

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: P192952

Luminaire Tested: **GAN-AF-04-LED-U-SL4-7030-HSS**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P192952  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24301)  
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-SL4-7030-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(4) 70 CRI, 3000K, 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: 18848.3 lumens  
Efficiency: N/A  
Efficacy: 83.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G4

Input Watts (W): 225  
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



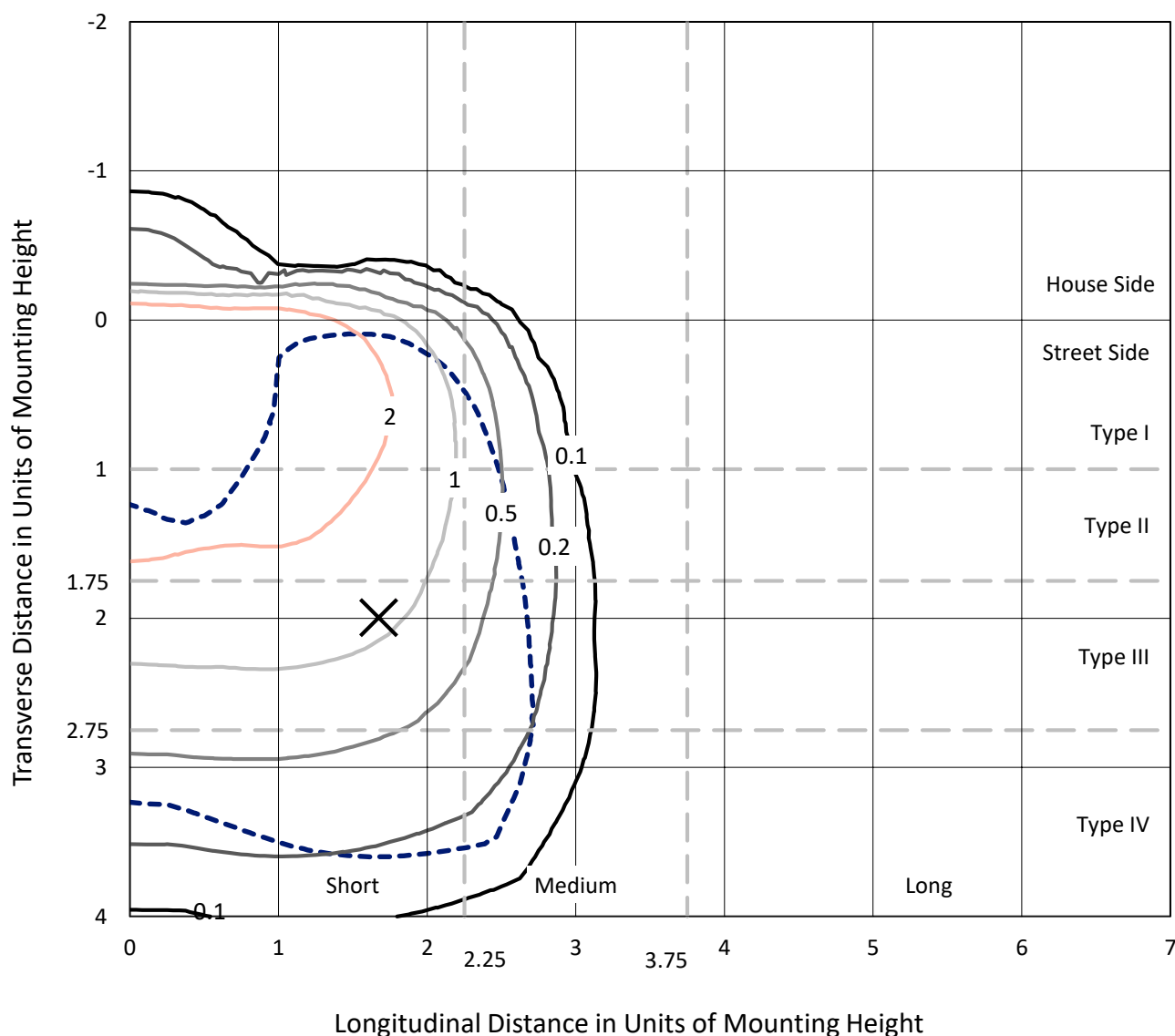
REPORT NUMBER: P192952

CATALOG NUMBER: GAN-AF-04-LED-U-SL4-7030-HSS

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

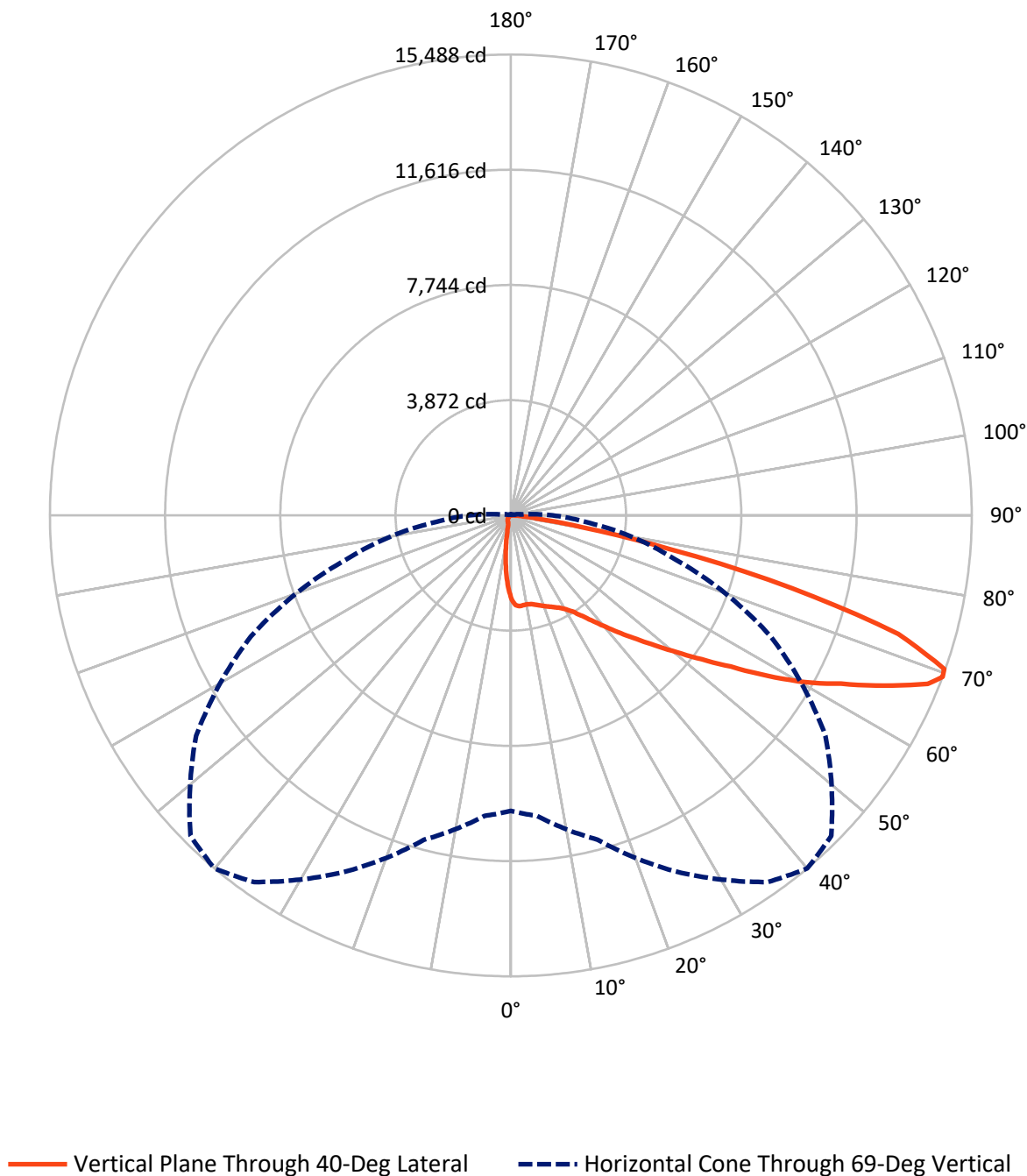


Based on 25 foot mounting height. Maximum calculated value = 4.9 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P192952

