

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: P522687

Luminaire Tested: **GALN-SA3A-730-U-T4W**

Issue Date: 5/13/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P522687  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2011-042-41)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/13/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA3A-730-U-T4W  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12442 lumens  
Efficiency: N/A  
Efficacy: 133.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G2

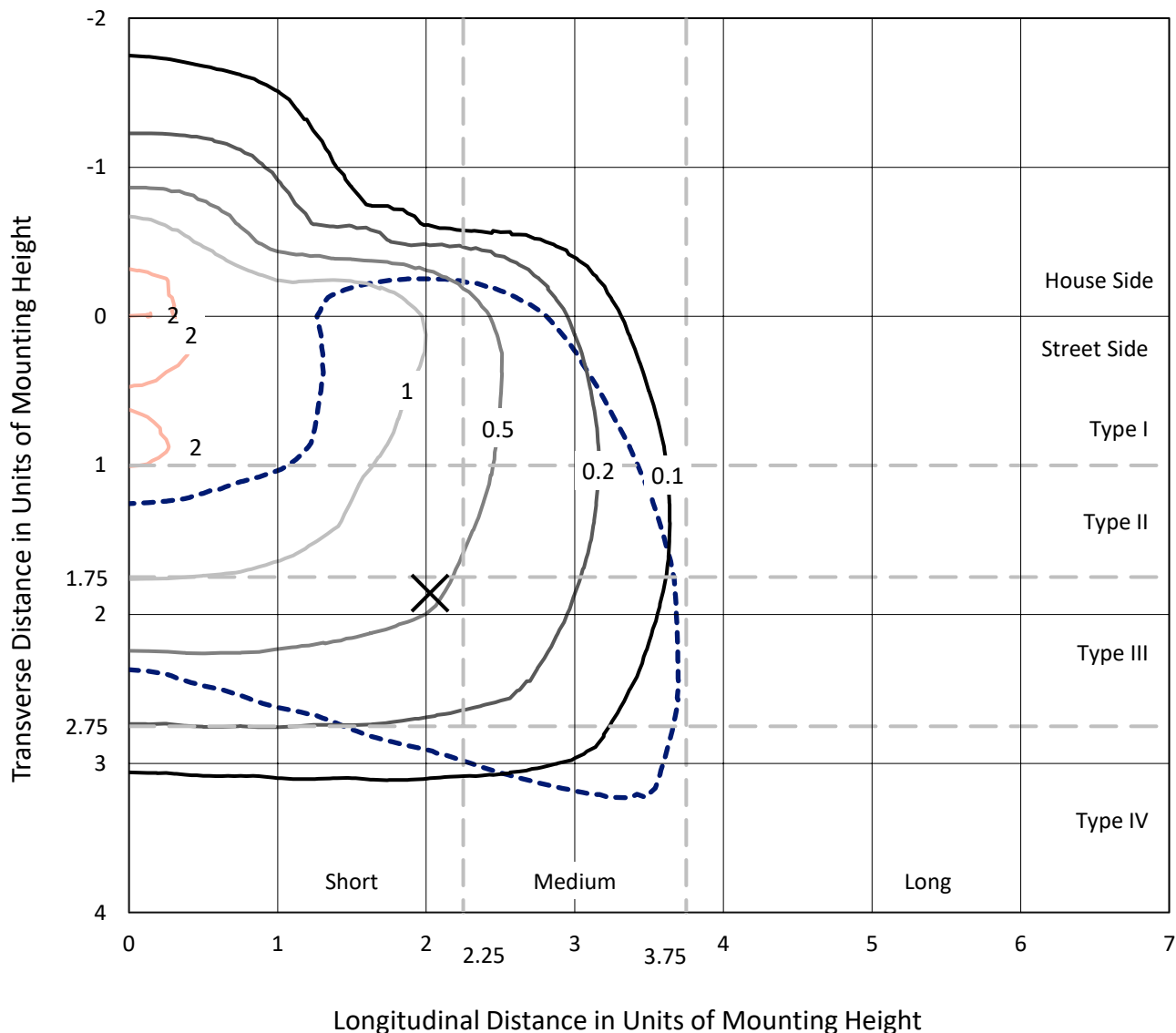
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

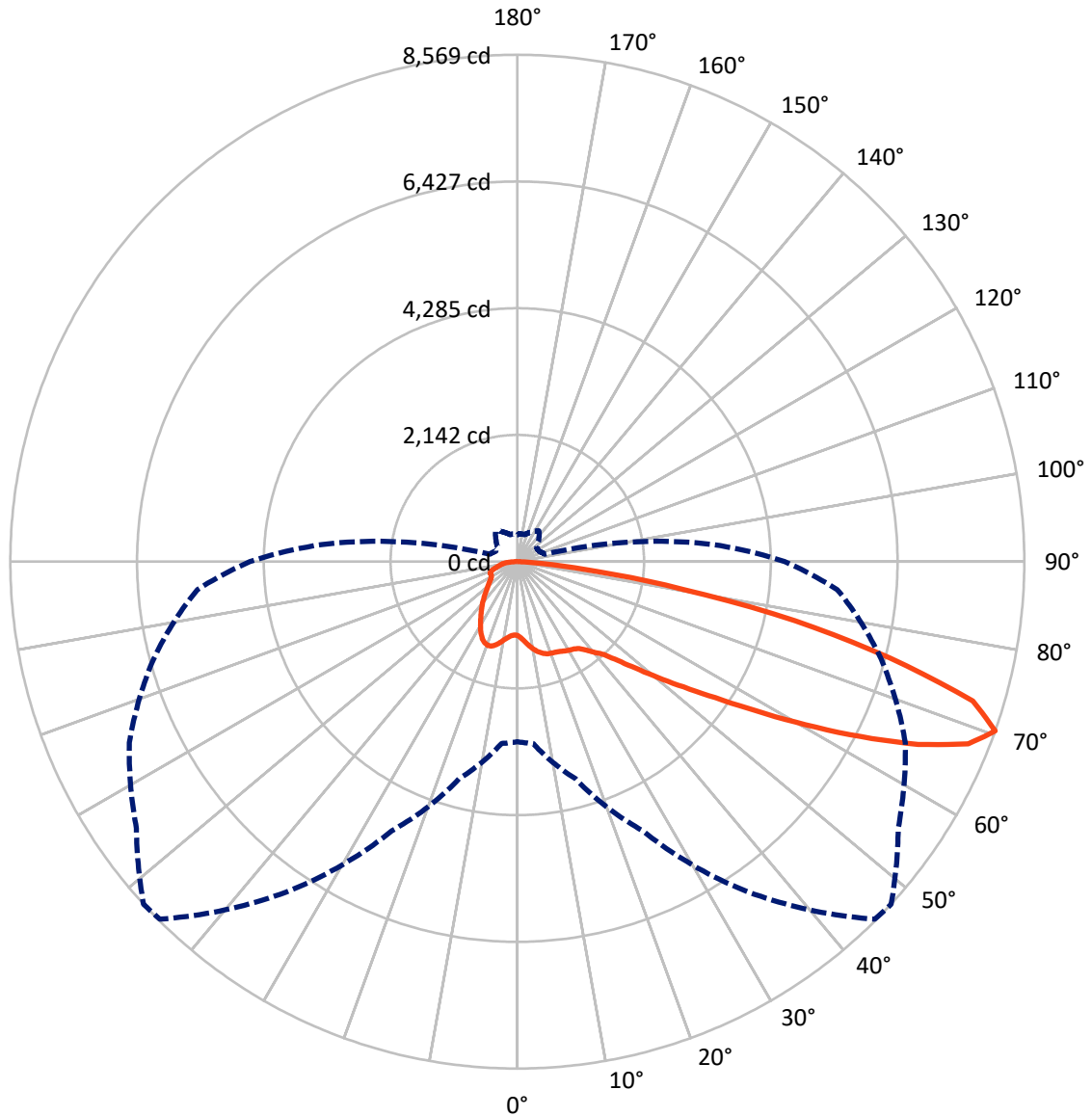
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.5 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2817.1   | 0.0    | 2817.1  |
|                    | % Fixture | 22.6     | 0.0    | 22.6    |
| <b>Street Side</b> | Lumens    | 9624.9   | 0.0    | 9624.9  |
|                    | % Fixture | 77.4     | 0.0    | 77.4    |
| <b>Total</b>       | Lumens    | 12442.0  | 0.0    | 12442.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 128.7   | 1.0       |
| 10°-20°   | 430.4   | 3.5       |
| 20°-30°   | 715.8   | 5.8       |
| 30°-40°   | 1014.5  | 8.2       |
| 40°-50°   | 1497.6  | 12.0      |
| 50°-60°   | 2594.0  | 20.8      |
| 60°-70°   | 3664.1  | 29.4      |
| 70°-80°   | 2106.3  | 16.9      |
| 80°-90°   | 290.6   | 2.3       |
| 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°    | 12442.0 | 100.0     |
