

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: P268496

Luminaire Tested: **GAN-AF-05-LED-U-AFL-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P268496  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAN-AF-05-LED-U-AFL-7027-800  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 21423.8 lumens  
Efficiency: N/A  
Efficacy: 102.0 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Full Cutoff  
BUG Rating: B2 - U0 - G2

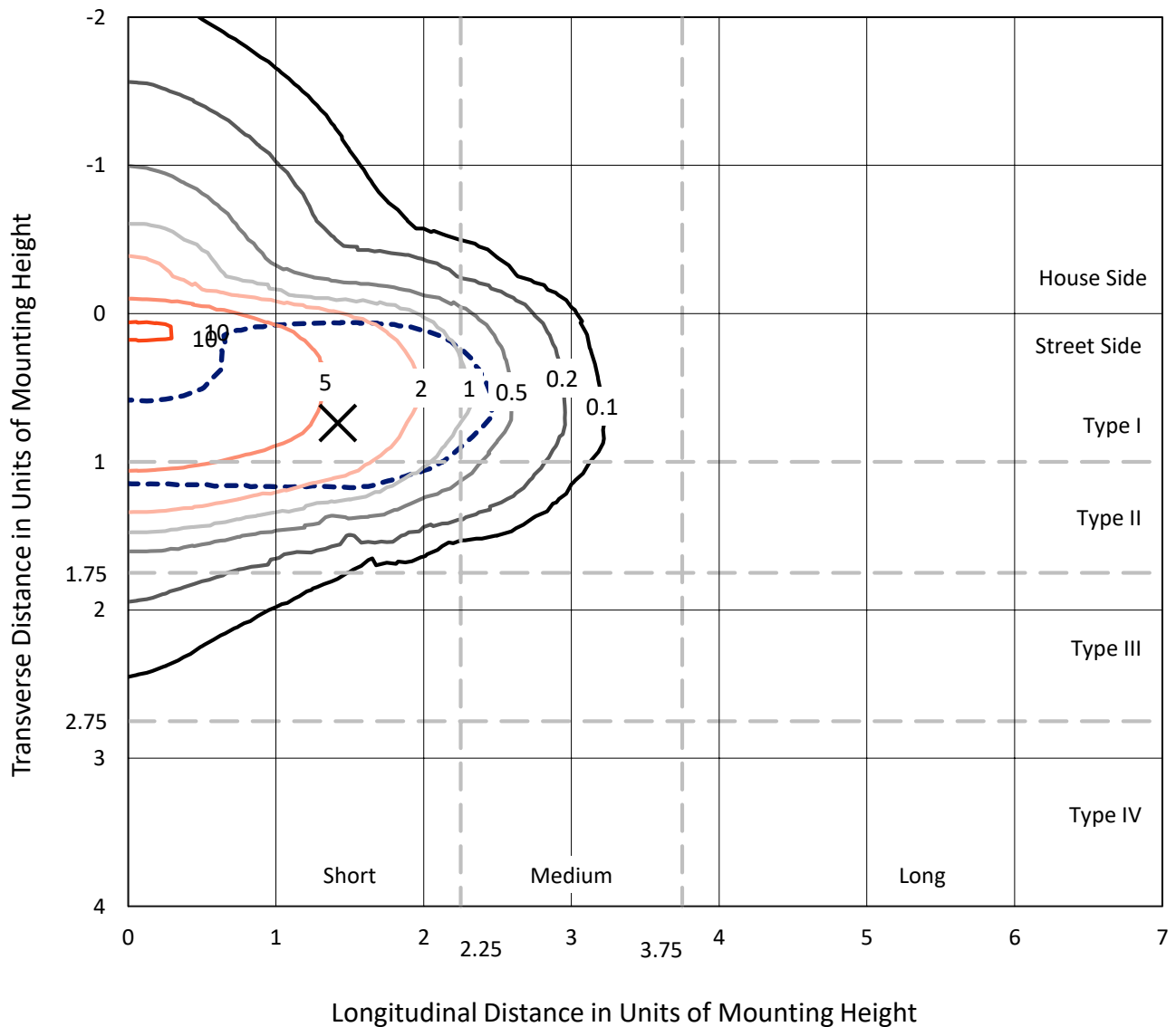
Input Watts (W): 210  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P268496  
 CATALOG NUMBER: GAN-AF-05-LED-U-AFL-7027-800

