

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: P301964

Luminaire Tested: **GAA-AF-08-LED-U-SL4-8030-600-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P301964  
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: GAA-AF-08-LED-U-SL4-8030-600-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 80 CRI, 3000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type IV  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 18911.8 lumens  
Efficiency: N/A  
Efficacy: 73.6 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G4  
  
Input Watts (W): 257  
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

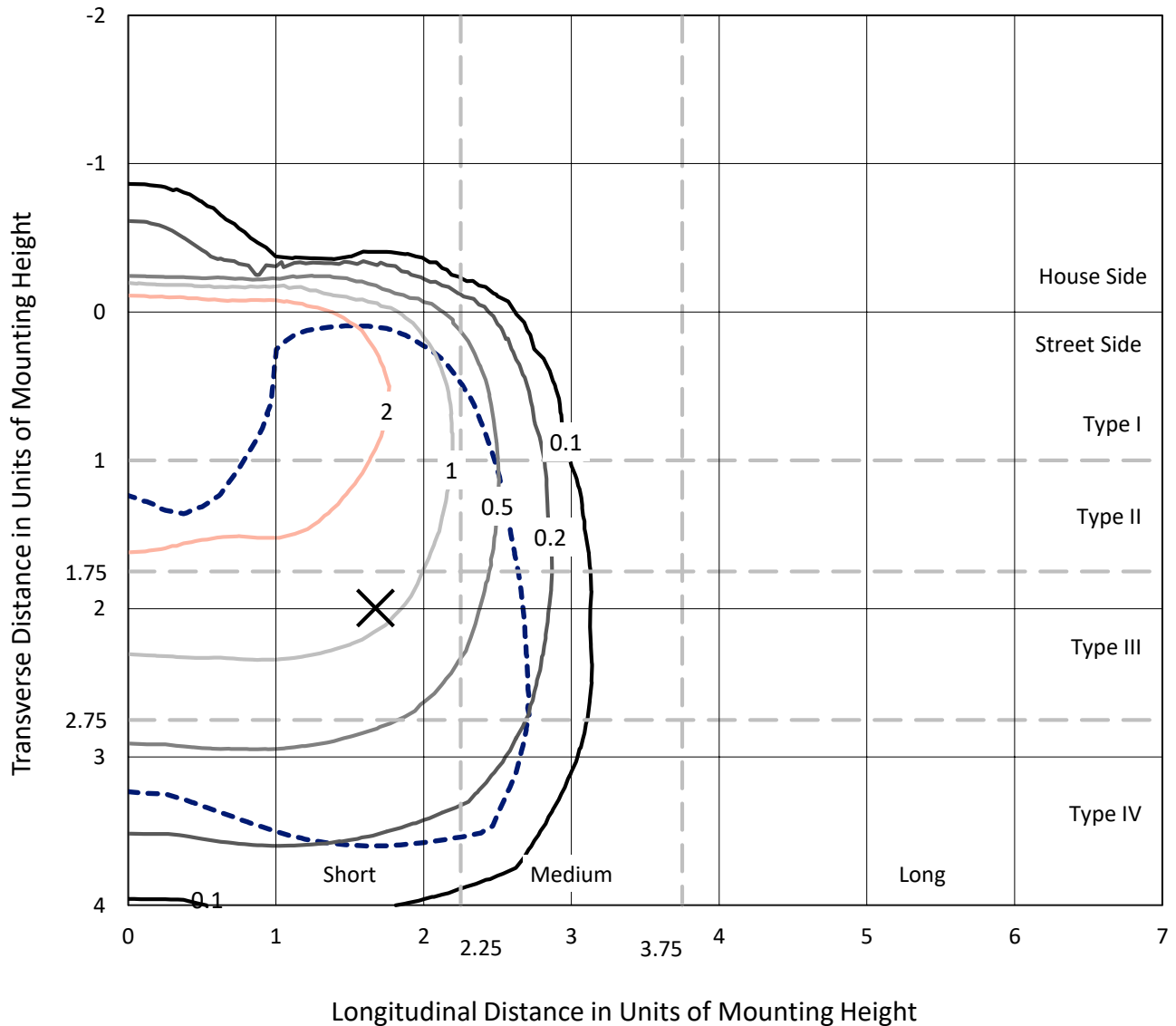


REPORT NUMBER: P301964

CATALOG NUMBER: GAA-AF-08-LED-U-SL4-8030-600-HSS

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

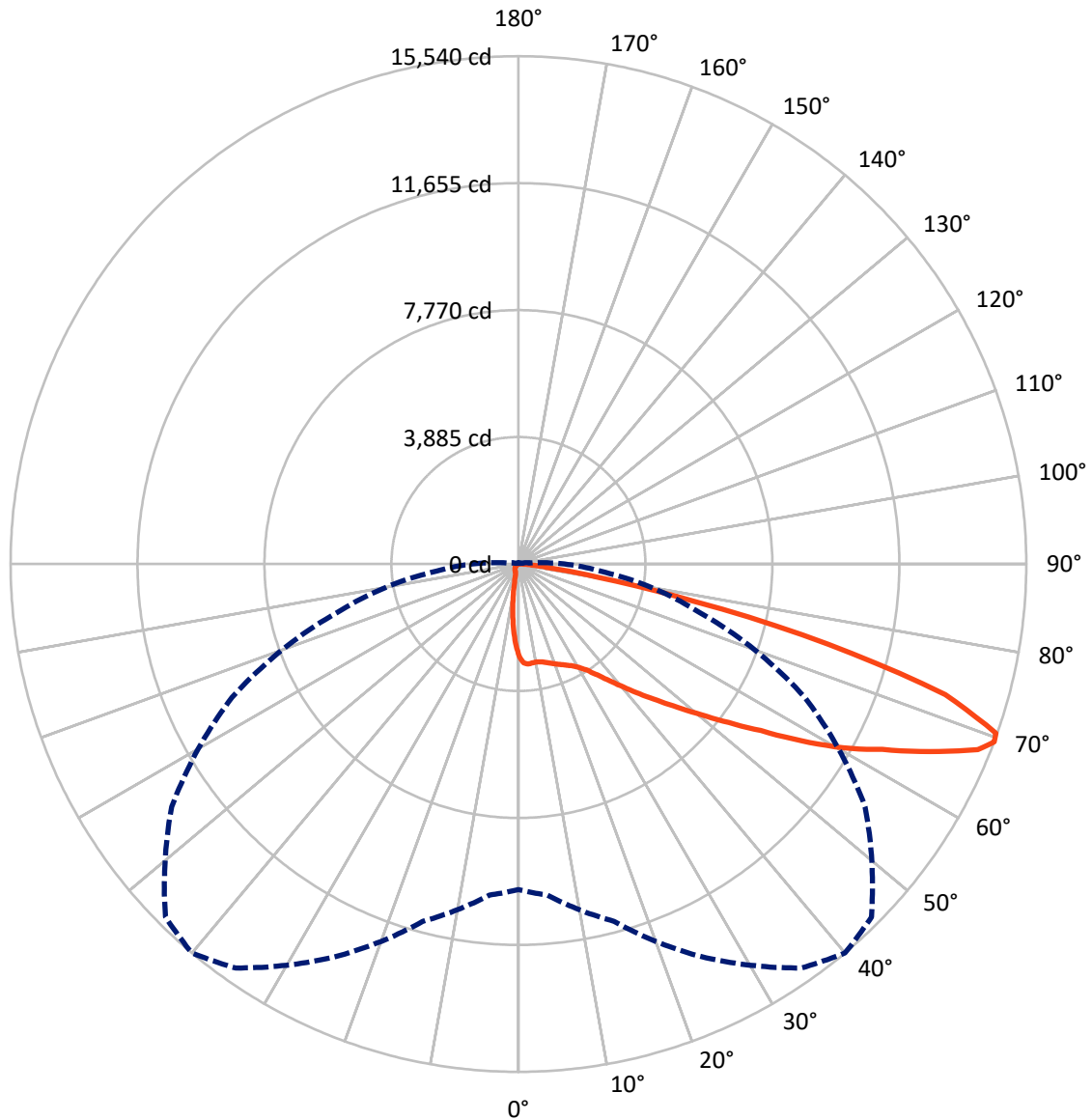


Based on 25 foot mounting height. Maximum calculated value = 4.9 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P301964

