

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: P252317

Luminaire Tested: **LD6B60D010TE EU6B60709030 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252317
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 EU6B60709030 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4714.0 lumens
Efficiency: N/A
Efficacy: 75.4 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

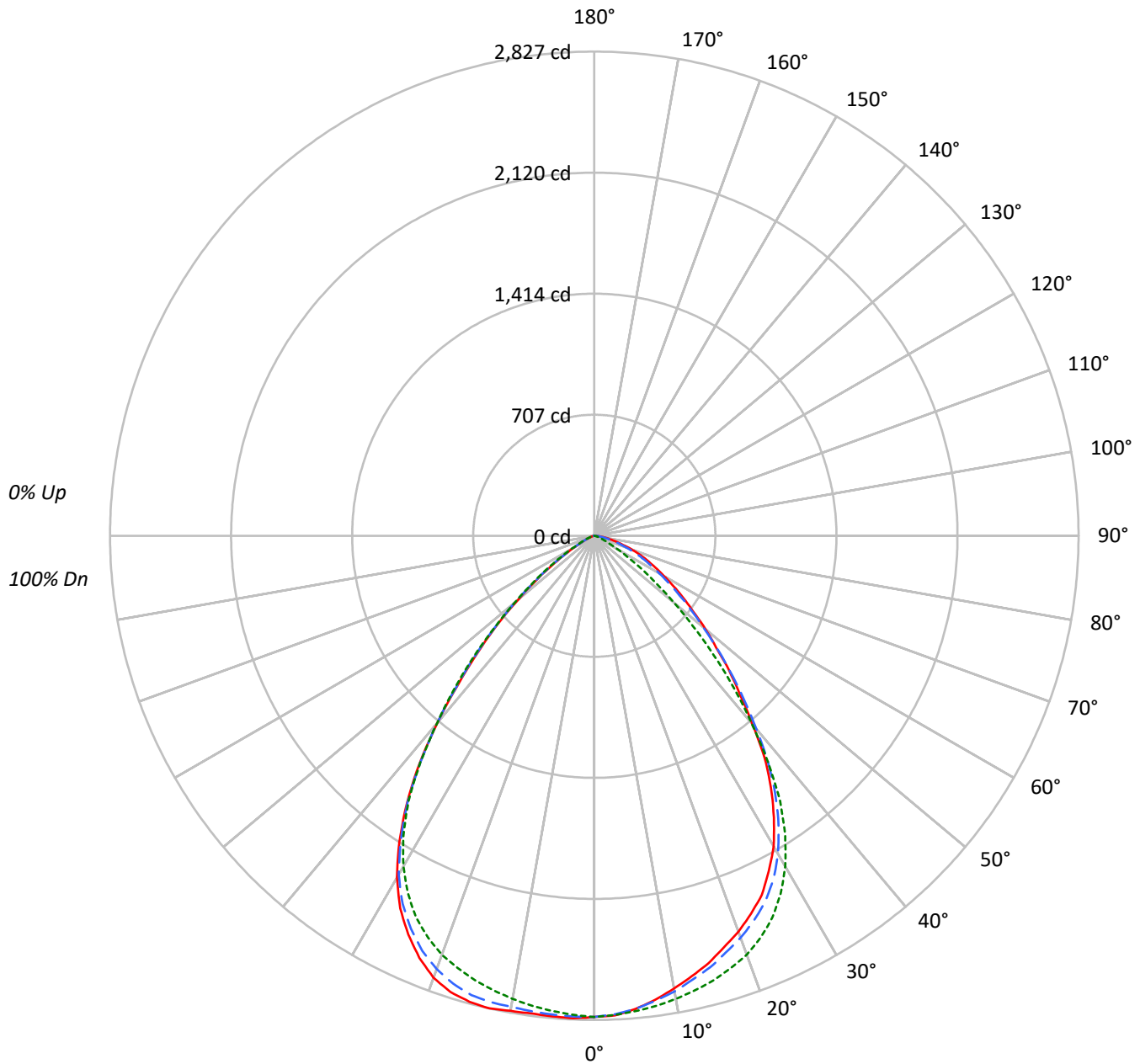
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	112	108	105	102	109	106	103	101	102	100	98		98	96	95		95
2	104	98	93	89	102	96	92	88	93	89	86		90	87	84		87
3	97	89	83	78	95	88	82	77	85	80	76		82	78	75		80
4	91	81	74	69	89	80	74	69	78	72	68		76	71	67		74
5	85	74	67	62	83	73	66	61	71	65	61		70	64	60		68
6	79	68	61	55	78	67	60	55	66	59	55		64	59	54		63
7	74	63	55	50	73	62	55	50	61	54	50		59	54	49		58
8	70	58	51	46	68	57	50	46	56	50	45		55	49	45		54
9	65	54	47	42	64	53	46	42	52	46	42		51	46	41		50
10	62	50	43	39	61	50	43	38	49	43	38		48	42	38		47

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	183313	183313	183313
5°	181571	182461	184459
10°	177827	181875	186591
15°	174427	181533	190239
20°	170813	180706	190607
25°	166602	177105	184922
30°	157733	167956	173583
35°	143248	150543	151897
40°	122255	121676	121097
45°	102699	91111	88297
50°	85764	61649	58553
55°	72182	37831	34351
60°	61104	19924	17263
65°	52903	10482	8382
70°	44025	6466	4540
75°	32517	4285	2571
80°	25510	2555	1277
85°	20286	2545	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.8	5.6
10°-20°	758.2	16.1
20°-30°	1119.6	23.8
30°-40°	1153.9	24.5
40°-50°	797.0	16.9
50°-60°	392.8	8.3
60°-70°	159.2	3.4
70°-80°	56.7	1.2
80°-90°	11.7	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°	2142.7	45.5
0°-40°	3296.6	69.9
0°-60°	4486.4	95.2
0°-90°	4714.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4714.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2810	2810	2810	2810	2810	
5°	2772	2772	2786	2806	2817	262
15°	2582	2610	2688	2776	2817	727
25°	2314	2358	2460	2532	2569	1058
35°	1799	1843	1890	1900	1907	1114
45°	1113	1120	988	974	957	860
55°	635	611	333	312	302	573
65°	343	309	68	54	54	340
75°	129	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°	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8
2.5°	2803.0	2792.9	2799.7	2786.1	2803.0	2786.1	2789.5	2792.9	2789.5	2792.9	2796.3
