

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: P323005

Luminaire Tested: **GAN-SA1C-827-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P323005  
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-SA1C-827-U-T4W-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(1) 80 CRI, 2700K, 1050mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV WIDE  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3946 lumens  
Efficiency: N/A  
Efficacy: 66.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B0 - U0 - G2

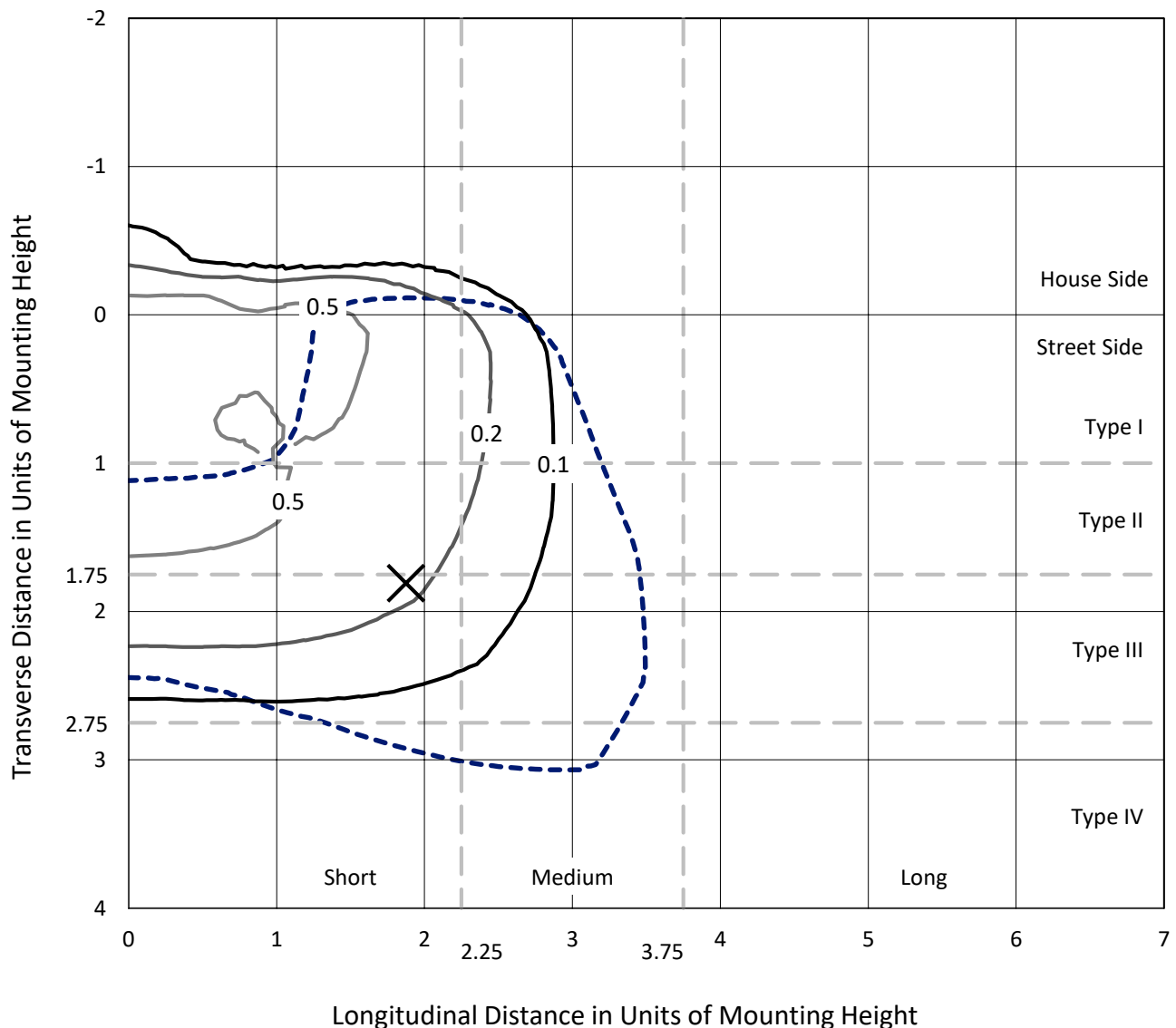
Input Watts (W): 59  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P323005  
CATALOG NUMBER: GAN-SA1C-827-U-T4W-HSS

