

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: P383072

Luminaire Tested: **GAN-SA4A-735-U-T4W-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P383072  
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-SA4A-735-U-T4W-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12693.3 lumens  
Efficiency: N/A  
Efficacy: 98.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G3

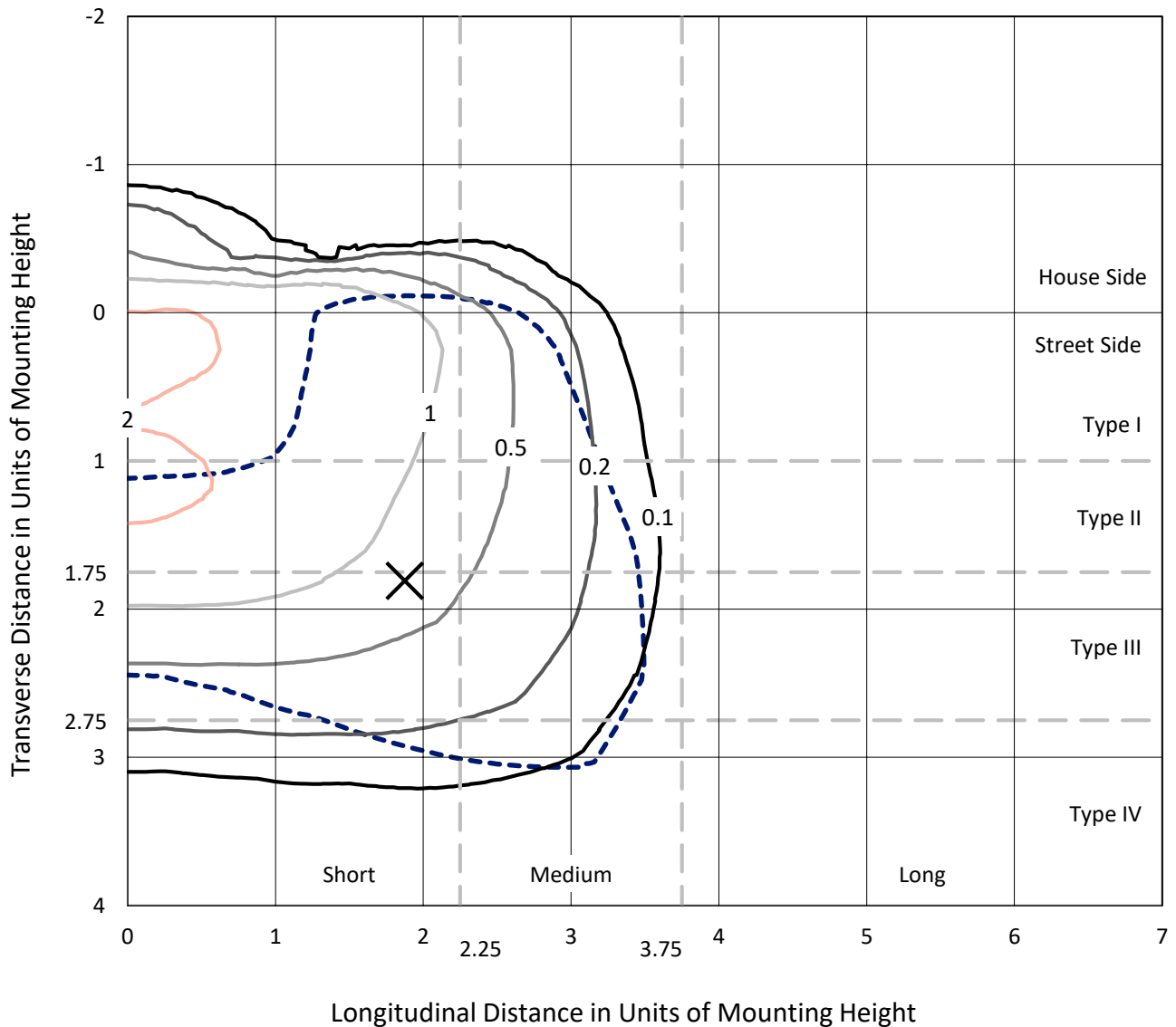
Input Watts (W): 129  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P383072  
 CATALOG NUMBER: GAN-SA4A-735-U-T4W-HSS

### Iso-Footcandle Lines of Horizontal Illumination

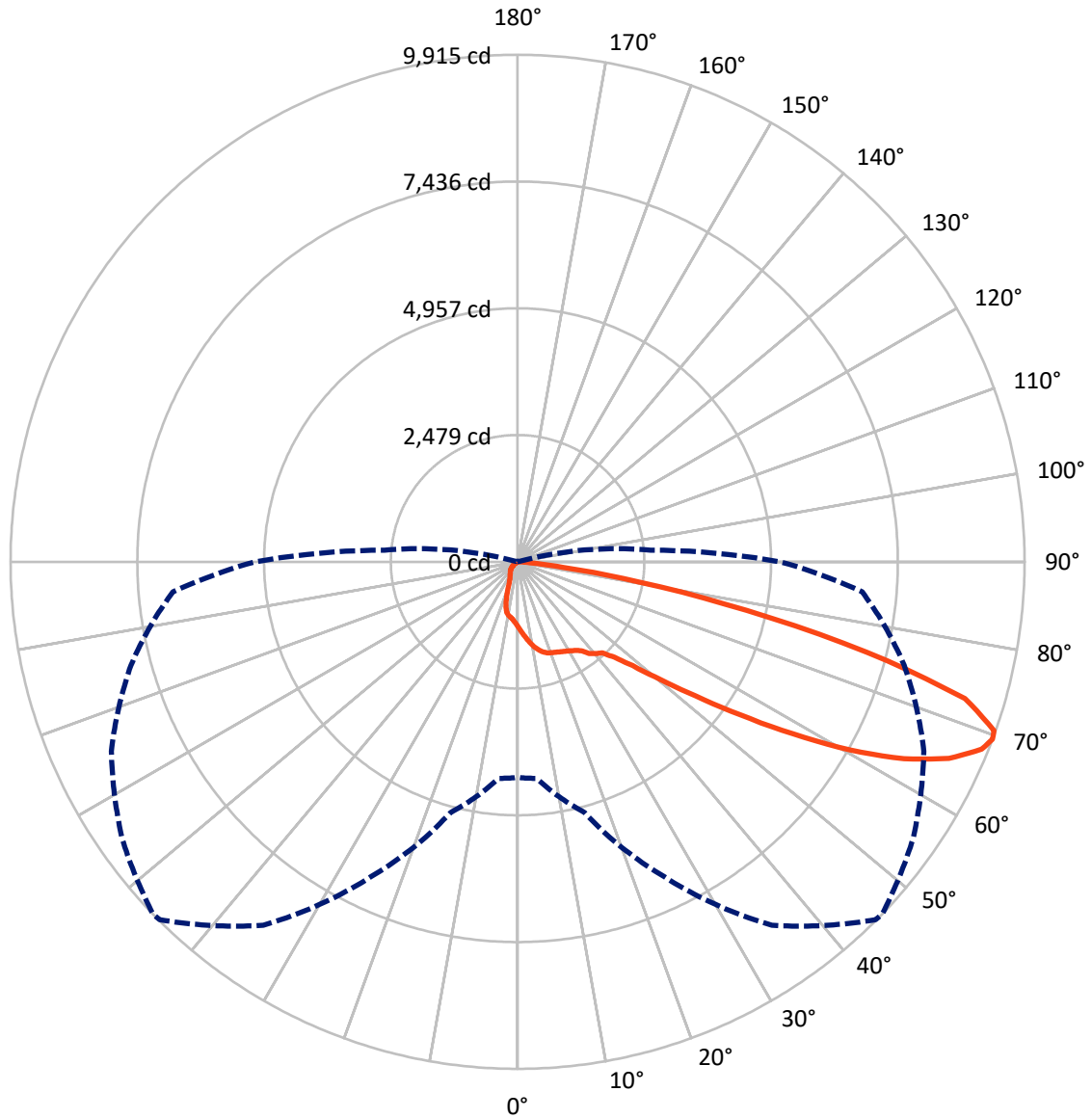
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3 fc  
 Type IV - Short - N/A

REPORT NUMBER: P383072  
CATALOG NUMBER: GAN-SA4A-735-U-T4W-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 46-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P383072  
 CATALOG NUMBER: GAN-SA4A-735-U-T4W-HSS

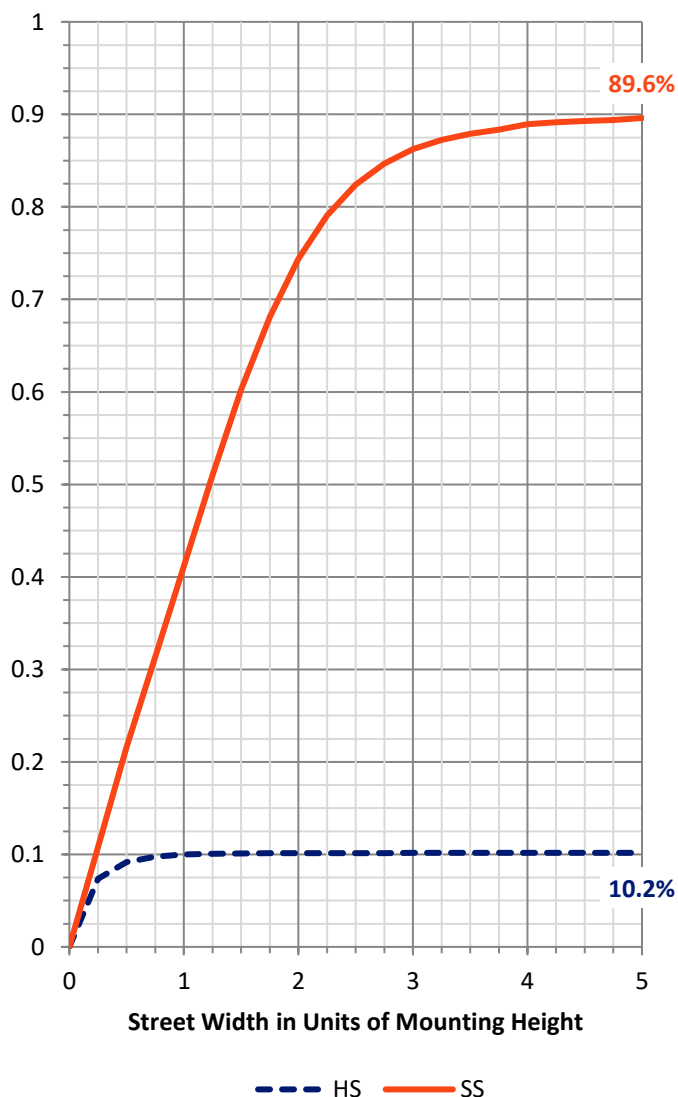
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1302.7   | 0.0    | 1302.7  |
|                    | % Fixture | 10.3     | 0.0    | 10.3    |
| <b>Street Side</b> | Lumens    | 11390.6  | 0.0    | 11390.6 |
|                    | % Fixture | 89.7     | 0.0    | 89.7    |
| <b>Total</b>       | Lumens    | 12693.3  | 0.0    | 12693.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 126.6   | 1.0       |
