

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: McGRAW-EDISON

Report Number: P451779

Luminaire Tested: **GALN-SA2C-830-U-T3R-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P451779  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA2C-830-U-T3R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8796 lumens  
Efficiency: N/A  
Efficacy: 81.4 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 108  
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

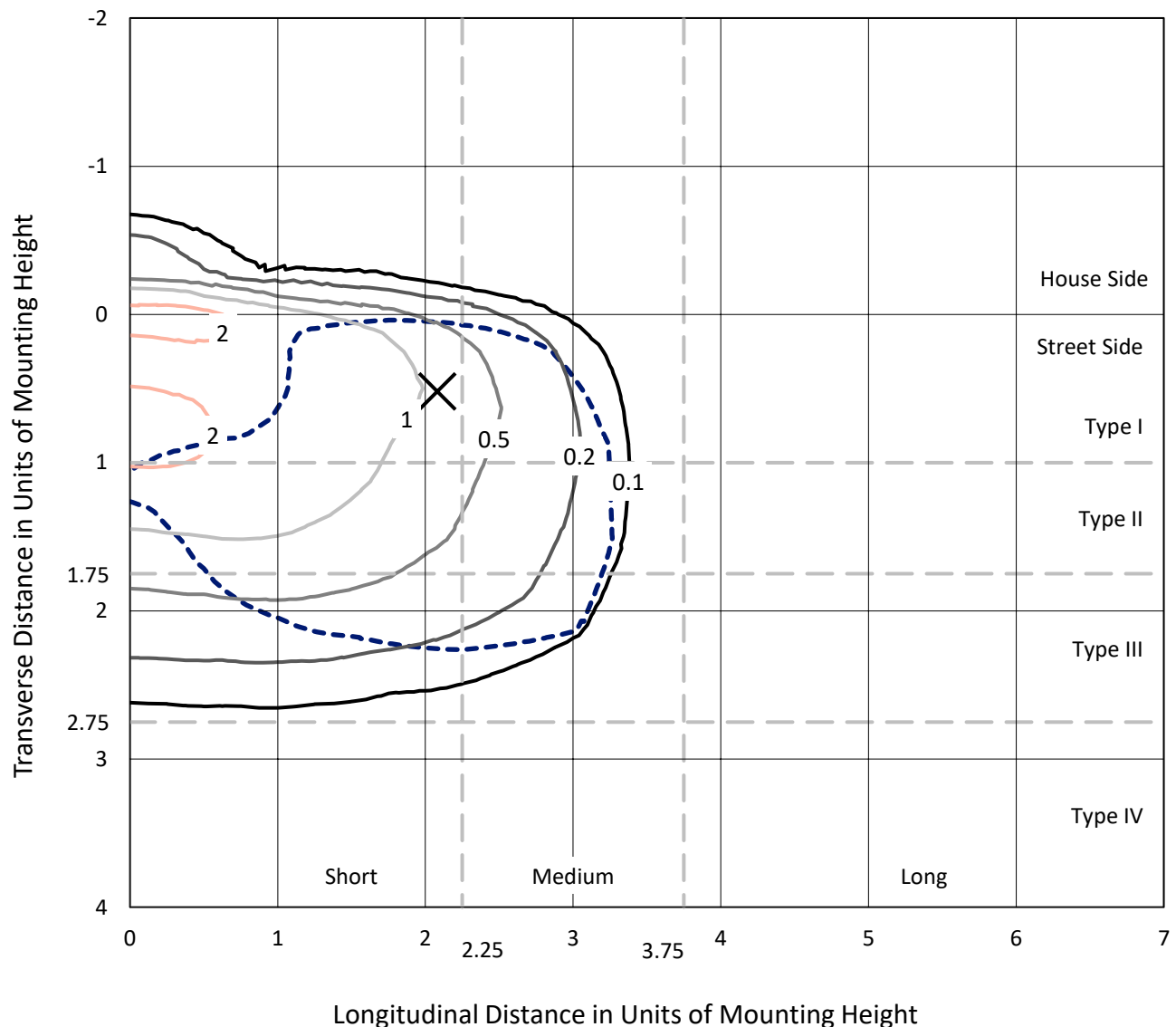


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## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

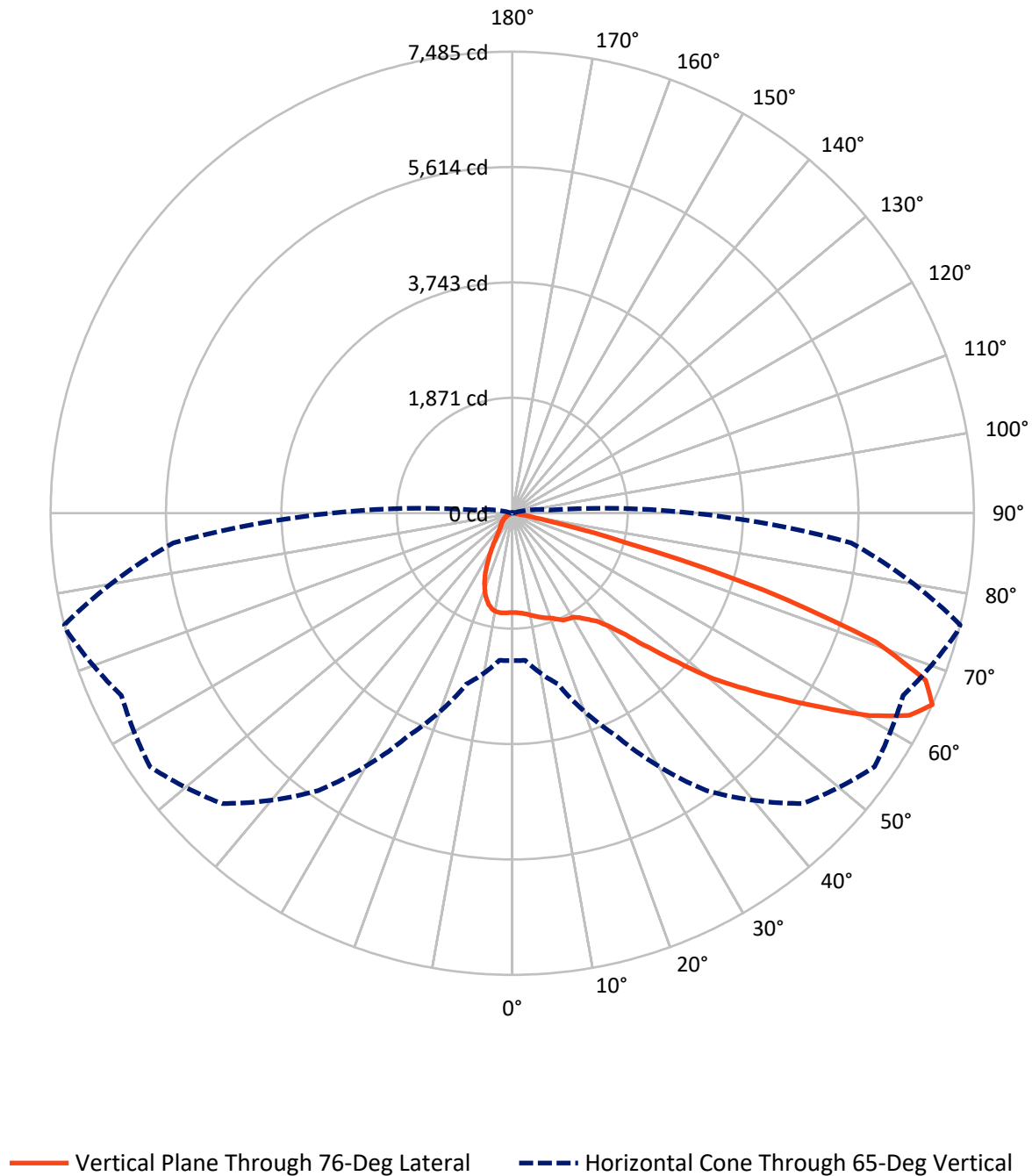


Based on 25 foot mounting height. Maximum calculated value = 2.7 fc  
 Type III - Short - N/A

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## Luminous Intensity Polar Plot



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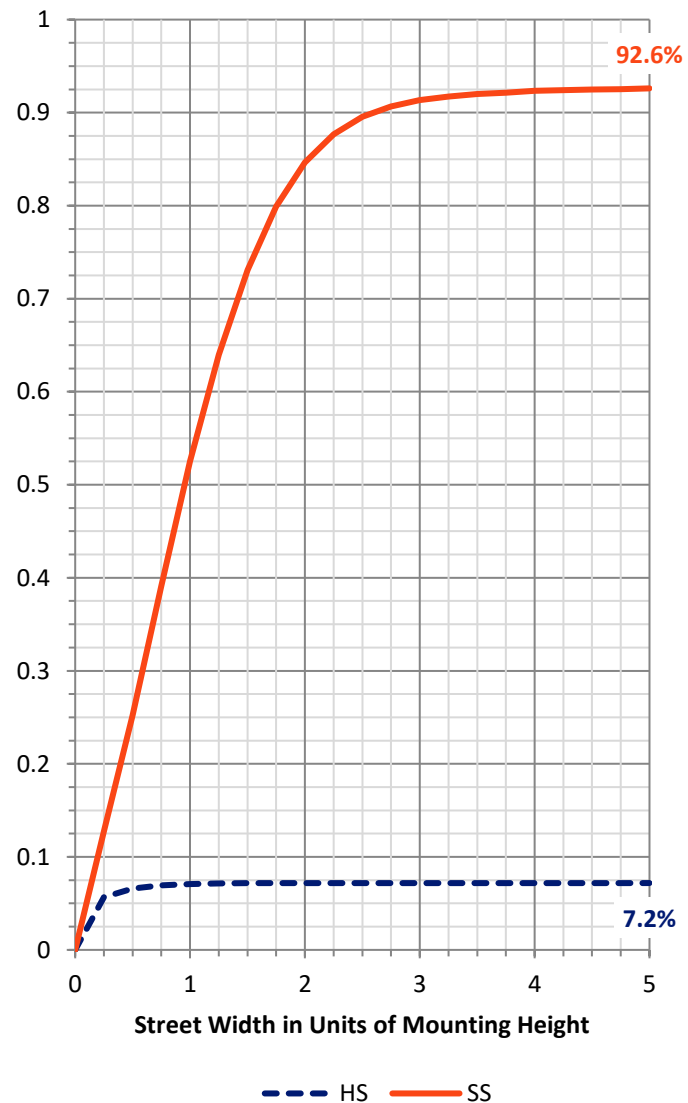
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 635.2    | 0.0    | 635.2  |
|                    | % Fixture | 7.2      | 0.0    | 7.2    |
| <b>Street Side</b> | Lumens    | 8160.8   | 0.0    | 8160.8 |
|                    | % Fixture | 92.8     | 0.0    | 92.8   |
| <b>Total</b>       | Lumens    | 8796.0   | 0.0    | 8796.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 132.5  | 1.5       |
| 10°-20°   | 295.1  | 3.4       |
| 20°-30°   | 475.6  | 5.4       |
| 30°-40°   | 826.9  | 9.4       |
