

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: P859479

Luminaire Tested: **LX4C70D010 EX4C709035 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P859479
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: LX4C70D010 EX4C709035 4LBLWWH
Description: 4 INCH 7000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

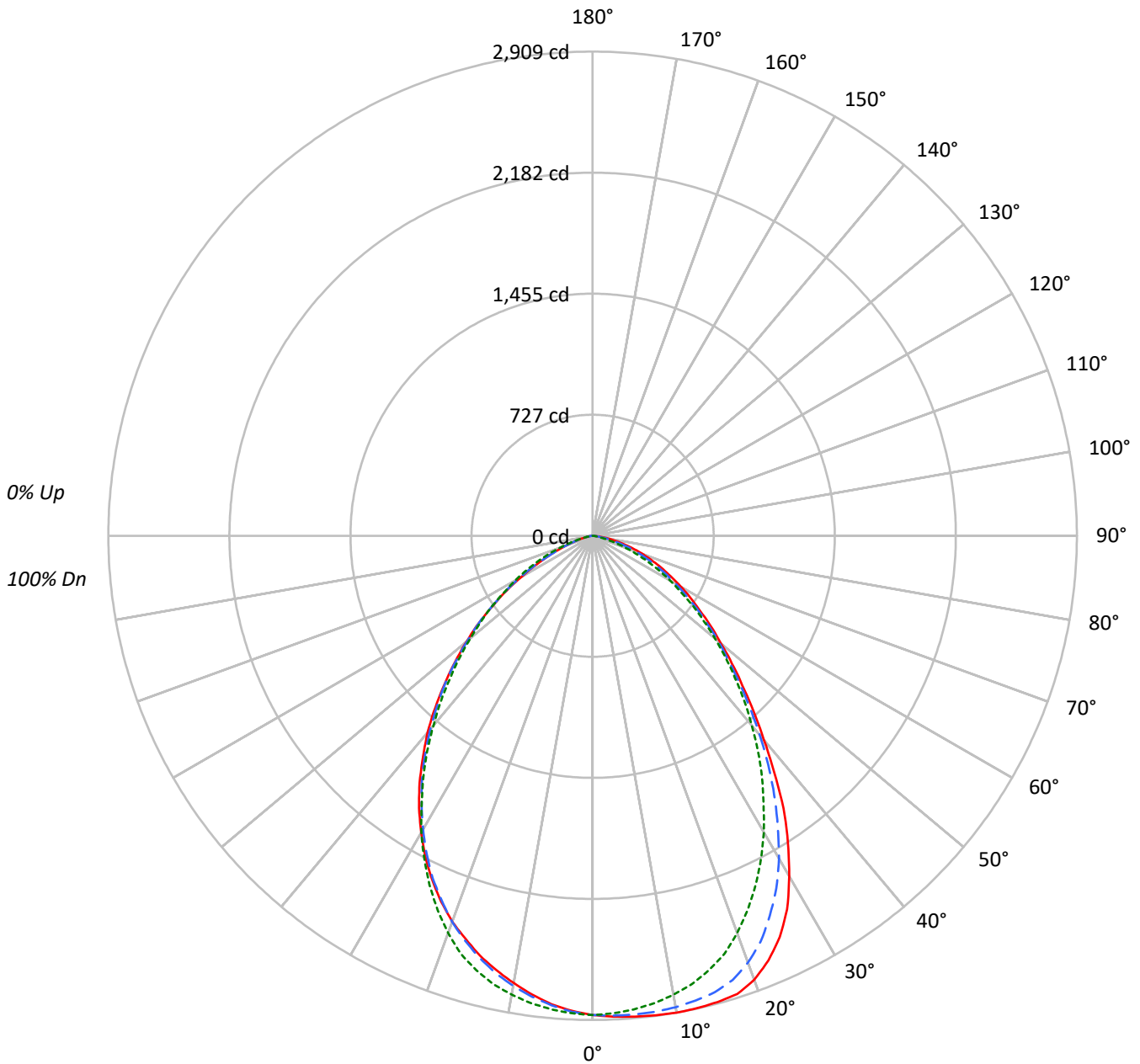
Lumens per Lamp: N/A
Luminaire Lumens: 5426.0 lumens
Efficiency: N/A
Efficacy: 69.6 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 78
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									
RC	80									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°	353720	353720	353720
5°	357661	352197	348374
10°	362906	349221	340389
15°	368869	343660	332251
20°	371204	331970	322413
25°	360560	314024	309225
30°	335071	291875	292031
35°	299938	266058	271712
40°	256807	238508	247216
45°	221068	210296	218184
50°	192177	183080	188584
55°	169123	157493	156079
60°	150471	131429	121084
65°	131976	105261	87558
70°	113363	74390	59268
75°	91991	43100	34698
80°	65796	18819	17263
85°	24950	7753	7753



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.3	5.0
10°-20°	768.1	14.2
20°-30°	1096.8	20.2
30°-40°	1147.4	21.1
40°-50°	961.4	17.7
50°-60°	672.8	12.4
60°-70°	366.4	6.8
70°-80°	127.2	2.3
80°-90°	14.6	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°	2136.2	39.4
0°-40°	3283.6	60.5
0°-60°	4917.9	90.6
0°-90°	5426.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5426.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2879	2879	2879	2879	2879	
5°	2900	2887	2856	2832	2825	277
15°	2900	2839	2702	2624	2612	819
25°	2660	2518	2317	2271	2281	1215
35°	2000	1901	1774	1787	1812	1240
45°	1272	1244	1210	1250	1256	989
55°	790	763	735	735	729	713
65°	454	414	362	304	301	452
75°	194	157	91	73	73	209
85°	18	10	6	6	6	32
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°	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2
2.5°	2892.5	2889.1	2890.2	2890.2	2890.2	2889.1	2890.2	2889.1	2889.1	2888.0	2885.8
5°	2900.2	2898.0	2898.0	2898.0	2896.9	2895.8	2895.8	2894.7	2892.5	2891.3	2886.9
7.5°	2905.7	2903.5	2903.5	2902.4	2901.3	2900.2	2899.1	2895.8	2892.5	2890.2	2884.7
10°	2909.1	2905.7	2905.7	2903.5	2901.3	2900.2	2898.0	2893.6	2889.1	2883.6	2875.8
12.5°	2906.9	2903.5	2902.4	2900.2	2895.8	2893.6	2891.3	2885.8	2878.1	2870.3	2860.3
15°	2900.2	2898.0	2895.8	2892.5	2886.9	2883.6	2881.4	2872.5	2862.6	2851.5	2839.3
