

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: PORTFOLIO

Report Number: P859184

Luminaire Tested: **LX4C60D010 EX4C609027 4LBSWNH**

Issue Date: 2/18/2022

Test Information

Test Method: LM-79-08
Report Number: P859184
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P251634)
Test Lab: INNOVATION CENTER
Issue Date: 2/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C60D010 EX4C609027 4LBSWNH
Description: 4 INCH 6000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

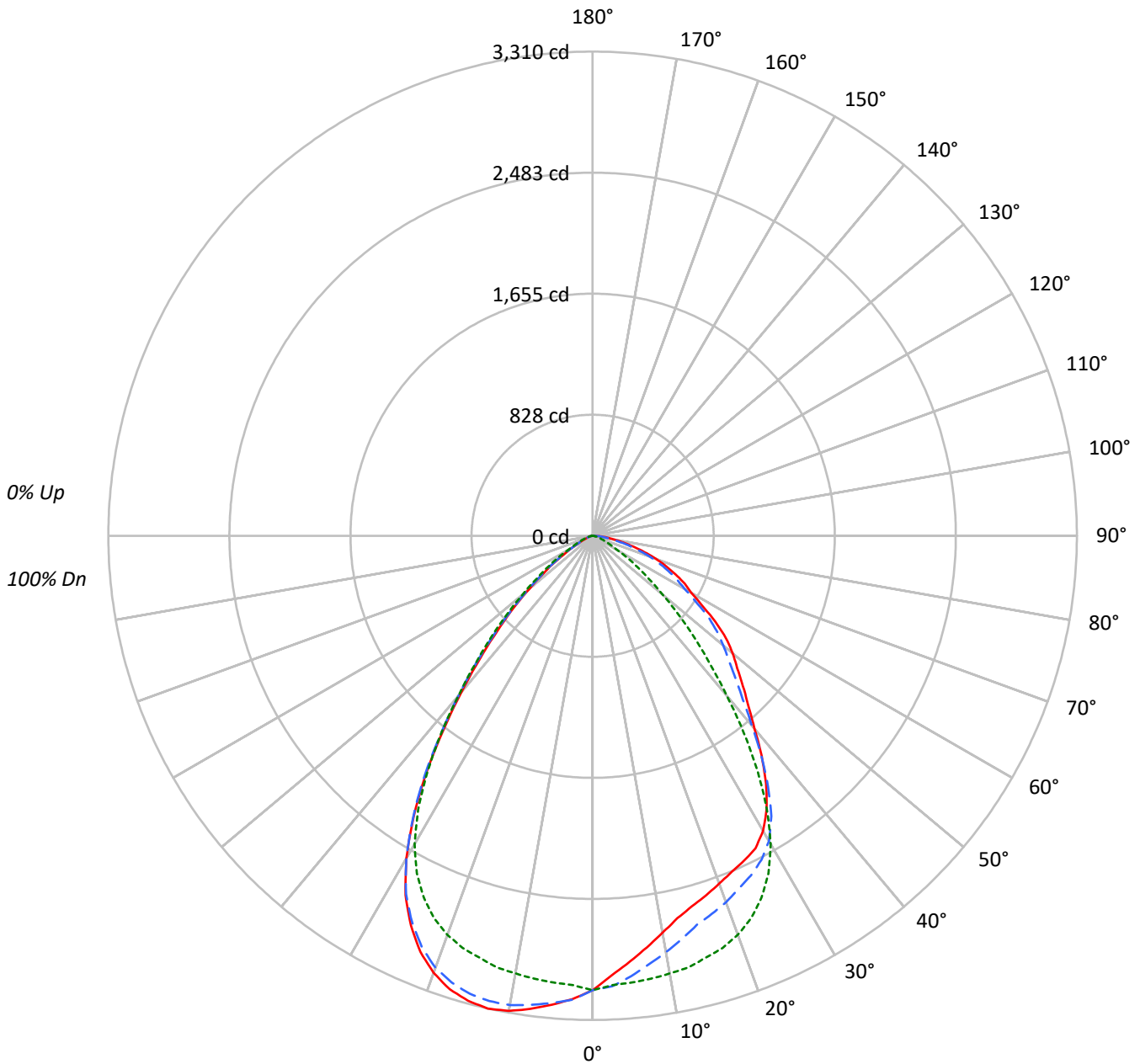
Lumens per Lamp: N/A
Luminaire Lumens: 5445.0 lumens
Efficiency: N/A
Efficacy: 75.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 72
Input Voltage (V):
Input Current (A_{in}): 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

