

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: P252612

Luminaire Tested: **LD6B50D010TE EU6B30508040 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252612
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B50D010TE EU6B30508040 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE 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: 5519.0 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

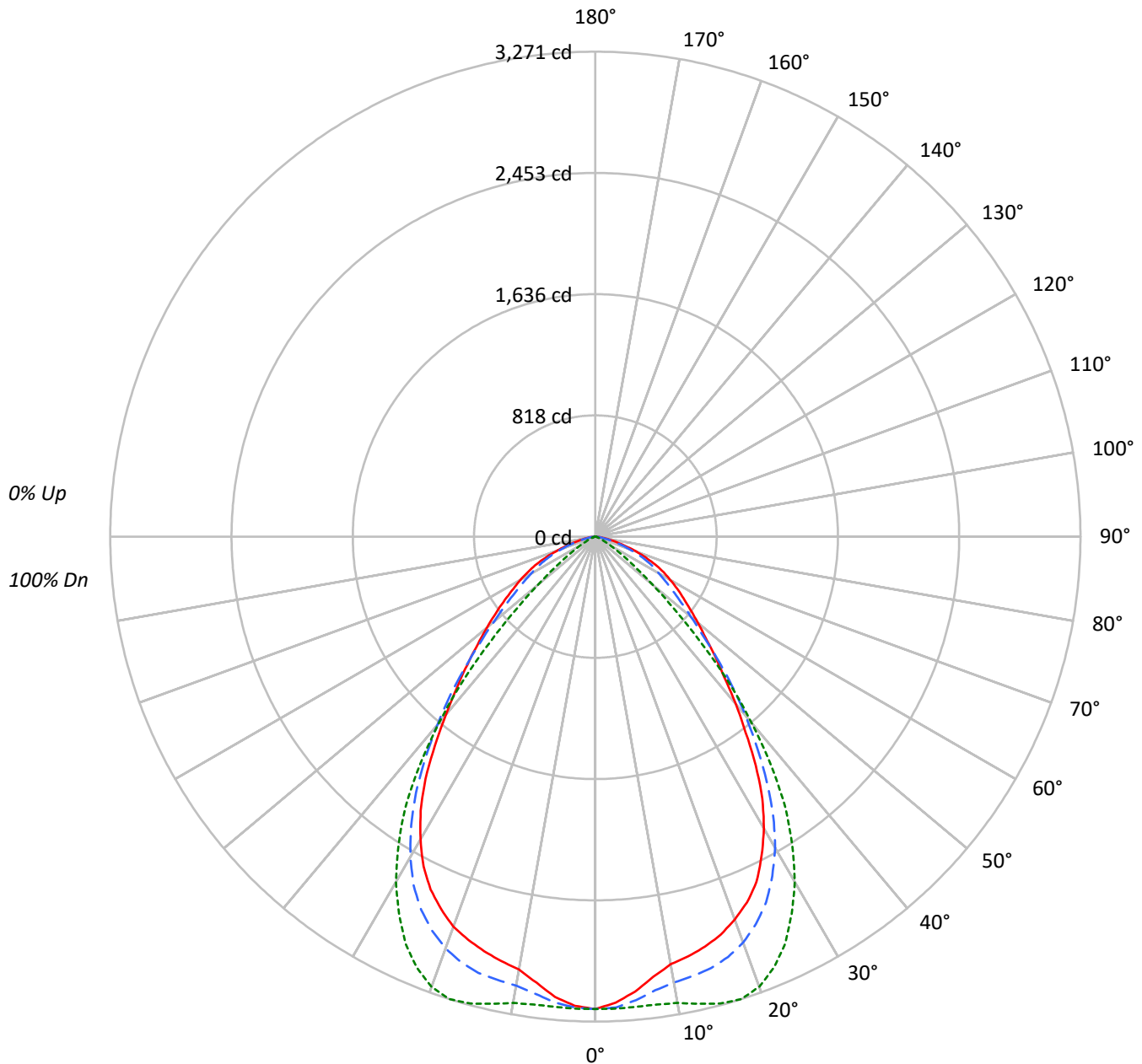
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	108	105	102	109	106	103	100	102	99	97		98	96	94		94
2	104	97	92	87	101	95	91	86	92	88	84		89	86	83		86
3	96	88	81	76	94	86	80	76	84	79	74		81	77	73		79
4	90	80	73	67	88	79	72	67	76	70	66		74	69	65		72
5	84	73	65	60	82	72	65	59	70	64	59		68	63	58		66
6	78	67	59	54	76	66	59	53	64	58	53		63	57	53		61
7	73	61	54	49	72	61	53	48	59	53	48		58	52	48		57
8	69	57	49	44	67	56	49	44	55	48	44		54	48	44		53
9	64	53	45	40	63	52	45	40	51	45	40		50	44	40		49
10	61	49	42	37	60	48	42	37	48	41	37		47	41	37		46

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	207883	207883	207883
5°	201682	208434	204093
10°	194005	211580	196449
15°	193319	220194	195561
20°	190787	224293	194370
25°	185088	217971	189069
30°	171218	202579	177606
35°	150217	178084	159017
40°	125176	139603	133335
45°	105356	92107	112498
50°	91225	50474	96838
55°	82544	26821	84637
60°	75940	13935	75940
65°	68804	7394	67106
70°	55508	4216	51293
75°	38063	2798	35290
80°	24909	1390	22129
85°	16543	2770	13773



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.1	5.4
10°-20°	859.2	15.6
20°-30°	1269.4	23.0
30°-40°	1282.2	23.2
40°-50°	883.8	16.0
50°-60°	507.6	9.2
60°-70°	295.4	5.4
70°-80°	107.8	2.0
80°-90°	16.5	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°	2425.7	44.0
0°-40°	3708.0	67.2
0°-60°	5099.3	92.4
0°-90°	5519.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5519.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3186	3186	3186	3186	3186	
5°	3080	3138	3183	3153	3116	289
15°	2862	3013	3260	3046	2895	806
25°	2571	2722	3028	2778	2626	1171
35°	1886	2015	2236	2107	1997	1171
