

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: P322689

Luminaire Tested: **GAN-SA5C-827-U-T4FT-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P322689  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA5C-827-U-T4FT-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 80 CRI, 2700K, 1050mA 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: 18455 lumens  
Efficiency: N/A  
Efficacy: 66.1 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4

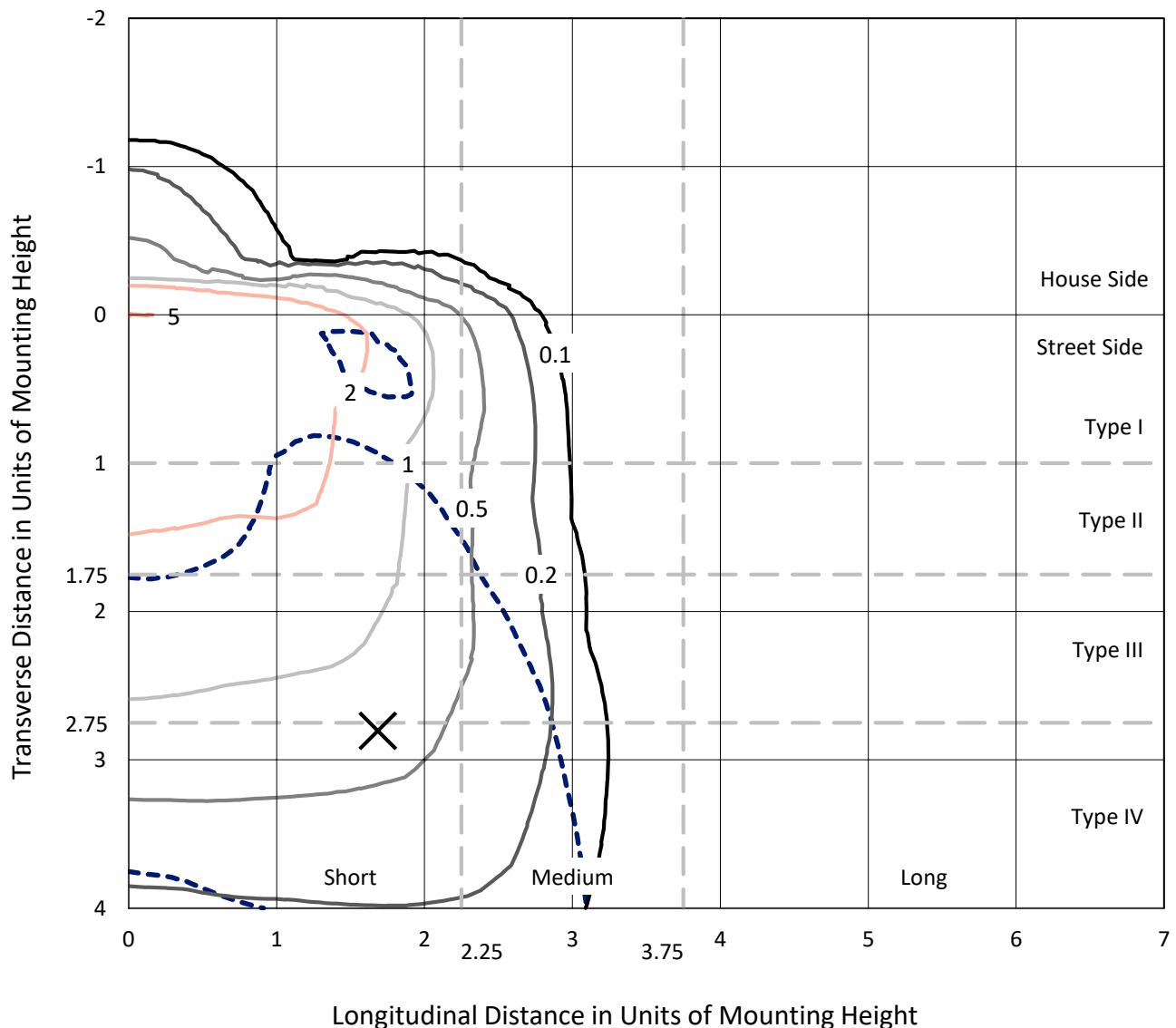
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P322689  
 CATALOG NUMBER: GAN-SA5C-827-U-T4FT-HSS

