

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: P671435

Luminaire Tested: **CCP-SA-1B-830-U-SL3**

Issue Date: 04/16/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P671435  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCP-SA-1B-830-U-SL3  
Description: INVUE CLEAR CURVE POLE MOUNT LIGHT SQUARE LUMINAIRE @450mA w/ SL3 distribution lens  
Light Source: (16) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

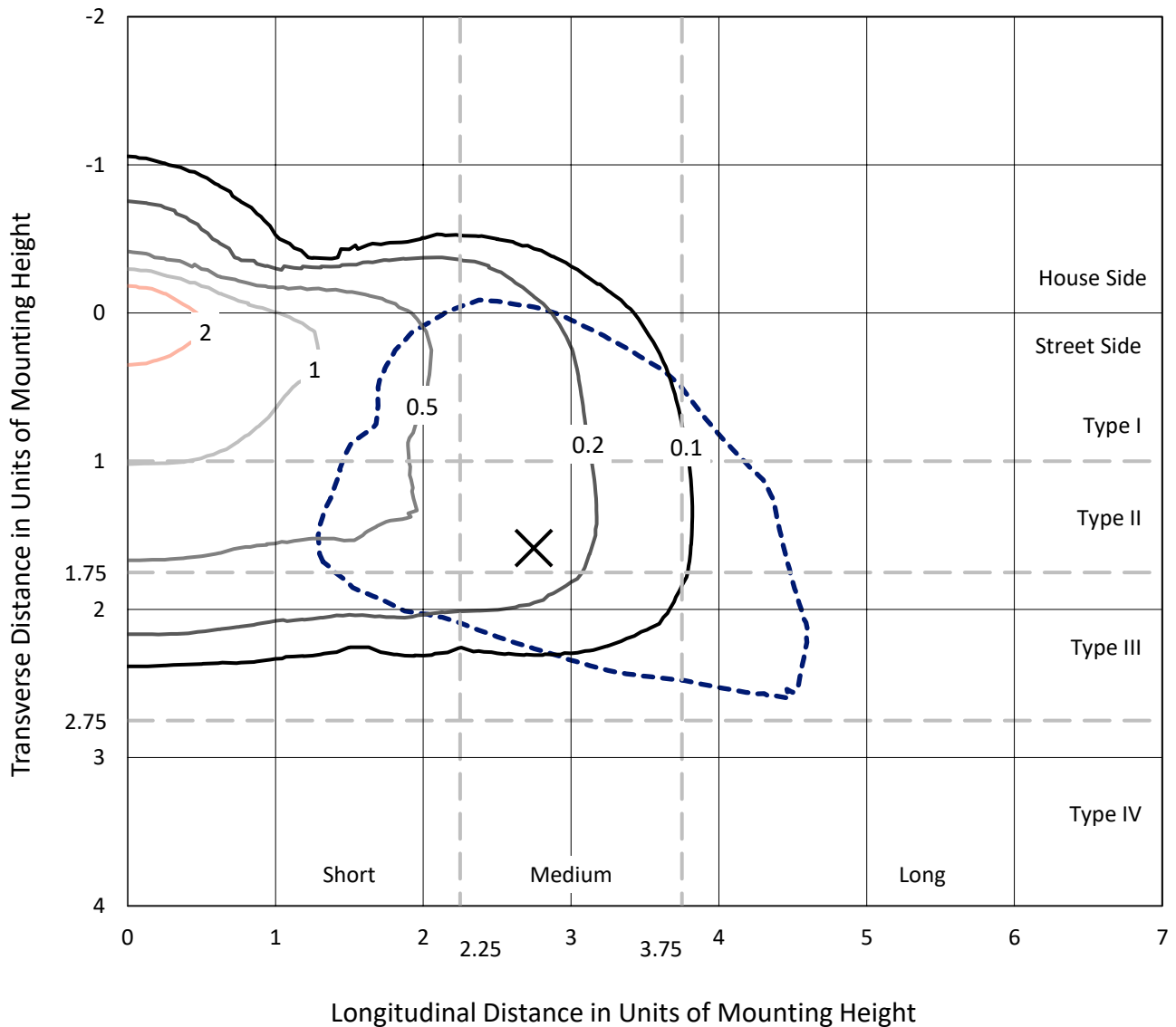
Lumens per Lamp: N/A  
Luminaire Lumens: 2713.3 lumens  
Efficiency: N/A  
Efficacy: 113.1 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B1 - U0 - G1

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

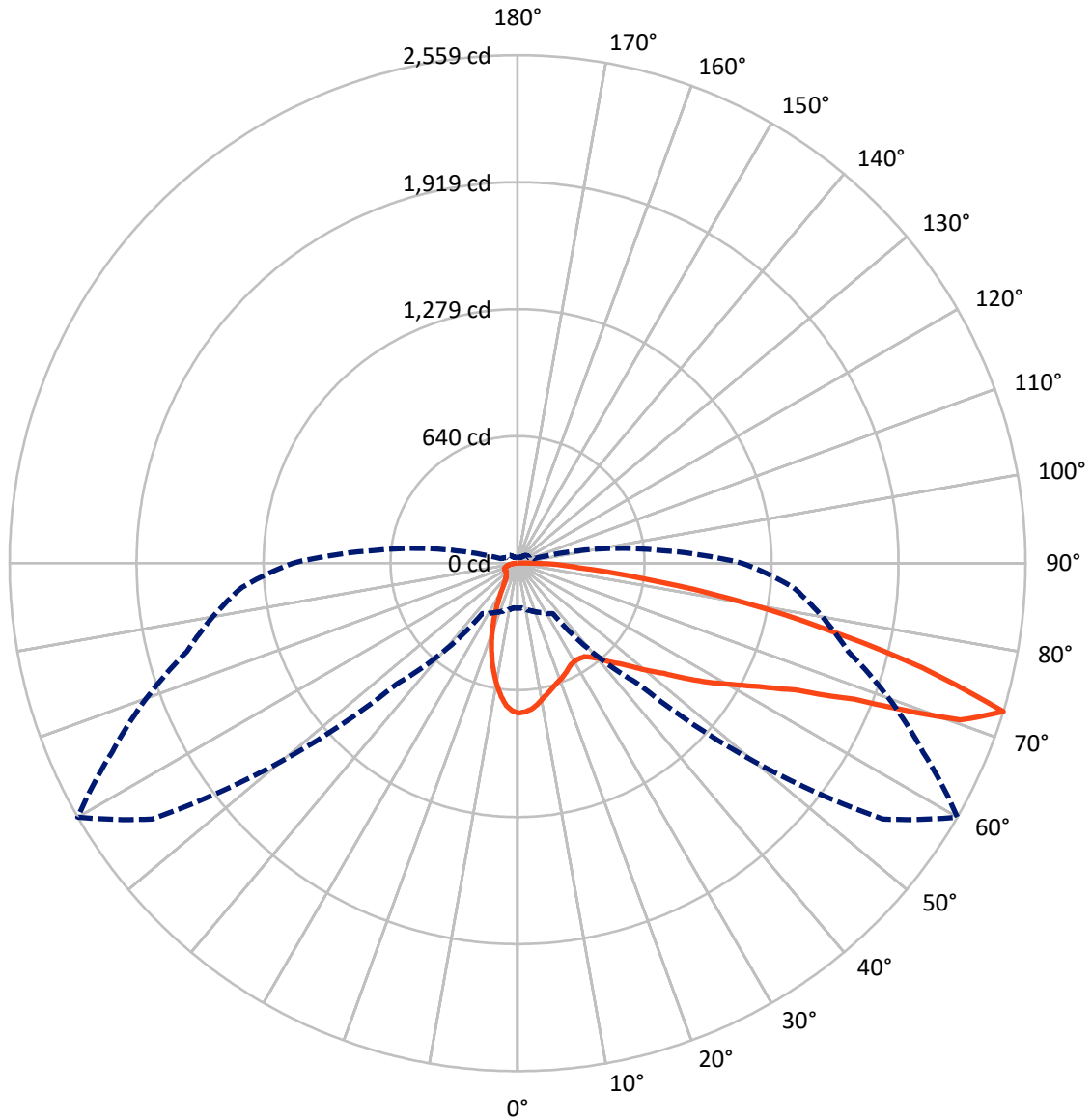
× Max cd  
 - - - 1/2 Max cd



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

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### Luminous Intensity Polar Plot



— Vertical Plane Through 60-Deg Lateral      - - - Horizontal Cone Through 72.5-Deg Vertical

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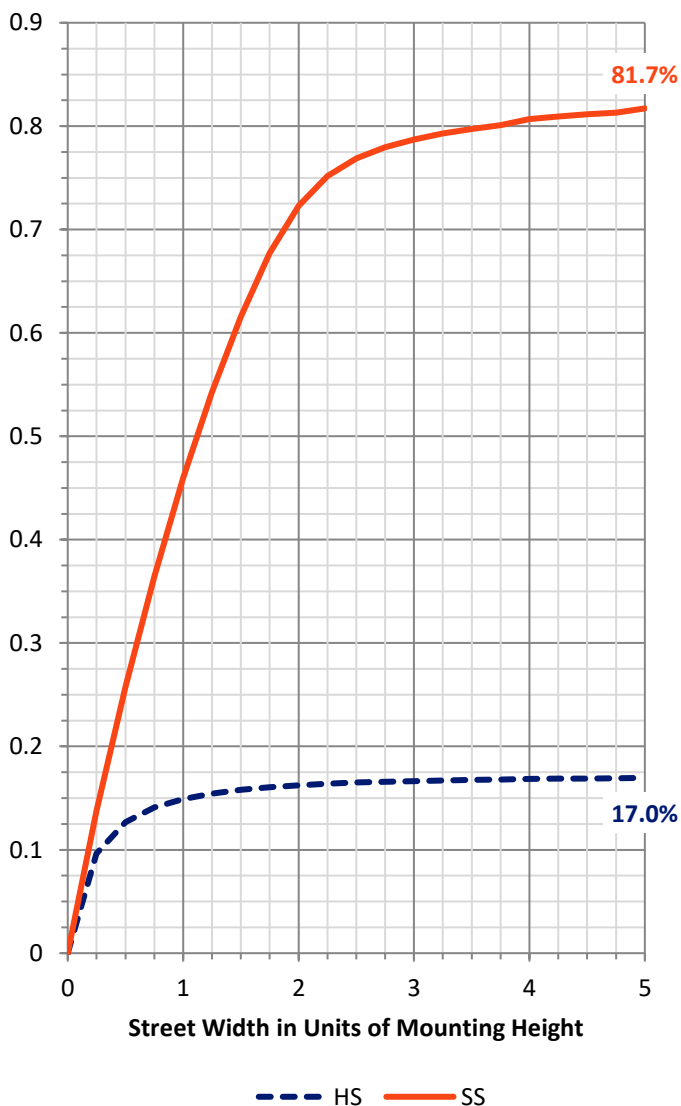
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 466.1    | 0.0    | 466.1  |
|                    | % Fixture | 17.2     | 0.0    | 17.2   |
| <b>Street Side</b> | Lumens    | 2247.2   | 0.0    | 2247.2 |
|                    | % Fixture | 82.8     | 0.0    | 82.8   |
| <b>Total</b>       | Lumens    | 2713.3   | 0.0    | 2713.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 65.5   | 2.4       |