TEST NUMBER: P859184

CATALOG NUMBER: LX4C60D010 EX4C609027 4LBSWNH

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			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	100	100	100
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89	89	89	89
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79	79	79	79
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	72	70	70	70	70
4	90	80	72	67	88	78	72	66	76	70	66	74	69	65	72	68	64	62	62	62	62
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56	56	56	56
6	78	67	59	53	76	66	59	53	64	58	53	62	57	52	61	56	52	50	50	50	50
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	56	51	47	46	46	46	46
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42	42	42	42
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38	38	38	38
10	61	49	42	37	59	48	42	37	47	41	37	47	41	37	46	40	37	35	35	35	35

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	381620	381620	381620
5°	360361	378145	396890
10°	343558	379011	411471
15°	333472	379819	418497
20°	330741	379415	415524
25°	332080	370062	398271
30°	330489	345256	361145
35°	309776	294779	297763
40°	276035	228549	223417
45°	252446	170388	159946
50°	238697	119358	107872
55°	219500	80599	67726
60°	191774	47200	37372
65°	181540	30232	20930
70°	165375	21588	12967
75°	136847	15189	9541
80°	107608	8561	5660
85°	95993	5779	0



TEST NUMBER: P859184

CATALOG NUMBER: LX4C60D010 EX4C609027 4LBSWNH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.5	5.4
10°-20°	842.0	15.5
20°-30°	1248.2	22.9
30°-40°	1249.9	23.0
40°-50°	873.5	16.0
50°-60°	519.8	9.5
60°-70°	271.3	5.0
70°-80°	120.6	2.2
80°-90°	26.3	0.5
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°	2383.6	43.8
0°-40°	3633.5	66.7
0°-60°	5026.8	92.3
0°-90°	5445.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5445.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3106	3106	3106	3106	3106	
5°	2922	3022	3066	3206	3218	274
15°	2622	2754	2986	3242	3290	742
25°	2450	2562	2730	2918	2938	1129
35°	2066	2090	1966	2002	1985	1281
45°	1453	1381	981	949	921	1128
55°	1025	961	376	328	316	909
65°	624	572	104	76	72	618
75°	288	252	32	20	20	312
85°	68	52	4	4	0	76
90°	0	0	0	0	0	



