

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: P252395

Luminaire Tested: **LE\_6B40D010 EC6B30509030 6LBLWW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252395  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LE\_6B40D010 EC6B30509030 6LBLWW1LI  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4032.5 lumens  
Efficiency: N/A  
Efficacy: 93.8 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.03 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

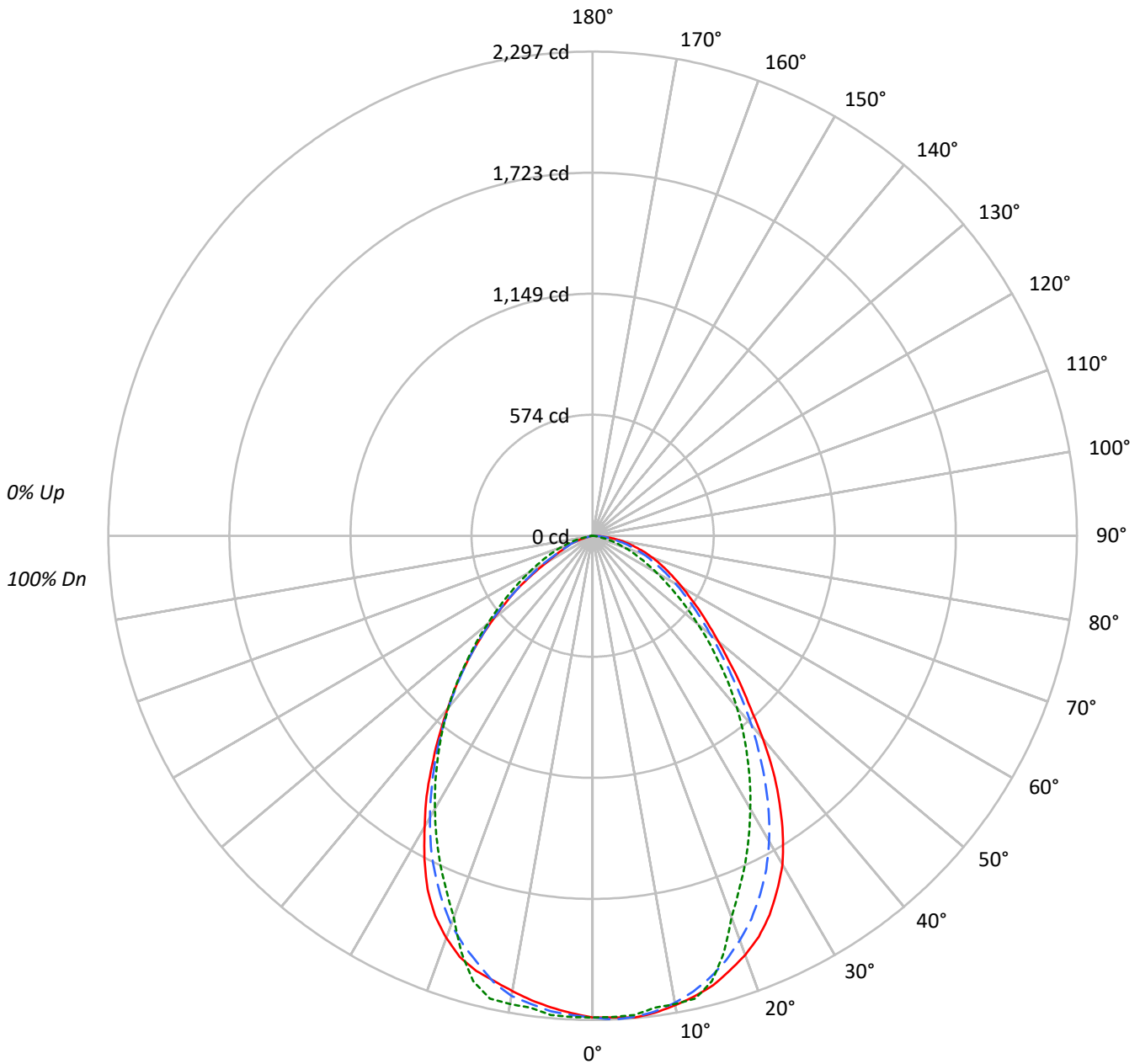
Input Watts (W): 43  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
RC	80									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																			
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77																			
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68																			
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60																			
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54																			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48																			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44																			
8	67	55	47	42	66	54	47	42	53	46	42	52	46	42	51	45	41	40																			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33																			

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

	0°	90°	180°
0°	149068	149068	149068
5°	150221	149441	147103
10°	149791	149394	145273
15°	149119	147708	144304
20°	146895	133704	140910
25°	142898	123246	133288
30°	135683	112661	120044
35°	123130	101857	105640
40°	106891	90718	90974
45°	91166	78037	77207
50°	78913	65963	62339
55°	70532	55006	48273
60°	64275	45681	32516
65°	60020	37574	24267
70°	57187	30558	20391
75°	53842	21678	6755
80°	51284	11121	2217
85°	42218	6662	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	215.8	5.4
10°-20°	603.5	15.0
20°-30°	833.0	20.7
30°-40°	847.6	21.0
40°-50°	681.2	16.9
50°-60°	453.0	11.2
60°-70°	258.1	6.4
70°-80°	115.9	2.9
80°-90°	24.4	0.6
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°	1652.2	41.0
0°-40°	2499.8	62.0
0°-60°	3634.0	90.1
0°-90°	4032.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4032.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	2285	2285	2285	2285	2285	
5°	2294	2291	2282	2264	2246	218
15°	2208	2166	2187	2101	2136	621
25°	1985	1878	1712	1768	1852	910
35°	1546	1427	1279	1303	1326	961
45°	988	929	846	837	837	766
55°	620	579	484	430	424	557
65°	389	347	243	157	157	387
75°	214	178	86	36	27	228
85°	56	39	9	3	0	67
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°	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9