| 10°-20°   | 148.5  | 5.5       |
| 20°-30°   | 190.1  | 7.0       |
| 30°-40°   | 243.1  | 9.0       |
| 40°-50°   | 333.5  | 12.3      |
| 50°-60°   | 482.3  | 17.8      |
| 60°-70°   | 661.6  | 24.4      |
| 70°-80°   | 496.5  | 18.3      |
| 80°-90°   | 92.3   | 3.4       |
| 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°    | 2713.3 | 100.0     |
| 0°-180°   | 2713.3 | 100.0     |



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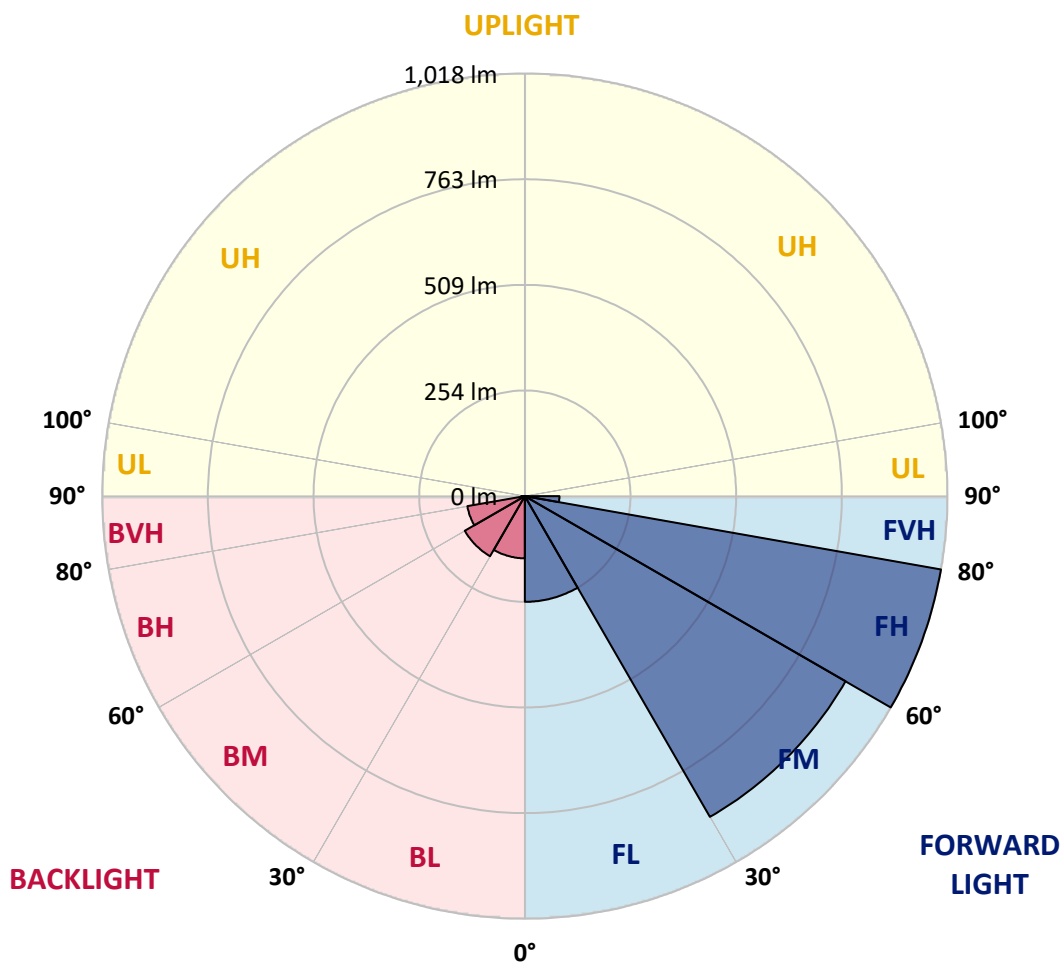
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 254.4  | 9.4       |                         |      |         |
| FM (30°-60°)   | 891.9  | 32.9      |                         |      |         |
| FH (60°-80°)   | 1017.7 | 37.5      |                         |      | G1/1800 |
| FVH (80°-90°)  | 83.3   | 3.1       |                         |      | G1/100  |
| BL (0°-30°)    | 149.6  | 5.5       | B1/500                  |      |         |
| BM (30°-60°)   | 167.0  | 6.2       | B0/220                  |      |         |
| BH (60°-80°)   | 140.5  | 5.2       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 9.0    | 0.3       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 15°   | 25°   | 35°    | 45°    | 55°    | 60°    | 65°    | 75°    | 85°    |
|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 755.5 | 755.5 | 755.5 | 755.5 | 755.5  | 755.5  | 755.5  | 755.5  | 755.5  | 755.5  | 755.5  |
