

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: P859410

Luminaire Tested: **LX4C65D010 EX4C659050 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P859410
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-2)
Test Lab: INNOVATION CENTER
Issue Date: 2/14/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C65D010 EX4C659050 4LBLWWH
Description: 4 INCH 6500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

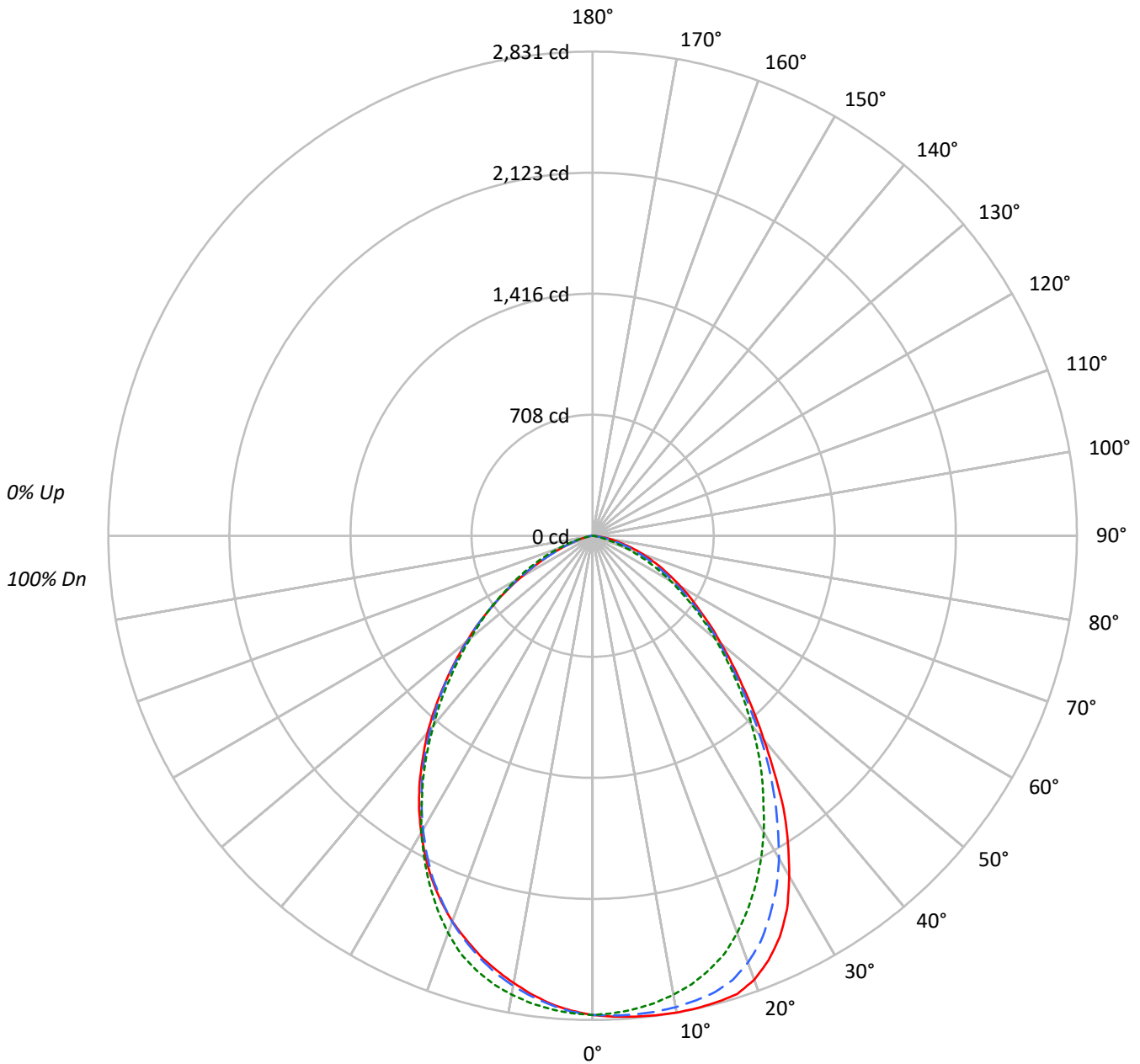
Lumens per Lamp: N/A
Luminaire Lumens: 5280.0 lumens
Efficiency: N/A
Efficacy: 72.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 72.4
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								
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88								
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77								
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68								
4	88	78	70	64	86	77	69	64	74	68	63	72	67	62	70	65	62	60								
5	82	71	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53								
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47								
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43								
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	40	39								
9	62	50	43	38	61	50	42	37	48	42	37	47	41	37	47	41	37	35								
10	59	47	39	34	58	46	39	34	45	39	34	44	38	34	43	38	34	32								

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	344199	344199	344199
5°	348041	342726	339002
10°	353139	339828	331220
15°	358948	334414	323310
20°	361216	323040	313745
25°	350854	305579	300902
30°	326063	284016	284172
35°	291869	258904	264393
40°	249894	232093	240561
45°	215109	204632	212312
50°	186998	178149	183500
55°	164561	153252	151860
60°	146417	127890	117816
65°	128430	102441	85203
70°	110310	72379	57687
75°	89523	41961	33749
80°	64027	18324	16767
85°	24245	7612	7612



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	264.0	5.0
10°-20°	747.4	14.2
20°-30°	1067.3	20.2
30°-40°	1116.5	21.1
40°-50°	935.5	17.7
50°-60°	654.7	12.4
60°-70°	356.5	6.8
70°-80°	123.7	2.3
80°-90°	14.2	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°	2078.8	39.4
0°-40°	3195.3	60.5
0°-60°	4785.5	90.6