CATALOG NUMBER: GAN-AF-04-LED-U-SL4-7030-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P192952

CATALOG NUMBER: GAN-AF-04-LED-U-SL4-7030-HSS

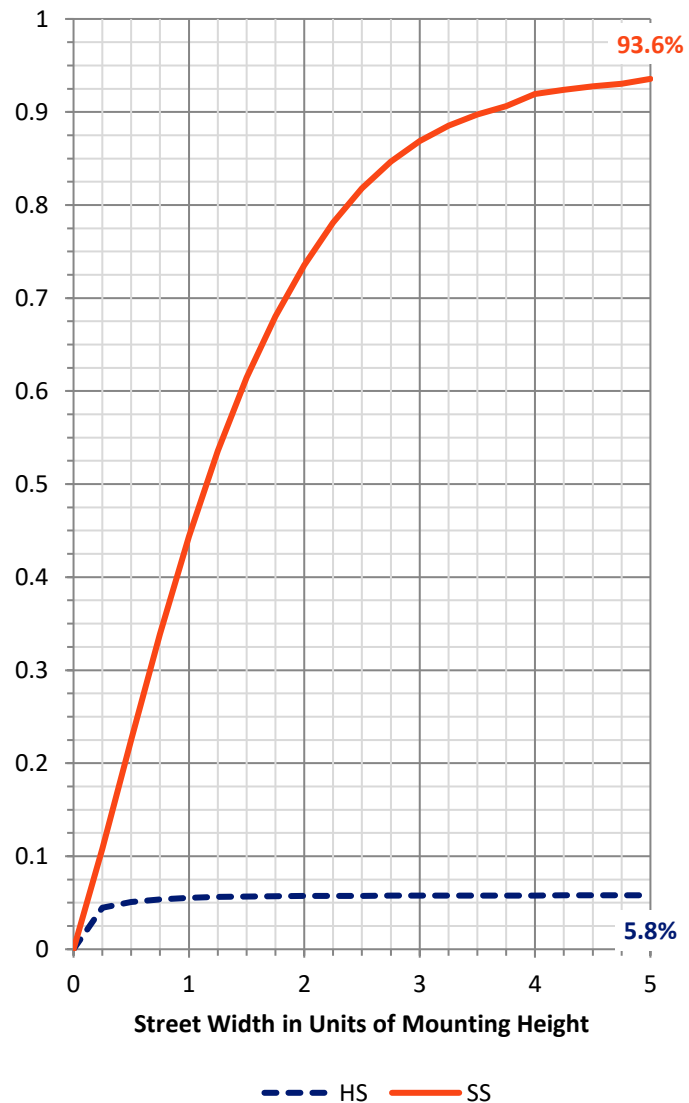
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1102.7   | 0.0    | 1102.7  |
|                    | % Fixture | 5.9      | 0.0    | 5.9     |
| <b>Street Side</b> | Lumens    | 17745.6  | 0.0    | 17745.6 |
|                    | % Fixture | 94.1     | 0.0    | 94.1    |
| <b>Total</b>       | Lumens    | 18848.3  | 0.0    | 18848.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 228.3   | 1.2       |
| 10°-20°   | 561.5   | 3.0       |
| 20°-30°   | 945.7   | 5.0       |
| 30°-40°   | 1548.2  | 8.2       |
| 40°-50°   | 2680.7  | 14.2      |
| 50°-60°   | 4222.3  | 22.4      |
| 60°-70°   | 5514.2  | 29.3      |
| 70°-80°   | 2840.1  | 15.1      |
| 80°-90°   | 307.2   | 1.6       |
| 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°    | 18848.3 | 100.0     |
| 0°-180°   | 18848.3 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P192952

