

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: P252630

Luminaire Tested: **LD6B60D010TE EU6B60709035 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252630
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: LD6B60D010TE EU6B60709035 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5157.0 lumens
Efficiency: N/A
Efficacy: 82.5 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

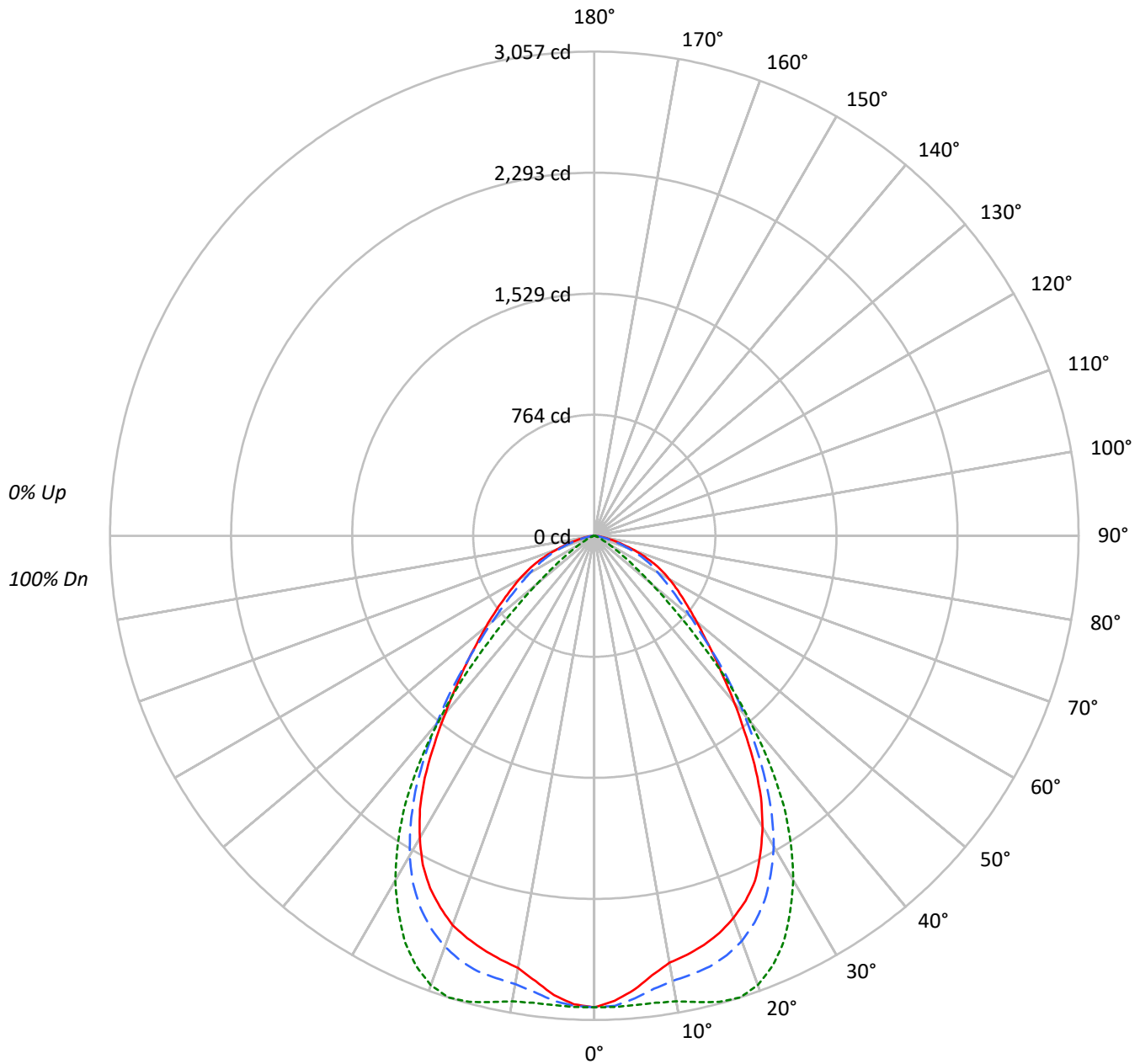
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0			
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	194247	194247	194247
5°	188454	194767	190706
10°	181278	197701	183564
15°	180641	205747	182735
20°	178276	209581	181623
25°	172951	203675	176666
30°	159993	189290	165952
35°	140357	166400	148584
40°	116966	130448	124589
45°	98446	86064	105117
50°	85247	47165	90484
55°	77130	25058	79086
60°	70956	13022	70956
65°	64296	6900	62706
70°	51865	3949	47936
75°	35567	2596	32971
80°	23294	1277	20701
85°	15495	2545	12875



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	277.6	5.4
10°-20°	802.8	15.6
20°-30°	1186.2	23.0
30°-40°	1198.1	23.2
40°-50°	825.8	16.0
50°-60°	474.3	9.2
60°-70°	276.0	5.4
70°-80°	100.7	2.0
80°-90°	15.4	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°	2266.6	44.0
0°-40°	3464.7	67.2
0°-60°	4764.8	92.4
0°-90°	5157.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5157.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2977	2977	2977	2977	2977	
5°	2878	2933	2974	2946	2912	270
15°	2674	2816	3046	2847	2706	753
25°	2403	2544	2829	2595	2454	1095
35°	1762	1883	2089	1969	1866	1094
45°	1067	1081	933	1150	1139	830
55°	678	596	220	620	695	610
65°	416	351	45	348	406	408
75°	141	114	10	110	131	159
85°	21	10	3	14	17	26
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°	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4
2.5°	2939.5	2943.0	2946.4	2943.0	2946.4	2960.2	2949.9	2956.7	2956.7	2960.2	2970.5
5°	2877.6	2877.6	2884.5	2881.0	2891.3	2905.1	2894.8	2905.1	2908.6	2915.4	2932.6