| 2.5°  | 739.4 | 746.4 | 748.5 | 748.5 | 754.5  | 747.4  | 757.5  | 749.5  | 751.5  | 754.5  | 752.5  |
| 5°    | 704.0 | 716.1 | 709.1 | 722.2 | 717.1  | 726.2  | 738.4  | 738.4  | 735.3  | 741.4  | 736.3  |
| 7.5°  | 669.7 | 665.6 | 677.8 | 677.8 | 685.8  | 698.0  | 708.1  | 718.2  | 719.2  | 721.2  | 720.2  |
| 10°   | 623.2 | 628.3 | 634.3 | 642.4 | 652.5  | 664.6  | 685.8  | 693.9  | 695.9  | 708.1  | 705.0  |
| 12.5° | 584.8 | 591.9 | 595.9 | 612.1 | 621.2  | 638.4  | 662.6  | 673.7  | 674.7  | 691.9  | 691.9  |
| 15°   | 556.5 | 560.6 | 569.7 | 575.7 | 595.9  | 620.2  | 643.4  | 653.5  | 664.6  | 682.8  | 677.8  |
| 17.5° | 537.4 | 542.4 | 546.4 | 554.5 | 573.7  | 593.9  | 630.3  | 636.3  | 649.5  | 675.7  | 669.7  |
| 20°   | 526.2 | 527.3 | 533.3 | 538.4 | 555.5  | 574.7  | 607.0  | 623.2  | 640.4  | 663.6  | 657.6  |
| 22.5° | 528.3 | 524.2 | 523.2 | 530.3 | 533.3  | 551.5  | 590.9  | 608.1  | 632.3  | 659.6  | 649.5  |
| 25°   | 532.3 | 533.3 | 531.3 | 525.2 | 526.2  | 542.4  | 568.7  | 590.9  | 618.2  | 658.6  | 638.4  |
| 27.5° | 542.4 | 547.5 | 539.4 | 533.3 | 527.3  | 533.3  | 560.6  | 576.7  | 607.0  | 663.6  | 637.4  |
| 30°   | 552.5 | 557.6 | 555.5 | 546.4 | 534.3  | 532.3  | 551.5  | 571.7  | 601.0  | 667.7  | 637.4  |
| 32.5° | 567.7 | 574.7 | 567.7 | 570.7 | 556.5  | 547.5  | 554.5  | 572.7  | 607.0  | 681.8  | 638.4  |
| 35°   | 584.8 | 590.9 | 592.9 | 585.8 | 582.8  | 565.6  | 569.7  | 578.8  | 613.1  | 698.0  | 648.5  |
