

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: P323751

Luminaire Tested: **GAN-SA7A-727-U-SL4-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P323751  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA7A-727-U-SL4-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 2700K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 22372 lumens  
Efficiency: N/A  
Efficacy: 99.0 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4

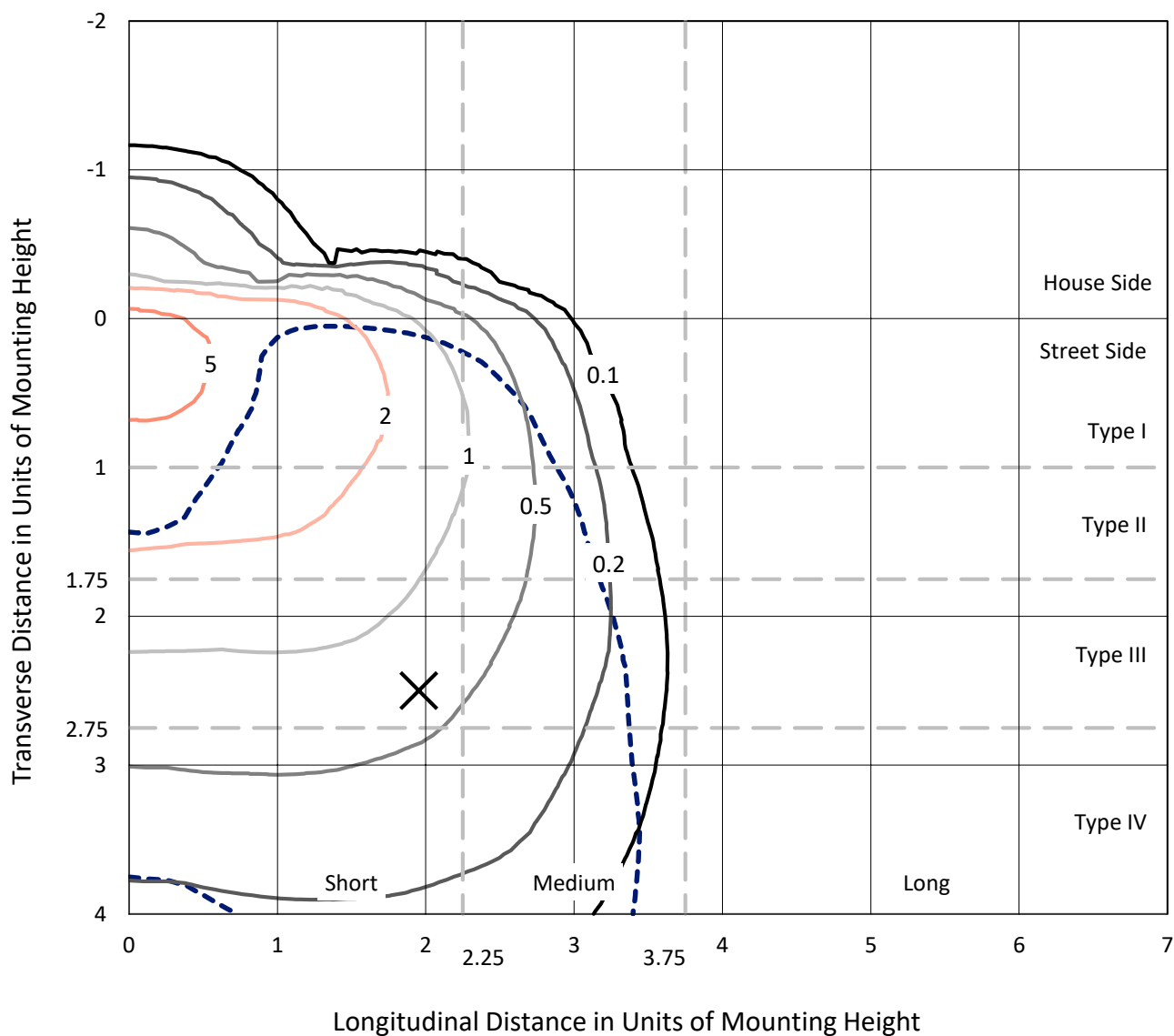
Input Watts (W): 226  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P323751  
 CATALOG NUMBER: GAN-SA7A-727-U-SL4-HSS

## Iso-Footcandle Lines of Horizontal Illumination

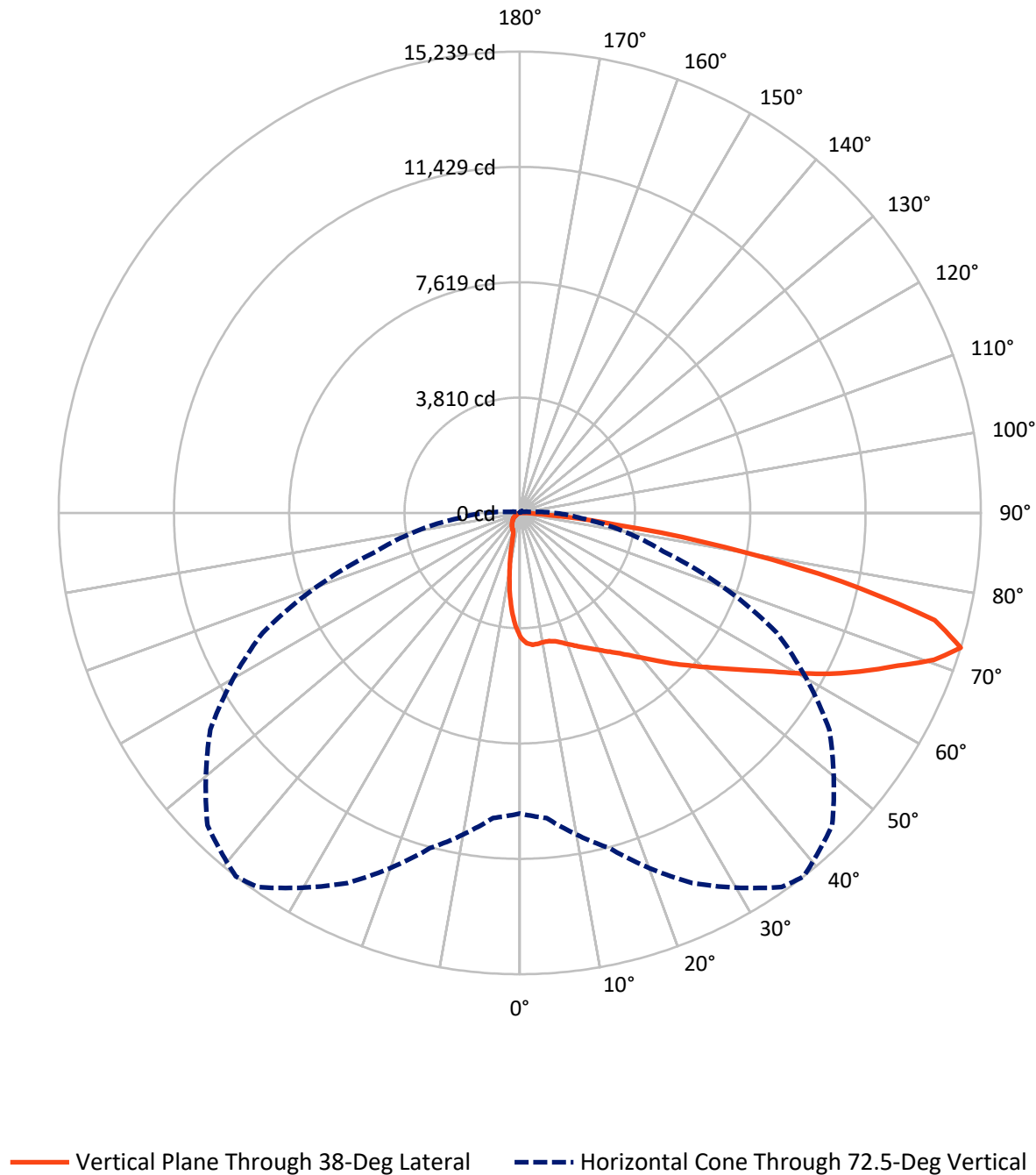
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7 fc  
 Type IV - Short - N/A

REPORT NUMBER: P323751  
CATALOG NUMBER: GAN-SA7A-727-U-SL4-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P323751

CATALOG NUMBER: GAN-SA7A-727-U-SL4-HSS

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1882.7   | 0.0    | 1882.7  |
|                    | % Fixture | 8.4      | 0.0    | 8.4     |
| <b>Street Side</b> | Lumens    | 20489.3  | 0.0    | 20489.3 |
|                    | % Fixture | 91.6     | 0.0    | 91.6    |
| <b>Total</b>       | Lumens    | 22372.0  | 0.0    | 22372.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 350.6   | 1.6       |
| 10°-20°   | 857.3   | 3.8       |
| 20°-30°   | 1363.5  | 6.1       |
| 30°-40°   | 2049.9  | 9.2       |
| 40°-50°   | 3127.3  | 14.0      |
| 50°-60°   | 4419.9  | 19.8      |
| 60°-70°   | 5544.0  | 24.8      |
