

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: P252435

Luminaire Tested: **LD6B70D010TE EU6B60709035 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252435
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B70D010TE EU6B60709035 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS 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: 5552.0 lumens
Efficiency: N/A
Efficacy: 69.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.02 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

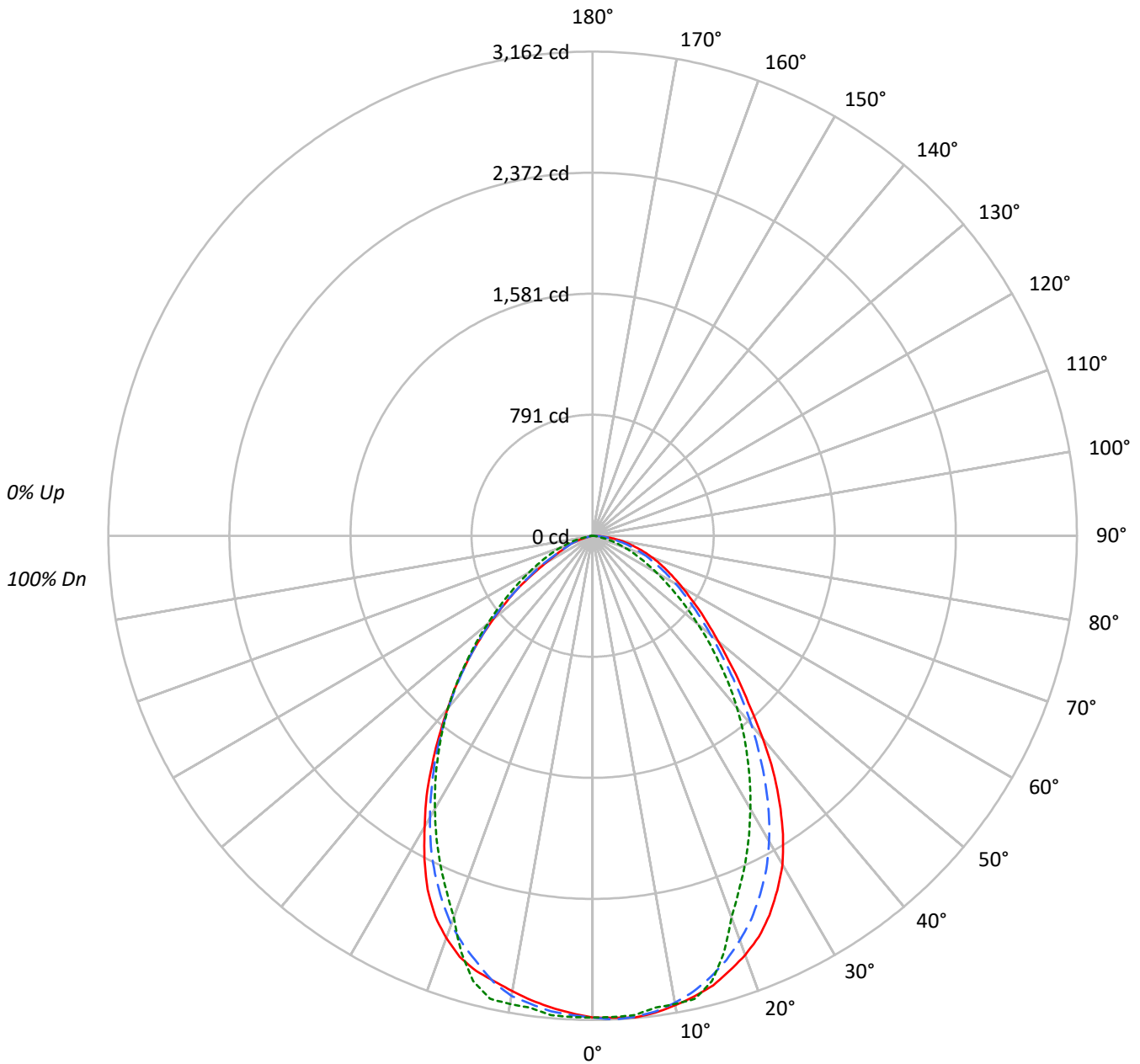
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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				100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88				88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77				77
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68				68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60				60
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54				54
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48				48
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44				44
8	67	55	47	42	66	54	47	42	53	46	42	52	46	42	51	45	41	40				40
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36				36
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33				33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	205234	205234	205234
5°	206823	205749	202540
10°	206234	205697	200013
15°	205301	203369	198675
20°	202236	184087	194015
25°	196750	169690	183512
30°	186819	155119	165274
35°	169522	140237	145446
40°	147183	124912	125262
45°	125525	107432	106298
50°	108642	90809	85836
55°	97126	75742	66449
60°	88492	62905	44781
65°	82620	51715	33422
70°	78704	42080	28059
75°	74159	29870	9276
80°	70595	15366	3081
85°	58088	9207	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	297.0	5.4
10°-20°	830.9	15.0
20°-30°	1146.9	20.7
30°-40°	1167.0	21.0
40°-50°	937.9	16.9
50°-60°	623.7	11.2
60°-70°	355.4	6.4
70°-80°	159.6	2.9
80°-90°	33.6	0.6
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°	2274.8	41.0
0°-40°	3441.8	62.0
0°-60°	5003.4	90.1
0°-90°	5552.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5552.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3146	3146	3146	3146	3146	
