

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: P383428

Luminaire Tested: **GAN-SA7B-735-U-T2R-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P383428  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1903-205-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-SA7B-735-U-T2R-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 30393.6 lumens  
Efficiency: N/A  
Efficacy: 103.0 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B2 - U0 - G4

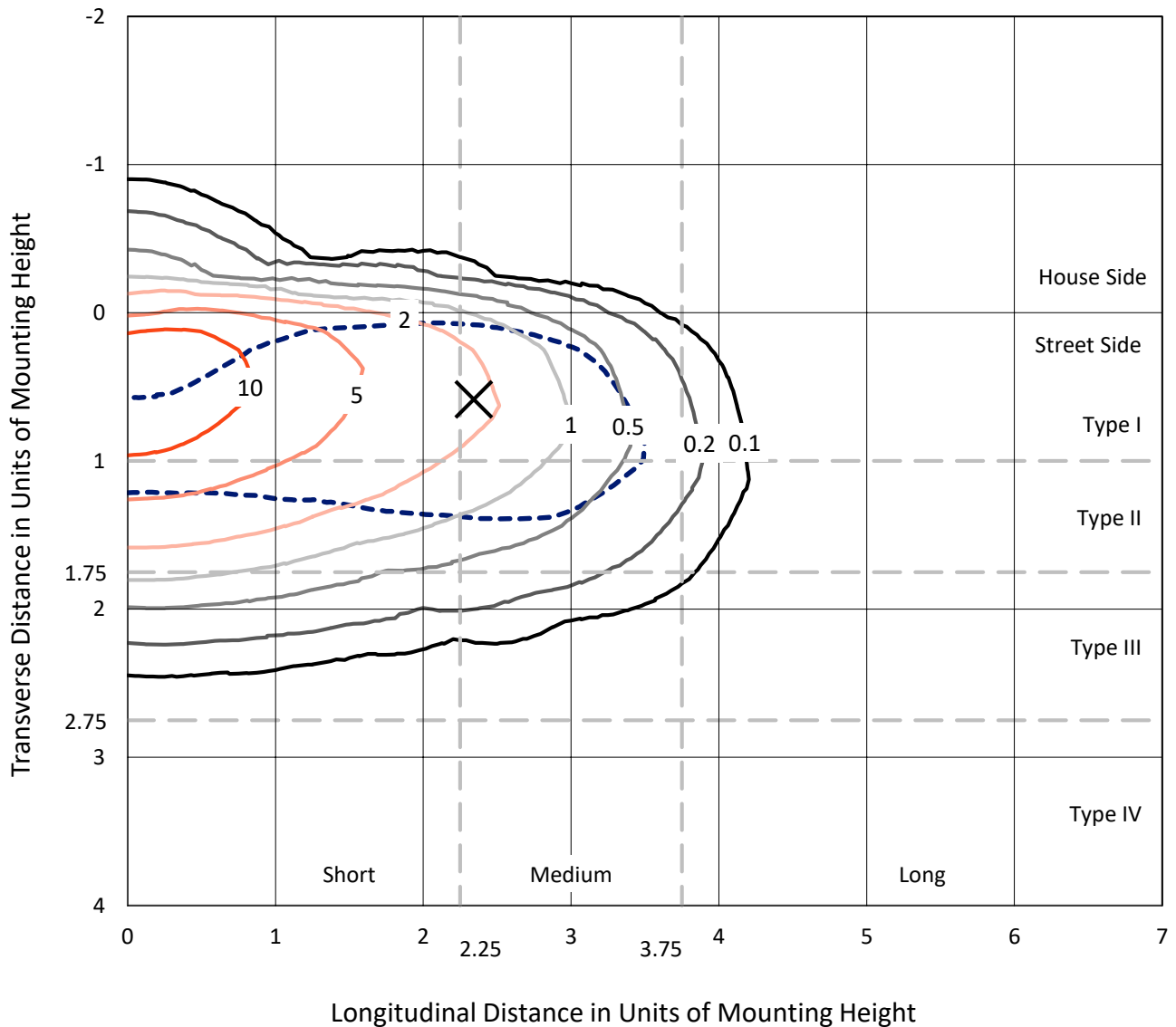
Input Watts (W): 295  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P383428  
 CATALOG NUMBER: GAN-SA7B-735-U-T2R-HSS

