

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: P252721

Luminaire Tested: **LE_6B50D010R EC6B30509035 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252721
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B50D010R EC6B30509035 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5403.7 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

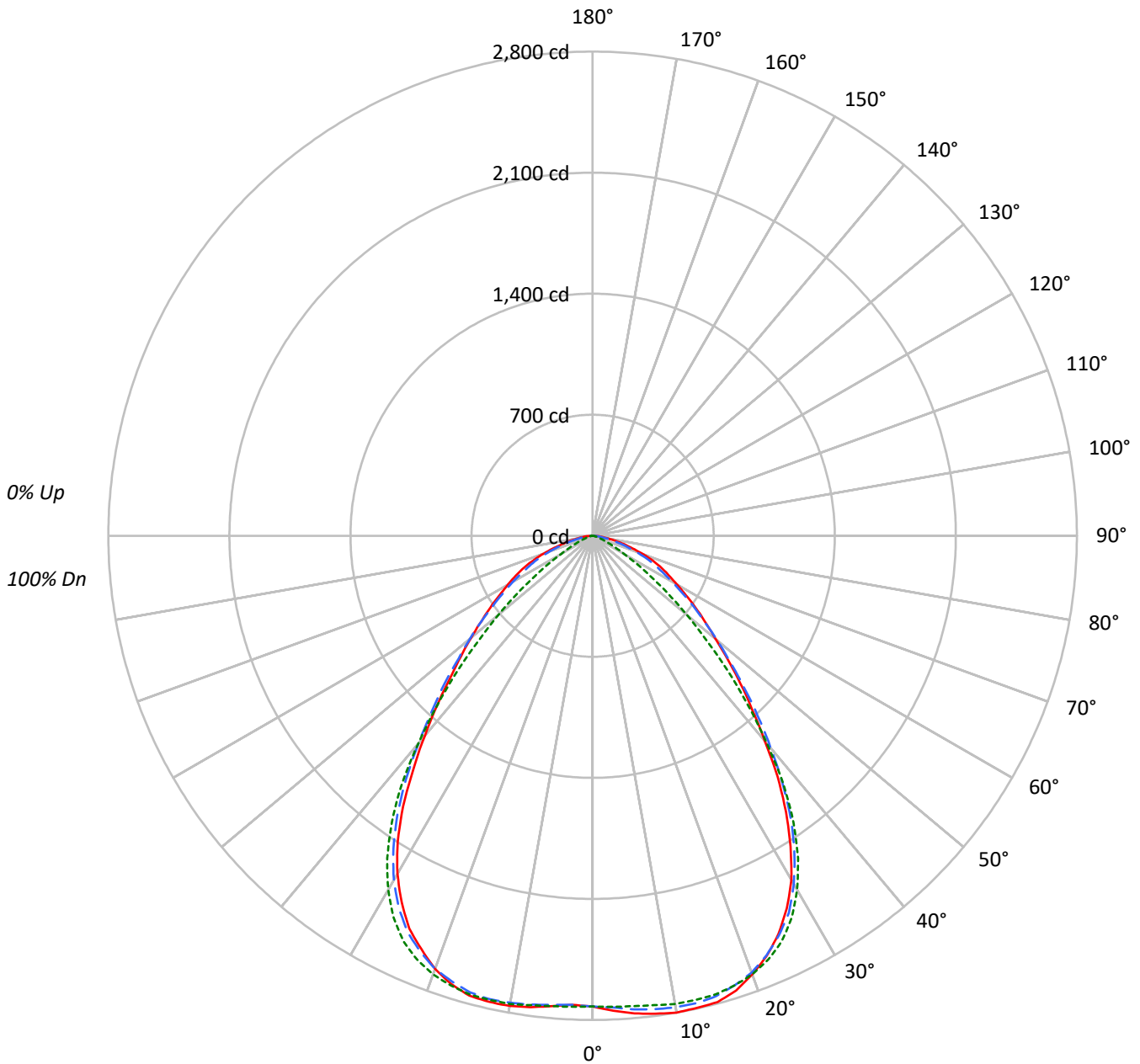
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	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	39	35	45	39	35	44	39	35	33																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	177618	177618	177618
5°	181577	178800	178800
10°	185459	182146	182908
15°	188571	185443	185970
20°	187413	187413	185011
25°	182950	186283	180459
30°	173184	178118	169997
35°	155187	161319	152120
40°	131836	133472	128557
45°	111557	101961	107654
50°	94189	71910	93021
55°	82783	46419	81907
60°	73357	27636	73865
65°	67770	16657	67770
70°	58770	9538	57302
75°	46608	5823	43659
80°	34715	4321	33288
85°	31739	2919	28819



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.1	4.9
10°-20°	775.8	14.4
20°-30°	1166.7	21.6
30°-40°	1226.7	22.7
40°-50°	916.4	17.0
50°-60°	570.5	10.6
60°-70°	324.4	6.0
70°-80°	133.6	2.5
80°-90°	27.6	0.5
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°	2204.6	40.8
0°-40°	3431.2	63.5
0°-60°	4918.1	91.0
0°-90°	5403.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5403.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2722	2722	2722	2722	2722	
5°	2773	2750	2730	2722	2730	265
15°	2792	2757	2746	2734	2753	785
25°	2542	2549	2588	2530	2507	1163
35°	1948	1999	2026	1968	1910	1209
45°	1209	1236	1105	1213	1167	937
55°	728	712	408	701	720	655
65°	439	393	108	393	439	432
75°	185	146	23	142	173	201
85°	42	27	4	23	38	47
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°	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5
2.5°	2749.5	2745.6	2749.5	2741.8	2737.9	2737.9	2741.8	2734.1	2730.2	2734.1	2730.2
5°	2772.6	2764.9	2768.8	2764.9	2757.1	2757.1	2761.0	2749.5	2749.5	2753.4	2749.5
