

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: P454767

Luminaire Tested: **GLAN-SA5D-827-U-T3R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P454767  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GLAN-SA5D-827-U-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29144 lumens  
Efficiency: N/A  
Efficacy: 94.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B3 - U0 - G4

Input Watts (W): 309  
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

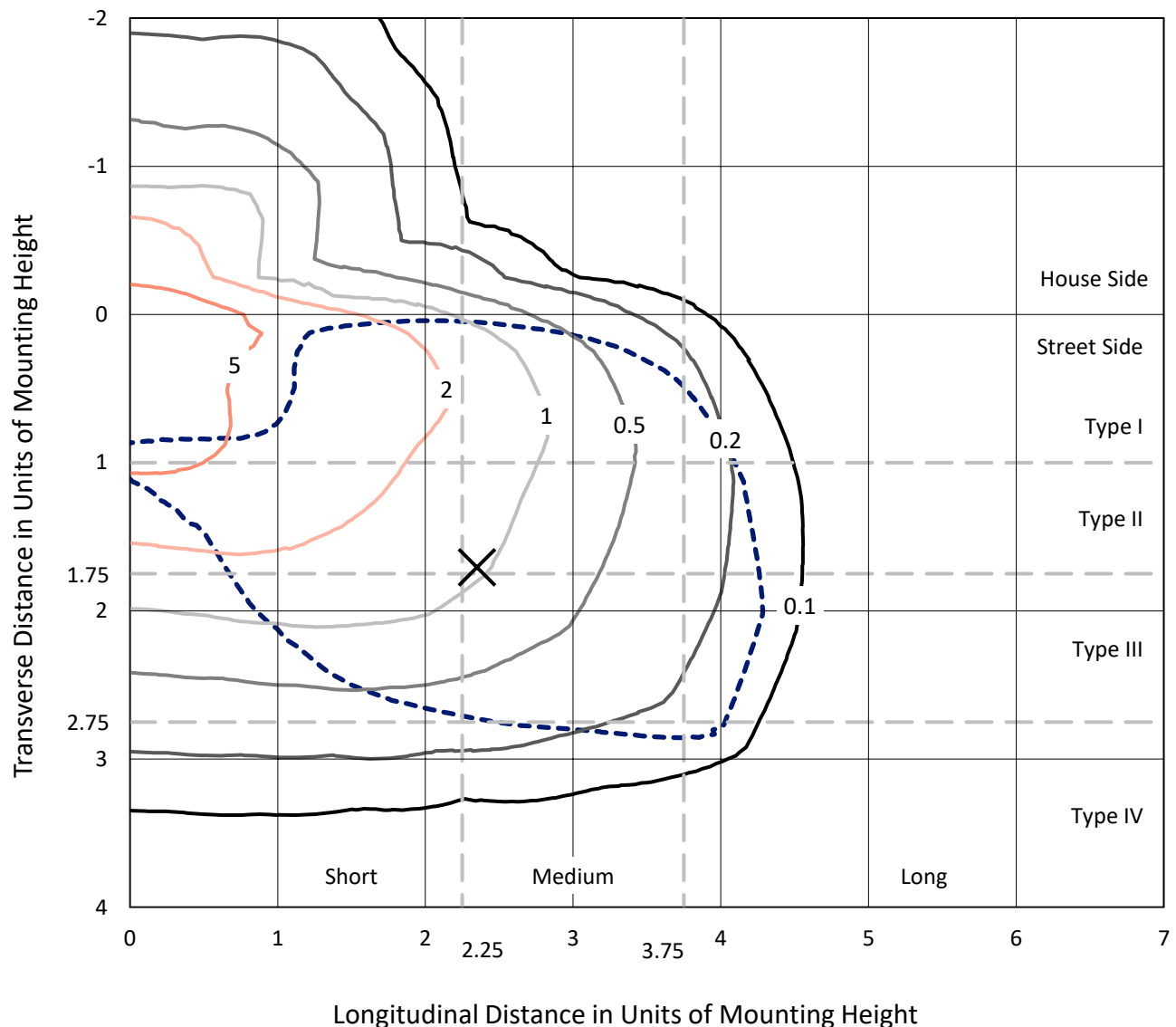


REPORT NUMBER: P454767

CATALOG NUMBER: GLAN-SA5D-827-U-T3R

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

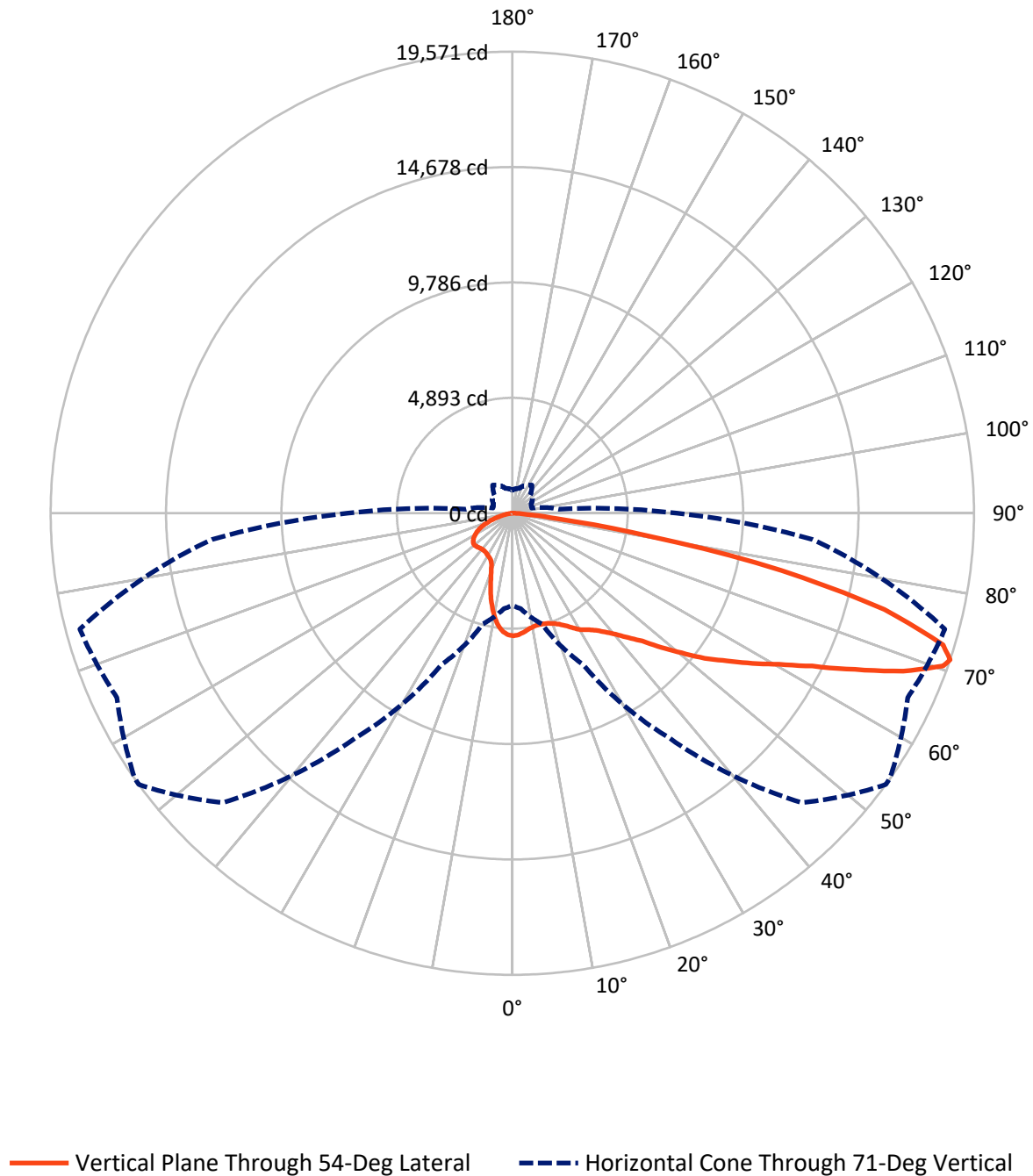


Based on 25 foot mounting height. Maximum calculated value = 8.4 fc  
 Type IV - Medium - N/A

