

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: P320122

Luminaire Tested: **GAN-SA8B-827-U-SL4**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P320122  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-24)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA8B-827-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 31992 lumens  
Efficiency: N/A  
Efficacy: 95.8 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

Input Watts (W): 334  
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



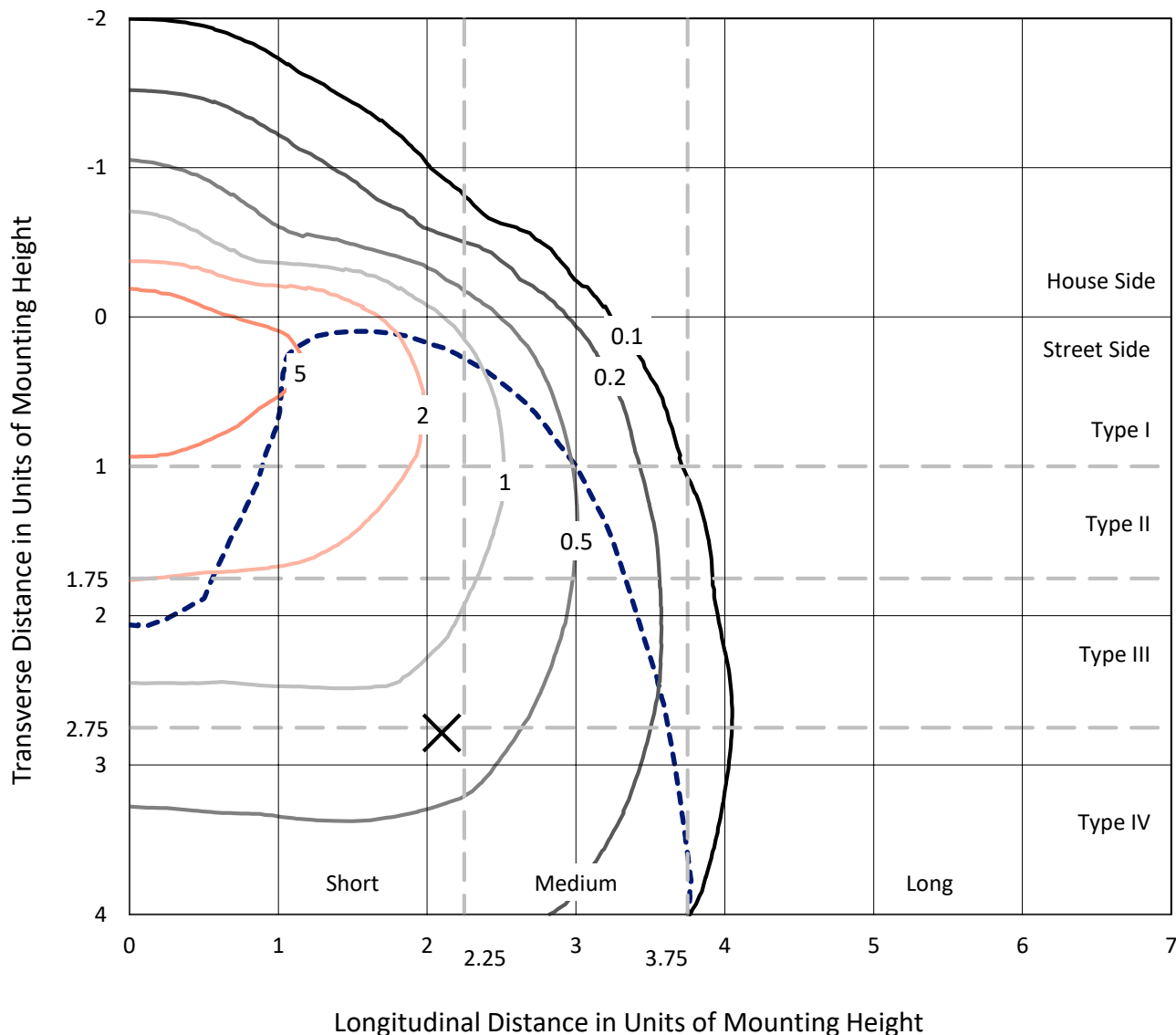
REPORT NUMBER: P320122

CATALOG NUMBER: GAN-SA8B-827-U-SL4

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

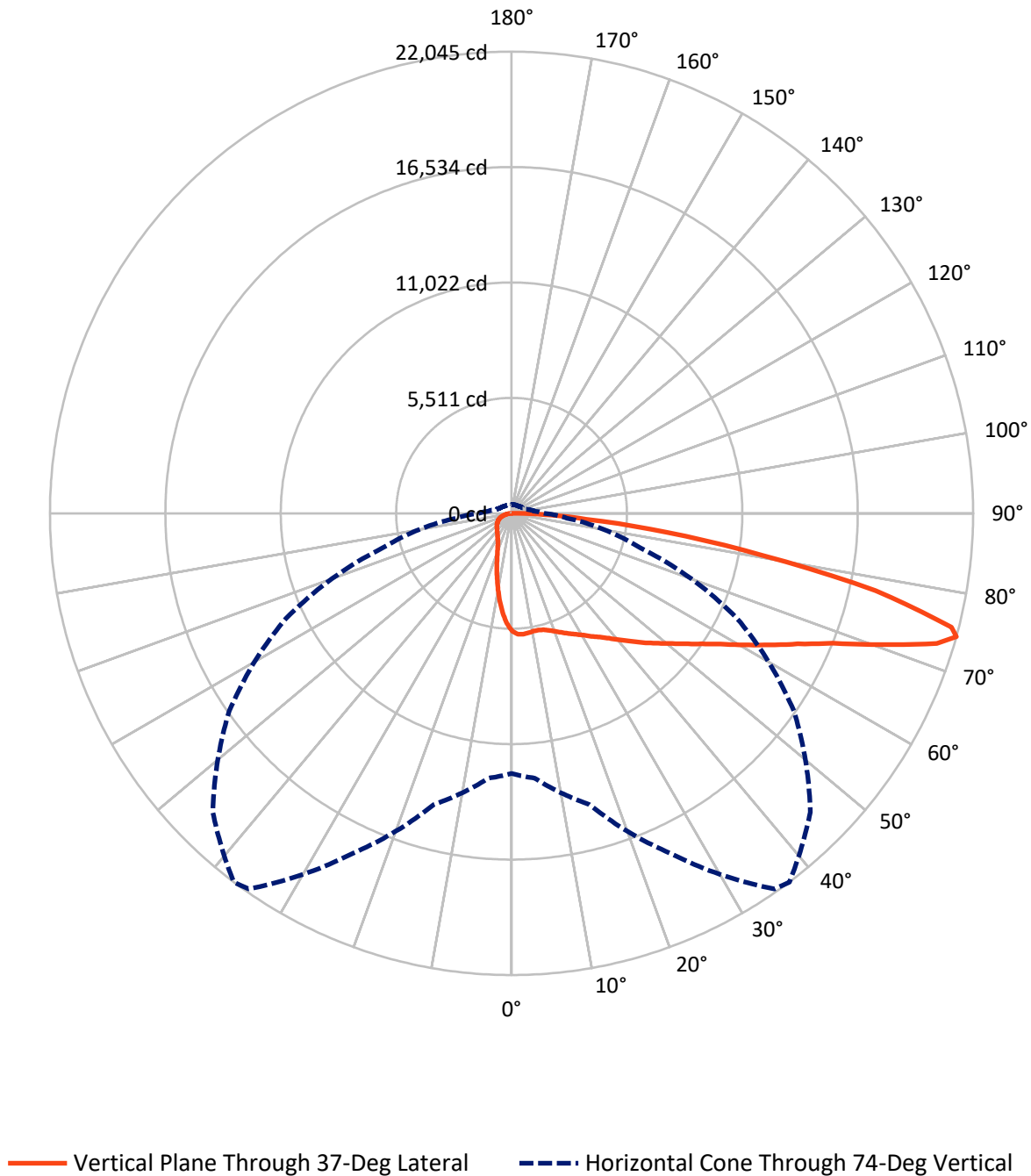
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc  
 Type IV - Short - N/A

