

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: P192857

Luminaire Tested: **GAN-AF-09-LED-U-SL3-7030-600-HSS**

Issue Date: 3/3/2020

#### Test Information

Test Method: LM-79-08  
Report Number: P192857  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24289)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-AF-09-LED-U-SL3-7030-600-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

#### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 28969 lumens  
Efficiency: N/A  
Efficacy: 99.9 lumens/watt  
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G4

Input Watts (W): 290  
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

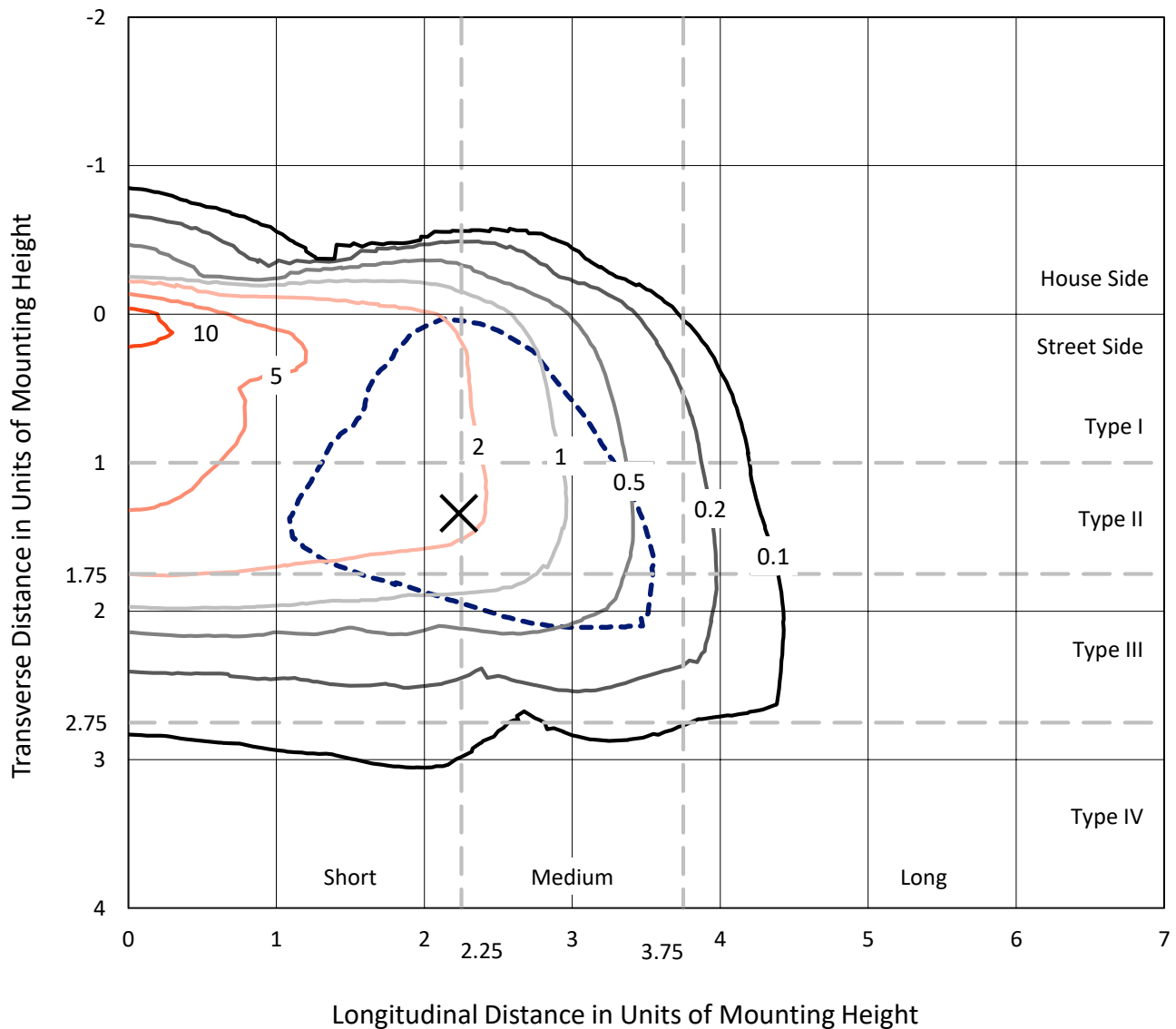


