

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: LUMARK

Report Number: P210682

Luminaire Tested: **WPLED-100-GL-UNV**

Test Date: 10/26/16

**Test Information**

Test Method: LM-79-08  
Report Number: P210682  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29005)  
Test Lab: INNOVATION CENTER-P2  
Test Date: 10/26/16  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: WPLLED-100-GL-UNV  
Description: LED WALL PACK  
Light Source: (3) CREE 4000K LEDS  
CXA1830  
Ballast/Driver: (1) MEAN WELL  
MW HLG-100H-42

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10263.6 lumens  
Efficiency: N/A  
Efficacy: 124.9 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.25' x L: 0.42' x H: 0.58')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U5 - G5  
  
Input Watts (W): 82.2  
Input Voltage (V): 120.0  
Input Current (Ain): 0.842  
Voltage Rise (V): NR  
Power Factor: 0.9974  
Total Harmonic Distortion (THDi): 9.26%  
Frequency (hertz): 60  
Stabilization Time: 1 HR  
Operation Time: 3 HR  
Ambient Temperature (°C): 24.7  
Test Distance: 25 FT

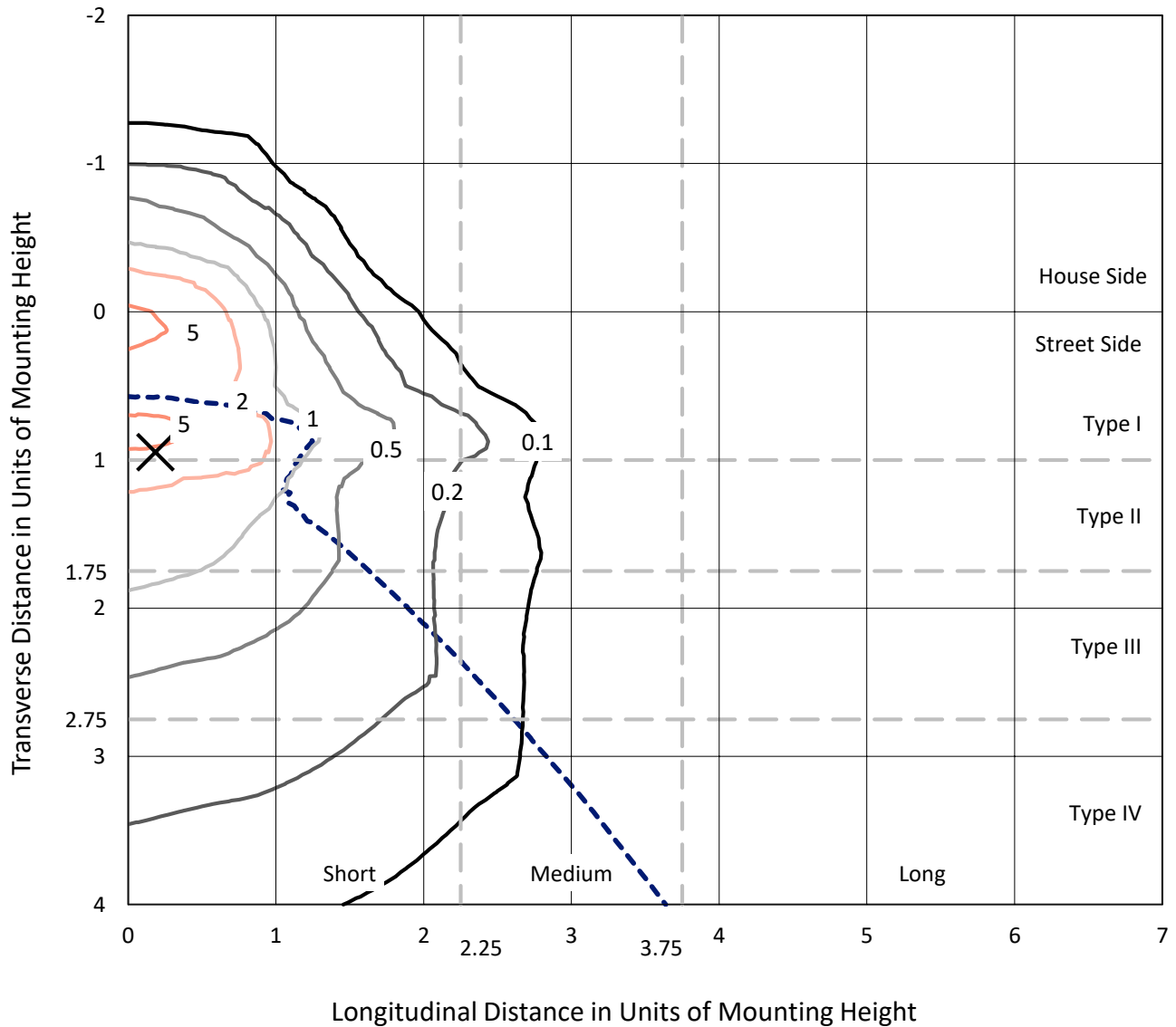


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### Iso-Footcandle Lines of Horizontal Illumination

