

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: io LED

Report Number: P252183

Luminaire Tested: **LD6B40D010 EU6B30508040 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252183
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: io LED
Catalog Number: LD6B40D010 EU6B30508040 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5508.0 lumens
Efficiency: N/A
Efficacy: 128.0 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

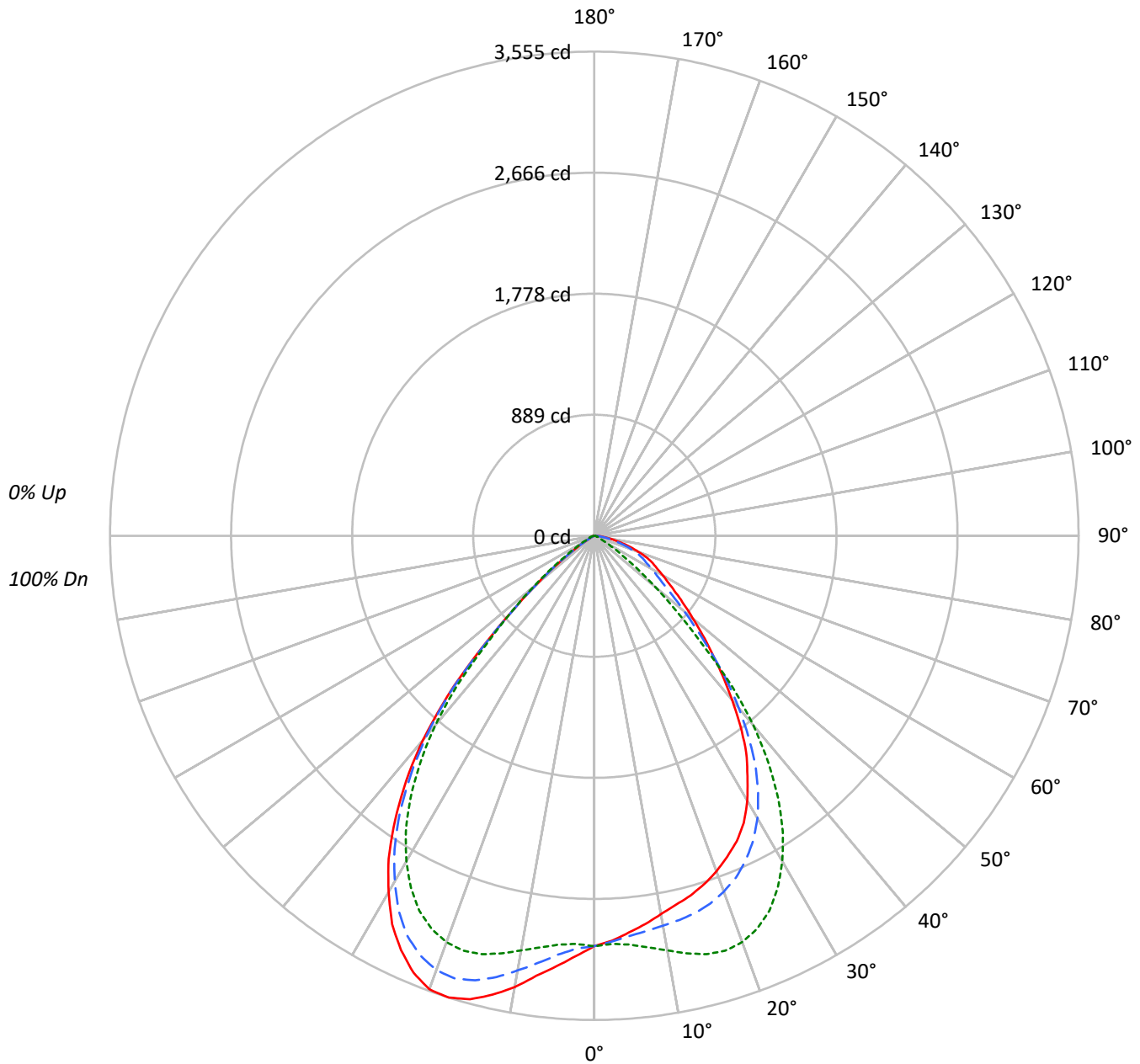
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	112	108	105	103	109	106	103	101		102	100	98		98	96	95		95	93	92
2	105	98	93	89	102	97	92	88		93	89	86		90	87	84		87	85	82
3	98	89	83	78	95	88	82	78		85	80	76		83	78	75		80	77	74
4	91	82	75	69	89	80	74	69		78	72	68		76	71	67		74	70	66
5	85	75	67	62	83	74	67	62		72	66	61		70	65	61		68	64	60
6	80	69	61	56	78	68	61	56		66	60	55		64	59	55		63	58	54
7	74	63	56	51	73	62	55	50		61	55	50		60	54	50		58	53	50
8	70	58	51	46	69	58	51	46		57	50	46		55	50	46		54	49	45
9	66	54	47	42	64	54	47	42		53	46	42		52	46	42		51	45	42
10	62	50	43	39	61	50	43	39		49	43	39		48	43	39		47	42	38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	196590	196590	196590
5°	191492	197341	207721
10°	186837	204776	222908
15°	184653	214811	237964
20°	182005	220405	246010
25°	178134	218777	241589
30°	169274	207905	227439
35°	154868	187450	203053
40°	133957	154814	166592
45°	112959	101537	108973
50°	95904	58766	55265
55°	83226	28174	21304
60°	75183	13153	5258
65°	72941	7564	1775
70°	65389	6047	1640
75°	53741	4361	731
80°	40050	2179	0
85°	34508	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.1	5.3
10°-20°	887.0	16.1
20°-30°	1355.3	24.6
30°-40°	1417.5	25.7
40°-50°	919.6	16.7
50°-60°	365.1	6.6
60°-70°	173.2	3.1
70°-80°	82.4	1.5
80°-90°	16.8	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°	2533.4	46.0
0°-40°	3951.0	71.7
0°-60°	5235.6	95.1
0°-90°	5508.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5508.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3013	3013	3013	3013	3013	
5°	2924	2950	3013	3088	3172	276
15°	2734	2866	3180	3379	3523	770
25°	2475	2630	3039	3244	3356	1133
35°	1944	2063	2354	2492	2550	1203
45°	1224	1213	1100	1167	1181	953
55°	732	622	248	193	187	663
65°	472	392	49	12	12	461
75°	213	173	17	6	3	230
85°	46	29	0	0	0	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°	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3