## Iso-Footcandle Lines of Horizontal Illumination

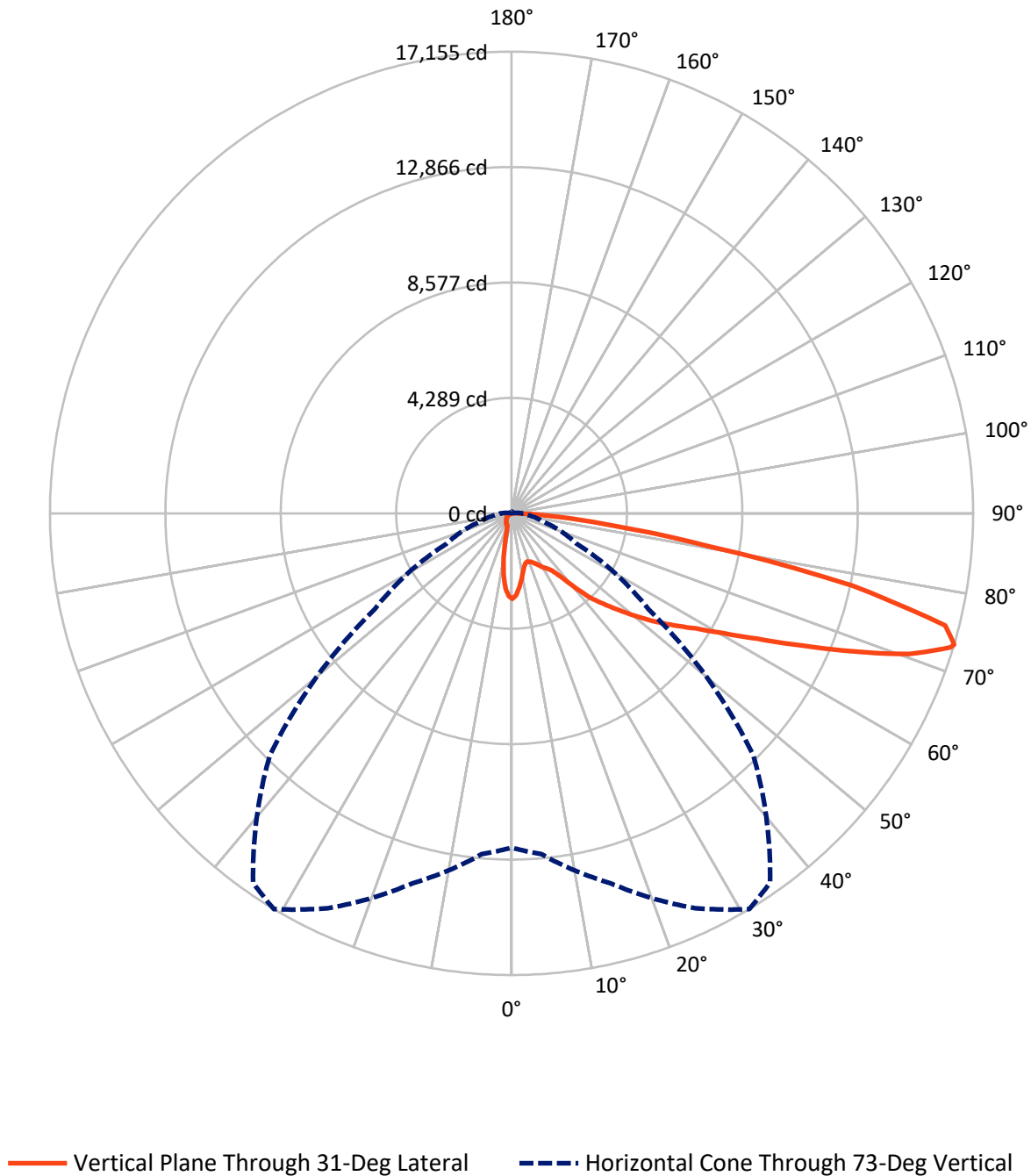
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc  
 Type IV - Short - N/A

