

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: P252631

Luminaire Tested: **LD6B60D010TE EU6B60709040 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252631
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 EU6B60709040 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5165.0 lumens
Efficiency: N/A
Efficacy: 82.7 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

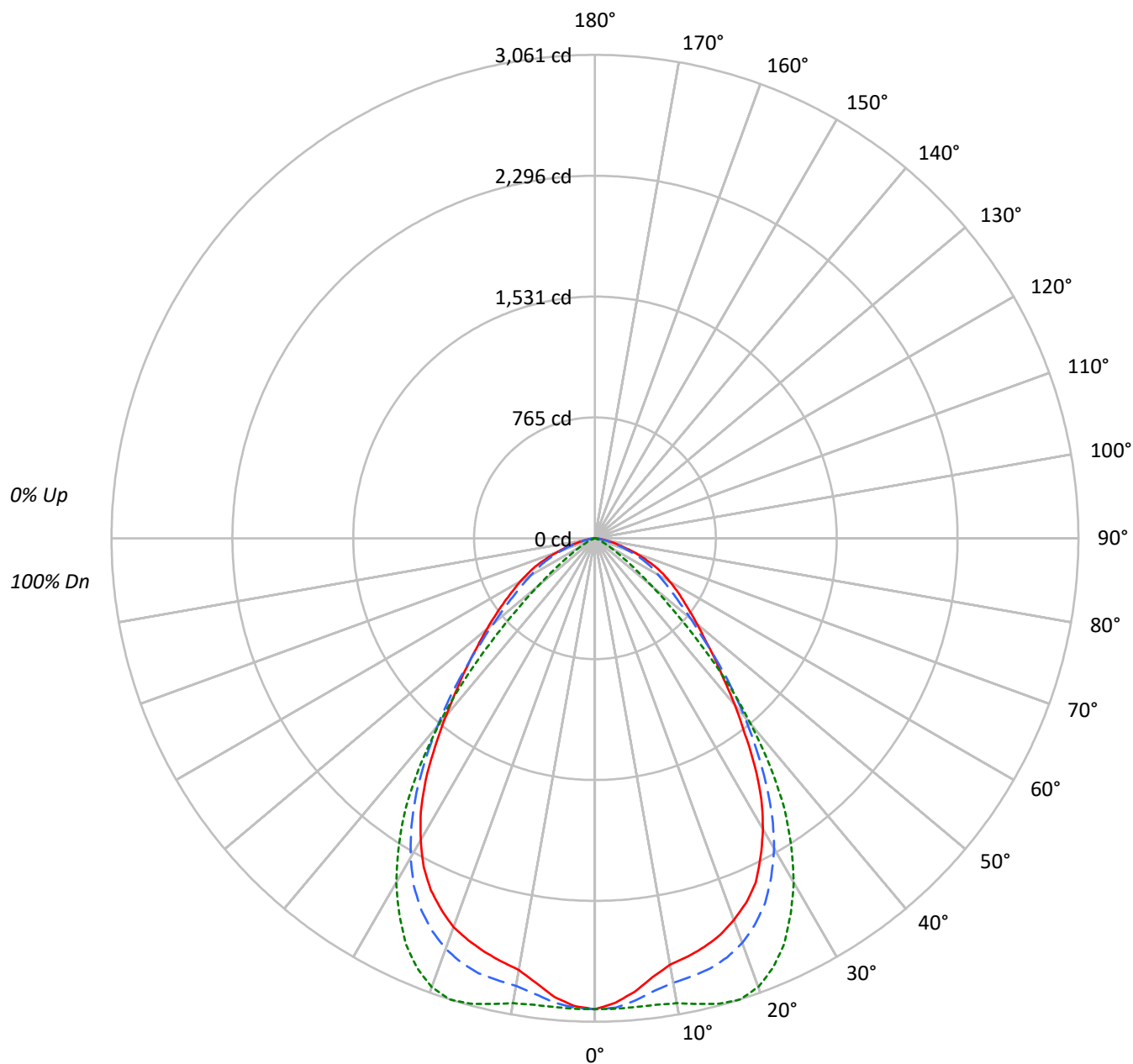
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
RW	70	50	30	10	70	50	30	10	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	100		
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89		
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79		
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70		
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62		
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56		
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50		
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46		
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42		
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38		
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	194548	194548	194548
5°	188742	195068	191001
10°	181563	198006	183849
15°	180918	206071	183019
20°	178554	209907	181900
25°	173218	203991	176939
30°	160242	189584	166208
35°	140580	166663	148815
40°	117145	130653	124785
45°	98603	86193	105283
50°	85379	47236	90626
55°	77243	25092	79211
60°	71073	13048	71073
65°	64389	6916	62799
70°	51941	3949	48012
75°	35618	2596	33021
80°	23331	1277	20739
85°	15495	2545	12875



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.1	5.4
10°-20°	804.1	15.6
20°-30°	1188.0	23.0
30°-40°	1200.0	23.2
40°-50°	827.1	16.0
50°-60°	475.0	9.2
60°-70°	276.5	5.4
70°-80°	100.9	2.0
80°-90°	15.4	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°	2270.1	44.0
0°-40°	3470.1	67.2
0°-60°	4772.2	92.4
0°-90°	5165.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5165.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2982	2982	2982	2982	2982	
5°	2882	2937	2979	2951	2916	270
15°	2679	2820	3051	2851	2710	755