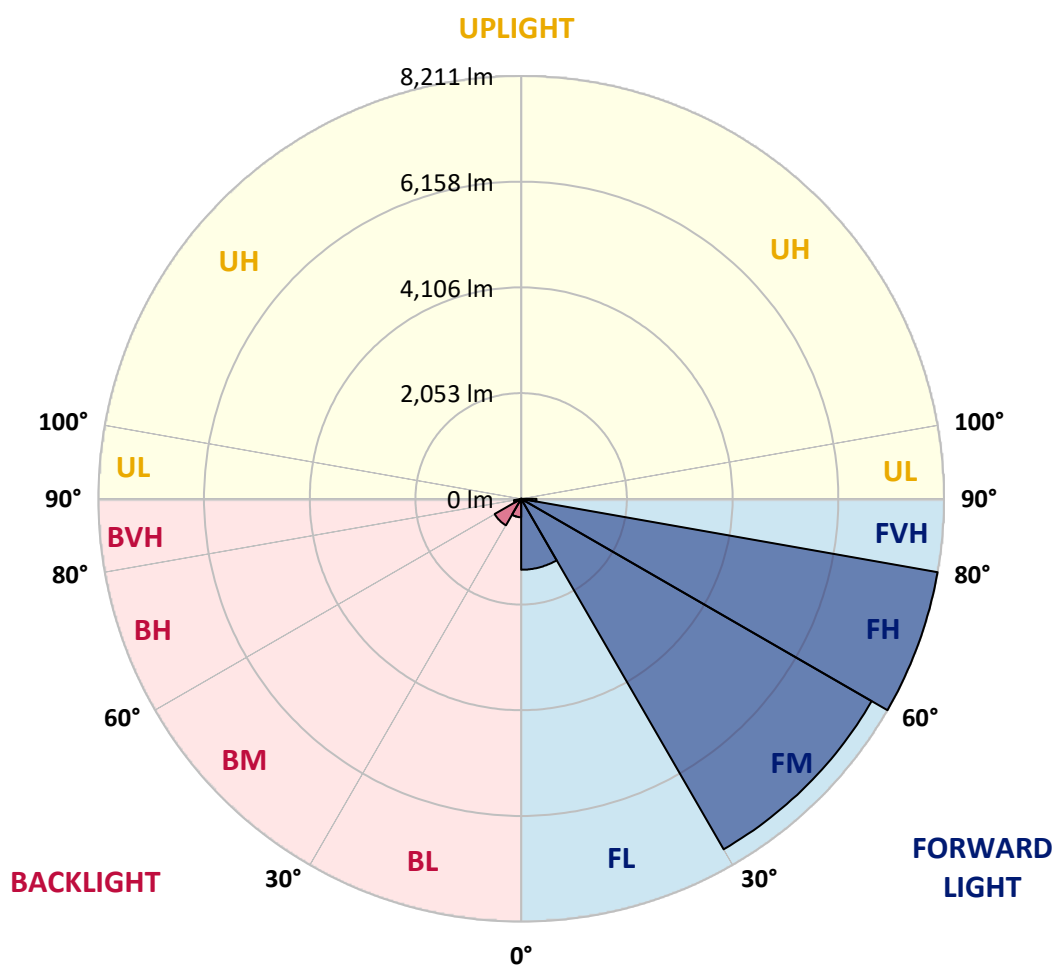
CATALOG NUMBER: GAN-AF-04-LED-U-SL4-7030-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1378.4 | 7.3       |                         |      |          |
| FM   | (30°-60°)   | 7858.6 | 41.7      |                         |      |          |
| FH   | (60°-80°)   | 8211.1 | 43.6      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 297.6  | 1.6       |                         |      | G3/500   |
| BL   | (0°-30°)    | 357.2  | 1.9       | B1/500                  |      |          |
| BM   | (30°-60°)   | 592.7  | 3.1       | B1/1000                 |      |          |
| BH   | (60°-80°)   | 143.2  | 0.8       | B1/500                  |      | G1/500   |
| BVH  | (80°-90°)   | 9.6    | 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-G4**