CATALOG NUMBER: GAA-AF-08-LED-U-SL4-8030-600-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral    - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P301964

CATALOG NUMBER: GAA-AF-08-LED-U-SL4-8030-600-HSS

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1106.4   | 0.0    | 1106.4  |
|                    | % Fixture | 5.9      | 0.0    | 5.9     |
| <b>Street Side</b> | Lumens    | 17805.3  | 0.0    | 17805.3 |
|                    | % Fixture | 94.1     | 0.0    | 94.1    |
| <b>Total</b>       | Lumens    | 18911.8  | 0.0    | 18911.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 229.1   | 1.2       |
| 10°-20°   | 563.4   | 3.0       |
| 20°-30°   | 948.9   | 5.0       |
| 30°-40°   | 1553.4  | 8.2       |
| 40°-50°   | 2689.7  | 14.2      |
| 50°-60°   | 4236.6  | 22.4      |
| 60°-70°   | 5532.8  | 29.3      |
| 70°-80°   | 2849.6  | 15.1      |
| 80°-90°   | 308.2   | 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°    | 18911.8 | 100.0     |
| 0°-180°   | 18911.8 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P301964

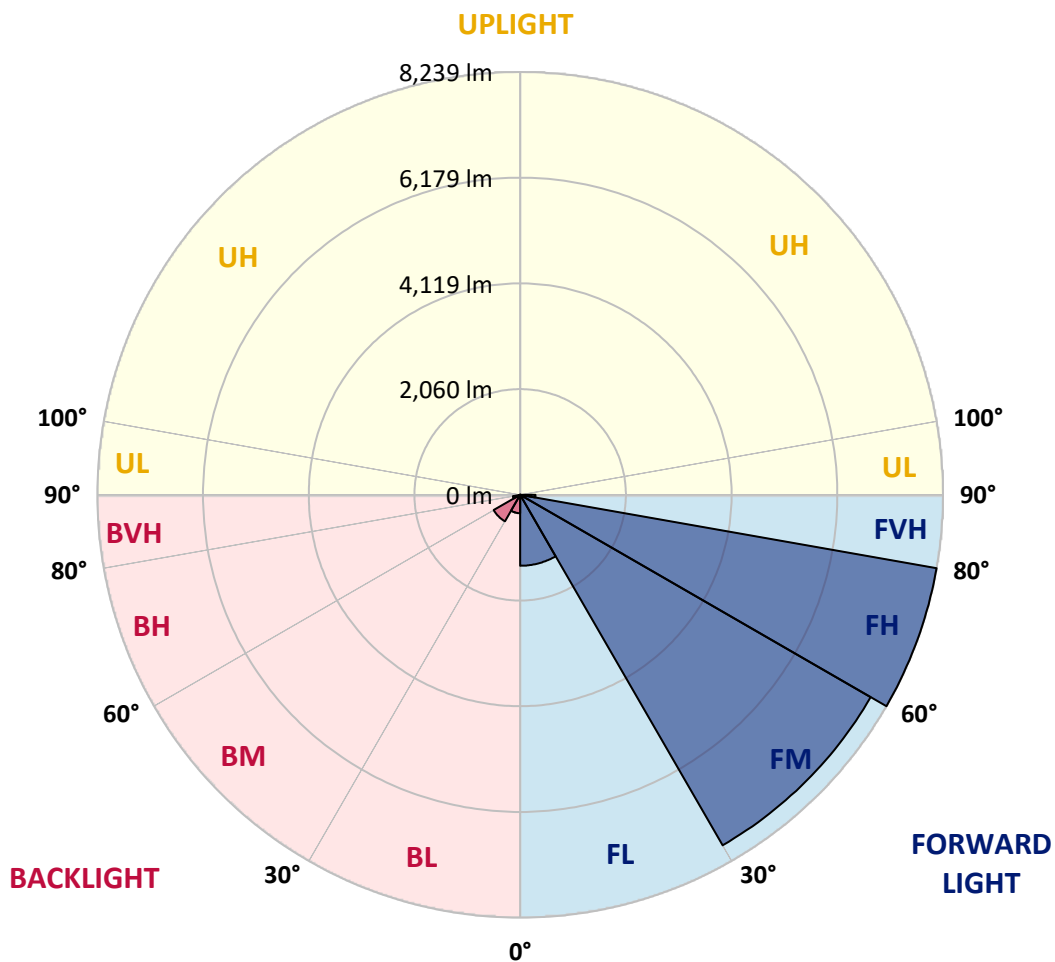
CATALOG NUMBER: GAA-AF-08-LED-U-SL4-8030-600-HSS

