

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: P299156

Luminaire Tested: **GAA-AF-01-LED-U-SL2-7030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P299156  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAA-AF-01-LED-U-SL2-7030-800  
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE  
(1) 70 CRI, 3000K CCT 800mA LIGHTSQUARE WITH 16 LEDS EACH AND Type V  
Narrow OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

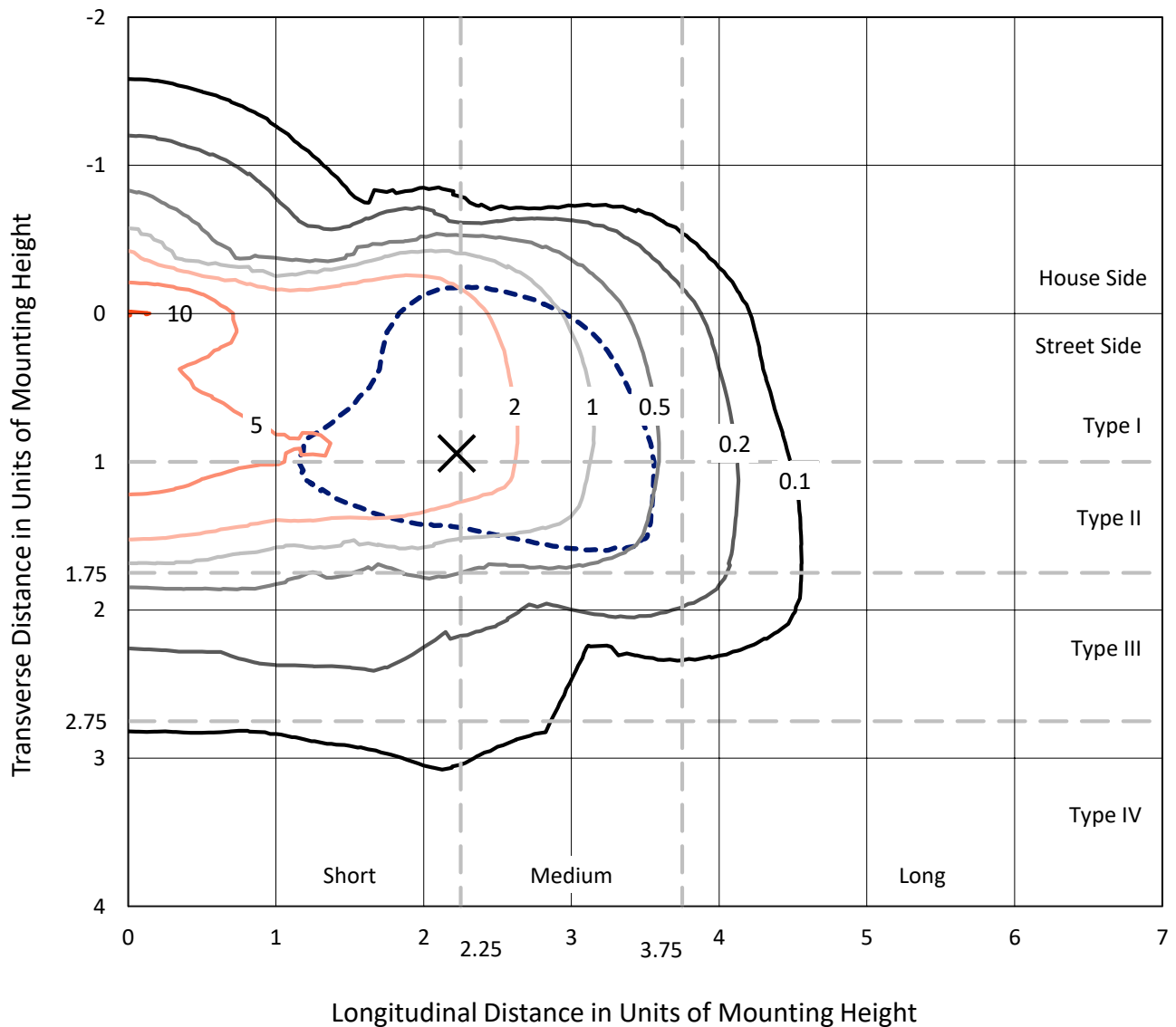
Lumens per Lamp: N/A  
Luminaire Lumens: 4754.6 lumens  
Efficiency: N/A  
Efficacy: 108.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G1  
  