## Iso-Footcandle Lines of Horizontal Illumination

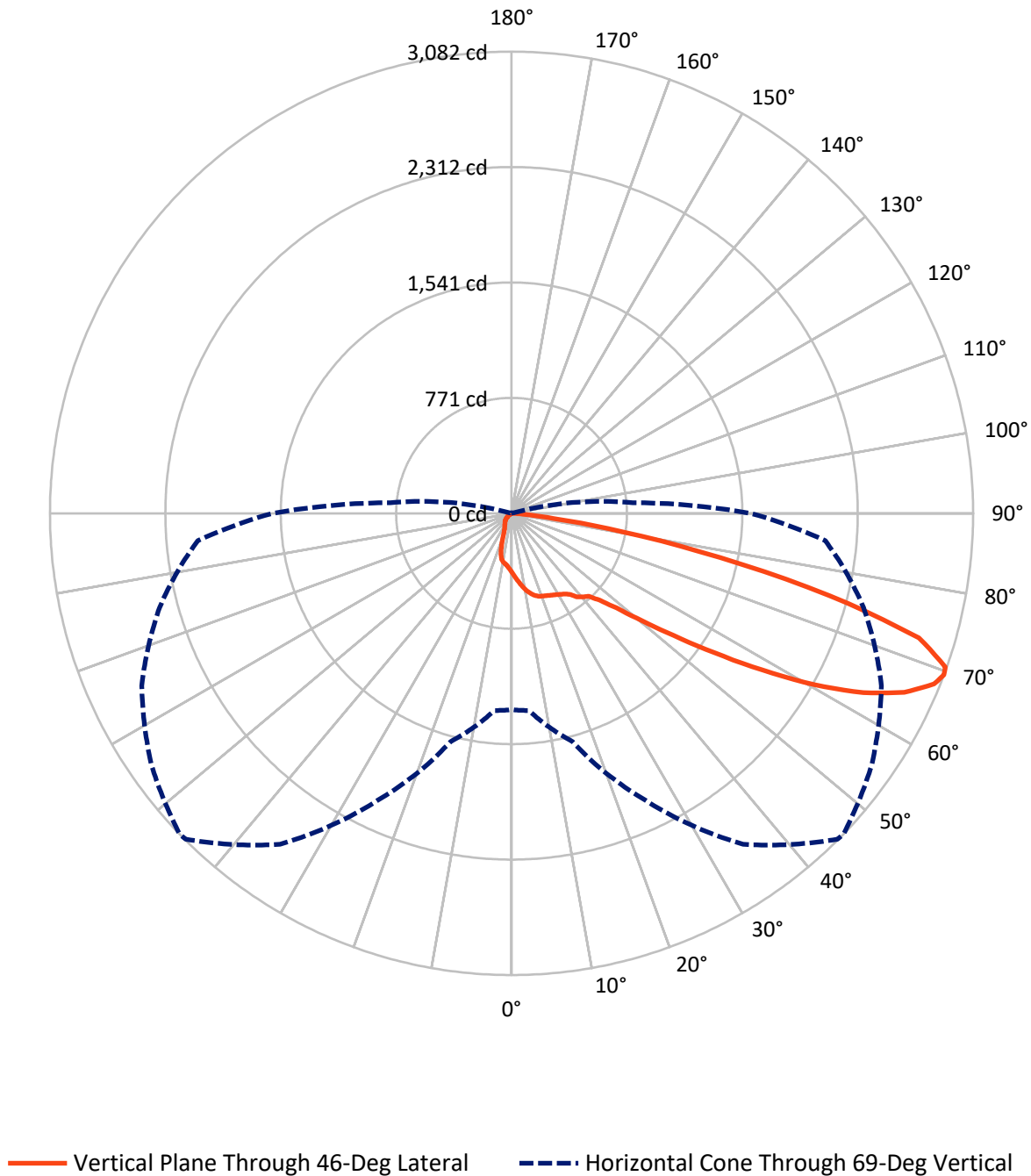
✕ Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.9 fc  
Type IV - Short - N/A

