

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: P859247

Luminaire Tested: **LX4C60D010 EX4C609040 4LBSWNH**

Issue Date: 2/18/2022

Test Information

Test Method: LM-79-08
Report Number: P859247
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 EX4C609040 4LBSWNH
Description: 4 INCH 6000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

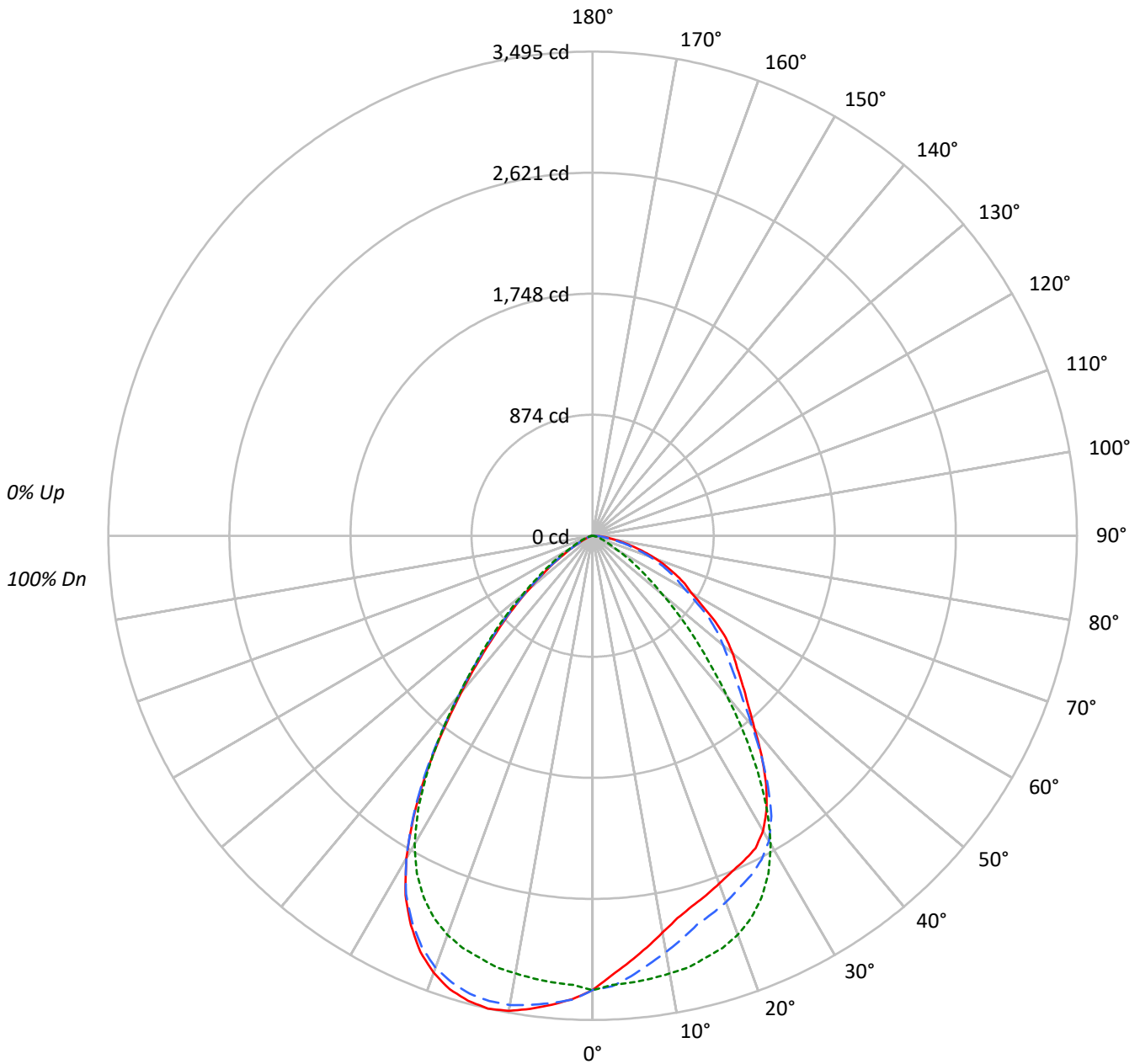
Lumens per Lamp: N/A
Luminaire Lumens: 5749.0 lumens
Efficiency: N/A
Efficacy: 79.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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°	402923	402923	402923
5°	380475	399257	419051
10°	362744	400169	434437
15°	352093	401021	441861
20°	349201	400607	438730
25°	350610	390720	420501
30°	348945	364521	381303
35°	327069	311246	314396
40°	291447	241314	235894
45°	266554	179909	168876
50°	252019	126029	113892
55°	231752	85097	71496
60°	202487	49829	39436
65°	191685	31918	22093
70°	174607	22809	13686
75°	144442	16044	10063
80°	113551	9056	5943
85°	101349	6061	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.9	5.4
10°-20°	889.0	15.5
20°-30°	1317.8	22.9
30°-40°	1319.6	23.0
40°-50°	922.3	16.0
50°-60°	548.8	9.5
60°-70°	286.4	5.0
70°-80°	127.4	2.2
80°-90°	27.8	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°	2516.7	43.8
0°-40°	3836.3	66.7
0°-60°	5307.4	92.3
0°-90°	5749.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5749.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3280	3280	3280	3280	3280	
5°	3085	3191	3238	3385	3398	289
15°	2768	2908	3153	3423	3474	784
25°	2586	2705	2882	3081	3102	1192
35°	2181	2206	2075	2113	2096	1352
45°	1534	1458	1036	1002	972	1191
55°	1082	1014	397	347	334	960
65°	659	604	110	80	76	652
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°	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7
2.5°	3174.0	3212.1	3174.0	3186.8	3237.5	3190.9	3216.3	3216.3	3203.7	3233.2	3254.4
5°	3085.2	3123.3	3085.2	3102.1	3157.1	3110.6	3140.2	3131.8	3136.1	3161.4	3190.9
7.5°	2996.6	3026.1	2992.3	3013.5	3064.2	3026.1	3051.4	3051.4	3055.7	3093.7	3119.2
10°	2907.8	2933.1	2907.8	2924.7	2979.7	2945.9	2962.8	2966.9	2979.7	3013.5	3051.4
12.5°	2827.4	2848.6	2823.3	2848.6	2895.0	2861.2	2882.4	2886.6	2899.3	2937.4	2979.7
15°	2768.3	2789.5	2764.1	2785.2	2827.4	2802.1	2819.0	2827.4	2835.9	2869.7	2907.8