| 0°-180°   | 12442.0 | 100.0     |

**Coefficient of Utilization**



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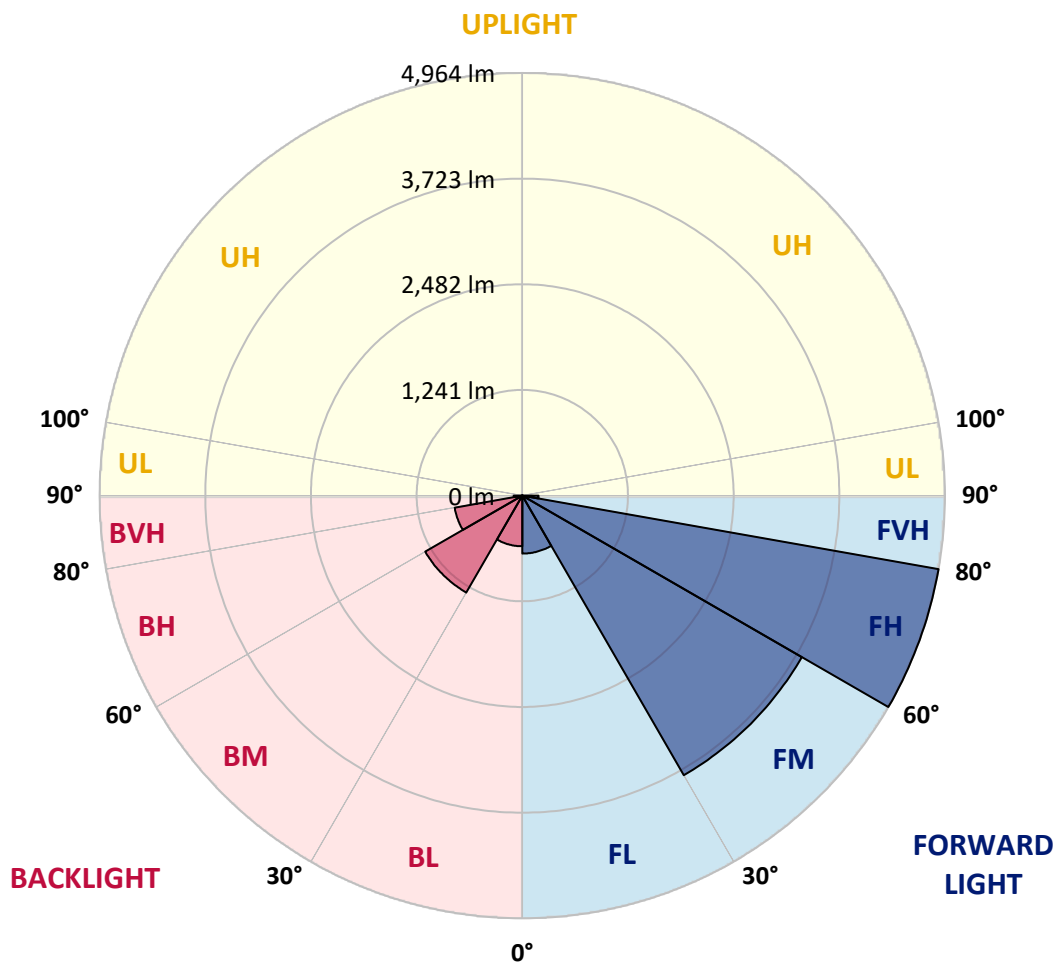
CATALOG NUMBER: GALN-SA3A-730-U-T4W

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 680.4  | 5.5       |                         |      |         |
| FM   | (30°-60°)   | 3790.8 | 30.5      |                         |      |         |
| FH   | (60°-80°)   | 4963.8 | 39.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 189.8  | 1.5       |                         |      | G2/225  |
| BL   | (0°-30°)    | 594.6  | 4.8       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1315.3 | 10.6      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 806.5  | 6.5       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 100.8  | 0.8       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 47.5°  | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1249.0 | 1249.0 | 1249.0 | 1249.0 | 1249.0 | 1249.0 | 1249.0 | 1249.0 | 1249.0 | 1249.0 | 1249.0 |
| 2.5°  | 1329.6 | 1324.9 | 1324.3 | 1314.3 | 1308.9 | 1299.0 | 1295.0 | 1285.6 | 1274.3 | 1263.0 | 1252.4 |
| 5°    | 1434.1 | 1434.1 | 1429.5 | 1415.5 | 1393.5 | 1370.9 | 1360.9 | 1342.9 | 1310.9 | 1285.0 | 1263.0 |
| 7.5°  | 1541.3 | 1542.6 | 1533.3 | 1512.7 | 1481.4 | 1444.8 | 1435.4 | 1408.8 | 1363.5 | 1325.6 | 1293.0 |
| 10°   | 1633.9 | 1633.9 | 1621.2 | 1593.2 | 1554.0 | 1514.0 | 1504.7 | 1474.7 | 1424.1 | 1376.9 | 1334.2 |