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (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: P299156  
 CATALOG NUMBER: GAA-AF-01-LED-U-SL2-7030-800

### Iso-Footcandle Lines of Horizontal Illumination

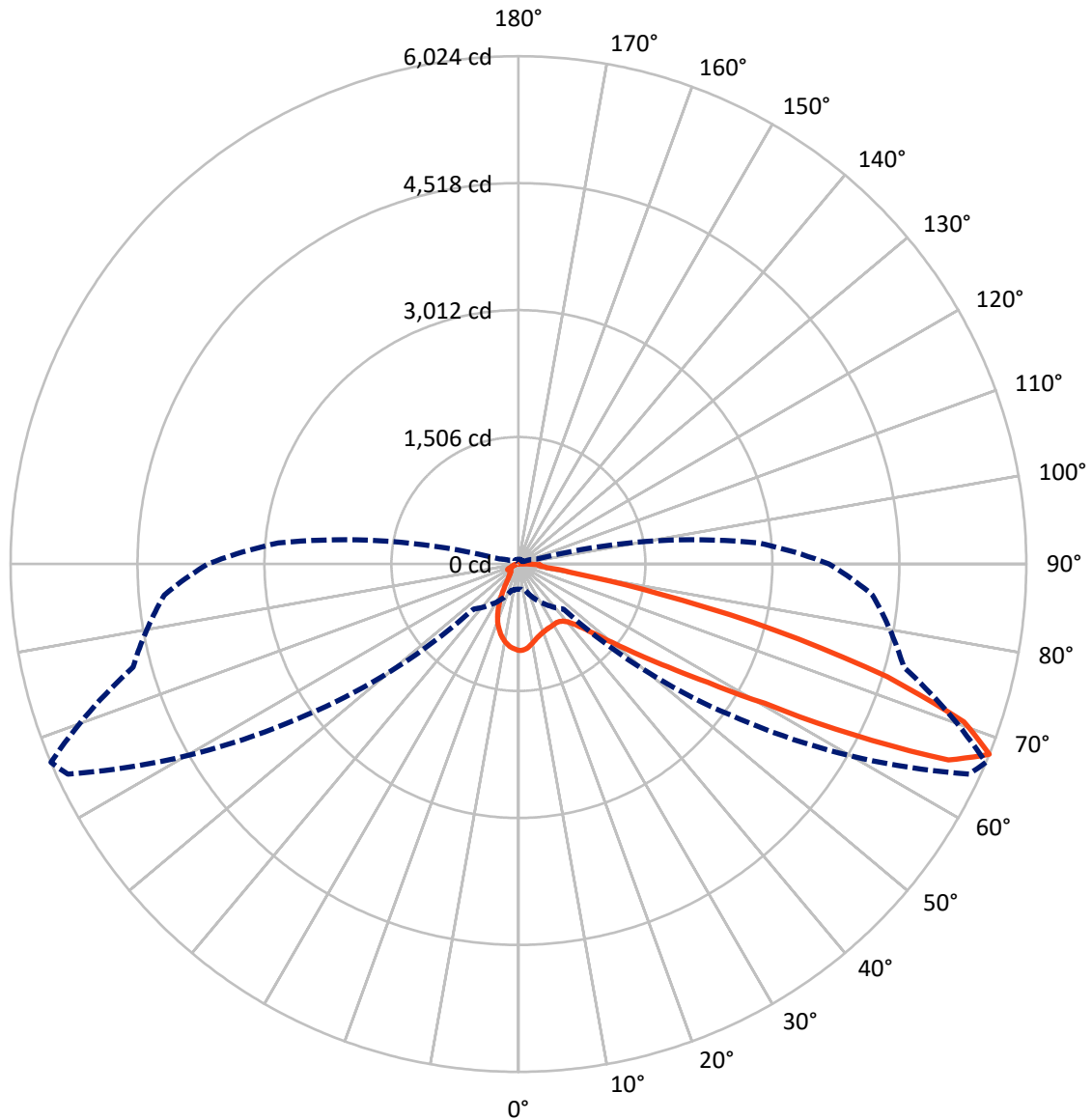
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.3 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P299156  
CATALOG NUMBER: GAA-AF-01-LED-U-SL2-7030-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P299156

