

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: P322631

Luminaire Tested: **GAN-SA7A-760-U-T4FT-HSS**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P322631  
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-SA7A-760-U-T4FT-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 5700K, 615mA 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: 23409 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4

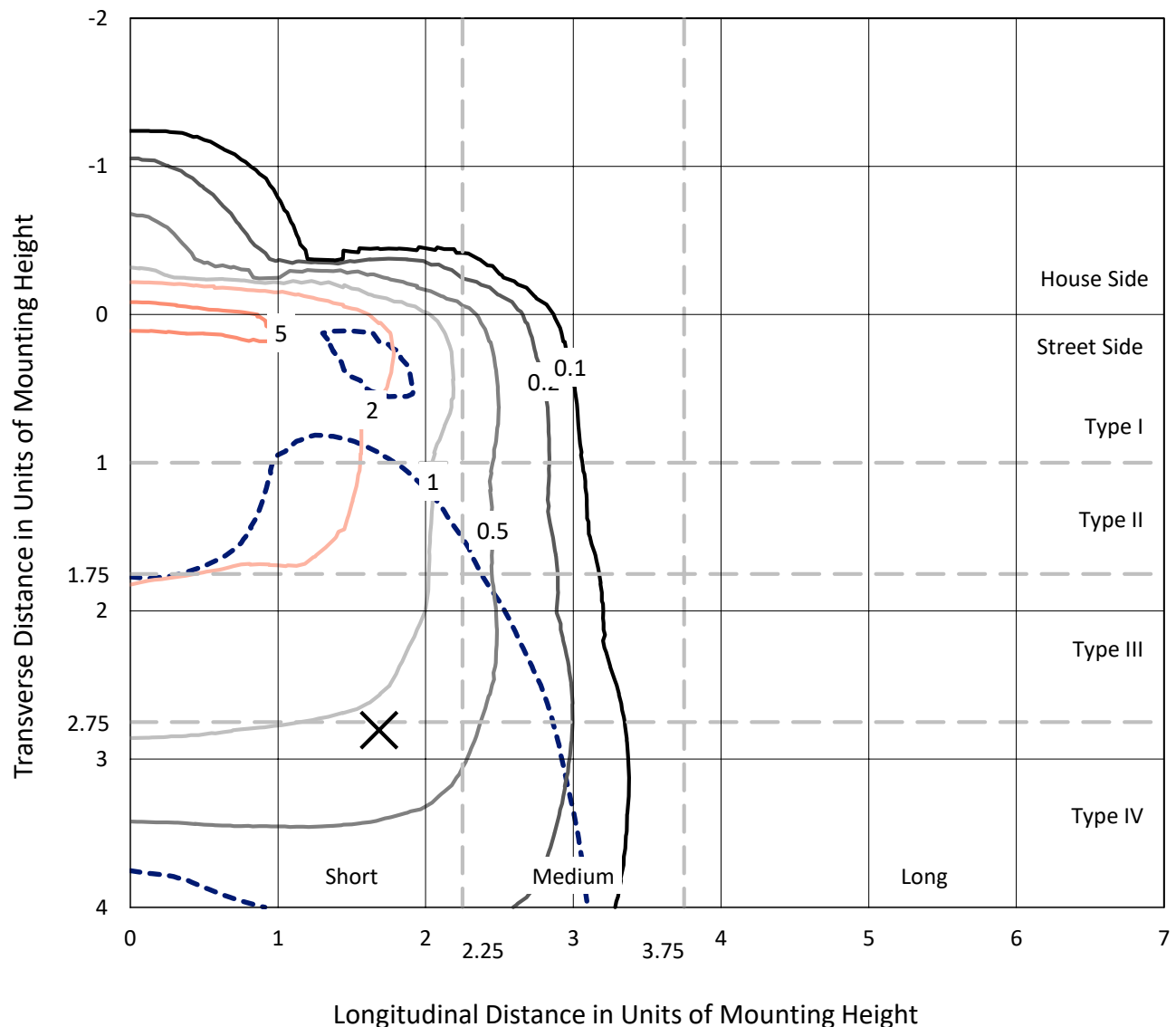
Input Watts (W): 226  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P322631  
 CATALOG NUMBER: GAN-SA7A-760-U-T4FT-HSS

## Iso-Footcandle Lines of Horizontal Illumination

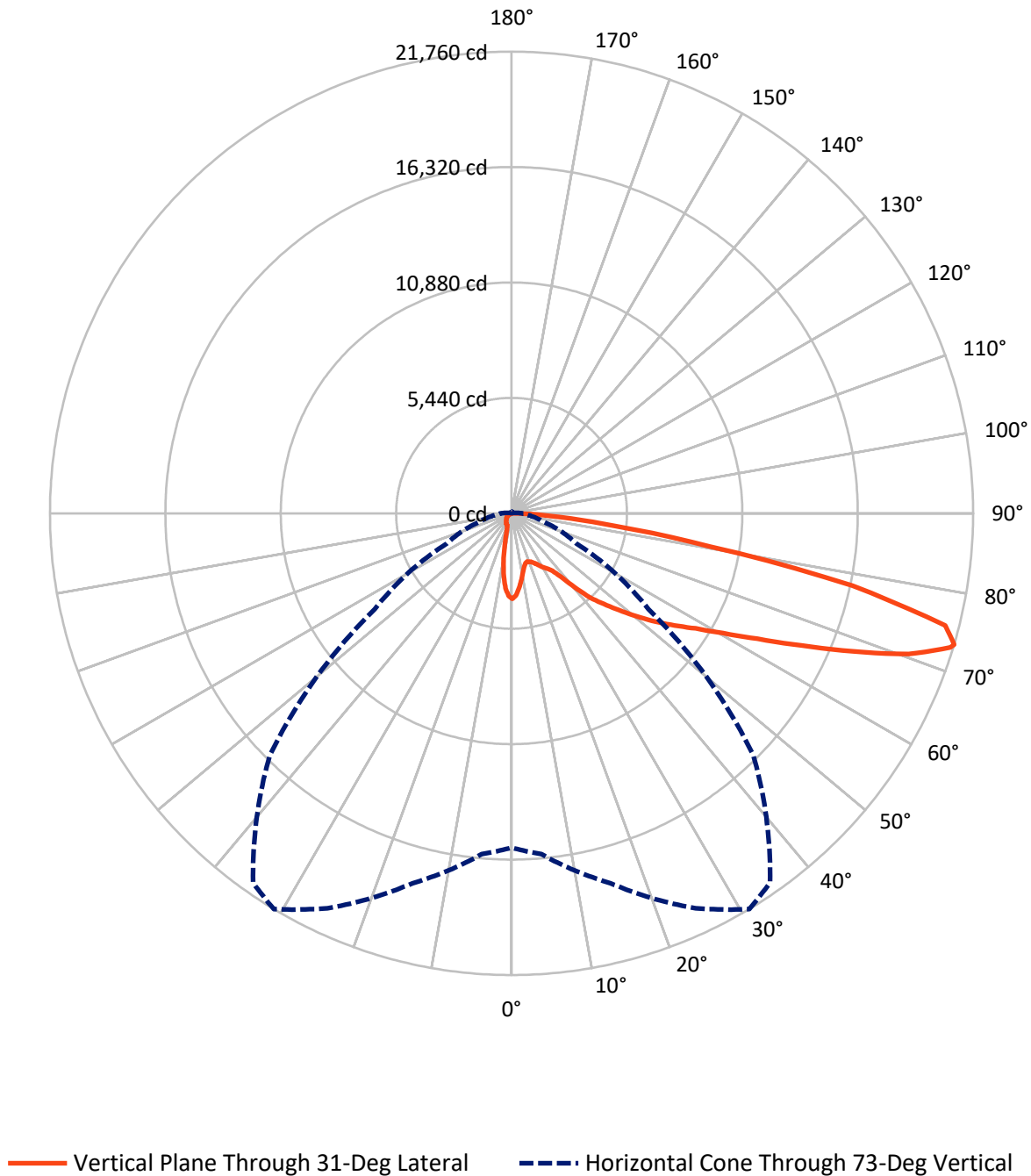
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.4 fc  
 Type IV - Short - N/A

REPORT NUMBER: P322631  
CATALOG NUMBER: GAN-SA7A-760-U-T4FT-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P322631

CATALOG NUMBER: GAN-SA7A-760-U-T4FT-HSS

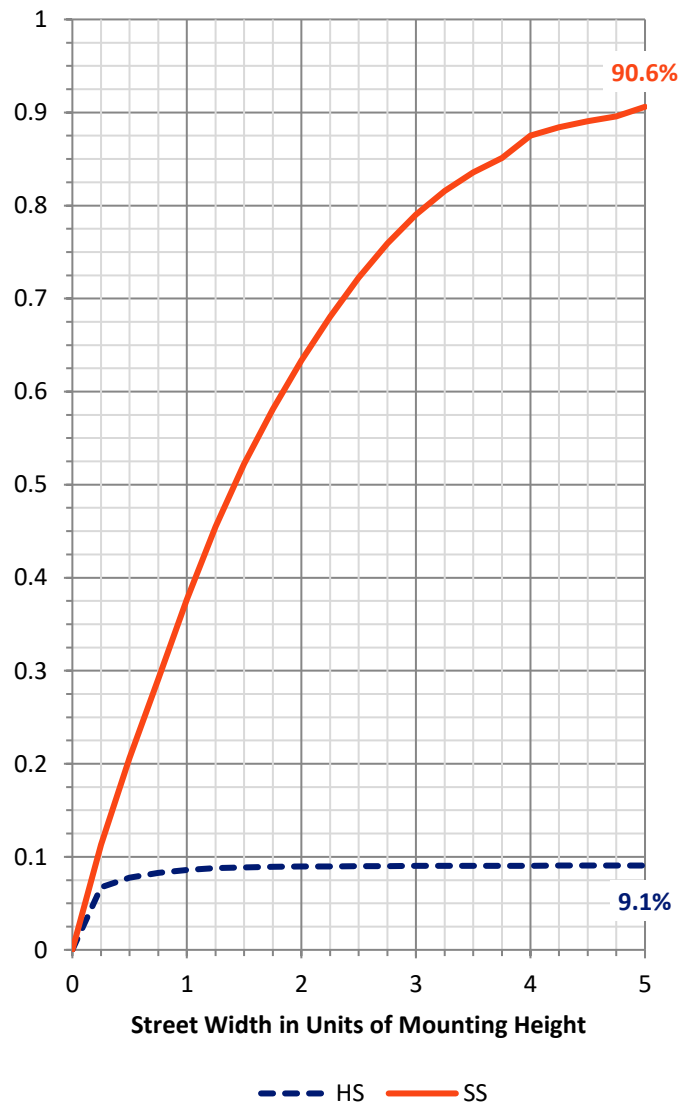
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2133.8   | 0.0    | 2133.8  |
|                    | % Fixture | 9.1      | 0.0    | 9.1     |
| <b>Street Side</b> | Lumens    | 21275.2  | 0.0    | 21275.2 |
|                    | % Fixture | 90.9     | 0.0    | 90.9    |
| <b>Total</b>       | Lumens    | 23409.0  | 0.0    | 23409.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 333.9   | 1.4       |
| 10°-20°   | 725.1   | 3.1       |
