

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: P299676

Luminaire Tested: **GAA-AF-07-LED-U-SL2-7060-800-HSS**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P299676  
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: GAA-AF-07-LED-U-SL2-7060-800-HSS  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(7) 70 CRI, 5700K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type II  
w/Spill Control WITH HOUSESIDE SHEILD OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 25591.8 lumens  
Efficiency: N/A  
Efficacy: 86.8 lumens/watt  
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G4

Input Watts (W): 295  
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

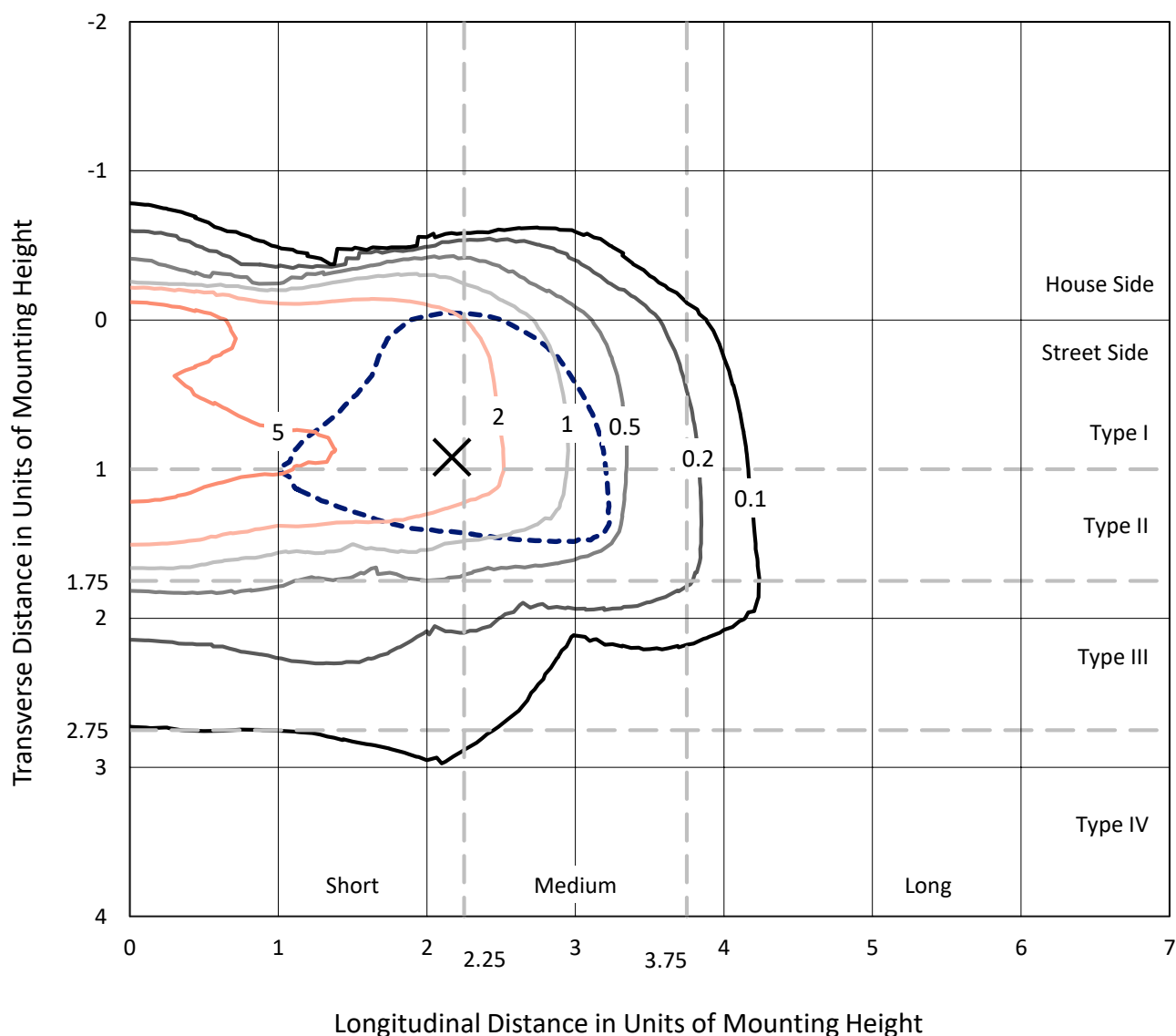


REPORT NUMBER: P299676

CATALOG NUMBER: GAA-AF-07-LED-U-SL2-7060-800-HSS

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

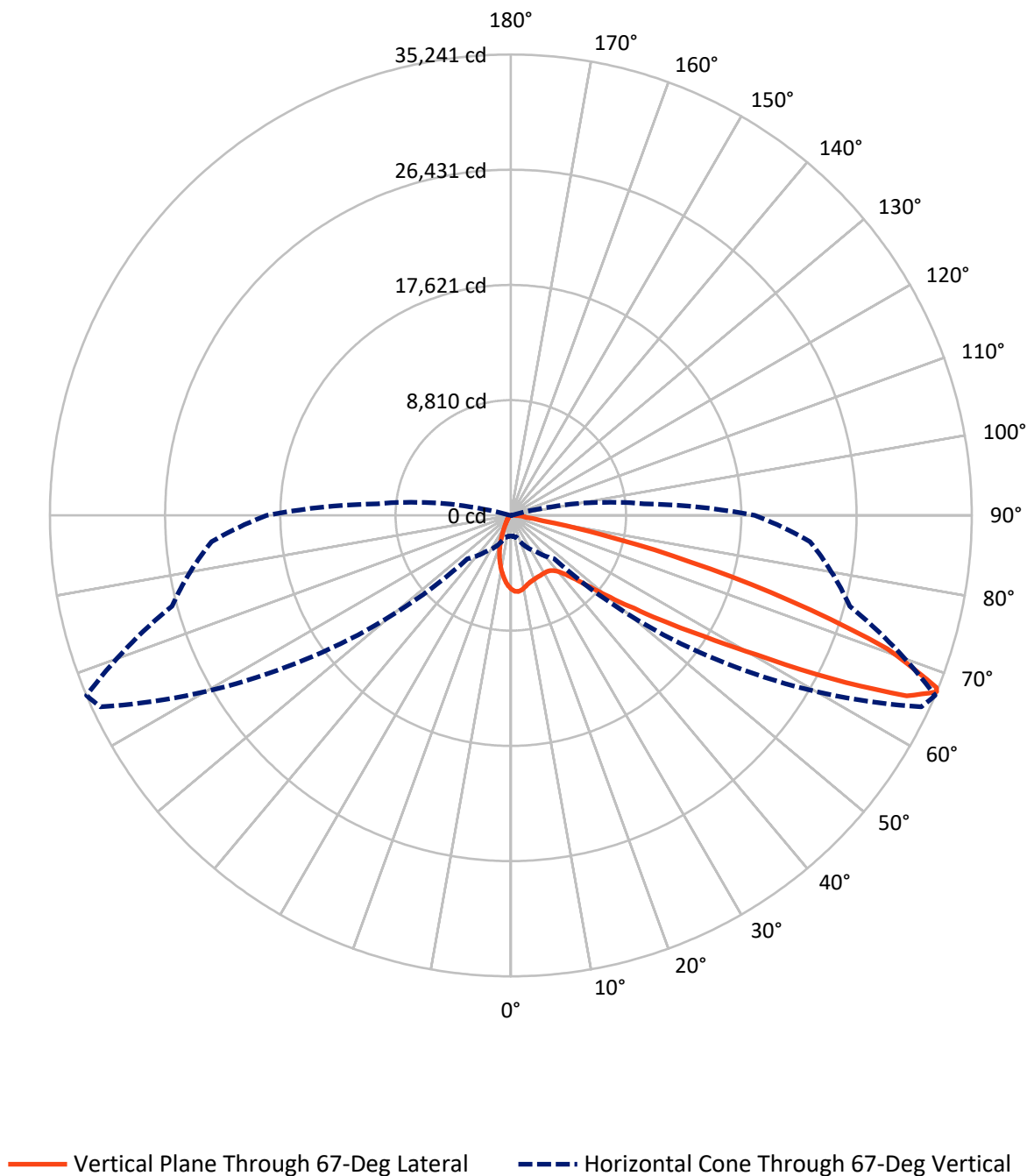


Based on 25 foot mounting height. Maximum calculated value = 9 fc  
Type II - Short - Semi-Cutoff