CATALOG NUMBER: GAA-AF-01-LED-U-SL2-7030-800

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 787.8    | 0.0    | 787.8  |
|                    | % Fixture | 16.6     | 0.0    | 16.6   |
| <b>Street Side</b> | Lumens    | 3966.8   | 0.0    | 3966.8 |
|                    | % Fixture | 83.4     | 0.0    | 83.4   |
| <b>Total</b>       | Lumens    | 4754.6   | 0.0    | 4754.6 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 87.5   | 1.8       |
| 10°-20°   | 202.4  | 4.3       |
| 20°-30°   | 274.4  | 5.8       |
| 30°-40°   | 390.1  | 8.2       |
| 40°-50°   | 652.7  | 13.7      |
| 50°-60°   | 1032.5 | 21.7      |
| 60°-70°   | 1315.4 | 27.7      |
| 70°-80°   | 689.0  | 14.5      |
| 80°-90°   | 110.5  | 2.3       |
| 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°    | 4754.6 | 100.0     |
| 0°-180°   | 4754.6 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P299156

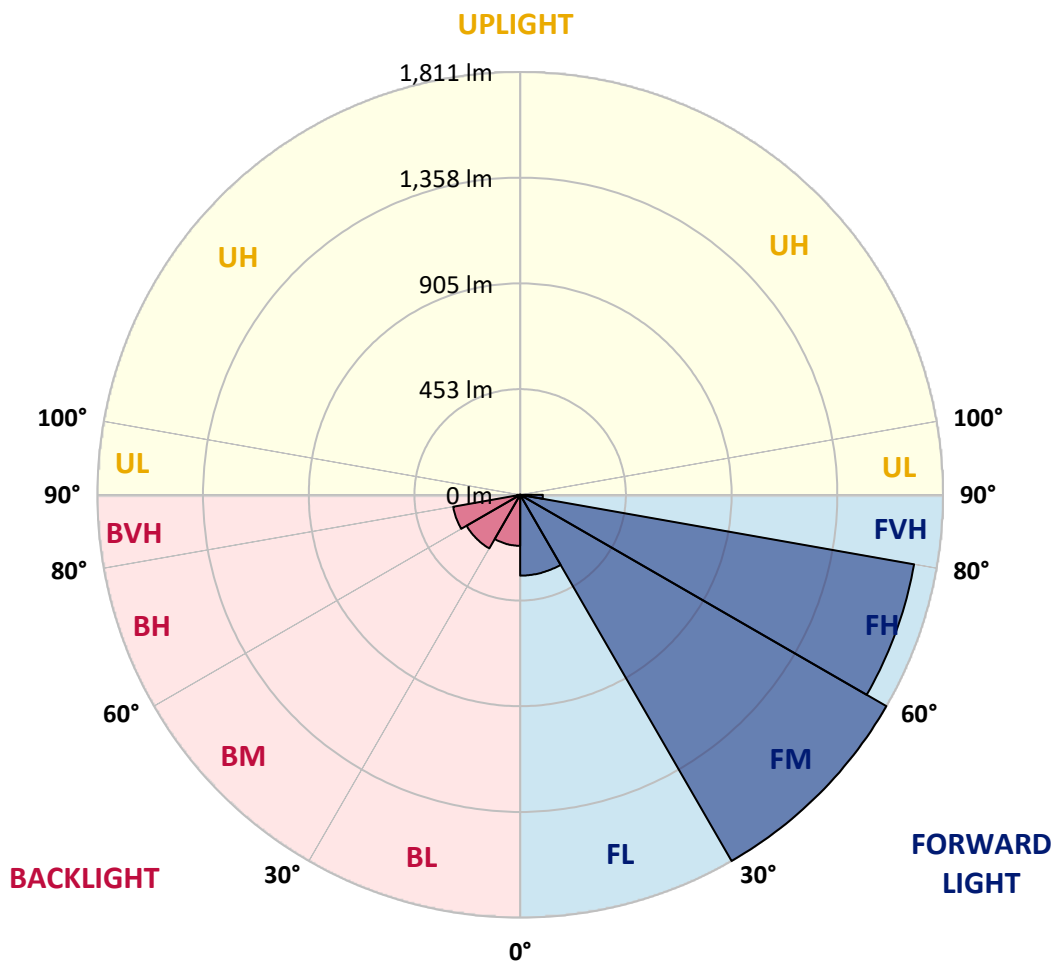
CATALOG NUMBER: GAA-AF-01-LED-U-SL2-7030-800