| 70°-80°   | 4145.4  | 18.5      |
| 80°-90°   | 514.0   | 2.3       |
| 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°    | 22372.0 | 100.0     |
| 0°-180°   | 22372.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P323751

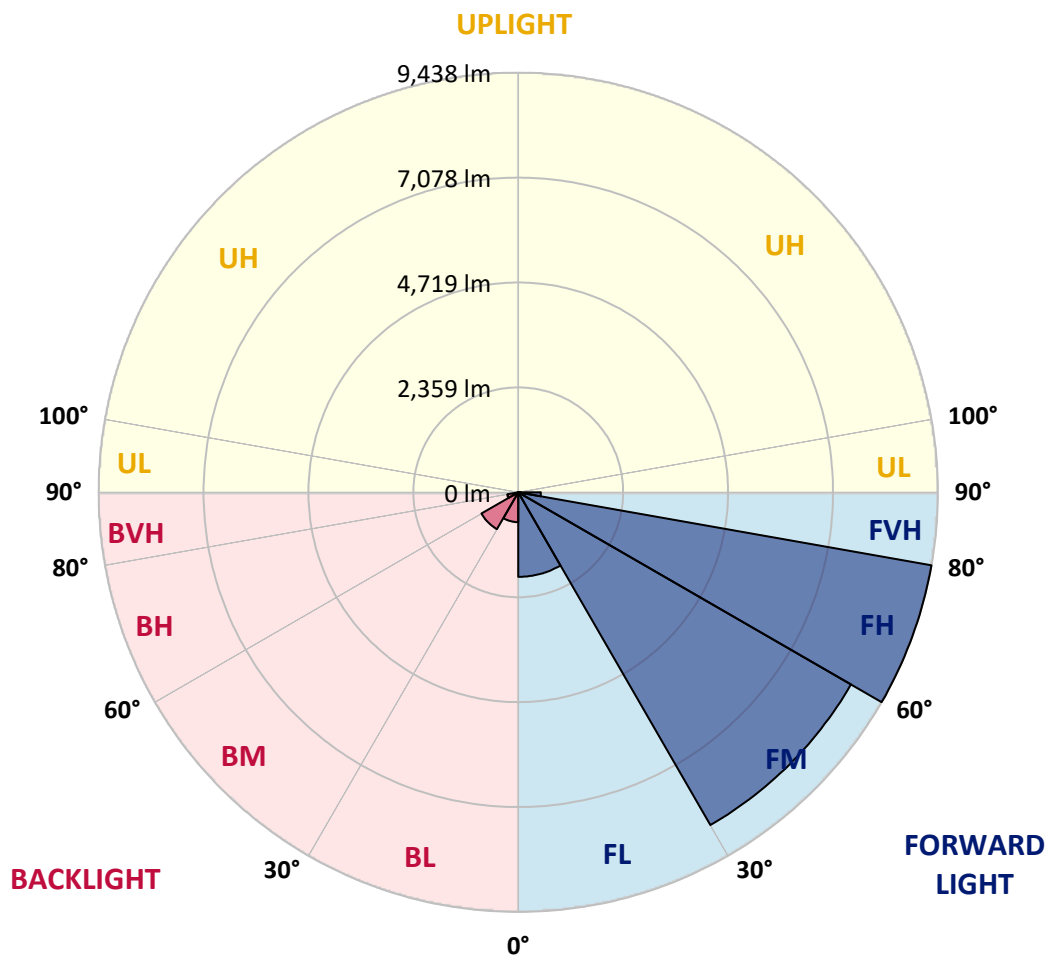
CATALOG NUMBER: GAN-SA7A-727-U-SL4-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1901.1 | 8.5       |                         |      |          |
| FM   | (30°-60°)   | 8641.1 | 38.6      |                         |      |          |
| FH   | (60°-80°)   | 9438.0 | 42.2      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 509.2  | 2.3       |                         |      | G4/750   |
| BL   | (0°-30°)    | 670.4  | 3.0       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 956.1  | 4.3       | B1/1000                 |      |          |
| BH   | (60°-80°)   | 251.5  | 1.1       | B1/500                  |      | G1/500   |
| BVH  | (80°-90°)   | 4.8    | 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: P323751

CATALOG NUMBER: GAN-SA7A-727-U-SL4-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 38°     | 45°     | 55°     | 65°     | 75°     | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 4114.1  | 4114.1  | 4114.1  | 4114.1  | 4114.1  | 4114.1  | 4114.1  | 4114.1  | 4114.1  | 4114.1  | 4114.1 |
| 2.5°  | 4366.9  | 4367.8  | 4357.6  | 4340.8  | 4319.5  | 4308.3  | 4289.7  | 4260.0  | 4228.4  | 4171.7  | 4110.4 |
| 5°    | 4456.1  | 4456.1  | 4443.0  | 4420.7  | 4386.4  | 4376.1  | 4340.8  | 4293.5  | 4228.4  | 4136.4  | 4033.3 |