### Iso-Footcandle Lines of Horizontal Illumination

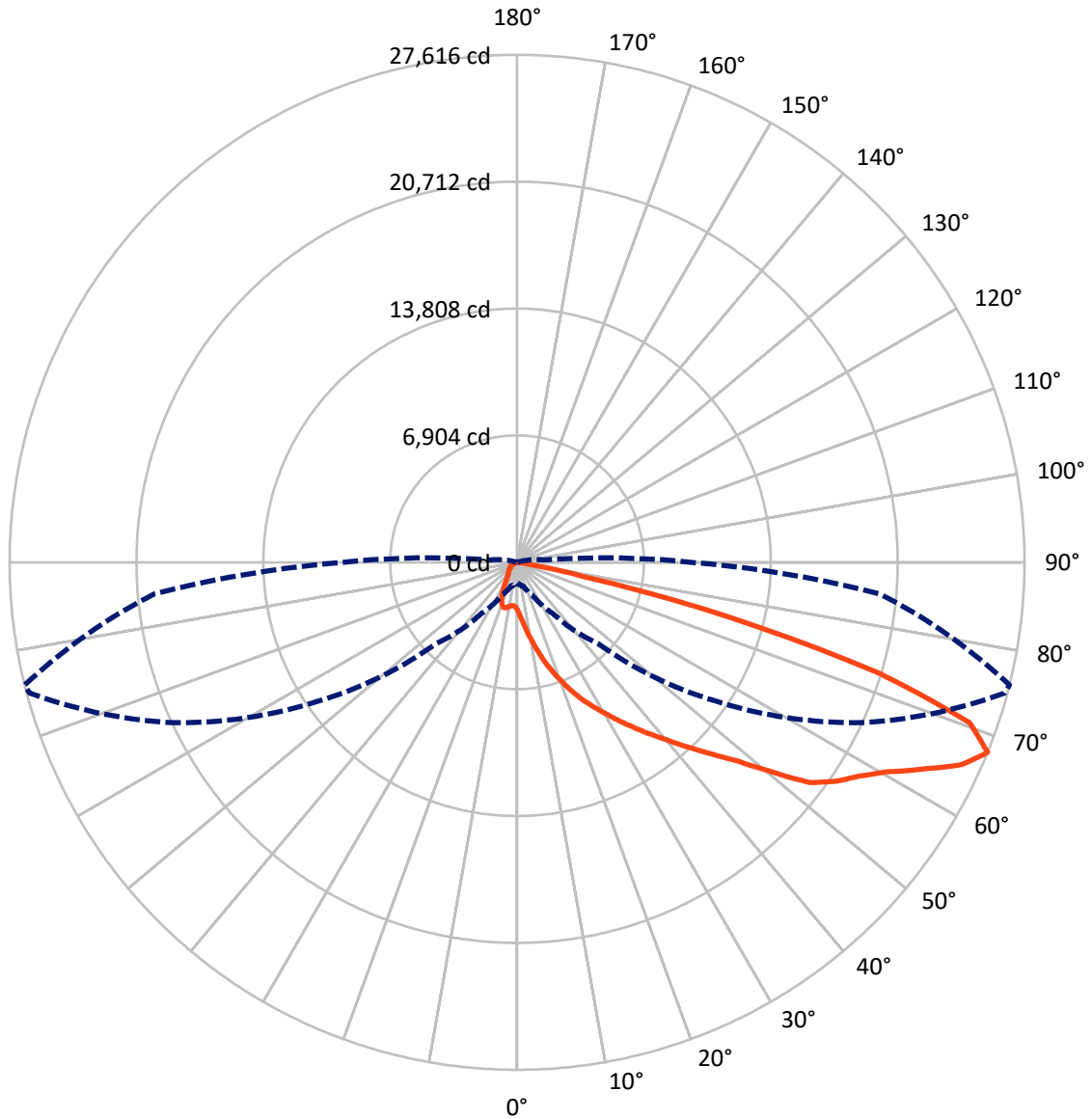
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.5 fc  
 Type II - Medium - N/A

REPORT NUMBER: P383428  
CATALOG NUMBER: GAN-SA7B-735-U-T2R-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral      - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P383428  
 CATALOG NUMBER: GAN-SA7B-735-U-T2R-HSS