| 37.5° | 604.0 | 611.1 | 617.1 | 618.2 | 608.1  | 598.0  | 595.9  | 601.0  | 628.3  | 726.2  | 659.6  |
| 40°   | 617.1 | 621.2 | 633.3 | 643.4 | 646.4  | 632.3  | 631.3  | 631.3  | 655.5  | 751.5  | 679.8  |
| 42.5° | 639.4 | 637.4 | 654.5 | 672.7 | 677.8  | 669.7  | 671.7  | 679.8  | 693.9  | 787.9  | 712.1  |
| 45°   | 650.5 | 648.5 | 668.7 | 699.0 | 722.2  | 718.2  | 720.2  | 723.2  | 736.3  | 845.4  | 766.6  |
| 47.5° | 665.6 | 667.7 | 696.9 | 731.3 | 755.5  | 769.7  | 780.8  | 779.8  | 789.9  | 904.0  | 827.2  |
| 50°   | 680.8 | 684.8 | 720.2 | 756.5 | 799.0  | 823.2  | 839.4  | 850.5  | 860.6  | 965.6  | 896.9  |
| 52.5° | 710.1 | 714.1 | 753.5 | 792.9 | 847.4  | 882.8  | 923.2  | 922.2  | 923.2  | 1027.2 | 966.6  |
| 55°   | 752.5 | 753.5 | 776.7 | 822.2 | 895.9  | 960.6  | 1016.1 | 1022.2 | 1005.0 | 1104.0 | 1046.4 |
| 57.5° | 801.0 | 805.0 | 825.2 | 859.6 | 934.3  | 1035.3 | 1120.2 | 1132.3 | 1085.8 | 1166.6 | 1119.2 |
| 60°   | 846.4 | 849.5 | 880.8 | 920.2 | 1001.0 | 1129.3 | 1225.2 | 1239.3 | 1188.8 | 1243.4 | 1194.9 |
| 62.5° | 794.9 | 810.1 | 865.6 | 955.5 | 1118.1 | 1271.7 | 1358.5 | 1367.6 | 1288.8 | 1321.2 | 1275.7 |
| 65°   | 636.3 | 646.4 | 726.2 | 871.7 | 1126.2 | 1530.2 | 1564.6 | 1540.3 | 1426.2 | 1421.2 | 1397.9 |
| 67.5° | 354.5 | 362.6 | 417.2 | 569.7 | 948.5  | 1627.2 | 2008.0 | 1830.2 | 1639.3 | 1571.7 | 1563.6 |
| 70°   | 279.8 | 281.8 | 288.9 | 320.2 | 526.2  | 1434.3 | 2357.5 | 2365.6 | 1987.8 | 1778.7 | 1598.9 |
