

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: P323972

Luminaire Tested: **GAN-SA8C-827-U-SL4-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P323972  
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-SA8C-827-U-SL4-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 2700K, 1050mA 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: 33821 lumens  
Efficiency: N/A  
Efficacy: 76.0 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B3 - U0 - G5

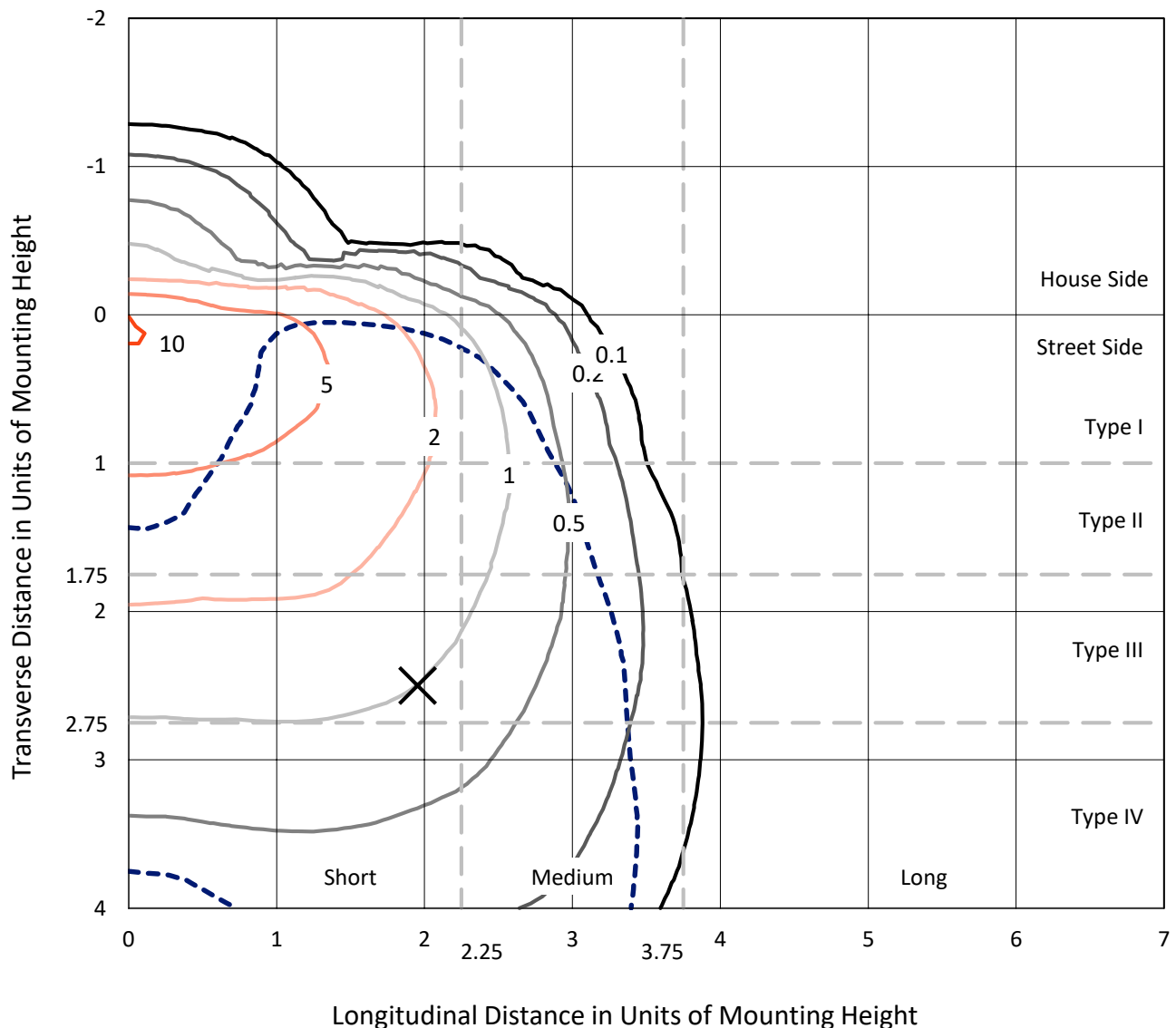
Input Watts (W): 445  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

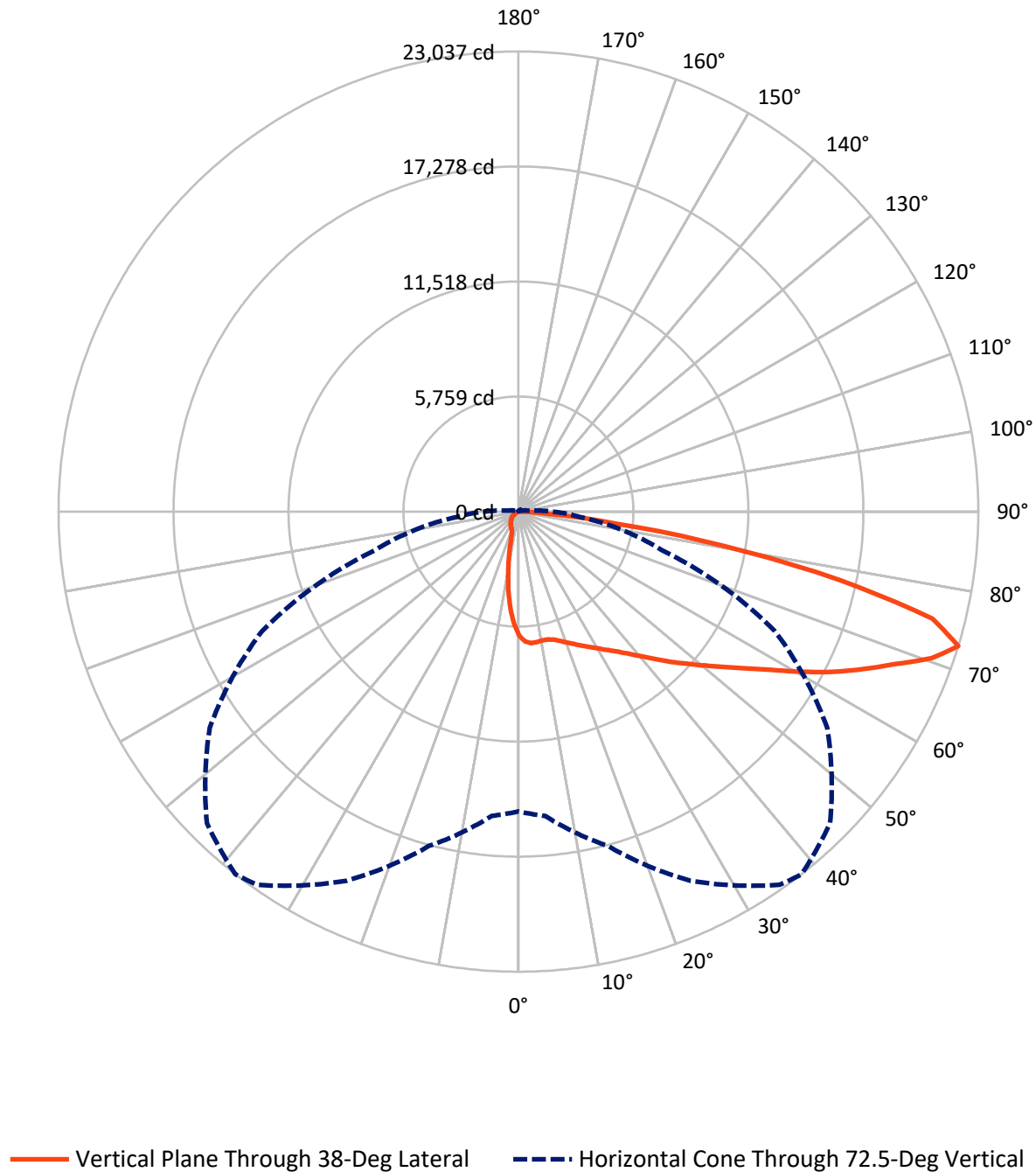
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc  
 Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2846.2   | 0.0    | 2846.2  |
|                    | % Fixture | 8.4      | 0.0    | 8.4     |
| <b>Street Side</b> | Lumens    | 30974.8  | 0.0    | 30974.8 |
|                    | % Fixture | 91.6     | 0.0    | 91.6    |
| <b>Total</b>       | Lumens    | 33821.0  | 0.0    | 33821.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 530.0   | 1.6       |
| 10°-20°   | 1296.0  | 3.8       |
| 20°-30°   | 2061.3  | 6.1       |
| 30°-40°   | 3099.0  | 9.2       |
| 40°-50°   | 4727.7  | 14.0      |
| 50°-60°   | 6681.8  | 19.8      |
| 60°-70°   | 8381.2  | 24.8      |
| 70°-80°   | 6266.8  | 18.5      |
| 80°-90°   | 777.1   | 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°    | 33821.0 | 100.0     |
| 0°-180°   | 33821.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P323972

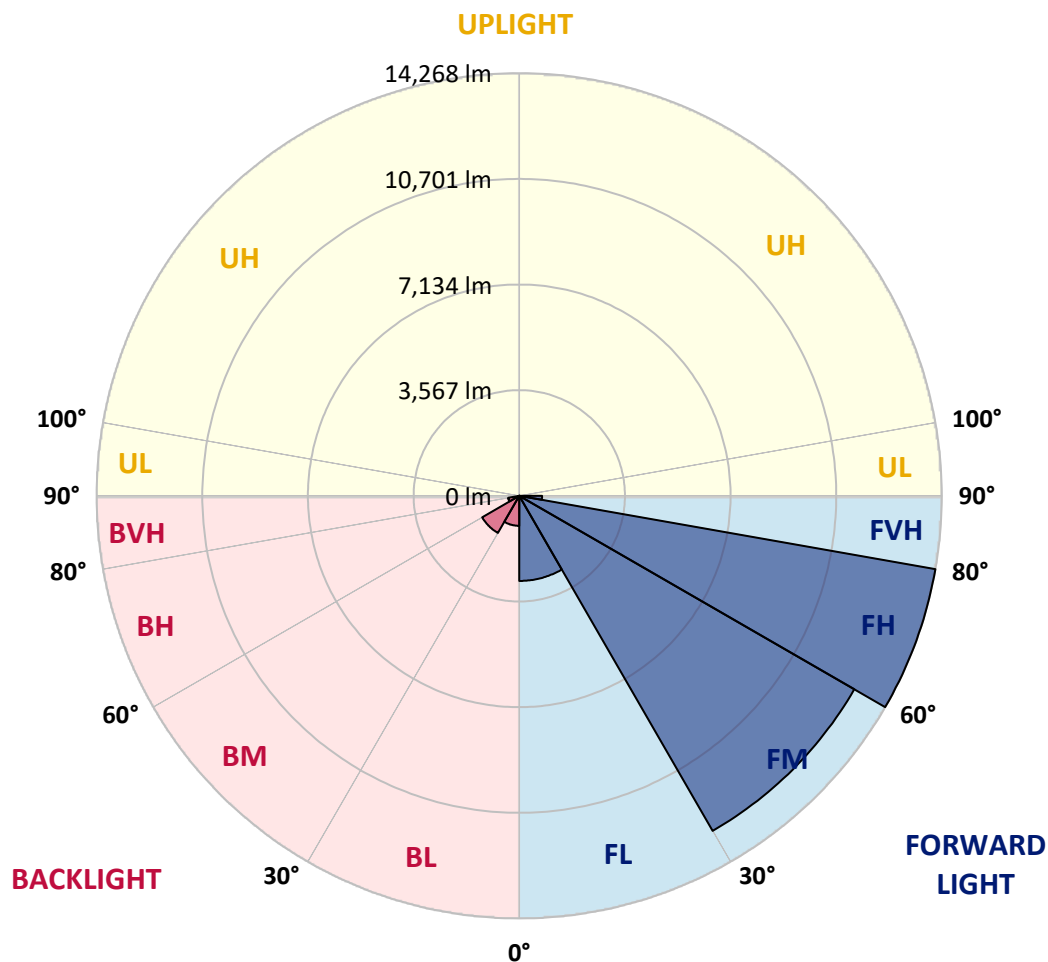
