

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: P252629

Luminaire Tested: **LD6B60D010TE EU6B60709030 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252629
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B60D010TE EU6B60709030 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5084.0 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

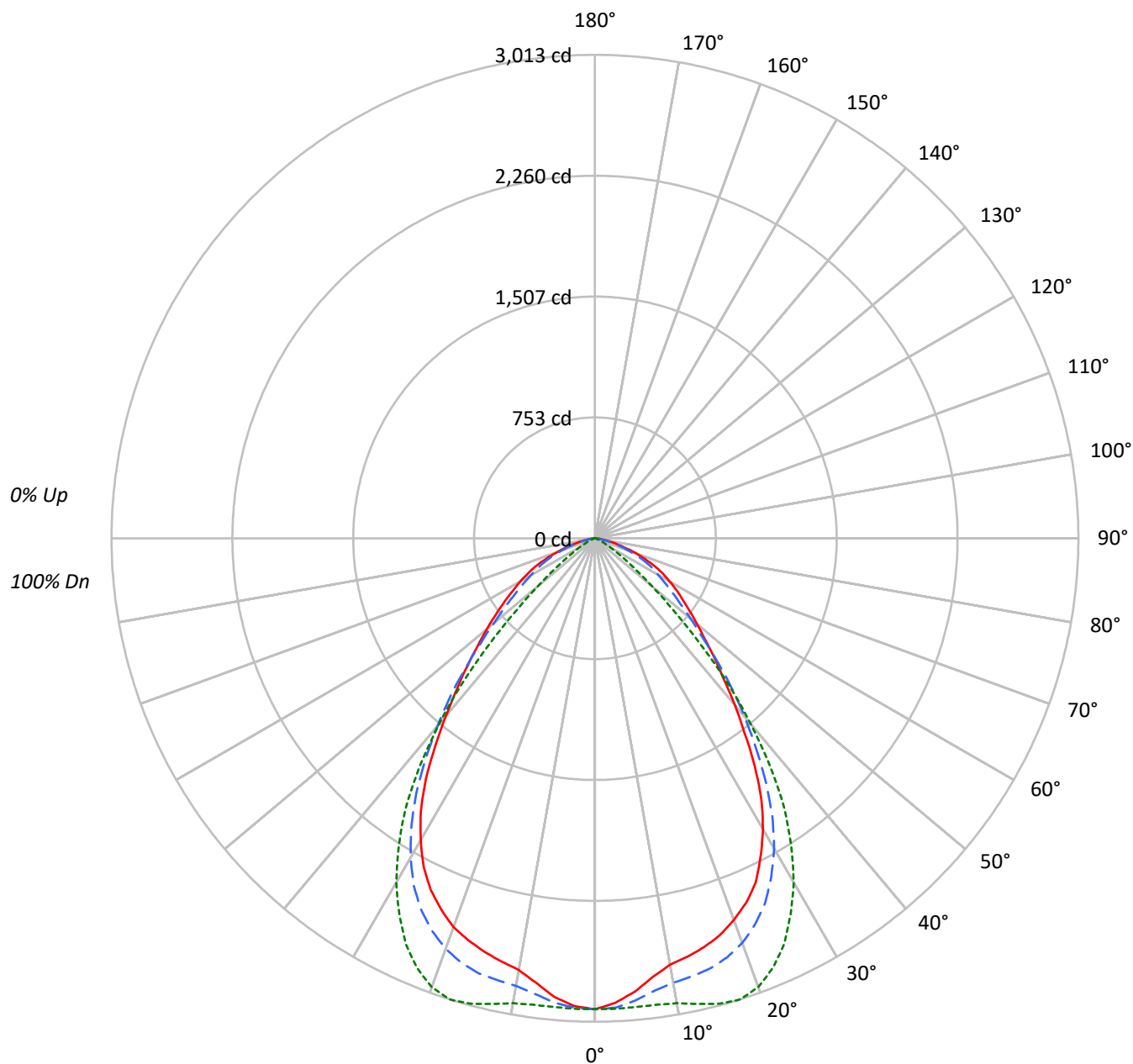
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	108	105	102		109	106	103	100		102	99	97		98	96	94		94	93	91
2	104	97	92	87		101	95	91	86		92	88	84		89	86	83		86	83	81
3	96	88	81	76		94	86	80	76		84	79	74		81	77	73		79	75	72
4	90	80	73	67		88	79	72	67		76	70	66		74	69	65		72	68	64
5	84	73	65	60		82	72	65	59		70	64	59		68	63	58		66	62	58
6	78	67	59	54		76	66	59	53		64	58	53		63	57	53		61	56	52
7	73	61	54	49		72	61	53	48		59	53	48		58	52	48		57	51	48
8	69	57	49	44		67	56	49	44		55	48	44		54	48	44		53	47	43
9	64	53	45	40		63	52	45	40		51	45	40		50	44	40		49	44	40
10	61	49	42	37		60	48	42	37		48	41	37		47	41	37		46	41	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	191494	191494	191494
5°	185782	192010	188008
10°	178715	194899	180960
15°	178081	202836	180148
20°	175749	206617	179047
25°	170504	200788	174168
30°	157726	186608	163602
35°	138374	164051	146481
40°	115306	128600	122826
45°	97053	84846	103631
50°	84039	46495	89205
55°	76038	24705	77971
60°	69951	12839	69951
65°	63385	6808	61811
70°	51140	3891	47249
75°	35063	2571	32492
80°	22956	1277	20401
85°	15270	2545	12725



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	273.7	5.4
10°-20°	791.5	15.6
20°-30°	1169.4	23.0
30°-40°	1181.2	23.2
40°-50°	814.1	16.0
50°-60°	467.6	9.2
60°-70°	272.1	5.4
70°-80°	99.3	2.0
80°-90°	15.2	0.3
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°	2234.5	44.0
0°-40°	3415.7	67.2
0°-60°	4697.4	92.4
0°-90°	5084.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5084.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2935	2935	2935	2935	2935	
5°	2837	2891	2932	2905	2871	266
15°	2637	2776	3003	2806	2667	743
25°	2369	2508	2789	2559	2420	1079
