

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: P252409

Luminaire Tested: **LE_6B50D010R EC6B30509035 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252409
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_6B50D010R EC6B30509035 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5233.8 lumens
Efficiency: N/A
Efficacy: 89.0 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.02 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

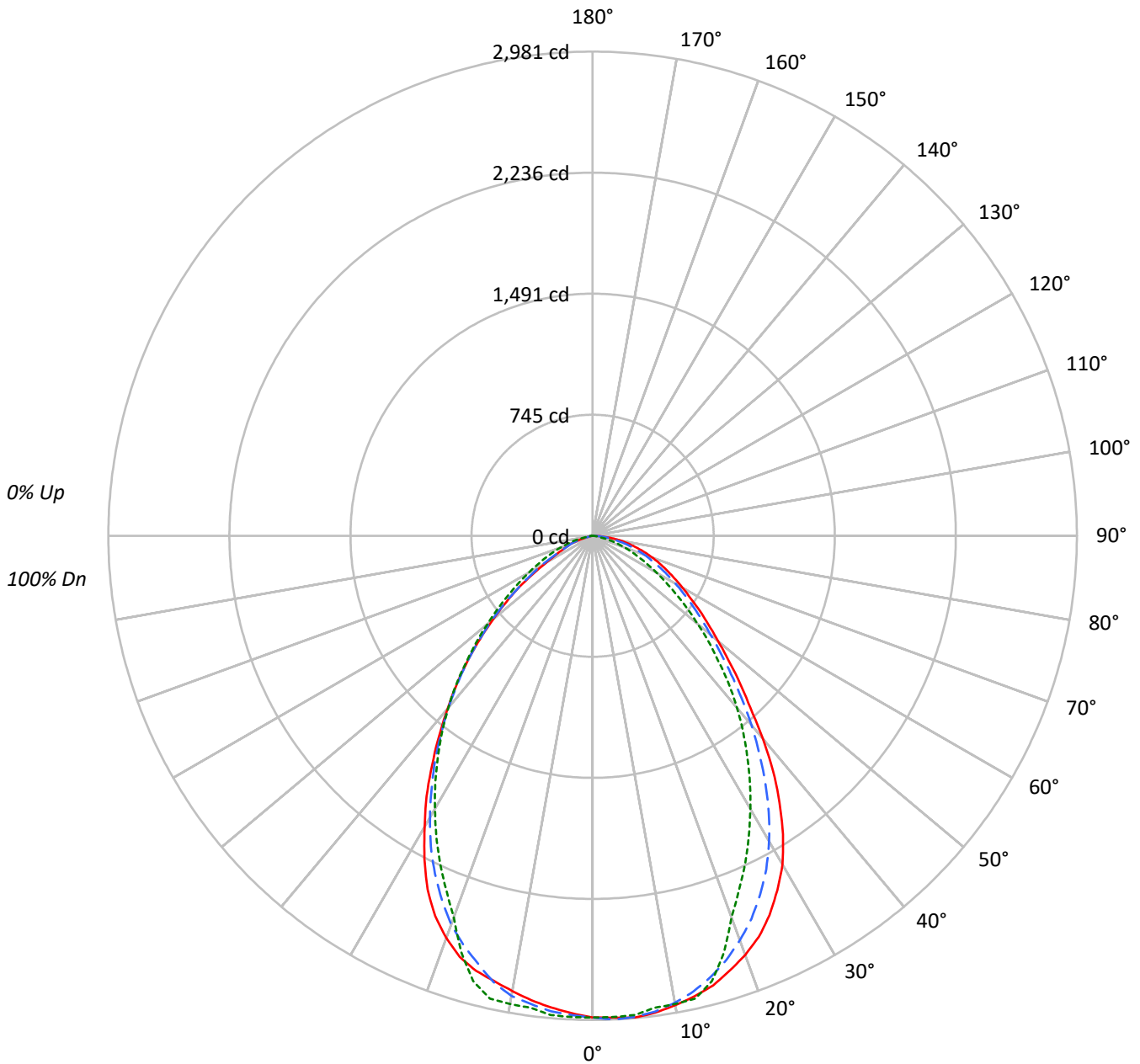
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			
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°	193471	193471	193471
5°	194963	193955	190929
10°	194409	193905	188546
15°	193535	191711	187287
20°	190648	173534	182886
25°	185470	159965	172995
30°	176114	146222	155797
35°	159806	132201	137107
40°	138743	117750	118082
45°	118329	101269	100199
50°	102410	85602	80913
55°	91552	71408	62650
60°	83430	59304	42211
65°	77881	48751	31507
70°	74202	39676	26438
75°	69874	28131	8722
80°	66537	14465	2931
85°	54719	8608	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.0	5.4
10°-20°	783.2	15.0
20°-30°	1081.1	20.7
30°-40°	1100.2	21.0
40°-50°	884.1	16.9
50°-60°	587.9	11.2
60°-70°	335.0	6.4
70°-80°	150.5	2.9
80°-90°	31.7	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°	2144.4	41.0
0°-40°	3244.5	62.0
0°-60°	4716.6	90.1
0°-90°	5233.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5233.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2966	2966	2966	2966	2966	
5°	2977	2973	2962	2938	2915	283
15°	2865	2811	2838	2727	2773	806
25°	2576	2438	2222	2295	2403	1181
35°	2006	1852	1660	1691	1722	1247
45°	1282	1206	1098	1086	1086	995
55°	805	751	628	558	551	723
65°	504	451	316	204	204	503
75°	277	231	112	46	35	296
85°	73	50	12	4	0	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°	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5
2.5°	2969.4	2984.8	2980.9	2977.0	2980.9	2977.0	2969.4	2969.4	2961.6	2961.6	2980.9
5°	2977.0	2984.8	2980.9	2977.0	2977.0	2980.9	2965.5	2965.5	2957.8	2953.9	2973.2
7.5°	2961.6	2973.2	2965.5	2965.5	2961.6	2965.5	2950.1	2950.1	2938.5	2934.6	2953.9
10°	2934.6	2950.1	2942.4	2942.4	2942.4	2934.6	2927.0	2923.1	2911.6	2907.8	2919.2
12.5°	2903.9	2915.4	2911.6	2903.9	2903.9	2903.9	2888.5	2884.6	2869.2	2861.5	2873.0
15°	2865.4	2873.0	2869.2	2865.4	2857.6	2857.6	2842.2	2834.5	2819.1	2803.8	2811.4
17.5°	2807.6	2819.1	2811.4	2807.6	2796.0	2796.0	2780.6	2772.9	2749.9	2734.4	2738.2