45°	1142	1157	998	1230	1219	888
55°	726	637	236	663	744	653
65°	446	376	48	372	435	436
75°	151	122	11	118	140	170
85°	22	11	4	15	18	28
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°	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4
2.5°	3145.9	3149.6	3153.2	3149.6	3153.2	3168.0	3156.9	3164.3	3164.3	3168.0	3179.0
5°	3079.6	3079.6	3086.9	3083.3	3094.3	3109.0	3098.0	3109.0	3112.7	3120.1	3138.5
7.5°	2994.8	2994.8	2998.5	2998.5	3013.3	3028.0	3020.6	3035.4	3050.1	3064.8	3086.9
10°	2928.5	2935.9	2935.9	2939.6	2954.3	2972.7	2969.1	2987.5	3002.2	3024.3	3053.8
12.5°	2899.1	2902.7	2902.7	2910.1	2924.9	2943.3	2939.6	2958.0	2980.1	3005.9	3035.4
15°	2862.2	2869.6	2865.9	2873.3	2888.0	2906.4	2902.7	2921.2	2947.0	2972.7	3013.3
17.5°	2814.3	2818.0	2821.7	2821.7	2836.4	2851.2	2851.2	2869.6	2899.1	2928.5	2972.7
20°	2748.0	2755.4	2755.4	2759.1	2770.1	2792.2	2788.6	2807.0	2836.4	2865.9	2913.8
22.5°	2670.7	2674.4	2674.4	2678.0	2696.5	2707.5	2711.2	2725.9	2751.7	2784.9	2829.1
25°	2571.2	2574.9	2571.2	2582.3	2589.6	2611.7	2604.4	2622.8	2652.3	2678.0	2722.2
27.5°	2427.6	2434.9	2434.9	2438.6	2457.0	2475.4	2475.4	2493.9	2519.6	2538.1	2582.3
30°	2272.8	2283.9	2272.8	2291.3	2298.6	2313.4	2324.4	2335.5	2357.6	2383.3	2423.9
32.5°	2096.0	2092.3	2096.0	2103.4	2125.5	2136.5	2143.9	2155.0	2177.1	2199.2	2232.3
35°	1886.1	1893.4	1897.1	1911.8	1911.8	1930.3	1933.9	1941.3	1974.5	1989.2	2015.0
37.5°	1665.0	1672.4	1676.1	1683.4	1698.2	1705.5	1716.6	1727.7	1749.8	1775.5	1790.3
40°	1469.8	1469.8	1473.5	1480.8	1491.9	1495.6	1506.6	1521.4	1536.1	1558.2	1572.9
42.5°	1285.6	1289.3	1285.6	1293.0	1304.0	1318.8	1315.1	1333.5	1337.2	1351.9	1363.0
45°	1141.9	1141.9	1134.6	1141.9	1141.9	1156.7	1153.0	1160.4	1156.7	1164.0	1156.7
47.5°	1005.6	1009.3	1005.6	1009.3	1009.3	1009.3	1013.0	1005.6	1009.3	998.3	976.2
50°	898.8	902.5	895.1	898.8	895.1	891.5	895.1	884.1	880.4	865.7	843.6
52.5°	806.7	803.0	799.4	799.4	799.4	795.7	792.0	780.9	769.9	755.2	729.4
55°	725.7	722.0	718.3	718.3	711.0	707.3	707.3	696.2	685.2	666.7	637.3
57.5°	652.0	648.3	644.6	644.6	641.0	633.6	633.6	622.5	607.8	585.7	559.9