5°	3158	3154	3142	3117	3093	300
15°	3040	2982	3011	2892	2942	855
25°	2733	2586	2357	2435	2549	1253
35°	2128	1965	1761	1794	1826	1323
45°	1360	1279	1164	1152	1152	1055
55°	854	797	666	592	584	767
65°	535	478	335	216	216	533
75°	294	245	118	49	37	314
85°	78	53	12	4	0	92
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°	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8
2.5°	3149.9	3166.2	3162.2	3158.1	3162.2	3158.1	3149.9	3149.9	3141.7	3141.7	3162.2
5°	3158.1	3166.2	3162.2	3158.1	3158.1	3162.2	3145.8	3145.8	3137.6	3133.6	3154.0
7.5°	3141.7	3154.0	3145.8	3145.8	3141.7	3145.8	3129.5	3129.5	3117.2	3113.1	3133.6
10°	3113.1	3129.5	3121.3	3121.3	3121.3	3113.1	3105.0	3100.9	3088.6	3084.5	3096.8
12.5°	3080.4	3092.7	3088.6	3080.4	3080.4	3080.4	3064.1	3060.0	3043.7	3035.5	3047.8
15°	3039.6	3047.8	3043.7	3039.6	3031.4	3031.4	3015.1	3006.9	2990.6	2974.2	2982.4
17.5°	2978.3	2990.6	2982.4	2978.3	2966.0	2966.0	2949.7	2941.5	2917.0	2900.7	2904.8
20°	2912.9	2917.0	2912.9	2904.8	2892.5	2888.4	2872.1	2855.7	2835.3	2814.9	2810.8
22.5°	2835.3	2839.4	2827.1	2819.0	2806.7	2802.6	2782.2	2769.9	2737.3	2712.8	2708.7
25°	2733.2	2737.3	2737.3	2716.8	2708.7	2700.5	2680.1	2659.6	2631.0	2598.4	2586.1
27.5°	2610.6	2622.9	2614.7	2594.3	2577.9	2573.8	2553.4	2537.1	2500.3	2471.7	2455.4
30°	2479.9	2475.8	2471.7	2459.5	2434.9	2430.9	2410.4	2390.0	2361.4	2324.6	2304.2
32.5°	2312.4	2312.4	2308.3	2296.0	2271.5	2263.3	2247.0	2222.5	2189.8	2161.2	2140.8
35°	2128.5	2132.6	2128.5	2104.0	2087.7	2079.5	2071.3	2042.7	2014.1	1981.5	1965.1
37.5°	1936.5	1924.3	1928.3	1907.9	1887.5	1895.7	1871.1	1858.9	1826.2	1801.7	1785.3
40°	1728.2	1736.3	1720.0	1711.8	1699.6	1687.3	1687.3	1666.9	1650.5	1621.9	1613.8
42.5°	1523.9	1536.1	1532.1	1523.9	1507.5	1511.6	1491.2	1483.0	1462.6	1450.3	1438.1
45°	1360.5	1360.5	1360.5	1352.3	1348.2	1340.0	1327.8	1315.5	1303.3	1286.9	1278.8
47.5°	1201.1	1201.1	1205.2	1197.0	1188.9	1184.8	1176.6	1176.6	1156.2	1139.8	1131.7
50°	1070.4	1070.4	1070.4	1062.2	1054.1	1054.1	1045.9	1037.7	1025.5	1013.2	1005.0
52.5°	951.9	951.9	951.9	943.7	939.7	935.6	931.5	927.4	911.1	902.9	894.7
