

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: P317551

Luminaire Tested: **GAN-SA7A-827-U-T2R**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P317551  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-8)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA7A-827-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 25245 lumens  
Efficiency: N/A  
Efficacy: 111.7 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

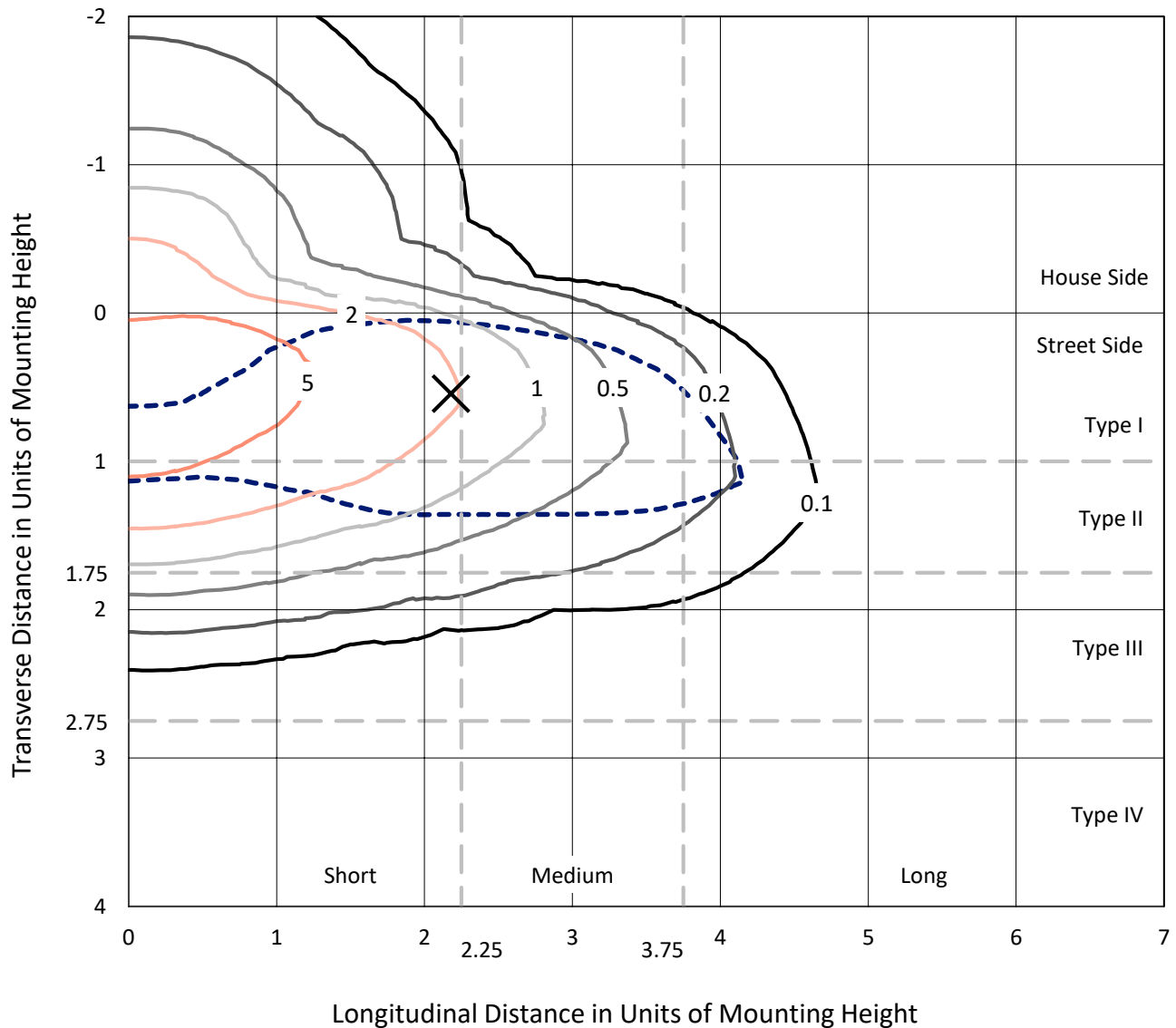
Input Watts (W): 226  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P317551  
 CATALOG NUMBER: GAN-SA7A-827-U-T2R