| 12.5° | 1704.4 | 1704.4 | 1687.8 | 1651.2 | 1608.6 | 1572.6 | 1561.9 | 1533.3 | 1486.0 | 1433.5 | 1379.5 |
| 15°   | 1750.4 | 1747.0 | 1728.4 | 1687.1 | 1645.8 | 1614.5 | 1607.2 | 1583.3 | 1540.0 | 1486.7 | 1426.1 |
| 17.5° | 1752.4 | 1751.0 | 1733.1 | 1698.4 | 1662.5 | 1641.2 | 1636.5 | 1620.5 | 1586.6 | 1536.0 | 1472.1 |
| 20°   | 1713.8 | 1716.4 | 1704.4 | 1679.8 | 1662.5 | 1653.2 | 1651.2 | 1645.8 | 1621.9 | 1574.6 | 1510.7 |
| 22.5° | 1672.5 | 1677.1 | 1665.8 | 1652.5 | 1651.2 | 1660.5 | 1661.8 | 1663.2 | 1647.8 | 1601.9 | 1543.3 |
| 25°   | 1662.5 | 1665.8 | 1654.5 | 1642.5 | 1649.8 | 1674.5 | 1679.8 | 1685.1 | 1673.1 | 1634.5 | 1581.9 |
| 27.5° | 1713.1 | 1710.4 | 1688.5 | 1662.5 | 1667.1 | 1700.4 | 1707.8 | 1713.8 | 1707.8 | 1674.5 | 1629.9 |
| 30°   | 1856.2 | 1847.6 | 1803.6 | 1727.7 | 1703.8 | 1727.1 | 1734.4 | 1751.0 | 1751.0 | 1726.4 | 1681.8 |
| 32.5° | 2095.9 | 2079.3 | 1998.7 | 1849.6 | 1766.3 | 1752.4 | 1759.7 | 1787.0 | 1801.0 | 1781.7 | 1733.1 |
| 35°   | 2386.9 | 2369.6 | 2254.4 | 2054.0 | 1880.9 | 1803.0 | 1801.0 | 1831.6 | 1868.9 | 1825.6 | 1762.4 |
| 37.5° | 2679.1 | 2661.2 | 2522.7 | 2297.7 | 2048.0 | 1909.5 | 1897.5 | 1908.2 | 1924.1 | 1844.9 | 1803.0 |
| 40°   | 2971.4 | 2950.1 | 2829.0 | 2570.0 | 2252.4 | 2050.6 | 2019.3 | 1971.4 | 1964.8 | 1908.2 | 1881.5 |
| 42.5° | 3261.1 | 3241.7 | 3180.5 | 2875.6 | 2497.4 | 2188.5 | 2140.5 | 2058.0 | 2083.3 | 2049.3 | 2026.0 |
