

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P252177

Luminaire Tested: **LE\_6B30D010 EC6B30509050 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252177  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LE\_6B30D010 EC6B30509050 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4097.5 lumens  
Efficiency: N/A  
Efficacy: 146.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

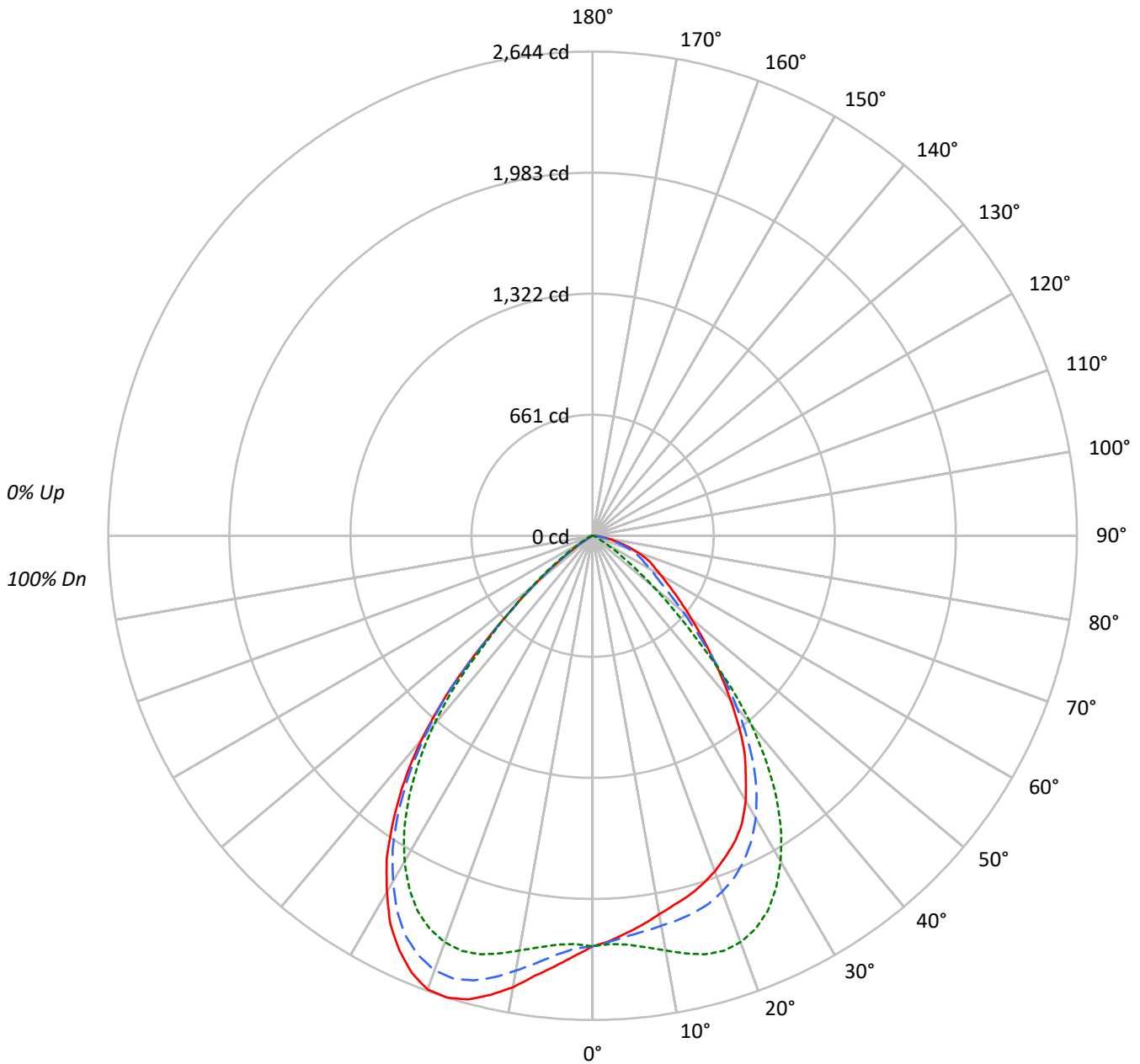
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				20	
RC	80				70				50				30				10				0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				80
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72				72
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65				65
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58				58
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53				53
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48				48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				44
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40				40
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37				37

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	146243	146243	146243
5°	142453	146802	154523
10°	138993	152335	165823
15°	137367	159805	177028
20°	135398	163960	183011
25°	132517	162758	179718
30°	125927	154667	169199
35°	115213	139449	151053
40°	99652	115161	123924
45°	84034	75527	81063
50°	71342	43725	41106
55°	61922	20952	15833
60°	55924	9786	3914
65°	54262	5619	1328
70°	48641	4502	1221
75°	39978	3252	529
80°	29756	1578	0
85°	25600	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	216.5	5.3
10°-20°	659.9	16.1
20°-30°	1008.2	24.6
30°-40°	1054.5	25.7
40°-50°	684.1	16.7
50°-60°	271.6	6.6
60°-70°	128.9	3.1
70°-80°	61.3	1.5
80°-90°	12.5	0.3
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°-30°	1884.6	46.0
0°-40°	2939.2	71.7
0°-60°	3894.9	95.1
0°-90°	4097.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4097.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2242	2242	2242	2242	2242	
5°	2175	2194	2242	2297	2360	205
15°	2034	2132	2366	2514	2621	573
25°	1841	1957	2261	2413	2497	843
35°	1447	1534	1751	1854	1897	895
45°	911	902	819	868	879	709
55°	544	463	184	144	139	493
65°	352	292	36	9	9	343
75°	159	129	13	4	2	171
85°	34	21	0	0	0	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6
2.5°	2213.8	2218.1	2194.5	2188.1	2205.2	2211.6	2213.8	2207.4	2209.5	2218.1	2218.1