| 10°-20°   | 384.0   | 3.0       |
| 20°-30°   | 604.0   | 4.8       |
| 30°-40°   | 866.1   | 6.8       |
| 40°-50°   | 1496.9  | 11.8      |
| 50°-60°   | 2957.4  | 23.3      |
| 60°-70°   | 4133.2  | 32.6      |
| 70°-80°   | 1996.8  | 15.7      |
| 80°-90°   | 128.3   | 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°    | 12693.3 | 100.0     |
| 0°-180°   | 12693.3 | 100.0     |

**Coefficient of Utilization**

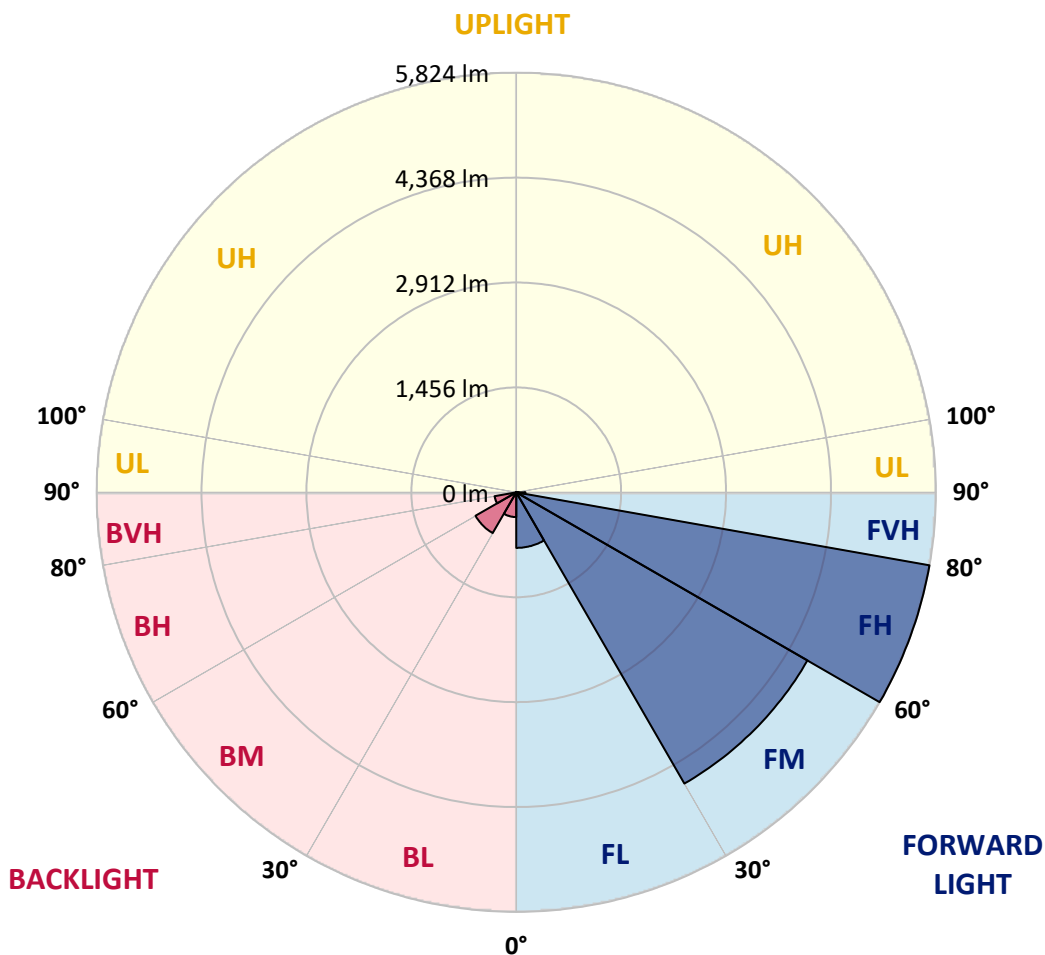


REPORT NUMBER: P383072  
 CATALOG NUMBER: GAN-SA4A-735-U-T4W-HSS

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 771.3  | 6.1       |                         |      |         |
| FM (30°-60°)   | 4667.6 | 36.8      |                         |      |         |
| FH (60°-80°)   | 5824.5 | 45.9      |                         |      | G3/7500 |
| FVH (80°-90°)  | 127.3  | 1.0       |                         |      | G2/225  |
| BL (0°-30°)    | 343.3  | 2.7       | B1/500                  |      |         |
| BM (30°-60°)   | 652.8  | 5.1       | B1/1000                 |      |         |
| BH (60°-80°)   | 305.5  | 2.4       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 1.1    | 0.0       |                         |      | G0/10   |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G3**  
 Type IV Short





REPORT NUMBER: P383072

