

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: P192772

Luminaire Tested: **GAN-AF-04-LED-U-SL2-7030-600-HSS**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P192772  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24287)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-AF-04-LED-U-SL2-7030-600-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 12674.1 lumens  
Efficiency: N/A  
Efficacy: 98.2 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

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: 28.75 FT



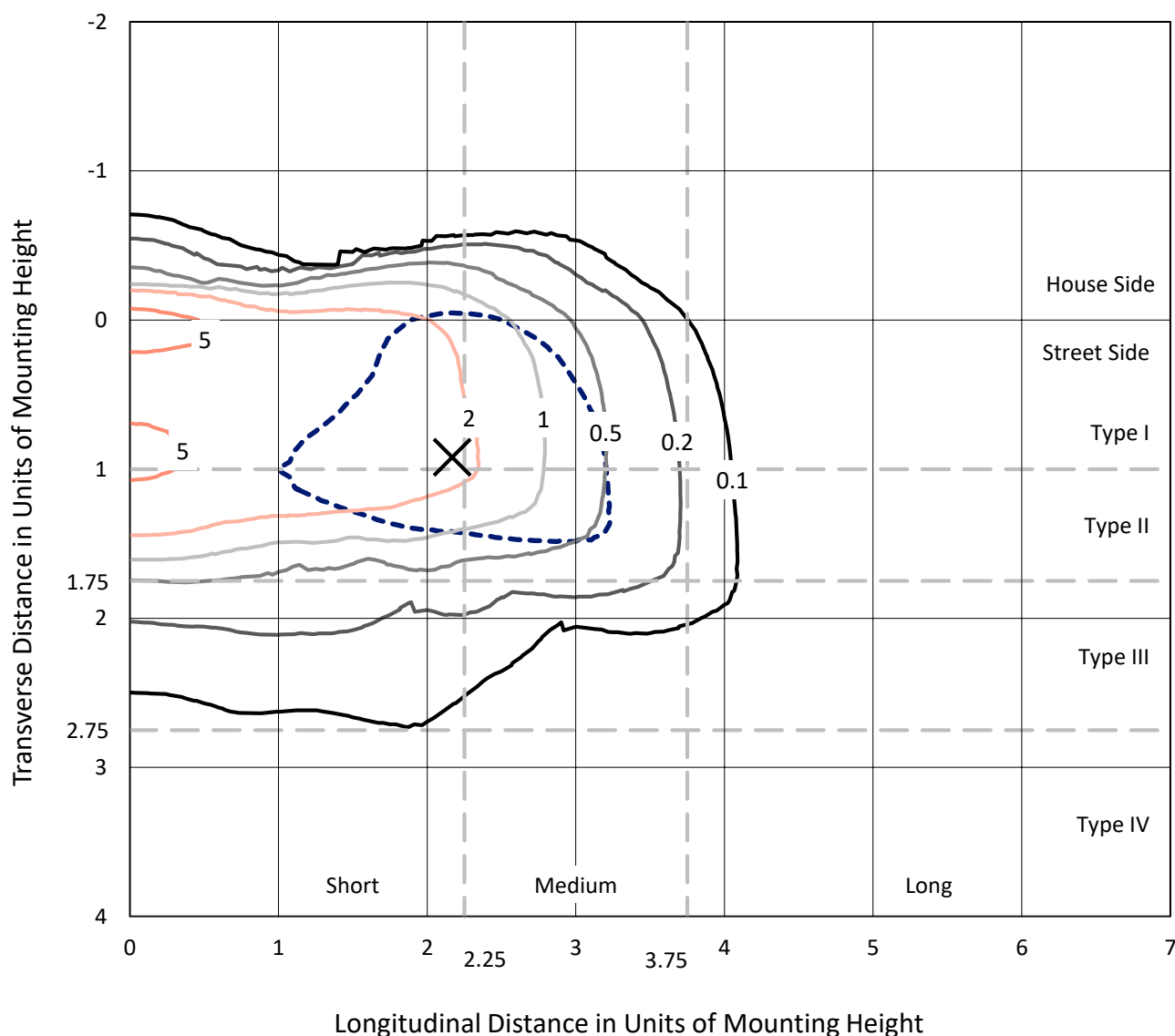
REPORT NUMBER: P192772

CATALOG NUMBER: GAN-AF-04-LED-U-SL2-7030-600-HSS

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

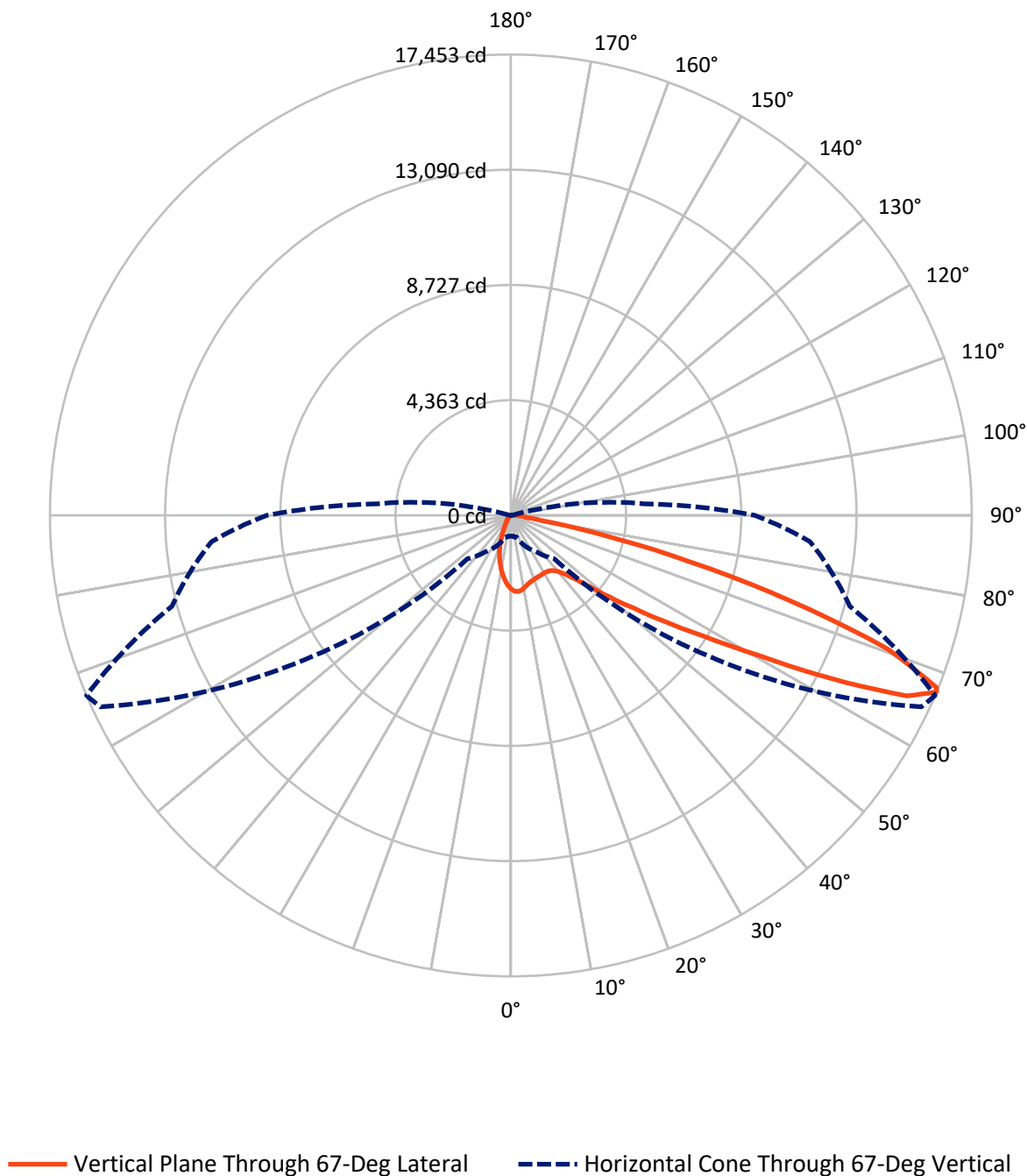


Based on 20 foot mounting height. Maximum calculated value = 7 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P192772