5°	2175.2	2179.5	2158.1	2151.6	2168.8	2173.1	2179.5	2177.4	2183.8	2196.6	2194.5
7.5°	2138.8	2145.2	2121.6	2113.1	2134.5	2145.2	2149.5	2149.5	2158.1	2175.2	2177.4
10°	2098.1	2106.6	2085.2	2080.9	2104.5	2115.2	2117.4	2121.6	2134.5	2158.1	2162.4
12.5°	2063.8	2072.4	2057.4	2050.9	2076.6	2087.4	2091.6	2100.2	2115.2	2145.2	2149.5
15°	2033.8	2040.2	2023.0	2018.8	2044.5	2057.4	2059.5	2072.4	2091.6	2125.9	2132.4
17.5°	1995.2	1999.5	1986.6	1982.4	2008.0	2020.9	2023.0	2038.1	2061.6	2095.9	2106.6
20°	1950.2	1954.5	1941.6	1937.4	1963.0	1978.0	1980.2	1993.0	2020.9	2057.4	2068.1
22.5°	1896.6	1905.2	1890.2	1885.9	1911.6	1924.5	1930.9	1941.6	1969.5	2005.9	2020.9
25°	1840.9	1840.9	1830.1	1828.0	1851.6	1866.6	1864.5	1879.5	1907.4	1943.8	1956.6
27.5°	1768.0	1765.9	1755.1	1753.0	1778.8	1791.6	1787.4	1802.4	1828.0	1864.5	1877.4
30°	1671.6	1675.9	1660.9	1656.6	1678.0	1699.5	1697.4	1712.4	1738.0	1772.4	1780.9
32.5°	1555.9	1560.1	1558.0	1551.6	1570.9	1581.6	1588.0	1598.8	1620.1	1656.6	1665.1
35°	1446.6	1440.1	1431.6	1431.6	1450.9	1468.0	1461.6	1474.4	1495.9	1532.2	1534.5
37.5°	1311.5	1309.4	1305.1	1300.9	1322.2	1326.6	1328.8	1337.2	1356.6	1386.6	1382.2
40°	1170.1	1172.2	1170.1	1161.5	1174.4	1191.5	1189.4	1193.8	1210.9	1232.2	1225.9
42.5°	1037.2	1037.2	1037.2	1028.6	1043.6	1052.2	1056.5	1054.4	1058.6	1078.0	1069.4
45°	910.8	913.0	910.8	908.6	910.8	915.1	910.8	908.6	908.6	915.1	902.2
47.5°	801.5	801.5	795.1	788.6	795.1	797.2	790.8	784.4	782.2	780.1	758.6
50°	702.9	700.8	698.6	687.9	694.4	696.5	687.9	683.6	675.1	664.4	638.6
52.5°	617.2	615.0	612.9	602.2	606.5	608.6	600.0	591.5	580.8	572.2	540.0
55°	544.4	542.2	542.2	535.8	531.5	535.8	527.2	520.8	505.8	495.0	462.9
57.5°	482.2	482.2	477.9	471.5	473.6	473.6	465.0	456.5	443.6	430.8	405.0
60°	428.6	428.6	428.6	422.1	422.1	422.1	417.9	409.4	398.6	385.8	360.0
62.5°	385.8	385.8	383.6	377.1	379.4	379.4	375.0	366.5	355.8	347.1	321.5
65°	351.5	351.5	351.5	345.0	345.0	347.1	342.9	334.4	325.8	315.0	291.5
67.5°	308.6	306.5	306.5	302.1	304.4	306.5	302.1	295.8	285.0	278.6	257.1
70°	255.0	257.1	259.2	252.9	255.0	255.0	252.9	246.5	240.0	233.6	214.2
72.5°	207.9	207.9	205.8	203.6	203.6	205.8	201.5	195.0	190.8	186.5	171.5
75°	158.6	156.5	158.6	154.2	154.2	154.2	150.0	147.9	145.8	139.2	128.6
77.5°	115.8	113.6	113.6	109.2	111.5	111.5	109.2	105.0	100.8	98.6	90.0
80°	79.2	79.2	79.2	77.1	77.1	75.0	75.0	72.9	68.6	66.4	62.1
82.5°	53.6	53.6	53.6	51.4	51.4	51.4	49.2	47.1	45.0	42.9	38.6
