

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: P859226

Luminaire Tested: **LX4C60D010 EX4C609035 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P859226
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 EX4C609035 4LBSWNH
Description: 4 INCH 6000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

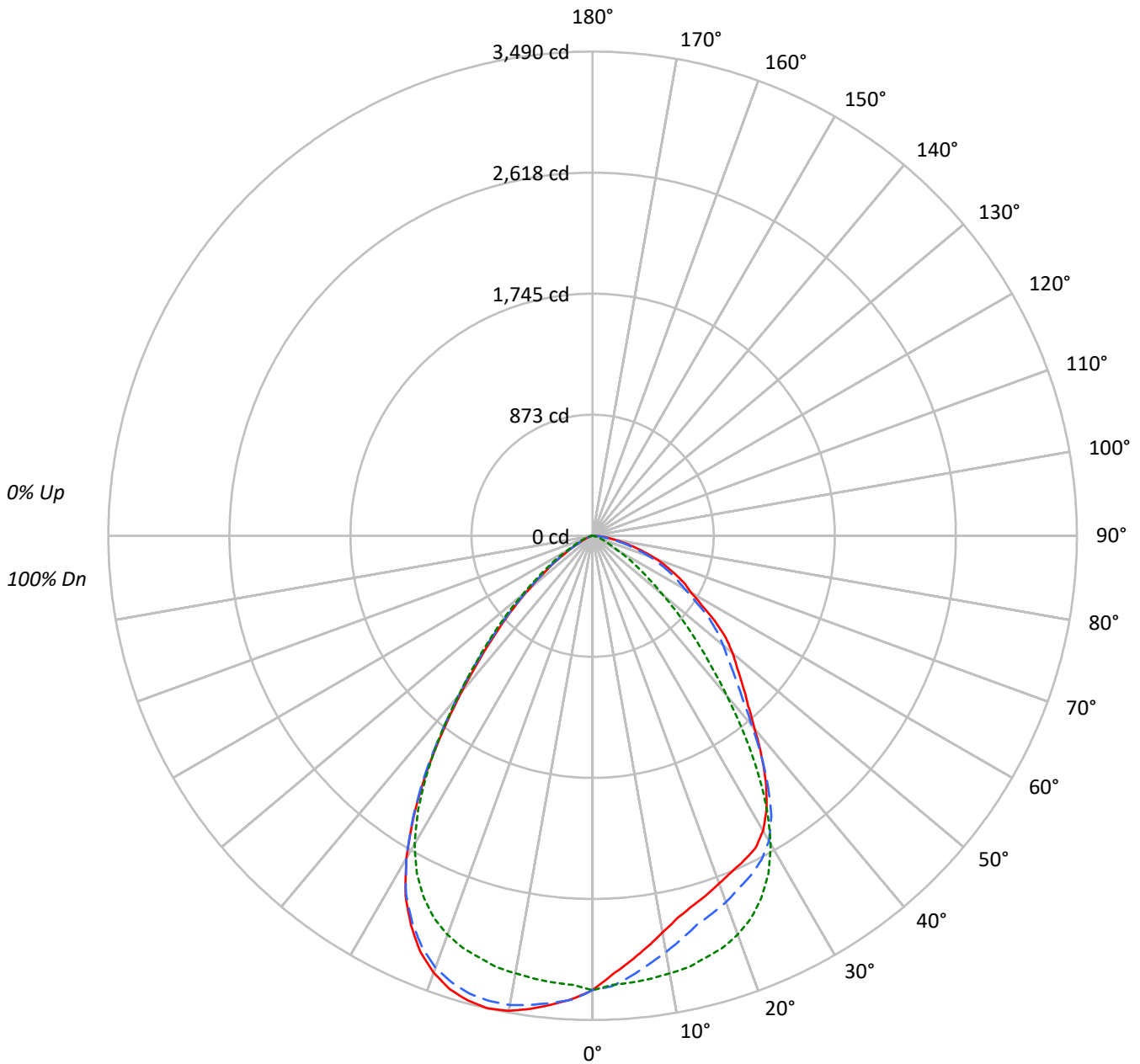
Lumens per Lamp: N/A
Luminaire Lumens: 5740.0 lumens
Efficiency: N/A
Efficacy: 79.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	402296	402296	402296
5°	379883	398628	418397
10°	362170	399545	433764
15°	351533	400386	441162
20°	348652	399980	438037
25°	350068	390110	419851
30°	348391	363953	380707
35°	326559	310751	313901
40°	290998	240930	235525
45°	266137	179631	168616
50°	251637	125837	113720
55°	231388	84969	71389
60°	202168	49756	39387
65°	191394	31889	22064
70°	174320	22773	13650
75°	144252	15996	10063
80°	113410	8985	5943
85°	101208	6061	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.4	5.4
10°-20°	887.6	15.5
20°-30°	1315.8	22.9
30°-40°	1317.6	23.0
40°-50°	920.8	16.0
50°-60°	547.9	9.5
60°-70°	286.0	5.0
70°-80°	127.2	2.2
80°-90°	27.7	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°	2512.8	43.8
0°-40°	3830.3	66.7
0°-60°	5299.1	92.3
0°-90°	5740.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5740.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3275	3275	3275	3275	3275	
5°	3080	3186	3232	3380	3393	289
15°	2764	2903	3148	3418	3469	783
25°	2582	2701	2878	3076	3097	1190
35°	2177	2203	2072	2110	2093	1350
45°	1532	1456	1034	1000	970	1189
55°	1080	1013	397	346	333	959
65°	658	603	110	80	76	651
75°	304	266	34	21	21	329
85°	72	55	4	4	0	80
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°	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6
2.5°	3169.0	3207.1	3169.0	3181.8	3232.4	3185.9	3211.2	3211.2	3198.7	3228.1	3249.3
5°	3080.4	3118.4	3080.4	3097.3	3152.2	3105.7	3135.3	3126.9	3131.2	3156.5	3185.9
7.5°	2991.9	3021.3	2987.6	3008.8	3059.4	3021.3	3046.6	3046.6	3050.9	3088.8	3114.3
10°	2903.2	2928.5	2903.2	2920.1	2975.0	2941.3	2958.1	2962.3	2975.0	3008.8	3046.6
12.5°	2823.0	2844.2	2818.9	2844.2	2890.5	2856.7	2877.9	2882.1	2894.8	2932.8	2975.0
15°	2763.9	2785.1	2759.8	2780.8	2823.0	2797.7	2814.6	2823.0	2831.4	2865.2	2903.2
17.5°	2717.6	2734.5	2713.3	2738.6	2772.4	2742.9	2768.2	2768.2	2780.8	2814.6	2856.7
20°	2666.8	2683.7	2666.8	2688.0	2726.1	2700.8	2721.8	2721.8	2734.5	2772.4	2810.4
