

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: P531659

Luminaire Tested: **GALN-SA7A-727-U-AFL-GRSBK**

Issue Date: 5/27/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P531659  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-27)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA7A-727-U-AFL-GRSBK  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS WITH BLACK GLARE REDUCTION SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19872 lumens  
Efficiency: N/A  
Efficacy: 92.4 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G1

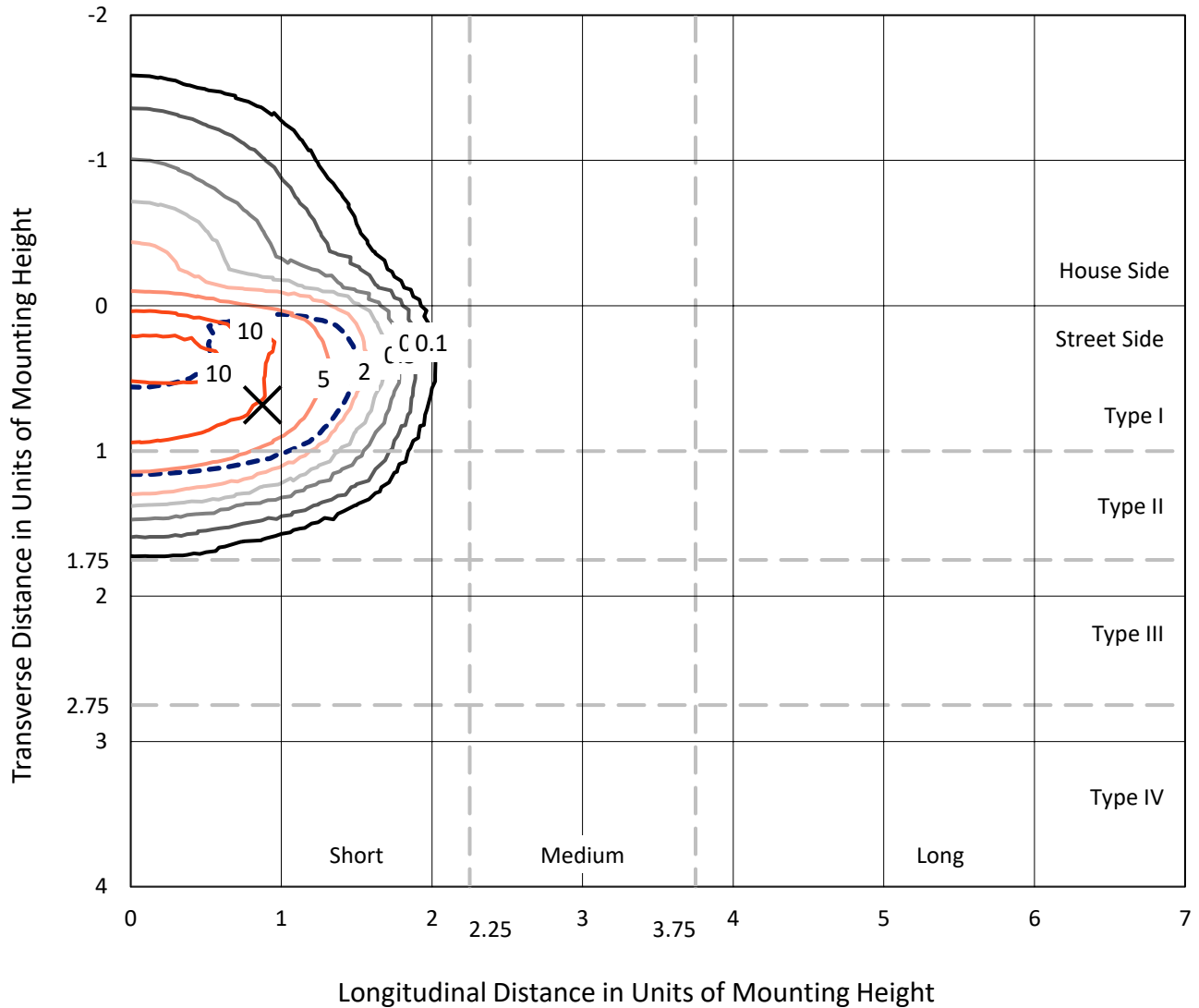
Input Watts (W): 215  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P531659  
 CATALOG NUMBER: GALN-SA7A-727-U-AFL-GRSBK

