

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: P323101

Luminaire Tested: **GAN-SA7D-722-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P323101  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA7D-722-U-T4W-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 2200K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29241 lumens  
Efficiency: N/A  
Efficacy: 65.3 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G5

Input Watts (W): 448  
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

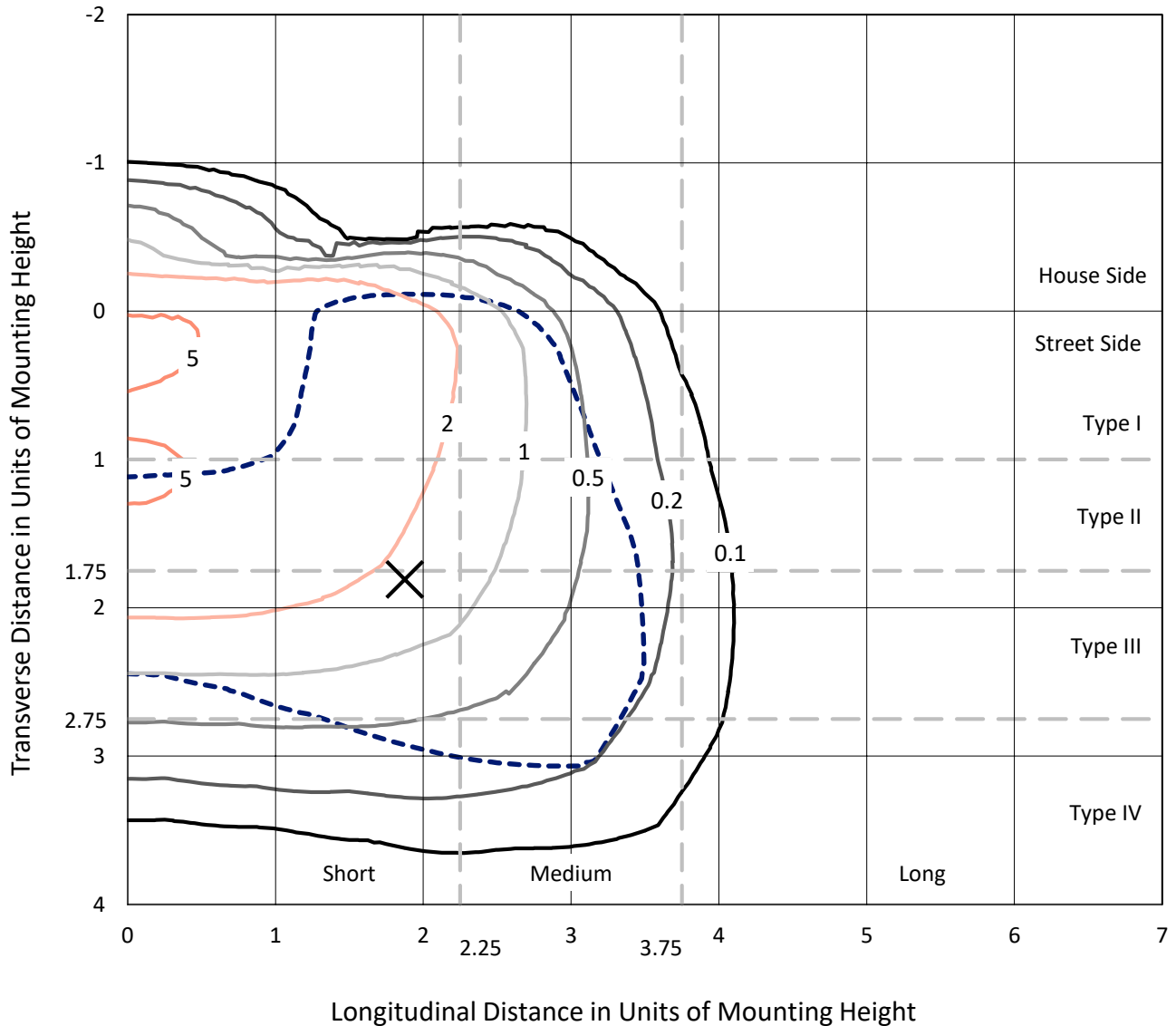




REPORT NUMBER: P323101  
 CATALOG NUMBER: GAN-SA7D-722-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