7.5°	2798.4	2798.4	2801.8	2801.8	2815.6	2829.4	2822.5	2836.3	2850.0	2863.8	2884.5
10°	2736.4	2743.3	2743.3	2746.8	2760.5	2777.8	2774.3	2791.5	2805.3	2825.9	2853.5
12.5°	2708.9	2712.4	2712.4	2719.2	2733.0	2750.2	2746.8	2764.0	2784.6	2808.7	2836.3
15°	2674.5	2681.4	2677.9	2684.8	2698.6	2715.8	2712.4	2729.6	2753.7	2777.8	2815.6
17.5°	2629.7	2633.2	2636.6	2636.6	2650.4	2664.2	2664.2	2681.4	2708.9	2736.4	2777.8
20°	2567.8	2574.7	2574.7	2578.1	2588.4	2609.1	2605.6	2622.9	2650.4	2677.9	2722.7
22.5°	2495.5	2498.9	2498.9	2502.4	2519.6	2529.9	2533.4	2547.1	2571.2	2602.2	2643.5
25°	2402.6	2406.0	2402.6	2412.9	2419.8	2440.4	2433.5	2450.8	2478.3	2502.4	2543.7
27.5°	2268.3	2275.2	2275.2	2278.7	2295.9	2313.1	2313.1	2330.3	2354.4	2371.6	2412.9
30°	2123.8	2134.1	2123.8	2141.0	2147.9	2161.6	2171.9	2182.3	2202.9	2227.0	2264.9
32.5°	1958.5	1955.1	1958.5	1965.4	1986.1	1996.4	2003.3	2013.6	2034.3	2054.9	2085.9
35°	1762.3	1769.2	1772.7	1786.4	1786.4	1803.6	1807.1	1814.0	1845.0	1858.7	1882.8
37.5°	1555.8	1562.7	1566.1	1573.0	1586.8	1593.7	1604.0	1614.3	1635.0	1659.1	1672.8
40°	1373.4	1373.4	1376.8	1383.7	1394.0	1397.5	1407.8	1421.6	1435.3	1456.0	1469.8
42.5°	1201.3	1204.7	1201.3	1208.2	1218.5	1232.3	1228.8	1246.0	1249.5	1263.2	1273.6
45°	1067.0	1067.0	1060.2	1067.0	1067.0	1080.8	1077.4	1084.3	1080.8	1087.7	1080.8
47.5°	939.7	943.1	939.7	943.1	943.1	943.1	946.6	939.7	943.1	932.8	912.1
50°	839.9	843.3	836.4	839.9	836.4	833.0	836.4	826.1	822.7	808.9	788.2
52.5°	753.8	750.4	746.9	746.9	746.9	743.5	740.0	729.7	719.4	705.6	681.5
55°	678.1	674.6	671.2	671.2	664.3	660.9	660.9	650.6	640.2	623.0	595.5
57.5°	609.2	605.8	602.4	602.4	598.9	592.0	592.0	581.7	567.9	547.3	523.2
60°	543.8	543.8	543.8	540.4	540.4	533.5	533.5	523.2	509.4	488.8	461.2
62.5°	485.3	481.9	481.9	481.9	481.9	478.4	475.0	468.1	454.4	433.7	409.6
65°	416.5	416.5	416.5	416.5	413.0	413.0	413.0	402.7	395.8	375.2	351.1
67.5°	340.8	340.8	340.8	340.8	337.3	340.8	340.8	333.9	327.0	306.3	285.7
70°	271.9	268.5	265.0	268.5	265.0	265.0	268.5	261.6	258.2	240.9	220.3