REPORT NUMBER: P322689  
CATALOG NUMBER: GAN-SA5C-827-U-T4FT-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P322689

CATALOG NUMBER: GAN-SA5C-827-U-T4FT-HSS

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1682.2   | 0.0    | 1682.2  |
|                    | % Fixture | 9.1      | 0.0    | 9.1     |
| <b>Street Side</b> | Lumens    | 16772.8  | 0.0    | 16772.8 |
|                    | % Fixture | 90.9     | 0.0    | 90.9    |
| <b>Total</b>       | Lumens    | 18455.0  | 0.0    | 18455.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 263.3   | 1.4       |
| 10°-20°   | 571.6   | 3.1       |
| 20°-30°   | 856.5   | 4.6       |
| 30°-40°   | 1362.7  | 7.4       |
| 40°-50°   | 2433.3  | 13.2      |
| 50°-60°   | 3775.8  | 20.5      |
| 60°-70°   | 5019.4  | 27.2      |
| 70°-80°   | 3775.6  | 20.5      |
| 80°-90°   | 396.7   | 2.1       |
| 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°    | 18455.0 | 100.0     |
| 0°-180°   | 18455.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P322689

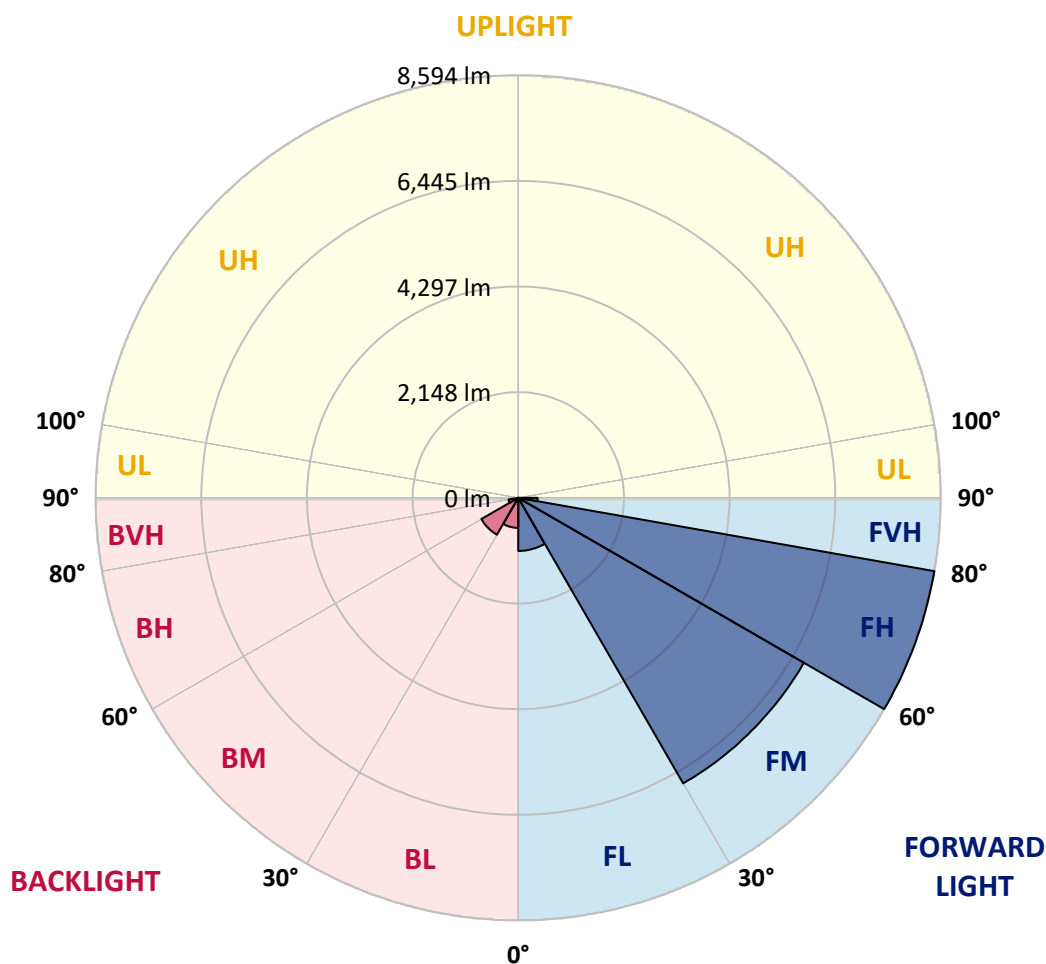
CATALOG NUMBER: GAN-SA5C-827-U-T4FT-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1079.6 | 5.9       |                         |      |          |
| FM   | (30°-60°)   | 6705.9 | 36.3      |                         |      |          |
| FH   | (60°-80°)   | 8593.8 | 46.6      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 393.4  | 2.1       |                         |      | G3/500   |
| BL   | (0°-30°)    | 611.7  | 3.3       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 865.9  | 4.7       | B1/1000                 |      |          |
| BH   | (60°-80°)   | 201.3  | 1.1       | B1/500                  |      | G1/500   |
| BVH  | (80°-90°)   | 3.3    | 0.0       |                         |      | G0/10    |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |          |