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1383.0 | 7.3       |                         |      |          |
| FM   | (30°-60°)   | 7885.0 | 41.7      |                         |      |          |
| FH   | (60°-80°)   | 8238.8 | 43.6      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 298.6  | 1.6       |                         |      | G3/500   |
| BL   | (0°-30°)    | 358.4  | 1.9       | B1/500                  |      |          |
| BM   | (30°-60°)   | 594.7  | 3.1       | B1/1000                 |      |          |
| BH   | (60°-80°)   | 143.7  | 0.8       | B1/500                  |      | G1/500   |
| BVH  | (80°-90°)   | 9.7    | 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: P301964

CATALOG NUMBER: GAA-AF-08-LED-U-SL4-8030-600-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 40°     | 45°     | 55°     | 65°     | 75°     | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 2825.5  | 2825.5  | 2825.5  | 2825.5  | 2825.5  | 2825.5  | 2825.5  | 2825.5  | 2825.5  | 2825.5  | 2825.5 |
| 2.5°  | 3102.4  | 3085.6  | 3075.4  | 3061.9  | 3045.0  | 3030.4  | 3024.8  | 2983.1  | 2943.7  | 2889.7  | 2827.8 |
| 5°    | 3159.9  | 3154.2  | 3136.2  | 3118.2  | 3097.9  | 3075.4  | 3063.0  | 3013.5  | 2957.2  | 2878.4  | 2770.4 |
| 7.5°  | 3165.5  | 3158.7  | 3136.2  | 3111.4  | 3083.3  | 3056.3  | 3034.9  | 2985.4  | 2933.6  | 2853.7  | 2722.0 |
| 10°   | 3156.5  | 3148.6  | 3131.7  | 3104.7  | 3069.8  | 3043.9  | 3022.5  | 2975.2  | 2931.3  | 2859.3  | 2712.9 |
| 12.5° | 3146.3  | 3138.5  | 3130.6  | 3117.1  | 3086.7  | 3068.7  | 3050.7  | 3005.6  | 2966.2  | 2905.4  | 2745.6 |
| 15°   | 3156.5  | 3152.0  | 3161.0  | 3155.3  | 3138.5  | 3122.7  | 3104.7  | 3064.2  | 3028.1  | 2977.5  | 2805.3 |
| 17.5° | 3199.3  | 3199.3  | 3227.4  | 3230.8  | 3215.0  | 3192.5  | 3166.6  | 3126.1  | 3095.7  | 3052.9  | 2876.2 |
| 20°   | 3299.4  | 3296.1  | 3332.1  | 3338.8  | 3300.6  | 3265.7  | 3227.4  | 3177.9  | 3154.2  | 3127.2  | 2946.0 |
| 22.5° | 3471.7  | 3455.9  | 3477.3  | 3470.5  | 3395.1  | 3341.1  | 3293.8  | 3233.0  | 3220.6  | 3208.3  | 3023.6 |
| 25°   | 3695.7  | 3686.7  | 3701.3  | 3634.9  | 3502.1  | 3428.9  | 3372.6  | 3303.9  | 3303.9  | 3316.3  | 3111.4 |
| 27.5° | 4021.0  | 3987.2  | 3937.7  | 3820.6  | 3621.4  | 3528.0  | 3467.2  | 3394.0  | 3413.1  | 3459.3  | 3227.4 |
| 30°   | 4354.2  | 4317.1  | 4203.4  | 4023.3  | 3766.6  | 3668.7  | 3597.8  | 3521.2  | 3566.2  | 3650.7  | 3382.7 |
| 32.5° | 4682.9  | 4641.3  | 4480.3  | 4252.9  | 3974.9  | 3876.9  | 3808.3  | 3723.8  | 3799.3  | 3941.1  | 3610.1 |
| 35°   | 5001.5  | 4964.4  | 4778.6  | 4510.7  | 4251.8  | 4170.7  | 4107.7  | 4034.5  | 4131.3  | 4329.5  | 3931.0 |