| 20°-30°   | 1086.4  | 4.6       |
| 30°-40°   | 1728.4  | 7.4       |
| 40°-50°   | 3086.5  | 13.2      |
| 50°-60°   | 4789.4  | 20.5      |
| 60°-70°   | 6366.8  | 27.2      |
| 70°-80°   | 4789.2  | 20.5      |
| 80°-90°   | 503.2   | 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°    | 23409.0 | 100.0     |
| 0°-180°   | 23409.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P322631

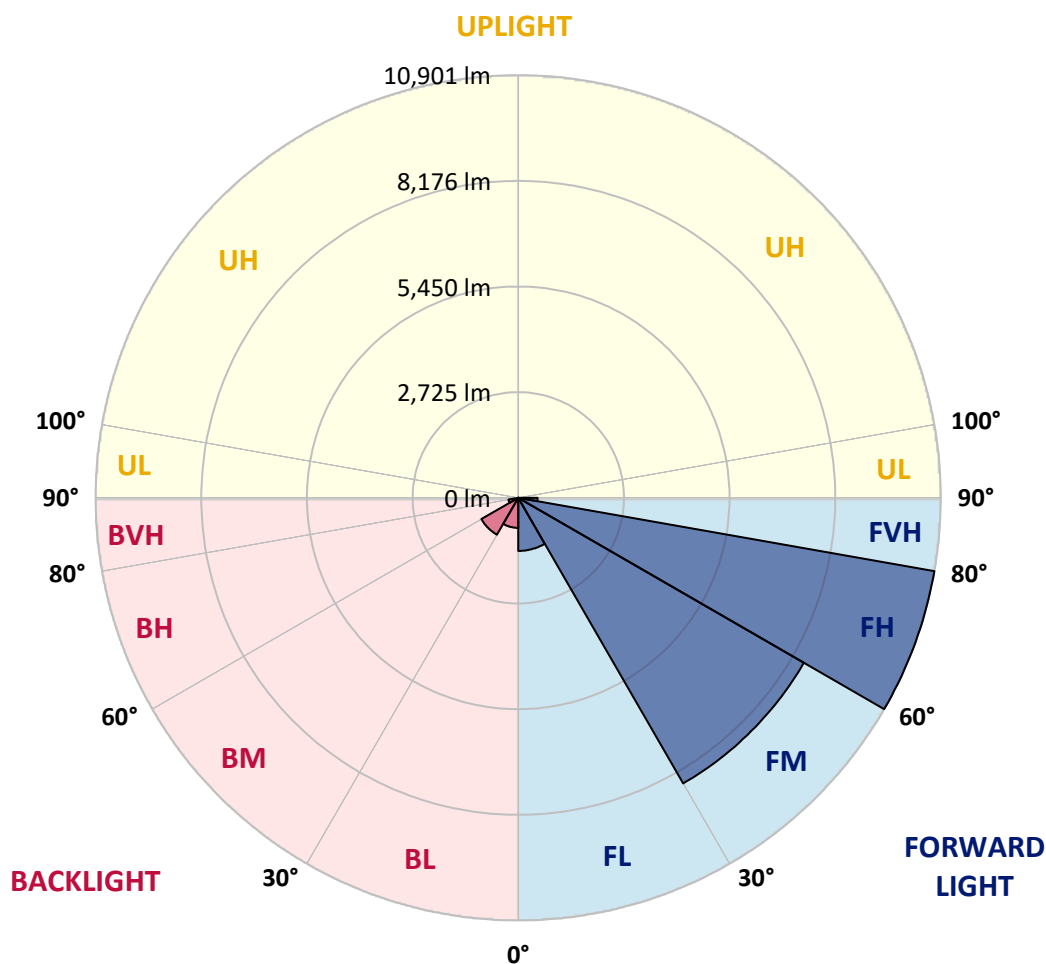
CATALOG NUMBER: GAN-SA7A-760-U-T4FT-HSS

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1369.5  | 5.9       |                         |      |          |
| FM   | (30°-60°)   | 8506.0  | 36.3      |                         |      |          |
| FH   | (60°-80°)   | 10900.7 | 46.6      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 499.0   | 2.1       |                         |      | G3/500   |
| BL   | (0°-30°)    | 775.9   | 3.3       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 1098.3  | 4.7       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 255.3   | 1.1       | B1/500                  |      | G1/500   |
| BVH  | (80°-90°)   | 4.2     | 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: P322631

CATALOG NUMBER: GAN-SA7A-760-U-T4FT-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 31°     | 35°     | 45°     | 55°     | 65°    | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|--------|---------|---------|