72.5°	199.6	203.1	199.6	199.6	199.6	196.2	199.6	196.2	189.3	175.5	161.8
75°	141.1	144.6	144.6	141.1	141.1	141.1	137.7	137.7	130.8	120.5	113.6
77.5°	96.4	96.4	96.4	96.4	92.9	92.9	92.9	89.5	86.1	79.2	72.3
80°	62.0	62.0	62.0	62.0	58.5	58.5	58.5	55.1	55.1	48.2	41.3
82.5°	37.9	37.9	37.9	37.9	37.9	37.9	34.4	34.4	31.0	27.5	24.1
85°	20.7	20.7	20.7	20.7	20.7	20.7	20.7	17.2	17.2	13.8	10.3
87.5°	6.9	6.9	10.3	10.3	10.3	10.3	10.3	10.3	6.9	6.9	6.9
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°	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4
2.5°	2963.6	2967.1	2967.1	2967.1	2977.4	2980.8	2970.5	2960.2	2980.8	2977.4	2984.3
5°	2929.2	2939.5	2946.4	2949.9	2960.2	2967.1	2956.7	2953.3	2970.5	2974.0	2977.4
7.5°	2887.9	2905.1	2922.3	2929.2	2943.0	2949.9	2946.4	2946.4	2967.1	2974.0	2974.0
10°	2860.4	2884.5	2905.1	2922.3	2939.5	2949.9	2949.9	2953.3	2977.4	2984.3	2991.2
12.5°	2853.5	2884.5	2912.0	2936.1	2949.9	2967.1	2970.5	2980.8	3004.9	3015.3	3015.3
15°	2836.3	2877.6	2912.0	2943.0	2963.6	2984.3	2991.2	3011.8	3039.4	3046.2	3053.1
17.5°	2805.3	2846.6	2887.9	2925.8	2953.3	2970.5	2991.2	3011.8	3046.2	3056.6	3060.0
20°	2750.2	2798.4	2839.7	2877.6	2905.1	2929.2	2949.9	2974.0	3004.9	3018.7	3022.1
22.5°	2667.6	2715.8	2757.1	2798.4	2825.9	2846.6	2867.2	2894.8	2925.8	2939.5	2939.5
25°	2567.8	2612.5	2657.3	2688.3	2715.8	2739.9	2750.2	2781.2	2812.2	2829.4	2829.4
27.5°	2440.4	2481.7	2523.0	2557.5	2574.7	2595.3	2612.5	2640.1	2664.2	2677.9	2691.7
30°	2278.7	2320.0	2357.8	2392.2	2412.9	2433.5	2450.8	2471.4	2495.5	2512.7	2516.2
32.5°	2103.1	2137.5	2175.4	2209.8	2230.5	2237.3	2254.6	2275.2	2295.9	2309.6	2313.1
35°	1910.4	1934.4	1958.5	1989.5	2010.2	2010.2	2027.4	2041.1	2058.4	2089.3	2082.5
37.5°	1683.2	1717.6	1734.8	1745.1	1758.9	1772.7	1776.1	1793.3	1814.0	1820.9	1831.2
40°	1469.8	1480.1	1490.4	1490.4	1504.2	1504.2	1504.2	1507.6	1528.3	1531.7	1545.5
42.5°	1256.4	1256.4	1246.0	1235.7	1239.1	1235.7	1218.5	1218.5	1228.8	1242.6	1242.6
