

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: P299995

Luminaire Tested: **GAA-AF-08-LED-U-SL3-7060-800-HSS**

Issue Date: 3/3/2020

#### Test Information

Test Method: LM-79-08  
Report Number: P299995  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)  
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-SL3-7060-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(8) 70 CRI  
5700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III w/Spill  
Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

#### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 29908.3 lumens  
Efficiency: N/A  
Efficacy: 89.5 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G4

Input Watts (W): 334  
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



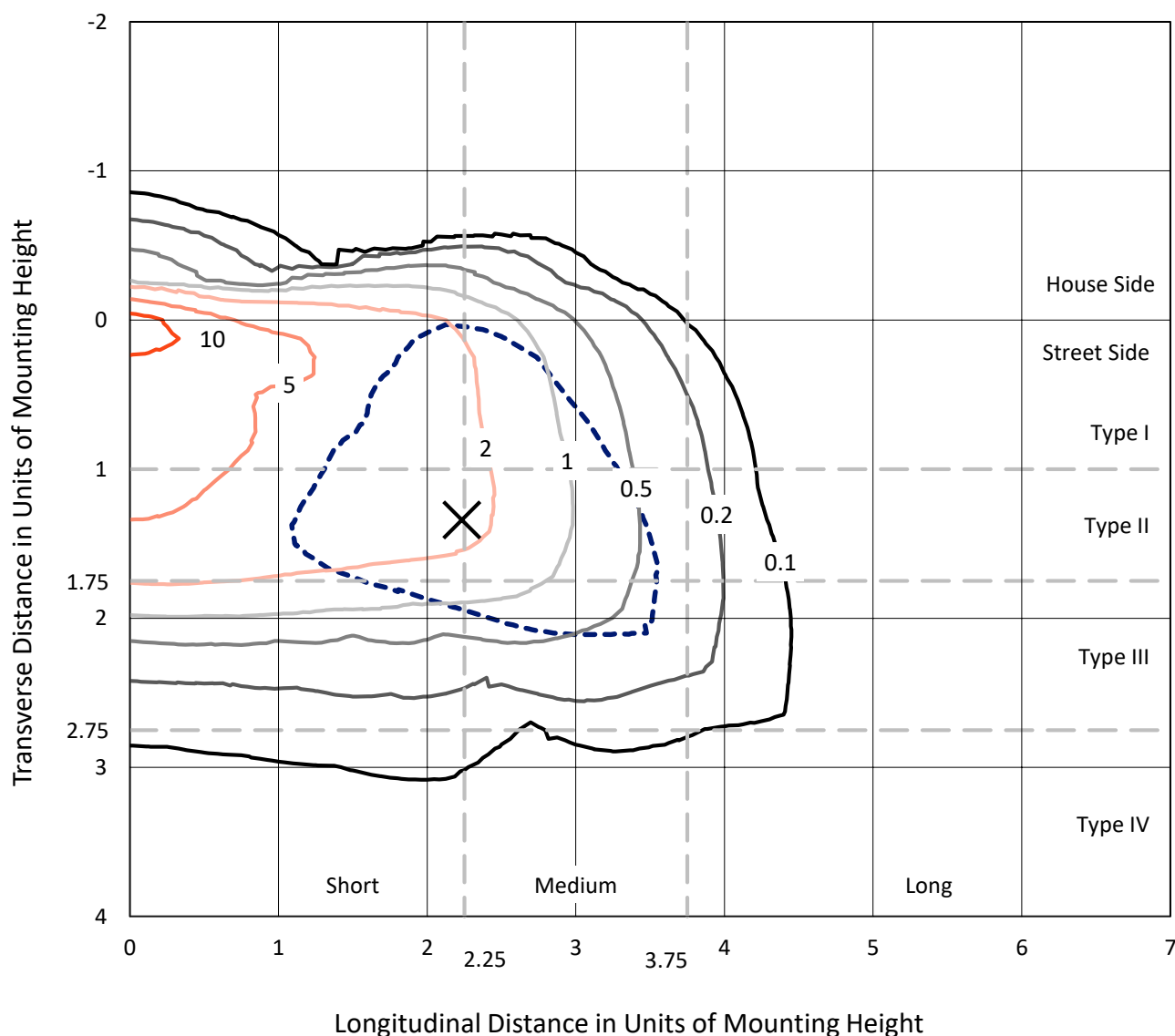
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