REPORT NUMBER: P323005  
CATALOG NUMBER: GAN-SA1C-827-U-T4W-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P323005

CATALOG NUMBER: GAN-SA1C-827-U-T4W-HSS

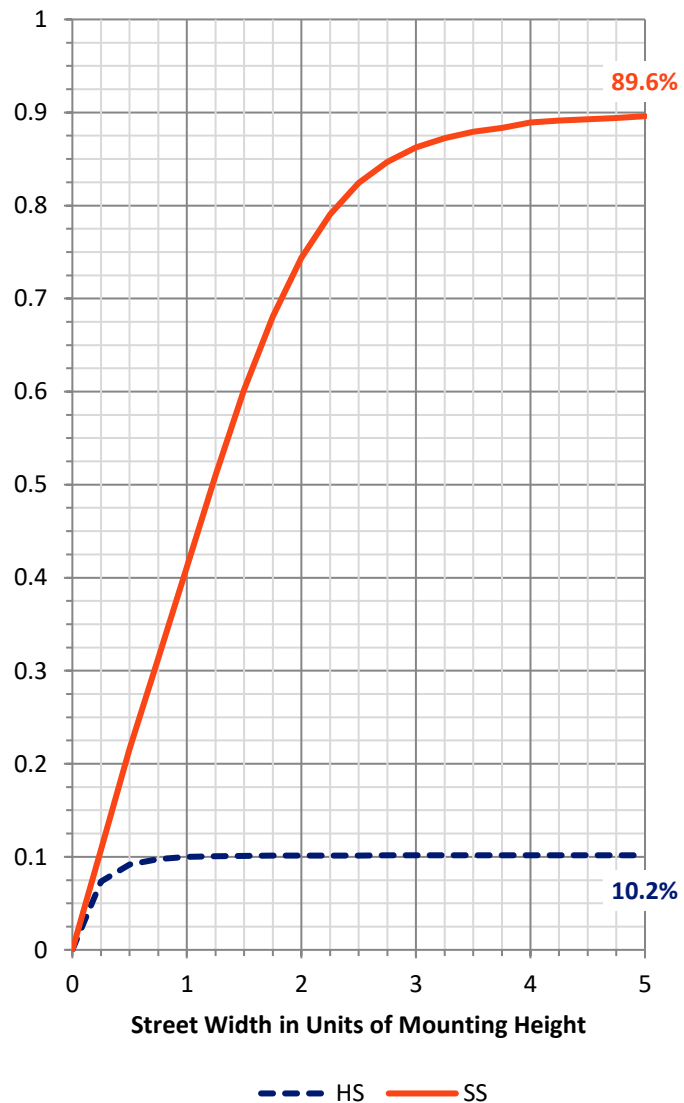
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 405.0    | 0.0    | 405.0  |
|                    | % Fixture | 10.3     | 0.0    | 10.3   |
| <b>Street Side</b> | Lumens    | 3541.0   | 0.0    | 3541.0 |
|                    | % Fixture | 89.7     | 0.0    | 89.7   |
| <b>Total</b>       | Lumens    | 3946.0   | 0.0    | 3946.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 39.4   | 1.0       |
| 10°-20°   | 119.4  | 3.0       |
| 20°-30°   | 187.8  | 4.8       |
| 30°-40°   | 269.2  | 6.8       |
| 40°-50°   | 465.4  | 11.8      |
| 50°-60°   | 919.4  | 23.3      |
| 60°-70°   | 1284.9 | 32.6      |
| 70°-80°   | 620.7  | 15.7      |
| 80°-90°   | 39.9   | 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°    | 3946.0 | 100.0     |
| 0°-180°   | 3946.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P323005