25°	2406	2548	2834	2599	2458	1096
35°	1765	1886	2093	1972	1868	1096
45°	1069	1082	934	1151	1141	831
55°	679	596	221	620	696	611
65°	417	352	45	348	407	408
75°	141	114	10	110	131	159
85°	21	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°	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0
2.5°	2944.1	2947.5	2951.0	2947.5	2951.0	2964.8	2954.4	2961.3	2961.3	2964.8	2975.1
5°	2882.0	2882.0	2888.9	2885.5	2895.8	2909.6	2899.3	2909.6	2913.1	2920.0	2937.2
7.5°	2802.7	2802.7	2806.2	2806.2	2820.0	2833.8	2826.9	2840.7	2854.5	2868.2	2888.9
10°	2740.7	2747.6	2747.6	2751.0	2764.8	2782.1	2778.6	2795.9	2809.6	2830.3	2857.9
12.5°	2713.1	2716.6	2716.6	2723.5	2737.2	2754.5	2751.0	2768.3	2789.0	2813.1	2840.7
15°	2678.6	2685.5	2682.1	2689.0	2702.8	2720.0	2716.6	2733.8	2757.9	2782.1	2820.0
17.5°	2633.8	2637.3	2640.7	2640.7	2654.5	2668.3	2668.3	2685.5	2713.1	2740.7	2782.1
20°	2571.8	2578.7	2578.7	2582.1	2592.5	2613.1	2609.7	2626.9	2654.5	2682.1	2726.9
22.5°	2499.4	2502.8	2502.8	2506.3	2523.5	2533.8	2537.3	2551.1	2575.2	2606.2	2647.6
25°	2406.3	2409.7	2406.3	2416.6	2423.5	2444.2	2437.3	2454.6	2482.1	2506.3	2547.6
27.5°	2271.8	2278.7	2278.7	2282.2	2299.4	2316.7	2316.7	2333.9	2358.0	2375.3	2416.6
30°	2127.1	2137.4	2127.1	2144.3	2151.2	2165.0	2175.3	2185.7	2206.3	2230.5	2268.4
32.5°	1961.6	1958.1	1961.6	1968.5	1989.2	1999.5	2006.4	2016.7	2037.4	2058.1	2089.1
35°	1765.1	1772.0	1775.4	1789.2	1789.2	1806.4	1809.9	1816.8	1847.8	1861.6	1885.7
37.5°	1558.2	1565.1	1568.6	1575.5	1589.3	1596.2	1606.5	1616.8	1637.5	1661.7	1675.4
40°	1375.5	1375.5	1379.0	1385.9	1396.2	1399.6	1410.0	1423.8	1437.6	1458.3	1472.0
42.5°	1203.1	1206.6	1203.1	1210.0	1220.4	1234.2	1230.7	1248.0	1251.4	1265.2	1275.5
45°	1068.7	1068.7	1061.8	1068.7	1068.7	1082.5	1079.0	1085.9	1082.5	1089.4	1082.5
47.5°	941.1	944.6	941.1	944.6	944.6	944.6	948.0	941.1	944.6	934.2	913.6
50°	841.2	844.6	837.7	841.2	837.7	834.3	837.7	827.4	823.9	810.1	789.5
52.5°	755.0	751.5	748.1	748.1	748.1	744.6	741.2	730.9	720.5	706.7	682.6
55°	679.1	675.7	672.2	672.2	665.4	661.9	661.9	651.6	641.2	624.0	596.4
