

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: P252719

Luminaire Tested: **LE_6B50D010R EC6B30509027 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252719
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_6B50D010R EC6B30509027 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5123.7 lumens
Efficiency: N/A
Efficacy: 87.1 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

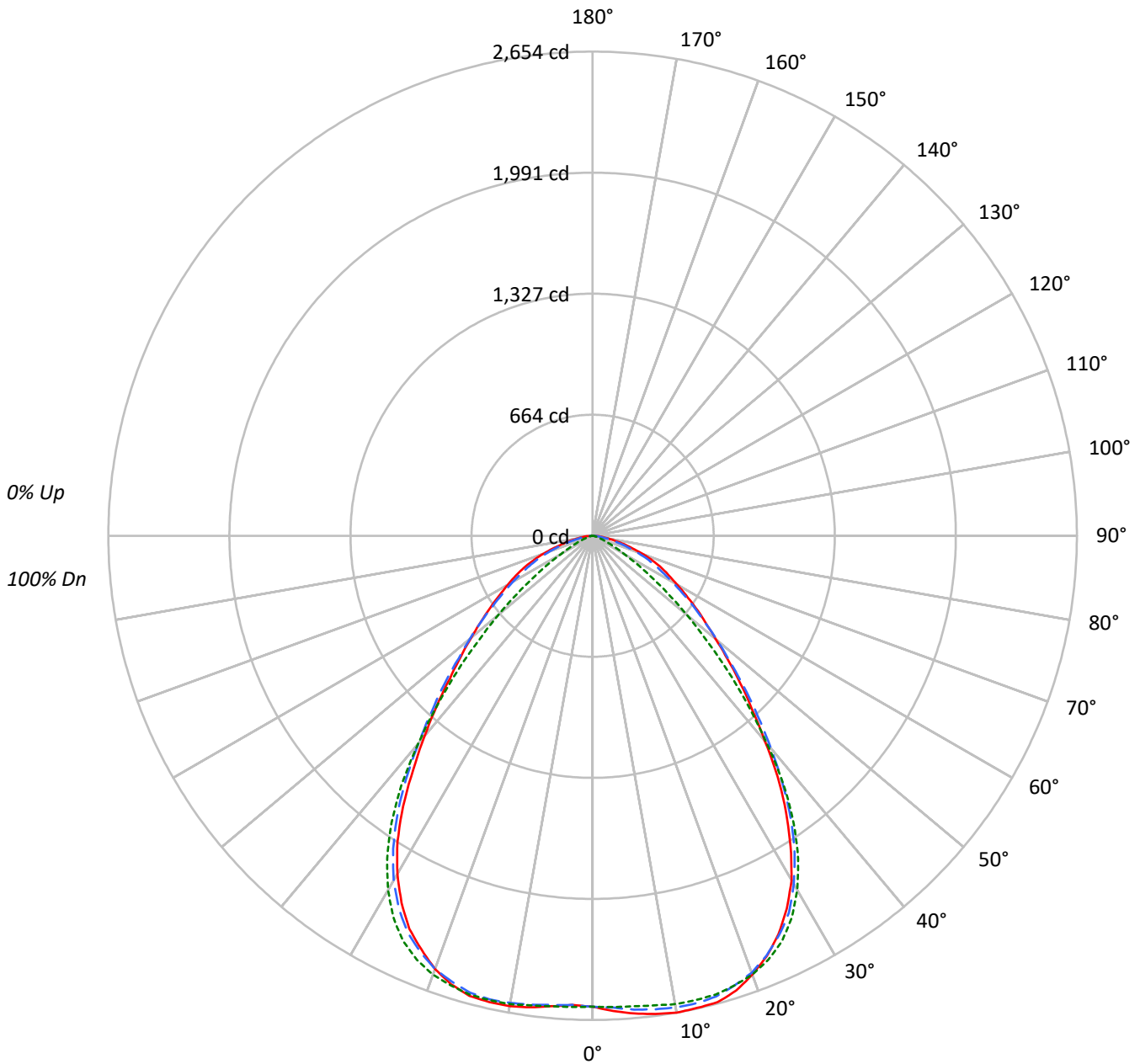
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252719