## Iso-Footcandle Lines of Horizontal Illumination

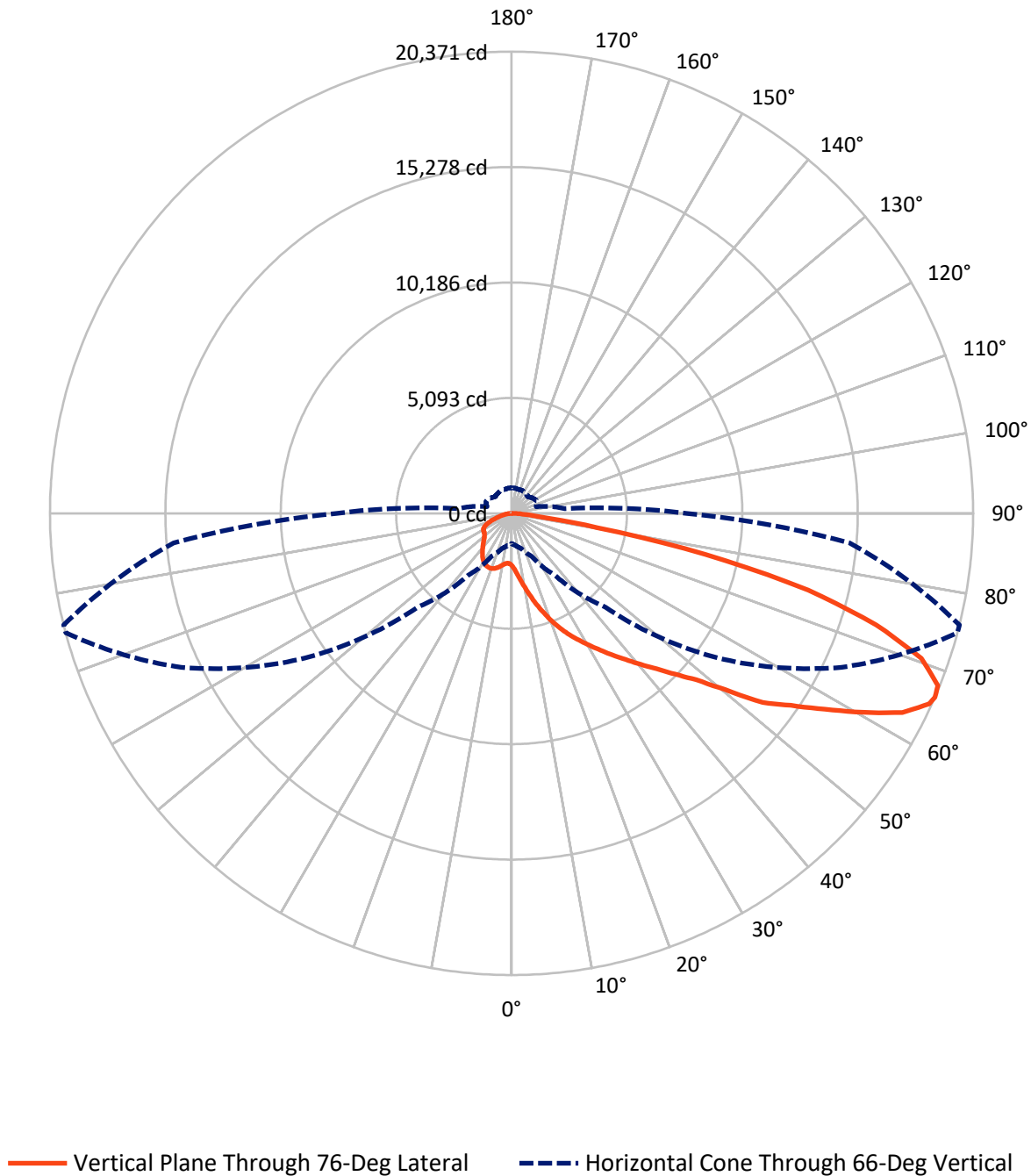
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.8 fc  
 Type II - Short - N/A