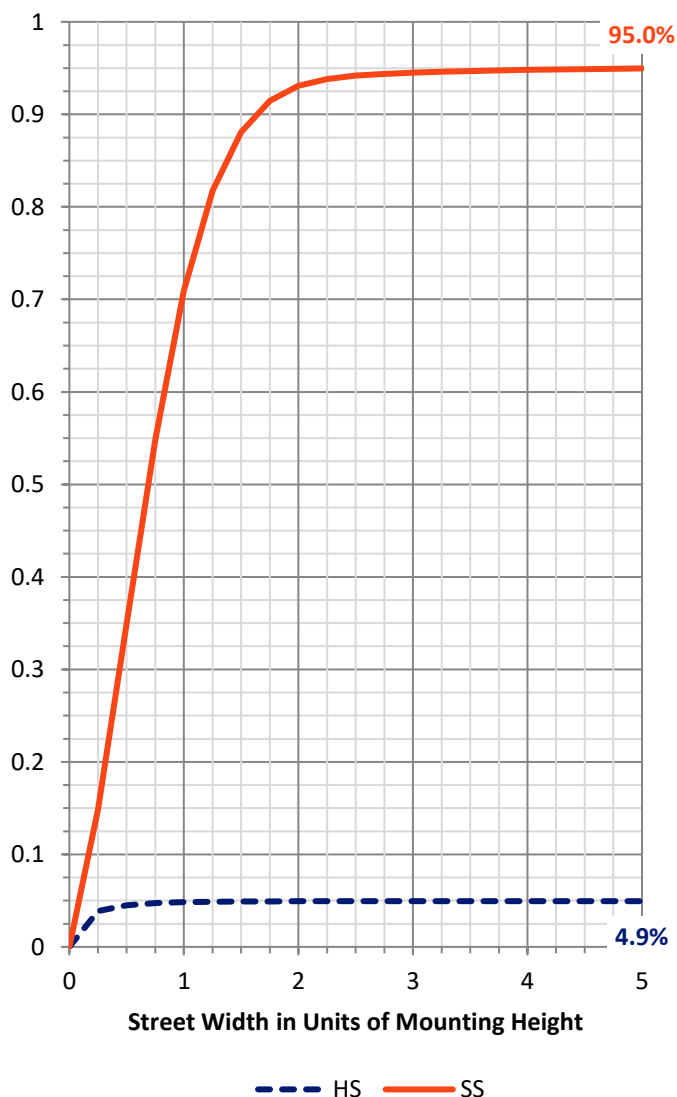
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1509.3   | 0.0    | 1509.3  |
|                    | % Fixture | 5.0      | 0.0    | 5.0     |
| <b>Street Side</b> | Lumens    | 28884.3  | 0.0    | 28884.3 |
|                    | % Fixture | 95.0     | 0.0    | 95.0    |
| <b>Total</b>       | Lumens    | 30393.6  | 0.0    | 30393.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 320.6   | 1.1       |
| 10°-20°   | 1270.9  | 4.2       |
| 20°-30°   | 2585.9  | 8.5       |
| 30°-40°   | 4488.3  | 14.8      |
| 40°-50°   | 6341.3  | 20.9      |
| 50°-60°   | 7191.4  | 23.7      |
| 60°-70°   | 5964.6  | 19.6      |
| 70°-80°   | 2160.5  | 7.1       |
| 80°-90°   | 70.1    | 0.2       |
| 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°    | 30393.6 | 100.0     |
| 0°-180°   | 30393.6 | 100.0     |