CATALOG NUMBER: GAN-SA4A-735-U-T4W-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 46°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1271.8 | 1271.8 | 1271.8 | 1271.8 | 1271.8 | 1271.8 | 1271.8 | 1271.8 | 1271.8 | 1271.8 | 1271.8 |
| 2.5°  | 1412.9 | 1411.1 | 1402.7 | 1399.2 | 1379.0 | 1367.0 | 1362.3 | 1347.4 | 1326.0 | 1304.5 | 1280.8 |
| 5°    | 1573.6 | 1572.9 | 1557.5 | 1542.6 | 1504.5 | 1468.8 | 1462.3 | 1427.8 | 1379.5 | 1334.3 | 1289.1 |
| 7.5°  | 1737.8 | 1730.1 | 1714.6 | 1686.0 | 1630.7 | 1573.6 | 1568.2 | 1519.4 | 1451.0 | 1385.5 | 1320.7 |
| 10°   | 1877.1 | 1872.3 | 1852.1 | 1808.6 | 1743.8 | 1678.9 | 1672.3 | 1612.2 | 1534.9 | 1454.5 | 1371.8 |
| 12.5° | 1985.4 | 1981.9 | 1955.0 | 1900.9 | 1831.9 | 1764.6 | 1755.7 | 1702.1 | 1619.4 | 1529.5 | 1431.9 |
| 15°   | 2051.5 | 2049.7 | 2016.9 | 1959.2 | 1891.3 | 1833.0 | 1825.3 | 1778.3 | 1701.5 | 1607.5 | 1497.4 |
| 17.5° | 2066.9 | 2067.5 | 2033.6 | 1975.3 | 1919.4 | 1877.6 | 1871.8 | 1836.0 | 1771.7 | 1678.3 | 1562.9 |
| 20°   | 2032.5 | 2039.5 | 2009.2 | 1958.6 | 1924.1 | 1902.0 | 1897.3 | 1875.9 | 1821.7 | 1733.6 | 1615.2 |
| 22.5° | 1983.6 | 1987.2 | 1966.3 | 1932.4 | 1918.1 | 1922.3 | 1919.9 | 1908.0 | 1862.2 | 1781.3 | 1667.0 |
| 25°   | 1953.8 | 1953.8 | 1941.3 | 1912.7 | 1922.3 | 1947.9 | 1948.5 | 1946.1 | 1909.8 | 1839.6 | 1730.1 |
| 27.5° | 1952.6 | 1949.1 | 1934.8 | 1913.4 | 1939.6 | 1978.9 | 1981.2 | 1997.3 | 1974.7 | 1910.4 | 1808.6 |