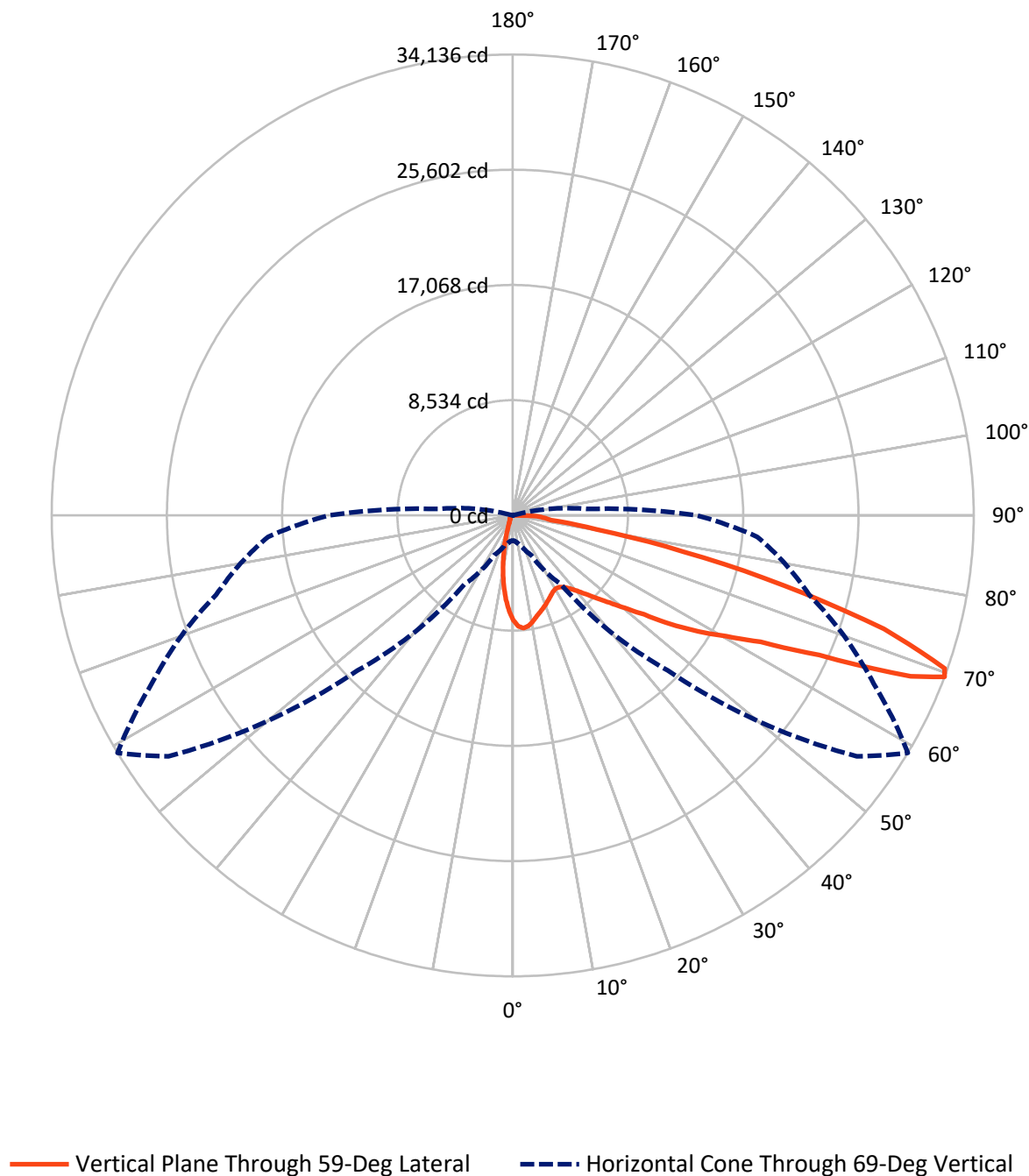


Based on 25 foot mounting height. Maximum calculated value = 12.5 fc  
 Type III - Short - Non-Cutoff

REPORT NUMBER: P299995

CATALOG NUMBER: GAA-AF-08-LED-U-SL3-7060-800-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P299995

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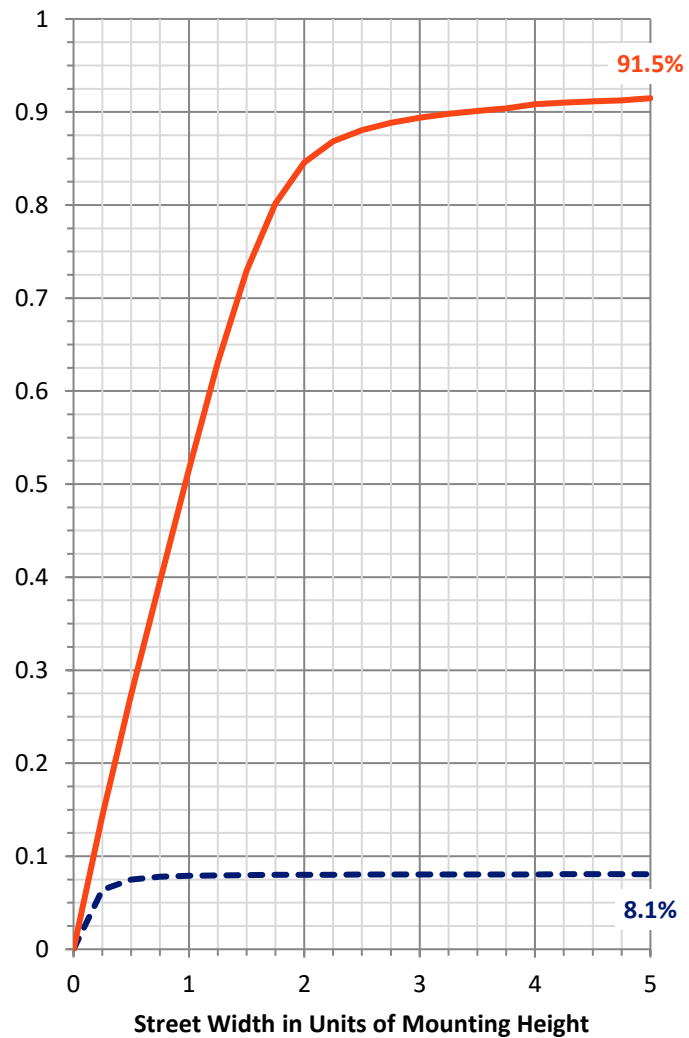
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2435.6   | 0.0    | 2435.6  |
|                    | % Fixture | 8.1      | 0.0    | 8.1     |
| <b>Street Side</b> | Lumens    | 27472.7  | 0.0    | 27472.7 |
|                    | % Fixture | 91.9     | 0.0    | 91.9    |
| <b>Total</b>       | Lumens    | 29908.3  | 0.0    | 29908.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 631.9   | 2.1       |
| 10°-20°   | 1305.7  | 4.4       |
| 20°-30°   | 1756.9  | 5.9       |
| 30°-40°   | 2550.9  | 8.5       |
| 40°-50°   | 4247.5  | 14.2      |
| 50°-60°   | 6626.0  | 22.2      |
| 60°-70°   | 8199.2  | 27.4      |
| 70°-80°   | 4155.3  | 13.9      |
| 80°-90°   | 434.8   | 1.5       |
| 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°    | 29908.3 | 100.0     |
| 0°-180°   | 29908.3 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P299995