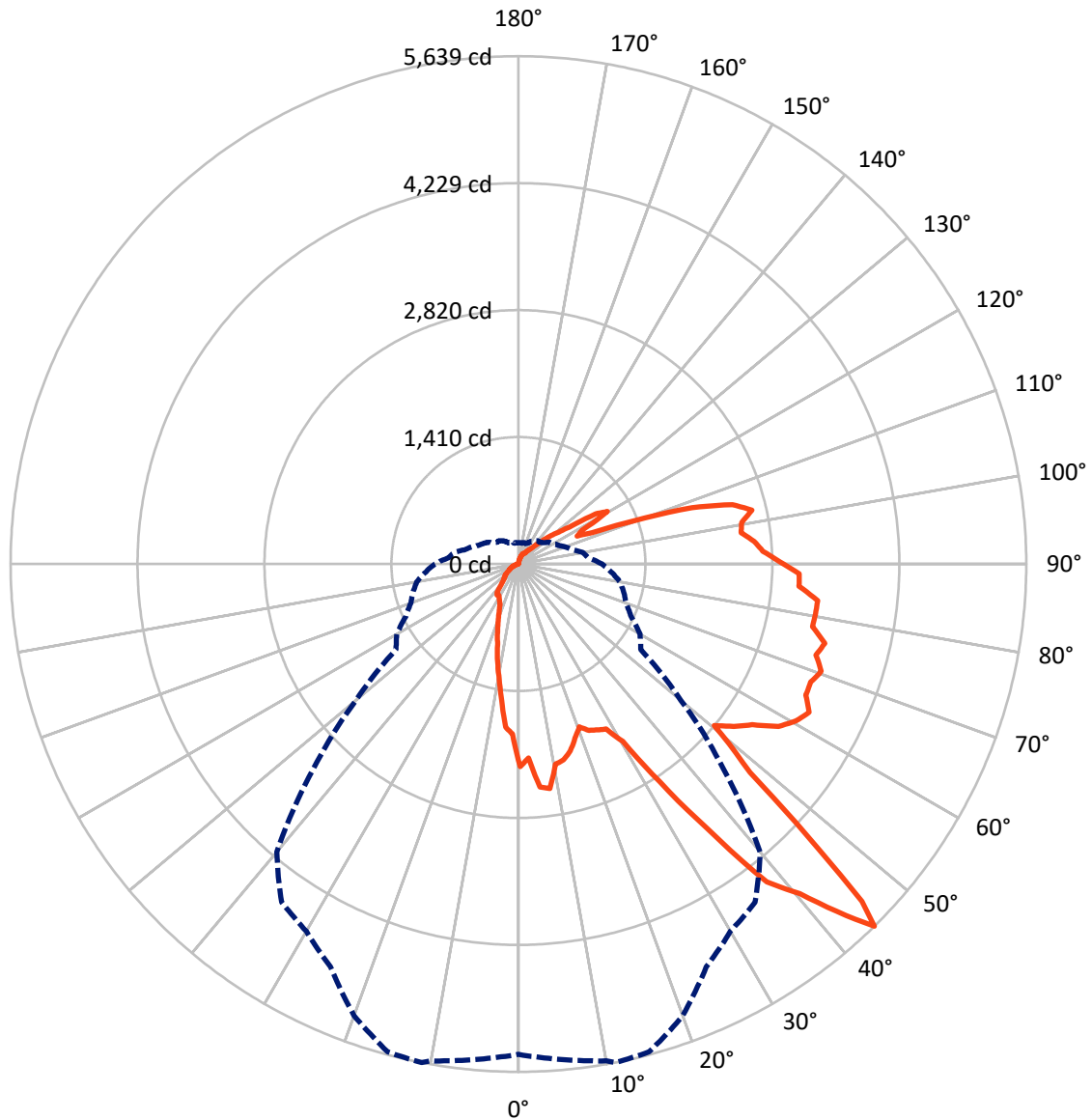
✕ Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.1 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 11-Deg Lateral      - - - Horizontal Cone Through 44-Deg Vertical

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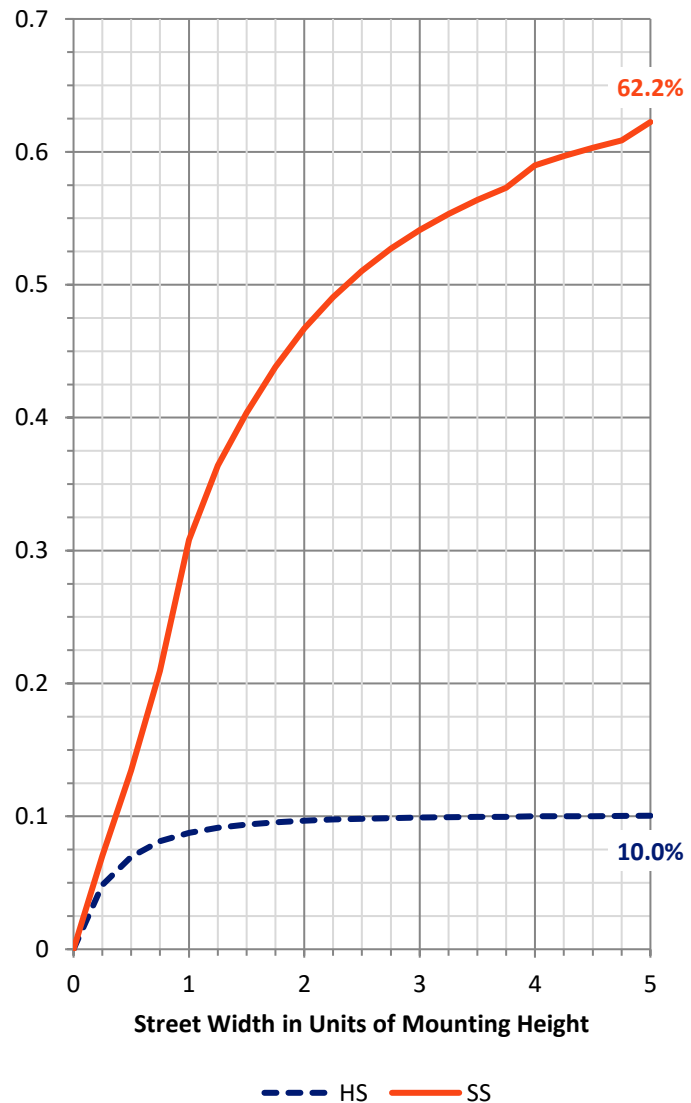
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1046.7	62.3	1109.1
	% Fixture	10.2	0.6	10.8
<b>Street Side</b>	Lumens	7178.6	1976.0	9154.6
	% Fixture	69.9	19.3	89.2
<b>Total</b>	Lumens	8225.3	2038.3	10263.6
	% Fixture	80.1	19.9	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	191.3	1.9
10°-20°	476.3	4.6
20°-30°	637.3	6.2
30°-40°	946.8	9.2
40°-50°	1317.6	12.8
50°-60°	1186.1	11.6
60°-70°	1226.4	11.9
70°-80°	1192.7	11.6
80°-90°	1050.8	10.2
90°-100°	841.2	8.2
100°-110°	597.5	5.8
110°-120°	264.5	2.6
120°-130°	177.5	1.7
130°-140°	85.0	0.8
140°-150°	45.0	0.4
150°-160°	21.2	0.2
160°-170°	6.2	0.1
170°-180°	0.2	0.0
0°-90°	8225.3	80.1
0°-180°	10263.6	100.0