**BUG Rating: B2-U0-G4**

Type IV Short





REPORT NUMBER: P322689

CATALOG NUMBER: GAN-SA5C-827-U-T4FT-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 31°     | 35°     | 45°     | 55°    | 65°    | 75°    | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|
| 0°    | 3175.2  | 3175.2  | 3175.2  | 3175.2  | 3175.2  | 3175.2  | 3175.2  | 3175.2 | 3175.2 | 3175.2 | 3175.2 |
| 2.5°  | 3009.1  | 3021.7  | 3035.2  | 3038.0  | 3060.5  | 3061.4  | 3093.9  | 3118.3 | 3142.7 | 3166.2 | 3174.3 |
| 5°    | 2700.2  | 2721.0  | 2745.4  | 2769.7  | 2817.6  | 2836.6  | 2916.0  | 2997.3 | 3075.0 | 3149.0 | 3185.2 |
| 7.5°  | 2370.6  | 2394.1  | 2428.4  | 2488.9  | 2542.2  | 2579.2  | 2704.7  | 2849.2 | 2993.7 | 3130.1 | 3208.6 |
| 10°   | 2069.9  | 2091.5  | 2127.7  | 2191.8  | 2273.9  | 2324.5  | 2493.4  | 2693.9 | 2906.1 | 3112.9 | 3243.9 |
| 12.5° | 1878.4  | 1890.1  | 1910.0  | 1978.6  | 2052.7  | 2109.6  | 2308.3  | 2556.6 | 2833.9 | 3112.0 | 3300.7 |
| 15°   | 1843.2  | 1846.8  | 1830.5  | 1861.2  | 1919.0  | 1974.1  | 2175.5  | 2445.5 | 2778.8 | 3126.5 | 3374.8 |
| 17.5° | 1899.2  | 1897.4  | 1843.2  | 1839.6  | 1885.6  | 1930.8  | 2110.5  | 2368.8 | 2739.9 | 3159.9 | 3470.5 |
| 20°   | 1984.1  | 1977.7  | 1883.8  | 1866.7  | 1915.4  | 1957.9  | 2106.0  | 2339.9 | 2725.5 | 3215.9 | 3587.0 |
| 22.5° | 2096.9  | 2086.1  | 1938.9  | 1920.8  | 1973.2  | 2017.5  | 2162.0  | 2367.9 | 2738.1 | 3290.8 | 3722.5 |
| 25°   | 2236.9  | 2220.7  | 2033.7  | 2013.9  | 2067.1  | 2111.4  | 2262.2  | 2448.2 | 2776.1 | 3382.0 | 3894.1 |
| 27.5° | 2395.0  | 2371.5  | 2185.4  | 2134.0  | 2194.5  | 2240.5  | 2395.9  | 2571.1 | 2835.7 | 3478.7 | 4104.5 |
| 30°   | 2544.0  | 2513.3  | 2345.3  | 2260.4  | 2334.5  | 2385.9  | 2540.4  | 2717.4 | 2931.4 | 3627.7 | 4392.6 |
| 32.5° | 2693.9  | 2659.6  | 2488.0  | 2386.8  | 2453.7  | 2509.7  | 2689.4  | 2918.7 | 3111.1 | 3855.2 | 4775.5 |
| 35°   | 3038.9  | 3002.7  | 2792.3  | 2625.2  | 2624.3  | 2656.0  | 2898.0  | 3194.2 | 3348.6 | 4172.2 | 5232.4 |
| 37.5° | 3619.5  | 3598.8  | 3398.3  | 3081.3  | 2996.4  | 2961.2  | 3182.4  | 3522.9 | 3690.0 | 4608.4 | 5748.1 |
| 40°   | 4255.3  | 4237.2  | 4012.4  | 3725.2  | 3596.1  | 3509.4  | 3590.6  | 3980.8 | 4172.2 | 5141.2 | 6274.6 |
| 42.5° | 4973.2  | 4887.5  | 4486.5  | 4400.7  | 4285.1  | 4219.2  | 4146.0  | 4545.2 | 4764.6 | 5721.0 | 6796.6 |