55°	853.9	849.8	849.8	845.7	837.5	837.5	833.4	825.3	813.0	800.8	796.7
57.5°	755.8	759.9	755.8	755.8	747.6	747.6	739.5	735.4	723.1	715.0	706.8
60°	678.2	678.2	678.2	674.1	665.9	670.0	661.8	657.8	645.5	633.2	625.1
62.5°	600.6	604.6	604.6	600.6	592.4	592.4	588.3	584.2	572.0	559.7	547.5
65°	535.2	535.2	535.2	531.1	527.0	527.0	522.9	518.9	506.6	490.3	478.0
67.5°	473.9	469.8	469.8	469.8	465.7	461.7	457.6	453.5	441.2	429.0	412.6
70°	412.6	412.6	412.6	408.5	400.4	404.5	400.4	396.3	384.0	371.8	359.5
72.5°	355.4	355.4	351.4	347.3	347.3	343.2	343.2	339.1	326.8	310.5	298.2
75°	294.2	294.2	294.2	294.2	286.0	290.1	281.9	277.8	269.6	257.4	245.1
77.5°	241.0	241.0	241.0	237.0	232.9	232.9	228.8	224.7	212.4	204.3	187.9
80°	187.9	187.9	187.9	187.9	183.8	179.8	175.7	171.6	163.4	151.2	138.9
82.5°	138.9	138.9	134.8	134.8	134.8	130.7	126.6	122.6	114.4	106.2	98.1
85°	77.6	81.7	81.7	73.5	77.6	73.5	73.5	65.4	65.4	57.2	53.1
87.5°	28.6	24.5	24.5	24.5	24.5	24.5	24.5	20.4	20.4	20.4	16.3
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°	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8
2.5°	3145.8	3141.7	3158.1	3158.1	3133.6	3145.8	3149.9	3141.7	3141.7	3145.8	3133.6
5°	3137.6	3129.5	3145.8	3149.9	3125.4	3137.6	3141.7	3133.6	3137.6	3141.7	3125.4
7.5°	3109.0	3109.0	3121.3	3125.4	3100.9	3113.1	3113.1	3105.0	3109.0	3109.0	3096.8
10°	3080.4	3068.2	3080.4	3080.4	3060.0	3064.1	3072.3	3068.2	3084.5	3105.0	3105.0
12.5°	3027.3	3015.1	3035.5	3035.5	3023.2	3039.6	3060.0	3072.3	3088.6	3096.8	3072.3
15°	2962.0	2966.0	3002.8	3031.4	3019.2	3043.7	3064.1	3055.9	3035.5	3011.0	2974.2
17.5°	2876.2	2863.9	2896.6	2912.9	2896.6	2904.8	2921.1	2904.8	2872.1	2851.7	2802.6
20°	2778.1	2745.4	2745.4	2737.3	2708.7	2708.7	2704.6	2676.0	2663.7	2651.5	2631.0
22.5°	2667.8	2631.0	2618.8	2594.3	2569.8	2565.7	2553.4	2524.8	2508.5	2500.3	2475.8
25°	2541.2	2508.5	2488.0	2463.5	2426.8	2418.6	2406.3	2377.7	2369.6	2357.3	2336.9
27.5°	2410.4	2369.6	2341.0	2316.5	2283.8	2279.7	2255.2	2234.8	2218.4	2210.2	2193.9
30°	2259.3	2214.3	2193.9	2161.2	2136.7	2128.5	2108.1	2079.5	2067.2	2059.1	2046.8
32.5°	2091.8	2055.0	2034.6	2006.0	1973.3	1977.4	1952.9	1928.3	1920.2	1912.0	1899.7