REPORT NUMBER: P192857

CATALOG NUMBER: GAN-AF-09-LED-U-SL3-7030-600-HSS

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

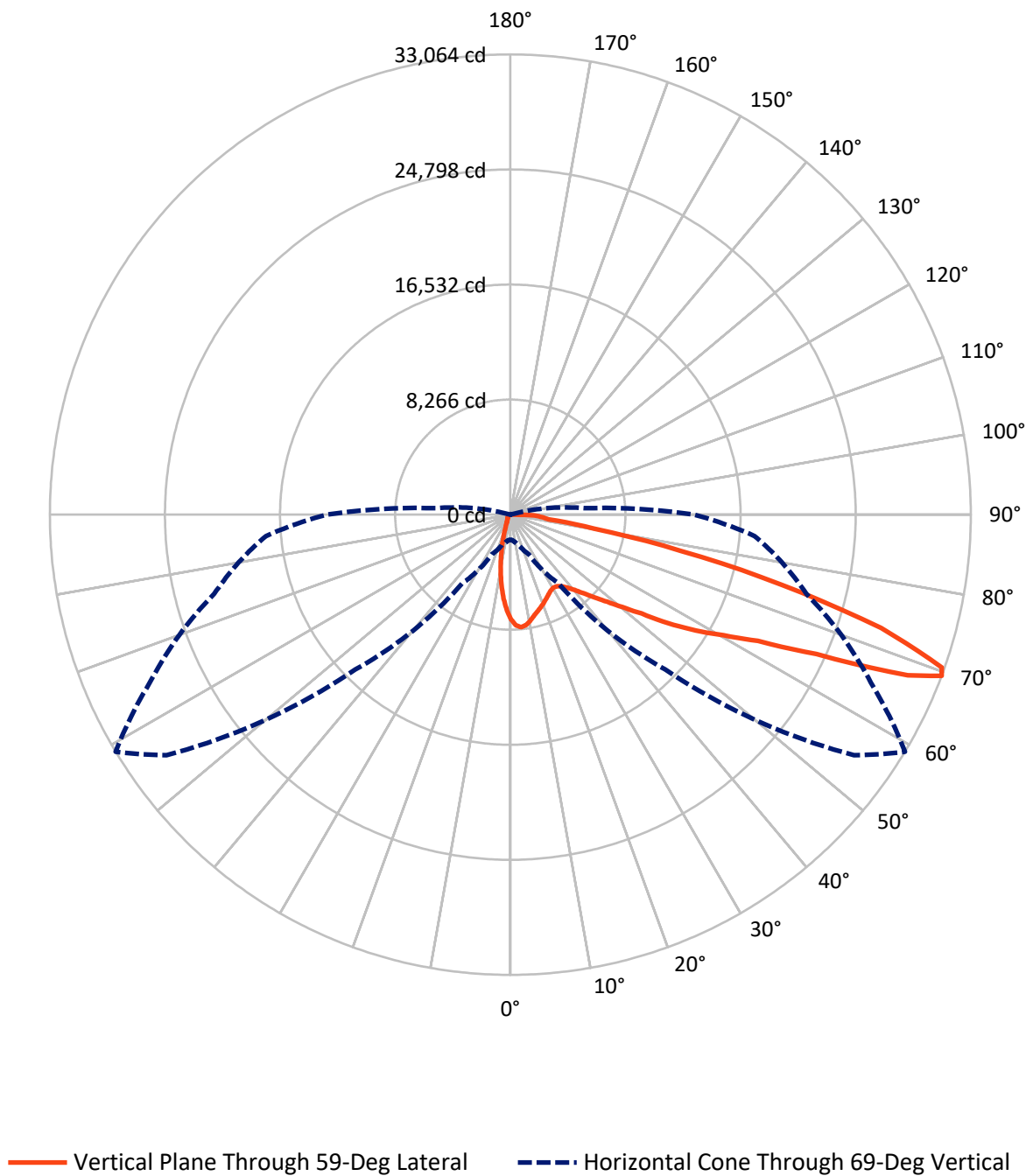


Based on 25 foot mounting height. Maximum calculated value = 12.1 fc  
Type III - Short - Non-Cutoff

REPORT NUMBER: P192857

CATALOG NUMBER: GAN-AF-09-LED-U-SL3-7030-600-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P192857

CATALOG NUMBER: GAN-AF-09-LED-U-SL3-7030-600-HSS

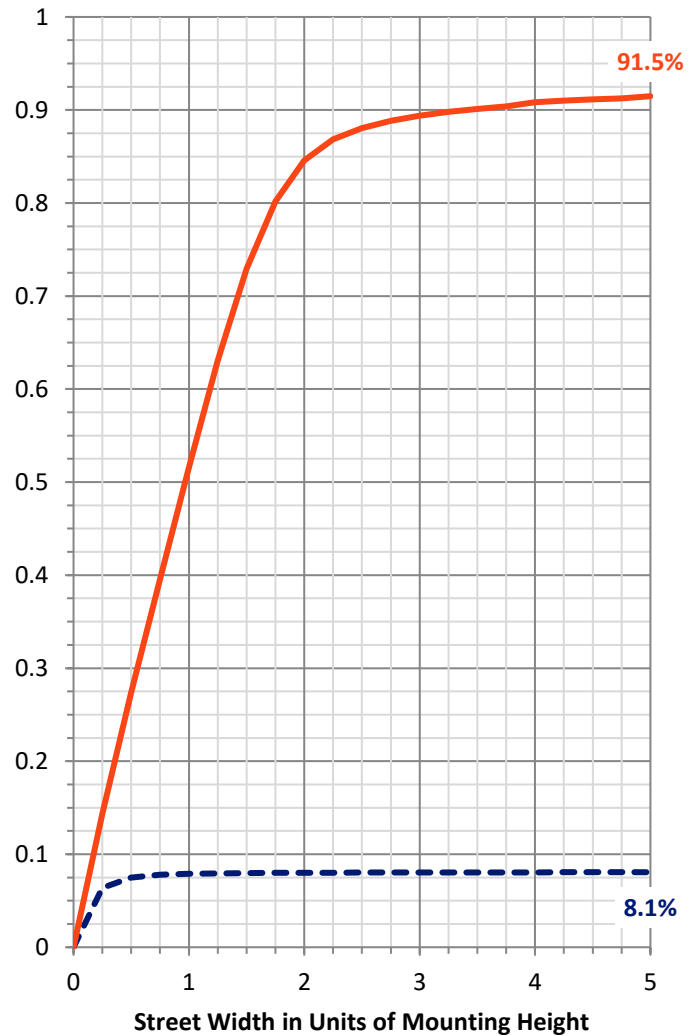
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2359.2   | 0.0    | 2359.2  |
|                    | % Fixture | 8.1      | 0.0    | 8.1     |
| <b>Street Side</b> | Lumens    | 26609.8  | 0.0    | 26609.8 |
|                    | % Fixture | 91.9     | 0.0    | 91.9    |
| <b>Total</b>       | Lumens    | 28969.0  | 0.0    | 28969.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 612.0   | 2.1       |
| 10°-20°   | 1264.6  | 4.4       |
| 20°-30°   | 1701.7  | 5.9       |
| 30°-40°   | 2470.8  | 8.5       |
| 40°-50°   | 4114.1  | 14.2      |
| 50°-60°   | 6418.0  | 22.2      |
| 60°-70°   | 7941.7  | 27.4      |
| 70°-80°   | 4024.8  | 13.9      |
| 80°-90°   | 421.1   | 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°    | 28969.0 | 100.0     |
| 0°-180°   | 28969.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P192857