0°-90°	5280.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5280.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2802	2802	2802	2802	2802	
5°	2822	2809	2779	2755	2749	270
15°	2822	2763	2629	2554	2542	797
25°	2588	2450	2254	2210	2220	1182
35°	1946	1850	1726	1739	1763	1207
45°	1238	1210	1178	1217	1222	963
55°	768	742	716	716	709	694
65°	442	403	352	296	293	440
75°	189	153	88	71	71	203
85°	17	10	5	5	5	31
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°	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7
2.5°	2814.6	2811.4	2812.5	2812.5	2812.5	2811.4	2812.5	2811.4	2811.4	2810.3	2808.2
5°	2822.2	2820.0	2820.0	2820.0	2818.9	2817.9	2817.9	2816.8	2814.6	2813.6	2809.2
7.5°	2827.6	2825.4	2825.4	2824.3	2823.2	2822.2	2821.1	2817.9	2814.6	2812.5	2807.1
10°	2830.8	2827.6	2827.6	2825.4	2823.2	2822.2	2820.0	2815.7	2811.4	2806.0	2798.5
12.5°	2828.6	2825.4	2824.3	2822.2	2817.9	2815.7	2813.6	2808.2	2800.6	2793.1	2783.4
15°	2822.2	2820.0	2817.9	2814.6	2809.2	2806.0	2803.9	2795.2	2785.5	2774.8	2762.9
17.5°	2809.2	2806.0	2801.7	2797.4	2789.8	2786.6	2781.2	2770.4	2756.4	2741.4	2723.0
20°	2762.9	2760.7	2756.4	2748.9	2737.0	2732.7	2725.2	2711.2	2692.9	2674.5	2655.1
22.5°	2686.4	2683.2	2676.7	2670.2	2659.5	2651.9	2645.4	2626.1	2605.6	2586.2	2567.9
25°	2588.3	2585.1	2576.5	2567.9	2557.1	2544.2	2537.7	2522.6	2502.1	2477.3	2450.4
27.5°	2462.3	2451.5	2448.3	2438.6	2422.4	2418.1	2408.4	2389.0	2369.6	2348.0	2325.4
30°	2298.5	2298.5	2292.0	2287.7	2272.6	2268.3	2257.5	2237.0	2226.3	2196.1	2178.9
32.5°	2125.0	2122.8	2117.4	2114.2	2105.6	2098.0	2087.3	2076.5	2052.8	2037.7	2014.0
35°	1946.1	1933.2	1935.3	1928.9	1923.5	1914.9	1913.8	1901.9	1880.4	1871.7	1850.2
37.5°	1742.4	1737.1	1744.6	1734.9	1729.5	1730.6	1722.0	1714.4	1705.8	1690.7	1686.4
40°	1558.2	1562.5	1561.4	1552.8	1557.1	1551.7	1543.1	1535.5	1531.2	1521.5	1518.3
42.5°	1393.3	1386.8	1384.7	1384.7	1385.8	1385.8	1381.5	1376.1	1376.1	1366.4	1356.7
45°	1238.1	1238.1	1236.0	1242.4	1232.7	1232.7	1229.5	1228.4	1224.1	1222.0	1210.1
47.5°	1104.5	1103.4	1102.4	1101.3	1100.2	1100.2	1093.7	1088.4	1087.3	1080.8	1074.3
50°	978.4	984.9	982.7	977.4	975.2	976.3	972.0	968.7	967.7	956.9	958.0
52.5°	872.8	871.8	873.9	870.7	865.3	866.4	862.1	857.8	853.4	848.1	843.7
