

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: P673439

Luminaire Tested: **CCP-SA-1A-827-U-T4FT-HSS**

Issue Date: 04/16/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P673439  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 04/16/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: CCP-SA-1A-827-U-T4FT-HSS  
Description: INVUE CLEAR CURVE POLE MOUNT Light Square Luminaire @350mA w/ T4FT distribution lens and House Side Shield  
Light Source: (16) 2700K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1444.1 lumens  
Efficiency: N/A  
Efficacy: 80.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B0 - U0 - G1

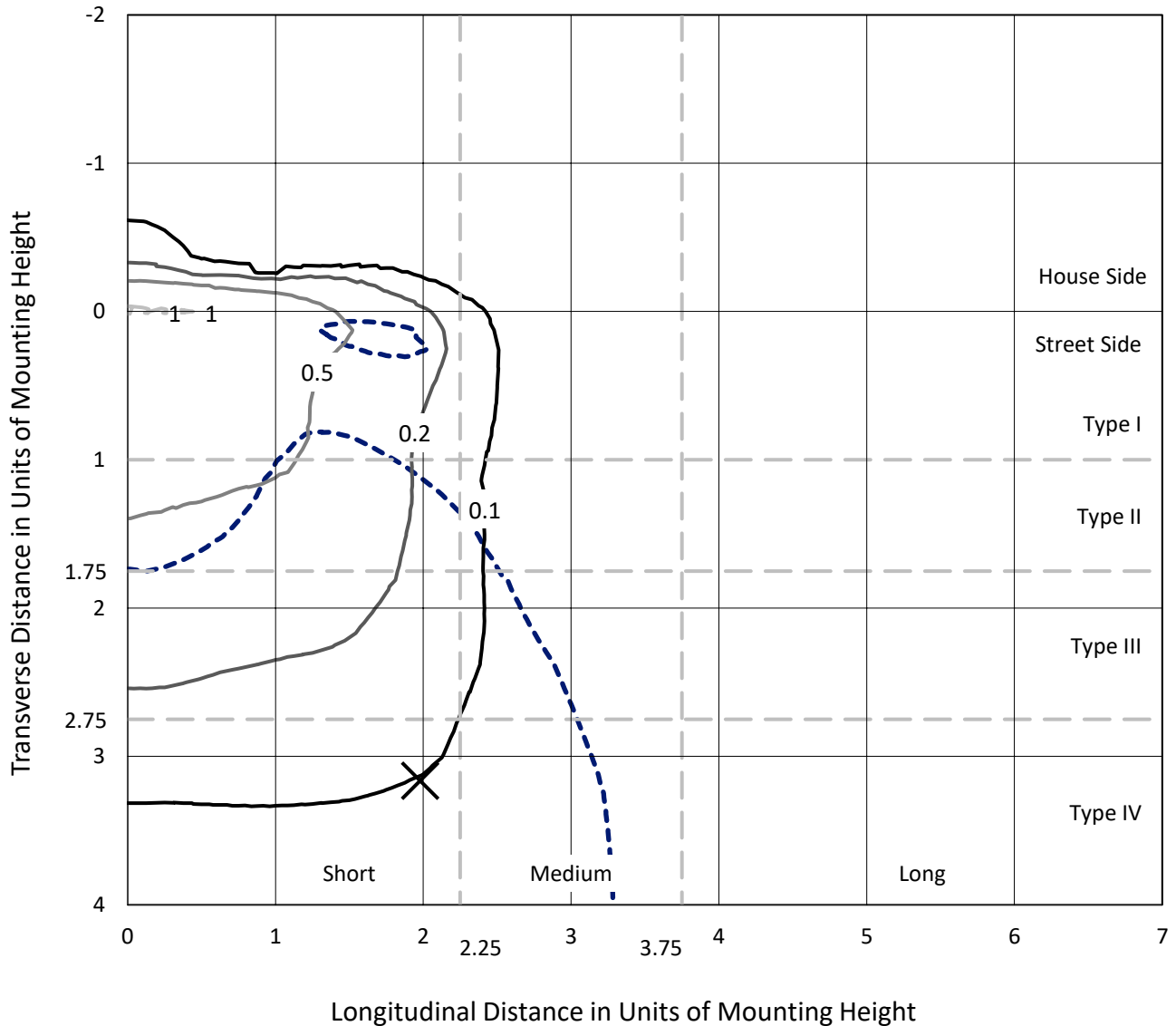
Input Watts (W): 18  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Iso-Footcandle Lines of Horizontal Illumination

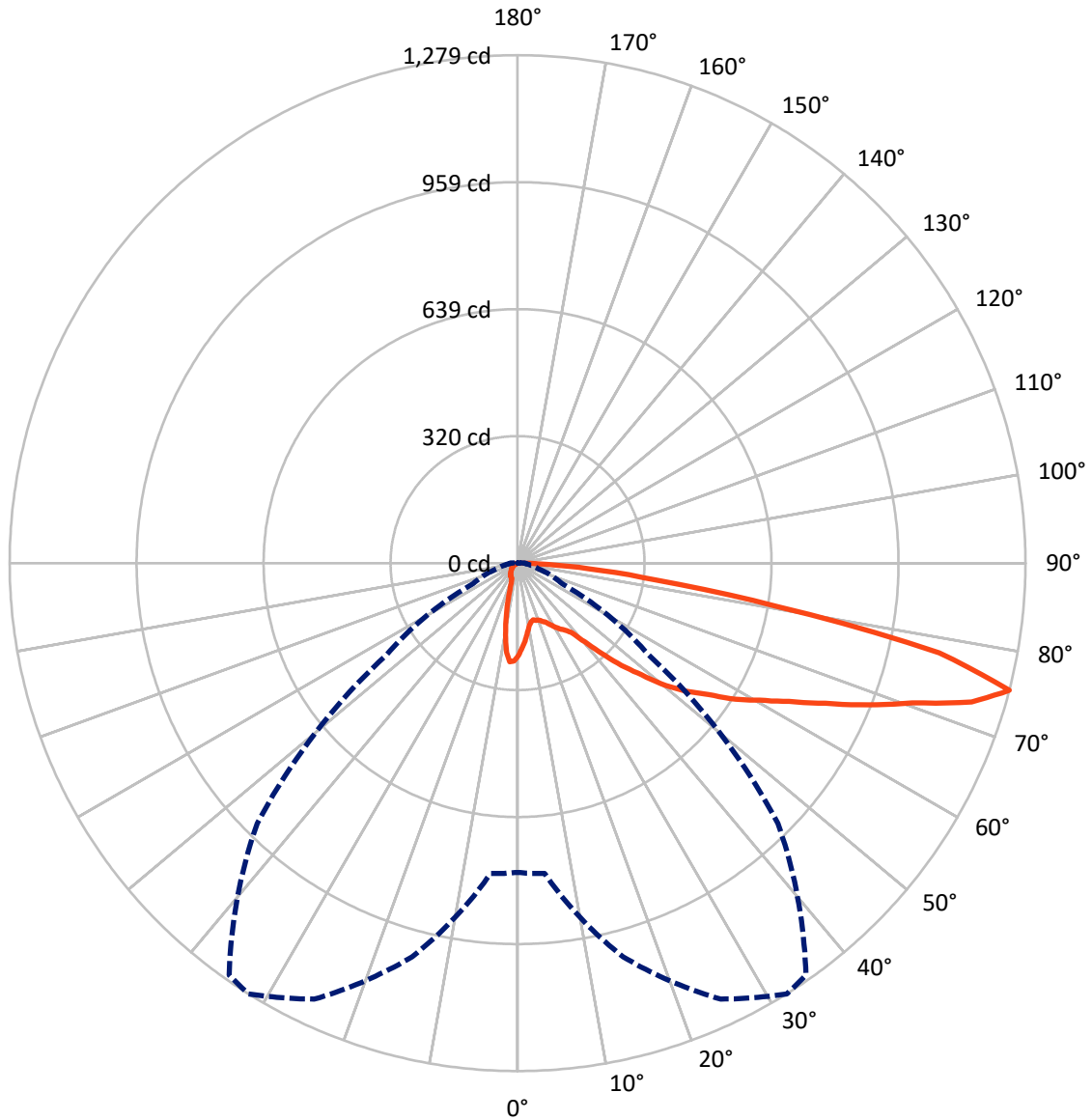
× Max cd  
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral      - - - Horizontal Cone Through 75-Deg Vertical

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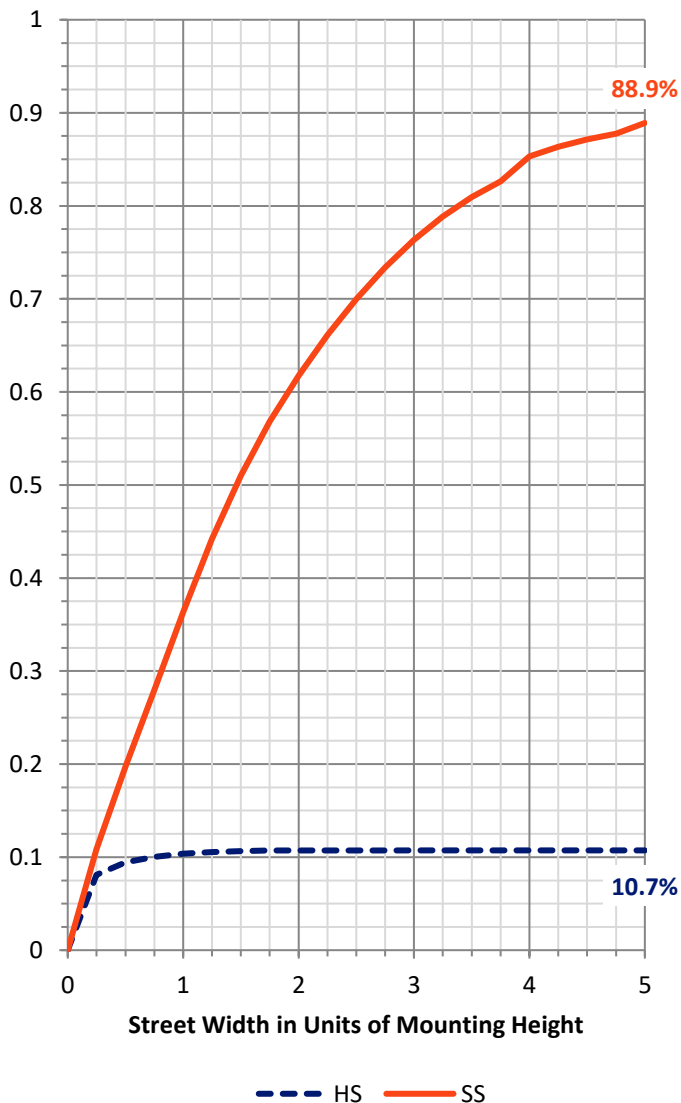
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 156.0    | 0.0    | 156.0  |
|                    | % Fixture | 10.8     | 0.0    | 10.8   |
| <b>Street Side</b> | Lumens    | 1288.1   | 0.0    | 1288.1 |
|                    | % Fixture | 89.2     | 0.0    | 89.2   |
| <b>Total</b>       | Lumens    | 1444.1   | 0.0    | 1444.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 20.5   | 1.4       |
