

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: P565372

Luminaire Tested: **MSA-SA3A-750-U-T1**

Issue Date: 8/19/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P565372  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2108-334-1)  
Test Lab: INNOVATIONS CENTER  
Issue Date: 8/19/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: MSA-SA3A-750-U-T1  
Description: MESA POST TOP DECORATIVE LUMINAIRE. (3) LIGHTSQUARES WITH 16 LEDS EACH AND TYPE I OPTICS.  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10606 lumens  
Efficiency: N/A  
Efficacy: 110.5 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type I - Medium  
BUG Rating: B3 - U0 - G3

Input Watts (W): 96  
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: 24 FT

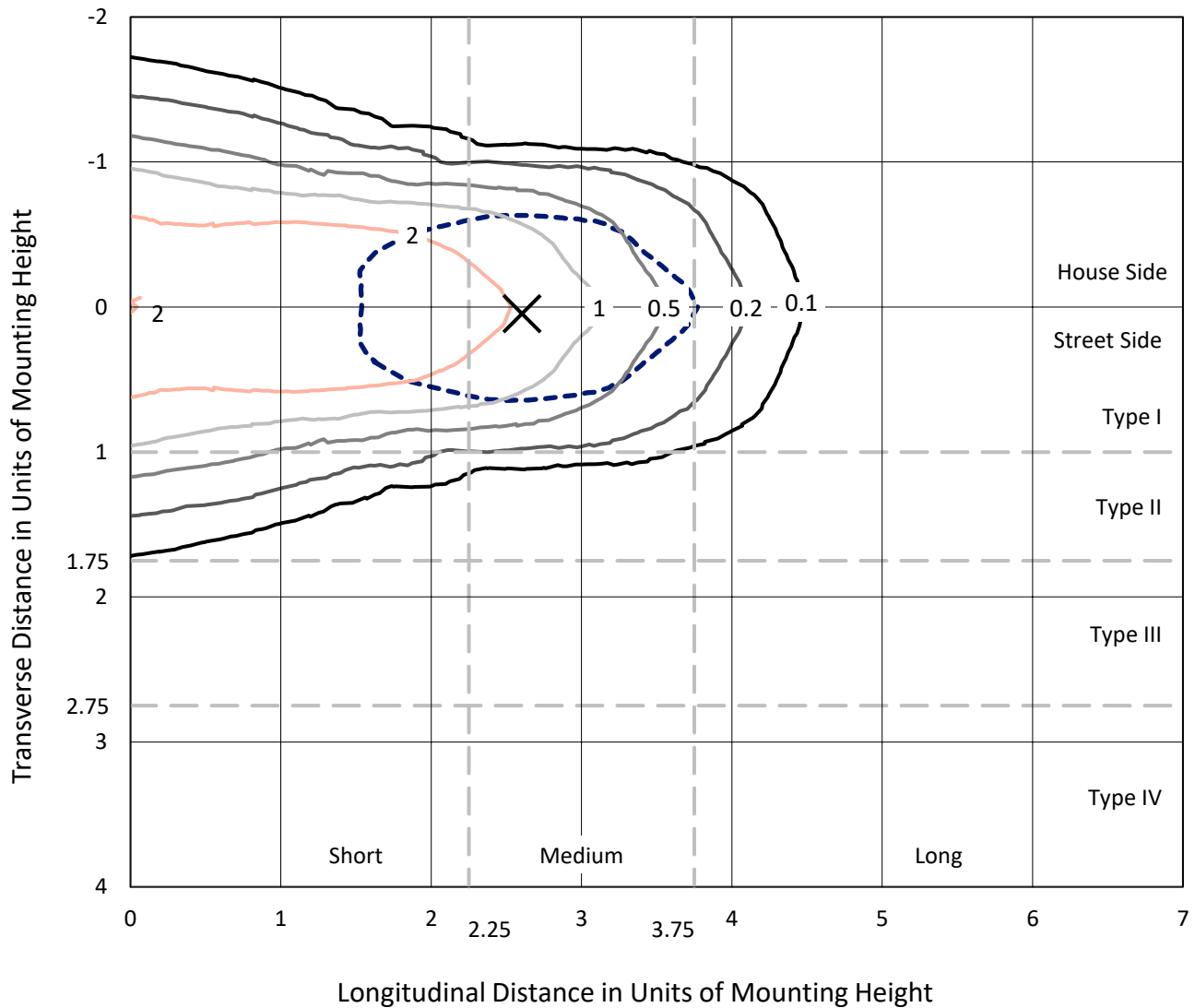


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## Iso-Footcandle Lines of Horizontal Illumination

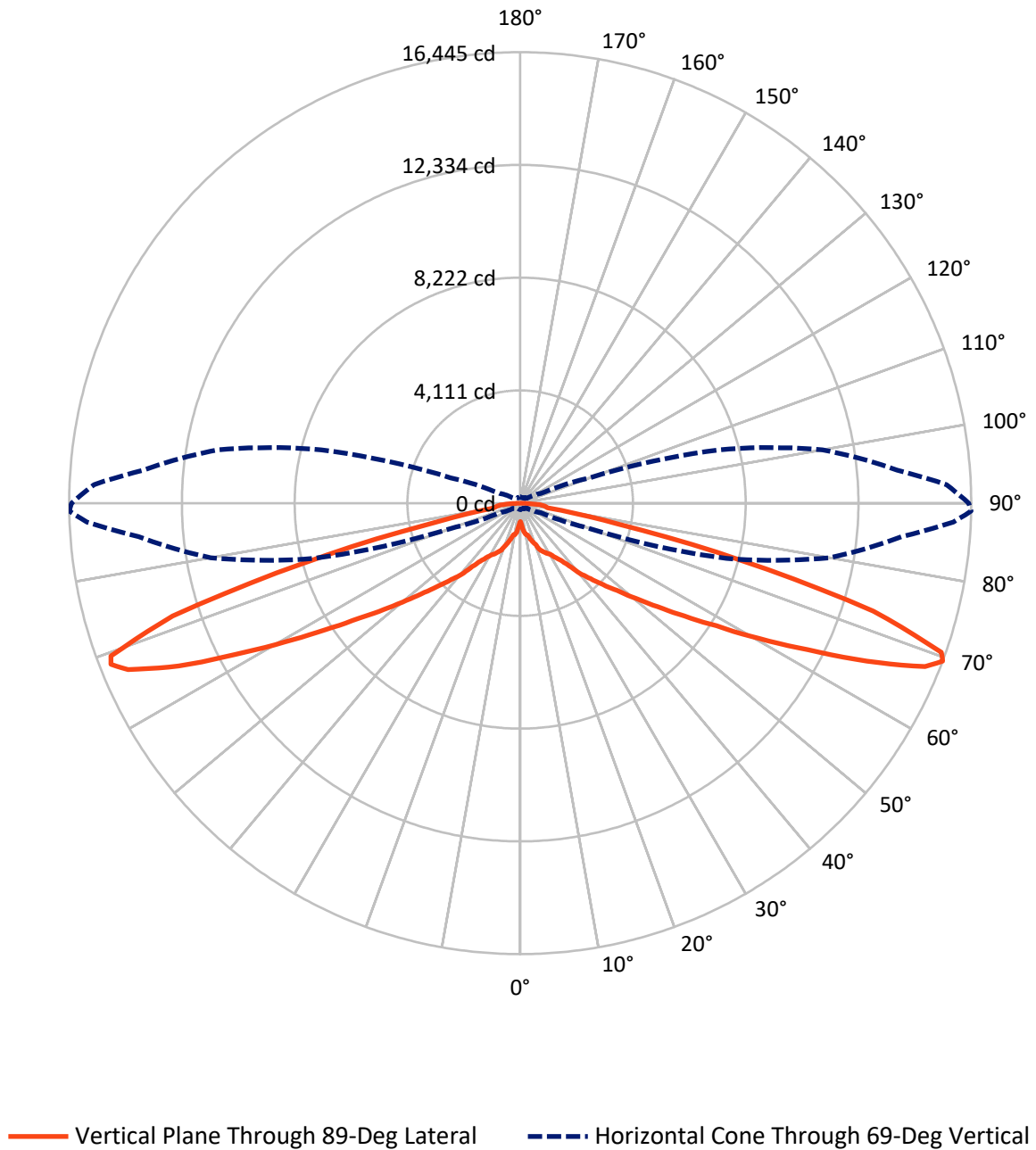
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 3.8 fc  
 Type I - Medium - N/A

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## Luminous Intensity Polar Plot



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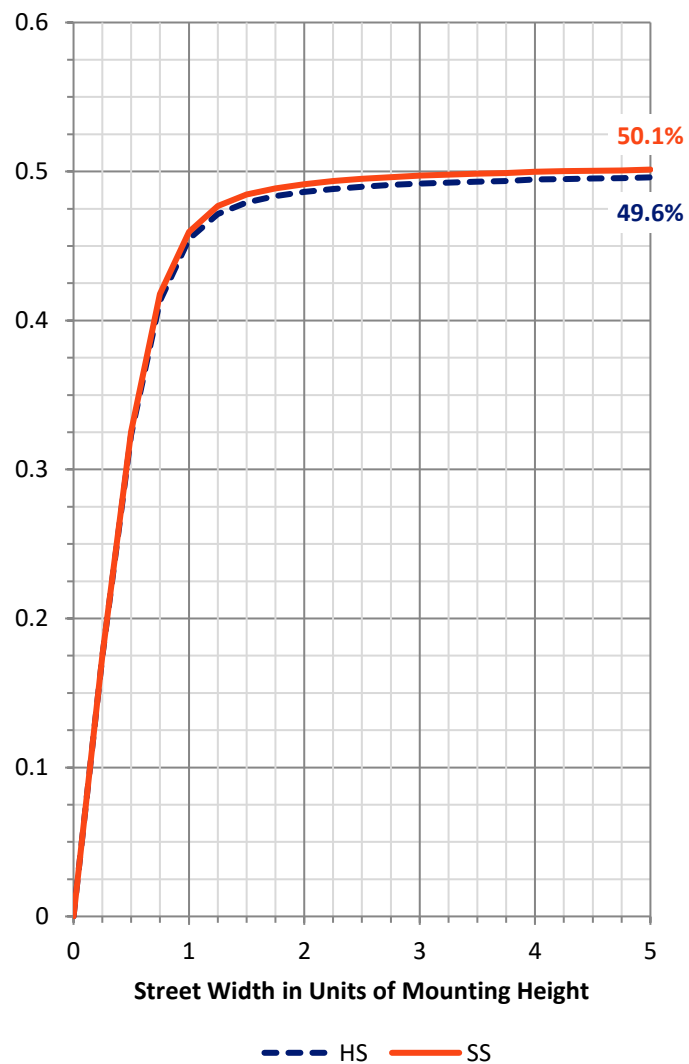
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5302.9   | 0.0    | 5302.9  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 5303.1   | 0.0    | 5303.1  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 10606.0  | 0.0    | 10606.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 84.4    | 0.8       |
| 10°-20°   | 388.9   | 3.7       |
| 20°-30°   | 775.9   | 7.3       |
| 30°-40°   | 1173.5  | 11.1      |
| 40°-50°   | 1703.4  | 16.1      |
| 50°-60°   | 2238.0  | 21.1      |
| 60°-70°   | 2730.0  | 25.7      |