### Iso-Footcandle Lines of Horizontal Illumination

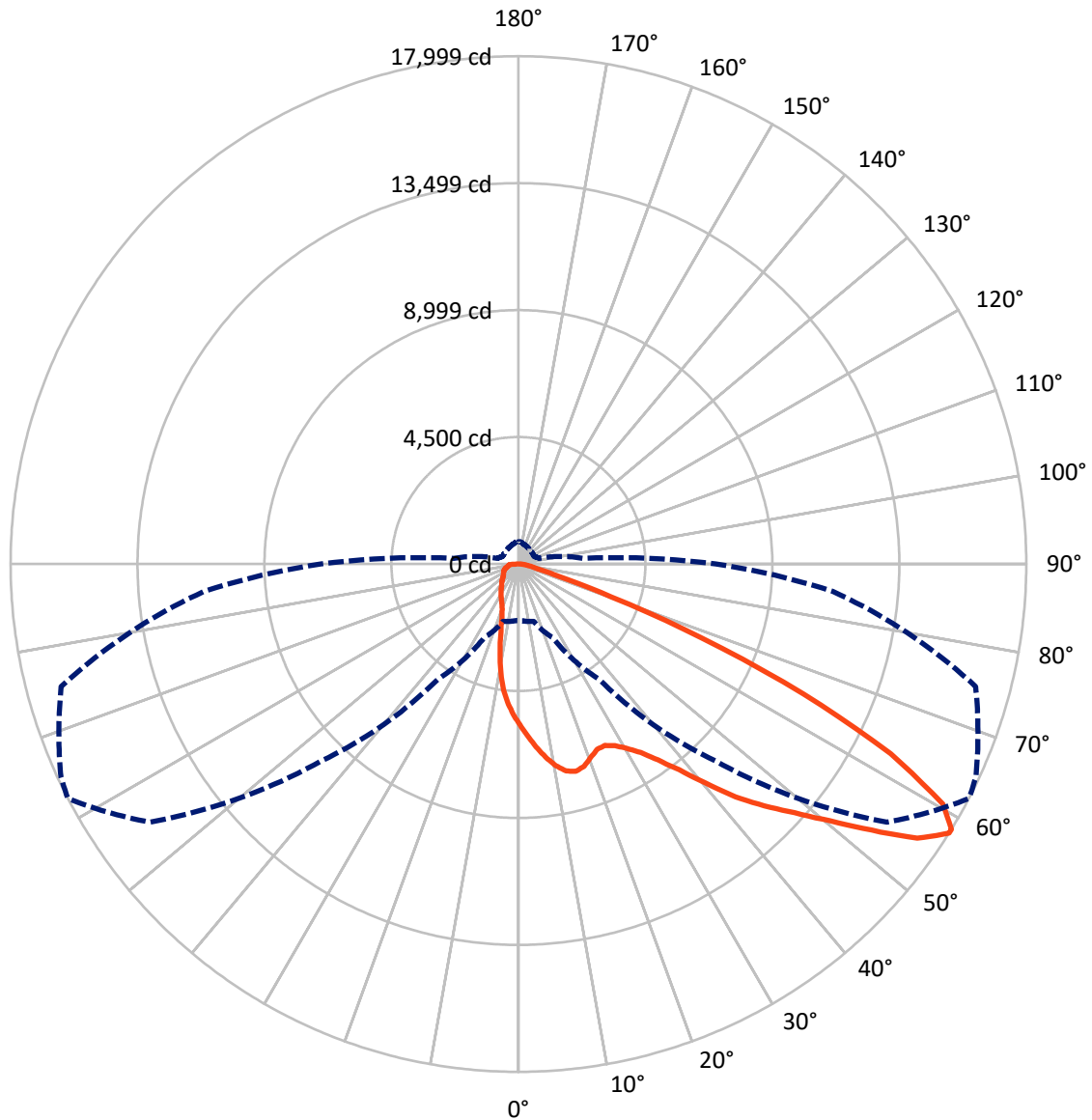
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.1 fc  
 Type II - Short - Full Cutoff