60°	582.0	582.0	582.0	578.3	578.3	571.0	571.0	559.9	545.2	523.1	493.6
62.5°	519.4	515.7	515.7	515.7	515.7	512.0	508.3	501.0	486.2	464.1	438.4
65°	445.7	445.7	445.7	445.7	442.0	442.0	442.0	431.0	423.6	401.5	375.7
67.5°	364.7	364.7	364.7	364.7	361.0	364.7	364.7	357.3	350.0	327.8	305.7
70°	291.0	287.3	283.6	287.3	283.6	283.6	287.3	280.0	276.3	257.9	235.8
72.5°	213.7	217.3	213.7	213.7	213.7	210.0	213.7	210.0	202.6	187.9	173.1
75°	151.0	154.7	154.7	151.0	151.0	151.0	147.3	147.3	140.0	128.9	121.6
77.5°	103.1	103.1	103.1	103.1	99.5	99.5	99.5	95.8	92.1	84.7	77.4
80°	66.3	66.3	66.3	66.3	62.6	62.6	62.6	58.9	58.9	51.6	44.2
82.5°	40.5	40.5	40.5	40.5	40.5	40.5	36.8	36.8	33.2	29.5	25.8
85°	22.1	22.1	22.1	22.1	22.1	22.1	22.1	18.4	18.4	14.7	11.1
87.5°	7.4	7.4	11.1	11.1	11.1	11.1	11.1	11.1	7.4	7.4	7.4
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°	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4
2.5°	3171.7	3175.3	3175.3	3175.3	3186.4	3190.1	3179.0	3168.0	3190.1	3186.4	3193.8
5°	3134.8	3145.9	3153.2	3156.9	3168.0	3175.3	3164.3	3160.6	3179.0	3182.7	3186.4
7.5°	3090.6	3109.0	3127.5	3134.8	3149.6	3156.9	3153.2	3153.2	3175.3	3182.7	3182.7
10°	3061.1	3086.9	3109.0	3127.5	3145.9	3156.9	3156.9	3160.6	3186.4	3193.8	3201.1
12.5°	3053.8	3086.9	3116.4	3142.2	3156.9	3175.3	3179.0	3190.1	3215.9	3226.9	3226.9
15°	3035.4	3079.6	3116.4	3149.6	3171.7	3193.8	3201.1	3223.2	3252.7	3260.1	3267.4
17.5°	3002.2	3046.4	3090.6	3131.1	3160.6	3179.0	3201.1	3223.2	3260.1	3271.1	3274.8
20°	2943.3	2994.8	3039.0	3079.6	3109.0	3134.8	3156.9	3182.7	3215.9	3230.6	3234.3
22.5°	2854.9	2906.4	2950.6	2994.8	3024.3	3046.4	3068.5	3098.0	3131.1	3145.9	3145.9
25°	2748.0	2795.9	2843.8	2877.0	2906.4	2932.2	2943.3	2976.4	3009.6	3028.0	3028.0
27.5°	2611.7	2655.9	2700.1	2737.0	2755.4	2777.5	2795.9	2825.4	2851.2	2865.9	2880.6
30°	2438.6	2482.8	2523.3	2560.2	2582.3	2604.4	2622.8	2644.9	2670.7	2689.1	2692.8
32.5°	2250.7	2287.6	2328.1	2364.9	2387.0	2394.4	2412.8	2434.9	2457.0	2471.8	2475.4
35°	2044.4	2070.2	2096.0	2129.2	2151.3	2151.3	2169.7	2184.4	2202.8	2236.0	2228.6