| 40°-50°   | 1366.4 | 15.5      |
| 50°-60°   | 2110.8 | 24.0      |
| 60°-70°   | 2577.6 | 29.3      |
| 70°-80°   | 978.3  | 11.1      |
| 80°-90°   | 32.6   | 0.4       |
| 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°    | 8796.0 | 100.0     |
| 0°-180°   | 8796.0 | 100.0     |

**Coefficient of Utilization**



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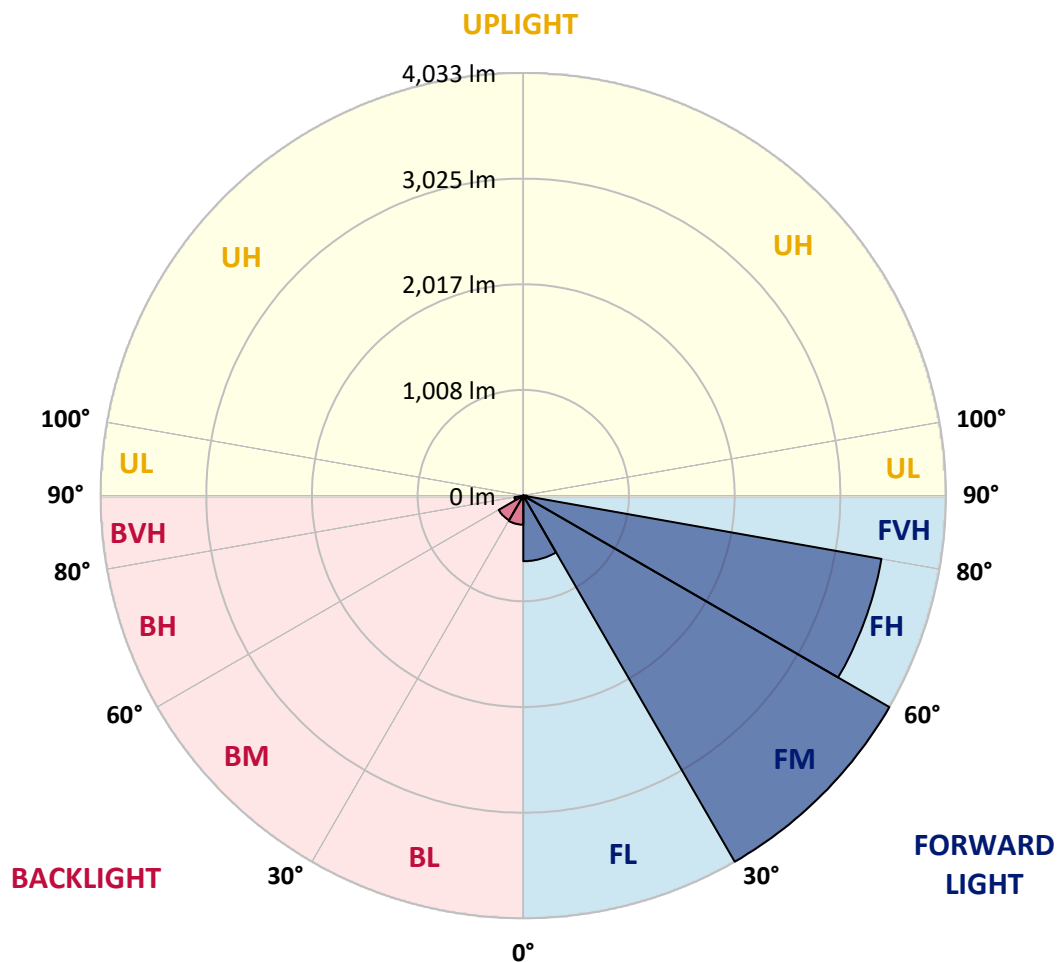
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 625.7  | 7.1       |                         |      |         |
| FM   | (30°-60°)   | 4033.1 | 45.9      |                         |      |         |
| FH   | (60°-80°)   | 3469.7 | 39.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 32.2   | 0.4       |                         |      | G1/100  |
| BL   | (0°-30°)    | 277.5  | 3.2       | B1/500                  |      |         |
| BM   | (30°-60°)   | 271.1  | 3.1       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 86.2   | 1.0       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.4    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°    | 76°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1609.1 | 1609.1 | 1609.1 | 1609.1 | 1609.1 | 1609.1 | 1609.1 | 1609.1 | 1609.1 | 1609.1 | 1609.1 |
| 2.5°  | 1537.7 | 1538.3 | 1542.0 | 1551.3 | 1565.6 | 1577.4 | 1587.3 | 1603.5 | 1614.7 | 1615.9 | 1619.6 |
| 5°    | 1431.5 | 1424.0 | 1431.5 | 1455.7 | 1477.4 | 1510.3 | 1550.7 | 1591.1 | 1627.1 | 1629.6 | 1647.0 |
