

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: P299207

Luminaire Tested: **GAA-AF-09-LED-U-T3-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299207
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAA-AF-09-LED-U-T3-7050-800
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 5000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 42852 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B4 - U0 - G5

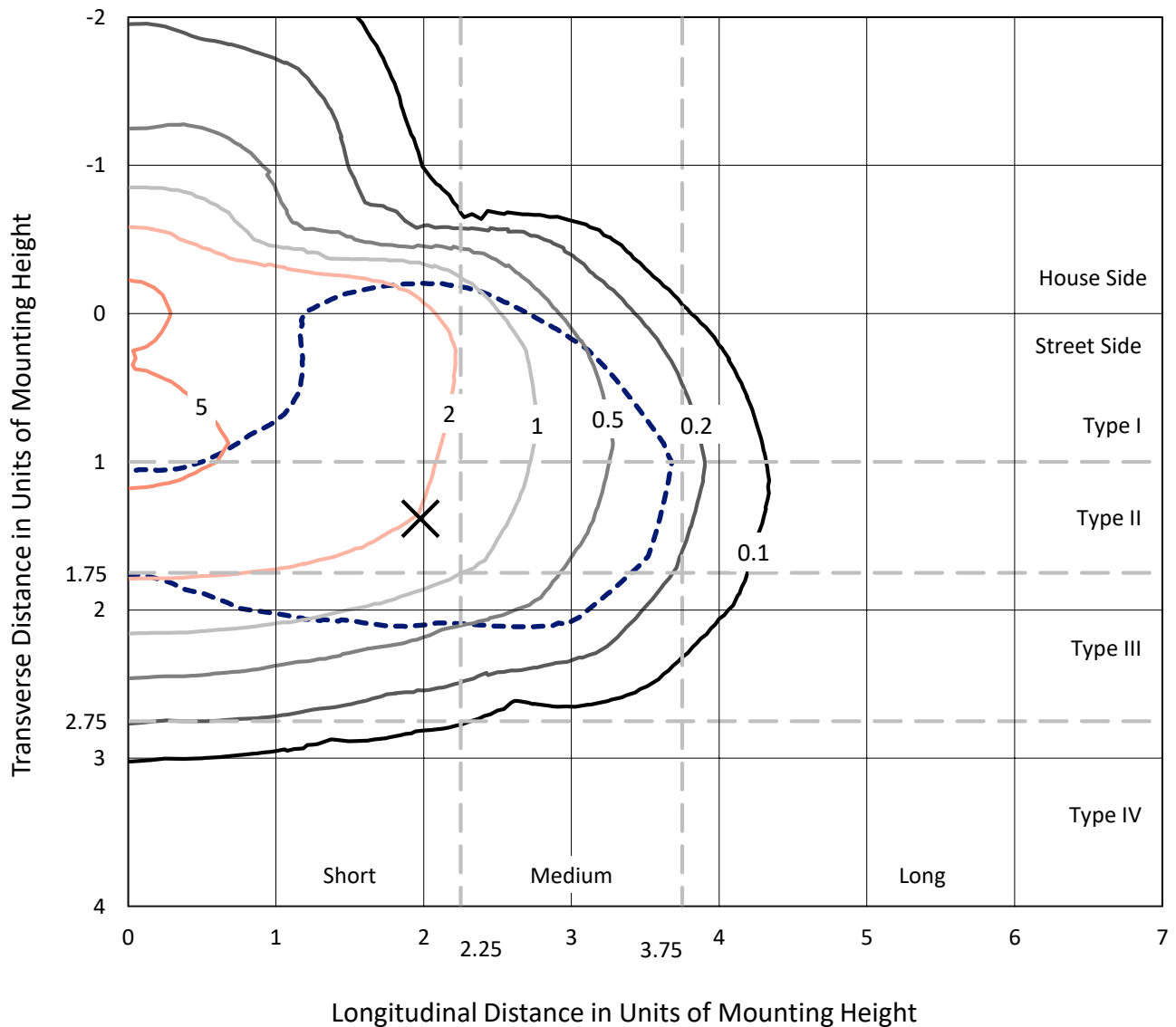
Input Watts (W): 374
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P299207
 CATALOG NUMBER: GAA-AF-09-LED-U-T3-7050-800

