

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: P252328

Luminaire Tested: **LD6B70D010TE EU6B60709024 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252328
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: LD6B70D010TE EU6B60709024 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4734.0 lumens
Efficiency: N/A
Efficacy: 59.6 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

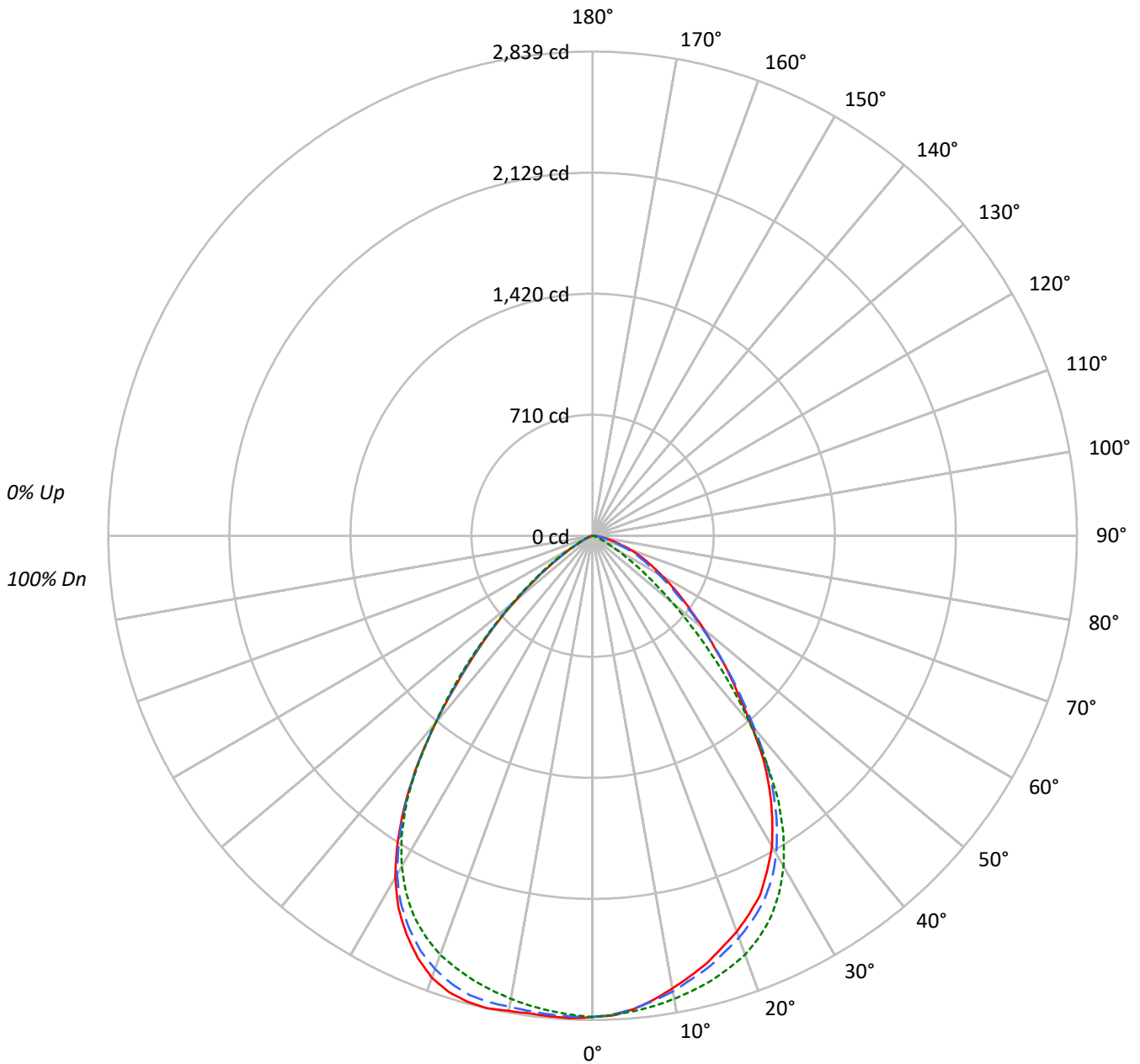
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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°	184096	184096	184096
5°	182343	183234	185245
10°	178582	182643	187386
15°	175164	182303	191049
20°	171535	181477	191412
25°	167308	177854	185707
30°	158404	168671	174321
35°	143853	151180	152534
40°	122766	122187	121608
45°	103133	91498	88666
50°	86130	61913	58797
55°	72489	37990	34498
60°	61365	20016	17341
65°	53135	10528	8413
70°	44197	6505	4559
75°	32643	4285	2571
80°	25623	2555	1277
85°	20435	2545	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.9	5.6
10°-20°	761.4	16.1
20°-30°	1124.4	23.8
30°-40°	1158.8	24.5
40°-50°	800.4	16.9
50°-60°	394.5	8.3
60°-70°	159.9	3.4
70°-80°	57.0	1.2
80°-90°	11.8	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°	2151.8	45.5
0°-40°	3310.6	69.9
0°-60°	4505.4	95.2
0°-90°	4734.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4734.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2822	2822	2822	2822	2822	
5°	2784	2784	2798	2818	2829	263
15°	2593	2621	2699	2788	2829	730
25°	2324	2368	2471	2542	2580	1063
35°	1806	1850	1898	1908	1915	1119
45°	1118	1125	992	978	961	864
55°	637	613	334	314	303	576
65°	344	310	68	54	54	342
75°	130	109	17	10	10	145
85°	27	20	3	0	0	33
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°	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8
2.5°	2814.9	2804.7	2811.5	2797.9	2814.9	2797.9	2801.3	2804.7	2801.3	2804.7	2808.1
5°	2784.3	2774.0	2784.3	2767.2	2784.3	2774.0	2774.0	2777.5	2777.5	2780.9	2784.3
7.5°	2743.4	2733.1	2743.4	2726.3	2746.8	2736.6	2736.6	2743.4	2740.0	2743.4	2750.2
10°	2695.7	2682.0	2692.3	2682.0	2702.5	2688.8	2695.7	2695.7	2695.7	2705.9	2712.7
12.5°	2644.5	2630.9	2644.5	2627.5	2648.0	2637.7	2641.1	2651.4	2654.8	2661.6	2665.0
15°	2593.4	2576.4	2583.2	2573.0	2593.4	2583.2	2586.6	2600.2	2600.2	2610.5	2620.7
17.5°	2528.7	2515.0	2528.7	2515.0	2532.1	2525.3	2532.1	2542.3	2542.3	2552.5	2562.8