| 70°-80°   | 1380.2  | 13.0      |
| 80°-90°   | 131.6   | 1.2       |
| 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°    | 10606.0 | 100.0     |
| 0°-180°   | 10606.0 | 100.0     |

**Coefficient of Utilization**



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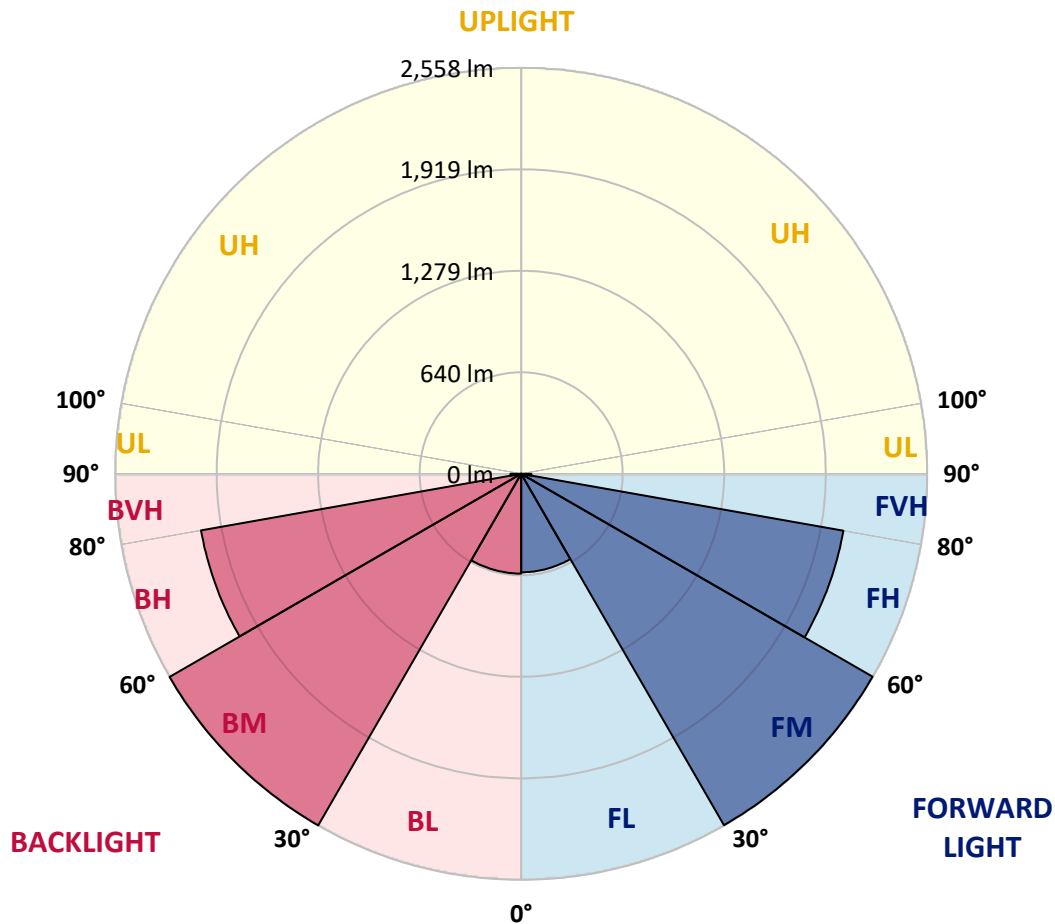
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 620.2  | 5.8       |                         |      |         |
| FM   | (30°-60°)   | 2556.6 | 24.1      |                         |      |         |
| FH   | (60°-80°)   | 2061.7 | 19.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 64.5   | 0.6       |                         |      | G1/100  |
| BL   | (0°-30°)    | 629.0  | 5.9       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 2558.3 | 24.1      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2048.6 | 19.3      | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 67.0   | 0.6       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type I Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 70°    | 75°    | 80°     |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| 0°    | 671.8  | 671.8  | 671.8  | 671.8  | 671.8  | 671.8  | 671.8  | 671.8  | 671.8  | 671.8  | 671.8   |
| 2.5°  | 788.4  | 697.5  | 689.6  | 667.8  | 683.6  | 689.6  | 675.7  | 656.0  | 677.7  | 689.6  | 667.8   |
| 5°    | 993.8  | 859.5  | 814.0  | 776.5  | 701.4  | 669.8  | 701.4  | 782.4  | 792.3  | 841.7  | 827.9   |
| 7.5°  | 1094.6 | 1072.9 | 1015.6 | 891.1  | 770.6  | 703.4  | 788.4  | 904.9  | 964.2  | 1011.6 | 1061.0  |
| 10°   | 1169.7 | 1157.8 | 1057.1 | 968.2  | 918.8  | 922.7  | 924.7  | 962.2  | 1013.6 | 1092.6 | 1120.3  |
| 12.5° | 1187.5 | 1183.5 | 1199.3 | 1179.6 | 1183.5 | 1205.3 | 1183.5 | 1173.6 | 1203.3 | 1229.0 | 1201.3  |