| 10°-20°   | 46.5   | 3.2       |
| 20°-30°   | 69.6   | 4.8       |
| 30°-40°   | 106.9  | 7.4       |
| 40°-50°   | 187.0  | 12.9      |
| 50°-60°   | 292.3  | 20.2      |
| 60°-70°   | 377.9  | 26.2      |
| 70°-80°   | 307.8  | 21.3      |
| 80°-90°   | 35.6   | 2.5       |
| 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°    | 1444.1 | 100.0     |
| 0°-180°   | 1444.1 | 100.0     |



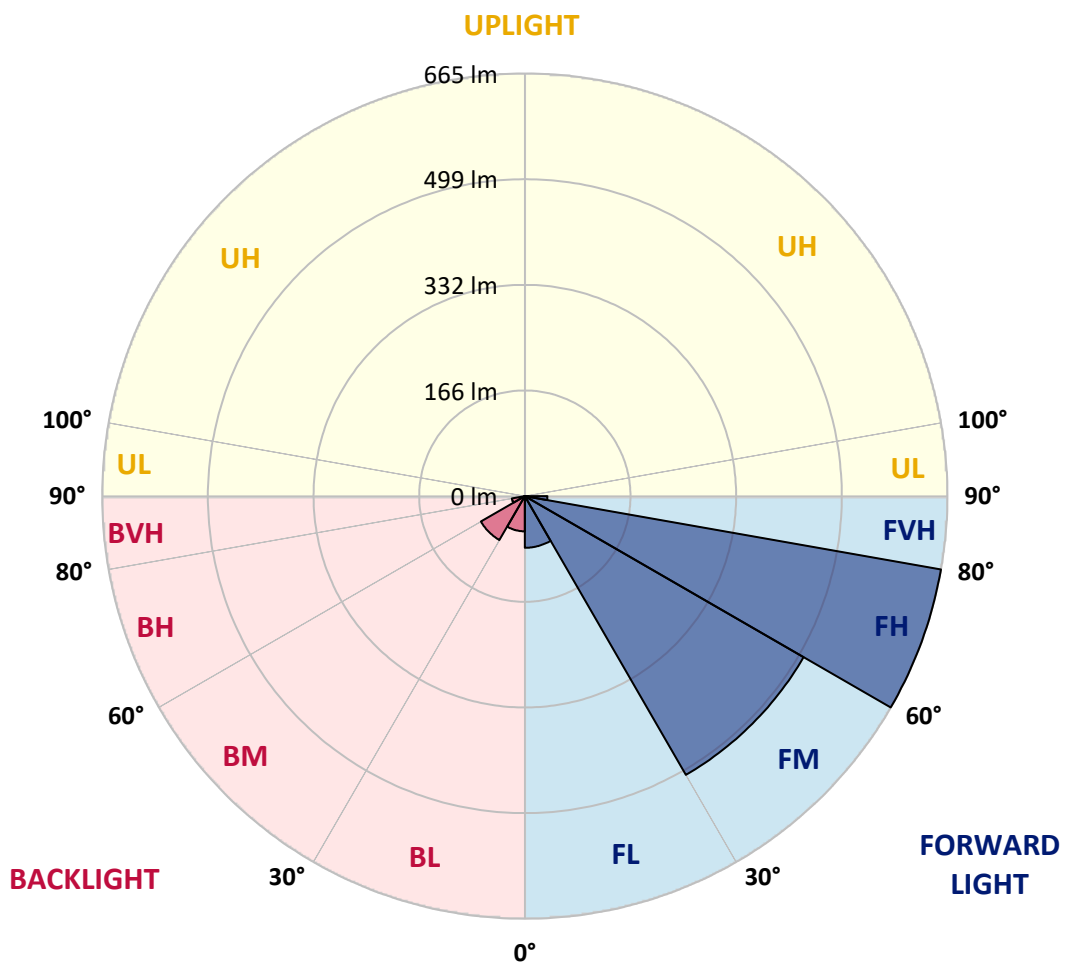
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 81.2   | 5.6       |                         |      |         |
| FM (30°-60°)   | 506.3  | 35.1      |                         |      |         |
| FH (60°-80°)   | 664.9  | 46.0      |                         |      | G1/1800 |
| FVH (80°-90°)  | 35.6   | 2.5       |                         |      | G1/100  |
| BL (0°-30°)    | 55.4   | 3.8       | B0/110                  |      |         |
| BM (30°-60°)   | 79.8   | 5.5       | B0/220                  |      |         |
| BH (60°-80°)   | 20.8   | 1.4       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 0.0    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G1**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 15°    | 25°    | 32°    | 35°    | 45°    | 55°   | 65°   | 75°   | 85°   |
|-------|-------|-------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 0°    | 233.2 | 233.2 | 233.2  | 233.2  | 233.2  | 233.2  | 233.2  | 233.2 | 233.2 | 233.2 | 233.2 |