5°	2772.5	2762.3	2772.5	2755.5	2772.5	2762.3	2762.3	2765.7	2765.7	2769.1	2772.5
7.5°	2731.8	2721.6	2731.8	2714.8	2735.2	2725.0	2725.0	2731.8	2728.4	2731.8	2738.6
10°	2684.3	2670.7	2680.9	2670.7	2691.1	2677.5	2684.3	2684.3	2684.3	2694.5	2701.2
12.5°	2633.4	2619.8	2633.4	2616.4	2636.8	2626.6	2630.0	2640.2	2643.6	2650.3	2653.7
15°	2582.5	2565.5	2572.3	2562.1	2582.5	2572.3	2575.7	2589.3	2589.3	2599.4	2609.6
17.5°	2518.0	2504.4	2518.0	2504.4	2521.4	2514.6	2521.4	2531.6	2531.6	2541.7	2551.9
20°	2460.3	2446.7	2456.9	2446.7	2467.1	2456.9	2460.3	2473.9	2477.3	2487.4	2497.6
22.5°	2389.0	2378.9	2385.6	2375.5	2395.8	2389.0	2392.4	2406.0	2409.4	2416.2	2433.2
25°	2314.4	2294.0	2304.2	2297.4	2317.8	2307.6	2314.4	2328.0	2334.7	2344.9	2358.5
27.5°	2205.8	2195.6	2202.4	2202.4	2219.4	2209.2	2212.6	2226.1	2236.3	2246.5	2263.5
30°	2093.8	2076.8	2083.6	2087.0	2100.6	2093.8	2100.6	2114.2	2117.6	2131.1	2144.7
32.5°	1951.3	1944.5	1958.1	1951.3	1958.1	1958.1	1961.5	1971.6	1978.4	1985.2	2002.2
35°	1798.6	1785.0	1798.6	1791.8	1808.7	1798.6	1808.7	1818.9	1818.9	1832.5	1842.7
37.5°	1632.3	1615.3	1622.1	1622.1	1628.9	1625.5	1625.5	1642.5	1645.9	1656.0	1666.2
40°	1435.5	1428.7	1442.2	1438.9	1442.2	1442.2	1445.6	1455.8	1462.6	1466.0	1469.4
42.5°	1259.0	1262.4	1265.8	1265.8	1265.8	1265.8	1265.8	1279.4	1276.0	1286.1	1289.5
45°	1113.1	1099.5	1106.3	1102.9	1113.1	1102.9	1113.1	1123.3	1116.5	1126.6	1119.9
47.5°	963.8	963.8	963.8	960.4	967.2	963.8	970.5	973.9	973.9	973.9	970.5
50°	845.0	834.8	838.2	838.2	841.6	838.2	845.0	848.4	848.4	841.6	828.0
52.5°	729.6	726.2	726.2	733.0	733.0	729.6	729.6	729.6	729.6	719.4	712.6
55°	634.6	627.8	631.2	631.2	631.2	631.2	634.6	631.2	631.2	621.0	610.8
57.5°	549.8	543.0	543.0	543.0	546.4	543.0	543.0	543.0	539.6	529.4	515.8
60°	468.3	464.9	468.3	468.3	471.7	468.3	468.3	468.3	461.5	451.3	437.8
62.5°	400.4	400.4	400.4	403.8	403.8	400.4	400.4	397.0	393.6	380.1	366.5
65°	342.7	339.4	342.7	342.7	346.1	346.1	342.7	339.4	336.0	322.4	308.8
67.5°	285.1	281.7	285.1	285.1	288.4	285.1	285.1	285.1	274.9	268.1	254.5
70°	230.8	227.4	227.4	227.4	230.8	224.0	227.4	227.4	220.6	210.4	196.8
72.5°	176.5	176.5	176.5	176.5	176.5	176.5	173.1	173.1	166.3	156.1	149.3
75°	129.0	129.0	132.3	132.3	129.0	129.0	129.0	125.6	122.2	115.4	108.6