| 15°   | 1302.1 | 1300.1 | 1306.0 | 1310.0 | 1389.0 | 1422.6 | 1389.0 | 1359.4 | 1337.6 | 1315.9 | 1361.4  |
| 17.5° | 1381.1 | 1371.2 | 1373.2 | 1410.7 | 1499.7 | 1592.5 | 1574.7 | 1535.2 | 1485.8 | 1515.5 | 1553.0  |
| 20°   | 1424.6 | 1406.8 | 1418.6 | 1434.5 | 1584.6 | 1687.4 | 1699.2 | 1645.9 | 1616.2 | 1653.8 | 1685.4  |
| 22.5° | 1466.1 | 1438.4 | 1396.9 | 1412.7 | 1551.0 | 1699.2 | 1756.5 | 1742.7 | 1764.4 | 1776.3 | 1770.3  |
| 25°   | 1416.7 | 1434.5 | 1389.0 | 1434.5 | 1574.7 | 1711.1 | 1825.7 | 1906.7 | 1908.7 | 1902.7 | 1946.2  |
| 27.5° | 1387.0 | 1373.2 | 1296.1 | 1412.7 | 1529.3 | 1614.3 | 1906.7 | 2043.0 | 2084.5 | 1958.1 | 2043.0  |
| 30°   | 1335.7 | 1357.4 | 1252.7 | 1349.5 | 1497.7 | 1639.9 | 1999.5 | 2195.2 | 2133.9 | 2118.1 | 2137.9  |
| 32.5° | 1304.1 | 1290.2 | 1240.8 | 1294.2 | 1406.8 | 1717.0 | 2058.8 | 2284.1 | 2361.1 | 2323.6 | 2319.6  |
| 35°   | 1252.7 | 1262.6 | 1185.5 | 1242.8 | 1400.9 | 1651.8 | 2098.3 | 2507.3 | 2625.9 | 2596.2 | 2572.5  |
| 37.5° | 1260.6 | 1227.0 | 1171.7 | 1213.2 | 1363.3 | 1687.4 | 2197.1 | 2722.7 | 2910.4 | 2926.2 | 2817.5  |
| 40°   | 1201.3 | 1181.5 | 1098.6 | 1167.7 | 1292.2 | 1665.6 | 2220.8 | 2967.7 | 3285.8 | 3356.9 | 3200.9  |
| 42.5° | 1116.3 | 1090.7 | 1043.2 | 1120.3 | 1250.7 | 1558.9 | 2254.4 | 3262.1 | 3667.1 | 3815.3 | 3673.1  |
| 45°   | 993.8  | 960.3  | 936.5  | 1039.3 | 1159.8 | 1531.3 | 2218.9 | 3507.1 | 4032.7 | 4236.2 | 4232.2  |
| 47.5° | 845.7  | 823.9  | 812.1  | 920.7  | 1084.7 | 1462.1 | 2145.8 | 3661.2 | 4287.6 | 4809.2 | 4730.1  |
| 50°   | 677.7  | 661.9  | 659.9  | 774.5  | 958.3  | 1319.9 | 2062.8 | 3738.3 | 4674.8 | 5334.8 | 5403.9  |
| 52.5° | 543.4  | 531.5  | 529.5  | 622.4  | 802.2  | 1128.2 | 1888.9 | 3797.6 | 5044.3 | 5931.5 | 6287.1  |