**Coefficient of Utilization**

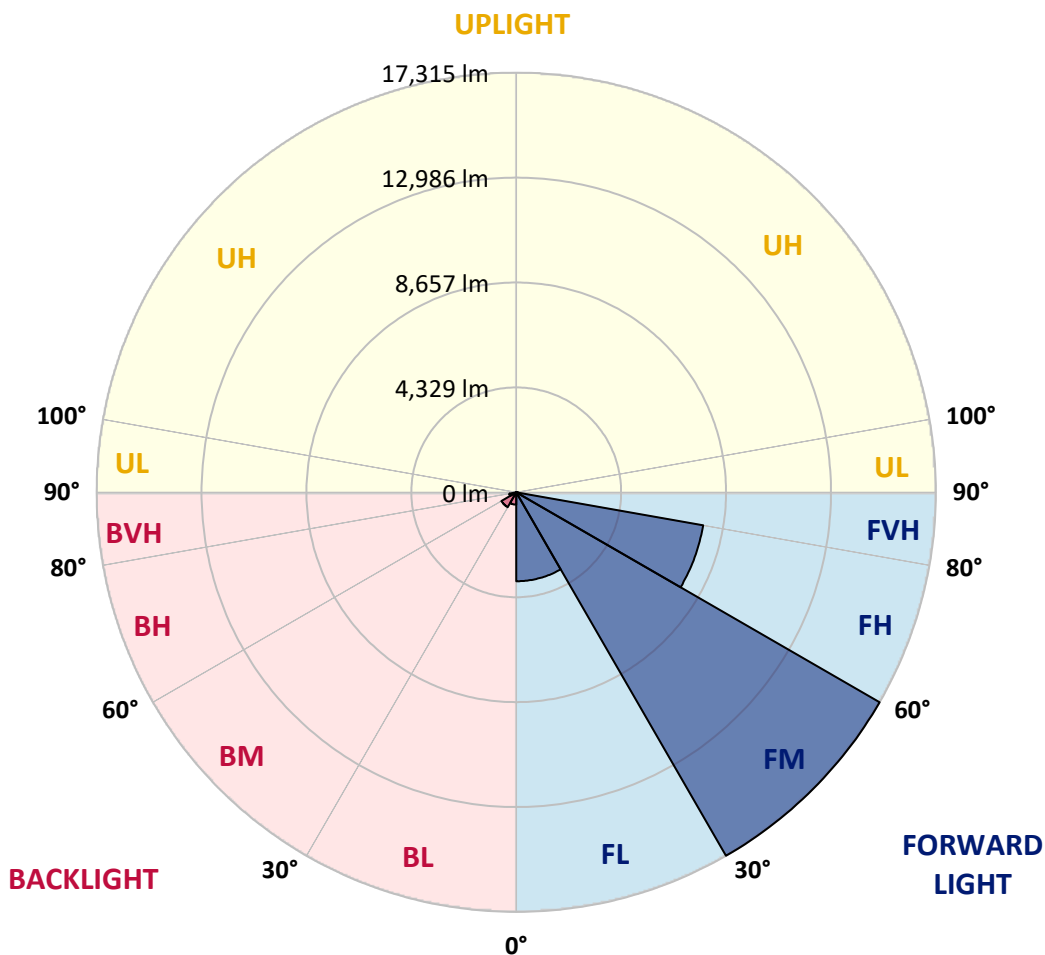


REPORT NUMBER: P383428  
 CATALOG NUMBER: GAN-SA7B-735-U-T2R-HSS

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

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|----------------|---------|-----------|-------------------------|------|----------|
|                |         |           | B                       | U    | G        |
| FL (0°-30°)    | 3668.4  | 12.1      |                         |      |          |
| FM (30°-60°)   | 17314.6 | 57.0      |                         |      |          |
| FH (60°-80°)   | 7833.4  | 25.8      |                         |      | G4/12000 |
| FVH (80°-90°)  | 67.9    | 0.2       |                         |      | G1/100   |
| BL (0°-30°)    | 509.0   | 1.7       | B2/1000                 |      |          |
| BM (30°-60°)   | 706.4   | 2.3       | B1/1000                 |      |          |
| BH (60°-80°)   | 291.7   | 1.0       | B1/500                  |      | G1/500   |
| BVH (80°-90°)  | 2.2     | 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 II Medium