REPORT NUMBER: P268496  
CATALOG NUMBER: GAN-AF-05-LED-U-AFL-7027-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral    - - - Horizontal Cone Through 58-Deg Vertical

REPORT NUMBER: P268496

CATALOG NUMBER: GAN-AF-05-LED-U-AFL-7027-800

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3267.2   | 0.0    | 3267.2  |
|                    | % Fixture | 15.3     | 0.0    | 15.3    |
| <b>Street Side</b> | Lumens    | 18156.6  | 0.0    | 18156.6 |
|                    | % Fixture | 84.7     | 0.0    | 84.7    |
| <b>Total</b>       | Lumens    | 21423.8  | 0.0    | 21423.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 509.0   | 2.4       |
| 10°-20°   | 1301.0  | 6.1       |
| 20°-30°   | 2103.1  | 9.8       |
| 30°-40°   | 3338.6  | 15.6      |
| 40°-50°   | 4885.1  | 22.8      |
| 50°-60°   | 5109.4  | 23.8      |
| 60°-70°   | 3018.6  | 14.1      |
| 70°-80°   | 850.4   | 4.0       |
| 80°-90°   | 308.7   | 1.4       |
| 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°    | 21423.8 | 100.0     |
| 0°-180°   | 21423.8 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P268496

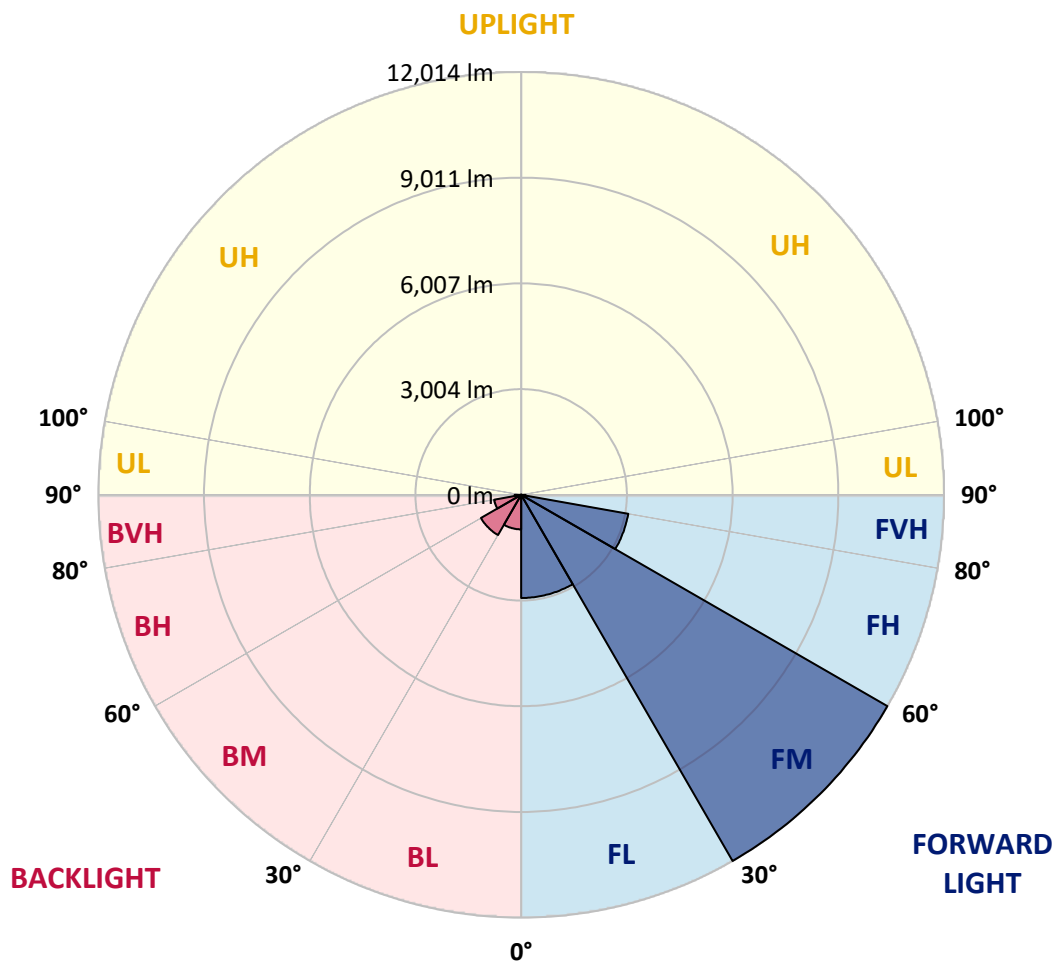
CATALOG NUMBER: GAN-AF-05-LED-U-AFL-7027-800