Iso-Footcandle Lines of Horizontal Illumination

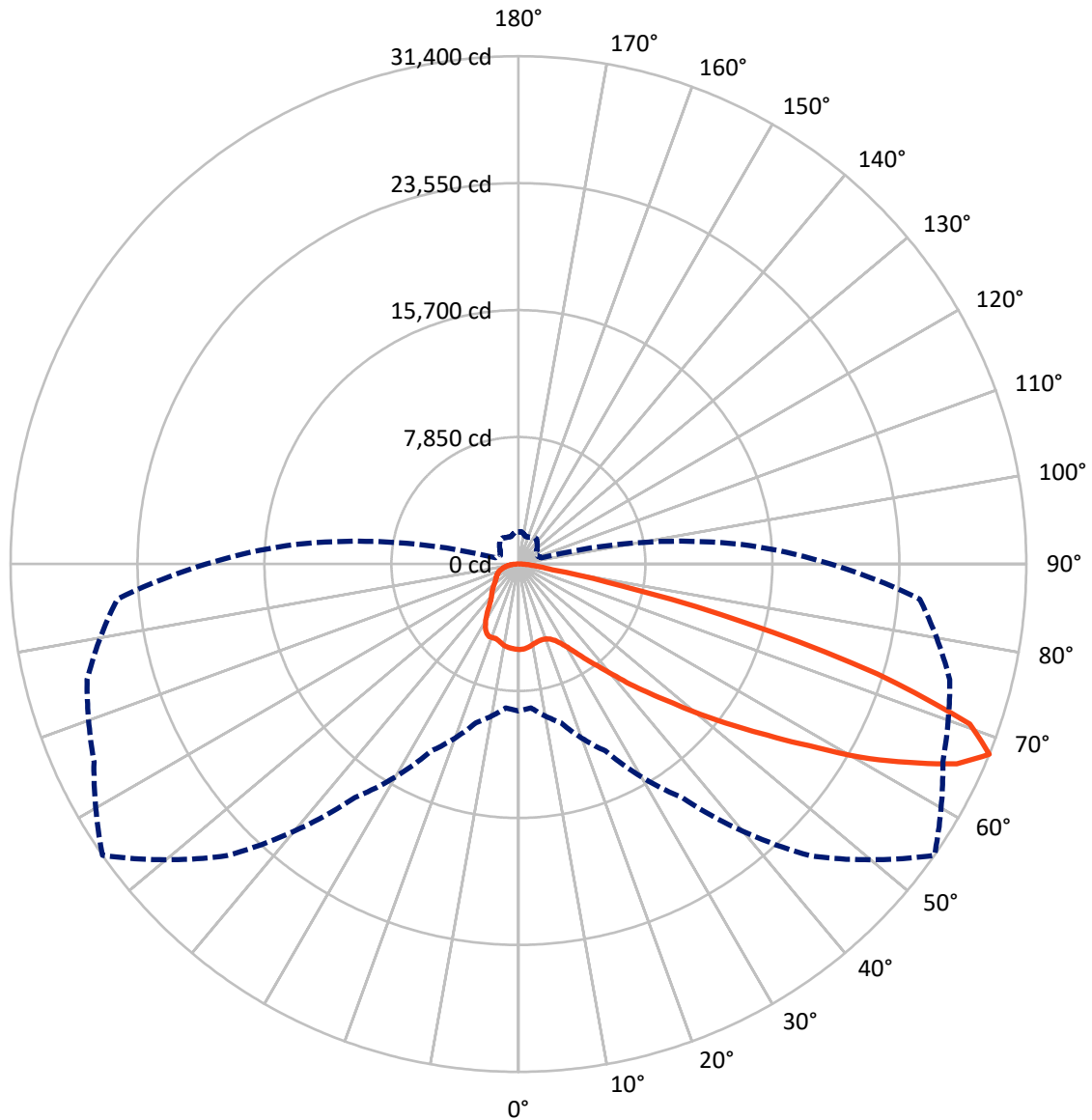
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6 fc
 Type III - Short - Full Cutoff

