

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: P252191

Luminaire Tested: **LE_6B40D010 EC6B30509727 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252191
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B40D010 EC6B30509727 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE 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: 4747.5 lumens
Efficiency: N/A
Efficacy: 110.4 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

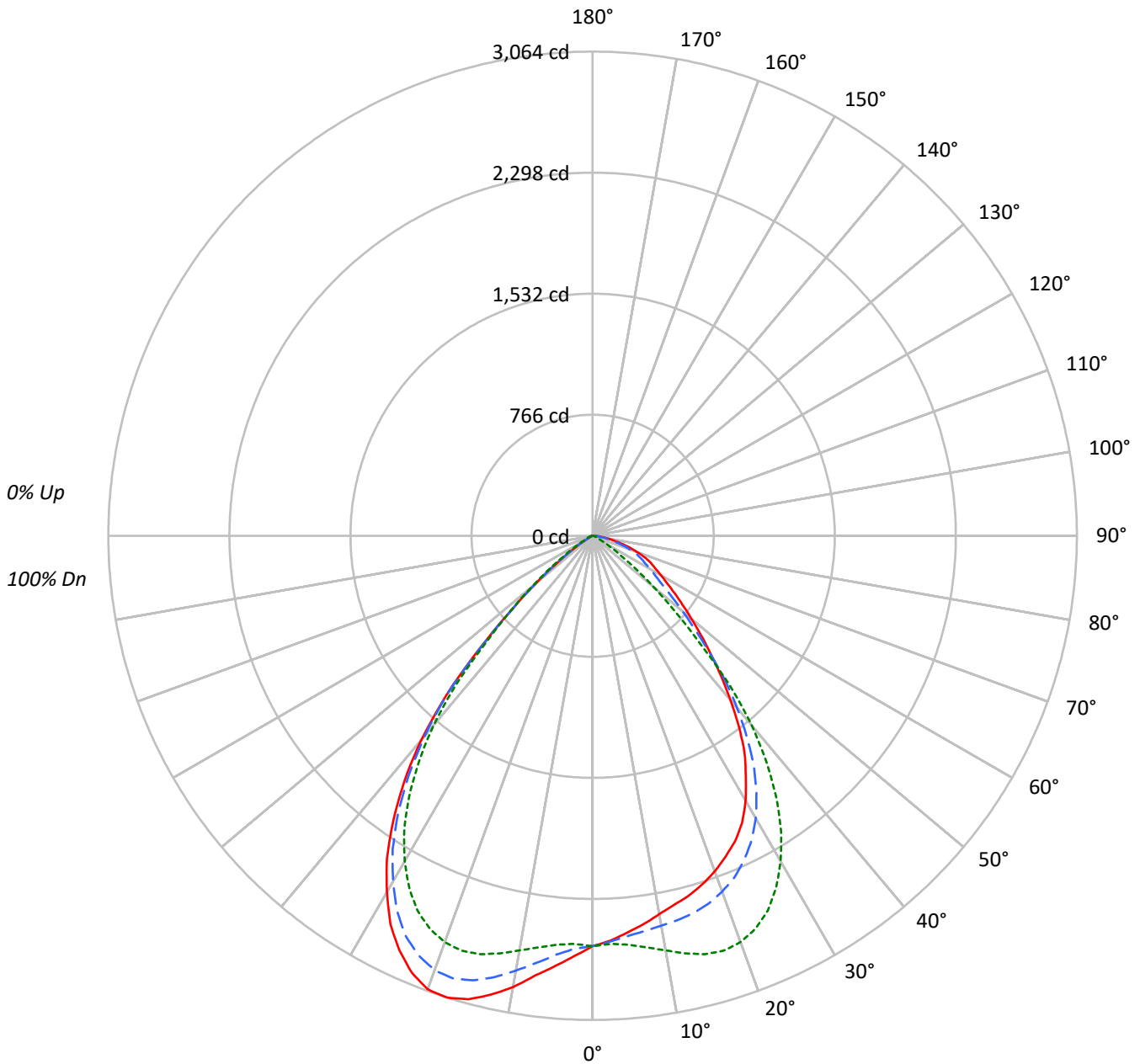
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90								
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80								
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72								
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65								
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58								
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53								
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48								
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44								
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40								
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	169443	169443	169443
5°	165047	170090	179043
10°	161040	176495	192130
15°	159156	185146	205112
20°	156879	189968	212039
25°	153537	188572	208238
30°	145906	179203	196033
35°	133484	161566	175018
40°	115468	133437	143589
45°	97357	87513	93925
50°	82659	50657	47622
55°	71749	24284	18358
60°	64797	11339	4541
65°	62860	6515	1528
70°	56367	5227	1431
75°	46331	3756	630
80°	34527	1879	0
85°	29792	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.9	5.3
10°-20°	764.6	16.1
20°-30°	1168.2	24.6
30°-40°	1221.8	25.7
40°-50°	792.6	16.7
50°-60°	314.7	6.6
60°-70°	149.3	3.1
70°-80°	71.0	1.5
80°-90°	14.5	0.3
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°	2183.6	46.0
0°-40°	3405.4	71.7
0°-60°	4512.7	95.1
0°-90°	4747.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4747.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2597	2597	2597	2597	2597	
5°	2520	2543	2597	2662	2734	238
15°	2356	2471	2741	2913	3037	664
25°	2133	2267	2620	2796	2893	977
35°	1676	1778	2029	2148	2198	1036
45°	1055	1045	948	1006	1018	821
55°	631	536	214	166	161	571
65°	407	338	42	10	10	398
75°	184	149	15	5	2	198
85°	40	25	0	0	0	46
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°	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2
2.5°	2565.0	2570.0	2542.6	2535.1	2555.0	2562.5	2565.0	2557.5	2560.0	2570.0	2570.0