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

| Zone           | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|---------|-----------|-------------------------|------|---------|
|                |         |           | B                       | U    | G       |
| FL (0°-30°)    | 2931.0  | 13.7      |                         |      |         |
| FM (30°-60°)   | 12014.3 | 56.1      |                         |      |         |
| FH (60°-80°)   | 3089.4  | 14.4      |                         |      | G2/5000 |
| FVH (80°-90°)  | 121.8   | 0.6       |                         |      | G2/225  |
| BL (0°-30°)    | 982.0   | 4.6       | B2/1000                 |      |         |
| BM (30°-60°)   | 1318.7  | 6.2       | B2/2500                 |      |         |
| BH (60°-80°)   | 779.6   | 3.6       | B2/1000                 |      | G2/1000 |
| BVH (80°-90°)  | 186.9   | 0.9       |                         |      | G2/225  |
| UL (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type II Short





REPORT NUMBER: P268496  
 CATALOG NUMBER: GAN-AF-05-LED-U-AFL-7027-800

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 62.5°   | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 5690.9  | 5690.9  | 5690.9  | 5690.9  | 5690.9  | 5690.9  | 5690.9  | 5690.9  | 5690.9  | 5690.9  | 5690.9  |
| 2.5°  | 6502.9  | 6450.4  | 6417.1  | 6387.8  | 6349.6  | 6267.8  | 6157.9  | 6088.3  | 6053.0  | 5932.9  | 5790.7  |
| 5°    | 7140.4  | 7094.1  | 7059.8  | 7020.4  | 6951.9  | 6823.7  | 6646.1  | 6504.8  | 6435.3  | 6195.3  | 5910.7  |
| 7.5°  | 6991.1  | 7010.4  | 7069.8  | 7173.8  | 7262.5  | 7245.4  | 7087.0  | 6907.4  | 6815.6  | 6481.7  | 6049.9  |
| 10°   | 6091.2  | 6124.6  | 6227.5  | 6470.6  | 6864.0  | 7267.6  | 7390.6  | 7266.6  | 7173.8  | 6765.1  | 6193.2  |
| 12.5° | 5910.7  | 5909.7  | 5917.8  | 5982.4  | 6216.5  | 6784.4  | 7400.7  | 7525.8  | 7470.3  | 7035.5  | 6339.5  |
| 15°   | 5984.4  | 5986.3  | 5980.3  | 6007.5  | 6080.2  | 6305.2  | 7092.1  | 7625.7  | 7665.1  | 7307.9  | 6490.9  |
| 17.5° | 6178.1  | 6173.1  | 6149.7  | 6149.7  | 6176.0  | 6263.8  | 6728.8  | 7532.8  | 7714.6  | 7549.0  | 6623.9  |
| 20°   | 6502.9  | 6479.7  | 6418.2  | 6361.6  | 6333.4  | 6380.8  | 6579.5  | 7319.0  | 7628.8  | 7759.9  | 6734.0  |
| 22.5° | 6896.4  | 6878.2  | 6778.3  | 6657.2  | 6559.5  | 6558.3  | 6656.3  | 7132.5  | 7480.5  | 7958.7  | 6826.7  |
| 25°   | 7404.8  | 7375.5  | 7227.3  | 7033.5  | 6862.1  | 6796.4  | 6823.7  | 7123.3  | 7399.8  | 8174.5  | 6909.5  |
| 27.5° | 8002.0  | 7948.6  | 7773.0  | 7493.7  | 7241.3  | 7109.1  | 7069.8  | 7287.8  | 7473.4  | 8441.8  | 7024.4  |
| 30°   | 8726.3  | 8664.8  | 8439.8  | 8075.7  | 7719.6  | 7502.6  | 7418.9  | 7579.3  | 7717.5  | 8767.6  | 7209.1  |
| 32.5° | 9550.6  | 9461.8  | 9201.5  | 8799.9  | 8331.9  | 8001.1  | 7864.8  | 7964.7  | 8074.7  | 9160.1  | 7440.1  |
