

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: P299608

Luminaire Tested: **GAA-AF-06-LED-U-5MQ**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299608  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAA-AF-06-LED-U-5MQ  
Description: GALLEONAIRE AREA AND ROADWAY LUMINAIRE  
(6) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III  
w/Spill Control OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 37272.3 lumens  
Efficiency: N/A  
Efficacy: 111.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B5 - U0 - G4  
  
Input Watts (W): 333  
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

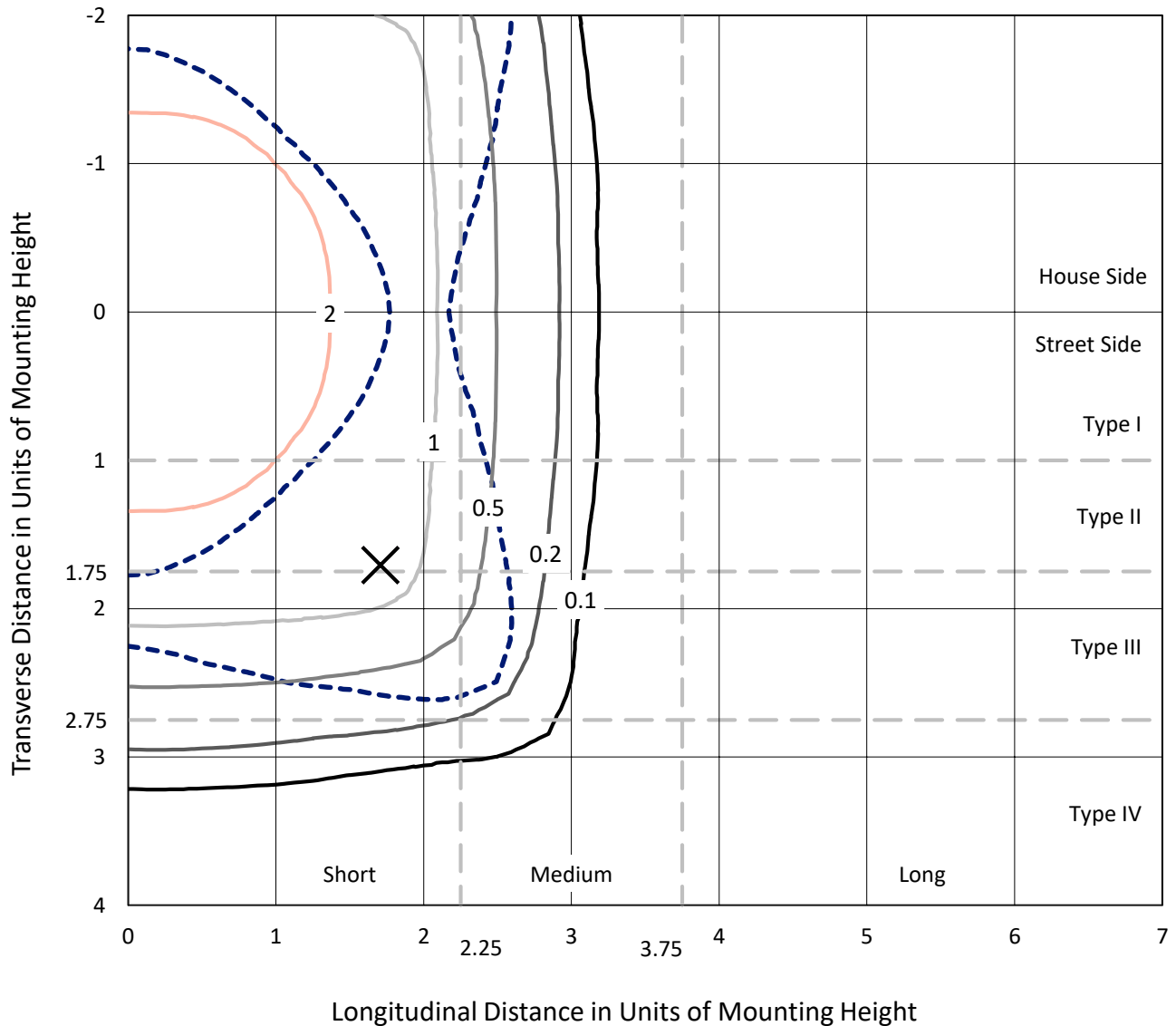


REPORT NUMBER: P299608

CATALOG NUMBER: GAA-AF-06-LED-U-5MQ

### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

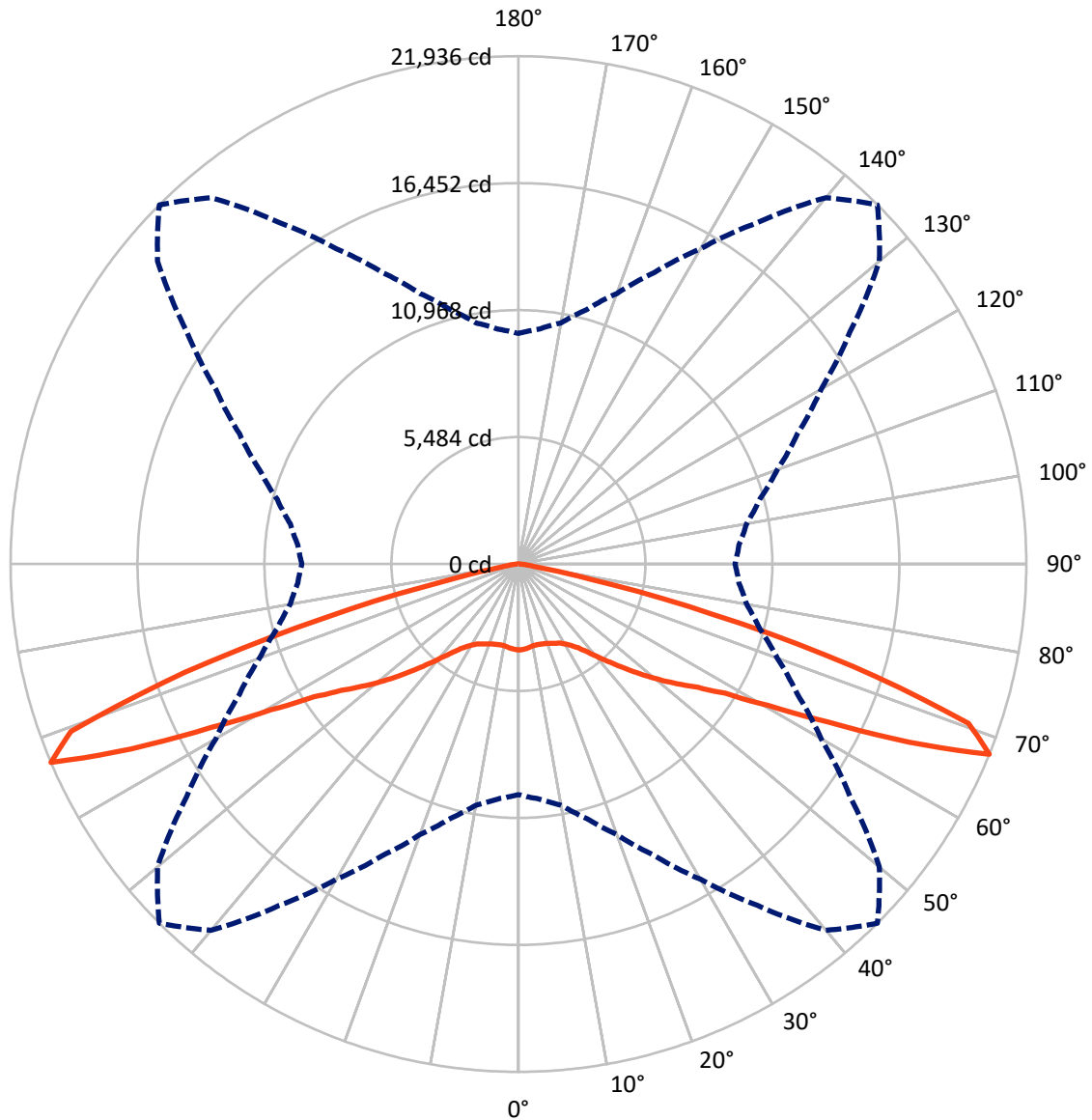


Based on 30 foot mounting height. Maximum calculated value = 4.1 fc  
 Type V - Short - Full Cutoff

REPORT NUMBER: P299608

CATALOG NUMBER: GAA-AF-06-LED-U-5MQ

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P299608

CATALOG NUMBER: GAA-AF-06-LED-U-5MQ

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 18636.1  | 0.0    | 18636.1 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 18636.1  | 0.0    | 18636.1 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 37272.3  | 0.0    | 37272.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 347.6   | 0.9       |
| 10°-20°   | 1008.8  | 2.7       |
| 20°-30°   | 1714.9  | 4.6       |
| 30°-40°   | 2803.4  | 7.5       |
| 40°-50°   | 5004.6  | 13.4      |
| 50°-60°   | 8437.9  | 22.6      |
| 60°-70°   | 13094.3 | 35.1      |
| 70°-80°   | 4600.8  | 12.3      |
| 80°-90°   | 260.0   | 0.7       |
| 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°    | 37272.3 | 100.0     |
| 0°-180°   | 37272.3 | 100.0     |