37.5°	1801.3	1838.2	1856.6	1867.6	1882.4	1897.1	1900.8	1919.2	1941.3	1948.7	1959.7
40°	1572.9	1584.0	1595.0	1595.0	1609.8	1609.8	1609.8	1613.5	1635.6	1639.2	1654.0
42.5°	1344.5	1344.5	1333.5	1322.4	1326.1	1322.4	1304.0	1304.0	1315.1	1329.8	1329.8
45°	1130.9	1105.1	1072.0	1046.2	1027.8	1020.4	998.3	998.3	994.6	998.3	1013.0
47.5°	950.4	906.2	850.9	799.4	780.9	766.2	733.1	718.3	711.0	714.6	722.0
50°	799.4	751.5	688.9	626.2	593.1	574.7	534.1	508.3	504.7	497.3	512.0
52.5°	688.9	629.9	563.6	489.9	456.8	427.3	383.1	361.0	346.3	346.3	350.0
55°	593.1	530.5	456.8	383.1	350.0	327.8	283.6	254.2	239.4	235.8	246.8
57.5°	512.0	453.1	379.4	305.7	272.6	246.8	202.6	176.8	165.8	158.4	162.1
60°	449.4	390.5	316.8	246.8	217.3	187.9	151.0	121.6	106.8	106.8	110.5
62.5°	390.5	335.2	268.9	202.6	176.8	151.0	110.5	84.7	73.7	70.0	73.7
65°	331.5	280.0	224.7	169.4	143.7	121.6	88.4	66.3	51.6	47.9	51.6
67.5°	268.9	228.4	180.5	136.3	114.2	95.8	66.3	47.9	36.8	33.2	36.8
70°	210.0	173.1	136.3	99.5	84.7	70.0	47.9	36.8	25.8	22.1	25.8
72.5°	151.0	125.2	95.8	70.0	58.9	47.9	33.2	25.8	18.4	14.7	18.4
75°	103.1	84.7	62.6	44.2	36.8	33.2	22.1	14.7	11.1	11.1	11.1
77.5°	66.3	51.6	40.5	29.5	22.1	18.4	11.1	7.4	7.4	7.4	7.4
80°	36.8	29.5	22.1	14.7	11.1	11.1	7.4	7.4	3.7	3.7	3.7
82.5°	22.1	14.7	11.1	7.4	7.4	3.7	3.7	3.7	3.7	3.7	3.7
85°	11.1	7.4	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
87.5°	3.7	3.7	3.7	3.7	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4
2.5°	3179.0	3182.7	3171.7	3186.4	3175.3	3190.1	3190.1	3175.3	3179.0	3171.7	3186.4
5°	3171.7	3171.7	3164.3	3175.3	3160.6	3175.3	3171.7	3145.9	3153.2	3138.5	3153.2
7.5°	3171.7	3164.3	3153.2	3164.3	3145.9	3156.9	3142.2	3116.4	3109.0	3090.6	3090.6
10°	3182.7	3171.7	3156.9	3160.6	3142.2	3145.9	3123.8	3086.9	3075.9	3053.8	3046.4
12.5°	3208.5	3197.4	3175.3	3182.7	3156.9	3156.9	3127.5	3083.3	3061.1	3031.7	3024.3
15°	3245.3	3226.9	3201.1	3204.8	3179.0	3164.3	3127.5	3075.9	3046.4	3005.9	2994.8
17.5°	3252.7	3234.3	3201.1	3201.1	3168.0	3149.6	3105.4	3046.4	3009.6	2969.1	2947.0
20°	3212.2	3193.8	3156.9	3153.2	3123.8	3098.0	3050.1	2991.2	2954.3	2910.1	2891.7