55°	768.3	773.7	771.5	768.3	767.2	765.1	761.8	756.5	755.4	743.5	742.4
57.5°	681.0	680.0	677.8	672.4	671.3	668.1	668.1	663.8	657.3	650.9	645.5
60°	595.9	595.9	592.7	591.6	587.3	586.2	585.1	580.8	573.3	567.9	559.3
62.5°	514.0	516.2	514.0	510.8	507.5	503.2	501.1	497.8	491.4	486.0	478.4
65°	441.8	440.7	439.7	435.3	434.3	430.0	428.9	422.4	415.9	411.6	403.0
67.5°	372.8	369.6	369.6	367.5	365.3	362.1	359.9	353.4	345.9	341.6	333.0
70°	307.1	305.0	305.0	305.0	299.6	296.3	295.3	292.0	281.2	276.9	268.3
72.5°	246.8	245.7	244.6	241.4	238.1	238.1	233.8	227.4	222.0	216.6	210.1
75°	188.6	190.7	188.6	184.3	183.2	181.0	177.8	172.4	167.0	160.6	153.0
77.5°	137.9	135.8	133.6	133.6	131.5	127.2	126.1	121.8	115.3	111.0	103.4
80°	90.5	89.4	87.3	85.1	84.1	83.0	81.9	77.6	71.1	67.9	61.4
82.5°	49.6	48.5	48.5	47.4	44.2	44.2	43.1	38.8	35.6	33.4	30.2
85°	17.2	17.2	17.2	16.2	16.2	16.2	15.1	14.0	12.9	11.9	9.7
87.5°	2.2	1.1	2.2	1.1	2.2	1.1	1.1	1.1	1.1	1.1	1.1
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°	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7
2.5°	2806.0	2803.9	2802.8	2801.7	2800.6	2799.5	2798.5	2796.3	2795.2	2794.2	2792.0
5°	2806.0	2801.7	2799.5	2796.3	2794.2	2792.0	2788.8	2785.5	2782.3	2779.1	2775.8
7.5°	2801.7	2795.2	2790.9	2784.5	2782.3	2779.1	2772.6	2768.3	2762.9	2756.4	2748.9
10°	2790.9	2783.4	2774.8	2766.1	2762.9	2757.5	2748.9	2741.4	2732.7	2724.1	2716.6
12.5°	2773.7	2761.8	2751.1	2739.2	2732.7	2727.3	2715.5	2704.7	2693.9	2684.2	2671.3
15°	2747.8	2733.8	2719.8	2703.6	2696.1	2689.6	2672.4	2659.5	2642.2	2629.3	2616.4
17.5°	2705.8	2684.2	2667.0	2646.5	2635.8	2628.2	2613.1	2592.6	2576.5	2562.5	2547.4
20°	2633.6	2613.1	2589.4	2566.8	2554.9	2545.2	2523.7	2502.1	2486.0	2470.9	2454.7
22.5°	2538.8	2512.9	2495.7	2467.6	2458.0	2446.1	2420.2	2400.8	2382.5	2367.4	2352.3
25°	2423.5	2400.8	2377.1	2351.3	2339.4	2325.4	2303.9	2283.4	2271.5	2254.3	2236.0
27.5°	2290.9	2272.6	2243.5	2220.9	2209.0	2198.3	2177.8	2159.5	2142.2	2130.4	2113.1
30°	2150.8	2129.3	2103.4	2079.7	2073.3	2060.3	2042.0	2028.0	2009.7	2002.1	1994.6
32.5°	1996.7	1972.0	1952.6	1937.5	1924.6	1913.8	1904.1	1881.4	1878.2	1858.8	1856.7