5°	2520.2	2525.2	2500.4	2493.0	2512.9	2517.8	2525.2	2522.8	2530.2	2545.1	2542.6
7.5°	2478.1	2485.5	2458.2	2448.2	2473.1	2485.5	2490.5	2490.5	2500.4	2520.2	2522.8
10°	2430.9	2440.9	2416.0	2411.0	2438.4	2450.8	2453.2	2458.2	2473.1	2500.4	2505.4
12.5°	2391.1	2401.1	2383.8	2376.2	2406.1	2418.5	2423.5	2433.4	2450.8	2485.5	2490.5
15°	2356.4	2363.9	2344.0	2339.0	2368.9	2383.8	2386.2	2401.1	2423.5	2463.1	2470.6
17.5°	2311.8	2316.6	2301.8	2296.8	2326.6	2341.5	2344.0	2361.4	2388.6	2428.4	2440.9
20°	2259.6	2264.5	2249.6	2244.6	2274.5	2291.9	2294.4	2309.2	2341.5	2383.8	2396.1
22.5°	2197.5	2207.4	2190.0	2185.1	2214.9	2229.8	2237.2	2249.6	2281.9	2324.1	2341.5
25°	2132.9	2132.9	2120.5	2118.0	2145.4	2162.8	2160.2	2177.6	2209.9	2252.1	2267.0
27.5°	2048.5	2046.0	2033.6	2031.1	2060.9	2075.9	2070.9	2088.2	2118.0	2160.2	2175.1
30°	1936.8	1941.8	1924.4	1919.4	1944.2	1969.0	1966.6	1984.0	2013.8	2053.5	2063.4
32.5°	1802.6	1807.6	1805.1	1797.8	1820.1	1832.5	1839.9	1852.4	1877.1	1919.4	1929.4
35°	1676.0	1668.6	1658.6	1658.6	1681.0	1700.9	1693.4	1708.4	1733.1	1775.4	1777.9
37.5°	1519.6	1517.1	1512.1	1507.2	1532.0	1537.0	1539.5	1549.4	1571.8	1606.5	1601.5
40°	1355.8	1358.2	1355.8	1345.8	1360.8	1380.6	1378.1	1383.0	1402.9	1427.8	1420.2
42.5°	1201.8	1201.8	1201.8	1191.9	1209.2	1219.1	1224.1	1221.6	1226.6	1249.0	1239.0
45°	1055.2	1057.8	1055.2	1052.8	1055.2	1060.2	1055.2	1052.8	1052.8	1060.2	1045.4
47.5°	928.6	928.6	921.2	913.8	921.2	923.8	916.2	908.8	906.2	903.9	879.0
50°	814.4	812.0	809.5	797.0	804.5	807.0	797.0	792.1	782.1	769.8	740.0
52.5°	715.1	712.6	710.1	697.8	702.8	705.1	695.2	685.4	672.9	663.0	625.8
55°	630.8	628.2	628.2	620.8	615.8	620.8	610.9	603.4	586.0	573.6	536.4
57.5°	558.6	558.6	553.8	546.2	548.8	548.8	538.9	528.9	514.0	499.1	469.2
60°	496.6	496.6	496.6	489.1	489.1	489.1	484.2	474.2	461.9	447.0	417.1
62.5°	447.0	447.0	444.5	437.0	439.5	439.5	434.5	424.6	412.1	402.2	372.5
65°	407.2	407.2	407.2	399.8	399.8	402.2	397.2	387.4	377.4	365.0	337.8
67.5°	357.5	355.1	355.1	350.1	352.6	355.1	350.1	342.6	330.2	322.8	298.0
70°	295.5	298.0	300.5	293.0	295.5	295.5	293.0	285.5	278.1	270.6	248.2
72.5°	240.9	240.9	238.4	235.9	235.9	238.4	233.4	226.0	221.0	216.0	198.6
75°	183.8	181.2	183.8	178.8	178.8	178.8	173.9	171.4	168.9	161.4	149.0
77.5°	134.1	131.6	131.6	126.6	129.1	129.1	126.6	121.6	116.8	114.2	104.2
80°	91.9	91.9	91.9	89.4	89.4	86.9	86.9	84.4	79.5	77.0	72.0