2.5°	2975.9	2981.6	2949.9	2941.3	2964.3	2973.0	2975.9	2967.2	2970.1	2981.6	2981.6
5°	2924.0	2929.8	2901.0	2892.3	2915.4	2921.1	2929.8	2926.9	2935.5	2952.8	2949.9
7.5°	2875.0	2883.7	2852.0	2840.5	2869.3	2883.7	2889.4	2889.4	2901.0	2924.0	2926.9
10°	2820.3	2831.8	2803.0	2797.3	2828.9	2843.3	2846.2	2852.0	2869.3	2901.0	2906.7
12.5°	2774.2	2785.7	2765.6	2756.9	2791.5	2805.9	2811.7	2823.2	2843.3	2883.7	2889.4
15°	2733.9	2742.5	2719.5	2713.7	2748.3	2765.6	2768.4	2785.7	2811.7	2857.7	2866.4
17.5°	2682.0	2687.8	2670.5	2664.7	2699.3	2716.6	2719.5	2739.6	2771.3	2817.4	2831.8
20°	2621.5	2627.3	2610.0	2604.2	2638.8	2659.0	2661.9	2679.1	2716.6	2765.6	2780.0
22.5°	2549.5	2561.0	2540.9	2535.1	2569.7	2587.0	2595.6	2610.0	2647.4	2696.4	2716.6
25°	2474.6	2474.6	2460.2	2457.3	2489.0	2509.2	2506.3	2526.5	2563.9	2612.9	2630.2
27.5°	2376.7	2373.8	2359.4	2356.5	2391.1	2408.3	2402.6	2422.7	2457.3	2506.3	2523.6
30°	2247.0	2252.8	2232.6	2226.9	2255.7	2284.5	2281.6	2301.8	2336.3	2382.4	2393.9
32.5°	2091.5	2097.2	2094.3	2085.7	2111.6	2126.0	2134.7	2149.1	2177.9	2226.9	2238.4
35°	1944.5	1935.9	1924.4	1924.4	1950.3	1973.3	1964.7	1982.0	2010.8	2059.8	2062.6
37.5°	1763.0	1760.2	1754.4	1748.6	1777.4	1783.2	1786.1	1797.6	1823.5	1863.9	1858.1
40°	1572.9	1575.8	1572.9	1561.4	1578.7	1601.7	1598.8	1604.6	1627.6	1656.5	1647.8
42.5°	1394.3	1394.3	1394.3	1382.8	1402.9	1414.5	1420.2	1417.4	1423.1	1449.0	1437.5
45°	1224.3	1227.2	1224.3	1221.5	1224.3	1230.1	1224.3	1221.5	1221.5	1230.1	1212.8
47.5°	1077.4	1077.4	1068.8	1060.1	1068.8	1071.7	1063.0	1054.4	1051.5	1048.6	1019.8
50°	944.9	942.0	939.1	924.7	933.4	936.3	924.7	919.0	907.5	893.0	858.5
52.5°	829.7	826.8	823.9	809.5	815.3	818.1	806.6	795.1	780.7	769.2	726.0
55°	731.7	728.8	728.8	720.2	714.4	720.2	708.7	700.0	679.9	665.5	622.3
57.5°	648.2	648.2	642.4	633.8	636.7	636.7	625.1	613.6	596.3	579.0	544.5
60°	576.2	576.2	576.2	567.5	567.5	567.5	561.8	550.2	535.8	518.5	484.0
62.5°	518.5	518.5	515.7	507.0	509.9	509.9	504.1	492.6	478.2	466.7	432.1
65°	472.5	472.5	472.5	463.8	463.8	466.7	460.9	449.4	437.9	423.5	391.8
67.5°	414.8	412.0	412.0	406.2	409.1	412.0	406.2	397.5	383.1	374.5	345.7
70°	342.8	345.7	348.6	339.9	342.8	342.8	339.9	331.3	322.6	314.0	288.1
72.5°	279.4	279.4	276.6	273.7	273.7	276.6	270.8	262.2	256.4	250.6	230.5
75°	213.2	210.3	213.2	207.4	207.4	207.4	201.7	198.8	195.9	187.3	172.8
77.5°	155.6	152.7	152.7	146.9	149.8	149.8	146.9	141.2	135.4	132.5	121.0