20°	2470.7	2457.1	2467.3	2457.1	2477.6	2467.3	2470.7	2484.4	2487.8	2498.0	2508.2
22.5°	2399.2	2388.9	2395.8	2385.5	2406.0	2399.2	2402.6	2416.2	2419.6	2426.4	2443.5
25°	2324.2	2303.8	2314.0	2307.2	2327.6	2317.4	2324.2	2337.8	2344.6	2354.9	2368.5
27.5°	2215.1	2204.9	2211.7	2211.7	2228.8	2218.6	2222.0	2235.6	2245.8	2256.0	2273.1
30°	2102.7	2085.6	2092.5	2095.9	2109.5	2102.7	2109.5	2123.1	2126.5	2140.2	2153.8
32.5°	1959.6	1952.7	1966.4	1959.6	1966.4	1966.4	1969.8	1980.0	1986.8	1993.6	2010.7
35°	1806.2	1792.6	1806.2	1799.4	1816.4	1806.2	1816.4	1826.6	1826.6	1840.3	1850.5
37.5°	1639.2	1622.2	1629.0	1629.0	1635.8	1632.4	1632.4	1649.4	1652.8	1663.1	1673.3
40°	1441.5	1434.7	1448.4	1445.0	1448.4	1448.4	1451.8	1462.0	1468.8	1472.2	1475.6
42.5°	1264.3	1267.7	1271.2	1271.2	1271.2	1271.2	1271.2	1284.8	1281.4	1291.6	1295.0
45°	1117.8	1104.2	1111.0	1107.6	1117.8	1107.6	1117.8	1128.0	1121.2	1131.4	1124.6
47.5°	967.8	967.8	967.8	964.4	971.3	967.8	974.7	978.1	978.1	978.1	974.7
50°	848.6	838.3	841.8	841.8	845.2	841.8	848.6	852.0	852.0	845.2	831.5
52.5°	732.7	729.3	729.3	736.1	736.1	732.7	732.7	732.7	732.7	722.5	715.7
55°	637.3	630.5	633.9	633.9	633.9	633.9	637.3	633.9	633.9	623.6	613.4
57.5°	552.1	545.3	545.3	545.3	548.7	545.3	545.3	545.3	541.9	531.6	518.0
60°	470.3	466.9	470.3	470.3	473.7	470.3	470.3	470.3	463.5	453.3	439.6
62.5°	402.1	402.1	402.1	405.5	405.5	402.1	402.1	398.7	395.3	381.7	368.1
65°	344.2	340.8	344.2	344.2	347.6	347.6	344.2	340.8	337.4	323.8	310.1
67.5°	286.3	282.9	286.3	286.3	289.7	286.3	286.3	286.3	276.0	269.2	255.6
70°	231.7	228.3	228.3	228.3	231.7	224.9	228.3	228.3	221.5	211.3	197.7
72.5°	177.2	177.2	177.2	177.2	177.2	177.2	173.8	173.8	167.0	156.8	149.9
75°	129.5	129.5	132.9	132.9	129.5	129.5	129.5	126.1	122.7	115.9	109.1
77.5°	95.4	95.4	95.4	95.4	92.0	92.0	92.0	88.6	85.2	81.8	75.0
80°	68.2	68.2	68.2	64.8	68.2	64.8	64.8	64.8	57.9	54.5	51.1
82.5°	47.7	44.3	44.3	44.3	44.3	44.3	44.3	40.9	40.9	37.5	34.1
85°	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	23.9	20.4	20.4
87.5°	13.6	17.0	17.0	17.0	17.0	17.0	17.0	13.6	13.6	13.6	10.2
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°	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8
2.5°	2808.1	2808.1	2814.9	2804.7	2821.8	2811.5	2808.1	2825.2	2814.9	2811.5	2818.3
5°	2784.3	2787.7	2791.1	2784.3	2801.3	2791.1	2791.1	2808.1	2801.3	2797.9	2808.1
7.5°	2753.6	2757.0	2763.8	2760.4	2774.0	2767.2	2770.6	2787.7	2780.9	2780.9	2791.1