| 30°   | 2000.3 | 1996.1 | 1965.8 | 1937.8 | 1971.2 | 2013.4 | 2019.3 | 2054.4 | 2043.2 | 1987.2 | 1896.2 |
| 32.5° | 2111.5 | 2096.7 | 2029.5 | 1983.6 | 2008.6 | 2059.2 | 2066.9 | 2122.9 | 2140.7 | 2081.8 | 1980.7 |
| 35°   | 2263.9 | 2216.9 | 2119.9 | 2070.5 | 2072.9 | 2125.9 | 2133.0 | 2215.1 | 2268.0 | 2168.7 | 2046.1 |
| 37.5° | 2474.0 | 2450.8 | 2293.1 | 2161.0 | 2171.7 | 2252.0 | 2272.9 | 2362.1 | 2347.2 | 2216.3 | 2120.5 |
| 40°   | 2934.7 | 2898.3 | 2730.6 | 2414.5 | 2266.3 | 2354.4 | 2360.9 | 2408.5 | 2409.7 | 2324.0 | 2275.2 |
| 42.5° | 3562.0 | 3547.1 | 3370.2 | 2874.6 | 2452.6 | 2422.9 | 2434.7 | 2515.1 | 2605.0 | 2551.4 | 2549.0 |
| 45°   | 4256.4 | 4248.7 | 4061.3 | 3485.1 | 2829.3 | 2647.2 | 2662.1 | 2769.8 | 2941.8 | 2953.7 | 3029.3 |
| 47.5° | 4815.3 | 4811.7 | 4704.0 | 4166.6 | 3406.0 | 3027.5 | 3032.3 | 3146.5 | 3448.9 | 3598.2 | 3719.0 |
| 50°   | 5324.7 | 5342.0 | 5256.9 | 4903.9 | 4191.6 | 3623.3 | 3611.9 | 3688.1 | 4173.7 | 4418.3 | 4568.3 |
| 52.5° | 6033.0 | 6057.4 | 5818.7 | 5592.0 | 5015.8 | 4362.3 | 4353.5 | 4433.2 | 5045.0 | 5228.3 | 5255.1 |
| 55°   | 6658.4 | 6616.8 | 6428.1 | 6362.7 | 6021.1 | 5275.4 | 5272.9 | 5343.2 | 5887.8 | 5965.7 | 6015.1 |
| 57.5° | 6934.6 | 6918.5 | 7009.6 | 7159.6 | 7073.9 | 6354.4 | 6349.0 | 6295.4 | 6641.7 | 6650.1 | 6801.9 |