17.5°	2886.9	2883.6	2879.2	2874.7	2867.0	2863.7	2858.1	2847.1	2832.7	2817.2	2798.3
20°	2839.3	2837.1	2832.7	2824.9	2812.7	2808.3	2800.5	2786.1	2767.3	2748.5	2728.6
22.5°	2760.7	2757.4	2750.7	2744.1	2733.0	2725.2	2718.6	2698.7	2677.6	2657.7	2638.9
25°	2659.9	2656.6	2647.7	2638.9	2627.8	2614.5	2607.9	2592.4	2571.3	2545.8	2518.2
27.5°	2530.3	2519.3	2515.9	2506.0	2489.4	2484.9	2475.0	2455.0	2435.1	2413.0	2389.7
30°	2362.0	2362.0	2355.4	2351.0	2335.4	2331.0	2319.9	2298.9	2287.8	2256.8	2239.1
32.5°	2183.7	2181.5	2176.0	2172.7	2163.8	2156.1	2145.0	2133.9	2109.5	2094.0	2069.7
35°	1999.9	1986.6	1988.8	1982.2	1976.7	1967.8	1966.7	1954.5	1932.4	1923.5	1901.4
37.5°	1790.6	1785.1	1792.8	1782.9	1777.3	1778.4	1769.6	1761.8	1753.0	1737.5	1733.0
40°	1601.3	1605.7	1604.6	1595.7	1600.2	1594.6	1585.8	1578.0	1573.6	1563.6	1560.3
42.5°	1431.8	1425.2	1423.0	1423.0	1424.1	1424.1	1419.7	1414.1	1414.1	1404.1	1394.2
45°	1272.4	1272.4	1270.2	1276.8	1266.8	1266.8	1263.5	1262.4	1258.0	1255.8	1243.6
47.5°	1135.1	1133.9	1132.8	1131.7	1130.6	1130.6	1124.0	1118.4	1117.3	1110.7	1104.1
50°	1005.5	1012.1	1009.9	1004.4	1002.2	1003.3	998.8	995.5	994.4	983.3	984.5
52.5°	897.0	895.9	898.1	894.8	889.2	890.3	885.9	881.5	877.0	871.5	867.1
55°	789.6	795.1	792.9	789.6	788.4	786.2	782.9	777.4	776.3	764.1	763.0
57.5°	699.9	698.8	696.5	691.0	689.9	686.6	686.6	682.1	675.5	668.9	663.3
60°	612.4	612.4	609.1	607.9	603.5	602.4	601.3	596.9	589.1	583.6	574.7
62.5°	528.2	530.4	528.2	524.9	521.6	517.1	514.9	511.6	505.0	499.4	491.7
65°	454.0	452.9	451.8	447.4	446.3	441.8	440.7	434.1	427.4	423.0	414.2
67.5°	383.2	379.8	379.8	377.6	375.4	372.1	369.9	363.2	355.5	351.0	342.2
70°	315.6	313.4	313.4	313.4	307.8	304.5	303.4	300.1	289.0	284.6	275.7
72.5°	253.6	252.5	251.4	248.1	244.7	244.7	240.3	233.7	228.1	222.6	215.9
75°	193.8	196.0	193.8	189.4	188.3	186.0	182.7	177.2	171.6	165.0	157.2
77.5°	141.7	139.5	137.3	137.3	135.1	130.7	129.6	125.1	118.5	114.1	106.3
80°	93.0	91.9	89.7	87.5	86.4	85.3	84.2	79.7	73.1	69.8	63.1
82.5°	50.9	49.8	49.8	48.7	45.4	45.4	44.3	39.9	36.5	34.3	31.0
85°	17.7	17.7	17.7	16.6	16.6	16.6	15.5	14.4	13.3	12.2	10.0
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°	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2
2.5°	2883.6	2881.4	2880.3	2879.2	2878.1	2877.0	2875.8	2873.6	2872.5	2871.4	2869.2
5°	2883.6	2879.2	2877.0	2873.6	2871.4	2869.2	2865.9	2862.6	2859.2	2855.9	2852.6
7.5°	2879.2	2872.5	2868.1	2861.4	2859.2	2855.9	2849.3	2844.8	2839.3	2832.7	2824.9