57.5°	610.2	606.7	603.3	603.3	599.8	593.0	593.0	582.6	568.8	548.1	524.0
60°	544.7	544.7	544.7	541.2	541.2	534.3	534.3	524.0	510.2	489.5	462.0
62.5°	486.1	482.6	482.6	482.6	482.6	479.2	475.7	468.8	455.1	434.4	410.2
65°	417.1	417.1	417.1	417.1	413.7	413.7	413.7	403.3	396.5	375.8	351.6
67.5°	341.3	341.3	341.3	341.3	337.8	341.3	341.3	334.4	327.5	306.8	286.1
70°	272.3	268.9	265.5	268.9	265.5	265.5	268.9	262.0	258.6	241.3	220.6
72.5°	199.9	203.4	199.9	199.9	199.9	196.5	199.9	196.5	189.6	175.8	162.0
75°	141.3	144.8	144.8	141.3	141.3	141.3	137.9	137.9	131.0	120.7	113.8
77.5°	96.5	96.5	96.5	96.5	93.1	93.1	93.1	89.6	86.2	79.3	72.4
80°	62.1	62.1	62.1	62.1	58.6	58.6	58.6	55.2	55.2	48.3	41.4
82.5°	37.9	37.9	37.9	37.9	37.9	37.9	34.5	34.5	31.0	27.6	24.1
85°	20.7	20.7	20.7	20.7	20.7	20.7	20.7	17.2	17.2	13.8	10.3
87.5°	6.9	6.9	10.3	10.3	10.3	10.3	10.3	10.3	6.9	6.9	6.9
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°	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0
2.5°	2968.2	2971.7	2971.7	2971.7	2982.0	2985.5	2975.1	2964.8	2985.5	2982.0	2988.9
5°	2933.7	2944.1	2951.0	2954.4	2964.8	2971.7	2961.3	2957.9	2975.1	2978.6	2982.0
7.5°	2892.4	2909.6	2926.9	2933.7	2947.5	2954.4	2951.0	2951.0	2971.7	2978.6	2978.6
10°	2864.8	2888.9	2909.6	2926.9	2944.1	2954.4	2954.4	2957.9	2982.0	2988.9	2995.8
12.5°	2857.9	2888.9	2916.5	2940.6	2954.4	2971.7	2975.1	2985.5	3009.6	3019.9	3019.9
15°	2840.7	2882.0	2916.5	2947.5	2968.2	2988.9	2995.8	3016.5	3044.1	3051.0	3057.9
17.5°	2809.6	2851.0	2892.4	2930.3	2957.9	2975.1	2995.8	3016.5	3051.0	3061.3	3064.7
20°	2754.5	2802.7	2844.1	2882.0	2909.6	2933.7	2954.4	2978.6	3009.6	3023.4	3026.8
22.5°	2671.7	2720.0	2761.4	2802.7	2830.3	2851.0	2871.7	2899.3	2930.3	2944.1	2944.1
25°	2571.8	2616.6	2661.4	2692.4	2720.0	2744.1	2754.5	2785.5	2816.5	2833.8	2833.8
27.5°	2444.2	2485.6	2527.0	2561.4	2578.7	2599.3	2616.6	2644.2	2668.3	2682.1	2695.9
30°	2282.2	2323.6	2361.5	2396.0	2416.6	2437.3	2454.6	2475.2	2499.4	2516.6	2520.1
32.5°	2106.4	2140.8	2178.8	2213.2	2233.9	2240.8	2258.1	2278.7	2299.4	2313.2	2316.7
35°	1913.3	1937.4	1961.6	1992.6	2013.3	2013.3	2030.5	2044.3	2061.6	2092.6	2085.7