Type IV Short





REPORT NUMBER: P192952

CATALOG NUMBER: GAN-AF-04-LED-U-SL4-7030-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°      | 15°     | 25°     | 35°     | 40°     | 45°     | 55°     | 65°     | 75°     | 85°    |
|-------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 2816.0 | 2816.0  | 2816.0  | 2816.0  | 2816.0  | 2816.0  | 2816.0  | 2816.0  | 2816.0  | 2816.0  | 2816.0 |
| 2.5°  | 3092.0 | 3075.2  | 3065.0  | 3051.6  | 3034.7  | 3020.3  | 3014.6  | 2973.1  | 2933.8  | 2880.0  | 2818.3 |
| 5°    | 3149.3 | 3143.6  | 3125.7  | 3107.8  | 3087.5  | 3065.0  | 3052.8  | 3003.4  | 2947.3  | 2868.7  | 2761.1 |
| 7.5°  | 3154.9 | 3148.1  | 3125.7  | 3101.0  | 3072.9  | 3046.0  | 3024.8  | 2975.3  | 2923.8  | 2844.1  | 2712.8 |
| 10°   | 3145.9 | 3138.0  | 3121.2  | 3094.2  | 3059.5  | 3033.7  | 3012.4  | 2965.3  | 2921.5  | 2849.7  | 2703.8 |
| 12.5° | 3135.7 | 3128.0  | 3120.1  | 3106.6  | 3076.3  | 3058.3  | 3040.4  | 2995.6  | 2956.2  | 2895.7  | 2736.4 |
| 15°   | 3145.9 | 3141.4  | 3150.4  | 3144.8  | 3128.0  | 3112.2  | 3094.2  | 3053.9  | 3018.0  | 2967.5  | 2795.8 |
| 17.5° | 3188.5 | 3188.5  | 3216.6  | 3220.0  | 3204.2  | 3181.7  | 3156.0  | 3115.6  | 3085.3  | 3042.7  | 2866.5 |
| 20°   | 3288.3 | 3285.0  | 3320.9  | 3327.6  | 3289.5  | 3254.8  | 3216.6  | 3167.2  | 3143.6  | 3116.7  | 2936.2 |
| 22.5° | 3460.0 | 3444.3  | 3465.6  | 3458.9  | 3383.8  | 3329.9  | 3282.8  | 3222.2  | 3209.8  | 3197.5  | 3013.5 |
| 25°   | 3683.2 | 3674.3  | 3688.9  | 3622.7  | 3490.3  | 3417.4  | 3361.3  | 3292.8  | 3292.8  | 3305.2  | 3101.0 |
| 27.5° | 4007.5 | 3973.9  | 3924.5  | 3807.8  | 3609.3  | 3516.1  | 3455.6  | 3382.5  | 3401.7  | 3447.6  | 3216.6 |
| 30°   | 4339.6 | 4302.6  | 4189.2  | 4009.9  | 3753.9  | 3656.4  | 3585.7  | 3509.4  | 3554.3  | 3638.5  | 3371.4 |
| 32.5° | 4667.2 | 4625.7  | 4465.3  | 4238.6  | 3961.5  | 3864.0  | 3795.4  | 3711.3  | 3786.5  | 3927.9  | 3598.0 |
| 35°   | 4984.7 | 4947.7  | 4762.6  | 4495.6  | 4237.5  | 4156.8  | 4094.0  | 4021.0  | 4117.4  | 4314.9  | 3917.8 |
| 37.5° | 5341.4 | 5301.2  | 5075.6  | 4786.1  | 4572.9  | 4514.6  | 4468.6  | 4395.7  | 4564.0  | 4853.4  | 4363.2 |
| 40°   | 5780.2 | 5711.7  | 5407.7  | 5119.4  | 4961.1  | 4933.0  | 4901.7  | 4891.6  | 5153.0  | 5553.5  | 4956.6 |
| 42.5° | 6282.7 | 6170.6  | 5755.4  | 5470.5  | 5387.5  | 5407.7  | 5399.8  | 5444.7  | 5890.1  | 6424.1  | 5679.2 |