| 0°    | 4027.6  | 4027.6  | 4027.6  | 4027.6  | 4027.6  | 4027.6  | 4027.6  | 4027.6  | 4027.6 | 4027.6  | 4027.6  |
| 2.5°  | 3816.8  | 3832.8  | 3850.0  | 3853.5  | 3882.1  | 3883.2  | 3924.5  | 3955.4  | 3986.3 | 4016.1  | 4026.4  |
| 5°    | 3425.0  | 3451.4  | 3482.3  | 3513.2  | 3573.9  | 3598.0  | 3698.8  | 3801.9  | 3900.4 | 3994.3  | 4040.2  |
| 7.5°  | 3006.9  | 3036.7  | 3080.2  | 3157.0  | 3224.6  | 3271.5  | 3430.8  | 3614.0  | 3797.3 | 3970.3  | 4069.9  |
| 10°   | 2625.5  | 2653.0  | 2698.8  | 2780.1  | 2884.4  | 2948.5  | 3162.7  | 3417.0  | 3686.2 | 3948.5  | 4114.6  |
| 12.5° | 2382.6  | 2397.5  | 2422.7  | 2509.8  | 2603.7  | 2675.9  | 2927.9  | 3242.9  | 3594.6 | 3947.4  | 4186.8  |
| 15°   | 2338.0  | 2342.5  | 2321.9  | 2360.9  | 2434.2  | 2504.1  | 2759.5  | 3102.0  | 3524.7 | 3965.7  | 4280.7  |
| 17.5° | 2409.0  | 2406.7  | 2338.0  | 2333.4  | 2391.8  | 2449.1  | 2677.0  | 3004.6  | 3475.4 | 4008.1  | 4402.1  |
| 20°   | 2516.7  | 2508.6  | 2389.5  | 2367.7  | 2429.6  | 2483.4  | 2671.3  | 2968.0  | 3457.1 | 4079.1  | 4549.9  |
| 22.5° | 2659.8  | 2646.1  | 2459.4  | 2436.5  | 2502.9  | 2559.0  | 2742.3  | 3003.5  | 3473.1 | 4174.2  | 4721.7  |
| 25°   | 2837.4  | 2816.8  | 2579.7  | 2554.5  | 2622.0  | 2678.2  | 2869.5  | 3105.4  | 3521.3 | 4289.9  | 4939.4  |
| 27.5° | 3037.9  | 3008.1  | 2772.1  | 2706.8  | 2783.6  | 2842.0  | 3039.0  | 3261.2  | 3596.9 | 4412.5  | 5206.3  |