82.5°	62.1	62.1	62.1	59.6	59.6	59.6	57.1	54.6	52.1	49.6	44.8
85°	39.8	39.8	39.8	37.2	37.2	37.2	34.8	34.8	32.2	29.8	24.9
87.5°	22.4	22.4	22.4	19.9	19.9	19.9	19.9	19.9	17.4	14.9	12.4
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°	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2
2.5°	2587.4	2552.5	2574.9	2574.9	2567.5	2587.4	2599.8	2609.6	2607.2	2584.9	2582.4
5°	2567.5	2537.6	2562.5	2565.0	2557.5	2584.9	2602.2	2614.6	2617.1	2597.2	2599.8
7.5°	2552.5	2527.8	2560.0	2570.0	2567.5	2592.2	2612.1	2632.0	2642.0	2627.0	2629.5
10°	2545.1	2525.2	2560.0	2574.9	2577.4	2604.8	2634.5	2661.9	2674.2	2664.2	2671.8
12.5°	2535.1	2522.8	2562.5	2584.9	2594.8	2622.1	2659.4	2691.6	2711.5	2706.5	2721.4
15°	2525.2	2515.4	2562.5	2594.8	2607.2	2632.0	2674.2	2721.4	2743.8	2741.2	2761.1
17.5°	2500.4	2497.9	2547.6	2582.4	2599.8	2629.5	2669.2	2726.4	2748.8	2753.8	2778.5
20°	2460.8	2460.8	2515.4	2552.5	2572.4	2599.8	2649.4	2704.0	2731.4	2736.2	2763.6
22.5°	2406.1	2411.0	2463.1	2500.4	2530.2	2550.1	2602.2	2659.4	2684.1	2691.6	2721.4
25°	2334.0	2339.0	2388.6	2425.9	2458.2	2480.5	2530.2	2582.4	2612.1	2619.6	2642.0
27.5°	2239.8	2249.6	2296.8	2334.0	2361.4	2376.2	2428.4	2483.0	2505.4	2512.9	2535.1
30°	2130.5	2132.9	2180.1	2212.4	2239.8	2252.1	2296.8	2353.9	2371.2	2378.8	2411.0
32.5°	1996.4	1993.9	2038.6	2068.4	2090.8	2105.6	2152.8	2190.0	2207.4	2219.9	2237.2
35°	1835.0	1832.5	1864.8	1899.5	1916.9	1921.9	1969.0	2008.8	2018.8	2028.6	2051.0
37.5°	1653.8	1653.8	1681.0	1698.4	1718.2	1725.8	1748.0	1792.8	1810.1	1807.6	1825.0
40°	1462.5	1452.6	1472.5	1489.9	1494.8	1497.2	1519.6	1554.4	1566.8	1566.8	1579.2
42.5°	1261.4	1246.5	1249.0	1258.9	1263.9	1246.5	1261.4	1283.8	1276.2	1286.2	1288.8
45°	1047.9	1025.5	1015.5	993.2	998.1	980.8	970.9	975.9	973.4	948.5	953.5
47.5°	874.0	834.2	816.9	784.6	777.2	757.4	744.9	722.6	702.8	702.8	690.2
50°	727.5	687.8	653.0	615.8	603.4	586.0	558.6	528.9	514.0	499.1	486.6
52.5°	610.9	568.6	526.4	486.6	469.2	447.0	409.8	379.9	352.6	337.8	322.8
55°	516.5	469.2	424.6	382.4	360.0	337.8	300.5	265.6	233.4	213.5	201.1
57.5°	444.5	399.8	352.6	307.9	288.0	263.2	223.5	186.2	156.4	134.1	121.6
60°	392.4	347.6	305.4	258.2	238.4	213.5	171.4	136.6	106.8	86.9	72.0
62.5°	347.6	307.9	263.2	221.0	201.1	176.2	136.6	101.8	74.5	54.6	42.2
65°	315.4	275.6	238.4	196.1	178.8	154.0	116.8	84.4	59.6	42.2	29.8
67.5°	278.1	243.4	206.1	171.4	154.0	134.1	99.4	72.0	49.6	34.8	24.9