CATALOG NUMBER: GAN-SA8C-827-U-SL4-HSS

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|---------|-----------|-------------------------|------|--------|
|      |             |         |           | B                       | U    | G      |
| FL   | (0°-30°)    | 2874.0  | 8.5       |                         |      |        |
| FM   | (30°-60°)   | 13063.2 | 38.6      |                         |      |        |
| FH   | (60°-80°)   | 14267.9 | 42.2      |                         |      | G5     |
| FVH  | (80°-90°)   | 769.8   | 2.3       |                         |      | G5     |
| BL   | (0°-30°)    | 1013.4  | 3.0       | B3/2500                 |      |        |
| BM   | (30°-60°)   | 1445.3  | 4.3       | B2/2500                 |      |        |
| BH   | (60°-80°)   | 380.2   | 1.1       | B1/500                  |      | G1/500 |
| BVH  | (80°-90°)   | 7.2     | 0.0       |                         |      | G0/10  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |        |

**BUG Rating: B3-U0-G5**

Type IV Short





REPORT NUMBER: P323972

CATALOG NUMBER: GAN-SA8C-827-U-SL4-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 38°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 6219.6  | 6219.6  | 6219.6  | 6219.6  | 6219.6  | 6219.6  | 6219.6  | 6219.6  | 6219.6  | 6219.6  | 6219.6  |
| 2.5°  | 6601.6  | 6603.0  | 6587.6  | 6562.3  | 6530.0  | 6513.1  | 6485.0  | 6440.1  | 6392.3  | 6306.7  | 6214.0  |
| 5°    | 6736.5  | 6736.5  | 6716.8  | 6683.1  | 6631.1  | 6615.7  | 6562.3  | 6490.7  | 6392.3  | 6253.3  | 6097.4  |
