

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: P200082

Luminaire Tested: **GAP-AF-02-LED-U-5WQ-1200**

Issue Date: 3/3/2020

### Test Information

Test Method: LM-79-08  
Report Number: P200082  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: GAP-AF-02-LED-U-5WQ-1200  
Description: GALLEON PEDESTRIAN LUMINAIRE  
(2) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 14683.4 lumens  
Efficiency: N/A  
Efficacy: 113.8 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type V - Short - Semi-Cutoff  
BUG Rating: B4 - U0 - G2

Input Watts (W): 129  
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

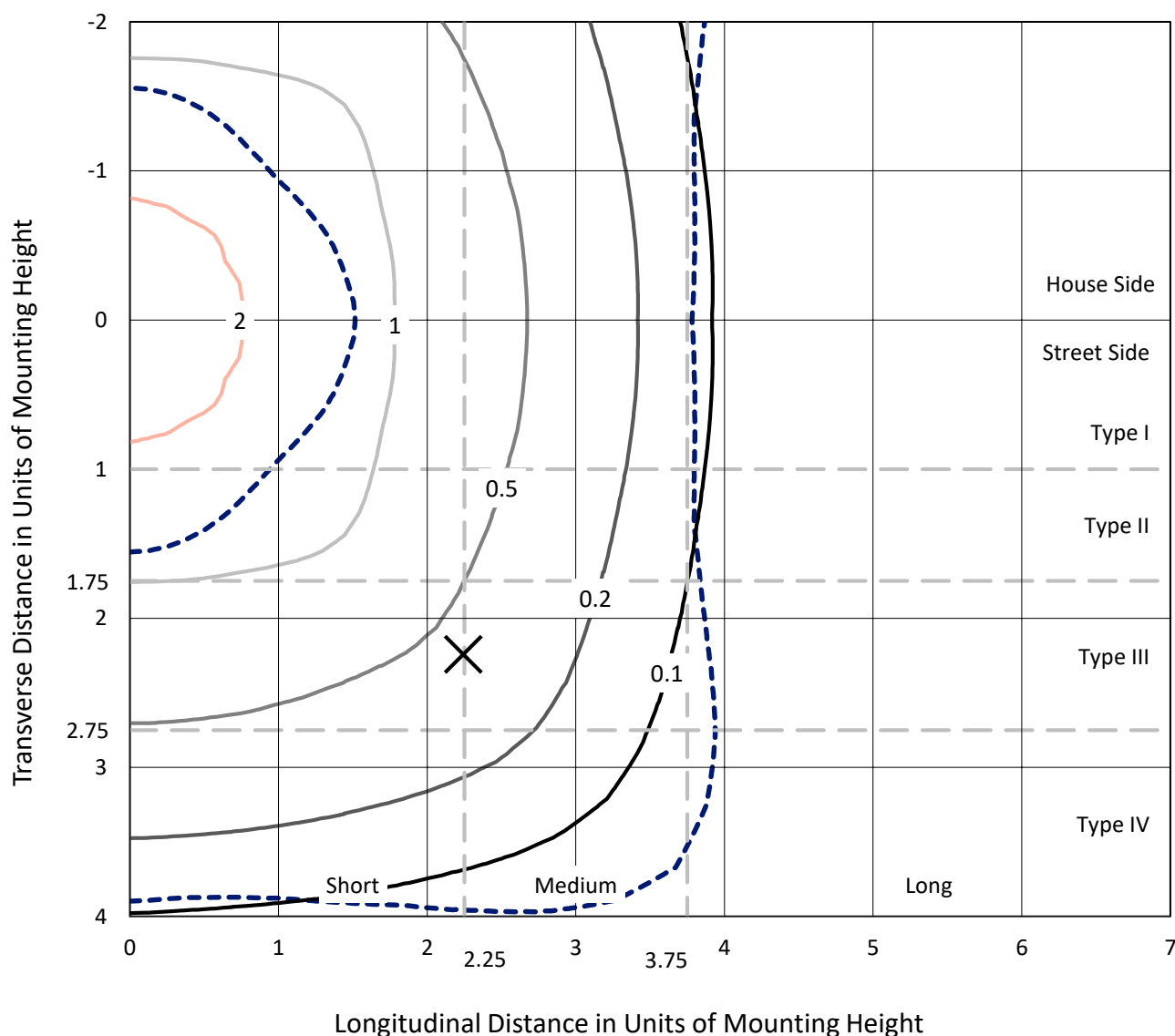


REPORT NUMBER: P200082

CATALOG NUMBER: GAP-AF-02-LED-U-5WQ-1200

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

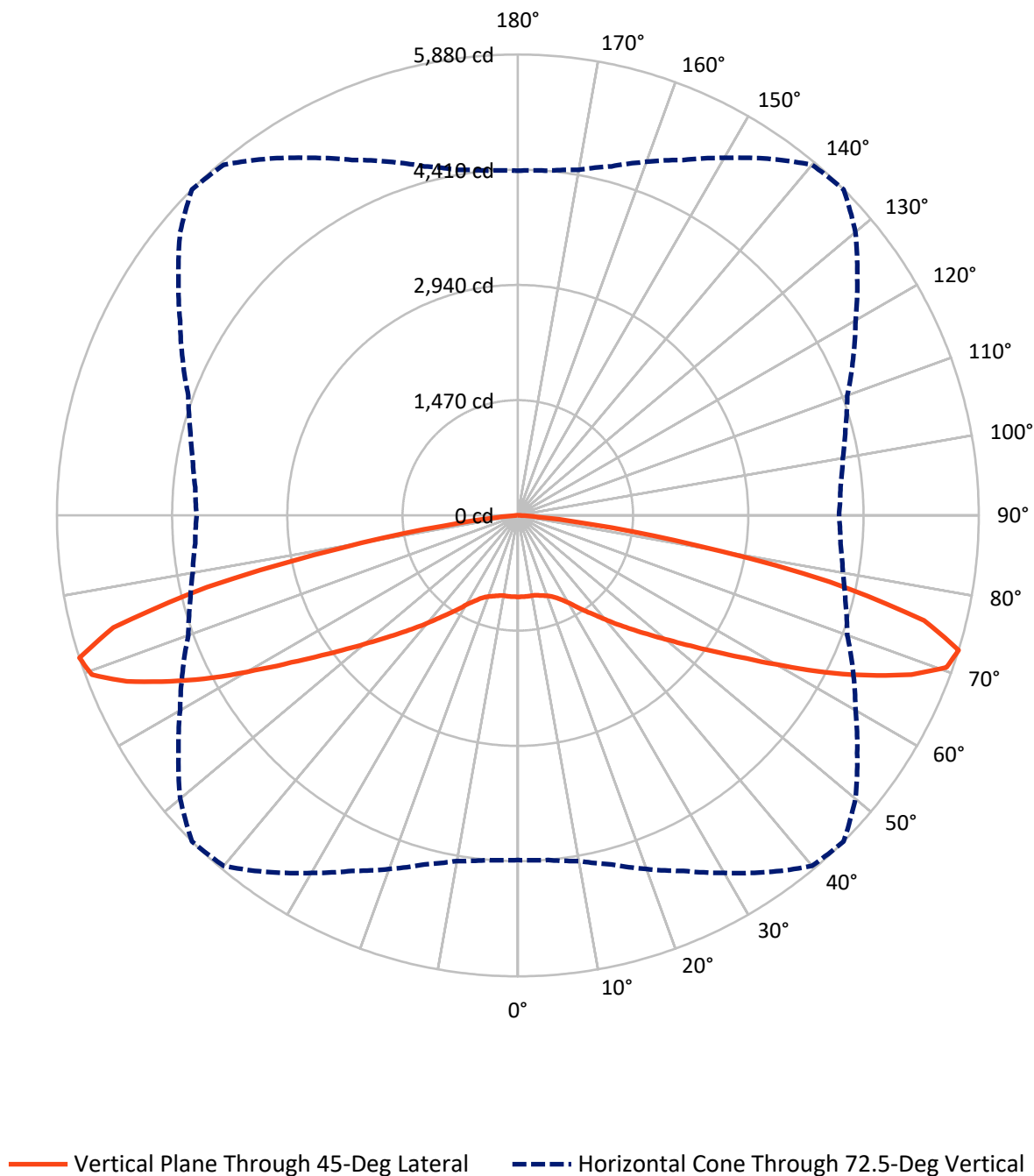


Based on 20 foot mounting height. Maximum calculated value = 2.6 fc  
 Type V - Short - Semi-Cutoff