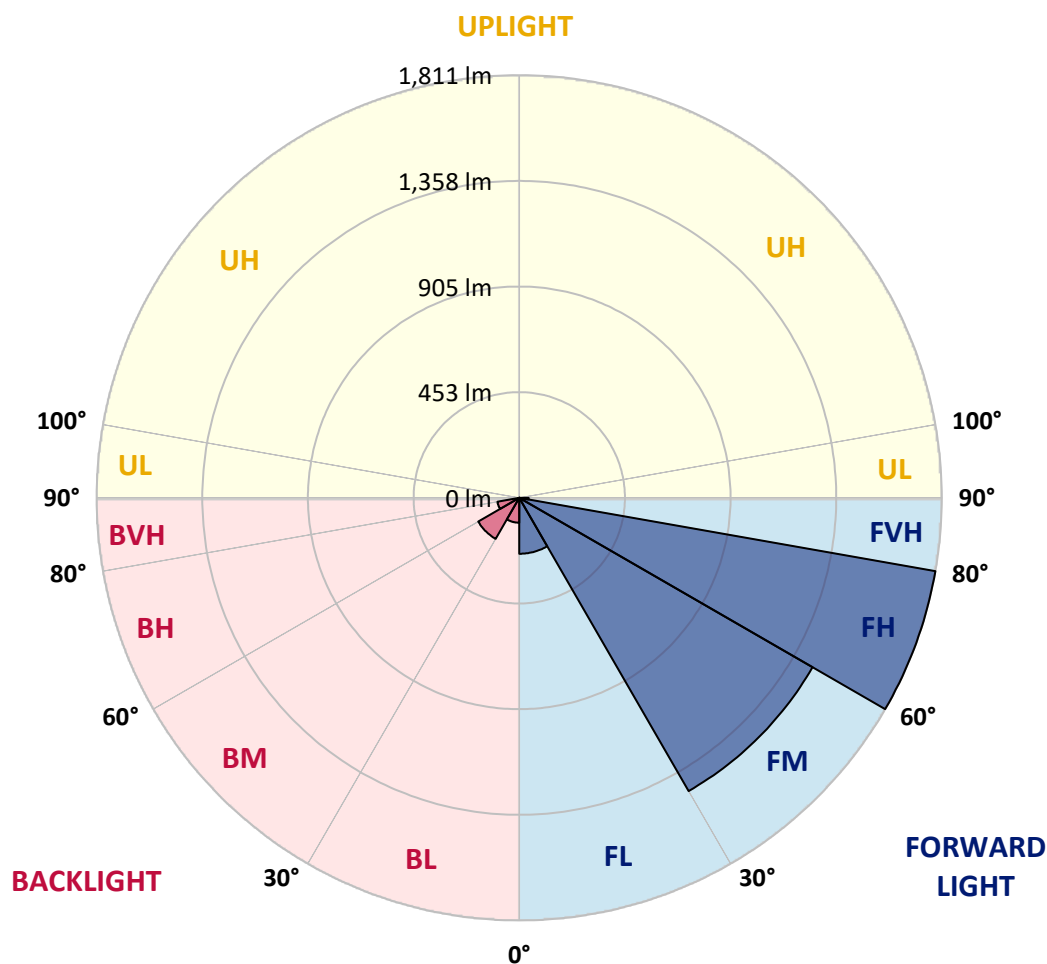
CATALOG NUMBER: GAN-SA1C-827-U-T4W-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 239.8  | 6.1       |                         |      |         |
| FM   | (30°-60°)   | 1451.0 | 36.8      |                         |      |         |
| FH   | (60°-80°)   | 1810.7 | 45.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 39.6   | 1.0       |                         |      | G1/100  |
| BL   | (0°-30°)    | 106.7  | 2.7       | B0/110                  |      |         |
| BM   | (30°-60°)   | 202.9  | 5.1       | B0/220                  |      |         |
| BH   | (60°-80°)   | 95.0   | 2.4       | B0/110                  |      | G0/110  |
| BVH  | (80°-90°)   | 0.3    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B0-U0-G2**