| 55°   | 424.8  | 412.9  | 414.9  | 492.0  | 638.2  | 922.7  | 1624.1 | 3730.4 | 5368.3 | 6542.0 | 7215.7  |
| 57.5° | 347.7  | 335.9  | 337.9  | 381.3  | 488.0  | 705.4  | 1294.2 | 3584.2 | 5514.6 | 7296.8 | 8298.5  |
| 60°   | 306.3  | 294.4  | 288.5  | 308.2  | 375.4  | 531.5  | 962.2  | 3015.1 | 5538.3 | 7923.1 | 9474.1  |
| 62.5° | 284.5  | 272.7  | 266.7  | 272.7  | 310.2  | 407.0  | 693.5  | 2388.8 | 5401.9 | 8458.5 | 10551.0 |
| 65°   | 264.8  | 254.9  | 247.0  | 252.9  | 272.7  | 324.0  | 505.8  | 1636.0 | 4688.7 | 8703.6 | 11333.4 |
| 67.5° | 243.0  | 235.1  | 227.2  | 235.1  | 249.0  | 272.7  | 393.2  | 1035.3 | 3515.0 | 8385.4 | 11659.4 |
| 69°   | 231.2  | 219.3  | 215.4  | 221.3  | 235.1  | 250.9  | 339.8  | 825.9  | 2673.3 | 7780.8 | 11461.8 |
| 70°   | 219.3  | 211.4  | 205.5  | 215.4  | 227.2  | 239.1  | 306.3  | 701.4  | 2096.4 | 7004.3 | 10971.8 |
| 72.5° | 193.6  | 187.7  | 183.8  | 193.6  | 203.5  | 211.4  | 250.9  | 499.9  | 1215.1 | 4769.7 | 8701.6  |
| 75°   | 169.9  | 164.0  | 162.0  | 169.9  | 177.8  | 181.8  | 211.4  | 343.8  | 717.2  | 2495.5 | 5220.2  |
| 77.5° | 142.3  | 134.4  | 136.3  | 146.2  | 152.1  | 154.1  | 177.8  | 247.0  | 422.8  | 1130.2 | 2418.4  |
| 80°   | 104.7  | 104.7  | 112.6  | 120.5  | 120.5  | 120.5  | 142.3  | 179.8  | 256.9  | 519.6  | 1003.7  |
| 82.5° | 73.1   | 75.1   | 77.1   | 88.9   | 90.9   | 83.0   | 108.7  | 130.4  | 160.0  | 227.2  | 347.7   |
| 85°   | 41.5   | 43.5   | 45.4   | 53.3   | 55.3   | 49.4   | 71.1   | 83.0   | 92.9   | 112.6  | 181.8   |
| 87.5° | 15.8   | 17.8   | 23.7   | 27.7   | 29.6   | 21.7   | 33.6   | 39.5   | 39.5   | 47.4   | 81.0    |
| 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):**

