

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: STREETWORKS

Report Number: P455907

Luminaire Tested: **GLAN-SA7A-827-U-AFL**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P455907  
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: STREETWORKS  
Catalog Number: GLAN-SA7A-827-U-AFL  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23645 lumens  
Efficiency: N/A  
Efficacy: 110.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G2

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

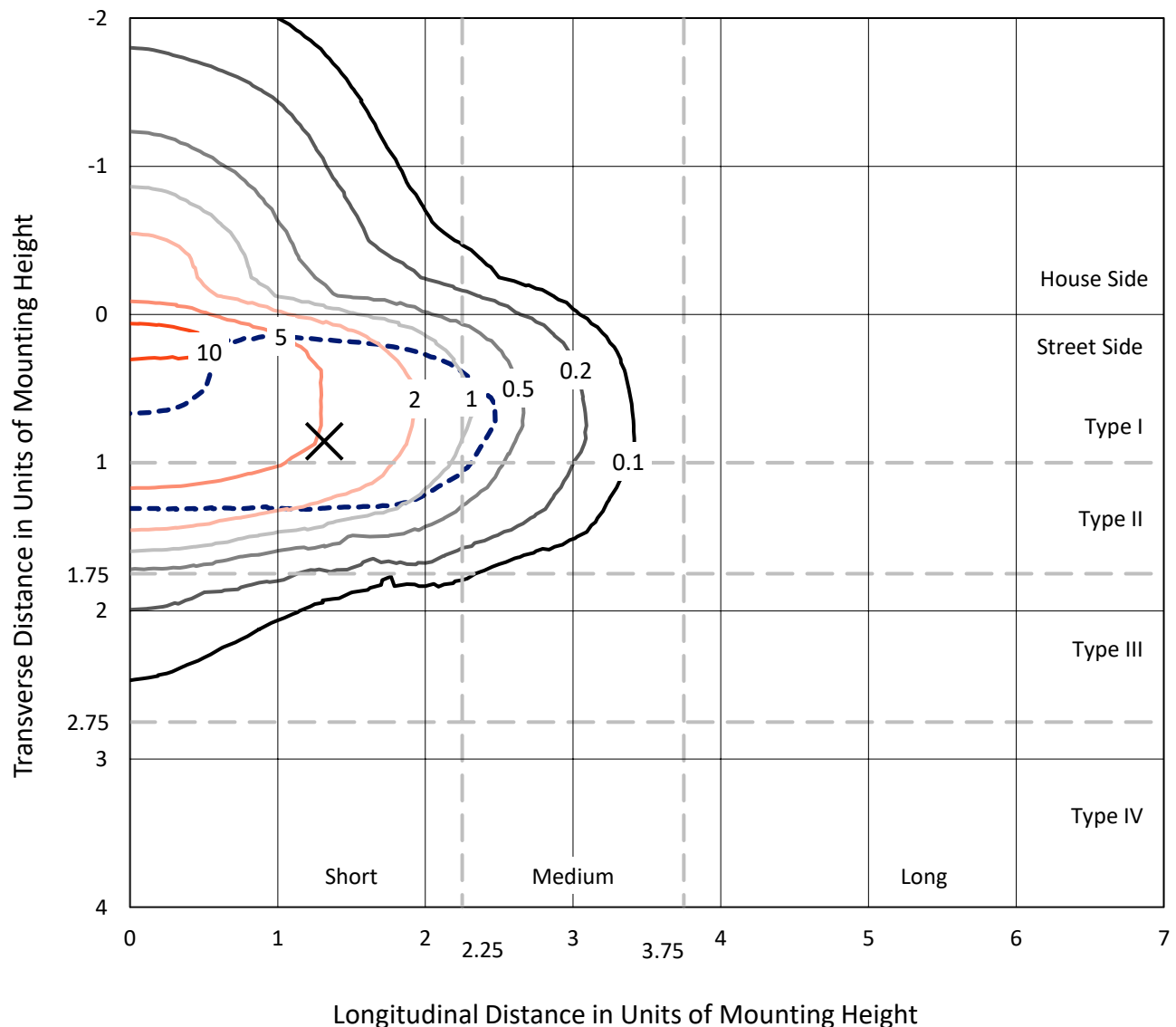


REPORT NUMBER: P455907

CATALOG NUMBER: GLAN-SA7A-827-U-AFL

## Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

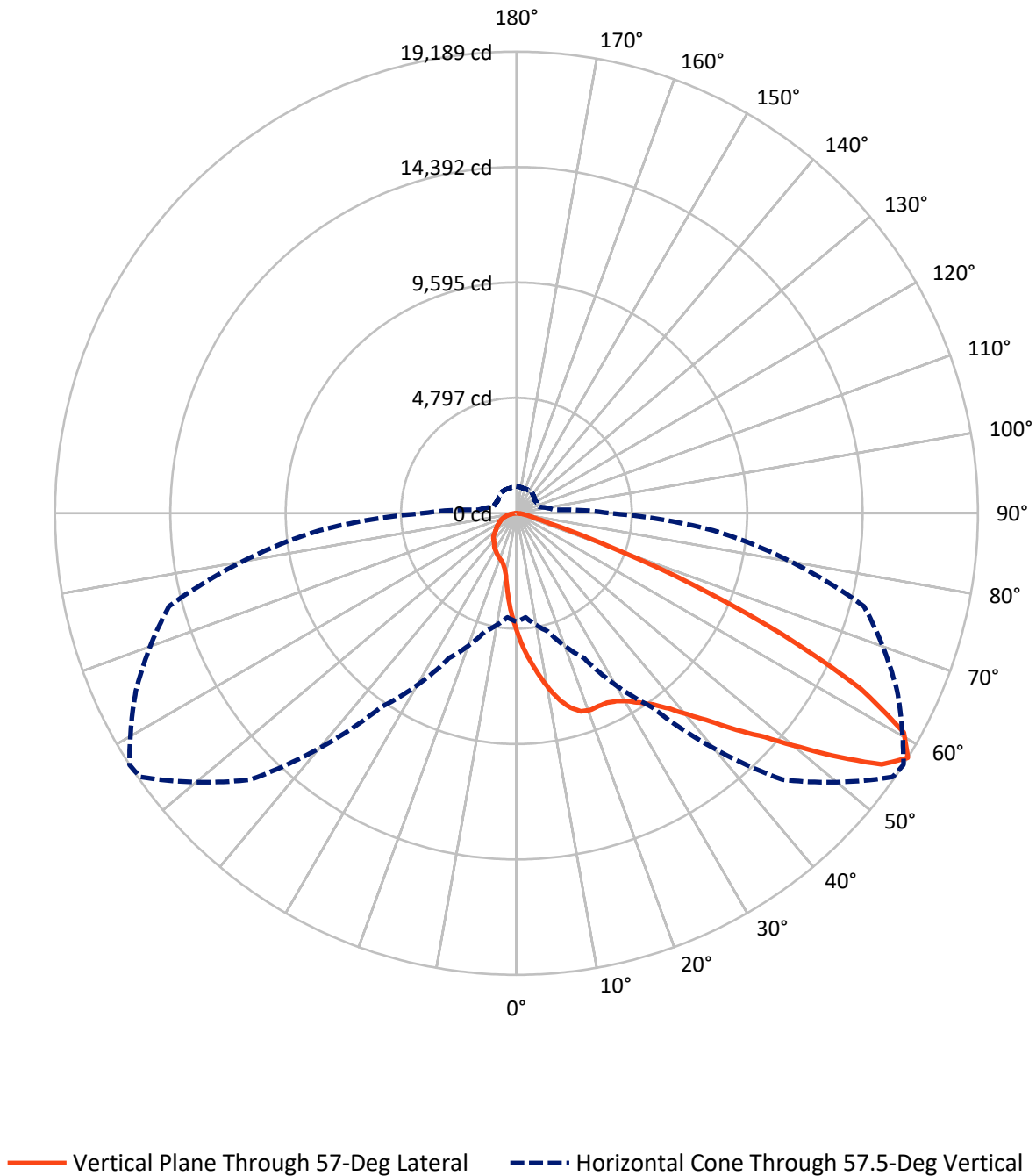


Based on 25 foot mounting height. Maximum calculated value = 12.1 fc  
 Type II - Short - N/A