TEST NUMBER: P859184

CATALOG NUMBER: LX4C60D010 EX4C609027 4LBSWNH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3
2.5°	3006.2	3042.3	3006.2	3018.3	3066.3	3022.2	3046.2	3046.2	3034.3	3062.2	3082.3
5°	2922.1	2958.2	2922.1	2938.1	2990.2	2946.1	2974.2	2966.2	2970.2	2994.3	3022.2
7.5°	2838.1	2866.1	2834.0	2854.1	2902.1	2866.1	2890.1	2890.1	2894.1	2930.1	2954.2
10°	2754.0	2778.0	2754.0	2770.0	2822.1	2790.1	2806.1	2810.0	2822.1	2854.1	2890.1
12.5°	2677.9	2698.0	2674.0	2698.0	2741.9	2709.9	2730.0	2733.9	2746.0	2782.1	2822.1
15°	2621.9	2642.0	2618.0	2637.9	2677.9	2653.9	2669.9	2677.9	2685.9	2717.9	2754.0
17.5°	2578.0	2594.0	2573.9	2597.9	2629.9	2602.0	2626.0	2626.0	2637.9	2669.9	2709.9
20°	2529.8	2545.8	2529.8	2549.9	2586.0	2562.0	2581.9	2581.9	2594.0	2629.9	2666.0
22.5°	2485.8	2493.9	2485.8	2501.9	2537.8	2517.9	2529.8	2533.9	2545.8	2578.0	2610.0
25°	2449.8	2465.8	2457.8	2473.8	2497.8	2477.8	2489.8	2493.9	2505.8	2533.9	2562.0
27.5°	2409.7	2417.7	2409.7	2429.8	2449.8	2433.8	2445.8	2441.8	2449.8	2473.8	2497.8
30°	2329.7	2337.7	2337.7	2349.6	2365.8	2357.8	2369.7	2357.8	2365.8	2385.7	2409.7
32.5°	2213.6	2217.7	2221.6	2233.7	2245.6	2233.7	2241.7	2241.7	2241.7	2257.7	2273.7
35°	2065.5	2073.5	2069.6	2077.6	2089.5	2085.6	2085.6	2081.5	2073.5	2081.5	2089.5
37.5°	1897.4	1885.3	1885.3	1897.4	1905.4	1889.4	1897.4	1889.4	1889.4	1893.3	1893.3
40°	1721.2	1709.3	1721.2	1725.3	1729.2	1721.2	1717.3	1709.3	1697.2	1701.3	1693.3
42.5°	1573.2	1565.1	1569.2	1569.2	1573.2	1565.1	1569.2	1553.1	1541.1	1533.1	1521.1
45°	1453.0	1441.1	1453.0	1445.0	1445.0	1441.1	1437.0	1429.0	1413.0	1401.1	1381.0
47.5°	1341.0	1341.0	1344.9	1344.9	1344.9	1336.9	1336.9	1320.9	1304.9	1288.9	1261.0
50°	1248.9	1240.9	1256.9	1256.9	1245.0	1240.9	1245.0	1224.9	1213.0	1192.9	1164.8
52.5°	1148.8	1148.8	1152.9	1152.9	1148.8	1140.8	1144.9	1128.8	1116.8	1096.8	1068.7
55°	1024.8	1016.8	1028.7	1028.7	1024.8	1020.7	1024.8	1012.7	1000.8	984.8	960.6
57.5°	884.7	880.6	888.6	892.7	884.7	884.7	888.6	876.7	872.6	856.6	832.6
60°	780.5	776.6	784.6	788.7	780.5	780.5	780.5	764.5	756.5	740.5	724.5
62.5°	708.5	704.5	712.6	708.5	704.5	700.5	704.5	688.5	680.5	664.5	648.5
65°	624.5	628.4	632.5	632.5	628.4	624.5	624.5	616.5	608.5	592.5	572.4
67.5°	544.3	544.3	548.4	552.3	548.4	548.4	548.4	536.3	528.3	516.4	492.4
70°	460.4	456.3	468.4	468.4	460.4	464.3	460.4	456.3	448.3	432.3	412.4
72.5°	372.2	372.2	376.3	376.3	372.2	372.2	372.2	368.3	356.2	348.2	328.3
75°	288.3	288.3	292.2	296.3	288.3	288.3	292.2	284.2	276.2	264.2	252.2
77.5°	216.2	212.1	216.2	216.2	212.1	212.1	212.1	208.2	204.1	192.1	180.1
80°	152.1	148.1	152.1	152.1	152.1	148.1	148.1	144.0	144.0	136.0	124.1
82.5°	104.0	100.1	104.0	104.0	104.0	100.1	100.1	100.1	96.0	92.1	84.1
85°	68.1	64.0	64.0	68.1	64.0	64.0	64.0	64.0	60.1	56.0	52.1
87.5°	32.0	32.0	32.0	32.0	32.0	32.0	32.0	28.1	28.1	28.1	24.0
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: P859184