REPORT NUMBER: P383428

CATALOG NUMBER: GAN-SA7B-735-U-T2R-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 76°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 2578.2  | 2578.2  | 2578.2  | 2578.2  | 2578.2  | 2578.2  | 2578.2  | 2578.2  | 2578.2  | 2578.2  | 2578.2  |
| 2.5°  | 3848.8  | 3762.1  | 3782.2  | 3726.2  | 3625.0  | 3417.3  | 3240.1  | 3072.3  | 2876.5  | 2869.9  | 2708.8  |
| 5°    | 5189.8  | 5116.5  | 5107.2  | 4994.0  | 4810.2  | 4457.4  | 4113.7  | 3722.2  | 3285.4  | 3253.4  | 2911.2  |
| 7.5°  | 6407.0  | 6348.4  | 6327.2  | 6192.6  | 5850.4  | 5506.8  | 5059.3  | 4484.0  | 3800.8  | 3742.2  | 3184.2  |
| 10°   | 7341.9  | 7314.0  | 7319.3  | 7223.4  | 6930.4  | 6610.8  | 6023.5  | 5289.7  | 4385.4  | 4294.9  | 3511.8  |
| 12.5° | 8050.4  | 8057.0  | 8105.0  | 8046.4  | 7882.6  | 7645.6  | 7018.3  | 6148.7  | 5032.7  | 4908.8  | 3886.0  |
| 15°   | 8571.1  | 8604.4  | 8692.3  | 8765.6  | 8753.6  | 8548.4  | 7973.1  | 7021.0  | 5719.9  | 5582.7  | 4302.9  |
| 17.5° | 8908.0  | 8945.4  | 9073.2  | 9235.6  | 9384.8  | 9336.9  | 8894.7  | 7862.6  | 6415.0  | 6256.6  | 4749.0  |
| 20°   | 9203.7  | 9247.7  | 9384.8  | 9599.2  | 9877.6  | 9937.5  | 9647.2  | 8678.9  | 7108.8  | 6915.7  | 5209.8  |
| 22.5° | 9844.2  | 9842.9  | 9926.9  | 10052.1 | 10317.0 | 10471.5 | 10287.7 | 9436.8  | 7794.7  | 7593.6  | 5679.9  |
| 25°   | 11002.9 | 10958.9 | 10929.7 | 10831.1 | 10889.7 | 10985.6 | 10883.0 | 10145.2 | 8484.5  | 8280.8  | 6156.7  |
| 27.5° | 12379.9 | 12406.5 | 12169.5 | 11904.4 | 11699.4 | 11600.8 | 11433.1 | 10801.8 | 9147.8  | 8924.0  | 6622.7  |
| 30°   | 13832.8 | 13840.8 | 13561.2 | 13222.9 | 12771.4 | 12397.2 | 12106.9 | 11429.1 | 9829.6  | 9585.9  | 7075.6  |
| 32.5° | 15143.2 | 15091.4 | 14814.3 | 14353.6 | 13783.6 | 13362.8 | 12759.4 | 12129.5 | 10551.5 | 10315.7 | 7579.0  |
| 35°   | 16182.0 | 16120.8 | 15783.9 | 15364.3 | 14773.0 | 14349.6 | 13623.8 | 12828.7 | 11310.5 | 11080.1 | 8083.7  |
| 37.5° | 16941.1 | 16869.2 | 16523.0 | 16091.5 | 15581.4 | 15335.0 | 14626.5 | 13589.1 | 12138.8 | 11891.1 | 8615.0  |
| 40°   | 17204.8 | 17142.2 | 16925.1 | 16609.5 | 16199.3 | 16143.4 | 15690.6 | 14464.0 | 13040.5 | 12776.7 | 9217.0  |
| 42.5° | 17047.7 | 16986.4 | 16909.2 | 16802.6 | 16632.1 | 16685.4 | 16694.7 | 15461.5 | 14042.0 | 13782.2 | 9881.6  |
| 45°   | 16424.4 | 16369.8 | 16449.7 | 16605.5 | 16817.2 | 17080.9 | 17611.0 | 16533.6 | 15160.6 | 14883.6 | 10649.9 |
| 47.5° | 15506.8 | 15466.9 | 15687.9 | 16076.8 | 16696.1 | 17423.2 | 18448.6 | 17660.3 | 16416.4 | 16159.4 | 11608.9 |
| 50°   | 14201.7 | 14195.1 | 14637.2 | 15347.1 | 16299.2 | 17588.4 | 19314.3 | 18941.4 | 18161.0 | 17890.7 | 12941.9 |
| 52.5° | 12169.5 | 12182.8 | 13052.5 | 14188.4 | 15602.7 | 17476.5 | 19870.9 | 20587.5 | 20190.5 | 19909.6 | 14096.6 |
