

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: P252309

Luminaire Tested: **LE_6B50D010R EC6B30509730 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252309
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B50D010R EC6B30509730 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4610.0 lumens
Efficiency: N/A
Efficacy: 78.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

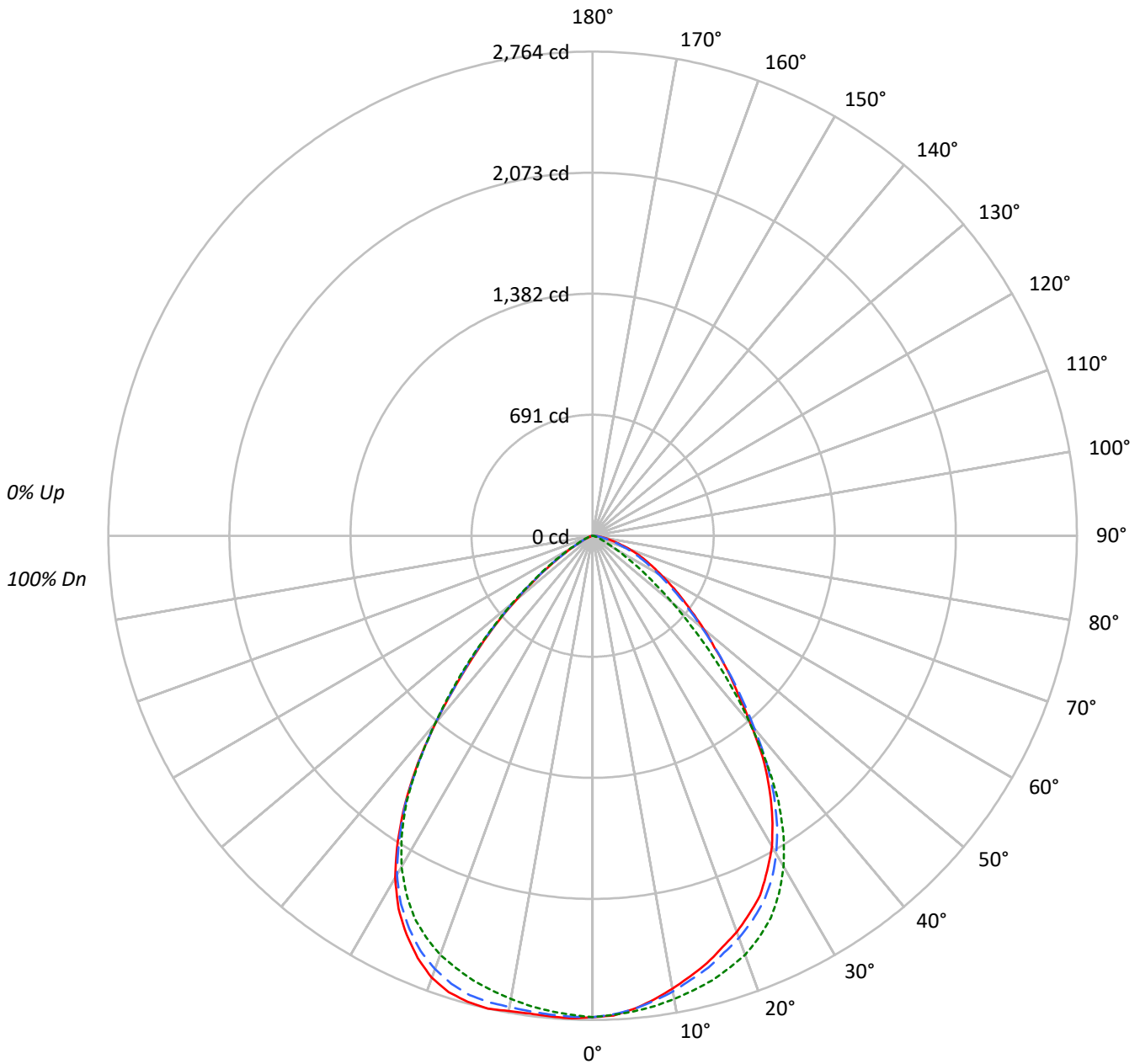
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80																			
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72																			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64																			
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58																			
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52																			
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47																			
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43																			
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40																			
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	179275	179275	179275
5°	177569	178434	180392
10°	173899	177860	182478
15°	170577	177528	186045
20°	167043	176721	186399
25°	162931	173196	180841
30°	154253	164257	169756
35°	140086	147222	148544
40°	119555	118985	118423
45°	100430	89109	86350
50°	83877	60289	57254
55°	70589	36989	33600
60°	59760	19494	16884
65°	51730	10250	8197
70°	43033	6314	4425
75°	31786	4184	2521
80°	24947	2480	1277
85°	19837	2545	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.0	5.6
10°-20°	741.5	16.1
20°-30°	1094.9	23.8
30°-40°	1128.4	24.5
40°-50°	779.4	16.9
50°-60°	384.2	8.3
60°-70°	155.7	3.4
70°-80°	55.5	1.2
80°-90°	11.5	0.2
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°	2095.4	45.5
0°-40°	3223.8	69.9
0°-60°	4387.4	95.2
0°-90°	4610.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4610.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2748	2748	2748	2748	2748	
5°	2711	2711	2725	2744	2754	256
15°	2526	2552	2628	2715	2754	711
25°	2263	2306	2406	2476	2512	1035
35°	1759	1802	1848	1858	1865	1090
45°	1088	1095	966	952	936	841
55°	621	597	325	305	295	561
65°	335	302	66	53	53	333
75°	126	106	17	10	10	142
85°	26	20	3	0	0	32
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°	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9
2.5°	2741.2	2731.2	2737.9	2724.6	2741.2	2724.6	2727.9	2731.2	2727.9	2731.2	2734.6
5°	2711.4	2701.4	2711.4	2694.8	2711.4	2701.4	2701.4	2704.8	2704.8	2708.0	2711.4