REPORT NUMBER: P455907

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3595.7   | 0.0    | 3595.7  |
|                    | % Fixture | 15.2     | 0.0    | 15.2    |
| <b>Street Side</b> | Lumens    | 20049.3  | 0.0    | 20049.3 |
|                    | % Fixture | 84.8     | 0.0    | 84.8    |
| <b>Total</b>       | Lumens    | 23645.0  | 0.0    | 23645.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 477.4   | 2.0       |
| 10°-20°   | 1407.0  | 6.0       |
| 20°-30°   | 2336.4  | 9.9       |
| 30°-40°   | 3519.2  | 14.9      |
| 40°-50°   | 5283.8  | 22.3      |
| 50°-60°   | 5922.5  | 25.0      |
| 60°-70°   | 3466.1  | 14.7      |
| 70°-80°   | 1025.3  | 4.3       |
| 80°-90°   | 207.2   | 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°    | 23645.0 | 100.0     |
| 0°-180°   | 23645.0 | 100.0     |



REPORT NUMBER: P455907

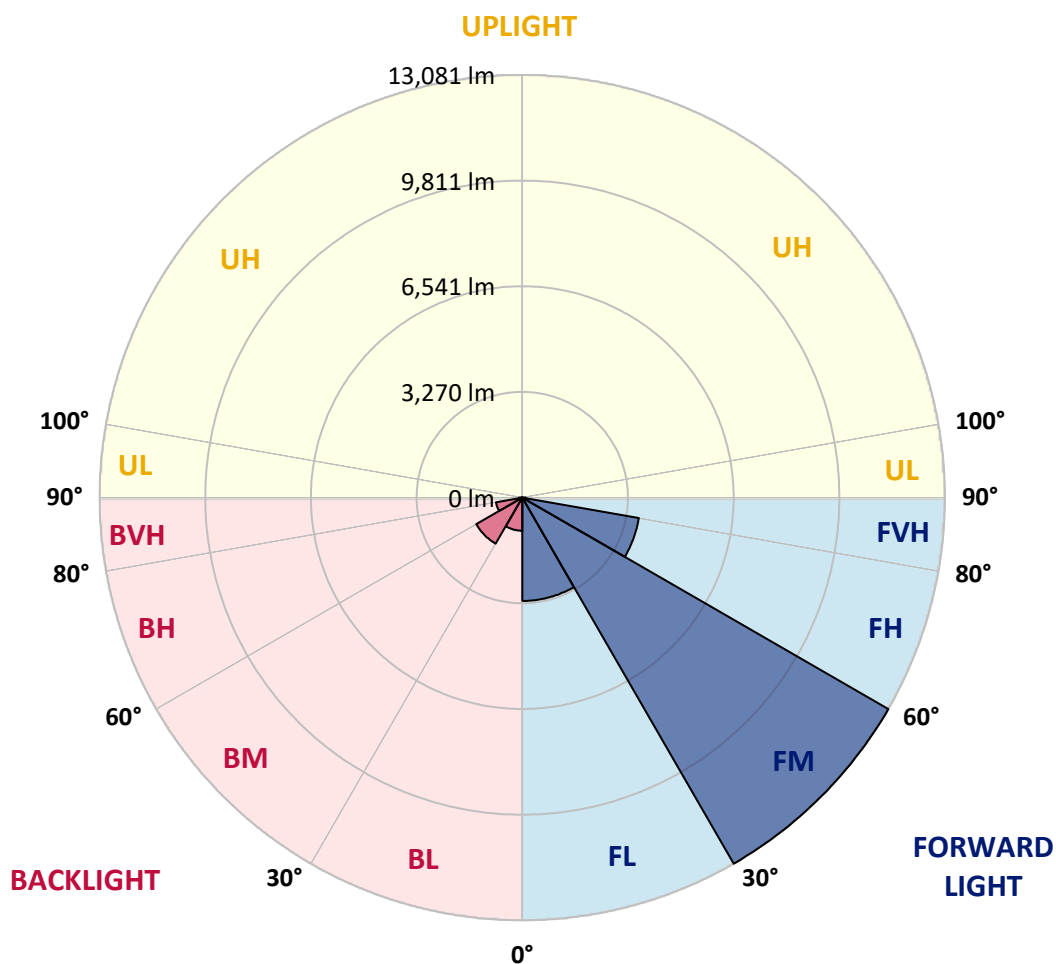
CATALOG NUMBER: GLAN-SA7A-827-U-AFL

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 3196.3  | 13.5      |                         |      |         |
| FM   | (30°-60°)   | 13081.5 | 55.3      |                         |      |         |
| FH   | (60°-80°)   | 3664.0  | 15.5      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 107.5   | 0.5       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1024.6  | 4.3       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 1644.1  | 7.0       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 827.4   | 3.5       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 99.7    | 0.4       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G2**