|       | 85°     | 87.5°   | 89°     | 90°     | 92.5°   | 95°     | 100°    | 105°   | 110°   | 115°   | 125°   |
|-------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|
| 0°    | 671.8   | 671.8   | 671.8   | 671.8   | 671.8   | 671.8   | 671.8   | 671.8  | 671.8  | 671.8  | 671.8  |
| 2.5°  | 713.3   | 727.1   | 752.8   | 758.7   | 737.0   | 713.3   | 659.9   | 693.5  | 707.3  | 681.7  | 689.6  |
| 5°    | 883.2   | 912.8   | 944.4   | 906.9   | 883.2   | 867.4   | 841.7   | 843.7  | 829.9  | 784.4  | 709.3  |
| 7.5°  | 1074.9  | 1041.3  | 1065.0  | 1090.7  | 1053.1  | 1055.1  | 1078.8  | 1029.4 | 991.9  | 914.8  | 774.5  |
| 10°   | 1163.8  | 1163.8  | 1169.7  | 1169.7  | 1153.9  | 1153.9  | 1151.9  | 1072.9 | 1027.4 | 993.8  | 954.3  |
| 12.5° | 1169.7  | 1167.7  | 1191.4  | 1173.6  | 1177.6  | 1181.5  | 1191.4  | 1227.0 | 1215.1 | 1171.7 | 1207.2 |
| 15°   | 1333.7  | 1325.8  | 1333.7  | 1331.7  | 1337.6  | 1355.4  | 1347.5  | 1339.6 | 1341.6 | 1373.2 | 1426.6 |
| 17.5° | 1487.8  | 1491.8  | 1483.9  | 1497.7  | 1497.7  | 1509.5  | 1537.2  | 1509.5 | 1485.8 | 1545.1 | 1586.6 |
| 20°   | 1665.6  | 1651.8  | 1620.2  | 1643.9  | 1649.8  | 1651.8  | 1697.2  | 1663.7 | 1630.1 | 1651.8 | 1701.2 |
| 22.5° | 1845.4  | 1843.5  | 1847.4  | 1849.4  | 1857.3  | 1827.6  | 1766.4  | 1756.5 | 1778.3 | 1748.6 | 1754.5 |
| 25°   | 1956.1  | 1958.1  | 1967.9  | 1969.9  | 1936.3  | 1967.9  | 1989.7  | 1924.5 | 1924.5 | 1918.5 | 1879.0 |
| 27.5° | 2090.4  | 2060.8  | 2072.7  | 2088.5  | 2074.6  | 2082.5  | 2056.8  | 1962.0 | 2062.8 | 2076.6 | 1918.5 |
| 30°   | 2181.3  | 2167.5  | 2153.7  | 2169.5  | 2183.3  | 2218.9  | 2145.8  | 2135.9 | 2143.8 | 2216.9 | 2009.4 |
| 32.5° | 2373.0  | 2392.7  | 2367.0  | 2341.4  | 2367.0  | 2359.1  | 2327.5  | 2313.7 | 2412.5 | 2315.7 | 2072.7 |
