

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: P252410

Luminaire Tested: **LE_6B50D010R EC6B30509040 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252410
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 EC6B30509040 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5242.5 lumens
Efficiency: N/A
Efficacy: 89.2 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

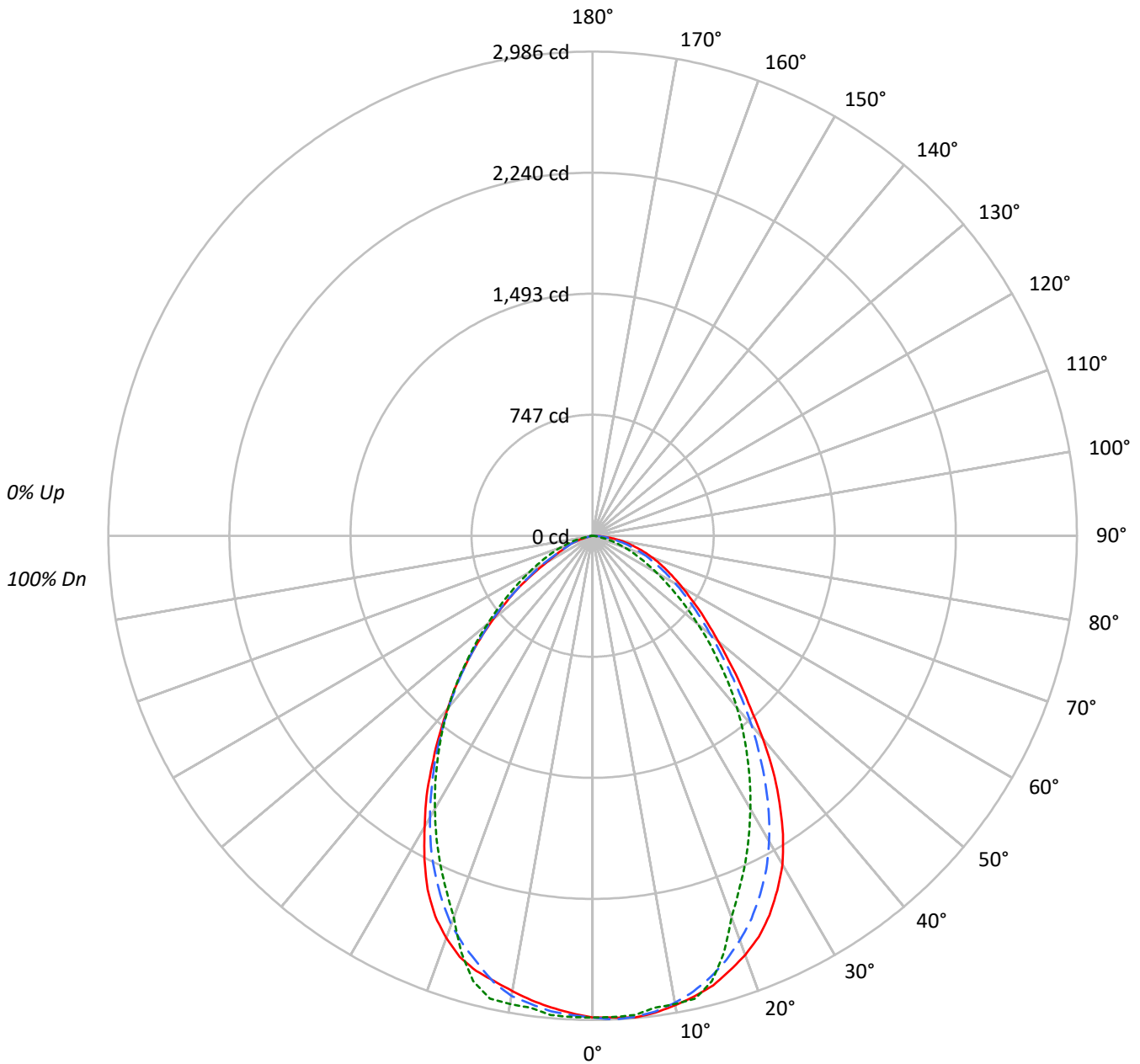
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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°	193797	193797	193797
5°	195291	194282	191243
10°	194740	194230	188864
15°	193852	192029	187598
20°	190961	173819	183192
25°	185786	160232	173282
30°	176401	146463	156061
35°	160077	132416	137338
40°	138982	117946	118278
45°	118523	101444	100374
50°	102593	85754	81045
55°	91700	71522	62741
60°	83560	59395	42276
65°	78020	48843	31569
70°	74317	39752	26495
75°	70025	28207	8772
80°	66688	14502	2931
85°	54794	8683	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.5	5.4
10°-20°	784.5	15.0
20°-30°	1082.9	20.7
30°-40°	1102.0	21.0
40°-50°	885.6	16.9
50°-60°	588.9	11.2
60°-70°	335.6	6.4
70°-80°	150.7	2.9
80°-90°	31.8	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°	2148.0	41.0
0°-40°	3249.9	62.0
0°-60°	4724.5	90.1
0°-90°	5242.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5242.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2970	2970	2970	2970	2970	
5°	2982	2978	2967	2944	2920	283
15°	2870	2816	2843	2731	2778	808
25°	2581	2442	2226	2299	2407	1183
35°	2010	1856	1663	1694	1724	1249
45°	1285	1208	1100	1088	1088	996
55°	806	752	629	559	552	724
65°	505	451	316	204	204	503
75°	278	232	112	46	35	297
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°	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5
2.5°	2974.2	2989.8	2985.9	2982.0	2985.9	2982.0	2974.2	2974.2	2966.6	2966.6	2985.9
5°	2982.0	2989.8	2985.9	2982.0	2982.0	2985.9	2970.5	2970.5	2962.8	2958.9	2978.1
7.5°	2966.6	2978.1	2970.5	2970.5	2966.6	2970.5	2955.0	2955.0	2943.5	2939.6	2958.9
10°	2939.6	2955.0	2947.2	2947.2	2947.2	2939.6	2931.9	2928.0	2916.4	2912.6	2924.1
12.5°	2908.8	2920.2	2916.4	2908.8	2908.8	2908.8	2893.2	2889.4	2874.0	2866.2	2877.9
15°	2870.1	2877.9	2874.0	2870.1	2862.4	2862.4	2847.0	2839.2	2823.9	2808.4	2816.1
17.5°	2812.2	2823.9	2816.1	2812.2	2800.8	2800.8	2785.2	2777.5	2754.4	2739.0	2742.9