| 30°   | 3226.9  | 3187.9  | 2974.9  | 2867.2  | 2961.1  | 3026.4  | 3222.3  | 3446.8  | 3718.3 | 4601.5  | 5571.7  |
| 32.5° | 3417.0  | 3373.5  | 3155.8  | 3027.5  | 3112.3  | 3183.3  | 3411.3  | 3702.2  | 3946.2 | 4890.1  | 6057.4  |
| 35°   | 3854.6  | 3808.8  | 3541.9  | 3330.0  | 3328.8  | 3368.9  | 3675.9  | 4051.6  | 4247.5 | 5292.2  | 6637.0  |
| 37.5° | 4591.2  | 4564.8  | 4310.5  | 3908.4  | 3800.8  | 3756.1  | 4036.7  | 4468.6  | 4680.5 | 5845.5  | 7291.1  |
| 40°   | 5397.6  | 5374.7  | 5089.4  | 4725.2  | 4561.4  | 4451.4  | 4554.5  | 5049.3  | 5292.2 | 6521.3  | 7958.9  |
| 42.5° | 6308.3  | 6199.4  | 5690.8  | 5582.0  | 5435.4  | 5351.8  | 5259.0  | 5765.3  | 6043.6 | 7256.7  | 8621.0  |
| 45°   | 7135.3  | 6952.0  | 6292.2  | 6127.3  | 6094.0  | 6114.7  | 6166.2  | 6727.5  | 6889.0 | 8130.7  | 9280.8  |
| 47.5° | 7627.9  | 7483.5  | 6977.2  | 6819.1  | 6810.0  | 6946.3  | 7335.8  | 7814.6  | 7731.0 | 8892.5  | 9861.6  |
| 50°   | 8096.4  | 7965.8  | 7545.4  | 7584.3  | 7626.7  | 7812.3  | 8663.4  | 8932.6  | 8499.6 | 9583.2  | 10394.2 |
| 52.5° | 8475.5  | 8276.2  | 8056.3  | 8275.1  | 8483.5  | 8782.5  | 10033.4 | 9936.0  | 9044.8 | 10133.1 | 10850.1 |
| 55°   | 8694.3  | 8603.8  | 8710.4  | 8930.3  | 9322.1  | 9807.7  | 11326.7 | 10771.1 | 9443.5 | 10634.8 | 11153.7 |
| 57.5° | 9496.2  | 9318.6  | 9530.5  | 9720.7  | 10231.6 | 10910.9 | 12434.4 | 11393.1 | 9731.0 | 10945.2 | 11223.6 |