REPORT NUMBER: P320122  
CATALOG NUMBER: GAN-SA8B-827-U-SL4

## Luminous Intensity Polar Plot



REPORT NUMBER: P320122

CATALOG NUMBER: GAN-SA8B-827-U-SL4

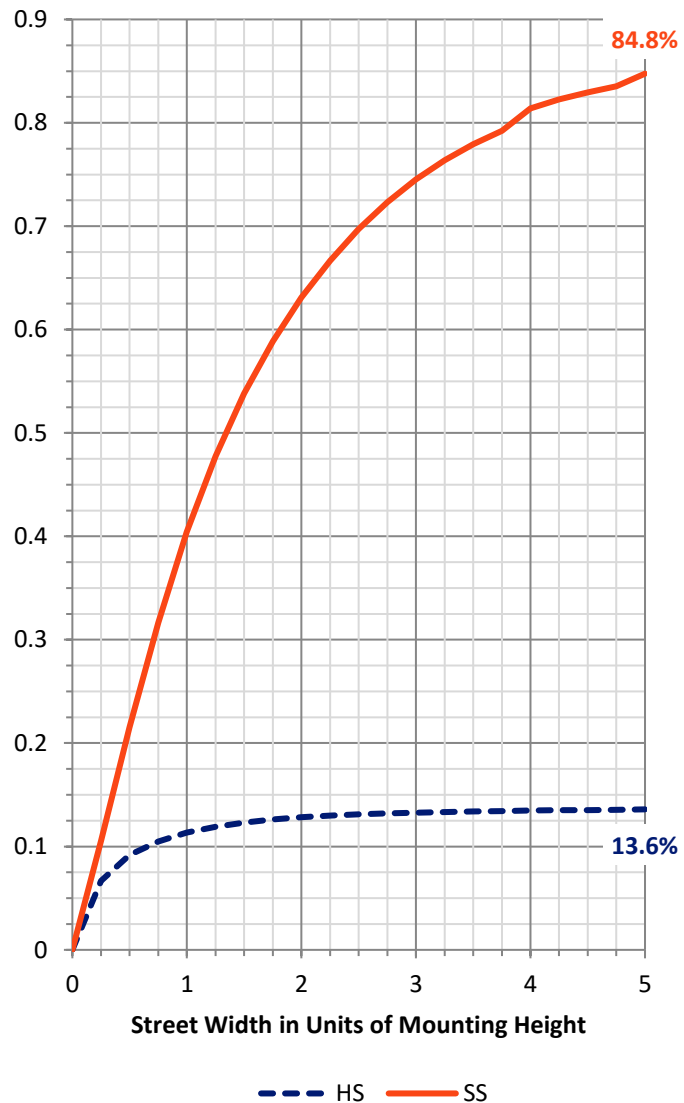
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4401.9   | 0.0    | 4401.9  |
|                    | % Fixture | 13.8     | 0.0    | 13.8    |
| <b>Street Side</b> | Lumens    | 27590.1  | 0.0    | 27590.1 |
|                    | % Fixture | 86.2     | 0.0    | 86.2    |
| <b>Total</b>       | Lumens    | 31992.0  | 0.0    | 31992.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 496.4   | 1.6       |
| 10°-20°   | 1272.4  | 4.0       |
| 20°-30°   | 1960.5  | 6.1       |
| 30°-40°   | 2850.8  | 8.9       |
| 40°-50°   | 4195.9  | 13.1      |
| 50°-60°   | 5892.4  | 18.4      |
| 60°-70°   | 7458.0  | 23.3      |
| 70°-80°   | 6567.1  | 20.5      |
| 80°-90°   | 1298.4  | 4.1       |
| 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°    | 31992.0 | 100.0     |
| 0°-180°   | 31992.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P320122