| 7.5°  | 1312.2 | 1318.4 | 1330.2 | 1355.1 | 1396.1 | 1446.4 | 1504.7 | 1576.8 | 1645.1 | 1651.3 | 1685.5 |
| 10°   | 1191.1 | 1204.8 | 1224.0 | 1261.9 | 1319.1 | 1384.3 | 1463.7 | 1566.8 | 1673.7 | 1682.3 | 1741.3 |
| 12.5° | 1079.3 | 1085.5 | 1109.1 | 1160.1 | 1230.9 | 1322.8 | 1432.7 | 1561.3 | 1705.3 | 1715.9 | 1801.0 |
| 15°   | 993.6  | 1001.7 | 1022.2 | 1068.2 | 1147.0 | 1265.0 | 1407.2 | 1559.4 | 1736.4 | 1751.3 | 1860.6 |
| 17.5° | 977.5  | 982.5  | 991.2  | 1022.2 | 1091.1 | 1219.1 | 1384.3 | 1558.8 | 1766.2 | 1784.2 | 1915.9 |
| 20°   | 1043.9 | 1039.6 | 1030.9 | 1027.8 | 1065.7 | 1183.7 | 1367.5 | 1563.7 | 1794.8 | 1815.2 | 1974.2 |
| 22.5° | 1210.4 | 1216.0 | 1165.0 | 1104.8 | 1092.4 | 1178.1 | 1365.0 | 1587.3 | 1840.1 | 1864.3 | 2039.4 |
| 25°   | 1563.7 | 1520.9 | 1441.4 | 1297.3 | 1188.6 | 1212.2 | 1393.0 | 1643.2 | 1892.9 | 1919.6 | 2098.4 |
| 27.5° | 1954.4 | 1941.3 | 1817.7 | 1580.5 | 1378.0 | 1284.3 | 1442.6 | 1686.1 | 1910.3 | 1937.6 | 2132.0 |
| 30°   | 2338.1 | 2353.7 | 2212.1 | 1950.0 | 1653.2 | 1417.8 | 1489.2 | 1702.2 | 1925.8 | 1954.4 | 2174.8 |
| 32.5° | 2694.0 | 2712.6 | 2588.4 | 2328.8 | 1977.3 | 1648.8 | 1569.3 | 1764.9 | 1991.0 | 2020.2 | 2246.2 |
| 35°   | 2974.1 | 2976.6 | 2882.8 | 2676.0 | 2331.3 | 1929.5 | 1742.6 | 1874.9 | 2079.2 | 2113.3 | 2322.0 |
| 37.5° | 3231.2 | 3227.5 | 3117.5 | 2939.3 | 2626.3 | 2208.4 | 1960.6 | 2001.6 | 2179.8 | 2215.2 | 2431.3 |
| 40°   | 3421.8 | 3424.3 | 3388.9 | 3221.2 | 2901.4 | 2466.1 | 2133.2 | 2120.2 | 2348.7 | 2404.0 | 2590.3 |