| 37.5° | 5359.5  | 5319.0  | 5092.7  | 4802.3  | 4588.4  | 4529.8  | 4483.7  | 4410.5  | 4579.4  | 4869.8  | 4377.9 |
| 40°   | 5799.6  | 5731.0  | 5425.9  | 5136.6  | 4977.9  | 4949.7  | 4918.2  | 4908.1  | 5170.4  | 5572.2  | 4973.4 |
| 42.5° | 6303.9  | 6191.4  | 5774.9  | 5488.9  | 5405.6  | 5425.9  | 5418.0  | 5463.0  | 5909.9  | 6445.8  | 5698.3 |
| 45°   | 6808.3  | 6663.0  | 6163.2  | 5864.9  | 5876.2  | 5947.1  | 5991.0  | 6171.1  | 6836.4  | 7447.7  | 6478.4 |
| 47.5° | 7236.0  | 7093.1  | 6535.8  | 6271.3  | 6406.4  | 6546.0  | 6665.3  | 7006.4  | 7788.7  | 8433.8  | 7085.2 |
| 50°   | 7601.9  | 7466.8  | 6931.0  | 6718.2  | 7022.1  | 7247.3  | 7440.9  | 7946.3  | 8813.1  | 9184.6  | 7510.7 |
| 52.5° | 7901.3  | 7811.3  | 7340.7  | 7230.4  | 7725.7  | 8055.5  | 8339.2  | 8944.8  | 9720.5  | 9794.8  | 7841.7 |
| 55°   | 8192.9  | 8128.7  | 7780.9  | 7839.4  | 8552.0  | 9001.1  | 9360.2  | 10004.1 | 10501.7 | 10303.6 | 8159.1 |
| 57.5° | 8528.3  | 8469.8  | 8282.9  | 8611.6  | 9638.3  | 10203.4 | 10595.1 | 10943.0 | 11189.5 | 10823.6 | 8458.5 |
| 60°   | 8870.6  | 8836.8  | 8841.3  | 9469.4  | 10885.6 | 11428.2 | 11644.3 | 11734.3 | 11864.9 | 11313.3 | 8475.4 |
| 62.5° | 9197.0  | 9261.2  | 9479.6  | 10424.0 | 12079.9 | 12496.4 | 12605.6 | 12694.6 | 12541.5 | 11391.0 | 7830.4 |
| 65°   | 9749.7  | 9854.4  | 10375.6 | 11701.7 | 13393.6 | 13839.4 | 13952.0 | 13646.9 | 12648.4 | 10386.9 | 6369.2 |
| 67.5° | 10019.9 | 10211.3 | 11141.1 | 12892.7 | 14667.9 | 15163.2 | 15121.6 | 13708.8 | 11350.5 | 7920.5  | 4087.4 |
| 69°   | 9963.6  | 10167.4 | 11317.8 | 13257.4 | 15091.2 | 15540.3 | 15275.8 | 12951.2 | 9669.8  | 5737.7  | 2509.2 |
| 70°   | 9740.7  | 9946.7  | 11226.7 | 13243.9 | 15145.2 | 15500.9 | 14989.9 | 12015.8 | 8176.0  | 4195.5  | 1569.2 |
| 72.5° | 8134.3  | 8312.2  | 9967.0  | 11970.7 | 13952.0 | 13662.7 | 12540.3 | 8324.6  | 3983.9  | 1142.6  | 353.5  |
| 75°   | 5007.1  | 5106.2  | 7151.6  | 9018.0  | 10537.7 | 9794.8  | 8355.0  | 4141.5  | 1187.6  | 323.1   | 195.9  |
| 77.5° | 2645.4  | 2690.4  | 3915.2  | 5315.6  | 6679.9  | 5527.2  | 4282.2  | 1615.4  | 547.1   | 202.6   | 141.8  |
| 80°   | 1563.6  | 1597.4  | 2108.4  | 2430.4  | 2890.8  | 2414.6  | 1712.2  | 991.7   | 391.7   | 127.2   | 126.1  |
| 82.5° | 894.9   | 916.3   | 1528.7  | 1350.8  | 1139.2  | 972.6   | 852.2   | 940.0   | 235.3   | 85.6    | 130.6  |
| 85°   | 328.7   | 333.2   | 860.0   | 1027.8  | 677.7   | 403.0   | 423.3   | 779.0   | 63.0    | 54.0    | 102.4  |
| 87.5° | 153.1   | 149.7   | 442.4   | 629.3   | 396.2   | 255.5   | 329.8   | 171.1   | 24.8    | 34.9    | 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: P301964