| 72.5° | 227.3 | 226.3 | 247.5 | 274.7 | 311.1  | 860.6  | 2247.4 | 2558.5 | 2254.5 | 1724.2 | 1392.9 |
| 75°   | 173.7 | 176.8 | 204.0 | 243.4 | 284.8  | 405.0  | 1676.7 | 2105.0 | 2112.0 | 1607.0 | 1174.7 |
| 77.5° | 132.3 | 133.3 | 163.6 | 215.1 | 278.8  | 285.8  | 1093.9 | 1568.6 | 1575.7 | 1244.4 | 647.5  |
| 80°   | 99.0  | 99.0  | 124.2 | 181.8 | 271.7  | 263.6  | 673.7  | 1087.8 | 984.8  | 437.4  | 141.4  |
| 82.5° | 56.6  | 60.6  | 82.8  | 138.4 | 246.5  | 253.5  | 379.8  | 623.2  | 416.1  | 119.2  | 65.7   |
| 85°   | 30.3  | 31.3  | 50.5  | 92.9  | 203.0  | 242.4  | 289.9  | 310.1  | 165.7  | 63.6   | 30.3   |
| 87.5° | 11.1  | 11.1  | 23.2  | 47.5  | 128.3  | 179.8  | 230.3  | 198.0  | 94.9   | 29.3   | 15.2   |
| 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°    | 755.5  | 755.5  | 755.5 | 755.5 | 755.5 | 755.5 | 755.5 | 755.5 | 755.5 | 755.5 | 755.5 |
| 2.5°  | 754.5  | 750.5  | 747.4 | 750.5 | 739.4 | 734.3 | 740.4 | 737.3 | 731.3 | 728.3 | 726.2 |
| 5°    | 739.4  | 734.3  | 729.3 | 726.2 | 714.1 | 702.0 | 695.9 | 683.8 | 673.7 | 676.7 | 670.7 |
| 7.5°  | 723.2  | 718.2  | 703.0 | 688.9 | 664.6 | 640.4 | 629.3 | 612.1 | 606.0 | 601.0 | 598.0 |
| 10°   | 703.0  | 693.9  | 670.7 | 642.4 | 607.0 | 579.8 | 551.5 | 531.3 | 510.1 | 501.0 | 504.0 |
| 12.5° | 677.8  | 672.7  | 636.3 | 592.9 | 543.4 | 498.0 | 464.6 | 432.3 | 404.0 | 388.9 | 384.8 |
| 15°   | 666.6  | 651.5  | 599.0 | 541.4 | 478.8 | 422.2 | 372.7 | 316.2 | 282.8 | 266.7 | 266.7 |