85°	34.2	34.2	34.2	32.1	32.1	32.1	30.0	30.0	27.9	25.8	21.4
87.5°	19.2	19.2	19.2	17.1	17.1	17.1	17.1	17.1	15.0	12.9	10.8
90°	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°	67.5°	70°	75°	80°	85°	90°	95°
0°	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6
2.5°	2233.1	2203.1	2222.4	2222.4	2216.0	2233.1	2243.8	2252.4	2250.2	2231.0	2228.8
5°	2216.0	2190.2	2211.6	2213.8	2207.4	2231.0	2246.0	2256.6	2258.8	2241.6	2243.8
7.5°	2203.1	2181.6	2209.5	2218.1	2216.0	2237.4	2254.5	2271.6	2280.2	2267.4	2269.5
10°	2196.6	2179.5	2209.5	2222.4	2224.5	2248.1	2273.8	2297.4	2308.1	2299.5	2306.0
12.5°	2188.1	2177.4	2211.6	2231.0	2239.5	2263.1	2295.2	2323.1	2340.2	2336.0	2348.8
15°	2179.5	2170.9	2211.6	2239.5	2250.2	2271.6	2308.1	2348.8	2368.1	2366.0	2383.1
17.5°	2158.1	2155.9	2198.8	2228.8	2243.8	2269.5	2303.8	2353.1	2372.4	2376.6	2398.1
20°	2123.8	2123.8	2170.9	2203.1	2220.2	2243.8	2286.6	2333.8	2357.4	2361.6	2385.2
22.5°	2076.6	2080.9	2125.9	2158.1	2183.8	2200.9	2246.0	2295.2	2316.6	2323.1	2348.8
25°	2014.5	2018.8	2061.6	2093.8	2121.6	2140.9	2183.8	2228.8	2254.5	2261.0	2280.2
27.5°	1933.0	1941.6	1982.4	2014.5	2038.1	2050.9	2095.9	2143.1	2162.4	2168.8	2188.1
30°	1838.8	1840.9	1881.6	1909.5	1933.0	1943.8	1982.4	2031.6	2046.6	2053.1	2080.9
32.5°	1723.0	1720.9	1759.5	1785.1	1804.5	1817.4	1858.0	1890.2	1905.2	1915.9	1930.9
35°	1583.8	1581.6	1609.5	1639.5	1654.5	1658.8	1699.5	1733.8	1742.4	1750.9	1770.1
37.5°	1427.2	1427.2	1450.9	1465.9	1483.0	1489.4	1508.8	1547.2	1562.2	1560.1	1575.1
40°	1262.2	1253.8	1270.9	1285.9	1290.1	1292.2	1311.5	1341.6	1352.2	1352.2	1363.0
42.5°	1088.6	1075.9	1078.0	1086.5	1090.9	1075.9	1088.6	1108.0	1101.5	1110.1	1112.2
45°	904.4	885.1	876.5	857.2	861.5	846.5	838.0	842.2	840.1	818.6	823.0
47.5°	754.4	720.1	705.1	677.2	670.8	653.6	642.9	623.6	606.5	606.5	595.8
50°	627.9	593.6	563.6	531.5	520.8	505.8	482.2	456.5	443.6	430.8	420.0
52.5°	527.2	490.8	454.4	420.0	405.0	385.8	353.6	327.9	304.4	291.5	278.6
55°	445.8	405.0	366.5	330.0	310.8	291.5	259.2	229.2	201.5	184.2	173.6
57.5°	383.6	345.0	304.4	265.8	248.6	227.1	192.9	160.8	135.0	115.8	105.0
60°	338.6	300.0	263.6	222.9	205.8	184.2	147.9	117.9	92.1	75.0	62.1
62.5°	300.0	265.8	227.1	190.8	173.6	152.1	117.9	87.9	64.2	47.1	36.4
65°	272.1	237.9	205.8	169.2	154.2	132.9	100.8	72.9	51.4	36.4	25.8
67.5°	240.0	210.0	177.9	147.9	132.9	115.8	85.8	62.1	42.9	30.0	21.4
70°	201.5	177.9	150.0	122.1	111.5	96.5	70.8	51.4	34.2	23.6	17.1