REPORT NUMBER: P200082

CATALOG NUMBER: GAP-AF-02-LED-U-5WQ-1200

## Luminous Intensity Polar Plot



REPORT NUMBER: P200082

CATALOG NUMBER: GAP-AF-02-LED-U-5WQ-1200

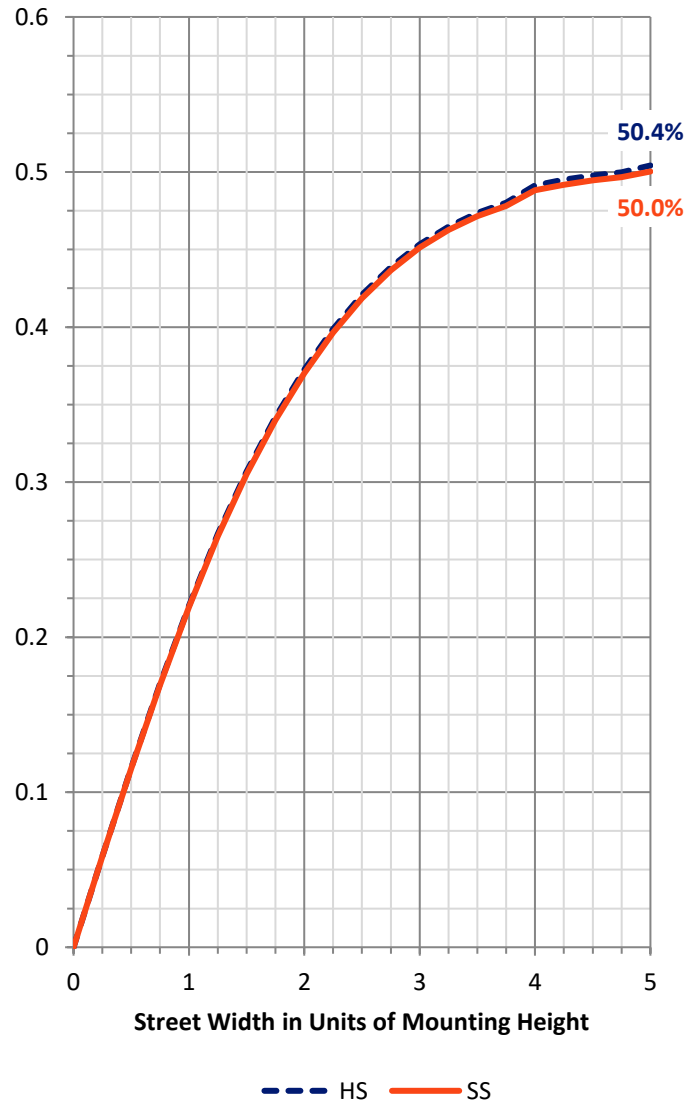
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7341.7   | 0.0    | 7341.7  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 7341.7   | 0.0    | 7341.7  |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 14683.4  | 0.0    | 14683.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 99.3    | 0.7       |
| 10°-20°   | 301.6   | 2.1       |
| 20°-30°   | 551.1   | 3.8       |
| 30°-40°   | 950.1   | 6.5       |
| 40°-50°   | 1624.2  | 11.1      |
| 50°-60°   | 2632.7  | 17.9      |
| 60°-70°   | 4367.5  | 29.7      |
| 70°-80°   | 3846.8  | 26.2      |
| 80°-90°   | 310.2   | 2.1       |
| 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°    | 14683.4 | 100.0     |
| 0°-180°   | 14683.4 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P200082