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

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 346.0  | 7.3       |                         |      |         |
| FM (30°-60°)   | 1810.6 | 38.1      |                         |      |         |
| FH (60°-80°)   | 1713.0 | 36.0      |                         |      | G1/1800 |
| FVH (80°-90°)  | 97.2   | 2.0       |                         |      | G1/100  |
| BL (0°-30°)    | 218.3  | 4.6       | B1/500                  |      |         |
| BM (30°-60°)   | 264.7  | 5.6       | B1/1000                 |      |         |
| BH (60°-80°)   | 291.4  | 6.1       | B1/500                  |      | G1/500  |
| BVH (80°-90°)  | 13.3   | 0.3       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G1**

Type II Short





REPORT NUMBER: P299156

CATALOG NUMBER: GAA-AF-01-LED-U-SL2-7030-800

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 67°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1025.5 | 1025.5 | 1025.5 | 1025.5 | 1025.5 | 1025.5 | 1025.5 | 1025.5 | 1025.5 | 1025.5 | 1025.5 |
| 2.5°  | 983.3  | 985.0  | 990.1  | 993.4  | 1008.2 | 1014.5 | 1019.0 | 1023.4 | 1024.1 | 1026.3 | 1024.1 |
| 5°    | 880.2  | 883.7  | 893.3  | 904.1  | 932.7  | 955.2  | 978.9  | 1003.5 | 1008.0 | 1023.9 | 1028.4 |
| 7.5°  | 800.2  | 799.3  | 807.3  | 820.2  | 849.5  | 880.6  | 922.1  | 971.2  | 980.8  | 1016.6 | 1034.0 |
| 10°   | 741.8  | 741.1  | 749.6  | 762.9  | 790.8  | 820.4  | 867.3  | 934.3  | 947.9  | 1005.2 | 1039.4 |
| 12.5° | 698.7  | 698.9  | 707.4  | 722.2  | 750.5  | 780.3  | 827.9  | 898.7  | 916.1  | 991.8  | 1045.0 |
| 15°   | 670.1  | 672.0  | 678.8  | 694.5  | 722.2  | 751.9  | 798.6  | 872.0  | 891.4  | 981.2  | 1051.3 |
| 17.5° | 660.5  | 663.5  | 665.9  | 677.4  | 701.0  | 730.8  | 776.5  | 852.3  | 872.9  | 974.0  | 1057.0 |
| 20°   | 669.4  | 672.9  | 668.5  | 672.4  | 687.5  | 713.7  | 759.2  | 836.8  | 857.9  | 965.8  | 1057.7 |
| 22.5° | 707.6  | 710.9  | 697.8  | 686.3  | 685.3  | 701.3  | 744.9  | 824.6  | 846.4  | 959.7  | 1057.9 |
| 25°   | 774.9  | 777.0  | 755.0  | 728.2  | 702.2  | 696.8  | 734.8  | 816.2  | 839.4  | 954.3  | 1053.4 |
| 27.5° | 857.4  | 859.1  | 833.8  | 794.4  | 742.1  | 707.4  | 731.3  | 811.2  | 835.4  | 949.6  | 1045.9 |
| 30°   | 957.8  | 965.5  | 931.5  | 881.8  | 805.6  | 738.6  | 738.3  | 808.7  | 830.9  | 941.6  | 1031.2 |
| 32.5° | 1060.5 | 1063.8 | 1040.3 | 989.9  | 891.2  | 793.4  | 758.0  | 810.5  | 829.8  | 932.0  | 1012.4 |