22.5°	2620.5	2629.0	2620.5	2637.4	2675.3	2654.3	2666.8	2671.1	2683.7	2717.6	2751.4
25°	2582.5	2599.4	2590.9	2607.8	2633.1	2612.1	2624.7	2629.0	2641.5	2671.1	2700.8
27.5°	2540.3	2548.7	2540.3	2561.5	2582.5	2565.6	2578.3	2574.0	2582.5	2607.8	2633.1
30°	2455.9	2464.4	2464.4	2476.9	2494.0	2485.5	2498.1	2485.5	2494.0	2515.0	2540.3
32.5°	2333.5	2337.8	2342.0	2354.7	2367.3	2354.7	2363.1	2363.1	2363.1	2380.0	2396.9
35°	2177.4	2185.8	2181.7	2190.1	2202.7	2198.6	2198.6	2194.3	2185.8	2194.3	2202.7
37.5°	2000.2	1987.5	1987.5	2000.2	2008.7	1991.8	2000.2	1991.8	1991.8	1995.9	1995.9
40°	1814.5	1801.9	1814.5	1818.8	1822.9	1814.5	1810.3	1801.9	1789.1	1793.4	1785.0
42.5°	1658.5	1649.9	1654.2	1654.2	1658.5	1649.9	1654.2	1637.3	1624.6	1616.1	1603.5
45°	1531.8	1519.2	1531.8	1523.3	1523.3	1519.2	1514.9	1506.4	1489.6	1477.0	1455.8
47.5°	1413.6	1413.6	1417.8	1417.8	1417.8	1409.3	1409.3	1392.5	1375.6	1358.7	1329.3
50°	1316.6	1308.1	1325.0	1325.0	1312.4	1308.1	1312.4	1291.2	1278.7	1257.5	1227.9
52.5°	1211.0	1211.0	1215.3	1215.3	1211.0	1202.6	1206.9	1190.0	1177.3	1156.3	1126.7
55°	1080.3	1071.9	1084.5	1084.5	1080.3	1076.0	1080.3	1067.6	1055.0	1038.2	1012.7
57.5°	932.6	928.3	936.8	941.1	932.6	932.6	936.8	924.2	919.9	903.0	877.7
60°	822.8	818.6	827.1	831.4	822.8	822.8	822.8	805.9	797.5	780.6	763.7
62.5°	746.9	742.7	751.2	746.9	742.7	738.4	742.7	725.8	717.4	700.5	683.7
65°	658.4	662.5	666.8	666.8	662.5	658.4	658.4	649.9	641.5	624.6	603.4
67.5°	573.8	573.8	578.1	582.3	578.1	578.1	578.1	565.4	557.0	544.4	519.1
70°	485.3	481.0	493.8	493.8	485.3	489.5	485.3	481.0	472.6	455.7	434.7
72.5°	392.4	392.4	396.7	396.7	392.4	392.4	392.4	388.2	375.5	367.1	346.1
75°	303.9	303.9	308.0	312.3	303.9	303.9	308.0	299.6	291.1	278.6	265.8
77.5°	227.9	223.6	227.9	227.9	223.6	223.6	223.6	219.5	215.2	202.5	189.9
80°	160.3	156.2	160.3	160.3	160.3	156.2	156.2	151.9	151.9	143.4	130.8
82.5°	109.7	105.5	109.7	109.7	109.7	105.5	105.5	105.5	101.2	97.1	88.7
85°	71.8	67.5	67.5	71.8	67.5	67.5	67.5	67.5	63.4	59.1	54.9
87.5°	33.7	33.7	33.7	33.7	33.7	33.7	33.7	29.6	29.6	29.6	25.3
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°	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6
2.5°	3232.4	3224.0	3249.3	3240.8	3245.0	3224.0	3257.7	3240.8	3261.8	3240.8	3283.0
5°	3177.5	3169.0	3207.1	3202.8	3207.1	3190.2	3228.1	3224.0	3249.3	3232.4	3278.7
7.5°	3118.4	3110.0	3152.2	3156.5	3164.9	3148.0	3198.7	3198.7	3224.0	3219.7	3270.3