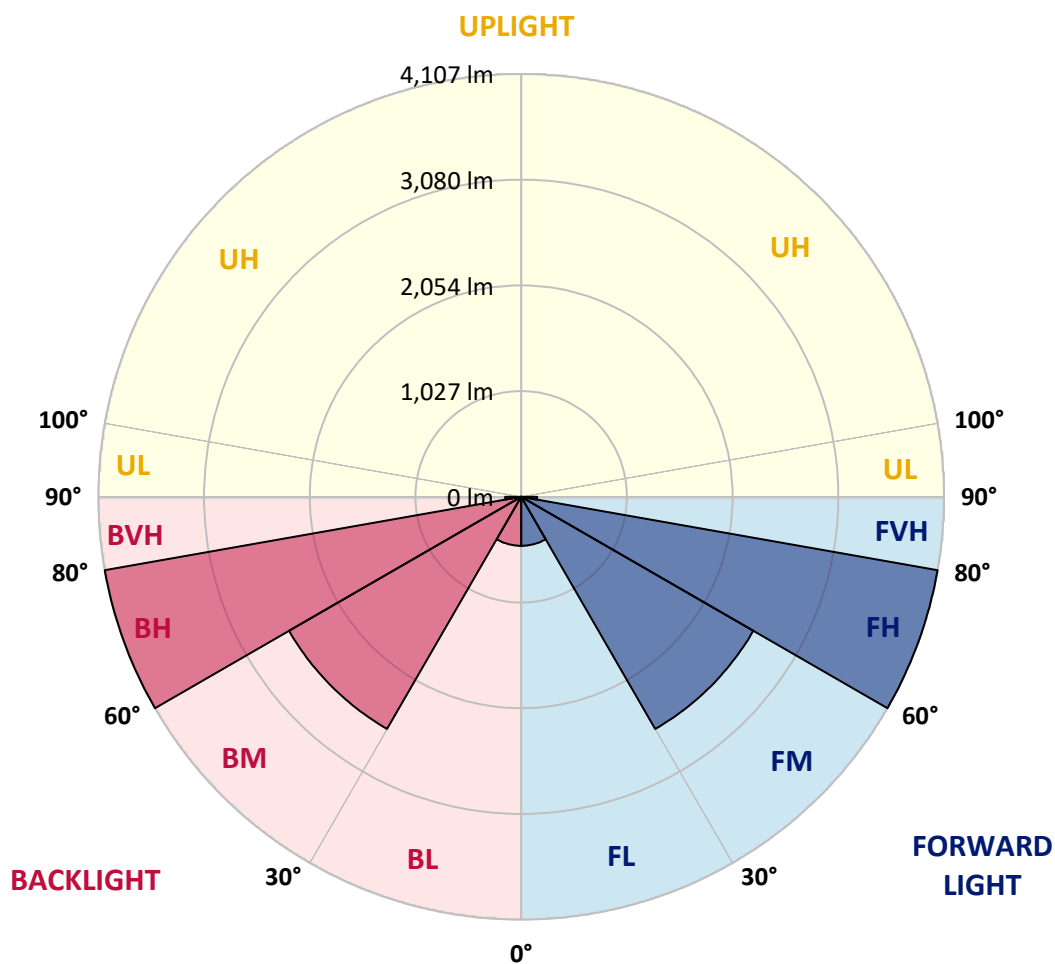
CATALOG NUMBER: GAP-AF-02-LED-U-5WQ-1200

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 476.0  | 3.2       |                         |      |         |
| FM   | (30°-60°)   | 2603.5 | 17.7      |                         |      |         |
| FH   | (60°-80°)   | 4107.2 | 28.0      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 155.1  | 1.1       |                         |      | G2/225  |
| BL   | (0°-30°)    | 476.0  | 3.2       | B1/500                  |      |         |
| BM   | (30°-60°)   | 2603.5 | 17.7      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 4107.2 | 28.0      | B4/5000                 |      | G2/5000 |
| BVH  | (80°-90°)   | 155.1  | 1.1       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G2**