10°	2716.1	2722.9	2729.7	2729.7	2746.8	2740.0	2740.0	2760.4	2753.6	2757.0	2770.6
12.5°	2671.8	2682.0	2692.3	2695.7	2712.7	2702.5	2705.9	2729.7	2726.3	2729.7	2743.4
15°	2624.1	2637.7	2648.0	2648.0	2668.4	2658.2	2668.4	2692.3	2685.4	2699.1	2716.1
17.5°	2569.6	2583.2	2596.8	2600.2	2620.7	2613.9	2627.5	2651.4	2651.4	2658.2	2678.6
20°	2518.5	2535.5	2542.3	2552.5	2573.0	2569.6	2576.4	2603.6	2603.6	2613.9	2634.3
22.5°	2450.3	2467.3	2481.0	2491.2	2508.2	2508.2	2518.5	2542.3	2542.3	2549.1	2569.6
25°	2375.3	2395.8	2406.0	2416.2	2433.3	2429.8	2440.1	2460.5	2463.9	2470.7	2491.2
27.5°	2279.9	2296.9	2310.6	2317.4	2341.2	2327.6	2337.8	2361.7	2358.3	2365.1	2382.1
30°	2160.6	2177.7	2191.3	2191.3	2211.7	2211.7	2222.0	2232.2	2232.2	2239.0	2252.6
32.5°	2020.9	2041.3	2041.3	2051.6	2065.2	2051.6	2065.2	2078.8	2072.0	2082.2	2092.5
35°	1860.7	1870.9	1874.4	1874.4	1884.6	1881.2	1877.8	1888.0	1881.2	1898.2	1908.4
37.5°	1666.5	1680.1	1673.3	1680.1	1676.7	1666.5	1666.5	1683.5	1669.9	1673.3	1683.5
40°	1479.0	1479.0	1475.6	1458.6	1462.0	1451.8	1448.4	1451.8	1438.1	1434.7	1448.4
42.5°	1284.8	1281.4	1271.2	1247.3	1250.7	1233.7	1220.0	1220.0	1213.2	1209.8	1213.2
45°	1111.0	1100.8	1083.7	1056.5	1049.6	1036.0	1008.7	1001.9	991.7	991.7	995.1
47.5°	950.8	937.2	909.9	879.2	862.2	845.2	817.9	807.7	790.6	783.8	790.6
50°	817.9	794.0	760.0	715.7	698.6	678.2	650.9	633.9	616.8	610.0	606.6
52.5°	695.2	661.1	627.1	572.5	558.9	538.5	501.0	483.9	466.9	453.3	453.3
55°	589.6	558.9	511.2	460.1	439.6	419.2	381.7	357.8	340.8	334.0	327.2
57.5°	494.1	460.1	415.8	361.2	340.8	320.3	282.9	259.0	242.0	231.7	224.9
60°	415.8	378.3	334.0	286.3	262.4	242.0	204.5	180.6	163.6	153.4	146.5
62.5°	340.8	310.1	265.8	221.5	201.1	180.6	149.9	126.1	109.1	102.2	92.0
65°	286.3	255.6	214.7	177.2	160.2	139.7	112.5	92.0	78.4	68.2	61.3
67.5°	231.7	207.9	173.8	139.7	122.7	109.1	85.2	68.2	54.5	47.7	44.3
70°	184.0	160.2	132.9	105.6	95.4	81.8	64.8	47.7	40.9	34.1	30.7
72.5°	136.3	119.3	98.8	78.4	68.2	61.3	44.3	37.5	27.3	23.9	20.4
75°	98.8	85.2	71.6	54.5	47.7	44.3	34.1	23.9	20.4	17.0	13.6
77.5°	68.2	61.3	47.7	37.5	34.1	30.7	23.9	17.0	13.6	10.2	10.2
80°	44.3	37.5	30.7	23.9	23.9	20.4	13.6	10.2	10.2	6.8	6.8
82.5°	27.3	23.9	20.4	17.0	13.6	13.6	10.2	6.8	6.8	3.4	3.4
85°	17.0	13.6	10.2	10.2	6.8	6.8	6.8	3.4	3.4	3.4	3.4
87.5°	6.8	6.8	6.8	3.4	3.4	3.4	3.4	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°	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8