Type IV Short



REPORT NUMBER: P323005

CATALOG NUMBER: GAN-SA1C-827-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 46°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 395.4  | 395.4  | 395.4  | 395.4  | 395.4  | 395.4  | 395.4  | 395.4  | 395.4  | 395.4  | 395.4  |
| 2.5°  | 439.2  | 438.7  | 436.1  | 435.0  | 428.7  | 425.0  | 423.5  | 418.9  | 412.2  | 405.6  | 398.1  |
| 5°    | 489.2  | 489.0  | 484.2  | 479.6  | 467.7  | 456.6  | 454.6  | 443.8  | 428.9  | 414.8  | 400.7  |
| 7.5°  | 540.2  | 537.8  | 533.0  | 524.1  | 506.9  | 489.2  | 487.5  | 472.3  | 451.1  | 430.7  | 410.5  |
| 10°   | 583.5  | 582.1  | 575.8  | 562.3  | 542.1  | 521.9  | 519.9  | 501.2  | 477.2  | 452.2  | 426.5  |
| 12.5° | 617.2  | 616.1  | 607.8  | 590.9  | 569.5  | 548.6  | 545.8  | 529.1  | 503.4  | 475.5  | 445.1  |
| 15°   | 637.7  | 637.2  | 627.0  | 609.1  | 588.0  | 569.8  | 567.4  | 552.8  | 529.0  | 499.7  | 465.5  |
| 17.5° | 642.6  | 642.7  | 632.2  | 614.1  | 596.7  | 583.7  | 581.9  | 570.8  | 550.8  | 521.7  | 485.8  |
| 20°   | 631.8  | 634.0  | 624.6  | 608.9  | 598.1  | 591.3  | 589.8  | 583.2  | 566.3  | 538.9  | 502.1  |
| 22.5° | 616.7  | 617.8  | 611.3  | 600.7  | 596.3  | 597.6  | 596.9  | 593.2  | 578.9  | 553.7  | 518.2  |
| 25°   | 607.4  | 607.4  | 603.5  | 594.6  | 597.6  | 605.6  | 605.7  | 605.0  | 593.7  | 571.9  | 537.8  |
| 27.5° | 607.0  | 605.9  | 601.5  | 594.8  | 603.0  | 615.2  | 615.9  | 620.9  | 613.9  | 593.9  | 562.3  |
| 30°   | 621.8  | 620.5  | 611.1  | 602.4  | 612.8  | 625.9  | 627.8  | 638.7  | 635.2  | 617.8  | 589.5  |
| 32.5° | 656.4  | 651.8  | 630.9  | 616.7  | 624.4  | 640.1  | 642.6  | 659.9  | 665.5  | 647.2  | 615.7  |
| 35°   | 703.8  | 689.2  | 659.0  | 643.7  | 644.4  | 660.9  | 663.1  | 688.6  | 705.1  | 674.2  | 636.1  |
| 37.5° | 769.1  | 761.9  | 712.9  | 671.8  | 675.1  | 700.1  | 706.6  | 734.3  | 729.7  | 689.0  | 659.2  |
| 40°   | 912.3  | 901.0  | 848.8  | 750.6  | 704.5  | 731.9  | 733.9  | 748.8  | 749.1  | 722.5  | 707.3  |
| 42.5° | 1107.3 | 1102.7 | 1047.7 | 893.6  | 762.4  | 753.2  | 756.9  | 781.9  | 809.8  | 793.2  | 792.4  |
