

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: P252714

Luminaire Tested: **LE_6B50D010R EC6B30508030 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252714
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 EC6B30508030 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6237.5 lumens
Efficiency: N/A
Efficacy: 106.1 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

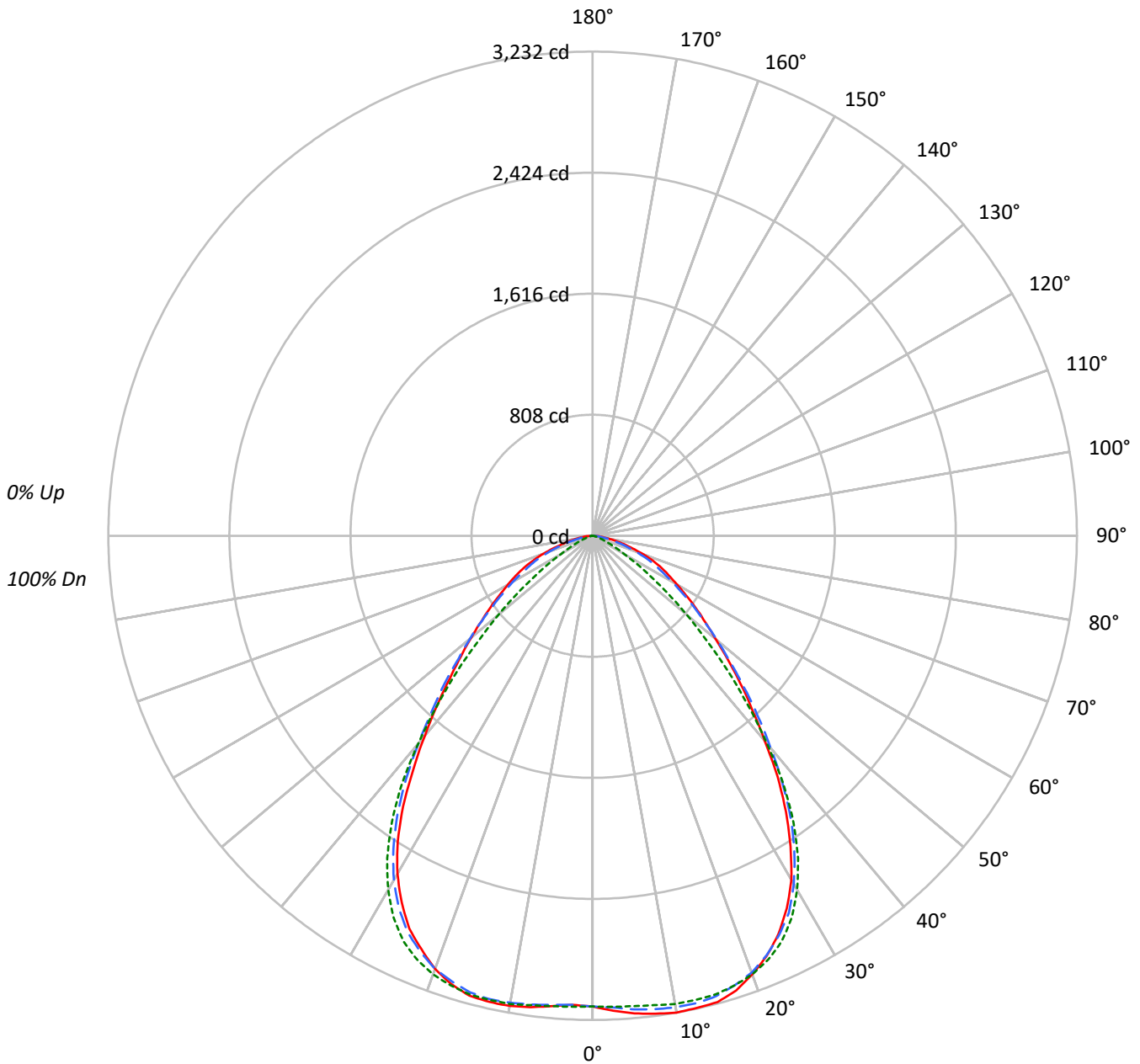
Input Watts (W): 58.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	205025	205025	205025
5°	209594	206391	206391
10°	214077	210255	211129
15°	217661	214054	214655
20°	216330	216330	213552
25°	211175	215019	208296
30°	199905	205600	196228
35°	179128	186208	175599
40°	152182	154073	148393
45°	128782	117711	124271
50°	108723	83014	107373
55°	95556	53585	94544
60°	84682	31903	85256
65°	78236	19219	78236
70°	67831	11025	66152
75°	53792	6705	50414
80°	40050	5034	38397
85°	36604	3368	33311



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.6	4.9
10°-20°	895.4	14.4
20°-30°	1346.7	21.6
30°-40°	1415.9	22.7
40°-50°	1057.7	17.0
50°-60°	658.5	10.6
60°-70°	374.5	6.0
70°-80°	154.2	2.5
80°-90°	31.9	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°	2544.7	40.8
0°-40°	3960.6	63.5
0°-60°	5676.9	91.0
0°-90°	6237.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6237.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3143	3143	3143	3143	3143	
5°	3200	3174	3152	3143	3152	306
15°	3223	3183	3169	3156	3178	906
25°	2934	2943	2987	2920	2894	1343
35°	2249	2307	2338	2271	2205	1396
45°	1396	1427	1276	1400	1347	1082
55°	840	822	471	809	831	756
65°	507	453	124	453	507	499
75°	213	169	27	164	200	232
85°	49	31	4	27	44	54
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°	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6
2.5°	3173.8	3169.2	3173.8	3164.8	3160.4	3160.4	3164.8	3155.9	3151.5	3155.9	3151.5
5°	3200.4	3191.5	3195.9	3191.5	3182.6	3182.6	3187.0	3173.8	3173.8	3178.1	3173.8
7.5°	3218.1	3218.1	3218.1	3209.2	3204.9	3200.4	3209.2	3195.9	3191.5	3191.5	3187.0
