

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: P252184

Luminaire Tested: **LD6B40D010 EU6B30508050 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252184
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B40D010 EU6B30508050 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5505.0 lumens
Efficiency: N/A
Efficacy: 128.0 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

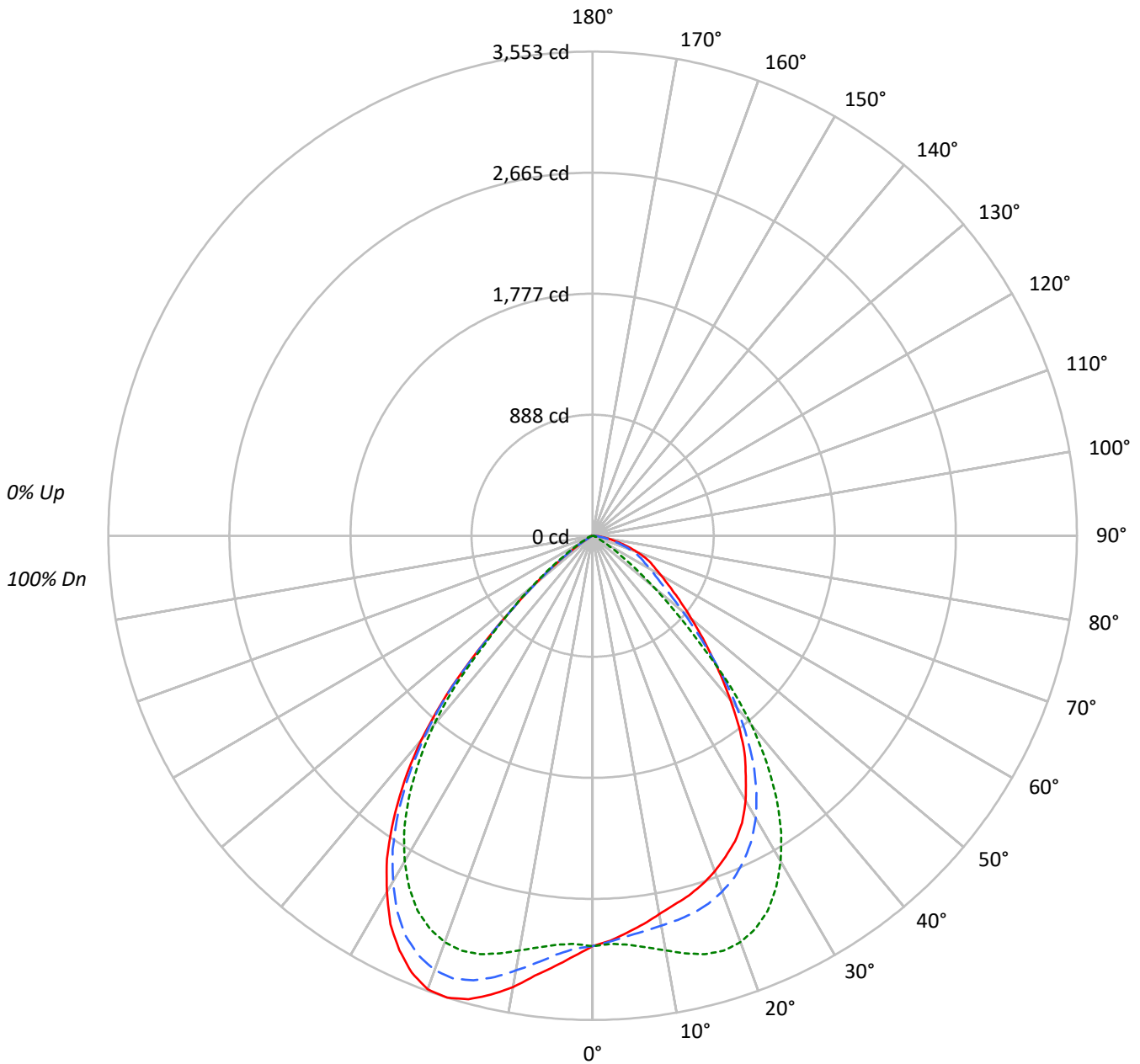
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80																			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72																			
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65																			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58																			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53																			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48																			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44																			
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40																			
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	196485	196485	196485
5°	191387	197236	207603
10°	186737	204664	222782
15°	184552	214696	237836
20°	181907	220287	245871
25°	178041	218662	241460
30°	169184	207792	227311
35°	154788	187347	202941
40°	133889	154729	166499
45°	112904	101481	108918
50°	95853	58736	55234
55°	83181	28163	21281
60°	75131	13153	5258
65°	72895	7549	1775
70°	65351	6047	1640
75°	53716	4361	731
80°	40013	2179	0
85°	34508	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.9	5.3
10°-20°	886.6	16.1
20°-30°	1354.6	24.6
30°-40°	1416.8	25.7
40°-50°	919.1	16.7
50°-60°	364.9	6.6
60°-70°	173.1	3.1
70°-80°	82.3	1.5
80°-90°	16.8	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°	2532.0	46.0
0°-40°	3948.8	71.7
0°-60°	5232.8	95.1
0°-90°	5505.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5505.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3012	3012	3012	3012	3012	
5°	2922	2948	3012	3086	3170	276
15°	2732	2865	3179	3377	3521	770
25°	2473	2629	3038	3242	3354	1133
35°	1944	2062	2352	2490	2548	1202
45°	1224	1212	1100	1166	1180	952
55°	731	622	248	193	187	663
65°	472	392	49	12	12	461
75°	213	173	17	6	3	230
85°	46	29	0	0	0	54
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°	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7
2.5°	2974.2	2980.0	2948.3	2939.7	2962.7	2971.4	2974.2	2965.6	2968.5	2980.0	2980.0
