

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: P452216

Luminaire Tested: **GLAN-SA3A-827-U-T4FT-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P452216  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GLAN-SA3A-827-U-T4FT-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7227 lumens  
Efficiency: N/A  
Efficacy: 77.7 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 93  
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

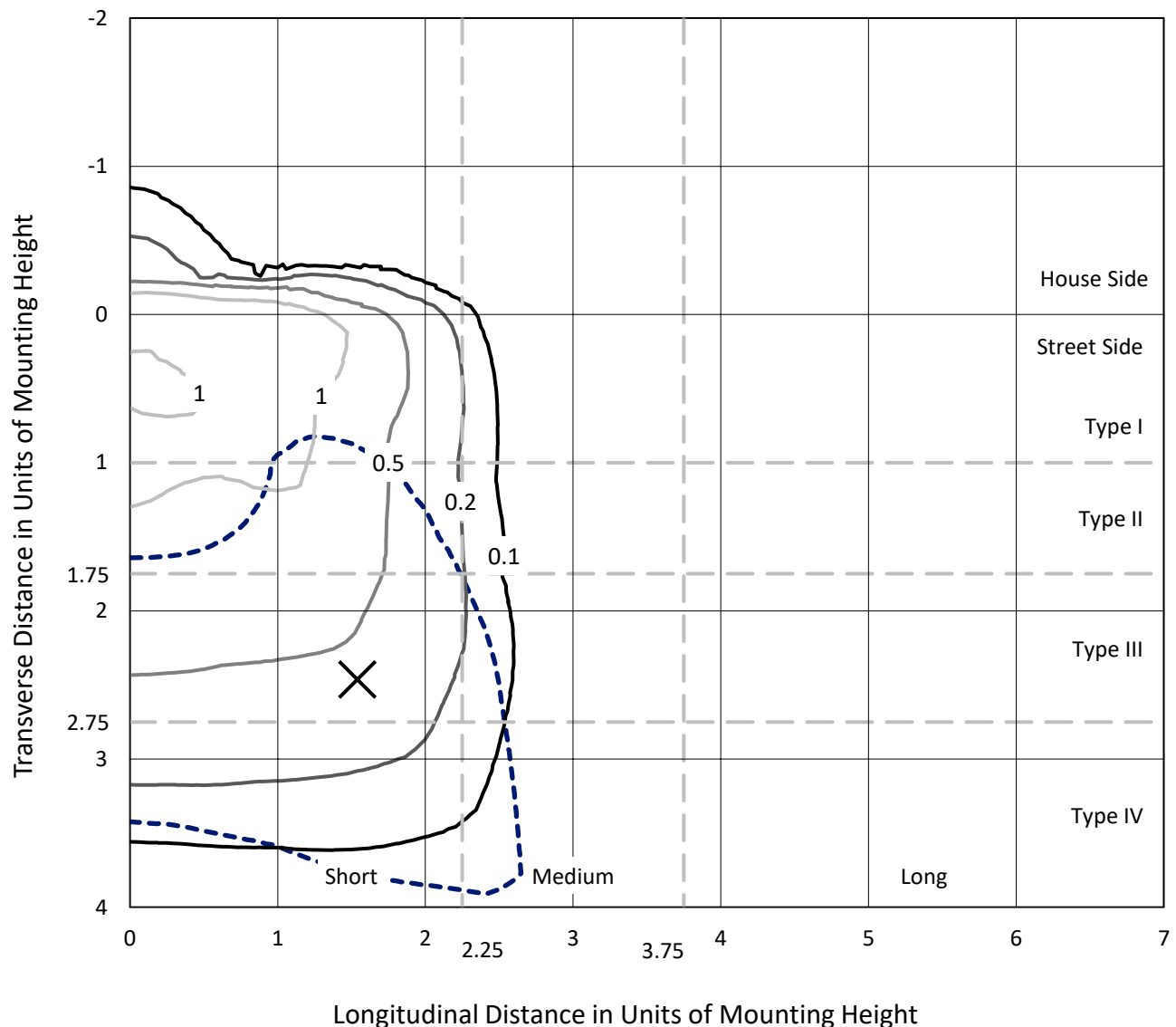


REPORT NUMBER: P452216

CATALOG NUMBER: GLAN-SA3A-827-U-T4FT-HSS

## Iso-Footcandle Lines of Horizontal Illumination

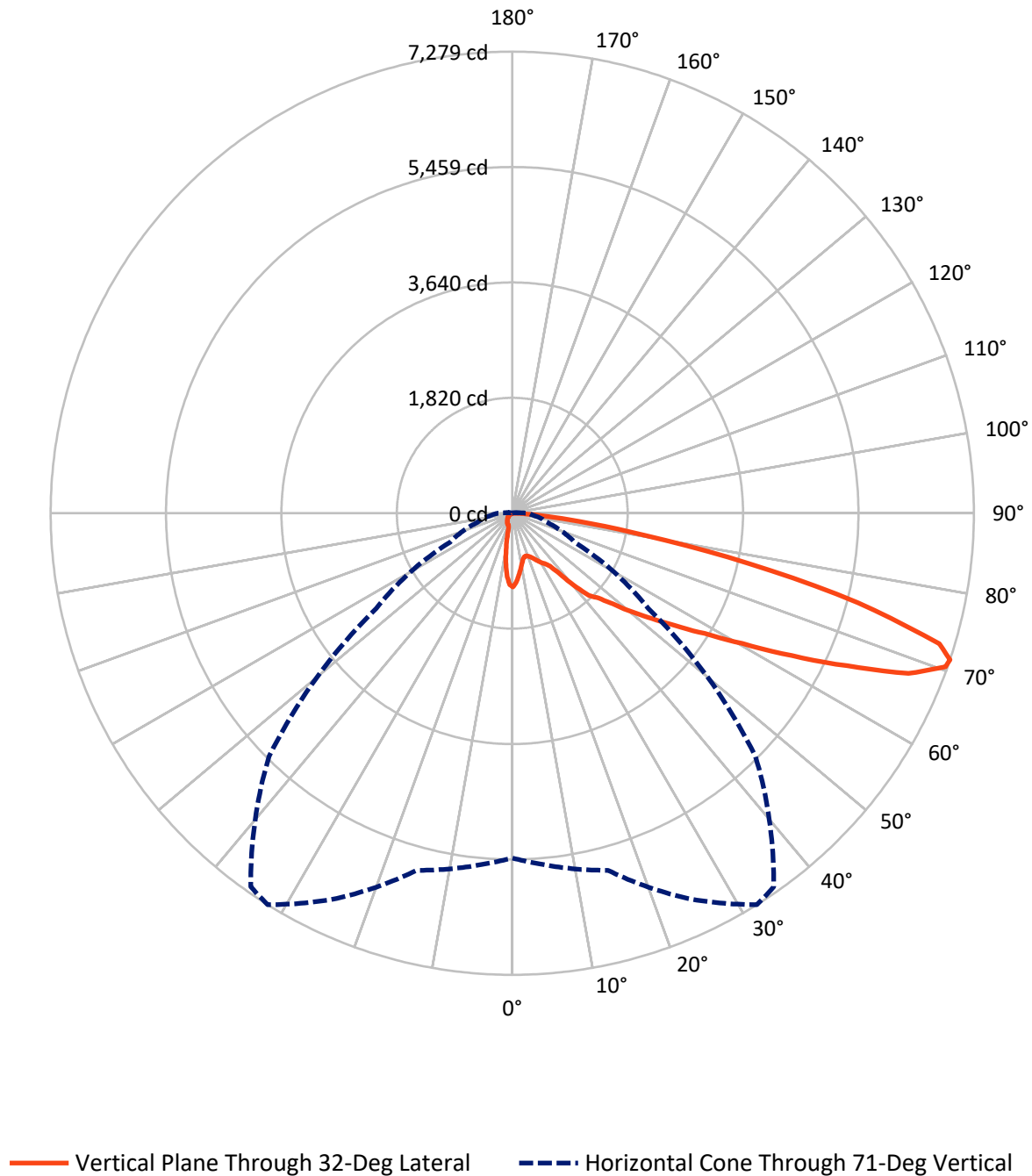
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.9 fc  
 Type IV - Short - N/A

