

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: P252320

Luminaire Tested: **LD6B60D010TE EU6B60709050 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252320
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 EU6B60709050 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4810.0 lumens
Efficiency: N/A
Efficacy: 77.0 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

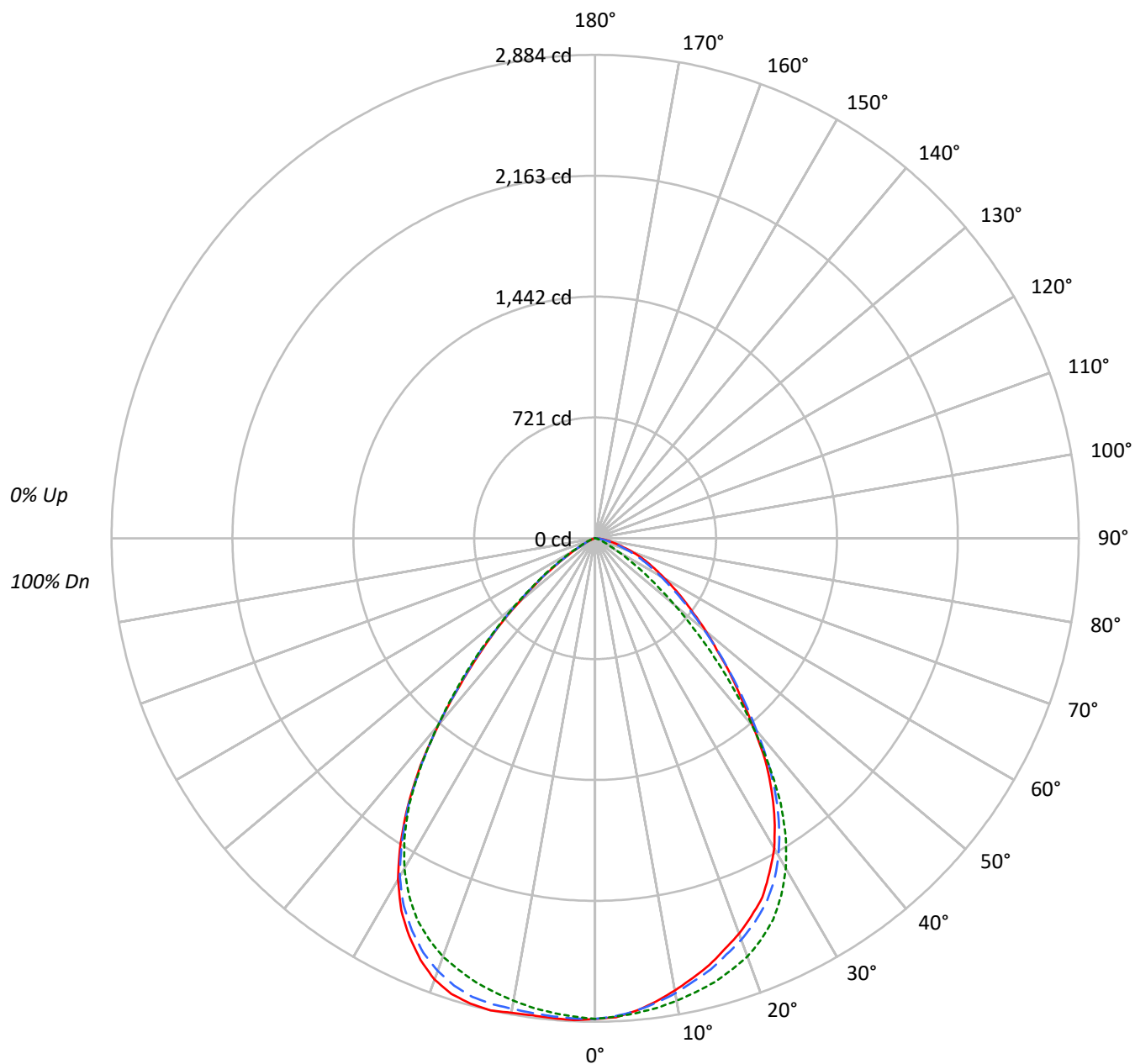
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
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	102	109	106	103	101		102	100	98		98	96	95		95	93	92
2	104	98	93	89	102	96	92	88		93	89	86		90	87	84		87	85	82
3	97	89	83	78	95	88	82	77		85	80	76		82	78	75		80	77	74
4	91	81	74	69	89	80	74	69		78	72	68		76	71	67		74	69	66
5	85	74	67	62	83	73	66	61		71	65	61		70	64	60		68	63	60
6	79	68	61	55	78	67	60	55		66	59	55		64	59	54		63	58	54
7	74	63	55	50	73	62	55	50		61	54	50		59	54	49		58	53	49
8	70	58	51	46	68	57	50	46		56	50	45		55	49	45		54	49	45
9	65	54	47	42	64	53	46	42		52	46	42		51	46	41		50	45	41
10	62	50	43	39	61	50	43	38		49	43	38		48	42	38		47	42	38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	187051	187051	187051
5°	185271	186175	188218
10°	181444	185578	190394
15°	177980	185227	194116
20°	174291	184386	194488
25°	169993	180711	188687
30°	160942	171376	177116
35°	146163	153610	154987
40°	124742	124154	123558
45°	104784	92965	90096
50°	87510	62907	59741
55°	73649	38593	35056
60°	62344	20329	17615
65°	53984	10698	8552
70°	44922	6600	4616
75°	33172	4361	2622
80°	26036	2592	1315
85°	20735	2620	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	270.2	5.6
10°-20°	773.7	16.1
20°-30°	1142.4	23.8
30°-40°	1177.4	24.5
40°-50°	813.2	16.9
50°-60°	400.8	8.3
60°-70°	162.4	3.4
70°-80°	57.9	1.2
80°-90°	12.0	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°	2186.3	45.5
0°-40°	3363.7	69.9
0°-60°	4577.7	95.2
0°-90°	4810.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4810.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2867	2867	2867	2867	2867	
5°	2829	2829	2843	2864	2874	267
15°	2635	2663	2742	2832	2874	742
25°	2362	2406	2510	2583	2621	1080
35°	1835	1880	1929	1939	1946	1137
45°	1136	1143	1008	994	976	878
55°	648	623	339	319	308	585
65°	350	315	69	55	55	347
75°	132	111	17	10	10	148
85°	28	21	4	0	0	34
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°	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1
2.5°	2860.1	2849.7	2856.7	2842.8	2860.1	2842.8	2846.3	2849.7	2846.3	2849.7	2853.2