72.5°	160.8	141.5	120.0	98.6	90.0	75.0	57.9	40.8	25.8	17.1	12.9
75°	122.1	107.1	90.0	75.0	66.4	57.9	42.9	30.0	19.2	12.9	8.6
77.5°	83.6	77.1	64.2	51.4	47.1	40.8	27.9	19.2	12.9	8.6	4.2
80°	57.9	51.4	42.9	34.2	30.0	25.8	17.1	12.9	6.4	4.2	2.1
82.5°	36.4	30.0	25.8	21.4	19.2	15.0	10.8	6.4	4.2	2.1	2.1
85°	19.2	17.1	15.0	10.8	10.8	8.6	6.4	4.2	2.1	0.0	0.0
87.5°	10.8	8.6	6.4	4.2	4.2	2.1	2.1	2.1	0.0	0.0	0.0
90°	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):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6
2.5°	2254.5	2254.5	2252.4	2278.1	2248.1	2278.1	2263.1	2278.1	2256.6	2254.5	2256.6
5°	2271.6	2278.1	2280.2	2303.8	2276.0	2312.4	2299.5	2312.4	2297.4	2301.6	2308.1
7.5°	2306.0	2316.6	2314.5	2344.5	2316.6	2357.4	2348.8	2368.1	2353.1	2357.4	2366.0
10°	2344.5	2357.4	2359.5	2389.5	2363.8	2413.1	2402.4	2423.9	2411.0	2417.4	2428.1
12.5°	2389.5	2404.5	2406.6	2441.0	2413.1	2464.5	2458.1	2479.5	2468.9	2475.2	2488.1
15°	2423.9	2445.2	2449.5	2483.9	2453.9	2507.4	2503.1	2531.0	2513.9	2524.5	2535.2
17.5°	2441.0	2460.2	2468.9	2501.0	2475.2	2528.9	2524.5	2548.1	2535.2	2546.0	2558.9
20°	2430.2	2453.9	2460.2	2492.4	2466.6	2520.2	2513.9	2537.4	2524.5	2533.1	2546.0
22.5°	2391.6	2415.2	2423.9	2453.9	2430.2	2479.5	2477.4	2498.9	2481.6	2492.4	2503.1
25°	2323.1	2348.8	2353.1	2381.0	2355.2	2406.6	2402.4	2426.0	2413.1	2419.5	2434.5
27.5°	2224.5	2254.5	2261.0	2284.5	2265.2	2308.1	2308.1	2327.4	2312.4	2312.4	2327.4
30°	2106.6	2136.6	2140.9	2160.2	2143.1	2181.6	2183.8	2203.1	2179.5	2192.4	2194.5
32.5°	1963.0	1982.4	1995.2	2012.4	1986.6	2035.9	2029.5	2044.5	2031.6	2031.6	2042.4
35°	1789.5	1813.0	1819.5	1840.9	1819.5	1858.0	1858.0	1866.6	1853.8	1853.8	1870.9
37.5°	1600.9	1618.0	1620.1	1641.6	1624.5	1656.6	1654.5	1660.9	1648.0	1656.6	1656.6
40°	1380.1	1393.0	1397.2	1408.0	1405.9	1429.4	1427.2	1431.6	1425.1	1427.2	1431.6
42.5°	1123.0	1140.1	1148.8	1157.2	1144.4	1176.5	1170.1	1176.5	1174.4	1176.5	1183.0
45°	827.2	840.1	846.5	848.6	844.4	863.6	878.6	865.8	868.0	863.6	872.2
47.5°	597.9	600.0	595.8	608.6	597.9	606.5	610.8	612.9	600.0	597.9	606.5
50°	409.4	420.0	405.0	411.5	409.4	417.9	413.6	415.8	402.9	409.4	405.0
52.5°	272.1	270.0	265.8	267.9	263.6	263.6	263.6	267.9	259.2	255.0	250.8
55°	165.0	160.8	152.1	150.0	150.0	152.1	147.9	143.6	143.6	141.5	141.5
57.5°	96.5	90.0	85.8	83.6	79.2	77.1	75.0	75.0	70.8	70.8	70.8
60°	53.6	47.1	42.9	38.6	38.6	36.4	34.2	32.1	32.1	32.1	30.0