| 60°   | 10466.4 | 10323.2 | 10448.1 | 10764.2 | 11453.8 | 12252.2 | 13469.9 | 11900.6 | 9881.1 | 11144.5 | 11042.6 |
| 62.5° | 12010.5 | 11821.5 | 11743.6 | 12097.6 | 13011.7 | 13883.4 | 14255.7 | 12252.2 | 9847.8 | 11056.3 | 10421.7 |
| 65°   | 14079.3 | 13883.4 | 13535.2 | 13855.9 | 15018.6 | 15633.7 | 15134.3 | 12326.7 | 9618.7 | 10342.7 | 8852.4  |
| 67.5° | 16198.5 | 16056.4 | 15758.6 | 16299.3 | 17348.5 | 17546.7 | 16063.3 | 12145.7 | 8881.0 | 8386.2  | 6254.4  |
| 70°   | 17598.3 | 17537.6 | 17731.1 | 18927.0 | 19862.9 | 19805.6 | 16915.5 | 11173.2 | 6922.2 | 5157.0  | 3094.0  |
| 72.5° | 16589.1 | 16880.0 | 18309.6 | 20478.0 | 21621.3 | 21153.9 | 16478.0 | 8579.8  | 3956.5 | 1984.0  | 894.6   |
| 73°   | 15752.9 | 16125.2 | 18049.6 | 20536.5 | 21759.9 | 21247.8 | 16110.3 | 7875.3  | 3372.3 | 1565.9  | 678.1   |
| 75°   | 10959.0 | 11416.0 | 14943.0 | 19126.4 | 21111.5 | 20244.4 | 13428.7 | 4820.3  | 1562.5 | 694.2   | 273.8   |
| 77.5° | 5320.8  | 5658.8  | 8228.1  | 13819.3 | 16418.4 | 15817.0 | 8359.8  | 1796.1  | 705.6  | 434.1   | 126.0   |
| 80°   | 1986.3  | 2208.5  | 3571.7  | 7033.3  | 9488.1  | 9736.7  | 3677.0  | 679.3   | 469.7  | 349.4   | 64.1    |
| 82.5° | 520.1   | 579.6   | 1317.3  | 3136.4  | 4862.6  | 5089.4  | 1159.2  | 342.5   | 343.6  | 287.5   | 38.9    |
| 85°   | 166.1   | 190.2   | 411.2   | 1407.8  | 2291.0  | 2011.5  | 302.4   | 166.1   | 249.7  | 214.2   | 21.8    |