5°	2829.0	2818.6	2829.0	2811.7	2829.0	2818.6	2818.6	2822.0	2822.0	2825.5	2829.0
7.5°	2787.4	2777.0	2787.4	2770.1	2790.9	2780.5	2780.5	2787.4	2784.0	2787.4	2794.3
10°	2738.9	2725.1	2735.5	2725.1	2745.9	2732.0	2738.9	2738.9	2738.9	2749.3	2756.3
12.5°	2687.0	2673.1	2687.0	2669.7	2690.5	2680.1	2683.5	2693.9	2697.4	2704.3	2707.8
15°	2635.1	2617.7	2624.7	2614.3	2635.1	2624.7	2628.1	2642.0	2642.0	2652.4	2662.8
17.5°	2569.3	2555.4	2569.3	2555.4	2572.7	2565.8	2572.7	2583.1	2583.1	2593.5	2603.9
20°	2510.4	2496.6	2506.9	2496.6	2517.3	2506.9	2510.4	2524.3	2527.7	2538.1	2548.5
22.5°	2437.7	2427.3	2434.2	2423.8	2444.6	2437.7	2441.2	2455.0	2458.5	2465.4	2482.7
25°	2361.5	2340.7	2351.1	2344.2	2365.0	2354.6	2361.5	2375.4	2382.3	2392.7	2406.5
27.5°	2250.7	2240.3	2247.2	2247.2	2264.6	2254.2	2257.6	2271.5	2281.9	2292.3	2309.6
30°	2136.4	2119.1	2126.1	2129.5	2143.4	2136.4	2143.4	2157.2	2160.7	2174.5	2188.4
32.5°	1991.0	1984.1	1997.9	1991.0	1997.9	1997.9	2001.4	2011.8	2018.7	2025.6	2043.0
35°	1835.2	1821.3	1835.2	1828.3	1845.6	1835.2	1845.6	1856.0	1856.0	1869.8	1880.2
37.5°	1665.5	1648.2	1655.1	1655.1	1662.1	1658.6	1658.6	1675.9	1679.4	1689.8	1700.2
40°	1464.7	1457.8	1471.6	1468.2	1471.6	1471.6	1475.1	1485.5	1492.4	1495.9	1499.3
42.5°	1284.6	1288.1	1291.6	1291.6	1291.6	1291.6	1291.6	1305.4	1301.9	1312.3	1315.8
45°	1135.7	1121.9	1128.8	1125.4	1135.7	1125.4	1135.7	1146.1	1139.2	1149.6	1142.7
47.5°	983.4	983.4	983.4	979.9	986.8	983.4	990.3	993.8	993.8	993.8	990.3
50°	862.2	851.8	855.3	855.3	858.7	855.3	862.2	865.7	865.7	858.7	844.9
52.5°	744.5	741.0	741.0	747.9	747.9	744.5	744.5	744.5	744.5	734.1	727.2
55°	647.5	640.6	644.0	644.0	644.0	644.0	647.5	644.0	644.0	633.7	623.3
57.5°	560.9	554.0	554.0	554.0	557.5	554.0	554.0	554.0	550.6	540.2	526.3
60°	477.8	474.4	477.8	477.8	481.3	477.8	477.8	477.8	470.9	460.5	446.7
62.5°	408.6	408.6	408.6	412.1	412.1	408.6	408.6	405.1	401.7	387.8	374.0
65°	349.7	346.3	349.7	349.7	353.2	353.2	349.7	346.3	342.8	328.9	315.1
67.5°	290.9	287.4	290.9	290.9	294.3	290.9	290.9	290.9	280.5	273.5	259.7
70°	235.5	232.0	232.0	232.0	235.5	228.5	232.0	232.0	225.1	214.7	200.8
72.5°	180.1	180.1	180.1	180.1	180.1	180.1	176.6	176.6	169.7	159.3	152.4
75°	131.6	131.6	135.0	135.0	131.6	131.6	131.6	128.1	124.7	117.7	110.8
77.5°	97.0	97.0	97.0	97.0	93.5	93.5	93.5	90.0	86.6	83.1	76.2
80°	69.3	69.3	69.3	65.8	69.3	65.8	65.8	65.8	58.9	55.4	51.9
82.5°	48.5	45.0	45.0	45.0	45.0	45.0	45.0	41.6	41.6	38.1	34.6
85°	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7	24.2	20.8	20.8