| 35°   | 10689.6 | 10583.7 | 10207.4 | 9653.5  | 9124.9  | 8669.8  | 8452.0  | 8524.6  | 8631.5  | 9745.3  | 7774.0  |
| 37.5° | 11466.3 | 11419.0 | 11168.6 | 10648.1 | 10073.1 | 9549.5  | 9212.6  | 9255.0  | 9315.6  | 10476.7 | 8201.7  |
| 40°   | 11459.3 | 11478.5 | 11483.5 | 11488.6 | 11097.1 | 10595.7 | 10233.5 | 10189.1 | 10177.1 | 11279.7 | 8688.0  |
| 42.5° | 10885.2 | 10964.0 | 11218.2 | 11733.8 | 11971.7 | 11741.7 | 11409.8 | 11281.8 | 11218.2 | 12225.9 | 9203.6  |
| 45°   | 10006.6 | 10048.9 | 10525.1 | 11531.9 | 12419.6 | 12876.7 | 12625.5 | 12221.9 | 12106.9 | 13095.6 | 9631.3  |
| 47.5° | 9553.6  | 9599.9  | 9899.6  | 10997.2 | 12414.7 | 13793.7 | 13939.0 | 13170.2 | 12964.3 | 13852.3 | 10000.6 |
| 50°   | 8475.1  | 8571.9  | 8949.4  | 10067.0 | 11961.7 | 14215.4 | 15312.0 | 14300.1 | 13874.4 | 14588.7 | 10370.8 |
| 52.5° | 6494.8  | 6644.1  | 7066.8  | 8537.8  | 10812.5 | 14006.6 | 16410.5 | 15670.2 | 15068.9 | 15351.3 | 10688.6 |
| 55°   | 4096.8  | 4207.8  | 4562.9  | 6029.8  | 8649.7  | 12920.1 | 16827.2 | 17152.1 | 16617.3 | 16073.6 | 10964.0 |
| 57.5° | 2227.4  | 2276.9  | 2410.2  | 3329.1  | 5626.3  | 10518.1 | 16219.8 | 17995.4 | 17773.5 | 16686.9 | 11171.7 |
| 58°   | 1993.5  | 2026.8  | 2109.5  | 2885.3  | 4989.6  | 9861.2  | 15950.6 | 17998.5 | 17887.5 | 16776.7 | 11187.9 |
| 60°   | 1478.9  | 1461.8  | 1388.2  | 1646.5  | 2777.3  | 6812.6  | 14322.2 | 17278.2 | 17604.1 | 16886.8 | 11109.2 |
| 62.5° | 1299.4  | 1257.9  | 1107.7  | 1090.5  | 1350.8  | 3138.5  | 10959.0 | 14800.5 | 15570.2 | 16259.2 | 10631.0 |
| 65°   | 1220.6  | 1176.3  | 982.6   | 920.0   | 974.5   | 1327.7  | 6455.5  | 11100.1 | 12065.6 | 14356.6 | 9408.3  |
| 67.5° | 1162.1  | 1104.6  | 902.8   | 817.2   | 821.2   | 877.6   | 2587.7  | 6991.1  | 8077.6  | 10900.4 | 7318.0  |
| 70°   | 1105.6  | 1043.1  | 835.3   | 736.4   | 713.3   | 694.1   | 1029.0  | 3499.5  | 4485.2  | 6885.2  | 4665.8  |
| 72.5° | 1045.2  | 983.6   | 775.7   | 672.9   | 627.5   | 564.0   | 671.9   | 1431.4  | 1999.4  | 3257.6  | 2116.5  |
| 75°   | 957.4   | 901.9   | 716.3   | 616.3   | 551.7   | 467.1   | 507.5   | 747.5   | 896.9   | 1297.3  | 1019.9  |
| 77.5° | 849.4   | 804.1   | 649.7   | 570.0   | 489.2   | 379.4   | 390.5   | 518.5   | 575.0   | 742.4   | 606.3   |
| 80°   | 610.4   | 626.5   | 578.1   | 512.6   | 435.8   | 307.7   | 299.7   | 378.2   | 408.5   | 477.2   | 394.4   |
| 82.5° | 428.8   | 437.8   | 478.2   | 418.7   | 360.1   | 242.2   | 221.0   | 266.3   | 284.6   | 313.8   | 212.9   |
| 85°   | 295.6   | 285.5   | 327.9   | 291.6   | 260.2   | 161.4   | 151.4   | 180.6   | 191.7   | 194.8   | 110.0   |
| 87.5° | 177.5   | 177.5   | 189.6   | 156.3   | 140.2   | 83.7    | 81.7    | 102.9   | 110.0   | 104.9   | 60.5    |
| 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: P268496  
 CATALOG NUMBER: GAN-AF-05-LED-U-AFL-7027-800