35°	1737	1856	2060	1941	1839	1078
45°	1052	1066	920	1133	1123	818
55°	668	587	217	611	686	602
65°	411	346	44	343	400	402
75°	139	112	10	109	129	157
85°	20	10	3	14	17	26
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°	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2
2.5°	2897.9	2901.3	2904.7	2901.3	2904.7	2918.3	2908.1	2914.9	2914.9	2918.3	2928.5
5°	2836.8	2836.8	2843.6	2840.2	2850.4	2864.0	2853.8	2864.0	2867.4	2874.2	2891.1
7.5°	2758.8	2758.8	2762.2	2762.2	2775.8	2789.3	2782.5	2796.1	2809.7	2823.3	2843.6
10°	2697.7	2704.5	2704.5	2707.9	2721.5	2738.4	2735.0	2752.0	2765.6	2785.9	2813.1
12.5°	2670.6	2674.0	2674.0	2680.7	2694.3	2711.3	2707.9	2724.9	2745.2	2769.0	2796.1
15°	2636.6	2643.4	2640.0	2646.8	2660.4	2677.4	2674.0	2690.9	2714.7	2738.4	2775.8
17.5°	2592.5	2595.9	2599.3	2599.3	2612.9	2626.5	2626.5	2643.4	2670.6	2697.7	2738.4
20°	2531.4	2538.2	2538.2	2541.6	2551.8	2572.2	2568.8	2585.7	2612.9	2640.0	2684.1
22.5°	2460.2	2463.6	2463.6	2467.0	2483.9	2494.1	2497.5	2511.1	2534.8	2565.4	2606.1
25°	2368.6	2372.0	2368.6	2378.7	2385.5	2405.9	2399.1	2416.1	2443.2	2467.0	2507.7
27.5°	2236.2	2243.0	2243.0	2246.4	2263.4	2280.3	2280.3	2297.3	2321.1	2338.0	2378.7
30°	2093.7	2103.9	2093.7	2110.7	2117.4	2131.0	2141.2	2151.4	2171.7	2195.5	2232.8
32.5°	1930.8	1927.4	1930.8	1937.6	1958.0	1968.1	1974.9	1985.1	2005.5	2025.8	2056.4
35°	1737.4	1744.2	1747.6	1761.1	1761.1	1778.1	1781.5	1788.3	1818.8	1832.4	1856.2
37.5°	1533.8	1540.6	1544.0	1550.8	1564.3	1571.1	1581.3	1591.5	1611.8	1635.6	1649.2
40°	1353.9	1353.9	1357.3	1364.1	1374.3	1377.7	1387.9	1401.5	1415.0	1435.4	1449.0
42.5°	1184.3	1187.7	1184.3	1191.1	1201.2	1214.8	1211.4	1228.4	1231.8	1245.4	1255.5
45°	1051.9	1051.9	1045.2	1051.9	1051.9	1065.5	1062.1	1068.9	1065.5	1072.3	1065.5
47.5°	926.4	929.8	926.4	929.8	929.8	929.8	933.2	926.4	929.8	919.6	899.2
50°	828.0	831.4	824.6	828.0	824.6	821.2	824.6	814.4	811.0	797.4	777.1
52.5°	743.1	739.7	736.4	736.4	736.4	733.0	729.6	719.4	709.2	695.6	671.9
55°	668.5	665.1	661.7	661.7	654.9	651.5	651.5	641.3	631.2	614.2	587.0
57.5°	600.6	597.2	593.8	593.8	590.4	583.7	583.7	573.5	559.9	539.5	515.8