7.5°	2788.0	2788.0	2788.0	2780.2	2776.4	2772.6	2780.2	2768.8	2764.9	2764.9	2761.0
10°	2799.5	2795.8	2799.5	2791.9	2784.1	2780.2	2788.0	2780.2	2772.6	2780.2	2768.8
12.5°	2795.8	2795.8	2795.8	2791.9	2784.1	2780.2	2788.0	2776.4	2772.6	2776.4	2768.8
15°	2791.9	2780.2	2784.1	2780.2	2768.8	2768.8	2772.6	2761.0	2753.4	2764.9	2757.1
17.5°	2757.1	2749.5	2753.4	2745.6	2737.9	2734.1	2737.9	2734.1	2726.4	2734.1	2726.4
20°	2699.4	2699.4	2703.2	2695.6	2687.9	2684.0	2691.8	2684.0	2676.4	2687.9	2687.9
22.5°	2630.1	2630.1	2630.1	2626.2	2622.4	2622.4	2622.4	2618.5	2614.8	2622.4	2626.2
25°	2541.5	2537.6	2541.5	2545.4	2541.5	2537.6	2541.5	2541.5	2533.9	2549.2	2549.2
27.5°	2429.9	2429.9	2437.6	2433.8	2433.8	2429.9	2437.6	2437.6	2433.8	2445.2	2456.9
30°	2298.9	2291.2	2298.9	2298.9	2302.8	2302.8	2306.6	2306.6	2306.6	2318.2	2325.9
32.5°	2129.5	2133.4	2144.9	2141.0	2137.2	2148.8	2148.8	2156.5	2160.2	2168.0	2171.9
35°	1948.5	1952.4	1952.4	1956.2	1963.9	1956.2	1975.5	1971.6	1975.5	1990.9	1998.6
37.5°	1756.0	1744.4	1763.6	1756.0	1759.9	1759.9	1767.5	1771.4	1782.9	1802.1	1802.1
40°	1548.0	1551.9	1559.6	1563.4	1567.2	1567.2	1567.2	1578.9	1582.6	1605.8	1602.0
42.5°	1367.0	1367.0	1374.8	1378.6	1378.6	1378.6	1378.6	1390.1	1397.9	1405.5	1413.2
45°	1209.1	1197.6	1205.2	1205.2	1213.0	1209.1	1216.9	1224.5	1228.4	1240.0	1236.1
47.5°	1059.0	1055.1	1059.0	1062.9	1059.0	1062.9	1066.6	1070.5	1074.4	1074.4	1074.4
50°	928.0	928.0	931.9	935.8	935.8	935.8	935.8	939.6	939.6	947.2	939.6
52.5°	820.2	824.1	824.1	820.2	824.1	824.1	827.9	827.9	824.1	824.1	812.5
55°	727.8	724.0	727.8	724.0	727.8	727.8	724.0	724.0	720.1	716.2	712.4
57.5°	639.2	639.2	639.2	639.2	635.4	639.2	635.4	631.5	631.5	623.9	612.2
60°	562.2	562.2	562.2	562.2	562.2	558.4	562.2	558.4	550.6	543.0	527.5
62.5°	496.8	492.9	496.8	492.9	492.9	489.0	489.0	485.2	477.5	469.8	454.4
65°	439.0	442.9	439.0	439.0	435.1	431.2	431.2	427.5	415.9	408.1	392.8
67.5°	377.4	373.5	373.5	373.5	369.6	369.6	369.6	362.0	354.2	342.8	327.4
