

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: P252737

Luminaire Tested: **LE_6B60D010R EC6B60709727 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252737
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B60D010R EC6B60709727 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4977.5 lumens
Efficiency: N/A
Efficacy: 79.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

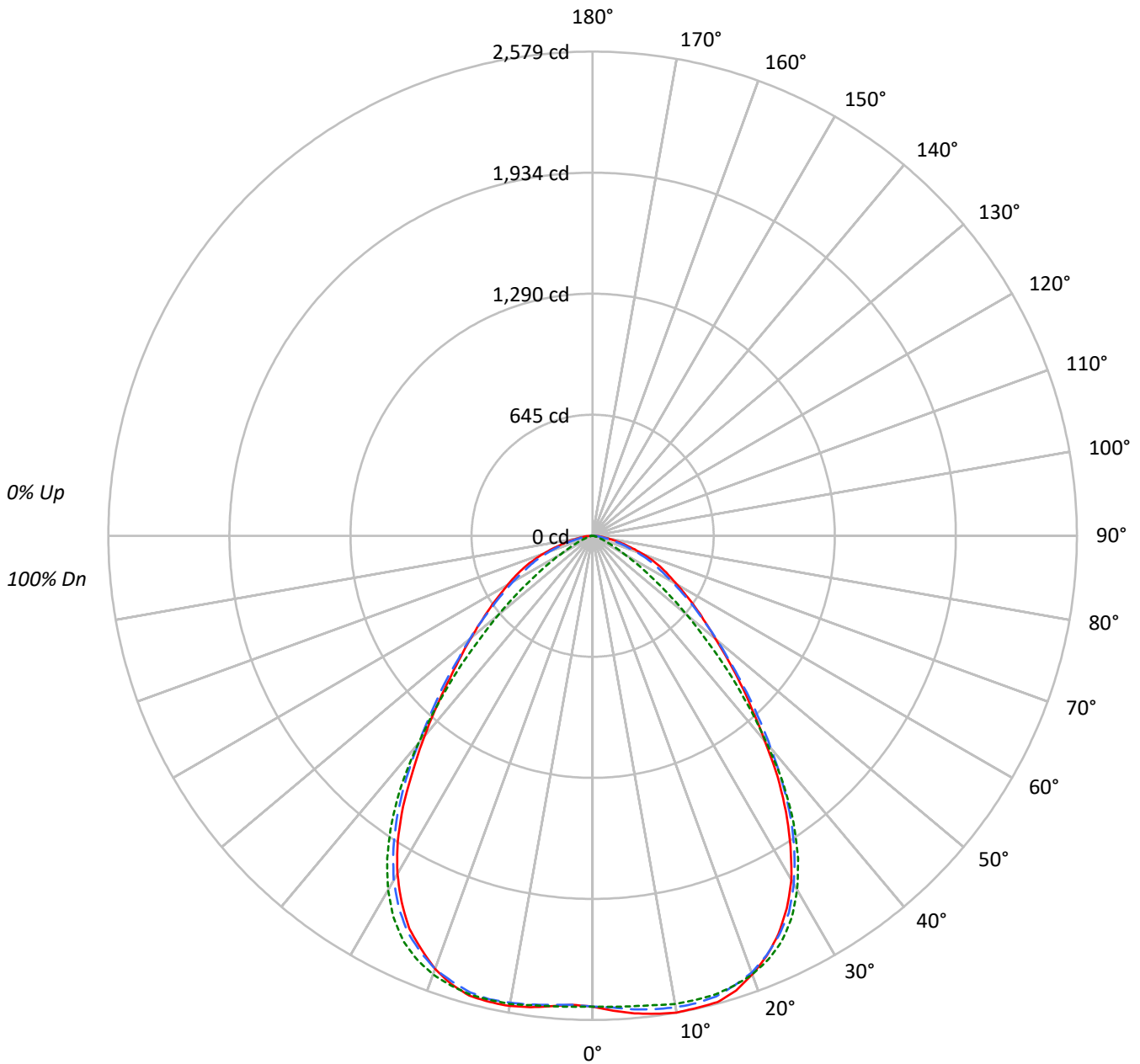
Input Watts (W): 62.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252737