REPORT NUMBER: P299676

CATALOG NUMBER: GAA-AF-07-LED-U-SL2-7060-800-HSS

## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2657.2   | 0.0    | 2657.2  |
|                    | % Fixture | 10.4     | 0.0    | 10.4    |
| <b>Street Side</b> | Lumens    | 22934.6  | 0.0    | 22934.6 |
|                    | % Fixture | 89.6     | 0.0    | 89.6    |
| <b>Total</b>       | Lumens    | 25591.8  | 0.0    | 25591.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 459.2   | 1.8       |
| 10°-20°   | 977.4   | 3.8       |
| 20°-30°   | 1421.1  | 5.6       |
| 30°-40°   | 2217.0  | 8.7       |
| 40°-50°   | 3927.3  | 15.3      |
| 50°-60°   | 6214.5  | 24.3      |
| 60°-70°   | 7117.9  | 27.8      |
| 70°-80°   | 2952.4  | 11.5      |
| 80°-90°   | 305.0   | 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°    | 25591.8 | 100.0     |
| 0°-180°   | 25591.8 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P299676

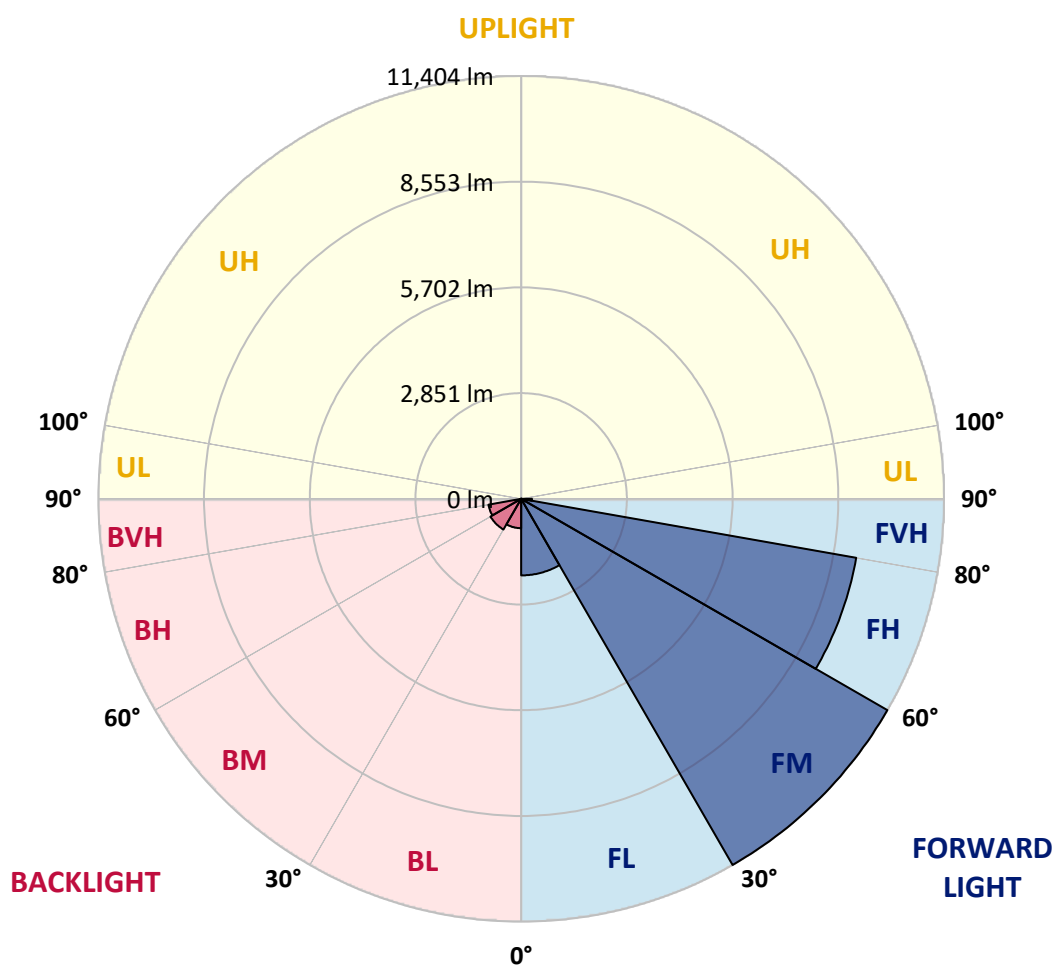
CATALOG NUMBER: GAA-AF-07-LED-U-SL2-7060-800-HSS

