

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: P252515

Luminaire Tested: **LE_6B50D010R EC6B30509050 6LBLWW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252515
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-6)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B50D010R EC6B30509050 6LBLWW1H
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4943.8 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.02 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

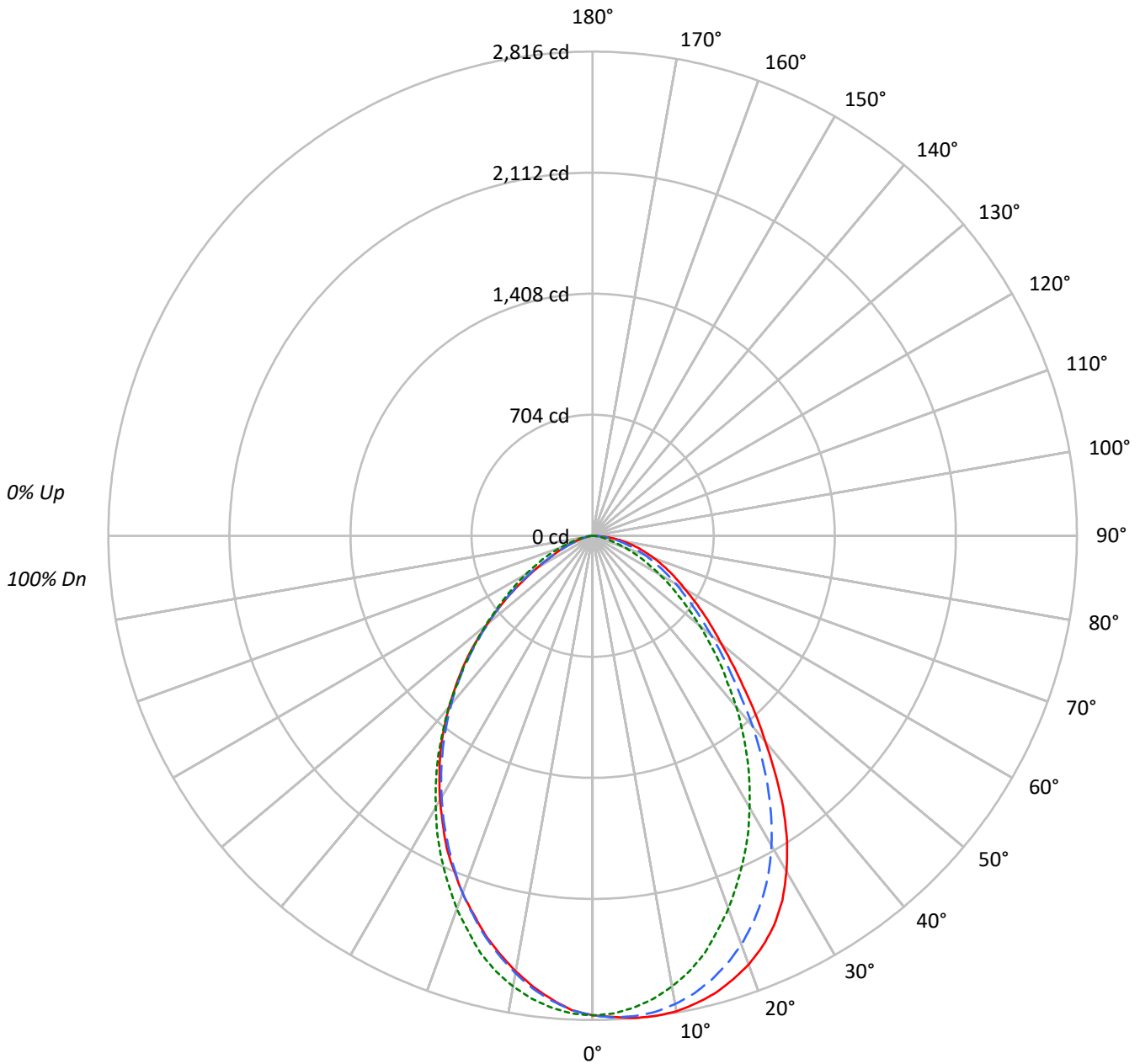
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	100	100
1	111	107	103	100	108	105	101	99	100	98	96	97	95	93	93	91	90	88	88	88	88
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77	77	77	77
3	95	86	79	73	93	84	78	73	81	76	71	79	74	70	76	72	69	67	67	67	67
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59	59	59	59
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53	53	53	53
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47	47	47	47
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	45	43	43	43	43
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	41	39	39	39	39
9	63	50	43	38	61	50	43	38	49	42	37	48	42	37	47	41	37	35	35	35	35
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33	33	33	33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	181956	181956	181956
5°	184426	180366	177320
10°	186048	176290	170394
15°	186018	169801	162472
20°	184219	160281	153567
25°	179855	149455	144438
30°	169839	137446	133649
35°	153944	124643	123098
40°	132952	110843	110511
45°	114002	96499	97210
50°	99071	82567	81390
55°	89004	69611	65198
60°	80872	58638	48017
65°	75951	48442	35274
70°	72409	37673	25866
75°	69319	27350	17595
80°	65523	18936	11647
85°	58013	11603	5839



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.9	5.3
10°-20°	714.5	14.5
20°-30°	992.0	20.1
30°-40°	1027.5	20.8
40°-50°	844.3	17.1
50°-60°	580.3	11.7
60°-70°	333.6	6.7
70°-80°	153.4	3.1
80°-90°	37.4	0.8
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°	1967.4	39.8
0°-40°	2994.8	60.6
0°-60°	4419.5	89.4
0°-90°	4943.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4943.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2789	2789	2789	2789	2789	