37.5°	1685.8	1720.3	1737.5	1747.8	1761.6	1775.4	1778.9	1796.1	1816.8	1823.7	1834.0
40°	1472.0	1482.4	1492.7	1492.7	1506.5	1506.5	1506.5	1510.0	1530.7	1534.1	1547.9
42.5°	1258.3	1258.3	1248.0	1237.6	1241.1	1237.6	1220.4	1220.4	1230.7	1244.5	1244.5
45°	1058.4	1034.2	1003.2	979.1	961.8	954.9	934.2	934.2	930.8	934.2	948.0
47.5°	889.4	848.1	796.4	748.1	730.9	717.1	686.0	672.2	665.4	668.8	675.7
50°	748.1	703.3	644.7	586.1	555.0	537.8	499.9	475.7	472.3	465.4	479.2
52.5°	644.7	589.5	527.5	458.5	427.5	399.9	358.5	337.8	324.1	324.1	327.5
55°	555.0	496.4	427.5	358.5	327.5	306.8	265.5	237.9	224.1	220.6	231.0
57.5°	479.2	424.0	355.1	286.1	255.1	231.0	189.6	165.5	155.1	148.2	151.7
60°	420.6	365.4	296.5	231.0	203.4	175.8	141.3	113.8	100.0	100.0	103.4
62.5°	365.4	313.7	251.7	189.6	165.5	141.3	103.4	79.3	68.9	65.5	68.9
65°	310.3	262.0	210.3	158.6	134.4	113.8	82.7	62.1	48.3	44.8	48.3
67.5°	251.7	213.7	168.9	127.6	106.9	89.6	62.1	44.8	34.5	31.0	34.5
70°	196.5	162.0	127.6	93.1	79.3	65.5	44.8	34.5	24.1	20.7	24.1
72.5°	141.3	117.2	89.6	65.5	55.2	44.8	31.0	24.1	17.2	13.8	17.2
75°	96.5	79.3	58.6	41.4	34.5	31.0	20.7	13.8	10.3	10.3	10.3
77.5°	62.1	48.3	37.9	27.6	20.7	17.2	10.3	6.9	6.9	6.9	6.9
80°	34.5	27.6	20.7	13.8	10.3	10.3	6.9	6.9	3.4	3.4	3.4
82.5°	20.7	13.8	10.3	6.9	6.9	3.4	3.4	3.4	3.4	3.4	3.4
85°	10.3	6.9	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°	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0
2.5°	2975.1	2978.6	2968.2	2982.0	2971.7	2985.5	2985.5	2971.7	2975.1	2968.2	2982.0
5°	2968.2	2968.2	2961.3	2971.7	2957.9	2971.7	2968.2	2944.1	2951.0	2937.2	2951.0
7.5°	2968.2	2961.3	2951.0	2961.3	2944.1	2954.4	2940.6	2916.5	2909.6	2892.4	2892.4
10°	2978.6	2968.2	2954.4	2957.9	2940.6	2944.1	2923.4	2888.9	2878.6	2857.9	2851.0
12.5°	3002.7	2992.4	2971.7	2978.6	2954.4	2954.4	2926.9	2885.5	2864.8	2837.2	2830.3
15°	3037.2	3019.9	2995.8	2999.2	2975.1	2961.3	2926.9	2878.6	2851.0	2813.1	2802.7
17.5°	3044.1	3026.8	2995.8	2995.8	2964.8	2947.5	2906.2	2851.0	2816.5	2778.6	2757.9
20°	3006.1	2988.9	2954.4	2951.0	2923.4	2899.3	2854.5	2799.3	2764.8	2723.5	2706.2