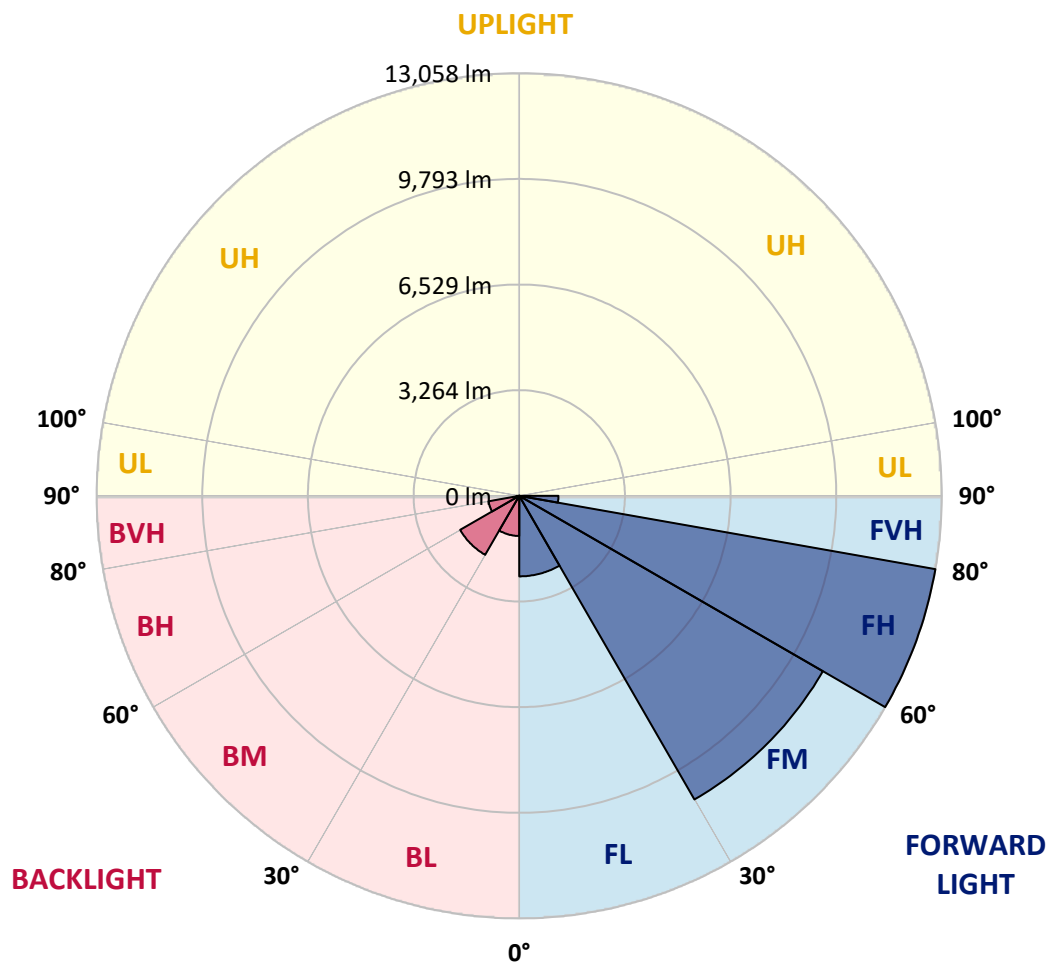
CATALOG NUMBER: GAN-SA8B-827-U-SL4

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2489.4  | 7.8       |                         |      |         |
| FM   | (30°-60°)   | 10832.7 | 33.9      |                         |      |         |
| FH   | (60°-80°)   | 13057.5 | 40.8      |                         |      | G5      |
| FVH  | (80°-90°)   | 1210.5  | 3.8       |                         |      | G5      |
| BL   | (0°-30°)    | 1239.9  | 3.9       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 2106.5  | 6.6       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 967.6   | 3.0       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 87.9    | 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-G5**