REPORT NUMBER: P454767

CATALOG NUMBER: GLAN-SA5D-827-U-T3R

## Luminous Intensity Polar Plot



REPORT NUMBER: P454767

CATALOG NUMBER: GLAN-SA5D-827-U-T3R

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5261.8   | 0.0    | 5261.8  |
|                    | % Fixture | 18.1     | 0.0    | 18.1    |
| <b>Street Side</b> | Lumens    | 23882.2  | 0.0    | 23882.2 |
|                    | % Fixture | 81.9     | 0.0    | 81.9    |
| <b>Total</b>       | Lumens    | 29144.0  | 0.0    | 29144.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 463.4   | 1.6       |
| 10°-20°   | 1223.5  | 4.2       |
| 20°-30°   | 2037.2  | 7.0       |
| 30°-40°   | 3012.4  | 10.3      |
| 40°-50°   | 4243.1  | 14.6      |
| 50°-60°   | 5681.7  | 19.5      |
| 60°-70°   | 7161.3  | 24.6      |
| 70°-80°   | 4891.2  | 16.8      |
| 80°-90°   | 430.1   | 1.5       |
| 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°    | 29144.0 | 100.0     |
| 0°-180°   | 29144.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P454767

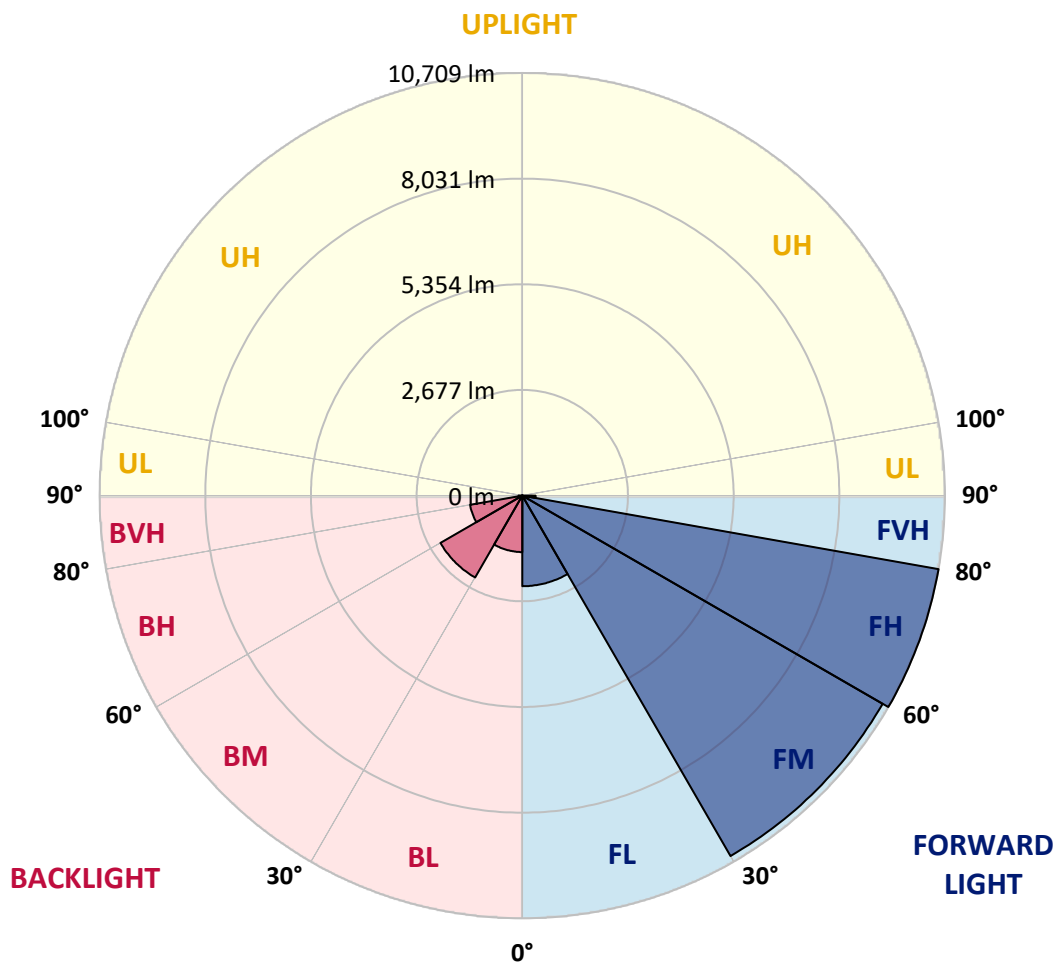
CATALOG NUMBER: GLAN-SA5D-827-U-T3R

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2294.1  | 7.9       |                         |      |          |
| FM   | (30°-60°)   | 10543.2 | 36.2      |                         |      |          |
| FH   | (60°-80°)   | 10708.6 | 36.7      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 336.2   | 1.2       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1430.0  | 4.9       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 2394.0  | 8.2       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 1343.8  | 4.6       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 93.9    | 0.3       |                         |      | G1/100   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G4**