77.5°	95.0	95.0	95.0	95.0	91.6	91.6	91.6	88.2	84.8	81.4	74.7
80°	67.9	67.9	67.9	64.5	67.9	64.5	64.5	64.5	57.7	54.3	50.9
82.5°	47.5	44.1	44.1	44.1	44.1	44.1	44.1	40.7	40.7	37.3	33.9
85°	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1	23.8	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°	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8
2.5°	2796.3	2796.3	2803.0	2792.9	2809.8	2799.7	2796.3	2813.2	2803.0	2799.7	2806.4
5°	2772.5	2775.9	2779.3	2772.5	2789.5	2779.3	2779.3	2796.3	2789.5	2786.1	2796.3
7.5°	2742.0	2745.4	2752.1	2748.8	2762.3	2755.5	2758.9	2775.9	2769.1	2769.1	2779.3
10°	2704.6	2711.4	2718.2	2718.2	2735.2	2728.4	2728.4	2748.8	2742.0	2745.4	2758.9
12.5°	2660.5	2670.7	2680.9	2684.3	2701.2	2691.1	2694.5	2718.2	2714.8	2718.2	2731.8
15°	2613.0	2626.6	2636.8	2636.8	2657.1	2646.9	2657.1	2680.9	2674.1	2687.7	2704.6
17.5°	2558.7	2572.3	2585.9	2589.3	2609.6	2602.8	2616.4	2640.2	2640.2	2646.9	2667.3
20°	2507.8	2524.8	2531.6	2541.7	2562.1	2558.7	2565.5	2592.6	2592.6	2602.8	2623.2
22.5°	2439.9	2456.9	2470.5	2480.7	2497.6	2497.6	2507.8	2531.6	2531.6	2538.4	2558.7
25°	2365.3	2385.6	2395.8	2406.0	2423.0	2419.6	2429.8	2450.1	2453.5	2460.3	2480.7
27.5°	2270.3	2287.2	2300.8	2307.6	2331.3	2317.8	2328.0	2351.7	2348.3	2355.1	2372.1
30°	2151.5	2168.5	2182.0	2182.0	2202.4	2202.4	2212.6	2222.8	2222.8	2229.5	2243.1
32.5°	2012.4	2032.7	2032.7	2042.9	2056.5	2042.9	2056.5	2070.0	2063.3	2073.4	2083.6
35°	1852.9	1863.0	1866.4	1866.4	1876.6	1873.2	1869.8	1880.0	1873.2	1890.2	1900.4
37.5°	1659.4	1673.0	1666.2	1673.0	1669.6	1659.4	1659.4	1676.4	1662.8	1666.2	1676.4
40°	1472.8	1472.8	1469.4	1452.4	1455.8	1445.6	1442.2	1445.6	1432.1	1428.7	1442.2
42.5°	1279.4	1276.0	1265.8	1242.0	1245.4	1228.5	1214.9	1214.9	1208.1	1204.7	1208.1
45°	1106.3	1096.1	1079.1	1052.0	1045.2	1031.6	1004.5	997.7	987.5	987.5	990.9
47.5°	946.8	933.2	906.1	875.5	858.6	841.6	814.4	804.3	787.3	780.5	787.3
50°	814.4	790.7	756.8	712.6	695.7	675.3	648.2	631.2	614.2	607.4	604.0
52.5°	692.3	658.3	624.4	570.1	556.5	536.2	498.8	481.9	464.9	451.3	451.3
55°	587.1	556.5	509.0	458.1	437.8	417.4	380.1	356.3	339.4	332.6	325.8
57.5°	492.1	458.1	414.0	359.7	339.4	319.0	281.7	257.9	240.9	230.8	224.0
60°	414.0	376.7	332.6	285.1	261.3	240.9	203.6	179.9	162.9	152.7	145.9