87.5°	13.9	17.3	17.3	17.3	17.3	17.3	17.3	13.9	13.9	13.9	10.4
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°	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1
2.5°	2853.2	2853.2	2860.1	2849.7	2867.1	2856.7	2853.2	2870.5	2860.1	2856.7	2863.6
5°	2829.0	2832.4	2835.9	2829.0	2846.3	2835.9	2835.9	2853.2	2846.3	2842.8	2853.2
7.5°	2797.8	2801.3	2808.2	2804.7	2818.6	2811.7	2815.1	2832.4	2825.5	2825.5	2835.9
10°	2759.7	2766.6	2773.6	2773.6	2790.9	2784.0	2784.0	2804.7	2797.8	2801.3	2815.1
12.5°	2714.7	2725.1	2735.5	2738.9	2756.3	2745.9	2749.3	2773.6	2770.1	2773.6	2787.4
15°	2666.2	2680.1	2690.5	2690.5	2711.2	2700.8	2711.2	2735.5	2728.6	2742.4	2759.7
17.5°	2610.8	2624.7	2638.5	2642.0	2662.8	2655.8	2669.7	2693.9	2693.9	2700.8	2721.6
20°	2558.9	2576.2	2583.1	2593.5	2614.3	2610.8	2617.7	2645.4	2645.4	2655.8	2676.6
22.5°	2489.6	2506.9	2520.8	2531.2	2548.5	2548.5	2558.9	2583.1	2583.1	2590.0	2610.8
25°	2413.5	2434.2	2444.6	2455.0	2472.3	2468.9	2479.2	2500.0	2503.5	2510.4	2531.2
27.5°	2316.5	2333.8	2347.7	2354.6	2378.8	2365.0	2375.4	2399.6	2396.1	2403.1	2420.4
30°	2195.3	2212.6	2226.5	2226.5	2247.2	2247.2	2257.6	2268.0	2268.0	2274.9	2288.8
32.5°	2053.3	2074.1	2074.1	2084.5	2098.4	2084.5	2098.4	2112.2	2105.3	2115.7	2126.1
35°	1890.6	1901.0	1904.4	1904.4	1914.8	1911.4	1907.9	1918.3	1911.4	1928.7	1939.1
37.5°	1693.2	1707.1	1700.2	1707.1	1703.6	1693.2	1693.2	1710.5	1696.7	1700.2	1710.5
40°	1502.8	1502.8	1499.3	1482.0	1485.5	1475.1	1471.6	1475.1	1461.2	1457.8	1471.6
42.5°	1305.4	1301.9	1291.6	1267.3	1270.8	1253.5	1239.6	1239.6	1232.7	1229.2	1232.7
45°	1128.8	1118.4	1101.1	1073.4	1066.5	1052.6	1024.9	1018.0	1007.6	1007.6	1011.1
47.5°	966.1	952.2	924.5	893.4	876.0	858.7	831.0	820.6	803.3	796.4	803.3
50°	831.0	806.8	772.2	727.2	709.8	689.1	661.4	644.0	626.7	619.8	616.3
52.5°	706.4	671.7	637.1	581.7	567.9	547.1	509.0	491.7	474.4	460.5	460.5
55°	599.0	567.9	519.4	467.5	446.7	425.9	387.8	363.6	346.3	339.3	332.4
57.5°	502.1	467.5	422.4	367.0	346.3	325.5	287.4	263.2	245.8	235.5	228.5
60°	422.4	384.4	339.3	290.9	266.6	245.8	207.8	183.5	166.2	155.8	148.9
62.5°	346.3	315.1	270.1	225.1	204.3	183.5	152.4	128.1	110.8	103.9	93.5
65°	290.9	259.7	218.1	180.1	162.7	142.0	114.3	93.5	79.6	69.3	62.3
67.5°	235.5	211.2	176.6	142.0	124.7	110.8	86.6	69.3	55.4	48.5	45.0
70°	187.0	162.7	135.0	107.3	97.0	83.1	65.8	48.5	41.6	34.6	31.2
72.5°	138.5	121.2	100.4	79.6	69.3	62.3	45.0	38.1	27.7	24.2	20.8
75°	100.4	86.6	72.7	55.4	48.5	45.0	34.6	24.2	20.8	17.3	13.9
77.5°	69.3	62.3	48.5	38.1	34.6	31.2	24.2	17.3	13.9	10.4	10.4