20°	2750.5	2754.4	2750.5	2742.9	2731.2	2727.4	2712.0	2696.5	2677.2	2658.0	2654.1
22.5°	2677.2	2681.1	2669.5	2661.9	2650.2	2646.4	2627.1	2615.5	2584.6	2561.5	2557.6
25°	2580.9	2584.6	2584.6	2565.4	2557.6	2550.0	2530.6	2511.4	2484.4	2453.5	2441.9
27.5°	2465.1	2476.6	2469.0	2449.6	2434.2	2430.4	2411.1	2395.6	2360.9	2333.9	2318.5
30°	2341.6	2337.8	2333.9	2322.4	2299.2	2295.4	2276.0	2256.8	2229.8	2195.0	2175.8
32.5°	2183.5	2183.5	2179.6	2168.0	2144.9	2137.1	2121.8	2098.6	2067.8	2040.8	2021.5
35°	2009.9	2013.8	2009.9	1986.8	1971.2	1963.6	1955.9	1928.9	1901.9	1871.0	1855.6
37.5°	1828.5	1817.0	1820.9	1801.5	1782.2	1790.0	1766.9	1755.2	1724.4	1701.2	1685.9
40°	1631.9	1639.5	1624.1	1616.4	1604.8	1593.2	1593.2	1574.0	1558.5	1531.5	1523.8
42.5°	1438.9	1450.5	1446.6	1438.9	1423.5	1427.4	1408.1	1400.4	1381.1	1369.5	1357.9
45°	1284.6	1284.6	1284.6	1276.9	1273.0	1265.4	1253.8	1242.1	1230.6	1215.1	1207.5
47.5°	1134.1	1134.1	1138.0	1130.2	1122.6	1118.8	1111.0	1111.0	1091.8	1076.2	1068.6
50°	1010.8	1010.8	1010.8	1003.0	995.2	995.2	987.6	979.9	968.2	956.8	949.0
52.5°	898.9	898.9	898.9	891.1	887.2	883.4	879.5	875.8	860.2	852.5	844.9
55°	806.2	802.4	802.4	798.5	790.9	790.9	787.0	779.2	767.6	756.1	752.2
57.5°	713.6	717.5	713.6	713.6	706.0	706.0	698.2	694.4	682.9	675.1	667.4
60°	640.4	640.4	640.4	636.5	628.8	632.6	625.0	621.1	609.5	598.0	590.2
62.5°	567.1	571.0	571.0	567.1	559.4	559.4	555.5	551.6	540.1	528.5	516.9
65°	505.4	505.4	505.4	501.5	497.6	497.6	493.8	489.9	478.4	462.9	451.4
67.5°	447.5	443.6	443.6	443.6	439.8	435.9	432.1	428.2	416.6	405.0	389.6
70°	389.6	389.6	389.6	385.8	378.0	381.9	378.0	374.2	362.6	351.0	339.5
72.5°	335.6	335.6	331.8	327.9	327.9	324.0	324.0	320.2	308.6	293.1	281.6
75°	277.8	277.8	277.8	277.8	270.0	273.9	266.1	262.4	254.6	243.0	231.5
77.5°	227.6	227.6	227.6	223.8	219.9	219.9	216.0	212.1	200.6	192.9	177.5
80°	177.5	177.5	177.5	177.5	173.6	169.8	165.9	162.0	154.2	142.8	131.1
82.5°	131.1	131.1	127.2	127.2	127.2	123.5	119.6	115.8	108.0	100.2	92.6
85°	73.2	77.1	77.1	69.5	73.2	69.5	69.5	61.8	61.8	54.0	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°	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5
2.5°	2970.5	2966.6	2982.0	2982.0	2958.9	2970.5	2974.2	2966.6	2966.6	2970.5	2958.9
5°	2962.8	2955.0	2970.5	2974.2	2951.1	2962.8	2966.6	2958.9	2962.8	2966.6	2951.1
