

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: P252319

Luminaire Tested: **LD6B60D010TE EU6B60709040 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252319
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 EU6B60709040 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4789.0 lumens
Efficiency: N/A
Efficacy: 76.6 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

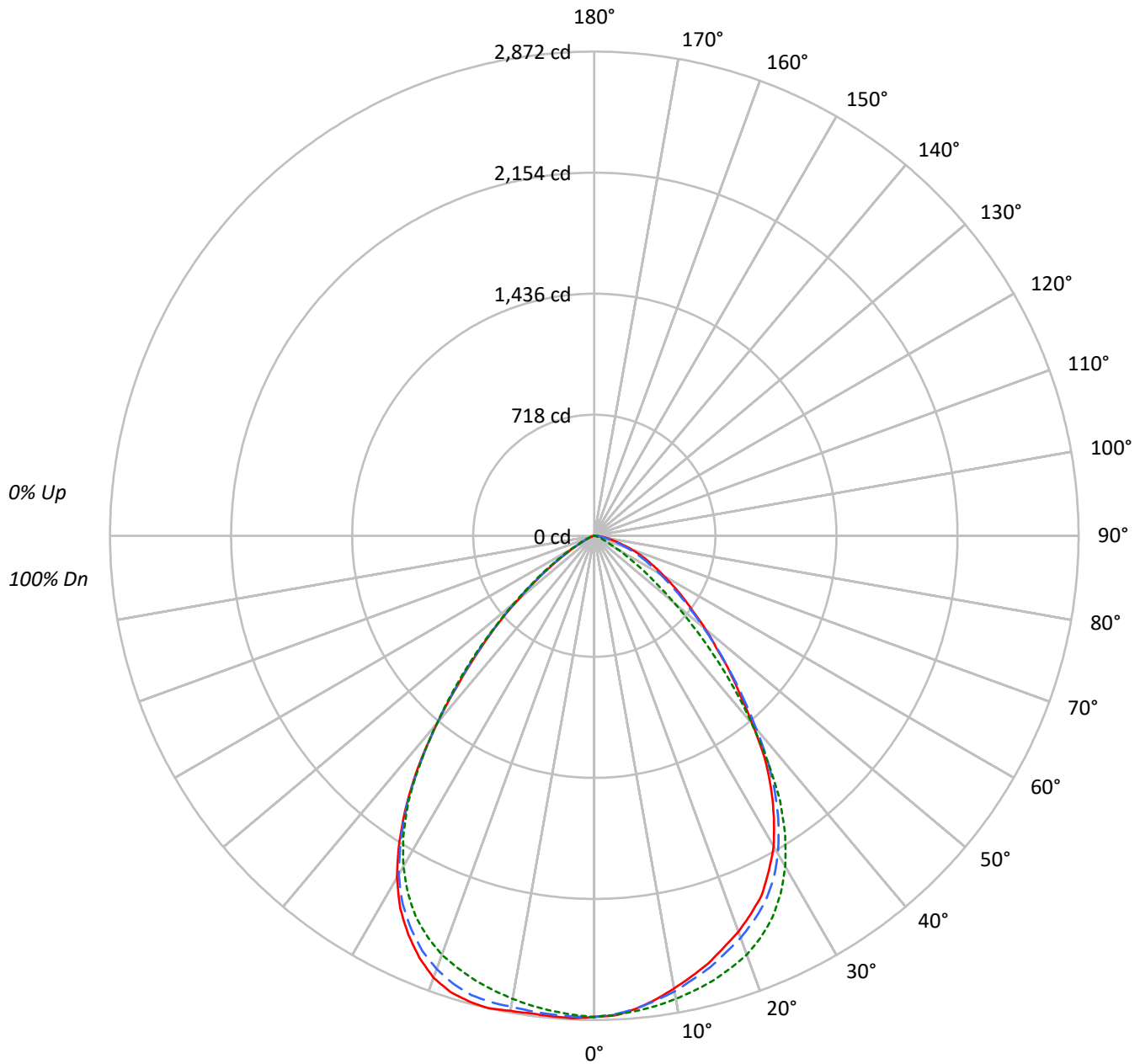
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	186229	186229	186229
5°	184459	185362	187393
10°	180656	184763	189559
15°	177203	184417	193265
20°	173527	183581	193634
25°	169251	179919	187867
30°	160242	170630	176348
35°	145526	152941	154310
40°	124197	123609	123022
45°	104332	92559	89699
50°	87125	62633	59487
55°	73330	38434	34897
60°	62083	20238	17550
65°	53752	10652	8521
70°	44712	6581	4597
75°	33021	4336	2596
80°	25924	2592	1277
85°	20660	2545	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.0	5.6
10°-20°	770.3	16.1
20°-30°	1137.5	23.8
30°-40°	1172.2	24.5
40°-50°	809.7	16.9
50°-60°	399.1	8.3
60°-70°	161.7	3.4
70°-80°	57.6	1.2
80°-90°	11.9	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°	2176.8	45.5
0°-40°	3349.0	69.9
0°-60°	4557.8	95.2
0°-90°	4789.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4789.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2854	2854	2854	2854	2854	
5°	2817	2817	2830	2851	2861	266
15°	2624	2651	2730	2820	2861	739
25°	2351	2396	2499	2572	2610	1075
35°	1827	1872	1920	1931	1938	1132
45°	1131	1138	1003	989	972	874
55°	645	621	338	317	307	583
65°	348	314	69	55	55	346
75°	131	110	17	10	10	147
85°	28	21	3	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°	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5
2.5°	2847.6	2837.3	2844.2	2830.4	2847.6	2830.4	2833.9	2837.3	2833.9	2837.3	2840.7
5°	2816.6	2806.3	2816.6	2799.4	2816.6	2806.3	2806.3	2809.7	2809.7	2813.2	2816.6
7.5°	2775.2	2764.9	2775.2	2758.0	2778.7	2768.4	2768.4	2775.2	2771.8	2775.2	2782.1
10°	2727.0	2713.2	2723.5	2713.2	2733.9	2720.1	2727.0	2727.0	2727.0	2737.3	2744.2
12.5°	2675.3	2661.5	2675.3	2658.0	2678.7	2668.4	2671.8	2682.2	2685.6	2692.5	2696.0
15°	2623.6	2606.3	2613.2	2602.9	2623.6	2613.2	2616.7	2630.5	2630.5	2640.8	2651.1
17.5°	2558.1	2544.3	2558.1	2544.3	2561.5	2554.6	2561.5	2571.8	2571.8	2582.2	2592.5