| 60°   | 7109.0 | 7128.6 | 7407.8 | 7870.2 | 8083.8 | 7515.4 | 7480.9 | 7154.2 | 7361.9 | 7343.5 | 7505.9 |
| 62.5° | 6978.0 | 7016.7 | 7519.0 | 8289.7 | 8839.6 | 8529.0 | 8480.2 | 7941.0 | 7977.3 | 7913.6 | 8064.8 |
| 65°   | 6282.9 | 6343.0 | 7166.1 | 8210.6 | 9214.6 | 9321.1 | 9271.7 | 8635.5 | 8465.9 | 8361.1 | 8277.3 |
| 67.5° | 5101.5 | 5137.3 | 5996.7 | 7522.0 | 9045.5 | 9793.6 | 9783.6 | 9244.3 | 8834.9 | 8285.6 | 7634.5 |
| 69°   | 4216.0 | 4251.1 | 5078.3 | 6797.1 | 8673.6 | 9894.8 | 9914.5 | 9439.6 | 8764.7 | 7826.1 | 6764.3 |
| 70°   | 3570.8 | 3608.3 | 4379.0 | 6175.8 | 8242.1 | 9847.9 | 9882.9 | 9421.1 | 8563.5 | 7294.0 | 6000.8 |
| 72.5° | 1872.9 | 1905.0 | 2696.0 | 4254.7 | 6719.2 | 9042.6 | 9149.1 | 8624.8 | 7258.9 | 5297.3 | 3548.3 |
| 75°   | 588.6  | 607.1  | 1052.8 | 2224.1 | 4600.4 | 7031.0 | 7055.4 | 6765.6 | 5154.5 | 2913.8 | 1477.7 |
| 77.5° | 224.4  | 219.0  | 350.5  | 819.5  | 2325.8 | 4427.3 | 4576.6 | 4227.9 | 2704.9 | 1030.2 | 341.0  |
| 80°   | 120.8  | 121.4  | 182.1  | 339.3  | 995.1  | 2275.2 | 2401.4 | 2049.0 | 961.2  | 321.4  | 78.5   |
| 82.5° | 52.4   | 54.8   | 102.4  | 179.7  | 457.1  | 839.1  | 902.2  | 751.1  | 367.2  | 216.0  | 29.2   |
| 85°   | 11.3   | 12.5   | 49.4   | 97.6   | 186.3  | 235.7  | 247.0  | 243.4  | 233.9  | 167.9  | 11.3   |
| 87.5° | 0.0    | 0.0    | 22.0   | 35.1   | 47.0   | 53.6   | 47.0   | 61.3   | 129.1  | 113.1  | 6.0    |