10°	3231.5	3227.0	3231.5	3222.6	3213.8	3209.2	3218.1	3209.2	3200.4	3209.2	3195.9
12.5°	3227.0	3227.0	3227.0	3222.6	3213.8	3209.2	3218.1	3204.9	3200.4	3204.9	3195.9
15°	3222.6	3209.2	3213.8	3209.2	3195.9	3195.9	3200.4	3187.0	3178.1	3191.5	3182.6
17.5°	3182.6	3173.8	3178.1	3169.2	3160.4	3155.9	3160.4	3155.9	3147.0	3155.9	3147.0
20°	3115.9	3115.9	3120.4	3111.5	3102.6	3098.1	3107.0	3098.1	3089.2	3102.6	3102.6
22.5°	3035.9	3035.9	3035.9	3031.5	3027.0	3027.0	3027.0	3022.6	3018.1	3027.0	3031.5
25°	2933.6	2929.2	2933.6	2938.1	2933.6	2929.2	2933.6	2933.6	2924.8	2942.6	2942.6
27.5°	2804.8	2804.8	2813.6	2809.2	2809.2	2804.8	2813.6	2813.6	2809.2	2822.5	2835.9
30°	2653.6	2644.8	2653.6	2653.6	2658.1	2658.1	2662.5	2662.5	2662.5	2675.9	2684.8
32.5°	2458.0	2462.5	2475.9	2471.4	2467.0	2480.2	2480.2	2489.1	2493.6	2502.5	2507.0
35°	2249.1	2253.6	2253.6	2258.0	2266.9	2258.0	2280.2	2275.9	2280.2	2298.0	2306.9
37.5°	2026.9	2013.6	2035.8	2026.9	2031.4	2031.4	2040.2	2044.6	2058.0	2080.2	2080.2
40°	1786.9	1791.4	1800.2	1804.6	1809.1	1809.1	1809.1	1822.4	1826.9	1853.5	1849.1
42.5°	1578.0	1578.0	1586.9	1591.2	1591.2	1591.2	1591.2	1604.6	1613.5	1622.4	1631.2
45°	1395.8	1382.4	1391.2	1391.2	1400.1	1395.8	1404.6	1413.5	1418.0	1431.2	1426.9
47.5°	1222.4	1217.9	1222.4	1226.8	1222.4	1226.8	1231.2	1235.8	1240.1	1240.1	1240.1
50°	1071.2	1071.2	1075.6	1080.1	1080.1	1080.1	1080.1	1084.6	1084.6	1093.5	1084.6
52.5°	946.8	951.2	951.2	946.8	951.2	951.2	955.6	955.6	951.2	951.2	937.9
55°	840.1	835.6	840.1	835.6	840.1	840.1	835.6	835.6	831.2	826.8	822.4
57.5°	737.9	737.9	737.9	737.9	733.4	737.9	733.4	729.0	729.0	720.1	706.8
60°	649.0	649.0	649.0	649.0	649.0	644.5	649.0	644.5	635.6	626.8	609.0
62.5°	573.4	569.0	573.4	569.0	569.0	564.5	564.5	560.1	551.1	542.2	524.5
65°	506.8	511.1	506.8	506.8	502.2	497.9	497.9	493.4	480.0	471.1	453.4
67.5°	435.6	431.1	431.1	431.1	426.8	426.8	426.8	417.9	408.9	395.6	377.9
70°	355.6	355.6	355.6	351.1	351.1	346.8	346.8	342.2	333.4	324.5	302.2
72.5°	280.0	280.0	280.0	271.1	275.6	271.1	271.1	262.2	257.8	244.5	231.1