20°	2746.0	2749.9	2746.0	2738.2	2726.8	2722.9	2707.5	2692.0	2672.8	2653.5	2649.6
22.5°	2672.8	2676.6	2665.1	2657.4	2645.9	2642.0	2622.8	2611.1	2580.4	2557.2	2553.4
25°	2576.5	2580.4	2580.4	2561.1	2553.4	2545.8	2526.5	2507.1	2480.2	2449.4	2437.9
27.5°	2461.0	2472.5	2464.9	2445.6	2430.1	2426.2	2407.0	2391.6	2357.0	2330.0	2314.6
30°	2337.8	2333.9	2330.0	2318.5	2295.4	2291.5	2272.2	2253.0	2226.0	2191.4	2172.1
32.5°	2179.9	2179.9	2176.0	2164.4	2141.2	2133.6	2118.2	2095.1	2064.2	2037.4	2018.1
35°	2006.5	2010.4	2006.5	1983.4	1968.0	1960.2	1952.6	1925.6	1898.6	1867.9	1852.5
37.5°	1825.5	1814.0	1817.8	1798.5	1779.2	1787.0	1763.9	1752.4	1721.5	1698.4	1683.0
40°	1629.1	1636.8	1621.4	1613.6	1602.1	1590.6	1590.6	1571.4	1555.9	1529.0	1521.2
42.5°	1436.5	1448.1	1444.2	1436.5	1421.1	1425.0	1405.8	1398.0	1378.8	1367.2	1355.6
45°	1282.5	1282.5	1282.5	1274.8	1270.9	1263.2	1251.6	1240.1	1228.5	1213.1	1205.5
47.5°	1132.2	1132.2	1136.1	1128.4	1120.8	1116.9	1109.1	1109.1	1089.9	1074.5	1066.8
50°	1009.0	1009.0	1009.0	1001.4	993.6	993.6	985.9	978.2	966.6	955.1	947.4
52.5°	897.4	897.4	897.4	889.6	885.8	882.0	878.1	874.2	858.9	851.1	843.4
55°	804.9	801.1	801.1	797.2	789.5	789.5	785.6	778.0	766.4	754.9	751.0
57.5°	712.5	716.4	712.5	712.5	704.8	704.8	697.1	693.2	681.6	674.0	666.2
60°	639.4	639.4	639.4	635.5	627.8	631.6	623.9	620.0	608.5	597.0	589.2
62.5°	566.1	570.0	570.0	566.1	558.4	558.4	554.6	550.8	539.1	527.6	516.1
65°	504.5	504.5	504.5	500.6	496.9	496.9	493.0	489.1	477.5	462.1	450.6
67.5°	446.8	442.9	442.9	442.9	439.0	435.2	431.4	427.5	416.0	404.4	389.0
70°	389.0	389.0	389.0	385.1	377.4	381.2	377.4	373.6	362.0	350.5	338.9
72.5°	335.0	335.0	331.2	327.4	327.4	323.5	323.5	319.6	308.1	292.8	281.1
75°	277.2	277.2	277.2	277.2	269.6	273.5	265.8	261.9	254.1	242.6	231.1
77.5°	227.2	227.2	227.2	223.4	219.5	219.5	215.6	211.9	200.2	192.6	177.1
80°	177.1	177.1	177.1	177.1	173.2	169.5	165.6	161.8	154.0	142.5	131.0
82.5°	131.0	131.0	127.1	127.1	127.1	123.2	119.4	115.5	107.9	100.1	92.4
85°	73.1	77.0	77.0	69.4	73.1	69.4	69.4	61.6	61.6	53.9	50.1
87.5°	27.0	23.1	23.1	23.1	23.1	23.1	23.1	19.2	19.2	19.2	15.4
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°	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5
2.5°	2965.5	2961.6	2977.0	2977.0	2953.9	2965.5	2969.4	2961.6	2961.6	2965.5	2953.9
5°	2957.8	2950.1	2965.5	2969.4	2946.2	2957.8	2961.6	2953.9	2957.8	2961.6	2946.2