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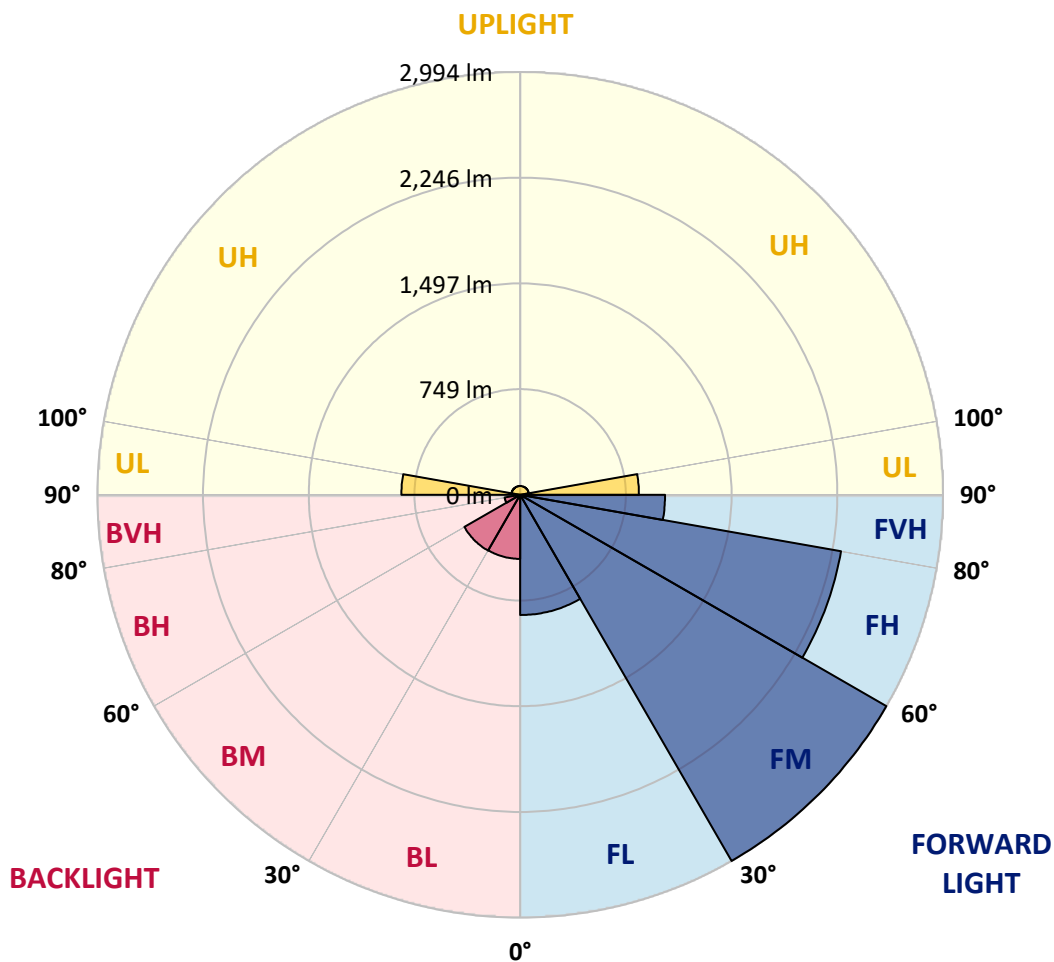
CATALOG NUMBER: WPLLED-100-GL-UNV

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	851.2	8.3			
FM	(30°-60°)	2994.3	29.2			
FH	(60°-80°)	2307.2	22.5			G2/5000
FVH	(80°-90°)	1025.9	10.0			G5
BL	(0°-30°)	453.7	4.4	B1/500		
BM	(30°-60°)	456.2	4.4	B1/1000		
BH	(60°-80°)	111.9	1.1	B1/500		G1/500
BVH	(80°-90°)	24.9	0.2			G1/100
UL	(90°-100°)	841.2	8.2		U4/1000	
UH	(100°-180°)	62.3	0.6		U3/500	