70°	308.1	308.1	308.1	304.2	304.2	300.4	300.4	296.5	288.8	281.1	261.9
72.5°	242.6	242.6	242.6	234.9	238.8	234.9	234.9	227.2	223.4	211.8	200.2
75°	184.9	184.9	181.0	181.0	177.1	173.2	173.2	169.4	165.6	157.9	146.4
77.5°	134.8	134.8	134.8	130.9	127.1	123.2	123.2	119.4	115.5	111.6	104.0
80°	92.4	92.4	92.4	92.4	88.6	84.8	84.8	80.9	80.9	77.0	69.4
82.5°	61.6	61.6	61.6	61.6	57.8	57.8	57.8	53.9	50.0	50.0	42.4
85°	42.4	42.4	38.5	38.5	38.5	38.5	34.6	34.6	30.8	27.0	27.0
87.5°	23.1	23.1	23.1	23.1	19.2	19.2	19.2	19.2	15.4	15.4	11.5
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5
2.5°	2741.8	2741.8	2737.9	2726.4	2730.2	2726.4	2730.2	2726.4	2714.9	2726.4	2714.9
5°	2757.1	2761.0	2753.4	2737.9	2741.8	2737.9	2737.9	2734.1	2722.5	2730.2	2722.5
7.5°	2772.6	2768.8	2764.9	2749.5	2753.4	2749.5	2749.5	2741.8	2730.2	2737.9	2726.4
10°	2780.2	2780.2	2772.6	2757.1	2757.1	2753.4	2757.1	2753.4	2737.9	2749.5	2741.8
12.5°	2780.2	2776.4	2776.4	2757.1	2761.0	2757.1	2761.0	2753.4	2741.8	2749.5	2745.6
15°	2768.8	2768.8	2764.9	2745.6	2749.5	2749.5	2753.4	2745.6	2734.1	2745.6	2737.9
17.5°	2745.6	2745.6	2741.8	2726.4	2734.1	2734.1	2737.9	2730.2	2718.6	2726.4	2726.4
20°	2699.4	2703.2	2703.2	2691.8	2699.4	2699.4	2703.2	2699.4	2695.6	2699.4	2691.8
22.5°	2645.5	2653.2	2653.2	2641.6	2649.4	2649.4	2660.9	2657.0	2649.4	2653.2	2649.4
25°	2564.6	2572.4	2580.0	2572.4	2580.0	2580.0	2591.6	2587.8	2580.0	2587.8	2576.2
27.5°	2472.2	2476.1	2483.8	2476.1	2487.6	2483.8	2495.4	2491.5	2479.9	2491.5	2487.6
30°	2341.2	2356.8	2368.2	2356.8	2368.2	2368.2	2376.0	2372.1	2368.2	2364.4	2364.4
32.5°	2195.0	2210.4	2210.4	2206.5	2214.2	2214.2	2218.1	2210.4	2206.5	2210.4	2214.2
35°	2014.0	2021.6	2029.4	2025.5	2029.4	2033.2	2029.4	2033.2	2021.6	2025.5	2025.5
37.5°	1817.6	1825.2	1825.2	1813.8	1821.4	1821.4	1813.8	1813.8	1806.0	1813.8	1798.4
40°	1609.6	1602.0	1605.8	1598.1	1590.4	1590.4	1586.5	1571.1	1563.4	1567.2	1571.1
42.5°	1405.5	1405.5	1394.0	1374.8	1355.5	1355.5	1343.9	1336.2	1320.9	1328.5	1324.6
45°	1232.2	1213.0	1197.6	1166.8	1155.2	1147.5	1128.2	1109.0	1101.4	1105.1	1101.4
