

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: P252311

Luminaire Tested: **LD6B60D010TE EU6B60708030 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252311
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: io LED
Catalog Number: LD6B60D010TE EU6B60708030 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE 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: 5520.0 lumens
Efficiency: N/A
Efficacy: 88.3 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

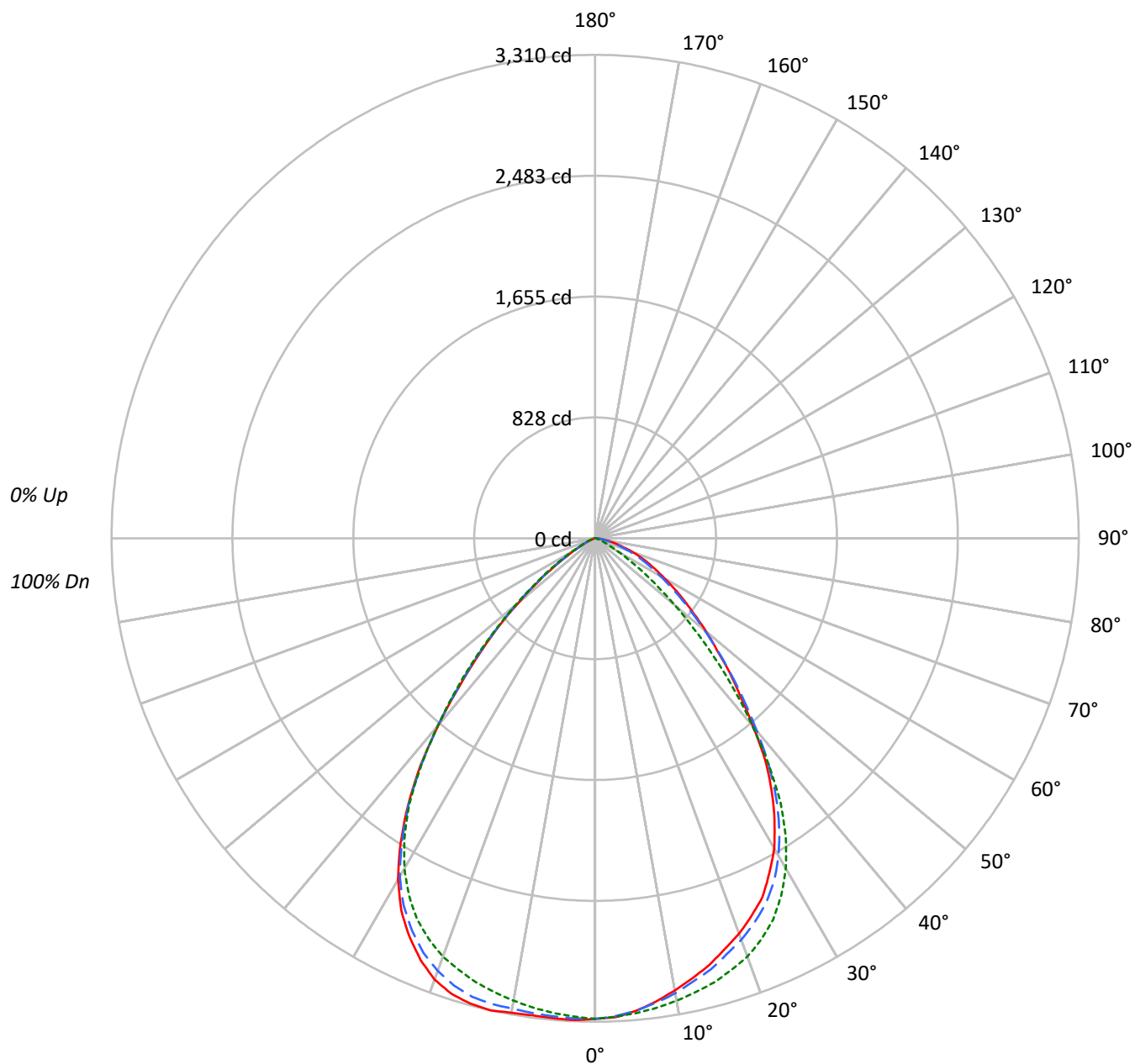
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	214661	214661	214661
5°	212613	213654	215999
10°	208228	212971	218496
15°	204247	212568	222767
20°	200021	211608	223196
25°	195087	207389	216538
30°	184702	196673	203265
35°	167738	176284	177861
40°	143155	142474	141801
45°	120257	106694	103391
50°	100431	72194	68561
55°	84523	44292	40231
60°	71556	23330	20225
65°	61950	12273	9818
70°	51541	7573	5303
75°	38063	5016	3000
80°	29869	2968	1503
85°	23804	2994	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	310.1	5.6
10°-20°	887.9	16.1
20°-30°	1311.1	23.8
30°-40°	1351.2	24.5
40°-50°	933.2	16.9
50°-60°	460.0	8.3
60°-70°	186.4	3.4
70°-80°	66.4	1.2
80°-90°	13.7	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°	2509.0	45.5
0°-40°	3860.2	69.9
0°-60°	5253.5	95.2
0°-90°	5520.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5520.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3290	3290	3290	3290	3290	
5°	3246	3246	3262	3286	3298	307
15°	3024	3056	3147	3250	3298	851
25°	2710	2762	2881	2964	3008	1239
35°	2106	2158	2213	2225	2233	1305
45°	1303	1311	1156	1140	1121	1007
55°	743	715	389	366	354	671
65°	401	362	80	64	64	399
75°	151	127	20	12	12	170
85°	32	24	4	0	0	39
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°	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3
2.5°	3282.3	3270.4	3278.3	3262.4	3282.3	3262.4	3266.4	3270.4	3266.4	3270.4	3274.4
5°	3246.5	3234.6	3246.5	3226.7	3246.5	3234.6	3234.6	3238.6	3238.6	3242.6	3246.5
7.5°	3198.9	3186.9	3198.9	3179.0	3202.8	3190.9	3190.9	3198.9	3194.9	3198.9	3206.8
10°	3143.2	3127.3	3139.3	3127.3	3151.2	3135.3	3143.2	3143.2	3143.2	3155.2	3163.1
12.5°	3083.6	3067.7	3083.6	3063.8	3087.6	3075.7	3079.7	3091.6	3095.5	3103.5	3107.5
15°	3024.0	3004.2	3012.1	3000.2	3024.0	3012.1	3016.1	3032.0	3032.0	3043.9	3055.8
17.5°	2948.5	2932.6	2948.5	2932.6	2952.5	2944.5	2952.5	2964.4	2964.4	2976.3	2988.3