17.5°	2721.9	2738.8	2717.6	2742.9	2776.7	2747.2	2772.6	2772.6	2785.2	2819.0	2861.2
20°	2671.0	2687.9	2671.0	2692.2	2730.3	2705.0	2726.0	2726.0	2738.8	2776.7	2814.8
22.5°	2624.6	2633.1	2624.6	2641.5	2679.5	2658.4	2671.0	2675.3	2687.9	2721.9	2755.7
25°	2586.5	2603.4	2595.0	2611.9	2637.2	2616.2	2628.8	2633.1	2645.7	2675.3	2705.0
27.5°	2544.3	2552.7	2544.3	2565.5	2586.5	2569.6	2582.4	2578.1	2586.5	2611.9	2637.2
30°	2459.8	2468.2	2468.2	2480.8	2497.9	2489.4	2502.0	2489.4	2497.9	2518.9	2544.3
32.5°	2337.2	2341.5	2345.6	2358.4	2371.0	2358.4	2366.8	2366.8	2366.8	2383.7	2400.6
35°	2180.8	2189.2	2185.1	2193.5	2206.1	2202.0	2202.0	2197.7	2189.2	2197.7	2206.1
37.5°	2003.4	1990.6	1990.6	2003.4	2011.8	1994.9	2003.4	1994.9	1994.9	1999.0	1999.0
40°	1817.3	1804.7	1817.3	1821.6	1825.7	1817.3	1813.2	1804.7	1792.0	1796.3	1787.8
42.5°	1661.1	1652.5	1656.8	1656.8	1661.1	1652.5	1656.8	1639.9	1627.1	1618.7	1606.1
45°	1534.2	1521.6	1534.2	1525.7	1525.7	1521.6	1517.3	1508.8	1491.9	1479.3	1458.1
47.5°	1415.9	1415.9	1420.0	1420.0	1420.0	1411.6	1411.6	1394.7	1377.8	1360.9	1331.4
50°	1318.6	1310.2	1327.1	1327.1	1314.5	1310.2	1314.5	1293.3	1280.7	1259.5	1229.8
52.5°	1212.9	1212.9	1217.2	1217.2	1212.9	1204.5	1208.8	1191.9	1179.1	1158.1	1128.4
55°	1082.0	1073.6	1086.2	1086.2	1082.0	1077.7	1082.0	1069.3	1056.7	1039.8	1014.3
57.5°	934.1	929.8	938.2	942.5	934.1	934.1	938.2	925.6	921.3	904.4	879.1
60°	824.1	819.9	828.4	832.7	824.1	824.1	824.1	807.2	798.7	781.8	764.9
62.5°	748.0	743.9	752.3	748.0	743.9	739.6	743.9	727.0	718.5	701.6	684.7
65°	659.4	663.5	667.8	667.8	663.5	659.4	659.4	650.9	642.5	625.6	604.4
67.5°	574.7	574.7	579.0	583.2	579.0	579.0	579.0	566.3	557.8	545.2	519.9
70°	486.1	481.8	494.5	494.5	486.1	490.2	486.1	481.8	473.3	456.4	435.4
72.5°	393.0	393.0	397.3	397.3	393.0	393.0	393.0	388.8	376.1	367.6	346.6
75°	304.3	304.3	308.5	312.8	304.3	304.3	308.5	300.0	291.6	279.0	266.2
77.5°	228.3	224.0	228.3	228.3	224.0	224.0	224.0	219.9	215.5	202.8	190.2
80°	160.5	156.4	160.5	160.5	160.5	156.4	156.4	152.1	152.1	143.6	131.0
82.5°	109.8	105.7	109.8	109.8	109.8	105.7	105.7	105.7	101.4	97.3	88.8
85°	71.9	67.6	67.6	71.9	67.6	67.6	67.6	67.6	63.5	59.1	55.0
87.5°	33.8	33.8	33.8	33.8	33.8	33.8	33.8	29.7	29.7	29.7	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°	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7