2.5°	2818.3	2818.3	2825.2	2814.9	2821.8	2821.8	2828.6	2814.9	2821.8	2825.2	2832.0
5°	2804.7	2808.1	2814.9	2811.5	2814.9	2814.9	2821.8	2804.7	2818.3	2818.3	2828.6
7.5°	2791.1	2791.1	2797.9	2794.5	2801.3	2804.7	2811.5	2797.9	2811.5	2811.5	2821.8
10°	2774.0	2774.0	2784.3	2780.9	2791.1	2794.5	2804.7	2791.1	2804.7	2808.1	2818.3
12.5°	2750.2	2753.6	2763.8	2763.8	2774.0	2780.9	2791.1	2784.3	2801.3	2804.7	2818.3
15°	2722.9	2729.7	2743.4	2740.0	2750.2	2760.4	2774.0	2763.8	2787.7	2794.5	2808.1
17.5°	2688.8	2695.7	2705.9	2705.9	2716.1	2722.9	2740.0	2733.1	2753.6	2757.0	2774.0
20°	2637.7	2648.0	2661.6	2658.2	2668.4	2675.2	2688.8	2682.0	2702.5	2709.3	2726.3
22.5°	2576.4	2583.2	2593.4	2593.4	2603.6	2610.5	2624.1	2613.9	2634.3	2637.7	2651.4
25°	2494.6	2501.4	2508.2	2511.6	2521.9	2525.3	2532.1	2525.3	2542.3	2545.7	2562.8
27.5°	2388.9	2392.4	2402.6	2402.6	2409.4	2412.8	2423.0	2409.4	2433.3	2433.3	2443.5
30°	2262.9	2259.4	2273.1	2266.3	2273.1	2273.1	2283.3	2276.5	2293.5	2286.7	2296.9
32.5°	2095.9	2102.7	2102.7	2095.9	2109.5	2106.1	2106.1	2099.3	2109.5	2112.9	2119.7
35°	1901.6	1911.8	1911.8	1915.2	1918.7	1908.4	1911.8	1891.4	1908.4	1911.8	1915.2
37.5°	1690.3	1680.1	1686.9	1676.7	1693.7	1673.3	1673.3	1659.7	1673.3	1673.3	1676.7
40°	1448.4	1445.0	1451.8	1445.0	1441.5	1438.1	1431.3	1421.1	1434.7	1427.9	1438.1
42.5°	1220.0	1216.6	1216.6	1209.8	1206.4	1206.4	1199.6	1192.8	1189.4	1189.4	1206.4
45°	984.9	991.7	984.9	981.5	988.3	981.5	984.9	971.3	978.1	971.3	978.1
47.5°	787.2	790.6	783.8	777.0	787.2	777.0	777.0	766.8	780.4	780.4	773.6
50°	610.0	606.6	599.8	606.6	603.2	603.2	603.2	593.0	599.8	589.6	596.4
52.5°	449.8	446.4	446.4	443.0	446.4	443.0	443.0	439.6	439.6	436.2	439.6
55°	327.2	323.8	316.9	316.9	316.9	320.3	316.9	313.5	313.5	310.1	313.5
57.5°	221.5	214.7	214.7	214.7	214.7	211.3	211.3	207.9	211.3	207.9	211.3
60°	143.1	143.1	136.3	136.3	136.3	136.3	136.3	132.9	136.3	136.3	136.3
62.5°	88.6	88.6	85.2	81.8	85.2	81.8	81.8	81.8	85.2	81.8	85.2
65°	57.9	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5
67.5°	40.9	37.5	37.5	37.5	37.5	37.5	37.5	34.1	37.5	37.5	37.5
70°	27.3	27.3	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9
72.5°	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
75°	13.6	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
77.5°	10.2	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