47.5°	1066.6	1051.2	1012.8	970.4	958.9	947.2	924.2	901.1	893.4	885.6	885.6
50°	928.0	901.1	858.8	812.5	793.2	774.0	743.2	720.1	704.8	708.5	708.5
52.5°	801.0	770.1	720.1	662.4	639.2	616.1	589.1	562.2	550.6	546.9	546.9
55°	689.2	654.6	604.6	539.1	519.9	492.9	458.2	427.5	412.0	408.1	415.9
57.5°	589.1	558.4	500.6	435.1	412.0	385.1	350.4	323.5	304.2	300.4	304.2
60°	508.2	466.0	415.9	354.2	323.5	300.4	261.9	238.8	219.5	211.8	215.6
62.5°	427.5	388.9	338.9	277.2	254.1	231.0	196.4	169.4	154.0	150.1	154.0
65°	365.9	327.4	281.1	227.2	204.1	181.0	150.1	123.2	111.6	107.9	111.6
67.5°	304.2	269.5	231.0	181.0	161.8	142.5	111.6	92.4	77.0	73.1	77.0
70°	246.5	215.6	177.1	142.5	123.2	107.9	84.8	65.5	53.9	50.0	53.9
72.5°	184.9	161.8	134.8	104.0	92.4	80.9	61.6	46.2	38.5	34.6	38.5
75°	134.8	115.5	96.2	73.1	65.5	57.8	42.4	30.8	27.0	23.1	27.0
77.5°	92.4	80.9	65.5	50.0	42.4	38.5	27.0	23.1	19.2	15.4	15.4
80°	61.6	53.9	42.4	34.6	30.8	27.0	19.2	15.4	11.5	11.5	11.5
82.5°	38.5	30.8	27.0	19.2	15.4	15.4	11.5	7.8	7.8	7.8	7.8
85°	23.1	19.2	15.4	11.5	7.8	7.8	3.9	3.9	3.9	3.9	3.9
87.5°	11.5	7.8	7.8	3.9	3.9	3.9	3.9	3.9	0.0	0.0	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°	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5
2.5°	2722.5	2714.9	2714.9	2718.6	2722.5	2726.4	2718.6	2714.9	2714.9	2726.4	2718.6
5°	2722.5	2718.6	2718.6	2718.6	2726.4	2730.2	2722.5	2718.6	2722.5	2734.1	2730.2
7.5°	2734.1	2726.4	2730.2	2730.2	2734.1	2741.8	2734.1	2730.2	2734.1	2745.6	2737.9
10°	2741.8	2734.1	2737.9	2734.1	2745.6	2749.5	2741.8	2737.9	2741.8	2757.1	2753.4
12.5°	2745.6	2741.8	2741.8	2737.9	2749.5	2753.4	2745.6	2741.8	2745.6	2757.1	2753.4
15°	2737.9	2734.1	2734.1	2734.1	2741.8	2749.5	2737.9	2734.1	2734.1	2745.6	2741.8
17.5°	2722.5	2714.9	2714.9	2714.9	2718.6	2722.5	2711.0	2707.1	2703.2	2714.9	2711.0
20°	2695.6	2687.9	2680.1	2680.1	2684.0	2684.0	2676.4	2664.8	2664.8	2668.6	2660.9
22.5°	2645.5	2641.6	2634.0	2630.1	2637.8	2634.0	2618.5	2607.0	2603.1	2607.0	2599.2
25°	2576.2	2568.5	2564.6	2560.8	2564.6	2560.8	2545.4	2530.0	2530.0	2530.0	2518.4