2.5°	3237.5	3229.0	3254.4	3245.9	3250.1	3229.0	3262.8	3245.9	3267.0	3245.9	3288.2
5°	3182.5	3174.0	3212.1	3207.8	3212.1	3195.2	3233.2	3229.0	3254.4	3237.5	3283.9
7.5°	3123.3	3114.9	3157.1	3161.4	3169.9	3153.0	3203.7	3203.7	3229.0	3224.7	3275.4
10°	3055.7	3059.9	3102.1	3110.6	3127.6	3119.2	3165.6	3178.3	3212.1	3207.8	3271.3
12.5°	2992.3	2992.3	3047.3	3064.2	3076.8	3072.6	3127.6	3144.5	3182.5	3190.9	3250.1
15°	2929.0	2933.1	2983.8	3009.2	3026.1	3021.9	3081.1	3102.1	3148.7	3153.0	3224.7
17.5°	2878.1	2874.0	2929.0	2950.0	2975.4	2971.2	3034.5	3059.9	3106.4	3119.2	3186.8
20°	2835.9	2831.7	2882.4	2907.8	2924.7	2920.5	2983.8	3013.5	3055.7	3064.2	3131.8
22.5°	2785.2	2776.7	2827.4	2848.6	2865.5	2861.2	2916.2	2937.4	2979.7	2988.1	3051.4
25°	2726.0	2717.6	2764.1	2776.7	2789.5	2781.0	2827.4	2840.2	2874.0	2882.4	2945.9
27.5°	2658.4	2637.2	2675.3	2675.3	2683.8	2671.0	2705.0	2717.6	2747.2	2747.2	2806.4
30°	2552.7	2523.2	2544.3	2540.1	2544.3	2527.4	2548.6	2552.7	2573.9	2569.6	2611.9
32.5°	2404.8	2362.5	2375.3	2362.5	2349.9	2324.6	2349.9	2341.5	2358.4	2341.5	2379.4
35°	2202.0	2159.8	2155.4	2138.5	2126.0	2104.7	2104.7	2083.7	2087.8	2075.3	2100.6
37.5°	1982.1	1927.3	1918.9	1885.1	1863.9	1838.5	1838.5	1821.6	1800.4	1792.0	1813.2
40°	1766.6	1707.5	1686.4	1631.4	1610.2	1584.9	1568.0	1546.9	1538.5	1504.7	1521.6
42.5°	1580.7	1517.3	1470.9	1411.6	1390.5	1352.4	1327.1	1301.7	1289.1	1251.0	1267.9
45°	1424.3	1348.3	1297.6	1221.4	1191.9	1149.6	1111.5	1082.0	1052.4	1035.5	1027.0
47.5°	1293.3	1212.9	1145.3	1060.8	1014.3	976.3	925.6	896.0	858.0	836.8	824.1
50°	1183.4	1094.6	1018.6	921.3	874.9	832.7	773.4	727.0	693.2	659.4	650.9
52.5°	1086.2	993.2	908.7	798.7	743.9	693.2	629.7	579.0	549.4	511.4	507.1
55°	972.0	891.8	798.7	684.7	629.7	579.0	511.4	460.7	422.6	397.3	388.8
57.5°	849.6	773.4	684.7	570.6	515.6	460.7	397.3	350.7	316.9	295.9	291.6
60°	735.4	663.5	579.0	464.9	409.9	363.5	295.9	249.3	219.9	202.8	194.3
62.5°	650.9	583.2	503.0	397.3	346.6	300.0	236.8	194.3	169.0	152.1	143.6
65°	570.6	503.0	431.1	333.8	291.6	249.3	190.2	152.1	126.7	109.8	101.4
67.5°	486.1	426.9	359.2	279.0	236.8	202.8	152.1	118.3	97.3	84.5	76.0
70°	401.4	346.6	291.6	224.0	194.3	160.5	118.3	92.9	71.9	63.5	55.0
72.5°	316.9	274.7	228.3	173.3	147.9	126.7	92.9	67.6	55.0	46.6	38.1
75°	236.8	207.1	169.0	131.0	109.8	92.9	67.6	50.7	42.2	33.8	29.7
77.5°	169.0	143.6	118.3	88.8	80.4	67.6	46.6	38.1	29.7	21.2	16.9
