

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: P191493

Luminaire Tested: **GAN-AF-05-LED-U-T3R**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P191493  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P40129)  
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-T3R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(5) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 31116.1 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Full Cutoff  
BUG Rating: B3 - U0 - G4

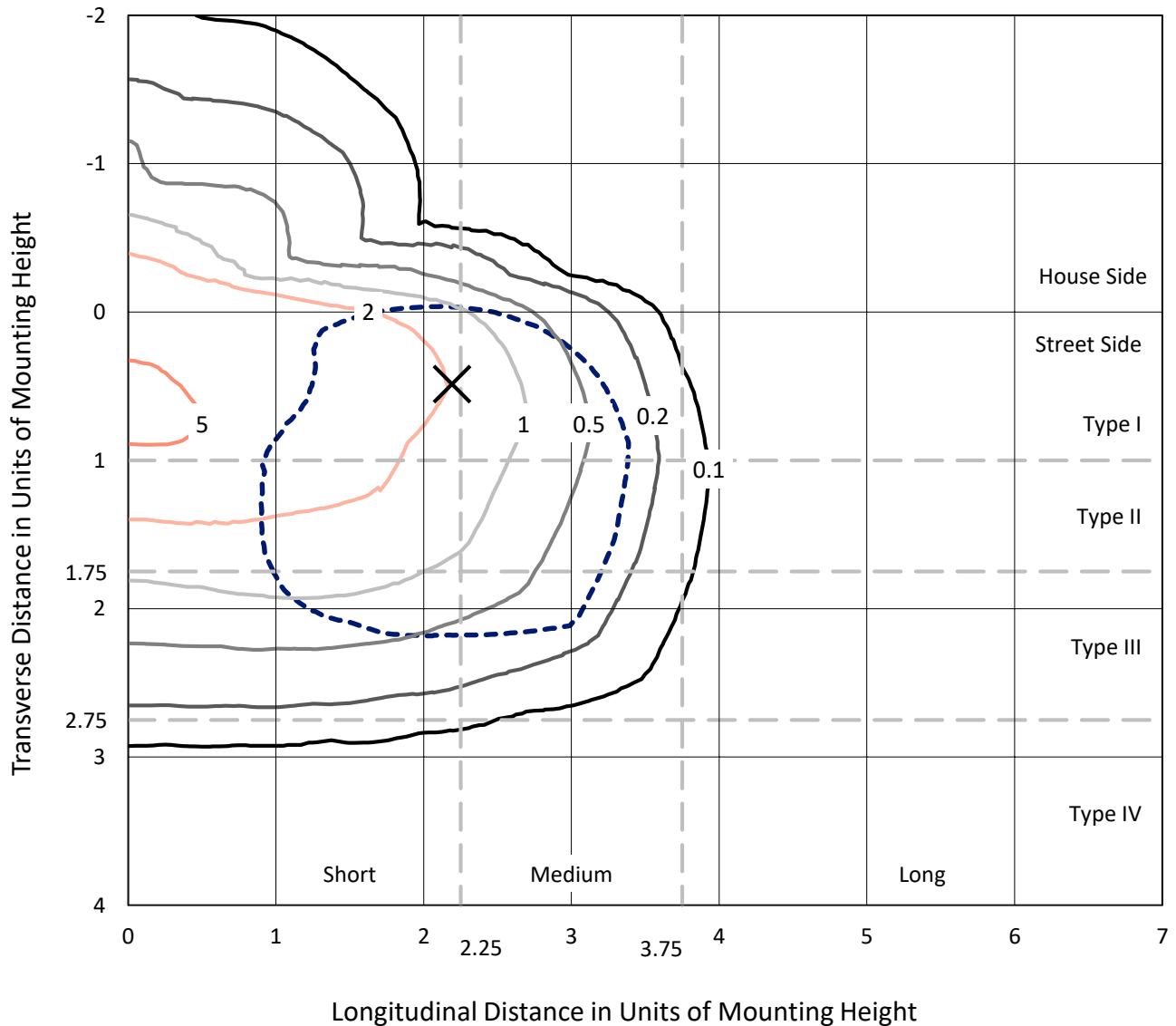
Input Watts (W): 279  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P191493  
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### Iso-Footcandle Lines of Horizontal Illumination