### Iso-Footcandle Lines of Horizontal Illumination

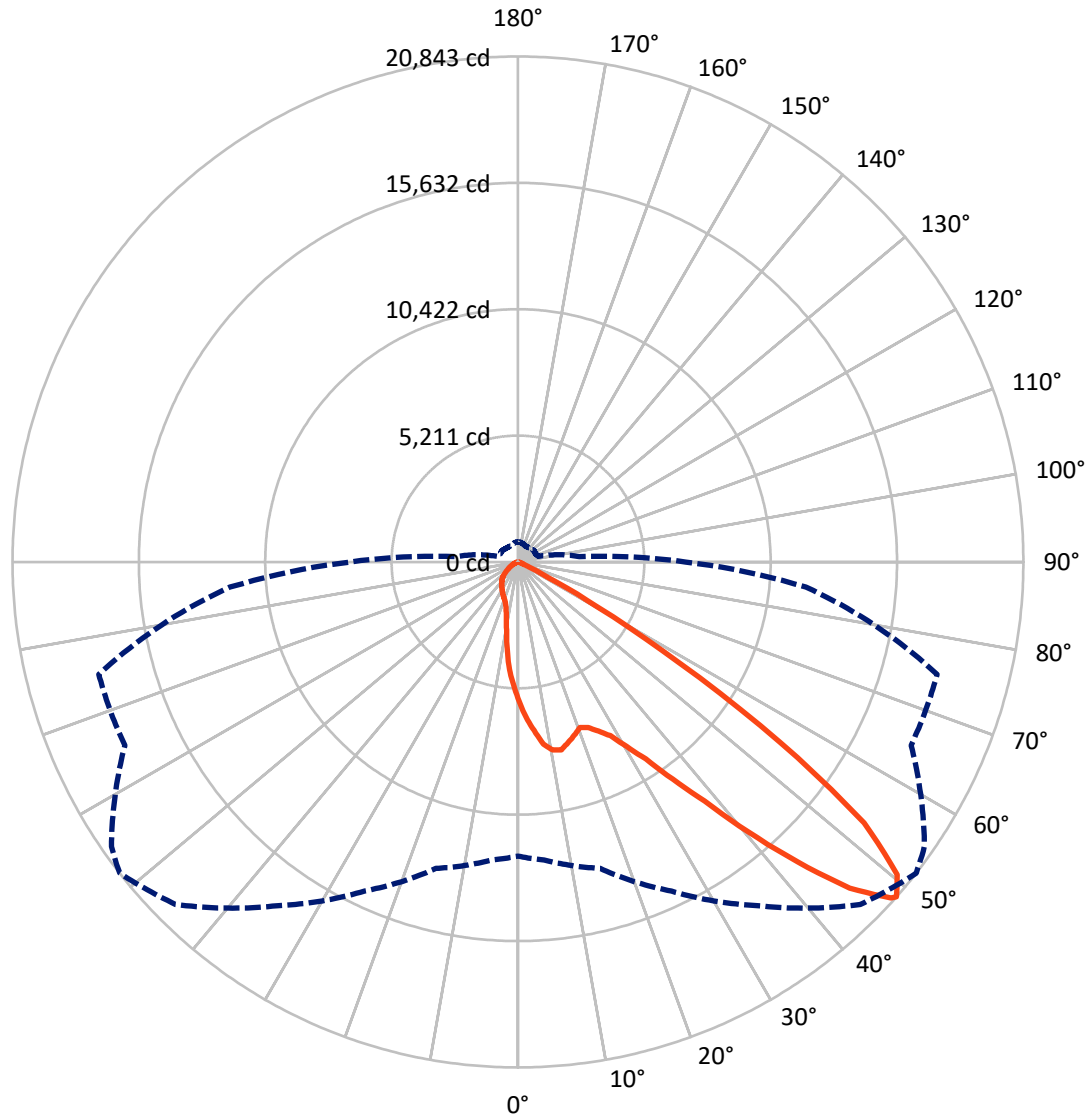
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 12.8 fc  
 Type II - Short - N/A