REPORT NUMBER: P299608

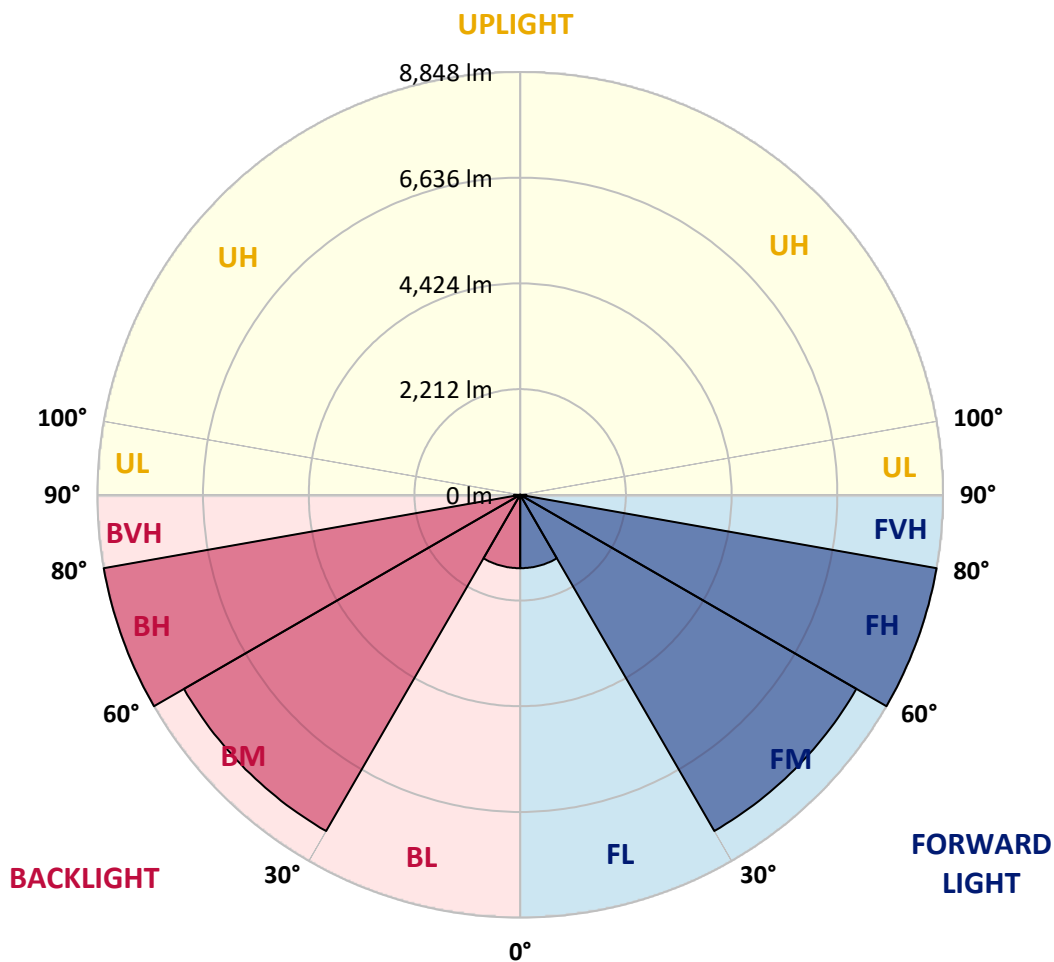
CATALOG NUMBER: GAA-AF-06-LED-U-5MQ

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|--------|-----------|-------------------------|------|----------|
|      |             |        |           | B                       | U    | G        |
| FL   | (0°-30°)    | 1535.7 | 4.1       |                         |      |          |
| FM   | (30°-60°)   | 8122.9 | 21.8      |                         |      |          |
| FH   | (60°-80°)   | 8847.5 | 23.7      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 130.0  | 0.3       |                         |      | G2/225   |
| BL   | (0°-30°)    | 1535.7 | 4.1       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 8122.9 | 21.8      | B4/8500                 |      |          |
| BH   | (60°-80°)   | 8847.5 | 23.7      | B5                      |      | G4/12000 |
| BVH  | (80°-90°)   | 130.0  | 0.3       |                         |      | G2/225   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |          |