45°	1056.7	1032.6	1001.6	977.5	960.3	953.5	932.8	932.8	929.4	932.8	946.6
47.5°	888.1	846.7	795.1	746.9	729.7	716.0	685.0	671.2	664.3	667.8	674.6
50°	746.9	702.2	643.7	585.2	554.2	537.0	499.1	475.0	471.6	464.7	478.4
52.5°	643.7	588.6	526.6	457.8	426.8	399.3	358.0	337.3	323.6	323.6	327.0
55°	554.2	495.7	426.8	358.0	327.0	306.3	265.0	237.5	223.7	220.3	230.6
57.5°	478.4	423.4	354.5	285.7	254.7	230.6	189.3	165.2	154.9	148.0	151.5
60°	419.9	364.9	296.0	230.6	203.1	175.5	141.1	113.6	99.8	99.8	103.3
62.5°	364.9	313.2	251.3	189.3	165.2	141.1	103.3	79.2	68.8	65.4	68.8
65°	309.8	261.6	210.0	158.3	134.2	113.6	82.6	62.0	48.2	44.7	48.2
67.5°	251.3	213.4	168.7	127.4	106.7	89.5	62.0	44.7	34.4	31.0	34.4
70°	196.2	161.8	127.4	92.9	79.2	65.4	44.7	34.4	24.1	20.7	24.1
72.5°	141.1	117.0	89.5	65.4	55.1	44.7	31.0	24.1	17.2	13.8	17.2
75°	96.4	79.2	58.5	41.3	34.4	31.0	20.7	13.8	10.3	10.3	10.3
77.5°	62.0	48.2	37.9	27.5	20.7	17.2	10.3	6.9	6.9	6.9	6.9
80°	34.4	27.5	20.7	13.8	10.3	10.3	6.9	6.9	3.4	3.4	3.4
82.5°	20.7	13.8	10.3	6.9	6.9	3.4	3.4	3.4	3.4	3.4	3.4
85°	10.3	6.9	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
87.5°	3.4	3.4	3.4	3.4	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°	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4
2.5°	2970.5	2974.0	2963.6	2977.4	2967.1	2980.8	2980.8	2967.1	2970.5	2963.6	2977.4
5°	2963.6	2963.6	2956.7	2967.1	2953.3	2967.1	2963.6	2939.5	2946.4	2932.6	2946.4
7.5°	2963.6	2956.7	2946.4	2956.7	2939.5	2949.9	2936.1	2912.0	2905.1	2887.9	2887.9
10°	2974.0	2963.6	2949.9	2953.3	2936.1	2939.5	2918.9	2884.5	2874.1	2853.5	2846.6
12.5°	2998.0	2987.7	2967.1	2974.0	2949.9	2949.9	2922.3	2881.0	2860.4	2832.8	2825.9
15°	3032.5	3015.3	2991.2	2994.6	2970.5	2956.7	2922.3	2874.1	2846.6	2808.7	2798.4
17.5°	3039.4	3022.1	2991.2	2991.2	2960.2	2943.0	2901.7	2846.6	2812.2	2774.3	2753.7
20°	3001.5	2984.3	2949.9	2946.4	2918.9	2894.8	2850.0	2795.0	2760.5	2719.2	2702.0
22.5°	2922.3	2901.7	2870.7	2867.2	2839.7	2825.9	2777.8	2722.7	2688.3	2647.0	2633.2
25°	2805.3	2795.0	2764.0	2760.5	2736.4	2719.2	2677.9	2626.3	2595.3	2554.0	2540.2