REPORT NUMBER: P317551  
CATALOG NUMBER: GAN-SA7A-827-U-T2R

## Luminous Intensity Polar Plot



REPORT NUMBER: P317551

CATALOG NUMBER: GAN-SA7A-827-U-T2R

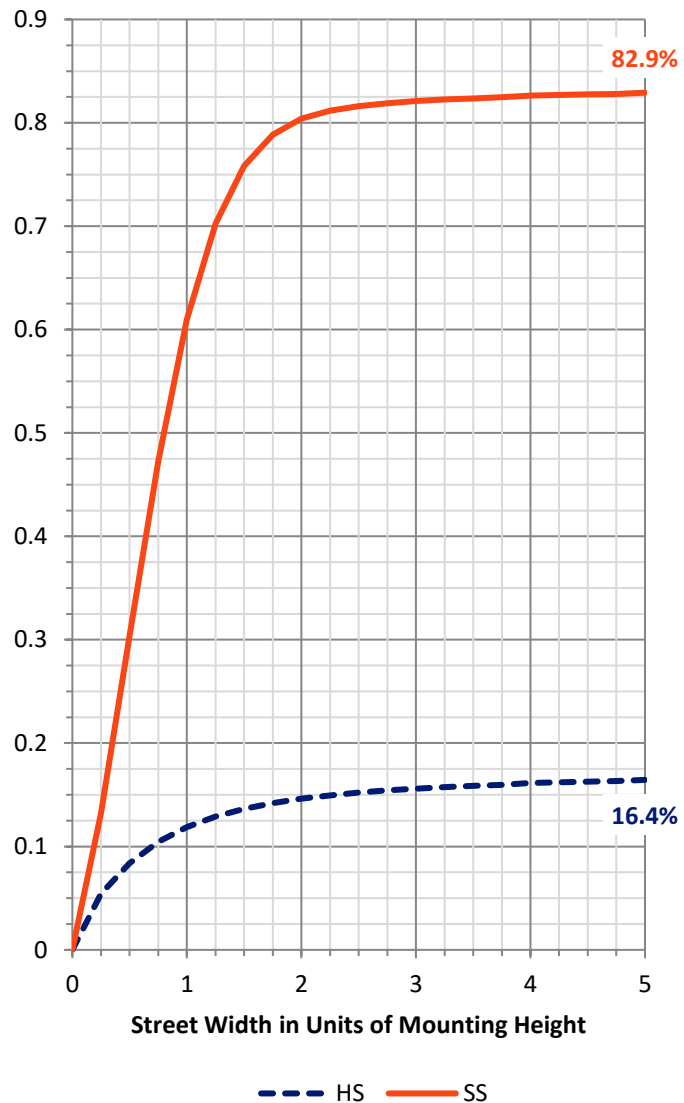
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 4247.9   | 0.0    | 4247.9  |
|                    | % Fixture | 16.8     | 0.0    | 16.8    |
| <b>Street Side</b> | Lumens    | 20997.1  | 0.0    | 20997.1 |
|                    | % Fixture | 83.2     | 0.0    | 83.2    |
| <b>Total</b>       | Lumens    | 25245.0  | 0.0    | 25245.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 278.8   | 1.1       |
| 10°-20°   | 1100.9  | 4.4       |
| 20°-30°   | 2139.4  | 8.5       |
| 30°-40°   | 3491.9  | 13.8      |
| 40°-50°   | 4770.8  | 18.9      |
| 50°-60°   | 5557.0  | 22.0      |
| 60°-70°   | 4982.0  | 19.7      |
| 70°-80°   | 2517.7  | 10.0      |
| 80°-90°   | 406.6   | 1.6       |
| 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°    | 25245.0 | 100.0     |
| 0°-180°   | 25245.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P317551