CATALOG NUMBER: LX4C60D010 EX4C609027 4LBSWNH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3
2.5°	3066.3	3058.3	3082.3	3074.3	3078.2	3058.3	3090.3	3074.3	3094.2	3074.3	3114.3
5°	3014.2	3006.2	3042.3	3038.2	3042.3	3026.3	3062.2	3058.3	3082.3	3066.3	3110.2
7.5°	2958.2	2950.2	2990.2	2994.3	3002.3	2986.3	3034.3	3034.3	3058.3	3054.2	3102.2
10°	2894.1	2898.1	2938.1	2946.1	2962.2	2954.2	2998.2	3010.3	3042.3	3038.2	3098.3
12.5°	2834.0	2834.0	2886.1	2902.1	2914.1	2910.1	2962.2	2978.2	3014.2	3022.2	3078.2
15°	2774.1	2778.0	2826.0	2850.0	2866.1	2862.1	2918.2	2938.1	2982.2	2986.3	3054.2
17.5°	2725.9	2722.0	2774.1	2794.0	2818.0	2814.1	2874.1	2898.1	2942.2	2954.2	3018.3
20°	2685.9	2682.0	2730.0	2754.0	2770.0	2766.1	2826.0	2854.1	2894.1	2902.1	2966.2
22.5°	2637.9	2629.9	2677.9	2698.0	2714.0	2709.9	2762.0	2782.1	2822.1	2830.1	2890.1
25°	2581.9	2573.9	2618.0	2629.9	2642.0	2634.0	2677.9	2690.0	2722.0	2730.0	2790.1
27.5°	2517.9	2497.8	2533.9	2533.9	2541.9	2529.8	2562.0	2573.9	2602.0	2602.0	2658.0
30°	2417.7	2389.8	2409.7	2405.8	2409.7	2393.7	2413.8	2417.7	2437.8	2433.8	2473.8
32.5°	2277.6	2237.6	2249.7	2237.6	2225.7	2201.7	2225.7	2217.7	2233.7	2217.7	2253.6
35°	2085.6	2045.5	2041.5	2025.5	2013.5	1993.4	1993.4	1973.5	1977.4	1965.5	1989.5
37.5°	1877.3	1825.4	1817.4	1785.4	1765.3	1741.3	1741.3	1725.3	1705.2	1697.2	1717.3
40°	1673.2	1617.2	1597.2	1545.1	1525.1	1501.1	1485.0	1465.1	1457.1	1425.1	1441.1
42.5°	1497.1	1437.0	1393.1	1336.9	1317.0	1280.9	1256.9	1232.9	1221.0	1184.9	1200.9
45°	1349.0	1277.0	1229.0	1156.8	1128.8	1088.8	1052.7	1024.8	996.7	980.7	972.7
47.5°	1224.9	1148.8	1084.8	1004.7	960.6	924.7	876.7	848.6	812.7	792.6	780.5
50°	1120.8	1036.7	964.7	872.6	828.7	788.7	732.5	688.5	656.5	624.5	616.5
52.5°	1028.7	940.7	860.7	756.5	704.5	656.5	596.4	548.4	520.3	484.4	480.3
55°	920.6	844.7	756.5	648.5	596.4	548.4	484.4	436.4	400.3	376.3	368.3
57.5°	804.7	732.5	648.5	540.4	488.3	436.4	376.3	332.2	300.2	280.3	276.2
60°	696.5	628.4	548.4	440.3	388.2	344.3	280.3	236.2	208.2	192.1	184.1
62.5°	616.5	552.3	476.4	376.3	328.3	284.2	224.2	184.1	160.1	144.0	136.0
65°	540.4	476.4	408.3	316.2	276.2	236.2	180.1	144.0	120.0	104.0	96.0
67.5°	460.4	404.4	340.2	264.2	224.2	192.1	144.0	112.0	92.1	80.0	72.0
70°	380.2	328.3	276.2	212.1	184.1	152.1	112.0	88.0	68.1	60.1	52.1
72.5°	300.2	260.2	216.2	164.1	140.1	120.0	88.0	64.0	52.1	44.1	36.1
75°	224.2	196.1	160.1	124.1	104.0	88.0	64.0	48.0	40.0	32.0	28.1
77.5°	160.1	136.0	112.0	84.1	76.1	64.0	44.1	36.1	28.1	20.1	16.0
80°	108.1	96.0	76.1	60.1	48.0	44.1	32.0	24.0	16.0	12.1	12.1
82.5°	72.0	60.1	48.0	36.1	32.0	28.1	20.1	16.0	12.1	8.0	8.0
85°	44.1	36.1	28.1	20.1	20.1	16.0	12.1	8.0	4.1	4.1	4.1
87.5°	20.1	16.0	12.1	8.0	8.0	4.1	4.1	4.1	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: P859184

