

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: P401417

Luminaire Tested: **ENC-SA1D-722-U-SL4-HSS**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P401417  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENC-SA1D-722-U-SL4-HSS  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2200K, 800mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL LIGHT  
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3406 lumens  
Efficiency: N/A  
Efficacy: 79.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B0 - U0 - G1

Input Watts (W): 43.1  
Input Voltage (V): NR  
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

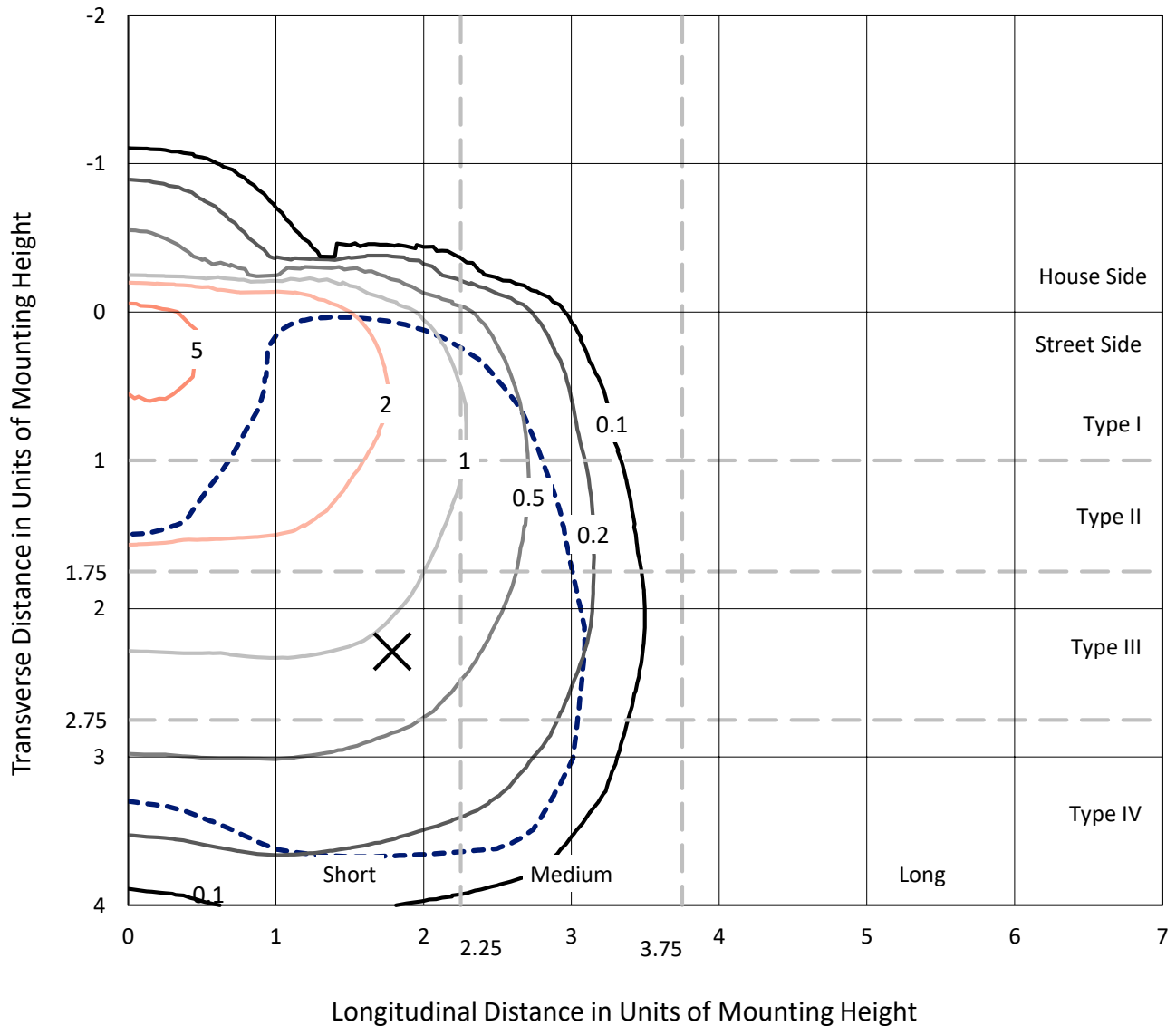


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

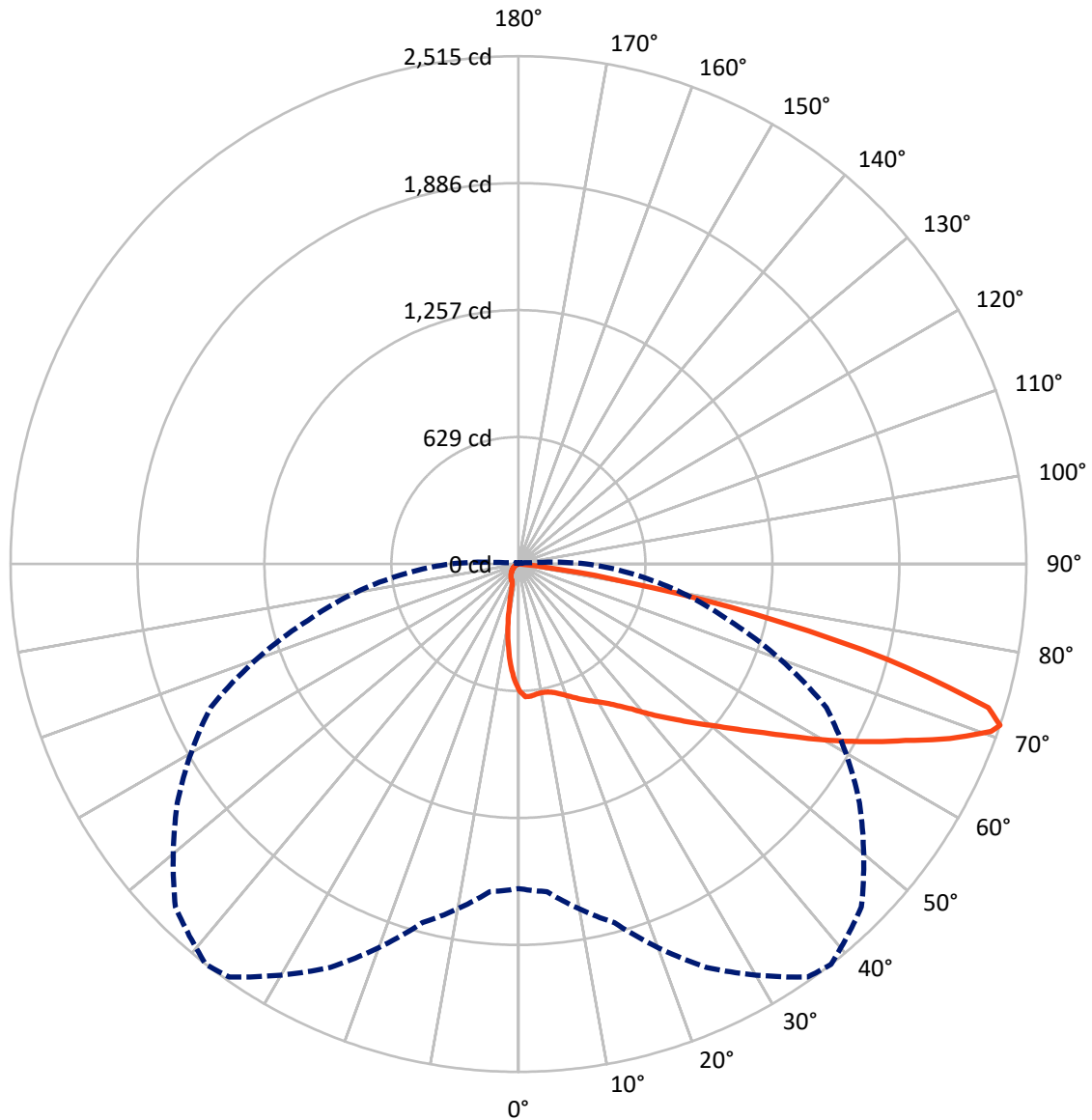


Based on 10 foot mounting height. Maximum calculated value = 6.5 fc  
 Type IV - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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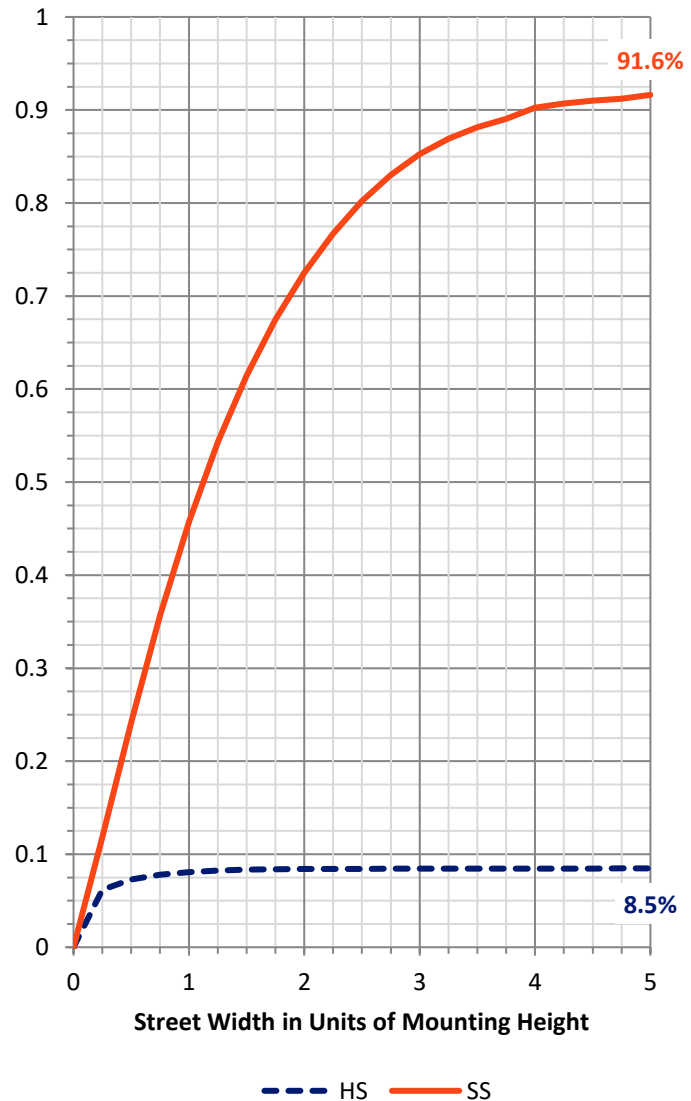
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 290.9    | 0.0    | 290.9  |
|                    | % Fixture | 8.5      | 0.0    | 8.5    |
| <b>Street Side</b> | Lumens    | 3115.1   | 0.0    | 3115.1 |
|                    | % Fixture | 91.5     | 0.0    | 91.5   |
| <b>Total</b>       | Lumens    | 3406.0   | 0.0    | 3406.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 53.0   | 1.6       |
| 10°-20°   | 128.4  | 3.8       |
| 20°-30°   | 205.9  | 6.0       |