80°	114.2	101.4	80.4	63.5	50.7	46.6	33.8	25.3	16.9	12.8	12.8
82.5°	76.0	63.5	50.7	38.1	33.8	29.7	21.2	16.9	12.8	8.4	8.4
85°	46.6	38.1	29.7	21.2	21.2	16.9	12.8	8.4	4.3	4.3	4.3
87.5°	21.2	16.9	12.8	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°	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7
2.5°	3322.0	3296.6	3279.7	3300.8	3309.2	3296.6	3309.2	3330.4	3351.6	3355.8	3296.6
5°	3326.3	3300.8	3292.3	3317.7	3322.0	3317.7	3330.4	3360.1	3385.4	3393.9	3334.7
7.5°	3326.3	3309.2	3305.1	3334.7	3338.9	3334.7	3355.8	3389.6	3414.9	3431.8	3372.7
10°	3317.7	3309.2	3313.5	3338.9	3347.3	3347.3	3377.0	3414.9	3440.3	3457.2	3398.0
12.5°	3305.1	3305.1	3305.1	3334.7	3343.2	3347.3	3372.7	3423.4	3440.3	3465.6	3406.5
15°	3283.9	3283.9	3283.9	3313.5	3326.3	3326.3	3355.8	3402.3	3423.4	3448.7	3389.6
17.5°	3245.9	3245.9	3250.1	3275.4	3288.2	3288.2	3317.7	3368.5	3381.1	3410.8	3351.6
20°	3190.9	3190.9	3195.2	3220.6	3233.2	3224.7	3262.8	3305.1	3317.7	3343.2	3283.9
22.5°	3110.6	3110.6	3110.6	3136.1	3144.5	3140.2	3178.3	3216.3	3216.3	3250.1	3186.8
25°	2992.3	3000.7	2992.3	3017.6	3026.1	3021.9	3055.7	3089.5	3081.1	3119.2	3055.7
27.5°	2848.6	2844.3	2844.3	2865.5	2865.5	2861.2	2886.6	2924.7	2916.2	2941.6	2882.4
30°	2650.0	2662.6	2641.5	2671.0	2658.4	2650.0	2666.9	2700.7	2687.9	2709.1	2662.6
32.5°	2421.7	2404.8	2404.8	2404.8	2413.2	2392.2	2409.1	2426.0	2413.2	2434.4	2383.7
35°	2121.6	2126.0	2113.2	2117.5	2121.6	2096.3	2113.2	2130.1	2113.2	2126.0	2079.4
37.5°	1821.6	1825.7	1796.3	1813.2	1796.3	1787.8	1804.7	1813.2	1796.3	1808.8	1758.2
40°	1521.6	1513.1	1508.8	1508.8	1513.1	1491.9	1504.7	1517.3	1504.7	1513.1	1466.6
42.5°	1259.5	1255.3	1246.9	1251.0	1238.3	1234.1	1238.3	1251.0	1238.3	1246.9	1212.9
45°	1031.2	1022.7	1010.1	1014.3	1014.3	993.2	1005.8	1014.3	1001.7	1005.8	976.3
47.5°	819.9	807.2	807.2	803.0	803.0	794.6	807.2	803.0	790.3	798.7	769.2
50°	638.2	629.7	629.7	629.7	629.7	617.0	621.3	629.7	617.0	617.0	600.1
52.5°	498.7	486.1	477.6	477.6	477.6	473.3	473.3	477.6	464.9	464.9	460.7
55°	376.1	371.9	359.2	359.2	359.2	346.6	350.7	350.7	346.6	346.6	333.8
57.5°	279.0	266.2	257.8	257.8	249.3	249.3	245.2	249.3	240.9	240.9	232.4
60°	185.9	177.4	173.3	169.0	169.0	164.8	169.0	164.8	164.8	160.5	156.4
62.5°	135.2	126.7	118.3	118.3	118.3	114.2	114.2	114.2	114.2	114.2	109.8
65°	97.3	88.8	88.8	84.5	84.5	80.4	80.4	80.4	80.4	80.4	76.0