60°	536.1	536.1	536.1	532.8	532.8	526.0	526.0	515.8	502.2	481.9	454.7
62.5°	478.5	475.1	475.1	475.1	475.1	471.7	468.3	461.5	447.9	427.6	403.8
65°	410.6	410.6	410.6	410.6	407.2	407.2	407.2	397.0	390.2	369.9	346.1
67.5°	335.9	335.9	335.9	335.9	332.5	335.9	335.9	329.2	322.4	302.0	281.6
70°	268.1	264.7	261.3	264.7	261.3	261.3	264.7	257.9	254.5	237.5	217.2
72.5°	196.8	200.2	196.8	196.8	196.8	193.4	196.8	193.4	186.6	173.1	159.5
75°	139.1	142.5	142.5	139.1	139.1	139.1	135.7	135.7	128.9	118.8	112.0
77.5°	95.0	95.0	95.0	95.0	91.6	91.6	91.6	88.2	84.8	78.0	71.3
80°	61.1	61.1	61.1	61.1	57.7	57.7	57.7	54.3	54.3	47.5	40.7
82.5°	37.3	37.3	37.3	37.3	37.3	37.3	33.9	33.9	30.5	27.1	23.8
85°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	17.0	17.0	13.6	10.2
87.5°	6.8	6.8	10.2	10.2	10.2	10.2	10.2	10.2	6.8	6.8	6.8
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°	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2
2.5°	2921.7	2925.1	2925.1	2925.1	2935.2	2938.6	2928.5	2918.3	2938.6	2935.2	2942.0
5°	2887.7	2897.9	2904.7	2908.1	2918.3	2925.1	2914.9	2911.5	2928.5	2931.9	2935.2
7.5°	2847.0	2864.0	2881.0	2887.7	2901.3	2908.1	2904.7	2904.7	2925.1	2931.9	2931.9
10°	2819.9	2843.6	2864.0	2881.0	2897.9	2908.1	2908.1	2911.5	2935.2	2942.0	2948.8
12.5°	2813.1	2843.6	2870.8	2894.5	2908.1	2925.1	2928.5	2938.6	2962.4	2972.6	2972.6
15°	2796.1	2836.8	2870.8	2901.3	2921.7	2942.0	2948.8	2969.2	2996.3	3003.1	3009.9
17.5°	2765.6	2806.3	2847.0	2884.3	2911.5	2928.5	2948.8	2969.2	3003.1	3013.3	3016.7
20°	2711.3	2758.8	2799.5	2836.8	2864.0	2887.7	2908.1	2931.9	2962.4	2976.0	2979.4
22.5°	2629.8	2677.4	2718.1	2758.8	2785.9	2806.3	2826.7	2853.8	2884.3	2897.9	2897.9
25°	2531.4	2575.6	2619.7	2650.2	2677.4	2701.1	2711.3	2741.8	2772.4	2789.3	2789.3
27.5°	2405.9	2446.6	2487.3	2521.3	2538.2	2558.6	2575.6	2602.7	2626.5	2640.0	2653.6
30°	2246.4	2287.1	2324.4	2358.4	2378.7	2399.1	2416.1	2436.4	2460.2	2477.1	2480.5
32.5°	2073.3	2107.3	2144.6	2178.5	2198.9	2205.7	2222.6	2243.0	2263.4	2276.9	2280.3
35°	1883.3	1907.1	1930.8	1961.4	1981.7	1981.7	1998.7	2012.3	2029.2	2059.8	2053.0