CATALOG NUMBER: LE_6B60D010R EC6B60709727 6LBDW1H

Luminous Intensity Polar Plot





TEST NUMBER: P252737

CATALOG NUMBER: LE_6B60D010R EC6B60709727 6LBDW1H

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	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	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	39	35	45	39	35	44	39	35	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	163610	163610	163610
5°	167254	164700	164700
10°	170838	167777	168480
15°	173691	170814	171293
20°	172632	172632	170417
25°	168517	171584	166221
30°	159526	164069	156588
35°	142945	148600	140126
40°	121438	122945	118423
45°	102764	93925	99166
50°	86769	66237	85683
55°	76254	42768	75435
60°	67576	25457	68033
65°	62428	15345	62428
70°	54135	8794	52762
75°	42902	5344	40230
80°	31973	3982	30658
85°	29194	2620	26574



TEST NUMBER: P252737

CATALOG NUMBER: LE_6B60D010R EC6B60709727 6LBDW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.4	4.9
10°-20°	714.6	14.4
20°-30°	1074.7	21.6
30°-40°	1129.9	22.7
40°-50°	844.1	17.0
50°-60°	525.5	10.6
60°-70°	298.9	6.0
70°-80°	123.1	2.5
80°-90°	25.4	0.5
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°	2030.7	40.8
0°-40°	3160.6	63.5
0°-60°	4530.1	91.0
0°-90°	4977.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4977.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2508	2508	2508	2508	2508	
5°	2554	2533	2515	2508	2515	244
15°	2572	2540	2529	2518	2536	723
25°	2341	2348	2384	2330	2309	1072
35°	1795	1841	1866	1812	1759	1114
45°	1114	1139	1018	1117	1075	863
55°	670	656	376	646	663	603
65°	404	362	99	362	404	398
75°	170	135	21	131	160	185
85°	39	25	4	21	36	43
90°	0	0	0	0	0	