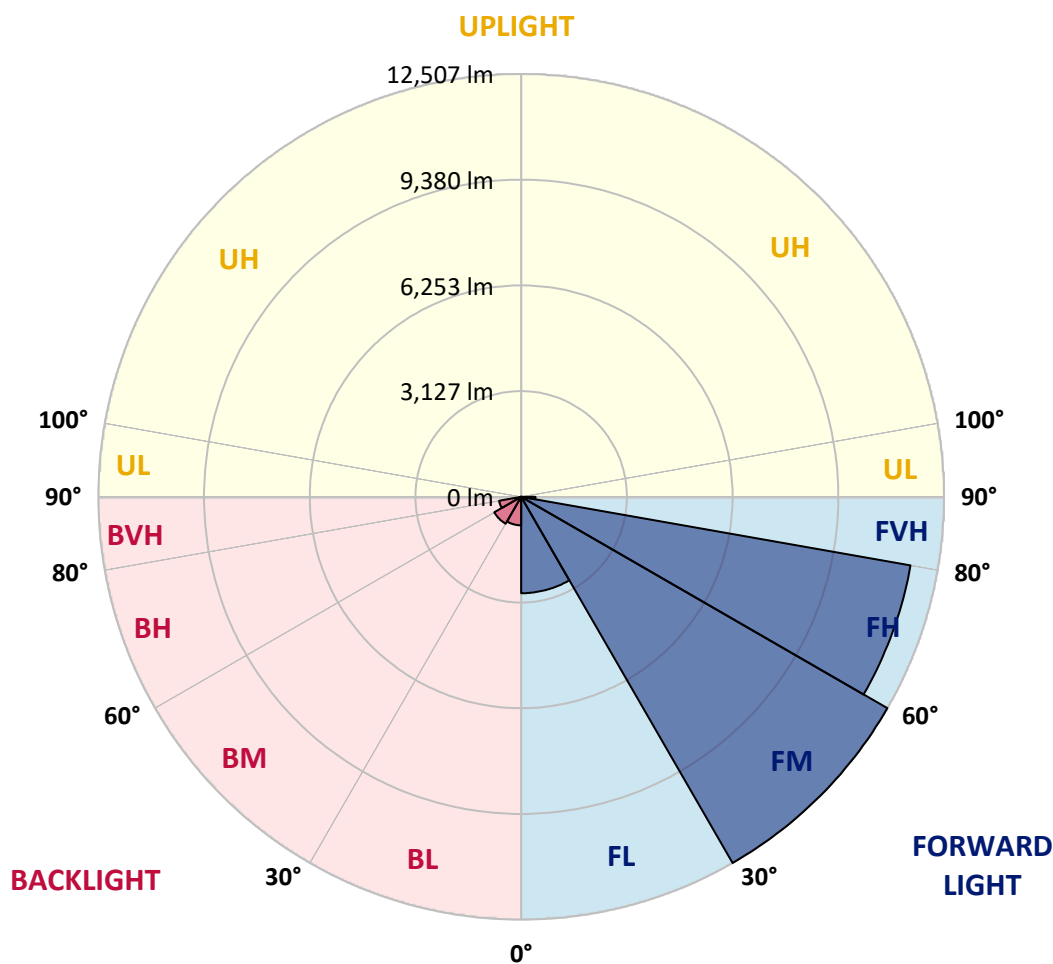
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2851.4  | 9.5       |                         |      |          |
| FM   | (30°-60°)   | 12506.8 | 41.8      |                         |      |          |
| FH   | (60°-80°)   | 11693.1 | 39.1      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 421.4   | 1.4       |                         |      | G3/500   |
| BL   | (0°-30°)    | 843.0   | 2.8       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 917.7   | 3.1       | B1/1000                 |      |          |
| BH   | (60°-80°)   | 661.5   | 2.2       | B2/1000                 |      | G2/1000  |
| BVH  | (80°-90°)   | 13.4    | 0.0       |                         |      | G1/100   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B2-U0-G4**