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2064.9  | 8.1       |                         |      |          |
| FM   | (30°-60°)   | 11403.8 | 44.6      |                         |      |          |
| FH   | (60°-80°)   | 9174.7  | 35.9      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 291.2   | 1.1       |                         |      | G3/500   |
| BL   | (0°-30°)    | 792.9   | 3.1       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 955.0   | 3.7       | B1/1000                 |      |          |
| BH   | (60°-80°)   | 895.6   | 3.5       | B2/1000                 |      | G2/1000  |
| BVH  | (80°-90°)   | 13.7    | 0.1       |                         |      | 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 II Short





REPORT NUMBER: P299676

CATALOG NUMBER: GAA-AF-07-LED-U-SL2-7060-800-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 67°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5643.9  | 5643.9  | 5643.9  | 5643.9  | 5643.9  | 5643.9  | 5643.9  | 5643.9  | 5643.9  | 5643.9  | 5643.9  |
| 2.5°  | 5835.0  | 5846.9  | 5845.4  | 5854.4  | 5875.3  | 5876.8  | 5855.9  | 5815.6  | 5806.6  | 5754.4  | 5663.3  |
| 5°    | 5381.2  | 5415.5  | 5436.4  | 5521.5  | 5617.1  | 5732.0  | 5818.6  | 5849.9  | 5845.4  | 5808.1  | 5670.8  |
| 7.5°  | 4863.2  | 4897.6  | 4921.5  | 5021.5  | 5148.4  | 5345.4  | 5570.8  | 5755.9  | 5772.3  | 5812.6  | 5664.8  |
| 10°   | 4518.4  | 4524.4  | 4557.2  | 4652.8  | 4785.6  | 4987.1  | 5255.8  | 5579.7  | 5629.0  | 5776.8  | 5649.9  |
| 12.5° | 4234.8  | 4239.3  | 4282.6  | 4385.6  | 4527.4  | 4730.4  | 5012.5  | 5387.2  | 5463.3  | 5732.0  | 5646.9  |
| 15°   | 4033.3  | 4049.7  | 4088.5  | 4196.0  | 4346.8  | 4548.3  | 4837.9  | 5245.4  | 5336.4  | 5715.6  | 5673.8  |
| 17.5° | 3966.1  | 3984.0  | 3996.0  | 4073.6  | 4210.9  | 4408.0  | 4705.0  | 5152.8  | 5255.8  | 5724.5  | 5726.0  |
| 20°   | 4036.3  | 4049.7  | 4022.8  | 4042.3  | 4127.3  | 4303.5  | 4593.1  | 5073.7  | 5196.1  | 5735.0  | 5793.2  |
| 22.5° | 4297.5  | 4303.5  | 4230.3  | 4145.3  | 4130.3  | 4227.4  | 4505.0  | 5011.0  | 5142.4  | 5763.3  | 5872.3  |
| 25°   | 4745.3  | 4734.9  | 4615.5  | 4431.9  | 4258.7  | 4213.9  | 4452.8  | 4972.2  | 5115.5  | 5793.2  | 5954.4  |
| 27.5° | 5285.7  | 5300.6  | 5136.4  | 4869.2  | 4539.3  | 4303.5  | 4445.3  | 4955.8  | 5103.6  | 5814.1  | 6026.1  |
| 30°   | 5942.5  | 5963.4  | 5775.3  | 5439.4  | 4966.2  | 4524.4  | 4514.0  | 4952.8  | 5096.1  | 5800.7  | 6032.0  |
| 32.5° | 6612.7  | 6638.1  | 6490.3  | 6144.0  | 5536.5  | 4894.6  | 4669.2  | 4985.6  | 5111.0  | 5754.4  | 5997.7  |
| 35°   | 7314.3  | 7350.1  | 7251.6  | 6954.5  | 6309.7  | 5429.0  | 4942.4  | 5085.7  | 5181.2  | 5749.9  | 5963.4  |