Type IV Medium



REPORT NUMBER: P454767

CATALOG NUMBER: GLAN-SA5D-827-U-T3R

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°     | 25°     | 35°     | 45°     | 54°     | 55°     | 65°     | 75°     | 85°     |
|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5199.7 | 5199.7 | 5199.7  | 5199.7  | 5199.7  | 5199.7  | 5199.7  | 5199.7  | 5199.7  | 5199.7  | 5199.7  |
| 2.5°  | 5023.4 | 5047.0 | 5053.3  | 5069.1  | 5102.1  | 5128.9  | 5155.6  | 5152.5  | 5190.3  | 5206.0  | 5220.2  |
| 5°    | 4799.9 | 4806.2 | 4829.8  | 4861.3  | 4919.5  | 4993.5  | 5065.9  | 5067.5  | 5160.4  | 5234.4  | 5270.6  |
| 7.5°  | 4636.1 | 4656.6 | 4672.4  | 4705.4  | 4766.8  | 4847.1  | 4962.0  | 4971.5  | 5136.8  | 5283.2  | 5360.3  |
| 10°   | 4529.1 | 4552.7 | 4570.0  | 4611.0  | 4672.4  | 4762.1  | 4886.4  | 4903.8  | 5119.4  | 5360.3  | 5495.7  |
| 12.5° | 4431.5 | 4455.1 | 4470.8  | 4524.4  | 4604.7  | 4714.9  | 4855.0  | 4875.4  | 5125.7  | 5450.0  | 5643.7  |
| 15°   | 4491.3 | 4510.2 | 4503.9  | 4519.6  | 4573.2  | 4699.1  | 4867.6  | 4888.0  | 5149.3  | 5536.6  | 5790.1  |
| 17.5° | 4757.4 | 4773.1 | 4721.2  | 4661.3  | 4636.1  | 4729.0  | 4906.9  | 4929.0  | 5196.6  | 5626.3  | 5939.6  |
| 20°   | 5149.3 | 5191.8 | 5078.5  | 4944.7  | 4823.5  | 4836.1  | 4988.8  | 5012.4  | 5262.7  | 5716.1  | 6092.3  |
| 22.5° | 5659.4 | 5690.9 | 5552.4  | 5332.0  | 5108.4  | 4993.5  | 5111.6  | 5125.7  | 5361.9  | 5832.6  | 6259.2  |
| 25°   | 6259.2 | 6278.1 | 6086.0  | 5802.7  | 5479.9  | 5262.7  | 5280.0  | 5305.2  | 5525.6  | 5964.8  | 6407.2  |
| 27.5° | 6841.7 | 6901.5 | 6679.5  | 6333.2  | 5908.1  | 5546.1  | 5511.4  | 5527.2  | 5703.5  | 6038.8  | 6509.5  |
| 30°   | 7532.7 | 7528.0 | 7293.5  | 6892.0  | 6347.3  | 5854.6  | 5730.2  | 5727.1  | 5799.5  | 6075.0  | 6583.5  |
| 32.5° | 8083.7 | 8148.3 | 7918.4  | 7480.8  | 6849.5  | 6174.2  | 5881.4  | 5875.1  | 5873.5  | 6138.0  | 6693.7  |
| 35°   | 8710.3 | 8719.7 | 8508.8  | 8068.0  | 7392.6  | 6575.6  | 6092.3  | 6060.8  | 6024.6  | 6273.4  | 6843.2  |
| 37.5° | 9270.7 | 9314.8 | 9121.2  | 8626.8  | 7926.3  | 6992.8  | 6382.0  | 6361.5  | 6251.3  | 6507.9  | 7082.5  |
| 40°   | 9708.4 | 9741.4 | 9624.9  | 9154.2  | 8452.1  | 7443.0  | 6750.3  | 6712.6  | 6578.8  | 6892.0  | 7402.1  |
| 42.5° | 9851.6 | 9919.3 | 9965.0  | 9733.5  | 9056.6  | 7976.7  | 7203.7  | 7156.5  | 7054.2  | 7474.5  | 7770.5  |