20°	2881.0	2865.1	2877.0	2865.1	2888.9	2877.0	2881.0	2896.9	2900.8	2912.8	2924.7
22.5°	2797.5	2785.6	2793.5	2781.6	2805.5	2797.5	2801.5	2817.4	2821.4	2829.3	2849.2
25°	2710.1	2686.3	2698.2	2690.2	2714.1	2702.1	2710.1	2726.0	2733.9	2745.9	2761.8
27.5°	2582.9	2571.0	2579.0	2579.0	2598.8	2586.9	2590.9	2606.8	2618.7	2630.6	2650.5
30°	2451.8	2431.9	2439.9	2443.9	2459.7	2451.8	2459.7	2475.6	2479.6	2495.5	2511.4
32.5°	2284.9	2277.0	2292.9	2284.9	2292.9	2292.9	2296.8	2308.7	2316.7	2324.6	2344.5
35°	2106.1	2090.2	2106.1	2098.1	2118.0	2106.1	2118.0	2129.9	2129.9	2145.8	2157.7
37.5°	1911.4	1891.5	1899.4	1899.4	1907.4	1903.4	1903.4	1923.3	1927.3	1939.2	1951.1
40°	1680.9	1672.9	1688.8	1684.9	1688.8	1688.8	1692.8	1704.7	1712.7	1716.7	1720.6
42.5°	1474.3	1478.2	1482.2	1482.2	1482.2	1482.2	1482.2	1498.1	1494.1	1506.0	1510.0
45°	1303.4	1287.5	1295.4	1291.5	1303.4	1291.5	1303.4	1315.3	1307.4	1319.3	1311.3
47.5°	1128.5	1128.5	1128.5	1124.6	1132.5	1128.5	1136.5	1140.5	1140.5	1140.5	1136.5
50°	989.5	977.5	981.5	981.5	985.5	981.5	989.5	993.4	993.4	985.5	969.6
52.5°	854.4	850.4	850.4	858.3	858.3	854.4	854.4	854.4	854.4	842.4	834.5
55°	743.1	735.1	739.1	739.1	739.1	739.1	743.1	739.1	739.1	727.2	715.3
57.5°	643.7	635.8	635.8	635.8	639.8	635.8	635.8	635.8	631.8	619.9	604.0
60°	548.4	544.4	548.4	548.4	552.4	548.4	548.4	548.4	540.4	528.5	512.6
62.5°	468.9	468.9	468.9	472.9	472.9	468.9	468.9	464.9	461.0	445.1	429.2
65°	401.3	397.4	401.3	401.3	405.3	405.3	401.3	397.4	393.4	377.5	361.6
67.5°	333.8	329.8	333.8	333.8	337.8	333.8	333.8	333.8	321.9	313.9	298.0
70°	270.2	266.2	266.2	266.2	270.2	262.3	266.2	266.2	258.3	246.4	230.5
72.5°	206.6	206.6	206.6	206.6	206.6	206.6	202.7	202.7	194.7	182.8	174.8
75°	151.0	151.0	155.0	155.0	151.0	151.0	151.0	147.0	143.1	135.1	127.2
77.5°	111.3	111.3	111.3	111.3	107.3	107.3	107.3	103.3	99.3	95.4	87.4
80°	79.5	79.5	79.5	75.5	79.5	75.5	75.5	75.5	67.6	63.6	59.6
82.5°	55.6	51.7	51.7	51.7	51.7	51.7	51.7	47.7	47.7	43.7	39.7
85°	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	27.8	23.8	23.8
87.5°	15.9	19.9	19.9	19.9	19.9	19.9	19.9	15.9	15.9	15.9	11.9
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3
2.5°	3274.4	3274.4	3282.3	3270.4	3290.3	3278.3	3274.4	3294.2	3282.3	3278.3	3286.3
5°	3246.5	3250.5	3254.5	3246.5	3266.4	3254.5	3254.5	3274.4	3266.4	3262.4	3274.4