**BUG Rating: B5-U0-G4**

Type V Short





REPORT NUMBER: P299608

CATALOG NUMBER: GAA-AF-06-LED-U-5MQ

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 10°     | 15°     | 20°     | 25°     | 30°     | 35°     | 40°     | 45°     | 50°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3714.3  | 3714.3  | 3714.3  | 3714.3  | 3714.3  | 3714.3  | 3714.3  | 3714.3  | 3714.3  | 3714.3  | 3714.3  |
| 2.5°  | 3700.6  | 3704.1  | 3704.1  | 3704.1  | 3702.3  | 3702.3  | 3698.9  | 3702.3  | 3700.6  | 3695.5  | 3697.2  |
| 5°    | 3669.8  | 3673.2  | 3673.2  | 3671.5  | 3676.6  | 3674.9  | 3669.8  | 3673.2  | 3671.5  | 3668.1  | 3669.8  |
| 7.5°  | 3625.2  | 3630.4  | 3630.4  | 3628.6  | 3633.8  | 3632.1  | 3628.6  | 3630.4  | 3630.4  | 3625.2  | 3625.2  |
| 10°   | 3575.5  | 3578.9  | 3578.9  | 3577.2  | 3585.8  | 3585.8  | 3584.1  | 3589.2  | 3590.9  | 3585.8  | 3582.4  |
| 12.5° | 3529.2  | 3534.4  | 3534.4  | 3541.2  | 3549.8  | 3553.2  | 3561.8  | 3568.6  | 3575.5  | 3573.8  | 3566.9  |
| 15°   | 3501.8  | 3505.2  | 3512.1  | 3520.7  | 3534.4  | 3546.4  | 3560.1  | 3575.5  | 3589.2  | 3592.6  | 3582.4  |
| 17.5° | 3484.7  | 3489.8  | 3500.1  | 3512.1  | 3530.9  | 3551.5  | 3572.1  | 3592.6  | 3611.5  | 3618.4  | 3606.4  |
| 20°   | 3479.5  | 3482.9  | 3493.2  | 3513.8  | 3539.5  | 3570.4  | 3599.5  | 3623.5  | 3649.2  | 3657.8  | 3649.2  |
| 22.5° | 3489.8  | 3496.7  | 3508.7  | 3532.7  | 3566.9  | 3606.4  | 3640.6  | 3673.2  | 3705.8  | 3721.2  | 3709.2  |
| 25°   | 3536.1  | 3542.9  | 3558.4  | 3589.2  | 3626.9  | 3668.1  | 3707.5  | 3745.2  | 3774.3  | 3789.8  | 3781.2  |
| 27.5° | 3621.8  | 3630.4  | 3649.2  | 3680.1  | 3721.2  | 3765.8  | 3808.6  | 3839.5  | 3863.5  | 3868.6  | 3858.3  |
| 30°   | 3750.3  | 3769.2  | 3791.5  | 3825.8  | 3873.7  | 3911.5  | 3954.3  | 3981.7  | 4010.9  | 4010.9  | 4002.3  |
| 32.5° | 3950.9  | 3969.7  | 3993.7  | 4026.3  | 4064.0  | 4105.1  | 4142.9  | 4166.8  | 4197.7  | 4199.4  | 4178.8  |
| 35°   | 4250.8  | 4259.4  | 4280.0  | 4300.5  | 4334.8  | 4370.8  | 4403.4  | 4418.8  | 4444.5  | 4446.2  | 4427.4  |
| 37.5° | 4646.8  | 4648.5  | 4662.2  | 4669.1  | 4699.9  | 4739.3  | 4770.2  | 4780.5  | 4804.5  | 4801.0  | 4782.2  |
| 40°   | 5107.9  | 5116.4  | 5121.6  | 5131.9  | 5164.4  | 5202.1  | 5234.7  | 5239.8  | 5265.6  | 5260.4  | 5236.4  |