CATALOG NUMBER: GAN-AF-04-LED-U-SL2-7030-600-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P192772

CATALOG NUMBER: GAN-AF-04-LED-U-SL2-7030-600-HSS

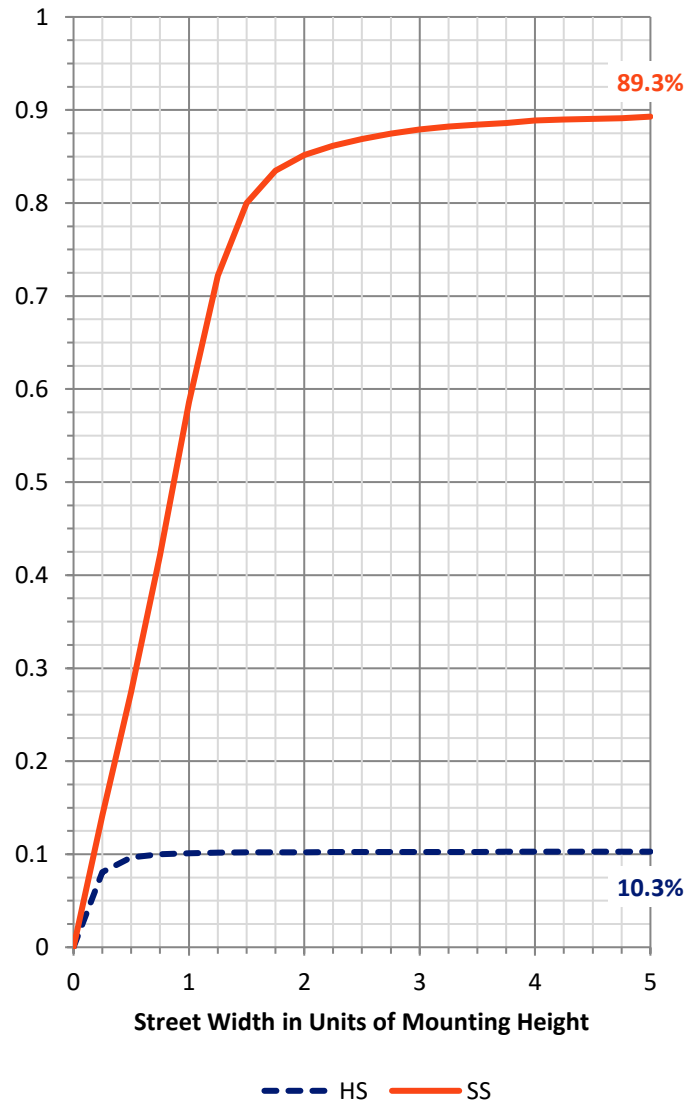
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1316.0   | 0.0    | 1316.0  |
|                    | % Fixture | 10.4     | 0.0    | 10.4    |
| <b>Street Side</b> | Lumens    | 11358.1  | 0.0    | 11358.1 |
|                    | % Fixture | 89.6     | 0.0    | 89.6    |
| <b>Total</b>       | Lumens    | 12674.1  | 0.0    | 12674.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 227.4   | 1.8       |
| 10°-20°   | 484.1   | 3.8       |
| 20°-30°   | 703.8   | 5.6       |
| 30°-40°   | 1097.9  | 8.7       |
| 40°-50°   | 1944.9  | 15.3      |
| 50°-60°   | 3077.7  | 24.3      |
| 60°-70°   | 3525.1  | 27.8      |
| 70°-80°   | 1462.2  | 11.5      |
| 80°-90°   | 151.0   | 1.2       |
| 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°    | 12674.1 | 100.0     |
| 0°-180°   | 12674.1 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P192772