CATALOG NUMBER: LX4C60D010 EX4C609027 4LBSWNH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3
2.5°	3146.3	3122.3	3106.3	3126.2	3134.2	3122.3	3134.2	3154.3	3174.4	3178.3	3122.3
5°	3150.4	3126.2	3118.2	3142.2	3146.3	3142.2	3154.3	3182.4	3206.4	3214.4	3158.4
7.5°	3150.4	3134.2	3130.3	3158.4	3162.3	3158.4	3178.3	3210.3	3234.3	3250.3	3194.3
10°	3142.2	3134.2	3138.3	3162.3	3170.3	3170.3	3198.4	3234.3	3258.3	3274.3	3218.3
12.5°	3130.3	3130.3	3130.3	3158.4	3166.4	3170.3	3194.3	3242.3	3258.3	3282.4	3226.3
15°	3110.2	3110.2	3110.2	3138.3	3150.4	3150.4	3178.3	3222.4	3242.3	3266.3	3210.3
17.5°	3074.3	3074.3	3078.2	3102.2	3114.3	3114.3	3142.2	3190.4	3202.3	3230.4	3174.4
20°	3022.2	3022.2	3026.3	3050.3	3062.2	3054.2	3090.3	3130.3	3142.2	3166.4	3110.2
22.5°	2946.1	2946.1	2946.1	2970.2	2978.2	2974.2	3010.3	3046.2	3046.2	3078.2	3018.3
25°	2834.0	2842.0	2834.0	2858.1	2866.1	2862.1	2894.1	2926.2	2918.2	2954.2	2894.1
27.5°	2698.0	2693.9	2693.9	2714.0	2714.0	2709.9	2733.9	2770.0	2762.0	2786.0	2730.0
30°	2509.9	2521.8	2501.9	2529.8	2517.9	2509.9	2525.9	2557.9	2545.8	2565.9	2521.8
32.5°	2293.6	2277.6	2277.6	2277.6	2285.6	2265.7	2281.7	2297.7	2285.6	2305.7	2257.7
35°	2009.5	2013.5	2001.5	2005.5	2009.5	1985.4	2001.5	2017.5	2001.5	2013.5	1969.4
37.5°	1725.3	1729.2	1701.3	1717.3	1701.3	1693.3	1709.3	1717.3	1701.3	1713.2	1665.2
40°	1441.1	1433.1	1429.0	1429.0	1433.1	1413.0	1425.1	1437.0	1425.1	1433.1	1389.0
42.5°	1192.9	1188.9	1180.9	1184.9	1172.8	1168.9	1172.8	1184.9	1172.8	1180.9	1148.8
45°	976.6	968.6	956.7	960.6	960.6	940.7	952.6	960.6	948.7	952.6	924.7
47.5°	776.6	764.5	764.5	760.6	760.6	752.6	764.5	760.6	748.5	756.5	728.6
50°	604.4	596.4	596.4	596.4	596.4	584.4	588.4	596.4	584.4	584.4	568.3
52.5°	472.3	460.4	452.4	452.4	452.4	448.3	448.3	452.4	440.3	440.3	436.4
55°	356.2	352.3	340.2	340.2	340.2	328.3	332.2	332.2	328.3	328.3	316.2
57.5°	264.2	252.2	244.2	244.2	236.2	236.2	232.2	236.2	228.2	228.2	220.2
60°	176.1	168.1	164.1	160.1	160.1	156.1	160.1	156.1	156.1	152.1	148.1
62.5°	128.0	120.0	112.0	112.0	112.0	108.1	108.1	108.1	108.1	108.1	104.0
65°	92.1	84.1	84.1	80.0	80.0	76.1	76.1	76.1	76.1	76.1	72.0
67.5°	64.0	60.1	56.0	56.0	56.0	56.0	56.0	56.0	52.1	52.1	52.1
70°	48.0	44.1	40.0	40.0	40.0	40.0	40.0	36.1	40.0	40.0	36.1
72.5°	32.0	32.0	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1
75°	24.0	24.0	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
77.5°	16.0	16.0	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1
80°	12.1	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
82.5°	8.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
85°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	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: P859184