37.5°	1659.3	1693.3	1710.2	1720.4	1734.0	1747.6	1751.0	1767.9	1788.3	1795.1	1805.3
40°	1449.0	1459.1	1469.3	1469.3	1482.9	1482.9	1482.9	1486.3	1506.6	1510.0	1523.6
42.5°	1238.6	1238.6	1228.4	1218.2	1221.6	1218.2	1201.2	1201.2	1211.4	1225.0	1225.0
45°	1041.8	1018.0	987.5	963.7	946.7	940.0	919.6	919.6	916.2	919.6	933.2
47.5°	875.5	834.8	783.9	736.4	719.4	705.8	675.3	661.7	654.9	658.3	665.1
50°	736.4	692.2	634.6	576.9	546.3	529.4	492.0	468.3	464.9	458.1	471.7
52.5°	634.6	580.3	519.2	451.3	420.8	393.6	352.9	332.5	319.0	319.0	322.4
55°	546.3	488.6	420.8	352.9	322.4	302.0	261.3	234.1	220.6	217.2	227.4
57.5°	471.7	417.4	349.5	281.6	251.1	227.4	186.6	162.9	152.7	145.9	149.3
60°	414.0	359.7	291.8	227.4	200.2	173.1	139.1	112.0	98.4	98.4	101.8
62.5°	359.7	308.8	247.7	186.6	162.9	139.1	101.8	78.0	67.9	64.5	67.9
65°	305.4	257.9	207.0	156.1	132.3	112.0	81.4	61.1	47.5	44.1	47.5
67.5°	247.7	210.4	166.3	125.6	105.2	88.2	61.1	44.1	33.9	30.5	33.9
70°	193.4	159.5	125.6	91.6	78.0	64.5	44.1	33.9	23.8	20.4	23.8
72.5°	139.1	115.4	88.2	64.5	54.3	44.1	30.5	23.8	17.0	13.6	17.0
75°	95.0	78.0	57.7	40.7	33.9	30.5	20.4	13.6	10.2	10.2	10.2
77.5°	61.1	47.5	37.3	27.1	20.4	17.0	10.2	6.8	6.8	6.8	6.8
80°	33.9	27.1	20.4	13.6	10.2	10.2	6.8	6.8	3.4	3.4	3.4
82.5°	20.4	13.6	10.2	6.8	6.8	3.4	3.4	3.4	3.4	3.4	3.4
85°	10.2	6.8	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
87.5°	3.4	3.4	3.4	3.4	0.0	0.0	0.0	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°	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2
2.5°	2928.5	2931.9	2921.7	2935.2	2925.1	2938.6	2938.6	2925.1	2928.5	2921.7	2935.2
5°	2921.7	2921.7	2914.9	2925.1	2911.5	2925.1	2921.7	2897.9	2904.7	2891.1	2904.7
7.5°	2921.7	2914.9	2904.7	2914.9	2897.9	2908.1	2894.5	2870.8	2864.0	2847.0	2847.0
10°	2931.9	2921.7	2908.1	2911.5	2894.5	2897.9	2877.6	2843.6	2833.4	2813.1	2806.3
12.5°	2955.6	2945.4	2925.1	2931.9	2908.1	2908.1	2881.0	2840.2	2819.9	2792.7	2785.9
15°	2989.5	2972.6	2948.8	2952.2	2928.5	2914.9	2881.0	2833.4	2806.3	2769.0	2758.8
17.5°	2996.3	2979.4	2948.8	2948.8	2918.3	2901.3	2860.6	2806.3	2772.4	2735.0	2714.7