| 45°   | 3553.3 | 3554.7 | 3489.4 | 3218.4 | 2793.0 | 2442.8 | 2378.2 | 2249.0 | 2309.0 | 2296.3 | 2309.6 |
| 47.5° | 3812.3 | 3809.0 | 3785.7 | 3551.3 | 3159.9 | 2770.4 | 2687.1 | 2537.3 | 2639.9 | 2686.5 | 2788.3 |
| 50°   | 4063.3 | 4061.3 | 4062.7 | 3928.8 | 3586.0 | 3159.9 | 3068.0 | 2910.8 | 3141.9 | 3303.7 | 3486.1 |
| 52.5° | 4422.9 | 4434.2 | 4353.6 | 4318.3 | 4103.9 | 3619.9 | 3518.7 | 3356.3 | 3735.1 | 3990.1 | 4346.3 |
| 55°   | 4783.7 | 4774.4 | 4711.1 | 4747.8 | 4645.9 | 4164.5 | 4058.7 | 3929.5 | 4395.6 | 4674.5 | 5209.8 |
| 57.5° | 4996.1 | 4999.4 | 5064.0 | 5243.1 | 5315.0 | 4843.6 | 4747.8 | 4647.9 | 5137.9 | 5335.7 | 5978.2 |
| 60°   | 5187.2 | 5202.5 | 5388.3 | 5726.5 | 5921.6 | 5677.9 | 5592.7 | 5495.5 | 5819.0 | 5897.6 | 6645.3 |
| 62.5° | 5247.1 | 5294.4 | 5618.6 | 6124.6 | 6512.8 | 6619.3 | 6513.4 | 6299.1 | 6467.5 | 6436.9 | 7097.4 |
| 65°   | 4948.2 | 5012.8 | 5594.0 | 6273.8 | 7040.8 | 7512.8 | 7445.6 | 7047.4 | 7020.1 | 6835.7 | 7171.3 |
| 67.5° | 4161.2 | 4225.8 | 4972.1 | 5960.8 | 7259.1 | 8286.5 | 8219.2 | 7593.4 | 7355.7 | 6873.0 | 6612.0 |
| 70°   | 3044.7 | 3085.3 | 3799.0 | 5018.7 | 6820.4 | 8546.1 | 8569.4 | 7859.7 | 7235.8 | 6366.3 | 5428.9 |
| 72.5° | 1754.4 | 1844.2 | 2344.3 | 3530.7 | 5572.0 | 7889.6 | 8051.4 | 7305.7 | 6478.2 | 5311.0 | 3795.7 |
| 75°   | 754.3  | 756.3  | 1083.9 | 1947.4 | 3773.7 | 6341.7 | 6498.1 | 6056.1 | 5087.3 | 3672.5 | 2026.7 |
| 77.5° | 358.9  | 365.5  | 476.7  | 869.5  | 2077.3 | 4381.6 | 4803.7 | 4278.4 | 3253.7 | 1764.4 | 765.7  |