7.5°	2930.9	2930.9	2942.4	2946.2	2923.1	2934.6	2934.6	2927.0	2930.9	2930.9	2919.2
10°	2903.9	2892.2	2903.9	2903.9	2884.6	2888.5	2896.1	2892.2	2907.8	2927.0	2927.0
12.5°	2853.8	2842.2	2861.5	2861.5	2850.0	2865.4	2884.6	2896.1	2911.6	2919.2	2896.1
15°	2792.1	2796.0	2830.8	2857.6	2846.1	2869.2	2888.5	2880.8	2861.5	2838.4	2803.8
17.5°	2711.2	2699.8	2730.5	2746.0	2730.5	2738.2	2753.6	2738.2	2707.5	2688.2	2642.0
20°	2618.9	2588.0	2588.0	2580.4	2553.4	2553.4	2549.5	2522.6	2511.0	2499.5	2480.2
22.5°	2514.9	2480.2	2468.6	2445.6	2422.5	2418.6	2407.0	2380.1	2364.6	2357.0	2333.9
25°	2395.5	2364.6	2345.4	2322.4	2287.6	2280.0	2268.4	2241.5	2233.8	2222.2	2202.9
27.5°	2272.2	2233.8	2206.8	2183.6	2152.9	2149.0	2125.9	2106.6	2091.2	2083.5	2068.1
30°	2129.8	2087.4	2068.1	2037.4	2014.2	2006.5	1987.2	1960.2	1948.8	1941.0	1929.5
32.5°	1971.9	1937.2	1918.0	1891.0	1860.1	1864.0	1840.9	1817.8	1810.1	1802.4	1790.9
35°	1817.8	1783.1	1760.0	1736.9	1717.6	1710.0	1694.6	1675.2	1663.8	1659.9	1652.2
37.5°	1648.4	1621.4	1602.1	1579.0	1563.6	1555.9	1548.2	1529.0	1521.2	1521.2	1505.9
40°	1482.8	1459.6	1444.2	1432.6	1413.4	1409.6	1401.9	1390.2	1386.5	1382.6	1371.0
42.5°	1332.5	1301.8	1290.1	1282.5	1270.9	1263.2	1259.4	1251.6	1247.9	1244.0	1232.4
45°	1190.0	1163.1	1151.5	1143.9	1132.2	1128.4	1124.6	1113.0	1105.4	1097.6	1093.8
47.5°	1051.4	1032.1	1028.2	1009.0	1001.4	993.6	985.9	978.2	974.4	970.5	955.1
50°	932.0	920.5	901.2	889.6	882.0	878.1	862.6	851.1	847.2	843.4	831.9
52.5°	824.1	808.8	797.2	778.0	774.1	766.4	758.8	743.2	735.6	731.8	720.2
55°	727.9	716.4	700.9	685.5	674.0	670.1	658.6	643.1	635.5	627.8	620.0
57.5°	647.0	627.8	612.4	597.0	589.2	577.8	566.1	558.4	546.9	535.4	523.8
60°	570.0	554.6	535.4	519.9	512.2	504.5	489.1	477.5	466.0	454.5	442.9
62.5°	496.9	481.4	462.1	446.8	439.0	431.4	416.0	404.4	392.9	381.2	365.9
65°	431.4	416.0	400.5	385.1	377.4	369.8	354.4	338.9	327.4	315.8	300.4
67.5°	377.4	358.1	342.8	327.4	319.6	312.0	296.5	285.0	269.6	258.0	242.6
70°	319.6	304.2	292.8	277.2	269.6	261.9	246.5	231.1	219.5	208.0	192.6
72.5°	269.6	250.4	238.8	223.4	215.6	211.9	196.4	184.9	173.2	157.9	146.4
75°	215.6	200.2	184.9	173.2	165.6	161.8	146.4	134.8	123.2	111.6	100.1
77.5°	165.6	154.0	138.6	127.1	119.4	115.5	100.1	88.6	77.0	69.4	57.8
80°	123.2	107.9	100.1	88.6	84.8	77.0	69.4	57.8	50.1	38.5	30.8
82.5°	84.8	73.1	65.5	57.8	53.9	50.1	42.4	34.6	27.0	23.1	19.2
85°	46.2	38.5	34.6	30.8	27.0	27.0	23.1	19.2	15.4	11.5	7.8
87.5°	15.4	11.5	11.5	11.5	11.5	7.8	7.8	7.8	3.9	3.9	3.9
