

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: P252425

Luminaire Tested: **LE_6B60D010R EC6B60709727 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252425
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_6B60D010R EC6B60709727 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4821.2 lumens
Efficiency: N/A
Efficacy: 77.1 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

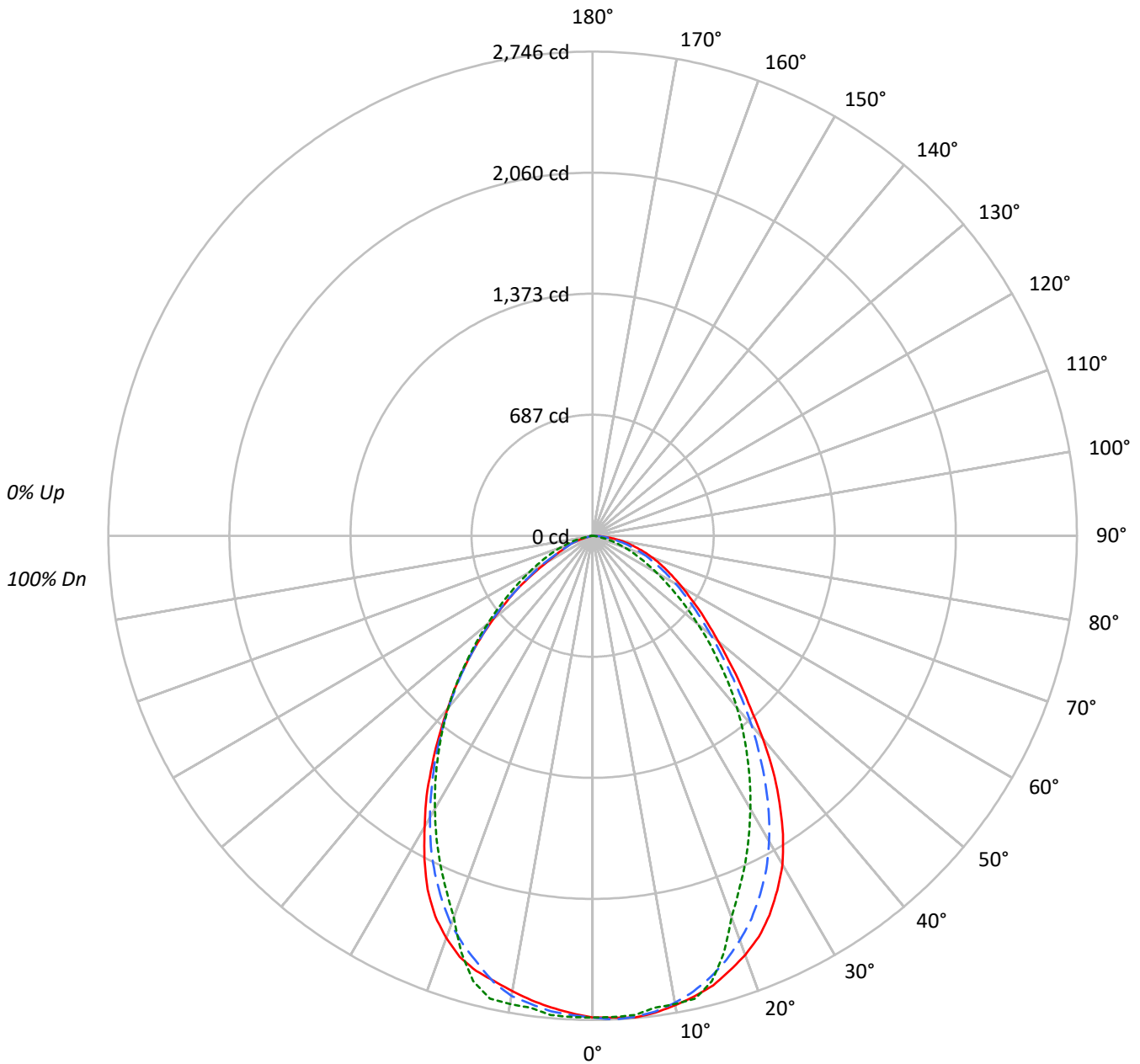
Input Watts (W): 62.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	178224	178224	178224
5°	179599	178669	175880
10°	179092	178615	173687
15°	178277	176595	172529
20°	175617	159857	168473
25°	170857	147353	159361
30°	162230	134696	143518
35°	147214	121784	126308
40°	127817	108467	108765
45°	109001	93288	92310
50°	94341	78863	74539
55°	84341	65767	57713
60°	76840	54619	38883
65°	71752	44907	29022
70°	68365	36548	24378
75°	64379	25938	8041
80°	61315	13338	2668
85°	50452	7935	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	258.0	5.4
10°-20°	721.5	15.0
20°-30°	995.9	20.7
30°-40°	1013.4	21.0
40°-50°	814.5	16.9
50°-60°	541.6	11.2
60°-70°	308.6	6.4
70°-80°	138.6	2.9
80°-90°	29.2	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°	1975.4	41.0
0°-40°	2988.8	62.0
0°-60°	4344.8	90.1
0°-90°	4821.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4821.2	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2732	2732	2732	2732	2732	
5°	2742	2739	2728	2707	2686	260
15°	2640	2590	2615	2512	2554	743
25°	2374	2246	2047	2114	2214	1088
35°	1848	1706	1529	1558	1586	1149
45°	1181	1110	1011	1000	1000	916
55°	742	692	578	514	507	666
65°	465	415	291	188	188	463
75°	255	213	103	43	32	273
85°	67	46	11	4	0	80
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°	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8
2.5°	2735.2	2749.5	2746.0	2742.4	2746.0	2742.4	2735.2	2735.2	2728.2	2728.2	2746.0
5°	2742.4	2749.5	2746.0	2742.4	2742.4	2746.0	2731.8	2731.8	2724.6	2721.1	2738.9
7.5°	2728.2	2738.9	2731.8	2731.8	2728.2	2731.8	2717.6	2717.6	2706.9	2703.4	2721.1
10°	2703.4	2717.6	2710.5	2710.5	2710.5	2703.4	2696.2	2692.8	2682.1	2678.5	2689.2
12.5°	2675.0	2685.6	2682.1	2675.0	2675.0	2675.0	2660.8	2657.2	2643.1	2636.0	2646.6
15°	2639.5	2646.6	2643.1	2639.5	2632.4	2632.4	2618.2	2611.1	2597.0	2582.8	2589.9
17.5°	2586.2	2597.0	2589.9	2586.2	2575.6	2575.6	2561.5	2554.4	2533.1	2518.9	2522.5