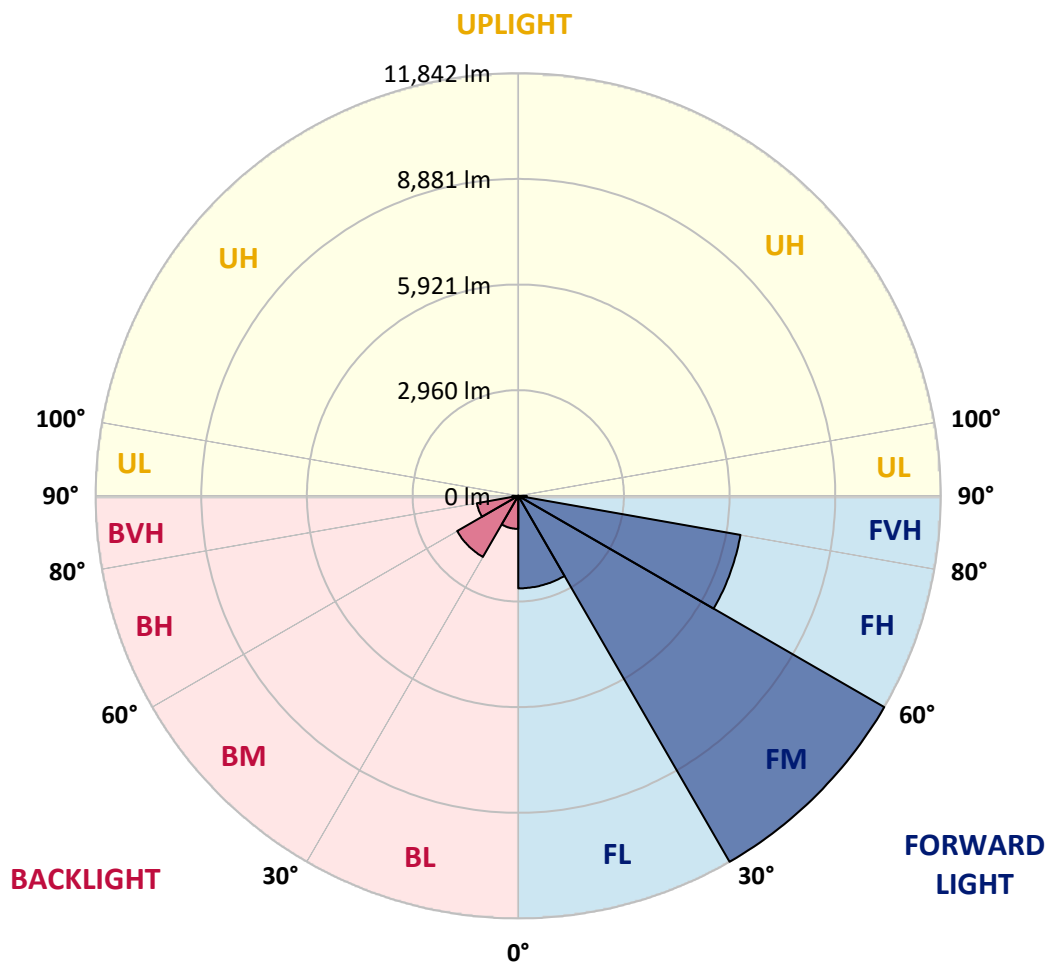
CATALOG NUMBER: GAN-SA7A-827-U-T2R

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2592.6  | 10.3      |                         |      |         |
| FM   | (30°-60°)   | 11841.7 | 46.9      |                         |      |         |
| FH   | (60°-80°)   | 6322.8  | 25.0      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 240.1   | 1.0       |                         |      | G3/500  |
| BL   | (0°-30°)    | 926.5   | 3.7       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1978.1  | 7.8       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1176.9  | 4.7       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 166.5   | 0.7       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Short