| 2.5°  | 209.1 | 212.1 | 211.7  | 213.6  | 213.9  | 215.0  | 217.6  | 217.6 | 225.0 | 230.2 | 233.5 |
| 5°    | 190.2 | 188.4 | 189.1  | 191.3  | 196.9  | 196.5  | 202.8  | 206.2 | 215.0 | 222.4 | 230.2 |
| 7.5°  | 166.9 | 166.6 | 168.0  | 173.2  | 177.3  | 180.6  | 187.3  | 195.8 | 207.6 | 218.7 | 232.4 |
| 10°   | 152.1 | 151.4 | 154.3  | 155.8  | 160.6  | 162.8  | 173.2  | 186.5 | 200.6 | 216.5 | 232.4 |
| 12.5° | 148.8 | 146.2 | 147.7  | 147.3  | 151.7  | 152.9  | 162.8  | 179.1 | 196.2 | 215.8 | 235.4 |
| 15°   | 150.6 | 148.8 | 147.3  | 147.3  | 148.4  | 149.2  | 159.9  | 174.3 | 193.6 | 216.9 | 242.1 |
| 17.5° | 156.6 | 155.4 | 151.0  | 146.6  | 151.4  | 151.4  | 158.0  | 173.2 | 193.9 | 220.2 | 250.2 |
| 20°   | 163.6 | 162.5 | 154.7  | 149.5  | 152.9  | 156.6  | 163.6  | 175.8 | 195.0 | 222.8 | 262.8 |
| 22.5° | 171.4 | 171.4 | 160.6  | 154.7  | 159.1  | 159.5  | 172.1  | 183.9 | 199.5 | 229.5 | 270.9 |
| 25°   | 181.0 | 180.2 | 169.9  | 163.2  | 164.7  | 168.8  | 180.2  | 192.8 | 207.6 | 238.7 | 286.1 |
| 27.5° | 193.6 | 192.5 | 180.2  | 173.6  | 175.4  | 179.9  | 192.8  | 205.4 | 215.0 | 242.4 | 299.1 |
| 30°   | 203.9 | 202.8 | 192.8  | 182.8  | 186.9  | 191.0  | 206.2  | 217.3 | 224.3 | 249.5 | 313.9 |
| 32.5° | 206.2 | 204.3 | 197.6  | 193.2  | 197.6  | 205.4  | 217.3  | 228.7 | 239.5 | 267.2 | 342.0 |