7.5°	2671.5	2661.5	2671.5	2654.9	2674.9	2664.9	2664.9	2671.5	2668.2	2671.5	2678.1
10°	2625.0	2611.8	2621.8	2611.8	2631.8	2618.4	2625.0	2625.0	2625.0	2635.0	2641.6
12.5°	2575.2	2562.0	2575.2	2558.6	2578.6	2568.6	2572.0	2581.9	2585.2	2591.9	2595.1
15°	2525.5	2508.9	2515.5	2505.6	2525.5	2515.5	2518.9	2532.1	2532.1	2542.1	2552.0
17.5°	2462.5	2449.1	2462.5	2449.1	2465.8	2459.1	2465.8	2475.8	2475.8	2485.6	2495.6
20°	2406.0	2392.8	2402.8	2392.8	2412.6	2402.8	2406.0	2419.2	2422.6	2432.6	2442.5
22.5°	2336.4	2326.4	2333.0	2323.0	2343.0	2336.4	2339.6	2352.9	2356.2	2362.9	2379.5
25°	2263.4	2243.4	2253.4	2246.8	2266.6	2256.6	2263.4	2276.6	2283.2	2293.2	2306.5
27.5°	2157.1	2147.1	2153.8	2153.8	2170.4	2160.5	2163.8	2177.0	2187.0	2197.0	2213.5
30°	2047.6	2031.0	2037.6	2041.0	2054.2	2047.6	2054.2	2067.5	2070.9	2084.1	2097.4
32.5°	1908.2	1901.6	1914.9	1908.2	1914.9	1914.9	1918.1	1928.1	1934.8	1941.4	1958.0
35°	1758.9	1745.6	1758.9	1752.2	1768.9	1758.9	1768.9	1778.8	1778.8	1792.1	1802.0
37.5°	1596.2	1579.6	1586.4	1586.4	1593.0	1589.6	1589.6	1606.2	1609.5	1619.5	1629.5
40°	1403.8	1397.1	1410.4	1407.1	1410.4	1410.4	1413.8	1423.8	1430.4	1433.6	1437.0
42.5°	1231.2	1234.5	1237.9	1237.9	1237.9	1237.9	1237.9	1251.1	1247.9	1257.8	1261.1
45°	1088.5	1075.2	1081.9	1078.5	1088.5	1078.5	1088.5	1098.5	1091.9	1101.8	1095.1
47.5°	942.5	942.5	942.5	939.1	945.9	942.5	949.1	952.5	952.5	952.5	949.1
50°	826.4	816.4	819.8	819.8	823.0	819.8	826.4	829.6	829.6	823.0	809.8
52.5°	713.5	710.2	710.2	716.9	716.9	713.5	713.5	713.5	713.5	703.5	696.9
55°	620.6	614.0	617.2	617.2	617.2	617.2	620.6	617.2	617.2	607.4	597.4
57.5°	537.6	531.0	531.0	531.0	534.2	531.0	531.0	531.0	527.6	517.8	504.4
60°	458.0	454.6	458.0	458.0	461.2	458.0	458.0	458.0	451.4	441.4	428.1
62.5°	391.6	391.6	391.6	394.9	394.9	391.6	391.6	388.2	385.0	371.8	358.4
65°	335.1	331.9	335.1	335.1	338.5	338.5	335.1	331.9	328.5	315.2	302.0
67.5°	278.8	275.5	278.8	278.8	282.1	278.8	278.8	278.8	268.8	262.1	248.9
70°	225.6	222.4	222.4	222.4	225.6	219.0	222.4	222.4	215.8	205.8	192.5
72.5°	172.6	172.6	172.6	172.6	172.6	172.6	169.2	169.2	162.6	152.6	146.0
75°	126.1	126.1	129.4	129.4	126.1	126.1	126.1	122.8	119.5	112.9	106.2
77.5°	92.9	92.9	92.9	92.9	89.6	89.6	89.6	86.2	83.0	79.6	73.0
80°	66.4	66.4	66.4	63.0	66.4	63.0	63.0	63.0	56.4	53.1	49.8
82.5°	46.5	43.1	43.1	43.1	43.1	43.1	43.1	39.9	39.9	36.5	33.1
85°	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	23.2	19.9	19.9