CATALOG NUMBER: LE_6B50D010R EC6B30509027 6LBDW1H

Luminous Intensity Polar Plot





TEST NUMBER: P252719

CATALOG NUMBER: LE_6B50D010R EC6B30509027 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°	168419	168419	168419
5°	172166	169540	169540
10°	175853	172706	173435
15°	178791	175839	176325
20°	177700	177700	175416
25°	173477	176623	171109
30°	164219	168890	161183
35°	147142	152964	144235
40°	125015	126565	121889
45°	105781	96684	102081
50°	89317	68195	88200
55°	78494	44019	77664
60°	69560	26214	70042
65°	64250	15777	64250
70°	55718	9061	54326
75°	44163	5520	41390
80°	32912	4133	31559
85°	30017	2695	27322



TEST NUMBER: P252719

CATALOG NUMBER: LE_6B50D010R EC6B30509027 6LBDW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	248.5	4.9
10°-20°	735.6	14.4
20°-30°	1106.2	21.6
30°-40°	1163.1	22.7
40°-50°	868.9	17.0
50°-60°	540.9	10.6
60°-70°	307.6	6.0
70°-80°	126.7	2.5
80°-90°	26.2	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°	2090.3	40.8
0°-40°	3253.4	63.5
0°-60°	4663.2	91.0
0°-90°	5123.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5123.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2582	2582	2582	2582	2582	
5°	2629	2607	2589	2582	2589	252
15°	2647	2614	2603	2592	2611	744
25°	2410	2417	2454	2399	2377	1103
35°	1848	1895	1921	1866	1811	1146
45°	1146	1172	1048	1150	1106	888
55°	690	676	387	664	683	621
65°	416	372	102	372	416	410
75°	175	139	22	135	164	190
85°	40	26	4	22	36	45
90°	0	0	0	0	0	