22.5°	2926.9	2906.2	2875.1	2871.7	2844.1	2830.3	2782.1	2726.9	2692.4	2651.1	2637.3
25°	2809.6	2799.3	2768.3	2764.8	2740.7	2723.5	2682.1	2630.4	2599.3	2558.0	2544.2
27.5°	2671.7	2661.4	2630.4	2630.4	2602.8	2592.5	2554.5	2506.3	2482.1	2444.2	2427.0
30°	2506.3	2492.5	2475.2	2471.8	2447.7	2437.3	2402.8	2358.0	2333.9	2302.9	2296.0
32.5°	2309.8	2299.4	2289.1	2285.6	2261.5	2251.2	2227.0	2182.2	2161.5	2133.9	2123.6
35°	2082.2	2075.3	2065.0	2061.6	2051.2	2040.9	2016.7	1982.3	1971.9	1951.2	1940.9
37.5°	1820.2	1827.1	1820.2	1820.2	1809.9	1813.3	1792.7	1772.0	1761.6	1747.8	1740.9
40°	1537.5	1551.3	1561.7	1561.7	1558.2	1572.0	1568.6	1551.3	1547.9	1541.0	1537.5
42.5°	1251.4	1258.3	1279.0	1292.8	1289.3	1323.8	1327.3	1341.0	1351.4	1344.5	1347.9
45°	951.5	972.2	999.7	1013.5	1030.8	1075.6	1099.7	1127.3	1151.4	1165.2	1161.8
47.5°	686.0	710.2	741.2	761.9	792.9	848.1	910.1	944.6	979.1	996.3	1013.5
50°	496.4	520.6	558.5	589.5	610.2	686.0	751.5	796.4	834.3	858.4	875.6
52.5°	348.2	375.8	417.1	444.7	475.7	548.1	624.0	675.7	717.1	748.1	765.3
55°	241.3	272.3	310.3	337.8	372.3	448.2	520.6	575.7	620.5	648.1	668.8
57.5°	168.9	196.5	234.4	258.6	293.0	365.4	437.8	493.0	537.8	565.4	589.5
60°	113.8	141.3	179.3	203.4	231.0	303.4	368.9	427.5	468.8	496.4	520.6
62.5°	79.3	103.4	141.3	165.5	189.6	251.7	313.7	365.4	406.8	437.8	458.5
65°	62.1	82.7	113.8	134.4	158.6	210.3	262.0	306.8	348.2	379.2	393.0
67.5°	44.8	65.5	89.6	106.9	124.1	168.9	213.7	248.2	286.1	310.3	327.5
70°	31.0	44.8	65.5	79.3	93.1	127.6	162.0	193.1	220.6	237.9	251.7
72.5°	24.1	31.0	44.8	55.2	65.5	89.6	117.2	141.3	162.0	175.8	189.6
75°	13.8	20.7	31.0	37.9	44.8	62.1	79.3	96.5	110.3	120.7	127.6
77.5°	6.9	10.3	17.2	20.7	27.6	37.9	51.7	62.1	72.4	79.3	86.2
80°	6.9	6.9	10.3	10.3	13.8	20.7	27.6	34.5	41.4	48.3	51.7
82.5°	3.4	3.4	6.9	6.9	6.9	10.3	13.8	20.7	24.1	27.6	31.0
85°	3.4	3.4	3.4	3.4	3.4	6.9	6.9	10.3	13.8	17.2	17.2
87.5°	0.0	0.0	3.4	3.4	3.4	3.4	3.4	6.9	6.9	6.9	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



TEST NUMBER: P252631

CATALOG NUMBER: LD6B60D010TE EU6B60709040 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0	2982.0