REPORT NUMBER: P452216  
CATALOG NUMBER: GLAN-SA3A-827-U-T4FT-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P452216

CATALOG NUMBER: GLAN-SA3A-827-U-T4FT-HSS

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 605.3    | 0.0    | 605.3  |
|                    | % Fixture | 8.4      | 0.0    | 8.4    |
| <b>Street Side</b> | Lumens    | 6621.7   | 0.0    | 6621.7 |
|                    | % Fixture | 91.6     | 0.0    | 91.6   |
| <b>Total</b>       | Lumens    | 7227.0   | 0.0    | 7227.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 94.5   | 1.3       |
| 10°-20°   | 205.1  | 2.8       |
| 20°-30°   | 319.1  | 4.4       |
| 30°-40°   | 531.6  | 7.4       |
| 40°-50°   | 988.8  | 13.7      |
| 50°-60°   | 1587.6 | 22.0      |
| 60°-70°   | 2135.4 | 29.5      |
| 70°-80°   | 1267.0 | 17.5      |
| 80°-90°   | 97.9   | 1.4       |
| 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°    | 7227.0 | 100.0     |
| 0°-180°   | 7227.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P452216

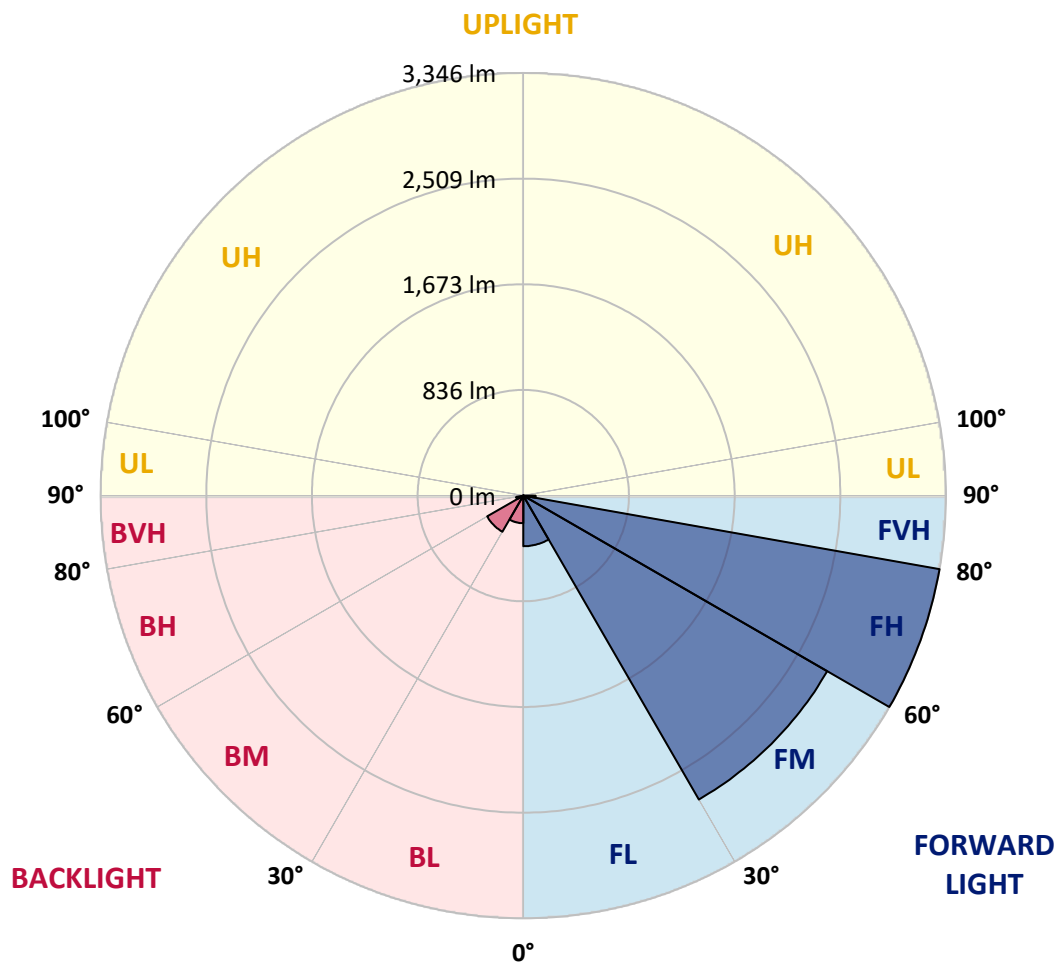
CATALOG NUMBER: GLAN-SA3A-827-U-T4FT-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 400.6  | 5.5       |                         |      |         |
| FM   | (30°-60°)   | 2777.8 | 38.4      |                         |      |         |
| FH   | (60°-80°)   | 3345.7 | 46.3      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 97.6   | 1.3       |                         |      | G1/100  |
| BL   | (0°-30°)    | 218.1  | 3.0       | B1/500                  |      |         |
| BM   | (30°-60°)   | 330.2  | 4.6       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 56.6   | 0.8       | 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 IV Short