**BUG Rating: B1-U5-G5**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	11°	15°	20°	25°	30°	35°	40°	45°
0°	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5
2.5°	2170.3	2152.3	2162.1	2155.6	2157.2	2154.7	2150.6	2149.0	2146.6	2145.8	2150.6
5°	2498.6	2483.9	2493.7	2488.0	2480.6	2457.0	2410.4	2375.3	2339.3	2278.9	2221.7
7.5°	2506.0	2519.9	2519.9	2518.2	2510.0	2487.2	2479.8	2463.5	2431.6	2387.5	2351.6
10°	2256.0	2269.9	2256.0	2260.1	2260.9	2265.8	2296.9	2301.8	2314.0	2333.6	2349.1
12.5°	2260.1	2259.3	2240.5	2231.5	2211.1	2173.5	2127.8	2098.4	2108.2	2181.7	2276.4
15°	2167.8	2171.9	2155.6	2154.7	2142.5	2120.4	2109.8	2106.5	2121.2	2112.3	2098.4
17.5°	2067.3	2060.0	2047.7	2033.9	2002.8	1986.5	2011.0	2054.3	2095.1	2100.0	2091.8
20°	1978.3	1972.6	1939.9	1930.9	1896.6	1902.3	1935.0	1958.7	1979.9	2018.3	2046.1
22.5°	2086.1	2074.7	2024.0	2006.9	1971.8	1939.9	1904.0	1897.4	1915.4	1922.0	1945.6
25°	2102.5	2096.7	2054.3	2040.4	2029.0	2024.9	1997.1	1929.3	1865.6	1866.4	1868.9
27.5°	2158.8	2140.0	2081.2	2074.7	2070.6	2060.8	2013.4	1978.3	1922.8	1843.5	1820.7
30°	2425.1	2415.3	2304.2	2286.2	2229.9	2159.6	2064.1	1997.1	1932.6	1879.5	1777.4
32.5°	2997.7	3003.4	2899.7	2883.3	2791.9	2605.6	2324.6	2103.3	1965.2	1876.2	1805.1
35°	3684.6	3660.9	3613.6	3603.8	3533.5	3311.3	2947.0	2546.0	2176.0	1918.7	1821.5
37.5°	4431.2	4457.3	4476.9	4481.0	4472.8	4201.7	3710.8	3242.7	2687.3	2219.3	1927.7
40°	4726.0	4727.7	4789.8	4811.0	4856.7	4842.8	4616.6	4169.8	3451.0	2769.0	2262.6
42.5°	5437.5	5411.3	5368.1	5335.4	5181.8	4962.9	4806.9	4658.3	4403.4	3581.7	2805.7
44°	5444.8	5523.2	5602.5	5639.2	5608.2	5335.4	4935.2	4708.9	4583.1	4173.9	3222.3
45°	4993.1	5120.6	5263.5	5346.0	5512.6	5479.1	5209.6	4748.1	4577.4	4409.1	3629.9
47.5°	3203.5	3253.3	3472.3	3460.0	3825.9	4335.6	4966.2	5143.4	4689.3	4543.9	4267.0
50°	2981.4	2907.0	2821.3	2818.0	2852.3	2928.3	3277.0	3921.5	4797.9	4560.2	4151.8
52.5°	3216.6	3122.7	2995.2	2994.4	2981.4	2883.3	2796.7	2917.6	3656.0	4240.0	3956.6
55°	3411.8	3281.9	3146.3	3148.8	3131.6	3024.6	2896.4	2798.4	2943.8	3219.9	3335.8
57.5°	3730.4	3576.8	3399.5	3404.5	3348.1	3187.2	3012.4	2831.1	2805.7	2661.2	2387.5
60°	3816.9	3670.7	3536.8	3540.0	3507.4	3377.5	3186.4	2934.8	2791.9	2613.8	2188.2
62.5°	3878.2	3716.5	3607.8	3623.4	3643.8	3516.4	3327.7	3074.5	2885.8	2710.2	2205.4
65°	3742.6	3582.5	3488.6	3507.4	3553.1	3518.8	3464.1	3244.4	2980.5	2830.2	2283.0
67.5°	3752.4	3578.4	3486.1	3499.2	3526.2	3451.8	3362.8	3290.1	3083.4	2962.6	2305.0
70°	3806.3	3634.0	3542.5	3567.8	3589.9	3478.8	3407.7	3248.4	3079.4	3050.8	2345.1
72.5°	3693.6	3536.8	3434.7	3455.9	3490.2	3411.8	3295.8	3179.8	3045.1	3110.4	2369.6
75°	3752.4	3576.0	3482.9	3513.9	3513.9	3395.5	3300.7	3108.0	2955.2	3016.5	2384.3
77.5°	3518.8	3388.9	3313.0	3339.1	3378.3	3324.4	3252.5	3114.5	2978.9	2969.1	2321.4
80°	3572.7	3417.5	3324.4	3344.0	3351.4	3242.7	3178.2	2992.0	2807.4	2809.8	2219.3
82.5°	3538.4	3385.7	3319.5	3348.1	3360.3	3253.3	3113.7	2913.5	2773.9	2743.7	2153.1
85°	3351.4	3222.3	3107.1	3125.1	3118.6	3009.1	2898.0	2716.7	2578.7	2581.1	2026.5
87.5°	3406.1	3220.7	3118.6	3121.0	3097.3	2955.2	2809.8	2635.0	2507.6	2457.0	1886.8
90°	3134.9	3003.4	2882.5	2900.5	2884.1	2778.0	2660.3	2454.5	2322.2	2298.5	1742.2
92.5°	2983.8	2853.1	2715.9	2718.3	2680.8	2564.0	2470.8	2319.7	2204.6	2115.5	1623.8
95°	2895.6	2756.7	2625.2	2628.5	2594.2	2483.9	2376.1	2232.3	2175.2	2020.8	1534.8
97.5°	2692.2	2593.4	2484.7	2496.2	2497.0	2461.9	2386.7	2281.3	2152.3	1941.6	1528.2
100°	2746.9	2644.0	2521.5	2520.7	2563.1	2494.5	2406.3	2216.8	2034.7	1802.7	1353.5
102.5°	3005.9	2842.5	2664.4	2661.2	2622.8	2477.4	2269.9	2008.5	1783.1	1527.4	1146.0
105°	2769.0	2644.0	2461.0	2465.1	2417.7	2247.0	2012.6	1727.5	1414.7	1149.2	907.5
107.5°	2343.4	2214.4	2040.4	2028.1	1938.3	1747.1	1479.2	1241.5	1003.9	826.6	686.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	11°	15°	20°	25°	30°	35°	40°	45°
110°	1623.0	1541.3	1367.3	1363.2	1259.5	1114.9	971.2	831.5	711.4	678.0	608.5
112.5°	1010.4	967.9	887.9	887.1	850.3	795.6	728.6	670.6	641.2	712.3	618.3
115°	800.5	767.8	723.7	722.9	718.8	716.3	711.4	752.3	777.6	740.8	618.3
117.5°	800.5	786.6	797.2	799.7	840.5	901.8	961.4	922.2	755.6	646.9	512.1
120°	1221.1	1177.8	1151.7	1147.6	1155.0	1079.0	935.2	767.8	605.3	490.9	408.4
122.5°	1274.2	1154.1	1031.6	1020.2	924.6	795.6	693.5	580.7	463.9	397.8	329.2
125°	810.3	772.7	731.0	725.3	698.4	646.9	570.9	482.7	400.2	330.0	281.0
127.5°	703.3	660.8	598.7	589.7	559.5	526.0	477.8	410.0	346.3	290.0	242.6
130°	528.5	520.3	504.0	499.1	483.6	449.2	406.8	355.3	304.7	253.2	217.3