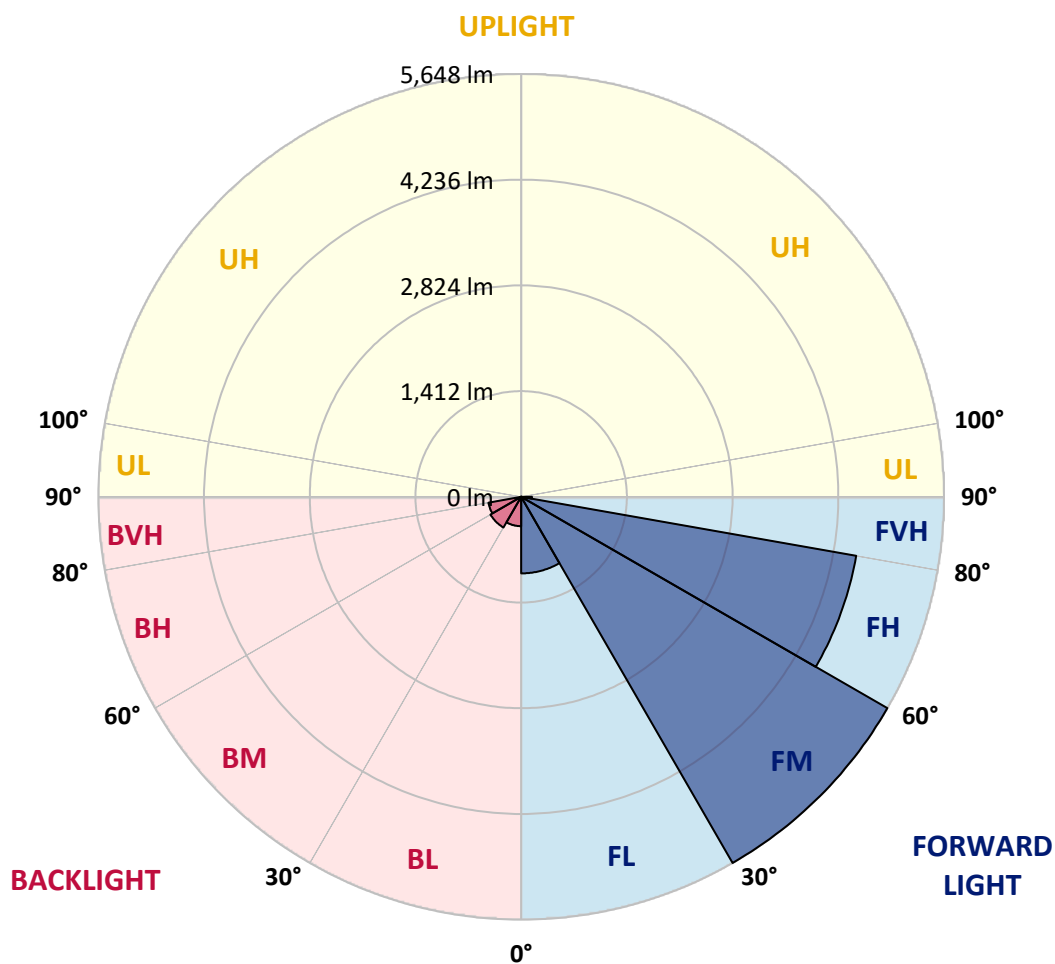
CATALOG NUMBER: GAN-AF-04-LED-U-SL2-7030-600-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1022.6 | 8.1       |                         |      |         |
| FM   | (30°-60°)   | 5647.6 | 44.6      |                         |      |         |
| FH   | (60°-80°)   | 4543.7 | 35.9      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 144.2  | 1.1       |                         |      | G2/225  |
| BL   | (0°-30°)    | 392.7  | 3.1       | B1/500                  |      |         |
| BM   | (30°-60°)   | 473.0  | 3.7       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 443.5  | 3.5       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 6.8    | 0.1       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type II Short