80°	106.6	106.6	106.6	103.7	103.7	100.8	100.8	97.9	92.2	89.3	83.5
82.5°	72.0	72.0	72.0	69.1	69.1	69.1	66.3	63.4	60.5	57.6	51.9
85°	46.1	46.1	46.1	43.2	43.2	43.2	40.3	40.3	37.5	34.6	28.8
87.5°	25.9	25.9	25.9	23.0	23.0	23.0	23.0	23.0	20.2	17.3	14.4
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°	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3
2.5°	3001.8	2961.5	2987.4	2987.4	2978.7	3001.8	3016.2	3027.7	3024.8	2998.9	2996.0
5°	2978.7	2944.2	2973.0	2975.9	2967.2	2998.9	3019.1	3033.5	3036.4	3013.3	3016.2
7.5°	2961.5	2932.6	2970.1	2981.6	2978.7	3007.5	3030.6	3053.6	3065.2	3047.9	3050.8
10°	2952.8	2929.8	2970.1	2987.4	2990.3	3022.0	3056.5	3088.2	3102.6	3091.1	3099.7
12.5°	2941.3	2926.9	2973.0	2998.9	3010.4	3042.1	3085.3	3122.8	3145.8	3140.1	3157.4
15°	2929.8	2918.2	2973.0	3010.4	3024.8	3053.6	3102.6	3157.4	3183.3	3180.4	3203.4
17.5°	2901.0	2898.1	2955.7	2996.0	3016.2	3050.8	3096.9	3163.1	3189.0	3194.8	3223.6
20°	2854.9	2854.9	2918.2	2961.5	2984.5	3016.2	3073.8	3137.2	3168.9	3174.6	3206.3
22.5°	2791.5	2797.3	2857.7	2901.0	2935.5	2958.6	3019.1	3085.3	3114.1	3122.8	3157.4
25°	2707.9	2713.7	2771.3	2814.5	2852.0	2877.9	2935.5	2996.0	3030.6	3039.2	3065.2
27.5°	2598.5	2610.0	2664.7	2707.9	2739.6	2756.9	2817.4	2880.8	2906.7	2915.4	2941.3
30°	2471.7	2474.6	2529.3	2566.8	2598.5	2612.9	2664.7	2731.0	2751.2	2759.8	2797.3
32.5°	2316.2	2313.3	2365.1	2399.7	2425.6	2442.9	2497.6	2540.9	2561.0	2575.4	2595.6
35°	2128.9	2126.0	2163.5	2203.8	2224.0	2229.7	2284.5	2330.6	2342.1	2353.6	2379.5
37.5°	1918.6	1918.6	1950.3	1970.5	1993.5	2002.2	2028.1	2079.9	2100.1	2097.2	2117.4
40°	1696.8	1685.3	1708.3	1728.5	1734.2	1737.1	1763.0	1803.4	1817.8	1817.8	1832.2
42.5°	1463.4	1446.2	1449.0	1460.6	1466.3	1446.2	1463.4	1489.4	1480.7	1492.3	1495.1
45°	1215.7	1189.8	1178.2	1152.3	1158.1	1137.9	1126.4	1132.2	1129.3	1100.5	1106.2
47.5°	1014.0	967.9	947.8	910.3	901.7	878.6	864.2	838.3	815.3	815.3	800.9
50°	844.1	798.0	757.6	714.4	700.0	679.9	648.2	613.6	596.3	579.0	564.6
52.5°	708.7	659.7	610.7	564.6	544.5	518.5	475.3	440.8	409.1	391.8	374.5
55°	599.2	544.5	492.6	443.6	417.7	391.8	348.6	308.2	270.8	247.7	233.3
57.5°	515.7	463.8	409.1	357.2	334.2	305.4	259.3	216.1	181.5	155.6	141.2
60°	455.2	403.3	354.3	299.6	276.6	247.7	198.8	158.4	123.9	100.8	83.5
62.5°	403.3	357.2	305.4	256.4	233.3	204.5	158.4	118.1	86.4	63.4	49.0
65°	365.9	319.8	276.6	227.6	207.4	178.6	135.4	97.9	69.1	49.0	34.6