10°	2868.1	2860.3	2851.5	2842.6	2839.3	2833.8	2824.9	2817.2	2808.3	2799.4	2791.7
12.5°	2850.4	2838.2	2827.1	2814.9	2808.3	2802.8	2790.6	2779.5	2768.4	2758.5	2745.2
15°	2823.8	2809.4	2795.0	2778.4	2770.6	2764.0	2746.3	2733.0	2715.3	2702.0	2688.7
17.5°	2780.6	2758.5	2740.7	2719.7	2708.6	2700.9	2685.4	2664.3	2647.7	2633.3	2617.8
20°	2706.4	2685.4	2661.0	2637.8	2625.6	2615.6	2593.5	2571.3	2554.7	2539.2	2522.6
22.5°	2609.0	2582.4	2564.7	2535.9	2525.9	2513.7	2487.2	2467.2	2448.4	2432.9	2417.4
25°	2490.5	2467.2	2442.9	2416.3	2404.1	2389.7	2367.6	2346.5	2334.3	2316.6	2297.8
27.5°	2354.3	2335.4	2305.5	2282.3	2270.1	2259.0	2238.0	2219.2	2201.5	2189.3	2171.6
30°	2210.3	2188.2	2161.6	2137.2	2130.6	2117.3	2098.5	2084.1	2065.2	2057.5	2049.7
32.5°	2052.0	2026.5	2006.6	1991.1	1977.8	1966.7	1956.7	1933.5	1930.1	1910.2	1908.0
35°	1879.2	1868.1	1849.3	1836.0	1824.9	1817.2	1800.6	1789.5	1777.3	1774.0	1766.3
37.5°	1716.4	1703.1	1685.4	1673.2	1665.5	1664.4	1652.2	1645.6	1636.7	1632.3	1623.4
40°	1545.9	1540.4	1524.9	1522.6	1510.5	1509.3	1502.7	1495.0	1487.2	1487.2	1488.3
42.5°	1388.6	1382.0	1375.4	1367.6	1361.0	1361.0	1357.6	1355.4	1353.2	1349.9	1355.4
45°	1241.4	1232.5	1228.1	1220.3	1223.6	1217.0	1214.8	1214.8	1211.5	1210.4	1218.1
47.5°	1104.1	1094.1	1089.7	1087.4	1087.4	1088.5	1078.6	1081.9	1080.8	1083.0	1086.3
50°	978.9	970.1	963.4	963.4	964.5	960.1	955.7	959.0	955.7	957.9	965.6
52.5°	862.6	853.8	850.5	850.5	843.8	842.7	844.9	840.5	841.6	842.7	847.1
55°	755.2	749.7	744.2	738.6	739.7	737.5	733.1	732.0	734.2	735.3	740.8
57.5°	658.9	651.1	643.4	641.2	639.0	639.0	633.4	632.3	634.5	629.0	629.0
60°	567.0	562.5	552.6	549.3	549.3	543.7	539.3	541.5	536.0	534.9	536.0
62.5°	481.7	478.4	471.7	465.1	462.9	460.7	455.1	452.9	450.7	446.3	439.6
65°	407.5	399.8	392.0	387.6	384.3	378.7	375.4	371.0	364.3	362.1	355.5
67.5°	333.3	325.6	317.8	314.5	311.2	307.8	302.3	296.8	289.0	280.2	272.4
70°	268.0	258.0	253.6	244.7	242.5	238.1	230.3	224.8	217.0	207.1	199.3
72.5°	204.9	198.2	191.6	183.8	178.3	175.0	168.3	159.5	150.6	145.1	137.3
75°	147.3	144.0	135.1	126.2	124.0	119.6	111.8	106.3	99.7	90.8	84.2
77.5°	99.7	93.0	87.5	79.7	77.5	73.1	68.7	63.1	58.7	53.2	48.7
80°	58.7	53.2	49.8	44.3	42.1	39.9	36.5	32.1	28.8	26.6	25.5
82.5°	28.8	24.4	23.3	19.9	18.8	17.7	15.5	14.4	12.2	12.2	12.2
85°	10.0	7.8	7.8	6.6	5.5	5.5	5.5	5.5	5.5	5.5	5.5
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°	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2
