

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: P859205

Luminaire Tested: **LX4C60D010 EX4C609030 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P859205
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 EX4C609030 4LBSWNH
Description: 4 INCH 6000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

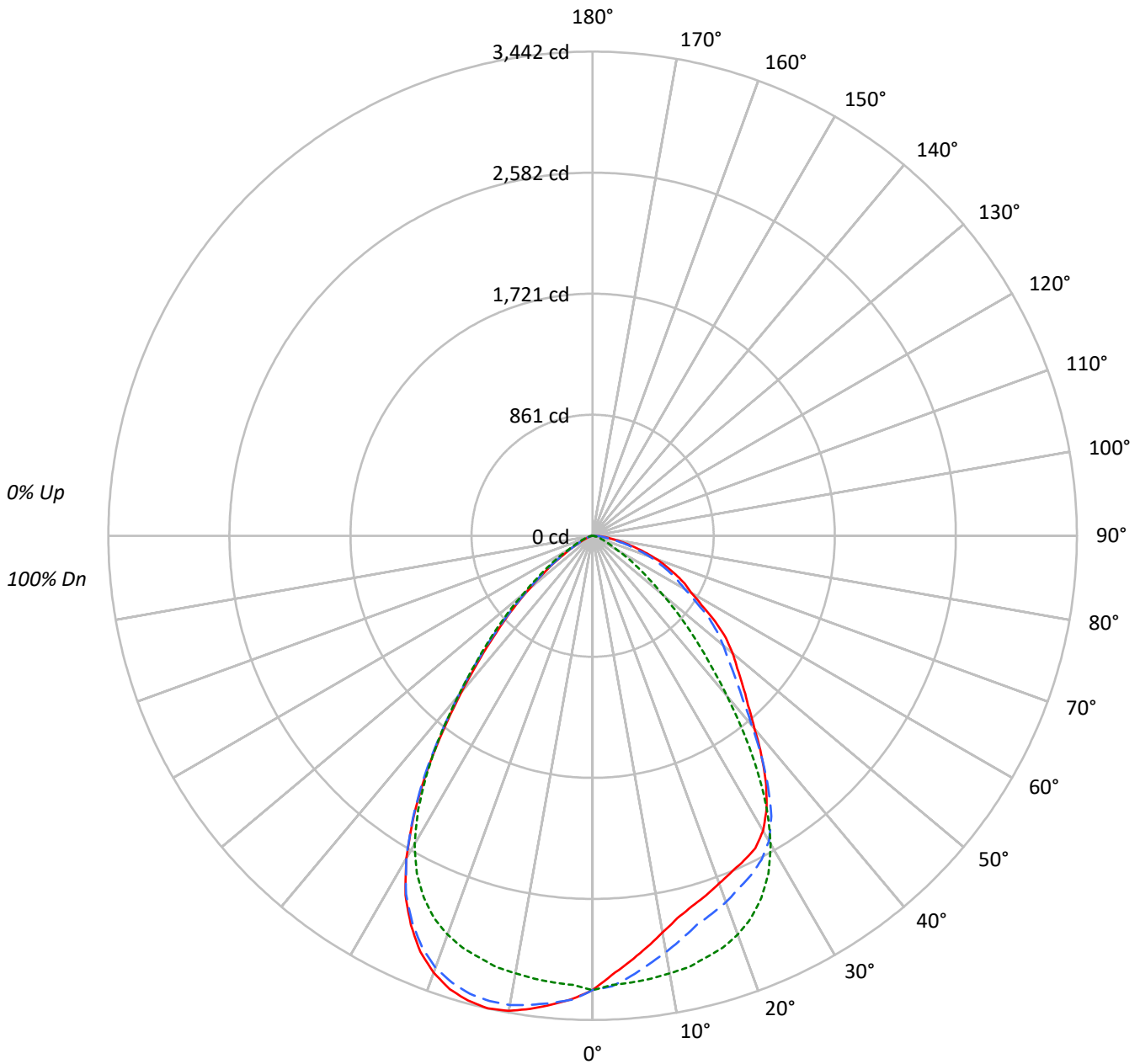
Lumens per Lamp: N/A
Luminaire Lumens: 5661.0 lumens
Efficiency: N/A
Efficacy: 78.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

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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°	396755	396755	396755
5°	374655	393141	412638
10°	357193	394044	427788
15°	346700	394878	435095
20°	343854	394476	432010
25°	345242	384742	414063
30°	343597	358946	375472
35°	322059	306477	309581
40°	286989	237610	232285
45°	262471	177146	166288
50°	248158	124098	112153
55°	228218	83791	70404
60°	199391	49068	38846
65°	188749	31453	21773
70°	171949	22450	13470
75°	142258	15806	9921
80°	111853	8914	5872
85°	99799	5920	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	305.1	5.4
10°-20°	875.4	15.5
20°-30°	1297.7	22.9
30°-40°	1299.4	23.0
40°-50°	908.2	16.0
50°-60°	540.4	9.5
60°-70°	282.0	5.0
70°-80°	125.4	2.2
80°-90°	27.3	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°	2478.2	43.8
0°-40°	3777.6	66.7
0°-60°	5226.2	92.3
0°-90°	5661.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5661.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3230	3230	3230	3230	3230	
5°	3038	3142	3188	3334	3346	285
15°	2726	2863	3105	3371	3421	772
25°	2547	2664	2838	3034	3055	1173
35°	2147	2172	2044	2081	2064	1331
45°	1511	1436	1020	986	957	1173
55°	1066	999	391	341	329	945
65°	649	595	108	79	75	642
75°	300	262	33	21	21	324
85°	71	54	4	4	0	79
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°	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5
2.5°	3125.4	3163.0	3125.4	3138.0	3187.9	3142.1	3167.0	3167.0	3154.6	3183.7	3204.6
5°	3038.0	3075.5	3038.0	3054.6	3108.8	3063.0	3092.2	3083.8	3088.1	3113.0	3142.1
7.5°	2950.7	2979.7	2946.5	2967.4	3017.3	2979.7	3004.7	3004.7	3009.0	3046.3	3071.4
10°	2863.3	2888.2	2863.3	2879.9	2934.1	2900.8	2917.4	2921.5	2934.1	2967.4	3004.7
12.5°	2784.1	2805.0	2780.1	2805.0	2850.7	2817.4	2838.3	2842.4	2854.9	2892.5	2934.1
15°	2725.9	2746.8	2721.8	2742.5	2784.1	2759.2	2775.8	2784.1	2792.5	2825.7	2863.3
17.5°	2680.2	2696.9	2676.0	2700.9	2734.2	2705.2	2730.1	2730.1	2742.5	2775.8	2817.4