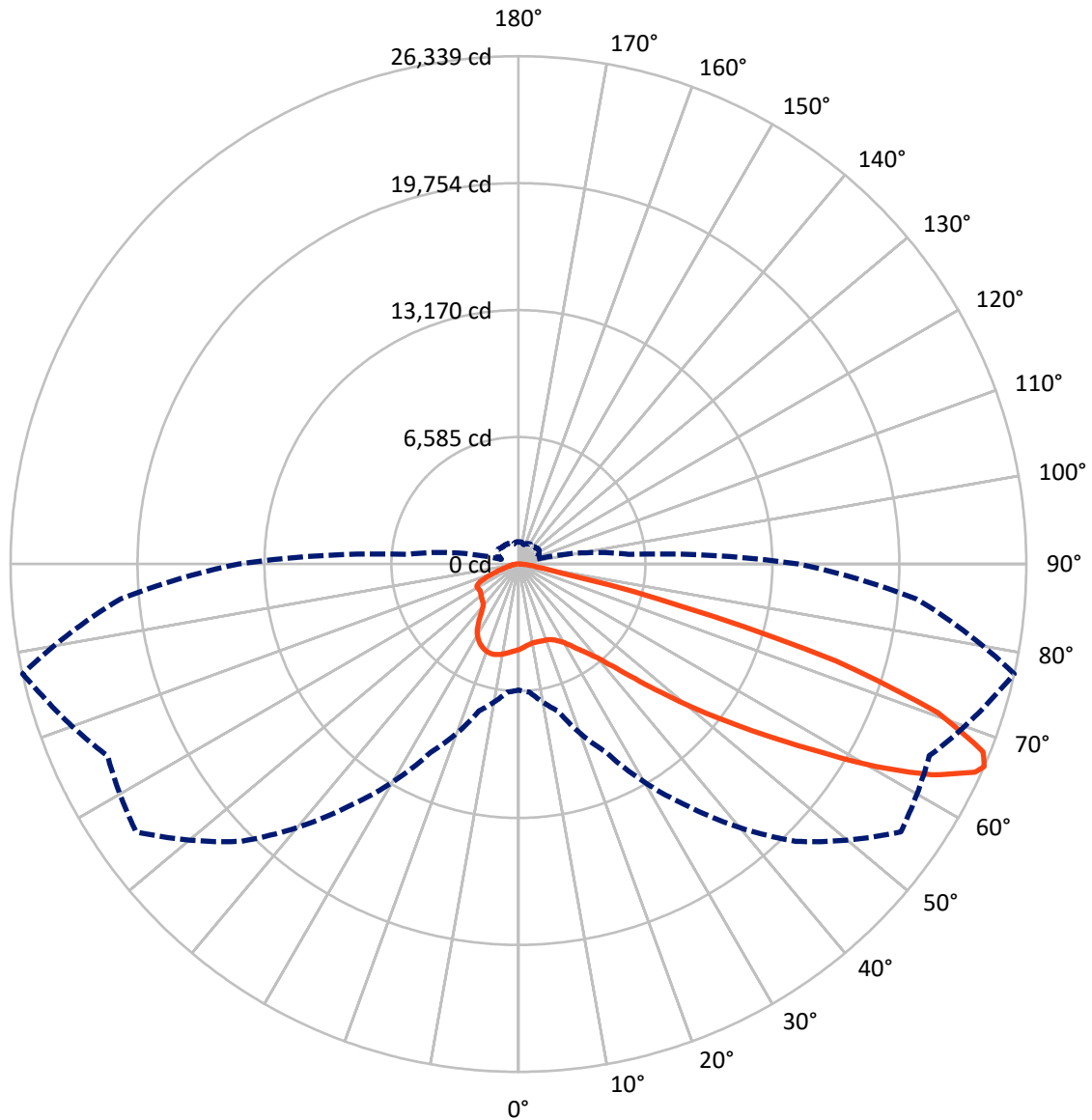
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.1 fc  
 Type III - Short - Full Cutoff

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CATALOG NUMBER: GAN-AF-05-LED-U-T3R

### Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral    - - - Horizontal Cone Through 66-Deg Vertical