| 80°   | 233.0  | 237.7  | 291.6  | 431.4  | 1018.7 | 2540.7 | 2834.9 | 2468.1 | 1435.4 | 630.5  | 330.2  |
| 82.5° | 141.1  | 142.5  | 195.1  | 263.7  | 560.6  | 1150.5 | 1356.2 | 1071.3 | 612.5  | 377.5  | 194.4  |
| 85°   | 85.9   | 86.6   | 118.5  | 163.1  | 340.2  | 397.5  | 408.1  | 404.8  | 359.5  | 247.0  | 103.9  |
| 87.5° | 41.3   | 42.6   | 61.3   | 77.2   | 133.8  | 123.2  | 116.5  | 135.2  | 169.8  | 133.2  | 44.6   |
| 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°    | 1249.0 | 1249.0 | 1249.0 | 1249.0 | 1249.0 | 1249.0 | 1249.0 | 1249.0 | 1249.0 | 1249.0 | 1249.0 |
| 2.5°  | 1247.7 | 1245.7 | 1241.0 | 1239.0 | 1237.7 | 1238.4 | 1237.7 | 1237.7 | 1238.4 | 1238.4 | 1238.4 |
| 5°    | 1253.7 | 1250.4 | 1243.0 | 1243.0 | 1247.0 | 1256.4 | 1265.0 | 1271.7 | 1279.0 | 1278.3 | 1278.3 |
| 7.5°  | 1279.7 | 1273.7 | 1265.0 | 1267.7 | 1277.7 | 1292.3 | 1307.6 | 1322.3 | 1336.9 | 1338.2 | 1337.6 |
| 10°   | 1317.6 | 1311.6 | 1302.3 | 1305.6 | 1321.6 | 1343.6 | 1362.9 | 1384.2 | 1400.2 | 1404.8 | 1403.5 |
| 12.5° | 1360.9 | 1348.9 | 1340.9 | 1350.2 | 1375.5 | 1404.8 | 1423.5 | 1439.4 | 1450.8 | 1457.4 | 1454.8 |
| 15°   | 1404.8 | 1393.5 | 1384.2 | 1403.5 | 1434.1 | 1461.4 | 1470.7 | 1473.4 | 1475.4 | 1482.1 | 1480.7 |
| 17.5° | 1447.4 | 1432.1 | 1428.8 | 1454.1 | 1483.4 | 1495.4 | 1490.0 | 1478.7 | 1470.1 | 1475.4 | 1474.7 |
| 20°   | 1485.4 | 1473.4 | 1472.1 | 1497.4 | 1508.7 | 1497.4 | 1474.7 | 1454.8 | 1439.4 | 1440.8 | 1440.1 |