| 37.5° | 8283.0  | 8315.9  | 8130.8  | 7815.8  | 7245.6  | 6145.5  | 5381.2  | 5273.7  | 5346.9  | 5821.6  | 5972.3  |
| 40°   | 9729.5  | 9725.0  | 9247.3  | 8765.2  | 8274.1  | 7056.0  | 5997.7  | 5614.1  | 5651.4  | 6038.0  | 6082.8  |
| 42.5° | 11305.8 | 11298.3 | 10592.3 | 9859.3  | 9416.0  | 8177.1  | 6808.2  | 6202.2  | 6176.8  | 6436.6  | 6369.4  |
| 45°   | 12520.8 | 12519.3 | 11943.2 | 11117.7 | 10790.8 | 9463.8  | 7856.1  | 7020.2  | 6981.4  | 7084.4  | 6897.8  |
| 47.5° | 13038.8 | 13047.8 | 12758.2 | 12177.5 | 12314.8 | 11204.3 | 9177.2  | 8205.4  | 8147.2  | 8105.4  | 7821.8  |
| 50°   | 12635.8 | 12653.7 | 12677.6 | 12564.1 | 13432.9 | 13543.3 | 10949.0 | 9875.8  | 9847.4  | 9660.8  | 9217.5  |
| 52.5° | 11319.2 | 11410.3 | 11690.9 | 12050.6 | 13821.0 | 15788.4 | 13726.9 | 11950.6 | 11798.4 | 11599.8 | 11111.7 |
| 55°   | 9101.0  | 9201.1  | 9734.0  | 10607.2 | 13243.3 | 17263.2 | 17619.9 | 14625.6 | 14371.8 | 13779.2 | 13074.6 |
| 57.5° | 6023.1  | 6178.3  | 6951.5  | 8062.1  | 11565.5 | 17500.5 | 21504.0 | 18337.9 | 17454.2 | 15831.7 | 15037.5 |
| 60°   | 3318.3  | 3467.6  | 4306.5  | 5312.6  | 8353.2  | 16327.2 | 24116.2 | 23171.3 | 21609.9 | 18126.0 | 17421.4 |
| 62.5° | 2043.5  | 2124.1  | 2743.6  | 3679.5  | 5009.5  | 12886.6 | 24656.6 | 29245.1 | 27437.5 | 21080.0 | 20300.8 |
| 65°   | 1627.1  | 1661.4  | 1964.4  | 3007.8  | 3591.5  | 7665.1  | 22911.6 | 33875.5 | 33272.5 | 24656.6 | 22878.7 |
| 67°   | 1579.3  | 1592.7  | 1736.0  | 2582.4  | 3385.5  | 4699.0  | 19194.7 | 34629.3 | 35241.4 | 26821.0 | 22959.4 |
| 67.5° | 1589.7  | 1604.7  | 1740.5  | 2464.5  | 3379.5  | 4318.4  | 17914.0 | 34332.3 | 35105.5 | 26992.7 | 22602.6 |
| 70°   | 1533.0  | 1579.3  | 1992.8  | 2463.0  | 3213.8  | 3588.5  | 10728.1 | 29746.7 | 30551.3 | 25080.5 | 19178.3 |
| 72.5° | 543.3   | 546.3   | 861.3   | 1992.8  | 3494.4  | 3627.3  | 5387.2  | 21807.0 | 22402.6 | 19185.8 | 13827.0 |
| 75°   | 322.4   | 274.7   | 286.6   | 567.2   | 3339.2  | 3522.8  | 3107.8  | 13934.4 | 14156.8 | 10993.8 | 7002.3  |
| 77.5° | 222.4   | 194.1   | 200.0   | 250.8   | 1271.8  | 3473.5  | 2468.9  | 7266.5  | 7029.2  | 3855.7  | 1491.2  |
| 80°   | 126.9   | 112.0   | 119.4   | 219.4   | 462.7   | 3240.7  | 2328.6  | 2946.6  | 2512.2  | 653.8   | 412.0   |
| 82.5° | 67.2    | 56.7    | 68.7    | 180.6   | 322.4   | 2019.6  | 2333.1  | 1424.0  | 1128.5  | 220.9   | 280.6   |
| 85°   | 23.9    | 19.4    | 32.8    | 123.9   | 215.0   | 619.5   | 2162.9  | 1197.2  | 940.4   | 107.5   | 213.5   |
| 87.5° | 4.5     | 4.5     | 13.4    | 50.8    | 86.6    | 189.6   | 1279.3  | 710.5   | 476.2   | 64.2    | 146.3   |
| 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: P299676