7.5°	3210.8	3214.8	3222.7	3218.7	3234.6	3226.7	3230.7	3250.5	3242.6	3242.6	3254.5
10°	3167.1	3175.0	3183.0	3183.0	3202.8	3194.9	3194.9	3218.7	3210.8	3214.8	3230.7
12.5°	3115.4	3127.3	3139.3	3143.2	3163.1	3151.2	3155.2	3183.0	3179.0	3183.0	3198.9
15°	3059.8	3075.7	3087.6	3087.6	3111.4	3099.5	3111.4	3139.3	3131.3	3147.2	3167.1
17.5°	2996.2	3012.1	3028.0	3032.0	3055.8	3047.9	3063.8	3091.6	3091.6	3099.5	3123.4
20°	2936.6	2956.5	2964.4	2976.3	3000.2	2996.2	3004.2	3035.9	3035.9	3047.9	3071.7
22.5°	2857.1	2877.0	2892.9	2904.8	2924.7	2924.7	2936.6	2964.4	2964.4	2972.4	2996.2
25°	2769.7	2793.5	2805.5	2817.4	2837.3	2833.3	2845.2	2869.0	2873.0	2881.0	2904.8
27.5°	2658.4	2678.3	2694.2	2702.1	2730.0	2714.1	2726.0	2753.8	2749.8	2757.8	2777.6
30°	2519.4	2539.2	2555.1	2555.1	2579.0	2579.0	2590.9	2602.8	2602.8	2610.7	2626.6
32.5°	2356.4	2380.3	2380.3	2392.2	2408.1	2392.2	2408.1	2424.0	2416.0	2428.0	2439.9
35°	2169.7	2181.6	2185.6	2185.6	2197.5	2193.5	2189.5	2201.5	2193.5	2213.4	2225.3
37.5°	1943.2	1959.1	1951.1	1959.1	1955.1	1943.2	1943.2	1963.0	1947.1	1951.1	1963.0
40°	1724.6	1724.6	1720.6	1700.8	1704.7	1692.8	1688.8	1692.8	1676.9	1672.9	1688.8
42.5°	1498.1	1494.1	1482.2	1454.4	1458.4	1438.5	1422.6	1422.6	1414.7	1410.7	1414.7
45°	1295.4	1283.5	1263.7	1231.9	1223.9	1208.0	1176.2	1168.3	1156.4	1156.4	1160.3
47.5°	1108.7	1092.8	1061.0	1025.2	1005.4	985.5	953.7	941.8	921.9	914.0	921.9
50°	953.7	925.9	886.1	834.5	814.6	790.8	759.0	739.1	719.2	711.3	707.3
52.5°	810.6	770.9	731.2	667.6	651.7	627.9	584.1	564.3	544.4	528.5	528.5
55°	687.5	651.7	596.1	536.5	512.6	488.8	445.1	417.2	397.4	389.4	381.5
57.5°	576.2	536.5	484.8	421.2	397.4	373.5	329.8	302.0	282.1	270.2	262.3
60°	484.8	441.1	389.4	333.8	306.0	282.1	238.4	210.6	190.7	178.8	170.9
62.5°	397.4	361.6	310.0	258.3	234.5	210.6	174.8	147.0	127.2	119.2	107.3
65°	333.8	298.0	250.3	206.6	186.8	162.9	131.1	107.3	91.4	79.5	71.5
67.5°	270.2	242.4	202.7	162.9	143.1	127.2	99.3	79.5	63.6	55.6	51.7
70°	214.6	186.8	155.0	123.2	111.3	95.4	75.5	55.6	47.7	39.7	35.8
72.5°	158.9	139.1	115.2	91.4	79.5	71.5	51.7	43.7	31.8	27.8	23.8
75°	115.2	99.3	83.4	63.6	55.6	51.7	39.7	27.8	23.8	19.9	15.9
77.5°	79.5	71.5	55.6	43.7	39.7	35.8	27.8	19.9	15.9	11.9	11.9
80°	51.7	43.7	35.8	27.8	27.8	23.8	15.9	11.9	11.9	7.9	7.9
82.5°	31.8	27.8	23.8	19.9	15.9	15.9	11.9	7.9	7.9	4.0	4.0
85°	19.9	15.9	11.9	11.9	7.9	7.9	7.9	4.0	4.0	4.0	4.0
87.5°	7.9	7.9	7.9	4.0	4.0	4.0	4.0	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3