| 45°   | 1323.2 | 1320.8 | 1262.5 | 1083.4 | 879.6  | 822.9  | 827.6  | 861.1  | 914.5  | 918.2  | 941.7  |
| 47.5° | 1496.9 | 1495.8 | 1462.3 | 1295.3 | 1058.8 | 941.2  | 942.6  | 978.2  | 1072.2 | 1118.6 | 1156.2 |
| 50°   | 1655.3 | 1660.7 | 1634.2 | 1524.5 | 1303.1 | 1126.4 | 1122.8 | 1146.5 | 1297.5 | 1373.5 | 1420.2 |
| 52.5° | 1875.5 | 1883.1 | 1808.9 | 1738.4 | 1559.3 | 1356.2 | 1353.4 | 1378.2 | 1568.4 | 1625.3 | 1633.7 |
| 55°   | 2069.9 | 2057.0 | 1998.3 | 1978.0 | 1871.8 | 1640.0 | 1639.2 | 1661.1 | 1830.3 | 1854.6 | 1869.9 |
| 57.5° | 2155.8 | 2150.8 | 2179.1 | 2225.7 | 2199.1 | 1975.4 | 1973.7 | 1957.1 | 2064.8 | 2067.3 | 2114.5 |
| 60°   | 2210.0 | 2216.1 | 2302.9 | 2446.6 | 2513.0 | 2336.4 | 2325.6 | 2224.1 | 2288.6 | 2282.9 | 2333.4 |
| 62.5° | 2169.3 | 2181.3 | 2337.5 | 2577.1 | 2748.0 | 2651.4 | 2636.3 | 2468.6 | 2479.9 | 2460.1 | 2507.1 |
| 65°   | 1953.2 | 1971.9 | 2227.8 | 2552.5 | 2864.6 | 2897.7 | 2882.3 | 2684.5 | 2631.8 | 2599.3 | 2573.2 |
| 67.5° | 1585.9 | 1597.0 | 1864.2 | 2338.4 | 2812.0 | 3044.6 | 3041.4 | 2873.8 | 2746.5 | 2575.8 | 2373.4 |
| 69°   | 1310.6 | 1321.6 | 1578.7 | 2113.0 | 2696.4 | 3076.0 | 3082.1 | 2934.5 | 2724.7 | 2432.9 | 2102.9 |
| 70°   | 1110.1 | 1121.7 | 1361.3 | 1919.9 | 2562.3 | 3061.4 | 3072.3 | 2928.8 | 2662.2 | 2267.5 | 1865.5 |
| 72.5° | 582.2  | 592.2  | 838.1  | 1322.7 | 2088.8 | 2811.1 | 2844.2 | 2681.2 | 2256.6 | 1646.8 | 1103.1 |
| 75°   | 183.0  | 188.7  | 327.3  | 691.4  | 1430.2 | 2185.8 | 2193.3 | 2103.2 | 1602.4 | 905.8  | 459.4  |
| 77.5° | 69.8   | 68.1   | 109.0  | 254.8  | 723.0  | 1376.3 | 1422.8 | 1314.3 | 840.9  | 320.3  | 106.0  |
| 80°   | 37.6   | 37.7   | 56.6   | 105.5  | 309.3  | 707.3  | 746.5  | 637.0  | 298.8  | 99.9   | 24.4   |
| 82.5° | 16.3   | 17.0   | 31.8   | 55.9   | 142.1  | 260.9  | 280.5  | 233.5  | 114.2  | 67.2   | 9.1    |
| 85°   | 3.5    | 3.9    | 15.4   | 30.3   | 57.9   | 73.3   | 76.8   | 75.7   | 72.7   | 52.2   | 3.5    |
| 87.5° | 0.0    | 0.0    | 6.8    | 10.9   | 14.6   | 16.7   | 14.6   | 19.1   | 40.1   | 35.2   | 1.9    |
| 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: P323005