| 42.5° | 3549.1 | 3572.1 | 3589.5 | 3504.4 | 3247.3 | 2783.4 | 2398.4 | 2374.2 | 2641.8 | 2687.8 | 2815.1 |
| 45°   | 3652.2 | 3693.2 | 3780.2 | 3775.8 | 3579.6 | 3172.8 | 2762.3 | 2712.6 | 3057.3 | 3106.4 | 3101.4 |
| 47.5° | 3727.4 | 3769.0 | 3913.1 | 4000.0 | 3891.9 | 3550.4 | 3220.0 | 3177.2 | 3553.5 | 3606.9 | 3417.5 |
| 50°   | 3765.9 | 3815.6 | 3999.4 | 4167.7 | 4136.0 | 3914.3 | 3741.7 | 3744.1 | 4152.8 | 4204.3 | 3783.9 |
| 52.5° | 3675.8 | 3740.4 | 4045.3 | 4348.4 | 4409.9 | 4262.7 | 4230.4 | 4312.4 | 4686.2 | 4730.3 | 4114.9 |
| 55°   | 3388.3 | 3469.7 | 3982.6 | 4502.4 | 4727.2 | 4673.8 | 4785.6 | 4910.4 | 5269.4 | 5297.9 | 4454.6 |
| 57.5° | 3206.3 | 3292.7 | 3797.6 | 4633.4 | 5108.5 | 5190.5 | 5367.5 | 5458.8 | 5871.1 | 5943.8 | 4844.6 |
| 60°   | 3052.9 | 3120.6 | 3645.4 | 4661.4 | 5496.0 | 5822.7 | 5994.7 | 6089.1 | 6613.9 | 6661.1 | 5273.7 |
| 62.5° | 2797.7 | 2875.3 | 3388.3 | 4466.4 | 5691.0 | 6328.8 | 6685.3 | 6643.1 | 7188.3 | 7221.2 | 5537.0 |
| 65°   | 2387.2 | 2394.0 | 2866.6 | 3976.4 | 5489.8 | 6657.4 | 7170.3 | 6993.3 | 7462.8 | 7485.2 | 5516.5 |
| 67.5° | 1781.7 | 1847.5 | 2205.3 | 3125.6 | 4637.2 | 6376.7 | 7327.4 | 7002.6 | 7289.6 | 7227.5 | 5078.7 |
| 70°   | 1147.6 | 1198.0 | 1494.8 | 2167.4 | 3343.6 | 5321.5 | 6806.4 | 6522.6 | 6397.8 | 6259.9 | 4157.1 |
| 72.5° | 529.7  | 594.3  | 888.1  | 1238.3 | 1982.9 | 3790.7 | 5525.2 | 5299.2 | 4604.9 | 4264.6 | 2642.5 |
