

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: P452746

Luminaire Tested: **GALN-SA3D-727-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P452746  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GALN-SA3D-727-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19502 lumens  
Efficiency: N/A  
Efficacy: 106.0 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

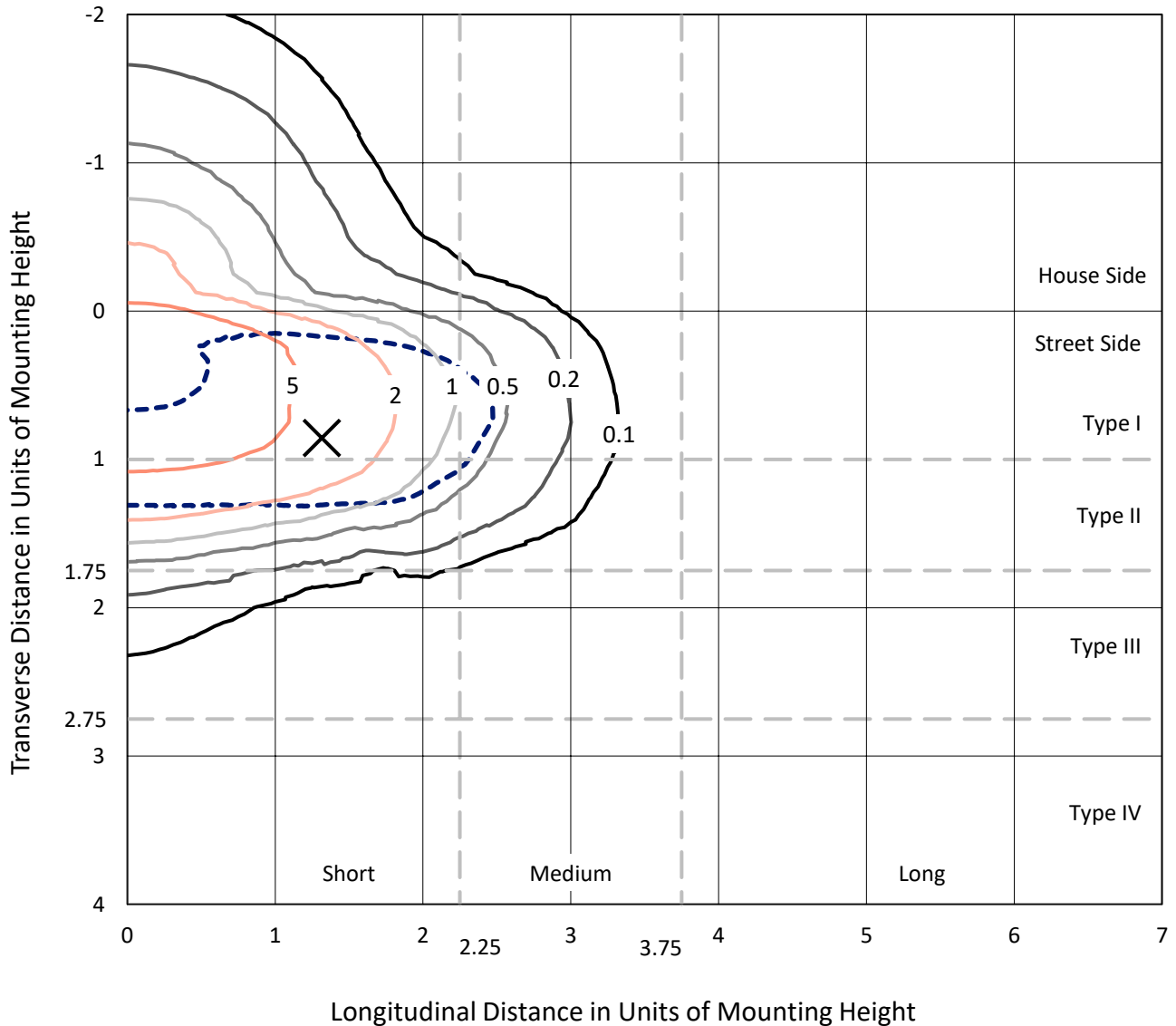
Input Watts (W): 184  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P452746  
 CATALOG NUMBER: GALN-SA3D-727-U-AFL