67.5°	322.6	282.3	239.1	198.8	178.6	155.6	115.2	83.5	57.6	40.3	28.8
70°	270.8	239.1	201.7	164.2	149.8	129.6	95.1	69.1	46.1	31.7	23.0
72.5°	216.1	190.1	161.3	132.5	121.0	100.8	77.8	54.7	34.6	23.0	17.3
75°	164.2	144.0	121.0	100.8	89.3	77.8	57.6	40.3	25.9	17.3	11.5
77.5°	112.4	103.7	86.4	69.1	63.4	54.7	37.5	25.9	17.3	11.5	5.8
80°	77.8	69.1	57.6	46.1	40.3	34.6	23.0	17.3	8.6	5.8	2.9
82.5°	49.0	40.3	34.6	28.8	25.9	20.2	14.4	8.6	5.8	2.9	2.9
85°	25.9	23.0	20.2	14.4	14.4	11.5	8.6	5.8	2.9	0.0	0.0
87.5°	14.4	11.5	8.6	5.8	5.8	2.9	2.9	2.9	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°	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3
2.5°	3030.6	3030.6	3027.7	3062.3	3022.0	3062.3	3042.1	3062.3	3033.5	3030.6	3033.5
5°	3053.6	3062.3	3065.2	3096.9	3059.4	3108.4	3091.1	3108.4	3088.2	3094.0	3102.6
7.5°	3099.7	3114.1	3111.3	3151.6	3114.1	3168.9	3157.4	3183.3	3163.1	3168.9	3180.4
10°	3151.6	3168.9	3171.8	3212.1	3177.5	3243.8	3229.4	3258.2	3240.9	3249.5	3263.9
12.5°	3212.1	3232.3	3235.1	3281.2	3243.8	3312.9	3304.3	3333.1	3318.7	3327.3	3344.6
15°	3258.2	3287.0	3292.7	3338.8	3298.5	3370.5	3364.8	3402.2	3379.2	3393.6	3408.0
17.5°	3281.2	3307.2	3318.7	3361.9	3327.3	3399.3	3393.6	3425.3	3408.0	3422.4	3439.7
20°	3266.8	3298.5	3307.2	3350.4	3315.8	3387.8	3379.2	3410.9	3393.6	3405.1	3422.4
22.5°	3215.0	3246.7	3258.2	3298.5	3266.8	3333.1	3330.2	3359.0	3336.0	3350.4	3364.8
25°	3122.8	3157.4	3163.1	3200.6	3166.0	3235.1	3229.4	3261.1	3243.8	3252.4	3272.6
27.5°	2990.3	3030.6	3039.2	3070.9	3045.0	3102.6	3102.6	3128.5	3108.4	3108.4	3128.5
30°	2831.8	2872.2	2877.9	2903.8	2880.8	2932.6	2935.5	2961.5	2929.8	2947.1	2949.9
32.5°	2638.8	2664.7	2682.0	2705.1	2670.5	2736.8	2728.1	2748.3	2731.0	2731.0	2745.4
35°	2405.5	2437.2	2445.8	2474.6	2445.8	2497.6	2497.6	2509.2	2491.9	2491.9	2514.9
37.5°	2152.0	2175.0	2177.9	2206.7	2183.6	2226.9	2224.0	2232.6	2215.3	2226.9	2226.9
40°	1855.2	1872.5	1878.3	1892.7	1889.8	1921.5	1918.6	1924.4	1915.7	1918.6	1924.4
42.5°	1509.5	1532.6	1544.1	1555.6	1538.3	1581.6	1572.9	1581.6	1578.7	1581.6	1590.2
45°	1112.0	1129.3	1137.9	1140.8	1135.0	1161.0	1181.1	1163.8	1166.7	1161.0	1172.5
47.5°	803.7	806.6	800.9	818.1	803.7	815.3	821.0	823.9	806.6	803.7	815.3
50°	550.2	564.6	544.5	553.1	550.2	561.8	556.0	558.9	541.6	550.2	544.5
52.5°	365.9	363.0	357.2	360.1	354.3	354.3	354.3	360.1	348.6	342.8	337.1
55°	221.8	216.1	204.5	201.7	201.7	204.5	198.8	193.0	193.0	190.1	190.1