| 75°   | 231.0  | 247.2  | 438.4  | 653.3  | 929.7  | 2004.7 | 3642.9 | 3289.6 | 2079.8 | 1899.7 | 1057.6 |
| 77.5° | 141.0  | 151.5  | 229.8  | 350.3  | 365.2  | 763.9  | 1962.4 | 1435.2 | 642.8  | 567.0  | 286.9  |
| 80°   | 95.6   | 107.4  | 167.1  | 183.2  | 124.8  | 213.0  | 736.5  | 383.2  | 129.8  | 124.2  | 61.5   |
| 82.5° | 46.6   | 59.0   | 123.6  | 102.5  | 54.0   | 68.3   | 214.3  | 82.0   | 37.9   | 35.4   | 21.7   |
| 85°   | 6.8    | 11.8   | 69.6   | 67.1   | 24.2   | 16.1   | 37.9   | 20.5   | 13.0   | 12.4   | 9.9    |
| 87.5° | 0.0    | 0.0    | 23.6   | 10.6   | 2.5    | 2.5    | 4.3    | 4.3    | 5.0    | 4.3    | 5.0    |
| 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°    | 1609.1 | 1609.1 | 1609.1 | 1609.1 | 1609.1 | 1609.1 | 1609.1 | 1609.1 | 1609.1 | 1609.1 | 1609.1 |
| 2.5°  | 1621.5 | 1624.6 | 1612.8 | 1596.0 | 1578.0 | 1560.0 | 1534.5 | 1511.6 | 1497.9 | 1506.0 | 1486.1 |
| 5°    | 1650.7 | 1648.2 | 1617.1 | 1566.2 | 1498.5 | 1417.2 | 1336.4 | 1267.5 | 1245.1 | 1211.6 | 1207.9 |
| 7.5°  | 1691.0 | 1684.2 | 1618.4 | 1501.6 | 1348.9 | 1196.1 | 1047.0 | 948.3  | 891.8  | 844.0  | 845.2  |
| 10°   | 1747.6 | 1727.7 | 1604.1 | 1388.0 | 1136.5 | 906.1  | 716.0  | 585.6  | 529.1  | 511.1  | 496.8  |
| 12.5° | 1805.9 | 1767.4 | 1564.4 | 1234.6 | 885.0  | 619.2  | 435.3  | 355.8  | 321.1  | 309.9  | 308.6  |
| 15°   | 1858.1 | 1797.2 | 1494.8 | 1050.1 | 643.4  | 395.6  | 296.8  | 270.8  | 266.4  | 267.0  | 266.4  |