5°	2816	2804	2754	2715	2708	268
15°	2754	2673	2514	2413	2406	776
25°	2498	2332	2076	1987	2006	1143
35°	1933	1774	1565	1518	1546	1199
45°	1236	1143	1046	1034	1054	962
55°	782	709	612	577	573	704
65°	492	430	314	221	228	490
75°	275	217	108	70	70	291
85°	78	54	16	8	8	87
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°	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0
2.5°	2800.6	2823.9	2808.4	2804.5	2812.2	2812.2	2812.2	2800.6	2808.4	2796.8	2804.5
5°	2816.1	2835.5	2820.0	2812.2	2820.0	2823.9	2812.2	2804.5	2816.1	2800.6	2804.5
7.5°	2816.1	2835.5	2820.0	2816.1	2820.0	2820.0	2816.1	2800.6	2808.4	2792.9	2792.9
10°	2808.4	2823.9	2808.4	2800.6	2804.5	2800.6	2800.6	2781.2	2785.1	2765.8	2765.8
12.5°	2785.1	2804.5	2785.1	2777.4	2777.4	2777.4	2765.8	2750.2	2754.1	2730.9	2727.0
15°	2754.1	2769.6	2750.2	2742.5	2742.5	2738.6	2730.9	2707.6	2707.6	2684.4	2672.8
17.5°	2707.6	2723.1	2707.6	2696.0	2692.1	2684.4	2676.6	2653.4	2645.6	2618.6	2607.0
20°	2653.4	2665.0	2649.5	2637.9	2630.2	2622.5	2607.0	2583.8	2576.0	2548.9	2529.5
22.5°	2583.8	2599.2	2576.0	2564.4	2556.6	2545.0	2529.5	2506.2	2494.6	2459.8	2436.5
25°	2498.5	2506.2	2486.9	2475.2	2459.8	2452.0	2440.4	2409.4	2397.8	2359.0	2331.9
27.5°	2390.0	2397.8	2374.5	2366.8	2347.4	2339.6	2324.1	2297.0	2281.6	2242.9	2215.8
30°	2254.5	2262.2	2246.8	2235.1	2219.6	2204.1	2192.5	2165.4	2142.1	2103.4	2080.1
32.5°	2103.4	2115.0	2099.5	2084.0	2056.9	2060.8	2041.4	2014.2	1994.9	1960.0	1932.9
35°	1932.9	1940.6	1921.4	1917.5	1902.0	1886.5	1867.1	1847.8	1836.1	1797.4	1774.1
37.5°	1743.1	1762.5	1743.1	1727.6	1719.9	1708.2	1696.6	1669.5	1661.8	1638.5	1607.5
40°	1561.1	1572.8	1561.1	1545.6	1534.0	1534.0	1518.5	1503.0	1483.6	1460.4	1448.8
42.5°	1398.4	1390.6	1386.8	1379.0	1363.5	1359.6	1355.8	1336.4	1324.8	1301.5	1282.1
45°	1235.6	1239.5	1231.8	1228.0	1216.4	1208.6	1200.9	1185.4	1181.5	1158.2	1142.8
47.5°	1100.1	1096.2	1088.5	1088.5	1080.8	1073.0	1065.2	1053.6	1049.8	1030.4	1014.9
50°	976.1	980.0	976.1	972.2	960.6	956.8	949.0	941.2	933.5	914.1	898.6
52.5°	875.5	871.6	867.8	867.8	856.1	852.2	844.5	836.8	829.0	809.6	798.0