| 30°-40°   | 313.2  | 9.2       |
| 40°-50°   | 488.2  | 14.3      |
| 50°-60°   | 713.9  | 21.0      |
| 60°-70°   | 915.6  | 26.9      |
| 70°-80°   | 559.7  | 16.4      |
| 80°-90°   | 28.1   | 0.8       |
| 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°    | 3406.0 | 100.0     |
| 0°-180°   | 3406.0 | 100.0     |



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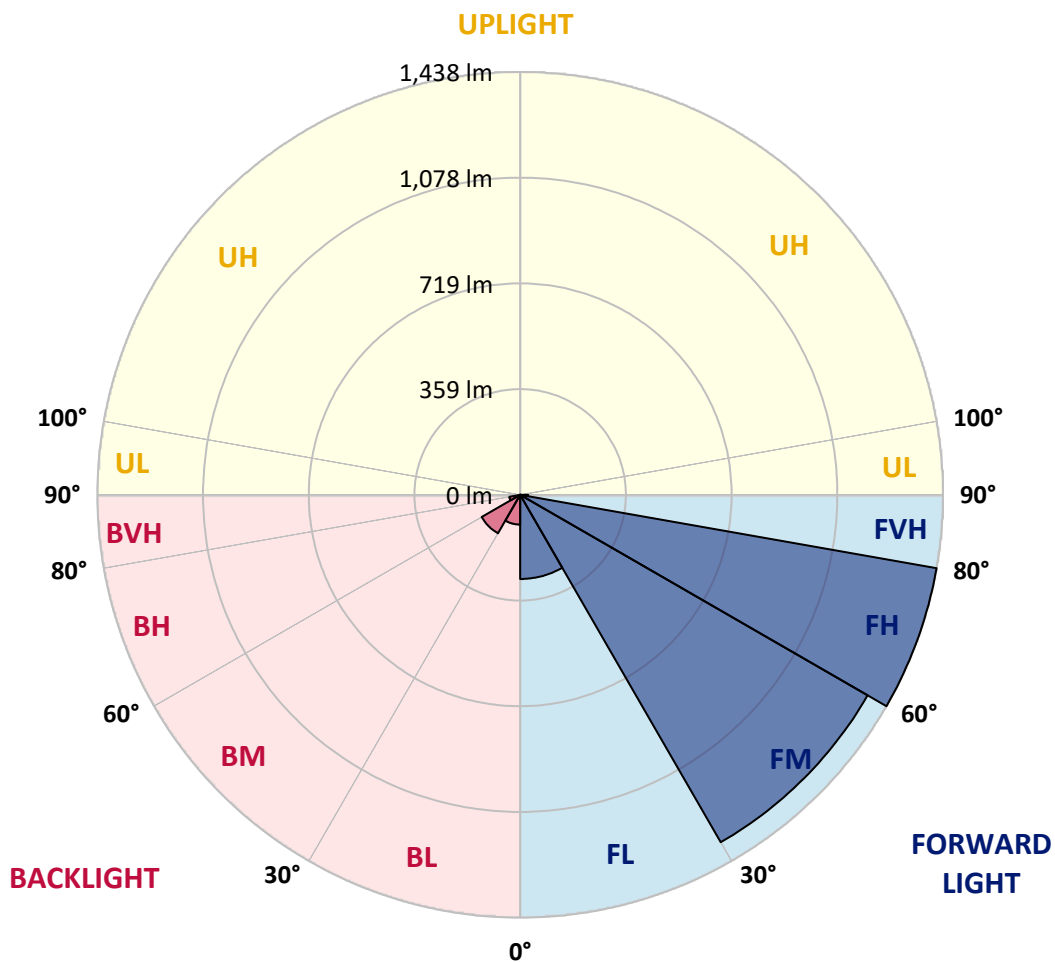
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 286.2  | 8.4       |                         |      |         |
| FM   | (30°-60°)   | 1364.1 | 40.1      |                         |      |         |
| FH   | (60°-80°)   | 1437.9 | 42.2      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 26.9   | 0.8       |                         |      | G1/100  |
| BL   | (0°-30°)    | 101.2  | 3.0       | B0/110                  |      |         |
| BM   | (30°-60°)   | 151.1  | 4.4       | B0/220                  |      |         |
| BH   | (60°-80°)   | 37.4   | 1.1       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 1.2    | 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°    | 35°    | 38°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 627.9  | 627.9  | 627.9  | 627.9  | 627.9  | 627.9  | 627.9  | 627.9  | 627.9  | 627.9  | 627.9  |
| 2.5°  | 665.1  | 663.3  | 665.1  | 663.3  | 659.8  | 658.0  | 655.6  | 649.1  | 643.2  | 636.2  | 625.5  |
| 5°    | 666.3  | 665.1  | 665.1  | 662.7  | 658.6  | 656.8  | 654.5  | 648.0  | 640.3  | 629.7  | 613.7  |