### Iso-Footcandle Lines of Horizontal Illumination

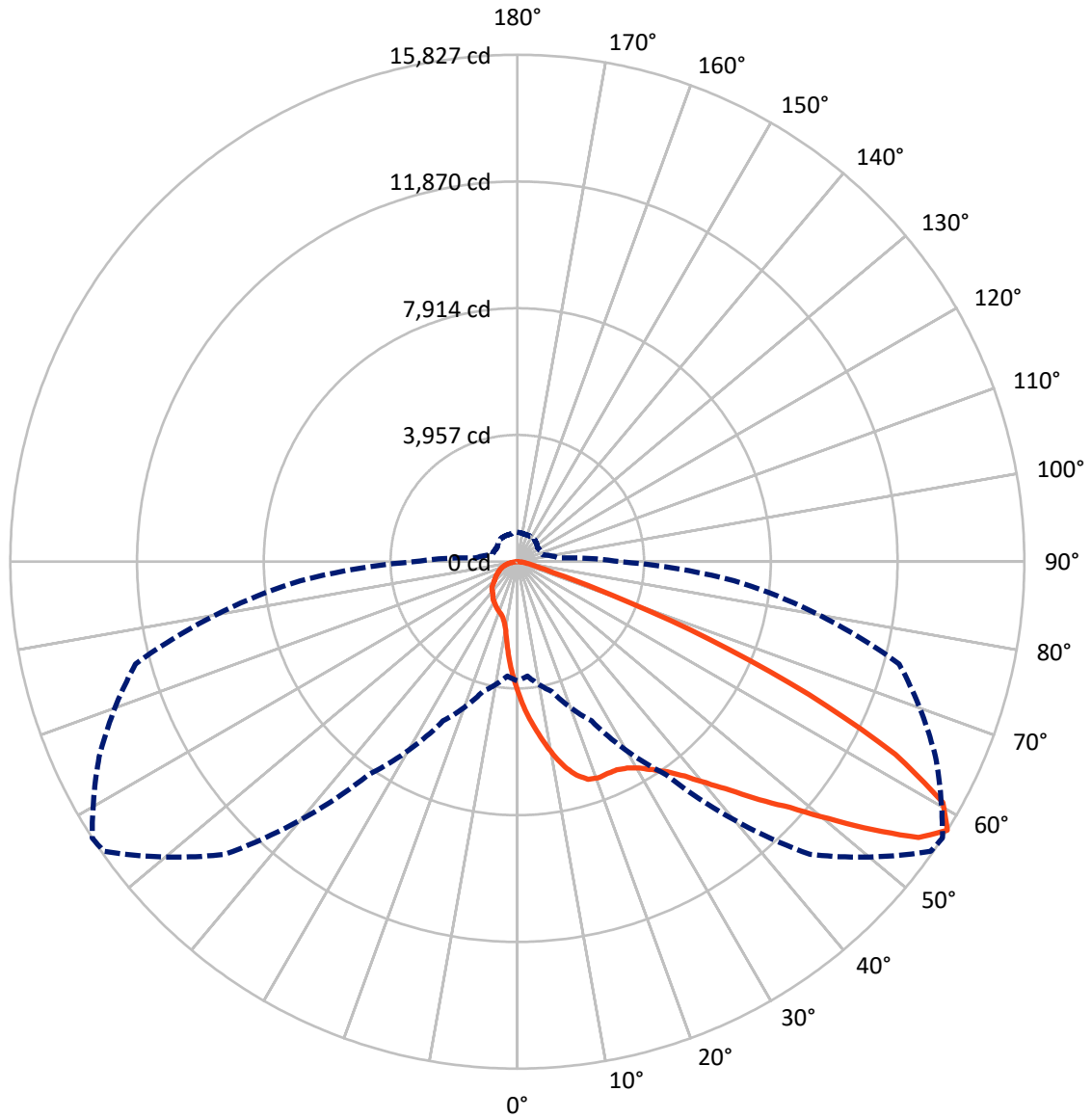
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10 fc  
 Type II - Short - N/A