Type IV Short





REPORT NUMBER: P320122

CATALOG NUMBER: GAN-SA8B-827-U-SL4

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 37°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5636.9  | 5636.9  | 5636.9  | 5636.9  | 5636.9  | 5636.9  | 5636.9  | 5636.9  | 5636.9  | 5636.9  | 5636.9  |
| 2.5°  | 5829.6  | 5830.7  | 5829.6  | 5820.6  | 5799.1  | 5781.1  | 5766.5  | 5745.1  | 5697.7  | 5661.7  | 5607.6  |
| 5°    | 5884.8  | 5878.0  | 5873.5  | 5856.6  | 5822.8  | 5802.5  | 5774.4  | 5733.8  | 5656.0  | 5583.9  | 5496.0  |
| 7.5°  | 5858.9  | 5851.0  | 5840.8  | 5820.6  | 5782.2  | 5765.3  | 5725.9  | 5672.9  | 5579.4  | 5484.7  | 5358.5  |
| 10°   | 5778.9  | 5776.6  | 5772.1  | 5767.6  | 5734.9  | 5721.4  | 5685.3  | 5629.0  | 5536.6  | 5421.6  | 5274.0  |
| 12.5° | 5689.8  | 5695.5  | 5713.5  | 5737.2  | 5722.5  | 5715.8  | 5693.2  | 5654.9  | 5560.2  | 5436.3  | 5258.2  |
| 15°   | 5633.5  | 5649.3  | 5697.7  | 5759.7  | 5772.1  | 5769.8  | 5764.2  | 5739.4  | 5639.1  | 5501.6  | 5294.3  |
| 17.5° | 5614.3  | 5640.2  | 5732.7  | 5835.2  | 5871.3  | 5879.2  | 5881.4  | 5838.6  | 5727.0  | 5581.6  | 5331.5  |
| 20°   | 5649.3  | 5681.9  | 5817.2  | 5958.0  | 6015.5  | 6020.0  | 6009.9  | 5935.5  | 5810.4  | 5650.4  | 5351.8  |
| 22.5° | 5755.2  | 5784.5  | 5953.5  | 6112.4  | 6177.8  | 6184.6  | 6154.1  | 6041.4  | 5898.3  | 5731.5  | 5379.9  |
| 25°   | 5959.2  | 5995.2  | 6164.3  | 6323.2  | 6357.0  | 6358.1  | 6314.1  | 6174.4  | 6013.3  | 5845.3  | 5440.8  |
| 27.5° | 6225.1  | 6261.2  | 6413.3  | 6568.8  | 6550.8  | 6540.7  | 6480.9  | 6341.2  | 6163.1  | 6002.0  | 5549.0  |
| 30°   | 6521.5  | 6560.9  | 6705.2  | 6815.6  | 6772.8  | 6752.5  | 6704.1  | 6523.8  | 6371.6  | 6216.1  | 5714.6  |
| 32.5° | 6828.0  | 6864.1  | 6990.3  | 7065.8  | 7011.7  | 7002.7  | 6929.4  | 6764.9  | 6643.2  | 6542.9  | 5982.8  |
| 35°   | 7142.4  | 7168.4  | 7292.3  | 7335.1  | 7263.0  | 7260.8  | 7240.5  | 7089.5  | 7012.8  | 7060.2  | 6372.7  |
| 37.5° | 7463.6  | 7470.4  | 7576.3  | 7578.6  | 7557.1  | 7566.2  | 7587.6  | 7492.9  | 7514.3  | 7661.9  | 6879.9  |
| 40°   | 7749.8  | 7767.9  | 7844.5  | 7868.2  | 7905.4  | 7936.9  | 8044.0  | 7982.0  | 8147.6  | 8409.1  | 7510.9  |
| 42.5° | 7961.7  | 7996.6  | 8119.5  | 8180.3  | 8300.9  | 8350.5  | 8501.5  | 8559.0  | 8892.5  | 9284.7  | 8261.5  |