REPORT NUMBER: P192772

CATALOG NUMBER: GAN-AF-04-LED-U-SL2-7030-600-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 65°     | 67°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| 0°    | 2795.1 | 2795.1 | 2795.1 | 2795.1 | 2795.1 | 2795.1 | 2795.1  | 2795.1  | 2795.1  | 2795.1  | 2795.1  |
| 2.5°  | 2889.7 | 2895.6 | 2895.0 | 2899.3 | 2909.7 | 2910.4 | 2900.1  | 2880.1  | 2875.7  | 2849.8  | 2804.6  |
| 5°    | 2665.0 | 2682.0 | 2692.3 | 2734.4 | 2781.7 | 2838.7 | 2881.6  | 2897.1  | 2895.0  | 2876.5  | 2808.4  |
| 7.5°  | 2408.5 | 2425.4 | 2437.3 | 2486.8 | 2549.7 | 2647.3 | 2758.9  | 2850.6  | 2858.7  | 2878.7  | 2805.4  |
| 10°   | 2237.7 | 2240.7 | 2257.0 | 2304.3 | 2370.1 | 2469.8 | 2602.9  | 2763.2  | 2787.8  | 2860.9  | 2798.0  |
| 12.5° | 2097.2 | 2099.4 | 2120.9 | 2172.0 | 2242.1 | 2342.6 | 2482.4  | 2668.0  | 2705.7  | 2838.7  | 2796.6  |
| 15°   | 1997.5 | 2005.6 | 2024.8 | 2078.0 | 2152.7 | 2252.5 | 2395.9  | 2597.7  | 2642.8  | 2830.6  | 2809.9  |
| 17.5° | 1964.2 | 1973.0 | 1979.0 | 2017.4 | 2085.4 | 2183.0 | 2330.1  | 2551.9  | 2602.9  | 2835.1  | 2835.8  |
| 20°   | 1998.9 | 2005.6 | 1992.3 | 2001.8 | 2044.0 | 2131.2 | 2274.7  | 2512.8  | 2573.3  | 2840.2  | 2869.0  |
| 22.5° | 2128.3 | 2131.2 | 2095.0 | 2052.9 | 2045.6 | 2093.5 | 2231.1  | 2481.6  | 2546.8  | 2854.3  | 2908.2  |
| 25°   | 2350.0 | 2344.9 | 2285.8 | 2194.8 | 2109.0 | 2086.9 | 2205.2  | 2462.4  | 2533.4  | 2869.0  | 2948.9  |
| 27.5° | 2617.7 | 2625.1 | 2543.8 | 2411.5 | 2248.0 | 2131.2 | 2201.5  | 2454.3  | 2527.5  | 2879.4  | 2984.3  |
| 30°   | 2942.9 | 2953.3 | 2860.2 | 2693.8 | 2459.5 | 2240.7 | 2235.5  | 2452.9  | 2523.8  | 2872.8  | 2987.2  |
| 32.5° | 3274.8 | 3287.4 | 3214.3 | 3042.8 | 2741.9 | 2424.0 | 2312.4  | 2469.0  | 2531.2  | 2849.8  | 2970.3  |
| 35°   | 3622.3 | 3640.1 | 3591.3 | 3444.2 | 3124.9 | 2688.7 | 2447.6  | 2518.7  | 2566.0  | 2847.7  | 2953.3  |
| 37.5° | 4102.1 | 4118.3 | 4026.6 | 3870.7 | 3588.3 | 3043.5 | 2665.0  | 2611.8  | 2648.0  | 2883.1  | 2957.7  |
| 40°   | 4818.5 | 4816.2 | 4579.6 | 4340.9 | 4097.7 | 3494.4 | 2970.3  | 2780.3  | 2798.7  | 2990.3  | 3012.4  |
| 42.5° | 5599.1 | 5595.3 | 5245.7 | 4882.7 | 4663.1 | 4049.5 | 3371.7  | 3071.6  | 3059.0  | 3187.6  | 3154.5  |