| 17.5° | 1909.6 | 1820.8 | 1398.5 | 854.5  | 437.2  | 283.8  | 255.2  | 249.0  | 250.9  | 253.4  | 252.8  |
| 20°   | 1952.5 | 1825.8 | 1275.6 | 652.1  | 309.3  | 249.0  | 239.7  | 238.5  | 240.3  | 242.2  | 242.2  |
| 22.5° | 1999.1 | 1829.5 | 1129.6 | 451.5  | 252.8  | 231.6  | 226.7  | 226.7  | 229.2  | 231.6  | 232.3  |
| 25°   | 2033.8 | 1809.0 | 955.1  | 324.2  | 222.9  | 214.9  | 212.4  | 213.0  | 215.5  | 216.7  | 216.1  |
| 27.5° | 2039.4 | 1751.3 | 770.1  | 248.4  | 202.5  | 194.4  | 191.9  | 194.4  | 191.3  | 193.1  | 191.9  |
| 30°   | 2044.4 | 1678.0 | 582.5  | 209.3  | 183.8  | 171.4  | 167.7  | 163.9  | 161.5  | 158.4  | 157.7  |
| 32.5° | 2059.9 | 1591.7 | 425.4  | 188.2  | 166.4  | 152.8  | 144.1  | 133.5  | 125.4  | 123.0  | 122.3  |
| 35°   | 2066.8 | 1488.0 | 312.4  | 171.4  | 150.9  | 136.0  | 120.5  | 105.6  | 93.8   | 89.4   | 92.5   |
| 37.5° | 2092.8 | 1387.4 | 242.2  | 159.0  | 137.2  | 118.6  | 98.7   | 80.1   | 68.9   | 66.4   | 67.7   |
| 40°   | 2146.3 | 1278.1 | 203.1  | 148.4  | 125.4  | 102.5  | 78.2   | 60.2   | 52.8   | 50.3   | 49.7   |
| 42.5° | 2232.0 | 1169.4 | 180.7  | 138.5  | 113.6  | 86.3   | 61.5   | 47.2   | 41.0   | 39.1   | 39.1   |
| 45°   | 2336.3 | 1065.1 | 165.2  | 127.9  | 101.2  | 69.6   | 48.4   | 37.9   | 34.2   | 32.9   | 32.9   |
| 47.5° | 2473.5 | 973.8  | 152.2  | 117.4  | 87.6   | 55.3   | 39.1   | 32.9   | 30.4   | 31.1   | 31.7   |
| 50°   | 2612.6 | 906.1  | 137.9  | 105.6  | 72.0   | 45.3   | 33.5   | 29.2   | 28.6   | 29.2   | 29.2   |