CATALOG NUMBER: GAA-AF-08-LED-U-SL4-8030-600-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2825.5 | 2825.5 | 2825.5 | 2825.5 | 2825.5 | 2825.5 | 2825.5 | 2825.5 | 2825.5 | 2825.5 | 2825.5 |
| 2.5°  | 2791.7 | 2750.1 | 2674.7 | 2597.0 | 2518.2 | 2457.4 | 2397.8 | 2350.5 | 2334.7 | 2305.4 | 2307.7 |
| 5°    | 2706.2 | 2629.6 | 2472.0 | 2312.2 | 2145.6 | 2008.3 | 1878.8 | 1774.1 | 1723.5 | 1671.7 | 1671.7 |
| 7.5°  | 2631.9 | 2520.5 | 2273.9 | 2013.9 | 1744.8 | 1518.6 | 1314.8 | 1161.7 | 1077.3 | 1009.8 | 1008.6 |
| 10°   | 2603.8 | 2452.9 | 2108.4 | 1735.8 | 1361.0 | 1052.5 | 810.5  | 655.2  | 575.2  | 523.5  | 521.2  |
| 12.5° | 2616.1 | 2429.3 | 1981.2 | 1479.2 | 1008.6 | 676.5  | 469.4  | 369.2  | 335.5  | 319.7  | 319.7  |
| 15°   | 2652.2 | 2422.5 | 1854.0 | 1228.1 | 712.6  | 423.3  | 311.8  | 284.8  | 282.6  | 282.6  | 282.6  |
| 17.5° | 2696.1 | 2424.8 | 1723.5 | 983.9  | 485.2  | 302.8  | 269.0  | 265.7  | 267.9  | 267.9  | 267.9  |
| 20°   | 2741.1 | 2425.9 | 1582.7 | 757.6  | 342.2  | 263.4  | 253.3  | 252.2  | 254.4  | 254.4  | 255.5  |
| 22.5° | 2796.2 | 2431.5 | 1442.0 | 566.2  | 282.6  | 248.8  | 240.9  | 240.9  | 242.0  | 242.0  | 240.9  |
| 25°   | 2859.3 | 2442.8 | 1295.7 | 419.9  | 257.8  | 238.6  | 231.9  | 230.8  | 231.9  | 230.8  | 229.6  |
| 27.5° | 2938.1 | 2458.5 | 1132.5 | 328.7  | 246.5  | 228.5  | 222.9  | 222.9  | 221.8  | 220.6  | 219.5  |
| 30°   | 3037.2 | 2476.5 | 949.0  | 279.2  | 235.3  | 219.5  | 213.9  | 212.8  | 211.6  | 209.4  | 209.4  |
| 32.5° | 3188.0 | 2515.9 | 767.7  | 253.3  | 222.9  | 207.1  | 202.6  | 202.6  | 200.4  | 198.1  | 197.0  |
| 35°   | 3419.9 | 2593.6 | 605.6  | 237.5  | 209.4  | 193.6  | 188.0  | 188.0  | 185.7  | 184.6  | 183.5  |
| 37.5° | 3740.7 | 2711.8 | 470.5  | 222.9  | 195.9  | 179.0  | 173.4  | 172.2  | 170.0  | 167.7  | 166.6  |
| 40°   | 4167.4 | 2858.2 | 370.4  | 209.4  | 182.4  | 164.4  | 159.9  | 157.6  | 153.1  | 149.7  | 149.7  |
| 42.5° | 4703.2 | 3024.8 | 300.6  | 194.7  | 166.6  | 150.8  | 147.5  | 144.1  | 136.2  | 132.8  | 131.7  |