2.5°	3286.3	3286.3	3294.2	3282.3	3290.3	3290.3	3298.2	3282.3	3290.3	3294.2	3302.2
5°	3270.4	3274.4	3282.3	3278.3	3282.3	3282.3	3290.3	3270.4	3286.3	3286.3	3298.2
7.5°	3254.5	3254.5	3262.4	3258.5	3266.4	3270.4	3278.3	3262.4	3278.3	3278.3	3290.3
10°	3234.6	3234.6	3246.5	3242.6	3254.5	3258.5	3270.4	3254.5	3270.4	3274.4	3286.3
12.5°	3206.8	3210.8	3222.7	3222.7	3234.6	3242.6	3254.5	3246.5	3266.4	3270.4	3286.3
15°	3175.0	3183.0	3198.9	3194.9	3206.8	3218.7	3234.6	3222.7	3250.5	3258.5	3274.4
17.5°	3135.3	3143.2	3155.2	3155.2	3167.1	3175.0	3194.9	3186.9	3210.8	3214.8	3234.6
20°	3075.7	3087.6	3103.5	3099.5	3111.4	3119.4	3135.3	3127.3	3151.2	3159.1	3179.0
22.5°	3004.2	3012.1	3024.0	3024.0	3035.9	3043.9	3059.8	3047.9	3071.7	3075.7	3091.6
25°	2908.8	2916.7	2924.7	2928.6	2940.6	2944.5	2952.5	2944.5	2964.4	2968.4	2988.3
27.5°	2785.6	2789.6	2801.5	2801.5	2809.4	2813.4	2825.3	2809.4	2837.3	2837.3	2849.2
30°	2638.6	2634.6	2650.5	2642.5	2650.5	2650.5	2662.4	2654.5	2674.3	2666.4	2678.3
32.5°	2443.9	2451.8	2451.8	2443.9	2459.7	2455.8	2455.8	2447.8	2459.7	2463.7	2471.7
35°	2217.3	2229.3	2229.3	2233.2	2237.2	2225.3	2229.3	2205.4	2225.3	2229.3	2233.2
37.5°	1971.0	1959.1	1967.0	1955.1	1975.0	1951.1	1951.1	1935.2	1951.1	1951.1	1955.1
40°	1688.8	1684.9	1692.8	1684.9	1680.9	1676.9	1669.0	1657.1	1672.9	1665.0	1676.9
42.5°	1422.6	1418.6	1418.6	1410.7	1406.7	1406.7	1398.8	1390.8	1386.8	1386.8	1406.7
45°	1148.4	1156.4	1148.4	1144.4	1152.4	1144.4	1148.4	1132.5	1140.5	1132.5	1140.5
47.5°	917.9	921.9	914.0	906.0	917.9	906.0	906.0	894.1	910.0	910.0	902.0
50°	711.3	707.3	699.4	707.3	703.4	703.4	703.4	691.4	699.4	687.5	695.4
52.5°	524.5	520.6	520.6	516.6	520.6	516.6	516.6	512.6	512.6	508.6	512.6
55°	381.5	377.5	369.6	369.6	369.6	373.5	369.6	365.6	365.6	361.6	365.6
57.5°	258.3	250.3	250.3	250.3	250.3	246.4	246.4	242.4	246.4	242.4	246.4
60°	166.9	166.9	158.9	158.9	158.9	158.9	158.9	155.0	158.9	158.9	158.9
62.5°	103.3	103.3	99.3	95.4	99.3	95.4	95.4	95.4	99.3	95.4	99.3
65°	67.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
67.5°	47.7	43.7	43.7	43.7	43.7	43.7	43.7	39.7	43.7	43.7	43.7
70°	31.8	31.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8
72.5°	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
75°	15.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
77.5°	11.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