55°	782.5	782.5	778.6	774.8	763.1	759.2	755.4	747.6	736.0	720.5	708.9
57.5°	697.2	697.2	693.4	689.5	681.8	681.8	674.0	666.2	658.5	643.0	627.5
60°	619.8	623.6	619.8	615.9	608.1	608.1	604.2	592.6	588.8	569.4	557.8
62.5°	553.9	553.9	553.9	550.0	546.1	538.4	538.4	526.8	519.1	507.5	492.0
65°	492.0	492.0	492.0	488.1	480.4	476.5	472.6	464.9	457.1	445.5	430.0
67.5°	433.9	433.9	433.9	430.0	422.2	418.4	414.5	410.6	399.0	387.4	371.9
70°	379.6	379.6	375.8	371.9	368.0	364.1	360.2	352.5	344.8	329.2	317.6
72.5°	325.4	325.4	325.4	317.6	313.8	313.8	306.0	302.1	294.4	278.9	267.2
75°	275.0	271.1	271.1	267.2	263.4	259.5	255.6	251.8	240.1	232.4	216.9
77.5°	224.6	224.6	220.8	216.9	216.9	213.0	209.1	201.4	197.5	185.9	174.4
80°	174.4	174.4	174.4	174.4	170.5	166.6	166.6	158.9	155.0	143.4	135.6
82.5°	131.8	127.9	127.9	127.9	124.0	120.1	120.1	116.2	112.4	104.6	96.9
85°	77.5	73.6	73.6	73.6	69.8	69.8	65.9	65.9	62.0	54.2	54.2
87.5°	23.2	23.2	27.1	27.1	23.2	23.2	23.2	23.2	23.2	19.4	19.4
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°	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0
2.5°	2796.8	2808.4	2792.9	2789.0	2804.5	2796.8	2792.9	2785.1	2789.0	2781.2	2769.6
5°	2792.9	2808.4	2789.0	2777.4	2796.8	2785.1	2777.4	2769.6	2769.6	2754.1	2746.4
7.5°	2781.2	2789.0	2769.6	2758.0	2769.6	2758.0	2750.2	2738.6	2734.8	2715.4	2703.8
10°	2750.2	2758.0	2734.8	2719.2	2730.9	2715.4	2703.8	2692.1	2684.4	2661.1	2645.6
12.5°	2707.6	2711.5	2684.4	2665.0	2672.8	2661.1	2641.8	2626.4	2618.6	2595.4	2576.0
15°	2649.5	2653.4	2622.5	2595.4	2603.1	2587.6	2564.4	2548.9	2537.2	2514.0	2486.9
17.5°	2579.9	2576.0	2541.1	2514.0	2517.9	2498.5	2475.2	2452.0	2436.5	2409.4	2390.0
20°	2502.4	2490.8	2452.0	2421.0	2424.9	2401.6	2374.5	2351.2	2331.9	2308.6	2281.6
22.5°	2405.5	2390.0	2355.1	2316.4	2320.2	2300.9	2262.2	2242.9	2223.5	2192.5	2169.2
25°	2300.9	2277.8	2242.9	2204.1	2204.1	2180.9	2149.9	2126.6	2107.2	2076.2	2049.1
27.5°	2177.0	2165.4	2118.9	2087.9	2084.0	2060.8	2033.6	2006.5	1983.2	1956.1	1929.1
30°	2041.4	2022.0	1987.1	1952.2	1944.5	1925.2	1898.1	1867.1	1851.6	1824.5	1801.2
32.5°	1898.1	1878.8	1840.0	1805.1	1801.2	1785.8	1762.5	1731.5	1716.0	1696.6	1681.1