REPORT NUMBER: P317551

CATALOG NUMBER: GAN-SA7A-827-U-T2R

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 76°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2305.4  | 2305.4  | 2305.4  | 2305.4  | 2305.4  | 2305.4  | 2305.4  | 2305.4  | 2305.4  | 2305.4  | 2305.4  |
| 2.5°  | 3060.5  | 3014.2  | 3009.9  | 2942.2  | 2926.8  | 2797.4  | 2702.2  | 2602.8  | 2489.7  | 2467.4  | 2378.3  |
| 5°    | 3931.2  | 3927.0  | 3867.8  | 3757.3  | 3670.7  | 3449.6  | 3231.0  | 2999.6  | 2746.0  | 2704.8  | 2504.3  |
| 7.5°  | 4714.6  | 4707.7  | 4662.3  | 4543.2  | 4418.0  | 4146.4  | 3834.4  | 3479.6  | 3068.2  | 3007.4  | 2674.8  |
| 10°   | 5309.4  | 5306.8  | 5291.4  | 5203.9  | 5097.7  | 4837.1  | 4492.6  | 4008.4  | 3442.7  | 3359.6  | 2888.2  |
| 12.5° | 5768.7  | 5773.9  | 5784.2  | 5753.3  | 5702.7  | 5480.8  | 5127.7  | 4568.9  | 3842.1  | 3759.8  | 3125.6  |
| 15°   | 6079.8  | 6095.3  | 6148.4  | 6192.1  | 6218.7  | 6082.4  | 5740.5  | 5142.2  | 4289.5  | 4190.9  | 3388.7  |
| 17.5° | 6236.7  | 6253.8  | 6345.5  | 6477.5  | 6599.2  | 6585.5  | 6313.8  | 5689.0  | 4718.9  | 4623.7  | 3671.6  |
| 20°   | 6372.1  | 6384.9  | 6487.8  | 6646.3  | 6861.5  | 6956.6  | 6804.0  | 6215.3  | 5189.4  | 5076.2  | 3971.5  |
| 22.5° | 6764.6  | 6780.9  | 6811.8  | 6901.7  | 7092.0  | 7266.8  | 7193.1  | 6713.2  | 5620.5  | 5515.1  | 4256.1  |
| 25°   | 7522.2  | 7542.0  | 7475.1  | 7398.8  | 7434.8  | 7556.5  | 7570.2  | 7167.4  | 6057.6  | 5938.4  | 4562.0  |
| 27.5° | 8435.0  | 8463.3  | 8349.3  | 8153.0  | 7981.6  | 7934.5  | 7918.2  | 7539.4  | 6474.9  | 6337.0  | 4864.6  |
| 30°   | 9328.9  | 9377.7  | 9229.5  | 8974.9  | 8660.4  | 8439.3  | 8275.6  | 7903.6  | 6886.3  | 6754.3  | 5150.0  |
| 32.5° | 10202.2 | 10182.5 | 9967.4  | 9718.8  | 9350.3  | 9073.5  | 8677.5  | 8294.4  | 7349.1  | 7197.4  | 5433.6  |
| 35°   | 10800.4 | 10807.3 | 10607.6 | 10312.8 | 9961.4  | 9748.8  | 9215.8  | 8716.1  | 7821.3  | 7681.7  | 5755.9  |
| 37.5° | 11309.5 | 11277.8 | 11051.5 | 10776.4 | 10473.9 | 10383.0 | 9845.7  | 9180.6  | 8333.0  | 8180.4  | 6098.7  |
| 40°   | 11479.2 | 11442.3 | 11294.1 | 11096.1 | 10853.6 | 10845.8 | 10540.7 | 9706.8  | 8911.5  | 8760.7  | 6485.2  |
| 42.5° | 11376.4 | 11329.2 | 11268.4 | 11214.4 | 11139.8 | 11174.1 | 11193.8 | 10323.9 | 9547.4  | 9378.6  | 6932.6  |