| 42.5° | 5640.9  | 5644.4  | 5673.5  | 5688.9  | 5719.8  | 5738.6  | 5779.8  | 5784.9  | 5815.8  | 5802.0  | 5774.6  |
| 45°   | 6239.1  | 6270.0  | 6297.4  | 6328.3  | 6360.8  | 6383.1  | 6415.7  | 6408.8  | 6429.4  | 6408.8  | 6393.4  |
| 47.5° | 6868.2  | 6890.5  | 6952.2  | 7000.2  | 7053.3  | 7072.2  | 7118.4  | 7097.9  | 7118.4  | 7089.3  | 7084.2  |
| 50°   | 7560.7  | 7600.1  | 7653.2  | 7708.1  | 7764.6  | 7795.5  | 7855.5  | 7829.8  | 7857.2  | 7829.8  | 7814.3  |
| 52.5° | 8242.9  | 8253.1  | 8369.7  | 8450.3  | 8529.1  | 8565.1  | 8601.1  | 8589.1  | 8590.8  | 8589.1  | 8573.7  |
| 55°   | 8890.8  | 8914.8  | 9031.3  | 9141.0  | 9278.1  | 9379.3  | 9441.0  | 9434.1  | 9418.7  | 9403.3  | 9377.6  |
| 57.5° | 9620.9  | 9644.9  | 9778.6  | 9914.0  | 10070.0 | 10214.0 | 10339.1 | 10467.7 | 10517.4 | 10531.1 | 10474.5 |
| 60°   | 10608.2 | 10606.5 | 10784.8 | 10949.3 | 11172.2 | 11386.4 | 11660.7 | 11940.1 | 12260.6 | 12409.7 | 12212.6 |
| 62.5° | 11612.7 | 11653.8 | 11910.9 | 12202.3 | 12661.7 | 13109.0 | 13614.7 | 14111.7 | 14619.1 | 15032.2 | 14593.4 |
| 65°   | 11492.7 | 11650.4 | 12032.6 | 12692.5 | 13541.0 | 14548.8 | 15639.0 | 16792.5 | 17834.7 | 18551.1 | 17747.2 |
| 67.5° | 9960.3  | 10184.9 | 10574.0 | 11376.1 | 12437.1 | 13890.6 | 15721.2 | 18002.6 | 20654.3 | 21936.4 | 20347.5 |
| 70°   | 7219.6  | 7473.2  | 7881.2  | 8664.5  | 9715.2  | 11096.7 | 13085.0 | 15824.1 | 19334.5 | 20626.8 | 18876.8 |
| 72.5° | 3592.6  | 3729.8  | 3981.7  | 4480.5  | 5275.8  | 6396.8  | 8200.0  | 10832.8 | 13938.6 | 15124.8 | 13525.5 |
| 75°   | 1220.4  | 1283.8  | 1326.7  | 1489.5  | 1741.5  | 2182.0  | 3078.4  | 4735.9  | 7224.7  | 8661.1  | 7121.9  |
| 77.5° | 704.5   | 706.2   | 735.3   | 764.5   | 807.3   | 855.3   | 975.3   | 1280.4  | 2214.5  | 3145.3  | 2291.7  |
| 80°   | 455.9   | 454.2   | 478.2   | 500.5   | 529.6   | 553.6   | 560.5   | 593.1   | 683.9   | 810.7   | 725.0   |
| 82.5° | 236.5   | 265.7   | 318.8   | 348.0   | 402.8   | 413.1   | 399.4   | 387.4   | 409.7   | 425.1   | 435.4   |
| 85°   | 130.3   | 113.1   | 169.7   | 219.4   | 243.4   | 246.8   | 246.8   | 233.1   | 241.7   | 236.5   | 257.1   |
| 87.5° | 60.0    | 54.8    | 66.8    | 108.0   | 114.8   | 97.7    | 102.8   | 90.8    | 65.1    | 63.4    | 72.0    |
| 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: P299608