| 55°   | 10234.4 | 10314.4 | 10931.0 | 12569.0 | 14534.7 | 17061.0 | 20062.7 | 21355.8 | 21310.5 | 21044.2 | 14738.4 |
| 57.5° | 8339.4  | 8484.5  | 9078.5  | 10608.7 | 12975.2 | 16103.5 | 19957.6 | 21688.8 | 22144.3 | 21940.5 | 15585.4 |
| 60°   | 6285.8  | 6352.4  | 7036.9  | 8467.2  | 10973.5 | 14356.2 | 19194.4 | 21869.9 | 23284.2 | 23143.1 | 16814.6 |
| 62.5° | 3999.2  | 4165.7  | 4773.0  | 6152.7  | 8544.4  | 11929.8 | 17908.0 | 21867.2 | 24710.5 | 24787.7 | 18400.7 |
| 65°   | 2106.8  | 2301.3  | 2623.5  | 3812.8  | 5871.6  | 9219.7  | 15973.0 | 21662.1 | 26460.4 | 26568.3 | 19640.6 |
| 67.5° | 1136.0  | 1191.9  | 1362.4  | 1979.0  | 3405.3  | 6245.8  | 13129.7 | 20650.0 | 27473.9 | 27616.4 | 19813.7 |
| 70°   | 831.0   | 861.7   | 925.6   | 1094.7  | 1714.0  | 3627.6  | 9580.6  | 18355.4 | 26167.5 | 26114.2 | 17604.3 |
| 72.5° | 637.9   | 685.8   | 733.8   | 801.7   | 985.5   | 1936.3  | 5964.9  | 14373.5 | 20879.1 | 20527.5 | 13158.9 |
| 75°   | 503.4   | 511.4   | 579.3   | 640.5   | 739.1   | 1102.7  | 2648.9  | 8371.4  | 12743.5 | 11911.1 | 6823.9  |
| 77.5° | 402.1   | 407.6   | 447.4   | 500.7   | 594.0   | 724.5   | 820.3   | 3293.4  | 4068.4  | 3630.3  | 1480.9  |
| 80°   | 238.4   | 251.7   | 332.9   | 386.2   | 492.8   | 456.8   | 299.7   | 715.1   | 635.2   | 575.3   | 249.0   |
| 82.5° | 133.2   | 143.8   | 187.8   | 305.0   | 343.6   | 218.4   | 149.1   | 193.1   | 149.1   | 145.1   | 70.6    |
| 85°   | 0.0     | 6.6     | 121.2   | 189.1   | 139.8   | 48.0    | 62.6    | 63.9    | 44.0    | 41.3    | 27.9    |
| 87.5° | 0.0     | 0.0     | 37.3    | 36.0    | 5.3     | 8.0     | 14.6    | 21.3    | 17.3    | 17.3    | 14.6    |
| 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: P383428  
 CATALOG NUMBER: GAN-SA7B-735-U-T2R-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2578.2  | 2578.2 | 2578.2 | 2578.2 | 2578.2 | 2578.2 | 2578.2 | 2578.2 | 2578.2 | 2578.2 | 2578.2 |
| 2.5°  | 2628.8  | 2556.9 | 2421.1 | 2288.0 | 2176.1 | 2084.2 | 2001.6 | 1968.4 | 1941.7 | 1937.7 | 1916.4 |
| 5°    | 2746.0  | 2600.9 | 2341.2 | 2128.1 | 1985.6 | 1884.4 | 1797.9 | 1744.6 | 1703.3 | 1687.3 | 1672.7 |
| 7.5°  | 2923.2  | 2703.4 | 2330.5 | 2085.5 | 1915.1 | 1744.6 | 1584.7 | 1411.7 | 1303.8 | 1262.5 | 1238.5 |
| 10°   | 3138.9  | 2839.3 | 2370.5 | 2073.5 | 1775.3 | 1415.7 | 1150.6 | 930.9  | 841.7  | 812.4  | 804.4  |
| 12.5° | 3390.6  | 3008.4 | 2439.7 | 1998.9 | 1476.9 | 1005.5 | 793.7  | 719.2  | 699.1  | 689.8  | 689.8  |
| 15°   | 3679.6  | 3193.5 | 2489.0 | 1783.2 | 1092.1 | 760.4  | 687.2  | 652.5  | 631.2  | 619.3  | 620.6  |
| 17.5° | 3975.3  | 3374.6 | 2465.1 | 1470.3 | 805.7  | 676.5  | 621.9  | 584.6  | 555.3  | 543.4  | 540.7  |
| 20°   | 4273.6  | 3542.4 | 2331.8 | 1094.7 | 681.9  | 613.9  | 552.7  | 511.4  | 482.1  | 470.2  | 467.5  |
| 22.5° | 4582.6  | 3684.9 | 2097.5 | 803.1  | 612.6  | 544.7  | 484.8  | 443.5  | 415.5  | 404.9  | 399.5  |