| 7.5°  | 659.8  | 659.2  | 658.0  | 655.6  | 650.9  | 649.7  | 648.0  | 640.3  | 632.6  | 621.4  | 601.9  |
| 10°   | 649.1  | 650.3  | 649.7  | 649.7  | 648.0  | 646.8  | 645.6  | 636.8  | 628.5  | 615.5  | 594.9  |
| 12.5° | 639.1  | 640.3  | 643.2  | 648.0  | 649.7  | 650.3  | 650.3  | 641.5  | 631.4  | 617.3  | 596.0  |
| 15°   | 632.6  | 635.0  | 643.2  | 652.7  | 658.0  | 659.8  | 661.5  | 652.1  | 640.3  | 625.0  | 602.5  |
| 17.5° | 630.9  | 634.4  | 650.3  | 665.1  | 675.1  | 676.3  | 676.3  | 664.5  | 652.1  | 634.4  | 610.2  |
| 20°   | 636.8  | 641.5  | 662.1  | 682.8  | 695.2  | 696.4  | 694.0  | 678.7  | 663.9  | 644.4  | 616.7  |
| 22.5° | 654.5  | 658.6  | 682.2  | 706.4  | 718.2  | 719.4  | 714.1  | 692.8  | 676.9  | 661.0  | 625.5  |
| 25°   | 685.1  | 687.5  | 712.9  | 735.9  | 742.4  | 744.2  | 735.3  | 709.9  | 691.6  | 676.9  | 637.9  |
| 27.5° | 725.9  | 727.0  | 750.1  | 767.2  | 768.4  | 767.8  | 758.3  | 731.8  | 713.5  | 701.1  | 656.8  |
| 30°   | 768.4  | 770.1  | 789.0  | 800.2  | 795.5  | 793.1  | 784.9  | 756.6  | 740.0  | 730.6  | 684.0  |
| 32.5° | 807.9  | 809.7  | 830.3  | 836.2  | 825.6  | 823.8  | 817.9  | 787.8  | 773.7  | 778.4  | 722.9  |
| 35°   | 846.8  | 846.8  | 870.4  | 873.4  | 864.0  | 864.0  | 864.0  | 828.0  | 825.6  | 841.5  | 777.2  |
| 37.5° | 881.7  | 887.6  | 912.3  | 911.2  | 909.4  | 910.6  | 914.1  | 887.0  | 895.2  | 922.4  | 848.6  |
| 40°   | 911.2  | 918.8  | 951.9  | 954.8  | 962.5  | 969.0  | 974.3  | 960.1  | 979.6  | 1023.9 | 940.1  |