| 45°   | 6785.4 | 6640.7  | 6142.5  | 5845.3  | 5856.4  | 5927.1  | 5970.9  | 6150.4  | 6813.4  | 7422.6  | 6456.6 |
| 47.5° | 7211.7 | 7069.3  | 6513.9  | 6250.2  | 6384.9  | 6524.0  | 6643.0  | 6982.9  | 7762.7  | 8405.5  | 7061.4 |
| 50°   | 7576.4 | 7441.7  | 6907.7  | 6695.6  | 6998.6  | 7222.9  | 7416.0  | 7919.6  | 8783.6  | 9153.8  | 7485.5 |
| 52.5° | 7874.8 | 7785.0  | 7316.1  | 7206.0  | 7699.8  | 8028.5  | 8311.3  | 8914.8  | 9687.8  | 9761.9  | 7815.4 |
| 55°   | 8165.4 | 8101.5  | 7754.7  | 7813.1  | 8523.4  | 8970.9  | 9328.8  | 9970.6  | 10466.5 | 10268.9 | 8131.7 |
| 57.5° | 8499.8 | 8441.4  | 8255.1  | 8582.8  | 9606.0  | 10169.1 | 10559.6 | 10906.3 | 11152.0 | 10787.2 | 8430.1 |
| 60°   | 8840.8 | 8807.2  | 8811.6  | 9437.6  | 10849.0 | 11389.8 | 11605.2 | 11695.0 | 11825.1 | 11275.3 | 8447.0 |
| 62.5° | 9166.1 | 9230.1  | 9447.7  | 10389.0 | 12039.4 | 12454.5 | 12563.2 | 12652.0 | 12499.4 | 11352.8 | 7804.2 |
| 65°   | 9717.0 | 9821.4  | 10340.9 | 11662.5 | 13348.6 | 13793.0 | 13905.2 | 13601.1 | 12606.0 | 10352.0 | 6347.9 |
| 67.5° | 9986.3 | 10177.0 | 11103.7 | 12849.4 | 14618.7 | 15112.3 | 15070.7 | 13662.9 | 11312.3 | 7893.9  | 4073.7 |
| 69°   | 9930.1 | 10133.2 | 11279.8 | 13212.9 | 15040.5 | 15488.1 | 15224.5 | 12907.8 | 9637.3  | 5718.4  | 2500.7 |
| 70°   | 9708.0 | 9913.3  | 11189.0 | 13199.5 | 15094.3 | 15448.9 | 14939.6 | 11975.5 | 8148.5  | 4181.5  | 1563.9 |
| 72.5° | 8107.0 | 8284.2  | 9933.6  | 11930.6 | 13905.2 | 13616.9 | 12498.2 | 8296.6  | 3970.5  | 1138.8  | 352.3  |
| 75°   | 4990.3 | 5089.1  | 7127.6  | 8987.7  | 10502.3 | 9761.9  | 8326.9  | 4127.6  | 1183.6  | 322.0   | 195.2  |
| 77.5° | 2636.5 | 2681.4  | 3902.0  | 5297.8  | 6657.5  | 5508.7  | 4267.7  | 1609.9  | 545.2   | 201.9   | 141.4  |
| 80°   | 1558.4 | 1592.0  | 2101.4  | 2422.3  | 2881.0  | 2406.6  | 1706.4  | 988.5   | 390.4   | 126.7   | 125.6  |
| 82.5° | 891.9  | 913.3   | 1523.6  | 1346.3  | 1135.4  | 969.3   | 849.3   | 936.8   | 234.5   | 85.2    | 130.1  |
| 85°   | 327.6  | 332.0   | 857.1   | 1024.3  | 675.4   | 401.6   | 421.8   | 776.4   | 62.9    | 53.9    | 102.0  |
| 87.5° | 152.6  | 149.2   | 441.0   | 627.1   | 395.0   | 254.7   | 328.8   | 170.6   | 24.7    | 34.8    | 28.1   |
| 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: P192952