5°	2922.4	2928.2	2899.4	2890.7	2913.8	2919.5	2928.2	2925.3	2933.9	2951.2	2948.3
7.5°	2873.5	2882.1	2850.4	2838.9	2867.7	2882.1	2887.9	2887.9	2899.4	2922.4	2925.3
10°	2818.8	2830.3	2801.5	2795.7	2827.4	2841.8	2844.7	2850.4	2867.7	2899.4	2905.1
12.5°	2772.7	2784.2	2764.1	2755.4	2790.0	2804.4	2810.1	2821.6	2841.8	2882.1	2887.9
15°	2732.4	2741.0	2718.0	2712.2	2746.8	2764.1	2766.9	2784.2	2810.1	2856.2	2864.8
17.5°	2680.6	2686.3	2669.0	2663.3	2697.8	2715.1	2718.0	2738.1	2769.8	2815.9	2830.3
20°	2620.1	2625.9	2608.6	2602.8	2637.4	2657.5	2660.4	2677.7	2715.1	2764.1	2778.5
22.5°	2548.1	2559.6	2539.5	2533.7	2568.3	2585.5	2594.2	2608.6	2646.0	2695.0	2715.1
25°	2473.3	2473.3	2458.9	2456.0	2487.7	2507.8	2504.9	2525.1	2562.5	2611.5	2628.7
27.5°	2375.4	2372.5	2358.1	2355.2	2389.8	2407.0	2401.3	2421.4	2456.0	2504.9	2522.2
30°	2245.8	2251.6	2231.4	2225.6	2254.4	2283.2	2280.3	2300.5	2335.1	2381.1	2392.6
32.5°	2090.3	2096.1	2093.2	2084.6	2110.5	2124.9	2133.5	2147.9	2176.7	2225.6	2237.2
35°	1943.5	1934.8	1923.3	1923.3	1949.2	1972.3	1963.6	1980.9	2009.7	2058.6	2061.5
37.5°	1762.1	1759.2	1753.4	1747.7	1776.5	1782.2	1785.1	1796.6	1822.5	1862.9	1857.1
40°	1572.1	1574.9	1572.1	1560.5	1577.8	1600.8	1598.0	1603.7	1626.8	1655.6	1646.9
42.5°	1393.5	1393.5	1393.5	1382.0	1402.2	1413.7	1419.5	1416.6	1422.3	1448.3	1436.7
45°	1223.7	1226.5	1223.7	1220.8	1223.7	1229.4	1223.7	1220.8	1220.8	1229.4	1212.2
47.5°	1076.8	1076.8	1068.2	1059.6	1068.2	1071.1	1062.4	1053.8	1050.9	1048.0	1019.2
50°	944.4	941.5	938.6	924.2	932.9	935.7	924.2	918.5	907.0	892.6	858.0
52.5°	829.2	826.3	823.5	809.1	814.8	817.7	806.2	794.7	780.3	768.8	725.6
55°	731.3	728.4	728.4	719.8	714.0	719.8	708.3	699.7	679.5	665.1	621.9
57.5°	647.8	647.8	642.1	633.4	636.3	636.3	624.8	613.3	596.0	578.7	544.2
60°	575.8	575.8	575.8	567.2	567.2	567.2	561.4	549.9	535.5	518.3	483.7
62.5°	518.3	518.3	515.4	506.7	509.6	509.6	503.9	492.3	478.0	466.4	431.9
65°	472.2	472.2	472.2	463.6	463.6	466.4	460.7	449.2	437.6	423.2	391.6
67.5°	414.6	411.7	411.7	406.0	408.8	411.7	406.0	397.3	382.9	374.3	345.5
70°	342.6	345.5	348.4	339.7	342.6	342.6	339.7	331.1	322.5	313.8	287.9
72.5°	279.3	279.3	276.4	273.5	273.5	276.4	270.6	262.0	256.3	250.5	230.3
75°	213.1	210.2	213.1	207.3	207.3	207.3	201.5	198.7	195.8	187.1	172.8
77.5°	155.5	152.6	152.6	146.8	149.7	149.7	146.8	141.1	135.3	132.4	120.9
80°	106.5	106.5	106.5	103.7	103.7	100.8	100.8	97.9	92.1	89.3	83.5
82.5°	72.0	72.0	72.0	69.1	69.1	69.1	66.2	63.3	60.5	57.6	51.8