62.5°	339.4	308.8	264.7	220.6	200.2	179.9	149.3	125.6	108.6	101.8	91.6
65°	285.1	254.5	213.8	176.5	159.5	139.1	112.0	91.6	78.1	67.9	61.1
67.5°	230.8	207.0	173.1	139.1	122.2	108.6	84.8	67.9	54.3	47.5	44.1
70°	183.3	159.5	132.3	105.2	95.0	81.4	64.5	47.5	40.7	33.9	30.5
72.5°	135.7	118.8	98.4	78.1	67.9	61.1	44.1	37.3	27.1	23.8	20.4
75°	98.4	84.8	71.3	54.3	47.5	44.1	33.9	23.8	20.4	17.0	13.6
77.5°	67.9	61.1	47.5	37.3	33.9	30.5	23.8	17.0	13.6	10.2	10.2
80°	44.1	37.3	30.5	23.8	23.8	20.4	13.6	10.2	10.2	6.8	6.8
82.5°	27.1	23.8	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°	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8
2.5°	2806.4	2806.4	2813.2	2803.0	2809.8	2809.8	2816.6	2803.0	2809.8	2813.2	2820.0
5°	2792.9	2796.3	2803.0	2799.7	2803.0	2803.0	2809.8	2792.9	2806.4	2806.4	2816.6
7.5°	2779.3	2779.3	2786.1	2782.7	2789.5	2792.9	2799.7	2786.1	2799.7	2799.7	2809.8
10°	2762.3	2762.3	2772.5	2769.1	2779.3	2782.7	2792.9	2779.3	2792.9	2796.3	2806.4
12.5°	2738.6	2742.0	2752.1	2752.1	2762.3	2769.1	2779.3	2772.5	2789.5	2792.9	2806.4
15°	2711.4	2718.2	2731.8	2728.4	2738.6	2748.8	2762.3	2752.1	2775.9	2782.7	2796.3
17.5°	2677.5	2684.3	2694.5	2694.5	2704.6	2711.4	2728.4	2721.6	2742.0	2745.4	2762.3
20°	2626.6	2636.8	2650.3	2646.9	2657.1	2663.9	2677.5	2670.7	2691.1	2697.8	2714.8
22.5°	2565.5	2572.3	2582.5	2582.5	2592.6	2599.4	2613.0	2602.8	2623.2	2626.6	2640.2
25°	2484.1	2490.8	2497.6	2501.0	2511.2	2514.6	2521.4	2514.6	2531.6	2535.0	2551.9
27.5°	2378.9	2382.3	2392.4	2392.4	2399.2	2402.6	2412.8	2399.2	2423.0	2423.0	2433.2
30°	2253.3	2249.9	2263.5	2256.7	2263.5	2263.5	2273.7	2266.9	2283.8	2277.1	2287.2
32.5°	2087.0	2093.8	2093.8	2087.0	2100.6	2097.2	2097.2	2090.4	2100.6	2104.0	2110.8
35°	1893.6	1903.8	1903.8	1907.2	1910.6	1900.4	1903.8	1883.4	1900.4	1903.8	1907.2
37.5°	1683.2	1673.0	1679.8	1669.6	1686.6	1666.2	1666.2	1652.6	1666.2	1666.2	1669.6
40°	1442.2	1438.9	1445.6	1438.9	1435.5	1432.1	1425.3	1415.1	1428.7	1421.9	1432.1
42.5°	1214.9	1211.5	1211.5	1204.7	1201.3	1201.3	1194.5	1187.7	1184.3	1184.3	1201.3
45°	980.7	987.5	980.7	977.3	984.1	977.3	980.7	967.2	973.9	967.2	973.9
47.5°	783.9	787.3	780.5	773.7	783.9	773.7	773.7	763.5	777.1	777.1	770.3
50°	607.4	604.0	597.3	604.0	600.7	600.7	600.7	590.5	597.3	587.1	593.9
52.5°	447.9	444.6	444.6	441.2	444.6	441.2	441.2	437.8	437.8	434.4	437.8