80°	45.0	38.1	31.2	24.2	24.2	20.8	13.9	10.4	10.4	6.9	6.9
82.5°	27.7	24.2	20.8	17.3	13.9	13.9	10.4	6.9	6.9	3.5	3.5
85°	17.3	13.9	10.4	10.4	6.9	6.9	6.9	3.5	3.5	3.5	3.5
87.5°	6.9	6.9	6.9	3.5	3.5	3.5	3.5	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°	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1
2.5°	2863.6	2863.6	2870.5	2860.1	2867.1	2867.1	2874.0	2860.1	2867.1	2870.5	2877.4
5°	2849.7	2853.2	2860.1	2856.7	2860.1	2860.1	2867.1	2849.7	2863.6	2863.6	2874.0
7.5°	2835.9	2835.9	2842.8	2839.4	2846.3	2849.7	2856.7	2842.8	2856.7	2856.7	2867.1
10°	2818.6	2818.6	2829.0	2825.5	2835.9	2839.4	2849.7	2835.9	2849.7	2853.2	2863.6
12.5°	2794.3	2797.8	2808.2	2808.2	2818.6	2825.5	2835.9	2829.0	2846.3	2849.7	2863.6
15°	2766.6	2773.6	2787.4	2784.0	2794.3	2804.7	2818.6	2808.2	2832.4	2839.4	2853.2
17.5°	2732.0	2738.9	2749.3	2749.3	2759.7	2766.6	2784.0	2777.0	2797.8	2801.3	2818.6
20°	2680.1	2690.5	2704.3	2700.8	2711.2	2718.2	2732.0	2725.1	2745.9	2752.8	2770.1
22.5°	2617.7	2624.7	2635.1	2635.1	2645.4	2652.4	2666.2	2655.8	2676.6	2680.1	2693.9
25°	2534.6	2541.6	2548.5	2552.0	2562.3	2565.8	2572.7	2565.8	2583.1	2586.6	2603.9
27.5°	2427.3	2430.8	2441.2	2441.2	2448.1	2451.5	2461.9	2448.1	2472.3	2472.3	2482.7
30°	2299.2	2295.7	2309.6	2302.6	2309.6	2309.6	2320.0	2313.0	2330.3	2323.4	2333.8
32.5°	2129.5	2136.4	2136.4	2129.5	2143.4	2139.9	2139.9	2133.0	2143.4	2146.8	2153.8
35°	1932.1	1942.5	1942.5	1946.0	1949.5	1939.1	1942.5	1921.8	1939.1	1942.5	1946.0
37.5°	1717.5	1707.1	1714.0	1703.6	1720.9	1700.2	1700.2	1686.3	1700.2	1700.2	1703.6
40°	1471.6	1468.2	1475.1	1468.2	1464.7	1461.2	1454.3	1443.9	1457.8	1450.8	1461.2
42.5°	1239.6	1236.2	1236.2	1229.2	1225.8	1225.8	1218.8	1211.9	1208.5	1208.5	1225.8
45°	1000.7	1007.6	1000.7	997.2	1004.2	997.2	1000.7	986.8	993.8	986.8	993.8
47.5°	799.9	803.3	796.4	789.5	799.9	789.5	789.5	779.1	792.9	792.9	786.0
50°	619.8	616.3	609.4	616.3	612.9	612.9	612.9	602.5	609.4	599.0	606.0
52.5°	457.1	453.6	453.6	450.1	453.6	450.1	450.1	446.7	446.7	443.2	446.7
55°	332.4	328.9	322.0	322.0	322.0	325.5	322.0	318.6	318.6	315.1	318.6
57.5°	225.1	218.1	218.1	218.1	218.1	214.7	214.7	211.2	214.7	211.2	214.7
60°	145.4	145.4	138.5	138.5	138.5	138.5	138.5	135.0	138.5	138.5	138.5
62.5°	90.0	90.0	86.6	83.1	86.6	83.1	83.1	83.1	86.6	83.1	86.6
65°	58.9	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4
67.5°	41.6	38.1	38.1	38.1	38.1	38.1	38.1	34.6	38.1	38.1	38.1
70°	27.7	27.7	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2
72.5°	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3