| 35°   | 231.7 | 225.0 | 207.6  | 200.6  | 207.3  | 209.9  | 229.5  | 249.8 | 260.2 | 281.3 | 373.4 |
| 37.5° | 280.5 | 274.3 | 251.3  | 231.7  | 222.4  | 225.4  | 250.9  | 276.1 | 286.1 | 307.6 | 407.9 |
| 40°   | 340.5 | 330.1 | 305.7  | 279.4  | 260.6  | 256.9  | 273.5  | 310.5 | 320.1 | 340.5 | 453.0 |
| 42.5° | 409.0 | 399.0 | 361.2  | 330.1  | 310.9  | 306.1  | 308.7  | 350.5 | 358.6 | 370.9 | 482.6 |
| 45°   | 458.2 | 453.0 | 410.5  | 382.7  | 367.5  | 362.3  | 356.0  | 394.2 | 404.5 | 408.6 | 525.6 |
| 47.5° | 486.7 | 483.0 | 459.3  | 440.4  | 420.1  | 414.5  | 418.6  | 454.9 | 447.8 | 451.2 | 566.6 |
| 50°   | 524.8 | 515.2 | 483.0  | 488.9  | 484.8  | 483.4  | 490.4  | 506.3 | 496.0 | 486.3 | 611.4 |
| 52.5° | 555.5 | 538.5 | 515.9  | 530.4  | 536.7  | 542.2  | 567.0  | 578.9 | 532.6 | 517.8 | 640.3 |
| 55°   | 574.4 | 558.1 | 564.1  | 577.4  | 584.0  | 609.6  | 638.8  | 629.9 | 556.7 | 543.0 | 678.8 |
| 57.5° | 591.4 | 592.6 | 608.5  | 612.5  | 646.6  | 651.0  | 707.3  | 678.4 | 573.7 | 565.9 | 694.0 |
| 60°   | 632.5 | 628.5 | 641.4  | 667.7  | 700.3  | 725.1  | 778.7  | 711.0 | 582.2 | 577.7 | 689.9 |
| 62.5° | 706.5 | 681.4 | 685.8  | 719.1  | 766.9  | 793.9  | 819.8  | 725.8 | 580.0 | 579.6 | 677.7 |
| 65°   | 800.6 | 771.7 | 758.4  | 789.5  | 851.3  | 889.4  | 866.1  | 742.4 | 565.2 | 575.5 | 632.2 |
| 67.5° | 878.6 | 879.0 | 854.2  | 871.6  | 952.3  | 960.4  | 909.7  | 739.1 | 540.4 | 543.3 | 521.1 |