REPORT NUMBER: P452746  
CATALOG NUMBER: GALN-SA3D-727-U-AFL

### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral    - - - Horizontal Cone Through 57.5-Deg Vertical

REPORT NUMBER: P452746

CATALOG NUMBER: GALN-SA3D-727-U-AFL

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2965.7   | 0.0    | 2965.7  |
|                    | % Fixture | 15.2     | 0.0    | 15.2    |
| <b>Street Side</b> | Lumens    | 16536.3  | 0.0    | 16536.3 |
|                    | % Fixture | 84.8     | 0.0    | 84.8    |
| <b>Total</b>       | Lumens    | 19502.0  | 0.0    | 19502.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 393.8   | 2.0       |
| 10°-20°   | 1160.5  | 6.0       |
| 20°-30°   | 1927.0  | 9.9       |
| 30°-40°   | 2902.6  | 14.9      |
| 40°-50°   | 4358.0  | 22.3      |
| 50°-60°   | 4884.8  | 25.0      |
| 60°-70°   | 2858.8  | 14.7      |
| 70°-80°   | 845.6   | 4.3       |
| 80°-90°   | 170.9   | 0.9       |
| 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°    | 19502.0 | 100.0     |
| 0°-180°   | 19502.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P452746

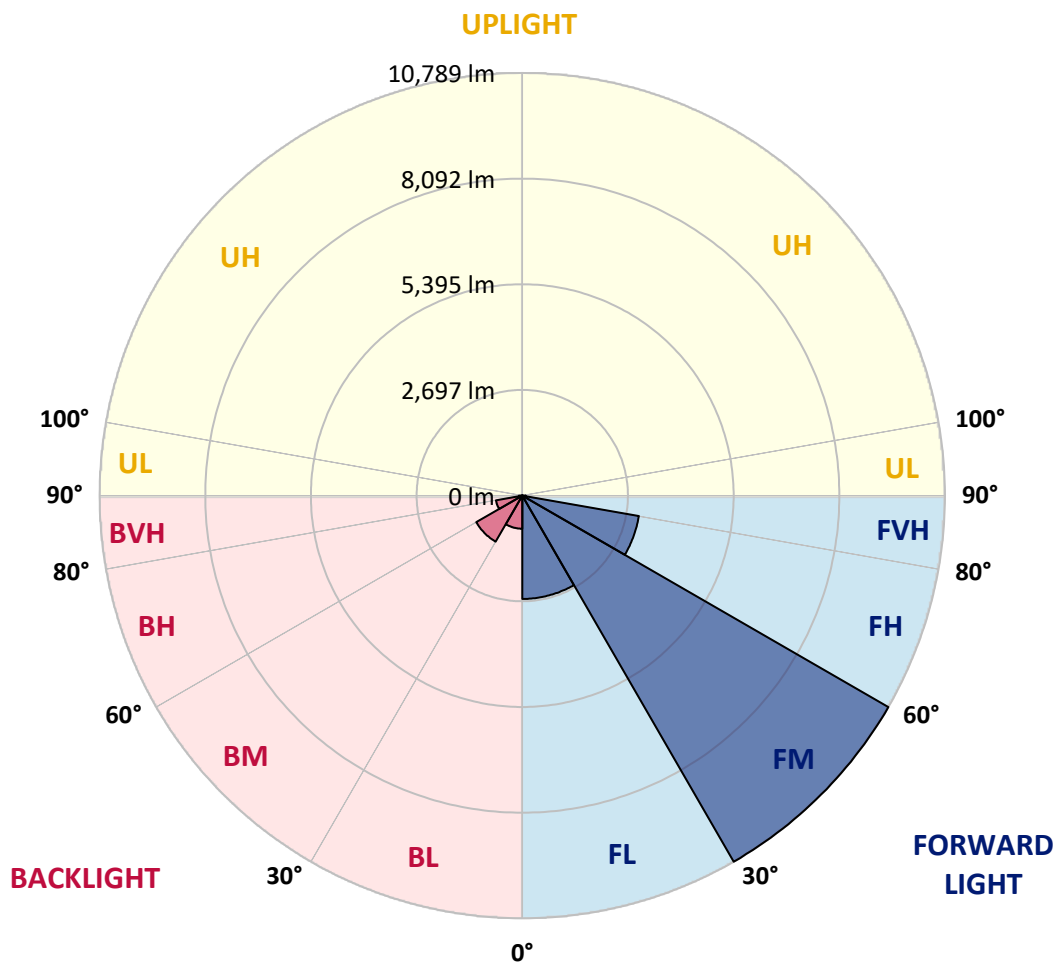
CATALOG NUMBER: GALN-SA3D-727-U-AFL

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2636.2  | 13.5      |                         |      |         |
| FM   | (30°-60°)   | 10789.4 | 55.3      |                         |      |         |
| FH   | (60°-80°)   | 3022.0  | 15.5      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 88.7    | 0.5       |                         |      | G1/100  |
| BL   | (0°-30°)    | 845.0   | 4.3       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1356.0  | 7.0       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 682.4   | 3.5       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 82.2    | 0.4       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