132.5°	468.0	446.8	414.9	409.2	392.1	365.1	334.9	299.0	261.4	223.8	196.8
135°	363.5	350.4	330.8	325.9	307.9	289.2	280.2	261.4	233.6	212.4	202.6
137.5°	302.2	293.2	282.6	280.2	271.2	261.4	249.1	239.3	236.9	234.4	212.4
140°	238.5	227.9	222.2	221.4	218.1	207.5	207.5	205.0	195.2	198.5	190.3
142.5°	205.8	204.2	199.3	199.3	197.7	194.4	198.5	199.3	197.7	193.6	187.1
145°	178.1	178.1	179.7	178.9	178.9	178.1	178.9	178.1	171.5	163.4	155.2
147.5°	151.1	151.1	151.9	151.1	151.9	150.3	151.9	152.7	151.1	146.2	139.7
150°	134.8	135.6	137.2	137.2	136.4	135.6	137.2	138.9	137.2	132.3	127.4
152.5°	132.3	131.5	131.5	132.3	132.3	133.1	132.3	129.1	125.8	120.9	113.5
155°	126.6	126.6	127.4	127.4	127.4	125.0	121.7	117.6	111.9	106.2	100.5
157.5°	117.6	117.6	116.8	116.8	114.3	111.9	106.2	101.3	95.6	91.5	85.8
160°	97.2	96.4	95.6	95.6	94.7	92.3	89.8	86.6	81.7	75.1	69.4
162.5°	80.9	81.7	80.9	80.9	80.9	79.2	76.0	71.1	64.5	56.4	50.6
165°	65.3	65.3	63.7	63.7	62.9	61.3	55.5	49.8	44.9	39.2	32.7
167.5°	44.1	43.3	41.7	42.5	42.5	40.8	37.6	32.7	26.1	21.2	16.3
170°	22.9	22.1	21.2	21.2	21.2	18.8	16.3	13.1	9.0	6.5	5.7
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5
2.5°	2159.6	2161.3	2180.1	2198.8	2217.6	2225.8	2231.5	2231.5	2220.1	2193.9	2167.8
5°	2165.4	2124.5	2087.8	2073.9	2082.0	2101.6	2133.5	2154.7	2138.4	2081.2	2013.4
7.5°	2305.8	2239.7	2160.5	2086.9	2044.5	2041.2	2078.0	2122.1	2100.8	2010.2	1906.4
10°	2352.4	2331.2	2302.6	2220.9	2116.3	2063.3	2082.0	2144.9	2105.7	1971.8	1857.4
12.5°	2330.4	2357.3	2341.0	2298.5	2181.7	2065.7	2057.5	2131.0	2062.4	1899.9	1801.1
15°	2195.6	2287.1	2319.7	2283.8	2211.9	2064.1	2008.5	2082.9	1979.9	1827.2	1753.7
17.5°	2054.3	2127.0	2231.5	2243.8	2185.8	2042.0	1935.8	2006.1	1876.2	1757.0	1709.6
20°	2040.4	1978.3	2074.7	2162.9	2125.3	1999.5	1855.0	1899.9	1769.2	1672.0	1630.3
22.5°	1979.9	1947.3	1917.9	2047.7	2057.5	1940.7	1773.3	1783.9	1652.4	1600.9	1521.7
25°	1893.4	1886.8	1836.2	1914.6	1955.4	1868.9	1696.5	1678.5	1541.3	1503.7	1404.9
27.5°	1796.2	1829.6	1790.4	1779.0	1865.6	1784.7	1618.9	1586.2	1455.6	1416.3	1315.1
30°	1763.5	1757.0	1737.3	1695.7	1781.5	1725.1	1585.4	1547.8	1412.3	1335.5	1232.6
32.5°	1736.5	1707.9	1712.8	1695.7	1817.4	1768.4	1655.7	1565.0	1431.9	1307.7	1181.1
35°	1755.3	1773.3	1815.0	1882.7	1922.8	1765.1	1618.9	1489.0	1355.9	1208.1	1091.3
37.5°	1878.7	1950.5	2010.2	1973.4	1797.0	1574.8	1415.5	1302.8	1176.2	1044.7	945.9
40°	2036.3	2014.2	1948.9	1761.0	1523.3	1364.9	1265.2	1187.6	1048.8	926.3	825.8
42.5°	2216.8	1814.1	1690.0	1496.4	1324.0	1252.2	1190.9	1103.5	984.2	832.3	753.9
44°	2355.7	1657.3	1558.5	1380.4	1271.0	1210.5	1146.0	1034.9	927.9	779.2	727.8
45°	2463.5	1607.5	1490.7	1336.3	1256.2	1194.2	1097.8	980.2	878.9	744.1	695.9
47.5°	3006.7	1670.4	1424.5	1271.8	1246.5	1155.0	980.2	855.2	744.9	680.4	588.9
50°	3483.7	2064.9	1485.0	1288.1	1289.7	1114.1	901.8	759.6	662.4	593.8	524.4
52.5°	3306.4	2750.2	1670.4	1334.7	1300.4	1063.5	839.7	671.4	630.6	526.8	472.9
55°	2804.9	2902.1	2191.5	1404.9	1260.3	1009.6	806.2	631.4	548.1	483.6	393.7
57.5°	2364.7	2415.3	2684.0	1588.7	1219.5	949.1	742.5	637.9	493.3	427.2	308.8
60°	1881.9	2073.1	2540.3	2183.3	1226.8	905.8	674.7	574.2	471.3	345.5	245.9
62.5°	1794.5	1759.4	1927.7	2755.1	1316.7	840.5	678.8	522.8	447.6	275.3	209.9
65°	1822.3	1658.9	1584.6	2112.3	1800.2	816.0	709.8	509.7	368.4	221.4	178.1
67.5°	1866.4	1645.1	1560.9	1420.4	2144.1	900.9	592.2	496.6	297.3	187.1	147.0
70°	1874.6	1654.9	1587.1	1253.8	1424.5	1123.9	620.8	410.8	236.1	163.4	126.6
72.5°	1871.3	1661.4	1562.6	1167.2	952.4	1023.5	608.5	368.4	203.4	136.4	107.8
75°	1904.0	1667.1	1506.2	1110.0	820.9	799.7	611.8	290.0	169.1	111.1	97.2
77.5°	1867.2	1660.6	1444.1	1029.2	810.3	678.0	466.4	236.9	142.1	92.3	90.7
80°	1809.2	1650.0	1391.0	963.0	696.7	575.0	379.8	202.6	108.6	80.0	88.2
82.5°	1720.2	1602.6	1297.1	877.2	624.0	490.1	300.6	165.8	88.2	71.9	91.5
85°	1661.4	1556.0	1198.3	809.5	562.0	400.2	240.1	129.1	67.0	67.0	92.3
87.5°	1574.8	1486.6	1117.4	704.1	520.3	325.9	191.9	96.4	57.2	67.8	95.6
90°	1476.0	1417.2	1046.3	691.0	444.3	276.9	169.1	79.2	53.1	72.7	98.8
92.5°	1390.2	1333.8	932.0	597.9	383.1	236.9	133.1	66.2	54.7	80.0	99.7
95°	1341.2	1181.9	871.5	549.7	330.8	203.4	110.3	58.8	59.6	85.8	100.5
97.5°	1229.3	1013.7	732.7	481.1	282.6	178.1	91.5	55.5	63.7	89.0	96.4
100°	1039.8	881.3	684.5	399.4	230.3	136.4	78.4	53.9	67.8	88.2	89.0
102.5°	904.2	707.4	557.1	327.5	199.3	111.1	71.9	55.5	66.2	84.1	80.9
105°	740.0	564.4	410.0	254.8	159.3	92.3	66.2	58.0	64.5	76.0	71.9
107.5°	566.1	441.9	333.3	224.6	137.2	85.8	64.5	61.3	63.7	69.4	60.4