35°	1828.6	1817.9	1799.6	1786.6	1775.8	1768.3	1752.1	1741.4	1729.5	1726.3	1718.7
37.5°	1670.2	1657.3	1640.1	1628.2	1620.7	1619.6	1607.7	1601.3	1592.7	1588.3	1579.7
40°	1504.3	1498.9	1483.8	1481.7	1469.8	1468.7	1462.3	1454.7	1447.2	1447.2	1448.3
42.5°	1351.3	1344.8	1338.3	1330.8	1324.3	1324.3	1321.1	1319.0	1316.8	1313.6	1319.0
45°	1208.0	1199.3	1195.0	1187.5	1190.7	1184.3	1182.1	1182.1	1178.9	1177.8	1185.3
47.5°	1074.3	1064.6	1060.3	1058.2	1058.2	1059.3	1049.6	1052.8	1051.7	1053.9	1057.1
50°	952.6	944.0	937.5	937.5	938.6	934.3	929.9	933.2	929.9	932.1	939.6
52.5°	839.4	830.8	827.6	827.6	821.1	820.0	822.2	817.9	819.0	820.0	824.3
55°	734.9	729.5	724.1	718.7	719.8	717.7	713.4	712.3	714.4	715.5	720.9
57.5°	641.2	633.6	626.1	623.9	621.8	621.8	616.4	615.3	617.5	612.1	612.1
60°	551.7	547.4	537.7	534.5	534.5	529.1	524.8	526.9	521.5	520.5	521.5
62.5°	468.7	465.5	459.0	452.6	450.4	448.3	442.9	440.7	438.6	434.3	427.8
65°	396.5	389.0	381.5	377.2	373.9	368.5	365.3	361.0	354.5	352.4	345.9
67.5°	324.4	316.8	309.3	306.0	302.8	299.6	294.2	288.8	281.2	272.6	265.1
70°	260.8	251.1	246.8	238.1	236.0	231.7	224.1	218.7	211.2	201.5	194.0
72.5°	199.4	192.9	186.4	178.9	173.5	170.3	163.8	155.2	146.6	141.2	133.6
75°	143.3	140.1	131.5	122.8	120.7	116.4	108.8	103.4	97.0	88.4	81.9
77.5°	97.0	90.5	85.1	77.6	75.4	71.1	66.8	61.4	57.1	51.7	47.4
80°	57.1	51.7	48.5	43.1	40.9	38.8	35.6	31.2	28.0	25.9	24.8
82.5°	28.0	23.7	22.6	19.4	18.3	17.2	15.1	14.0	11.9	11.9	11.9
85°	9.7	7.5	7.5	6.5	5.4	5.4	5.4	5.4	5.4	5.4	5.4
87.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	2.2	1.1
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°	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7
2.5°	2790.9	2789.8	2788.8	2787.7	2787.7	2786.6	2786.6	2785.5	2785.5	2784.5	2784.5
5°	2771.5	2768.3	2766.1	2764.0	2764.0	2760.7	2758.6	2756.4	2755.4	2755.4	2753.2
7.5°	2744.6	2740.3	2736.0	2732.7	2731.7	2726.3	2722.0	2722.0	2717.6	2715.5	2713.3
10°	2709.0	2701.5	2695.0	2691.8	2687.5	2684.2	2678.9	2675.6	2672.4	2667.0	2665.9
12.5°	2660.5	2655.1	2645.4	2641.1	2639.0	2632.5	2623.9	2619.6	2618.5	2614.2	2611.0
15°	2605.6	2593.7	2585.1	2579.7	2579.7	2568.9	2564.6	2558.2	2553.9	2550.6	2549.5