Type II Short





REPORT NUMBER: P455907

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 57°     | 65°     | 75°     | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 4967.5  | 4967.5  | 4967.5  | 4967.5  | 4967.5  | 4967.5  | 4967.5  | 4967.5  | 4967.5  | 4967.5  | 4967.5 |
| 2.5°  | 6172.5  | 6105.2  | 6052.2  | 6005.6  | 5944.7  | 5780.4  | 5616.0  | 5613.4  | 5482.7  | 5280.8  | 5073.7 |
| 5°    | 7178.2  | 7087.6  | 7099.3  | 6954.3  | 6809.3  | 6571.2  | 6223.0  | 6204.9  | 5926.6  | 5548.7  | 5164.3 |
| 7.5°  | 7833.1  | 7834.4  | 7798.2  | 7715.4  | 7558.7  | 7288.2  | 6893.5  | 6804.2  | 6417.2  | 5843.8  | 5267.8 |
| 10°   | 7799.5  | 7834.4  | 7895.3  | 7966.4  | 8014.3  | 7881.0  | 7521.2  | 7412.5  | 6909.0  | 6201.0  | 5383.0 |
| 12.5° | 7351.7  | 7406.0  | 7492.7  | 7671.3  | 7960.0  | 8180.0  | 8057.1  | 7969.0  | 7478.5  | 6557.0  | 5509.9 |
| 15°   | 7072.1  | 7104.4  | 7152.3  | 7272.7  | 7583.3  | 8110.1  | 8428.5  | 8381.9  | 8015.6  | 6959.5  | 5652.2 |
| 17.5° | 6986.7  | 7019.0  | 7034.5  | 7108.3  | 7329.7  | 7869.4  | 8574.8  | 8657.6  | 8491.9  | 7329.7  | 5795.9 |
| 20°   | 7072.1  | 7087.6  | 7087.6  | 7131.6  | 7305.1  | 7728.3  | 8568.3  | 8735.3  | 8882.8  | 7773.6  | 5930.5 |
| 22.5° | 7296.0  | 7302.5  | 7293.4  | 7308.9  | 7438.4  | 7767.1  | 8507.5  | 8714.6  | 9198.6  | 8150.2  | 6035.3 |
| 25°   | 7659.7  | 7670.1  | 7610.5  | 7574.3  | 7668.8  | 7938.0  | 8541.1  | 8731.4  | 9445.8  | 8510.1  | 6105.2 |
| 27.5° | 8072.6  | 8085.5  | 8013.0  | 7928.9  | 7972.9  | 8148.9  | 8673.1  | 8844.0  | 9630.9  | 8864.7  | 6149.2 |
| 30°   | 8578.7  | 8583.8  | 8462.2  | 8361.2  | 8332.7  | 8463.5  | 8898.3  | 9057.5  | 9861.3  | 9282.8  | 6215.3 |
| 32.5° | 9096.4  | 9135.2  | 8978.6  | 8836.2  | 8788.3  | 8828.5  | 9231.0  | 9385.0  | 10135.7 | 9731.9  | 6321.4 |
| 35°   | 9800.5  | 9807.0  | 9619.3  | 9445.8  | 9287.9  | 9339.7  | 9656.8  | 9768.1  | 10514.9 | 10250.9 | 6471.5 |
| 37.5° | 10679.3 | 10738.9 | 10480.0 | 10156.4 | 9962.3  | 9887.2  | 10171.9 | 10293.6 | 11046.9 | 10887.7 | 6698.0 |
| 40°   | 11655.2 | 11677.2 | 11455.9 | 11254.0 | 10899.3 | 10681.9 | 10878.6 | 11010.7 | 11703.1 | 11647.5 | 6960.8 |
| 42.5° | 12268.7 | 12316.6 | 12333.4 | 12312.7 | 12046.1 | 11681.1 | 11756.2 | 11818.3 | 12479.7 | 12360.6 | 7230.0 |