70°	233.4	206.1	173.9	141.5	129.1	111.8	82.0	59.6	39.8	27.4	19.9
72.5°	186.2	163.9	139.0	114.2	104.2	86.9	67.0	47.1	29.8	19.9	14.9
75°	141.5	124.1	104.2	86.9	77.0	67.0	49.6	34.8	22.4	14.9	9.9
77.5°	96.9	89.4	74.5	59.6	54.6	47.1	32.2	22.4	14.9	9.9	5.0
80°	67.0	59.6	49.6	39.8	34.8	29.8	19.9	14.9	7.5	5.0	2.5
82.5°	42.2	34.8	29.8	24.9	22.4	17.4	12.4	7.5	5.0	2.5	2.5
85°	22.4	19.9	17.4	12.4	12.4	9.9	7.5	5.0	2.5	0.0	0.0
87.5°	12.4	9.9	7.5	5.0	5.0	2.5	2.5	2.5	0.0	0.0	0.0
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°	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2
2.5°	2612.1	2612.1	2609.6	2639.5	2604.8	2639.5	2622.1	2639.5	2614.6	2612.1	2614.6
5°	2632.0	2639.5	2642.0	2669.2	2637.0	2679.2	2664.2	2679.2	2661.9	2666.8	2674.2
7.5°	2671.8	2684.1	2681.6	2716.5	2684.1	2731.4	2721.4	2743.8	2726.4	2731.4	2741.2
10°	2716.5	2731.4	2733.9	2768.6	2738.8	2795.9	2783.5	2808.4	2793.4	2800.9	2813.2
12.5°	2768.6	2786.0	2788.5	2828.1	2795.9	2855.5	2848.0	2872.9	2860.5	2867.9	2882.8
15°	2808.4	2833.1	2838.1	2877.9	2843.1	2905.1	2900.2	2932.5	2912.6	2925.0	2937.4
17.5°	2828.1	2850.5	2860.5	2897.8	2867.9	2930.0	2925.0	2952.4	2937.4	2949.9	2964.8
20°	2815.8	2843.1	2850.5	2887.8	2858.0	2920.0	2912.6	2939.9	2925.0	2935.0	2949.9
22.5°	2771.1	2798.4	2808.4	2843.1	2815.8	2872.9	2870.4	2895.2	2875.4	2887.8	2900.2
25°	2691.6	2721.4	2726.4	2758.6	2728.9	2788.5	2783.5	2810.8	2795.9	2803.4	2820.8
27.5°	2577.4	2612.1	2619.6	2646.9	2624.6	2674.2	2674.2	2696.6	2679.2	2679.2	2696.6
30°	2440.9	2475.6	2480.5	2502.9	2483.0	2527.8	2530.2	2552.5	2525.2	2540.1	2542.6
32.5°	2274.5	2296.8	2311.8	2331.6	2301.8	2358.9	2351.4	2368.9	2353.9	2353.9	2366.4
35°	2073.4	2100.6	2108.1	2132.9	2108.1	2152.8	2152.8	2162.8	2147.9	2147.9	2167.8
37.5°	1854.9	1874.8	1877.1	1902.0	1882.1	1919.4	1916.9	1924.4	1909.5	1919.4	1919.4
40°	1599.1	1614.0	1619.0	1631.4	1628.9	1656.1	1653.8	1658.6	1651.2	1653.8	1658.6
42.5°	1301.1	1321.0	1330.9	1340.9	1326.0	1363.2	1355.8	1363.2	1360.8	1363.2	1370.6
45°	958.5	973.4	980.8	983.2	978.4	1000.6	1018.0	1003.1	1005.6	1000.6	1010.6
47.5°	692.8	695.2	690.2	705.1	692.8	702.8	707.6	710.1	695.2	692.8	702.8
50°	474.2	486.6	469.2	476.8	474.2	484.2	479.2	481.8	466.8	474.2	469.2
52.5°	315.4	312.9	307.9	310.4	305.4	305.4	305.4	310.4	300.5	295.5	290.5
55°	191.2	186.2	176.2	173.9	173.9	176.2	171.4	166.4	166.4	163.9	163.9
57.5°	111.8	104.2	99.4	96.9	91.9	89.4	86.9	86.9	82.0	82.0	82.0