TEST NUMBER: P252737

CATALOG NUMBER: LE_6B60D010R EC6B60709727 6LBDW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8
2.5°	2532.6	2529.0	2532.6	2525.5	2522.0	2522.0	2525.5	2518.4	2514.9	2518.4	2514.9
5°	2553.9	2546.8	2550.4	2546.8	2539.8	2539.8	2543.2	2532.6	2532.6	2536.1	2532.6
7.5°	2568.1	2568.1	2568.1	2561.0	2557.4	2553.9	2561.0	2550.4	2546.8	2546.8	2543.2
10°	2578.8	2575.1	2578.8	2571.6	2564.5	2561.0	2568.1	2561.0	2553.9	2561.0	2550.4
12.5°	2575.1	2575.1	2575.1	2571.6	2564.5	2561.0	2568.1	2557.4	2553.9	2557.4	2550.4
15°	2571.6	2561.0	2564.5	2561.0	2550.4	2550.4	2553.9	2543.2	2536.1	2546.8	2539.8
17.5°	2539.8	2532.6	2536.1	2529.0	2522.0	2518.4	2522.0	2518.4	2511.4	2518.4	2511.4
20°	2486.5	2486.5	2490.0	2483.0	2475.9	2472.2	2479.4	2472.2	2465.2	2475.9	2475.9
22.5°	2422.6	2422.6	2422.6	2419.1	2415.5	2415.5	2415.5	2412.0	2408.5	2415.5	2419.1
25°	2341.0	2337.5	2341.0	2344.6	2341.0	2337.5	2341.0	2341.0	2334.0	2348.1	2348.1
27.5°	2238.2	2238.2	2245.2	2241.8	2241.8	2238.2	2245.2	2245.2	2241.8	2252.4	2263.0
30°	2117.6	2110.5	2117.6	2117.6	2121.1	2121.1	2124.8	2124.8	2124.8	2135.4	2142.4
32.5°	1961.5	1965.1	1975.8	1972.1	1968.6	1979.2	1979.2	1986.4	1989.9	1997.0	2000.5
35°	1794.8	1798.4	1798.4	1801.9	1809.0	1801.9	1819.6	1816.1	1819.6	1833.9	1840.9
37.5°	1617.5	1606.9	1624.5	1617.5	1621.0	1621.0	1628.1	1631.6	1642.2	1660.0	1660.0
40°	1425.9	1429.5	1436.5	1440.1	1443.6	1443.6	1443.6	1454.2	1457.9	1479.1	1475.6
42.5°	1259.2	1259.2	1266.2	1269.9	1269.9	1269.9	1269.9	1280.5	1287.6	1294.6	1301.8
45°	1113.8	1103.1	1110.2	1110.2	1117.4	1113.8	1120.9	1128.0	1131.5	1142.1	1138.6
47.5°	975.5	971.9	975.5	979.0	975.5	979.0	982.5	986.1	989.6	989.6	989.6
50°	854.9	854.9	858.4	861.9	861.9	861.9	861.9	865.5	865.5	872.6	865.5
52.5°	755.5	759.1	759.1	755.5	759.1	759.1	762.6	762.6	759.1	759.1	748.4
55°	670.4	666.9	670.4	666.9	670.4	670.4	666.9	666.9	663.2	659.8	656.2
57.5°	588.8	588.8	588.8	588.8	585.2	588.8	585.2	581.8	581.8	574.6	564.0
60°	517.9	517.9	517.9	517.9	517.9	514.4	517.9	514.4	507.2	500.1	486.0
62.5°	457.6	454.0	457.6	454.0	454.0	450.5	450.5	446.9	439.9	432.8	418.5
65°	404.4	407.9	404.4	404.4	400.9	397.2	397.2	393.8	383.1	376.0	361.8
67.5°	347.6	344.1	344.1	344.1	340.5	340.5	340.5	333.4	326.4	315.8	301.5
70°	283.8	283.8	283.8	280.2	280.2	276.6	276.6	273.1	266.0	258.9	241.2
72.5°	223.5	223.5	223.5	216.4	219.9	216.4	216.4	209.2	205.8	195.1	184.5
75°	170.2	170.2	166.8	166.8	163.1	159.6	159.6	156.1	152.5	145.4	134.8
77.5°	124.1	124.1	124.1	120.6	117.0	113.5	113.5	110.0	106.4	102.9	95.8
80°	85.1	85.1	85.1	85.1	81.6	78.0	78.0	74.5	74.5	71.0	63.9
82.5°	56.8	56.8	56.8	56.8	53.2	53.2	53.2	49.6	46.1	46.1	39.0
85°	39.0	39.0	35.5	35.5	35.5	35.5	31.9	31.9	28.4	24.9	24.9
87.5°	21.2	21.2	21.2	21.2	17.8	17.8	17.8	17.8	14.2	14.2	10.6
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: P252737