REPORT NUMBER: P452216

CATALOG NUMBER: GLAN-SA3A-827-U-T4FT-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 32°    | 35°    | 45°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1162.2 | 1162.2 | 1162.2 | 1162.2 | 1162.2 | 1162.2 | 1162.2 | 1162.2 | 1162.2 | 1162.2 | 1162.2 |
| 2.5°  | 1077.9 | 1089.0 | 1087.3 | 1091.2 | 1100.6 | 1104.5 | 1115.1 | 1126.7 | 1142.8 | 1153.9 | 1161.1 |
| 5°    | 965.3  | 973.6  | 974.7  | 994.1  | 1003.6 | 1014.1 | 1045.2 | 1079.0 | 1116.7 | 1146.7 | 1166.7 |
| 7.5°  | 844.9  | 849.3  | 858.2  | 883.7  | 907.6  | 918.1  | 965.3  | 1024.1 | 1083.4 | 1139.5 | 1175.5 |
| 10°   | 745.6  | 750.6  | 766.7  | 793.9  | 816.0  | 829.9  | 895.4  | 969.2  | 1052.4 | 1135.6 | 1188.3 |
| 12.5° | 689.0  | 691.8  | 697.9  | 722.3  | 750.6  | 765.6  | 836.0  | 920.3  | 1027.4 | 1137.3 | 1209.9 |
| 15°   | 685.1  | 684.0  | 676.8  | 686.8  | 712.3  | 727.8  | 796.6  | 887.1  | 1005.2 | 1142.8 | 1235.4 |
| 17.5° | 705.7  | 702.9  | 685.7  | 685.7  | 706.8  | 719.5  | 780.0  | 869.3  | 994.1  | 1155.6 | 1271.5 |
| 20°   | 737.3  | 732.8  | 704.5  | 702.3  | 722.8  | 736.2  | 790.0  | 870.4  | 996.3  | 1179.4 | 1319.8 |
| 22.5° | 777.2  | 772.2  | 729.5  | 730.6  | 752.8  | 766.1  | 818.8  | 890.4  | 1010.2 | 1208.8 | 1371.4 |
| 25°   | 829.4  | 823.8  | 773.3  | 771.1  | 794.4  | 806.1  | 861.5  | 925.9  | 1029.6 | 1245.4 | 1439.0 |
| 27.5° | 898.7  | 887.1  | 826.6  | 823.3  | 848.2  | 863.2  | 913.1  | 973.6  | 1064.0 | 1295.9 | 1530.0 |
| 30°   | 955.8  | 943.1  | 885.4  | 876.5  | 903.1  | 914.8  | 966.4  | 1037.9 | 1131.7 | 1384.1 | 1655.9 |
| 32.5° | 1030.7 | 1011.9 | 944.2  | 920.9  | 949.2  | 964.2  | 1043.5 | 1157.8 | 1232.1 | 1477.3 | 1805.7 |
| 35°   | 1199.4 | 1187.7 | 1105.1 | 1023.5 | 1021.9 | 1040.7 | 1157.2 | 1278.7 | 1335.3 | 1622.7 | 2009.9 |
| 37.5° | 1440.7 | 1432.4 | 1344.7 | 1235.4 | 1203.8 | 1194.9 | 1295.4 | 1411.9 | 1500.1 | 1822.4 | 2247.3 |
| 40°   | 1720.9 | 1701.4 | 1621.0 | 1528.4 | 1487.3 | 1461.2 | 1458.5 | 1609.9 | 1715.3 | 2093.7 | 2494.7 |
| 42.5° | 1921.7 | 1886.2 | 1788.5 | 1781.9 | 1773.0 | 1745.8 | 1667.0 | 1899.5 | 1993.2 | 2385.5 | 2759.4 |