| 7.5°  | 6722.4  | 6725.2  | 6698.5  | 6663.4  | 6611.5  | 6597.4  | 6532.8  | 6452.7  | 6330.5  | 6162.0  | 5962.5  |
| 10°   | 6649.4  | 6656.4  | 6635.3  | 6618.5  | 6570.7  | 6555.3  | 6494.9  | 6414.8  | 6292.6  | 6112.8  | 5883.9  |
| 12.5° | 6574.9  | 6582.0  | 6589.0  | 6604.4  | 6574.9  | 6569.3  | 6521.6  | 6454.1  | 6337.6  | 6150.7  | 5892.3  |
| 15°   | 6527.2  | 6541.2  | 6591.8  | 6652.2  | 6659.2  | 6653.6  | 6622.7  | 6559.5  | 6441.5  | 6247.7  | 5952.7  |
| 17.5° | 6527.2  | 6549.7  | 6655.0  | 6770.2  | 6810.9  | 6815.1  | 6788.4  | 6699.9  | 6559.5  | 6351.6  | 6008.9  |
| 20°   | 6582.0  | 6612.9  | 6777.2  | 6940.1  | 7007.6  | 7007.6  | 6955.6  | 6832.0  | 6667.6  | 6445.7  | 6046.8  |
| 22.5° | 6722.4  | 6763.2  | 6969.6  | 7157.8  | 7229.5  | 7214.0  | 7143.8  | 6964.0  | 6780.0  | 6552.5  | 6094.6  |
| 25°   | 6999.1  | 7030.0  | 7244.9  | 7434.5  | 7478.1  | 7443.0  | 7354.5  | 7124.1  | 6923.3  | 6697.1  | 6181.6  |
| 27.5° | 7355.9  | 7360.1  | 7582.0  | 7742.2  | 7715.5  | 7691.6  | 7580.6  | 7325.0  | 7129.8  | 6903.6  | 6331.9  |
| 30°   | 7747.8  | 7747.8  | 7943.0  | 8065.2  | 7983.7  | 7964.1  | 7853.1  | 7568.0  | 7393.8  | 7184.5  | 6545.4  |
| 32.5° | 8127.0  | 8143.9  | 8302.6  | 8379.8  | 8288.5  | 8268.9  | 8160.7  | 7875.6  | 7745.0  | 7612.9  | 6878.3  |
| 35°   | 8493.6  | 8506.3  | 8656.6  | 8698.7  | 8611.6  | 8617.2  | 8540.0  | 8298.4  | 8249.2  | 8232.4  | 7379.8  |
| 37.5° | 8849.0  | 8851.8  | 9004.9  | 9031.6  | 8988.0  | 9035.8  | 9042.8  | 8829.3  | 8920.6  | 9056.9  | 8086.3  |
| 40°   | 9173.4  | 9176.3  | 9328.0  | 9396.8  | 9471.2  | 9533.0  | 9587.8  | 9474.0  | 9776.0  | 10092.1 | 8927.6  |