| 17.5° | 654.5  | 626.2  | 563.6 | 484.8 | 413.1 | 340.4 | 270.7 | 219.2 | 192.9 | 183.8 | 183.8 |
| 20°   | 635.3  | 604.0  | 522.2 | 431.3 | 344.4 | 256.6 | 193.9 | 165.7 | 157.6 | 151.5 | 152.5 |
| 22.5° | 621.2  | 582.8  | 483.8 | 378.8 | 272.7 | 190.9 | 152.5 | 143.4 | 140.4 | 138.4 | 139.4 |
| 25°   | 605.0  | 557.6  | 443.4 | 322.2 | 214.1 | 150.5 | 132.3 | 128.3 | 130.3 | 131.3 | 131.3 |
| 27.5° | 591.9  | 536.3  | 402.0 | 261.6 | 161.6 | 127.3 | 119.2 | 118.2 | 122.2 | 124.2 | 125.2 |
| 30°   | 582.8  | 517.2  | 361.6 | 206.1 | 129.3 | 113.1 | 109.1 | 109.1 | 114.1 | 116.2 | 117.2 |
| 32.5° | 573.7  | 501.0  | 318.2 | 157.6 | 110.1 | 101.0 | 100.0 | 101.0 | 104.0 | 104.0 | 105.0 |
| 35°   | 576.7  | 485.8  | 276.8 | 127.3 | 99.0  | 92.9  | 92.9  | 92.9  | 93.9  | 94.9  | 94.9  |
| 37.5° | 582.8  | 481.8  | 232.3 | 107.1 | 90.9  | 86.9  | 86.9  | 85.9  | 86.9  | 85.9  | 86.9  |
| 40°   | 588.9  | 475.7  | 191.9 | 94.9  | 85.9  | 82.8  | 81.8  | 79.8  | 78.8  | 78.8  | 79.8  |
| 42.5° | 614.1  | 483.8  | 157.6 | 86.9  | 81.8  | 79.8  | 76.8  | 74.7  | 73.7  | 73.7  | 73.7  |
| 45°   | 646.4  | 499.0  | 130.3 | 82.8  | 78.8  | 73.7  | 71.7  | 70.7  | 68.7  | 69.7  | 70.7  |
| 47.5° | 694.9  | 522.2  | 114.1 | 79.8  | 75.8  | 69.7  | 67.7  | 65.7  | 65.7  | 67.7  | 67.7  |
| 50°   | 758.6  | 560.6  | 104.0 | 76.8  | 72.7  | 66.7  | 63.6  | 62.6  | 62.6  | 65.7  | 65.7  |
| 52.5° | 827.2  | 605.0  | 100.0 | 75.8  | 69.7  | 63.6  | 60.6  | 59.6  | 59.6  | 63.6  | 63.6  |