REPORT NUMBER: P210682

CATALOG NUMBER: WPLLED-100-GL-UNV

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
110°	486.8	375.7	289.2	209.9	122.5	81.7	66.2	64.5	64.5	64.5	53.9
112.5°	472.9	356.1	256.5	173.2	112.7	80.9	69.4	67.0	64.5	59.6	49.8
115°	442.7	299.8	218.1	152.7	105.4	80.9	76.0	69.4	64.5	57.2	47.4
117.5°	356.9	261.4	187.9	136.4	99.7	82.5	81.7	72.7	62.9	53.9	44.9
120°	299.8	223.0	170.7	129.1	96.4	84.1	84.9	71.9	59.6	49.8	42.5
122.5°	259.7	197.7	156.0	123.3	98.0	87.4	87.4	68.6	56.4	46.6	40.0
125°	227.9	180.5	145.4	119.3	100.5	93.1	89.8	62.9	52.3	43.3	37.6
127.5°	205.0	169.1	138.9	117.6	103.7	100.5	88.2	57.2	48.2	40.8	35.1
130°	187.9	161.7	135.6	115.2	104.6	102.1	82.5	52.3	43.3	37.6	32.7
132.5°	172.3	152.7	132.3	115.2	105.4	98.0	72.7	46.6	40.0	34.3	30.2
135°	185.4	164.2	148.7	134.0	116.8	97.2	63.7	41.7	35.9	31.9	27.0
137.5°	178.9	150.3	127.4	115.2	103.7	84.9	53.9	37.6	33.5	29.4	25.3
140°	182.2	165.0	148.7	129.1	111.1	82.5	45.7	34.3	30.2	27.0	22.9
142.5°	174.0	166.6	146.2	125.8	101.3	68.6	39.2	31.9	27.8	24.5	20.4
145°	146.2	135.6	120.9	107.0	82.5	55.5	33.5	27.8	24.5	22.1	18.8
147.5°	132.3	122.5	110.3	93.1	69.4	44.1	27.8	24.5	22.1	19.6	16.3
150°	121.7	111.9	98.0	79.2	58.0	35.1	23.7	21.2	18.8	17.2	14.7
152.5°	106.2	98.0	83.3	67.0	44.9	27.0	20.4	18.0	16.3	14.7	13.1
155°	93.1	81.7	66.2	52.3	33.5	18.8	16.3	14.7	13.9	13.1	12.3
157.5°	76.8	63.7	52.3	37.6	22.9	13.9	13.1	13.1	12.3	12.3	11.4
160°	58.8	49.0	35.9	24.5	13.1	11.4	11.4	11.4	11.4	11.4	10.6
162.5°	43.3	32.7	22.1	13.1	9.8	10.6	10.6	10.6	10.6	10.6	9.8
165°	26.1	18.0	9.8	9.0	9.0	9.0	9.8	9.8	9.8	9.8	9.8
167.5°	11.4	6.5	7.3	8.2	8.2	8.2	9.0	9.8	9.8	9.8	9.8
170°	6.5	6.5	7.3	8.2	8.2	8.2	9.0	9.8	9.8	9.8	9.8
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P210682