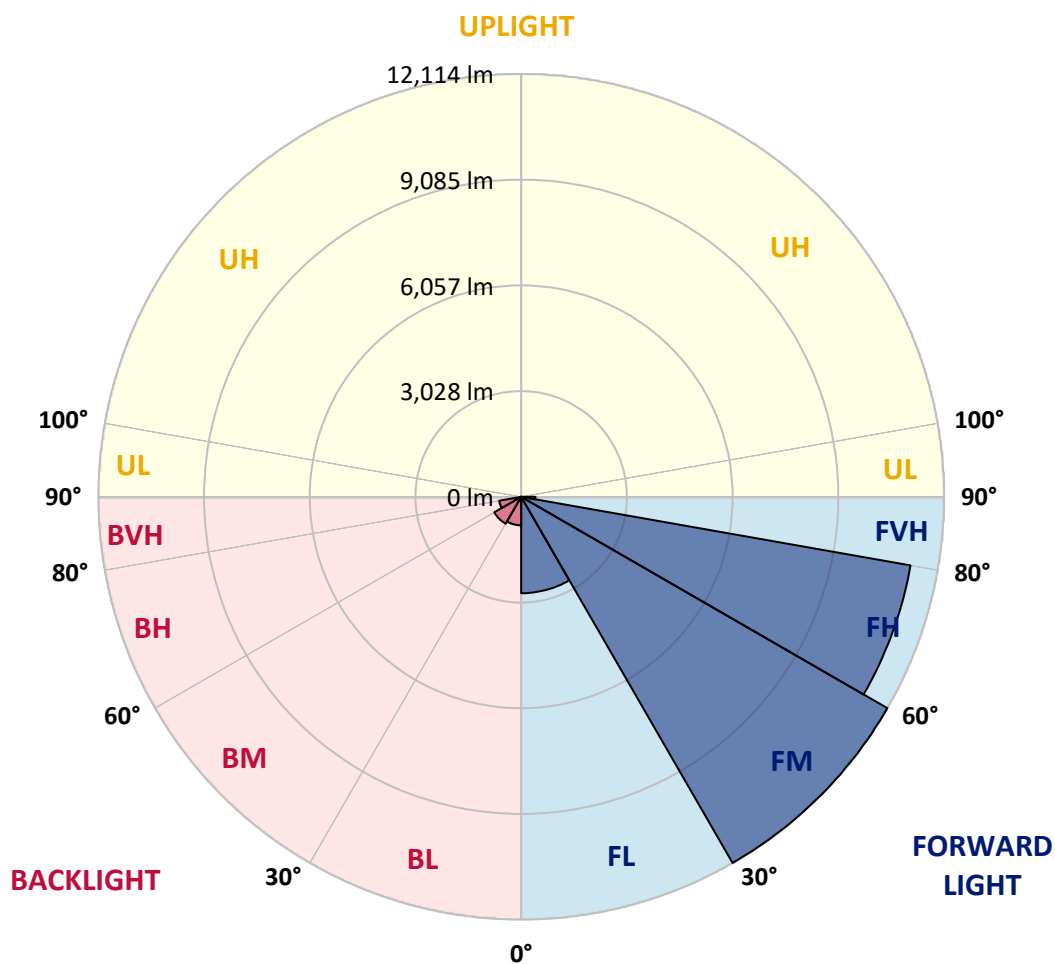
CATALOG NUMBER: GAN-AF-09-LED-U-SL3-7030-600-HSS