Type V Short





REPORT NUMBER: P200082

CATALOG NUMBER: GAP-AF-02-LED-U-5WQ-1200

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1039.8 | 1039.8 | 1039.8 | 1039.8 | 1039.8 | 1039.8 | 1039.8 | 1039.8 | 1039.8 | 1039.8 | 1039.8 |
| 2.5°  | 1039.8 | 1040.4 | 1041.2 | 1040.4 | 1040.4 | 1039.8 | 1039.1 | 1039.8 | 1039.1 | 1037.8 | 1038.5 |
| 5°    | 1043.2 | 1044.5 | 1044.5 | 1043.2 | 1043.8 | 1043.2 | 1041.9 | 1042.5 | 1041.2 | 1039.1 | 1039.1 |
| 7.5°  | 1047.2 | 1047.9 | 1047.9 | 1046.6 | 1047.2 | 1045.9 | 1044.5 | 1043.8 | 1042.5 | 1039.8 | 1037.8 |
| 10°   | 1053.3 | 1053.9 | 1053.3 | 1051.9 | 1051.9 | 1050.0 | 1046.6 | 1045.3 | 1042.5 | 1038.5 | 1036.5 |
| 12.5° | 1060.0 | 1060.7 | 1060.0 | 1058.7 | 1058.0 | 1054.7 | 1051.9 | 1050.0 | 1047.9 | 1044.5 | 1041.2 |
| 15°   | 1069.5 | 1070.8 | 1069.5 | 1066.7 | 1064.7 | 1062.0 | 1060.7 | 1061.4 | 1062.0 | 1059.4 | 1056.0 |
| 17.5° | 1087.0 | 1087.6 | 1085.7 | 1079.5 | 1076.9 | 1074.2 | 1074.2 | 1075.5 | 1077.6 | 1076.1 | 1072.8 |
| 20°   | 1119.3 | 1117.3 | 1112.6 | 1105.1 | 1101.8 | 1097.0 | 1096.4 | 1097.0 | 1097.0 | 1096.4 | 1093.7 |
| 22.5° | 1159.7 | 1158.4 | 1152.3 | 1142.8 | 1138.1 | 1135.5 | 1131.4 | 1128.0 | 1127.4 | 1125.3 | 1122.7 |
| 25°   | 1208.2 | 1207.5 | 1200.1 | 1192.0 | 1188.7 | 1185.3 | 1181.9 | 1177.2 | 1173.1 | 1168.4 | 1165.8 |
| 27.5° | 1270.1 | 1267.4 | 1256.7 | 1252.6 | 1247.9 | 1245.9 | 1241.1 | 1235.8 | 1232.5 | 1226.3 | 1223.0 |
| 30°   | 1338.1 | 1338.1 | 1329.4 | 1328.1 | 1328.1 | 1323.3 | 1318.0 | 1308.6 | 1302.4 | 1296.4 | 1294.3 |
| 32.5° | 1406.1 | 1406.9 | 1398.1 | 1400.8 | 1402.8 | 1406.1 | 1407.5 | 1404.2 | 1400.1 | 1399.4 | 1395.4 |
| 35°   | 1504.5 | 1501.8 | 1493.1 | 1495.0 | 1494.4 | 1493.7 | 1493.7 | 1501.2 | 1502.5 | 1503.8 | 1495.8 |
| 37.5° | 1626.4 | 1626.4 | 1617.6 | 1617.6 | 1613.6 | 1609.5 | 1604.2 | 1608.9 | 1616.3 | 1618.3 | 1612.9 |
| 40°   | 1765.8 | 1770.5 | 1759.8 | 1759.1 | 1760.4 | 1747.6 | 1741.6 | 1748.9 | 1753.6 | 1761.7 | 1755.7 |
| 42.5° | 1930.1 | 1926.7 | 1916.0 | 1914.7 | 1907.2 | 1903.2 | 1897.8 | 1903.8 | 1911.3 | 1916.7 | 1918.6 |