| 45°   | 5263.8 | 3174.5 | 254.4  | 177.9  | 150.8  | 137.3  | 135.1  | 129.5  | 119.3  | 115.9  | 115.9  |
| 47.5° | 5667.9 | 3209.4 | 224.0  | 162.1  | 136.2  | 122.7  | 121.6  | 111.4  | 102.4  | 100.2  | 99.1   |
| 50°   | 5920.1 | 3140.7 | 199.2  | 146.3  | 122.7  | 109.2  | 105.8  | 93.4   | 87.8   | 85.6   | 84.4   |
| 52.5° | 6090.1 | 3018.0 | 179.0  | 132.8  | 110.3  | 96.8   | 88.9   | 79.9   | 75.4   | 73.2   | 73.2   |
| 55°   | 6226.3 | 2844.7 | 158.7  | 120.5  | 100.2  | 86.7   | 75.4   | 68.7   | 64.2   | 61.9   | 61.9   |
| 57.5° | 6264.5 | 2609.4 | 138.5  | 110.3  | 90.1   | 76.5   | 64.2   | 59.7   | 54.0   | 52.9   | 52.9   |
| 60°   | 5986.5 | 2185.0 | 122.7  | 97.9   | 81.1   | 66.4   | 56.3   | 50.7   | 45.0   | 43.9   | 42.8   |
| 62.5° | 5253.7 | 1690.8 | 108.1  | 86.7   | 70.9   | 57.4   | 48.4   | 41.7   | 37.1   | 37.1   | 37.1   |
| 65°   | 4007.5 | 1133.6 | 94.6   | 75.4   | 61.9   | 48.4   | 41.7   | 33.8   | 31.5   | 31.5   | 32.6   |
| 67.5° | 2398.9 | 616.9  | 81.1   | 64.2   | 52.9   | 40.5   | 34.9   | 29.3   | 28.1   | 29.3   | 29.3   |
| 69°   | 1406.0 | 362.5  | 73.2   | 57.4   | 46.2   | 36.0   | 30.4   | 25.9   | 28.1   | 29.3   | 29.3   |
| 70°   | 867.9  | 244.3  | 67.5   | 51.8   | 41.7   | 32.6   | 28.1   | 24.8   | 27.0   | 28.1   | 28.1   |
| 72.5° | 242.0  | 126.1  | 54.0   | 40.5   | 33.8   | 27.0   | 22.5   | 22.5   | 25.9   | 27.0   | 27.0   |
| 75°   | 157.6  | 93.4   | 41.7   | 30.4   | 25.9   | 21.4   | 19.1   | 21.4   | 24.8   | 25.9   | 25.9   |
| 77.5° | 130.6  | 76.5   | 33.8   | 24.8   | 21.4   | 20.3   | 18.0   | 19.1   | 22.5   | 23.6   | 23.6   |
| 80°   | 119.3  | 54.0   | 27.0   | 22.5   | 19.1   | 18.0   | 16.9   | 15.8   | 20.3   | 21.4   | 21.4   |
| 82.5° | 113.7  | 42.8   | 23.6   | 20.3   | 18.0   | 15.8   | 14.6   | 15.8   | 18.0   | 19.1   | 20.3   |
| 85°   | 70.9   | 28.1   | 21.4   | 19.1   | 15.8   | 14.6   | 14.6   | 14.6   | 16.9   | 18.0   | 18.0   |
| 87.5° | 25.9   | 22.5   | 19.1   | 15.8   | 13.5   | 13.5   | 13.5   | 13.5   | 14.6   | 16.9   | 16.9   |
| 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)