2.5°	2868.1	2867.0	2865.9	2864.8	2864.8	2863.7	2863.7	2862.6	2862.6	2861.4	2861.4
5°	2848.2	2844.8	2842.6	2840.4	2840.4	2837.1	2834.9	2832.7	2831.6	2831.6	2829.3
7.5°	2820.5	2816.0	2811.6	2808.3	2807.2	2801.7	2797.2	2797.2	2792.8	2790.6	2788.4
10°	2783.9	2776.2	2769.5	2766.2	2761.8	2758.5	2752.9	2749.6	2746.3	2740.7	2739.6
12.5°	2734.1	2728.6	2718.6	2714.2	2712.0	2705.3	2696.5	2692.0	2690.9	2686.5	2683.2
15°	2677.6	2665.4	2656.6	2651.0	2651.0	2640.0	2635.5	2628.9	2624.5	2621.2	2620.0
17.5°	2604.5	2592.4	2583.5	2575.7	2573.5	2564.7	2558.0	2555.8	2550.3	2552.5	2547.0
20°	2510.4	2500.4	2493.8	2483.8	2483.8	2478.3	2476.1	2470.5	2468.3	2466.1	2468.3
22.5°	2409.6	2397.5	2386.4	2385.3	2385.3	2377.5	2376.4	2375.3	2370.9	2374.2	2373.1
25°	2291.2	2282.3	2275.6	2274.5	2274.5	2270.1	2265.7	2267.9	2271.2	2270.1	2273.4
27.5°	2168.2	2159.4	2157.2	2156.1	2153.8	2152.7	2154.9	2154.9	2158.3	2162.7	2167.1
30°	2035.4	2033.1	2029.8	2028.7	2026.5	2032.0	2034.2	2037.6	2036.5	2043.1	2047.5
32.5°	1902.5	1898.0	1896.9	1899.1	1902.5	1901.4	1908.0	1910.2	1912.4	1920.2	1923.5
35°	1768.5	1767.4	1765.2	1765.2	1766.3	1775.1	1775.1	1782.9	1787.3	1789.5	1798.4
37.5°	1624.5	1628.9	1631.2	1634.5	1635.6	1638.9	1641.1	1648.9	1653.3	1657.7	1662.2
40°	1492.7	1490.5	1500.5	1493.8	1496.1	1506.0	1510.5	1509.3	1516.0	1522.6	1527.1
42.5°	1352.1	1355.4	1357.6	1359.9	1365.4	1366.5	1372.0	1379.8	1382.0	1389.8	1392.0
45°	1215.9	1217.0	1221.4	1225.9	1229.2	1238.0	1240.3	1243.6	1250.2	1250.2	1253.5
47.5°	1087.4	1091.9	1091.9	1098.5	1104.1	1102.9	1110.7	1112.9	1111.8	1117.3	1119.6
50°	964.5	971.2	970.1	974.5	976.7	977.8	984.5	986.7	982.2	987.8	988.9
52.5°	847.1	850.5	854.9	856.0	853.8	859.3	857.1	861.5	860.4	864.9	860.4
55°	739.7	738.6	738.6	740.8	738.6	740.8	743.0	738.6	735.3	739.7	738.6
57.5°	632.3	632.3	630.1	633.4	630.1	626.8	625.7	622.3	619.0	619.0	617.9
60°	531.5	529.3	524.9	523.8	523.8	518.3	516.0	511.6	511.6	507.2	502.7
62.5°	437.4	431.9	428.6	428.6	426.3	420.8	410.8	404.2	402.0	395.3	394.2
65°	348.8	343.3	340.0	333.3	327.8	325.6	315.6	307.8	304.5	297.9	299.0
67.5°	268.0	259.1	249.2	244.7	241.4	233.7	230.3	224.8	221.5	221.5	221.5
70°	192.7	184.9	175.0	171.6	169.4	162.8	159.5	158.4	161.7	160.6	161.7
72.5°	129.6	121.8	117.4	115.2	113.0	109.6	111.8	113.0	110.7	111.8	113.0
75°	78.6	76.4	73.1	72.0	72.0	73.1	72.0	72.0	73.1	73.1	74.2
77.5°	45.4	43.2	43.2	42.1	44.3	43.2	43.2	43.2	44.3	44.3	44.3
80°	24.4	24.4	24.4	24.4	25.5	24.4	25.5	25.5	25.5	25.5	25.5