REPORT NUMBER: P531659  
CATALOG NUMBER: GALN-SA7A-727-U-AFL-GRSBK

### Luminous Intensity Polar Plot



— Vertical Plane Through 52-Deg Lateral    - - - Horizontal Cone Through 48-Deg Vertical

REPORT NUMBER: P531659  
 CATALOG NUMBER: GALN-SA7A-727-U-AFL-GRSBK

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2419.6   | 0.0    | 2419.6  |
|                    | % Fixture | 12.2     | 0.0    | 12.2    |
| <b>Street Side</b> | Lumens    | 17452.4  | 0.0    | 17452.4 |
|                    | % Fixture | 87.8     | 0.0    | 87.8    |
| <b>Total</b>       | Lumens    | 19872.0  | 0.0    | 19872.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 525.3   | 2.6       |
| 10°-20°   | 1372.7  | 6.9       |
| 20°-30°   | 2343.7  | 11.8      |
| 30°-40°   | 4316.0  | 21.7      |
| 40°-50°   | 6702.7  | 33.7      |
| 50°-60°   | 4033.9  | 20.3      |
| 60°-70°   | 466.6   | 2.3       |
| 70°-80°   | 90.3    | 0.5       |
| 80°-90°   | 20.9    | 0.1       |
| 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°    | 19872.0 | 100.0     |
| 0°-180°   | 19872.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P531659

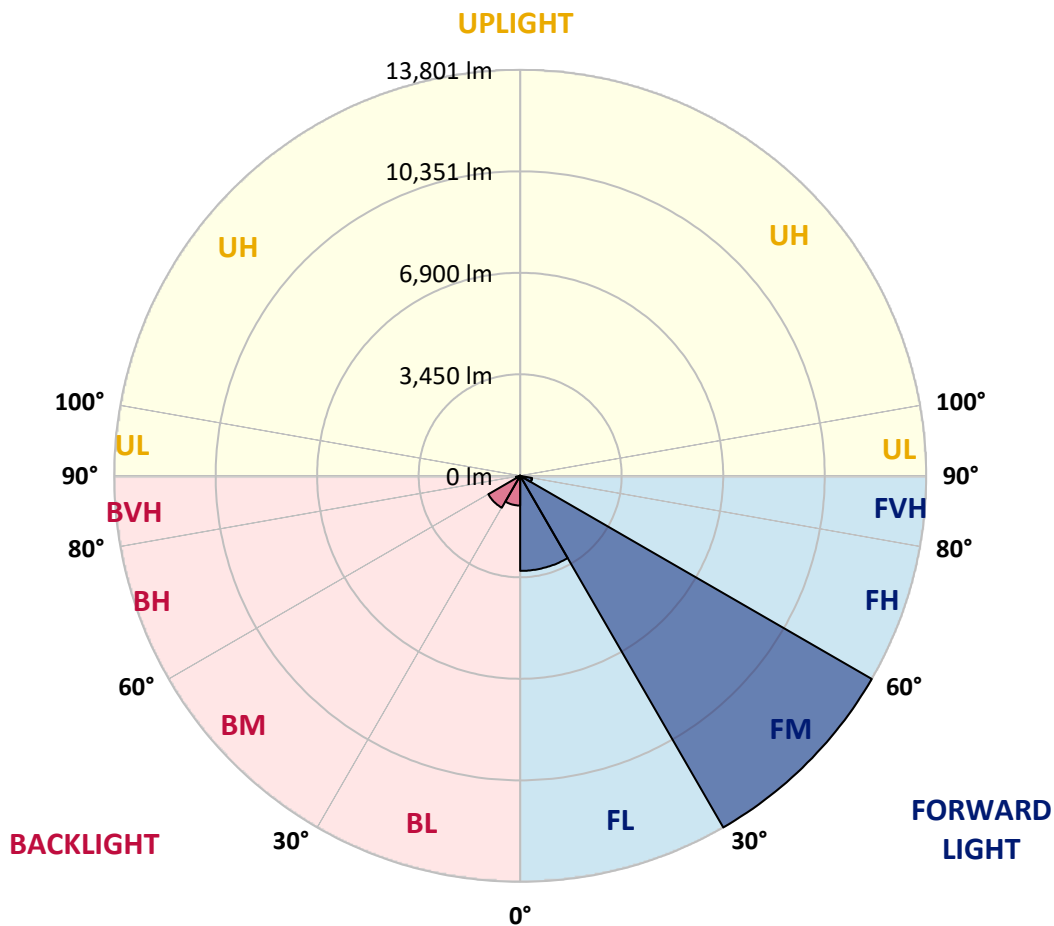
CATALOG NUMBER: GALN-SA7A-727-U-AFL-GRSBK