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5690.9 | 5690.9 | 5690.9 | 5690.9 | 5690.9 | 5690.9 | 5690.9 | 5690.9 | 5690.9 | 5690.9 | 5690.9 |
| 2.5°  | 5705.9 | 5634.3 | 5481.9 | 5359.8 | 5205.6 | 5045.2 | 4955.4 | 4859.6 | 4794.0 | 4746.6 | 4822.2 |
| 5°    | 5749.3 | 5603.0 | 5288.2 | 4989.6 | 4659.8 | 4316.7 | 4056.4 | 3814.4 | 3646.0 | 3540.9 | 3639.8 |
| 7.5°  | 5818.0 | 5592.9 | 5091.6 | 4581.0 | 3989.0 | 3418.0 | 2907.5 | 2587.7 | 2401.0 | 2309.3 | 2366.8 |
| 10°   | 5896.6 | 5576.8 | 4860.5 | 4027.2 | 3179.8 | 2460.5 | 2079.1 | 1950.1 | 1907.7 | 1890.6 | 1898.6 |
| 12.5° | 5962.2 | 5542.5 | 4577.0 | 3357.3 | 2387.9 | 1943.0 | 1833.0 | 1829.9 | 1839.1 | 1841.0 | 1844.1 |
| 15°   | 6008.6 | 5492.1 | 4156.4 | 2659.3 | 1909.6 | 1770.5 | 1764.5 | 1782.5 | 1799.8 | 1806.9 | 1810.9 |
| 17.5° | 6039.8 | 5388.2 | 3681.3 | 2102.5 | 1711.0 | 1686.7 | 1700.9 | 1724.0 | 1742.3 | 1747.4 | 1751.3 |
| 20°   | 6036.8 | 5235.9 | 3115.2 | 1753.3 | 1603.0 | 1603.0 | 1627.2 | 1645.3 | 1646.5 | 1640.3 | 1643.4 |
| 22.5° | 6005.6 | 5026.9 | 2566.5 | 1567.7 | 1507.1 | 1524.3 | 1548.6 | 1531.4 | 1460.7 | 1414.4 | 1417.3 |
| 25°   | 5953.1 | 4777.7 | 2096.4 | 1449.7 | 1418.5 | 1448.6 | 1441.6 | 1312.5 | 1211.6 | 1166.2 | 1166.2 |
| 27.5° | 5906.6 | 4483.3 | 1735.2 | 1346.7 | 1329.6 | 1367.0 | 1241.8 | 1124.9 | 1082.5 | 1061.3 | 1054.3 |
| 30°   | 5873.4 | 4165.4 | 1494.2 | 1247.9 | 1245.9 | 1218.7 | 1077.4 | 1045.2 | 1038.1 | 1021.0 | 1014.8 |
| 32.5° | 5881.5 | 3843.7 | 1339.7 | 1161.1 | 1168.2 | 1043.1 | 998.7  | 1005.8 | 999.8  | 981.6  | 973.6  |
| 35°   | 5948.0 | 3538.0 | 1238.9 | 1082.5 | 1061.3 | 942.2  | 952.4  | 965.5  | 963.4  | 938.2  | 930.1  |
| 37.5° | 6067.2 | 3248.5 | 1172.3 | 1016.9 | 926.2  | 891.7  | 907.9  | 928.0  | 923.1  | 905.9  | 899.9  |
| 40°   | 6192.1 | 2976.1 | 1117.9 | 965.5  | 846.5  | 857.5  | 871.6  | 882.8  | 887.7  | 892.8  | 888.8  |
| 42.5° | 6314.2 | 2691.5 | 1051.1 | 912.9  | 813.1  | 825.3  | 831.3  | 842.4  | 869.6  | 888.8  | 887.7  |
| 45°   | 6386.9 | 2424.2 | 982.6  | 838.4  | 786.8  | 793.9  | 789.9  | 812.1  | 845.3  | 876.7  | 877.6  |