CATALOG NUMBER: GAN-AF-04-LED-U-SL4-7030-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2816.0 | 2816.0 | 2816.0 | 2816.0 | 2816.0 | 2816.0 | 2816.0 | 2816.0 | 2816.0 | 2816.0 | 2816.0 |
| 2.5°  | 2782.4 | 2740.9 | 2665.7 | 2588.3 | 2509.8 | 2449.1 | 2389.7 | 2342.6 | 2326.9 | 2297.7 | 2299.9 |
| 5°    | 2697.1 | 2620.8 | 2463.8 | 2304.4 | 2138.4 | 2001.5 | 1872.4 | 1768.2 | 1717.7 | 1666.1 | 1666.1 |
| 7.5°  | 2623.1 | 2512.0 | 2266.2 | 2007.1 | 1739.0 | 1513.5 | 1310.4 | 1157.8 | 1073.7 | 1006.4 | 1005.3 |
| 10°   | 2595.0 | 2444.6 | 2101.4 | 1730.0 | 1356.5 | 1049.0 | 807.8  | 653.0  | 573.3  | 521.7  | 519.4  |
| 12.5° | 2607.4 | 2421.0 | 1974.7 | 1474.2 | 1005.3 | 674.2  | 467.8  | 367.9  | 334.4  | 318.6  | 318.6  |
| 15°   | 2643.3 | 2414.4 | 1847.8 | 1224.0 | 710.1  | 421.8  | 310.8  | 283.8  | 281.6  | 281.6  | 281.6  |
| 17.5° | 2687.0 | 2416.6 | 1717.7 | 980.6  | 483.6  | 301.8  | 268.1  | 264.7  | 267.0  | 267.0  | 267.0  |
| 20°   | 2731.9 | 2417.8 | 1577.3 | 755.1  | 341.1  | 262.6  | 252.4  | 251.3  | 253.6  | 253.6  | 254.7  |
| 22.5° | 2786.8 | 2423.4 | 1437.2 | 564.4  | 281.6  | 247.9  | 240.1  | 240.1  | 241.3  | 241.3  | 240.1  |
| 25°   | 2849.7 | 2434.7 | 1291.3 | 418.5  | 256.9  | 237.8  | 231.1  | 230.0  | 231.1  | 230.0  | 228.9  |
| 27.5° | 2928.2 | 2450.2 | 1128.6 | 327.6  | 245.8  | 227.8  | 222.2  | 222.2  | 221.0  | 219.9  | 218.7  |
| 30°   | 3026.9 | 2468.2 | 945.7  | 278.3  | 234.5  | 218.7  | 213.2  | 212.1  | 210.9  | 208.6  | 208.6  |
| 32.5° | 3177.3 | 2507.5 | 765.2  | 252.4  | 222.2  | 206.4  | 201.9  | 201.9  | 199.7  | 197.4  | 196.3  |
| 35°   | 3408.5 | 2585.0 | 603.5  | 236.8  | 208.6  | 193.0  | 187.4  | 187.4  | 185.0  | 184.0  | 182.9  |
| 37.5° | 3728.2 | 2702.7 | 468.9  | 222.2  | 195.2  | 178.4  | 172.7  | 171.6  | 169.5  | 167.1  | 166.1  |
| 40°   | 4153.4 | 2848.6 | 369.1  | 208.6  | 181.7  | 163.8  | 159.3  | 157.2  | 152.6  | 149.2  | 149.2  |
| 42.5° | 4687.4 | 3014.6 | 299.6  | 194.1  | 166.1  | 150.3  | 147.0  | 143.5  | 135.7  | 132.4  | 131.2  |