80°	7.9	7.9	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
82.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
85°	4.0	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	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
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: P252311

CATALOG NUMBER: LD6B60D010TE EU6B60708030 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3	3290.3
2.5°	3290.3	3294.2	3286.3	3290.3	3282.3	3290.3	3294.2	3302.2
5°	3282.3	3286.3	3278.3	3286.3	3278.3	3286.3	3290.3	3298.2
7.5°	3274.4	3282.3	3274.4	3282.3	3274.4	3282.3	3286.3	3294.2
10°	3274.4	3286.3	3278.3	3290.3	3278.3	3286.3	3294.2	3298.2
12.5°	3274.4	3286.3	3282.3	3290.3	3286.3	3294.2	3302.2	3310.1
15°	3266.4	3278.3	3270.4	3282.3	3278.3	3282.3	3298.2	3298.2
17.5°	3222.7	3234.6	3234.6	3242.6	3242.6	3254.5	3262.4	3270.4
20°	3167.1	3179.0	3175.0	3186.9	3186.9	3198.9	3206.8	3214.8
22.5°	3083.6	3099.5	3095.5	3107.5	3103.5	3111.4	3127.3	3123.4
25°	2976.3	2996.2	2992.2	3000.2	2996.2	2996.2	3004.2	3008.1
27.5°	2845.2	2857.1	2853.1	2861.1	2853.1	2861.1	2869.0	2873.0
30°	2674.3	2682.3	2678.3	2682.3	2678.3	2686.3	2690.2	2698.2
32.5°	2467.7	2479.6	2467.7	2475.6	2471.7	2471.7	2487.6	2479.6
35°	2221.3	2225.3	2229.3	2229.3	2221.3	2225.3	2233.2	2233.2
37.5°	1947.1	1967.0	1943.2	1955.1	1951.1	1951.1	1951.1	1963.0
40°	1661.0	1665.0	1657.1	1657.1	1657.1	1653.1	1669.0	1665.0
42.5°	1390.8	1394.8	1390.8	1378.9	1382.9	1382.9	1394.8	1378.9
45°	1128.5	1136.5	1132.5	1132.5	1124.6	1124.6	1128.5	1120.6
47.5°	894.1	902.0	890.1	894.1	886.1	894.1	890.1	898.1
50°	679.5	687.5	683.5	687.5	687.5	679.5	691.4	675.5
52.5°	508.6	512.6	508.6	504.7	500.7	500.7	508.6	504.7
55°	361.6	357.6	357.6	357.6	361.6	361.6	357.6	353.7
57.5°	242.4	242.4	238.4	238.4	242.4	234.5	238.4	234.5
60°	155.0	155.0	155.0	155.0	151.0	155.0	155.0	155.0
62.5°	95.4	95.4	95.4	95.4	95.4	95.4	95.4	95.4
65°	63.6	63.6	63.6	63.6	63.6	63.6	63.6	63.6
67.5°	39.7	43.7	43.7	43.7	39.7	39.7	39.7	39.7
70°	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8
72.5°	19.9	19.9	19.9	19.9	19.9	19.9	19.9	19.9
75°	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
77.5°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
80°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
82.5°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.0	4.0	4.0	4.0	4.0	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)