CATALOG NUMBER: LE_6B60D010R EC6B60709727 6LBDW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8
2.5°	2525.5	2525.5	2522.0	2511.4	2514.9	2511.4	2514.9	2511.4	2500.6	2511.4	2500.6
5°	2539.8	2543.2	2536.1	2522.0	2525.5	2522.0	2522.0	2518.4	2507.8	2514.9	2507.8
7.5°	2553.9	2550.4	2546.8	2532.6	2536.1	2532.6	2532.6	2525.5	2514.9	2522.0	2511.4
10°	2561.0	2561.0	2553.9	2539.8	2539.8	2536.1	2539.8	2536.1	2522.0	2532.6	2525.5
12.5°	2561.0	2557.4	2557.4	2539.8	2543.2	2539.8	2543.2	2536.1	2525.5	2532.6	2529.0
15°	2550.4	2550.4	2546.8	2529.0	2532.6	2532.6	2536.1	2529.0	2518.4	2529.0	2522.0
17.5°	2529.0	2529.0	2525.5	2511.4	2518.4	2518.4	2522.0	2514.9	2504.2	2511.4	2511.4
20°	2486.5	2490.0	2490.0	2479.4	2486.5	2486.5	2490.0	2486.5	2483.0	2486.5	2479.4
22.5°	2436.9	2443.9	2443.9	2433.2	2440.4	2440.4	2451.0	2447.5	2440.4	2443.9	2440.4
25°	2362.4	2369.4	2376.5	2369.4	2376.5	2376.5	2387.1	2383.6	2376.5	2383.6	2373.0
27.5°	2277.2	2280.8	2287.9	2280.8	2291.4	2287.9	2298.5	2295.0	2284.2	2295.0	2291.4
30°	2156.6	2170.8	2181.5	2170.8	2181.5	2181.5	2188.5	2185.0	2181.5	2177.9	2177.9
32.5°	2021.9	2036.0	2036.0	2032.5	2039.5	2039.5	2043.1	2036.0	2032.5	2036.0	2039.5
35°	1855.1	1862.2	1869.2	1865.8	1869.2	1872.9	1869.2	1872.9	1862.2	1865.8	1865.8
37.5°	1674.2	1681.2	1681.2	1670.6	1677.8	1677.8	1670.6	1670.6	1663.6	1670.6	1656.5
40°	1482.6	1475.6	1479.1	1472.0	1464.9	1464.9	1461.4	1447.2	1440.1	1443.6	1447.2
42.5°	1294.6	1294.6	1284.0	1266.2	1248.6	1248.6	1237.9	1230.9	1216.6	1223.8	1220.2
45°	1135.0	1117.4	1103.1	1074.8	1064.1	1057.0	1039.2	1021.5	1014.5	1018.0	1014.5
47.5°	982.5	968.4	932.9	893.9	883.2	872.6	851.2	830.0	822.9	815.9	815.9
50°	854.9	830.0	791.0	748.4	730.8	713.0	684.6	663.2	649.1	652.6	652.6
52.5°	737.8	709.4	663.2	610.1	588.8	567.5	542.8	517.9	507.2	503.6	503.6
55°	634.9	603.0	556.9	496.6	478.9	454.0	422.1	393.8	379.5	376.0	383.1
57.5°	542.8	514.4	461.1	400.9	379.5	354.8	322.8	298.0	280.2	276.6	280.2
60°	468.2	429.2	383.1	326.4	298.0	276.6	241.2	219.9	202.1	195.1	198.6
62.5°	393.8	358.2	312.1	255.4	234.1	212.9	180.9	156.1	141.9	138.4	141.9
65°	337.0	301.5	258.9	209.2	188.0	166.8	138.4	113.5	102.9	99.4	102.9
67.5°	280.2	248.2	212.9	166.8	149.0	131.2	102.9	85.1	71.0	67.4	71.0
70°	227.0	198.6	163.1	131.2	113.5	99.4	78.0	60.2	49.6	46.1	49.6
72.5°	170.2	149.0	124.1	95.8	85.1	74.5	56.8	42.6	35.5	31.9	35.5
75°	124.1	106.4	88.6	67.4	60.2	53.2	39.0	28.4	24.9	21.2	24.9
77.5°	85.1	74.5	60.2	46.1	39.0	35.5	24.9	21.2	17.8	14.2	14.2
80°	56.8	49.6	39.0	31.9	28.4	24.9	17.8	14.2	10.6	10.6	10.6
82.5°	35.5	28.4	24.9	17.8	14.2	14.2	10.6	7.1	7.1	7.1	7.1
85°	21.2	17.8	14.2	10.6	7.1	7.1	3.5	3.5	3.5	3.5	3.5
87.5°	10.6	7.1	7.1	3.5	3.5	3.5	3.5	3.5	0.0	0.0	3.5
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: P252737