| 45°   | 12475.8 | 12547.0 | 12787.7 | 13297.7 | 13326.2 | 12966.4 | 12791.6 | 12851.2 | 13326.2 | 13080.2 | 7487.6 |
| 47.5° | 12132.8 | 12254.5 | 12698.4 | 13744.2 | 14527.3 | 14554.5 | 14027.7 | 13897.0 | 14097.6 | 13676.9 | 7673.9 |
| 50°   | 11246.2 | 11272.1 | 11951.6 | 13466.0 | 15090.3 | 16072.7 | 15527.8 | 15284.5 | 14830.2 | 14118.3 | 7802.1 |
| 52.5° | 9874.3  | 9904.0  | 10473.5 | 12172.9 | 14743.4 | 17134.0 | 17282.9 | 16848.0 | 15574.4 | 14461.3 | 7886.2 |
| 55°   | 7329.7  | 7501.8  | 8128.2  | 9770.7  | 13099.7 | 17034.4 | 18678.1 | 18430.9 | 16473.9 | 14733.1 | 8018.2 |
| 57.5° | 4506.8  | 4348.9  | 5091.8  | 6647.6  | 9852.3  | 15665.0 | 19109.1 | 19189.4 | 17464.1 | 14960.9 | 8239.5 |
| 60°   | 2073.5  | 2104.5  | 2411.3  | 3428.6  | 6005.6  | 12254.5 | 17998.6 | 18506.0 | 18011.6 | 14953.1 | 8295.2 |
| 62.5° | 1428.9  | 1400.4  | 1322.8  | 1505.3  | 2738.8  | 7750.3  | 15202.9 | 16062.3 | 16914.0 | 14488.5 | 8073.9 |
| 65°   | 1277.5  | 1249.0  | 1098.9  | 1048.4  | 1258.1  | 3378.1  | 11052.1 | 12136.7 | 14241.2 | 13315.8 | 7522.5 |
| 67.5° | 1193.3  | 1154.5  | 999.2   | 900.8   | 898.2   | 1344.8  | 6516.8  | 7822.8  | 10562.8 | 11257.9 | 6518.1 |
| 70°   | 1105.3  | 1074.3  | 920.3   | 811.5   | 764.9   | 845.2   | 2864.3  | 3749.6  | 6858.5  | 8112.7  | 5077.6 |
| 72.5° | 1017.3  | 981.1   | 842.6   | 726.1   | 665.3   | 632.9   | 1097.6  | 1427.6  | 3875.2  | 4864.0  | 3112.8 |
| 75°   | 889.2   | 871.1   | 753.3   | 657.5   | 591.5   | 511.3   | 696.3   | 794.7   | 1853.4  | 2234.0  | 1562.2 |
| 77.5° | 777.9   | 758.5   | 669.2   | 574.7   | 526.8   | 415.5   | 494.4   | 539.7   | 781.8   | 906.0   | 705.4  |
| 80°   | 569.5   | 588.9   | 564.3   | 507.4   | 469.8   | 326.2   | 332.6   | 370.2   | 464.7   | 513.8   | 431.0  |
| 82.5° | 361.1   | 397.4   | 434.9   | 390.9   | 355.9   | 257.6   | 230.4   | 244.6   | 317.1   | 336.5   | 191.6  |
| 85°   | 151.4   | 154.0   | 252.4   | 238.2   | 203.2   | 152.7   | 138.5   | 146.3   | 169.6   | 177.3   | 89.3   |
| 87.5° | 58.2    | 56.9    | 89.3    | 82.8    | 63.4    | 44.0    | 44.0    | 49.2    | 67.3    | 62.1    | 28.5   |
| 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: P455907