75°	13.9	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
77.5°	10.4	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
80°	6.9	6.9	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
82.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
85°	3.5	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	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
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: P252320

CATALOG NUMBER: LD6B60D010TE EU6B60709050 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1	2867.1
2.5°	2867.1	2870.5	2863.6	2867.1	2860.1	2867.1	2870.5	2877.4
5°	2860.1	2863.6	2856.7	2863.6	2856.7	2863.6	2867.1	2874.0
7.5°	2853.2	2860.1	2853.2	2860.1	2853.2	2860.1	2863.6	2870.5
10°	2853.2	2863.6	2856.7	2867.1	2856.7	2863.6	2870.5	2874.0
12.5°	2853.2	2863.6	2860.1	2867.1	2863.6	2870.5	2877.4	2884.4
15°	2846.3	2856.7	2849.7	2860.1	2856.7	2860.1	2874.0	2874.0
17.5°	2808.2	2818.6	2818.6	2825.5	2825.5	2835.9	2842.8	2849.7
20°	2759.7	2770.1	2766.6	2777.0	2777.0	2787.4	2794.3	2801.3
22.5°	2687.0	2700.8	2697.4	2707.8	2704.3	2711.2	2725.1	2721.6
25°	2593.5	2610.8	2607.4	2614.3	2610.8	2610.8	2617.7	2621.2
27.5°	2479.2	2489.6	2486.2	2493.1	2486.2	2493.1	2500.0	2503.5
30°	2330.3	2337.3	2333.8	2337.3	2333.8	2340.7	2344.2	2351.1
32.5°	2150.3	2160.7	2150.3	2157.2	2153.8	2153.8	2167.6	2160.7
35°	1935.6	1939.1	1942.5	1942.5	1935.6	1939.1	1946.0	1946.0
37.5°	1696.7	1714.0	1693.2	1703.6	1700.2	1700.2	1700.2	1710.5
40°	1447.4	1450.8	1443.9	1443.9	1443.9	1440.5	1454.3	1450.8
42.5°	1211.9	1215.4	1211.9	1201.5	1205.0	1205.0	1215.4	1201.5
45°	983.4	990.3	986.8	986.8	979.9	979.9	983.4	976.5
47.5°	779.1	786.0	775.6	779.1	772.2	779.1	775.6	782.6
50°	592.1	599.0	595.6	599.0	599.0	592.1	602.5	588.6
52.5°	443.2	446.7	443.2	439.8	436.3	436.3	443.2	439.8
55°	315.1	311.6	311.6	311.6	315.1	315.1	311.6	308.2
57.5°	211.2	211.2	207.8	207.8	211.2	204.3	207.8	204.3
60°	135.0	135.0	135.0	135.0	131.6	135.0	135.0	135.0
62.5°	83.1	83.1	83.1	83.1	83.1	83.1	83.1	83.1
65°	55.4	55.4	55.4	55.4	55.4	55.4	55.4	55.4
67.5°	34.6	38.1	38.1	38.1	34.6	34.6	34.6	34.6
70°	24.2	24.2	24.2	24.2	24.2	24.2	24.2	24.2
72.5°	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3
75°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
77.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
80°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
82.5°	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.5	3.5	3.5	3.5	3.5	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)