| 35°   | 2550.8  | 2558.7  | 2560.7  | 2556.7  | 2572.5  | 2544.9  | 2544.9  | 2596.2 | 2625.9 | 2521.2 | 2092.4 |
| 37.5° | 2979.6  | 2951.9  | 2894.6  | 2866.9  | 2916.3  | 2957.8  | 2835.3  | 2896.6 | 2884.7 | 2706.9 | 2240.6 |
| 40°   | 3287.8  | 3351.0  | 3368.8  | 3360.9  | 3368.8  | 3250.2  | 3275.9  | 3321.4 | 3268.0 | 2973.6 | 2189.2 |
| 42.5° | 3738.3  | 3777.8  | 3764.0  | 3746.2  | 3754.1  | 3732.4  | 3655.3  | 3823.2 | 3631.6 | 3272.0 | 2268.3 |
| 45°   | 4149.3  | 4238.2  | 4244.1  | 4182.8  | 4232.2  | 4155.2  | 4186.8  | 4246.1 | 4052.4 | 3495.3 | 2246.5 |
| 47.5° | 4639.3  | 4823.0  | 4753.9  | 4753.9  | 4803.3  | 4637.3  | 4712.4  | 4791.4 | 4277.7 | 3645.4 | 2128.0 |
| 50°   | 5364.4  | 5463.2  | 5459.2  | 5441.4  | 5463.2  | 5374.3  | 5362.4  | 5352.5 | 4623.5 | 3787.7 | 2054.9 |
| 52.5° | 6184.4  | 6318.7  | 6267.3  | 6287.1  | 6316.7  | 6148.8  | 6281.2  | 5919.6 | 5056.2 | 3841.0 | 1888.9 |
| 55°   | 7231.6  | 7324.4  | 7273.0  | 7172.3  | 7306.6  | 7199.9  | 7243.4  | 6538.0 | 5356.5 | 3688.9 | 1612.3 |
| 57.5° | 8478.3  | 8525.7  | 8440.8  | 8430.9  | 8519.8  | 8405.2  | 8332.1  | 7233.5 | 5512.6 | 3574.3 | 1288.2 |
| 60°   | 9934.5  | 10082.7 | 10029.3 | 9944.4  | 10025.4 | 9924.6  | 9371.4  | 7824.3 | 5481.0 | 3038.8 | 997.8  |
| 62.5° | 11681.1 | 11831.3 | 11772.0 | 11714.7 | 11766.1 | 11503.3 | 10347.4 | 8290.6 | 5338.7 | 2408.5 | 729.1  |
| 65°   | 13123.5 | 13801.2 | 13890.1 | 13892.1 | 13643.1 | 13034.6 | 11125.9 | 8472.4 | 4587.9 | 1681.4 | 533.5  |
| 67.5° | 14071.9 | 15480.7 | 15919.3 | 15761.2 | 15190.2 | 13801.2 | 11440.1 | 8116.7 | 3542.7 | 1063.0 | 399.1  |
| 69°   | 13963.2 | 15810.6 | 16444.9 | 16356.0 | 15553.8 | 13789.4 | 11195.1 | 7518.1 | 2706.9 | 845.7  | 337.9  |