| 45°   | 10996.7 | 10925.5 | 10968.4 | 11085.8 | 11247.8 | 11441.5 | 11783.4 | 11007.0 | 10259.6 | 10118.2 | 7458.0  |
| 47.5° | 10413.0 | 10348.8 | 10482.5 | 10733.6 | 11174.1 | 11664.3 | 12341.4 | 11761.2 | 11109.8 | 10969.3 | 8206.2  |
| 50°   | 9592.0  | 9610.8  | 9802.0  | 10258.8 | 10924.7 | 11767.2 | 13028.7 | 12759.6 | 12345.7 | 12214.5 | 9226.9  |
| 52.5° | 8244.7  | 8248.2  | 8786.4  | 9536.3  | 10482.5 | 11714.0 | 13410.1 | 14035.7 | 14033.2 | 13874.6 | 10198.8 |
| 55°   | 6993.4  | 7069.7  | 7495.7  | 8492.4  | 9766.0  | 11501.5 | 13676.6 | 14656.2 | 15141.3 | 14955.3 | 11104.7 |
| 57.5° | 5771.3  | 5815.9  | 6219.5  | 7220.6  | 8743.5  | 10935.0 | 13950.0 | 15401.0 | 16418.3 | 16300.9 | 12230.8 |
| 60°   | 4381.2  | 4449.8  | 4867.1  | 5791.9  | 7435.7  | 9929.7  | 13975.8 | 16178.3 | 17944.7 | 17826.4 | 13488.1 |
| 62.5° | 2843.7  | 2961.9  | 3352.7  | 4219.2  | 5853.6  | 8483.8  | 13379.3 | 16686.6 | 19391.4 | 19349.4 | 14604.0 |
| 65°   | 1634.4  | 1723.5  | 1995.2  | 2663.7  | 4038.4  | 6668.6  | 11960.9 | 16491.2 | 20281.9 | 20257.9 | 15021.3 |
| 66°   | 1335.3  | 1391.0  | 1599.2  | 2081.8  | 3332.2  | 5856.2  | 11136.4 | 16078.9 | 20370.1 | 20371.0 | 14973.3 |
| 67.5° | 1067.9  | 1092.7  | 1186.1  | 1490.4  | 2458.8  | 4641.7  | 9663.1  | 15169.6 | 20260.4 | 20290.4 | 14664.0 |
| 70°   | 883.6   | 896.5   | 925.6   | 999.3   | 1342.1  | 2799.1  | 6858.9  | 12806.8 | 19159.1 | 19182.3 | 13456.4 |
| 72.5° | 792.8   | 800.5   | 811.6   | 821.9   | 947.0   | 1564.1  | 4189.2  | 10245.1 | 16798.0 | 16828.0 | 11616.3 |
| 75°   | 718.2   | 722.5   | 720.8   | 721.6   | 794.5   | 996.7   | 2164.9  | 7649.1  | 13582.4 | 13522.4 | 8898.6  |
| 77.5° | 630.8   | 635.1   | 626.5   | 628.2   | 702.8   | 766.2   | 1077.3  | 5354.8  | 9166.0  | 8742.7  | 5013.7  |
| 80°   | 533.1   | 536.5   | 533.1   | 539.1   | 611.9   | 578.5   | 626.5   | 3012.5  | 4052.9  | 3833.5  | 1782.6  |
| 82.5° | 402.8   | 417.4   | 427.7   | 451.7   | 503.9   | 411.4   | 419.1   | 1173.3  | 1234.1  | 1175.0  | 546.8   |
| 85°   | 176.6   | 215.1   | 322.2   | 345.4   | 378.8   | 246.8   | 275.1   | 478.2   | 502.2   | 486.8   | 198.8   |
| 87.5° | 46.3    | 50.6    | 159.4   | 200.5   | 210.0   | 111.4   | 143.1   | 217.7   | 229.7   | 217.7   | 66.0    |
| 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: P317551