| 7.5°  | 4446.8  | 4448.6  | 4431.0  | 4407.7  | 4373.4  | 4364.1  | 4321.3  | 4268.4  | 4187.5  | 4076.0  | 3944.1 |
| 10°   | 4398.4  | 4403.1  | 4389.2  | 4378.0  | 4346.4  | 4336.2  | 4296.2  | 4243.3  | 4162.5  | 4043.5  | 3892.1 |
| 12.5° | 4349.2  | 4353.8  | 4358.5  | 4368.7  | 4349.2  | 4345.5  | 4313.9  | 4269.3  | 4192.2  | 4068.6  | 3897.7 |
| 15°   | 4317.6  | 4326.9  | 4360.4  | 4400.3  | 4405.0  | 4401.2  | 4380.8  | 4339.0  | 4260.9  | 4132.7  | 3937.6 |
| 17.5° | 4317.6  | 4332.5  | 4402.2  | 4478.4  | 4505.3  | 4508.1  | 4490.4  | 4431.9  | 4339.0  | 4201.5  | 3974.8 |
| 20°   | 4353.8  | 4374.3  | 4483.0  | 4590.8  | 4635.4  | 4635.4  | 4601.0  | 4519.2  | 4410.5  | 4263.7  | 3999.9 |
| 22.5° | 4446.8  | 4473.7  | 4610.3  | 4734.8  | 4782.2  | 4772.0  | 4725.5  | 4606.6  | 4484.9  | 4334.3  | 4031.4 |
| 25°   | 4629.8  | 4650.2  | 4792.4  | 4917.8  | 4946.6  | 4923.4  | 4864.9  | 4712.5  | 4579.6  | 4430.0  | 4089.1 |
| 27.5° | 4865.8  | 4868.6  | 5015.4  | 5121.3  | 5103.6  | 5087.9  | 5014.5  | 4845.4  | 4716.2  | 4566.6  | 4188.5 |
| 30°   | 5125.0  | 5125.0  | 5254.2  | 5335.0  | 5281.1  | 5268.1  | 5194.7  | 5006.1  | 4890.9  | 4752.4  | 4329.7 |
| 32.5° | 5375.9  | 5387.0  | 5492.0  | 5543.1  | 5482.7  | 5469.7  | 5398.2  | 5209.6  | 5123.2  | 5035.8  | 4549.9 |
| 35°   | 5618.4  | 5626.7  | 5726.2  | 5754.0  | 5696.4  | 5700.1  | 5649.0  | 5489.2  | 5456.7  | 5445.6  | 4881.6 |
| 37.5° | 5853.4  | 5855.3  | 5956.6  | 5974.2  | 5945.4  | 5977.0  | 5981.7  | 5840.4  | 5900.8  | 5991.0  | 5348.9 |
| 40°   | 6068.1  | 6069.9  | 6170.3  | 6215.8  | 6265.0  | 6305.9  | 6342.2  | 6266.9  | 6466.7  | 6675.7  | 5905.5 |