| 70°   | 13461.4 | 15539.9 | 16292.7 | 16332.2 | 15322.6 | 13259.8 | 10758.4 | 6830.5 | 2189.2 | 721.2  | 310.2  |
| 72.5° | 10742.6 | 12805.4 | 13467.3 | 13726.1 | 12724.4 | 10618.1 | 8822.1  | 4819.1 | 1268.5 | 503.8  | 250.9  |
| 75°   | 6654.6  | 7765.0  | 8314.3  | 8464.5  | 7857.9  | 6613.1  | 5354.5  | 2681.2 | 772.6  | 355.7  | 211.4  |
| 77.5° | 2983.5  | 3305.6  | 3621.7  | 3621.7  | 3384.6  | 3019.1  | 2454.0  | 1296.1 | 438.6  | 252.9  | 177.8  |
| 80°   | 999.8   | 1037.3  | 1009.7  | 1019.5  | 980.0   | 942.5   | 985.9   | 559.2  | 270.7  | 189.7  | 144.2  |
| 82.5° | 679.7   | 853.6   | 906.9   | 906.9   | 851.6   | 671.8   | 379.4   | 256.9  | 166.0  | 136.3  | 110.6  |
| 85°   | 553.2   | 675.7   | 725.1   | 746.9   | 703.4   | 567.1   | 199.6   | 124.5  | 98.8   | 86.9   | 75.1   |
| 87.5° | 185.7   | 173.9   | 164.0   | 160.0   | 167.9   | 175.8   | 98.8    | 53.3   | 45.4   | 41.5   | 39.5   |
| 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):**

|       | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|
| 0°    | 671.8  | 671.8  | 671.8  | 671.8  | 671.8  | 671.8  |
| 2.5°  | 703.4  | 679.7  | 689.6  | 699.4  | 770.6  | 823.9  |
| 5°    | 699.4  | 733.0  | 808.1  | 903.0  | 946.4  | 1053.1 |
| 7.5°  | 719.2  | 841.7  | 982.0  | 1080.8 | 1120.3 | 1153.9 |
| 10°   | 962.2  | 984.0  | 1031.4 | 1126.2 | 1205.3 | 1219.1 |
| 12.5° | 1242.8 | 1236.9 | 1203.3 | 1246.8 | 1207.2 | 1234.9 |
| 15°   | 1462.1 | 1396.9 | 1351.5 | 1345.5 | 1331.7 | 1331.7 |
| 17.5° | 1582.6 | 1525.3 | 1462.1 | 1446.3 | 1404.8 | 1438.4 |
| 20°   | 1724.9 | 1626.1 | 1468.0 | 1452.2 | 1438.4 | 1406.8 |
| 22.5° | 1697.2 | 1598.5 | 1434.5 | 1414.7 | 1487.8 | 1483.9 |