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5
2.5°	2961.6	2961.6	2961.6	2957.8	2957.8	2957.8	2953.9	2969.4	2953.9	2950.1	2961.6
5°	2957.8	2950.1	2950.1	2950.1	2950.1	2946.2	2942.4	2950.1	2938.5	2934.6	2934.6
7.5°	2934.6	2930.9	2930.9	2927.0	2923.1	2919.2	2915.4	2919.2	2907.8	2903.9	2903.9
10°	2938.5	2930.9	2930.9	2919.2	2911.6	2900.0	2888.5	2892.2	2876.9	2865.4	2865.4
12.5°	2892.2	2873.0	2861.5	2850.0	2842.2	2838.4	2823.0	2830.8	2815.2	2811.4	2811.4
15°	2788.4	2765.2	2746.0	2738.2	2738.2	2730.5	2719.0	2734.4	2726.8	2730.5	2749.9
17.5°	2626.6	2615.0	2603.5	2599.6	2603.5	2611.1	2618.9	2642.0	2642.0	2653.5	2672.8
20°	2484.1	2476.4	2484.1	2484.1	2487.9	2503.4	2518.8	2538.0	2545.8	2557.2	2584.2
22.5°	2345.4	2345.4	2353.1	2364.6	2360.9	2387.8	2391.6	2426.2	2426.2	2449.4	2472.5
25°	2210.6	2210.6	2218.4	2222.2	2229.9	2245.2	2260.8	2287.6	2295.4	2318.5	2337.8
27.5°	2079.8	2075.9	2075.9	2079.8	2087.4	2106.6	2114.4	2145.1	2156.8	2172.1	2191.4
30°	1933.4	1929.5	1937.2	1944.9	1941.0	1960.2	1971.9	1995.0	2002.6	2018.1	2033.5
32.5°	1794.8	1794.8	1794.8	1802.4	1802.4	1817.8	1817.8	1844.8	1844.8	1856.4	1871.8
35°	1652.2	1652.2	1656.0	1659.9	1663.8	1667.6	1671.5	1686.9	1690.8	1694.6	1702.2
37.5°	1517.4	1513.5	1517.4	1517.4	1509.8	1525.1	1525.1	1540.5	1529.0	1540.5	1544.4
40°	1378.8	1378.8	1374.9	1374.9	1374.9	1382.6	1374.9	1386.5	1378.8	1386.5	1382.6
42.5°	1236.2	1236.2	1228.5	1236.2	1232.4	1232.4	1232.4	1240.1	1228.5	1236.2	1240.1
45°	1093.8	1089.9	1089.9	1086.0	1086.0	1086.0	1089.9	1089.9	1086.0	1093.8	1093.8
47.5°	955.1	951.2	951.2	951.2	951.2	955.1	943.6	951.2	943.6	943.6	943.6
50°	835.8	831.9	828.0	824.1	820.4	820.4	816.5	816.5	808.8	804.9	801.1
52.5°	720.2	716.4	708.6	708.6	704.8	700.9	689.4	689.4	677.9	674.0	674.0
55°	616.2	604.6	600.8	593.1	593.1	585.4	577.8	570.0	558.4	550.8	550.8
57.5°	519.9	508.4	500.6	496.9	493.0	485.2	469.9	466.0	450.6	446.8	442.9
60°	435.2	423.6	412.1	404.4	400.5	389.0	373.6	365.9	358.1	346.6	335.0
62.5°	354.4	342.8	327.4	323.5	315.8	304.2	292.8	281.1	273.5	261.9	254.1
65°	285.0	273.5	261.9	254.1	246.5	234.9	223.4	211.9	204.1	200.2	196.4
67.5°	231.1	215.6	204.1	200.2	192.6	184.9	173.2	169.5	161.8	161.8	161.8
70°	181.0	169.5	157.9	154.0	150.2	142.5	134.8	134.8	134.8	134.8	134.8
72.5°	134.8	127.1	115.5	111.6	107.9	104.0	96.2	100.1	96.2	96.2	96.2
75°	84.8	77.0	69.4	65.5	61.6	57.8	53.9	50.1	46.2	42.4	42.4
77.5°	46.2	38.5	34.6	30.8	30.8	27.0	23.1	23.1	19.2	19.2	19.2