| 35°   | 1164.6 | 1168.8 | 1153.6 | 1113.0 | 1008.2 | 873.8  | 796.5  | 821.6  | 837.0  | 928.7  | 999.3  |
| 37.5° | 1299.4 | 1305.0 | 1283.9 | 1237.0 | 1150.5 | 982.9  | 860.5  | 849.2  | 859.3  | 938.1  | 995.3  |
| 40°   | 1512.5 | 1510.0 | 1448.3 | 1378.4 | 1306.2 | 1122.4 | 951.9  | 896.1  | 902.0  | 968.3  | 1007.5 |
| 42.5° | 1760.6 | 1754.3 | 1648.1 | 1538.3 | 1477.4 | 1291.2 | 1072.9 | 977.5  | 976.3  | 1027.9 | 1050.4 |
| 45°   | 1958.5 | 1953.3 | 1857.7 | 1722.4 | 1673.6 | 1483.5 | 1229.3 | 1098.7 | 1090.0 | 1122.4 | 1129.7 |
| 47.5° | 2065.6 | 2065.9 | 2010.8 | 1900.3 | 1899.2 | 1727.8 | 1430.2 | 1274.1 | 1259.1 | 1274.3 | 1266.6 |
| 50°   | 2028.1 | 2033.0 | 2027.2 | 1992.0 | 2105.0 | 2048.0 | 1692.6 | 1518.6 | 1488.4 | 1503.4 | 1473.6 |
| 52.5° | 1846.6 | 1853.0 | 1887.7 | 1941.6 | 2191.5 | 2435.2 | 2078.1 | 1822.5 | 1787.3 | 1781.9 | 1748.9 |
| 55°   | 1525.0 | 1532.7 | 1603.5 | 1750.0 | 2119.6 | 2695.2 | 2686.3 | 2209.8 | 2153.8 | 2102.9 | 2088.8 |
| 57.5° | 1051.1 | 1064.0 | 1178.0 | 1395.5 | 1886.7 | 2773.7 | 3410.5 | 2762.0 | 2648.0 | 2470.3 | 2473.6 |
| 60°   | 592.5  | 607.5  | 741.8  | 939.5  | 1416.9 | 2688.4 | 3961.5 | 3598.3 | 3357.8 | 2900.6 | 2924.9 |
| 62.5° | 376.8  | 393.0  | 495.0  | 652.7  | 850.2  | 2228.8 | 4187.3 | 4761.0 | 4455.5 | 3430.9 | 3454.8 |
| 65°   | 305.0  | 312.1  | 360.1  | 538.8  | 617.3  | 1342.8 | 4015.9 | 5718.8 | 5604.9 | 4104.1 | 3992.5 |
| 67.5° | 297.8  | 300.1  | 325.0  | 452.3  | 592.0  | 754.7  | 3203.3 | 5898.0 | 6024.3 | 4732.7 | 4216.4 |
| 70°   | 294.3  | 302.5  | 366.2  | 431.6  | 566.9  | 636.6  | 1925.0 | 5407.0 | 5606.5 | 4897.0 | 3918.4 |
| 72.5° | 142.8  | 142.3  | 184.3  | 390.4  | 638.7  | 660.3  | 989.0  | 4374.9 | 4575.1 | 4242.6 | 3219.9 |
| 75°   | 115.1  | 105.3  | 100.6  | 143.0  | 614.1  | 681.8  | 630.2  | 3010.3 | 3155.2 | 2844.5 | 1979.4 |
| 77.5° | 109.3  | 97.5   | 89.3   | 89.6   | 259.6  | 723.1  | 533.9  | 1666.1 | 1708.3 | 1284.9 | 542.3  |
| 80°   | 90.5   | 79.7   | 73.9   | 83.2   | 125.7  | 688.6  | 577.3  | 754.0  | 691.9  | 315.6  | 180.5  |
| 82.5° | 62.8   | 57.2   | 55.6   | 69.9   | 100.6  | 490.7  | 671.3  | 405.2  | 339.7  | 158.0  | 111.4  |
| 85°   | 40.1   | 34.2   | 38.0   | 50.9   | 78.3   | 226.5  | 691.4  | 315.8  | 251.1  | 100.4  | 62.8   |
| 87.5° | 18.5   | 15.0   | 18.8   | 28.1   | 51.1   | 78.1   | 657.9  | 354.7  | 258.6  | 53.0   | 39.6   |
| 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: P299156  
 CATALOG NUMBER: GAA-AF-01-LED-U-SL2-7030-800