20°	2499.4	2485.7	2496.0	2485.7	2506.3	2496.0	2499.4	2513.2	2516.7	2527.0	2537.4
22.5°	2427.0	2416.7	2423.6	2413.3	2433.9	2427.0	2430.5	2444.3	2447.7	2454.6	2471.9
25°	2351.2	2330.5	2340.9	2334.0	2354.6	2344.3	2351.2	2365.0	2371.9	2382.2	2396.0
27.5°	2240.9	2230.5	2237.4	2237.4	2254.7	2244.3	2247.8	2261.6	2271.9	2282.3	2299.5
30°	2127.1	2109.9	2116.8	2120.2	2134.0	2127.1	2134.0	2147.8	2151.2	2165.0	2178.8
32.5°	1982.3	1975.4	1989.2	1982.3	1989.2	1989.2	1992.7	2003.0	2009.9	2016.8	2034.0
35°	1827.2	1813.4	1827.2	1820.3	1837.5	1827.2	1837.5	1847.9	1847.9	1861.7	1872.0
37.5°	1658.3	1641.0	1647.9	1647.9	1654.8	1651.4	1651.4	1668.6	1672.0	1682.4	1692.7
40°	1458.3	1451.4	1465.2	1461.7	1465.2	1465.2	1468.6	1479.0	1485.9	1489.3	1492.8
42.5°	1279.0	1282.5	1285.9	1285.9	1285.9	1285.9	1285.9	1299.7	1296.3	1306.6	1310.1
45°	1130.8	1117.0	1123.9	1120.4	1130.8	1120.4	1130.8	1141.1	1134.2	1144.6	1137.7
47.5°	979.1	979.1	979.1	975.6	982.5	979.1	986.0	989.4	989.4	989.4	986.0
50°	858.4	848.1	851.5	851.5	855.0	851.5	858.4	861.9	861.9	855.0	841.2
52.5°	741.2	737.8	737.8	744.7	744.7	741.2	741.2	741.2	741.2	730.9	724.0
55°	644.7	637.8	641.2	641.2	641.2	641.2	644.7	641.2	641.2	630.9	620.6
57.5°	558.5	551.6	551.6	551.6	555.0	551.6	551.6	551.6	548.2	537.8	524.0
60°	475.8	472.3	475.8	475.8	479.2	475.8	475.8	475.8	468.9	458.5	444.7
62.5°	406.8	406.8	406.8	410.3	410.3	406.8	406.8	403.4	399.9	386.1	372.3
65°	348.2	344.8	348.2	348.2	351.6	351.6	348.2	344.8	341.3	327.5	313.7
67.5°	289.6	286.1	289.6	289.6	293.0	289.6	289.6	289.6	279.2	272.4	258.6
70°	234.4	231.0	231.0	231.0	234.4	227.5	231.0	231.0	224.1	213.7	200.0
72.5°	179.3	179.3	179.3	179.3	179.3	179.3	175.8	175.8	168.9	158.6	151.7
75°	131.0	131.0	134.5	134.5	131.0	131.0	131.0	127.6	124.1	117.2	110.3
77.5°	96.5	96.5	96.5	96.5	93.1	93.1	93.1	89.6	86.2	82.7	75.8
80°	69.0	69.0	69.0	65.5	69.0	65.5	65.5	65.5	58.6	55.2	51.7
82.5°	48.3	44.8	44.8	44.8	44.8	44.8	44.8	41.4	41.4	37.9	34.5
85°	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6	24.1	20.7	20.7
87.5°	13.8	17.2	17.2	17.2	17.2	17.2	17.2	13.8	13.8	13.8	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5
2.5°	2840.7	2840.7	2847.6	2837.3	2854.5	2844.2	2840.7	2858.0	2847.6	2844.2	2851.1
5°	2816.6	2820.1	2823.5	2816.6	2833.9	2823.5	2823.5	2840.7	2833.9	2830.4	2840.7