| 25°   | 1730.8 | 1598.5 | 1442.4 | 1420.6 | 1454.2 | 1454.2 |
| 27.5° | 1647.8 | 1539.2 | 1426.6 | 1296.1 | 1398.9 | 1422.6 |
| 30°   | 1626.1 | 1503.6 | 1373.2 | 1256.6 | 1361.4 | 1339.6 |
| 32.5° | 1740.7 | 1414.7 | 1286.3 | 1250.7 | 1327.8 | 1312.0 |
| 35°   | 1651.8 | 1398.9 | 1264.5 | 1199.3 | 1290.2 | 1274.4 |
| 37.5° | 1689.3 | 1379.1 | 1227.0 | 1171.7 | 1244.8 | 1268.5 |
| 40°   | 1681.4 | 1286.3 | 1183.5 | 1112.4 | 1185.5 | 1197.4 |
| 42.5° | 1549.1 | 1215.1 | 1110.4 | 1039.3 | 1076.8 | 1116.3 |
| 45°   | 1509.5 | 1171.7 | 1039.3 | 940.5  | 942.5  | 987.9  |
| 47.5° | 1436.4 | 1072.9 | 908.9  | 818.0  | 818.0  | 855.5  |
| 50°   | 1313.9 | 940.5  | 760.7  | 677.7  | 675.7  | 705.4  |
| 52.5° | 1132.2 | 812.1  | 642.1  | 551.3  | 545.3  | 575.0  |
| 55°   | 926.7  | 654.0  | 505.8  | 446.5  | 434.7  | 446.5  |
| 57.5° | 721.2  | 509.8  | 399.1  | 351.7  | 349.7  | 359.6  |
| 60°   | 559.2  | 399.1  | 318.1  | 290.4  | 294.4  | 310.2  |
| 62.5° | 422.8  | 318.1  | 270.7  | 260.8  | 266.7  | 282.5  |
| 65°   | 335.9  | 274.6  | 247.0  | 241.1  | 247.0  | 262.8  |
| 67.5° | 272.7  | 249.0  | 229.2  | 221.3  | 225.2  | 241.1  |
| 69°   | 250.9  | 235.1  | 219.3  | 209.4  | 213.4  | 225.2  |
| 70°   | 239.1  | 227.2  | 211.4  | 201.5  | 205.5  | 217.3  |
| 72.5° | 209.4  | 203.5  | 191.7  | 181.8  | 183.8  | 193.6  |
| 75°   | 183.8  | 179.8  | 171.9  | 160.0  | 160.0  | 171.9  |
| 77.5° | 154.1  | 156.1  | 148.2  | 136.3  | 134.4  | 140.3  |
| 80°   | 122.5  | 126.5  | 122.5  | 110.6  | 106.7  | 106.7  |
| 82.5° | 88.9   | 96.8   | 92.9   | 81.0   | 79.0   | 79.0   |
| 85°   | 55.3   | 61.3   | 59.3   | 51.4   | 51.4   | 45.4   |
| 87.5° | 25.7   | 33.6   | 31.6   | 27.7   | 25.7   | 17.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)