| 42.5° | 9433.3  | 9462.8  | 9655.2  | 9785.9  | 9982.5  | 10100.5 | 10249.4 | 10243.8 | 10794.4 | 11269.1 | 9944.6  |
| 45°   | 9662.2  | 9712.8  | 9981.1  | 10210.0 | 10547.1 | 10735.4 | 10968.5 | 11151.1 | 11940.5 | 12579.6 | 10974.1 |
| 47.5° | 9964.2  | 10012.0 | 10318.2 | 10693.2 | 11142.7 | 11389.9 | 11776.2 | 12170.9 | 13200.4 | 13866.2 | 11979.8 |
| 50°   | 10389.8 | 10368.8 | 10670.7 | 11208.7 | 11786.0 | 12110.5 | 12661.1 | 13252.4 | 14450.5 | 14987.1 | 12571.2 |
| 52.5° | 10843.5 | 10835.1 | 11058.4 | 11769.1 | 12544.5 | 12923.7 | 13651.3 | 14370.5 | 15645.8 | 15759.6 | 12842.3 |
| 55°   | 11405.4 | 11345.0 | 11533.2 | 12408.2 | 13444.8 | 13852.2 | 14709.0 | 15477.3 | 16598.2 | 16195.0 | 12978.5 |
| 57.5° | 11993.9 | 11894.2 | 12073.9 | 13120.4 | 14460.4 | 14942.1 | 15880.4 | 16556.0 | 17231.6 | 16492.8 | 12977.1 |
| 60°   | 12602.1 | 12484.1 | 12697.6 | 14010.9 | 15721.7 | 16279.3 | 17150.2 | 17285.0 | 17823.0 | 16643.1 | 12881.6 |
| 62.5° | 13110.5 | 13040.3 | 13357.7 | 14963.2 | 17130.5 | 17678.3 | 18109.5 | 17948.0 | 18321.6 | 16759.7 | 12658.3 |
| 65°   | 13648.5 | 13652.7 | 14165.4 | 16074.2 | 18627.8 | 18997.2 | 19033.7 | 18807.6 | 18738.8 | 16735.8 | 11902.6 |
| 67.5° | 14376.1 | 14443.5 | 15298.9 | 17582.8 | 20084.4 | 20369.5 | 20366.7 | 19738.8 | 19043.6 | 15786.3 | 10226.9 |
| 70°   | 15145.8 | 15304.5 | 16605.2 | 19309.0 | 21674.4 | 21963.7 | 21814.8 | 20331.6 | 17931.1 | 12765.0 | 7237.9  |
| 72.5° | 15016.6 | 15291.9 | 17331.4 | 20397.6 | 22816.3 | 23036.9 | 22069.1 | 18875.0 | 14172.4 | 7419.1  | 3081.7  |