20°	2630.1	2646.8	2630.1	2651.0	2688.5	2663.6	2684.3	2684.3	2696.9	2734.2	2771.7
22.5°	2584.5	2592.8	2584.5	2601.1	2638.5	2617.7	2630.1	2634.4	2646.8	2680.2	2713.5
25°	2546.9	2563.6	2555.3	2571.9	2596.9	2576.1	2588.5	2592.8	2605.2	2634.4	2663.6
27.5°	2505.3	2513.7	2505.3	2526.2	2546.9	2530.3	2542.9	2538.6	2546.9	2571.9	2596.9
30°	2422.1	2430.5	2430.5	2442.9	2459.7	2451.3	2463.7	2451.3	2459.7	2480.4	2505.3
32.5°	2301.4	2305.7	2309.7	2322.3	2334.7	2322.3	2330.6	2330.6	2330.6	2347.3	2363.9
35°	2147.4	2155.7	2151.7	2160.0	2172.4	2168.3	2168.3	2164.1	2155.7	2164.1	2172.4
37.5°	1972.7	1960.1	1960.1	1972.7	1981.0	1964.4	1972.7	1964.4	1964.4	1968.4	1968.4
40°	1789.5	1777.1	1789.5	1793.7	1797.8	1789.5	1785.4	1777.1	1764.5	1768.8	1760.4
42.5°	1635.6	1627.2	1631.4	1631.4	1635.6	1627.2	1631.4	1614.8	1602.2	1593.9	1581.5
45°	1510.7	1498.3	1510.7	1502.4	1502.4	1498.3	1494.0	1485.7	1469.1	1456.7	1435.8
47.5°	1394.2	1394.2	1398.3	1398.3	1398.3	1390.0	1390.0	1373.3	1356.7	1340.0	1311.0
50°	1298.4	1290.1	1306.8	1306.8	1294.4	1290.1	1294.4	1273.5	1261.1	1240.2	1211.0
52.5°	1194.3	1194.3	1198.6	1198.6	1194.3	1186.0	1190.3	1173.6	1161.1	1140.3	1111.1
55°	1065.5	1057.1	1069.5	1069.5	1065.5	1061.2	1065.5	1052.9	1040.5	1023.9	998.7
57.5°	919.8	915.5	923.9	928.1	919.8	919.8	923.9	911.5	907.2	890.6	865.6
60°	811.5	807.4	815.7	819.9	811.5	811.5	811.5	794.8	786.5	769.9	753.2
62.5°	736.6	732.5	740.8	736.6	732.5	728.3	732.5	715.9	707.5	690.9	674.3
65°	649.3	653.4	657.6	657.6	653.4	649.3	649.3	641.0	632.7	616.0	595.1
67.5°	565.9	565.9	570.2	574.3	570.2	570.2	570.2	557.6	549.3	536.9	511.9
70°	478.7	474.4	487.0	487.0	478.7	482.7	478.7	474.4	466.1	449.5	428.7
72.5°	387.0	387.0	391.2	391.2	387.0	387.0	387.0	382.9	370.3	362.0	341.3
75°	299.7	299.7	303.8	308.0	299.7	299.7	303.8	295.4	287.1	274.7	262.2
77.5°	224.8	220.6	224.8	224.8	220.6	220.6	220.6	216.5	212.2	199.7	187.3
80°	158.1	154.0	158.1	158.1	158.1	154.0	154.0	149.8	149.8	141.4	129.0
82.5°	108.2	104.1	108.2	108.2	108.2	104.1	104.1	104.1	99.8	95.8	87.4
85°	70.8	66.6	66.6	70.8	66.6	66.6	66.6	66.6	62.5	58.2	54.2
87.5°	33.3	33.3	33.3	33.3	33.3	33.3	33.3	29.2	29.2	29.2	25.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5
2.5°	3187.9	3179.6	3204.6	3196.2	3200.3	3179.6	3212.9	3196.2	3217.0	3196.2	3237.8
5°	3133.8	3125.4	3163.0	3158.7	3163.0	3146.3	3183.7	3179.6	3204.6	3187.9	3233.6