2.5°	2287.9	2299.6	2296.8	2293.8	2296.8	2293.8	2287.9	2287.9	2281.9	2281.9	2296.8
5°	2293.8	2299.6	2296.8	2293.8	2293.8	2296.8	2284.9	2284.9	2278.9	2276.0	2290.8
7.5°	2281.9	2290.8	2284.9	2284.9	2281.9	2284.9	2273.0	2273.0	2264.1	2261.1	2276.0
10°	2261.1	2273.0	2267.0	2267.0	2267.0	2261.1	2255.1	2252.2	2243.2	2240.4	2249.2
12.5°	2237.4	2246.2	2243.2	2237.4	2237.4	2237.4	2225.5	2222.5	2210.6	2204.8	2213.6
15°	2207.8	2213.6	2210.6	2207.8	2201.8	2201.8	2189.9	2184.0	2172.1	2160.2	2166.1
17.5°	2163.1	2172.1	2166.1	2163.1	2154.2	2154.2	2142.4	2136.5	2118.6	2106.8	2109.8
20°	2115.8	2118.6	2115.8	2109.8	2100.9	2097.9	2086.0	2074.1	2059.4	2044.5	2041.5
22.5°	2059.4	2062.2	2053.4	2047.5	2038.5	2035.6	2020.8	2011.9	1988.1	1970.2	1967.4
25°	1985.1	1988.1	1988.1	1973.2	1967.4	1961.4	1946.6	1931.8	1911.0	1887.2	1878.4
27.5°	1896.1	1905.0	1899.1	1884.2	1872.4	1869.4	1854.6	1842.8	1816.0	1795.2	1783.4
30°	1801.1	1798.2	1795.2	1786.4	1768.5	1765.6	1750.8	1735.9	1715.1	1688.4	1673.6
32.5°	1679.5	1679.5	1676.5	1667.6	1649.9	1643.9	1632.0	1614.2	1590.5	1569.8	1554.9
35°	1546.0	1549.0	1546.0	1528.1	1516.2	1510.4	1504.5	1483.6	1462.9	1439.1	1427.2
37.5°	1406.5	1397.6	1400.6	1385.8	1370.9	1376.9	1359.0	1350.1	1326.4	1308.6	1296.8
40°	1255.1	1261.1	1249.2	1243.4	1234.4	1225.5	1225.5	1210.6	1198.8	1178.0	1172.1
42.5°	1106.9	1115.8	1112.8	1106.9	1095.0	1097.9	1083.1	1077.1	1062.2	1053.4	1044.5
45°	988.1	988.1	988.1	982.2	979.2	973.2	964.4	955.5	946.6	934.8	928.8
47.5°	872.4	872.4	875.4	869.4	863.5	860.5	854.6	854.6	839.8	827.9	822.0
50°	777.5	777.5	777.5	771.5	765.6	765.6	759.6	753.8	744.8	735.9	730.0
52.5°	691.4	691.4	691.4	685.5	682.5	679.5	676.5	673.6	661.8	655.8	649.9
55°	620.1	617.2	617.2	614.2	608.2	608.2	605.4	599.4	590.5	581.6	578.6
57.5°	549.0	551.9	549.0	549.0	543.0	543.0	537.1	534.1	525.2	519.2	513.4
60°	492.6	492.6	492.6	489.6	483.6	486.6	480.8	477.8	468.9	459.9	454.0
62.5°	436.2	439.1	439.1	436.2	430.2	430.2	427.2	424.4	415.4	406.5	397.6
65°	388.8	388.8	388.8	385.8	382.8	382.8	379.9	376.9	368.0	356.1	347.1
67.5°	344.2	341.2	341.2	341.2	338.2	335.2	332.4	329.4	320.5	311.6	299.8
70°	299.8	299.8	299.8	296.8	290.8	293.8	290.8	287.9	278.9	270.0	261.1
72.5°	258.1	258.1	255.2	252.2	252.2	249.2	249.2	246.2	237.4	225.5	216.6
75°	213.6	213.6	213.6	213.6	207.8	210.6	204.8	201.8	195.9	187.0	178.0
77.5°	175.1	175.1	175.1	172.1	169.1	169.1	166.1	163.2	154.2	148.4	136.5
80°	136.5	136.5	136.5	136.5	133.5	130.6	127.6	124.6	118.8	109.8	100.9
82.5°	100.9	100.9	97.9	97.9	97.9	95.0	92.0	89.0	83.1	77.1	71.2