17.5°	2534.5	2522.6	2514.0	2506.4	2504.3	2495.7	2489.2	2487.0	2481.7	2483.8	2478.4
20°	2442.9	2433.2	2426.7	2417.0	2417.0	2411.6	2409.5	2404.1	2401.9	2399.8	2401.9
22.5°	2344.8	2333.0	2322.2	2321.1	2321.1	2313.6	2312.5	2311.4	2307.1	2310.3	2309.2
25°	2229.5	2220.9	2214.4	2213.3	2213.3	2209.0	2204.7	2206.9	2210.1	2209.0	2212.3
27.5°	2109.9	2101.3	2099.1	2098.0	2095.9	2094.8	2097.0	2097.0	2100.2	2104.5	2108.8
30°	1980.6	1978.4	1975.2	1974.1	1972.0	1977.4	1979.5	1982.7	1981.7	1988.1	1992.4
32.5°	1851.3	1847.0	1845.9	1848.0	1851.3	1850.2	1856.7	1858.8	1861.0	1868.5	1871.7
35°	1720.9	1719.8	1717.7	1717.7	1718.7	1727.4	1727.4	1734.9	1739.2	1741.4	1750.0
37.5°	1580.8	1585.1	1587.3	1590.5	1591.6	1594.8	1597.0	1604.5	1608.8	1613.1	1617.4
40°	1452.6	1450.4	1460.1	1453.6	1455.8	1465.5	1469.8	1468.7	1475.2	1481.7	1486.0
42.5°	1315.7	1319.0	1321.1	1323.3	1328.7	1329.7	1335.1	1342.7	1344.8	1352.4	1354.5
45°	1183.2	1184.3	1188.6	1192.9	1196.1	1204.7	1206.9	1210.1	1216.6	1216.6	1219.8
47.5°	1058.2	1062.5	1062.5	1069.0	1074.3	1073.3	1080.8	1083.0	1081.9	1087.3	1089.4
50°	938.6	945.0	944.0	948.3	950.4	951.5	958.0	960.1	955.8	961.2	962.3
52.5°	824.3	827.6	831.9	833.0	830.8	836.2	834.0	838.4	837.3	841.6	837.3
55°	719.8	718.7	718.7	720.9	718.7	720.9	723.1	718.7	715.5	719.8	718.7
57.5°	615.3	615.3	613.1	616.4	613.1	609.9	608.8	605.6	602.4	602.4	601.3
60°	517.2	515.1	510.8	509.7	509.7	504.3	502.2	497.8	497.8	493.5	489.2
62.5°	425.6	420.3	417.0	417.0	414.9	409.5	399.8	393.3	391.2	384.7	383.6
65°	339.4	334.0	330.8	324.4	319.0	316.8	307.1	299.6	296.3	289.9	290.9
67.5°	260.8	252.2	242.5	238.1	234.9	227.4	224.1	218.7	215.5	215.5	215.5
70°	187.5	180.0	170.3	167.0	164.9	158.4	155.2	154.1	157.3	156.2	157.3
72.5°	126.1	118.5	114.2	112.1	109.9	106.7	108.8	109.9	107.8	108.8	109.9
75°	76.5	74.4	71.1	70.0	70.0	71.1	70.0	70.0	71.1	71.1	72.2
77.5°	44.2	42.0	42.0	40.9	43.1	42.0	42.0	42.0	43.1	43.1	43.1
80°	23.7	23.7	23.7	23.7	24.8	23.7	24.8	24.8	24.8	24.8	24.8
82.5°	11.9	11.9	11.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	11.9
85°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
87.5°	1.1	2.2	2.2	2.2	2.2	2.2	1.1	1.1	1.1	1.1	1.1
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: P859410