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2761.9  | 9.5       |                         |      |          |
| FM   | (30°-60°)   | 12114.0 | 41.8      |                         |      |          |
| FH   | (60°-80°)   | 11325.8 | 39.1      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 408.2   | 1.4       |                         |      | G3/500   |
| BL   | (0°-30°)    | 816.6   | 2.8       | B2/1000                 |      |          |
| BM   | (30°-60°)   | 888.9   | 3.1       | B1/1000                 |      |          |
| BH   | (60°-80°)   | 640.7   | 2.2       | B2/1000                 |      | G2/1000  |
| BVH  | (80°-90°)   | 13.0    | 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





REPORT NUMBER: P192857

CATALOG NUMBER: GAN-AF-09-LED-U-SL3-7030-600-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 59°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 7540.2  | 7540.2  | 7540.2  | 7540.2  | 7540.2  | 7540.2  | 7540.2  | 7540.2  | 7540.2  | 7540.2  | 7540.2  |
| 2.5°  | 8264.3  | 8261.0  | 8224.9  | 8208.5  | 8179.1  | 8116.9  | 8020.1  | 7969.4  | 7887.5  | 7745.0  | 7553.3  |
| 5°    | 8188.9  | 8228.2  | 8249.5  | 8251.2  | 8272.4  | 8249.5  | 8162.8  | 8120.1  | 8007.1  | 7777.7  | 7433.8  |
| 7.5°  | 7677.8  | 7692.6  | 7753.1  | 7805.6  | 7907.2  | 8003.8  | 8034.9  | 8016.9  | 7949.7  | 7704.1  | 7247.0  |
| 10°   | 7130.7  | 7145.4  | 7217.5  | 7286.3  | 7423.9  | 7573.0  | 7730.2  | 7763.0  | 7790.8  | 7599.2  | 7066.8  |
| 12.5° | 6659.0  | 6673.7  | 6747.5  | 6837.5  | 6998.0  | 7181.5  | 7425.6  | 7479.7  | 7602.5  | 7499.2  | 6922.6  |
| 15°   | 6252.7  | 6259.3  | 6331.3  | 6442.7  | 6634.3  | 6870.2  | 7147.0  | 7233.9  | 7422.3  | 7428.9  | 6796.6  |
| 17.5° | 5907.0  | 5923.4  | 5967.6  | 6074.2  | 6283.8  | 6575.3  | 6898.1  | 7022.6  | 7243.8  | 7369.9  | 6673.7  |
| 20°   | 5695.6  | 5712.1  | 5710.4  | 5769.4  | 5957.8  | 6269.1  | 6649.1  | 6798.1  | 7066.8  | 7309.2  | 6564.0  |
| 22.5° | 5654.7  | 5654.7  | 5612.2  | 5604.0  | 5715.4  | 5975.8  | 6390.2  | 6572.1  | 6907.9  | 7283.0  | 6486.9  |
| 25°   | 5800.6  | 5794.0  | 5687.5  | 5600.7  | 5605.6  | 5761.2  | 6139.6  | 6355.8  | 6773.6  | 7301.0  | 6446.0  |
| 27.5° | 6108.4  | 6100.4  | 5966.0  | 5800.6  | 5667.9  | 5666.1  | 5949.6  | 6182.2  | 6667.1  | 7386.3  | 6462.3  |
| 30°   | 6534.5  | 6531.2  | 6385.3  | 6177.3  | 5936.5  | 5715.4  | 5884.0  | 6095.5  | 6598.2  | 7540.2  | 6500.1  |
| 32.5° | 6999.7  | 6994.8  | 6885.0  | 6665.5  | 6360.7  | 5936.5  | 5952.9  | 6129.8  | 6618.0  | 7745.0  | 6591.7  |
| 35°   | 7492.7  | 7484.6  | 7437.1  | 7245.4  | 6909.5  | 6344.3  | 6178.9  | 6316.6  | 6742.5  | 8051.4  | 6772.0  |