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

Type II Short





REPORT NUMBER: P452746

CATALOG NUMBER: GALN-SA3D-727-U-AFL

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 57°     | 65°     | 75°     | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 4097.1  | 4097.1  | 4097.1  | 4097.1  | 4097.1  | 4097.1  | 4097.1  | 4097.1  | 4097.1  | 4097.1  | 4097.1 |
| 2.5°  | 5091.0  | 5035.5  | 4991.7  | 4953.3  | 4903.1  | 4767.6  | 4632.0  | 4629.8  | 4522.0  | 4355.5  | 4184.7 |
| 5°    | 5920.5  | 5845.7  | 5855.4  | 5735.8  | 5616.2  | 5419.8  | 5132.6  | 5117.7  | 4888.2  | 4576.5  | 4259.4 |
| 7.5°  | 6460.6  | 6461.7  | 6431.8  | 6363.5  | 6234.3  | 6011.2  | 5685.6  | 5612.0  | 5292.8  | 4819.9  | 4344.8 |
| 10°   | 6432.9  | 6461.7  | 6511.9  | 6570.6  | 6610.1  | 6500.1  | 6203.4  | 6113.7  | 5698.4  | 5114.5  | 4439.8 |
| 12.5° | 6063.5  | 6108.4  | 6179.9  | 6327.2  | 6565.3  | 6746.7  | 6645.3  | 6572.7  | 6168.1  | 5408.1  | 4544.4 |
| 15°   | 5832.9  | 5859.6  | 5899.1  | 5998.4  | 6254.6  | 6689.1  | 6951.7  | 6913.3  | 6611.2  | 5740.1  | 4661.9 |
| 17.5° | 5762.5  | 5789.2  | 5802.0  | 5862.8  | 6045.4  | 6490.5  | 7072.3  | 7140.7  | 7004.0  | 6045.4  | 4780.4 |
| 20°   | 5832.9  | 5845.7  | 5845.7  | 5882.0  | 6025.1  | 6374.2  | 7067.0  | 7204.7  | 7326.4  | 6411.5  | 4891.4 |
| 22.5° | 6017.6  | 6023.0  | 6015.5  | 6028.3  | 6135.0  | 6406.2  | 7016.8  | 7187.6  | 7586.9  | 6722.2  | 4977.9 |
| 25°   | 6317.6  | 6326.1  | 6277.0  | 6247.1  | 6325.1  | 6547.1  | 7044.6  | 7201.5  | 7790.8  | 7019.0  | 5035.5 |
| 27.5° | 6658.1  | 6668.8  | 6609.0  | 6539.6  | 6575.9  | 6721.1  | 7153.5  | 7294.4  | 7943.4  | 7311.5  | 5071.8 |
| 30°   | 7075.5  | 7079.8  | 6979.5  | 6896.2  | 6872.7  | 6980.5  | 7339.2  | 7470.5  | 8133.4  | 7656.3  | 5126.2 |
| 32.5° | 7502.5  | 7534.6  | 7405.4  | 7288.0  | 7248.5  | 7281.6  | 7613.6  | 7740.6  | 8359.8  | 8026.7  | 5213.8 |
| 35°   | 8083.3  | 8088.6  | 7933.8  | 7790.8  | 7660.5  | 7703.2  | 7964.8  | 8056.6  | 8672.5  | 8454.8  | 5337.6 |
| 37.5° | 8808.1  | 8857.2  | 8643.7  | 8376.8  | 8216.7  | 8154.8  | 8389.7  | 8490.0  | 9111.3  | 8980.0  | 5524.4 |
| 40°   | 9613.0  | 9631.2  | 9448.6  | 9282.1  | 8989.6  | 8810.3  | 8972.5  | 9081.4  | 9652.5  | 9606.6  | 5741.1 |