| 42.5° | 937.7  | 946.6  | 989.1  | 1002.6 | 1023.9 | 1032.7 | 1042.8 | 1039.2 | 1082.3 | 1163.2 | 1056.9 |
| 45°   | 972.0  | 981.4  | 1025.1 | 1057.5 | 1087.0 | 1098.8 | 1121.3 | 1136.6 | 1208.0 | 1300.1 | 1183.2 |
| 47.5° | 1017.4 | 1023.9 | 1064.0 | 1115.4 | 1155.5 | 1176.7 | 1211.5 | 1251.1 | 1337.8 | 1445.2 | 1295.9 |
| 50°   | 1079.4 | 1079.9 | 1110.0 | 1176.7 | 1236.3 | 1259.3 | 1319.5 | 1370.9 | 1479.5 | 1573.3 | 1377.4 |
| 52.5° | 1147.8 | 1144.3 | 1167.9 | 1252.3 | 1327.8 | 1359.1 | 1429.9 | 1501.3 | 1610.5 | 1665.9 | 1414.0 |
| 55°   | 1212.7 | 1214.5 | 1229.2 | 1332.5 | 1442.9 | 1473.0 | 1562.7 | 1635.3 | 1730.3 | 1722.6 | 1434.0 |
| 57.5° | 1287.7 | 1287.1 | 1306.0 | 1420.5 | 1577.4 | 1612.2 | 1706.1 | 1765.7 | 1802.9 | 1763.3 | 1437.6 |
| 60°   | 1358.5 | 1356.7 | 1385.6 | 1525.5 | 1720.8 | 1772.2 | 1856.6 | 1854.2 | 1875.4 | 1789.3 | 1434.6 |
| 62.5° | 1421.6 | 1425.8 | 1476.5 | 1647.7 | 1881.3 | 1936.8 | 1979.3 | 1949.8 | 1955.7 | 1819.4 | 1398.0 |
| 65°   | 1498.4 | 1506.0 | 1588.1 | 1795.8 | 2079.6 | 2106.2 | 2122.7 | 2074.9 | 2015.9 | 1795.2 | 1287.1 |
| 67.5° | 1595.1 | 1618.1 | 1733.8 | 2014.1 | 2286.2 | 2304.5 | 2305.1 | 2150.4 | 2013.5 | 1673.0 | 1082.3 |
| 70°   | 1633.5 | 1657.7 | 1841.8 | 2187.0 | 2460.3 | 2483.3 | 2411.3 | 2138.6 | 1854.8 | 1310.1 | 730.6  |
| 71°   | 1606.9 | 1628.8 | 1838.9 | 2203.6 | 2496.3 | 2514.6 | 2401.8 | 2061.3 | 1681.9 | 1079.4 | 565.9  |
| 72.5° | 1415.1 | 1471.8 | 1725.6 | 2099.7 | 2431.9 | 2432.5 | 2249.0 | 1879.0 | 1337.8 | 673.9  | 284.4  |