REPORT NUMBER: P299207
CATALOG NUMBER: GAA-AF-09-LED-U-T3-7050-800

Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P299207

CATALOG NUMBER: GAA-AF-09-LED-U-T3-7050-800

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9256.9 | 0.0 | 9256.9 |
| | % Fixture | 21.6 | 0.0 | 21.6 |
| Street Side | Lumens | 33595.0 | 0.0 | 33595.0 |
| | % Fixture | 78.4 | 0.0 | 78.4 |
| Total | Lumens | 42852.0 | 0.0 | 42852.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 493.2 | 1.2 |
| 10°-20° | 1396.9 | 3.3 |
| 20°-30° | 2339.9 | 5.5 |
| 30°-40° | 3847.8 | 9.0 |
| 40°-50° | 6477.1 | 15.1 |
| 50°-60° | 10194.5 | 23.8 |
| 60°-70° | 12166.0 | 28.4 |
| 70°-80° | 5224.3 | 12.2 |
| 80°-90° | 712.3 | 1.7 |
| 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° | 42852.0 | 100.0 |
| 0°-180° | 42852.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P299207

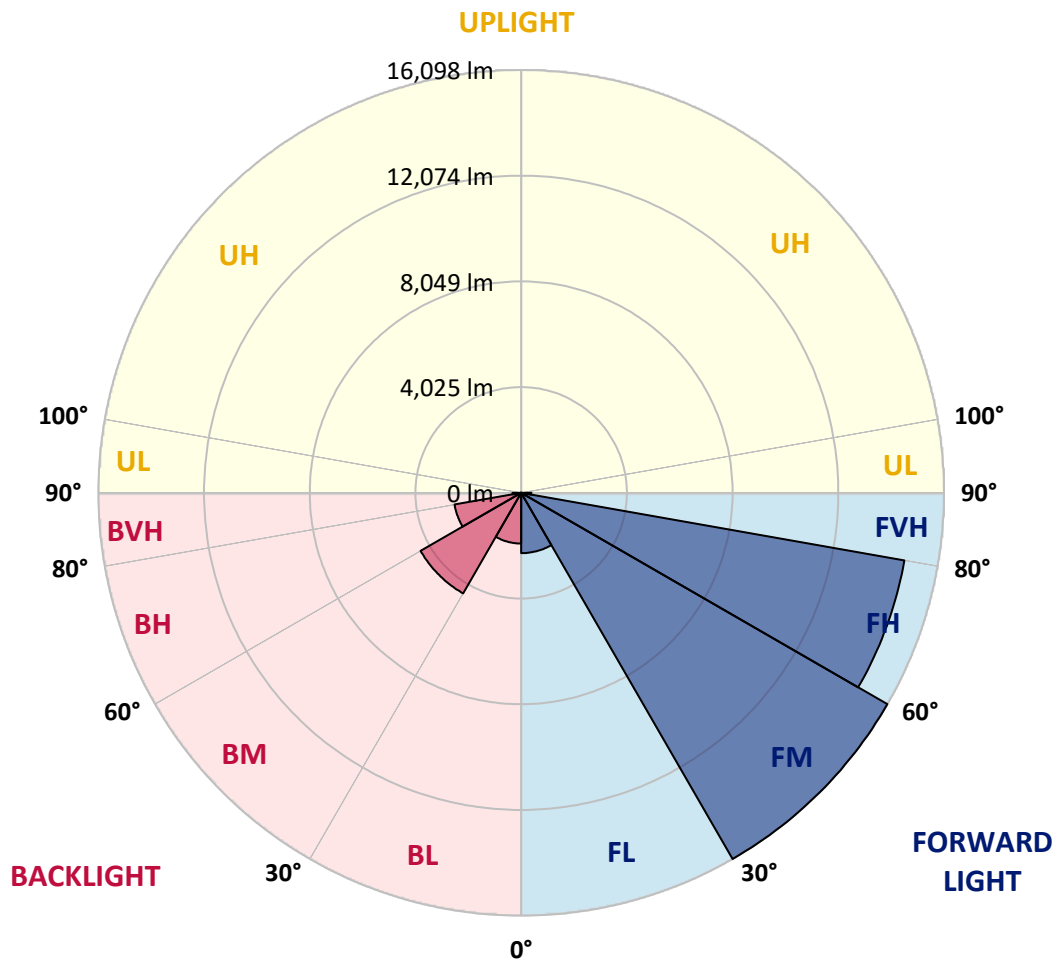
CATALOG NUMBER: GAA-AF-09-LED-U-T3-7050-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 2297.0 | 5.4 | | | |
| FM | (30°-60°) | 16098.4 | 37.6 | | | |
| FH | (60°-80°) | 14814.1 | 34.6 | | | G5 |
| FVH | (80°-90°) | 385.6 | 0.9 | | | G3/500 |
| BL | (0°-30°) | 1933.0 | 4.5 | B3/2500 | | |
| BM | (30°-60°) | 4421.0 | 10.3 | B3/5000 | | |
| BH | (60°-80°) | 2576.2 | 6.0 | B4/5000 | | G4/5000 |
| BVH | (80°-90°) | 326.7 | 0.8 | | | G3/500 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G5