7.5°	3075.5	3067.2	3108.8	3113.0	3121.4	3104.7	3154.6	3154.6	3179.6	3175.4	3225.3
10°	3009.0	3013.0	3054.6	3063.0	3079.8	3071.4	3117.1	3129.7	3163.0	3158.7	3221.2
12.5°	2946.5	2946.5	3000.6	3017.3	3029.7	3025.6	3079.8	3096.4	3133.8	3142.1	3200.3
15°	2884.1	2888.2	2938.1	2963.1	2979.7	2975.7	3033.9	3054.6	3100.5	3104.7	3175.4
17.5°	2834.1	2830.0	2884.1	2904.9	2929.8	2925.8	2988.1	3013.0	3058.9	3071.4	3138.0
20°	2792.5	2788.4	2838.3	2863.3	2879.9	2875.8	2938.1	2967.4	3009.0	3017.3	3083.8
22.5°	2742.5	2734.2	2784.1	2805.0	2821.7	2817.4	2871.6	2892.5	2934.1	2942.4	3004.7
25°	2684.3	2676.0	2721.8	2734.2	2746.8	2738.5	2784.1	2796.7	2830.0	2838.3	2900.8
27.5°	2617.7	2596.9	2634.4	2634.4	2642.7	2630.1	2663.6	2676.0	2705.2	2705.2	2763.4
30°	2513.7	2484.6	2505.3	2501.3	2505.3	2488.7	2509.6	2513.7	2534.5	2530.3	2571.9
32.5°	2368.0	2326.4	2338.9	2326.4	2314.0	2289.0	2314.0	2305.7	2322.3	2305.7	2343.0
35°	2168.3	2126.7	2122.4	2105.8	2093.4	2072.5	2072.5	2051.8	2055.9	2043.5	2068.5
37.5°	1951.8	1897.8	1889.5	1856.2	1835.3	1810.4	1810.4	1793.7	1772.8	1764.5	1785.4
40°	1739.6	1681.3	1660.6	1606.4	1585.6	1560.6	1544.0	1523.2	1514.9	1481.6	1498.3
42.5°	1556.5	1494.0	1448.4	1390.0	1369.2	1331.7	1306.8	1281.8	1269.4	1231.9	1248.5
45°	1402.5	1327.6	1277.7	1202.7	1173.6	1132.0	1094.5	1065.5	1036.3	1019.6	1011.3
47.5°	1273.5	1194.3	1127.8	1044.6	998.7	961.4	911.5	882.3	844.9	824.0	811.5
50°	1165.3	1077.9	1003.0	907.2	861.5	819.9	761.5	715.9	682.6	649.3	641.0
52.5°	1069.5	978.0	894.8	786.5	732.5	682.6	620.1	570.2	541.0	503.6	499.4
55°	957.1	878.2	786.5	674.3	620.1	570.2	503.6	453.7	416.2	391.2	382.9
57.5°	836.6	761.5	674.3	561.9	507.7	453.7	391.2	345.4	312.1	291.4	287.1
60°	724.2	653.4	570.2	457.8	403.6	357.9	291.4	245.5	216.5	199.7	191.4
62.5°	641.0	574.3	495.3	391.2	341.3	295.4	233.1	191.4	166.4	149.8	141.4
65°	561.9	495.3	424.5	328.7	287.1	245.5	187.3	149.8	124.8	108.2	99.8
67.5°	478.7	420.4	353.7	274.7	233.1	199.7	149.8	116.5	95.8	83.2	74.9
70°	395.3	341.3	287.1	220.6	191.4	158.1	116.5	91.5	70.8	62.5	54.2
72.5°	312.1	270.5	224.8	170.6	145.7	124.8	91.5	66.6	54.2	45.8	37.5
75°	233.1	203.9	166.4	129.0	108.2	91.5	66.6	49.9	41.6	33.3	29.2
77.5°	166.4	141.4	116.5	87.4	79.1	66.6	45.8	37.5	29.2	20.9	16.6
80°	112.4	99.8	79.1	62.5	49.9	45.8	33.3	25.0	16.6	12.6	12.6
82.5°	74.9	62.5	49.9	37.5	33.3	29.2	20.9	16.6	12.6	8.3	8.3
85°	45.8	37.5	29.2	20.9	20.9	16.6	12.6	8.3	4.2	4.2	4.2