62.5°	27.9	23.6	19.2	17.1	17.1	15.0	12.9	12.9	12.9	12.9	10.8
65°	19.2	15.0	12.9	10.8	10.8	8.6	8.6	8.6	8.6	8.6	8.6
67.5°	15.0	12.9	10.8	8.6	8.6	8.6	6.4	6.4	6.4	6.4	6.4
70°	12.9	8.6	8.6	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
72.5°	8.6	8.6	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
75°	6.4	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
77.5°	2.1	2.1	2.1	2.1	2.1	2.1	0.0	0.0	0.0	0.0	0.0
80°	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





TEST NUMBER: P252177

CATALOG NUMBER: LE\_6B30D010 EC6B30509050 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6	2241.6
2.5°	2276.0	2273.8	2276.0	2280.2	2271.6	2297.4	2284.5	2297.4
5°	2325.2	2327.4	2329.5	2336.0	2325.2	2357.4	2340.2	2359.5
7.5°	2389.5	2391.6	2393.9	2400.2	2393.9	2426.0	2406.6	2423.9
10°	2456.0	2460.2	2460.2	2471.0	2464.5	2494.5	2481.6	2503.1
12.5°	2518.1	2522.4	2526.6	2533.1	2528.9	2561.0	2550.2	2567.4
15°	2567.4	2576.0	2578.1	2586.8	2582.4	2616.8	2603.9	2621.0
17.5°	2591.0	2599.5	2599.5	2610.2	2606.0	2642.4	2625.2	2644.5
20°	2578.1	2584.5	2586.8	2597.4	2593.1	2629.5	2612.4	2636.0
22.5°	2537.4	2539.5	2541.6	2552.4	2550.2	2582.4	2567.4	2582.4
25°	2462.4	2468.9	2466.6	2475.2	2475.2	2501.0	2483.9	2496.6
27.5°	2355.2	2361.6	2361.6	2372.4	2363.8	2389.5	2372.4	2391.6
30°	2224.5	2231.0	2226.6	2235.2	2226.6	2252.4	2239.5	2246.0
32.5°	2068.1	2068.1	2070.2	2072.4	2068.1	2091.6	2078.8	2091.6
35°	1881.6	1885.9	1888.0	1890.2	1885.9	1903.0	1888.0	1896.6
37.5°	1671.6	1682.4	1680.1	1682.4	1675.9	1697.4	1684.5	1688.8
40°	1446.6	1446.6	1444.4	1448.8	1442.2	1459.4	1450.9	1455.1
42.5°	1185.1	1191.5	1183.0	1193.8	1176.5	1200.1	1191.5	1185.1
45°	889.4	880.8	878.6	880.8	874.4	876.5	883.0	878.6
47.5°	606.5	606.5	602.2	595.8	604.4	606.5	597.9	597.9
50°	407.1	407.1	402.9	400.8	405.0	402.9	398.6	405.0
52.5°	259.2	250.8	250.8	255.0	250.8	246.5	252.9	248.6
55°	141.5	137.1	137.1	141.5	137.1	137.1	135.0	139.2
57.5°	68.6	70.8	68.6	68.6	68.6	68.6	66.4	68.6
60°	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
62.5°	12.9	12.9	10.8	10.8	10.8	10.8	10.8	10.8
65°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
67.5°	6.4	6.4	6.4	6.4	6.4	8.6	6.4	6.4
70°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
72.5°	6.4	6.4	8.6	8.6	8.6	8.6	8.6	8.6
75°	4.2	4.2	4.2	2.1	2.1	2.1	2.1	2.1
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°    - - 45°-225°    - - - - 90°-270°















(END OF REPORT)