20°	2529.5	2533.1	2529.5	2522.5	2511.8	2508.2	2494.0	2479.9	2462.1	2444.4	2440.9
22.5°	2462.1	2465.6	2455.0	2448.0	2437.2	2433.8	2416.0	2405.4	2377.0	2355.8	2352.1
25°	2373.5	2377.0	2377.0	2359.2	2352.1	2345.0	2327.4	2309.6	2284.8	2256.4	2245.8
27.5°	2267.0	2277.6	2270.5	2252.9	2238.6	2235.1	2217.4	2203.1	2171.2	2146.4	2132.2
30°	2153.5	2149.9	2146.4	2135.8	2114.5	2110.9	2093.1	2075.4	2050.6	2018.6	2000.9
32.5°	2008.0	2008.0	2004.5	1993.9	1972.5	1965.5	1951.2	1930.0	1901.6	1876.8	1859.0
35°	1848.4	1851.9	1848.4	1827.1	1812.9	1805.8	1798.8	1773.9	1749.0	1720.6	1706.5
37.5°	1681.6	1671.0	1674.5	1656.8	1639.0	1646.1	1624.9	1614.2	1585.9	1564.5	1550.4
40°	1500.8	1507.8	1493.6	1486.5	1475.9	1465.2	1465.2	1447.5	1433.2	1408.5	1401.4
42.5°	1323.2	1334.0	1330.4	1323.2	1309.1	1312.6	1294.9	1287.9	1270.1	1259.5	1248.8
45°	1181.4	1181.4	1181.4	1174.2	1170.8	1163.6	1153.0	1142.4	1131.8	1117.5	1110.5
47.5°	1043.0	1043.0	1046.6	1039.5	1032.4	1028.9	1021.8	1021.8	1004.0	989.9	982.8
50°	929.5	929.5	929.5	922.4	915.4	915.4	908.2	901.1	890.5	879.9	872.8
52.5°	826.6	826.6	826.6	819.5	816.0	812.4	808.9	805.4	791.1	784.0	777.0
55°	741.5	737.9	737.9	734.4	727.2	727.2	723.8	716.6	706.0	695.4	691.8
57.5°	656.4	659.9	656.4	656.4	649.2	649.2	642.1	638.6	628.0	620.9	613.8
60°	588.9	588.9	588.9	585.4	578.2	581.9	574.8	571.1	560.5	549.9	542.8
62.5°	521.5	525.1	525.1	521.5	514.4	514.4	510.9	507.4	496.6	486.0	475.4
65°	464.8	464.8	464.8	461.2	457.6	457.6	454.1	450.6	439.9	425.8	415.1
67.5°	411.5	408.0	408.0	408.0	404.5	400.9	397.4	393.8	383.1	372.5	358.4
70°	358.4	358.4	358.4	354.8	347.6	351.2	347.6	344.1	333.5	322.9	312.2
72.5°	308.6	308.6	305.1	301.5	301.5	298.0	298.0	294.5	283.9	269.6	259.0
75°	255.4	255.4	255.4	255.4	248.4	251.9	244.8	241.2	234.1	223.5	212.9
77.5°	209.4	209.4	209.4	205.8	202.2	202.2	198.6	195.1	184.5	177.4	163.2
80°	163.2	163.2	163.2	163.2	159.6	156.1	152.5	149.0	141.9	131.2	120.6
82.5°	120.6	120.6	117.1	117.1	117.1	113.5	110.0	106.4	99.4	92.2	85.1
85°	67.4	71.0	71.0	63.9	67.4	63.9	63.9	56.8	56.8	49.6	46.1
87.5°	24.9	21.2	21.2	21.2	21.2	21.2	21.2	17.8	17.8	17.8	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8
2.5°	2731.8	2728.2	2742.4	2742.4	2721.1	2731.8	2735.2	2728.2	2728.2	2731.8	2721.1
5°	2724.6	2717.6	2731.8	2735.2	2714.0	2724.6	2728.2	2721.1	2724.6	2728.2	2714.0
7.5°	2699.9	2699.9	2710.5	2714.0	2692.8	2703.4	2703.4	2696.2	2699.9	2699.9	2689.2