| 45°   | 5625.3  | 5480.8  | 4960.6  | 4830.6  | 4804.4  | 4820.6  | 4861.3  | 5303.8 | 5431.1 | 6410.0 | 7316.7 |
| 47.5° | 6013.6  | 5899.8  | 5500.6  | 5376.0  | 5368.8  | 5476.3  | 5783.3  | 6160.8 | 6094.9 | 7010.6 | 7774.6 |
| 50°   | 6383.0  | 6280.0  | 5948.6  | 5979.3  | 6012.7  | 6159.0  | 6830.0  | 7042.2 | 6700.8 | 7555.1 | 8194.5 |
| 52.5° | 6681.9  | 6524.7  | 6351.3  | 6523.8  | 6688.2  | 6923.9  | 7910.1  | 7833.3 | 7130.7 | 7988.6 | 8554.0 |
| 55°   | 6854.4  | 6783.0  | 6867.0  | 7040.4  | 7349.2  | 7732.1  | 8929.6  | 8491.6 | 7445.0 | 8384.2 | 8793.3 |
| 57.5° | 7486.5  | 7346.5  | 7513.6  | 7663.5  | 8066.3  | 8601.8  | 9802.9  | 8982.0 | 7671.6 | 8628.9 | 8848.4 |
| 60°   | 8251.4  | 8138.5  | 8237.0  | 8486.2  | 9029.9  | 9659.3  | 10619.3 | 9382.1 | 7789.9 | 8786.0 | 8705.7 |
| 62.5° | 9468.8  | 9319.8  | 9258.4  | 9537.4  | 10258.1 | 10945.3 | 11238.8 | 9659.3 | 7763.8 | 8716.5 | 8216.2 |
| 65°   | 11099.7 | 10945.3 | 10670.8 | 10923.6 | 11840.2 | 12325.2 | 11931.5 | 9718.0 | 7583.1 | 8153.9 | 6979.0 |
| 67.5° | 12770.4 | 12658.4 | 12423.6 | 12849.9 | 13677.1 | 13833.3 | 12663.9 | 9575.3 | 7001.6 | 6611.4 | 4930.8 |
| 70°   | 13874.0 | 13826.1 | 13978.7 | 14921.5 | 15659.4 | 15614.2 | 13335.7 | 8808.6 | 5457.3 | 4065.7 | 2439.2 |
| 72.5° | 13078.4 | 13307.8 | 14434.8 | 16144.3 | 17045.6 | 16677.1 | 12990.8 | 6764.1 | 3119.2 | 1564.1 | 705.3  |
| 73°   | 12419.1 | 12712.6 | 14229.8 | 16190.4 | 17154.9 | 16751.2 | 12700.9 | 6208.7 | 2658.7 | 1234.5 | 534.6  |
| 75°   | 8639.7  | 9000.1  | 11780.6 | 15078.7 | 16643.7 | 15960.1 | 10586.8 | 3800.2 | 1231.8 | 547.3  | 215.8  |
| 77.5° | 4194.8  | 4461.2  | 6486.8  | 10894.7 | 12943.8 | 12469.7 | 6590.7  | 1416.0 | 556.3  | 342.3  | 99.3   |
| 80°   | 1565.9  | 1741.1  | 2815.8  | 5544.9  | 7480.2  | 7676.2  | 2898.9  | 535.5  | 370.3  | 275.4  | 50.6   |
| 82.5° | 410.0   | 457.0   | 1038.5  | 2472.6  | 3833.6  | 4012.4  | 913.9   | 270.0  | 270.9  | 226.7  | 30.7   |
| 85°   | 130.9   | 149.9   | 324.2   | 1109.9  | 1806.2  | 1585.8  | 238.4   | 130.9  | 196.9  | 168.9  | 17.2   |
| 87.5° | 16.3    | 20.8    | 103.0   | 261.0   | 398.3   | 221.3   | 37.0    | 38.8   | 84.0   | 93.9   | 9.9    |
| 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: P322689

