 586.5  | 582.6  | 572.2  |
| 10°   | 586.5  | 589.1  | 591.7  | 594.3  | 593.0  | 591.7  | 590.4  | 585.2  | 583.9  | 574.8  | 564.3  |
| 12.5° | 577.4  | 577.4  | 578.7  | 589.1  | 590.4  | 590.4  | 582.6  | 582.6  | 578.7  | 577.4  | 561.7  |
| 15°   | 568.3  | 572.2  | 582.6  | 585.2  | 590.4  | 593.0  | 589.1  | 589.1  | 582.6  | 573.5  | 561.7  |
| 17.5° | 570.9  | 577.4  | 587.8  | 594.3  | 596.9  | 596.9  | 602.1  | 598.2  | 589.1  | 583.9  | 572.2  |
| 20°   | 583.9  | 585.2  | 598.2  | 609.9  | 612.5  | 612.5  | 607.3  | 603.4  | 596.9  | 587.8  | 572.2  |
| 22.5° | 591.7  | 600.8  | 616.4  | 622.9  | 630.7  | 630.7  | 624.2  | 615.1  | 606.0  | 596.9  | 580.0  |
| 25°   | 625.5  | 626.8  | 633.3  | 643.7  | 647.6  | 642.4  | 635.9  | 625.5  | 613.8  | 604.7  | 589.1  |
| 27.5° | 648.9  | 655.4  | 663.2  | 668.4  | 661.9  | 658.0  | 652.8  | 641.1  | 632.0  | 624.2  | 602.1  |
| 30°   | 691.8  | 684.0  | 689.2  | 691.8  | 680.1  | 682.7  | 668.4  | 658.0  | 647.6  | 647.6  | 622.9  |
| 32.5° | 717.8  | 724.3  | 719.1  | 717.8  | 708.7  | 707.4  | 698.3  | 686.6  | 680.1  | 687.9  | 654.1  |
| 35°   | 763.3  | 759.4  | 759.4  | 758.1  | 747.7  | 741.2  | 741.2  | 720.4  | 726.9  | 743.8  | 702.2  |
| 37.5° | 786.7  | 785.4  | 793.2  | 799.7  | 789.3  | 793.2  | 789.3  | 780.2  | 782.8  | 812.7  | 762.0  |
| 40°   | 810.1  | 819.2  | 834.8  | 837.4  | 843.9  | 849.1  | 846.5  | 845.2  | 855.6  | 903.7  | 842.6  |
| 42.5° | 832.2  | 840.0  | 863.4  | 884.2  | 899.8  | 916.7  | 918.0  | 918.0  | 951.9  | 1020.8 | 940.1  |
| 45°   | 860.8  | 867.3  | 899.8  | 941.4  | 967.5  | 979.2  | 989.6  | 1001.3 | 1046.8 | 1128.7 | 1044.2 |
| 47.5° | 899.8  | 905.0  | 944.1  | 996.1  | 1046.8 | 1053.3 | 1074.1 | 1087.1 | 1156.0 | 1239.2 | 1150.8 |
| 50°   | 955.8  | 951.9  | 983.1  | 1058.5 | 1107.9 | 1139.1 | 1169.0 | 1192.4 | 1260.0 | 1351.1 | 1234.0 |
| 52.5° | 1001.3 | 1001.3 | 1024.7 | 1124.8 | 1192.4 | 1222.3 | 1253.5 | 1286.0 | 1364.1 | 1462.9 | 1301.6 |
| 55°   | 1079.3 | 1071.5 | 1085.8 | 1189.8 | 1287.3 | 1315.9 | 1375.8 | 1403.1 | 1478.5 | 1546.1 | 1358.9 |
| 57.5° | 1132.6 | 1136.5 | 1153.4 | 1275.6 | 1399.2 | 1434.3 | 1494.1 | 1513.6 | 1579.9 | 1633.2 | 1400.5 |
| 60°   | 1202.8 | 1189.8 | 1226.2 | 1370.6 | 1522.7 | 1572.1 | 1621.5 | 1633.2 | 1682.6 | 1689.1 | 1420.0 |
| 62.5° | 1270.4 | 1267.8 | 1299.0 | 1465.5 | 1655.3 | 1690.4 | 1741.2 | 1754.2 | 1775.0 | 1733.4 | 1392.7 |