| 70°   | 968.6 | 980.8 | 959.0  | 1013.4 | 1053.7 | 1058.9 | 959.7  | 711.7 | 487.1 | 409.7 | 299.4 |
| 72.5° | 991.5 | 997.8 | 1065.9 | 1149.6 | 1195.1 | 1196.6 | 1008.9 | 620.3 | 320.5 | 181.0 | 92.9  |
| 75°   | 778.7 | 784.6 | 1026.0 | 1211.0 | 1278.7 | 1265.8 | 926.8  | 402.7 | 124.7 | 52.9  | 22.2  |
| 77.5° | 434.5 | 436.4 | 637.0  | 979.0  | 1084.8 | 1032.6 | 649.2  | 156.9 | 50.3  | 30.3  | 10.4  |
| 80°   | 118.8 | 139.5 | 236.1  | 482.6  | 662.5  | 650.3  | 309.0  | 51.1  | 32.6  | 23.7  | 4.8   |
| 82.5° | 28.5  | 30.7  | 75.9   | 213.6  | 350.1  | 365.3  | 92.2   | 25.9  | 22.6  | 19.6  | 2.6   |
| 85°   | 10.4  | 11.5  | 23.3   | 104.0  | 179.9  | 165.1  | 27.8   | 13.0  | 16.7  | 15.2  | 1.1   |
| 87.5° | 3.7   | 3.7   | 7.4    | 34.1   | 52.6   | 39.6   | 9.3    | 4.4   | 8.5   | 9.3   | 0.4   |
| 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°    | 233.2 | 233.2 | 233.2 | 233.2 | 233.2 | 233.2 | 233.2 | 233.2 | 233.2 | 233.2 | 233.2 |
| 2.5°  | 233.9 | 233.9 | 239.1 | 243.5 | 245.0 | 246.9 | 245.0 | 249.1 | 248.7 | 246.9 | 247.6 |
| 5°    | 234.3 | 240.9 | 245.4 | 248.3 | 249.8 | 249.5 | 250.2 | 245.8 | 243.2 | 241.3 | 239.5 |
| 7.5°  | 236.1 | 242.4 | 250.6 | 249.8 | 245.8 | 237.2 | 230.6 | 218.7 | 207.3 | 206.9 | 205.0 |
| 10°   | 242.4 | 248.0 | 252.8 | 249.8 | 235.0 | 209.1 | 188.0 | 172.1 | 157.7 | 151.0 | 151.7 |