| 42.5° | 10119.0 | 10158.5 | 10172.4 | 10155.3 | 9935.4  | 9634.4  | 9696.3  | 9747.5  | 10293.0 | 10194.8 | 5963.2 |
| 45°   | 10289.8 | 10348.6 | 10547.1 | 10967.7 | 10991.2 | 10694.4 | 10550.3 | 10599.4 | 10991.2 | 10788.4 | 6175.6 |
| 47.5° | 10006.9 | 10107.3 | 10473.5 | 11336.0 | 11981.9 | 12004.3 | 11569.8 | 11462.0 | 11627.4 | 11280.5 | 6329.3 |
| 50°   | 9275.7  | 9297.0  | 9857.5  | 11106.5 | 12446.2 | 13256.5 | 12807.1 | 12606.4 | 12231.7 | 11644.5 | 6435.0 |
| 52.5° | 8144.1  | 8168.7  | 8638.4  | 10040.0 | 12160.1 | 14131.8 | 14254.6 | 13895.9 | 12845.5 | 11927.4 | 6504.4 |
| 55°   | 6045.4  | 6187.4  | 6704.0  | 8058.7  | 10804.4 | 14049.6 | 15405.4 | 15201.5 | 13587.4 | 12151.6 | 6613.3 |
| 57.5° | 3717.1  | 3586.9  | 4199.6  | 5482.8  | 8126.0  | 12920.2 | 15760.9 | 15827.1 | 14404.1 | 12339.5 | 6795.8 |
| 60°   | 1710.2  | 1735.8  | 1988.8  | 2827.9  | 4953.3  | 10107.3 | 14845.0 | 15263.4 | 14855.6 | 12333.1 | 6841.7 |
| 62.5° | 1178.5  | 1155.1  | 1091.0  | 1241.5  | 2258.9  | 6392.3  | 12539.1 | 13247.9 | 13950.4 | 11949.8 | 6659.2 |
| 65°   | 1053.6  | 1030.2  | 906.3   | 864.7   | 1037.6  | 2786.2  | 9115.6  | 10010.1 | 11745.9 | 10982.7 | 6204.4 |
| 67.5° | 984.3   | 952.2   | 824.1   | 743.0   | 740.9   | 1109.2  | 5375.0  | 6452.1  | 8712.0  | 9285.3  | 5376.0 |
| 70°   | 911.7   | 886.0   | 759.0   | 669.3   | 630.9   | 697.1   | 2362.4  | 3092.6  | 5656.8  | 6691.2  | 4187.9 |
| 72.5° | 839.1   | 809.2   | 695.0   | 598.9   | 548.7   | 522.0   | 905.3   | 1177.5  | 3196.2  | 4011.7  | 2567.4 |
| 75°   | 733.4   | 718.4   | 621.3   | 542.3   | 487.9   | 421.7   | 574.3   | 655.5   | 1528.7  | 1842.5  | 1288.5 |
| 77.5° | 641.6   | 625.6   | 551.9   | 474.0   | 434.5   | 342.7   | 407.8   | 445.2   | 644.8   | 747.3   | 581.8  |
| 80°   | 469.7   | 485.7   | 465.4   | 418.5   | 387.5   | 269.0   | 274.4   | 305.3   | 383.2   | 423.8   | 355.5  |
| 82.5° | 297.8   | 327.7   | 358.7   | 322.4   | 293.6   | 212.4   | 190.0   | 201.8   | 261.5   | 277.6   | 158.0  |
| 85°   | 124.9   | 127.0   | 208.2   | 196.4   | 167.6   | 126.0   | 114.2   | 120.6   | 139.8   | 146.3   | 73.7   |
| 87.5° | 48.0    | 47.0    | 73.7    | 68.3    | 52.3    | 36.3    | 36.3    | 40.6    | 55.5    | 51.2    | 23.5   |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0    |