57.5°	129.6	121.0	115.2	112.4	106.6	103.7	100.8	100.8	95.1	95.1	95.1
60°	72.0	63.4	57.6	51.9	51.9	49.0	46.1	43.2	43.2	43.2	40.3
62.5°	37.5	31.7	25.9	23.0	23.0	20.2	17.3	17.3	17.3	17.3	14.4
65°	25.9	20.2	17.3	14.4	14.4	11.5	11.5	11.5	11.5	11.5	11.5
67.5°	20.2	17.3	14.4	11.5	11.5	11.5	8.6	8.6	8.6	8.6	8.6
70°	17.3	11.5	11.5	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
72.5°	11.5	11.5	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
75°	8.6	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0
80°	2.9	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: P252183

CATALOG NUMBER: LD6B40D010 EU6B30508040 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3	3013.3
2.5°	3059.4	3056.5	3059.4	3065.2	3053.6	3088.2	3070.9	3088.2
5°	3125.7	3128.5	3131.4	3140.1	3125.7	3168.9	3145.8	3171.8
7.5°	3212.1	3215.0	3217.8	3226.5	3217.8	3261.1	3235.1	3258.2
10°	3301.4	3307.2	3307.2	3321.6	3312.9	3353.2	3336.0	3364.8
12.5°	3384.9	3390.7	3396.5	3405.1	3399.3	3442.5	3428.1	3451.2
15°	3451.2	3462.7	3465.6	3477.1	3471.4	3517.4	3500.2	3523.2
17.5°	3482.9	3494.4	3494.4	3508.8	3503.0	3552.0	3529.0	3554.9
20°	3465.6	3474.2	3477.1	3491.5	3485.8	3534.7	3511.7	3543.4
22.5°	3410.9	3413.7	3416.6	3431.0	3428.1	3471.4	3451.2	3471.4
25°	3310.0	3318.7	3315.8	3327.3	3327.3	3361.9	3338.8	3356.1
27.5°	3166.0	3174.6	3174.6	3189.0	3177.5	3212.1	3189.0	3215.0
30°	2990.3	2998.9	2993.1	3004.7	2993.1	3027.7	3010.4	3019.1
32.5°	2780.0	2780.0	2782.8	2785.7	2780.0	2811.7	2794.4	2811.7
35°	2529.3	2535.1	2538.0	2540.9	2535.1	2558.1	2538.0	2549.5
37.5°	2247.0	2261.4	2258.5	2261.4	2252.8	2281.6	2264.3	2270.1
40°	1944.5	1944.5	1941.7	1947.4	1938.8	1961.8	1950.3	1956.1
42.5°	1593.1	1601.7	1590.2	1604.6	1581.6	1613.2	1601.7	1593.1
45°	1195.5	1184.0	1181.1	1184.0	1175.4	1178.2	1186.9	1181.1
47.5°	815.3	815.3	809.5	800.9	812.4	815.3	803.7	803.7
50°	547.4	547.4	541.6	538.7	544.5	541.6	535.8	544.5
52.5°	348.6	337.1	337.1	342.8	337.1	331.3	339.9	334.2
55°	190.1	184.4	184.4	190.1	184.4	184.4	181.5	187.3
57.5°	92.2	95.1	92.2	92.2	92.2	92.2	89.3	92.2
60°	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3
62.5°	17.3	17.3	14.4	14.4	14.4	14.4	14.4	14.4
65°	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
67.5°	8.6	8.6	8.6	8.6	8.6	11.5	8.6	8.6
70°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
72.5°	8.6	8.6	11.5	11.5	11.5	11.5	11.5	11.5
75°	5.8	5.8	5.8	2.9	2.9	2.9	2.9	2.9
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)