75°	213.4	213.4	208.9	208.9	204.5	200.0	200.0	195.6	191.1	182.2	168.9
77.5°	155.6	155.6	155.6	151.1	146.6	142.2	142.2	137.8	133.4	128.9	120.0
80°	106.6	106.6	106.6	106.6	102.2	97.8	97.8	93.4	93.4	88.9	80.0
82.5°	71.1	71.1	71.1	71.1	66.6	66.6	66.6	62.2	57.8	57.8	48.9
85°	48.9	48.9	44.5	44.5	44.5	44.5	40.0	40.0	35.5	31.1	31.1
87.5°	26.6	26.6	26.6	26.6	22.2	22.2	22.2	22.2	17.8	17.8	13.4
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°	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6
2.5°	3164.8	3164.8	3160.4	3147.0	3151.5	3147.0	3151.5	3147.0	3133.8	3147.0	3133.8
5°	3182.6	3187.0	3178.1	3160.4	3164.8	3160.4	3160.4	3155.9	3142.6	3151.5	3142.6
7.5°	3200.4	3195.9	3191.5	3173.8	3178.1	3173.8	3173.8	3164.8	3151.5	3160.4	3147.0
10°	3209.2	3209.2	3200.4	3182.6	3182.6	3178.1	3182.6	3178.1	3160.4	3173.8	3164.8
12.5°	3209.2	3204.9	3204.9	3182.6	3187.0	3182.6	3187.0	3178.1	3164.8	3173.8	3169.2
15°	3195.9	3195.9	3191.5	3169.2	3173.8	3173.8	3178.1	3169.2	3155.9	3169.2	3160.4
17.5°	3169.2	3169.2	3164.8	3147.0	3155.9	3155.9	3160.4	3151.5	3138.1	3147.0	3147.0
20°	3115.9	3120.4	3120.4	3107.0	3115.9	3115.9	3120.4	3115.9	3111.5	3115.9	3107.0
22.5°	3053.6	3062.6	3062.6	3049.2	3058.1	3058.1	3071.5	3067.0	3058.1	3062.6	3058.1
25°	2960.4	2969.2	2978.1	2969.2	2978.1	2978.1	2991.5	2987.0	2978.1	2987.0	2973.6
27.5°	2853.6	2858.1	2867.0	2858.1	2871.5	2867.0	2880.4	2875.9	2862.5	2875.9	2871.5
30°	2702.5	2720.4	2733.6	2720.4	2733.6	2733.6	2742.5	2738.1	2733.6	2729.2	2729.2
32.5°	2533.6	2551.4	2551.4	2547.0	2555.9	2555.9	2560.2	2551.4	2547.0	2551.4	2555.9
35°	2324.8	2333.6	2342.5	2338.0	2342.5	2347.0	2342.5	2347.0	2333.6	2338.0	2338.0
37.5°	2098.0	2106.9	2106.9	2093.6	2102.5	2102.5	2093.6	2093.6	2084.6	2093.6	2075.8
40°	1858.0	1849.1	1853.5	1844.6	1835.8	1835.8	1831.4	1813.5	1804.6	1809.1	1813.5
42.5°	1622.4	1622.4	1609.1	1586.9	1564.6	1564.6	1551.2	1542.4	1524.6	1533.5	1529.1
45°	1422.4	1400.1	1382.4	1346.9	1333.5	1324.6	1302.4	1280.1	1271.2	1275.8	1271.2