| 65°   | 1312.0 | 1329.0 | 1387.5 | 1569.5 | 1806.2 | 1845.2 | 1895.9 | 1869.9 | 1846.5 | 1694.3 | 1258.7 |
| 67.5° | 1369.3 | 1377.1 | 1466.8 | 1682.6 | 1980.4 | 2038.9 | 2083.2 | 1980.4 | 1806.2 | 1534.4 | 1059.8 |
| 70°   | 1382.3 | 1403.1 | 1520.1 | 1801.0 | 2159.9 | 2219.7 | 2222.3 | 1942.7 | 1659.2 | 1248.3 | 768.5  |
| 72.5° | 1325.1 | 1339.4 | 1504.5 | 1850.4 | 2262.6 | 2306.8 | 2172.9 | 1756.8 | 1314.6 | 786.7  | 418.7  |
| 75°   | 1114.4 | 1154.7 | 1309.4 | 1698.3 | 2074.0 | 2057.1 | 1841.3 | 1340.7 | 789.3  | 348.5  | 176.8  |
| 77.5° | 776.3  | 777.6  | 938.8  | 1235.3 | 1552.6 | 1548.7 | 1313.3 | 777.6  | 338.1  | 140.4  | 104.0  |
| 80°   | 344.6  | 369.3  | 466.8  | 665.8  | 942.7  | 942.7  | 765.9  | 386.2  | 169.0  | 91.0   | 71.5   |
| 82.5° | 202.9  | 210.7  | 249.7  | 310.8  | 459.0  | 483.7  | 366.7  | 257.5  | 115.7  | 57.2   | 44.2   |
| 85°   | 149.5  | 162.5  | 185.9  | 187.2  | 217.2  | 221.1  | 202.9  | 223.7  | 79.3   | 31.2   | 36.4   |
| 87.5° | 111.8  | 119.6  | 148.2  | 123.5  | 115.7  | 109.2  | 124.8  | 228.9  | 29.9   | 15.6   | 11.7   |
| 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°    | 606.0  | 606.0 | 606.0 | 606.0 | 606.0 | 606.0 | 606.0 | 606.0 | 606.0 | 606.0 | 606.0 |
| 2.5°  | 599.5  | 599.5 | 596.9 | 591.7 | 591.7 | 581.3 | 583.9 | 586.5 | 580.0 | 580.0 | 581.3 |
| 5°    | 590.4  | 585.2 | 578.7 | 570.9 | 565.6 | 551.3 | 548.7 | 539.6 | 538.3 | 535.7 | 531.8 |
| 7.5°  | 572.2  | 564.3 | 552.6 | 540.9 | 524.0 | 511.0 | 495.4 | 482.4 | 477.2 | 473.3 | 472.0 |
| 10°   | 555.2  | 553.9 | 534.4 | 511.0 | 485.0 | 460.3 | 436.9 | 420.0 | 409.6 | 403.1 | 401.8 |
| 12.5° | 555.2  | 544.8 | 517.5 | 485.0 | 447.3 | 410.9 | 381.0 | 357.6 | 343.3 | 332.9 | 329.0 |
| 15°   | 552.6  | 542.2 | 505.8 | 456.4 | 413.5 | 364.1 | 322.5 | 297.8 | 277.0 | 266.6 | 267.9 |
| 17.5° | 555.2  | 539.6 | 488.9 | 435.6 | 375.8 | 322.5 | 273.1 | 243.2 | 222.4 | 214.6 | 213.3 |
| 20°   | 556.5  | 537.0 | 475.9 | 407.0 | 336.8 | 277.0 | 230.2 | 201.6 | 185.9 | 180.7 | 180.7 |
| 22.5° | 553.9  | 529.2 | 456.4 | 373.2 | 303.0 | 239.3 | 200.3 | 175.5 | 165.1 | 158.6 | 161.2 |
| 25°   | 565.6  | 527.9 | 438.2 | 344.6 | 264.0 | 208.1 | 178.1 | 159.9 | 153.4 | 149.5 | 150.8 |
| 27.5° | 568.3  | 527.9 | 423.9 | 312.1 | 230.2 | 184.6 | 161.2 | 149.5 | 144.3 | 141.7 | 140.4 |