27.5°	2479.9	2472.2	2468.4	2468.4	2472.2	2464.5	2449.1	2433.8	2426.0	2426.0	2414.5
30°	2356.8	2356.8	2352.9	2349.0	2345.1	2345.1	2322.0	2306.6	2298.9	2302.8	2295.1
32.5°	2206.5	2202.6	2198.9	2187.2	2191.1	2187.2	2168.0	2156.5	2144.9	2137.2	2133.4
35°	2014.0	2014.0	2010.1	2010.1	2010.1	2006.2	1987.0	1975.5	1967.8	1963.9	1952.4
37.5°	1802.1	1798.4	1794.5	1794.5	1794.5	1794.5	1782.9	1771.4	1771.4	1767.5	1759.9
40°	1563.4	1567.2	1571.1	1567.2	1578.9	1590.4	1575.0	1567.2	1563.4	1575.0	1559.6
42.5°	1332.4	1328.5	1347.8	1351.6	1351.6	1370.9	1374.8	1378.6	1374.8	1382.5	1382.5
45°	1109.0	1105.1	1124.4	1132.1	1151.4	1174.5	1186.0	1205.2	1213.0	1220.8	1213.0
47.5°	897.2	912.6	928.0	947.2	962.8	1001.2	1024.4	1043.6	1051.2	1062.9	1062.9
50°	720.1	735.5	762.5	777.9	797.1	843.4	881.9	908.8	924.2	935.8	931.9
52.5°	554.5	581.5	616.1	631.5	658.5	712.4	754.8	785.6	804.9	816.4	820.2
55°	427.5	450.5	485.2	508.2	535.2	593.0	646.9	681.6	700.9	716.2	724.0
57.5°	315.8	342.8	381.2	400.5	431.2	496.8	543.0	585.4	608.4	627.6	631.5
60°	231.0	258.0	292.6	315.8	346.6	412.0	466.0	504.5	531.4	546.9	554.5
62.5°	165.6	192.5	227.2	250.2	277.2	335.0	388.9	427.5	454.4	473.6	485.2
65°	119.4	146.4	181.0	200.2	223.4	277.2	327.4	365.9	392.8	415.9	423.6
67.5°	88.6	107.9	138.6	157.9	181.0	223.4	265.8	300.4	327.4	346.6	354.2
70°	65.5	80.9	107.9	119.4	134.8	173.2	208.0	238.8	261.9	277.2	285.0
72.5°	46.2	57.8	77.0	88.6	100.1	130.9	157.9	181.0	196.4	211.8	219.5
75°	30.8	38.5	53.9	61.6	69.4	92.4	111.6	130.9	142.5	154.0	157.9
77.5°	19.2	27.0	38.5	42.4	50.0	61.6	77.0	88.6	96.2	104.0	111.6
80°	11.5	15.4	23.1	27.0	30.8	42.4	50.0	57.8	65.5	73.1	77.0
82.5°	7.8	11.5	15.4	15.4	19.2	23.1	30.8	38.5	42.4	46.2	50.0
85°	3.9	3.9	7.8	7.8	11.5	11.5	15.4	19.2	23.1	27.0	30.8
87.5°	3.9	3.9	3.9	3.9	7.8	7.8	11.5	11.5	11.5	15.4	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



TEST NUMBER: P252721

CATALOG NUMBER: LE_6B50D010R EC6B30509035 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5	2722.5