87.5°	13.2	16.6	16.6	16.6	16.6	16.6	16.6	13.2	13.2	13.2	10.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9
2.5°	2734.6	2734.6	2741.2	2731.2	2747.9	2737.9	2734.6	2751.1	2741.2	2737.9	2744.5
5°	2711.4	2714.6	2718.0	2711.4	2727.9	2718.0	2718.0	2734.6	2727.9	2724.6	2734.6
7.5°	2681.5	2684.8	2691.4	2688.1	2701.4	2694.8	2698.1	2714.6	2708.0	2708.0	2718.0
10°	2645.0	2651.6	2658.2	2658.2	2674.9	2668.2	2668.2	2688.1	2681.5	2684.8	2698.1
12.5°	2601.9	2611.8	2621.8	2625.0	2641.6	2631.8	2635.0	2658.2	2654.9	2658.2	2671.5
15°	2555.4	2568.6	2578.6	2578.6	2598.5	2588.5	2598.5	2621.8	2615.1	2628.4	2645.0
17.5°	2502.2	2515.5	2528.9	2532.1	2552.0	2545.4	2558.6	2581.9	2581.9	2588.5	2608.5
20°	2452.5	2469.1	2475.8	2485.6	2505.6	2502.2	2508.9	2535.5	2535.5	2545.4	2565.4
22.5°	2386.1	2402.8	2416.0	2425.9	2442.5	2442.5	2452.5	2475.8	2475.8	2482.4	2502.2
25°	2313.1	2333.0	2343.0	2352.9	2369.5	2366.2	2376.1	2396.1	2399.4	2406.0	2425.9
27.5°	2220.1	2236.8	2250.0	2256.6	2279.9	2266.6	2276.6	2299.9	2296.5	2303.1	2319.8
30°	2104.0	2120.6	2133.9	2133.9	2153.8	2153.8	2163.8	2173.8	2173.8	2180.4	2193.6
32.5°	1968.0	1987.9	1987.9	1997.9	2011.1	1997.9	2011.1	2024.4	2017.8	2027.8	2037.6
35°	1812.0	1822.0	1825.2	1825.2	1835.2	1831.9	1828.6	1838.5	1831.9	1848.5	1858.5
37.5°	1622.9	1636.1	1629.5	1636.1	1632.8	1622.9	1622.9	1639.4	1626.1	1629.5	1639.4
40°	1440.2	1440.2	1437.0	1420.4	1423.8	1413.8	1410.4	1413.8	1400.5	1397.1	1410.4
42.5°	1251.1	1247.9	1237.9	1214.6	1218.0	1201.4	1188.1	1188.1	1181.5	1178.1	1181.5
45°	1081.9	1071.9	1055.4	1028.8	1022.1	1008.9	982.4	975.6	965.8	965.8	969.0
47.5°	925.9	912.6	886.1	856.2	839.6	823.0	796.5	786.5	769.9	763.2	769.9
50°	796.5	773.2	740.0	696.9	680.4	660.4	633.9	617.2	600.6	594.0	590.8
52.5°	677.0	643.9	610.6	557.5	544.2	524.4	487.9	471.2	454.6	441.4	441.4
55°	574.1	544.2	497.8	448.0	428.1	408.2	371.8	348.5	331.9	325.2	318.6
57.5°	481.2	448.0	404.9	351.8	331.9	312.0	275.5	252.2	235.6	225.6	219.0
60°	404.9	368.4	325.2	278.8	255.5	235.6	199.1	175.9	159.2	149.4	142.8
62.5°	331.9	302.0	258.9	215.8	195.8	175.9	146.0	122.8	106.2	99.5	89.6
65°	278.8	248.9	209.1	172.6	156.0	136.1	109.5	89.6	76.4	66.4	59.8
67.5°	225.6	202.5	169.2	136.1	119.5	106.2	83.0	66.4	53.1	46.5	43.1
70°	179.2	156.0	129.4	102.9	92.9	79.6	63.0	46.5	39.9	33.1	29.9
72.5°	132.8	116.1	96.2	76.4	66.4	59.8	43.1	36.5	26.5	23.2	19.9
75°	96.2	83.0	69.8	53.1	46.5	43.1	33.1	23.2	19.9	16.6	13.2
77.5°	66.4	59.8	46.5	36.5	33.1	29.9	23.2	16.6	13.2	10.0	10.0