| 47.5° | 6467.5 | 2216.4 | 928.0  | 769.8  | 761.7  | 766.8  | 754.5  | 776.9  | 807.0  | 845.3  | 849.4  |
| 50°   | 6565.4 | 2092.3 | 884.7  | 715.3  | 727.4  | 727.4  | 724.4  | 744.5  | 786.8  | 831.3  | 839.3  |
| 52.5° | 6676.5 | 2068.1 | 848.4  | 676.0  | 693.0  | 692.1  | 695.1  | 725.3  | 771.7  | 815.1  | 822.2  |
| 55°   | 6811.6 | 2133.7 | 809.1  | 646.7  | 659.7  | 663.8  | 673.9  | 708.3  | 747.5  | 796.9  | 800.0  |
| 57.5° | 6969.1 | 2266.9 | 777.8  | 623.5  | 629.5  | 642.6  | 658.7  | 690.1  | 732.4  | 786.8  | 789.9  |
| 58°   | 6995.2 | 2295.1 | 772.7  | 621.4  | 623.5  | 638.5  | 656.8  | 687.1  | 729.3  | 788.9  | 791.9  |
| 60°   | 6996.2 | 2389.0 | 761.7  | 612.4  | 600.2  | 625.5  | 645.6  | 676.0  | 724.4  | 796.0  | 803.1  |
| 62.5° | 6748.1 | 2387.9 | 753.6  | 599.2  | 576.1  | 607.3  | 630.5  | 665.9  | 719.4  | 813.1  | 827.2  |
| 65°   | 5942.0 | 2169.9 | 715.3  | 579.0  | 556.9  | 591.2  | 617.5  | 658.7  | 733.5  | 887.7  | 896.9  |
| 67.5° | 4647.7 | 1778.6 | 643.6  | 550.8  | 531.6  | 575.0  | 609.3  | 657.7  | 748.6  | 905.0  | 911.1  |
| 70°   | 3072.9 | 1330.6 | 564.9  | 518.5  | 505.4  | 556.0  | 613.4  | 692.1  | 731.4  | 868.7  | 852.4  |
| 72.5° | 1594.9 | 934.1  | 501.3  | 478.2  | 475.2  | 538.8  | 671.9  | 688.0  | 714.2  | 817.2  | 796.9  |
| 75°   | 837.3  | 648.7  | 445.9  | 433.8  | 438.8  | 534.8  | 792.9  | 669.9  | 692.1  | 781.9  | 820.2  |
| 77.5° | 512.6  | 523.6  | 398.5  | 393.5  | 403.5  | 522.5  | 791.9  | 646.7  | 659.7  | 719.4  | 761.7  |
| 80°   | 343.1  | 424.7  | 362.1  | 363.2  | 370.2  | 478.2  | 711.2  | 610.4  | 620.4  | 679.9  | 723.3  |
| 82.5° | 216.9  | 251.2  | 328.9  | 346.0  | 337.0  | 394.4  | 604.3  | 556.0  | 570.0  | 777.8  | 822.2  |
| 85°   | 110.0  | 157.4  | 285.5  | 332.9  | 303.6  | 276.4  | 490.3  | 487.3  | 494.3  | 560.9  | 586.1  |
| 87.5° | 50.5   | 86.7   | 223.0  | 290.5  | 229.0  | 172.6  | 356.1  | 361.2  | 389.4  | 398.5  | 398.5  |
| 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)