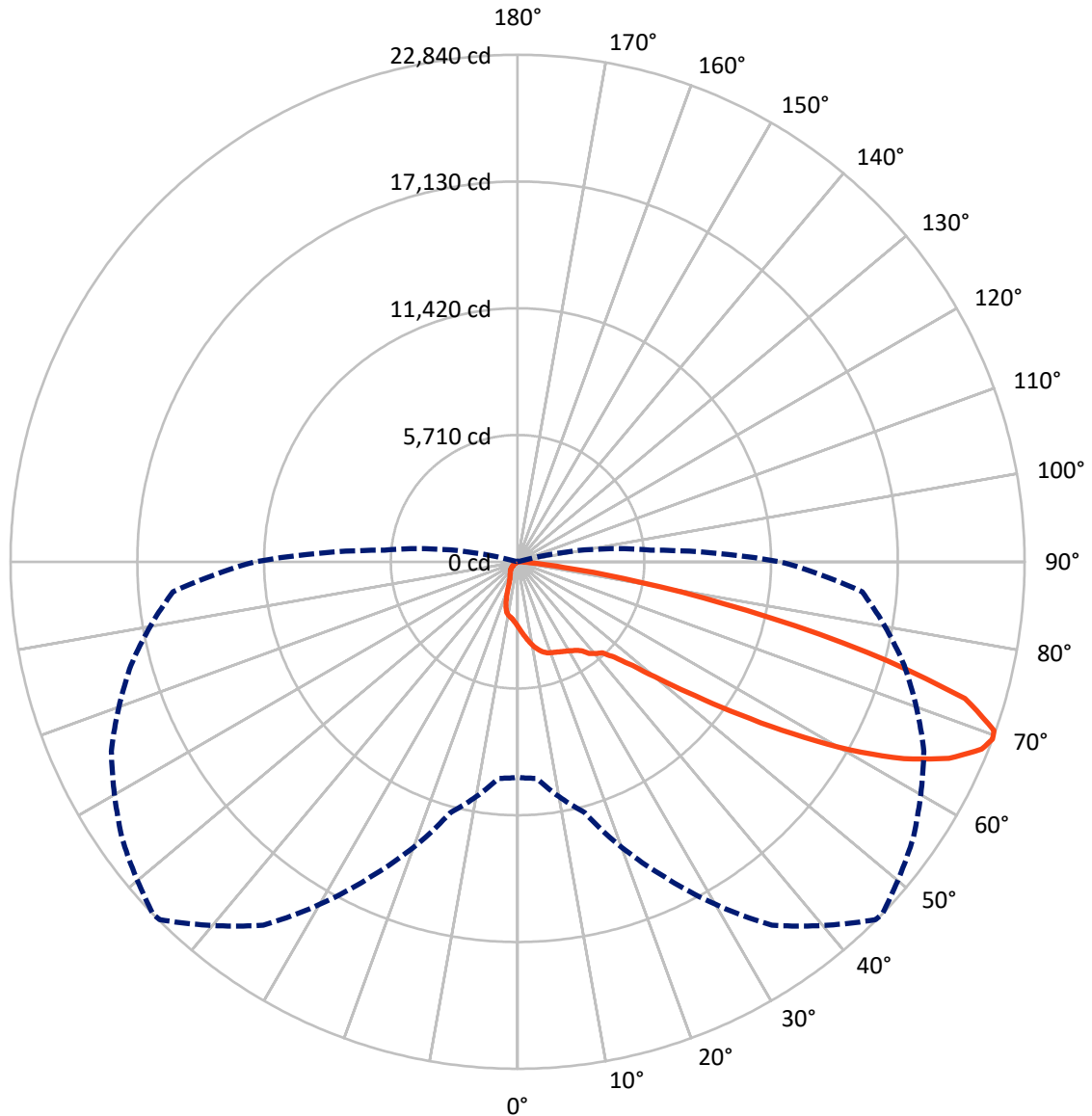
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc  
 Type IV - Short - N/A