| 87.5° | 20.6    | 26.3    | 130.6   | 331.0   | 505.2   | 280.6   | 47.0    | 49.3    | 106.5  | 119.1   | 12.6    |
| 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: P322631

CATALOG NUMBER: GAN-SA7A-760-U-T4FT-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4027.6 | 4027.6 | 4027.6 | 4027.6 | 4027.6 | 4027.6 | 4027.6 | 4027.6 | 4027.6 | 4027.6 | 4027.6 |
| 2.5°  | 4036.7 | 4031.0 | 4032.1 | 4002.4 | 3982.9 | 3943.9 | 3903.9 | 3885.5 | 3866.1 | 3858.0 | 3866.1 |
| 5°    | 4057.3 | 4047.0 | 4017.3 | 3925.6 | 3828.2 | 3702.2 | 3584.3 | 3494.9 | 3382.7 | 3351.7 | 3383.8 |
| 7.5°  | 4089.4 | 4068.8 | 3981.7 | 3795.0 | 3578.5 | 3338.0 | 3067.6 | 2870.6 | 2709.1 | 2604.9 | 2642.7 |
| 10°   | 4136.4 | 4097.4 | 3922.2 | 3604.9 | 3217.7 | 2791.6 | 2407.8 | 2108.9 | 1896.9 | 1809.9 | 1806.4 |
| 12.5° | 4215.4 | 4142.1 | 3848.9 | 3357.5 | 2776.7 | 2208.5 | 1705.6 | 1381.5 | 1209.6 | 1098.5 | 1096.2 |
| 15°   | 4302.5 | 4194.8 | 3756.1 | 3060.8 | 2263.5 | 1581.9 | 1098.5 | 852.2  | 741.1  | 705.6  | 701.0  |
| 17.5° | 4409.0 | 4255.5 | 3635.8 | 2695.4 | 1726.3 | 1048.1 | 717.1  | 646.1  | 641.5  | 638.0  | 638.0  |
| 20°   | 4543.0 | 4327.7 | 3481.2 | 2277.2 | 1224.5 | 699.9  | 609.4  | 614.0  | 616.3  | 611.7  | 612.8  |
| 22.5° | 4698.8 | 4401.0 | 3296.7 | 1828.2 | 828.2  | 585.3  | 583.1  | 588.8  | 591.1  | 588.8  | 589.9  |
| 25°   | 4879.8 | 4485.8 | 3072.2 | 1357.4 | 597.9  | 555.6  | 561.3  | 569.3  | 575.0  | 575.0  | 575.0  |