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 5316.0   | 0.0    | 5316.0  |
|                    | % Fixture | 17.1     | 0.0    | 17.1    |
| <b>Street Side</b> | Lumens    | 25800.1  | 0.0    | 25800.1 |
|                    | % Fixture | 82.9     | 0.0    | 82.9    |
| <b>Total</b>       | Lumens    | 31116.1  | 0.0    | 31116.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 396.2   | 1.3       |
| 10°-20°   | 1117.6  | 3.6       |
| 20°-30°   | 1907.4  | 6.1       |
| 30°-40°   | 3053.4  | 9.8       |
| 40°-50°   | 4717.2  | 15.2      |
| 50°-60°   | 6690.7  | 21.5      |
| 60°-70°   | 8950.3  | 28.8      |
| 70°-80°   | 3886.9  | 12.5      |
| 80°-90°   | 396.4   | 1.3       |
| 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°    | 31116.1 | 100.0     |
| 0°-180°   | 31116.1 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P191493

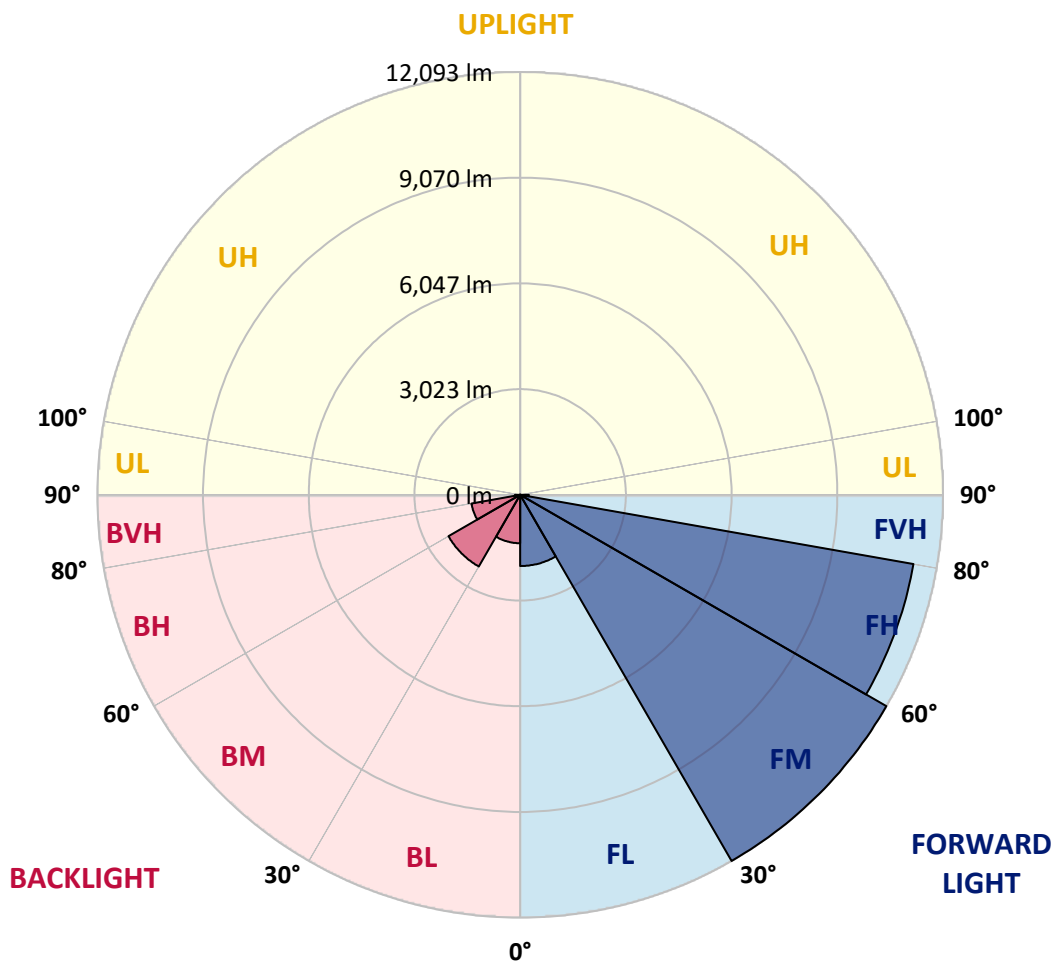
CATALOG NUMBER: GAN-AF-05-LED-U-T3R

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

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |          |
|------|-------------|---------|-----------|-------------------------|------|----------|
|      |             |         |           | B                       | U    | G        |
| FL   | (0°-30°)    | 2036.7  | 6.5       |                         |      |          |
| FM   | (30°-60°)   | 12093.3 | 38.9      |                         |      |          |
| FH   | (60°-80°)   | 11421.5 | 36.7      |                         |      | G4/12000 |
| FVH  | (80°-90°)   | 248.6   | 0.8       |                         |      | G3/500   |
| BL   | (0°-30°)    | 1384.5  | 4.4       | B3/2500                 |      |          |
| BM   | (30°-60°)   | 2368.0  | 7.6       | B2/2500                 |      |          |
| BH   | (60°-80°)   | 1415.7  | 4.5       | B3/2500                 |      | G3/2500  |
| BVH  | (80°-90°)   | 147.8   | 0.5       |                         |      | G2/225   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |          |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |          |