35°	1735.4	1727.6	1688.9	1661.8	1661.8	1646.2	1623.0	1595.9	1584.2	1565.0	1545.6
37.5°	1580.4	1568.9	1534.0	1510.8	1510.8	1491.4	1468.1	1456.5	1444.9	1429.4	1417.8
40°	1417.8	1410.0	1382.9	1359.6	1363.5	1348.0	1332.5	1317.0	1309.2	1301.5	1289.9
42.5°	1266.6	1258.9	1239.5	1220.2	1220.2	1208.6	1193.1	1181.5	1173.8	1162.1	1158.2
45°	1131.1	1119.5	1104.0	1084.6	1084.6	1073.0	1065.2	1057.5	1053.6	1045.9	1034.2
47.5°	999.4	991.6	976.1	956.8	956.8	956.8	941.2	929.6	929.6	921.9	918.0
50°	887.0	875.5	863.9	848.4	848.4	840.6	829.0	817.4	817.4	813.5	805.8
52.5°	782.5	774.8	759.2	743.8	743.8	736.0	724.4	720.5	716.6	705.0	701.1
55°	693.4	685.6	674.0	654.6	650.8	646.9	635.2	627.5	623.6	612.0	612.0
57.5°	612.0	604.2	584.9	573.2	569.4	561.6	550.0	542.2	538.4	530.6	523.0
60°	542.2	530.6	515.2	499.8	495.9	488.1	476.5	468.8	464.9	449.4	441.6
62.5°	476.5	464.9	449.4	433.9	430.0	422.2	406.8	399.0	391.2	375.8	368.0
65°	414.5	402.9	387.4	371.9	364.1	360.2	344.8	333.1	325.4	313.8	298.2
67.5°	356.4	344.8	329.2	309.9	309.9	298.2	286.6	275.0	263.4	251.8	240.1
70°	302.1	290.5	275.0	259.5	255.6	247.9	236.2	220.8	213.0	197.5	185.9
72.5°	251.8	240.1	224.6	209.1	205.2	197.5	185.9	170.5	158.9	147.2	135.6
75°	205.2	193.6	178.1	166.6	162.8	155.0	143.4	127.9	116.2	108.5	96.9
77.5°	162.8	151.1	139.5	127.9	124.0	116.2	104.6	96.9	85.2	77.5	65.9
80°	124.0	116.2	104.6	96.9	93.0	85.2	77.5	65.9	58.1	50.4	46.5
82.5°	89.1	81.4	73.6	62.0	62.0	54.2	50.4	42.6	34.9	31.0	27.1
85°	50.4	42.6	38.8	34.9	31.0	31.0	27.1	23.2	19.4	15.5	15.5
87.5°	15.5	15.5	11.6	11.6	11.6	11.6	7.8	7.8	7.8	7.8	7.8
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0
2.5°	2769.6	2773.5	2765.8	2773.5	2765.8	2769.6	2761.9	2769.6	2761.9	2769.6	2754.1
5°	2742.5	2742.5	2730.9	2738.6	2730.9	2734.8	2719.2	2723.1	2715.4	2723.1	2707.6
7.5°	2696.0	2699.9	2680.5	2688.2	2676.6	2676.6	2665.0	2668.9	2657.2	2661.1	2649.5
10°	2641.8	2637.9	2618.6	2626.4	2610.9	2610.9	2599.2	2599.2	2583.8	2587.6	2572.1
12.5°	2564.4	2560.5	2537.2	2545.0	2529.5	2529.5	2517.9	2517.9	2502.4	2510.1	2494.6
15°	2475.2	2471.4	2448.1	2452.0	2436.5	2436.5	2421.0	2424.9	2413.2	2421.0	2405.5
17.5°	2374.5	2370.6	2347.4	2351.2	2331.9	2335.8	2324.1	2320.2	2312.5	2316.4	2304.8