27.5°	2667.6	2657.3	2626.3	2626.3	2598.8	2588.4	2550.6	2502.4	2478.3	2440.4	2423.2
30°	2502.4	2488.6	2471.4	2468.0	2443.9	2433.5	2399.1	2354.4	2330.3	2299.3	2292.4
32.5°	2306.2	2295.9	2285.5	2282.1	2258.0	2247.7	2223.6	2178.8	2158.2	2130.6	2120.3
35°	2079.0	2072.1	2061.8	2058.4	2048.0	2037.7	2013.6	1979.2	1968.9	1948.2	1937.9
37.5°	1817.4	1824.3	1817.4	1817.4	1807.1	1810.5	1789.9	1769.2	1758.9	1745.1	1738.2
40°	1535.2	1548.9	1559.3	1559.3	1555.8	1569.6	1566.1	1548.9	1545.5	1538.6	1535.2
42.5°	1249.5	1256.4	1277.0	1290.8	1287.3	1321.8	1325.2	1339.0	1349.3	1342.4	1345.9
45°	950.0	970.7	998.2	1012.0	1029.2	1073.9	1098.0	1125.6	1149.7	1163.4	1160.0
47.5°	685.0	709.1	740.0	760.7	791.7	846.7	908.7	943.1	977.5	994.8	1012.0
50°	495.7	519.8	557.6	588.6	609.2	685.0	750.4	795.1	833.0	857.1	874.3
52.5°	347.6	375.2	416.5	444.0	475.0	547.3	623.0	674.6	716.0	746.9	764.1
55°	240.9	271.9	309.8	337.3	371.7	447.5	519.8	574.8	619.6	647.1	667.8
57.5°	168.7	196.2	234.1	258.2	292.6	364.9	437.1	492.2	537.0	564.5	588.6
60°	113.6	141.1	179.0	203.1	230.6	302.9	368.3	426.8	468.1	495.7	519.8
62.5°	79.2	103.3	141.1	165.2	189.3	251.3	313.2	364.9	406.2	437.1	457.8
65°	62.0	82.6	113.6	134.2	158.3	210.0	261.6	306.3	347.6	378.6	392.4
67.5°	44.7	65.4	89.5	106.7	123.9	168.7	213.4	247.8	285.7	309.8	327.0
70°	31.0	44.7	65.4	79.2	92.9	127.4	161.8	192.8	220.3	237.5	251.3
72.5°	24.1	31.0	44.7	55.1	65.4	89.5	117.0	141.1	161.8	175.5	189.3
75°	13.8	20.7	31.0	37.9	44.7	62.0	79.2	96.4	110.1	120.5	127.4
77.5°	6.9	10.3	17.2	20.7	27.5	37.9	51.6	62.0	72.3	79.2	86.1
80°	6.9	6.9	10.3	10.3	13.8	20.7	27.5	34.4	41.3	48.2	51.6
82.5°	3.4	3.4	6.9	6.9	6.9	10.3	13.8	20.7	24.1	27.5	31.0
85°	3.4	3.4	3.4	3.4	3.4	6.9	6.9	10.3	13.8	17.2	17.2
87.5°	0.0	0.0	3.4	3.4	3.4	3.4	3.4	6.9	6.9	6.9	10.3
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: P252630

CATALOG NUMBER: LD6B60D010TE EU6B60709035 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4	2977.4