REPORT NUMBER: P452746  
 CATALOG NUMBER: GALN-SA3D-727-U-AFL

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4097.1 | 4097.1 | 4097.1 | 4097.1 | 4097.1 | 4097.1 | 4097.1 | 4097.1 | 4097.1 | 4097.1 | 4097.1 |
| 2.5°  | 4111.0 | 4035.2 | 3884.7 | 3697.9 | 3561.3 | 3407.5 | 3272.0 | 3174.8 | 3138.5 | 3121.4 | 3089.4 |
| 5°    | 4107.8 | 3958.4 | 3646.7 | 3320.0 | 3057.4 | 2788.4 | 2561.0 | 2413.7 | 2400.9 | 2302.6 | 2293.0 |
| 7.5°  | 4108.9 | 3880.4 | 3384.0 | 2903.7 | 2503.3 | 2227.9 | 2040.0 | 1990.9 | 1932.2 | 1917.3 | 1924.7 |
| 10°   | 4112.1 | 3781.2 | 3102.2 | 2491.6 | 2104.1 | 1923.7 | 1853.2 | 1834.0 | 1836.1 | 1842.5 | 1843.6 |
| 12.5° | 4116.4 | 3685.1 | 2809.7 | 2178.8 | 1879.9 | 1805.2 | 1797.7 | 1814.8 | 1832.9 | 1846.8 | 1850.0 |
| 15°   | 4121.7 | 3575.1 | 2524.7 | 1926.9 | 1767.8 | 1761.4 | 1786.0 | 1814.8 | 1840.4 | 1860.7 | 1863.9 |
| 17.5° | 4115.3 | 3447.0 | 2285.6 | 1772.1 | 1705.9 | 1736.9 | 1777.4 | 1813.7 | 1837.2 | 1856.4 | 1858.6 |
| 20°   | 4100.3 | 3304.0 | 2055.0 | 1663.2 | 1667.5 | 1717.6 | 1761.4 | 1795.6 | 1821.2 | 1830.8 | 1838.3 |
| 22.5° | 4042.7 | 3133.2 | 1854.3 | 1578.9 | 1621.6 | 1691.0 | 1743.3 | 1763.5 | 1734.7 | 1714.4 | 1719.8 |
| 25°   | 3944.5 | 2911.1 | 1667.5 | 1510.5 | 1579.9 | 1653.6 | 1707.0 | 1657.9 | 1634.4 | 1625.8 | 1630.1 |
| 27.5° | 3821.7 | 2667.7 | 1526.6 | 1439.0 | 1526.6 | 1612.0 | 1597.0 | 1588.5 | 1577.8 | 1563.9 | 1567.1 |
| 30°   | 3689.4 | 2429.7 | 1407.0 | 1383.5 | 1468.9 | 1518.0 | 1524.4 | 1538.3 | 1526.6 | 1505.2 | 1513.7 |
| 32.5° | 3566.6 | 2205.5 | 1316.3 | 1336.5 | 1428.3 | 1420.9 | 1468.9 | 1484.9 | 1430.5 | 1359.0 | 1362.2 |
| 35°   | 3462.0 | 1997.3 | 1247.9 | 1290.6 | 1359.0 | 1362.2 | 1410.2 | 1354.7 | 1296.0 | 1261.8 | 1263.9 |
| 37.5° | 3383.0 | 1835.1 | 1203.1 | 1251.1 | 1270.4 | 1310.9 | 1285.3 | 1256.5 | 1249.0 | 1225.5 | 1226.6 |
| 40°   | 3336.0 | 1693.1 | 1174.3 | 1220.2 | 1217.0 | 1244.7 | 1162.5 | 1191.4 | 1202.0 | 1194.6 | 1195.6 |
| 42.5° | 3289.0 | 1592.7 | 1144.4 | 1177.5 | 1176.4 | 1122.0 | 1103.8 | 1128.4 | 1156.1 | 1159.3 | 1157.2 |