82.5°	12.2	12.2	12.2	13.3	13.3	13.3	13.3	13.3	13.3	13.3	12.2
85°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
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: P859479

CATALOG NUMBER: LX4C70D010 EX4C709035 4LBLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2	2879.2
2.5°	2859.2	2859.2	2859.2	2857.0	2858.1	2858.1	2857.0	2857.0
5°	2828.2	2827.1	2824.9	2824.9	2822.7	2824.9	2823.8	2824.9
7.5°	2786.1	2786.1	2782.8	2782.8	2781.7	2780.6	2779.5	2780.6
10°	2736.3	2736.3	2734.1	2733.0	2734.1	2729.7	2729.7	2728.6
12.5°	2680.9	2678.7	2676.5	2677.6	2676.5	2673.2	2672.1	2673.2
15°	2616.7	2613.4	2614.5	2611.2	2611.2	2610.1	2612.3	2612.3
17.5°	2545.8	2543.6	2541.4	2542.5	2540.3	2541.4	2540.3	2539.2
20°	2467.2	2466.1	2466.1	2461.7	2462.8	2461.7	2462.8	2466.1
22.5°	2376.4	2375.3	2376.4	2373.1	2375.3	2375.3	2378.6	2378.6
25°	2276.8	2275.6	2277.9	2279.0	2280.1	2283.4	2280.1	2281.2
27.5°	2166.0	2169.3	2172.7	2173.8	2178.2	2174.9	2172.7	2176.0
30°	2054.2	2054.2	2053.1	2057.5	2060.8	2064.1	2058.6	2058.6
32.5°	1925.7	1931.3	1931.3	1932.4	1935.7	1935.7	1935.7	1940.1
35°	1802.8	1806.1	1807.2	1802.8	1805.0	1803.9	1811.7	1811.7
37.5°	1665.5	1665.5	1666.6	1674.3	1674.3	1671.0	1673.2	1673.2
40°	1534.8	1535.9	1531.5	1533.7	1539.2	1537.0	1539.2	1541.5
42.5°	1392.0	1399.7	1395.3	1397.5	1396.4	1397.5	1398.6	1398.6
45°	1255.8	1258.0	1258.0	1259.1	1261.3	1263.5	1256.9	1255.8
47.5°	1122.9	1124.0	1127.3	1121.8	1128.4	1121.8	1128.4	1120.7
50°	988.9	993.3	990.0	992.2	988.9	988.9	987.8	986.7
52.5°	861.5	860.4	860.4	859.3	859.3	861.5	859.3	862.6
55°	734.2	735.3	733.1	732.0	730.9	734.2	730.9	728.7
57.5°	613.5	615.7	611.3	613.5	605.7	609.1	610.2	611.3
60°	501.6	498.3	498.3	493.9	493.9	497.2	492.8	492.8
62.5°	388.7	390.9	387.6	392.0	392.0	396.4	394.2	396.4
65°	297.9	299.0	300.1	300.1	300.1	306.7	304.5	301.2
67.5°	224.8	225.9	227.0	225.9	229.2	227.0	227.0	228.1
70°	162.8	163.9	165.0	165.0	163.9	165.0	165.0	165.0
72.5°	113.0	114.1	113.0	114.1	115.2	114.1	114.1	115.2
75°	74.2	74.2	73.1	73.1	73.1	73.1	74.2	73.1
77.5°	43.2	44.3	43.2	44.3	44.3	44.3	44.3	44.3
80°	25.5	25.5	25.5	24.4	25.5	25.5	25.5	24.4
82.5°	13.3	13.3	12.2	12.2	13.3	13.3	13.3	13.3
85°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
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



Report Generated By 670246072 / DESKTOP-50001EG





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













(END OF REPORT)