55°	325.8	322.4	315.6	315.6	315.6	319.0	315.6	312.2	312.2	308.8	312.2
57.5°	220.6	213.8	213.8	213.8	213.8	210.4	210.4	207.0	210.4	207.0	210.4
60°	142.5	142.5	135.7	135.7	135.7	135.7	135.7	132.3	135.7	135.7	135.7
62.5°	88.2	88.2	84.8	81.4	84.8	81.4	81.4	81.4	84.8	81.4	84.8
65°	57.7	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3
67.5°	40.7	37.3	37.3	37.3	37.3	37.3	37.3	33.9	37.3	37.3	37.3
70°	27.1	27.1	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
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: P252317

CATALOG NUMBER: LD6B60D010TE EU6B60709030 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8	2809.8
2.5°	2809.8	2813.2	2806.4	2809.8	2803.0	2809.8	2813.2	2820.0
5°	2803.0	2806.4	2799.7	2806.4	2799.7	2806.4	2809.8	2816.6
7.5°	2796.3	2803.0	2796.3	2803.0	2796.3	2803.0	2806.4	2813.2
10°	2796.3	2806.4	2799.7	2809.8	2799.7	2806.4	2813.2	2816.6
12.5°	2796.3	2806.4	2803.0	2809.8	2806.4	2813.2	2820.0	2826.8
15°	2789.5	2799.7	2792.9	2803.0	2799.7	2803.0	2816.6	2816.6
17.5°	2752.1	2762.3	2762.3	2769.1	2769.1	2779.3	2786.1	2792.9
20°	2704.6	2714.8	2711.4	2721.6	2721.6	2731.8	2738.6	2745.4
22.5°	2633.4	2646.9	2643.6	2653.7	2650.3	2657.1	2670.7	2667.3
25°	2541.7	2558.7	2555.3	2562.1	2558.7	2558.7	2565.5	2568.9
27.5°	2429.8	2439.9	2436.5	2443.3	2436.5	2443.3	2450.1	2453.5
30°	2283.8	2290.6	2287.2	2290.6	2287.2	2294.0	2297.4	2304.2
32.5°	2107.4	2117.6	2107.4	2114.2	2110.8	2110.8	2124.3	2117.6
35°	1897.0	1900.4	1903.8	1903.8	1897.0	1900.4	1907.2	1907.2
37.5°	1662.8	1679.8	1659.4	1669.6	1666.2	1666.2	1666.2	1676.4
40°	1418.5	1421.9	1415.1	1415.1	1415.1	1411.7	1425.3	1421.9
42.5°	1187.7	1191.1	1187.7	1177.6	1180.9	1180.9	1191.1	1177.6
45°	963.8	970.5	967.2	967.2	960.4	960.4	963.8	957.0
47.5°	763.5	770.3	760.1	763.5	756.8	763.5	760.1	766.9
50°	580.3	587.1	583.7	587.1	587.1	580.3	590.5	576.9
52.5°	434.4	437.8	434.4	431.0	427.6	427.6	434.4	431.0
55°	308.8	305.4	305.4	305.4	308.8	308.8	305.4	302.0
57.5°	207.0	207.0	203.6	203.6	207.0	200.2	203.6	200.2
60°	132.3	132.3	132.3	132.3	129.0	132.3	132.3	132.3
62.5°	81.4	81.4	81.4	81.4	81.4	81.4	81.4	81.4
65°	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3
67.5°	33.9	37.3	37.3	37.3	33.9	33.9	33.9	33.9
70°	23.8	23.8	23.8	23.8	23.8	23.8	23.8	23.8
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)