| 45°   | 5246.1 | 3163.8 | 253.6  | 177.2  | 150.3  | 136.9  | 134.6  | 129.0  | 118.9  | 115.6  | 115.6  |
| 47.5° | 5648.9 | 3198.6 | 223.2  | 161.6  | 135.7  | 122.3  | 121.2  | 111.1  | 102.0  | 99.9   | 98.8   |
| 50°   | 5900.2 | 3130.2 | 198.7  | 145.9  | 122.3  | 108.8  | 105.4  | 93.1   | 87.5   | 85.2   | 84.1   |
| 52.5° | 6069.6 | 3007.9 | 178.4  | 132.4  | 110.0  | 96.4   | 88.6   | 79.6   | 75.2   | 72.8   | 72.8   |
| 55°   | 6205.4 | 2835.1 | 158.2  | 120.0  | 99.9   | 86.5   | 75.2   | 68.4   | 63.9   | 61.7   | 61.7   |
| 57.5° | 6243.5 | 2600.6 | 138.0  | 110.0  | 89.7   | 76.3   | 63.9   | 59.4   | 53.9   | 52.8   | 52.8   |
| 60°   | 5966.4 | 2177.6 | 122.3  | 97.6   | 80.8   | 66.2   | 56.0   | 50.5   | 44.9   | 43.7   | 42.6   |
| 62.5° | 5236.0 | 1685.1 | 107.7  | 86.5   | 70.7   | 57.3   | 48.3   | 41.5   | 37.0   | 37.0   | 37.0   |
| 65°   | 3994.1 | 1129.7 | 94.3   | 75.2   | 61.7   | 48.3   | 41.5   | 33.7   | 31.4   | 31.4   | 32.6   |
| 67.5° | 2390.8 | 614.8  | 80.8   | 63.9   | 52.8   | 40.4   | 34.8   | 29.2   | 28.1   | 29.2   | 29.2   |
| 69°   | 1401.2 | 361.2  | 72.8   | 57.3   | 46.0   | 35.9   | 30.3   | 25.7   | 28.1   | 29.2   | 29.2   |
| 70°   | 865.0  | 243.4  | 67.3   | 51.6   | 41.5   | 32.6   | 28.1   | 24.7   | 26.9   | 28.1   | 28.1   |
| 72.5° | 241.3  | 125.6  | 53.9   | 40.4   | 33.7   | 26.9   | 22.4   | 22.4   | 25.7   | 26.9   | 26.9   |
| 75°   | 157.2  | 93.1   | 41.5   | 30.3   | 25.7   | 21.3   | 19.1   | 21.3   | 24.7   | 25.7   | 25.7   |
| 77.5° | 130.1  | 76.3   | 33.7   | 24.7   | 21.3   | 20.2   | 17.9   | 19.1   | 22.4   | 23.6   | 23.6   |
| 80°   | 118.9  | 53.9   | 26.9   | 22.4   | 19.1   | 17.9   | 16.8   | 15.8   | 20.2   | 21.3   | 21.3   |
| 82.5° | 113.3  | 42.6   | 23.6   | 20.2   | 17.9   | 15.8   | 14.5   | 15.8   | 17.9   | 19.1   | 20.2   |
| 85°   | 70.7   | 28.1   | 21.3   | 19.1   | 15.8   | 14.5   | 14.5   | 14.5   | 16.8   | 17.9   | 17.9   |
| 87.5° | 25.7   | 22.4   | 19.1   | 15.8   | 13.4   | 13.4   | 13.4   | 13.4   | 14.5   | 16.8   | 16.8   |
| 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)