REPORT NUMBER: P323101  
CATALOG NUMBER: GAN-SA7D-722-U-T4W-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P323101  
 CATALOG NUMBER: GAN-SA7D-722-U-T4W-HSS

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3000.9   | 0.0    | 3000.9  |
|                    | % Fixture | 10.3     | 0.0    | 10.3    |
| <b>Street Side</b> | Lumens    | 26240.1  | 0.0    | 26240.1 |
|                    | % Fixture | 89.7     | 0.0    | 89.7    |
| <b>Total</b>       | Lumens    | 29241.0  | 0.0    | 29241.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 291.6   | 1.0       |
| 10°-20°   | 884.7   | 3.0       |
| 20°-30°   | 1391.3  | 4.8       |
| 30°-40°   | 1995.2  | 6.8       |
| 40°-50°   | 3448.5  | 11.8      |
| 50°-60°   | 6812.7  | 23.3      |
| 60°-70°   | 9521.4  | 32.6      |
| 70°-80°   | 4599.9  | 15.7      |
| 80°-90°   | 295.7   | 1.0       |
| 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°    | 29241.0 | 100.0     |
| 0°-180°   | 29241.0 | 100.0     |

**Coefficient of Utilization**

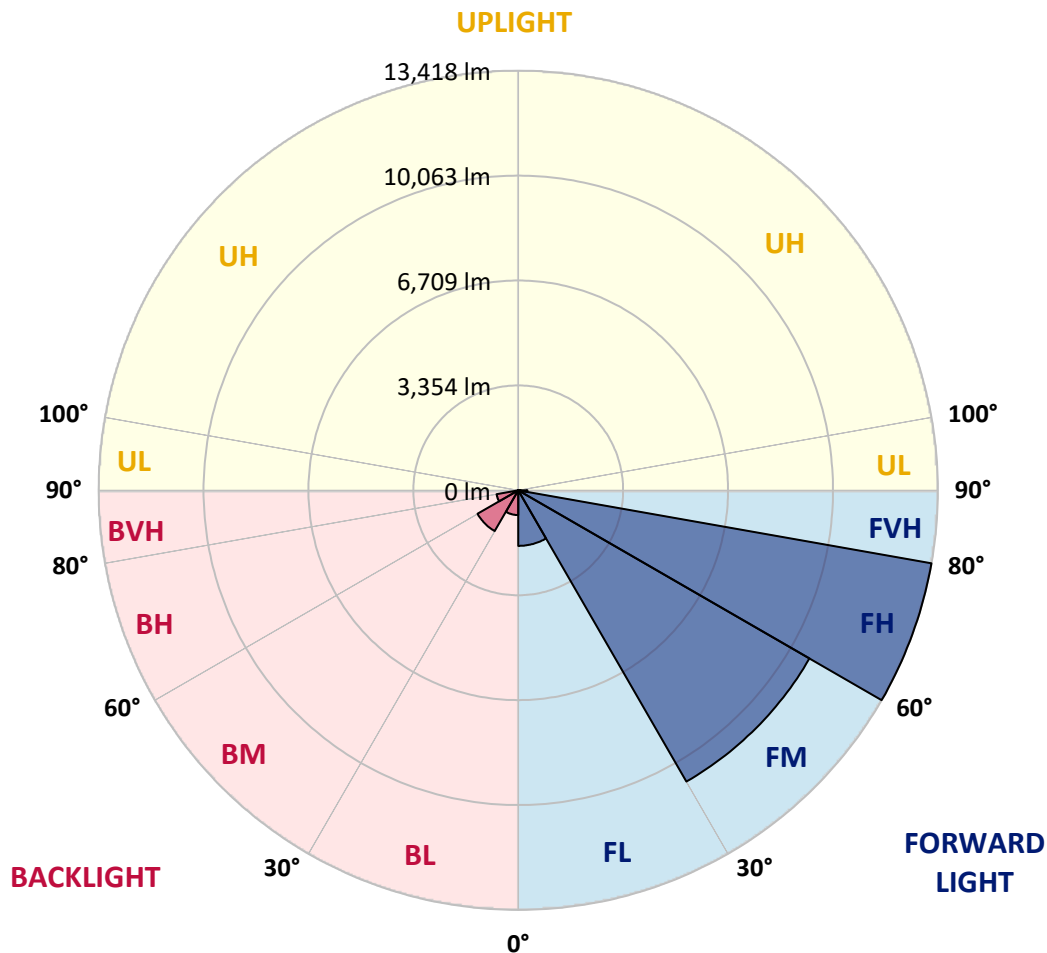


REPORT NUMBER: P323101  
 CATALOG NUMBER: GAN-SA7D-722-U-T4W-HSS

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

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 1776.7  | 6.1       |                         |      |         |
| FM (30°-60°)   | 10752.6 | 36.8      |                         |      |         |
| FH (60°-80°)   | 13417.6 | 45.9      |                         |      | G5      |
| FVH (80°-90°)  | 293.2   | 1.0       |                         |      | G3/500  |
| BL (0°-30°)    | 790.9   | 2.7       | B2/1000                 |      |         |
| BM (30°-60°)   | 1503.8  | 5.1       | B2/2500                 |      |         |
| BH (60°-80°)   | 703.7   | 2.4       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 2.5     | 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-G5**  
 Type IV Short