| 45°   | 6200.8 | 6200.1 | 5914.8 | 5505.9 | 5344.0 | 4686.9 | 3890.7  | 3476.7  | 3457.5  | 3508.5  | 3416.1  |
| 47.5° | 6457.3 | 6461.8 | 6318.4 | 6030.8 | 6098.9 | 5548.8 | 4544.8  | 4063.7  | 4034.8  | 4014.0  | 3873.7  |
| 50°   | 6257.8 | 6266.6 | 6278.5 | 6222.4 | 6652.5 | 6707.2 | 5422.4  | 4890.9  | 4876.8  | 4784.5  | 4564.9  |
| 52.5° | 5605.8 | 5650.8 | 5789.7 | 5968.0 | 6844.6 | 7819.0 | 6798.1  | 5918.5  | 5843.0  | 5744.8  | 5503.0  |
| 55°   | 4507.2 | 4556.7 | 4820.6 | 5253.0 | 6558.7 | 8549.4 | 8726.1  | 7243.2  | 7117.4  | 6824.0  | 6475.0  |
| 57.5° | 2982.9 | 3059.8 | 3442.6 | 3992.7 | 5727.7 | 8667.0 | 10649.6 | 9081.6  | 8644.0  | 7840.5  | 7447.2  |
| 60°   | 1643.4 | 1717.2 | 2132.7 | 2631.0 | 4136.9 | 8085.9 | 11943.3 | 11475.4 | 10702.2 | 8976.7  | 8627.7  |
| 62.5° | 1012.1 | 1051.9 | 1358.7 | 1822.2 | 2481.0 | 6382.0 | 12211.0 | 14483.4 | 13588.1 | 10439.7 | 10053.8 |
| 65°   | 805.8  | 822.8  | 972.9  | 1489.6 | 1778.6 | 3796.0 | 11346.7 | 16776.5 | 16477.8 | 12211.0 | 11330.5 |
| 67°   | 782.1  | 788.8  | 859.8  | 1278.9 | 1676.6 | 2327.1 | 9506.0  | 17149.9 | 17453.0 | 13282.8 | 11370.4 |
| 67.5° | 787.3  | 794.7  | 861.9  | 1220.5 | 1673.7 | 2138.6 | 8871.8  | 17002.7 | 17385.7 | 13367.9 | 11193.7 |
| 70°   | 759.3  | 782.1  | 986.9  | 1219.8 | 1591.6 | 1777.1 | 5312.9  | 14731.8 | 15130.2 | 12420.9 | 9497.9  |
| 72.5° | 269.1  | 270.5  | 426.5  | 986.9  | 1730.5 | 1796.3 | 2668.0  | 10799.7 | 11094.6 | 9501.6  | 6847.8  |
| 75°   | 159.6  | 136.0  | 141.9  | 280.9  | 1653.7 | 1744.7 | 1539.1  | 6901.0  | 7011.0  | 5444.6  | 3467.8  |
| 77.5° | 110.2  | 96.1   | 99.1   | 124.2  | 629.9  | 1720.3 | 1222.7  | 3598.7  | 3481.1  | 1909.6  | 738.5   |
| 80°   | 62.9   | 55.4   | 59.1   | 108.7  | 229.1  | 1604.9 | 1153.2  | 1459.2  | 1244.1  | 323.9   | 204.0   |
| 82.5° | 33.3   | 28.1   | 34.0   | 89.5   | 159.6  | 1000.2 | 1155.4  | 705.3   | 558.9   | 109.4   | 139.0   |
| 85°   | 11.8   | 9.7    | 16.3   | 61.4   | 106.4  | 306.8  | 1071.2  | 592.8   | 465.8   | 53.2    | 105.8   |
| 87.5° | 2.1    | 2.1    | 6.7    | 25.1   | 42.8   | 93.9   | 633.4   | 352.0   | 235.8   | 31.8    | 72.4    |
| 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: P192772