CATALOG NUMBER: LE_6B60D010R EC6B60709727 6LBDW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8
2.5°	2507.8	2500.6	2500.6	2504.2	2507.8	2511.4	2504.2	2500.6	2500.6	2511.4	2504.2
5°	2507.8	2504.2	2504.2	2504.2	2511.4	2514.9	2507.8	2504.2	2507.8	2518.4	2514.9
7.5°	2518.4	2511.4	2514.9	2514.9	2518.4	2525.5	2518.4	2514.9	2518.4	2529.0	2522.0
10°	2525.5	2518.4	2522.0	2518.4	2529.0	2532.6	2525.5	2522.0	2525.5	2539.8	2536.1
12.5°	2529.0	2525.5	2525.5	2522.0	2532.6	2536.1	2529.0	2525.5	2529.0	2539.8	2536.1
15°	2522.0	2518.4	2518.4	2518.4	2525.5	2532.6	2522.0	2518.4	2518.4	2529.0	2525.5
17.5°	2507.8	2500.6	2500.6	2500.6	2504.2	2507.8	2497.1	2493.6	2490.0	2500.6	2497.1
20°	2483.0	2475.9	2468.8	2468.8	2472.2	2472.2	2465.2	2454.6	2454.6	2458.1	2451.0
22.5°	2436.9	2433.2	2426.2	2422.6	2429.8	2426.2	2412.0	2401.4	2397.8	2401.4	2394.2
25°	2373.0	2365.9	2362.4	2358.8	2362.4	2358.8	2344.6	2330.4	2330.4	2330.4	2319.8
27.5°	2284.2	2277.2	2273.6	2273.6	2277.2	2270.1	2255.9	2241.8	2234.6	2234.6	2224.0
30°	2170.8	2170.8	2167.2	2163.8	2160.1	2160.1	2138.9	2124.8	2117.6	2121.1	2114.0
32.5°	2032.5	2028.9	2025.4	2014.8	2018.2	2014.8	1997.0	1986.4	1975.8	1968.6	1965.1
35°	1855.1	1855.1	1851.6	1851.6	1851.6	1848.0	1830.2	1819.6	1812.5	1809.0	1798.4
37.5°	1660.0	1656.5	1652.9	1652.9	1652.9	1652.9	1642.2	1631.6	1631.6	1628.1	1621.0
40°	1440.1	1443.6	1447.2	1443.6	1454.2	1464.9	1450.8	1443.6	1440.1	1450.8	1436.5
42.5°	1227.2	1223.8	1241.5	1245.0	1245.0	1262.8	1266.2	1269.9	1266.2	1273.4	1273.4
45°	1021.5	1018.0	1035.8	1042.9	1060.6	1081.9	1092.5	1110.2	1117.4	1124.4	1117.4
47.5°	826.5	840.6	854.9	872.6	886.8	922.2	943.5	961.2	968.4	979.0	979.0
50°	663.2	677.5	702.4	716.5	734.2	776.8	812.2	837.1	851.2	861.9	858.4
52.5°	510.8	535.6	567.5	581.8	606.5	656.2	695.2	723.6	741.4	752.0	755.5
55°	393.8	415.0	446.9	468.2	493.0	546.2	595.9	627.9	645.6	659.8	666.9
57.5°	290.9	315.8	351.1	368.9	397.2	457.6	500.1	539.1	560.4	578.1	581.8
60°	212.9	237.6	269.6	290.9	319.2	379.5	429.2	464.6	489.5	503.6	510.8
62.5°	152.5	177.4	209.2	230.5	255.4	308.6	358.2	393.8	418.5	436.2	446.9
65°	110.0	134.8	166.8	184.5	205.8	255.4	301.5	337.0	361.8	383.1	390.1
67.5°	81.6	99.4	127.8	145.4	166.8	205.8	244.8	276.6	301.5	319.2	326.4
70°	60.2	74.5	99.4	110.0	124.1	159.6	191.5	219.9	241.2	255.4	262.5
72.5°	42.6	53.2	71.0	81.6	92.2	120.6	145.4	166.8	180.9	195.1	202.1
75°	28.4	35.5	49.6	56.8	63.9	85.1	102.9	120.6	131.2	141.9	145.4
77.5°	17.8	24.9	35.5	39.0	46.1	56.8	71.0	81.6	88.6	95.8	102.9
80°	10.6	14.2	21.2	24.9	28.4	39.0	46.1	53.2	60.2	67.4	71.0
82.5°	7.1	10.6	14.2	14.2	17.8	21.2	28.4	35.5	39.0	42.6	46.1
85°	3.5	3.5	7.1	7.1	10.6	10.6	14.2	17.8	21.2	24.9	28.4
87.5°	3.5	3.5	3.5	3.5	7.1	7.1	10.6	10.6	10.6	14.2	14.2
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: P252737