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1025.5 | 1025.5 | 1025.5 | 1025.5 | 1025.5 | 1025.5 | 1025.5 | 1025.5 | 1025.5 | 1025.5 | 1025.5 |
| 2.5°  | 1026.0 | 1021.6 | 1018.0 | 1011.5 | 1004.2 | 997.2  | 990.8  | 982.9  | 980.5  | 978.4  | 981.7  |
| 5°    | 1029.3 | 1024.8 | 1011.9 | 991.8  | 969.5  | 948.6  | 927.8  | 910.0  | 898.9  | 892.8  | 896.4  |
| 7.5°  | 1034.2 | 1027.9 | 1001.2 | 964.1  | 924.0  | 887.4  | 849.7  | 819.5  | 797.2  | 786.6  | 789.7  |
| 10°   | 1038.7 | 1026.5 | 982.9  | 927.3  | 868.7  | 814.3  | 754.7  | 705.5  | 668.9  | 649.7  | 654.4  |
| 12.5° | 1040.6 | 1021.1 | 957.3  | 881.4  | 800.9  | 721.2  | 633.5  | 559.9  | 507.4  | 488.2  | 484.2  |
| 15°   | 1042.4 | 1015.0 | 929.2  | 829.1  | 719.1  | 606.3  | 483.5  | 395.3  | 351.7  | 342.1  | 340.0  |
| 17.5° | 1042.9 | 1004.4 | 897.3  | 772.3  | 623.2  | 469.6  | 330.6  | 274.6  | 274.8  | 290.3  | 292.1  |
| 20°   | 1038.0 | 988.7  | 858.6  | 701.8  | 508.3  | 324.7  | 227.0  | 217.3  | 252.8  | 291.4  | 296.1  |
| 22.5° | 1026.7 | 967.9  | 814.8  | 619.5  | 376.8  | 213.8  | 175.6  | 186.2  | 231.9  | 279.2  | 284.6  |
| 25°   | 1012.4 | 942.5  | 762.9  | 524.0  | 249.5  | 152.9  | 147.2  | 160.1  | 191.1  | 222.7  | 225.8  |
| 27.5° | 993.0  | 912.5  | 704.8  | 414.8  | 162.0  | 125.9  | 129.7  | 138.3  | 151.0  | 165.1  | 166.5  |
| 30°   | 967.9  | 876.7  | 642.7  | 302.5  | 122.4  | 113.2  | 118.6  | 123.3  | 128.7  | 136.7  | 137.4  |
| 32.5° | 939.0  | 842.2  | 578.9  | 208.9  | 108.6  | 106.7  | 110.9  | 113.2  | 117.5  | 122.4  | 122.9  |
| 35°   | 914.9  | 809.4  | 512.8  | 147.7  | 102.7  | 101.8  | 104.6  | 105.5  | 109.5  | 114.9  | 115.4  |
| 37.5° | 901.0  | 782.6  | 444.5  | 119.1  | 98.7   | 97.3   | 98.9   | 98.9   | 104.6  | 112.5  | 113.7  |
| 40°   | 902.0  | 767.9  | 376.3  | 107.6  | 95.4   | 93.6   | 93.8   | 93.8   | 101.1  | 109.7  | 110.4  |
| 42.5° | 927.5  | 771.6  | 315.8  | 103.2  | 92.8   | 90.7   | 89.6   | 90.3   | 96.4   | 102.0  | 102.5  |