85°	46.1	46.1	46.1	43.2	43.2	43.2	40.3	40.3	37.4	34.6	28.8
87.5°	25.9	25.9	25.9	23.0	23.0	23.0	23.0	23.0	20.2	17.3	14.4
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°	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7
2.5°	3000.2	2959.8	2985.8	2985.8	2977.1	3000.2	3014.5	3026.1	3023.2	2997.3	2994.4
5°	2977.1	2942.6	2971.4	2974.2	2965.6	2997.3	3017.4	3031.8	3034.7	3011.7	3014.5
7.5°	2959.8	2931.1	2968.5	2980.0	2977.1	3005.9	3028.9	3052.0	3063.5	3046.2	3049.1
10°	2951.2	2928.2	2968.5	2985.8	2988.6	3020.3	3054.9	3086.5	3100.9	3089.4	3098.0
12.5°	2939.7	2925.3	2971.4	2997.3	3008.8	3040.5	3083.7	3121.1	3144.1	3138.4	3155.6
15°	2928.2	2916.7	2971.4	3008.8	3023.2	3052.0	3100.9	3155.6	3181.5	3178.7	3201.7
17.5°	2899.4	2896.5	2954.1	2994.4	3014.5	3049.1	3095.2	3161.4	3187.3	3193.1	3221.9
20°	2853.3	2853.3	2916.7	2959.8	2982.9	3014.5	3072.1	3135.5	3167.1	3172.9	3204.6
22.5°	2790.0	2795.7	2856.2	2899.4	2933.9	2957.0	3017.4	3083.7	3112.4	3121.1	3155.6
25°	2706.5	2712.2	2769.8	2813.0	2850.4	2876.3	2933.9	2994.4	3028.9	3037.6	3063.5
27.5°	2597.1	2608.6	2663.3	2706.5	2738.1	2755.4	2815.9	2879.2	2905.1	2913.8	2939.7
30°	2470.4	2473.3	2528.0	2565.4	2597.1	2611.5	2663.3	2729.5	2749.7	2758.3	2795.7
32.5°	2314.9	2312.0	2363.8	2398.4	2424.3	2441.6	2496.3	2539.5	2559.6	2574.0	2594.2
35°	2127.7	2124.9	2162.3	2202.6	2222.8	2228.5	2283.2	2329.3	2340.8	2352.3	2378.2
37.5°	1917.6	1917.6	1949.2	1969.4	1992.4	2001.1	2027.0	2078.8	2099.0	2096.1	2116.2
40°	1695.9	1684.3	1707.4	1727.5	1733.3	1736.2	1762.1	1802.4	1816.8	1816.8	1831.2
42.5°	1462.6	1445.4	1448.3	1459.8	1465.5	1445.4	1462.6	1488.6	1479.9	1491.4	1494.3
45°	1215.0	1189.1	1177.6	1151.7	1157.4	1137.3	1125.8	1131.5	1128.7	1099.9	1105.6
47.5°	1013.5	967.4	947.3	909.8	901.2	878.2	863.8	837.9	814.8	814.8	800.4
50°	843.6	797.5	757.2	714.0	699.7	679.5	647.8	613.3	596.0	578.7	564.3
52.5°	708.3	659.3	610.4	564.3	544.2	518.3	475.1	440.5	408.8	391.6	374.3
55°	598.9	544.2	492.3	443.4	417.5	391.6	348.4	308.1	270.6	247.6	233.2
57.5°	515.4	463.6	408.8	357.0	334.0	305.2	259.1	215.9	181.4	155.5	141.1
60°	454.9	403.1	354.1	299.4	276.4	247.6	198.7	158.4	123.8	100.8	83.5
62.5°	403.1	357.0	305.2	256.3	233.2	204.4	158.4	118.0	86.4	63.3	48.9
65°	365.7	319.6	276.4	227.5	207.3	178.5	135.3	97.9	69.1	48.9	34.6
67.5°	322.5	282.2	239.0	198.7	178.5	155.5	115.2	83.5	57.6	40.3	28.8
70°	270.6	239.0	201.5	164.1	149.7	129.6	95.0	69.1	46.1	31.7	23.0