| 45°   | 9862.6 | 9969.7 | 10210.5 | 10221.6 | 9664.3  | 8615.8  | 7732.7  | 7699.6  | 7691.7  | 8220.7  | 8288.4  |
| 47.5° | 9779.2 | 9887.8 | 10292.4 | 10511.2 | 10205.8 | 9261.3  | 8496.2  | 8444.2  | 8449.0  | 9143.2  | 8869.3  |
| 50°   | 9577.7 | 9706.8 | 10197.9 | 10697.0 | 10629.3 | 9931.9  | 9302.2  | 9284.9  | 9382.5  | 10196.4 | 9472.2  |
| 52.5° | 9198.3 | 9354.1 | 10100.3 | 10813.5 | 10944.1 | 10509.6 | 10218.4 | 10169.6 | 10416.8 | 11339.3 | 10131.8 |
| 55°   | 8148.3 | 8382.8 | 9743.0  | 10878.0 | 11243.2 | 11062.2 | 11043.3 | 11131.5 | 11458.9 | 12586.1 | 10857.5 |
| 57.5° | 7600.4 | 7776.8 | 8966.9  | 10889.0 | 11621.1 | 11704.5 | 12006.7 | 12028.8 | 12601.8 | 13910.0 | 11677.7 |
| 60°   | 7301.3 | 7457.2 | 8541.8  | 10816.6 | 12148.4 | 12499.5 | 12992.2 | 13070.9 | 13717.9 | 15344.1 | 12527.8 |
| 62.5° | 7040.0 | 7173.8 | 8286.8  | 10566.3 | 12743.5 | 13678.6 | 14268.9 | 14306.7 | 14985.2 | 16927.8 | 13366.9 |
| 65°   | 6424.5 | 6577.2 | 7773.6  | 10316.0 | 13256.7 | 15152.1 | 15962.8 | 15918.7 | 16334.3 | 18294.3 | 13892.7 |
| 67.5° | 5594.9 | 5788.5 | 6814.9  | 9451.7  | 13510.1 | 16762.5 | 17870.8 | 17815.7 | 17666.1 | 19190.0 | 14043.8 |
| 70°   | 4535.4 | 4639.3 | 5588.6  | 7957.8  | 12497.9 | 17607.9 | 19377.3 | 19319.1 | 18491.0 | 19308.1 | 13329.1 |
| 71°   | 3902.5 | 4064.7 | 4866.0  | 7068.3  | 11655.7 | 17349.7 | 19571.0 | 19555.2 | 18492.6 | 18982.2 | 12790.7 |
| 72.5° | 3046.2 | 3145.3 | 3853.7  | 5476.8  | 9906.7  | 15882.5 | 19092.4 | 19152.2 | 18091.2 | 18077.0 | 11680.9 |
| 75°   | 1926.9 | 1971.0 | 2418.0  | 3224.0  | 5435.9  | 11248.0 | 16298.1 | 16460.3 | 16063.6 | 14796.3 | 8686.7  |
| 77.5° | 1119.3 | 1176.0 | 1448.3  | 1900.1  | 2348.8  | 6104.9  | 11662.0 | 11838.3 | 11161.4 | 8146.7  | 3556.2  |
| 80°   | 651.7  | 714.7  | 954.0   | 1103.5  | 1078.4  | 2265.3  | 5938.0  | 6238.7  | 4832.9  | 2057.5  | 998.1   |
| 82.5° | 362.1  | 404.6  | 670.6   | 672.2   | 574.6   | 739.9   | 1868.6  | 1955.2  | 1379.0  | 829.6   | 407.7   |
| 85°   | 262.9  | 297.5  | 432.9   | 392.0   | 275.5   | 318.0   | 650.2   | 681.6   | 557.3   | 349.5   | 132.2   |
| 87.5° | 92.9   | 132.2  | 237.7   | 188.9   | 75.6    | 66.1    | 187.3   | 152.7   | 141.7   | 97.6    | 29.9    |
| 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: P454767