**BUG Rating: B3-U0-G4**

Type III Short





REPORT NUMBER: P191493

CATALOG NUMBER: GAN-AF-05-LED-U-T3R

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 77.5°   | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4434.2  | 4434.2  | 4434.2  | 4434.2  | 4434.2  | 4434.2  | 4434.2  | 4434.2  | 4434.2  | 4434.2  | 4434.2  |
| 2.5°  | 3922.6  | 3949.0  | 3971.1  | 3991.7  | 4032.8  | 4100.5  | 4178.3  | 4241.6  | 4332.7  | 4350.4  | 4398.9  |
| 5°    | 3562.3  | 3562.3  | 3580.0  | 3610.9  | 3666.8  | 3768.1  | 3874.0  | 4015.2  | 4213.6  | 4260.7  | 4390.1  |
| 7.5°  | 3387.4  | 3388.8  | 3399.2  | 3425.7  | 3474.1  | 3566.7  | 3682.9  | 3849.1  | 4118.1  | 4196.0  | 4416.6  |
| 10°   | 3452.0  | 3437.4  | 3415.3  | 3402.1  | 3409.5  | 3463.8  | 3574.1  | 3759.3  | 4059.3  | 4159.2  | 4475.4  |
| 12.5° | 3813.8  | 3785.8  | 3709.4  | 3607.9  | 3510.9  | 3471.2  | 3535.9  | 3716.7  | 4034.3  | 4150.4  | 4553.3  |
| 15°   | 4404.8  | 4393.1  | 4250.5  | 4040.1  | 3805.0  | 3607.9  | 3563.9  | 3700.5  | 4037.3  | 4160.8  | 4645.9  |
| 17.5° | 5145.7  | 5129.6  | 4941.5  | 4635.6  | 4251.9  | 3868.2  | 3662.4  | 3713.8  | 4047.5  | 4178.3  | 4735.5  |
| 20°   | 5894.1  | 5844.1  | 5641.3  | 5276.6  | 4784.1  | 4222.4  | 3825.5  | 3747.6  | 4060.8  | 4197.5  | 4829.7  |
| 22.5° | 6452.8  | 6411.7  | 6229.4  | 5875.0  | 5307.5  | 4632.6  | 4044.5  | 3806.4  | 4103.4  | 4253.3  | 4945.9  |
| 25°   | 6943.9  | 6946.8  | 6766.0  | 6423.4  | 5836.8  | 5067.9  | 4326.9  | 3963.7  | 4212.2  | 4368.0  | 5104.6  |
| 27.5° | 7551.1  | 7515.8  | 7346.7  | 7007.1  | 6360.2  | 5507.5  | 4667.9  | 4179.9  | 4373.9  | 4531.3  | 5313.4  |
| 30°   | 8277.3  | 8252.3  | 8056.9  | 7671.6  | 6940.9  | 5979.4  | 5057.6  | 4431.2  | 4582.7  | 4745.9  | 5586.8  |
| 32.5° | 9131.6  | 9119.8  | 8916.9  | 8421.4  | 7611.4  | 6535.1  | 5514.8  | 4763.6  | 4894.4  | 5063.4  | 5979.4  |
| 35°   | 10134.3 | 10135.7 | 9896.0  | 9300.7  | 8345.0  | 7182.0  | 6033.8  | 5191.4  | 5273.7  | 5450.1  | 6446.9  |
| 37.5° | 10751.7 | 10826.7 | 10737.0 | 10129.9 | 9175.7  | 7905.4  | 6707.2  | 5758.9  | 5705.9  | 5883.8  | 6948.3  |
| 40°   | 10884.1 | 10975.2 | 11259.0 | 10950.2 | 10104.8 | 8702.2  | 7304.1  | 6304.3  | 6238.2  | 6455.7  | 7593.7  |
| 42.5° | 10698.8 | 10825.3 | 11425.1 | 11642.7 | 11091.3 | 9684.4  | 8106.8  | 7114.4  | 7030.6  | 7323.2  | 8396.5  |