CATALOG NUMBER: LE_6B60D010R EC6B60709727 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8	2507.8
2.5°	2497.1	2507.8	2497.1	2504.2	2500.6	2500.6	2497.1	2500.6
5°	2507.8	2522.0	2507.8	2518.4	2511.4	2511.4	2511.4	2514.9
7.5°	2518.4	2532.6	2522.0	2532.6	2529.0	2525.5	2525.5	2532.6
10°	2529.0	2539.8	2532.6	2543.2	2539.8	2536.1	2536.1	2543.2
12.5°	2529.0	2543.2	2536.1	2546.8	2543.2	2539.8	2539.8	2543.2
15°	2518.4	2536.1	2525.5	2536.1	2532.6	2529.0	2529.0	2536.1
17.5°	2486.5	2500.6	2493.6	2500.6	2500.6	2497.1	2500.6	2504.2
20°	2443.9	2454.6	2447.5	2454.6	2454.6	2447.5	2451.0	2454.6
22.5°	2383.6	2394.2	2387.1	2394.2	2390.8	2387.1	2387.1	2383.6
25°	2309.1	2323.4	2312.6	2319.8	2312.6	2305.6	2305.6	2309.1
27.5°	2216.9	2227.5	2213.4	2220.5	2213.4	2206.2	2206.2	2202.8
30°	2096.2	2099.9	2089.2	2096.2	2089.2	2085.6	2078.6	2078.6
32.5°	1950.9	1954.4	1943.8	1943.8	1936.8	1936.8	1922.5	1933.1
35°	1780.6	1784.1	1780.6	1777.1	1766.4	1762.9	1759.4	1759.4
37.5°	1603.2	1603.2	1592.6	1589.1	1582.0	1574.9	1578.5	1567.8
40°	1422.4	1418.9	1408.1	1411.8	1408.1	1397.5	1394.0	1390.5
42.5°	1252.1	1252.1	1241.5	1245.0	1237.9	1234.4	1223.8	1227.2
45°	1103.1	1103.1	1092.5	1092.5	1089.0	1078.2	1081.9	1074.8
47.5°	968.4	968.4	964.8	964.8	954.1	950.6	950.6	950.6
50°	851.2	851.2	851.2	851.2	847.8	844.2	840.6	844.2
52.5°	752.0	759.1	755.5	755.5	752.0	748.4	744.9	744.9
55°	663.2	666.9	666.9	670.4	666.9	663.2	666.9	663.2
57.5°	585.2	592.4	592.4	592.4	592.4	592.4	588.8	585.2
60°	517.9	521.4	521.4	525.0	525.0	525.0	521.4	521.4
62.5°	450.5	457.6	461.1	461.1	464.6	461.1	461.1	461.1
65°	397.2	404.4	407.9	404.4	407.9	407.9	404.4	404.4
67.5°	333.4	340.5	340.5	340.5	340.5	344.1	340.5	340.5
70°	269.6	276.6	273.1	276.6	276.6	276.6	276.6	276.6
72.5°	205.8	209.2	212.9	212.9	216.4	212.9	212.9	212.9
75°	149.0	156.1	156.1	156.1	156.1	159.6	159.6	159.6
77.5°	106.4	110.0	110.0	113.5	113.5	113.5	113.5	117.0
80°	74.5	74.5	78.0	78.0	81.6	81.6	81.6	81.6
82.5°	49.6	53.2	53.2	53.2	53.2	53.2	53.2	53.2
85°	28.4	31.9	31.9	31.9	31.9	35.5	35.5	35.5
87.5°	17.8	17.8	17.8	17.8	17.8	17.8	14.2	14.2
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)