47.5°	1231.2	1213.5	1169.0	1120.1	1106.8	1093.5	1066.8	1040.1	1031.2	1022.4	1022.4
50°	1071.2	1040.1	991.2	937.9	915.6	893.4	857.9	831.2	813.4	817.9	817.9
52.5°	924.5	889.0	831.2	764.5	737.9	711.2	680.1	649.0	635.6	631.1	631.1
55°	795.6	755.6	697.9	622.2	600.1	569.0	529.0	493.4	475.6	471.1	480.0
57.5°	680.1	644.5	577.9	502.2	475.6	444.5	404.5	373.4	351.1	346.8	351.1
60°	586.8	537.9	480.0	408.9	373.4	346.8	302.2	275.6	253.4	244.5	248.9
62.5°	493.4	449.0	391.1	320.0	293.4	266.8	226.8	195.6	177.8	173.4	177.8
65°	422.2	377.9	324.5	262.2	235.6	208.9	173.4	142.2	128.9	124.5	128.9
67.5°	351.1	311.1	266.8	208.9	186.8	164.5	128.9	106.6	88.9	84.5	88.9
70°	284.5	248.9	204.5	164.5	142.2	124.5	97.8	75.6	62.2	57.8	62.2
72.5°	213.4	186.8	155.6	120.0	106.6	93.4	71.1	53.4	44.5	40.0	44.5
75°	155.6	133.4	111.1	84.5	75.6	66.6	48.9	35.5	31.1	26.6	31.1
77.5°	106.6	93.4	75.6	57.8	48.9	44.5	31.1	26.6	22.2	17.8	17.8
80°	71.1	62.2	48.9	40.0	35.5	31.1	22.2	17.8	13.4	13.4	13.4
82.5°	44.5	35.5	31.1	22.2	17.8	17.8	13.4	8.9	8.9	8.9	8.9
85°	26.6	22.2	17.8	13.4	8.9	8.9	4.5	4.5	4.5	4.5	4.5
87.5°	13.4	8.9	8.9	4.5	4.5	4.5	4.5	4.5	0.0	0.0	4.5
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°	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6
2.5°	3142.6	3133.8	3133.8	3138.1	3142.6	3147.0	3138.1	3133.8	3133.8	3147.0	3138.1
5°	3142.6	3138.1	3138.1	3138.1	3147.0	3151.5	3142.6	3138.1	3142.6	3155.9	3151.5
7.5°	3155.9	3147.0	3151.5	3151.5	3155.9	3164.8	3155.9	3151.5	3155.9	3169.2	3160.4
10°	3164.8	3155.9	3160.4	3155.9	3169.2	3173.8	3164.8	3160.4	3164.8	3182.6	3178.1
12.5°	3169.2	3164.8	3164.8	3160.4	3173.8	3178.1	3169.2	3164.8	3169.2	3182.6	3178.1
15°	3160.4	3155.9	3155.9	3155.9	3164.8	3173.8	3160.4	3155.9	3155.9	3169.2	3164.8
17.5°	3142.6	3133.8	3133.8	3133.8	3138.1	3142.6	3129.2	3124.8	3120.4	3133.8	3129.2
20°	3111.5	3102.6	3093.8	3093.8	3098.1	3098.1	3089.2	3075.9	3075.9	3080.4	3071.5
22.5°	3053.6	3049.2	3040.4	3035.9	3044.8	3040.4	3022.6	3009.2	3004.8	3009.2	3000.4
25°	2973.6	2964.8	2960.4	2955.9	2960.4	2955.9	2938.1	2920.4	2920.4	2920.4	2907.0