| 45°   | 2087.7 | 2085.0 | 2072.9 | 2072.9 | 2065.4 | 2062.2 | 2064.8 | 2075.0 | 2078.3 | 2085.7 | 2093.1 |
| 47.5° | 2243.3 | 2240.0 | 2231.9 | 2235.2 | 2235.9 | 2241.9 | 2250.7 | 2260.1 | 2269.5 | 2279.6 | 2283.0 |
| 50°   | 2402.2 | 2402.9 | 2394.1 | 2402.2 | 2412.3 | 2429.2 | 2452.7 | 2468.2 | 2487.7 | 2500.5 | 2504.6 |
| 52.5° | 2547.0 | 2549.7 | 2559.1 | 2577.9 | 2598.2 | 2631.2 | 2671.6 | 2709.3 | 2741.6 | 2763.2 | 2761.9 |
| 55°   | 2720.7 | 2724.8 | 2747.7 | 2780.1 | 2813.0 | 2862.8 | 2922.8 | 2989.5 | 3043.4 | 3074.3 | 3054.8 |
| 57.5° | 2943.0 | 2951.7 | 2977.3 | 3021.1 | 3070.3 | 3134.9 | 3217.1 | 3317.4 | 3400.9 | 3442.7 | 3411.0 |
| 60°   | 3248.1 | 3253.5 | 3284.5 | 3333.0 | 3392.2 | 3472.3 | 3582.1 | 3716.8 | 3834.6 | 3889.9 | 3853.6 |
| 62.5° | 3650.1 | 3660.2 | 3685.2 | 3734.3 | 3794.9 | 3885.9 | 4019.9 | 4188.3 | 4335.1 | 4411.8 | 4329.6 |
| 65°   | 4130.3 | 4162.6 | 4183.5 | 4233.4 | 4289.9 | 4386.2 | 4526.3 | 4706.8 | 4864.3 | 4914.9 | 4819.9 |
| 67.5° | 4605.7 | 4634.1 | 4670.4 | 4727.7 | 4784.9 | 4893.3 | 5023.3 | 5198.4 | 5371.5 | 5417.2 | 5269.8 |
| 70°   | 4813.9 | 4830.1 | 4886.6 | 4964.7 | 5074.4 | 5202.4 | 5352.6 | 5549.3 | 5763.4 | 5801.2 | 5614.0 |
| 72.5° | 4396.9 | 4413.1 | 4476.4 | 4609.1 | 4800.4 | 5003.8 | 5265.7 | 5554.6 | 5837.5 | 5879.9 | 5622.0 |
| 75°   | 3325.5 | 3299.2 | 3392.8 | 3568.7 | 3826.6 | 4110.1 | 4476.4 | 4890.6 | 5299.4 | 5352.6 | 5044.9 |
| 77.5° | 1718.7 | 1715.3 | 1786.0 | 2004.2 | 2312.0 | 2634.5 | 3038.0 | 3506.0 | 3906.0 | 4067.7 | 3817.1 |
| 80°   | 484.3  | 489.6  | 523.2  | 631.7  | 811.5  | 1044.5 | 1359.7 | 1798.1 | 2125.4 | 2292.4 | 2152.4 |
| 82.5° | 190.0  | 204.7  | 217.5  | 237.7  | 261.3  | 295.6  | 394.7  | 587.3  | 788.0  | 941.5  | 771.1  |
| 85°   | 68.0   | 72.7   | 103.0  | 121.9  | 123.9  | 130.6  | 148.8  | 173.8  | 209.4  | 249.8  | 205.4  |
| 87.5° | 25.6   | 28.3   | 33.0   | 54.5   | 53.9   | 49.2   | 59.9   | 62.6   | 47.2   | 43.1   | 53.2   |
| 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: P200082