72.5°	215.9	190.0	161.2	132.4	120.9	100.8	77.7	54.7	34.6	23.0	17.3
75°	164.1	144.0	120.9	100.8	89.3	77.7	57.6	40.3	25.9	17.3	11.5
77.5°	112.3	103.7	86.4	69.1	63.3	54.7	37.4	25.9	17.3	11.5	5.8
80°	77.7	69.1	57.6	46.1	40.3	34.6	23.0	17.3	8.6	5.8	2.9
82.5°	48.9	40.3	34.6	28.8	25.9	20.2	14.4	8.6	5.8	2.9	2.9
85°	25.9	23.0	20.2	14.4	14.4	11.5	8.6	5.8	2.9	0.0	0.0
87.5°	14.4	11.5	8.6	5.8	5.8	2.9	2.9	2.9	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°	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7
2.5°	3028.9	3028.9	3026.1	3060.6	3020.3	3060.6	3040.5	3060.6	3031.8	3028.9	3031.8
5°	3052.0	3060.6	3063.5	3095.2	3057.7	3106.7	3089.4	3106.7	3086.5	3092.3	3100.9
7.5°	3098.0	3112.4	3109.6	3149.9	3112.4	3167.1	3155.6	3181.5	3161.4	3167.1	3178.7
10°	3149.9	3167.1	3170.0	3210.3	3175.8	3242.0	3227.6	3256.4	3239.1	3247.8	3262.2
12.5°	3210.3	3230.5	3233.4	3279.4	3242.0	3311.1	3302.5	3331.3	3316.9	3325.5	3342.8
15°	3256.4	3285.2	3291.0	3337.0	3296.7	3368.7	3362.9	3400.4	3377.3	3391.7	3406.1
17.5°	3279.4	3305.4	3316.9	3360.1	3325.5	3397.5	3391.7	3423.4	3406.1	3420.5	3437.8
20°	3265.0	3296.7	3305.4	3348.5	3314.0	3386.0	3377.3	3409.0	3391.7	3403.2	3420.5
22.5°	3213.2	3244.9	3256.4	3296.7	3265.0	3331.3	3328.4	3357.2	3334.1	3348.5	3362.9
25°	3121.1	3155.6	3161.4	3198.8	3164.3	3233.4	3227.6	3259.3	3242.0	3250.6	3270.8
27.5°	2988.6	3028.9	3037.6	3069.3	3043.3	3100.9	3100.9	3126.8	3106.7	3106.7	3126.8
30°	2830.3	2870.6	2876.3	2902.3	2879.2	2931.1	2933.9	2959.8	2928.2	2945.4	2948.3
32.5°	2637.4	2663.3	2680.6	2703.6	2669.0	2735.3	2726.6	2746.8	2729.5	2729.5	2743.9
35°	2404.2	2435.8	2444.5	2473.3	2444.5	2496.3	2496.3	2507.8	2490.5	2490.5	2513.6
37.5°	2150.8	2173.8	2176.7	2205.5	2182.5	2225.6	2222.8	2231.4	2214.1	2225.6	2225.6
40°	1854.2	1871.5	1877.3	1891.7	1888.8	1920.4	1917.6	1923.3	1914.7	1917.6	1923.3
42.5°	1508.7	1531.7	1543.3	1554.8	1537.5	1580.7	1572.1	1580.7	1577.8	1580.7	1589.3
45°	1111.4	1128.7	1137.3	1140.2	1134.4	1160.3	1180.5	1163.2	1166.1	1160.3	1171.8
47.5°	803.3	806.2	800.4	817.7	803.3	814.8	820.6	823.5	806.2	803.3	814.8
50°	549.9	564.3	544.2	552.8	549.9	561.4	555.7	558.6	541.3	549.9	544.2
52.5°	365.7	362.8	357.0	359.9	354.1	354.1	354.1	359.9	348.4	342.6	336.9
55°	221.7	215.9	204.4	201.5	201.5	204.4	198.7	192.9	192.9	190.0	190.0
57.5°	129.6	120.9	115.2	112.3	106.5	103.7	100.8	100.8	95.0	95.0	95.0
60°	72.0	63.3	57.6	51.8	51.8	48.9	46.1	43.2	43.2	43.2	40.3