CATALOG NUMBER: GAN-AF-04-LED-U-SL2-7030-600-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2795.1 | 2795.1 | 2795.1 | 2795.1 | 2795.1 | 2795.1 | 2795.1 | 2795.1 | 2795.1 | 2795.1 | 2795.1 |
| 2.5°  | 2786.2 | 2754.4 | 2711.6 | 2659.1 | 2597.0 | 2542.3 | 2501.6 | 2459.5 | 2450.5 | 2435.8 | 2433.6 |
| 5°    | 2767.7 | 2713.0 | 2606.6 | 2484.7 | 2354.5 | 2237.0 | 2141.6 | 2056.6 | 2018.9 | 1986.4 | 1982.6 |
| 7.5°  | 2740.4 | 2658.4 | 2477.2 | 2280.6 | 2077.2 | 1892.5 | 1735.8 | 1624.9 | 1522.8 | 1474.0 | 1466.7 |
| 10°   | 2708.6 | 2591.1 | 2331.6 | 2058.8 | 1777.8 | 1516.9 | 1284.2 | 1088.9 | 970.7  | 900.4  | 891.5  |
| 12.5° | 2679.0 | 2525.3 | 2183.0 | 1828.9 | 1455.6 | 1106.7 | 807.2  | 620.9  | 496.8  | 446.6  | 440.7  |
| 15°   | 2665.0 | 2472.1 | 2044.0 | 1593.9 | 1118.5 | 704.5  | 441.3  | 341.6  | 300.9  | 289.1  | 288.3  |
| 17.5° | 2663.5 | 2426.9 | 1908.0 | 1350.7 | 783.6  | 409.5  | 287.6  | 262.4  | 254.3  | 251.3  | 251.3  |
| 20°   | 2662.7 | 2384.0 | 1771.9 | 1098.5 | 497.5  | 272.8  | 239.5  | 233.6  | 227.7  | 224.0  | 224.0  |
| 22.5° | 2671.0 | 2345.7 | 1630.0 | 841.3  | 313.5  | 221.0  | 210.7  | 204.8  | 197.4  | 192.2  | 191.4  |
| 25°   | 2679.0 | 2316.1 | 1485.2 | 598.7  | 226.9  | 192.2  | 181.8  | 173.7  | 163.4  | 156.7  | 156.0  |
| 27.5° | 2680.5 | 2279.1 | 1329.9 | 400.7  | 190.0  | 167.8  | 154.5  | 141.9  | 130.1  | 123.5  | 122.7  |
| 30°   | 2658.4 | 2217.0 | 1157.7 | 270.5  | 167.8  | 145.7  | 128.0  | 114.6  | 103.5  | 98.4   | 98.4   |
| 32.5° | 2614.7 | 2140.2 | 968.4  | 204.0  | 149.3  | 124.9  | 105.8  | 93.2   | 85.8   | 83.6   | 82.8   |
| 35°   | 2575.6 | 2057.4 | 774.0  | 172.9  | 133.9  | 105.8  | 86.6   | 78.3   | 74.0   | 73.2   | 72.4   |
| 37.5° | 2552.7 | 1990.8 | 591.4  | 156.7  | 119.0  | 88.7   | 73.2   | 67.3   | 65.0   | 63.6   | 64.4   |
| 40°   | 2570.4 | 1935.3 | 436.9  | 143.4  | 104.3  | 74.0   | 62.1   | 59.1   | 57.0   | 56.2   | 56.2   |
| 42.5° | 2648.0 | 1925.7 | 324.5  | 131.5  | 90.1   | 61.4   | 54.0   | 51.8   | 50.3   | 49.5   | 50.3   |