| 45°   | 8140.9  | 8195.0  | 8392.2  | 8517.3  | 8721.3  | 8808.0  | 9024.4  | 9217.1  | 9734.4  | 10234.7 | 9051.4  |
| 47.5° | 8334.7  | 8403.5  | 8650.3  | 8889.2  | 9166.4  | 9264.4  | 9657.7  | 9946.2  | 10632.5 | 11190.3 | 9796.3  |
| 50°   | 8619.8  | 8672.8  | 8914.0  | 9289.2  | 9635.2  | 9761.4  | 10305.7 | 10719.3 | 11545.3 | 12100.9 | 10442.1 |
| 52.5° | 9017.6  | 8997.3  | 9201.3  | 9727.6  | 10191.9 | 10347.4 | 10997.6 | 11541.9 | 12470.5 | 12924.7 | 10987.5 |
| 55°   | 9417.7  | 9383.9  | 9527.0  | 10186.3 | 10841.0 | 11004.4 | 11759.4 | 12368.0 | 13350.7 | 13666.2 | 11405.6 |
| 57.5° | 9862.8  | 9798.6  | 9919.2  | 10703.5 | 11580.3 | 11775.2 | 12612.5 | 13245.8 | 14216.1 | 14265.7 | 11671.5 |
| 60°   | 10321.5 | 10234.7 | 10369.9 | 11344.7 | 12519.0 | 12748.9 | 13611.0 | 14102.3 | 15032.0 | 14745.8 | 11757.2 |
| 62.5° | 10722.7 | 10661.8 | 10870.3 | 12060.3 | 13577.2 | 13829.6 | 14591.4 | 15012.9 | 15836.6 | 14945.2 | 11448.4 |
| 65°   | 11073.1 | 11083.3 | 11443.9 | 12864.9 | 14757.1 | 15026.4 | 15716.1 | 16135.3 | 16470.0 | 14826.9 | 10726.0 |
| 67.5° | 11491.2 | 11548.7 | 12164.0 | 13924.3 | 16242.3 | 16537.6 | 17352.4 | 17359.1 | 16823.8 | 14132.7 | 9303.9  |
| 70°   | 12100.9 | 12219.2 | 13154.6 | 15393.8 | 18354.2 | 18759.9 | 19388.7 | 18078.1 | 16326.9 | 12250.8 | 7320.5  |
| 72.5° | 12641.8 | 12862.7 | 14208.2 | 17075.1 | 20928.1 | 21235.7 | 20579.9 | 17663.4 | 14249.9 | 9181.0  | 4560.7  |
| 74°   | 12422.1 | 12695.9 | 14399.8 | 17903.4 | 21897.2 | 22044.9 | 20177.5 | 16453.1 | 11881.1 | 6358.1  | 2650.5  |
| 75°   | 11948.8 | 12246.3 | 14120.3 | 17895.5 | 21774.4 | 21692.1 | 19206.1 | 15070.3 | 9785.1  | 4336.4  | 1763.6  |
| 77.5° | 9643.1  | 9957.5  | 11898.0 | 15337.4 | 17853.8 | 17776.1 | 14753.7 | 10109.6 | 4285.7  | 1422.2  | 895.9   |
| 80°   | 5606.4  | 5846.5  | 7385.9  | 9740.0  | 12038.9 | 12179.8 | 9702.8  | 5002.4  | 1685.9  | 799.0   | 607.4   |
| 82.5° | 2490.5  | 2656.2  | 3567.8  | 4972.0  | 7265.3  | 7446.7  | 5081.3  | 2621.2  | 1041.3  | 485.7   | 365.1   |
| 85°   | 1634.0  | 1756.9  | 2165.9  | 2367.7  | 3459.7  | 3583.6  | 2487.1  | 2040.9  | 687.4   | 267.1   | 268.2   |
| 87.5° | 1175.4  | 1293.7  | 1609.2  | 1405.3  | 1587.8  | 1503.3  | 1353.4  | 1888.7  | 276.1   | 152.1   | 90.2    |
| 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: P320122