CATALOG NUMBER: GLAN-SA7A-827-U-AFL

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4967.5 | 4967.5 | 4967.5 | 4967.5 | 4967.5 | 4967.5 | 4967.5 | 4967.5 | 4967.5 | 4967.5 | 4967.5 |
| 2.5°  | 4984.4 | 4892.5 | 4710.0 | 4483.5 | 4317.8 | 4131.4 | 3967.0 | 3849.3 | 3805.3 | 3784.5 | 3745.7 |
| 5°    | 4980.5 | 4799.3 | 4421.3 | 4025.3 | 3706.9 | 3380.7 | 3105.0 | 2926.4 | 2910.9 | 2791.8 | 2780.2 |
| 7.5°  | 4981.8 | 4704.8 | 4102.9 | 3520.5 | 3035.1 | 2701.2 | 2473.4 | 2413.9 | 2342.7 | 2324.6 | 2333.6 |
| 10°   | 4985.7 | 4584.4 | 3761.3 | 3020.9 | 2551.1 | 2332.3 | 2246.9 | 2223.6 | 2226.2 | 2234.0 | 2235.3 |
| 12.5° | 4990.8 | 4467.9 | 3406.6 | 2641.7 | 2279.3 | 2188.7 | 2179.6 | 2200.3 | 2222.3 | 2239.1 | 2243.0 |
| 15°   | 4997.3 | 4334.6 | 3061.0 | 2336.2 | 2143.4 | 2135.6 | 2165.4 | 2200.3 | 2231.4 | 2256.0 | 2259.9 |
| 17.5° | 4989.5 | 4179.3 | 2771.1 | 2148.5 | 2068.3 | 2105.8 | 2155.0 | 2199.0 | 2227.5 | 2250.8 | 2253.4 |
| 20°   | 4971.4 | 4005.9 | 2491.5 | 2016.5 | 2021.7 | 2082.5 | 2135.6 | 2177.0 | 2208.1 | 2219.7 | 2228.8 |
| 22.5° | 4901.5 | 3798.8 | 2248.2 | 1914.3 | 1966.0 | 2050.2 | 2113.6 | 2138.2 | 2103.2 | 2078.7 | 2085.1 |
| 25°   | 4782.5 | 3529.6 | 2021.7 | 1831.4 | 1915.6 | 2004.9 | 2069.6 | 2010.1 | 1981.6 | 1971.2 | 1976.4 |
| 27.5° | 4633.6 | 3234.5 | 1850.9 | 1744.7 | 1850.9 | 1954.4 | 1936.3 | 1925.9 | 1913.0 | 1896.2 | 1900.0 |
| 30°   | 4473.1 | 2945.8 | 1705.9 | 1677.4 | 1781.0 | 1840.5 | 1848.3 | 1865.1 | 1850.9 | 1825.0 | 1835.3 |
| 32.5° | 4324.3 | 2674.0 | 1595.9 | 1620.5 | 1731.8 | 1722.7 | 1781.0 | 1800.4 | 1734.4 | 1647.7 | 1651.5 |
| 35°   | 4197.4 | 2421.6 | 1513.0 | 1564.8 | 1647.7 | 1651.5 | 1709.8 | 1642.5 | 1571.3 | 1529.9 | 1532.5 |
| 37.5° | 4101.7 | 2224.9 | 1458.7 | 1516.9 | 1540.2 | 1589.4 | 1558.3 | 1523.4 | 1514.3 | 1485.9 | 1487.2 |
| 40°   | 4044.7 | 2052.8 | 1423.7 | 1479.4 | 1475.5 | 1509.2 | 1409.5 | 1444.4 | 1457.4 | 1448.3 | 1449.6 |
| 42.5° | 3987.8 | 1931.1 | 1387.5 | 1427.6 | 1426.3 | 1360.3 | 1338.3 | 1368.1 | 1401.7 | 1405.6 | 1403.0 |