| 75°   | 11585.1 | 11904.0 | 15891.6 | 19318.9 | 21618.2 | 21420.2 | 18962.1 | 14687.9 | 7745.0  | 2070.4  | 693.9   |
| 77.5° | 6119.8  | 6289.8  | 10498.0 | 14717.4 | 16856.6 | 16442.3 | 13357.7 | 8148.1  | 2361.1  | 512.7   | 311.8   |
| 80°   | 3205.3  | 3244.6  | 4574.8  | 8350.3  | 10403.9 | 10406.7 | 7916.3  | 3578.9  | 973.4   | 262.7   | 209.3   |
| 82.5° | 1716.4  | 1750.1  | 2417.3  | 3858.4  | 5451.3  | 4941.4  | 3031.1  | 1969.2  | 566.1   | 148.9   | 200.9   |
| 85°   | 413.0   | 420.0   | 1370.9  | 1762.8  | 2143.4  | 1531.0  | 900.3   | 1653.2  | 153.1   | 87.1    | 162.9   |
| 87.5° | 158.7   | 161.5   | 508.5   | 762.7   | 546.4   | 354.0   | 421.4   | 616.6   | 19.7    | 33.7    | 25.3    |
| 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: P323972

CATALOG NUMBER: GAN-SA8C-827-U-SL4-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 6219.6  | 6219.6 | 6219.6 | 6219.6 | 6219.6 | 6219.6 | 6219.6 | 6219.6 | 6219.6 | 6219.6 | 6219.6 |
| 2.5°  | 6157.8  | 6121.2 | 6031.4 | 5917.6 | 5816.5 | 5743.4 | 5633.9 | 5562.2 | 5514.5 | 5513.1 | 5494.8 |
| 5°    | 6001.9  | 5927.4 | 5733.6 | 5503.2 | 5293.9 | 5105.7 | 4883.8 | 4708.2 | 4577.6 | 4556.5 | 4511.6 |
| 7.5°  | 5834.7  | 5712.5 | 5414.7 | 5055.2 | 4704.0 | 4347.2 | 3932.9 | 3675.8 | 3455.3 | 3350.0 | 3338.7 |
| 10°   | 5732.2  | 5560.8 | 5138.0 | 4618.3 | 4067.7 | 3487.6 | 2945.4 | 2570.4 | 2299.3 | 2222.1 | 2164.5 |
| 12.5° | 5711.1  | 5485.0 | 4924.5 | 4208.2 | 3421.6 | 2654.7 | 2054.9 | 1656.0 | 1439.7 | 1370.9 | 1352.6 |
| 15°   | 5732.2  | 5449.8 | 4744.7 | 3802.3 | 2767.1 | 1883.6 | 1379.3 | 1147.6 | 1066.1 | 1046.4 | 1045.0 |