CATALOG NUMBER: GAP-AF-02-LED-U-5WQ-1200

**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1039.8 | 1039.8 | 1039.8 | 1039.8 | 1039.8 | 1039.8 | 1039.8 | 1039.8 |
| 2.5°  | 1037.2 | 1037.8 | 1037.8 | 1038.5 | 1039.1 | 1039.1 | 1040.4 | 1040.4 |
| 5°    | 1037.8 | 1037.8 | 1036.5 | 1037.2 | 1036.5 | 1036.5 | 1037.2 | 1037.2 |
| 7.5°  | 1036.5 | 1035.7 | 1034.4 | 1033.8 | 1032.4 | 1032.4 | 1032.4 | 1032.4 |
| 10°   | 1034.4 | 1033.8 | 1032.4 | 1031.7 | 1031.0 | 1031.0 | 1031.0 | 1031.0 |
| 12.5° | 1039.8 | 1037.8 | 1036.5 | 1035.7 | 1035.7 | 1035.7 | 1035.7 | 1035.7 |
| 15°   | 1053.9 | 1049.2 | 1045.9 | 1045.9 | 1046.6 | 1047.9 | 1047.9 | 1049.2 |
| 17.5° | 1071.4 | 1066.1 | 1062.7 | 1060.0 | 1061.4 | 1063.4 | 1064.7 | 1066.1 |
| 20°   | 1092.3 | 1089.6 | 1084.9 | 1082.3 | 1082.3 | 1084.9 | 1086.3 | 1087.0 |
| 22.5° | 1121.3 | 1119.3 | 1117.3 | 1113.9 | 1113.9 | 1115.2 | 1118.0 | 1118.0 |
| 25°   | 1164.4 | 1163.1 | 1161.7 | 1159.0 | 1158.4 | 1158.4 | 1159.7 | 1161.0 |
| 27.5° | 1218.2 | 1218.9 | 1217.6 | 1216.9 | 1215.0 | 1214.2 | 1216.3 | 1215.6 |
| 30°   | 1290.4 | 1293.7 | 1297.1 | 1294.3 | 1291.0 | 1289.0 | 1287.0 | 1284.3 |
| 32.5° | 1388.0 | 1384.0 | 1381.3 | 1376.6 | 1370.4 | 1365.1 | 1361.0 | 1356.3 |
| 35°   | 1480.2 | 1473.6 | 1470.8 | 1474.9 | 1474.2 | 1470.8 | 1466.1 | 1462.1 |
| 37.5° | 1593.3 | 1592.0 | 1593.3 | 1600.8 | 1599.5 | 1602.9 | 1593.3 | 1592.7 |
| 40°   | 1736.2 | 1737.5 | 1746.9 | 1755.7 | 1760.4 | 1765.1 | 1759.8 | 1754.4 |
| 42.5° | 1901.9 | 1901.2 | 1904.5 | 1916.7 | 1924.8 | 1930.1 | 1918.6 | 1917.3 |
| 45°   | 2076.9 | 2072.2 | 2075.0 | 2085.0 | 2093.1 | 2099.2 | 2086.4 | 2086.4 |
| 47.5° | 2269.5 | 2261.4 | 2252.7 | 2264.2 | 2268.9 | 2272.9 | 2262.8 | 2259.5 |
| 50°   | 2484.3 | 2467.6 | 2448.6 | 2453.4 | 2453.4 | 2452.0 | 2439.2 | 2438.6 |
| 52.5° | 2730.9 | 2699.9 | 2665.5 | 2652.7 | 2645.4 | 2637.3 | 2615.1 | 2604.2 |
| 55°   | 3014.4 | 2967.9 | 2914.1 | 2881.0 | 2863.5 | 2841.3 | 2804.3 | 2794.2 |
| 57.5° | 3345.8 | 3273.0 | 3180.0 | 3139.6 | 3100.6 | 3064.2 | 3023.1 | 3011.7 |
| 60°   | 3738.4 | 3631.3 | 3508.0 | 3433.2 | 3390.9 | 3355.8 | 3313.4 | 3311.4 |
| 62.5° | 4176.1 | 4007.1 | 3867.7 | 3800.3 | 3769.4 | 3738.4 | 3698.0 | 3703.3 |
| 65°   | 4621.3 | 4444.8 | 4314.2 | 4259.6 | 4230.6 | 4205.0 | 4164.6 | 4170.7 |
| 67.5° | 5060.3 | 4898.1 | 4754.6 | 4698.7 | 4666.4 | 4634.1 | 4597.7 | 4603.8 |
| 70°   | 5375.5 | 5174.2 | 5012.6 | 4888.6 | 4811.1 | 4723.6 | 4667.0 | 4652.9 |
| 72.5° | 5285.3 | 4974.8 | 4718.3 | 4472.4 | 4328.3 | 4211.1 | 4131.7 | 4097.3 |
| 75°   | 4574.1 | 4149.8 | 3819.8 | 3518.1 | 3348.4 | 3210.3 | 3110.0 | 3047.4 |
| 77.5° | 3396.9 | 2920.1 | 2530.2 | 2182.7 | 1907.9 | 1723.4 | 1593.3 | 1509.3 |
| 80°   | 1859.4 | 1414.2 | 1033.8 | 726.7  | 534.1  | 443.8  | 392.0  | 367.0  |
| 82.5° | 579.2  | 373.8  | 275.5  | 237.7  | 220.9  | 211.4  | 196.0  | 171.0  |
| 85°   | 184.5  | 161.6  | 150.2  | 143.4  | 136.7  | 119.2  | 82.1   | 74.8   |
| 87.5° | 71.4   | 73.4   | 72.7   | 68.7   | 70.1   | 50.5   | 40.4   | 35.7   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)