80°	6.8	6.8	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
82.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
85°	3.4	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	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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: P252328

CATALOG NUMBER: LD6B70D010TE EU6B60709024 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8	2821.8
2.5°	2821.8	2825.2	2818.3	2821.8	2814.9	2821.8	2825.2	2832.0
5°	2814.9	2818.3	2811.5	2818.3	2811.5	2818.3	2821.8	2828.6
7.5°	2808.1	2814.9	2808.1	2814.9	2808.1	2814.9	2818.3	2825.2
10°	2808.1	2818.3	2811.5	2821.8	2811.5	2818.3	2825.2	2828.6
12.5°	2808.1	2818.3	2814.9	2821.8	2818.3	2825.2	2832.0	2838.8
15°	2801.3	2811.5	2804.7	2814.9	2811.5	2814.9	2828.6	2828.6
17.5°	2763.8	2774.0	2774.0	2780.9	2780.9	2791.1	2797.9	2804.7
20°	2716.1	2726.3	2722.9	2733.1	2733.1	2743.4	2750.2	2757.0
22.5°	2644.5	2658.2	2654.8	2665.0	2661.6	2668.4	2682.0	2678.6
25°	2552.5	2569.6	2566.2	2573.0	2569.6	2569.6	2576.4	2579.8
27.5°	2440.1	2450.3	2446.9	2453.7	2446.9	2453.7	2460.5	2463.9
30°	2293.5	2300.3	2296.9	2300.3	2296.9	2303.8	2307.2	2314.0
32.5°	2116.3	2126.5	2116.3	2123.1	2119.7	2119.7	2133.4	2126.5
35°	1905.0	1908.4	1911.8	1911.8	1905.0	1908.4	1915.2	1915.2
37.5°	1669.9	1686.9	1666.5	1676.7	1673.3	1673.3	1673.3	1683.5
40°	1424.5	1427.9	1421.1	1421.1	1421.1	1417.7	1431.3	1427.9
42.5°	1192.8	1196.2	1192.8	1182.5	1186.0	1186.0	1196.2	1182.5
45°	967.8	974.7	971.3	971.3	964.4	964.4	967.8	961.0
47.5°	766.8	773.6	763.4	766.8	760.0	766.8	763.4	770.2
50°	582.8	589.6	586.2	589.6	589.6	582.8	593.0	579.3
52.5°	436.2	439.6	436.2	432.8	429.4	429.4	436.2	432.8
55°	310.1	306.7	306.7	306.7	310.1	310.1	306.7	303.3
57.5°	207.9	207.9	204.5	204.5	207.9	201.1	204.5	201.1
60°	132.9	132.9	132.9	132.9	129.5	132.9	132.9	132.9
62.5°	81.8	81.8	81.8	81.8	81.8	81.8	81.8	81.8
65°	54.5	54.5	54.5	54.5	54.5	54.5	54.5	54.5
67.5°	34.1	37.5	37.5	37.5	34.1	34.1	34.1	34.1
70°	23.9	23.9	23.9	23.9	23.9	23.9	23.9	23.9
72.5°	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
75°	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
77.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
80°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
82.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.4	3.4	3.4	3.4	3.4	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)