| 45°   | 3942.5 | 1836.6 | 1350.0 | 1348.7 | 1374.6 | 1271.0 | 1264.5 | 1282.7 | 1330.5 | 1353.8 | 1352.5 |
| 47.5° | 3892.0 | 1757.7 | 1293.0 | 1256.8 | 1264.5 | 1215.4 | 1205.0 | 1212.8 | 1271.0 | 1308.5 | 1318.9 |
| 50°   | 3828.6 | 1678.7 | 1221.8 | 1172.6 | 1140.3 | 1163.6 | 1166.2 | 1167.5 | 1225.7 | 1268.4 | 1277.5 |
| 52.5° | 3778.1 | 1619.2 | 1140.3 | 1104.0 | 1065.2 | 1117.0 | 1136.4 | 1139.0 | 1173.9 | 1208.9 | 1215.4 |
| 55°   | 3807.8 | 1585.5 | 1060.0 | 1034.1 | 999.2  | 1069.1 | 1106.6 | 1111.8 | 1119.6 | 1145.5 | 1149.3 |
| 57.5° | 3897.2 | 1593.3 | 995.3  | 961.7  | 935.8  | 1012.1 | 1075.6 | 1079.5 | 1074.3 | 1105.3 | 1110.5 |
| 60°   | 3924.3 | 1589.4 | 947.4  | 881.4  | 865.9  | 951.3  | 1030.3 | 1038.0 | 1036.7 | 1082.0 | 1091.1 |
| 62.5° | 3810.4 | 1540.2 | 899.5  | 814.1  | 803.8  | 889.2  | 966.8  | 997.9  | 1004.4 | 1069.1 | 1080.7 |
| 65°   | 3542.5 | 1439.3 | 836.1  | 742.9  | 742.9  | 823.2  | 906.0  | 948.7  | 966.8  | 1053.6 | 1066.5 |
| 67.5° | 3189.2 | 1320.2 | 771.4  | 682.1  | 679.5  | 759.8  | 841.3  | 885.3  | 913.8  | 1031.6 | 1039.3 |
| 70°   | 2646.9 | 1159.7 | 691.2  | 616.1  | 616.1  | 688.6  | 762.3  | 815.4  | 856.8  | 990.1  | 990.1  |
| 72.5° | 1813.3 | 964.3  | 594.1  | 541.0  | 542.3  | 609.6  | 684.7  | 744.2  | 793.4  | 907.3  | 909.9  |
| 75°   | 1146.8 | 753.3  | 488.0  | 460.8  | 465.9  | 529.4  | 607.0  | 669.2  | 767.5  | 897.0  | 900.8  |
| 77.5° | 609.6  | 529.4  | 388.3  | 381.8  | 388.3  | 446.5  | 533.3  | 618.7  | 770.1  | 777.9  | 764.9  |
| 80°   | 394.8  | 375.3  | 306.8  | 293.8  | 296.4  | 359.8  | 475.0  | 587.6  | 618.7  | 626.4  | 598.0  |
| 82.5° | 214.9  | 238.2  | 217.4  | 204.5  | 204.5  | 280.9  | 405.1  | 467.2  | 443.9  | 368.9  | 352.1  |
| 85°   | 91.9   | 111.3  | 112.6  | 98.4   | 94.5   | 173.4  | 271.8  | 255.0  | 236.9  | 226.5  | 223.9  |
| 87.5° | 25.9   | 36.2   | 36.2   | 27.2   | 20.7   | 47.9   | 54.4   | 15.5   | 0.0    | 1.3    | 2.6    |
| 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)