CATALOG NUMBER: GLAN-SA5D-827-U-T3R

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5199.7 | 5199.7 | 5199.7 | 5199.7 | 5199.7 | 5199.7 | 5199.7 | 5199.7 | 5199.7 | 5199.7 | 5199.7 |
| 2.5°  | 5228.1 | 5231.2 | 5215.5 | 5187.1 | 5158.8 | 5122.6 | 5081.7 | 5050.2 | 5036.0 | 5034.4 | 5032.9 |
| 5°    | 5284.7 | 5292.6 | 5232.8 | 5144.6 | 5047.0 | 4927.4 | 4825.1 | 4708.6 | 4678.6 | 4631.4 | 4645.6 |
| 7.5°  | 5376.0 | 5371.3 | 5253.2 | 5065.9 | 4837.6 | 4584.2 | 4370.1 | 4245.7 | 4116.6 | 4080.4 | 4082.0 |
| 10°   | 5506.7 | 5476.8 | 5253.2 | 4905.3 | 4524.4 | 4148.1 | 3849.0 | 3660.1 | 3557.8 | 3472.8 | 3441.3 |
| 12.5° | 5645.2 | 5569.7 | 5202.9 | 4680.2 | 4121.4 | 3660.1 | 3339.0 | 3083.9 | 3017.8 | 2948.6 | 2950.1 |
| 15°   | 5777.5 | 5651.5 | 5103.7 | 4363.8 | 3686.9 | 3139.0 | 2827.3 | 2674.6 | 2654.2 | 2662.0 | 2660.5 |
| 17.5° | 5897.1 | 5709.8 | 4952.6 | 4011.2 | 3180.0 | 2692.0 | 2526.7 | 2537.7 | 2592.8 | 2632.1 | 2636.9 |
| 20°   | 6018.3 | 5744.4 | 4727.4 | 3538.9 | 2701.4 | 2421.2 | 2427.5 | 2514.1 | 2597.5 | 2651.0 | 2658.9 |
| 22.5° | 6133.2 | 5760.2 | 4463.0 | 3082.4 | 2355.1 | 2306.3 | 2399.1 | 2492.0 | 2573.9 | 2625.8 | 2633.7 |
| 25°   | 6208.8 | 5723.9 | 4088.3 | 2605.4 | 2185.0 | 2265.3 | 2362.9 | 2441.6 | 2510.9 | 2564.4 | 2577.0 |
| 27.5° | 6229.3 | 5607.4 | 3623.9 | 2219.7 | 2106.3 | 2226.0 | 2315.7 | 2374.0 | 2427.5 | 2477.9 | 2487.3 |
| 30°   | 6218.3 | 5435.9 | 3113.9 | 1993.0 | 2060.7 | 2180.3 | 2249.6 | 2292.1 | 2356.6 | 2396.0 | 2403.9 |
| 32.5° | 6200.9 | 5235.9 | 2581.8 | 1871.8 | 2022.9 | 2137.8 | 2178.8 | 2216.5 | 2215.0 | 2199.2 | 2210.2 |
| 35°   | 6207.2 | 4996.6 | 2150.4 | 1799.4 | 1989.8 | 2106.3 | 2141.0 | 2093.7 | 1958.4 | 1952.1 | 1945.8 |
| 37.5° | 6240.3 | 4760.5 | 1837.1 | 1749.0 | 1972.5 | 2101.6 | 2120.5 | 1903.3 | 1783.6 | 1728.5 | 1714.3 |
| 40°   | 6325.3 | 4485.0 | 1630.9 | 1711.2 | 1971.0 | 2137.8 | 2027.6 | 1807.2 | 1577.4 | 1470.3 | 1462.5 |
| 42.5° | 6438.6 | 4214.2 | 1505.0 | 1687.6 | 1989.8 | 2192.9 | 1989.8 | 1671.8 | 1421.5 | 1358.6 | 1349.1 |