| 17.5° | 5744.8  | 5407.7 | 4541.1 | 3351.4 | 2132.2 | 1345.6 | 1056.3 | 988.8  | 976.2  | 974.8  | 977.6  |
| 20°   | 5743.4  | 5343.1 | 4298.1 | 2848.5 | 1585.8 | 1057.7 | 955.1  | 941.1  | 938.3  | 939.7  | 938.3  |
| 22.5° | 5733.6  | 5267.3 | 4031.2 | 2330.2 | 1198.1 | 945.3  | 911.6  | 903.2  | 901.8  | 901.8  | 901.8  |
| 25°   | 5751.8  | 5206.9 | 3737.6 | 1834.4 | 987.4  | 893.3  | 872.3  | 865.2  | 863.8  | 863.8  | 861.0  |
| 27.5° | 5817.9  | 5173.1 | 3416.0 | 1411.6 | 891.9  | 847.0  | 830.1  | 828.7  | 824.5  | 823.1  | 825.9  |
| 30°   | 5924.6  | 5173.1 | 3063.4 | 1098.4 | 834.3  | 799.2  | 786.6  | 783.8  | 782.4  | 781.0  | 782.4  |
| 32.5° | 6112.8  | 5212.5 | 2678.6 | 913.0  | 779.6  | 745.8  | 737.4  | 741.6  | 737.4  | 737.4  | 737.4  |
| 35°   | 6452.7  | 5330.5 | 2275.5 | 796.4  | 722.0  | 693.9  | 685.4  | 691.1  | 688.3  | 688.3  | 686.8  |
| 37.5° | 6948.6  | 5549.6 | 1869.5 | 726.2  | 671.4  | 641.9  | 630.7  | 639.1  | 636.3  | 636.3  | 634.9  |
| 40°   | 7552.5  | 5868.4 | 1483.3 | 672.8  | 622.2  | 591.3  | 581.5  | 585.7  | 578.7  | 578.7  | 581.5  |
| 42.5° | 8298.4  | 6272.9 | 1146.2 | 620.8  | 573.1  | 543.6  | 538.0  | 533.7  | 521.1  | 514.1  | 515.5  |
| 45°   | 9127.1  | 6694.3 | 893.3  | 570.3  | 526.7  | 502.8  | 494.4  | 483.2  | 462.1  | 448.1  | 449.5  |
| 47.5° | 9867.3  | 7018.8 | 726.2  | 521.1  | 484.6  | 466.3  | 453.7  | 432.6  | 401.7  | 384.9  | 386.3  |
| 50°   | 10256.4 | 7067.9 | 618.0  | 471.9  | 445.3  | 427.0  | 408.7  | 376.4  | 339.9  | 321.7  | 320.2  |