Type III Short





REPORT NUMBER: P299207

CATALOG NUMBER: GAA-AF-09-LED-U-T3-7050-800

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5284.1 | 5284.1 | 5284.1 | 5284.1 | 5284.1 | 5284.1 | 5284.1 | 5284.1 | 5284.1 | 5284.1 | 5284.1 |
| 2.5° | 5238.6 | 5240.6 | 5244.8 | 5261.3 | 5275.8 | 5271.7 | 5273.8 | 5265.5 | 5263.4 | 5251.0 | 5263.4 |
| 5° | 5172.3 | 5178.6 | 5180.6 | 5207.5 | 5224.1 | 5228.2 | 5222.0 | 5211.7 | 5199.3 | 5186.8 | 5193.0 |
| 7.5° | 5021.3 | 5037.8 | 5039.9 | 5077.1 | 5104.0 | 5139.2 | 5141.3 | 5143.4 | 5137.2 | 5128.9 | 5141.3 |
| 10° | 4926.0 | 4930.2 | 4928.1 | 4955.0 | 4975.7 | 5015.0 | 5037.8 | 5077.1 | 5093.7 | 5097.8 | 5106.1 |
| 12.5° | 4919.8 | 4915.7 | 4909.5 | 4909.5 | 4903.3 | 4919.8 | 4961.2 | 5017.1 | 5056.4 | 5068.9 | 5079.2 |
| 15° | 4986.1 | 4984.0 | 4963.3 | 4932.3 | 4892.9 | 4880.5 | 4915.7 | 4977.8 | 5029.5 | 5056.4 | 5066.8 |
| 17.5° | 5135.1 | 5122.7 | 5089.6 | 5019.2 | 4934.3 | 4901.2 | 4905.3 | 4957.1 | 5017.1 | 5052.3 | 5062.6 |
| 20° | 5408.3 | 5408.3 | 5337.9 | 5205.5 | 5054.4 | 4975.7 | 4938.5 | 4969.5 | 5027.5 | 5075.1 | 5089.6 |
| 22.5° | 5880.2 | 5884.3 | 5766.4 | 5549.0 | 5294.5 | 5126.8 | 5033.7 | 5027.5 | 5095.8 | 5149.6 | 5166.1 |
| 25° | 6548.7 | 6532.2 | 6366.6 | 6056.1 | 5669.1 | 5391.7 | 5230.3 | 5193.0 | 5251.0 | 5311.0 | 5331.7 |
| 27.5° | 7327.0 | 7267.0 | 7070.3 | 6695.7 | 6194.8 | 5789.1 | 5540.8 | 5480.7 | 5536.6 | 5604.9 | 5625.6 |
| 30° | 8096.9 | 8034.8 | 7800.9 | 7391.1 | 6834.4 | 6321.1 | 5965.1 | 5867.8 | 5946.4 | 6043.7 | 6056.1 |
| 32.5° | 8866.9 | 8866.9 | 8606.1 | 8128.0 | 7521.5 | 6956.5 | 6530.1 | 6414.2 | 6544.6 | 6662.6 | 6689.5 |
| 35° | 9787.9 | 9792.1 | 9539.6 | 8964.2 | 8312.2 | 7714.0 | 7244.2 | 7159.3 | 7356.0 | 7438.7 | 7502.9 |
| 37.5° | 10920.1 | 10942.9 | 10617.9 | 9922.5 | 9208.4 | 8579.2 | 8020.3 | 7904.4 | 8101.1 | 8326.7 | 8533.6 |
| 40° | 12143.3 | 12172.3 | 11814.2 | 10957.3 | 10243.3 | 9585.1 | 8980.7 | 8771.7 | 9098.7 | 9529.2 | 9796.2 |
| 42.5° | 13310.7 | 13459.7 | 13114.0 | 12232.3 | 11464.4 | 10783.5 | 10170.8 | 9866.6 | 10276.4 | 10926.3 | 11158.1 |