20°	2959.0	2942.0	2908.1	2904.7	2877.6	2853.8	2809.7	2755.4	2721.5	2680.7	2663.8
22.5°	2881.0	2860.6	2830.1	2826.7	2799.5	2785.9	2738.4	2684.1	2650.2	2609.5	2595.9
25°	2765.6	2755.4	2724.9	2721.5	2697.7	2680.7	2640.0	2589.1	2558.6	2517.9	2504.3
27.5°	2629.8	2619.7	2589.1	2589.1	2562.0	2551.8	2514.5	2467.0	2443.2	2405.9	2388.9
30°	2467.0	2453.4	2436.4	2433.0	2409.3	2399.1	2365.2	2321.1	2297.3	2266.8	2260.0
32.5°	2273.5	2263.4	2253.2	2249.8	2226.0	2215.9	2192.1	2148.0	2127.6	2100.5	2090.3
35°	2049.6	2042.8	2032.6	2029.2	2019.0	2008.9	1985.1	1951.2	1941.0	1920.6	1910.5
37.5°	1791.7	1798.5	1791.7	1791.7	1781.5	1784.9	1764.5	1744.2	1734.0	1720.4	1713.6
40°	1513.4	1527.0	1537.2	1537.2	1533.8	1547.4	1544.0	1527.0	1523.6	1516.8	1513.4
42.5°	1231.8	1238.6	1258.9	1272.5	1269.1	1303.0	1306.4	1320.0	1330.2	1323.4	1326.8
45°	936.6	956.9	984.1	997.6	1014.6	1058.7	1082.5	1109.6	1133.4	1147.0	1143.6
47.5°	675.3	699.0	729.6	749.9	780.5	834.8	895.8	929.8	963.7	980.7	997.6
50°	488.6	512.4	549.7	580.3	600.6	675.3	739.7	783.9	821.2	844.9	861.9
52.5°	342.7	369.9	410.6	437.7	468.3	539.5	614.2	665.1	705.8	736.4	753.3
55°	237.5	268.1	305.4	332.5	366.5	441.1	512.4	566.7	610.8	637.9	658.3
57.5°	166.3	193.4	230.7	254.5	288.4	359.7	431.0	485.2	529.4	556.5	580.3
60°	112.0	139.1	176.5	200.2	227.4	298.6	363.1	420.8	461.5	488.6	512.4
62.5°	78.0	101.8	139.1	162.9	186.6	247.7	308.8	359.7	400.4	431.0	451.3
65°	61.1	81.4	112.0	132.3	156.1	207.0	257.9	302.0	342.7	373.3	386.8
67.5°	44.1	64.5	88.2	105.2	122.2	166.3	210.4	244.3	281.6	305.4	322.4
70°	30.5	44.1	64.5	78.0	91.6	125.6	159.5	190.0	217.2	234.1	247.7
72.5°	23.8	30.5	44.1	54.3	64.5	88.2	115.4	139.1	159.5	173.1	186.6
75°	13.6	20.4	30.5	37.3	44.1	61.1	78.0	95.0	108.6	118.8	125.6
77.5°	6.8	10.2	17.0	20.4	27.1	37.3	50.9	61.1	71.3	78.0	84.8
80°	6.8	6.8	10.2	10.2	13.6	20.4	27.1	33.9	40.7	47.5	50.9
82.5°	3.4	3.4	6.8	6.8	6.8	10.2	13.6	20.4	23.8	27.1	30.5
85°	3.4	3.4	3.4	3.4	3.4	6.8	6.8	10.2	13.6	17.0	17.0
87.5°	0.0	0.0	3.4	3.4	3.4	3.4	3.4	6.8	6.8	6.8	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



TEST NUMBER: P252629