7.5°	2785.6	2789.0	2795.9	2792.5	2806.3	2799.4	2802.8	2820.1	2813.2	2813.2	2823.5
10°	2747.7	2754.6	2761.5	2761.5	2778.7	2771.8	2771.8	2792.5	2785.6	2789.0	2802.8
12.5°	2702.8	2713.2	2723.5	2727.0	2744.2	2733.9	2737.3	2761.5	2758.0	2761.5	2775.2
15°	2654.6	2668.4	2678.7	2678.7	2699.4	2689.1	2699.4	2723.5	2716.6	2730.4	2747.7
17.5°	2599.4	2613.2	2627.0	2630.5	2651.1	2644.2	2658.0	2682.2	2682.2	2689.1	2709.7
20°	2547.7	2564.9	2571.8	2582.2	2602.9	2599.4	2606.3	2633.9	2633.9	2644.2	2664.9
22.5°	2478.8	2496.0	2509.8	2520.1	2537.4	2537.4	2547.7	2571.8	2571.8	2578.7	2599.4
25°	2402.9	2423.6	2433.9	2444.3	2461.5	2458.1	2468.4	2489.1	2492.6	2499.4	2520.1
27.5°	2306.4	2323.6	2337.4	2344.3	2368.4	2354.6	2365.0	2389.1	2385.7	2392.6	2409.8
30°	2185.7	2203.0	2216.7	2216.7	2237.4	2237.4	2247.8	2258.1	2258.1	2265.0	2278.8
32.5°	2044.4	2065.1	2065.1	2075.4	2089.2	2075.4	2089.2	2103.0	2096.1	2106.4	2116.8
35°	1882.3	1892.7	1896.1	1896.1	1906.5	1903.0	1899.6	1909.9	1903.0	1920.3	1930.6
37.5°	1685.8	1699.6	1692.7	1699.6	1696.2	1685.8	1685.8	1703.1	1689.3	1692.7	1703.1
40°	1496.2	1496.2	1492.8	1475.5	1479.0	1468.6	1465.2	1468.6	1454.8	1451.4	1465.2
42.5°	1299.7	1296.3	1285.9	1261.8	1265.2	1248.0	1234.2	1234.2	1227.3	1223.9	1227.3
45°	1123.9	1113.5	1096.3	1068.7	1061.8	1048.0	1020.5	1013.6	1003.2	1003.2	1006.7
47.5°	961.9	948.1	920.5	889.5	872.2	855.0	827.4	817.1	799.8	792.9	799.8
50°	827.4	803.3	768.8	724.0	706.7	686.1	658.5	641.2	624.0	617.1	613.7
52.5°	703.3	668.8	634.3	579.2	565.4	544.7	506.8	489.5	472.3	458.5	458.5
55°	596.4	565.4	517.1	465.4	444.7	424.0	386.1	362.0	344.8	337.9	331.0
57.5°	499.9	465.4	420.6	365.4	344.8	324.1	286.1	262.0	244.8	234.4	227.5
60°	420.6	382.7	337.9	289.6	265.5	244.8	206.9	182.7	165.5	155.1	148.2
62.5°	344.8	313.7	268.9	224.1	203.4	182.7	151.7	127.6	110.3	103.4	93.1
65°	289.6	258.6	217.2	179.3	162.0	141.3	113.8	93.1	79.3	69.0	62.1
67.5°	234.4	210.3	175.8	141.3	124.1	110.3	86.2	69.0	55.2	48.3	44.8
70°	186.2	162.0	134.5	106.9	96.5	82.7	65.5	48.3	41.4	34.5	31.0
72.5°	137.9	120.7	100.0	79.3	69.0	62.1	44.8	37.9	27.6	24.1	20.7
75°	100.0	86.2	72.4	55.2	48.3	44.8	34.5	24.1	20.7	17.2	13.8
77.5°	69.0	62.1	48.3	37.9	34.5	31.0	24.1	17.2	13.8	10.3	10.3
80°	44.8	37.9	31.0	24.1	24.1	20.7	13.8	10.3	10.3	6.9	6.9