REPORT NUMBER: P323101

CATALOG NUMBER: GAN-SA7D-722-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 46°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2929.8  | 2929.8  | 2929.8  | 2929.8  | 2929.8  | 2929.8  | 2929.8  | 2929.8  | 2929.8  | 2929.8  | 2929.8  |
| 2.5°  | 3254.8  | 3250.7  | 3231.5  | 3223.2  | 3176.6  | 3149.2  | 3138.2  | 3104.0  | 3054.6  | 3005.2  | 2950.4  |
| 5°    | 3624.9  | 3623.6  | 3587.9  | 3553.6  | 3465.9  | 3383.6  | 3368.6  | 3289.0  | 3178.0  | 3073.8  | 2969.6  |
| 7.5°  | 4003.3  | 3985.5  | 3949.9  | 3884.1  | 3756.6  | 3624.9  | 3612.6  | 3500.2  | 3342.5  | 3191.7  | 3042.3  |
| 10°   | 4324.2  | 4313.2  | 4266.6  | 4166.5  | 4017.0  | 3867.6  | 3852.5  | 3714.1  | 3535.8  | 3350.7  | 3160.2  |
| 12.5° | 4573.7  | 4565.4  | 4503.8  | 4379.0  | 4220.0  | 4065.0  | 4044.5  | 3921.1  | 3730.5  | 3523.5  | 3298.6  |
| 15°   | 4725.9  | 4721.7  | 4646.3  | 4513.4  | 4357.1  | 4222.7  | 4204.9  | 4096.6  | 3919.7  | 3703.1  | 3449.5  |
| 17.5° | 4761.5  | 4762.9  | 4684.7  | 4550.4  | 4421.5  | 4325.5  | 4311.8  | 4229.6  | 4081.5  | 3866.2  | 3600.3  |
| 20°   | 4682.0  | 4698.4  | 4628.5  | 4512.0  | 4432.5  | 4381.7  | 4370.8  | 4321.4  | 4196.6  | 3993.7  | 3720.9  |
| 22.5° | 4569.6  | 4577.8  | 4529.8  | 4451.7  | 4418.8  | 4428.3  | 4422.9  | 4395.4  | 4289.9  | 4103.4  | 3840.2  |
| 25°   | 4501.0  | 4501.0  | 4472.2  | 4406.4  | 4428.3  | 4487.3  | 4488.7  | 4483.2  | 4399.6  | 4237.8  | 3985.5  |
| 27.5° | 4498.3  | 4490.0  | 4457.1  | 4407.8  | 4468.1  | 4558.6  | 4564.1  | 4601.1  | 4549.0  | 4400.9  | 4166.5  |
| 30°   | 4607.9  | 4598.4  | 4528.4  | 4464.0  | 4540.8  | 4638.1  | 4651.8  | 4732.7  | 4706.7  | 4577.8  | 4368.0  |
| 32.5° | 4864.3  | 4830.1  | 4675.1  | 4569.6  | 4627.1  | 4743.7  | 4761.5  | 4890.4  | 4931.5  | 4795.8  | 4562.7  |
| 35°   | 5215.3  | 5107.0  | 4883.5  | 4769.7  | 4775.2  | 4897.2  | 4913.7  | 5102.9  | 5224.9  | 4995.9  | 4713.5  |
| 37.5° | 5699.3  | 5645.8  | 5282.5  | 4978.1  | 5002.8  | 5187.9  | 5235.9  | 5441.5  | 5407.2  | 5105.6  | 4884.9  |
| 40°   | 6760.4  | 6676.8  | 6290.2  | 5562.2  | 5220.8  | 5423.7  | 5438.8  | 5548.5  | 5551.2  | 5353.8  | 5241.4  |