TEST NUMBER: P252719

CATALOG NUMBER: LE_6B50D010R EC6B30509027 6LBDW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5
2.5°	2607.0	2603.4	2607.0	2599.8	2596.0	2596.0	2599.8	2592.4	2588.8	2592.4	2588.8
5°	2628.9	2621.6	2625.2	2621.6	2614.4	2614.4	2618.0	2607.0	2607.0	2610.6	2607.0
7.5°	2643.5	2643.5	2643.5	2636.2	2632.6	2628.9	2636.2	2625.2	2621.6	2621.6	2618.0
10°	2654.5	2650.9	2654.5	2647.1	2639.9	2636.2	2643.5	2636.2	2628.9	2636.2	2625.2
12.5°	2650.9	2650.9	2650.9	2647.1	2639.9	2636.2	2643.5	2632.6	2628.9	2632.6	2625.2
15°	2647.1	2636.2	2639.9	2636.2	2625.2	2625.2	2628.9	2618.0	2610.6	2621.6	2614.4
17.5°	2614.4	2607.0	2610.6	2603.4	2596.0	2592.4	2596.0	2592.4	2585.1	2592.4	2585.1
20°	2559.5	2559.5	2563.2	2555.9	2548.6	2545.0	2552.2	2545.0	2537.6	2548.6	2548.6
22.5°	2493.9	2493.9	2493.9	2490.1	2486.5	2486.5	2486.5	2482.9	2479.2	2486.5	2490.1
25°	2409.9	2406.2	2409.9	2413.5	2409.9	2406.2	2409.9	2409.9	2402.5	2417.1	2417.1
27.5°	2304.0	2304.0	2311.2	2307.6	2307.6	2304.0	2311.2	2311.2	2307.6	2318.6	2329.5
30°	2179.9	2172.5	2179.9	2179.9	2183.5	2183.5	2187.1	2187.1	2187.1	2198.1	2205.4
32.5°	2019.1	2022.8	2033.8	2030.1	2026.5	2037.4	2037.4	2044.8	2048.4	2055.6	2059.4
35°	1847.5	1851.2	1851.2	1854.9	1862.1	1854.9	1873.1	1869.5	1873.1	1887.8	1895.0
37.5°	1665.0	1654.0	1672.2	1665.0	1668.6	1668.6	1675.9	1679.6	1690.5	1708.8	1708.8
40°	1467.9	1471.5	1478.8	1482.4	1486.1	1486.1	1486.1	1497.0	1500.6	1522.6	1518.9
42.5°	1296.2	1296.2	1303.5	1307.1	1307.1	1307.1	1307.1	1318.1	1325.4	1332.8	1340.0
45°	1146.5	1135.5	1142.9	1142.9	1150.1	1146.5	1153.8	1161.1	1164.8	1175.8	1172.0
47.5°	1004.1	1000.5	1004.1	1007.8	1004.1	1007.8	1011.4	1015.0	1018.8	1018.8	1018.8
50°	880.0	880.0	883.6	887.2	887.2	887.2	887.2	890.9	890.9	898.2	890.9
52.5°	777.8	781.4	781.4	777.8	781.4	781.4	785.0	785.0	781.4	781.4	770.4
55°	690.1	686.5	690.1	686.5	690.1	690.1	686.5	686.5	682.8	679.1	675.5
57.5°	606.1	606.1	606.1	606.1	602.5	606.1	602.5	598.8	598.8	591.5	580.5
60°	533.1	533.1	533.1	533.1	533.1	529.4	533.1	529.4	522.1	514.9	500.2
62.5°	471.0	467.4	471.0	467.4	467.4	463.8	463.8	460.0	452.8	445.5	430.9
65°	416.2	419.9	416.2	416.2	412.6	409.0	409.0	405.2	394.4	387.0	372.4
67.5°	357.9	354.1	354.1	354.1	350.5	350.5	350.5	343.2	335.9	325.0	310.4
70°	292.1	292.1	292.1	288.5	288.5	284.8	284.8	281.1	273.9	266.5	248.2
72.5°	230.0	230.0	230.0	222.8	226.4	222.8	222.8	215.4	211.8	200.9	189.9
75°	175.2	175.2	171.6	171.6	168.0	164.2	164.2	160.6	157.0	149.8	138.8
77.5°	127.8	127.8	127.8	124.1	120.5	116.9	116.9	113.2	109.5	105.9	98.6
80°	87.6	87.6	87.6	87.6	84.0	80.4	80.4	76.6	76.6	73.0	65.8
82.5°	58.4	58.4	58.4	58.4	54.8	54.8	54.8	51.1	47.5	47.5	40.1
85°	40.1	40.1	36.5	36.5	36.5	36.5	32.9	32.9	29.2	25.5	25.5
87.5°	21.9	21.9	21.9	21.9	18.2	18.2	18.2	18.2	14.6	14.6	11.0
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: P252719