27.5°	2862.5	2853.6	2849.2	2849.2	2853.6	2844.8	2827.0	2809.2	2800.4	2800.4	2787.0
30°	2720.4	2720.4	2715.9	2711.4	2707.0	2707.0	2680.2	2662.5	2653.6	2658.1	2649.2
32.5°	2547.0	2542.5	2538.1	2524.8	2529.1	2524.8	2502.5	2489.1	2475.9	2467.0	2462.5
35°	2324.8	2324.8	2320.2	2320.2	2320.2	2315.9	2293.6	2280.2	2271.4	2266.9	2253.6
37.5°	2080.2	2075.8	2071.4	2071.4	2071.4	2071.4	2058.0	2044.6	2044.6	2040.2	2031.4
40°	1804.6	1809.1	1813.5	1809.1	1822.4	1835.8	1818.0	1809.1	1804.6	1818.0	1800.2
42.5°	1538.0	1533.5	1555.8	1560.1	1560.1	1582.4	1586.9	1591.2	1586.9	1595.8	1595.8
45°	1280.1	1275.8	1297.9	1306.9	1329.0	1355.8	1369.0	1391.2	1400.1	1409.0	1400.1
47.5°	1035.6	1053.5	1071.2	1093.5	1111.2	1155.8	1182.4	1204.6	1213.5	1226.8	1226.8
50°	831.2	849.0	880.1	897.9	920.1	973.5	1017.9	1049.0	1066.8	1080.1	1075.6
52.5°	640.1	671.2	711.2	729.0	760.1	822.4	871.2	906.8	929.0	942.4	946.8
55°	493.4	520.0	560.1	586.8	617.9	684.5	746.8	786.8	809.0	826.8	835.6
57.5°	364.5	395.6	440.0	462.2	497.9	573.4	626.8	675.6	702.2	724.5	729.0
60°	266.8	297.8	337.9	364.5	400.0	475.6	537.9	582.2	613.4	631.1	640.1
62.5°	191.1	222.2	262.2	288.9	320.0	386.8	449.0	493.4	524.5	546.8	560.1
65°	137.8	168.9	208.9	231.1	257.8	320.0	377.9	422.2	453.4	480.0	489.0
67.5°	102.2	124.5	160.0	182.2	208.9	257.8	306.8	346.8	377.9	400.0	408.9
70°	75.6	93.4	124.5	137.8	155.6	200.0	240.0	275.6	302.2	320.0	328.9
72.5°	53.4	66.6	88.9	102.2	115.6	151.1	182.2	208.9	226.8	244.5	253.4
75°	35.5	44.5	62.2	71.1	80.0	106.6	128.9	151.1	164.5	177.8	182.2
77.5°	22.2	31.1	44.5	48.9	57.8	71.1	88.9	102.2	111.1	120.0	128.9
80°	13.4	17.8	26.6	31.1	35.5	48.9	57.8	66.6	75.6	84.5	88.9
82.5°	8.9	13.4	17.8	17.8	22.2	26.6	35.5	44.5	48.9	53.4	57.8
85°	4.5	4.5	8.9	8.9	13.4	13.4	17.8	22.2	26.6	31.1	35.5
87.5°	4.5	4.5	4.5	4.5	8.9	8.9	13.4	13.4	13.4	17.8	17.8
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: P252714

CATALOG NUMBER: LE_6B50D010R EC6B30508030 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6	3142.6