CATALOG NUMBER: GAN-SA5C-827-U-T4FT-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3175.2 | 3175.2 | 3175.2 | 3175.2 | 3175.2 | 3175.2 | 3175.2 | 3175.2 | 3175.2 | 3175.2 | 3175.2 |
| 2.5°  | 3182.4 | 3177.9 | 3178.8 | 3155.4 | 3140.0 | 3109.3 | 3077.7 | 3063.2 | 3047.9 | 3041.6 | 3047.9 |
| 5°    | 3198.7 | 3190.6 | 3167.1 | 3094.8 | 3018.1 | 2918.7 | 2825.7 | 2755.3 | 2666.8 | 2642.4 | 2667.7 |
| 7.5°  | 3224.0 | 3207.7 | 3139.1 | 2991.9 | 2821.2 | 2631.6 | 2418.4 | 2263.1 | 2135.8 | 2053.6 | 2083.4 |
| 10°   | 3261.0 | 3230.3 | 3092.1 | 2842.0 | 2536.7 | 2200.8 | 1898.3 | 1662.6 | 1495.5 | 1426.9 | 1424.2 |
| 12.5° | 3323.3 | 3265.5 | 3034.3 | 2646.9 | 2189.1 | 1741.1 | 1344.7 | 1089.1 | 953.6  | 866.1  | 864.2  |
| 15°   | 3392.0 | 3307.1 | 2961.2 | 2413.0 | 1784.5 | 1247.2 | 866.1  | 671.9  | 584.3  | 556.3  | 552.7  |
| 17.5° | 3475.9 | 3354.9 | 2866.4 | 2124.9 | 1360.9 | 826.3  | 565.3  | 509.3  | 505.7  | 503.0  | 503.0  |
| 20°   | 3581.6 | 3411.8 | 2744.5 | 1795.3 | 965.4  | 551.8  | 480.4  | 484.0  | 485.9  | 482.2  | 483.1  |
| 22.5° | 3704.4 | 3469.6 | 2599.1 | 1441.3 | 652.9  | 461.5  | 459.7  | 464.2  | 466.0  | 464.2  | 465.1  |
| 25°   | 3847.1 | 3536.5 | 2422.1 | 1070.1 | 471.4  | 438.0  | 442.5  | 448.8  | 453.3  | 453.3  | 453.3  |
| 27.5° | 4024.1 | 3617.7 | 2208.9 | 746.8  | 407.3  | 413.6  | 426.3  | 438.0  | 444.3  | 446.1  | 446.1  |
| 30°   | 4254.4 | 3718.9 | 1953.4 | 512.0  | 370.3  | 381.1  | 404.6  | 427.2  | 438.9  | 440.7  | 441.6  |
| 32.5° | 4545.2 | 3832.7 | 1657.1 | 378.4  | 338.7  | 346.8  | 372.1  | 410.0  | 432.6  | 436.2  | 436.2  |
| 35°   | 4878.4 | 3964.5 | 1338.4 | 329.6  | 316.1  | 318.8  | 338.7  | 382.0  | 421.7  | 431.7  | 432.6  |
| 37.5° | 5243.3 | 4094.6 | 1017.8 | 307.9  | 297.1  | 297.1  | 311.6  | 348.6  | 395.5  | 426.3  | 429.9  |
| 40°   | 5583.7 | 4173.1 | 713.4  | 290.8  | 280.0  | 280.0  | 292.6  | 319.7  | 363.9  | 410.0  | 419.9  |
| 42.5° | 5898.0 | 4200.2 | 496.7  | 274.5  | 263.7  | 266.4  | 277.2  | 298.9  | 332.3  | 378.4  | 387.4  |