Type III Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 59°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 7784.5  | 7784.5  | 7784.5  | 7784.5  | 7784.5  | 7784.5  | 7784.5  | 7784.5  | 7784.5  | 7784.5  | 7784.5  |
| 2.5°  | 8532.1  | 8529.1  | 8491.7  | 8474.8  | 8444.1  | 8380.0  | 8280.2  | 8228.0  | 8143.5  | 7996.0  | 7798.4  |
| 5°    | 8454.3  | 8495.3  | 8516.8  | 8518.8  | 8540.8  | 8516.8  | 8427.2  | 8383.6  | 8266.9  | 8029.8  | 7675.0  |
| 7.5°  | 7926.9  | 7941.7  | 8004.7  | 8058.5  | 8163.5  | 8263.3  | 8295.6  | 8276.6  | 8207.5  | 7954.0  | 7481.9  |
| 10°   | 7362.1  | 7377.0  | 7451.7  | 7522.4  | 7664.7  | 7818.3  | 7980.7  | 8015.0  | 8043.6  | 7845.5  | 7296.1  |
| 12.5° | 6874.7  | 6890.0  | 6966.3  | 7059.0  | 7224.9  | 7414.3  | 7666.3  | 7722.1  | 7849.1  | 7742.6  | 7147.1  |
| 15°   | 6455.3  | 6461.9  | 6536.7  | 6651.4  | 6849.6  | 7092.8  | 7379.0  | 7468.6  | 7663.2  | 7669.8  | 7017.0  |
| 17.5° | 6098.4  | 6115.3  | 6161.4  | 6271.0  | 6487.5  | 6788.6  | 7122.0  | 7250.5  | 7478.3  | 7608.9  | 6890.0  |
| 20°   | 5880.3  | 5897.2  | 5895.6  | 5956.6  | 6151.1  | 6472.2  | 6864.9  | 7018.5  | 7296.1  | 7546.4  | 6776.9  |
| 22.5° | 5838.3  | 5838.3  | 5794.2  | 5785.5  | 5900.8  | 6169.6  | 6597.6  | 6785.0  | 7131.7  | 7519.3  | 6697.5  |
| 25°   | 5988.8  | 5981.7  | 5872.1  | 5782.5  | 5787.6  | 5947.9  | 6338.5  | 6561.8  | 6993.4  | 7537.7  | 6655.0  |
| 27.5° | 6306.8  | 6298.1  | 6159.3  | 5988.8  | 5851.6  | 5850.1  | 6142.4  | 6382.6  | 6883.4  | 7625.8  | 6671.9  |
| 30°   | 6746.1  | 6743.1  | 6592.5  | 6377.5  | 6129.1  | 5900.8  | 6074.8  | 6293.0  | 6812.2  | 7784.5  | 6710.8  |
| 32.5° | 7226.4  | 7221.3  | 7108.1  | 6881.8  | 6566.9  | 6129.1  | 6146.0  | 6328.8  | 6832.7  | 7996.0  | 6805.5  |
| 35°   | 7735.9  | 7727.2  | 7678.0  | 7480.4  | 7133.7  | 6550.0  | 6379.5  | 6521.3  | 6961.2  | 8312.5  | 6991.4  |
| 37.5° | 8286.9  | 8295.6  | 8330.9  | 8141.4  | 7777.9  | 7140.4  | 6770.2  | 6866.5  | 7219.8  | 8742.1  | 7294.0  |
| 40°   | 9100.5  | 9099.0  | 9110.7  | 8861.9  | 8512.2  | 7862.4  | 7316.0  | 7346.8  | 7653.0  | 9312.0  | 7754.3  |
| 42.5° | 10576.7 | 10473.8 | 10160.9 | 9653.5  | 9301.7  | 8687.8  | 8004.7  | 7972.5  | 8182.4  | 10017.0 | 8398.5  |