| 42.5° | 8205.5  | 8171.2  | 7764.0  | 6622.0  | 5649.9  | 5581.4  | 5608.8  | 5793.9  | 6000.9  | 5877.5  | 5872.0  |
| 45°   | 9805.4  | 9787.6  | 9355.7  | 8028.6  | 6517.8  | 6098.2  | 6132.5  | 6380.7  | 6776.9  | 6804.3  | 6978.4  |
| 47.5° | 11092.8 | 11084.6 | 10836.4 | 9598.4  | 7846.3  | 6974.3  | 6985.3  | 7248.5  | 7945.0  | 8289.1  | 8567.4  |
| 50°   | 12266.4 | 12306.1 | 12110.1 | 11297.1 | 9656.0  | 8346.7  | 8320.6  | 8496.1  | 9614.9  | 10178.3 | 10523.8 |
| 52.5° | 13897.9 | 13954.1 | 13404.3 | 12882.0 | 11554.8 | 10049.5 | 10028.9 | 10212.6 | 11622.0 | 12044.3 | 12106.0 |
| 55°   | 15338.8 | 15242.8 | 14808.2 | 14657.4 | 13870.5 | 12152.6 | 12147.1 | 12308.9 | 13563.4 | 13743.0 | 13856.8 |
| 57.5° | 15975.0 | 15937.9 | 16147.7 | 16493.2 | 16295.8 | 14638.2 | 14625.9 | 14502.5 | 15300.4 | 15319.6 | 15669.2 |
| 60°   | 16376.7 | 16421.9 | 17064.9 | 18130.2 | 18622.4 | 17313.1 | 17233.5 | 16480.9 | 16959.3 | 16916.8 | 17291.1 |
| 62.5° | 16075.0 | 16164.2 | 17321.3 | 19096.7 | 20363.5 | 19647.9 | 19535.5 | 18293.3 | 18377.0 | 18230.3 | 18578.5 |
| 65°   | 14473.7 | 14612.2 | 16508.3 | 18914.4 | 21227.3 | 21472.7 | 21358.9 | 19893.3 | 19502.6 | 19261.3 | 19067.9 |
| 67.5° | 11752.3 | 11834.5 | 13814.3 | 17328.1 | 20837.9 | 22561.3 | 22538.0 | 21295.8 | 20352.6 | 19087.1 | 17587.3 |
| 69°   | 9712.2  | 9793.1  | 11698.8 | 15658.3 | 19981.0 | 22794.3 | 22839.6 | 21745.5 | 20190.8 | 18028.7 | 15582.8 |
| 70°   | 8226.0  | 8312.4  | 10087.9 | 14226.9 | 18987.1 | 22686.0 | 22766.9 | 21703.0 | 19727.4 | 16803.0 | 13823.8 |
| 72.5° | 4314.6  | 4388.6  | 6210.7  | 9801.3  | 15478.7 | 20831.1 | 21076.5 | 19868.6 | 16722.2 | 12203.3 | 8173.9  |
| 75°   | 1355.9  | 1398.4  | 2425.3  | 5123.4  | 10597.9 | 16197.1 | 16253.3 | 15585.6 | 11874.3 | 6712.4  | 3404.2  |
| 77.5° | 516.9   | 504.5   | 807.5   | 1887.9  | 5357.9  | 10198.9 | 10543.0 | 9739.6  | 6231.2  | 2373.2  | 785.6   |
| 80°   | 278.3   | 279.7   | 419.5   | 781.5   | 2292.3  | 5241.4  | 5532.0  | 4720.4  | 2214.2  | 740.3   | 181.0   |
| 82.5° | 120.6   | 126.1   | 235.8   | 414.0   | 1052.9  | 1933.1  | 2078.4  | 1730.2  | 845.9   | 497.7   | 67.2    |
| 85°   | 26.0    | 28.8    | 113.8   | 224.8   | 429.1   | 542.9   | 569.0   | 560.7   | 538.8   | 386.6   | 26.0    |