| 75°   | 764.2  | 832.7  | 1264.7 | 1598.1 | 1876.0 | 1890.8 | 1730.3 | 1304.8 | 647.4  | 174.7  | 69.0   |
| 77.5° | 252.0  | 283.9  | 567.1  | 829.7  | 1176.7 | 1199.7 | 1058.1 | 579.5  | 204.2  | 59.0   | 36.0   |
| 80°   | 158.2  | 161.7  | 191.8  | 348.8  | 523.4  | 542.9  | 435.5  | 234.9  | 92.1   | 32.5   | 24.8   |
| 82.5° | 26.6   | 31.9   | 90.3   | 102.7  | 184.7  | 146.4  | 99.1   | 119.8  | 43.1   | 14.8   | 21.2   |
| 85°   | 0.0    | 0.0    | 0.6    | 0.6    | 3.0    | 0.6    | 0.6    | 24.2   | 2.4    | 2.4    | 11.2   |
| 87.5° | 0.0    | 0.0    | 0.6    | 0.6    | 0.6    | 0.6    | 0.6    | 0.6    | 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    |



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**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 627.9  | 627.9 | 627.9 | 627.9 | 627.9 | 627.9 | 627.9 | 627.9 | 627.9 | 627.9 | 627.9 |
| 2.5°  | 620.8  | 616.1 | 606.7 | 596.6 | 584.2 | 573.6 | 570.1 | 562.4 | 558.9 | 555.9 | 555.9 |
| 5°    | 603.7  | 595.4 | 575.4 | 554.7 | 534.7 | 513.4 | 493.9 | 475.6 | 466.8 | 454.4 | 460.3 |
| 7.5°  | 589.5  | 575.4 | 547.1 | 514.6 | 473.3 | 431.4 | 398.9 | 370.6 | 347.0 | 339.3 | 334.0 |
| 10°   | 579.5  | 561.8 | 520.5 | 470.9 | 410.7 | 351.1 | 301.0 | 254.3 | 227.2 | 210.7 | 210.7 |
| 12.5° | 578.3  | 555.9 | 502.2 | 426.1 | 339.3 | 258.5 | 196.5 | 152.3 | 130.4 | 120.4 | 119.8 |
| 15°   | 582.5  | 555.3 | 485.7 | 385.4 | 273.8 | 179.4 | 122.7 | 103.3 | 98.0  | 96.8  | 96.8  |