| 25°   | 4883.5  | 3800.8 | 1769.8 | 649.8  | 547.4  | 479.5  | 422.2  | 383.5  | 358.3  | 347.6  | 346.3  |
| 27.5° | 5164.5  | 3874.0 | 1390.3 | 574.0  | 490.1  | 420.9  | 368.9  | 334.2  | 313.0  | 305.0  | 303.6  |
| 30°   | 5417.5  | 3880.7 | 1028.1 | 518.0  | 439.5  | 370.2  | 322.3  | 291.7  | 273.0  | 265.0  | 262.3  |
| 32.5° | 5673.2  | 3824.7 | 748.4  | 467.5  | 392.8  | 326.3  | 279.7  | 255.7  | 242.4  | 235.7  | 235.7  |
| 35°   | 5914.3  | 3695.6 | 583.3  | 423.5  | 347.6  | 283.7  | 246.4  | 229.1  | 221.1  | 214.4  | 214.4  |
| 37.5° | 6150.0  | 3510.4 | 495.4  | 384.9  | 305.0  | 247.7  | 217.1  | 206.4  | 199.7  | 193.1  | 193.1  |
| 40°   | 6389.7  | 3277.5 | 450.1  | 349.0  | 270.3  | 219.8  | 193.1  | 183.8  | 177.1  | 171.8  | 170.5  |
| 42.5° | 6684.0  | 3008.4 | 420.9  | 315.6  | 239.7  | 194.4  | 170.5  | 159.9  | 154.5  | 149.1  | 146.5  |
| 45°   | 7025.0  | 2776.7 | 396.8  | 282.4  | 214.4  | 173.1  | 147.8  | 137.1  | 129.2  | 122.5  | 121.2  |
| 47.5° | 7516.4  | 2608.9 | 364.9  | 246.4  | 190.4  | 150.4  | 127.8  | 115.9  | 103.9  | 97.3   | 95.9   |
| 50°   | 8143.6  | 2470.4 | 323.6  | 214.4  | 166.5  | 127.8  | 106.6  | 91.9   | 81.2   | 74.6   | 74.6   |
| 52.5° | 8455.3  | 2289.3 | 286.4  | 186.4  | 139.8  | 107.9  | 86.5   | 69.2   | 63.9   | 57.3   | 57.3   |
| 55°   | 8580.4  | 2150.8 | 249.0  | 158.5  | 115.9  | 89.2   | 67.9   | 53.3   | 49.3   | 45.3   | 44.0   |
| 57.5° | 8932.1  | 2110.8 | 217.1  | 134.5  | 95.9   | 70.6   | 52.0   | 40.0   | 37.3   | 32.0   | 32.0   |
| 60°   | 9498.0  | 2130.8 | 187.8  | 114.5  | 77.2   | 54.6   | 38.7   | 30.6   | 27.9   | 22.6   | 22.6   |
| 62.5° | 10109.2 | 2105.5 | 158.5  | 98.6   | 59.9   | 40.0   | 26.6   | 22.6   | 22.6   | 13.3   | 12.0   |
| 65°   | 10226.4 | 1875.1 | 135.8  | 81.2   | 46.6   | 29.3   | 17.3   | 14.6   | 19.9   | 2.7    | 0.0    |
| 67.5° | 9491.4  | 1454.2 | 117.2  | 62.6   | 34.7   | 22.6   | 13.3   | 6.6    | 17.3   | 0.0    | 0.0    |
| 70°   | 7589.6  | 924.2  | 94.6   | 45.3   | 26.6   | 18.6   | 10.6   | 2.7    | 13.3   | 0.0    | 0.0    |
| 72.5° | 5366.9  | 536.7  | 74.6   | 32.0   | 22.6   | 14.6   | 8.0    | 0.0    | 8.0    | 0.0    | 0.0    |
| 75°   | 2714.1  | 286.4  | 46.6   | 23.9   | 17.3   | 10.6   | 5.3    | 0.0    | 1.3    | 0.0    | 0.0    |
| 77.5° | 587.3   | 133.2  | 29.3   | 17.3   | 12.0   | 6.6    | 2.7    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 127.8   | 58.6   | 18.6   | 10.6   | 6.6    | 4.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 46.6    | 30.6   | 9.3    | 5.3    | 2.7    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 25.3    | 16.0   | 5.3    | 2.7    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 13.3    | 5.3    | 1.3    | 1.3    | 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)