| 45°   | 987.6  | 798.1  | 259.1  | 100.4  | 90.3   | 89.6   | 87.0   | 86.8   | 89.1   | 91.7   | 91.7   |
| 47.5° | 1086.0 | 850.4  | 220.6  | 98.5   | 88.2   | 87.9   | 84.9   | 81.8   | 81.6   | 82.5   | 82.5   |
| 50°   | 1246.2 | 940.4  | 194.8  | 96.4   | 86.8   | 84.9   | 81.4   | 76.7   | 75.0   | 75.7   | 75.7   |
| 52.5° | 1486.3 | 1101.0 | 185.0  | 93.6   | 83.7   | 80.7   | 76.7   | 72.0   | 70.6   | 70.8   | 70.8   |
| 55°   | 1801.2 | 1347.7 | 183.6  | 90.3   | 80.4   | 75.5   | 72.2   | 68.7   | 67.1   | 67.5   | 67.5   |
| 57.5° | 2185.9 | 1688.8 | 208.7  | 85.1   | 76.0   | 70.3   | 68.5   | 66.1   | 64.9   | 65.7   | 65.4   |
| 60°   | 2653.7 | 2135.3 | 309.5  | 79.7   | 71.5   | 65.7   | 65.7   | 63.8   | 62.8   | 63.5   | 63.3   |
| 62.5° | 3192.5 | 2648.0 | 435.2  | 75.7   | 66.8   | 61.9   | 62.8   | 61.9   | 61.0   | 61.4   | 61.2   |
| 65°   | 3670.3 | 2982.2 | 407.5  | 72.7   | 62.1   | 58.4   | 60.0   | 59.6   | 58.9   | 59.3   | 59.1   |
| 67.5° | 3684.1 | 2858.4 | 228.8  | 69.4   | 57.7   | 54.9   | 57.2   | 57.0   | 56.5   | 57.0   | 56.7   |
| 70°   | 3287.9 | 2413.6 | 129.0  | 63.3   | 53.0   | 50.6   | 53.9   | 53.7   | 53.2   | 54.2   | 53.9   |
| 72.5° | 2634.2 | 1751.5 | 94.3   | 55.8   | 48.3   | 46.2   | 49.9   | 49.7   | 49.7   | 51.1   | 50.4   |
| 75°   | 1515.8 | 901.3  | 75.3   | 47.8   | 43.4   | 41.7   | 45.0   | 45.3   | 45.7   | 47.6   | 46.2   |
| 77.5° | 432.1  | 280.9  | 61.4   | 40.6   | 37.3   | 36.6   | 39.9   | 40.3   | 40.6   | 42.7   | 40.8   |
| 80°   | 160.6  | 129.4  | 50.6   | 34.0   | 30.5   | 30.7   | 33.8   | 34.5   | 34.7   | 36.8   | 34.5   |
| 82.5° | 102.5  | 85.3   | 41.0   | 26.3   | 23.9   | 23.7   | 27.4   | 28.4   | 28.4   | 28.6   | 27.2   |
| 85°   | 59.8   | 51.1   | 30.9   | 19.0   | 16.9   | 16.2   | 20.4   | 22.0   | 21.3   | 20.9   | 19.9   |
| 87.5° | 40.1   | 35.2   | 19.0   | 10.6   | 9.1    | 8.7    | 12.0   | 13.1   | 12.7   | 12.0   | 11.3   |
| 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)