CATALOG NUMBER: GAN-SA7A-827-U-T2R

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2305.4 | 2305.4 | 2305.4 | 2305.4 | 2305.4 | 2305.4 | 2305.4 | 2305.4 | 2305.4 | 2305.4 | 2305.4 |
| 2.5°  | 2331.1 | 2289.2 | 2213.7 | 2146.9 | 2096.3 | 2062.0 | 2027.8 | 2010.6 | 2000.3 | 1990.0 | 1991.8 |
| 5°    | 2405.7 | 2320.9 | 2191.5 | 2099.7 | 2048.3 | 2015.8 | 1998.6 | 1991.8 | 1987.5 | 1977.2 | 1977.2 |
| 7.5°  | 2518.0 | 2398.0 | 2219.7 | 2125.5 | 2085.2 | 2060.3 | 2050.0 | 2046.6 | 2041.5 | 2029.5 | 2031.2 |
| 10°   | 2659.4 | 2491.4 | 2278.9 | 2187.2 | 2150.3 | 2122.9 | 2108.3 | 2103.2 | 2093.7 | 2080.0 | 2081.8 |
| 12.5° | 2825.7 | 2607.1 | 2356.9 | 2260.9 | 2216.3 | 2179.5 | 2155.5 | 2140.9 | 2124.6 | 2106.6 | 2107.5 |
| 15°   | 3007.4 | 2733.1 | 2440.9 | 2326.9 | 2266.0 | 2214.6 | 2176.0 | 2151.2 | 2125.5 | 2103.2 | 2102.3 |
| 17.5° | 3191.6 | 2854.8 | 2505.1 | 2362.9 | 2280.6 | 2212.9 | 2160.6 | 2122.0 | 2090.3 | 2062.9 | 2060.3 |
| 20°   | 3390.5 | 2964.5 | 2541.1 | 2359.4 | 2253.2 | 2172.6 | 2103.2 | 2055.2 | 2020.0 | 1992.6 | 1988.3 |
| 22.5° | 3592.7 | 3067.3 | 2547.1 | 2324.3 | 2192.3 | 2093.7 | 2020.9 | 1967.8 | 1931.8 | 1903.5 | 1893.2 |
| 25°   | 3777.8 | 3147.1 | 2522.3 | 2256.6 | 2107.5 | 2001.2 | 1930.1 | 1876.1 | 1846.9 | 1813.5 | 1803.2 |
| 27.5° | 3946.7 | 3202.8 | 2472.6 | 2170.0 | 2012.3 | 1907.8 | 1840.9 | 1794.6 | 1762.9 | 1737.2 | 1728.6 |
| 30°   | 4098.4 | 3232.8 | 2391.1 | 2067.2 | 1914.6 | 1819.5 | 1762.9 | 1731.2 | 1703.8 | 1671.2 | 1665.2 |
| 32.5° | 4242.3 | 3232.8 | 2286.6 | 1954.9 | 1817.8 | 1741.5 | 1708.1 | 1688.4 | 1657.5 | 1625.8 | 1617.2 |
| 35°   | 4386.3 | 3213.0 | 2163.2 | 1837.5 | 1728.6 | 1685.8 | 1684.1 | 1660.9 | 1613.8 | 1571.0 | 1559.8 |
| 37.5° | 4538.0 | 3172.8 | 2024.3 | 1727.8 | 1655.8 | 1660.9 | 1675.5 | 1624.1 | 1557.2 | 1496.4 | 1480.1 |
| 40°   | 4709.4 | 3117.1 | 1880.3 | 1632.7 | 1595.0 | 1649.8 | 1652.4 | 1571.0 | 1440.7 | 1385.0 | 1370.4 |
| 42.5° | 4910.8 | 3061.3 | 1746.6 | 1548.7 | 1547.0 | 1616.4 | 1608.7 | 1456.1 | 1378.1 | 1349.8 | 1342.1 |