35°	1928.3	1891.6	1867.1	1842.5	1822.1	1813.9	1797.6	1777.2	1764.9	1760.8	1752.7
37.5°	1748.6	1720.0	1699.6	1675.0	1658.7	1650.5	1642.4	1621.9	1613.8	1613.8	1597.4
40°	1572.9	1548.4	1532.1	1519.8	1499.4	1495.3	1487.1	1474.9	1470.8	1466.7	1454.4
42.5°	1413.6	1380.9	1368.6	1360.5	1348.2	1340.0	1335.9	1327.8	1323.7	1319.6	1307.3
45°	1262.4	1233.8	1221.6	1213.4	1201.1	1197.0	1193.0	1180.7	1172.5	1164.4	1160.3
47.5°	1115.3	1094.9	1090.8	1070.4	1062.2	1054.1	1045.9	1037.7	1033.6	1029.5	1013.2
50°	988.7	976.4	956.0	943.7	935.6	931.5	915.1	902.9	898.8	894.7	882.5
52.5°	874.3	857.9	845.7	825.3	821.2	813.0	804.8	788.5	780.3	776.2	764.0
55°	772.2	759.9	743.6	727.2	715.0	710.9	698.6	682.3	674.1	665.9	657.8
57.5°	686.4	665.9	649.6	633.2	625.1	612.8	600.6	592.4	580.1	567.9	555.6
60°	604.6	588.3	567.9	551.5	543.4	535.2	518.9	506.6	494.3	482.1	469.8
62.5°	527.0	510.7	490.3	473.9	465.7	457.6	441.2	429.0	416.7	404.5	388.1
65°	457.6	441.2	424.9	408.5	400.4	392.2	375.9	359.5	347.3	335.0	318.7
67.5°	400.4	379.9	363.6	347.3	339.1	330.9	314.6	302.3	286.0	273.7	257.4
70°	339.1	322.8	310.5	294.2	286.0	277.8	261.5	245.1	232.9	220.6	204.3
72.5°	286.0	265.6	253.3	237.0	228.8	224.7	208.4	196.1	183.8	167.5	155.2
75°	228.8	212.4	196.1	183.8	175.7	171.6	155.2	143.0	130.7	118.5	106.2
77.5°	175.7	163.4	147.1	134.8	126.6	122.6	106.2	94.0	81.7	73.5	61.3
80°	130.7	114.4	106.2	94.0	89.9	81.7	73.5	61.3	53.1	40.9	32.7
82.5°	89.9	77.6	69.5	61.3	57.2	53.1	44.9	36.8	28.6	24.5	20.4
85°	49.0	40.9	36.8	32.7	28.6	28.6	24.5	20.4	16.3	12.3	8.2
87.5°	16.3	12.3	12.3	12.3	12.3	8.2	8.2	8.2	4.1	4.1	4.1
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°	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8
2.5°	3141.7	3141.7	3141.7	3137.6	3137.6	3137.6	3133.6	3149.9	3133.6	3129.5	3141.7
5°	3137.6	3129.5	3129.5	3129.5	3129.5	3125.4	3121.3	3129.5	3117.2	3113.1	3113.1
7.5°	3113.1	3109.0	3109.0	3105.0	3100.9	3096.8	3092.7	3096.8	3084.5	3080.4	3080.4
10°	3117.2	3109.0	3109.0	3096.8	3088.6	3076.4	3064.1	3068.2	3051.8	3039.6	3039.6
12.5°	3068.2	3047.8	3035.5	3023.2	3015.1	3011.0	2994.6	3002.8	2986.5	2982.4	2982.4
15°	2957.9	2933.4	2912.9	2904.8	2904.8	2896.6	2884.3	2900.7	2892.5	2896.6	2917.0