| 27.5° | 5104.3 | 4588.9 | 2801.9 | 947.3  | 516.6  | 524.6  | 540.7  | 555.6  | 563.6  | 565.9  | 565.9  |
| 30°   | 5396.4 | 4717.2 | 2477.7 | 649.5  | 469.7  | 483.4  | 513.2  | 541.8  | 556.7  | 559.0  | 560.1  |
| 32.5° | 5765.3 | 4861.5 | 2102.0 | 480.0  | 429.6  | 439.9  | 471.9  | 520.1  | 548.7  | 553.3  | 553.3  |
| 35°   | 6188.0 | 5028.7 | 1697.6 | 418.1  | 400.9  | 404.4  | 429.6  | 484.5  | 534.9  | 547.5  | 548.7  |
| 37.5° | 6650.8 | 5193.7 | 1291.0 | 390.6  | 376.9  | 376.9  | 395.2  | 442.2  | 501.7  | 540.7  | 545.3  |
| 40°   | 7082.6 | 5293.3 | 904.9  | 368.8  | 355.1  | 355.1  | 371.1  | 405.5  | 461.6  | 520.1  | 532.7  |
| 42.5° | 7481.2 | 5327.7 | 630.0  | 348.2  | 334.5  | 337.9  | 351.7  | 379.2  | 421.5  | 480.0  | 491.4  |
| 45°   | 7891.3 | 5322.0 | 459.3  | 324.2  | 313.9  | 324.2  | 334.5  | 355.1  | 386.0  | 419.3  | 421.5  |
| 47.5° | 8200.6 | 5273.9 | 364.3  | 301.3  | 294.4  | 308.1  | 317.3  | 331.0  | 348.2  | 345.9  | 345.9  |
| 50°   | 8490.4 | 5157.0 | 293.2  | 270.3  | 274.9  | 291.0  | 295.5  | 300.1  | 301.3  | 279.5  | 277.2  |
| 52.5° | 8710.4 | 4974.9 | 234.8  | 237.1  | 255.4  | 271.5  | 266.9  | 260.0  | 248.6  | 222.2  | 217.6  |
| 55°   | 8783.7 | 4624.4 | 184.4  | 195.9  | 226.8  | 247.4  | 230.2  | 215.4  | 193.6  | 171.8  | 167.2  |
| 57.5° | 8650.8 | 4171.9 | 150.1  | 152.4  | 191.3  | 208.5  | 189.0  | 171.8  | 147.8  | 129.4  | 126.0  |