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

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |        |
|----------------|---------|-----------|-------------------------|------|--------|
|                |         |           | B                       | U    | G      |
| FL (0°-30°)    | 3230.9  | 16.3      |                         |      |        |
| FM (30°-60°)   | 13800.7 | 69.4      |                         |      |        |
| FH (60°-80°)   | 410.8   | 2.1       |                         |      | G0/660 |
| FVH (80°-90°)  | 9.9     | 0.1       |                         |      | G0/10  |
| BL (0°-30°)    | 1010.7  | 5.1       | B3/2500                 |      |        |
| BM (30°-60°)   | 1251.9  | 6.3       | B2/2500                 |      |        |
| BH (60°-80°)   | 146.0   | 0.7       | B1/500                  |      | G1/500 |
| BVH (80°-90°)  | 10.9    | 0.1       |                         |      | G1/100 |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |        |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |        |

**BUG Rating: B3-U0-G1**

Type II Short





REPORT NUMBER: P531659

CATALOG NUMBER: GALN-SA7A-727-U-AFL-GRSBK

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 52°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5738.7  | 5738.7  | 5738.7  | 5738.7  | 5738.7  | 5738.7  | 5738.7  | 5738.7  | 5738.7  | 5738.7  | 5738.7  |
| 2.5°  | 6955.4  | 6796.1  | 6810.5  | 6706.3  | 6645.4  | 6546.9  | 6413.7  | 6387.6  | 6242.8  | 6045.8  | 5845.9  |
| 5°    | 7581.1  | 7543.5  | 7592.7  | 7442.1  | 7447.9  | 7285.6  | 6972.8  | 6978.6  | 6645.4  | 6323.9  | 6013.9  |
| 7.5°  | 7621.7  | 7534.8  | 7584.0  | 7717.3  | 7795.5  | 7766.5  | 7589.8  | 7436.3  | 7120.5  | 6648.3  | 6196.4  |
| 10°   | 6825.0  | 6990.2  | 7042.3  | 7262.5  | 7575.3  | 7905.6  | 7885.3  | 7894.0  | 7630.4  | 7013.3  | 6352.8  |
| 12.5° | 6347.0  | 6237.0  | 6413.7  | 6546.9  | 7019.1  | 7659.3  | 7951.9  | 8015.6  | 8035.9  | 7366.7  | 6509.3  |
| 15°   | 6129.8  | 6129.8  | 6158.7  | 6196.4  | 6538.2  | 7129.2  | 7726.0  | 7911.4  | 8348.8  | 7830.2  | 6755.5  |
| 17.5° | 6265.9  | 6260.1  | 6300.7  | 6222.5  | 6349.9  | 6804.8  | 7517.4  | 7728.9  | 8699.3  | 8285.1  | 6949.6  |
| 20°   | 6680.2  | 6700.5  | 6674.4  | 6448.4  | 6457.1  | 6799.0  | 7285.6  | 7618.8  | 8936.9  | 8679.0  | 7207.4  |
| 22.5° | 7256.7  | 7268.3  | 7120.5  | 6874.3  | 6801.9  | 6969.9  | 7418.9  | 7673.8  | 9128.0  | 9151.2  | 7285.6  |
| 25°   | 7922.9  | 7876.6  | 7847.6  | 7500.0  | 7279.8  | 7424.7  | 7720.2  | 7867.9  | 9246.8  | 9556.8  | 7508.7  |
| 27.5° | 8847.0  | 8754.3  | 8577.6  | 8267.7  | 8105.4  | 7899.8  | 8111.2  | 8354.6  | 9585.7  | 10124.6 | 7752.0  |
| 30°   | 10211.5 | 10130.4 | 9785.6  | 9385.9  | 8960.0  | 8757.2  | 8823.9  | 8957.1  | 10197.0 | 10782.2 | 8073.6  |