CATALOG NUMBER: LD6B60D010TE EU6B60709030 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2	2935.2
2.5°	2925.1	2931.9	2928.5	2935.2	2925.1	2921.7	2928.5	2918.3
5°	2887.7	2891.1	2887.7	2887.7	2881.0	2874.2	2881.0	2870.8
7.5°	2830.1	2830.1	2819.9	2819.9	2806.3	2799.5	2799.5	2796.1
10°	2782.5	2772.4	2762.2	2765.6	2745.2	2738.4	2735.0	2731.6
12.5°	2758.8	2752.0	2735.0	2735.0	2714.7	2707.9	2704.5	2701.1
15°	2731.6	2718.1	2704.5	2701.1	2684.1	2677.4	2674.0	2667.2
17.5°	2684.1	2674.0	2657.0	2657.0	2640.0	2636.6	2629.8	2626.5
20°	2633.2	2619.7	2606.1	2606.1	2585.7	2585.7	2575.6	2578.9
22.5°	2562.0	2551.8	2538.2	2538.2	2521.3	2517.9	2507.7	2504.3
25°	2477.1	2463.6	2453.4	2450.0	2436.4	2429.6	2426.2	2419.5
27.5°	2365.2	2355.0	2344.8	2338.0	2321.1	2317.7	2307.5	2310.9
30°	2226.0	2219.2	2215.9	2209.1	2188.7	2181.9	2181.9	2171.7
32.5°	2073.3	2063.2	2056.4	2046.2	2029.2	2025.8	2015.6	2019.0
35°	1886.7	1873.1	1862.9	1866.3	1846.0	1842.6	1835.8	1839.2
37.5°	1693.3	1679.7	1666.1	1662.7	1645.8	1645.8	1635.6	1635.6
40°	1493.1	1479.5	1472.7	1472.7	1452.4	1455.7	1445.6	1442.2
42.5°	1313.2	1299.7	1296.3	1292.9	1282.7	1279.3	1269.1	1272.5
45°	1143.6	1140.2	1140.2	1133.4	1123.2	1119.8	1123.2	1123.2
47.5°	994.3	997.6	994.3	994.3	987.5	994.3	987.5	990.9
50°	868.7	875.5	875.5	875.5	872.1	875.5	875.5	878.9
52.5°	763.5	773.7	770.3	773.7	770.3	777.1	773.7	777.1
55°	671.9	678.7	682.1	685.5	685.5	685.5	685.5	685.5
57.5°	587.0	597.2	600.6	604.0	604.0	610.8	604.0	604.0
60°	519.2	529.4	532.8	536.1	536.1	539.5	532.8	536.1
62.5°	458.1	468.3	468.3	471.7	471.7	471.7	464.9	468.3
65°	397.0	400.4	403.8	403.8	400.4	400.4	397.0	400.4
67.5°	329.2	332.5	329.2	329.2	325.8	325.8	319.0	322.4
70°	254.5	254.5	257.9	254.5	251.1	254.5	251.1	247.7
72.5°	190.0	190.0	190.0	186.6	186.6	183.2	186.6	186.6
75°	128.9	128.9	132.3	132.3	132.3	132.3	128.9	128.9
77.5°	84.8	84.8	84.8	84.8	88.2	84.8	84.8	84.8
80°	54.3	54.3	57.7	57.7	54.3	54.3	54.3	54.3
82.5°	33.9	33.9	33.9	33.9	33.9	33.9	33.9	33.9
85°	20.4	20.4	20.4	20.4	17.0	17.0	17.0	17.0
87.5°	10.2	10.2	10.2	10.2	10.2	10.2	6.8	6.8
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)