| 45°   | 2132.5 | 2078.7 | 1933.3 | 1908.4 | 1905.0 | 1903.4 | 1982.1 | 2242.3 | 2296.1 | 2701.7 | 3031.2 |
| 47.5° | 2296.1 | 2253.4 | 2134.1 | 2123.1 | 2136.9 | 2174.6 | 2398.8 | 2606.2 | 2595.2 | 2983.5 | 3259.2 |
| 50°   | 2514.2 | 2482.0 | 2349.4 | 2370.5 | 2442.0 | 2503.6 | 2868.6 | 3002.9 | 2840.9 | 3205.4 | 3425.1 |
| 52.5° | 2771.6 | 2712.2 | 2589.0 | 2646.2 | 2756.0 | 2858.7 | 3367.4 | 3350.2 | 3013.4 | 3372.4 | 3548.8 |
| 55°   | 2994.6 | 2952.4 | 2910.3 | 2969.6 | 3133.8 | 3262.0 | 3817.8 | 3610.4 | 3138.8 | 3506.6 | 3603.1 |
| 57.5° | 3371.8 | 3361.8 | 3318.6 | 3379.0 | 3578.2 | 3711.3 | 4221.1 | 3812.3 | 3219.3 | 3576.5 | 3539.3 |
| 60°   | 3929.9 | 3913.8 | 3833.4 | 3910.5 | 4170.1 | 4379.2 | 4592.8 | 3993.7 | 3237.6 | 3549.3 | 3355.7 |
| 62.5° | 4601.1 | 4546.2 | 4477.4 | 4591.2 | 4947.3 | 5039.4 | 4942.9 | 4101.3 | 3169.3 | 3333.0 | 2913.0 |
| 65°   | 5228.0 | 5171.4 | 5173.1 | 5412.8 | 5800.5 | 5863.2 | 5351.2 | 4085.2 | 2969.6 | 2791.0 | 2148.6 |
| 67.5° | 5707.9 | 5698.5 | 5766.1 | 6233.8 | 6740.8 | 6697.6 | 5716.2 | 3844.5 | 2377.7 | 1809.1 | 1141.7 |
| 70°   | 5732.3 | 5750.6 | 5944.8 | 6734.2 | 7249.0 | 7180.2 | 5685.1 | 3124.9 | 1482.3 | 832.1  | 449.9  |
| 71°   | 5437.2 | 5560.3 | 5828.8 | 6718.7 | 7279.0 | 7189.6 | 5423.3 | 2617.3 | 1087.3 | 580.3  | 324.5  |
| 72.5° | 4633.3 | 4698.2 | 5278.5 | 6323.1 | 7042.1 | 6851.2 | 4759.3 | 1834.6 | 696.2  | 355.0  | 186.4  |
| 75°   | 2551.9 | 2711.6 | 3534.9 | 4960.6 | 5632.4 | 5464.9 | 3101.6 | 871.5  | 347.3  | 194.2  | 77.1   |
| 77.5° | 1214.9 | 1183.8 | 1724.7 | 2950.2 | 3818.9 | 3810.1 | 1562.7 | 387.2  | 202.5  | 131.5  | 38.8   |
| 80°   | 347.3  | 390.5  | 660.2  | 1402.4 | 2120.3 | 2143.6 | 600.2  | 187.0  | 140.4  | 102.6  | 20.0   |
| 82.5° | 104.8  | 107.1  | 242.4  | 620.2  | 1054.6 | 994.1  | 225.2  | 95.4   | 101.0  | 81.5   | 11.6   |
| 85°   | 18.3   | 22.7   | 71.6   | 218.6  | 402.2  | 305.1  | 56.6   | 45.5   | 66.6   | 53.8   | 6.7    |
| 87.5° | 1.1    | 1.7    | 23.9   | 25.0   | 35.5   | 20.5   | 10.0   | 6.7    | 14.4   | 14.4   | 3.9    |
| 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: P452216