10°	3050.9	3055.1	3097.3	3105.7	3122.7	3114.3	3160.6	3173.4	3207.1	3202.8	3266.1
12.5°	2987.6	2987.6	3042.5	3059.4	3072.0	3067.8	3122.7	3139.6	3177.5	3185.9	3245.0
15°	2924.4	2928.5	2979.2	3004.5	3021.3	3017.2	3076.3	3097.3	3143.7	3148.0	3219.7
17.5°	2873.6	2869.5	2924.4	2945.4	2970.7	2966.6	3029.8	3055.1	3101.6	3114.3	3181.8
20°	2831.4	2827.3	2877.9	2903.2	2920.1	2916.0	2979.2	3008.8	3050.9	3059.4	3126.9
22.5°	2780.8	2772.4	2823.0	2844.2	2861.0	2856.7	2911.7	2932.8	2975.0	2983.5	3046.6
25°	2721.8	2713.3	2759.8	2772.4	2785.1	2776.7	2823.0	2835.7	2869.5	2877.9	2941.3
27.5°	2654.3	2633.1	2671.1	2671.1	2679.6	2666.8	2700.8	2713.3	2742.9	2742.9	2802.0
30°	2548.7	2519.3	2540.3	2536.2	2540.3	2523.4	2544.6	2548.7	2569.9	2565.6	2607.8
32.5°	2401.0	2358.8	2371.6	2358.8	2346.3	2321.0	2346.3	2337.8	2354.7	2337.8	2375.7
35°	2198.6	2156.4	2152.1	2135.2	2122.6	2101.5	2101.5	2080.4	2084.6	2072.0	2097.3
37.5°	1979.0	1924.3	1915.9	1882.1	1860.9	1835.6	1835.6	1818.8	1797.6	1789.1	1810.3
40°	1763.8	1704.8	1683.8	1628.9	1607.7	1582.4	1565.5	1544.5	1536.1	1502.3	1519.2
42.5°	1578.2	1514.9	1468.6	1409.3	1388.3	1350.3	1325.0	1299.7	1287.1	1249.1	1265.9
45°	1422.1	1346.2	1295.5	1219.5	1190.0	1147.8	1109.8	1080.3	1050.7	1033.9	1025.4
47.5°	1291.2	1211.0	1143.5	1059.2	1012.7	974.8	924.2	894.6	856.7	835.5	822.8
50°	1181.6	1092.9	1017.0	919.9	873.6	831.4	772.2	725.8	692.1	658.4	649.9
52.5°	1084.5	991.7	907.3	797.5	742.7	692.1	628.7	578.1	548.5	510.6	506.3
55°	970.5	890.4	797.5	683.7	628.7	578.1	510.6	460.0	422.0	396.7	388.2
57.5°	848.3	772.2	683.7	569.7	514.8	460.0	396.7	350.2	316.4	295.4	291.1
60°	734.3	662.5	578.1	464.2	409.2	362.9	295.4	249.0	219.5	202.5	194.0
62.5°	649.9	582.3	502.2	396.7	346.1	299.6	236.4	194.0	168.7	151.9	143.4
65°	569.7	502.2	430.4	333.3	291.1	249.0	189.9	151.9	126.5	109.7	101.2
67.5°	485.3	426.3	358.6	278.6	236.4	202.5	151.9	118.1	97.1	84.4	75.9
70°	400.8	346.1	291.1	223.6	194.0	160.3	118.1	92.8	71.8	63.4	54.9
72.5°	316.4	274.3	227.9	173.0	147.7	126.5	92.8	67.5	54.9	46.5	38.0
75°	236.4	206.8	168.7	130.8	109.7	92.8	67.5	50.6	42.2	33.7	29.6
77.5°	168.7	143.4	118.1	88.7	80.2	67.5	46.5	38.0	29.6	21.2	16.9
80°	114.0	101.2	80.2	63.4	50.6	46.5	33.7	25.3	16.9	12.7	12.7
82.5°	75.9	63.4	50.6	38.0	33.7	29.6	21.2	16.9	12.7	8.4	8.4
85°	46.5	38.0	29.6	21.2	21.2	16.9	12.7	8.4	4.3	4.3	4.3