82.5°	27.6	24.1	20.7	17.2	13.8	13.8	10.3	6.9	6.9	3.4	3.4
85°	17.2	13.8	10.3	10.3	6.9	6.9	6.9	3.4	3.4	3.4	3.4
87.5°	6.9	6.9	6.9	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°	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5
2.5°	2851.1	2851.1	2858.0	2847.6	2854.5	2854.5	2861.4	2847.6	2854.5	2858.0	2864.9
5°	2837.3	2840.7	2847.6	2844.2	2847.6	2847.6	2854.5	2837.3	2851.1	2851.1	2861.4
7.5°	2823.5	2823.5	2830.4	2827.0	2833.9	2837.3	2844.2	2830.4	2844.2	2844.2	2854.5
10°	2806.3	2806.3	2816.6	2813.2	2823.5	2827.0	2837.3	2823.5	2837.3	2840.7	2851.1
12.5°	2782.1	2785.6	2795.9	2795.9	2806.3	2813.2	2823.5	2816.6	2833.9	2837.3	2851.1
15°	2754.6	2761.5	2775.2	2771.8	2782.1	2792.5	2806.3	2795.9	2820.1	2827.0	2840.7
17.5°	2720.1	2727.0	2737.3	2737.3	2747.7	2754.6	2771.8	2764.9	2785.6	2789.0	2806.3
20°	2668.4	2678.7	2692.5	2689.1	2699.4	2706.3	2720.1	2713.2	2733.9	2740.8	2758.0
22.5°	2606.3	2613.2	2623.6	2623.6	2633.9	2640.8	2654.6	2644.2	2664.9	2668.4	2682.2
25°	2523.6	2530.5	2537.4	2540.8	2551.2	2554.6	2561.5	2554.6	2571.8	2575.3	2592.5
27.5°	2416.7	2420.2	2430.5	2430.5	2437.4	2440.8	2451.2	2437.4	2461.5	2461.5	2471.9
30°	2289.1	2285.7	2299.5	2292.6	2299.5	2299.5	2309.8	2302.9	2320.2	2313.3	2323.6
32.5°	2120.2	2127.1	2127.1	2120.2	2134.0	2130.6	2130.6	2123.7	2134.0	2137.5	2144.4
35°	1923.7	1934.1	1934.1	1937.5	1940.9	1930.6	1934.1	1913.4	1930.6	1934.1	1937.5
37.5°	1710.0	1699.6	1706.5	1696.2	1713.4	1692.7	1692.7	1678.9	1692.7	1692.7	1696.2
40°	1465.2	1461.7	1468.6	1461.7	1458.3	1454.8	1448.0	1437.6	1451.4	1444.5	1454.8
42.5°	1234.2	1230.8	1230.8	1223.9	1220.4	1220.4	1213.5	1206.6	1203.2	1203.2	1220.4
45°	996.3	1003.2	996.3	992.9	999.8	992.9	996.3	982.5	989.4	982.5	989.4
47.5°	796.4	799.8	792.9	786.0	796.4	786.0	786.0	775.7	789.5	789.5	782.6
50°	617.1	613.7	606.8	613.7	610.2	610.2	610.2	599.9	606.8	596.4	603.3
52.5°	455.1	451.6	451.6	448.2	451.6	448.2	448.2	444.7	444.7	441.3	444.7
55°	331.0	327.5	320.6	320.6	320.6	324.1	320.6	317.2	317.2	313.7	317.2
57.5°	224.1	217.2	217.2	217.2	217.2	213.7	213.7	210.3	213.7	210.3	213.7
60°	144.8	144.8	137.9	137.9	137.9	137.9	137.9	134.5	137.9	137.9	137.9
62.5°	89.6	89.6	86.2	82.7	86.2	82.7	82.7	82.7	86.2	82.7	86.2
65°	58.6	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2
67.5°	41.4	37.9	37.9	37.9	37.9	37.9	37.9	34.5	37.9	37.9	37.9