CATALOG NUMBER: GAN-SA8B-827-U-SL4

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5636.9 | 5636.9 | 5636.9 | 5636.9 | 5636.9 | 5636.9 | 5636.9 | 5636.9 | 5636.9 | 5636.9 | 5636.9 |
| 2.5°  | 5583.9 | 5565.9 | 5525.3 | 5448.7 | 5405.8 | 5369.8 | 5310.1 | 5275.1 | 5259.3 | 5258.2 | 5265.0 |
| 5°    | 5445.3 | 5403.6 | 5298.8 | 5170.3 | 5067.8 | 4974.2 | 4858.2 | 4788.3 | 4738.7 | 4709.4 | 4717.3 |
| 7.5°  | 5284.1 | 5218.8 | 5054.2 | 4849.1 | 4684.6 | 4503.2 | 4324.0 | 4216.9 | 4133.6 | 4071.6 | 4082.8 |
| 10°   | 5173.7 | 5083.5 | 4843.5 | 4548.3 | 4274.4 | 4010.7 | 3763.9 | 3616.3 | 3499.1 | 3408.9 | 3415.7 |
| 12.5° | 5136.5 | 5014.8 | 4682.4 | 4287.9 | 3903.7 | 3543.0 | 3220.7 | 2994.2 | 2873.7 | 2771.1 | 2779.0 |
| 15°   | 5142.1 | 4978.7 | 4547.1 | 4053.5 | 3570.1 | 3115.9 | 2724.9 | 2460.1 | 2296.7 | 2225.7 | 2226.8 |
| 17.5° | 5146.7 | 4937.0 | 4405.1 | 3802.2 | 3239.9 | 2717.0 | 2292.2 | 2024.0 | 1869.6 | 1804.2 | 1805.3 |
| 20°   | 5132.0 | 4869.4 | 4229.3 | 3513.7 | 2895.1 | 2350.8 | 1939.4 | 1711.8 | 1594.6 | 1543.9 | 1543.9 |
| 22.5° | 5112.8 | 4789.4 | 4031.0 | 3224.1 | 2554.7 | 2033.0 | 1687.0 | 1513.5 | 1445.8 | 1412.0 | 1410.9 |
| 25°   | 5121.9 | 4729.7 | 3828.2 | 2926.6 | 2241.4 | 1779.4 | 1519.1 | 1404.1 | 1359.1 | 1337.7 | 1336.5 |
| 27.5° | 5170.3 | 4701.5 | 3641.1 | 2630.2 | 1967.6 | 1589.0 | 1406.4 | 1325.3 | 1296.0 | 1282.4 | 1282.4 |
| 30°   | 5258.2 | 4701.5 | 3446.1 | 2377.8 | 1740.0 | 1448.1 | 1319.6 | 1264.4 | 1244.1 | 1235.1 | 1235.1 |
| 32.5° | 5411.5 | 4727.4 | 3257.9 | 2127.6 | 1558.5 | 1337.7 | 1247.5 | 1210.3 | 1194.5 | 1190.0 | 1190.0 |
| 35°   | 5675.2 | 4815.3 | 3074.2 | 1891.0 | 1412.0 | 1247.5 | 1178.8 | 1157.3 | 1146.1 | 1145.0 | 1148.3 |
| 37.5° | 6045.9 | 4994.5 | 2901.8 | 1716.3 | 1308.4 | 1174.3 | 1121.3 | 1104.4 | 1097.6 | 1103.3 | 1107.8 |
| 40°   | 6512.5 | 5237.9 | 2745.2 | 1558.5 | 1229.5 | 1115.7 | 1068.3 | 1057.1 | 1053.7 | 1061.6 | 1068.3 |
| 42.5° | 7075.9 | 5567.0 | 2616.7 | 1444.7 | 1168.6 | 1066.1 | 1023.2 | 1009.7 | 1006.3 | 1015.4 | 1024.4 |