| 22.5° | 1521.3 | 1512.0 | 1513.3 | 1524.0 | 1506.0 | 1467.4 | 1430.1 | 1402.8 | 1386.2 | 1389.5 | 1391.5 |
| 25°   | 1561.3 | 1552.0 | 1555.3 | 1538.0 | 1478.7 | 1411.5 | 1357.6 | 1334.2 | 1327.6 | 1334.2 | 1338.9 |
| 27.5° | 1613.2 | 1607.2 | 1605.2 | 1538.6 | 1430.1 | 1328.9 | 1267.7 | 1259.0 | 1265.0 | 1279.7 | 1287.0 |
| 30°   | 1669.1 | 1669.1 | 1658.5 | 1527.3 | 1363.5 | 1229.7 | 1176.5 | 1177.8 | 1198.4 | 1219.1 | 1226.4 |
| 32.5° | 1723.1 | 1734.4 | 1701.1 | 1496.7 | 1277.7 | 1133.2 | 1092.6 | 1093.9 | 1111.9 | 1137.2 | 1143.8 |
| 35°   | 1767.7 | 1800.3 | 1737.7 | 1440.8 | 1176.5 | 1052.0 | 1021.3 | 1003.3 | 1004.0 | 1023.3 | 1028.6 |
| 37.5° | 1828.9 | 1889.5 | 1759.0 | 1357.6 | 1068.6 | 982.7  | 948.1  | 916.8  | 896.2  | 888.2  | 888.2  |
| 40°   | 1935.5 | 2024.7 | 1764.4 | 1234.4 | 966.7  | 916.8  | 867.5  | 830.2  | 790.3  | 754.3  | 747.7  |
| 42.5° | 2115.9 | 2228.4 | 1753.7 | 1092.6 | 874.9  | 844.2  | 796.3  | 750.3  | 695.1  | 644.5  | 640.5  |
| 45°   | 2435.5 | 2493.4 | 1725.1 | 945.4  | 793.0  | 774.3  | 727.7  | 677.8  | 619.2  | 573.9  | 570.6  |
| 47.5° | 2947.5 | 2865.6 | 1687.1 | 814.9  | 718.4  | 713.1  | 677.1  | 619.2  | 560.6  | 529.3  | 526.0  |
| 50°   | 3695.1 | 3451.5 | 1681.8 | 720.4  | 658.5  | 661.1  | 631.8  | 578.6  | 527.3  | 501.3  | 497.3  |
| 52.5° | 4595.3 | 4159.2 | 1717.1 | 653.8  | 605.9  | 615.9  | 601.2  | 551.9  | 506.7  | 484.7  | 480.7  |
| 55°   | 5468.8 | 4795.7 | 1738.4 | 601.9  | 556.6  | 575.2  | 577.2  | 536.0  | 494.7  | 472.7  | 470.0  |