| 45° | 14997.5 | 15105.2 | 14502.9 | 13703.9 | 12981.6 | 12219.9 | 11408.6 | 11087.7 | 11661.1 | 12480.7 | 12528.3 |
| 47.5° | 16121.4 | 16040.7 | 15734.4 | 15237.6 | 14780.2 | 14068.2 | 12847.0 | 12495.2 | 13256.9 | 14221.4 | 13954.4 |
| 50° | 16719.6 | 16744.4 | 16703.0 | 16732.0 | 16748.6 | 16301.5 | 14610.5 | 14128.2 | 15036.9 | 16202.1 | 15587.4 |
| 52.5° | 17278.4 | 17112.8 | 17249.4 | 17928.3 | 18747.9 | 18582.4 | 16529.2 | 16026.2 | 16945.2 | 18400.2 | 17313.6 |
| 55° | 17266.0 | 17013.5 | 17458.5 | 18656.9 | 20434.8 | 20625.2 | 18683.8 | 18104.2 | 18963.2 | 20757.7 | 19143.3 |
| 57.5° | 16655.4 | 16667.8 | 17352.9 | 18921.8 | 21610.4 | 22546.0 | 21184.1 | 20314.8 | 21103.3 | 23146.2 | 20813.6 |
| 60° | 15815.1 | 15928.9 | 16916.2 | 18878.3 | 22552.2 | 24121.1 | 24251.5 | 22697.1 | 23200.0 | 25317.4 | 22196.2 |
| 62.5° | 14459.4 | 14579.4 | 15941.3 | 18427.1 | 22409.4 | 25638.2 | 27024.9 | 25400.2 | 25391.9 | 26633.8 | 22601.8 |
| 65° | 12321.3 | 12286.1 | 13716.3 | 16740.3 | 21211.0 | 26760.0 | 29779.8 | 27736.9 | 27043.6 | 26654.5 | 21786.4 |
| 67.5° | 9086.3 | 8929.0 | 10156.3 | 12749.8 | 17630.3 | 25503.7 | 31400.4 | 28954.0 | 27606.5 | 24901.4 | 19294.4 |
| 70° | 4714.9 | 4557.6 | 5551.1 | 7444.9 | 11594.8 | 19904.9 | 29605.9 | 28324.8 | 26362.6 | 20873.6 | 15115.5 |
| 72.5° | 2016.0 | 1989.0 | 2392.7 | 3266.1 | 5609.1 | 11481.0 | 23214.5 | 24516.4 | 22620.5 | 15552.2 | 10392.3 |
| 75° | 1355.7 | 1347.4 | 1498.5 | 1780.0 | 2523.0 | 4659.0 | 14527.7 | 17402.6 | 16549.9 | 9643.0 | 5845.0 |
| 77.5° | 1063.9 | 1053.5 | 1142.5 | 1279.1 | 1635.1 | 1838.0 | 6447.3 | 9342.9 | 8647.5 | 4197.5 | 2558.2 |
| 80° | 832.0 | 823.8 | 879.7 | 954.2 | 1175.6 | 1159.1 | 2121.5 | 3717.3 | 2877.0 | 1608.2 | 1243.9 |
| 82.5° | 656.1 | 656.1 | 701.7 | 703.7 | 834.1 | 790.7 | 1107.3 | 1637.2 | 1436.4 | 937.6 | 761.7 |
| 85° | 600.2 | 600.2 | 647.8 | 525.7 | 544.3 | 498.8 | 687.2 | 970.7 | 910.7 | 385.0 | 331.2 |
| 87.5° | 302.2 | 293.9 | 544.3 | 465.7 | 296.0 | 264.9 | 335.3 | 469.8 | 505.0 | 213.2 | 165.6 |
| 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: P299207