| 45°   | 6607.1 | 3904.1 | 1435.7 | 1676.6 | 2018.2 | 2213.4 | 1977.2 | 1572.7 | 1358.6 | 1308.2 | 1308.2 |
| 47.5° | 6797.6 | 3608.2 | 1397.9 | 1668.7 | 2054.4 | 2199.2 | 1865.5 | 1541.2 | 1328.7 | 1335.0 | 1364.9 |
| 50°   | 6986.5 | 3351.6 | 1369.6 | 1651.4 | 2085.9 | 2191.3 | 1819.8 | 1539.6 | 1336.5 | 1416.8 | 1470.3 |
| 52.5° | 7205.3 | 3170.5 | 1335.0 | 1623.0 | 2085.9 | 2141.0 | 1805.7 | 1571.1 | 1358.6 | 1382.2 | 1405.8 |
| 55°   | 7469.8 | 3113.9 | 1290.9 | 1561.6 | 2048.1 | 2015.0 | 1797.8 | 1616.7 | 1374.3 | 1319.2 | 1328.7 |
| 57.5° | 7819.3 | 3205.2 | 1248.4 | 1484.5 | 1961.5 | 1884.4 | 1794.6 | 1629.3 | 1338.1 | 1292.5 | 1283.0 |
| 60°   | 8225.4 | 3386.2 | 1235.8 | 1405.8 | 1843.4 | 1772.6 | 1775.7 | 1593.1 | 1287.7 | 1240.5 | 1248.4 |
| 62.5° | 8510.4 | 3494.8 | 1227.9 | 1346.0 | 1714.3 | 1649.8 | 1730.1 | 1549.1 | 1265.7 | 1224.8 | 1232.6 |
| 65°   | 8510.4 | 3362.6 | 1155.5 | 1254.7 | 1547.5 | 1501.8 | 1675.0 | 1494.0 | 1237.4 | 1190.1 | 1182.3 |
| 67.5° | 8187.6 | 2976.9 | 1045.3 | 1117.7 | 1363.3 | 1333.4 | 1597.9 | 1427.8 | 1194.8 | 1158.6 | 1139.8 |
| 70°   | 7347.0 | 2257.5 | 906.8  | 957.1  | 1130.3 | 1157.1 | 1498.7 | 1338.1 | 1124.0 | 1079.9 | 1051.6 |
| 71°   | 6977.0 | 1966.2 | 848.5  | 875.3  | 1040.6 | 1079.9 | 1451.5 | 1300.3 | 1092.5 | 1029.6 | 979.2  |
| 72.5° | 6263.9 | 1656.1 | 760.4  | 771.4  | 889.4  | 960.3  | 1352.3 | 1227.9 | 1032.7 | 943.0  | 886.3  |
| 75°   | 4758.9 | 1209.0 | 612.4  | 606.1  | 658.0  | 761.9  | 1144.5 | 1094.1 | 905.2  | 784.0  | 750.9  |
| 77.5° | 2056.0 | 658.0  | 458.1  | 462.8  | 447.1  | 577.7  | 900.5  | 939.8  | 776.1  | 637.6  | 607.7  |
| 80°   | 623.4  | 379.4  | 313.3  | 319.6  | 299.1  | 387.3  | 634.4  | 736.7  | 623.4  | 495.9  | 455.0  |
| 82.5° | 319.6  | 226.7  | 214.1  | 210.9  | 190.5  | 218.8  | 384.1  | 503.8  | 445.5  | 310.1  | 273.9  |
| 85°   | 138.5  | 121.2  | 105.5  | 102.3  | 89.7   | 78.7   | 137.0  | 251.9  | 236.1  | 173.2  | 165.3  |
| 87.5° | 34.6   | 31.5   | 20.5   | 18.9   | 11.0   | 1.6    | 0.0    | 0.0    | 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)