10°	2675.0	2664.4	2675.0	2675.0	2657.2	2660.8	2667.9	2664.4	2678.5	2696.2	2696.2
12.5°	2628.9	2618.2	2636.0	2636.0	2625.4	2639.5	2657.2	2667.9	2682.1	2689.2	2667.9
15°	2572.1	2575.6	2607.6	2632.4	2621.8	2643.1	2660.8	2653.8	2636.0	2614.6	2582.8
17.5°	2497.6	2487.0	2515.4	2529.5	2515.4	2522.5	2536.6	2522.5	2494.0	2476.4	2433.8
20°	2412.5	2384.1	2384.1	2377.0	2352.1	2352.1	2348.6	2323.8	2313.1	2302.5	2284.8
22.5°	2316.6	2284.8	2274.1	2252.9	2231.5	2228.0	2217.4	2192.5	2178.4	2171.2	2149.9
25°	2206.8	2178.4	2160.6	2139.2	2107.4	2100.2	2089.6	2064.8	2057.8	2047.0	2029.2
27.5°	2093.1	2057.8	2032.9	2011.6	1983.1	1979.6	1958.4	1940.6	1926.4	1919.4	1905.1
30°	1961.9	1922.9	1905.1	1876.8	1855.5	1848.4	1830.6	1805.8	1795.1	1788.0	1777.4
32.5°	1816.5	1784.5	1766.8	1742.0	1713.5	1717.1	1695.9	1674.5	1667.5	1660.4	1649.8
35°	1674.5	1642.6	1621.4	1600.0	1582.2	1575.2	1561.0	1543.2	1532.6	1529.1	1522.0
37.5°	1518.4	1493.6	1475.9	1454.6	1440.4	1433.2	1426.2	1408.5	1401.4	1401.4	1387.1
40°	1365.9	1344.6	1330.4	1319.8	1302.0	1298.5	1291.4	1280.8	1277.1	1273.6	1263.0
42.5°	1227.5	1199.1	1188.5	1181.4	1170.8	1163.6	1160.1	1153.0	1149.5	1145.9	1135.2
45°	1096.2	1071.4	1060.8	1053.6	1043.0	1039.5	1036.0	1025.2	1018.2	1011.1	1007.5
47.5°	968.5	950.8	947.2	929.5	922.4	915.4	908.2	901.1	897.6	894.0	879.9
50°	858.5	847.9	830.1	819.5	812.4	808.9	794.8	784.0	780.5	777.0	766.2
52.5°	759.2	745.0	734.4	716.6	713.1	706.0	698.9	684.8	677.6	674.1	663.4
55°	670.5	659.9	645.8	631.5	620.9	617.2	606.6	592.5	585.4	578.2	571.1
57.5°	596.0	578.2	564.1	549.9	542.8	532.1	521.5	514.4	503.8	493.1	482.5
60°	525.1	510.9	493.1	479.0	471.9	464.8	450.6	439.9	429.2	418.6	408.0
62.5°	457.6	443.5	425.8	411.5	404.5	397.4	383.1	372.5	361.9	351.2	337.0
65°	397.4	383.1	369.0	354.8	347.6	340.6	326.4	312.2	301.5	290.9	276.8
67.5°	347.6	330.0	315.8	301.5	294.5	287.4	273.1	262.5	248.4	237.8	223.5
70°	294.5	280.2	269.6	255.4	248.4	241.2	227.0	212.9	202.2	191.6	177.4
72.5°	248.4	230.6	220.0	205.8	198.6	195.1	180.9	170.2	159.6	145.5	134.9
75°	198.6	184.5	170.2	159.6	152.5	149.0	134.9	124.1	113.5	102.9	92.2
77.5°	152.5	141.9	127.8	117.1	110.0	106.4	92.2	81.6	71.0	63.9	53.2
80°	113.5	99.4	92.2	81.6	78.0	71.0	63.9	53.2	46.1	35.5	28.4
82.5°	78.0	67.4	60.2	53.2	49.6	46.1	39.0	31.9	24.9	21.2	17.8
85°	42.6	35.5	31.9	28.4	24.9	24.9	21.2	17.8	14.2	10.6	7.1
87.5°	14.2	10.6	10.6	10.6	10.6	7.1	7.1	7.1	3.5	3.5	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8