60°	62.1	54.6	49.6	44.8	44.8	42.2	39.8	37.2	37.2	37.2	34.8
62.5°	32.2	27.4	22.4	19.9	19.9	17.4	14.9	14.9	14.9	14.9	12.4
65°	22.4	17.4	14.9	12.4	12.4	9.9	9.9	9.9	9.9	9.9	9.9
67.5°	17.4	14.9	12.4	9.9	9.9	9.9	7.5	7.5	7.5	7.5	7.5
70°	14.9	9.9	9.9	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
72.5°	9.9	9.9	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
75°	7.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
77.5°	2.5	2.5	2.5	2.5	2.5	2.5	0.0	0.0	0.0	0.0	0.0
80°	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P252191

CATALOG NUMBER: LE_6B40D010 EC6B30509727 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2	2597.2
2.5°	2637.0	2634.5	2637.0	2642.0	2632.0	2661.9	2646.9	2661.9
5°	2694.1	2696.6	2699.0	2706.5	2694.1	2731.4	2711.5	2733.9
7.5°	2768.6	2771.1	2773.5	2781.0	2773.5	2810.8	2788.5	2808.4
10°	2845.5	2850.5	2850.5	2863.0	2855.5	2890.2	2875.4	2900.2
12.5°	2917.6	2922.5	2927.5	2935.0	2930.0	2967.2	2954.9	2974.6
15°	2974.6	2984.6	2987.1	2997.0	2992.0	3031.8	3016.9	3036.8
17.5°	3002.0	3011.9	3011.9	3024.4	3019.4	3061.6	3041.8	3064.1
20°	2987.1	2994.5	2997.0	3009.5	3004.5	3046.6	3026.9	3054.1
22.5°	2939.9	2942.4	2944.9	2957.2	2954.9	2992.0	2974.6	2992.0
25°	2853.0	2860.5	2858.0	2867.9	2867.9	2897.8	2877.9	2892.8
27.5°	2728.9	2736.2	2736.2	2748.8	2738.8	2768.6	2748.8	2771.1
30°	2577.4	2584.9	2579.9	2589.8	2579.9	2609.6	2594.8	2602.2
32.5°	2396.1	2396.1	2398.6	2401.1	2396.1	2423.5	2408.5	2423.5
35°	2180.1	2185.1	2187.5	2190.0	2185.1	2204.9	2187.5	2197.5
37.5°	1936.8	1949.1	1946.8	1949.1	1941.8	1966.6	1951.6	1956.6
40°	1676.0	1676.0	1673.6	1678.5	1671.1	1691.0	1681.0	1686.0
42.5°	1373.1	1380.6	1370.6	1383.0	1363.2	1390.5	1380.6	1373.1
45°	1030.5	1020.5	1018.0	1020.5	1013.1	1015.5	1023.0	1018.0
47.5°	702.8	702.8	697.8	690.2	700.2	702.8	692.8	692.8
50°	471.8	471.8	466.8	464.4	469.2	466.8	461.9	469.2
52.5°	300.5	290.5	290.5	295.5	290.5	285.5	293.0	288.0
55°	163.9	158.9	158.9	163.9	158.9	158.9	156.4	161.4
57.5°	79.5	82.0	79.5	79.5	79.5	79.5	77.0	79.5
60°	34.8	34.8	34.8	34.8	34.8	34.8	34.8	34.8
62.5°	14.9	14.9	12.4	12.4	12.4	12.4	12.4	12.4
65°	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
67.5°	7.5	7.5	7.5	7.5	7.5	9.9	7.5	7.5
70°	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
72.5°	7.5	7.5	9.9	9.9	9.9	9.9	9.9	9.9
75°	5.0	5.0	5.0	2.5	2.5	2.5	2.5	2.5
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	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)