| 45°   | 10588.6 | 10682.7 | 11376.5 | 12002.9 | 11947.0 | 10794.4 | 9128.6  | 8131.8  | 8101.0  | 8484.7  | 9322.7  |
| 47.5° | 10397.4 | 10482.7 | 11150.2 | 12086.7 | 12449.8 | 11811.8 | 10356.3 | 9375.7  | 9435.9  | 9938.7  | 10368.0 |
| 50°   | 10500.4 | 10535.6 | 10897.3 | 11873.5 | 12595.4 | 12557.1 | 11727.9 | 10816.5 | 11022.3 | 11650.1 | 11551.6 |
| 52.5° | 10485.7 | 10576.8 | 10867.9 | 11523.6 | 12614.5 | 13017.4 | 13079.1 | 12423.4 | 12857.1 | 13577.5 | 12864.4 |
| 55°   | 8477.3  | 8645.0  | 10522.4 | 11435.4 | 12682.1 | 13468.7 | 14281.7 | 14117.1 | 14925.7 | 15765.2 | 14346.5 |
| 57.5° | 8095.0  | 8200.9  | 9241.8  | 11620.6 | 13040.9 | 14330.3 | 15619.6 | 15981.4 | 17333.9 | 18308.7 | 16151.9 |
| 60°   | 8020.0  | 8150.9  | 9228.6  | 11847.1 | 13768.6 | 15734.3 | 17602.9 | 18238.1 | 20264.1 | 21331.5 | 18245.5 |
| 62.5° | 7786.3  | 7927.5  | 9141.8  | 11817.6 | 14802.2 | 17676.5 | 20142.1 | 20637.5 | 23042.8 | 24080.8 | 19996.5 |
| 65°   | 7045.3  | 7177.6  | 8434.6  | 11342.8 | 15499.1 | 19749.5 | 23147.2 | 22837.0 | 25236.4 | 26017.1 | 20869.8 |
| 66°   | 6538.1  | 6667.5  | 7877.4  | 10784.0 | 15337.4 | 20337.6 | 24211.6 | 23517.7 | 25727.4 | 26339.0 | 20699.3 |
| 67.5° | 5610.4  | 5711.9  | 6795.4  | 9533.0  | 14477.3 | 20502.3 | 25107.0 | 24029.3 | 25778.9 | 25995.0 | 19724.5 |
| 70°   | 3544.7  | 3574.1  | 4416.6  | 6580.7  | 10959.1 | 17780.9 | 23744.1 | 22759.0 | 23653.0 | 23067.8 | 16535.6 |
| 72.5° | 1537.9  | 1527.6  | 2120.1  | 3347.7  | 6204.3  | 11930.9 | 19207.0 | 18779.1 | 18554.2 | 17219.2 | 11575.1 |
| 75°   | 855.7   | 867.5   | 1101.2  | 1554.1  | 2521.5  | 5860.3  | 12564.5 | 12023.5 | 10151.9 | 8662.6  | 5248.7  |
| 77.5° | 686.6   | 702.8   | 913.0   | 1102.6  | 1132.1  | 2043.7  | 5879.4  | 4784.1  | 2880.1  | 2311.2  | 1458.4  |
| 80°   | 542.5   | 571.9   | 796.9   | 858.6   | 763.0   | 842.4   | 1899.5  | 1518.8  | 1139.5  | 1045.4  | 755.7   |
| 82.5° | 429.3   | 449.9   | 683.6   | 649.9   | 533.7   | 567.5   | 910.1   | 886.6   | 741.0   | 674.8   | 436.7   |
| 85°   | 308.7   | 347.0   | 561.6   | 489.6   | 350.0   | 382.3   | 604.3   | 579.3   | 424.9   | 347.0   | 192.6   |
| 87.5° | 126.4   | 164.7   | 397.0   | 324.9   | 195.6   | 177.9   | 301.4   | 283.8   | 201.4   | 147.0   | 95.5    |
| 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: P191493