| 30°   | 578.7  | 530.5 | 407.0 | 279.6 | 202.9 | 166.4 | 148.2 | 141.7 | 137.8 | 136.5 | 136.5 |
| 32.5° | 607.3  | 538.3 | 388.8 | 252.3 | 179.4 | 150.8 | 139.1 | 133.9 | 131.3 | 130.0 | 131.3 |
| 35°   | 641.1  | 559.1 | 369.3 | 223.7 | 162.5 | 140.4 | 131.3 | 127.4 | 126.1 | 126.1 | 126.1 |
| 37.5° | 693.1  | 590.4 | 352.4 | 200.3 | 148.2 | 130.0 | 123.5 | 122.2 | 120.9 | 122.2 | 122.2 |
| 40°   | 752.9  | 624.2 | 336.8 | 182.0 | 137.8 | 123.5 | 117.0 | 117.0 | 115.7 | 117.0 | 118.3 |
| 42.5° | 821.8  | 665.8 | 321.2 | 163.8 | 128.7 | 118.3 | 113.1 | 111.8 | 110.5 | 113.1 | 114.4 |
| 45°   | 916.7  | 723.0 | 310.8 | 153.4 | 122.2 | 113.1 | 107.9 | 107.9 | 106.6 | 106.6 | 109.2 |
| 47.5° | 996.1  | 777.6 | 310.8 | 143.0 | 118.3 | 109.2 | 104.0 | 104.0 | 101.4 | 102.7 | 102.7 |
| 50°   | 1062.4 | 824.4 | 317.3 | 140.4 | 113.1 | 105.3 | 101.4 | 98.8  | 97.5  | 97.5  | 97.5  |
| 52.5° | 1106.6 | 853.0 | 322.5 | 137.8 | 110.5 | 100.1 | 97.5  | 96.2  | 93.6  | 92.3  | 93.6  |
| 55°   | 1150.8 | 872.5 | 323.8 | 137.8 | 106.6 | 94.9  | 92.3  | 92.3  | 89.7  | 88.4  | 88.4  |
| 57.5° | 1167.7 | 864.7 | 305.6 | 135.2 | 104.0 | 91.0  | 88.4  | 87.1  | 85.8  | 84.5  | 84.5  |
| 60°   | 1159.9 | 836.1 | 265.3 | 128.7 | 101.4 | 88.4  | 83.2  | 83.2  | 83.2  | 80.6  | 81.9  |
| 62.5° | 1106.6 | 738.6 | 213.3 | 118.3 | 97.5  | 83.2  | 78.0  | 80.6  | 80.6  | 79.3  | 79.3  |
| 65°   | 966.2  | 609.9 | 172.9 | 109.2 | 92.3  | 79.3  | 74.1  | 78.0  | 79.3  | 78.0  | 76.7  |
| 67.5° | 772.4  | 469.4 | 143.0 | 98.8  | 85.8  | 72.8  | 68.9  | 72.8  | 74.1  | 72.8  | 72.8  |
| 70°   | 530.5  | 303.0 | 115.7 | 88.4  | 76.7  | 66.3  | 62.4  | 65.0  | 65.0  | 66.3  | 66.3  |
| 72.5° | 274.4  | 163.8 | 94.9  | 75.4  | 66.3  | 59.8  | 55.9  | 55.9  | 54.6  | 54.6  | 54.6  |
| 75°   | 136.5  | 111.8 | 79.3  | 63.7  | 55.9  | 50.7  | 48.1  | 45.5  | 45.5  | 45.5  | 45.5  |
| 77.5° | 94.9   | 85.8  | 65.0  | 50.7  | 45.5  | 41.6  | 41.6  | 37.7  | 37.7  | 37.7  | 37.7  |
| 80°   | 71.5   | 67.6  | 49.4  | 39.0  | 35.1  | 32.5  | 32.5  | 31.2  | 31.2  | 29.9  | 29.9  |
| 82.5° | 50.7   | 54.6  | 37.7  | 28.6  | 26.0  | 24.7  | 24.7  | 23.4  | 23.4  | 20.8  | 20.8  |
| 85°   | 40.3   | 45.5  | 28.6  | 20.8  | 19.5  | 16.9  | 16.9  | 15.6  | 15.6  | 14.3  | 13.0  |
| 87.5° | 11.7   | 24.7  | 11.7  | 7.8   | 7.8   | 7.8   | 7.8   | 6.5   | 6.5   | 5.2   | 5.2   |
| 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)