17.5°	2786.3	2774.0	2761.8	2757.7	2761.8	2769.9	2778.1	2802.6	2802.6	2814.9	2835.3
20°	2635.1	2627.0	2635.1	2635.1	2639.2	2655.6	2671.9	2692.3	2700.5	2712.8	2741.3
22.5°	2488.0	2488.0	2496.2	2508.5	2504.4	2533.0	2537.1	2573.8	2573.8	2598.4	2622.9
25°	2345.1	2345.1	2353.2	2357.3	2365.5	2381.8	2398.2	2426.8	2434.9	2459.5	2479.9
27.5°	2206.2	2202.1	2202.1	2206.2	2214.3	2234.8	2242.9	2275.6	2287.9	2304.2	2324.6
30°	2050.9	2046.8	2055.0	2063.2	2059.1	2079.5	2091.8	2116.3	2124.4	2140.8	2157.1
32.5°	1903.8	1903.8	1903.8	1912.0	1912.0	1928.3	1928.3	1956.9	1956.9	1969.2	1985.5
35°	1752.7	1752.7	1756.8	1760.8	1764.9	1769.0	1773.1	1789.4	1793.5	1797.6	1805.8
37.5°	1609.7	1605.6	1609.7	1609.7	1601.5	1617.8	1617.8	1634.2	1621.9	1634.2	1638.3
40°	1462.6	1462.6	1458.5	1458.5	1458.5	1466.7	1458.5	1470.8	1462.6	1470.8	1466.7
42.5°	1311.4	1311.4	1303.3	1311.4	1307.3	1307.3	1307.3	1315.5	1303.3	1311.4	1315.5
45°	1160.3	1156.2	1156.2	1152.1	1152.1	1152.1	1156.2	1156.2	1152.1	1160.3	1160.3
47.5°	1013.2	1009.1	1009.1	1009.1	1009.1	1013.2	1000.9	1009.1	1000.9	1000.9	1000.9
50°	886.5	882.5	878.4	874.3	870.2	870.2	866.1	866.1	857.9	853.9	849.8
52.5°	764.0	759.9	751.7	751.7	747.6	743.6	731.3	731.3	719.0	715.0	715.0
55°	653.7	641.4	637.3	629.2	629.2	621.0	612.8	604.6	592.4	584.2	584.2
57.5°	551.5	539.3	531.1	527.0	522.9	514.8	498.4	494.3	478.0	473.9	469.8
60°	461.7	449.4	437.1	429.0	424.9	412.6	396.3	388.1	379.9	367.7	355.4
62.5°	375.9	363.6	347.3	343.2	335.0	322.8	310.5	298.2	290.1	277.8	269.6
65°	302.3	290.1	277.8	269.6	261.5	249.2	237.0	224.7	216.5	212.4	208.4
67.5°	245.1	228.8	216.5	212.4	204.3	196.1	183.8	179.8	171.6	171.6	171.6
70°	192.0	179.8	167.5	163.4	159.3	151.2	143.0	143.0	143.0	143.0	143.0
72.5°	143.0	134.8	122.6	118.5	114.4	110.3	102.1	106.2	102.1	102.1	102.1
75°	89.9	81.7	73.5	69.5	65.4	61.3	57.2	53.1	49.0	44.9	44.9
77.5°	49.0	40.9	36.8	32.7	32.7	28.6	24.5	24.5	20.4	20.4	20.4
80°	28.6	24.5	20.4	16.3	16.3	12.3	12.3	12.3	12.3	8.2	8.2
82.5°	16.3	12.3	8.2	8.2	8.2	8.2	4.1	4.1	4.1	4.1	4.1
85°	8.2	8.2	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	0.0
87.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