80°	27.0	23.1	19.2	15.4	15.4	11.5	11.5	11.5	11.5	7.8	7.8
82.5°	15.4	11.5	7.8	7.8	7.8	7.8	3.9	3.9	3.9	3.9	3.9
85°	7.8	7.8	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	0.0
87.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	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	0.0	0.0	0.0



TEST NUMBER: P252409

CATALOG NUMBER: LE_6B50D010R EC6B30509035 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5	2965.5
2.5°	2942.4	2953.9	2942.4	2953.9	2953.9	2953.9	2953.9	2942.4
5°	2923.1	2930.9	2919.2	2927.0	2930.9	2927.0	2927.0	2915.4
7.5°	2888.5	2896.1	2884.6	2896.1	2900.0	2896.1	2892.2	2884.6
10°	2853.8	2857.6	2846.1	2853.8	2861.5	2861.5	2857.6	2846.1
12.5°	2799.9	2811.4	2799.9	2807.6	2815.2	2819.1	2819.1	2807.6
15°	2738.2	2757.5	2749.9	2761.4	2772.9	2776.8	2776.8	2772.9
17.5°	2676.6	2695.9	2684.4	2703.6	2715.1	2722.9	2726.8	2719.0
20°	2588.0	2611.1	2603.5	2618.9	2634.2	2645.9	2645.9	2634.2
22.5°	2472.5	2503.4	2499.5	2511.0	2530.2	2534.1	2541.9	2534.1
25°	2345.4	2368.5	2364.6	2376.2	2399.4	2399.4	2403.2	2403.2
27.5°	2199.1	2222.2	2218.4	2226.0	2241.5	2245.2	2249.1	2241.5
30°	2041.1	2052.8	2052.8	2064.2	2075.9	2079.8	2079.8	2068.1
32.5°	1867.9	1883.2	1891.0	1887.1	1898.6	1906.4	1902.5	1902.5
35°	1710.0	1713.9	1717.6	1721.5	1725.4	1733.1	1725.4	1721.5
37.5°	1540.5	1552.1	1544.4	1552.1	1559.8	1555.9	1552.1	1552.1
40°	1386.5	1390.2	1382.6	1390.2	1394.1	1394.1	1394.1	1386.5
42.5°	1232.4	1240.1	1232.4	1240.1	1240.1	1240.1	1240.1	1236.2
45°	1078.4	1086.0	1086.0	1089.9	1089.9	1086.0	1086.0	1086.0
47.5°	935.9	943.6	935.9	943.6	947.4	939.8	939.8	939.8
50°	801.1	797.2	797.2	801.1	801.1	801.1	801.1	797.2
52.5°	662.4	666.2	666.2	666.2	670.1	666.2	670.1	670.1
55°	543.0	543.0	543.0	546.9	543.0	543.0	546.9	550.8
57.5°	435.2	431.4	427.5	427.5	431.4	427.5	427.5	427.5
60°	335.0	331.2	327.4	327.4	327.4	327.4	327.4	323.5
62.5°	250.4	250.4	250.4	254.1	254.1	254.1	254.1	258.0
65°	200.2	200.2	200.2	200.2	200.2	200.2	200.2	204.1
67.5°	161.8	161.8	161.8	165.6	165.6	165.6	165.6	165.6
70°	134.8	134.8	138.6	134.8	138.6	138.6	138.6	138.6
72.5°	92.4	92.4	92.4	92.4	92.4	88.6	92.4	88.6
75°	38.5	38.5	38.5	38.5	38.5	38.5	38.5	34.6
77.5°	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
80°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
82.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.9	3.9	3.9	3.9	3.9	0.0	0.0	0.0
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)