CATALOG NUMBER: LX4C65D010 EX4C659050 4LBLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7	2801.7
2.5°	2782.3	2782.3	2782.3	2780.1	2781.2	2781.2	2780.1	2780.1
5°	2752.1	2751.1	2748.9	2748.9	2746.7	2748.9	2747.8	2748.9
7.5°	2711.2	2711.2	2707.9	2707.9	2706.9	2705.8	2704.7	2705.8
10°	2662.7	2662.7	2660.5	2659.5	2660.5	2656.2	2656.2	2655.1
12.5°	2608.8	2606.7	2604.5	2605.6	2604.5	2601.3	2600.2	2601.3
15°	2546.3	2543.1	2544.2	2540.9	2540.9	2539.8	2542.0	2542.0
17.5°	2477.3	2475.2	2473.0	2474.1	2472.0	2473.0	2472.0	2470.9
20°	2400.8	2399.8	2399.8	2395.5	2396.5	2395.5	2396.5	2399.8
22.5°	2312.5	2311.4	2312.5	2309.2	2311.4	2311.4	2314.6	2314.6
25°	2215.5	2214.4	2216.6	2217.7	2218.7	2222.0	2218.7	2219.8
27.5°	2107.7	2111.0	2114.2	2115.3	2119.6	2116.4	2114.2	2117.4
30°	1998.9	1998.9	1997.8	2002.1	2005.4	2008.6	2003.2	2003.2
32.5°	1873.9	1879.3	1879.3	1880.4	1883.6	1883.6	1883.6	1887.9
35°	1754.3	1757.5	1758.6	1754.3	1756.4	1755.4	1762.9	1762.9
37.5°	1620.7	1620.7	1621.8	1629.3	1629.3	1626.1	1628.2	1628.2
40°	1493.5	1494.6	1490.3	1492.4	1497.8	1495.7	1497.8	1500.0
42.5°	1354.5	1362.1	1357.7	1359.9	1358.8	1359.9	1361.0	1361.0
45°	1222.0	1224.1	1224.1	1225.2	1227.4	1229.5	1223.0	1222.0
47.5°	1092.7	1093.7	1097.0	1091.6	1098.0	1091.6	1098.0	1090.5
50°	962.3	966.6	963.4	965.5	962.3	962.3	961.2	960.1
52.5°	838.4	837.3	837.3	836.2	836.2	838.4	836.2	839.4
55°	714.4	715.5	713.4	712.3	711.2	714.4	711.2	709.0
57.5°	597.0	599.1	594.8	597.0	589.4	592.7	593.7	594.8
60°	488.1	484.9	484.9	480.6	480.6	483.8	479.5	479.5
62.5°	378.2	380.4	377.2	381.5	381.5	385.8	383.6	385.8
65°	289.9	290.9	292.0	292.0	292.0	298.5	296.3	293.1
67.5°	218.7	219.8	220.9	219.8	223.1	220.9	220.9	222.0
70°	158.4	159.5	160.6	160.6	159.5	160.6	160.6	160.6
72.5°	109.9	111.0	109.9	111.0	112.1	111.0	111.0	112.1
75°	72.2	72.2	71.1	71.1	71.1	71.1	72.2	71.1
77.5°	42.0	43.1	42.0	43.1	43.1	43.1	43.1	43.1
80°	24.8	24.8	24.8	23.7	24.8	24.8	24.8	23.7
82.5°	12.9	12.9	11.9	11.9	12.9	12.9	12.9	12.9
85°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
87.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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)