CATALOG NUMBER: GAN-SA1C-827-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 395.4  | 395.4  | 395.4 | 395.4 | 395.4 | 395.4 | 395.4 | 395.4 | 395.4 | 395.4 | 395.4 |
| 2.5°  | 395.7  | 392.4  | 386.7 | 380.4 | 375.9 | 371.3 | 367.6 | 366.0 | 364.1 | 362.8 | 364.5 |
| 5°    | 395.0  | 388.5  | 377.4 | 366.7 | 358.9 | 352.6 | 347.5 | 345.4 | 343.4 | 341.9 | 341.7 |
| 7.5°  | 401.5  | 392.4  | 375.4 | 359.7 | 347.6 | 339.1 | 332.1 | 329.1 | 326.7 | 325.6 | 324.7 |
| 10°   | 413.9  | 402.2  | 379.5 | 358.9 | 343.4 | 329.0 | 313.8 | 302.1 | 294.5 | 291.0 | 289.7 |
| 12.5° | 430.0  | 415.4  | 387.2 | 362.8 | 340.2 | 312.5 | 280.3 | 252.5 | 234.6 | 228.7 | 225.2 |
| 15°   | 448.8  | 430.7  | 397.4 | 367.8 | 328.8 | 278.1 | 223.5 | 187.2 | 170.6 | 167.3 | 163.6 |
| 17.5° | 467.0  | 447.0  | 409.6 | 368.7 | 303.6 | 222.2 | 163.7 | 139.1 | 132.7 | 134.9 | 135.4 |
| 20°   | 482.9  | 463.1  | 421.6 | 360.6 | 257.9 | 166.7 | 126.7 | 120.6 | 123.0 | 127.3 | 128.0 |
| 22.5° | 499.0  | 478.6  | 432.7 | 339.1 | 199.4 | 126.5 | 114.2 | 115.6 | 118.0 | 122.3 | 123.0 |
| 25°   | 518.6  | 497.5  | 443.1 | 299.7 | 149.7 | 107.7 | 108.4 | 110.6 | 113.0 | 116.9 | 117.3 |
| 27.5° | 541.2  | 521.4  | 450.0 | 248.5 | 111.0 | 99.0  | 101.4 | 104.7 | 107.1 | 110.8 | 111.6 |
| 30°   | 571.1  | 552.8  | 452.2 | 195.4 | 93.1  | 91.2  | 92.3  | 96.4  | 99.9  | 103.2 | 103.8 |
| 32.5° | 599.3  | 583.9  | 444.8 | 147.5 | 86.2  | 84.0  | 84.0  | 86.4  | 90.5  | 93.6  | 94.4  |
| 35°   | 625.2  | 615.2  | 421.1 | 107.9 | 81.0  | 77.3  | 75.5  | 75.5  | 78.1  | 80.7  | 81.4  |
| 37.5° | 659.4  | 659.0  | 382.8 | 86.0  | 76.0  | 71.8  | 67.9  | 64.9  | 64.0  | 64.6  | 64.9  |
| 40°   | 718.0  | 718.6  | 332.8 | 77.2  | 71.8  | 66.0  | 60.1  | 54.8  | 49.8  | 48.1  | 47.9  |
| 42.5° | 809.6  | 801.3  | 280.5 | 72.9  | 68.1  | 60.1  | 51.2  | 44.0  | 36.3  | 33.9  | 33.7  |
| 45°   | 955.0  | 905.6  | 225.0 | 69.0  | 64.2  | 53.5  | 42.4  | 32.6  | 26.3  | 24.4  | 24.4  |
| 47.5° | 1166.9 | 1042.7 | 174.3 | 64.8  | 59.0  | 45.9  | 32.0  | 23.5  | 19.2  | 18.3  | 18.5  |
| 50°   | 1385.9 | 1177.1 | 133.6 | 59.4  | 52.7  | 37.9  | 23.7  | 17.0  | 14.6  | 14.6  | 14.8  |
| 52.5° | 1580.2 | 1275.5 | 104.2 | 53.7  | 45.0  | 29.8  | 17.9  | 13.3  | 12.2  | 12.0  | 12.2  |
| 55°   | 1762.1 | 1338.9 | 79.7  | 47.0  | 35.7  | 22.2  | 13.7  | 10.9  | 10.2  | 9.8   | 9.6   |
| 57.5° | 1937.5 | 1370.4 | 59.8  | 37.9  | 25.9  | 16.1  | 10.9  | 9.3   | 8.5   | 8.0   | 7.8   |
| 60°   | 2054.2 | 1344.9 | 41.1  | 27.9  | 17.9  | 11.7  | 9.1   | 8.0   | 7.0   | 6.5   | 6.3   |
| 62.5° | 2120.1 | 1275.1 | 26.5  | 20.2  | 12.8  | 8.7   | 7.2   | 6.7   | 5.4   | 4.8   | 4.8   |
| 65°   | 2093.4 | 1160.0 | 18.5  | 14.4  | 9.3   | 6.5   | 5.4   | 5.4   | 3.9   | 3.1   | 3.0   |
| 67.5° | 1855.1 | 980.0  | 14.1  | 10.7  | 6.7   | 4.8   | 4.1   | 4.6   | 2.4   | 1.5   | 1.5   |
| 69°   | 1596.1 | 812.2  | 12.0  | 8.9   | 5.6   | 3.9   | 3.5   | 4.3   | 1.7   | 1.1   | 0.9   |
| 70°   | 1387.2 | 700.6  | 10.9  | 7.8   | 4.6   | 3.3   | 3.1   | 4.1   | 1.7   | 0.9   | 0.7   |
| 72.5° | 830.0  | 390.7  | 8.3   | 5.6   | 3.0   | 2.6   | 2.6   | 4.6   | 1.7   | 0.9   | 0.7   |
| 75°   | 335.4  | 137.7  | 6.1   | 3.9   | 2.2   | 2.2   | 3.1   | 5.9   | 1.5   | 0.7   | 0.6   |
| 77.5° | 76.0   | 30.2   | 3.5   | 2.4   | 1.5   | 2.2   | 3.7   | 4.6   | 0.9   | 0.4   | 0.0   |
| 80°   | 18.5   | 7.4    | 2.2   | 1.5   | 0.9   | 1.7   | 2.8   | 2.6   | 0.2   | 0.0   | 0.0   |
| 82.5° | 6.1    | 2.6    | 0.9   | 0.7   | 0.2   | 0.6   | 1.3   | 0.7   | 0.0   | 0.0   | 0.0   |
| 85°   | 2.6    | 1.5    | 0.4   | 0.2   | 0.0   | 0.0   | 0.2   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 1.7    | 0.6    | 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)