2.5°	2967.1	2974.0	2970.5	2977.4	2967.1	2963.6	2970.5	2960.2
5°	2929.2	2932.6	2929.2	2929.2	2922.3	2915.4	2922.3	2912.0
7.5°	2870.7	2870.7	2860.4	2860.4	2846.6	2839.7	2839.7	2836.3
10°	2822.5	2812.2	2801.8	2805.3	2784.6	2777.8	2774.3	2770.9
12.5°	2798.4	2791.5	2774.3	2774.3	2753.7	2746.8	2743.3	2739.9
15°	2770.9	2757.1	2743.3	2739.9	2722.7	2715.8	2712.4	2705.5
17.5°	2722.7	2712.4	2695.1	2695.1	2677.9	2674.5	2667.6	2664.2
20°	2671.0	2657.3	2643.5	2643.5	2622.9	2622.9	2612.5	2616.0
22.5°	2598.8	2588.4	2574.7	2574.7	2557.5	2554.0	2543.7	2540.2
25°	2512.7	2498.9	2488.6	2485.2	2471.4	2464.5	2461.1	2454.2
27.5°	2399.1	2388.8	2378.5	2371.6	2354.4	2350.9	2340.6	2344.1
30°	2258.0	2251.1	2247.7	2240.8	2220.1	2213.3	2213.3	2202.9
32.5°	2103.1	2092.8	2085.9	2075.6	2058.4	2054.9	2044.6	2048.0
35°	1913.8	1900.0	1889.7	1893.1	1872.5	1869.0	1862.2	1865.6
37.5°	1717.6	1703.8	1690.1	1686.6	1669.4	1669.4	1659.1	1659.1
40°	1514.5	1500.7	1493.9	1493.9	1473.2	1476.6	1466.3	1462.9
42.5°	1332.1	1318.3	1314.9	1311.4	1301.1	1297.7	1287.3	1290.8
45°	1160.0	1156.5	1156.5	1149.7	1139.3	1135.9	1139.3	1139.3
47.5°	1008.5	1012.0	1008.5	1008.5	1001.6	1008.5	1001.6	1005.1
50°	881.2	888.1	888.1	888.1	884.6	888.1	888.1	891.5
52.5°	774.5	784.8	781.4	784.8	781.4	788.2	784.8	788.2
55°	681.5	688.4	691.9	695.3	695.3	695.3	695.3	695.3
57.5°	595.5	605.8	609.2	612.7	612.7	619.6	612.7	612.7
60°	526.6	537.0	540.4	543.8	543.8	547.3	540.4	543.8
62.5°	464.7	475.0	475.0	478.4	478.4	478.4	471.6	475.0
65°	402.7	406.2	409.6	409.6	406.2	406.2	402.7	406.2
67.5°	333.9	337.3	333.9	333.9	330.4	330.4	323.6	327.0
70°	258.2	258.2	261.6	258.2	254.7	258.2	254.7	251.3
72.5°	192.8	192.8	192.8	189.3	189.3	185.9	189.3	189.3
75°	130.8	130.8	134.2	134.2	134.2	134.2	130.8	130.8
77.5°	86.1	86.1	86.1	86.1	89.5	86.1	86.1	86.1
80°	55.1	55.1	58.5	58.5	55.1	55.1	55.1	55.1
82.5°	34.4	34.4	34.4	34.4	34.4	34.4	34.4	34.4
85°	20.7	20.7	20.7	20.7	17.2	17.2	17.2	17.2
87.5°	10.3	10.3	10.3	10.3	10.3	10.3	6.9	6.9
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)