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: P252435

CATALOG NUMBER: LD6B70D010TE EU6B60709035 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8	3145.8
2.5°	3121.3	3133.6	3121.3	3133.6	3133.6	3133.6	3133.6	3121.3
5°	3100.9	3109.0	3096.8	3105.0	3109.0	3105.0	3105.0	3092.7
7.5°	3064.1	3072.3	3060.0	3072.3	3076.4	3072.3	3068.2	3060.0
10°	3027.3	3031.4	3019.2	3027.3	3035.5	3035.5	3031.4	3019.2
12.5°	2970.1	2982.4	2970.1	2978.3	2986.5	2990.6	2990.6	2978.3
15°	2904.8	2925.2	2917.0	2929.3	2941.5	2945.6	2945.6	2941.5
17.5°	2839.4	2859.8	2847.6	2868.0	2880.3	2888.4	2892.5	2884.3
20°	2745.4	2769.9	2761.8	2778.1	2794.5	2806.7	2806.7	2794.5
22.5°	2622.9	2655.6	2651.5	2663.7	2684.2	2688.2	2696.4	2688.2
25°	2488.0	2512.6	2508.5	2520.7	2545.2	2545.2	2549.3	2549.3
27.5°	2332.8	2357.3	2353.2	2361.4	2377.7	2381.8	2385.9	2377.7
30°	2165.3	2177.6	2177.6	2189.8	2202.1	2206.2	2206.2	2193.9
32.5°	1981.5	1997.8	2006.0	2001.9	2014.1	2022.3	2018.2	2018.2
35°	1813.9	1818.0	1822.1	1826.2	1830.3	1838.5	1830.3	1826.2
37.5°	1634.2	1646.4	1638.3	1646.4	1654.6	1650.5	1646.4	1646.4
40°	1470.8	1474.9	1466.7	1474.9	1478.9	1478.9	1478.9	1470.8
42.5°	1307.3	1315.5	1307.3	1315.5	1315.5	1315.5	1315.5	1311.4
45°	1143.9	1152.1	1152.1	1156.2	1156.2	1152.1	1152.1	1152.1
47.5°	992.8	1000.9	992.8	1000.9	1005.0	996.9	996.9	996.9
50°	849.8	845.7	845.7	849.8	849.8	849.8	849.8	845.7
52.5°	702.7	706.8	706.8	706.8	710.9	706.8	710.9	710.9
55°	576.1	576.1	576.1	580.1	576.1	576.1	580.1	584.2
57.5°	461.7	457.6	453.5	453.5	457.6	453.5	453.5	453.5
60°	355.4	351.4	347.3	347.3	347.3	347.3	347.3	343.2
62.5°	265.6	265.6	265.6	269.6	269.6	269.6	269.6	273.7
65°	212.4	212.4	212.4	212.4	212.4	212.4	212.4	216.5
67.5°	171.6	171.6	171.6	175.7	175.7	175.7	175.7	175.7
70°	143.0	143.0	147.1	143.0	147.1	147.1	147.1	147.1
72.5°	98.1	98.1	98.1	98.1	98.1	94.0	98.1	94.0
75°	40.9	40.9	40.9	40.9	40.9	40.9	40.9	36.8
77.5°	16.3	16.3	16.3	16.3	16.3	16.3	16.3	16.3
80°	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.2
82.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.1	4.1	4.1	4.1	4.1	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)