CATALOG NUMBER: LX4C60D010 EX4C609027 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3	3106.3
2.5°	3182.4	3178.3	3170.3	3182.4	3150.4	3138.3	3134.2	3170.3
5°	3226.3	3218.3	3218.3	3230.4	3194.3	3186.3	3178.3	3218.3
7.5°	3266.3	3258.3	3258.3	3270.4	3238.4	3230.4	3222.4	3262.4
10°	3290.4	3290.4	3290.4	3298.4	3270.4	3262.4	3258.3	3298.4
12.5°	3302.4	3302.4	3298.4	3314.4	3278.4	3278.4	3270.4	3310.4
15°	3286.4	3286.4	3286.4	3298.4	3266.3	3258.3	3258.3	3290.4
17.5°	3246.4	3246.4	3242.3	3254.4	3218.3	3218.3	3214.4	3250.3
20°	3186.3	3186.3	3178.3	3194.3	3158.4	3146.3	3142.2	3178.3
22.5°	3090.3	3086.2	3082.3	3090.3	3058.3	3050.3	3046.2	3078.2
25°	2966.2	2962.2	2954.2	2962.2	2926.2	2914.1	2914.1	2938.1
27.5°	2790.1	2790.1	2778.0	2790.1	2749.9	2746.0	2741.9	2770.0
30°	2573.9	2557.9	2549.9	2565.9	2525.9	2525.9	2517.9	2545.8
32.5°	2305.7	2289.7	2285.6	2293.6	2257.7	2245.6	2261.6	2277.6
35°	1997.5	2001.5	1985.4	1985.4	1953.4	1957.4	1961.4	1985.4
37.5°	1701.3	1693.3	1689.2	1693.3	1669.3	1661.3	1653.3	1677.3
40°	1425.1	1405.0	1401.1	1401.1	1381.0	1377.1	1381.0	1393.1
42.5°	1164.8	1160.9	1144.9	1152.9	1132.8	1140.8	1136.9	1136.9
45°	940.7	944.6	928.6	940.7	924.7	912.6	912.6	920.6
47.5°	744.6	744.6	740.5	740.5	728.6	732.5	724.5	736.6
50°	576.3	576.3	568.3	572.4	564.4	564.4	560.3	564.4
52.5°	440.3	436.4	436.4	432.3	424.3	428.4	432.3	424.3
55°	320.3	324.2	316.2	320.3	312.3	316.2	312.3	316.2
57.5°	220.2	224.2	216.2	224.2	216.2	220.2	216.2	216.2
60°	152.1	152.1	148.1	152.1	148.1	148.1	144.0	152.1
62.5°	104.0	104.0	104.0	104.0	104.0	100.1	104.0	104.0
65°	76.1	72.0	72.0	72.0	72.0	72.0	72.0	72.0
67.5°	52.1	52.1	52.1	52.1	52.1	52.1	52.1	52.1
70°	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
72.5°	28.1	28.1	28.1	28.1	28.1	28.1	28.1	28.1
75°	20.1	20.1	20.1	20.1	20.1	20.1	20.1	20.1
77.5°	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1
80°	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
82.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
85°	4.1	4.1	4.1	0.0	4.1	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



Report Generated By 670246072 / DESKTOP-50001EG





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













(END OF REPORT)