7.5°	2935.8	2935.8	2947.2	2951.1	2928.0	2939.6	2939.6	2931.9	2935.8	2935.8	2924.1
10°	2908.8	2897.1	2908.8	2908.8	2889.4	2893.2	2901.0	2897.1	2912.6	2931.9	2931.9
12.5°	2858.6	2847.0	2866.2	2866.2	2854.8	2870.1	2889.4	2901.0	2916.4	2924.1	2901.0
15°	2796.9	2800.8	2835.4	2862.4	2850.9	2874.0	2893.2	2885.6	2866.2	2843.1	2808.4
17.5°	2715.9	2704.2	2735.1	2750.5	2735.1	2742.9	2758.2	2742.9	2712.0	2692.8	2646.4
20°	2623.2	2592.4	2592.4	2584.6	2557.6	2557.6	2553.8	2526.8	2515.2	2503.6	2484.4
22.5°	2519.1	2484.4	2472.8	2449.6	2426.5	2422.6	2411.1	2384.1	2368.6	2360.9	2337.8
25°	2399.5	2368.6	2349.4	2326.2	2291.5	2283.8	2272.2	2245.2	2237.5	2225.9	2206.6
27.5°	2276.0	2237.5	2210.5	2187.4	2156.5	2152.6	2129.5	2110.1	2094.8	2087.0	2071.6
30°	2133.4	2090.9	2071.6	2040.8	2017.6	2009.9	1990.6	1963.6	1952.0	1944.2	1932.8
32.5°	1975.1	1940.4	1921.1	1894.1	1863.2	1867.1	1844.0	1820.9	1813.1	1805.4	1793.9
35°	1820.9	1786.1	1763.0	1739.9	1720.5	1712.9	1697.4	1678.1	1666.5	1662.6	1655.0
37.5°	1651.1	1624.1	1604.8	1581.6	1566.2	1558.5	1550.8	1531.5	1523.8	1523.8	1508.4
40°	1485.2	1462.1	1446.6	1435.1	1415.8	1411.9	1404.2	1392.6	1388.8	1384.9	1373.4
42.5°	1334.8	1303.9	1292.4	1284.6	1273.0	1265.4	1261.5	1253.8	1249.9	1246.0	1234.5
45°	1192.0	1165.0	1153.5	1145.8	1134.1	1130.2	1126.5	1114.9	1107.1	1099.5	1095.6
47.5°	1053.1	1033.9	1030.0	1010.8	1003.0	995.2	987.6	979.9	976.0	972.1	956.8
50°	933.6	922.0	902.8	891.1	883.4	879.5	864.1	852.5	848.8	844.9	833.2
52.5°	825.5	810.1	798.5	779.2	775.4	767.6	760.0	744.5	736.9	733.0	721.4
55°	729.1	717.5	702.1	686.6	675.1	671.2	659.6	644.2	636.5	628.8	621.1
57.5°	648.1	628.8	613.4	598.0	590.2	578.6	567.1	559.4	547.8	536.2	524.6
60°	571.0	555.5	536.2	520.8	513.1	505.4	489.9	478.4	466.8	455.2	443.6
62.5°	497.6	482.2	462.9	447.5	439.8	432.1	416.6	405.0	393.5	381.9	366.5
65°	432.1	416.6	401.2	385.8	378.0	370.4	354.9	339.5	327.9	316.4	300.9
67.5°	378.0	358.8	343.4	327.9	320.2	312.5	297.0	285.5	270.0	258.5	243.0
70°	320.2	304.8	293.1	277.8	270.0	262.4	246.9	231.5	219.9	208.4	192.9
72.5°	270.0	250.8	239.1	223.8	216.0	212.1	196.8	185.1	173.6	158.1	146.6
75°	216.0	200.6	185.1	173.6	165.9	162.0	146.6	135.0	123.5	111.9	100.2
77.5°	165.9	154.2	138.9	127.2	119.6	115.8	100.2	88.8	77.1	69.5	57.9
80°	123.5	108.0	100.2	88.8	84.9	77.1	69.5	57.9	50.1	38.6	30.9