22.5°	3127.5	3105.4	3072.2	3068.5	3039.0	3024.3	2972.7	2913.8	2877.0	2832.8	2818.0
25°	3002.2	2991.2	2958.0	2954.3	2928.5	2910.1	2865.9	2810.7	2777.5	2733.3	2718.6
27.5°	2854.9	2843.8	2810.7	2810.7	2781.2	2770.1	2729.6	2678.0	2652.3	2611.7	2593.3
30°	2678.0	2663.3	2644.9	2641.2	2615.4	2604.4	2567.5	2519.6	2493.9	2460.7	2453.3
32.5°	2468.1	2457.0	2446.0	2442.3	2416.5	2405.5	2379.7	2331.8	2309.7	2280.2	2269.2
35°	2225.0	2217.6	2206.5	2202.8	2191.8	2180.7	2155.0	2118.1	2107.1	2085.0	2073.9
37.5°	1945.0	1952.4	1945.0	1945.0	1933.9	1937.6	1915.5	1893.4	1882.4	1867.6	1860.3
40°	1642.9	1657.7	1668.7	1668.7	1665.0	1679.8	1676.1	1657.7	1654.0	1646.6	1642.9
42.5°	1337.2	1344.5	1366.6	1381.4	1377.7	1414.5	1418.2	1433.0	1444.0	1436.6	1440.3
45°	1016.7	1038.8	1068.3	1083.0	1101.4	1149.3	1175.1	1204.6	1230.4	1245.1	1241.4
47.5°	733.1	758.8	792.0	814.1	847.2	906.2	972.5	1009.3	1046.2	1064.6	1083.0
50°	530.5	556.2	596.8	629.9	652.0	733.1	803.0	850.9	891.5	917.2	935.7
52.5°	372.1	401.5	445.7	475.2	508.3	585.7	666.7	722.0	766.2	799.4	817.8
55°	257.9	291.0	331.5	361.0	397.8	478.9	556.2	615.2	663.1	692.5	714.6
57.5°	180.5	210.0	250.5	276.3	313.1	390.5	467.8	526.8	574.7	604.1	629.9
60°	121.6	151.0	191.6	217.3	246.8	324.2	394.2	456.8	501.0	530.5	556.2
62.5°	84.7	110.5	151.0	176.8	202.6	268.9	335.2	390.5	434.7	467.8	489.9
65°	66.3	88.4	121.6	143.7	169.4	224.7	280.0	327.8	372.1	405.2	419.9
67.5°	47.9	70.0	95.8	114.2	132.6	180.5	228.4	265.2	305.7	331.5	350.0
70°	33.2	47.9	70.0	84.7	99.5	136.3	173.1	206.3	235.8	254.2	268.9
72.5°	25.8	33.2	47.9	58.9	70.0	95.8	125.2	151.0	173.1	187.9	202.6
75°	14.7	22.1	33.2	40.5	47.9	66.3	84.7	103.1	117.9	128.9	136.3
77.5°	7.4	11.1	18.4	22.1	29.5	40.5	55.3	66.3	77.4	84.7	92.1
80°	7.4	7.4	11.1	11.1	14.7	22.1	29.5	36.8	44.2	51.6	55.3
82.5°	3.7	3.7	7.4	7.4	7.4	11.1	14.7	22.1	25.8	29.5	33.2
85°	3.7	3.7	3.7	3.7	3.7	7.4	7.4	11.1	14.7	18.4	18.4
87.5°	0.0	0.0	3.7	3.7	3.7	3.7	3.7	7.4	7.4	7.4	11.1
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: P252612

CATALOG NUMBER: LD6B50D010TE EU6B30508040 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4	3186.4