CATALOG NUMBER: LE_6B50D010R EC6B30509027 6LBDW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5
2.5°	2599.8	2599.8	2596.0	2585.1	2588.8	2585.1	2588.8	2585.1	2574.1	2585.1	2574.1
5°	2614.4	2618.0	2610.6	2596.0	2599.8	2596.0	2596.0	2592.4	2581.5	2588.8	2581.5
7.5°	2628.9	2625.2	2621.6	2607.0	2610.6	2607.0	2607.0	2599.8	2588.8	2596.0	2585.1
10°	2636.2	2636.2	2628.9	2614.4	2614.4	2610.6	2614.4	2610.6	2596.0	2607.0	2599.8
12.5°	2636.2	2632.6	2632.6	2614.4	2618.0	2614.4	2618.0	2610.6	2599.8	2607.0	2603.4
15°	2625.2	2625.2	2621.6	2603.4	2607.0	2607.0	2610.6	2603.4	2592.4	2603.4	2596.0
17.5°	2603.4	2603.4	2599.8	2585.1	2592.4	2592.4	2596.0	2588.8	2577.8	2585.1	2585.1
20°	2559.5	2563.2	2563.2	2552.2	2559.5	2559.5	2563.2	2559.5	2555.9	2559.5	2552.2
22.5°	2508.4	2515.8	2515.8	2504.8	2512.1	2512.1	2523.0	2519.4	2512.1	2515.8	2512.1
25°	2431.8	2439.0	2446.4	2439.0	2446.4	2446.4	2457.2	2453.6	2446.4	2453.6	2442.8
27.5°	2344.1	2347.8	2355.1	2347.8	2358.8	2355.1	2366.0	2362.4	2351.4	2362.4	2358.8
30°	2220.0	2234.6	2245.5	2234.6	2245.5	2245.5	2252.9	2249.2	2245.5	2241.9	2241.9
32.5°	2081.2	2095.9	2095.9	2092.1	2099.5	2099.5	2103.1	2095.9	2092.1	2095.9	2099.5
35°	1909.6	1916.9	1924.2	1920.6	1924.2	1927.9	1924.2	1927.9	1916.9	1920.6	1920.6
37.5°	1723.4	1730.8	1730.8	1719.8	1727.0	1727.0	1719.8	1719.8	1712.5	1719.8	1705.1
40°	1526.2	1518.9	1522.6	1515.2	1508.0	1508.0	1504.4	1489.8	1482.4	1486.1	1489.8
42.5°	1332.8	1332.8	1321.8	1303.5	1285.2	1285.2	1274.2	1267.0	1252.4	1259.8	1256.0
45°	1168.4	1150.1	1135.5	1106.4	1095.4	1088.1	1069.9	1051.6	1044.2	1047.9	1044.2
47.5°	1011.4	996.8	960.2	920.1	909.1	898.2	876.2	854.4	847.1	839.8	839.8
50°	880.0	854.4	814.2	770.4	752.1	733.9	704.8	682.8	668.1	671.9	671.9
52.5°	759.5	730.2	682.8	628.0	606.1	584.2	558.6	533.1	522.1	518.5	518.5
55°	653.6	620.8	573.2	511.1	492.9	467.4	434.5	405.2	390.6	387.0	394.4
57.5°	558.6	529.4	474.6	412.6	390.6	365.1	332.2	306.8	288.5	284.8	288.5
60°	482.0	441.8	394.4	335.9	306.8	284.8	248.2	226.4	208.1	200.9	204.5
62.5°	405.2	368.8	321.4	262.9	241.0	219.1	186.2	160.6	146.0	142.4	146.0
65°	346.9	310.4	266.5	215.4	193.5	171.6	142.4	116.9	105.9	102.2	105.9
67.5°	288.5	255.6	219.1	171.6	153.4	135.1	105.9	87.6	73.0	69.4	73.0
70°	233.6	204.5	168.0	135.1	116.9	102.2	80.4	62.1	51.1	47.5	51.1
72.5°	175.2	153.4	127.8	98.6	87.6	76.6	58.4	43.9	36.5	32.9	36.5
75°	127.8	109.5	91.2	69.4	62.1	54.8	40.1	29.2	25.5	21.9	25.5
77.5°	87.6	76.6	62.1	47.5	40.1	36.5	25.5	21.9	18.2	14.6	14.6
80°	58.4	51.1	40.1	32.9	29.2	25.5	18.2	14.6	11.0	11.0	11.0
82.5°	36.5	29.2	25.5	18.2	14.6	14.6	11.0	7.2	7.2	7.2	7.2
85°	21.9	18.2	14.6	11.0	7.2	7.2	3.6	3.6	3.6	3.6	3.6
87.5°	11.0	7.2	7.2	3.6	3.6	3.6	3.6	3.6	0.0	0.0	3.6
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: P252719