| 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: P383072

CATALOG NUMBER: GAN-SA4A-735-U-T4W-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1271.8 | 1271.8 | 1271.8 | 1271.8 | 1271.8 | 1271.8 | 1271.8 | 1271.8 | 1271.8 | 1271.8 | 1271.8 |
| 2.5°  | 1273.1 | 1262.3 | 1243.8 | 1223.6 | 1209.3 | 1194.4 | 1182.5 | 1177.2 | 1171.2 | 1167.0 | 1172.4 |
| 5°    | 1270.6 | 1249.8 | 1214.1 | 1179.5 | 1154.6 | 1134.3 | 1117.7 | 1111.1 | 1104.6 | 1099.8 | 1099.2 |
| 7.5°  | 1291.5 | 1262.3 | 1207.6 | 1157.0 | 1118.2 | 1090.9 | 1068.3 | 1058.8 | 1051.1 | 1047.4 | 1044.5 |
| 10°   | 1331.4 | 1293.8 | 1220.6 | 1154.6 | 1104.6 | 1058.1 | 1009.3 | 971.9  | 947.5  | 936.1  | 932.0  |
| 12.5° | 1383.1 | 1336.1 | 1245.7 | 1167.0 | 1094.5 | 1005.2 | 901.6  | 812.4  | 754.6  | 735.5  | 724.3  |
| 15°   | 1443.8 | 1385.5 | 1278.4 | 1183.2 | 1057.6 | 894.5  | 719.0  | 602.2  | 548.7  | 538.0  | 526.1  |
| 17.5° | 1502.1 | 1437.8 | 1317.7 | 1186.1 | 976.6  | 714.8  | 526.7  | 447.5  | 426.7  | 433.8  | 435.7  |
| 20°   | 1553.4 | 1489.6 | 1356.3 | 1160.0 | 829.6  | 536.2  | 407.6  | 388.0  | 395.8  | 409.4  | 411.8  |
| 22.5° | 1605.1 | 1539.7 | 1392.0 | 1090.9 | 641.6  | 407.1  | 367.2  | 372.0  | 379.7  | 393.4  | 395.8  |
| 25°   | 1668.2 | 1600.3 | 1425.4 | 964.2  | 481.4  | 346.3  | 348.8  | 355.9  | 363.7  | 376.2  | 377.3  |