85°	56.4	59.4	59.4	53.4	56.4	53.4	53.4	47.5	47.5	41.5	38.6
87.5°	20.8	17.8	17.8	17.8	17.8	17.8	17.8	14.9	14.9	14.9	11.9
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°	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9
2.5°	2284.9	2281.9	2293.8	2293.8	2276.0	2284.9	2287.9	2281.9	2281.9	2284.9	2276.0
5°	2278.9	2273.0	2284.9	2287.9	2270.0	2278.9	2281.9	2276.0	2278.9	2281.9	2270.0
7.5°	2258.1	2258.1	2267.0	2270.0	2252.2	2261.1	2261.1	2255.1	2258.1	2258.1	2249.2
10°	2237.4	2228.5	2237.4	2237.4	2222.5	2225.5	2231.4	2228.5	2240.4	2255.1	2255.1
12.5°	2198.8	2189.9	2204.8	2204.8	2195.9	2207.8	2222.5	2231.4	2243.2	2249.2	2231.4
15°	2151.4	2154.2	2181.0	2201.8	2192.9	2210.6	2225.5	2219.6	2204.8	2186.9	2160.2
17.5°	2089.0	2080.1	2103.9	2115.8	2103.9	2109.8	2121.6	2109.8	2086.0	2071.2	2035.6
20°	2017.8	1994.0	1994.0	1988.1	1967.4	1967.4	1964.4	1943.6	1934.8	1925.8	1911.0
22.5°	1937.6	1911.0	1902.0	1884.2	1866.5	1863.5	1854.6	1833.9	1822.0	1816.0	1798.2
25°	1845.6	1822.0	1807.1	1789.2	1762.6	1756.6	1747.8	1727.0	1721.0	1712.1	1697.4
27.5°	1750.8	1721.0	1700.2	1682.5	1658.8	1655.8	1638.0	1623.1	1611.2	1605.4	1593.5
30°	1640.9	1608.2	1593.5	1569.8	1551.9	1546.0	1531.1	1510.4	1501.5	1495.5	1486.6
32.5°	1519.2	1492.6	1477.8	1457.0	1433.2	1436.2	1418.4	1400.6	1394.6	1388.8	1379.8
35°	1400.6	1373.9	1356.1	1338.2	1323.4	1317.5	1305.6	1290.8	1281.9	1278.9	1273.0
37.5°	1270.0	1249.2	1234.4	1216.6	1204.8	1198.8	1192.9	1178.0	1172.1	1172.1	1160.2
40°	1142.4	1124.6	1112.8	1103.9	1089.0	1086.0	1080.1	1071.2	1068.2	1065.2	1056.4
42.5°	1026.8	1003.0	994.0	988.1	979.2	973.2	970.4	964.4	961.4	958.5	949.5
45°	916.9	896.1	887.2	881.2	872.4	869.4	866.5	857.5	851.6	845.8	842.8
47.5°	810.1	795.2	792.2	777.5	771.5	765.6	759.6	753.8	750.8	747.8	735.9
50°	718.1	709.2	694.4	685.5	679.5	676.5	664.6	655.8	652.9	649.9	641.0
52.5°	635.0	623.1	614.2	599.4	596.4	590.5	584.6	572.8	566.8	563.8	554.9
55°	560.9	551.9	540.0	528.1	519.2	516.4	507.4	495.5	489.6	483.6	477.8
57.5°	498.5	483.6	471.8	459.9	454.0	445.1	436.2	430.2	421.4	412.5	403.5
60°	439.1	427.2	412.5	400.6	394.6	388.8	376.9	368.0	359.0	350.1	341.2
62.5°	382.8	370.9	356.1	344.2	338.2	332.4	320.5	311.6	302.6	293.8	281.9
65°	332.4	320.5	308.6	296.8	290.8	284.9	273.0	261.1	252.2	243.4	231.5
67.5°	290.8	276.0	264.1	252.2	246.2	240.4	228.5	219.6	207.8	198.8	187.0
70°	246.2	234.4	225.5	213.6	207.8	201.8	189.9	178.0	169.1	160.2	148.4
72.5°	207.8	192.9	184.0	172.1	166.1	163.2	151.4	142.4	133.5	121.6	112.8
75°	166.1	154.2	142.4	133.5	127.6	124.6	112.8	103.9	95.0	86.0	77.1