| 55°   | 895.9  | 659.6  | 103.0 | 75.8  | 67.7  | 60.6  | 57.6  | 55.6  | 56.6  | 59.6  | 59.6  |
| 57.5° | 971.7  | 718.2  | 118.2 | 75.8  | 65.7  | 59.6  | 55.6  | 52.5  | 53.5  | 54.5  | 54.5  |
| 60°   | 1054.5 | 794.9  | 144.4 | 75.8  | 64.6  | 57.6  | 52.5  | 48.5  | 48.5  | 49.5  | 49.5  |
| 62.5° | 1138.3 | 870.7  | 181.8 | 76.8  | 65.7  | 56.6  | 48.5  | 44.4  | 43.4  | 44.4  | 44.4  |
| 65°   | 1248.4 | 991.9  | 219.2 | 76.8  | 68.7  | 54.5  | 45.5  | 40.4  | 39.4  | 39.4  | 40.4  |
| 67.5° | 1403.0 | 1078.7 | 169.7 | 73.7  | 70.7  | 54.5  | 42.4  | 37.4  | 35.4  | 35.4  | 35.4  |
| 70°   | 1321.2 | 910.1  | 108.1 | 68.7  | 67.7  | 56.6  | 40.4  | 34.3  | 32.3  | 31.3  | 31.3  |
| 72.5° | 1131.3 | 728.3  | 86.9  | 64.6  | 62.6  | 55.6  | 38.4  | 32.3  | 29.3  | 28.3  | 28.3  |
| 75°   | 907.0  | 574.7  | 75.8  | 58.6  | 54.5  | 46.5  | 35.4  | 29.3  | 27.3  | 25.3  | 25.3  |
| 77.5° | 444.4  | 240.4  | 57.6  | 51.5  | 46.5  | 35.4  | 31.3  | 27.3  | 24.2  | 22.2  | 22.2  |
| 80°   | 111.1  | 83.8   | 42.4  | 40.4  | 34.3  | 27.3  | 25.3  | 23.2  | 21.2  | 19.2  | 19.2  |
| 82.5° | 59.6   | 49.5   | 30.3  | 27.3  | 23.2  | 19.2  | 19.2  | 18.2  | 17.2  | 15.2  | 14.1  |
| 85°   | 30.3   | 29.3   | 20.2  | 18.2  | 15.2  | 12.1  | 13.1  | 13.1  | 12.1  | 9.1   | 9.1   |
| 87.5° | 16.2   | 16.2   | 10.1  | 8.1   | 7.1   | 6.1   | 6.1   | 6.1   | 5.1   | 4.0   | 4.0   |
| 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)