67.5°	67.6	63.5	59.1	59.1	59.1	59.1	59.1	59.1	55.0	55.0	55.0
70°	50.7	46.6	42.2	42.2	42.2	42.2	42.2	38.1	42.2	42.2	38.1
72.5°	33.8	33.8	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
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	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
80°	12.8	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: P859247

CATALOG NUMBER: LX4C60D010 EX4C609040 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7	3279.7
2.5°	3360.1	3355.8	3347.3	3360.1	3326.3	3313.5	3309.2	3347.3
5°	3406.5	3398.0	3398.0	3410.8	3372.7	3364.2	3355.8	3398.0
7.5°	3448.7	3440.3	3440.3	3453.0	3419.2	3410.8	3402.3	3444.6
10°	3474.1	3474.1	3474.1	3482.5	3453.0	3444.6	3440.3	3482.5
12.5°	3486.8	3486.8	3482.5	3499.4	3461.5	3461.5	3453.0	3495.3
15°	3469.9	3469.9	3469.9	3482.5	3448.7	3440.3	3440.3	3474.1
17.5°	3427.7	3427.7	3423.4	3436.1	3398.0	3398.0	3393.9	3431.8
20°	3364.2	3364.2	3355.8	3372.7	3334.7	3322.0	3317.7	3355.8
22.5°	3262.8	3258.5	3254.4	3262.8	3229.0	3220.6	3216.3	3250.1
25°	3131.8	3127.6	3119.2	3127.6	3089.5	3076.8	3076.8	3102.1
27.5°	2945.9	2945.9	2933.1	2945.9	2903.5	2899.3	2895.0	2924.7
30°	2717.6	2700.7	2692.2	2709.1	2666.9	2666.9	2658.4	2687.9
32.5°	2434.4	2417.5	2413.2	2421.7	2383.7	2371.0	2387.9	2404.8
35°	2109.1	2113.2	2096.3	2096.3	2062.5	2066.6	2070.9	2096.3
37.5°	1796.3	1787.8	1783.5	1787.8	1762.5	1754.0	1745.6	1770.9
40°	1504.7	1483.5	1479.3	1479.3	1458.1	1454.0	1458.1	1470.9
42.5°	1229.8	1225.7	1208.8	1217.2	1196.0	1204.5	1200.3	1200.3
45°	993.2	997.4	980.5	993.2	976.3	963.6	963.6	972.0
47.5°	786.1	786.1	781.8	781.8	769.2	773.4	764.9	777.7
50°	608.5	608.5	600.1	604.4	595.9	595.9	591.6	595.9
52.5°	464.9	460.7	460.7	456.4	448.0	452.3	456.4	448.0
55°	338.1	342.3	333.8	338.1	329.7	333.8	329.7	333.8
57.5°	232.4	236.8	228.3	236.8	228.3	232.4	228.3	228.3
60°	160.5	160.5	156.4	160.5	156.4	156.4	152.1	160.5
62.5°	109.8	109.8	109.8	109.8	109.8	105.7	109.8	109.8
65°	80.4	76.0	76.0	76.0	76.0	76.0	76.0	76.0
67.5°	55.0	55.0	55.0	55.0	55.0	55.0	55.0	55.0
70°	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
72.5°	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
75°	21.2	21.2	21.2	21.2	21.2	21.2	21.2	21.2
77.5°	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8
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)