70°	27.6	27.6	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1
72.5°	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2
75°	13.8	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
77.5°	10.3	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	3.4	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: P252319

CATALOG NUMBER: LD6B60D010TE EU6B60709040 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5	2854.5
2.5°	2854.5	2858.0	2851.1	2854.5	2847.6	2854.5	2858.0	2864.9
5°	2847.6	2851.1	2844.2	2851.1	2844.2	2851.1	2854.5	2861.4
7.5°	2840.7	2847.6	2840.7	2847.6	2840.7	2847.6	2851.1	2858.0
10°	2840.7	2851.1	2844.2	2854.5	2844.2	2851.1	2858.0	2861.4
12.5°	2840.7	2851.1	2847.6	2854.5	2851.1	2858.0	2864.9	2871.8
15°	2833.9	2844.2	2837.3	2847.6	2844.2	2847.6	2861.4	2861.4
17.5°	2795.9	2806.3	2806.3	2813.2	2813.2	2823.5	2830.4	2837.3
20°	2747.7	2758.0	2754.6	2764.9	2764.9	2775.2	2782.1	2789.0
22.5°	2675.3	2689.1	2685.6	2696.0	2692.5	2699.4	2713.2	2709.7
25°	2582.2	2599.4	2596.0	2602.9	2599.4	2599.4	2606.3	2609.8
27.5°	2468.4	2478.8	2475.3	2482.2	2475.3	2482.2	2489.1	2492.6
30°	2320.2	2327.1	2323.6	2327.1	2323.6	2330.5	2334.0	2340.9
32.5°	2140.9	2151.2	2140.9	2147.8	2144.4	2144.4	2158.1	2151.2
35°	1927.2	1930.6	1934.1	1934.1	1927.2	1930.6	1937.5	1937.5
37.5°	1689.3	1706.5	1685.8	1696.2	1692.7	1692.7	1692.7	1703.1
40°	1441.1	1444.5	1437.6	1437.6	1437.6	1434.2	1448.0	1444.5
42.5°	1206.6	1210.1	1206.6	1196.3	1199.7	1199.7	1210.1	1196.3
45°	979.1	986.0	982.5	982.5	975.6	975.6	979.1	972.2
47.5°	775.7	782.6	772.2	775.7	768.8	775.7	772.2	779.1
50°	589.5	596.4	593.0	596.4	596.4	589.5	599.9	586.1
52.5°	441.3	444.7	441.3	437.8	434.4	434.4	441.3	437.8
55°	313.7	310.3	310.3	310.3	313.7	313.7	310.3	306.8
57.5°	210.3	210.3	206.9	206.9	210.3	203.4	206.9	203.4
60°	134.5	134.5	134.5	134.5	131.0	134.5	134.5	134.5
62.5°	82.7	82.7	82.7	82.7	82.7	82.7	82.7	82.7
65°	55.2	55.2	55.2	55.2	55.2	55.2	55.2	55.2
67.5°	34.5	37.9	37.9	37.9	34.5	34.5	34.5	34.5
70°	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1
72.5°	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2
75°	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
77.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
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)