2.5°	2728.2	2728.2	2728.2	2724.6	2724.6	2724.6	2721.1	2735.2	2721.1	2717.6	2728.2
5°	2724.6	2717.6	2717.6	2717.6	2717.6	2714.0	2710.5	2717.6	2706.9	2703.4	2703.4
7.5°	2703.4	2699.9	2699.9	2696.2	2692.8	2689.2	2685.6	2689.2	2678.5	2675.0	2675.0
10°	2706.9	2699.9	2699.9	2689.2	2682.1	2671.5	2660.8	2664.4	2650.1	2639.5	2639.5
12.5°	2664.4	2646.6	2636.0	2625.4	2618.2	2614.6	2600.5	2607.6	2593.4	2589.9	2589.9
15°	2568.6	2547.2	2529.5	2522.5	2522.5	2515.4	2504.8	2518.9	2511.8	2515.4	2533.1
17.5°	2419.5	2408.9	2398.2	2394.8	2398.2	2405.4	2412.5	2433.8	2433.8	2444.4	2462.1
20°	2288.2	2281.2	2288.2	2288.2	2291.9	2306.0	2320.2	2338.0	2345.0	2355.8	2380.5
22.5°	2160.6	2160.6	2167.6	2178.4	2174.8	2199.6	2203.1	2235.1	2235.1	2256.4	2277.6
25°	2036.4	2036.4	2043.5	2047.0	2054.1	2068.4	2082.5	2107.4	2114.5	2135.8	2153.5
27.5°	1915.8	1912.2	1912.2	1915.8	1922.9	1940.6	1947.8	1976.1	1986.8	2000.9	2018.6
30°	1781.0	1777.4	1784.5	1791.6	1788.0	1805.8	1816.5	1837.8	1844.9	1859.0	1873.2
32.5°	1653.2	1653.2	1653.2	1660.4	1660.4	1674.5	1674.5	1699.4	1699.4	1710.0	1724.2
35°	1522.0	1522.0	1525.5	1529.1	1532.6	1536.1	1539.8	1553.9	1557.5	1561.0	1568.1
37.5°	1397.8	1394.2	1397.8	1397.8	1390.8	1404.9	1404.9	1419.1	1408.5	1419.1	1422.6
40°	1270.1	1270.1	1266.5	1266.5	1266.5	1273.6	1266.5	1277.1	1270.1	1277.1	1273.6
42.5°	1138.9	1138.9	1131.8	1138.9	1135.2	1135.2	1135.2	1142.4	1131.8	1138.9	1142.4
45°	1007.5	1004.0	1004.0	1000.5	1000.5	1000.5	1004.0	1004.0	1000.5	1007.5	1007.5
47.5°	879.9	876.2	876.2	876.2	876.2	879.9	869.2	876.2	869.2	869.2	869.2
50°	769.9	766.2	762.8	759.2	755.6	755.6	752.1	752.1	745.0	741.5	737.9
52.5°	663.4	659.9	652.8	652.8	649.2	645.8	635.0	635.0	624.4	620.9	620.9
55°	567.6	557.0	553.5	546.4	546.4	539.2	532.1	525.1	514.4	507.4	507.4
57.5°	479.0	468.2	461.2	457.6	454.1	447.0	432.9	429.2	415.1	411.5	408.0
60°	400.9	390.2	379.6	372.5	369.0	358.4	344.1	337.0	330.0	319.2	308.6
62.5°	326.4	315.8	301.5	298.0	290.9	280.2	269.6	259.0	251.9	241.2	234.1
65°	262.5	251.9	241.2	234.1	227.0	216.4	205.8	195.1	188.0	184.5	180.9
67.5°	212.9	198.6	188.0	184.5	177.4	170.2	159.6	156.1	149.0	149.0	149.0
70°	166.8	156.1	145.5	141.9	138.4	131.2	124.1	124.1	124.1	124.1	124.1
72.5°	124.1	117.1	106.4	102.9	99.4	95.8	88.8	92.2	88.8	88.8	88.8
75°	78.0	71.0	63.9	60.2	56.8	53.2	49.6	46.1	42.6	39.0	39.0
77.5°	42.6	35.5	31.9	28.4	28.4	24.9	21.2	21.2	17.8	17.8	17.8