| 27.5° | 1740.8 | 1677.1 | 1447.3 | 799.3  | 357.1  | 318.4  | 326.1  | 336.8  | 344.6  | 356.5  | 358.8  |
| 30°   | 1837.2 | 1778.3 | 1454.5 | 628.5  | 299.4  | 293.4  | 297.0  | 310.1  | 321.4  | 332.1  | 333.9  |
| 32.5° | 1927.7 | 1878.3 | 1430.8 | 474.3  | 277.3  | 270.1  | 270.1  | 278.0  | 291.0  | 301.2  | 303.5  |
| 35°   | 2011.0 | 1978.9 | 1354.6 | 347.0  | 260.6  | 248.7  | 242.9  | 242.9  | 251.1  | 259.4  | 261.9  |
| 37.5° | 2121.0 | 2119.9 | 1231.3 | 276.8  | 244.6  | 230.9  | 218.4  | 208.9  | 206.0  | 207.7  | 208.9  |
| 40°   | 2309.8 | 2311.5 | 1070.6 | 248.2  | 230.9  | 212.5  | 193.4  | 176.2  | 160.1  | 154.7  | 154.2  |
| 42.5° | 2604.3 | 2577.6 | 902.2  | 234.5  | 219.0  | 193.4  | 164.9  | 141.7  | 116.6  | 108.9  | 108.3  |
| 45°   | 3072.2 | 2913.2 | 723.7  | 222.0  | 206.5  | 172.0  | 136.3  | 104.7  | 84.5   | 78.5   | 78.5   |
| 47.5° | 3753.6 | 3354.2 | 560.6  | 208.3  | 189.8  | 147.6  | 102.9  | 75.5   | 61.9   | 58.9   | 59.5   |
| 50°   | 4458.2 | 3786.3 | 429.7  | 191.1  | 169.6  | 122.0  | 76.2   | 54.8   | 47.0   | 47.0   | 47.6   |
| 52.5° | 5083.1 | 4102.9 | 335.1  | 172.6  | 144.6  | 95.9   | 57.8   | 42.9   | 39.3   | 38.7   | 39.3   |
| 55°   | 5668.1 | 4307.0 | 256.5  | 151.2  | 114.9  | 71.4   | 44.1   | 35.1   | 32.7   | 31.6   | 30.9   |
| 57.5° | 6232.3 | 4408.2 | 192.3  | 122.0  | 83.3   | 51.8   | 35.1   | 29.7   | 27.4   | 25.6   | 25.0   |