| 12.5° | 246.9 | 257.2 | 255.0 | 239.8 | 209.1 | 175.1 | 144.0 | 120.7 | 107.7 | 95.5  | 95.5  |
| 15°   | 256.1 | 259.8 | 259.1 | 225.4 | 177.3 | 136.6 | 98.8  | 75.1  | 61.4  | 55.9  | 55.1  |
| 17.5° | 265.0 | 269.1 | 256.5 | 203.6 | 145.8 | 91.8  | 60.0  | 46.6  | 44.8  | 44.0  | 44.4  |
| 20°   | 276.1 | 276.5 | 254.3 | 181.7 | 109.6 | 58.1  | 42.9  | 41.8  | 42.2  | 41.8  | 41.8  |
| 22.5° | 287.9 | 290.5 | 246.5 | 151.0 | 72.9  | 42.2  | 40.0  | 40.3  | 40.3  | 40.3  | 41.5  |
| 25°   | 303.5 | 299.4 | 234.3 | 121.8 | 47.7  | 38.9  | 38.9  | 39.2  | 39.2  | 39.2  | 39.6  |
| 27.5° | 313.9 | 308.3 | 218.7 | 87.7  | 37.4  | 36.6  | 37.4  | 37.4  | 38.1  | 38.1  | 38.1  |
| 30°   | 335.3 | 320.9 | 199.1 | 56.6  | 33.7  | 34.8  | 35.5  | 36.3  | 36.6  | 37.4  | 37.8  |
| 32.5° | 352.0 | 332.0 | 174.7 | 37.8  | 30.7  | 31.5  | 33.3  | 34.8  | 36.3  | 35.9  | 35.9  |
| 35°   | 382.3 | 350.1 | 152.1 | 30.0  | 28.1  | 28.1  | 30.0  | 32.6  | 34.8  | 35.5  | 35.5  |
| 37.5° | 417.1 | 364.9 | 120.7 | 27.4  | 25.9  | 25.9  | 27.0  | 30.0  | 32.9  | 34.4  | 33.7  |
| 40°   | 446.0 | 382.0 | 89.2  | 25.5  | 24.1  | 24.1  | 24.8  | 27.0  | 30.3  | 32.9  | 33.3  |
| 42.5° | 466.3 | 394.5 | 60.3  | 23.7  | 22.6  | 22.2  | 23.3  | 24.4  | 27.0  | 30.7  | 31.5  |
| 45°   | 484.8 | 401.2 | 37.4  | 21.8  | 21.1  | 21.1  | 21.1  | 22.2  | 24.1  | 27.4  | 28.1  |
| 47.5° | 517.8 | 408.6 | 27.0  | 20.4  | 19.2  | 19.6  | 20.0  | 20.4  | 21.8  | 22.6  | 22.9  |