CATALOG NUMBER: GAA-AF-07-LED-U-SL2-7060-800-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°     | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5643.9  | 5643.9  | 5643.9 | 5643.9 | 5643.9 | 5643.9 | 5643.9 | 5643.9 | 5643.9 | 5643.9 | 5643.9 |
| 2.5°  | 5626.0  | 5561.8  | 5475.3 | 5369.3 | 5243.9 | 5133.4 | 5051.3 | 4966.2 | 4948.3 | 4918.5 | 4914.0 |
| 5°    | 5588.7  | 5478.2  | 5263.3 | 5017.0 | 4754.3 | 4516.9 | 4324.4 | 4152.7 | 4076.6 | 4010.9 | 4003.4 |
| 7.5°  | 5533.5  | 5367.8  | 5002.1 | 4605.0 | 4194.5 | 3821.3 | 3504.9 | 3281.0 | 3075.0 | 2976.5 | 2961.5 |
| 10°   | 5469.3  | 5231.9  | 4708.0 | 4157.2 | 3590.0 | 3063.0 | 2592.8 | 2198.8 | 1959.9 | 1818.1 | 1800.2 |
| 12.5° | 5409.6  | 5099.1  | 4408.0 | 3693.0 | 2939.1 | 2234.6 | 1630.0 | 1253.9 | 1003.1 | 901.6  | 889.7  |
| 15°   | 5381.2  | 4991.6  | 4127.3 | 3218.3 | 2258.5 | 1422.6 | 891.1  | 689.6  | 607.5  | 583.6  | 582.2  |
| 17.5° | 5378.2  | 4900.6  | 3852.7 | 2727.2 | 1582.3 | 827.0  | 580.7  | 529.9  | 513.5  | 507.5  | 507.5  |
| 20°   | 5376.7  | 4814.0  | 3578.0 | 2218.2 | 1004.6 | 550.8  | 483.6  | 471.7  | 459.8  | 452.3  | 452.3  |
| 22.5° | 5393.2  | 4736.4  | 3291.4 | 1698.7 | 632.9  | 446.3  | 425.4  | 413.5  | 398.6  | 388.1  | 386.6  |
| 25°   | 5409.6  | 4676.7  | 2998.9 | 1209.1 | 458.3  | 388.1  | 367.2  | 350.8  | 329.9  | 316.5  | 315.0  |
| 27.5° | 5412.6  | 4602.0  | 2685.4 | 809.0  | 383.6  | 338.8  | 312.0  | 286.6  | 262.7  | 249.3  | 247.8  |
| 30°   | 5367.8  | 4476.6  | 2337.6 | 546.3  | 338.8  | 294.1  | 258.2  | 231.4  | 209.0  | 198.5  | 198.5  |
| 32.5° | 5279.7  | 4321.4  | 1955.4 | 412.0  | 301.5  | 252.3  | 213.5  | 188.1  | 173.2  | 168.7  | 167.2  |
| 35°   | 5200.6  | 4154.2  | 1562.9 | 349.3  | 270.2  | 213.5  | 174.6  | 158.2  | 149.3  | 147.8  | 146.3  |
| 37.5° | 5154.3  | 4019.9  | 1194.2 | 316.5  | 240.3  | 179.1  | 147.8  | 135.8  | 131.4  | 128.4  | 129.9  |
| 40°   | 5190.1  | 3907.9  | 882.2  | 289.6  | 210.5  | 149.3  | 125.4  | 119.4  | 114.9  | 113.4  | 113.4  |
| 42.5° | 5346.9  | 3888.5  | 655.3  | 265.7  | 182.1  | 123.9  | 109.0  | 104.5  | 101.5  | 100.0  | 101.5  |