| 45°   | 5175.7 | 3029.6 | 1619.8 | 1469.0 | 1509.2 | 1562.4 | 1534.1 | 1392.7 | 1360.1 | 1343.8 | 1337.0 |
| 47.5° | 5593.0 | 3045.9 | 1503.2 | 1405.5 | 1471.5 | 1508.4 | 1395.3 | 1367.0 | 1343.8 | 1324.1 | 1317.3 |
| 50°   | 6115.8 | 3036.5 | 1409.0 | 1361.8 | 1428.7 | 1451.8 | 1332.7 | 1333.6 | 1321.6 | 1299.3 | 1289.0 |
| 52.5° | 6509.2 | 2962.8 | 1348.1 | 1337.0 | 1391.0 | 1351.6 | 1293.3 | 1301.0 | 1295.0 | 1262.4 | 1251.3 |
| 55°   | 6888.9 | 2899.4 | 1317.3 | 1327.6 | 1363.6 | 1226.4 | 1247.0 | 1265.8 | 1259.8 | 1228.1 | 1223.0 |
| 57.5° | 7361.1 | 2887.4 | 1298.4 | 1330.1 | 1340.4 | 1163.9 | 1202.4 | 1227.3 | 1223.0 | 1209.3 | 1206.7 |
| 60°   | 7939.6 | 2890.8 | 1281.3 | 1334.4 | 1314.7 | 1117.6 | 1160.4 | 1192.1 | 1194.7 | 1192.1 | 1190.4 |
| 62.5° | 8257.6 | 2797.4 | 1238.4 | 1322.4 | 1269.3 | 1077.3 | 1116.7 | 1163.0 | 1163.9 | 1169.0 | 1168.1 |
| 65°   | 7987.6 | 2518.0 | 1158.7 | 1280.4 | 1193.0 | 1043.9 | 1079.0 | 1129.6 | 1116.7 | 1139.9 | 1139.9 |
| 66°   | 7725.4 | 2356.9 | 1119.3 | 1253.0 | 1160.4 | 1031.0 | 1067.0 | 1112.4 | 1096.2 | 1127.9 | 1127.9 |
| 67.5° | 7189.7 | 2085.2 | 1048.2 | 1194.7 | 1114.2 | 1013.0 | 1053.3 | 1084.2 | 1061.9 | 1109.0 | 1105.6 |
| 70°   | 6211.0 | 1612.9 | 905.0  | 1062.7 | 1037.9 | 986.5  | 1034.4 | 1027.6 | 995.0  | 1067.0 | 1053.3 |
| 72.5° | 5236.5 | 1225.6 | 726.8  | 889.6  | 922.2  | 953.0  | 1007.9 | 955.6  | 914.5  | 965.0  | 935.0  |
| 75°   | 4063.2 | 921.3  | 574.2  | 691.6  | 779.0  | 900.7  | 976.2  | 872.5  | 813.3  | 808.2  | 791.9  |
| 77.5° | 2196.6 | 632.5  | 455.1  | 527.9  | 618.8  | 835.6  | 954.7  | 783.3  | 694.2  | 673.6  | 660.8  |
| 80°   | 869.9  | 411.4  | 330.8  | 400.2  | 432.8  | 741.3  | 903.3  | 679.6  | 572.5  | 551.9  | 532.2  |
| 82.5° | 359.1  | 243.4  | 213.4  | 268.3  | 282.0  | 634.2  | 810.8  | 557.1  | 442.2  | 611.9  | 649.6  |
| 85°   | 154.3  | 133.7  | 126.8  | 138.8  | 159.4  | 444.8  | 645.4  | 425.1  | 477.4  | 425.9  | 338.5  |
| 87.5° | 46.3   | 56.6   | 54.0   | 53.1   | 58.3   | 106.3  | 343.7  | 236.5  | 350.5  | 132.8  | 99.4   |
| 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)