CATALOG NUMBER: WPLLED-100-GL-UNV

**CANDELA DISTRIBUTION (continued):**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5	2249.5
2.5°	2120.4	2091.0	2055.1	2015.1	1995.5	1960.3	1944.0	1919.5	1922.8	1904.8	1899.9
5°	1931.7	1889.3	1851.7	1816.6	1791.3	1786.4	1787.2	1788.0	1797.0	1806.0	1812.5
7.5°	1826.4	1770.0	1737.3	1721.0	1709.6	1674.5	1636.9	1583.8	1570.7	1533.1	1514.4
10°	1785.5	1746.3	1705.5	1637.7	1560.1	1470.2	1416.3	1400.0	1382.9	1331.4	1310.2
12.5°	1753.7	1694.9	1598.5	1504.6	1435.1	1369.8	1284.8	1210.5	1162.3	1125.6	1106.0
15°	1707.9	1589.5	1486.6	1415.5	1303.6	1205.6	1138.6	1078.2	1037.3	978.5	938.5
17.5°	1613.2	1485.0	1391.0	1270.1	1167.2	1092.1	1024.3	952.4	896.0	861.7	828.2
20°	1499.7	1384.5	1265.2	1146.0	1062.7	976.1	893.6	850.3	798.8	739.2	698.4
22.5°	1402.5	1271.8	1149.2	1047.1	944.2	860.9	796.4	725.3	687.7	644.5	604.4
25°	1298.7	1168.8	1056.1	945.0	843.8	771.9	695.1	633.0	603.6	566.9	532.6
27.5°	1198.3	1084.7	963.8	844.6	765.3	672.2	621.6	577.5	534.2	503.2	479.5
30°	1121.5	1002.2	873.2	769.4	667.3	611.8	563.6	523.6	489.3	471.3	459.0
32.5°	1074.1	941.0	798.0	691.0	602.8	557.1	526.0	492.5	466.4	438.6	426.4
35°	999.0	889.5	740.0	617.5	550.5	516.2	496.6	468.8	440.3	428.0	427.2
37.5°	865.0	789.8	683.7	572.6	500.7	481.1	471.3	455.8	441.9	419.8	423.1
40°	730.2	663.2	606.9	529.3	472.9	450.9	432.1	425.6	404.3	379.0	352.9
42.5°	651.0	581.6	526.0	496.6	448.4	401.9	375.7	365.9	352.0	324.3	286.7
44°	614.2	554.6	488.5	454.1	418.2	368.4	339.0	335.7	315.3	290.0	260.6
45°	589.7	531.7	465.6	425.6	396.2	345.5	317.7	311.2	305.5	270.4	244.2
47.5°	542.4	459.9	401.1	376.6	339.8	299.8	270.4	260.6	269.5	241.0	245.0
50°	454.1	373.3	353.7	330.8	289.2	254.8	226.3	246.7	241.8	245.0	214.8
52.5°	372.5	317.7	311.2	281.8	248.3	217.3	211.6	216.5	246.7	215.6	185.4
55°	304.7	280.2	272.8	243.4	210.7	193.6	200.1	209.9	217.3	188.7	172.3
57.5°	263.0	244.2	235.2	208.3	175.6	183.8	191.9	185.4	183.0	167.4	149.5
60°	221.4	210.7	199.3	180.5	169.9	178.9	169.9	160.9	153.6	150.3	134.0
62.5°	181.3	179.7	168.3	156.8	165.0	168.3	154.4	139.7	138.0	136.4	122.5
65°	156.8	158.5	145.4	148.7	164.2	156.0	142.1	125.0	127.4	120.1	102.9
67.5°	137.2	142.1	136.4	143.8	152.7	146.2	131.5	118.4	112.7	98.0	84.1
70°	124.2	129.9	142.9	148.7	142.1	131.5	120.9	104.6	93.1	80.9	67.0
72.5°	115.2	129.1	146.2	147.8	127.4	119.3	102.1	87.4	76.0	64.5	51.5
75°	111.1	134.8	146.2	133.1	116.0	98.0	84.1	71.1	62.1	49.0	35.9
77.5°	111.9	134.0	136.4	114.3	98.0	78.4	64.5	57.2	46.6	31.0	20.4
80°	116.8	129.1	117.6	98.0	76.8	61.3	50.6	41.7	31.0	20.4	13.1
82.5°	116.8	119.3	98.8	81.7	62.1	53.1	44.9	37.6	27.8	18.0	11.4
85°	112.7	105.4	84.1	65.3	53.1	45.7	39.2	31.0	22.1	14.7	9.8
87.5°	105.4	89.8	71.1	56.4	48.2	42.5	35.9	26.1	18.8	13.1	8.2
90°	100.5	82.5	62.1	52.3	45.7	40.8	31.9	22.9	17.2	12.3	8.2
92.5°	91.5	75.1	57.2	49.8	44.1	38.4	28.6	21.2	15.5	11.4	7.3
95°	87.4	67.0	53.1	48.2	43.3	35.1	25.3	19.6	14.7	10.6	6.5
97.5°	80.0	59.6	49.8	46.6	40.8	31.9	23.7	18.0	13.1	9.0	5.7
100°	71.1	54.7	47.4	44.9	38.4	28.6	21.2	16.3	12.3	8.2	5.7
102.5°	63.7	50.6	45.7	44.1	34.3	26.1	20.4	15.5	11.4	7.3	4.9
105°	56.4	47.4	44.1	40.8	30.2	22.9	18.0	13.9	9.8	6.5	4.9
107.5°	50.6	44.1	42.5	38.4	27.0	21.2	16.3	12.3	9.0	5.7	4.9



REPORT NUMBER: P210682  
 CATALOG NUMBER: WPLLED-100-GL-UNV

REPORT N  
 CATALOG

**CANDELA DISTRIBUTION (continued):**

**CANDELA**

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	
110°	45.7	41.7	39.2	33.5	23.7	19.6	15.5	11.4	8.2	5.7	4.1	0°
112.5°	43.3	39.2	35.9	28.6	22.1	18.8	14.7	10.6	7.3	5.7	4.1	2.5°
115°	41.7	38.4	33.5	26.1	22.1	18.8	14.7	11.4	8.2	6.5	5.7	5°
117.5°	40.0	35.9	30.2	24.5	21.2	18.8	14.7	10.6	9.0	7.3	5.7	7.5°
120°	37.6	33.5	27.8	22.1	19.6	17.2	13.1	10.6	9.0	7.3	5.7	10°
122.5°	35.1	31.0	25.3	20.4	18.0	15.5	12.3	9.8	8.2	6.5	5.7	12.5°
125°	32.7	27.8	22.9	19.6	17.2	14.7	11.4	9.8	8.2	6.5	5.7	15°
127.5°	30.2	25.3	20.4	18.0	15.5	13.1	10.6	9.0	8.2	6.5	5.7	17.5°
130°	27.8	22.9	19.6	17.2	14.7	12.3	10.6	9.0	7.3	6.5	5.7	20°
132.5°	25.3	21.2	18.0	15.5	13.9	11.4	9.8	8.2	7.3	5.7	4.9	22.5°
135°	22.9	18.8	16.3	14.7	12.3	10.6	9.0	8.2	6.5	5.7	4.9	25°
137.5°	21.2	18.0	15.5	13.1	11.4	10.6	9.0	8.2	6.5	5.7	4.9	27.5°
140°	19.6	16.3	13.9	12.3	11.4	9.8	9.0	8.2	6.5	5.7	4.9	30°
142.5°	18.0	15.5	13.1	11.4	10.6	9.8	9.0	7.3	6.5	5.7	4.9	32.5°
145°	16.3	13.9	12.3	11.4	10.6	9.0	8.2	7.3	6.5	5.7	4.9	35°
147.5°	14.7	13.1	11.4	10.6	9.8	9.0	8.2	7.3	6.5	5.7	4.9	37.5°
150°	13.1	12.3	10.6	10.6	9.8	9.0	8.2	7.3	6.5	5.7	4.9	40°
152.5°	12.3	11.4	10.6	9.8	9.0	9.0	8.2	7.3	6.5	5.7	4.9	42.5°
155°	11.4	10.6	9.8	9.8	9.0	8.2	8.2	7.3	6.5	5.7	4.9	44°
157.5°	10.6	9.8	9.8	9.0	9.0	8.2	8.2	7.3	6.5	5.7	4.9	45°
160°	10.6	9.8	9.0	9.0	9.0	8.2	8.2	7.3	6.5	5.7	4.9	47.5°
162.5°	9.8	9.8	9.0	9.0	9.0	8.2	8.2	7.3	6.5	5.7	4.9	50°
165°	9.8	9.8	9.0	9.0	9.0	8.2	8.2	7.3	6.5	5.7	4.9	52.5°
167.5°	9.8	9.8	9.0	9.0	9.0	8.2	8.2	7.3	6.5	5.7	4.9	55°
170°	9.8	9.8	9.0	9.0	9.0	8.2	8.2	7.3	6.5	5.7	4.9	57.5°
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60°
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62.5°
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	65°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.5°
												70°
												72.5°
												75°
												77.5°
												80°
												82.5°
												85°
												87.5°
												90°
												92.5°
												95°
												97.5°
												100°
												102.5°
												105°
												107.5°