2.5°	3175.3	3182.7	3179.0	3186.4	3175.3	3171.7	3179.0	3168.0
5°	3134.8	3138.5	3134.8	3134.8	3127.5	3120.1	3127.5	3116.4
7.5°	3072.2	3072.2	3061.1	3061.1	3046.4	3039.0	3039.0	3035.4
10°	3020.6	3009.6	2998.5	3002.2	2980.1	2972.7	2969.1	2965.4
12.5°	2994.8	2987.5	2969.1	2969.1	2947.0	2939.6	2935.9	2932.2
15°	2965.4	2950.6	2935.9	2932.2	2913.8	2906.4	2902.7	2895.4
17.5°	2913.8	2902.7	2884.3	2884.3	2865.9	2862.2	2854.9	2851.2
20°	2858.5	2843.8	2829.1	2829.1	2807.0	2807.0	2795.9	2799.6
22.5°	2781.2	2770.1	2755.4	2755.4	2737.0	2733.3	2722.2	2718.6
25°	2689.1	2674.4	2663.3	2659.6	2644.9	2637.5	2633.8	2626.5
27.5°	2567.5	2556.5	2545.4	2538.1	2519.6	2516.0	2504.9	2508.6
30°	2416.5	2409.1	2405.5	2398.1	2376.0	2368.6	2368.6	2357.6
32.5°	2250.7	2239.7	2232.3	2221.3	2202.8	2199.2	2188.1	2191.8
35°	2048.1	2033.4	2022.3	2026.0	2003.9	2000.2	1992.9	1996.6
37.5°	1838.2	1823.4	1808.7	1805.0	1786.6	1786.6	1775.5	1775.5
40°	1620.8	1606.1	1598.7	1598.7	1576.6	1580.3	1569.3	1565.6
42.5°	1425.6	1410.9	1407.2	1403.5	1392.4	1388.8	1377.7	1381.4
45°	1241.4	1237.7	1237.7	1230.4	1219.3	1215.6	1219.3	1219.3
47.5°	1079.3	1083.0	1079.3	1079.3	1072.0	1079.3	1072.0	1075.6
50°	943.0	950.4	950.4	950.4	946.7	950.4	950.4	954.1
52.5°	828.8	839.9	836.2	839.9	836.2	843.6	839.9	843.6
55°	729.4	736.7	740.4	744.1	744.1	744.1	744.1	744.1
57.5°	637.3	648.3	652.0	655.7	655.7	663.1	655.7	655.7
60°	563.6	574.7	578.3	582.0	582.0	585.7	578.3	582.0
62.5°	497.3	508.3	508.3	512.0	512.0	512.0	504.7	508.3
65°	431.0	434.7	438.4	438.4	434.7	434.7	431.0	434.7
67.5°	357.3	361.0	357.3	357.3	353.6	353.6	346.3	350.0
70°	276.3	276.3	280.0	276.3	272.6	276.3	272.6	268.9
72.5°	206.3	206.3	206.3	202.6	202.6	198.9	202.6	202.6
75°	140.0	140.0	143.7	143.7	143.7	143.7	140.0	140.0
77.5°	92.1	92.1	92.1	92.1	95.8	92.1	92.1	92.1
80°	58.9	58.9	62.6	62.6	58.9	58.9	58.9	58.9
82.5°	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
85°	22.1	22.1	22.1	22.1	18.4	18.4	18.4	18.4
87.5°	11.1	11.1	11.1	11.1	11.1	11.1	7.4	7.4
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)