| 37.5° | 8026.7  | 8034.9  | 8069.4  | 7885.9  | 7533.7  | 6916.1  | 6557.4  | 6650.7  | 6993.1  | 8467.4  | 7065.1  |
| 40°   | 8814.7  | 8813.1  | 8824.6  | 8583.7  | 8244.6  | 7615.6  | 7086.4  | 7115.9  | 7412.4  | 9019.5  | 7510.7  |
| 42.5° | 10244.8 | 10144.8 | 9841.7  | 9350.3  | 9009.6  | 8414.9  | 7753.1  | 7722.0  | 7925.2  | 9702.6  | 8134.9  |
| 45°   | 12166.2 | 11953.3 | 11167.1 | 10225.1 | 9789.4  | 9316.0  | 8573.9  | 8473.9  | 8603.4  | 10523.2 | 8904.7  |
| 47.5° | 13819.1 | 13598.0 | 12485.7 | 11135.9 | 10616.6 | 10171.1 | 9535.5  | 9355.3  | 9397.8  | 11442.1 | 9881.1  |
| 50°   | 14381.0 | 14272.9 | 13301.4 | 11928.7 | 11417.6 | 11247.2 | 10651.0 | 10431.5 | 10370.9 | 12505.4 | 11013.0 |
| 52.5° | 14186.0 | 14177.8 | 13530.7 | 12443.1 | 12151.5 | 12361.1 | 12054.9 | 11801.0 | 11578.2 | 13625.8 | 12164.6 |
| 55°   | 13873.2 | 13914.1 | 13624.2 | 12893.5 | 12883.8 | 13378.5 | 13974.7 | 13763.4 | 13118.0 | 14843.0 | 13157.3 |
| 57.5° | 13009.9 | 13185.2 | 13571.7 | 13745.4 | 14148.4 | 14654.5 | 15573.5 | 15698.1 | 14934.6 | 15775.1 | 13981.3 |
| 60°   | 10556.0 | 10941.0 | 12205.6 | 13868.3 | 15778.3 | 17039.6 | 17503.3 | 17609.8 | 16425.4 | 16549.8 | 15093.5 |
| 62.5° | 7492.7  | 7885.9  | 9489.6  | 12302.3 | 15802.8 | 20173.3 | 20378.2 | 19960.3 | 18066.8 | 17698.2 | 17011.7 |
| 65°   | 3977.4  | 4280.3  | 5590.9  | 8880.1  | 13701.2 | 20900.6 | 25405.5 | 24160.5 | 20962.9 | 19957.1 | 19490.2 |
| 67.5° | 2034.5  | 2126.3  | 2647.3  | 4345.9  | 9419.1  | 18564.7 | 29911.9 | 30788.2 | 25954.2 | 22198.1 | 19370.7 |
| 69°   | 1800.3  | 1854.3  | 2199.9  | 3141.9  | 6031.5  | 15724.3 | 30131.4 | 33063.7 | 28567.0 | 22011.3 | 17603.2 |
| 70°   | 1742.9  | 1790.4  | 2105.0  | 2843.8  | 4714.5  | 13186.8 | 29291.1 | 32863.8 | 29235.4 | 21300.4 | 16282.8 |
| 72.5° | 1479.3  | 1520.2  | 1874.1  | 2512.9  | 3831.5  | 6545.9  | 23793.6 | 27847.9 | 26234.4 | 17744.0 | 11786.3 |
| 75°   | 989.5   | 1123.7  | 1798.6  | 2355.6  | 3564.6  | 3718.5  | 15686.6 | 20124.3 | 18694.1 | 11968.0 | 6139.6  |
| 77.5° | 237.5   | 255.5   | 507.8   | 1874.1  | 3259.9  | 3273.0  | 8067.7  | 12510.3 | 10203.8 | 4265.6  | 1451.4  |
| 80°   | 127.8   | 122.8   | 142.5   | 371.8   | 3035.4  | 3071.5  | 3631.7  | 6072.5  | 3643.1  | 707.7   | 478.3   |
| 82.5° | 90.1    | 85.2    | 91.8    | 155.5   | 955.0   | 2797.9  | 2627.5  | 2748.8  | 1510.3  | 271.9   | 214.5   |
| 85°   | 32.8    | 31.1    | 50.8    | 140.8   | 299.8   | 1608.7  | 2699.6  | 2267.1  | 1223.7  | 124.4   | 157.3   |
| 87.5° | 11.5    | 9.9     | 19.6    | 77.0    | 91.8    | 684.7   | 1665.9  | 1713.5  | 481.7   | 75.4    | 73.8    |
| 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: P192857