77.5°	127.6	118.8	106.9	97.9	92.0	89.0	77.1	68.2	59.4	53.4	44.5
80°	95.0	83.1	77.1	68.2	65.2	59.4	53.4	44.5	38.6	29.6	23.8
82.5°	65.2	56.4	50.5	44.5	41.5	38.6	32.6	26.8	20.8	17.8	14.9
85°	35.6	29.6	26.8	23.8	20.8	20.8	17.8	14.9	11.9	8.9	5.9
87.5°	11.9	8.9	8.9	8.9	8.9	5.9	5.9	5.9	3.0	3.0	3.0
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°	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9
2.5°	2281.9	2281.9	2281.9	2278.9	2278.9	2278.9	2276.0	2287.9	2276.0	2273.0	2281.9
5°	2278.9	2273.0	2273.0	2273.0	2273.0	2270.0	2267.0	2273.0	2264.1	2261.1	2261.1
7.5°	2261.1	2258.1	2258.1	2255.1	2252.2	2249.2	2246.2	2249.2	2240.4	2237.4	2237.4
10°	2264.1	2258.1	2258.1	2249.2	2243.2	2234.4	2225.5	2228.5	2216.6	2207.8	2207.8
12.5°	2228.5	2213.6	2204.8	2195.9	2189.9	2186.9	2175.0	2181.0	2169.1	2166.1	2166.1
15°	2148.4	2130.5	2115.8	2109.8	2109.8	2103.9	2095.0	2106.8	2100.9	2103.9	2118.6
17.5°	2023.8	2014.9	2005.9	2003.0	2005.9	2011.9	2017.8	2035.6	2035.6	2044.5	2059.4
20°	1913.9	1908.0	1913.9	1913.9	1916.9	1928.8	1940.6	1955.5	1961.4	1970.2	1991.1
22.5°	1807.1	1807.1	1813.0	1822.0	1819.0	1839.8	1842.8	1869.4	1869.4	1887.2	1905.0
25°	1703.2	1703.2	1709.1	1712.1	1718.1	1730.0	1741.9	1762.6	1768.5	1786.4	1801.1
27.5°	1602.4	1599.4	1599.4	1602.4	1608.2	1623.1	1629.1	1652.8	1661.8	1673.6	1688.4
30°	1489.6	1486.6	1492.6	1498.5	1495.5	1510.4	1519.2	1537.1	1543.0	1554.9	1566.8
32.5°	1382.8	1382.8	1382.8	1388.8	1388.8	1400.6	1400.6	1421.4	1421.4	1430.2	1442.1
35°	1273.0	1273.0	1276.0	1278.9	1281.9	1284.9	1287.9	1299.8	1302.6	1305.6	1311.5
37.5°	1169.1	1166.1	1169.1	1169.1	1163.2	1175.1	1175.1	1186.9	1178.0	1186.9	1189.9
40°	1062.2	1062.2	1059.4	1059.4	1059.4	1065.2	1059.4	1068.2	1062.2	1068.2	1065.2
42.5°	952.5	952.5	946.6	952.5	949.5	949.5	949.5	955.5	946.6	952.5	955.5
45°	842.8	839.8	839.8	836.8	836.8	836.8	839.8	839.8	836.8	842.8	842.8
47.5°	735.9	732.9	732.9	732.9	732.9	735.9	727.0	732.9	727.0	727.0	727.0
50°	643.9	641.0	638.0	635.0	632.0	632.0	629.1	629.1	623.1	620.1	617.2
52.5°	554.9	551.9	546.0	546.0	543.0	540.0	531.1	531.1	522.2	519.2	519.2
55°	474.8	465.9	462.9	457.0	457.0	451.0	445.1	439.1	430.2	424.4	424.4
57.5°	400.6	391.8	385.8	382.8	379.9	373.9	362.0	359.0	347.1	344.2	341.2
60°	335.2	326.4	317.5	311.6	308.6	299.8	287.9	281.9	276.0	267.0	258.1
62.5°	273.0	264.1	252.2	249.2	243.4	234.4	225.5	216.6	210.6	201.8	195.9
65°	219.6	210.6	201.8	195.9	189.9	181.0	172.1	163.2	157.2	154.2	151.4
67.5°	178.0	166.1	157.2	154.2	148.4	142.4	133.5	130.6	124.6	124.6	124.6
70°	139.5	130.6	121.6	118.8	115.8	109.8	103.9	103.9	103.9	103.9	103.9