| 17.5° | 586.0  | 554.7 | 466.2 | 339.3 | 201.8 | 118.0 | 97.4  | 93.8  | 92.7  | 92.1  | 92.1  |
| 20°   | 589.5  | 551.8 | 443.8 | 287.4 | 142.8 | 96.2  | 90.9  | 89.1  | 88.5  | 87.9  | 87.9  |
| 22.5° | 594.3  | 548.8 | 420.8 | 228.4 | 105.6 | 89.7  | 86.7  | 85.0  | 84.4  | 84.4  | 84.4  |
| 25°   | 600.8  | 547.1 | 392.4 | 172.9 | 90.9  | 85.0  | 82.0  | 80.8  | 80.8  | 80.3  | 80.3  |
| 27.5° | 613.1  | 548.8 | 361.8 | 123.9 | 85.0  | 80.3  | 78.5  | 77.3  | 77.3  | 76.7  | 76.7  |
| 30°   | 630.3  | 554.1 | 323.4 | 96.8  | 80.3  | 75.5  | 73.8  | 73.2  | 72.6  | 72.6  | 72.6  |
| 32.5° | 654.5  | 562.4 | 281.5 | 82.6  | 74.4  | 70.8  | 69.0  | 68.5  | 68.5  | 68.5  | 67.9  |
| 35°   | 691.6  | 579.5 | 230.2 | 75.5  | 69.0  | 65.5  | 63.7  | 63.7  | 63.7  | 63.1  | 63.7  |
| 37.5° | 748.3  | 607.2 | 178.2 | 69.6  | 63.1  | 60.2  | 59.0  | 58.4  | 58.4  | 58.4  | 58.4  |
| 40°   | 819.7  | 652.1 | 129.8 | 64.3  | 57.8  | 54.9  | 53.7  | 53.1  | 52.5  | 52.5  | 52.5  |
| 42.5° | 911.8  | 701.7 | 94.4  | 58.4  | 53.1  | 50.2  | 49.0  | 47.8  | 46.6  | 46.0  | 46.0  |
| 45°   | 1007.4 | 760.7 | 73.8  | 53.7  | 48.4  | 46.0  | 44.9  | 43.1  | 41.3  | 39.5  | 39.5  |
| 47.5° | 1100.0 | 806.1 | 63.1  | 48.4  | 44.3  | 41.9  | 40.7  | 38.4  | 35.4  | 33.6  | 33.6  |
| 50°   | 1158.4 | 820.3 | 56.7  | 43.7  | 40.1  | 38.4  | 36.6  | 33.6  | 29.5  | 27.7  | 27.7  |
| 52.5° | 1176.7 | 794.3 | 50.8  | 39.5  | 36.6  | 34.8  | 32.5  | 28.3  | 24.2  | 21.8  | 21.8  |