87.5°	20.9	16.6	12.6	8.3	8.3	4.2	4.2	4.2	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°	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5
2.5°	3271.1	3246.2	3229.5	3250.2	3258.6	3246.2	3258.6	3279.4	3300.3	3304.4	3246.2
5°	3275.4	3250.2	3241.9	3266.9	3271.1	3266.9	3279.4	3308.6	3333.6	3341.9	3283.7
7.5°	3275.4	3258.6	3254.5	3283.7	3287.8	3283.7	3304.4	3337.7	3362.6	3379.3	3321.0
10°	3266.9	3258.6	3262.8	3287.8	3296.1	3296.1	3325.3	3362.6	3387.6	3404.2	3346.0
12.5°	3254.5	3254.5	3254.5	3283.7	3292.0	3296.1	3321.0	3371.0	3387.6	3412.6	3354.3
15°	3233.6	3233.6	3233.6	3262.8	3275.4	3275.4	3304.4	3350.2	3371.0	3395.9	3337.7
17.5°	3196.2	3196.2	3200.3	3225.3	3237.8	3237.8	3266.9	3317.0	3329.4	3358.6	3300.3
20°	3142.1	3142.1	3146.3	3171.3	3183.7	3175.4	3212.9	3254.5	3266.9	3292.0	3233.6
22.5°	3063.0	3063.0	3063.0	3088.1	3096.4	3092.2	3129.7	3167.0	3167.0	3200.3	3138.0
25°	2946.5	2954.8	2946.5	2971.4	2979.7	2975.7	3009.0	3042.2	3033.9	3071.4	3009.0
27.5°	2805.0	2800.8	2800.8	2821.7	2821.7	2817.4	2842.4	2879.9	2871.6	2896.5	2838.3
30°	2609.4	2621.8	2601.1	2630.1	2617.7	2609.4	2626.1	2659.3	2646.8	2667.7	2621.8
32.5°	2384.6	2368.0	2368.0	2368.0	2376.3	2355.6	2372.2	2388.9	2376.3	2397.2	2347.3
35°	2089.2	2093.4	2080.8	2085.1	2089.2	2064.2	2080.8	2097.5	2080.8	2093.4	2047.6
37.5°	1793.7	1797.8	1768.8	1785.4	1768.8	1760.4	1777.1	1785.4	1768.8	1781.2	1731.2
40°	1498.3	1490.0	1485.7	1485.7	1490.0	1469.1	1481.6	1494.0	1481.6	1490.0	1444.1
42.5°	1240.2	1236.1	1227.8	1231.9	1219.3	1215.2	1219.3	1231.9	1219.3	1227.8	1194.3
45°	1015.4	1007.1	994.7	998.7	998.7	978.0	990.4	998.7	986.3	990.4	961.4
47.5°	807.4	794.8	794.8	790.7	790.7	782.4	794.8	790.7	778.2	786.5	757.5
50°	628.4	620.1	620.1	620.1	620.1	607.5	611.8	620.1	607.5	607.5	590.9
52.5°	491.1	478.7	470.3	470.3	470.3	466.1	466.1	470.3	457.8	457.8	453.7
55°	370.3	366.2	353.7	353.7	353.7	341.3	345.4	345.4	341.3	341.3	328.7
57.5°	274.7	262.2	253.8	253.8	245.5	245.5	241.4	245.5	237.2	237.2	228.9
60°	183.0	174.7	170.6	166.4	166.4	162.3	166.4	162.3	162.3	158.1	154.0
62.5°	133.1	124.8	116.5	116.5	116.5	112.4	112.4	112.4	112.4	112.4	108.2
65°	95.8	87.4	87.4	83.2	83.2	79.1	79.1	79.1	79.1	79.1	74.9
67.5°	66.6	62.5	58.2	58.2	58.2	58.2	58.2	58.2	54.2	54.2	54.2
70°	49.9	45.8	41.6	41.6	41.6	41.6	41.6	37.5	41.6	41.6	37.5
72.5°	33.3	33.3	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
75°	25.0	25.0	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