CATALOG NUMBER: GLAN-SA3A-827-U-T4FT-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1162.2 | 1162.2 | 1162.2 | 1162.2 | 1162.2 | 1162.2 | 1162.2 | 1162.2 | 1162.2 | 1162.2 | 1162.2 |
| 2.5°  | 1166.1 | 1169.4 | 1167.2 | 1162.2 | 1153.9 | 1143.9 | 1130.6 | 1119.5 | 1110.1 | 1105.1 | 1111.2 |
| 5°    | 1173.3 | 1177.7 | 1166.7 | 1141.7 | 1104.0 | 1062.9 | 1016.3 | 980.3  | 952.0  | 943.1  | 939.8  |
| 7.5°  | 1184.4 | 1187.2 | 1157.2 | 1101.7 | 1021.9 | 924.8  | 839.9  | 768.3  | 712.9  | 696.2  | 671.8  |
| 10°   | 1198.8 | 1197.2 | 1140.6 | 1037.4 | 897.0  | 751.1  | 619.7  | 522.0  | 448.2  | 421.6  | 419.4  |
| 12.5° | 1221.0 | 1212.1 | 1119.5 | 949.7  | 748.4  | 557.5  | 395.0  | 309.0  | 262.4  | 246.9  | 243.5  |
| 15°   | 1248.8 | 1227.7 | 1086.2 | 847.1  | 573.1  | 360.0  | 243.5  | 217.5  | 211.4  | 210.3  | 209.1  |
| 17.5° | 1281.5 | 1248.2 | 1042.4 | 721.2  | 402.8  | 233.6  | 203.6  | 203.0  | 203.6  | 202.5  | 201.9  |
| 20°   | 1325.9 | 1269.8 | 990.2  | 572.0  | 266.3  | 196.9  | 194.2  | 194.2  | 194.7  | 194.2  | 194.2  |
| 22.5° | 1373.0 | 1295.4 | 925.9  | 436.6  | 200.8  | 187.0  | 186.4  | 187.5  | 188.6  | 188.1  | 188.1  |
| 25°   | 1431.3 | 1328.6 | 841.0  | 299.0  | 179.7  | 178.6  | 179.2  | 181.4  | 183.6  | 184.2  | 183.6  |
| 27.5° | 1515.6 | 1369.7 | 750.0  | 205.8  | 164.8  | 165.9  | 171.4  | 177.0  | 180.3  | 180.9  | 180.9  |
| 30°   | 1610.5 | 1415.2 | 631.3  | 167.0  | 152.6  | 152.6  | 159.2  | 169.8  | 177.0  | 178.1  | 178.6  |
| 32.5° | 1732.5 | 1467.9 | 499.8  | 150.3  | 140.9  | 139.8  | 145.9  | 158.7  | 172.0  | 175.9  | 175.9  |
| 35°   | 1883.4 | 1530.0 | 371.7  | 139.8  | 132.6  | 129.8  | 133.1  | 143.7  | 160.9  | 172.0  | 173.1  |
| 37.5° | 2060.4 | 1588.8 | 271.8  | 130.4  | 124.8  | 120.9  | 123.2  | 131.5  | 145.3  | 162.0  | 166.4  |
| 40°   | 2224.0 | 1641.0 | 203.0  | 122.6  | 117.1  | 114.3  | 115.9  | 119.8  | 131.5  | 147.0  | 149.8  |
| 42.5° | 2402.6 | 1681.5 | 161.4  | 114.3  | 109.3  | 108.2  | 108.2  | 109.8  | 117.6  | 126.5  | 127.0  |