| 45°   | 12560.9 | 12340.7 | 11529.1 | 10556.7 | 10106.6 | 9618.2  | 8851.6  | 8748.7  | 8882.4  | 10864.5 | 9193.7  |
| 47.5° | 14267.0 | 14038.6 | 12890.6 | 11496.8 | 10960.7 | 10500.9 | 9844.5  | 9658.6  | 9702.6  | 11813.3 | 10201.4 |
| 50°   | 14847.1 | 14735.5 | 13732.9 | 12315.6 | 11787.7 | 11612.0 | 10996.6 | 10769.7 | 10707.3 | 12910.6 | 11369.9 |
| 52.5° | 14645.9 | 14637.7 | 13969.5 | 12846.6 | 12545.5 | 12762.1 | 12445.6 | 12183.5 | 11953.6 | 14067.8 | 12558.8 |
| 55°   | 14322.8 | 14365.3 | 14065.7 | 13311.5 | 13301.3 | 13812.3 | 14427.8 | 14209.6 | 13543.5 | 15324.3 | 13583.9 |
| 57.5° | 13431.8 | 13612.6 | 14012.0 | 14191.2 | 14607.0 | 15129.8 | 16078.6 | 16207.1 | 15419.1 | 16286.5 | 14434.4 |
| 60°   | 10898.3 | 11295.6 | 12601.3 | 14317.7 | 16290.0 | 17592.2 | 18070.9 | 18180.5 | 16957.7 | 17086.3 | 15582.9 |
| 62.5° | 7735.9  | 8141.4  | 9797.4  | 12701.2 | 16315.1 | 20827.2 | 21038.7 | 20607.6 | 18652.6 | 18272.2 | 17563.5 |
| 65°   | 4106.1  | 4419.4  | 5772.2  | 9168.1  | 14145.6 | 21578.4 | 26229.3 | 24944.0 | 21642.4 | 20604.0 | 20122.2 |
| 67.5° | 2100.4  | 2195.1  | 2733.3  | 4487.0  | 9724.7  | 19166.7 | 30881.7 | 31786.4 | 26795.6 | 22917.9 | 19998.8 |
| 69°   | 1858.7  | 1914.5  | 2271.4  | 3243.8  | 6226.9  | 16234.2 | 31108.5 | 34135.7 | 29493.5 | 22724.9 | 18173.8 |
| 70°   | 1799.3  | 1848.5  | 2173.1  | 2936.0  | 4867.5  | 13614.1 | 30240.6 | 33929.3 | 30183.2 | 21991.1 | 16810.8 |
| 72.5° | 1527.4  | 1569.4  | 1935.0  | 2594.5  | 3956.0  | 6757.9  | 24565.1 | 28751.1 | 27084.9 | 18319.3 | 12168.1 |
| 75°   | 1021.5  | 1160.3  | 1857.2  | 2432.2  | 3680.0  | 3839.3  | 16195.3 | 20776.5 | 19300.3 | 12356.0 | 6338.5  |
| 77.5° | 245.3   | 263.7   | 524.3   | 1935.0  | 3365.6  | 3379.0  | 8329.4  | 12915.7 | 10534.7 | 4404.1  | 1498.2  |
| 80°   | 132.1   | 127.0   | 147.0   | 384.0   | 3133.7  | 3171.1  | 3749.7  | 6269.4  | 3761.4  | 730.7   | 493.6   |
| 82.5° | 93.2    | 88.1    | 94.7    | 160.8   | 986.2   | 2888.4  | 2712.8  | 2837.7  | 1559.2  | 280.6   | 221.7   |
| 85°   | 33.8    | 32.3    | 52.2    | 145.4   | 309.3   | 1660.5  | 2787.0  | 2340.5  | 1263.2  | 128.5   | 162.3   |
| 87.5° | 11.8    | 10.2    | 20.5    | 79.4    | 94.7    | 707.1   | 1719.9  | 1769.1  | 497.2   | 77.8    | 76.3    |
| 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: P299995