CATALOG NUMBER: GAA-AF-09-LED-U-T3-7050-800

CANDELA DISTRIBUTION (continued):

| | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 5284.1 | 5284.1 | 5284.1 | 5284.1 | 5284.1 | 5284.1 | 5284.1 | 5284.1 | 5284.1 | 5284.1 |
| 2.5° | 5259.3 | 5257.2 | 5261.3 | 5263.4 | 5280.0 | 5302.7 | 5313.1 | 5327.6 | 5335.9 | 5331.7 |
| 5° | 5197.2 | 5201.3 | 5217.9 | 5230.3 | 5259.3 | 5296.5 | 5317.2 | 5333.8 | 5348.3 | 5342.1 |
| 7.5° | 5145.4 | 5155.8 | 5180.6 | 5191.0 | 5207.5 | 5217.9 | 5215.8 | 5222.0 | 5234.4 | 5220.0 |
| 10° | 5116.5 | 5128.9 | 5147.5 | 5133.0 | 5093.7 | 5037.8 | 4986.1 | 4959.2 | 4967.4 | 4957.1 |
| 12.5° | 5087.5 | 5104.0 | 5089.6 | 5021.3 | 4911.6 | 4839.1 | 4799.8 | 4803.9 | 4822.6 | 4826.7 |
| 15° | 5070.9 | 5077.1 | 5015.0 | 4886.7 | 4775.0 | 4764.6 | 4785.3 | 4781.2 | 4783.2 | 4783.2 |
| 17.5° | 5070.9 | 5054.4 | 4938.5 | 4810.1 | 4762.5 | 4743.9 | 4679.7 | 4599.0 | 4563.8 | 4551.4 |
| 20° | 5097.8 | 5054.4 | 4913.6 | 4828.8 | 4725.3 | 4565.9 | 4396.2 | 4247.2 | 4180.9 | 4162.3 |
| 22.5° | 5178.6 | 5104.0 | 4984.0 | 4837.0 | 4543.1 | 4276.1 | 4007.1 | 3829.1 | 3709.0 | 3688.3 |
| 25° | 5342.1 | 5259.3 | 5122.7 | 4727.3 | 4253.4 | 3872.5 | 3566.2 | 3367.5 | 3247.5 | 3230.9 |
| 27.5° | 5627.7 | 5573.9 | 5197.2 | 4485.2 | 3868.4 | 3460.6 | 3177.1 | 3023.9 | 2934.9 | 2928.7 |
| 30° | 6058.2 | 6031.3 | 5159.9 | 4127.1 | 3394.4 | 3061.2 | 2924.6 | 2835.6 | 2769.3 | 2767.3 |
| 32.5° | 6745.4 | 6528.0 | 5037.8 | 3690.4 | 2961.8 | 2777.6 | 2721.7 | 2667.9 | 2616.2 | 2616.2 |
| 35° | 7629.2 | 6929.6 | 4806.0 | 3222.6 | 2699.0 | 2620.3 | 2550.0 | 2465.1 | 2396.8 | 2392.7 |
| 37.5° | 8668.2 | 7178.0 | 4390.0 | 2845.9 | 2574.8 | 2514.8 | 2411.3 | 2285.0 | 2165.0 | 2144.3 |
| 40° | 9717.6 | 7252.5 | 3804.2 | 2614.1 | 2496.1 | 2409.2 | 2283.0 | 2133.9 | 2018.0 | 2011.8 |