| 42.5° | 6240.0  | 6259.5  | 6386.8  | 6473.2  | 6603.2  | 6681.3  | 6779.8  | 6776.1  | 7140.3  | 7454.3  | 6578.2 |
| 45°   | 6391.4  | 6424.9  | 6602.3  | 6753.8  | 6976.8  | 7101.3  | 7255.5  | 7376.3  | 7898.4  | 8321.2  | 7259.2 |
| 47.5° | 6591.2  | 6622.8  | 6825.3  | 7073.4  | 7370.7  | 7534.2  | 7789.7  | 8050.8  | 8731.9  | 9172.3  | 7924.5 |
| 50°   | 6872.7  | 6858.8  | 7058.5  | 7414.4  | 7796.2  | 8010.9  | 8375.1  | 8766.2  | 9558.8  | 9913.7  | 8315.6 |
| 52.5° | 7172.8  | 7167.2  | 7315.0  | 7785.1  | 8298.0  | 8548.8  | 9030.1  | 9505.8  | 10349.5 | 10424.7 | 8494.9 |
| 55°   | 7544.4  | 7504.5  | 7629.0  | 8207.8  | 8893.5  | 9163.0  | 9729.7  | 10238.0 | 10979.4 | 10712.7 | 8585.1 |
| 57.5° | 7933.7  | 7867.8  | 7986.7  | 8678.9  | 9565.3  | 9884.0  | 10504.6 | 10951.5 | 11398.4 | 10909.7 | 8584.1 |
| 60°   | 8336.1  | 8258.0  | 8399.2  | 9268.0  | 10399.6 | 10768.5 | 11344.5 | 11433.7 | 11789.6 | 11009.1 | 8520.9 |
| 62.5° | 8672.4  | 8625.9  | 8835.9  | 9897.9  | 11331.5 | 11693.9 | 11979.1 | 11872.3 | 12119.4 | 11086.2 | 8373.2 |
| 65°   | 9028.2  | 9031.0  | 9370.2  | 10632.8 | 12322.0 | 12566.3 | 12590.5 | 12440.9 | 12395.4 | 11070.4 | 7873.4 |
| 67.5° | 9509.5  | 9554.1  | 10120.0 | 11630.7 | 13285.5 | 13474.1 | 13472.2 | 13056.9 | 12597.0 | 10442.4 | 6764.9 |
| 70°   | 10018.7 | 10123.7 | 10984.0 | 12772.6 | 14337.2 | 14528.6 | 14430.1 | 13449.0 | 11861.1 | 8443.8  | 4787.7 |
| 72.5° | 9933.2  | 10115.3 | 11464.4 | 13492.7 | 15092.6 | 15238.5 | 14598.3 | 12485.5 | 9374.8  | 4907.6  | 2038.5 |