| 87.5° | 0.0     | 0.0     | 50.7    | 80.9    | 108.3   | 123.4   | 108.3   | 141.2   | 297.5   | 260.5   | 13.7    |
| 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: P323101  
 CATALOG NUMBER: GAN-SA7D-722-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2929.8  | 2929.8  | 2929.8 | 2929.8 | 2929.8 | 2929.8 | 2929.8 | 2929.8 | 2929.8 | 2929.8 | 2929.8 |
| 2.5°  | 2932.6  | 2907.9  | 2865.4 | 2818.8 | 2785.9 | 2751.6 | 2724.2 | 2711.8 | 2698.1 | 2688.5 | 2700.9 |
| 5°    | 2927.1  | 2879.1  | 2796.9 | 2717.3 | 2659.8 | 2613.1 | 2574.7 | 2559.7 | 2544.6 | 2533.6 | 2532.2 |
| 7.5°  | 2975.1  | 2907.9  | 2781.8 | 2665.2 | 2576.1 | 2513.1 | 2461.0 | 2439.0 | 2421.2 | 2413.0 | 2406.1 |
| 10°   | 3066.9  | 2980.6  | 2811.9 | 2659.8 | 2544.6 | 2437.6 | 2325.2 | 2238.9 | 2182.6 | 2156.6 | 2147.0 |
| 12.5° | 3186.2  | 3077.9  | 2869.5 | 2688.5 | 2521.3 | 2315.6 | 2077.1 | 1871.4 | 1738.4 | 1694.6 | 1668.5 |
| 15°   | 3326.1  | 3191.7  | 2944.9 | 2725.6 | 2436.3 | 2060.6 | 1656.2 | 1387.5 | 1264.1 | 1239.4 | 1212.0 |
| 17.5° | 3460.4  | 3312.3  | 3035.4 | 2732.4 | 2249.8 | 1646.6 | 1213.3 | 1031.0 | 983.0  | 999.5  | 1003.6 |
| 20°   | 3578.3  | 3431.6  | 3124.5 | 2672.1 | 1911.2 | 1235.3 | 939.1  | 893.9  | 911.7  | 943.3  | 948.7  |
| 22.5° | 3697.6  | 3546.8  | 3206.8 | 2513.1 | 1477.9 | 937.8  | 845.9  | 856.9  | 874.7  | 906.2  | 911.7  |
| 25°   | 3842.9  | 3686.6  | 3283.6 | 2221.0 | 1109.1 | 797.9  | 803.4  | 819.9  | 837.7  | 866.5  | 869.2  |
| 27.5° | 4010.2  | 3863.5  | 3334.3 | 1841.3 | 822.6  | 733.5  | 751.3  | 776.0  | 793.8  | 821.2  | 826.7  |
| 30°   | 4232.3  | 4096.6  | 3350.7 | 1447.8 | 689.6  | 675.9  | 684.1  | 714.3  | 740.3  | 765.0  | 769.1  |
| 32.5° | 4440.7  | 4326.9  | 3295.9 | 1092.7 | 638.9  | 622.4  | 622.4  | 640.3  | 670.4  | 693.7  | 699.2  |
| 35°   | 4632.6  | 4558.6  | 3120.4 | 799.3  | 600.5  | 573.1  | 559.4  | 559.4  | 578.6  | 597.8  | 603.2  |
| 37.5° | 4886.3  | 4883.5  | 2836.6 | 637.5  | 563.5  | 532.0  | 503.2  | 481.2  | 474.4  | 478.5  | 481.2  |
| 40°   | 5320.9  | 5325.0  | 2466.4 | 571.7  | 532.0  | 489.4  | 445.6  | 405.8  | 368.8  | 356.5  | 355.1  |