62.5°	37.4	31.7	25.9	23.0	23.0	20.2	17.3	17.3	17.3	17.3	14.4
65°	25.9	20.2	17.3	14.4	14.4	11.5	11.5	11.5	11.5	11.5	11.5
67.5°	20.2	17.3	14.4	11.5	11.5	11.5	8.6	8.6	8.6	8.6	8.6
70°	17.3	11.5	11.5	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
72.5°	11.5	11.5	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
75°	8.6	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0
80°	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	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	0.0	0.0	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



TEST NUMBER: P252184

CATALOG NUMBER: LD6B40D010 EU6B30508050 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7
2.5°	3057.7	3054.9	3057.7	3063.5	3052.0	3086.5	3069.3	3086.5
5°	3124.0	3126.8	3129.7	3138.4	3124.0	3167.1	3144.1	3170.0
7.5°	3210.3	3213.2	3216.1	3224.7	3216.1	3259.3	3233.4	3256.4
10°	3299.6	3305.4	3305.4	3319.7	3311.1	3351.4	3334.1	3362.9
12.5°	3383.1	3388.8	3394.6	3403.2	3397.5	3440.7	3426.3	3449.3
15°	3449.3	3460.8	3463.7	3475.2	3469.5	3515.5	3498.3	3521.3
17.5°	3481.0	3492.5	3492.5	3506.9	3501.1	3550.1	3527.1	3553.0
20°	3463.7	3472.3	3475.2	3489.6	3483.9	3532.8	3509.8	3541.4
22.5°	3409.0	3411.9	3414.8	3429.2	3426.3	3469.5	3449.3	3469.5
25°	3308.2	3316.9	3314.0	3325.5	3325.5	3360.1	3337.0	3354.3
27.5°	3164.3	3172.9	3172.9	3187.3	3175.8	3210.3	3187.3	3213.2
30°	2988.6	2997.3	2991.5	3003.0	2991.5	3026.1	3008.8	3017.4
32.5°	2778.5	2778.5	2781.3	2784.2	2778.5	2810.1	2792.8	2810.1
35°	2528.0	2533.7	2536.6	2539.5	2533.7	2556.8	2536.6	2548.1
37.5°	2245.8	2260.2	2257.3	2260.2	2251.6	2280.3	2263.1	2268.8
40°	1943.5	1943.5	1940.6	1946.4	1937.7	1960.8	1949.2	1955.0
42.5°	1592.2	1600.8	1589.3	1603.7	1580.7	1612.4	1600.8	1592.2
45°	1194.9	1183.4	1180.5	1183.4	1174.7	1177.6	1186.2	1180.5
47.5°	814.8	814.8	809.1	800.4	811.9	814.8	803.3	803.3
50°	547.1	547.1	541.3	538.4	544.2	541.3	535.5	544.2
52.5°	348.4	336.9	336.9	342.6	336.9	331.1	339.7	334.0
55°	190.0	184.3	184.3	190.0	184.3	184.3	181.4	187.1
57.5°	92.1	95.0	92.1	92.1	92.1	92.1	89.3	92.1
60°	40.3	40.3	40.3	40.3	40.3	40.3	40.3	40.3
62.5°	17.3	17.3	14.4	14.4	14.4	14.4	14.4	14.4
65°	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
67.5°	8.6	8.6	8.6	8.6	8.6	11.5	8.6	8.6
70°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
72.5°	8.6	8.6	11.5	11.5	11.5	11.5	11.5	11.5
75°	5.8	5.8	5.8	2.9	2.9	2.9	2.9	2.9
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)