| 32.5° | 12265.4 | 12094.4 | 11596.2 | 10834.3 | 10254.9 | 9695.8  | 9678.4  | 9820.4  | 10744.5 | 11691.8 | 8456.0  |
| 35°   | 14527.8 | 14475.7 | 13742.8 | 12957.7 | 11836.6 | 10973.4 | 10987.8 | 11063.2 | 11793.2 | 12885.3 | 8957.1  |
| 37.5° | 16031.3 | 16318.1 | 15851.7 | 15008.7 | 14067.2 | 12833.1 | 12520.3 | 12546.4 | 13232.9 | 14299.0 | 9861.0  |
| 40°   | 17192.9 | 16949.6 | 17004.6 | 16807.7 | 16164.5 | 15324.5 | 14632.1 | 14495.9 | 14898.6 | 15863.3 | 10759.0 |
| 42.5° | 16686.0 | 16697.6 | 17036.5 | 17502.9 | 17662.2 | 17601.4 | 16894.6 | 16636.7 | 16323.9 | 17143.7 | 11613.6 |
| 45°   | 15254.9 | 15553.3 | 15993.6 | 17227.7 | 18311.1 | 19327.9 | 19188.9 | 18760.1 | 17308.8 | 18157.6 | 12106.0 |
| 47.5° | 12972.2 | 12960.6 | 13681.9 | 15286.8 | 17694.1 | 20075.3 | 20706.8 | 20405.6 | 18007.0 | 18044.6 | 12004.6 |
| 48°   | 12129.2 | 12337.8 | 13082.3 | 14971.0 | 17303.0 | 19965.2 | 20843.0 | 20463.5 | 17888.2 | 17894.0 | 11917.7 |
| 50°   | 8965.8  | 8928.2  | 9855.2  | 12172.7 | 15454.8 | 18760.1 | 20269.4 | 20564.9 | 17885.3 | 17132.1 | 11309.4 |
| 52.5° | 4736.4  | 4898.6  | 5573.6  | 7653.5  | 10927.0 | 15353.4 | 17879.5 | 18340.1 | 17253.8 | 15886.4 | 10434.5 |
| 55°   | 2013.3  | 1819.2  | 2337.8  | 3456.0  | 6147.2  | 10257.8 | 13117.0 | 14142.5 | 14588.6 | 14058.5 | 9128.0  |
| 57.5° | 718.4   | 785.1   | 903.8   | 1300.7  | 2584.0  | 5614.1  | 7821.6  | 8618.2  | 10107.2 | 10315.8 | 6219.6  |
| 60°   | 460.6   | 469.3   | 507.0   | 596.8   | 970.5   | 2164.0  | 3710.9  | 4345.3  | 5020.3  | 5182.5  | 2902.7  |
| 62.5° | 356.3   | 359.2   | 376.6   | 391.1   | 460.6   | 840.1   | 1393.4  | 1651.2  | 1714.9  | 1474.5  | 761.9   |
| 65°   | 298.4   | 301.3   | 307.1   | 307.1   | 327.3   | 394.0   | 486.7   | 535.9   | 521.4   | 515.6   | 431.6   |
| 67.5° | 228.9   | 234.6   | 246.2   | 246.2   | 257.8   | 240.4   | 269.4   | 286.8   | 324.4   | 394.0   | 367.9   |
| 70°   | 179.6   | 182.5   | 191.2   | 197.0   | 197.0   | 173.8   | 194.1   | 211.5   | 237.5   | 292.6   | 289.7   |
| 72.5° | 139.0   | 144.8   | 150.6   | 150.6   | 141.9   | 118.8   | 139.0   | 153.5   | 170.9   | 202.8   | 197.0   |
| 75°   | 107.2   | 107.2   | 110.1   | 89.8    | 69.5    | 60.8    | 84.0    | 101.4   | 127.5   | 133.3   | 110.1   |
| 77.5° | 29.0    | 31.9    | 29.0    | 26.1    | 29.0    | 43.5    | 55.0    | 63.7    | 81.1    | 81.1    | 72.4    |
| 80°   | 0.0     | 2.9     | 8.7     | 17.4    | 29.0    | 40.6    | 49.2    | 55.0    | 63.7    | 69.5    | 66.6    |
| 82.5° | 0.0     | 2.9     | 8.7     | 17.4    | 26.1    | 31.9    | 43.5    | 46.3    | 52.1    | 60.8    | 60.8    |
| 85°   | 0.0     | 2.9     | 5.8     | 11.6    | 17.4    | 20.3    | 20.3    | 17.4    | 17.4    | 14.5    | 11.6    |
| 87.5° | 0.0     | 0.0     | 2.9     | 5.8     | 5.8     | 8.7     | 8.7     | 8.7     | 8.7     | 8.7     | 8.7     |
| 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: P531659