CATALOG NUMBER: GAA-AF-08-LED-U-SL3-7060-800-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 7784.5  | 7784.5 | 7784.5 | 7784.5 | 7784.5 | 7784.5 | 7784.5 | 7784.5 | 7784.5 | 7784.5 | 7784.5 |
| 2.5°  | 7715.4  | 7610.5 | 7417.9 | 7219.8 | 7037.0 | 6817.3 | 6707.2 | 6599.2 | 6553.6 | 6536.7 | 6457.3 |
| 5°    | 7492.2  | 7314.5 | 6905.4 | 6494.2 | 6115.3 | 5712.8 | 5447.6 | 5234.6 | 5109.1 | 5048.2 | 4951.9 |
| 7.5°  | 7206.5  | 6915.6 | 6294.5 | 5660.6 | 5070.2 | 4488.5 | 4057.4 | 3725.6 | 3497.2 | 3387.7 | 3287.8 |
| 10°   | 6928.9  | 6541.8 | 5659.1 | 4794.7 | 3992.9 | 3221.8 | 2626.3 | 2195.1 | 1919.6 | 1792.7 | 1711.8 |
| 12.5° | 6680.6  | 6178.3 | 5045.1 | 3950.9 | 2944.2 | 2041.5 | 1435.8 | 1092.7 | 921.7  | 862.3  | 833.6  |
| 15°   | 6458.9  | 5843.4 | 4465.0 | 3149.0 | 1993.9 | 1166.9 | 785.0  | 668.2  | 641.1  | 641.1  | 637.5  |
| 17.5° | 6248.9  | 5515.2 | 3904.8 | 2396.3 | 1251.4 | 713.8  | 597.0  | 581.7  | 581.7  | 588.3  | 588.3  |
| 20°   | 6047.7  | 5202.3 | 3363.6 | 1719.9 | 788.0  | 566.3  | 539.7  | 536.1  | 539.7  | 547.9  | 547.9  |
| 22.5° | 5875.1  | 4918.1 | 2858.2 | 1180.3 | 585.3  | 510.5  | 497.2  | 492.1  | 493.6  | 498.7  | 502.3  |
| 25°   | 5746.6  | 4678.0 | 2381.5 | 799.8  | 503.8  | 464.9  | 450.1  | 441.4  | 434.7  | 434.7  | 437.8  |
| 27.5° | 5665.7  | 4475.2 | 1919.6 | 581.7  | 453.2  | 422.9  | 398.9  | 385.6  | 370.2  | 362.0  | 365.1  |
| 30°   | 5606.3  | 4282.2 | 1486.5 | 475.2  | 406.0  | 375.3  | 345.1  | 323.1  | 301.1  | 290.8  | 294.4  |
| 32.5° | 5584.3  | 4126.5 | 1111.1 | 419.4  | 363.5  | 329.8  | 292.4  | 263.7  | 240.1  | 231.4  | 233.5  |
| 35°   | 5643.7  | 4003.1 | 813.6  | 378.9  | 329.8  | 287.3  | 245.3  | 213.0  | 194.6  | 189.5  | 191.0  |
| 37.5° | 5799.4  | 3937.1 | 608.8  | 345.1  | 299.5  | 251.9  | 204.8  | 174.1  | 162.3  | 162.3  | 163.9  |
| 40°   | 6093.3  | 3935.5 | 489.0  | 321.6  | 272.4  | 218.1  | 169.0  | 147.0  | 140.3  | 143.9  | 145.4  |
| 42.5° | 6522.9  | 4025.1 | 426.0  | 299.5  | 248.9  | 185.9  | 140.3  | 124.9  | 123.4  | 127.0  | 128.5  |