| 45°   | 6221.3 | 4195.7 | 362.1  | 255.6  | 247.4  | 255.6  | 263.7  | 280.0  | 304.3  | 330.5  | 332.3  |
| 47.5° | 6465.1 | 4157.8 | 287.2  | 237.5  | 232.1  | 242.9  | 250.2  | 261.0  | 274.5  | 272.7  | 272.7  |
| 50°   | 6693.6 | 4065.7 | 231.2  | 213.1  | 216.7  | 229.4  | 233.0  | 236.6  | 237.5  | 220.4  | 218.5  |
| 52.5° | 6867.0 | 3922.1 | 185.1  | 186.9  | 201.4  | 214.0  | 210.4  | 205.0  | 196.0  | 175.2  | 171.6  |
| 55°   | 6924.8 | 3645.7 | 145.4  | 154.4  | 178.8  | 195.1  | 181.5  | 169.8  | 152.6  | 135.5  | 131.8  |
| 57.5° | 6820.0 | 3289.0 | 118.3  | 120.1  | 150.8  | 164.4  | 149.0  | 135.5  | 116.5  | 102.0  | 99.3   |
| 60°   | 6597.9 | 2892.6 | 97.5   | 90.3   | 116.5  | 128.2  | 118.3  | 104.8  | 87.6   | 76.8   | 75.9   |
| 62.5° | 6157.2 | 2469.9 | 80.4   | 70.4   | 88.5   | 98.4   | 92.1   | 82.2   | 67.7   | 60.5   | 59.6   |
| 65°   | 5230.6 | 1975.9 | 65.0   | 56.9   | 68.6   | 76.8   | 71.3   | 64.1   | 53.3   | 47.9   | 47.0   |
| 67.5° | 3651.1 | 1335.7 | 53.3   | 47.0   | 54.2   | 60.5   | 56.0   | 52.4   | 42.4   | 41.5   | 42.4   |
| 70°   | 1761.0 | 643.9  | 44.3   | 37.9   | 42.4   | 47.0   | 45.2   | 42.4   | 40.6   | 47.0   | 54.2   |
| 72.5° | 504.8  | 215.8  | 35.2   | 31.6   | 34.3   | 37.0   | 38.8   | 37.9   | 44.3   | 56.9   | 65.9   |
| 73°   | 388.3  | 174.3  | 33.4   | 29.8   | 32.5   | 36.1   | 37.9   | 37.0   | 45.2   | 57.8   | 65.9   |
| 75°   | 166.2  | 84.0   | 25.3   | 24.4   | 27.1   | 31.6   | 33.4   | 33.4   | 45.2   | 58.7   | 63.2   |
| 77.5° | 75.0   | 45.2   | 16.3   | 19.0   | 23.5   | 25.3   | 28.0   | 28.0   | 36.1   | 45.2   | 45.2   |
| 80°   | 42.4   | 24.4   | 12.6   | 14.4   | 17.2   | 17.2   | 17.2   | 15.4   | 16.3   | 18.1   | 19.9   |
| 82.5° | 27.1   | 16.3   | 9.9    | 11.7   | 10.8   | 9.0    | 7.2    | 7.2    | 6.3    | 7.2    | 9.0    |
| 85°   | 15.4   | 9.0    | 9.0    | 7.2    | 4.5    | 3.6    | 4.5    | 3.6    | 0.9    | 0.0    | 0.9    |
| 87.5° | 9.0    | 5.4    | 2.7    | 0.0    | 0.0    | 0.0    | 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)