| 45°   | 7685.6 | 5920.9 | 2526.6 | 1360.2 | 1121.3 | 1028.9 | 983.8  | 969.2  | 962.4  | 966.9  | 977.0  |
| 47.5° | 8240.1 | 6255.5 | 2490.5 | 1300.5 | 1076.2 | 997.3  | 948.9  | 930.8  | 919.6  | 917.3  | 925.2  |
| 50°   | 8707.7 | 6504.6 | 2507.4 | 1264.4 | 1040.1 | 962.4  | 915.1  | 894.8  | 877.9  | 867.7  | 873.4  |
| 52.5° | 9048.1 | 6661.2 | 2523.2 | 1248.6 | 1012.0 | 924.1  | 877.9  | 858.7  | 836.2  | 819.3  | 819.3  |
| 55°   | 9294.9 | 6697.3 | 2488.2 | 1236.2 | 990.6  | 882.4  | 836.2  | 818.1  | 795.6  | 776.4  | 774.2  |
| 57.5° | 9391.8 | 6595.9 | 2358.6 | 1218.2 | 975.9  | 842.9  | 792.2  | 778.7  | 759.5  | 737.0  | 735.9  |
| 60°   | 9261.0 | 6282.6 | 2108.5 | 1179.9 | 956.8  | 810.3  | 748.3  | 739.3  | 730.2  | 708.8  | 707.7  |
| 62.5° | 8735.9 | 5595.2 | 1785.0 | 1102.1 | 918.4  | 775.3  | 707.7  | 712.2  | 713.3  | 698.7  | 696.4  |
| 65°   | 7783.7 | 4650.8 | 1469.5 | 1000.7 | 861.0  | 733.6  | 666.0  | 687.4  | 699.8  | 697.6  | 694.2  |
| 67.5° | 6399.8 | 3619.7 | 1245.2 | 893.6  | 785.5  | 676.2  | 620.9  | 645.7  | 655.9  | 663.8  | 661.5  |
| 70°   | 4750.0 | 2552.5 | 1030.0 | 781.0  | 694.2  | 608.5  | 562.3  | 574.7  | 568.0  | 577.0  | 580.4  |
| 72.5° | 2648.3 | 1531.5 | 839.6  | 668.3  | 599.5  | 529.7  | 497.0  | 494.7  | 480.1  | 480.1  | 480.1  |
| 74°   | 1589.0 | 1123.5 | 738.1  | 598.4  | 542.0  | 477.8  | 449.6  | 439.5  | 426.0  | 427.1  | 426.0  |
| 75°   | 1277.9 | 965.8  | 677.3  | 552.2  | 501.5  | 447.4  | 419.2  | 405.7  | 395.5  | 395.5  | 394.4  |
| 77.5° | 806.9  | 733.6  | 545.4  | 439.5  | 401.2  | 368.5  | 349.3  | 331.3  | 331.3  | 330.2  | 329.1  |
| 80°   | 609.7  | 583.7  | 424.8  | 332.4  | 307.6  | 282.9  | 270.5  | 262.6  | 262.6  | 266.0  | 264.8  |
| 82.5° | 418.1  | 439.5  | 298.6  | 232.1  | 219.7  | 201.7  | 199.5  | 200.6  | 197.2  | 192.7  | 191.6  |
| 85°   | 305.4  | 330.2  | 201.7  | 146.5  | 134.1  | 122.8  | 131.8  | 136.4  | 130.7  | 120.6  | 116.1  |
| 87.5° | 117.2  | 216.4  | 108.2  | 60.9   | 56.3   | 48.5   | 56.3   | 58.6   | 63.1   | 49.6   | 50.7   |
| 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)