80°	43.1	36.5	29.9	23.2	23.2	19.9	13.2	10.0	10.0	6.6	6.6
82.5°	26.5	23.2	19.9	16.6	13.2	13.2	10.0	6.6	6.6	3.4	3.4
85°	16.6	13.2	10.0	10.0	6.6	6.6	6.6	3.4	3.4	3.4	3.4
87.5°	6.6	6.6	6.6	3.4	3.4	3.4	3.4	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9
2.5°	2744.5	2744.5	2751.1	2741.2	2747.9	2747.9	2754.5	2741.2	2747.9	2751.1	2757.8
5°	2731.2	2734.6	2741.2	2737.9	2741.2	2741.2	2747.9	2731.2	2744.5	2744.5	2754.5
7.5°	2718.0	2718.0	2724.6	2721.2	2727.9	2731.2	2737.9	2724.6	2737.9	2737.9	2747.9
10°	2701.4	2701.4	2711.4	2708.0	2718.0	2721.2	2731.2	2718.0	2731.2	2734.6	2744.5
12.5°	2678.1	2681.5	2691.4	2691.4	2701.4	2708.0	2718.0	2711.4	2727.9	2731.2	2744.5
15°	2651.6	2658.2	2671.5	2668.2	2678.1	2688.1	2701.4	2691.4	2714.6	2721.2	2734.6
17.5°	2618.4	2625.0	2635.0	2635.0	2645.0	2651.6	2668.2	2661.5	2681.5	2684.8	2701.4
20°	2568.6	2578.6	2591.9	2588.5	2598.5	2605.1	2618.4	2611.8	2631.8	2638.4	2654.9
22.5°	2508.9	2515.5	2525.5	2525.5	2535.5	2542.1	2555.4	2545.4	2565.4	2568.6	2581.9
25°	2429.2	2435.9	2442.5	2445.9	2455.8	2459.1	2465.8	2459.1	2475.8	2479.0	2495.6
27.5°	2326.4	2329.8	2339.6	2339.6	2346.2	2349.6	2359.5	2346.2	2369.5	2369.5	2379.5
30°	2203.6	2200.2	2213.5	2206.9	2213.5	2213.5	2223.5	2216.9	2233.5	2226.9	2236.8
32.5°	2041.0	2047.6	2047.6	2041.0	2054.2	2050.9	2050.9	2044.2	2054.2	2057.6	2064.2
35°	1851.8	1861.8	1861.8	1865.1	1868.4	1858.5	1861.8	1841.9	1858.5	1861.8	1865.1
37.5°	1646.0	1636.1	1642.8	1632.8	1649.4	1629.5	1629.5	1616.1	1629.5	1629.5	1632.8
40°	1410.4	1407.1	1413.8	1407.1	1403.8	1400.5	1393.9	1383.9	1397.1	1390.5	1400.5
42.5°	1188.1	1184.8	1184.8	1178.1	1174.8	1174.8	1168.1	1161.5	1158.2	1158.2	1174.8
45°	959.1	965.8	959.1	955.8	962.4	955.8	959.1	945.9	952.5	945.9	952.5
47.5°	766.6	769.9	763.2	756.6	766.6	756.6	756.6	746.8	760.0	760.0	753.4
50°	594.0	590.8	584.1	590.8	587.4	587.4	587.4	577.5	584.1	574.1	580.8
52.5°	438.0	434.8	434.8	431.4	434.8	431.4	431.4	428.1	428.1	424.8	428.1
55°	318.6	315.2	308.6	308.6	308.6	312.0	308.6	305.4	305.4	302.0	305.4
57.5°	215.8	209.1	209.1	209.1	209.1	205.8	205.8	202.5	205.8	202.5	205.8
60°	139.4	139.4	132.8	132.8	132.8	132.8	132.8	129.4	132.8	132.8	132.8
62.5°	86.2	86.2	83.0	79.6	83.0	79.6	79.6	79.6	83.0	79.6	83.0
65°	56.4	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1
67.5°	39.9	36.5	36.5	36.5	36.5	36.5	36.5	33.1	36.5	36.5	36.5
70°	26.5	26.5	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
72.5°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