82.5°	84.9	73.2	65.6	57.9	54.0	50.1	42.4	34.8	27.0	23.1	19.2
85°	46.2	38.6	34.8	30.9	27.0	27.0	23.1	19.2	15.4	11.6	7.8
87.5°	15.4	11.6	11.6	11.6	11.6	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°	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5
2.5°	2966.6	2966.6	2966.6	2962.8	2962.8	2962.8	2958.9	2974.2	2958.9	2955.0	2966.6
5°	2962.8	2955.0	2955.0	2955.0	2955.0	2951.1	2947.2	2955.0	2943.5	2939.6	2939.6
7.5°	2939.6	2935.8	2935.8	2931.9	2928.0	2924.1	2920.2	2924.1	2912.6	2908.8	2908.8
10°	2943.5	2935.8	2935.8	2924.1	2916.4	2904.9	2893.2	2897.1	2881.8	2870.1	2870.1
12.5°	2897.1	2877.9	2866.2	2854.8	2847.0	2843.1	2827.8	2835.4	2820.0	2816.1	2816.1
15°	2793.0	2769.9	2750.5	2742.9	2742.9	2735.1	2723.5	2739.0	2731.2	2735.1	2754.4
17.5°	2631.0	2619.4	2607.9	2604.0	2607.9	2615.5	2623.2	2646.4	2646.4	2658.0	2677.2
20°	2488.2	2480.5	2488.2	2488.2	2492.1	2507.5	2523.0	2542.2	2550.0	2561.5	2588.5
22.5°	2349.4	2349.4	2357.1	2368.6	2364.8	2391.8	2395.6	2430.4	2430.4	2453.5	2476.6
25°	2214.4	2214.4	2222.0	2225.9	2233.6	2249.0	2264.5	2291.5	2299.2	2322.4	2341.6
27.5°	2083.1	2079.2	2079.2	2083.1	2090.9	2110.1	2117.9	2148.8	2160.4	2175.8	2195.0
30°	1936.6	1932.8	1940.4	1948.1	1944.2	1963.6	1975.1	1998.2	2006.0	2021.5	2036.9
32.5°	1797.8	1797.8	1797.8	1805.4	1805.4	1820.9	1820.9	1847.9	1847.9	1859.4	1874.9
35°	1655.0	1655.0	1658.9	1662.6	1666.5	1670.4	1674.2	1689.6	1693.5	1697.4	1705.1
37.5°	1520.0	1516.1	1520.0	1520.0	1512.2	1527.6	1527.6	1543.1	1531.5	1543.1	1547.0
40°	1381.1	1381.1	1377.2	1377.2	1377.2	1384.9	1377.2	1388.8	1381.1	1388.8	1384.9
42.5°	1238.4	1238.4	1230.6	1238.4	1234.5	1234.5	1234.5	1242.1	1230.6	1238.4	1242.1
45°	1095.6	1091.8	1091.8	1087.9	1087.9	1087.9	1091.8	1091.8	1087.9	1095.6	1095.6
47.5°	956.8	952.9	952.9	952.9	952.9	956.8	945.1	952.9	945.1	945.1	945.1
50°	837.1	833.2	829.4	825.5	821.8	821.8	817.9	817.9	810.1	806.2	802.4
52.5°	721.4	717.5	709.9	709.9	706.0	702.1	690.5	690.5	679.0	675.1	675.1
55°	617.2	605.6	601.8	594.1	594.1	586.4	578.6	571.0	559.4	551.6	551.6
57.5°	520.8	509.2	501.5	497.6	493.8	486.1	470.6	466.8	451.4	447.5	443.6
60°	435.9	424.4	412.8	405.0	401.2	389.6	374.2	366.5	358.8	347.2	335.6
62.5°	354.9	343.4	327.9	324.0	316.4	304.8	293.1	281.6	273.9	262.4	254.6
65°	285.5	273.9	262.4	254.6	246.9	235.4	223.8	212.1	204.5	200.6	196.8