| 75°   | 7663.4  | 7874.3  | 10512.0 | 12779.1 | 14300.1 | 14169.1 | 12543.1 | 9715.8  | 5123.2  | 1369.5  | 459.0  |
| 77.5° | 4048.2  | 4160.6  | 6944.2  | 9735.3  | 11150.4 | 10876.3 | 8835.9  | 5389.8  | 1561.8  | 339.1   | 206.3  |
| 80°   | 2120.2  | 2146.3  | 3026.1  | 5523.6  | 6882.0  | 6883.8  | 5236.5  | 2367.4  | 643.9   | 173.7   | 138.4  |
| 82.5° | 1135.4  | 1157.7  | 1599.0  | 2552.3  | 3605.9  | 3268.6  | 2005.0  | 1302.6  | 374.4   | 98.5    | 132.9  |
| 85°   | 273.2   | 277.8   | 906.8   | 1166.0  | 1417.8  | 1012.7  | 595.6   | 1093.6  | 101.3   | 57.6    | 107.8  |
| 87.5° | 105.0   | 106.8   | 336.3   | 504.5   | 361.4   | 234.1   | 278.7   | 407.9   | 13.0    | 22.3    | 16.7   |
| 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: P323751

CATALOG NUMBER: GAN-SA7A-727-U-SL4-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4114.1 | 4114.1 | 4114.1 | 4114.1 | 4114.1 | 4114.1 | 4114.1 | 4114.1 | 4114.1 | 4114.1 | 4114.1 |
| 2.5°  | 4073.3 | 4049.1 | 3989.6 | 3914.4 | 3847.5 | 3799.2 | 3726.7 | 3679.3 | 3647.7 | 3646.8 | 3634.7 |
| 5°    | 3970.1 | 3920.9 | 3792.7 | 3640.3 | 3501.8 | 3377.3 | 3230.5 | 3114.4 | 3028.0 | 3014.1 | 2984.3 |
| 7.5°  | 3859.6 | 3778.7 | 3581.8 | 3343.9 | 3111.6 | 2875.6 | 2601.5 | 2431.5 | 2285.6 | 2215.9 | 2208.5 |
| 10°   | 3791.7 | 3678.4 | 3398.7 | 3054.9 | 2690.7 | 2307.0 | 1948.4 | 1700.3 | 1521.0 | 1469.9 | 1431.8 |
| 12.5° | 3777.8 | 3628.2 | 3257.5 | 2783.6 | 2263.3 | 1756.0 | 1359.3 | 1095.4 | 952.3  | 906.8  | 894.7  |
| 15°   | 3791.7 | 3605.0 | 3138.6 | 2515.1 | 1830.4 | 1245.9 | 912.4  | 759.1  | 705.2  | 692.2  | 691.3  |