20°	2270.0	2262.2	2239.0	2242.9	2235.1	2223.5	2215.8	2219.6	2211.9	2219.6	2208.0
22.5°	2161.5	2146.0	2126.6	2126.6	2118.9	2118.9	2107.2	2115.0	2099.5	2111.1	2103.4
25°	2037.5	2025.9	2010.4	2018.1	2002.6	2002.6	1991.0	1994.9	1987.1	1994.9	1987.1
27.5°	1917.5	1909.8	1886.5	1894.2	1882.6	1886.5	1874.9	1878.8	1874.9	1882.6	1874.9
30°	1789.6	1785.8	1770.2	1770.2	1766.4	1762.5	1758.6	1758.6	1754.8	1766.4	1758.6
32.5°	1669.5	1657.9	1642.4	1654.0	1634.6	1646.2	1638.5	1646.2	1638.5	1646.2	1642.4
35°	1545.6	1541.8	1522.4	1526.2	1522.4	1522.4	1518.5	1518.5	1518.5	1530.1	1530.1
37.5°	1413.9	1410.0	1398.4	1402.2	1394.5	1390.6	1390.6	1398.4	1398.4	1406.1	1406.1
40°	1286.0	1289.9	1278.2	1278.2	1274.4	1274.4	1274.4	1282.1	1278.2	1286.0	1282.1
42.5°	1158.2	1158.2	1146.6	1150.5	1146.6	1150.5	1150.5	1158.2	1158.2	1162.1	1158.2
45°	1038.1	1038.1	1034.2	1038.1	1030.4	1034.2	1030.4	1038.1	1034.2	1038.1	1038.1
47.5°	918.0	918.0	918.0	914.1	914.1	914.1	914.1	914.1	910.2	918.0	914.1
50°	805.8	809.6	805.8	805.8	801.9	805.8	801.9	801.9	794.1	798.0	798.0
52.5°	705.0	705.0	697.2	697.2	697.2	693.4	693.4	693.4	689.5	689.5	681.8
55°	608.1	608.1	600.4	600.4	596.5	592.6	588.8	588.8	577.1	577.1	565.5
57.5°	519.1	515.2	503.6	503.6	495.9	492.0	488.1	484.2	476.5	468.8	464.9
60°	437.8	430.0	422.2	418.4	410.6	402.9	395.1	387.4	379.6	375.8	371.9
62.5°	360.2	348.6	340.9	337.0	329.2	317.6	309.9	302.1	294.4	290.5	282.8
65°	290.5	278.9	267.2	263.4	255.6	247.9	236.2	228.5	220.8	216.9	216.9
67.5°	228.5	216.9	201.4	201.4	193.6	185.9	178.1	170.5	166.6	170.5	170.5
70°	170.5	162.8	151.1	147.2	139.5	131.8	127.9	127.9	127.9	131.8	127.9
72.5°	127.9	116.2	108.5	104.6	100.8	96.9	96.9	96.9	93.0	96.9	96.9
75°	89.1	81.4	73.6	73.6	69.8	69.8	69.8	69.8	69.8	69.8	69.8
77.5°	62.0	54.2	50.4	50.4	50.4	46.5	46.5	46.5	46.5	46.5	46.5
80°	38.8	38.8	34.9	34.9	31.0	31.0	31.0	31.0	31.0	31.0	31.0
82.5°	23.2	23.2	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4
85°	11.6	11.6	11.6	11.6	11.6	7.8	7.8	7.8	7.8	7.8	7.8
87.5°	3.9	3.9	3.9	3.9	3.9	7.8	7.8	7.8	7.8	7.8	7.8
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: P252515