CATALOG NUMBER: LE_6B50D010R EC6B30509027 6LBDW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5
2.5°	2581.5	2574.1	2574.1	2577.8	2581.5	2585.1	2577.8	2574.1	2574.1	2585.1	2577.8
5°	2581.5	2577.8	2577.8	2577.8	2585.1	2588.8	2581.5	2577.8	2581.5	2592.4	2588.8
7.5°	2592.4	2585.1	2588.8	2588.8	2592.4	2599.8	2592.4	2588.8	2592.4	2603.4	2596.0
10°	2599.8	2592.4	2596.0	2592.4	2603.4	2607.0	2599.8	2596.0	2599.8	2614.4	2610.6
12.5°	2603.4	2599.8	2599.8	2596.0	2607.0	2610.6	2603.4	2599.8	2603.4	2614.4	2610.6
15°	2596.0	2592.4	2592.4	2592.4	2599.8	2607.0	2596.0	2592.4	2592.4	2603.4	2599.8
17.5°	2581.5	2574.1	2574.1	2574.1	2577.8	2581.5	2570.5	2566.9	2563.2	2574.1	2570.5
20°	2555.9	2548.6	2541.2	2541.2	2545.0	2545.0	2537.6	2526.6	2526.6	2530.4	2523.0
22.5°	2508.4	2504.8	2497.5	2493.9	2501.1	2497.5	2482.9	2471.9	2468.2	2471.9	2464.6
25°	2442.8	2435.4	2431.8	2428.1	2431.8	2428.1	2413.5	2398.9	2398.9	2398.9	2387.9
27.5°	2351.4	2344.1	2340.5	2340.5	2344.1	2336.9	2322.2	2307.6	2300.2	2300.2	2289.4
30°	2234.6	2234.6	2230.9	2227.2	2223.6	2223.6	2201.8	2187.1	2179.9	2183.5	2176.1
32.5°	2092.1	2088.5	2084.9	2073.9	2077.6	2073.9	2055.6	2044.8	2033.8	2026.5	2022.8
35°	1909.6	1909.6	1906.0	1906.0	1906.0	1902.4	1884.0	1873.1	1865.8	1862.1	1851.2
37.5°	1708.8	1705.1	1701.5	1701.5	1701.5	1701.5	1690.5	1679.6	1679.6	1675.9	1668.6
40°	1482.4	1486.1	1489.8	1486.1	1497.0	1508.0	1493.4	1486.1	1482.4	1493.4	1478.8
42.5°	1263.4	1259.8	1278.0	1281.6	1281.6	1299.9	1303.5	1307.1	1303.5	1310.8	1310.8
45°	1051.6	1047.9	1066.1	1073.5	1091.8	1113.6	1124.6	1142.9	1150.1	1157.5	1150.1
47.5°	850.8	865.4	880.0	898.2	912.9	949.4	971.2	989.5	996.8	1007.8	1007.8
50°	682.8	697.4	723.0	737.5	755.9	799.6	836.1	861.8	876.2	887.2	883.6
52.5°	525.8	551.4	584.2	598.8	624.4	675.5	715.6	744.9	763.1	774.1	777.8
55°	405.2	427.2	460.0	482.0	507.5	562.2	613.4	646.2	664.5	679.1	686.5
57.5°	299.4	325.0	361.5	379.8	409.0	471.0	514.9	555.0	576.9	595.1	598.8
60°	219.1	244.6	277.5	299.4	328.6	390.6	441.8	478.4	503.9	518.5	525.8
62.5°	157.0	182.6	215.4	237.4	262.9	317.6	368.8	405.2	430.9	449.1	460.0
65°	113.2	138.8	171.6	189.9	211.8	262.9	310.4	346.9	372.4	394.4	401.6
67.5°	84.0	102.2	131.5	149.8	171.6	211.8	252.0	284.8	310.4	328.6	335.9
70°	62.1	76.6	102.2	113.2	127.8	164.2	197.1	226.4	248.2	262.9	270.2
72.5°	43.9	54.8	73.0	84.0	94.9	124.1	149.8	171.6	186.2	200.9	208.1
75°	29.2	36.5	51.1	58.4	65.8	87.6	105.9	124.1	135.1	146.0	149.8
77.5°	18.2	25.5	36.5	40.1	47.5	58.4	73.0	84.0	91.2	98.6	105.9
80°	11.0	14.6	21.9	25.5	29.2	40.1	47.5	54.8	62.1	69.4	73.0
82.5°	7.2	11.0	14.6	14.6	18.2	21.9	29.2	36.5	40.1	43.9	47.5
85°	3.6	3.6	7.2	7.2	11.0	11.0	14.6	18.2	21.9	25.5	29.2
87.5°	3.6	3.6	3.6	3.6	7.2	7.2	11.0	11.0	11.0	14.6	14.6
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: P252719