CATALOG NUMBER: GAA-AF-06-LED-U-5MQ

**CANDELA DISTRIBUTION (continued):**

|       | 55°     | 60°     | 65°     | 70°     | 75°     | 80°     | 85°     | 90°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3714.3  | 3714.3  | 3714.3  | 3714.3  | 3714.3  | 3714.3  | 3714.3  | 3714.3  |
| 2.5°  | 3697.2  | 3698.9  | 3698.9  | 3704.1  | 3705.8  | 3709.2  | 3712.6  | 3714.3  |
| 5°    | 3668.1  | 3673.2  | 3669.8  | 3674.9  | 3674.9  | 3678.3  | 3678.3  | 3680.1  |
| 7.5°  | 3625.2  | 3630.4  | 3630.4  | 3630.4  | 3628.6  | 3633.8  | 3633.8  | 3633.8  |
| 10°   | 3580.6  | 3584.1  | 3582.4  | 3578.9  | 3575.5  | 3580.6  | 3578.9  | 3577.2  |
| 12.5° | 3566.9  | 3558.4  | 3551.5  | 3548.1  | 3541.2  | 3542.9  | 3537.8  | 3537.8  |
| 15°   | 3575.5  | 3560.1  | 3548.1  | 3542.9  | 3536.1  | 3532.7  | 3529.2  | 3530.9  |
| 17.5° | 3597.8  | 3578.9  | 3563.5  | 3554.9  | 3546.4  | 3541.2  | 3534.4  | 3536.1  |
| 20°   | 3637.2  | 3614.9  | 3592.6  | 3575.5  | 3560.1  | 3551.5  | 3546.4  | 3544.6  |
| 22.5° | 3695.5  | 3662.9  | 3630.4  | 3604.6  | 3584.1  | 3572.1  | 3566.9  | 3563.5  |
| 25°   | 3762.3  | 3726.3  | 3688.6  | 3659.5  | 3638.9  | 3623.5  | 3613.2  | 3613.2  |
| 27.5° | 3846.3  | 3817.2  | 3782.9  | 3748.6  | 3729.8  | 3714.3  | 3707.5  | 3704.1  |
| 30°   | 3986.9  | 3959.4  | 3932.0  | 3899.5  | 3875.5  | 3860.0  | 3848.0  | 3837.8  |
| 32.5° | 4166.8  | 4144.6  | 4122.3  | 4098.3  | 4076.0  | 4055.4  | 4036.6  | 4028.0  |
| 35°   | 4420.5  | 4403.4  | 4388.0  | 4360.5  | 4352.0  | 4340.0  | 4329.7  | 4321.1  |
| 37.5° | 4770.2  | 4763.3  | 4763.3  | 4734.2  | 4727.3  | 4722.2  | 4711.9  | 4713.6  |
| 40°   | 5229.6  | 5236.4  | 5227.8  | 5217.6  | 5212.4  | 5198.7  | 5198.7  | 5210.7  |