| 57.5° | 6177.9 | 5275.1 | 1643.8 | 554.6  | 514.0  | 542.6  | 557.3  | 526.6  | 488.7  | 472.0  | 469.4  |
| 60°   | 6671.2 | 5501.4 | 1374.9 | 512.7  | 482.7  | 516.7  | 549.9  | 527.3  | 503.3  | 505.3  | 506.7  |
| 62.5° | 6828.4 | 5400.9 | 1031.3 | 481.4  | 461.4  | 508.0  | 561.9  | 554.6  | 530.0  | 545.3  | 547.9  |
| 65°   | 6568.0 | 4985.5 | 747.7  | 456.7  | 442.8  | 514.0  | 597.9  | 574.6  | 520.6  | 532.0  | 532.0  |
| 67.5° | 5696.5 | 4295.0 | 581.9  | 434.1  | 421.4  | 525.3  | 633.8  | 572.6  | 498.7  | 512.0  | 500.0  |
| 70°   | 4518.7 | 3322.3 | 484.7  | 408.8  | 398.8  | 508.7  | 637.2  | 551.9  | 472.7  | 475.4  | 452.7  |
| 72.5° | 2998.7 | 2184.5 | 416.8  | 384.8  | 364.2  | 457.4  | 609.9  | 525.3  | 447.4  | 432.1  | 409.5  |
| 75°   | 1469.4 | 1089.2 | 363.5  | 354.9  | 318.9  | 398.1  | 572.6  | 500.0  | 420.1  | 396.1  | 383.5  |
| 77.5° | 569.3  | 463.4  | 310.3  | 316.9  | 277.6  | 350.9  | 523.3  | 464.1  | 384.2  | 351.5  | 341.6  |
| 80°   | 276.3  | 263.0  | 254.3  | 264.3  | 228.4  | 298.9  | 478.0  | 432.8  | 350.9  | 314.9  | 300.3  |
| 82.5° | 171.8  | 162.5  | 195.1  | 205.7  | 175.8  | 273.0  | 453.4  | 406.1  | 308.9  | 261.0  | 249.0  |
| 85°   | 87.2   | 93.2   | 130.5  | 140.5  | 125.8  | 217.0  | 373.5  | 304.9  | 223.0  | 185.1  | 186.4  |
| 87.5° | 33.3   | 44.6   | 68.6   | 73.9   | 67.2   | 114.5  | 205.7  | 177.8  | 143.1  | 97.2   | 89.9   |
| 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)