| 60°   | 8369.0 | 3669.0 | 123.7  | 114.5  | 147.8  | 162.7  | 150.1  | 132.9  | 111.1  | 97.4   | 96.2   |
| 62.5° | 7810.0 | 3132.9 | 101.9  | 89.3   | 112.3  | 124.9  | 116.8  | 104.2  | 85.9   | 76.7   | 75.6   |
| 65°   | 6634.7 | 2506.3 | 82.5   | 72.2   | 87.1   | 97.4   | 90.5   | 81.3   | 67.6   | 60.7   | 59.6   |
| 67.5° | 4631.2 | 1694.2 | 67.6   | 59.6   | 68.7   | 76.7   | 71.0   | 66.4   | 53.8   | 52.7   | 53.8   |
| 70°   | 2233.7 | 816.7  | 56.1   | 48.1   | 53.8   | 59.6   | 57.3   | 53.8   | 51.5   | 59.6   | 68.7   |
| 72.5° | 640.3  | 273.8  | 44.7   | 40.1   | 43.5   | 47.0   | 49.3   | 48.1   | 56.1   | 72.2   | 83.6   |
| 73°   | 492.6  | 221.1  | 42.4   | 37.8   | 41.2   | 45.8   | 48.1   | 47.0   | 57.3   | 73.3   | 83.6   |
| 75°   | 210.8  | 106.5  | 32.1   | 30.9   | 34.4   | 40.1   | 42.4   | 42.4   | 57.3   | 74.5   | 80.2   |
| 77.5° | 95.1   | 57.3   | 20.6   | 24.1   | 29.8   | 32.1   | 35.5   | 35.5   | 45.8   | 57.3   | 57.3   |
| 80°   | 53.8   | 30.9   | 16.0   | 18.3   | 21.8   | 21.8   | 21.8   | 19.5   | 20.6   | 22.9   | 25.2   |
| 82.5° | 34.4   | 20.6   | 12.6   | 14.9   | 13.7   | 11.5   | 9.2    | 9.2    | 8.0    | 9.2    | 11.5   |
| 85°   | 19.5   | 11.5   | 11.5   | 9.2    | 5.7    | 4.6    | 5.7    | 4.6    | 1.1    | 0.0    | 1.1    |
| 87.5° | 11.5   | 6.9    | 3.4    | 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)