CATALOG NUMBER: GAN-AF-09-LED-U-SL3-7030-600-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 7540.2  | 7540.2 | 7540.2 | 7540.2 | 7540.2 | 7540.2 | 7540.2 | 7540.2 | 7540.2 | 7540.2 | 7540.2 |
| 2.5°  | 7473.2  | 7371.5 | 7184.8 | 6993.1 | 6816.1 | 6603.2 | 6496.8 | 6391.8 | 6347.6 | 6331.3 | 6254.3 |
| 5°    | 7256.9  | 7084.8 | 6688.5 | 6290.4 | 5923.4 | 5533.6 | 5276.3 | 5069.9 | 4948.8 | 4889.8 | 4796.4 |
| 7.5°  | 6980.0  | 6698.2 | 6097.1 | 5482.7 | 4911.1 | 4347.5 | 3929.8 | 3608.8 | 3387.6 | 3281.2 | 3184.5 |
| 10°   | 6711.4  | 6336.3 | 5481.1 | 4644.1 | 3867.6 | 3120.6 | 2544.0 | 2126.3 | 1859.3 | 1736.3 | 1657.8 |
| 12.5° | 6470.6  | 5984.0 | 4886.5 | 3826.6 | 2852.0 | 1977.1 | 1390.8 | 1058.1 | 892.7  | 835.4  | 807.5  |
| 15°   | 6255.9  | 5659.6 | 4324.6 | 3050.2 | 1931.3 | 1130.3 | 760.1  | 647.1  | 620.8  | 620.8  | 617.6  |
| 17.5° | 6052.9  | 5341.9 | 3782.4 | 2321.2 | 1212.2 | 691.3  | 578.2  | 563.6  | 563.6  | 570.2  | 570.2  |
| 20°   | 5857.9  | 5038.8 | 3258.2 | 1665.9 | 763.4  | 548.8  | 522.6  | 519.3  | 522.6  | 530.8  | 530.8  |
| 22.5° | 5690.8  | 4763.6 | 2768.4 | 1143.4 | 566.8  | 494.7  | 481.7  | 476.7  | 478.3  | 483.3  | 486.5  |
| 25°   | 5566.3  | 4531.0 | 2306.5 | 774.8  | 488.2  | 450.4  | 435.7  | 427.5  | 420.9  | 420.9  | 424.3  |
| 27.5° | 5487.6  | 4334.5 | 1859.3 | 563.6  | 439.0  | 409.5  | 386.6  | 373.4  | 358.7  | 350.5  | 353.8  |
| 30°   | 5430.3  | 4147.7 | 1439.9 | 460.3  | 393.2  | 363.7  | 334.3  | 312.9  | 291.6  | 281.8  | 285.0  |
| 32.5° | 5409.1  | 3997.0 | 1076.2 | 406.2  | 352.2  | 319.5  | 283.4  | 255.5  | 232.6  | 224.4  | 226.0  |
| 35°   | 5466.3  | 3877.4 | 788.0  | 366.9  | 319.5  | 278.5  | 237.5  | 206.4  | 188.4  | 183.4  | 185.0  |
| 37.5° | 5617.1  | 3813.4 | 589.7  | 334.3  | 290.0  | 244.0  | 198.2  | 168.7  | 157.3  | 157.3  | 158.9  |
| 40°   | 5902.0  | 3811.8 | 473.4  | 311.3  | 263.8  | 211.3  | 163.8  | 142.5  | 135.9  | 139.2  | 140.8  |
| 42.5° | 6318.3  | 3898.7 | 412.8  | 290.0  | 240.8  | 180.2  | 135.9  | 121.2  | 119.5  | 122.8  | 124.4  |