87.5°	21.2	16.9	12.7	8.4	8.4	4.3	4.3	4.3	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°	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6
2.5°	3316.8	3291.5	3274.6	3295.6	3304.0	3291.5	3304.0	3325.2	3346.4	3350.5	3291.5
5°	3321.1	3295.6	3287.2	3312.5	3316.8	3312.5	3325.2	3354.8	3380.1	3388.6	3329.5
7.5°	3321.1	3304.0	3299.9	3329.5	3333.6	3329.5	3350.5	3384.3	3409.6	3426.4	3367.4
10°	3312.5	3304.0	3308.3	3333.6	3342.1	3342.1	3371.7	3409.6	3434.9	3451.7	3392.7
12.5°	3299.9	3299.9	3299.9	3329.5	3337.9	3342.1	3367.4	3418.0	3434.9	3460.2	3401.1
15°	3278.7	3278.7	3278.7	3308.3	3321.1	3321.1	3350.5	3397.0	3418.0	3443.3	3384.3
17.5°	3240.8	3240.8	3245.0	3270.3	3283.0	3283.0	3312.5	3363.2	3375.8	3405.4	3346.4
20°	3185.9	3185.9	3190.2	3215.5	3228.1	3219.7	3257.7	3299.9	3312.5	3337.9	3278.7
22.5°	3105.7	3105.7	3105.7	3131.2	3139.6	3135.3	3173.4	3211.2	3211.2	3245.0	3181.8
25°	2987.6	2996.0	2987.6	3012.9	3021.3	3017.2	3050.9	3084.7	3076.3	3114.3	3050.9
27.5°	2844.2	2839.9	2839.9	2861.0	2861.0	2856.7	2882.1	2920.1	2911.7	2937.0	2877.9
30°	2645.8	2658.4	2637.4	2666.8	2654.3	2645.8	2662.7	2696.5	2683.7	2704.9	2658.4
32.5°	2417.9	2401.0	2401.0	2401.0	2409.5	2388.4	2405.3	2422.2	2409.5	2430.6	2380.0
35°	2118.3	2122.6	2109.9	2114.2	2118.3	2093.0	2109.9	2126.8	2109.9	2122.6	2076.1
37.5°	1818.8	1822.9	1793.4	1810.3	1793.4	1785.0	1801.9	1810.3	1793.4	1806.0	1755.4
40°	1519.2	1510.7	1506.4	1506.4	1510.7	1489.6	1502.3	1514.9	1502.3	1510.7	1464.3
42.5°	1257.5	1253.4	1244.9	1249.1	1236.3	1232.2	1236.3	1249.1	1236.3	1244.9	1211.0
45°	1029.6	1021.1	1008.5	1012.7	1012.7	991.7	1004.2	1012.7	1000.1	1004.2	974.8
47.5°	818.6	805.9	805.9	801.8	801.8	793.3	805.9	801.8	789.0	797.5	768.0
50°	637.2	628.7	628.7	628.7	628.7	616.0	620.3	628.7	616.0	616.0	599.1
52.5°	497.9	485.3	476.9	476.9	476.9	472.6	472.6	476.9	464.2	464.2	460.0
55°	375.5	371.4	358.6	358.6	358.6	346.1	350.2	350.2	346.1	346.1	333.3
57.5°	278.6	265.8	257.4	257.4	249.0	249.0	244.8	249.0	240.5	240.5	232.1
60°	185.6	177.2	173.0	168.7	168.7	164.6	168.7	164.6	164.6	160.3	156.2
62.5°	135.0	126.5	118.1	118.1	118.1	114.0	114.0	114.0	114.0	114.0	109.7
65°	97.1	88.7	88.7	84.4	84.4	80.2	80.2	80.2	80.2	80.2	75.9
67.5°	67.5	63.4	59.1	59.1	59.1	59.1	59.1	59.1	54.9	54.9	54.9
70°	50.6	46.5	42.2	42.2	42.2	42.2	42.2	38.0	42.2	42.2	38.0
72.5°	33.7	33.7	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
75°	25.3	25.3	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