CATALOG NUMBER: GAN-AF-05-LED-U-T3R

**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4434.2  | 4434.2 | 4434.2 | 4434.2 | 4434.2 | 4434.2 | 4434.2 | 4434.2 | 4434.2 | 4434.2 | 4434.2 |
| 2.5°  | 4429.8  | 4465.1 | 4510.6 | 4538.6 | 4553.3 | 4563.6 | 4579.8 | 4578.3 | 4582.7 | 4584.1 | 4590.1 |
| 5°    | 4459.1  | 4518.0 | 4584.1 | 4601.8 | 4601.8 | 4585.6 | 4569.4 | 4543.0 | 4532.7 | 4529.7 | 4532.7 |
| 7.5°  | 4535.7  | 4600.3 | 4657.7 | 4637.0 | 4592.9 | 4528.3 | 4444.5 | 4371.0 | 4331.3 | 4318.1 | 4315.1 |
| 10°   | 4632.6  | 4710.6 | 4734.1 | 4656.2 | 4526.9 | 4371.0 | 4204.8 | 4084.2 | 4015.2 | 3996.1 | 3990.2 |
| 12.5° | 4750.3  | 4823.8 | 4791.5 | 4626.8 | 4387.1 | 4135.8 | 3906.3 | 3713.8 | 3569.7 | 3524.2 | 3521.2 |
| 15°   | 4879.7  | 4937.0 | 4823.8 | 4535.7 | 4178.3 | 3807.8 | 3399.2 | 3066.9 | 2887.5 | 2830.2 | 2825.8 |
| 17.5° | 5000.2  | 5029.6 | 4804.7 | 4376.9 | 3871.1 | 3271.3 | 2728.7 | 2472.9 | 2411.2 | 2425.8 | 2428.8 |
| 20°   | 5103.2  | 5103.2 | 4740.0 | 4149.0 | 3387.4 | 2564.0 | 2221.5 | 2217.1 | 2261.2 | 2305.3 | 2314.1 |
| 22.5° | 5216.3  | 5148.7 | 4626.8 | 3827.0 | 2702.2 | 2098.0 | 2048.0 | 2089.2 | 2139.2 | 2187.7 | 2195.0 |
| 25°   | 5356.1  | 5185.4 | 4469.5 | 3338.9 | 2124.5 | 1905.5 | 1924.5 | 1958.3 | 1983.3 | 2014.2 | 2018.6 |
| 27.5° | 5511.9  | 5232.5 | 4262.2 | 2666.9 | 1843.7 | 1784.8 | 1799.6 | 1811.3 | 1808.4 | 1820.1 | 1823.1 |
| 30°   | 5698.6  | 5286.9 | 3978.5 | 2084.8 | 1727.6 | 1681.9 | 1655.4 | 1645.2 | 1645.2 | 1664.3 | 1671.6 |
| 32.5° | 5948.6  | 5367.8 | 3571.2 | 1786.3 | 1671.6 | 1608.4 | 1523.2 | 1484.9 | 1499.6 | 1564.3 | 1579.0 |
| 35°   | 6223.4  | 5454.6 | 3019.9 | 1684.9 | 1659.8 | 1574.6 | 1442.3 | 1371.7 | 1373.2 | 1433.5 | 1452.6 |
| 37.5° | 6523.4  | 5564.8 | 2415.6 | 1665.8 | 1686.3 | 1576.1 | 1399.7 | 1302.6 | 1262.9 | 1262.9 | 1270.3 |
| 40°   | 6907.1  | 5678.0 | 1955.4 | 1679.0 | 1742.2 | 1593.8 | 1377.6 | 1248.2 | 1136.5 | 1139.5 | 1145.3 |
| 42.5° | 7407.0  | 5775.1 | 1708.4 | 1706.9 | 1809.8 | 1617.3 | 1376.2 | 1176.2 | 1079.1 | 1145.3 | 1205.5 |