75°	13.2	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
77.5°	10.0	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
80°	6.6	6.6	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
82.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
85°	3.4	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	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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: P252309

CATALOG NUMBER: LE_6B50D010R EC6B30509730 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9	2747.9
2.5°	2747.9	2751.1	2744.5	2747.9	2741.2	2747.9	2751.1	2757.8
5°	2741.2	2744.5	2737.9	2744.5	2737.9	2744.5	2747.9	2754.5
7.5°	2734.6	2741.2	2734.6	2741.2	2734.6	2741.2	2744.5	2751.1
10°	2734.6	2744.5	2737.9	2747.9	2737.9	2744.5	2751.1	2754.5
12.5°	2734.6	2744.5	2741.2	2747.9	2744.5	2751.1	2757.8	2764.4
15°	2727.9	2737.9	2731.2	2741.2	2737.9	2741.2	2754.5	2754.5
17.5°	2691.4	2701.4	2701.4	2708.0	2708.0	2718.0	2724.6	2731.2
20°	2645.0	2654.9	2651.6	2661.5	2661.5	2671.5	2678.1	2684.8
22.5°	2575.2	2588.5	2585.2	2595.1	2591.9	2598.5	2611.8	2608.5
25°	2485.6	2502.2	2499.0	2505.6	2502.2	2502.2	2508.9	2512.2
27.5°	2376.1	2386.1	2382.8	2389.4	2382.8	2389.4	2396.1	2399.4
30°	2233.5	2240.1	2236.8	2240.1	2236.8	2243.4	2246.8	2253.4
32.5°	2060.9	2070.9	2060.9	2067.5	2064.2	2064.2	2077.5	2070.9
35°	1855.1	1858.5	1861.8	1861.8	1855.1	1858.5	1865.1	1865.1
37.5°	1626.1	1642.8	1622.9	1632.8	1629.5	1629.5	1629.5	1639.4
40°	1387.2	1390.5	1383.9	1383.9	1383.9	1380.5	1393.9	1390.5
42.5°	1161.5	1164.9	1161.5	1151.6	1154.9	1154.9	1164.9	1151.6
45°	942.5	949.1	945.9	945.9	939.1	939.1	942.5	935.9
47.5°	746.8	753.4	743.4	746.8	740.0	746.8	743.4	750.0
50°	567.5	574.1	570.8	574.1	574.1	567.5	577.5	564.1
52.5°	424.8	428.1	424.8	421.5	418.1	418.1	424.8	421.5
55°	302.0	298.6	298.6	298.6	302.0	302.0	298.6	295.4
57.5°	202.5	202.5	199.1	199.1	202.5	195.8	199.1	195.8
60°	129.4	129.4	129.4	129.4	126.1	129.4	129.4	129.4
62.5°	79.6	79.6	79.6	79.6	79.6	79.6	79.6	79.6
65°	53.1	53.1	53.1	53.1	53.1	53.1	53.1	53.1
67.5°	33.1	36.5	36.5	36.5	33.1	33.1	33.1	33.1
70°	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
72.5°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
75°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
77.5°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
80°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
82.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	3.4	3.4	3.4	3.4	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)