CATALOG NUMBER: GALN-SA7A-727-U-AFL-GRSBK

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5738.7 | 5738.7 | 5738.7 | 5738.7 | 5738.7 | 5738.7 | 5738.7 | 5738.7 | 5738.7 | 5738.7 | 5738.7 |
| 2.5°  | 5767.7 | 5677.9 | 5541.7 | 5327.3 | 5121.7 | 4988.4 | 4861.0 | 4719.0 | 4640.8 | 4635.0 | 4591.5 |
| 5°    | 5837.2 | 5634.4 | 5310.0 | 4942.1 | 4548.1 | 4209.2 | 3867.3 | 3644.3 | 3444.4 | 3334.3 | 3314.0 |
| 7.5°  | 5874.9 | 5611.2 | 5086.9 | 4469.9 | 3797.8 | 3244.5 | 2862.1 | 2581.1 | 2471.0 | 2389.9 | 2387.0 |
| 10°   | 5953.1 | 5570.7 | 4753.8 | 3844.1 | 3012.7 | 2453.7 | 2190.0 | 2062.6 | 2001.7 | 1978.6 | 1943.8 |
| 12.5° | 6011.0 | 5495.4 | 4411.9 | 3201.0 | 2381.2 | 2033.6 | 1917.7 | 1888.8 | 1891.7 | 1903.2 | 1888.8 |
| 15°   | 6092.1 | 5428.7 | 3951.3 | 2627.5 | 1998.8 | 1830.8 | 1830.8 | 1836.6 | 1877.2 | 1883.0 | 1880.1 |
| 17.5° | 6086.3 | 5298.4 | 3476.2 | 2164.0 | 1767.1 | 1743.9 | 1752.6 | 1807.6 | 1833.7 | 1842.4 | 1822.1 |
| 20°   | 6155.9 | 5176.7 | 2986.7 | 1848.2 | 1636.7 | 1671.5 | 1729.4 | 1743.9 | 1775.8 | 1781.6 | 1758.4 |
| 22.5° | 6135.6 | 4872.5 | 2531.9 | 1599.1 | 1538.2 | 1604.9 | 1662.8 | 1680.2 | 1671.5 | 1654.1 | 1651.2 |
| 25°   | 6097.9 | 4611.8 | 2114.7 | 1434.0 | 1465.8 | 1538.2 | 1593.3 | 1561.4 | 1544.0 | 1546.9 | 1549.8 |
| 27.5° | 6031.3 | 4281.6 | 1770.0 | 1318.1 | 1367.3 | 1474.5 | 1471.6 | 1460.0 | 1477.4 | 1462.9 | 1477.4 |
| 30°   | 6019.7 | 3951.3 | 1486.1 | 1213.8 | 1294.9 | 1373.1 | 1378.9 | 1399.2 | 1419.5 | 1393.4 | 1419.5 |
| 32.5° | 6037.1 | 3589.2 | 1283.3 | 1150.1 | 1251.4 | 1254.3 | 1318.1 | 1338.4 | 1323.9 | 1265.9 | 1271.7 |
| 35°   | 6170.3 | 3311.1 | 1135.6 | 1115.3 | 1181.9 | 1184.8 | 1245.7 | 1219.6 | 1155.9 | 1121.1 | 1141.4 |
| 37.5° | 6451.3 | 3079.4 | 1066.0 | 1083.4 | 1089.2 | 1126.9 | 1129.8 | 1077.6 | 1083.4 | 1080.5 | 1092.1 |
| 40°   | 6810.5 | 2902.7 | 1016.8 | 1054.5 | 1048.7 | 1074.7 | 970.5  | 999.4  | 1025.5 | 1034.2 | 1040.0 |
| 42.5° | 7056.8 | 2775.2 | 984.9  | 1008.1 | 996.5  | 950.2  | 892.2  | 921.2  | 941.5  | 973.3  | 979.1  |