| 17.5° | 3800.1 | 3577.1 | 3003.8 | 2216.9 | 1410.4 | 890.1  | 698.7  | 654.1  | 645.7  | 644.8  | 646.7  |
| 20°   | 3799.2 | 3534.4 | 2843.1 | 1884.3 | 1049.0 | 699.6  | 631.8  | 622.5  | 620.7  | 621.6  | 620.7  |
| 22.5° | 3792.7 | 3484.2 | 2666.6 | 1541.4 | 792.5  | 625.3  | 603.0  | 597.4  | 596.5  | 596.5  | 596.5  |
| 25°   | 3804.7 | 3444.2 | 2472.4 | 1213.4 | 653.2  | 590.9  | 577.0  | 572.3  | 571.4  | 571.4  | 569.5  |
| 27.5° | 3848.4 | 3421.9 | 2259.6 | 933.8  | 590.0  | 560.3  | 549.1  | 548.2  | 545.4  | 544.5  | 546.3  |
| 30°   | 3919.0 | 3421.9 | 2026.4 | 726.6  | 551.9  | 528.7  | 520.3  | 518.4  | 517.5  | 516.6  | 517.5  |
| 32.5° | 4043.5 | 3448.0 | 1771.8 | 603.9  | 515.7  | 493.4  | 487.8  | 490.6  | 487.8  | 487.8  | 487.8  |
| 35°   | 4268.4 | 3526.0 | 1505.2 | 526.8  | 477.6  | 459.0  | 453.4  | 457.1  | 455.3  | 455.3  | 454.3  |
| 37.5° | 4596.3 | 3670.9 | 1236.7 | 480.4  | 444.1  | 424.6  | 417.2  | 422.7  | 420.9  | 420.9  | 420.0  |
| 40°   | 4995.9 | 3881.9 | 981.1  | 445.0  | 411.6  | 391.2  | 384.7  | 387.4  | 382.8  | 382.8  | 384.7  |
| 42.5° | 5489.2 | 4149.4 | 758.2  | 410.7  | 379.1  | 359.6  | 355.9  | 353.1  | 344.7  | 340.1  | 341.0  |
| 45°   | 6037.4 | 4428.2 | 590.9  | 377.2  | 348.4  | 332.6  | 327.0  | 319.6  | 305.7  | 296.4  | 297.3  |
| 47.5° | 6527.1 | 4642.8 | 480.4  | 344.7  | 320.5  | 308.5  | 300.1  | 286.2  | 265.7  | 254.6  | 255.5  |
| 50°   | 6784.4 | 4675.3 | 408.8  | 312.2  | 294.5  | 282.5  | 270.4  | 249.0  | 224.8  | 212.8  | 211.8  |