| 50°   | 545.5 | 414.2 | 22.2  | 18.9  | 18.1  | 18.5  | 18.5  | 18.5  | 19.2  | 18.1  | 18.1  |
| 52.5° | 566.6 | 408.6 | 18.9  | 17.4  | 16.7  | 17.0  | 16.7  | 16.7  | 15.9  | 14.4  | 14.4  |
| 55°   | 582.2 | 398.6 | 15.2  | 15.9  | 15.9  | 15.9  | 15.2  | 14.1  | 12.6  | 11.5  | 11.5  |
| 57.5° | 586.3 | 381.6 | 11.8  | 13.3  | 14.4  | 14.4  | 13.0  | 11.5  | 9.6   | 8.5   | 8.1   |
| 60°   | 580.0 | 344.6 | 8.9   | 9.6   | 11.1  | 11.5  | 10.4  | 8.5   | 6.7   | 5.6   | 5.6   |
| 62.5° | 557.4 | 315.3 | 7.0   | 6.3   | 8.1   | 8.5   | 7.4   | 5.6   | 3.7   | 2.6   | 2.2   |
| 65°   | 514.5 | 270.2 | 5.2   | 4.4   | 5.6   | 5.9   | 4.8   | 2.6   | 1.1   | 0.4   | 0.0   |
| 67.5° | 412.7 | 203.6 | 3.3   | 3.0   | 3.7   | 3.7   | 2.2   | 0.7   | 0.0   | 0.0   | 0.0   |
| 70°   | 228.4 | 114.4 | 2.2   | 1.5   | 1.9   | 1.1   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 65.9  | 32.6  | 1.1   | 0.7   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 17.8  | 7.8   | 0.7   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 7.8   | 3.0   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 3.3   | 1.1   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 1.9   | 0.4   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 0.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 0.4   | 0.0   | 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)