NUMBER: P210682  
 NUMBER: WPLLED-100-GL-UNV

REPORT NUMBER: P  
 CATALOG NUMBER:

**DISTRIBUTION (continued):**

160°	165°	170°	175°	180°
2249.5	2249.5	2249.5	2249.5	2249.5
1899.1	1896.6	1886.0	1881.1	1876.2
1818.2	1821.5	1815.0	1810.9	1803.5
1513.5	1516.0	1525.0	1532.3	1532.3
1304.4	1298.7	1290.6	1288.1	1283.2
1101.1	1110.0	1110.9	1114.1	1108.4
915.6	919.7	923.8	934.4	940.1
804.6	800.5	790.7	792.3	811.9
677.1	673.1	669.8	674.7	691.8
577.5	572.6	572.6	583.2	597.1
502.3	492.5	491.7	503.2	515.4
465.6	460.7	461.5	464.8	475.4
440.3	430.5	434.5	446.0	463.9
409.2	403.5	409.2	417.4	430.5
415.8	424.7	415.8	428.0	433.7
388.8	390.4	393.7	401.9	412.5
349.6	312.8	299.8	296.5	306.3
263.8	263.0	257.3	258.1	259.7
241.0	245.9	235.2	236.9	237.7
249.9	240.1	227.1	222.2	223.0
227.1	214.0	202.6	197.7	199.3
197.7	196.8	191.1	188.7	186.2
181.3	177.2	167.4	167.4	164.2
158.5	148.7	135.6	132.3	131.5
135.6	124.2	117.6	113.5	112.7
120.9	112.7	107.0	103.7	102.1
107.8	96.4	92.3	91.5	90.7
88.2	82.5	79.2	77.6	75.1
73.5	67.0	62.1	61.3	60.4
58.8	53.9	50.6	49.0	48.2
44.9	39.2	35.9	34.3	34.3
31.0	27.0	22.9	22.9	22.9
12.3	8.2	6.5	6.5	6.5
8.2	7.3	6.5	6.5	6.5
7.3	6.5	6.5	6.5	6.5
5.7	5.7	4.9	4.9	4.9
5.7	4.9	4.9	4.9	4.9
4.9	4.9	4.9	4.9	4.9
4.9	4.9	4.9	4.1	4.1
4.9	4.1	4.1	4.1	4.1
4.9	4.1	4.1	4.1	4.1
4.9	4.1	3.3	3.3	3.3
4.1	3.3	3.3	3.3	2.4
4.1	3.3	2.4	2.4	2.4
4.1	3.3	2.4	1.6	1.6

**CANDELA DISTRIBUTION:**

	160°
110°	3.3
112.5°	3.3
115°	4.9
117.5°	4.9
120°	4.9
122.5°	4.9
125°	4.9
127.5°	4.9
130°	4.9
132.5°	4.9
135°	4.1
137.5°	4.1
140°	4.1
142.5°	4.1
145°	4.1
147.5°	4.1
150°	4.1
152.5°	4.1
155°	4.1
157.5°	4.1
160°	4.1
162.5°	4.1
165°	4.1
167.5°	4.1
170°	4.1
172.5°	0.0
175°	0.0
177.5°	0.0
180°	0.0



'210682  
WPLLED-100-GL-UNV

**TION (continued):**

165°	170°	175°	180°
2.4	2.4	1.6	0.8
2.4	1.6	0.8	0.8
4.1	2.4	1.6	1.6
4.9	3.3	2.4	2.4
4.9	3.3	2.4	2.4
4.9	3.3	2.4	1.6
4.1	3.3	1.6	1.6
4.1	3.3	1.6	1.6
4.1	2.4	1.6	0.8
4.1	2.4	1.6	0.8
4.1	2.4	0.8	0.0
4.1	2.4	0.8	0.0
4.1	2.4	0.8	0.0
4.1	2.4	0.8	0.0
4.1	2.4	0.8	0.0
4.1	2.4	0.8	0.0
4.1	2.4	0.8	0.0
3.3	2.4	0.8	0.0
4.1	2.4	0.8	0.0
3.3	2.4	0.8	0.0
3.3	2.4	0.8	0.0
3.3	2.4	0.8	0.0
3.3	2.4	0.8	0.0
3.3	2.4	0.8	0.0
3.3	1.6	0.8	0.0
3.3	1.6	0.8	0.0
3.3	1.6	0.8	0.0
0.0	0.0	0.0	0.0
0.0	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)