| 52.5° | 10356.1 | 6837.6 | 538.0  | 427.0  | 405.9  | 384.9  | 361.0  | 317.4  | 276.7  | 257.0  | 254.2  |
| 55°   | 10392.6 | 6486.4 | 466.3  | 384.9  | 363.8  | 339.9  | 309.0  | 259.9  | 221.9  | 202.3  | 200.9  |
| 57.5° | 10271.8 | 5962.5 | 410.1  | 346.9  | 321.7  | 292.2  | 254.2  | 207.9  | 171.4  | 155.9  | 155.9  |
| 60°   | 10003.6 | 5253.2 | 366.6  | 306.2  | 278.1  | 244.4  | 205.1  | 161.5  | 127.8  | 115.2  | 115.2  |
| 62.5° | 9468.4  | 4334.6 | 325.9  | 264.1  | 237.4  | 202.3  | 165.7  | 122.2  | 89.9   | 82.9   | 84.3   |
| 65°   | 8458.5  | 3288.2 | 285.1  | 226.1  | 202.3  | 167.1  | 129.2  | 87.1   | 60.4   | 60.4   | 63.2   |
| 67.5° | 6898.0  | 2283.9 | 243.0  | 192.4  | 174.2  | 136.2  | 98.3   | 60.4   | 42.1   | 47.8   | 53.4   |
| 70°   | 4566.4  | 1281.0 | 207.9  | 158.7  | 148.9  | 108.2  | 73.0   | 40.7   | 33.7   | 44.9   | 54.8   |
| 72.5° | 1723.4  | 498.6  | 174.2  | 127.8  | 129.2  | 82.9   | 52.0   | 30.9   | 30.9   | 49.2   | 64.6   |
| 75°   | 480.4   | 244.4  | 125.0  | 94.1   | 101.1  | 60.4   | 37.9   | 26.7   | 29.5   | 56.2   | 75.8   |
| 77.5° | 282.3   | 179.8  | 81.5   | 54.8   | 68.8   | 42.1   | 25.3   | 21.1   | 25.3   | 47.8   | 73.0   |
| 80°   | 227.5   | 95.5   | 47.8   | 28.1   | 37.9   | 23.9   | 16.9   | 12.6   | 7.0    | 18.3   | 37.9   |
| 82.5° | 227.5   | 57.6   | 22.5   | 19.7   | 19.7   | 12.6   | 8.4    | 5.6    | 1.4    | 0.0    | 9.8    |
| 85°   | 153.1   | 23.9   | 14.0   | 12.6   | 9.8    | 4.2    | 2.8    | 1.4    | 0.0    | 0.0    | 0.0    |
| 87.5° | 25.3    | 9.8    | 5.6    | 2.8    | 1.4    | 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)