| 45°   | 5758.9  | 4007.9  | 509.0  | 243.3  | 153.7  | 104.5  | 92.5   | 91.1   | 89.6   | 89.6   | 89.6   |
| 47.5° | 6378.3  | 4254.2  | 423.9  | 217.9  | 128.4  | 89.6   | 80.6   | 79.1   | 77.6   | 79.1   | 79.1   |
| 50°   | 7427.7  | 4705.0  | 379.1  | 192.6  | 106.0  | 76.1   | 68.7   | 68.7   | 68.7   | 68.7   | 70.2   |
| 52.5° | 9023.4  | 5591.7  | 349.3  | 167.2  | 86.6   | 64.2   | 58.2   | 58.2   | 59.7   | 59.7   | 61.2   |
| 55°   | 10801.2 | 6767.9  | 322.4  | 141.8  | 73.1   | 53.7   | 47.8   | 49.3   | 50.8   | 52.2   | 52.2   |
| 57.5° | 12729.8 | 8071.1  | 300.0  | 116.4  | 62.7   | 43.3   | 40.3   | 41.8   | 43.3   | 46.3   | 46.3   |
| 60°   | 15057.0 | 9481.7  | 267.2  | 91.1   | 52.2   | 34.3   | 31.3   | 34.3   | 38.8   | 41.8   | 43.3   |
| 62.5° | 17612.5 | 10846.0 | 225.4  | 71.7   | 43.3   | 26.9   | 25.4   | 31.3   | 37.3   | 40.3   | 41.8   |
| 65°   | 19358.9 | 11274.4 | 173.2  | 58.2   | 32.8   | 19.4   | 20.9   | 28.4   | 35.8   | 40.3   | 40.3   |
| 67°   | 18651.4 | 10222.1 | 141.8  | 49.3   | 26.9   | 14.9   | 19.4   | 28.4   | 35.8   | 38.8   | 40.3   |
| 67.5° | 18160.3 | 9810.1  | 135.8  | 47.8   | 25.4   | 14.9   | 19.4   | 28.4   | 35.8   | 40.3   | 40.3   |
| 70°   | 14776.3 | 7369.5  | 113.4  | 35.8   | 20.9   | 13.4   | 16.4   | 26.9   | 34.3   | 38.8   | 38.8   |
| 72.5° | 10266.9 | 4543.8  | 101.5  | 25.4   | 17.9   | 11.9   | 14.9   | 25.4   | 32.8   | 37.3   | 38.8   |
| 75°   | 4881.2  | 1645.0  | 86.6   | 19.4   | 16.4   | 10.4   | 13.4   | 25.4   | 32.8   | 37.3   | 37.3   |
| 77.5° | 995.6   | 382.1   | 70.2   | 16.4   | 13.4   | 10.4   | 11.9   | 23.9   | 31.3   | 35.8   | 35.8   |
| 80°   | 326.9   | 147.8   | 52.2   | 14.9   | 13.4   | 10.4   | 11.9   | 22.4   | 31.3   | 34.3   | 35.8   |
| 82.5° | 235.8   | 74.6    | 34.3   | 14.9   | 13.4   | 10.4   | 10.4   | 22.4   | 29.9   | 34.3   | 34.3   |
| 85°   | 180.6   | 52.2    | 22.4   | 14.9   | 13.4   | 10.4   | 10.4   | 20.9   | 28.4   | 32.8   | 32.8   |
| 87.5° | 119.4   | 20.9    | 17.9   | 14.9   | 13.4   | 10.4   | 10.4   | 20.9   | 26.9   | 31.3   | 32.8   |
| 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)