2.5°	2711.0	2722.5	2711.0	2718.6	2714.9	2714.9	2711.0	2714.9
5°	2722.5	2737.9	2722.5	2734.1	2726.4	2726.4	2726.4	2730.2
7.5°	2734.1	2749.5	2737.9	2749.5	2745.6	2741.8	2741.8	2749.5
10°	2745.6	2757.1	2749.5	2761.0	2757.1	2753.4	2753.4	2761.0
12.5°	2745.6	2761.0	2753.4	2764.9	2761.0	2757.1	2757.1	2761.0
15°	2734.1	2753.4	2741.8	2753.4	2749.5	2745.6	2745.6	2753.4
17.5°	2699.4	2714.9	2707.1	2714.9	2714.9	2711.0	2714.9	2718.6
20°	2653.2	2664.8	2657.0	2664.8	2664.8	2657.0	2660.9	2664.8
22.5°	2587.8	2599.2	2591.6	2599.2	2595.5	2591.6	2591.6	2587.8
25°	2506.9	2522.2	2510.8	2518.4	2510.8	2503.0	2503.0	2506.9
27.5°	2406.8	2418.2	2402.9	2410.6	2402.9	2395.2	2395.2	2391.4
30°	2275.9	2279.6	2268.1	2275.9	2268.1	2264.2	2256.6	2256.6
32.5°	2118.0	2121.8	2110.2	2110.2	2102.5	2102.5	2087.1	2098.8
35°	1933.1	1937.0	1933.1	1929.2	1917.8	1913.9	1910.0	1910.0
37.5°	1740.6	1740.6	1729.0	1725.1	1717.5	1709.8	1713.6	1702.0
40°	1544.1	1540.4	1528.8	1532.6	1528.8	1517.2	1513.4	1509.5
42.5°	1359.4	1359.4	1347.8	1351.6	1343.9	1340.1	1328.5	1332.4
45°	1197.6	1197.6	1186.0	1186.0	1182.2	1170.6	1174.5	1166.8
47.5°	1051.2	1051.2	1047.4	1047.4	1035.9	1032.0	1032.0	1032.0
50°	924.2	924.2	924.2	924.2	920.4	916.5	912.6	916.5
52.5°	816.4	824.1	820.2	820.2	816.4	812.5	808.6	808.6
55°	720.1	724.0	724.0	727.8	724.0	720.1	724.0	720.1
57.5°	635.4	643.1	643.1	643.1	643.1	643.1	639.2	635.4
60°	562.2	566.1	566.1	569.9	569.9	569.9	566.1	566.1
62.5°	489.0	496.8	500.6	500.6	504.5	500.6	500.6	500.6
65°	431.2	439.0	442.9	439.0	442.9	442.9	439.0	439.0
67.5°	362.0	369.6	369.6	369.6	369.6	373.5	369.6	369.6
70°	292.6	300.4	296.5	300.4	300.4	300.4	300.4	300.4
72.5°	223.4	227.2	231.0	231.0	234.9	231.0	231.0	231.0
75°	161.8	169.4	169.4	169.4	169.4	173.2	173.2	173.2
77.5°	115.5	119.4	119.4	123.2	123.2	123.2	123.2	127.1
80°	80.9	80.9	84.8	84.8	88.6	88.6	88.6	88.6
82.5°	53.9	57.8	57.8	57.8	57.8	57.8	57.8	57.8
85°	30.8	34.6	34.6	34.6	34.6	38.5	38.5	38.5
87.5°	19.2	19.2	19.2	19.2	19.2	19.2	15.4	15.4
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)