| 42.5° | 10680.0 | 7109.6 | 3183.3 | 2454.7 | 2417.5 | 2301.6 | 2169.1 | 2036.7 | 1945.6 | 1943.5 |
| 45° | 11487.2 | 6739.2 | 2661.7 | 2303.7 | 2334.7 | 2204.3 | 2086.3 | 1978.7 | 1908.3 | 1893.8 |
| 47.5° | 12246.8 | 6215.5 | 2295.4 | 2144.3 | 2251.9 | 2150.5 | 2051.1 | 1949.7 | 1881.4 | 1871.1 |
| 50° | 13128.5 | 5650.5 | 2038.7 | 1989.0 | 2179.5 | 2131.9 | 2080.1 | 1974.6 | 1860.7 | 1848.3 |
| 52.5° | 14196.5 | 5162.0 | 1838.0 | 1852.4 | 2123.6 | 2156.7 | 2154.6 | 2044.9 | 1846.2 | 1829.7 |
| 55° | 15388.7 | 4619.7 | 1686.9 | 1740.7 | 2100.8 | 2202.2 | 2173.3 | 2111.2 | 1858.7 | 1833.8 |
| 57.5° | 16562.3 | 3986.4 | 1581.3 | 1655.8 | 2067.7 | 2198.1 | 2084.3 | 1995.3 | 1887.6 | 1852.4 |
| 60° | 17441.9 | 3135.7 | 1500.6 | 1581.3 | 1995.3 | 2129.8 | 1987.0 | 1869.0 | 1881.4 | 1854.5 |
| 62.5° | 17499.9 | 2423.7 | 1403.3 | 1517.1 | 1885.6 | 2061.5 | 1922.8 | 1813.1 | 1908.3 | 1883.5 |
| 65° | 16471.2 | 1831.7 | 1310.2 | 1440.6 | 1767.6 | 2018.0 | 1860.7 | 1782.1 | 1964.2 | 1937.3 |
| 67.5° | 13867.4 | 1473.7 | 1231.5 | 1361.9 | 1649.6 | 1927.0 | 1804.8 | 1753.1 | 2013.9 | 1966.3 |
| 70° | 10011.5 | 1256.3 | 1154.9 | 1266.7 | 1544.0 | 1823.5 | 1755.2 | 1701.3 | 1879.3 | 1804.8 |
| 72.5° | 6163.8 | 1088.7 | 1068.0 | 1140.4 | 1463.3 | 1715.8 | 1680.7 | 1604.1 | 1693.1 | 1633.0 |
| 75° | 3077.7 | 943.8 | 970.7 | 1016.3 | 1349.5 | 1593.7 | 1556.5 | 1479.9 | 1492.3 | 1479.9 |
| 77.5° | 1473.7 | 807.2 | 856.9 | 892.1 | 1202.5 | 1455.0 | 1415.7 | 1337.1 | 1322.6 | 1324.7 |
| 80° | 933.5 | 674.7 | 722.3 | 747.2 | 1074.2 | 1293.6 | 1254.3 | 1175.6 | 1341.2 | 1243.9 |
| 82.5° | 583.7 | 548.5 | 560.9 | 606.4 | 935.5 | 1126.0 | 1074.2 | 1003.8 | 1208.7 | 956.2 |
| 85° | 322.9 | 382.9 | 399.5 | 438.8 | 720.3 | 941.7 | 890.0 | 801.0 | 718.2 | 705.8 |
| 87.5° | 192.5 | 227.7 | 233.9 | 262.9 | 484.3 | 681.0 | 602.3 | 571.3 | 474.0 | 471.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)