| 52.5° | 6850.4 | 4522.9 | 355.9  | 282.5  | 268.5  | 254.6  | 238.8  | 210.0  | 183.0  | 170.0  | 168.2  |
| 55°   | 6874.5 | 4290.7 | 308.5  | 254.6  | 240.6  | 224.8  | 204.4  | 171.9  | 146.8  | 133.8  | 132.9  |
| 57.5° | 6794.6 | 3944.1 | 271.3  | 229.5  | 212.8  | 193.3  | 168.2  | 137.5  | 113.4  | 103.1  | 103.1  |
| 60°   | 6617.2 | 3474.9 | 242.5  | 202.5  | 184.0  | 161.7  | 135.7  | 106.8  | 84.5   | 76.2   | 76.2   |
| 62.5° | 6263.2 | 2867.3 | 215.6  | 174.7  | 157.0  | 133.8  | 109.6  | 80.8   | 59.5   | 54.8   | 55.7   |
| 65°   | 5595.2 | 2175.1 | 188.6  | 149.6  | 133.8  | 110.6  | 85.5   | 57.6   | 40.0   | 40.0   | 41.8   |
| 67.5° | 4562.9 | 1510.7 | 160.7  | 127.3  | 115.2  | 90.1   | 65.0   | 40.0   | 27.9   | 31.6   | 35.3   |
| 70°   | 3020.6 | 847.4  | 137.5  | 105.0  | 98.5   | 71.5   | 48.3   | 26.9   | 22.3   | 29.7   | 36.2   |
| 72.5° | 1140.0 | 329.8  | 115.2  | 84.5   | 85.5   | 54.8   | 34.4   | 20.4   | 20.4   | 32.5   | 42.7   |
| 75°   | 317.8  | 161.7  | 82.7   | 62.3   | 66.9   | 40.0   | 25.1   | 17.7   | 19.5   | 37.2   | 50.2   |
| 77.5° | 186.8  | 118.9  | 53.9   | 36.2   | 45.5   | 27.9   | 16.7   | 13.9   | 16.7   | 31.6   | 48.3   |
| 80°   | 150.5  | 63.2   | 31.6   | 18.6   | 25.1   | 15.8   | 11.1   | 8.4    | 4.6    | 12.1   | 25.1   |
| 82.5° | 150.5  | 38.1   | 14.9   | 13.0   | 13.0   | 8.4    | 5.6    | 3.7    | 0.9    | 0.0    | 6.5    |
| 85°   | 101.3  | 15.8   | 9.3    | 8.4    | 6.5    | 2.8    | 1.9    | 0.9    | 0.0    | 0.0    | 0.0    |
| 87.5° | 16.7   | 6.5    | 3.7    | 1.9    | 0.9    | 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)