| 42.5° | 5772.9  | 5778.1  | 5796.9  | 5779.8  | 5798.6  | 5781.5  | 5771.2  | 5779.8  |
| 45°   | 6403.7  | 6422.5  | 6460.2  | 6443.1  | 6455.1  | 6426.0  | 6390.0  | 6391.7  |
| 47.5° | 7111.6  | 7128.7  | 7144.1  | 7132.2  | 7133.9  | 7085.9  | 7037.9  | 7025.9  |
| 50°   | 7846.9  | 7853.8  | 7862.3  | 7845.2  | 7848.6  | 7795.5  | 7740.6  | 7742.4  |
| 52.5° | 8573.7  | 8606.2  | 8640.5  | 8594.2  | 8583.9  | 8524.0  | 8446.8  | 8416.0  |
| 55°   | 9405.0  | 9451.3  | 9411.8  | 9331.3  | 9250.7  | 9170.2  | 9069.0  | 9051.9  |
| 57.5° | 10430.0 | 10351.1 | 10227.7 | 10075.2 | 9963.8  | 9850.6  | 9747.8  | 9704.9  |
| 60°   | 11856.1 | 11559.5 | 11336.7 | 11110.5 | 10968.2 | 10829.3 | 10693.9 | 10673.4 |
| 62.5° | 13871.8 | 13359.3 | 12915.3 | 12447.4 | 12065.2 | 11766.9 | 11528.7 | 11461.8 |
| 65°   | 16398.3 | 15186.5 | 14135.7 | 13155.3 | 12303.4 | 11660.7 | 11256.1 | 11077.9 |
| 67.5° | 17485.0 | 15092.2 | 13290.7 | 11898.9 | 10784.8 | 10006.6 | 9569.5  | 9351.8  |
| 70°   | 15364.7 | 12516.0 | 10556.8 | 9163.3  | 8148.6  | 7319.0  | 6923.0  | 6689.9  |
| 72.5° | 10570.5 | 7961.7  | 6295.7  | 5138.7  | 4328.0  | 3633.8  | 3359.5  | 3339.0  |
| 75°   | 4746.2  | 3143.6  | 2166.6  | 1669.5  | 1405.5  | 1222.1  | 1165.6  | 1122.7  |
| 77.5° | 1328.4  | 982.1   | 875.9   | 819.3   | 764.5   | 701.0   | 677.0   | 682.2   |
| 80°   | 646.2   | 610.2   | 586.2   | 550.2   | 500.5   | 447.4   | 423.4   | 433.7   |
| 82.5° | 428.5   | 423.4   | 438.8   | 413.1   | 341.1   | 289.7   | 243.4   | 222.8   |
| 85°   | 260.5   | 264.0   | 269.1   | 270.8   | 229.7   | 161.1   | 109.7   | 123.4   |
| 87.5° | 102.8   | 118.3   | 128.6   | 133.7   | 125.1   | 77.1    | 61.7    | 63.4    |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)