| 60°   | 6607.8 | 4326.1 | 132.1  | 89.9   | 57.8   | 37.4   | 29.2   | 25.6   | 22.6   | 20.9   | 20.2   |
| 62.5° | 6819.8 | 4101.7 | 85.1   | 64.8   | 41.1   | 27.9   | 23.2   | 21.4   | 17.2   | 15.5   | 15.5   |
| 65°   | 6734.1 | 3731.5 | 59.5   | 46.4   | 29.7   | 20.9   | 17.2   | 17.2   | 12.5   | 10.2   | 9.5    |
| 67.5° | 5967.5 | 3152.5 | 45.3   | 34.6   | 21.4   | 15.5   | 13.1   | 14.9   | 7.7    | 4.8    | 4.8    |
| 69°   | 5134.3 | 2612.7 | 38.7   | 28.6   | 17.9   | 12.5   | 11.3   | 13.7   | 5.3    | 3.5    | 3.0    |
| 70°   | 4462.4 | 2253.8 | 35.1   | 25.0   | 14.9   | 10.7   | 10.2   | 13.1   | 5.3    | 3.0    | 2.4    |
| 72.5° | 2669.8 | 1256.9 | 26.7   | 17.9   | 9.5    | 8.3    | 8.3    | 14.9   | 5.3    | 3.0    | 2.4    |
| 75°   | 1079.0 | 442.8  | 19.7   | 12.5   | 7.2    | 7.2    | 10.2   | 19.0   | 4.8    | 2.4    | 1.8    |
| 77.5° | 244.6  | 97.0   | 11.3   | 7.7    | 4.8    | 7.2    | 11.9   | 14.9   | 3.0    | 1.2    | 0.0    |
| 80°   | 59.5   | 23.8   | 7.2    | 4.8    | 3.0    | 5.3    | 8.9    | 8.3    | 0.6    | 0.0    | 0.0    |
| 82.5° | 19.7   | 8.3    | 3.0    | 2.4    | 0.6    | 1.8    | 4.2    | 2.4    | 0.0    | 0.0    | 0.0    |
| 85°   | 8.3    | 4.8    | 1.2    | 0.6    | 0.0    | 0.0    | 0.6    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 5.3    | 1.8    | 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)