| 45°   | 3251.7 | 1514.8 | 1113.4 | 1112.4 | 1133.7 | 1048.3 | 1043.0 | 1057.9 | 1097.4 | 1116.6 | 1115.6 |
| 47.5° | 3210.0 | 1449.7 | 1066.5 | 1036.6 | 1043.0 | 1002.4 | 993.9  | 1000.3 | 1048.3 | 1079.3 | 1087.8 |
| 50°   | 3157.7 | 1384.6 | 1007.7 | 967.2  | 940.5  | 959.7  | 961.8  | 962.9  | 1010.9 | 1046.2 | 1053.6 |
| 52.5° | 3116.1 | 1335.5 | 940.5  | 910.6  | 878.6  | 921.3  | 937.3  | 939.4  | 968.2  | 997.1  | 1002.4 |
| 55°   | 3140.6 | 1307.7 | 874.3  | 852.9  | 824.1  | 881.8  | 912.7  | 917.0  | 923.4  | 944.8  | 948.0  |
| 57.5° | 3214.3 | 1314.1 | 820.9  | 793.2  | 771.8  | 834.8  | 887.1  | 890.3  | 886.0  | 911.7  | 915.9  |
| 60°   | 3236.7 | 1310.9 | 781.4  | 727.0  | 714.2  | 784.6  | 849.7  | 856.2  | 855.1  | 892.4  | 899.9  |
| 62.5° | 3142.8 | 1270.4 | 741.9  | 671.5  | 662.9  | 733.4  | 797.4  | 823.1  | 828.4  | 881.8  | 891.4  |
| 65°   | 2921.8 | 1187.1 | 689.6  | 612.8  | 612.8  | 678.9  | 747.3  | 782.5  | 797.4  | 869.0  | 879.6  |
| 67.5° | 2630.4 | 1088.9 | 636.2  | 562.6  | 560.4  | 626.6  | 693.9  | 730.2  | 753.7  | 850.8  | 857.2  |
| 70°   | 2183.1 | 956.5  | 570.1  | 508.1  | 508.1  | 567.9  | 628.8  | 672.5  | 706.7  | 816.7  | 816.7  |
| 72.5° | 1495.6 | 795.3  | 490.0  | 446.2  | 447.3  | 502.8  | 564.7  | 613.8  | 654.4  | 748.3  | 750.5  |
| 75°   | 945.8  | 621.3  | 402.5  | 380.0  | 384.3  | 436.6  | 500.7  | 551.9  | 633.0  | 739.8  | 743.0  |
| 77.5° | 502.8  | 436.6  | 320.3  | 314.9  | 320.3  | 368.3  | 439.8  | 510.3  | 635.2  | 641.6  | 630.9  |
| 80°   | 325.6  | 309.6  | 253.0  | 242.3  | 244.5  | 296.8  | 391.8  | 484.7  | 510.3  | 516.7  | 493.2  |
| 82.5° | 177.2  | 196.4  | 179.3  | 168.7  | 168.7  | 231.7  | 334.1  | 385.4  | 366.2  | 304.2  | 290.4  |
| 85°   | 75.8   | 91.8   | 92.9   | 81.1   | 77.9   | 143.0  | 224.2  | 210.3  | 195.4  | 186.8  | 184.7  |
| 87.5° | 21.4   | 29.9   | 29.9   | 22.4   | 17.1   | 39.5   | 44.8   | 12.8   | 0.0    | 1.1    | 2.1    |
| 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)