CATALOG NUMBER: LE_6B50D010R EC6B30509027 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5	2581.5
2.5°	2570.5	2581.5	2570.5	2577.8	2574.1	2574.1	2570.5	2574.1
5°	2581.5	2596.0	2581.5	2592.4	2585.1	2585.1	2585.1	2588.8
7.5°	2592.4	2607.0	2596.0	2607.0	2603.4	2599.8	2599.8	2607.0
10°	2603.4	2614.4	2607.0	2618.0	2614.4	2610.6	2610.6	2618.0
12.5°	2603.4	2618.0	2610.6	2621.6	2618.0	2614.4	2614.4	2618.0
15°	2592.4	2610.6	2599.8	2610.6	2607.0	2603.4	2603.4	2610.6
17.5°	2559.5	2574.1	2566.9	2574.1	2574.1	2570.5	2574.1	2577.8
20°	2515.8	2526.6	2519.4	2526.6	2526.6	2519.4	2523.0	2526.6
22.5°	2453.6	2464.6	2457.2	2464.6	2461.0	2457.2	2457.2	2453.6
25°	2377.0	2391.6	2380.6	2387.9	2380.6	2373.4	2373.4	2377.0
27.5°	2282.0	2293.0	2278.4	2285.8	2278.4	2271.1	2271.1	2267.5
30°	2157.9	2161.5	2150.6	2157.9	2150.6	2147.0	2139.6	2139.6
32.5°	2008.2	2011.9	2000.9	2000.9	1993.6	1993.6	1979.0	1990.0
35°	1833.0	1836.6	1833.0	1829.2	1818.4	1814.6	1811.0	1811.0
37.5°	1650.4	1650.4	1639.4	1635.8	1628.5	1621.1	1624.9	1613.9
40°	1464.1	1460.5	1449.5	1453.2	1449.5	1438.6	1435.0	1431.2
42.5°	1288.9	1288.9	1278.0	1281.6	1274.2	1270.6	1259.8	1263.4
45°	1135.5	1135.5	1124.6	1124.6	1121.0	1110.0	1113.6	1106.4
47.5°	996.8	996.8	993.1	993.1	982.2	978.5	978.5	978.5
50°	876.2	876.2	876.2	876.2	872.6	869.0	865.4	869.0
52.5°	774.1	781.4	777.8	777.8	774.1	770.4	766.8	766.8
55°	682.8	686.5	686.5	690.1	686.5	682.8	686.5	682.8
57.5°	602.5	609.8	609.8	609.8	609.8	609.8	606.1	602.5
60°	533.1	536.8	536.8	540.4	540.4	540.4	536.8	536.8
62.5°	463.8	471.0	474.6	474.6	478.4	474.6	474.6	474.6
65°	409.0	416.2	419.9	416.2	419.9	419.9	416.2	416.2
67.5°	343.2	350.5	350.5	350.5	350.5	354.1	350.5	350.5
70°	277.5	284.8	281.1	284.8	284.8	284.8	284.8	284.8
72.5°	211.8	215.4	219.1	219.1	222.8	219.1	219.1	219.1
75°	153.4	160.6	160.6	160.6	160.6	164.2	164.2	164.2
77.5°	109.5	113.2	113.2	116.9	116.9	116.9	116.9	120.5
80°	76.6	76.6	80.4	80.4	84.0	84.0	84.0	84.0
82.5°	51.1	54.8	54.8	54.8	54.8	54.8	54.8	54.8
85°	29.2	32.9	32.9	32.9	32.9	36.5	36.5	36.5
87.5°	18.2	18.2	18.2	18.2	18.2	18.2	14.6	14.6
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)