| 45°   | 2580.7 | 1695.9 | 135.4  | 104.3  | 101.0  | 102.1  | 101.5  | 100.4  | 103.7  | 102.6  | 102.6  |
| 47.5° | 2707.8 | 1678.7 | 112.1  | 94.9   | 94.9   | 96.5   | 93.8   | 89.9   | 88.2   | 81.5   | 82.1   |
| 50°   | 2794.9 | 1616.0 | 92.1   | 83.8   | 88.2   | 90.4   | 84.9   | 78.8   | 72.7   | 65.5   | 63.8   |
| 52.5° | 2830.9 | 1504.5 | 75.4   | 69.3   | 78.2   | 81.0   | 74.3   | 67.1   | 57.7   | 51.6   | 49.9   |
| 55°   | 2807.6 | 1366.9 | 62.7   | 56.6   | 66.0   | 69.3   | 62.7   | 54.4   | 43.8   | 37.2   | 36.1   |
| 57.5° | 2705.0 | 1202.7 | 53.3   | 44.9   | 52.7   | 54.9   | 50.5   | 41.6   | 31.1   | 24.4   | 24.4   |
| 60°   | 2527.5 | 1033.0 | 43.3   | 35.5   | 39.4   | 42.7   | 38.3   | 30.0   | 21.1   | 15.0   | 13.9   |
| 62.5° | 2167.4 | 838.8  | 34.9   | 27.7   | 27.7   | 30.5   | 26.6   | 21.6   | 13.3   | 7.8    | 7.2    |
| 65°   | 1565.0 | 575.3  | 27.7   | 20.5   | 20.0   | 20.0   | 16.6   | 14.4   | 7.8    | 3.3    | 2.2    |
| 67.5° | 850.4  | 324.5  | 22.2   | 15.5   | 13.9   | 13.3   | 10.5   | 8.3    | 3.3    | 0.6    | 0.0    |
| 70°   | 334.5  | 124.8  | 17.2   | 10.5   | 8.9    | 8.3    | 5.5    | 3.9    | 2.2    | 0.0    | 0.0    |
| 71°   | 226.9  | 86.0   | 15.0   | 8.9    | 7.2    | 6.1    | 4.4    | 3.3    | 1.7    | 0.0    | 0.0    |
| 72.5° | 129.8  | 53.3   | 11.6   | 6.7    | 5.5    | 4.4    | 3.3    | 2.2    | 1.7    | 0.0    | 0.0    |
| 75°   | 56.6   | 27.2   | 7.2    | 5.0    | 3.9    | 2.8    | 2.2    | 1.7    | 0.6    | 0.0    | 0.0    |
| 77.5° | 28.8   | 15.0   | 5.0    | 3.9    | 2.2    | 1.7    | 1.1    | 0.6    | 0.0    | 0.0    | 0.0    |
| 80°   | 16.1   | 7.8    | 3.3    | 2.2    | 1.7    | 1.1    | 0.6    | 0.6    | 0.0    | 0.0    | 0.0    |
| 82.5° | 8.9    | 4.4    | 1.7    | 1.1    | 0.6    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 5.5    | 2.8    | 0.6    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 2.8    | 1.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.6    | 0.6    | 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)