CATALOG NUMBER: LE_6B50D010R EC6B30509050 6LBLWW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0	2789.0
2.5°	2754.1	2765.8	2750.2	2761.9	2758.0	2754.1	2746.4	2761.9
5°	2707.6	2711.5	2696.0	2711.5	2707.6	2699.9	2692.1	2707.6
7.5°	2641.8	2653.4	2634.0	2649.5	2645.6	2637.9	2630.2	2645.6
10°	2568.2	2579.9	2564.4	2576.0	2576.0	2568.2	2556.6	2572.1
12.5°	2486.9	2494.6	2479.1	2494.6	2490.8	2483.0	2479.1	2490.8
15°	2397.8	2409.4	2393.9	2405.5	2401.6	2397.8	2393.9	2405.5
17.5°	2300.9	2312.5	2300.9	2312.5	2312.5	2300.9	2297.0	2304.8
20°	2204.1	2211.9	2200.2	2211.9	2208.0	2208.0	2200.2	2211.9
22.5°	2095.6	2107.2	2099.5	2107.2	2103.4	2103.4	2099.5	2107.2
25°	1987.1	1998.8	1987.1	1998.8	1994.9	1994.9	1987.1	2006.5
27.5°	1878.8	1886.5	1874.9	1890.4	1886.5	1878.8	1882.6	1886.5
30°	1762.5	1770.2	1762.5	1774.1	1774.1	1774.1	1766.4	1774.1
32.5°	1646.2	1657.9	1646.2	1657.9	1654.0	1654.0	1650.1	1657.9
35°	1530.1	1534.0	1526.2	1537.9	1537.9	1541.8	1534.0	1545.6
37.5°	1410.0	1413.9	1410.0	1413.9	1421.6	1410.0	1417.8	1421.6
40°	1286.0	1293.8	1289.9	1293.8	1293.8	1297.6	1293.8	1297.6
42.5°	1162.1	1169.9	1162.1	1173.8	1169.9	1169.9	1173.8	1173.8
45°	1034.2	1045.9	1038.1	1045.9	1049.8	1045.9	1045.9	1053.6
47.5°	914.1	921.9	918.0	921.9	921.9	921.9	921.9	929.6
50°	794.1	798.0	798.0	801.9	801.9	805.8	798.0	801.9
52.5°	674.0	681.8	681.8	681.8	677.9	681.8	681.8	681.8
55°	565.5	569.4	561.6	569.4	569.4	565.5	565.5	573.2
57.5°	461.0	461.0	461.0	461.0	461.0	457.1	461.0	461.0
60°	364.1	368.0	364.1	364.1	364.1	364.1	360.2	368.0
62.5°	282.8	282.8	278.9	282.8	282.8	282.8	286.6	286.6
65°	220.8	224.6	220.8	224.6	224.6	224.6	224.6	228.5
67.5°	174.4	174.4	174.4	174.4	174.4	174.4	174.4	174.4
70°	131.8	131.8	131.8	135.6	131.8	131.8	131.8	135.6
72.5°	96.9	96.9	96.9	96.9	96.9	96.9	100.8	100.8
75°	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8
77.5°	46.5	46.5	46.5	50.4	46.5	50.4	46.5	46.5
80°	31.0	31.0	31.0	31.0	31.0	31.0	31.0	31.0
82.5°	19.4	19.4	19.4	19.4	19.4	19.4	19.4	19.4
85°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
87.5°	7.8	7.8	7.8	7.8	3.9	3.9	3.9	3.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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













(END OF REPORT)