| 45°   | 7962.8  | 5823.6 | 1599.6 | 1732.0 | 1864.2 | 1631.9 | 1352.6 | 1164.4 | 1086.5 | 1283.5 | 1398.2 |
| 47.5° | 8602.3  | 5795.6 | 1539.3 | 1740.8 | 1877.5 | 1631.9 | 1326.2 | 1192.4 | 1137.9 | 1486.3 | 1620.1 |
| 50°   | 9303.5  | 5714.7 | 1480.5 | 1723.1 | 1873.0 | 1629.0 | 1351.1 | 1220.3 | 1157.1 | 1521.6 | 1614.3 |
| 52.5° | 10128.3 | 5647.1 | 1418.7 | 1684.9 | 1842.2 | 1612.9 | 1380.6 | 1208.5 | 1096.8 | 1383.4 | 1448.2 |
| 55°   | 11069.4 | 5666.2 | 1349.7 | 1630.5 | 1793.6 | 1582.0 | 1370.2 | 1161.5 | 1033.6 | 1218.8 | 1258.5 |
| 57.5° | 12271.9 | 5894.1 | 1267.3 | 1561.3 | 1727.6 | 1530.5 | 1333.5 | 1139.5 | 1014.5 | 1105.6 | 1129.1 |
| 60°   | 13614.2 | 6291.0 | 1164.4 | 1492.3 | 1645.2 | 1448.2 | 1305.6 | 1149.7 | 1023.3 | 1096.8 | 1108.6 |
| 62.5° | 14599.3 | 6521.9 | 1076.2 | 1390.8 | 1533.4 | 1357.0 | 1270.3 | 1163.0 | 1046.8 | 1127.7 | 1124.7 |
| 65°   | 14866.9 | 6142.6 | 966.0  | 1242.4 | 1382.0 | 1261.5 | 1226.2 | 1177.6 | 1057.1 | 1152.7 | 1139.5 |
| 66°   | 14492.0 | 5733.8 | 917.4  | 1173.2 | 1305.6 | 1214.4 | 1204.1 | 1176.2 | 1052.7 | 1155.6 | 1133.5 |
| 67.5° | 13581.9 | 4895.8 | 833.6  | 1071.7 | 1183.6 | 1143.9 | 1168.8 | 1163.0 | 1041.0 | 1152.7 | 1121.8 |
| 70°   | 11076.7 | 3340.3 | 713.1  | 892.4  | 985.0  | 1007.1 | 1101.2 | 1115.9 | 1002.7 | 1101.2 | 1033.6 |
| 72.5° | 7739.2  | 2034.8 | 630.8  | 692.4  | 796.9  | 858.6  | 1008.5 | 1051.2 | 951.2  | 961.6  | 896.8  |
| 75°   | 3740.2  | 1080.6 | 571.9  | 536.6  | 619.0  | 717.5  | 896.8  | 963.0  | 870.3  | 804.2  | 780.7  |
| 77.5° | 1165.9  | 660.1  | 485.2  | 432.2  | 485.2  | 579.3  | 749.8  | 843.9  | 774.8  | 673.4  | 664.5  |
| 80°   | 626.4   | 485.2  | 373.5  | 347.0  | 383.7  | 454.3  | 589.5  | 704.2  | 666.0  | 604.3  | 539.6  |
| 82.5° | 413.2   | 314.7  | 276.4  | 269.0  | 292.6  | 347.0  | 438.1  | 583.7  | 583.7  | 517.5  | 376.3  |
| 85°   | 213.2   | 192.6  | 189.7  | 189.7  | 204.4  | 230.8  | 298.5  | 449.9  | 479.3  | 273.4  | 226.4  |
| 87.5° | 105.9   | 110.3  | 102.9  | 107.3  | 114.7  | 113.2  | 142.6  | 226.4  | 270.6  | 166.1  | 138.2  |
| 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)