77.5°	16.9	16.9	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
80°	12.7	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
82.5°	8.4	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
85°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	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: P859226

CATALOG NUMBER: LX4C60D010 EX4C609035 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6	3274.6
2.5°	3354.8	3350.5	3342.1	3354.8	3321.1	3308.3	3304.0	3342.1
5°	3401.1	3392.7	3392.7	3405.4	3367.4	3358.9	3350.5	3392.7
7.5°	3443.3	3434.9	3434.9	3447.6	3413.9	3405.4	3397.0	3439.2
10°	3468.6	3468.6	3468.6	3477.1	3447.6	3439.2	3434.9	3477.1
12.5°	3481.4	3481.4	3477.1	3493.9	3456.0	3456.0	3447.6	3489.8
15°	3464.5	3464.5	3464.5	3477.1	3443.3	3434.9	3434.9	3468.6
17.5°	3422.3	3422.3	3418.0	3430.7	3392.7	3392.7	3388.6	3426.4
20°	3358.9	3358.9	3350.5	3367.4	3329.5	3316.8	3312.5	3350.5
22.5°	3257.7	3253.4	3249.3	3257.7	3224.0	3215.5	3211.2	3245.0
25°	3126.9	3122.7	3114.3	3122.7	3084.7	3072.0	3072.0	3097.3
27.5°	2941.3	2941.3	2928.5	2941.3	2898.9	2894.8	2890.5	2920.1
30°	2713.3	2696.5	2688.0	2704.9	2662.7	2662.7	2654.3	2683.7
32.5°	2430.6	2413.8	2409.5	2417.9	2380.0	2367.3	2384.1	2401.0
35°	2105.8	2109.9	2093.0	2093.0	2059.3	2063.4	2067.7	2093.0
37.5°	1793.4	1785.0	1780.7	1785.0	1759.7	1751.3	1742.8	1768.1
40°	1502.3	1481.1	1477.0	1477.0	1455.8	1451.7	1455.8	1468.6
42.5°	1227.9	1223.8	1206.9	1215.3	1194.1	1202.6	1198.4	1198.4
45°	991.7	995.8	978.9	991.7	974.8	962.1	962.1	970.5
47.5°	784.9	784.9	780.6	780.6	768.0	772.2	763.7	776.5
50°	607.6	607.6	599.1	603.4	595.0	595.0	590.7	595.0
52.5°	464.2	460.0	460.0	455.7	447.3	451.6	455.7	447.3
55°	337.6	341.8	333.3	337.6	329.2	333.3	329.2	333.3
57.5°	232.1	236.4	227.9	236.4	227.9	232.1	227.9	227.9
60°	160.3	160.3	156.2	160.3	156.2	156.2	151.9	160.3
62.5°	109.7	109.7	109.7	109.7	109.7	105.5	109.7	109.7
65°	80.2	75.9	75.9	75.9	75.9	75.9	75.9	75.9
67.5°	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9
70°	38.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0
72.5°	29.6	29.6	29.6	29.6	29.6	29.6	29.6	29.6
75°	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
77.5°	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
80°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
82.5°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
85°	4.3	4.3	4.3	0.0	4.3	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)