67.5°	231.5	216.0	204.5	200.6	192.9	185.1	173.6	169.8	162.0	162.0	162.0
70°	181.4	169.8	158.1	154.2	150.5	142.8	135.0	135.0	135.0	135.0	135.0
72.5°	135.0	127.2	115.8	111.9	108.0	104.1	96.5	100.2	96.5	96.5	96.5
75°	84.9	77.1	69.5	65.6	61.8	57.9	54.0	50.1	46.2	42.4	42.4
77.5°	46.2	38.6	34.8	30.9	30.9	27.0	23.1	23.1	19.2	19.2	19.2
80°	27.0	23.1	19.2	15.4	15.4	11.6	11.6	11.6	11.6	7.8	7.8
82.5°	15.4	11.6	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: P252410

CATALOG NUMBER: LE_6B50D010R EC6B30509040 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5	2970.5
2.5°	2947.2	2958.9	2947.2	2958.9	2958.9	2958.9	2958.9	2947.2
5°	2928.0	2935.8	2924.1	2931.9	2935.8	2931.9	2931.9	2920.2
7.5°	2893.2	2901.0	2889.4	2901.0	2904.9	2901.0	2897.1	2889.4
10°	2858.6	2862.4	2850.9	2858.6	2866.2	2866.2	2862.4	2850.9
12.5°	2804.5	2816.1	2804.5	2812.2	2820.0	2823.9	2823.9	2812.2
15°	2742.9	2762.1	2754.4	2766.0	2777.5	2781.4	2781.4	2777.5
17.5°	2681.1	2700.4	2688.9	2708.1	2719.8	2727.4	2731.2	2723.5
20°	2592.4	2615.5	2607.9	2623.2	2638.6	2650.2	2650.2	2638.6
22.5°	2476.6	2507.5	2503.6	2515.2	2534.5	2538.4	2546.1	2538.4
25°	2349.4	2372.5	2368.6	2380.2	2403.4	2403.4	2407.2	2407.2
27.5°	2202.8	2225.9	2222.0	2229.8	2245.2	2249.0	2252.9	2245.2
30°	2044.6	2056.1	2056.1	2067.8	2079.2	2083.1	2083.1	2071.6
32.5°	1871.0	1886.4	1894.1	1890.2	1901.9	1909.6	1905.8	1905.8
35°	1712.9	1716.6	1720.5	1724.4	1728.2	1736.0	1728.2	1724.4
37.5°	1543.1	1554.6	1547.0	1554.6	1562.4	1558.5	1554.6	1554.6
40°	1388.8	1392.6	1384.9	1392.6	1396.5	1396.5	1396.5	1388.8
42.5°	1234.5	1242.1	1234.5	1242.1	1242.1	1242.1	1242.1	1238.4
45°	1080.1	1087.9	1087.9	1091.8	1091.8	1087.9	1087.9	1087.9
47.5°	937.4	945.1	937.4	945.1	949.0	941.2	941.2	941.2
50°	802.4	798.5	798.5	802.4	802.4	802.4	802.4	798.5
52.5°	663.5	667.4	667.4	667.4	671.2	667.4	671.2	671.2
55°	544.0	544.0	544.0	547.8	544.0	544.0	547.8	551.6
57.5°	435.9	432.1	428.2	428.2	432.1	428.2	428.2	428.2
60°	335.6	331.8	327.9	327.9	327.9	327.9	327.9	324.0
62.5°	250.8	250.8	250.8	254.6	254.6	254.6	254.6	258.5
65°	200.6	200.6	200.6	200.6	200.6	200.6	200.6	204.5
67.5°	162.0	162.0	162.0	165.9	165.9	165.9	165.9	165.9
70°	135.0	135.0	138.9	135.0	138.9	138.9	138.9	138.9
72.5°	92.6	92.6	92.6	92.6	92.6	88.8	92.6	88.8
75°	38.6	38.6	38.6	38.6	38.6	38.6	38.6	34.8
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)