2.5°	2971.7	2978.6	2975.1	2982.0	2971.7	2968.2	2975.1	2964.8
5°	2933.7	2937.2	2933.7	2933.7	2926.9	2920.0	2926.9	2916.5
7.5°	2875.1	2875.1	2864.8	2864.8	2851.0	2844.1	2844.1	2840.7
10°	2826.9	2816.5	2806.2	2809.6	2789.0	2782.1	2778.6	2775.2
12.5°	2802.7	2795.9	2778.6	2778.6	2757.9	2751.0	2747.6	2744.1
15°	2775.2	2761.4	2747.6	2744.1	2726.9	2720.0	2716.6	2709.7
17.5°	2726.9	2716.6	2699.3	2699.3	2682.1	2678.6	2671.7	2668.3
20°	2675.2	2661.4	2647.6	2647.6	2626.9	2626.9	2616.6	2620.0
22.5°	2602.8	2592.5	2578.7	2578.7	2561.4	2558.0	2547.6	2544.2
25°	2516.6	2502.8	2492.5	2489.0	2475.2	2468.3	2464.9	2458.0
27.5°	2402.8	2392.5	2382.2	2375.3	2358.0	2354.6	2344.2	2347.7
30°	2261.5	2254.6	2251.2	2244.3	2223.6	2216.7	2216.7	2206.3
32.5°	2106.4	2096.0	2089.1	2078.8	2061.6	2058.1	2047.8	2051.2
35°	1916.8	1903.0	1892.6	1896.1	1875.4	1871.9	1865.1	1868.5
37.5°	1720.3	1706.5	1692.7	1689.2	1672.0	1672.0	1661.7	1661.7
40°	1516.9	1503.1	1496.2	1496.2	1475.5	1478.9	1468.6	1465.2
42.5°	1334.1	1320.4	1316.9	1313.5	1303.1	1299.7	1289.3	1292.8
45°	1161.8	1158.3	1158.3	1151.4	1141.1	1137.6	1141.1	1141.1
47.5°	1010.1	1013.5	1010.1	1010.1	1003.2	1010.1	1003.2	1006.6
50°	882.5	889.4	889.4	889.4	886.0	889.4	889.4	892.9
52.5°	775.7	786.0	782.6	786.0	782.6	789.5	786.0	789.5
55°	682.6	689.5	692.9	696.4	696.4	696.4	696.4	696.4
57.5°	596.4	606.7	610.2	613.6	613.6	620.5	613.6	613.6
60°	527.5	537.8	541.2	544.7	544.7	548.1	541.2	544.7
62.5°	465.4	475.7	475.7	479.2	479.2	479.2	472.3	475.7
65°	403.3	406.8	410.2	410.2	406.8	406.8	403.3	406.8
67.5°	334.4	337.8	334.4	334.4	331.0	331.0	324.1	327.5
70°	258.6	258.6	262.0	258.6	255.1	258.6	255.1	251.7
72.5°	193.1	193.1	193.1	189.6	189.6	186.2	189.6	189.6
75°	131.0	131.0	134.4	134.4	134.4	134.4	131.0	131.0
77.5°	86.2	86.2	86.2	86.2	89.6	86.2	86.2	86.2
80°	55.2	55.2	58.6	58.6	55.2	55.2	55.2	55.2
82.5°	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
85°	20.7	20.7	20.7	20.7	17.2	17.2	17.2	17.2
87.5°	10.3	10.3	10.3	10.3	10.3	10.3	6.9	6.9
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)