| 45°   | 7166.9 | 2673.8 | 947.3  | 927.0  | 927.0  | 843.0  | 819.8  | 825.6  | 872.0  | 906.7  | 900.9  |
| 47.5° | 6987.3 | 2575.3 | 880.6  | 819.8  | 840.1  | 770.6  | 744.5  | 744.5  | 793.7  | 837.2  | 828.5  |
| 48°   | 6917.7 | 2534.8 | 883.5  | 796.6  | 811.1  | 759.0  | 732.9  | 727.1  | 782.2  | 822.7  | 822.7  |
| 50°   | 6573.0 | 2384.1 | 808.2  | 732.9  | 703.9  | 698.1  | 680.8  | 686.6  | 721.3  | 759.0  | 759.0  |
| 52.5° | 5900.9 | 2059.7 | 683.7  | 628.6  | 576.5  | 611.2  | 619.9  | 608.3  | 625.7  | 660.5  | 657.6  |
| 55°   | 4924.7 | 1581.7 | 547.5  | 521.4  | 480.9  | 518.5  | 535.9  | 521.4  | 504.1  | 530.1  | 530.1  |
| 57.5° | 3154.7 | 851.7  | 437.4  | 443.2  | 402.7  | 440.3  | 454.8  | 420.0  | 388.2  | 408.5  | 405.6  |
| 60°   | 1422.4 | 509.8  | 359.2  | 350.5  | 324.4  | 367.9  | 391.1  | 350.5  | 307.1  | 321.6  | 336.0  |
| 62.5° | 533.0  | 362.1  | 272.3  | 266.5  | 260.7  | 301.3  | 312.9  | 281.0  | 237.5  | 246.2  | 249.1  |
| 65°   | 391.1  | 318.7  | 217.3  | 197.0  | 208.6  | 237.5  | 231.7  | 199.9  | 170.9  | 170.9  | 176.7  |
| 67.5° | 333.1  | 278.1  | 176.7  | 153.5  | 153.5  | 156.4  | 144.8  | 127.5  | 118.8  | 124.6  | 130.4  |
| 70°   | 260.7  | 220.2  | 139.0  | 118.8  | 107.2  | 95.6   | 84.0   | 81.1   | 72.4   | 81.1   | 78.2   |
| 72.5° | 168.0  | 147.7  | 107.2  | 89.8   | 81.1   | 66.6   | 55.0   | 52.1   | 43.5   | 40.6   | 40.6   |
| 75°   | 89.8   | 89.8   | 84.0   | 72.4   | 63.7   | 52.1   | 43.5   | 34.8   | 23.2   | 17.4   | 17.4   |
| 77.5° | 63.7   | 69.5   | 75.3   | 69.5   | 57.9   | 43.5   | 34.8   | 23.2   | 11.6   | 5.8    | 5.8    |
| 80°   | 60.8   | 69.5   | 75.3   | 66.6   | 57.9   | 43.5   | 31.9   | 17.4   | 8.7    | 2.9    | 2.9    |
| 82.5° | 55.0   | 63.7   | 69.5   | 60.8   | 52.1   | 37.7   | 29.0   | 17.4   | 8.7    | 2.9    | 2.9    |
| 85°   | 11.6   | 14.5   | 17.4   | 17.4   | 20.3   | 26.1   | 20.3   | 14.5   | 5.8    | 2.9    | 2.9    |
| 87.5° | 8.7    | 8.7    | 8.7    | 8.7    | 8.7    | 8.7    | 5.8    | 5.8    | 2.9    | 2.9    | 2.9    |
| 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)