| 45°   | 6886.6  | 4057.6 | 380.0  | 271.9  | 216.3  | 150.7  | 114.7  | 104.9  | 104.9  | 109.8  | 111.5  |
| 47.5° | 7582.8  | 4290.2 | 352.2  | 253.9  | 191.6  | 126.0  | 98.4   | 91.8   | 93.4   | 98.4   | 100.0  |
| 50°   | 8421.4  | 4583.4 | 324.4  | 234.3  | 173.6  | 104.9  | 85.2   | 80.3   | 82.0   | 88.5   | 90.1   |
| 52.5° | 9376.5  | 4978.2 | 301.4  | 216.3  | 150.7  | 86.9   | 72.1   | 68.9   | 72.1   | 78.6   | 80.3   |
| 55°   | 10195.6 | 5332.1 | 273.5  | 201.5  | 121.2  | 72.1   | 59.0   | 59.0   | 62.3   | 70.5   | 72.1   |
| 57.5° | 10983.5 | 5702.2 | 249.0  | 173.6  | 95.0   | 57.4   | 49.1   | 50.8   | 55.7   | 63.9   | 65.5   |
| 60°   | 12140.1 | 6329.7 | 219.5  | 145.8  | 72.1   | 45.9   | 41.0   | 42.6   | 49.1   | 57.4   | 59.0   |
| 62.5° | 14104.2 | 7284.7 | 190.0  | 121.2  | 55.7   | 36.0   | 32.8   | 36.0   | 44.2   | 54.1   | 55.7   |
| 65°   | 15876.6 | 7672.9 | 155.5  | 101.6  | 42.6   | 27.9   | 27.9   | 32.8   | 42.6   | 52.5   | 54.1   |
| 67.5° | 14888.8 | 6459.1 | 121.2  | 80.3   | 32.8   | 21.3   | 23.0   | 31.1   | 41.0   | 52.5   | 54.1   |
| 69°   | 13167.2 | 5281.3 | 103.2  | 63.9   | 27.9   | 19.6   | 21.3   | 31.1   | 41.0   | 50.8   | 52.5   |
| 70°   | 11825.5 | 4459.0 | 91.8   | 54.1   | 24.6   | 19.6   | 21.3   | 29.5   | 41.0   | 50.8   | 52.5   |
| 72.5° | 7920.3  | 2408.1 | 73.8   | 39.4   | 23.0   | 18.0   | 18.0   | 29.5   | 39.4   | 49.1   | 50.8   |
| 75°   | 3404.0  | 665.1  | 59.0   | 27.9   | 19.6   | 16.4   | 16.4   | 27.9   | 37.7   | 47.5   | 50.8   |
| 77.5° | 622.4   | 168.7  | 47.5   | 24.6   | 19.6   | 16.4   | 14.7   | 26.2   | 36.0   | 45.9   | 47.5   |
| 80°   | 247.4   | 83.6   | 37.7   | 21.3   | 18.0   | 14.7   | 13.1   | 24.6   | 34.4   | 44.2   | 45.9   |
| 82.5° | 149.0   | 47.5   | 31.1   | 19.6   | 18.0   | 13.1   | 11.5   | 21.3   | 32.8   | 42.6   | 44.2   |
| 85°   | 121.2   | 32.8   | 24.6   | 19.6   | 16.4   | 13.1   | 9.9    | 19.6   | 29.5   | 41.0   | 42.6   |
| 87.5° | 59.0    | 23.0   | 23.0   | 18.0   | 16.4   | 13.1   | 9.9    | 18.0   | 27.9   | 39.4   | 41.0   |
| 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)