| 45°   | 7109.7  | 4189.0 | 392.2  | 280.6  | 223.2  | 155.7  | 118.3  | 108.0  | 108.0  | 113.2  | 115.2  |
| 47.5° | 7828.6  | 4429.1 | 363.5  | 262.2  | 197.6  | 130.1  | 101.4  | 94.7   | 96.3   | 101.4  | 102.9  |
| 50°   | 8694.4  | 4732.3 | 334.9  | 241.7  | 179.2  | 108.0  | 88.1   | 83.0   | 84.5   | 91.1   | 93.2   |
| 52.5° | 9680.6  | 5139.9 | 311.3  | 223.2  | 155.7  | 89.6   | 74.2   | 71.2   | 74.2   | 81.4   | 83.0   |
| 55°   | 10526.0 | 5504.9 | 282.6  | 207.9  | 124.9  | 74.2   | 60.9   | 60.9   | 64.5   | 72.7   | 74.2   |
| 57.5° | 11339.6 | 5886.9 | 257.0  | 179.2  | 98.3   | 59.4   | 50.7   | 52.2   | 57.3   | 66.1   | 67.6   |
| 60°   | 12533.7 | 6534.7 | 226.8  | 150.5  | 74.2   | 47.1   | 42.5   | 44.0   | 50.7   | 59.4   | 60.9   |
| 62.5° | 14561.4 | 7520.8 | 196.1  | 124.9  | 57.3   | 37.4   | 33.8   | 37.4   | 45.6   | 55.8   | 57.3   |
| 65°   | 16391.4 | 7921.8 | 160.8  | 105.0  | 44.0   | 28.7   | 28.7   | 33.8   | 44.0   | 54.3   | 55.8   |
| 67.5° | 15371.4 | 6668.3 | 124.9  | 83.0   | 33.8   | 22.0   | 23.6   | 32.3   | 42.5   | 54.3   | 55.8   |
| 69°   | 13594.2 | 5452.7 | 106.5  | 66.1   | 28.7   | 20.5   | 22.0   | 32.3   | 42.5   | 52.2   | 54.3   |
| 70°   | 12209.1 | 4603.8 | 94.7   | 55.8   | 25.6   | 20.5   | 22.0   | 30.2   | 42.5   | 52.2   | 54.3   |
| 72.5° | 8177.3  | 2486.0 | 76.3   | 40.5   | 23.6   | 18.4   | 18.4   | 30.2   | 40.5   | 50.7   | 52.2   |
| 75°   | 3514.1  | 686.6  | 60.9   | 28.7   | 20.5   | 16.9   | 16.9   | 28.7   | 38.9   | 49.2   | 52.2   |
| 77.5° | 642.6   | 174.1  | 49.2   | 25.6   | 20.5   | 16.9   | 15.4   | 27.1   | 37.4   | 47.1   | 49.2   |
| 80°   | 255.5   | 86.0   | 38.9   | 22.0   | 18.4   | 15.4   | 13.3   | 25.6   | 35.3   | 45.6   | 47.1   |
| 82.5° | 154.1   | 49.2   | 32.3   | 20.5   | 18.4   | 13.3   | 11.8   | 22.0   | 33.8   | 44.0   | 45.6   |
| 85°   | 124.9   | 33.8   | 25.6   | 20.5   | 16.9   | 13.3   | 10.2   | 20.5   | 30.2   | 42.5   | 44.0   |
| 87.5° | 60.9    | 23.6   | 23.6   | 18.4   | 16.9   | 13.3   | 10.2   | 18.4   | 28.7   | 40.5   | 42.5   |
| 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)