77.5°	16.6	16.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
80°	12.6	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
82.5°	8.3	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
85°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	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: P859205

CATALOG NUMBER: LX4C60D010 EX4C609030 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5	3229.5
2.5°	3308.6	3304.4	3296.1	3308.6	3275.4	3262.8	3258.6	3296.1
5°	3354.3	3346.0	3346.0	3358.6	3321.0	3312.7	3304.4	3346.0
7.5°	3395.9	3387.6	3387.6	3400.2	3366.9	3358.6	3350.2	3391.8
10°	3420.9	3420.9	3420.9	3429.2	3400.2	3391.8	3387.6	3429.2
12.5°	3433.4	3433.4	3429.2	3445.8	3408.5	3408.5	3400.2	3441.8
15°	3416.8	3416.8	3416.8	3429.2	3395.9	3387.6	3387.6	3420.9
17.5°	3375.2	3375.2	3371.0	3383.5	3346.0	3346.0	3341.9	3379.3
20°	3312.7	3312.7	3304.4	3321.0	3283.7	3271.1	3266.9	3304.4
22.5°	3212.9	3208.6	3204.6	3212.9	3179.6	3171.3	3167.0	3200.3
25°	3083.8	3079.8	3071.4	3079.8	3042.2	3029.7	3029.7	3054.6
27.5°	2900.8	2900.8	2888.2	2900.8	2859.0	2854.9	2850.7	2879.9
30°	2676.0	2659.3	2651.0	2667.7	2626.1	2626.1	2617.7	2646.8
32.5°	2397.2	2380.5	2376.3	2384.6	2347.3	2334.7	2351.3	2368.0
35°	2076.8	2080.8	2064.2	2064.2	2030.9	2035.0	2039.2	2064.2
37.5°	1768.8	1760.4	1756.2	1760.4	1735.5	1727.2	1718.8	1743.8
40°	1481.6	1460.8	1456.7	1456.7	1435.8	1431.7	1435.8	1448.4
42.5°	1211.0	1206.9	1190.3	1198.6	1177.7	1186.0	1181.9	1181.9
45°	978.0	982.1	965.5	978.0	961.4	948.8	948.8	957.1
47.5°	774.1	774.1	769.9	769.9	757.5	761.5	753.2	765.8
50°	599.2	599.2	590.9	595.1	586.8	586.8	582.6	586.8
52.5°	457.8	453.7	453.7	449.5	441.1	445.4	449.5	441.1
55°	333.0	337.0	328.7	333.0	324.6	328.7	324.6	328.7
57.5°	228.9	233.1	224.8	233.1	224.8	228.9	224.8	224.8
60°	158.1	158.1	154.0	158.1	154.0	154.0	149.8	158.1
62.5°	108.2	108.2	108.2	108.2	108.2	104.1	108.2	108.2
65°	79.1	74.9	74.9	74.9	74.9	74.9	74.9	74.9
67.5°	54.2	54.2	54.2	54.2	54.2	54.2	54.2	54.2
70°	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5
72.5°	29.2	29.2	29.2	29.2	29.2	29.2	29.2	29.2
75°	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9
77.5°	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
80°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
82.5°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
85°	4.2	4.2	4.2	0.0	4.2	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)