| 42.5° | 5999.5  | 5937.8  | 2078.4 | 540.2  | 504.5  | 445.6  | 379.8  | 326.3  | 268.7  | 250.9  | 249.5  |
| 45°   | 7077.1  | 6711.1  | 1667.1 | 511.4  | 475.7  | 396.2  | 314.0  | 241.3  | 194.7  | 181.0  | 181.0  |
| 47.5° | 8646.9  | 7727.0  | 1291.5 | 479.9  | 437.4  | 340.0  | 237.2  | 174.1  | 142.6  | 135.7  | 137.1  |
| 50°   | 10270.2 | 8722.3  | 989.9  | 440.1  | 390.7  | 281.1  | 175.5  | 126.1  | 108.3  | 108.3  | 109.7  |
| 52.5° | 11709.8 | 9451.7  | 771.9  | 397.6  | 333.2  | 220.7  | 133.0  | 98.7   | 90.5   | 89.1   | 90.5   |
| 55°   | 13057.5 | 9922.0  | 590.9  | 348.2  | 264.6  | 164.5  | 101.5  | 80.9   | 75.4   | 72.7   | 71.3   |
| 57.5° | 14357.2 | 10155.0 | 442.8  | 281.1  | 191.9  | 119.3  | 80.9   | 68.6   | 63.1   | 59.0   | 57.6   |
| 60°   | 15222.3 | 9965.8  | 304.4  | 207.0  | 133.0  | 86.4   | 67.2   | 59.0   | 52.1   | 48.0   | 46.6   |
| 62.5° | 15710.4 | 9449.0  | 196.1  | 149.4  | 94.6   | 64.4   | 53.5   | 49.4   | 39.8   | 35.6   | 35.6   |
| 65°   | 15512.9 | 8596.2  | 137.1  | 106.9  | 68.6   | 48.0   | 39.8   | 39.8   | 28.8   | 23.3   | 21.9   |
| 67.5° | 13747.1 | 7262.2  | 104.2  | 79.5   | 49.4   | 35.6   | 30.2   | 34.3   | 17.8   | 11.0   | 11.0   |
| 69°   | 11827.7 | 6018.7  | 89.1   | 65.8   | 41.1   | 28.8   | 26.0   | 31.5   | 12.3   | 8.2    | 6.9    |
| 70°   | 10279.8 | 5192.0  | 80.9   | 57.6   | 34.3   | 24.7   | 23.3   | 30.2   | 12.3   | 6.9    | 5.5    |
| 72.5° | 6150.3  | 2895.6  | 61.7   | 41.1   | 21.9   | 19.2   | 19.2   | 34.3   | 12.3   | 6.9    | 5.5    |
| 75°   | 2485.6  | 1020.0  | 45.2   | 28.8   | 16.5   | 16.5   | 23.3   | 43.9   | 11.0   | 5.5    | 4.1    |
| 77.5° | 563.5   | 223.5   | 26.0   | 17.8   | 11.0   | 16.5   | 27.4   | 34.3   | 6.9    | 2.7    | 0.0    |
| 80°   | 137.1   | 54.8    | 16.5   | 11.0   | 6.9    | 12.3   | 20.6   | 19.2   | 1.4    | 0.0    | 0.0    |
| 82.5° | 45.2    | 19.2    | 6.9    | 5.5    | 1.4    | 4.1    | 9.6    | 5.5    | 0.0    | 0.0    | 0.0    |
| 85°   | 19.2    | 11.0    | 2.7    | 1.4    | 0.0    | 0.0    | 1.4    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 12.3    | 4.1     | 0.0    | 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)