| 55°   | 1183.8 | 744.2 | 44.9  | 36.6  | 33.0  | 30.7  | 27.7  | 23.6  | 19.5  | 17.1  | 17.1  |
| 57.5° | 1175.0 | 673.3 | 40.1  | 33.0  | 29.5  | 27.1  | 23.6  | 18.9  | 14.8  | 13.0  | 13.0  |
| 60°   | 1144.9 | 570.7 | 36.0  | 29.5  | 26.0  | 23.0  | 19.5  | 14.8  | 11.2  | 8.9   | 9.4   |
| 62.5° | 1063.4 | 441.4 | 31.3  | 24.8  | 22.4  | 19.5  | 15.3  | 11.2  | 7.1   | 5.9   | 5.9   |
| 65°   | 933.6  | 305.7 | 26.6  | 20.7  | 18.9  | 15.9  | 11.8  | 7.7   | 4.1   | 3.5   | 3.5   |
| 67.5° | 758.3  | 197.7 | 20.7  | 17.1  | 15.9  | 13.0  | 8.9   | 4.7   | 2.4   | 2.4   | 1.8   |
| 70°   | 476.2  | 98.0  | 16.5  | 13.0  | 13.0  | 10.0  | 6.5   | 3.0   | 1.8   | 1.8   | 1.8   |
| 71°   | 337.0  | 66.7  | 14.8  | 11.8  | 11.8  | 9.4   | 5.9   | 2.4   | 1.8   | 1.8   | 1.8   |
| 72.5° | 152.3  | 41.9  | 12.4  | 10.6  | 10.0  | 7.7   | 5.3   | 2.4   | 2.4   | 2.4   | 2.4   |
| 75°   | 47.8   | 23.0  | 8.9   | 8.3   | 8.3   | 6.5   | 4.7   | 3.0   | 3.0   | 3.0   | 3.0   |
| 77.5° | 31.9   | 17.7  | 5.9   | 5.3   | 6.5   | 6.5   | 4.7   | 3.5   | 3.5   | 3.5   | 3.5   |
| 80°   | 26.0   | 9.4   | 3.5   | 3.5   | 4.7   | 5.9   | 4.7   | 3.5   | 4.1   | 3.5   | 3.5   |
| 82.5° | 25.4   | 4.7   | 1.2   | 1.8   | 3.0   | 3.5   | 3.5   | 3.0   | 3.5   | 3.5   | 3.5   |
| 85°   | 10.6   | 1.2   | 0.6   | 1.2   | 1.2   | 1.8   | 1.8   | 2.4   | 3.0   | 3.0   | 3.0   |
| 87.5° | 0.0    | 0.0   | 0.0   | 0.0   | 0.6   | 0.6   | 1.2   | 1.2   | 1.8   | 2.4   | 2.4   |
| 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)