| 45°   | 2852.0 | 1984.9 | 252.1  | 120.5  | 76.2   | 51.8   | 45.8   | 45.2   | 44.4   | 44.4   | 44.4   |
| 47.5° | 3158.8 | 2106.8 | 210.0  | 107.9  | 63.6   | 44.4   | 39.9   | 39.3   | 38.5   | 39.3   | 39.3   |
| 50°   | 3678.5 | 2330.1 | 187.8  | 95.4   | 52.5   | 37.7   | 34.0   | 34.0   | 34.0   | 34.0   | 34.8   |
| 52.5° | 4468.8 | 2769.1 | 172.9  | 82.8   | 42.8   | 31.8   | 28.9   | 28.9   | 29.6   | 29.6   | 30.3   |
| 55°   | 5349.3 | 3351.7 | 159.6  | 70.3   | 36.3   | 26.7   | 23.7   | 24.4   | 25.1   | 25.9   | 25.9   |
| 57.5° | 6304.4 | 3997.1 | 148.6  | 57.7   | 31.0   | 21.5   | 20.0   | 20.6   | 21.5   | 23.0   | 23.0   |
| 60°   | 7456.8 | 4695.8 | 132.3  | 45.2   | 25.9   | 17.1   | 15.6   | 17.1   | 19.2   | 20.6   | 21.5   |
| 62.5° | 8722.3 | 5371.4 | 111.7  | 35.5   | 21.5   | 13.3   | 12.6   | 15.6   | 18.5   | 20.0   | 20.6   |
| 65°   | 9587.3 | 5583.5 | 85.8   | 28.9   | 16.3   | 9.7    | 10.4   | 14.1   | 17.7   | 20.0   | 20.0   |
| 67°   | 9236.9 | 5062.4 | 70.3   | 24.4   | 13.3   | 7.4    | 9.7    | 14.1   | 17.7   | 19.2   | 20.0   |
| 67.5° | 8993.6 | 4858.3 | 67.3   | 23.7   | 12.6   | 7.4    | 9.7    | 14.1   | 17.7   | 20.0   | 20.0   |
| 70°   | 7317.8 | 3649.7 | 56.2   | 17.7   | 10.4   | 6.7    | 8.0    | 13.3   | 17.1   | 19.2   | 19.2   |
| 72.5° | 5084.6 | 2250.3 | 50.3   | 12.6   | 8.8    | 5.9    | 7.4    | 12.6   | 16.3   | 18.5   | 19.2   |
| 75°   | 2417.4 | 814.6  | 42.8   | 9.7    | 8.0    | 5.1    | 6.7    | 12.6   | 16.3   | 18.5   | 18.5   |
| 77.5° | 493.1  | 189.2  | 34.8   | 8.0    | 6.7    | 5.1    | 5.9    | 11.8   | 15.6   | 17.7   | 17.7   |
| 80°   | 161.9  | 73.2   | 25.9   | 7.4    | 6.7    | 5.1    | 5.9    | 11.0   | 15.6   | 17.1   | 17.7   |
| 82.5° | 116.8  | 36.9   | 17.1   | 7.4    | 6.7    | 5.1    | 5.1    | 11.0   | 14.7   | 17.1   | 17.1   |
| 85°   | 89.5   | 25.9   | 11.0   | 7.4    | 6.7    | 5.1    | 5.1    | 10.4   | 14.1   | 16.3   | 16.3   |
| 87.5° | 59.1   | 10.4   | 8.8    | 7.4    | 6.7    | 5.1    | 5.1    | 10.4   | 13.3   | 15.6   | 16.3   |
| 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)