| 52.5° | 2717.6 | 866.3  | 118.6  | 89.4   | 56.5   | 37.9   | 29.8   | 27.3   | 26.7   | 25.5   | 25.5   |
| 55°   | 2859.2 | 857.6  | 94.4   | 72.7   | 44.7   | 31.7   | 26.7   | 24.8   | 23.0   | 21.7   | 21.1   |
| 57.5° | 3041.1 | 867.6  | 72.7   | 56.5   | 34.8   | 26.1   | 23.6   | 20.5   | 18.0   | 15.5   | 15.5   |
| 60°   | 3154.2 | 845.2  | 56.5   | 43.5   | 25.5   | 21.1   | 18.0   | 14.9   | 11.8   | 9.9    | 9.3    |
| 62.5° | 3118.2 | 750.8  | 44.7   | 32.3   | 18.0   | 15.5   | 11.8   | 9.9    | 6.8    | 5.0    | 4.3    |
| 65°   | 2932.5 | 606.1  | 36.0   | 22.4   | 13.0   | 9.3    | 6.2    | 6.2    | 3.1    | 0.6    | 0.0    |
| 67.5° | 2566.7 | 449.0  | 28.6   | 14.9   | 7.5    | 4.3    | 3.1    | 1.9    | 0.0    | 0.0    | 0.0    |
| 70°   | 2089.1 | 324.2  | 22.4   | 9.3    | 4.3    | 3.1    | 1.2    | 0.6    | 0.0    | 0.0    | 0.0    |
| 72.5° | 1326.5 | 185.7  | 17.4   | 5.6    | 3.1    | 1.2    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 513.0  | 72.7   | 11.8   | 3.7    | 1.2    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 145.3  | 34.2   | 6.8    | 1.9    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 37.9   | 14.9   | 3.7    | 0.6    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 18.0   | 6.2    | 1.2    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 10.6   | 2.5    | 0.6    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 5.0    | 0.6    | 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)