2.5°	3129.2	3142.6	3129.2	3138.1	3133.8	3133.8	3129.2	3133.8
5°	3142.6	3160.4	3142.6	3155.9	3147.0	3147.0	3147.0	3151.5
7.5°	3155.9	3173.8	3160.4	3173.8	3169.2	3164.8	3164.8	3173.8
10°	3169.2	3182.6	3173.8	3187.0	3182.6	3178.1	3178.1	3187.0
12.5°	3169.2	3187.0	3178.1	3191.5	3187.0	3182.6	3182.6	3187.0
15°	3155.9	3178.1	3164.8	3178.1	3173.8	3169.2	3169.2	3178.1
17.5°	3115.9	3133.8	3124.8	3133.8	3133.8	3129.2	3133.8	3138.1
20°	3062.6	3075.9	3067.0	3075.9	3075.9	3067.0	3071.5	3075.9
22.5°	2987.0	3000.4	2991.5	3000.4	2995.9	2991.5	2991.5	2987.0
25°	2893.6	2911.5	2898.1	2907.0	2898.1	2889.2	2889.2	2893.6
27.5°	2778.1	2791.4	2773.6	2782.5	2773.6	2764.8	2764.8	2760.4
30°	2627.0	2631.4	2618.1	2627.0	2618.1	2613.6	2604.8	2604.8
32.5°	2444.8	2449.1	2435.9	2435.9	2427.0	2427.0	2409.1	2422.5
35°	2231.4	2235.9	2231.4	2226.9	2213.6	2209.1	2204.8	2204.8
37.5°	2009.1	2009.1	1995.8	1991.4	1982.5	1973.5	1978.0	1964.6
40°	1782.4	1778.0	1764.6	1769.1	1764.6	1751.4	1746.9	1742.4
42.5°	1569.1	1569.1	1555.8	1560.1	1551.2	1546.9	1533.5	1538.0
45°	1382.4	1382.4	1369.0	1369.0	1364.6	1351.2	1355.8	1346.9
47.5°	1213.5	1213.5	1209.0	1209.0	1195.8	1191.2	1191.2	1191.2
50°	1066.8	1066.8	1066.8	1066.8	1062.4	1057.9	1053.5	1057.9
52.5°	942.4	951.2	946.8	946.8	942.4	937.9	933.5	933.5
55°	831.2	835.6	835.6	840.1	835.6	831.2	835.6	831.2
57.5°	733.4	742.2	742.2	742.2	742.2	742.2	737.9	733.4
60°	649.0	653.4	653.4	657.9	657.9	657.9	653.4	653.4
62.5°	564.5	573.4	577.9	577.9	582.2	577.9	577.9	577.9
65°	497.9	506.8	511.1	506.8	511.1	511.1	506.8	506.8
67.5°	417.9	426.8	426.8	426.8	426.8	431.1	426.8	426.8
70°	337.9	346.8	342.2	346.8	346.8	346.8	346.8	346.8
72.5°	257.8	262.2	266.8	266.8	271.1	266.8	266.8	266.8
75°	186.8	195.6	195.6	195.6	195.6	200.0	200.0	200.0
77.5°	133.4	137.8	137.8	142.2	142.2	142.2	142.2	146.6
80°	93.4	93.4	97.8	97.8	102.2	102.2	102.2	102.2
82.5°	62.2	66.6	66.6	66.6	66.6	66.6	66.6	66.6
85°	35.5	40.0	40.0	40.0	40.0	44.5	44.5	44.5
87.5°	22.2	22.2	22.2	22.2	22.2	22.2	17.8	17.8
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)