72.5°	103.9	97.9	89.0	86.0	83.1	80.1	74.1	77.1	74.1	74.1	74.1
75°	65.2	59.4	53.4	50.5	47.5	44.5	41.5	38.6	35.6	32.6	32.6
77.5°	35.6	29.6	26.8	23.8	23.8	20.8	17.8	17.8	14.9	14.9	14.9
80°	20.8	17.8	14.9	11.9	11.9	8.9	8.9	8.9	8.9	5.9	5.9
82.5°	11.9	8.9	5.9	5.9	5.9	5.9	3.0	3.0	3.0	3.0	3.0
85°	5.9	5.9	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0
87.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
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: P252395

CATALOG NUMBER: LE\_6B40D010 EC6B30509030 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9	2284.9
2.5°	2267.0	2276.0	2267.0	2276.0	2276.0	2276.0	2276.0	2267.0
5°	2252.2	2258.1	2249.2	2255.1	2258.1	2255.1	2255.1	2246.2
7.5°	2225.5	2231.4	2222.5	2231.4	2234.4	2231.4	2228.5	2222.5
10°	2198.8	2201.8	2192.9	2198.8	2204.8	2204.8	2201.8	2192.9
12.5°	2157.2	2166.1	2157.2	2163.1	2169.1	2172.1	2172.1	2163.1
15°	2109.8	2124.6	2118.6	2127.6	2136.5	2139.5	2139.5	2136.5
17.5°	2062.2	2077.1	2068.2	2083.1	2092.0	2097.9	2100.9	2095.0
20°	1994.0	2011.9	2005.9	2017.8	2029.6	2038.5	2038.5	2029.6
22.5°	1905.0	1928.8	1925.8	1934.8	1949.5	1952.5	1958.5	1952.5
25°	1807.1	1824.9	1822.0	1830.9	1848.6	1848.6	1851.6	1851.6
27.5°	1694.4	1712.1	1709.1	1715.1	1727.0	1730.0	1732.9	1727.0
30°	1572.8	1581.6	1581.6	1590.5	1599.4	1602.4	1602.4	1593.5
32.5°	1439.1	1451.0	1457.0	1454.0	1462.9	1468.9	1465.9	1465.9
35°	1317.5	1320.5	1323.4	1326.4	1329.4	1335.2	1329.4	1326.4
37.5°	1186.9	1195.9	1189.9	1195.9	1201.8	1198.8	1195.9	1195.9
40°	1068.2	1071.2	1065.2	1071.2	1074.1	1074.1	1074.1	1068.2
42.5°	949.5	955.5	949.5	955.5	955.5	955.5	955.5	952.5
45°	830.9	836.8	836.8	839.8	839.8	836.8	836.8	836.8
47.5°	721.0	727.0	721.0	727.0	730.0	724.0	724.0	724.0
50°	617.2	614.2	614.2	617.2	617.2	617.2	617.2	614.2
52.5°	510.4	513.4	513.4	513.4	516.4	513.4	516.4	516.4
55°	418.4	418.4	418.4	421.4	418.4	418.4	421.4	424.4
57.5°	335.2	332.4	329.4	329.4	332.4	329.4	329.4	329.4
60°	258.1	255.2	252.2	252.2	252.2	252.2	252.2	249.2
62.5°	192.9	192.9	192.9	195.9	195.9	195.9	195.9	198.8
65°	154.2	154.2	154.2	154.2	154.2	154.2	154.2	157.2
67.5°	124.6	124.6	124.6	127.6	127.6	127.6	127.6	127.6
70°	103.9	103.9	106.9	103.9	106.9	106.9	106.9	106.9
72.5°	71.2	71.2	71.2	71.2	71.2	68.2	71.2	68.2
75°	29.6	29.6	29.6	29.6	29.6	29.6	29.6	26.8
77.5°	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
80°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
82.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	3.0	3.0	3.0	3.0	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)