80°	24.9	21.2	17.8	14.2	14.2	10.6	10.6	10.6	10.6	7.1	7.1
82.5°	14.2	10.6	7.1	7.1	7.1	7.1	3.5	3.5	3.5	3.5	3.5
85°	7.1	7.1	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	0.0
87.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	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: P252425

CATALOG NUMBER: LE_6B60D010R EC6B60709727 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8	2731.8
2.5°	2710.5	2721.1	2710.5	2721.1	2721.1	2721.1	2721.1	2710.5
5°	2692.8	2699.9	2689.2	2696.2	2699.9	2696.2	2696.2	2685.6
7.5°	2660.8	2667.9	2657.2	2667.9	2671.5	2667.9	2664.4	2657.2
10°	2628.9	2632.4	2621.8	2628.9	2636.0	2636.0	2632.4	2621.8
12.5°	2579.2	2589.9	2579.2	2586.2	2593.4	2597.0	2597.0	2586.2
15°	2522.5	2540.1	2533.1	2543.8	2554.4	2557.9	2557.9	2554.4
17.5°	2465.6	2483.4	2472.8	2490.5	2501.1	2508.2	2511.8	2504.8
20°	2384.1	2405.4	2398.2	2412.5	2426.6	2437.2	2437.2	2426.6
22.5°	2277.6	2306.0	2302.5	2313.1	2330.9	2334.4	2341.5	2334.4
25°	2160.6	2181.9	2178.4	2189.0	2210.2	2210.2	2213.8	2213.8
27.5°	2025.8	2047.0	2043.5	2050.6	2064.8	2068.4	2071.9	2064.8
30°	1880.2	1891.0	1891.0	1901.6	1912.2	1915.8	1915.8	1905.1
32.5°	1720.6	1734.9	1742.0	1738.4	1749.0	1756.1	1752.6	1752.6
35°	1575.2	1578.8	1582.2	1585.9	1589.4	1596.5	1589.4	1585.9
37.5°	1419.1	1429.8	1422.6	1429.8	1436.9	1433.2	1429.8	1429.8
40°	1277.1	1280.8	1273.6	1280.8	1284.2	1284.2	1284.2	1277.1
42.5°	1135.2	1142.4	1135.2	1142.4	1142.4	1142.4	1142.4	1138.9
45°	993.4	1000.5	1000.5	1004.0	1004.0	1000.5	1000.5	1000.5
47.5°	862.1	869.2	862.1	869.2	872.8	865.6	865.6	865.6
50°	737.9	734.4	734.4	737.9	737.9	737.9	737.9	734.4
52.5°	610.2	613.8	613.8	613.8	617.2	613.8	617.2	617.2
55°	500.2	500.2	500.2	503.8	500.2	500.2	503.8	507.4
57.5°	400.9	397.4	393.8	393.8	397.4	393.8	393.8	393.8
60°	308.6	305.1	301.5	301.5	301.5	301.5	301.5	298.0
62.5°	230.6	230.6	230.6	234.1	234.1	234.1	234.1	237.8
65°	184.5	184.5	184.5	184.5	184.5	184.5	184.5	188.0
67.5°	149.0	149.0	149.0	152.5	152.5	152.5	152.5	152.5
70°	124.1	124.1	127.8	124.1	127.8	127.8	127.8	127.8
72.5°	85.1	85.1	85.1	85.1	85.1	81.6	85.1	81.6
75°	35.5	35.5	35.5	35.5	35.5	35.5	35.5	31.9
77.5°	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
80°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
82.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.5	3.5	3.5	3.5	3.5	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)