

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: P859499

Luminaire Tested: **LX4C70D010 EX4C709040 4LBLWW***

Issue Date: 2/9/2022

Test Information

Test Method: LM-79-08
Report Number: P859499
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-1)
Test Lab: INNOVATION CENTER
Issue Date: 2/9/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C70D010 EX4C709040 4LBLWW*
Description: 4 INCH 7000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LRLWW TRIM WITH * FINISH
Light Source: -
Ballast/Driver: -

Summary

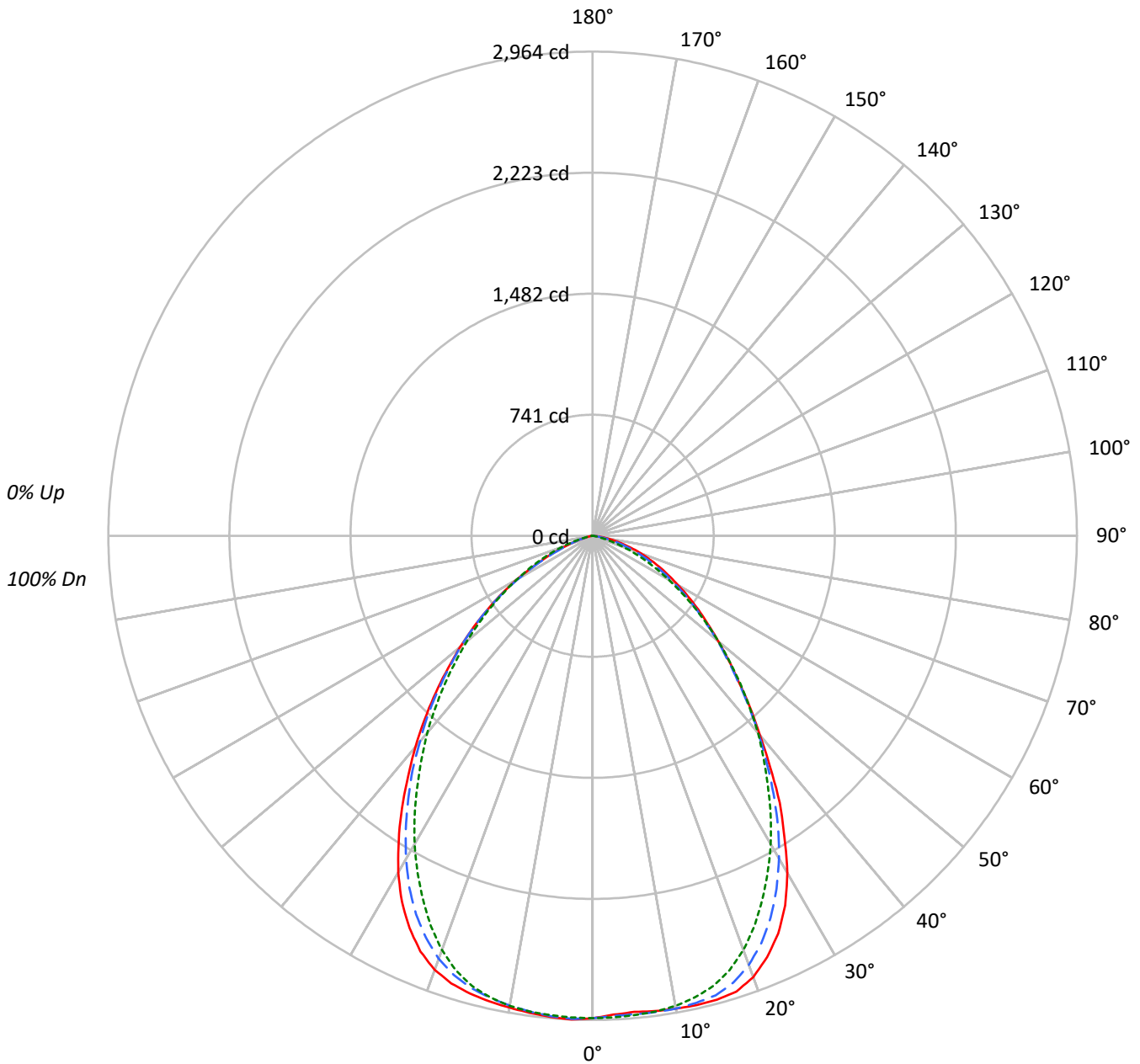
Lumens per Lamp: N/A
Luminaire Lumens: 5662.0 lumens
Efficiency: N/A
Efficacy: 72.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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				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	107	104	101	109	105	102	99	101	99	96	97	95	93	94	92	91	89			89
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78			78
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68			68
4	88	78	71	65	86	77	70	65	75	69	64	72	67	63	70	66	62	60			60
5	82	71	63	57	80	70	63	57	68	61	57	66	60	56	64	59	55	54			54
6	76	65	57	51	75	64	56	51	62	56	51	61	55	50	59	54	50	48			48
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	43			43
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	50	45	41	39			39
9	63	51	43	38	61	50	43	38	49	42	38	48	42	38	47	41	37	36			36
10	59	47	40	35	58	46	39	35	45	39	35	45	39	35	44	38	34	33			33

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	362823	362823	362823
5°	360793	363247	364616
10°	366761	364541	365925
15°	373931	362929	368996
20°	375819	352757	369583
25°	364247	333137	359285
30°	338092	309139	337454
35°	299383	280426	305037
40°	255219	252557	270519
45°	219279	221780	235645
50°	191394	191833	202001
55°	169123	161991	167474
60°	148235	132166	131625
65°	131220	102529	91220
70°	111927	70511	54167
75°	90519	37879	24730
80°	61976	9410	6297
85°	18747	3101	3101



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.7	5.0
10°-20°	812.5	14.4
20°-30°	1174.0	20.7
30°-40°	1213.7	21.4
40°-50°	1002.9	17.7
50°-60°	692.1	12.2
60°-70°	362.3	6.4
70°-80°	114.1	2.0
80°-90°	9.7	0.2
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°	2267.2	40.0
0°-40°	3480.9	61.5
0°-60°	5175.9	91.4
0°-90°	5662.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5662.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2953	2953	2953	2953	2953	
5°	2926	2940	2946	2951	2957	280
15°	2940	2912	2854	2867	2901	829
25°	2687	2578	2458	2556	2650	1227
35°	1996	1930	1870	1967	2034	1239
45°	1262	1256	1276	1335	1356	984
55°	790	765	756	777	782	709
65°	451	409	353	293	314	447
75°	191	150	80	54	52	204
85°	13	7	2	2	2	28
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°	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3
2.5°	2934.4	2935.5	2935.5	2937.8	2937.8	2937.8	2938.9	2938.9	2940.0	2941.1	2942.2
5°	2925.6	2925.6	2927.8	2928.9	2931.1	2932.2	2934.4	2935.5	2937.8	2938.9	2940.0
7.5°	2934.4	2934.4	2935.5	2936.7	2936.7	2937.8	2937.8	2938.9	2940.0	2941.1	2941.1
10°	2940.0	2940.0	2940.0	2940.0	2941.1	2941.1	2941.1	2940.0	2940.0	2940.0	2938.9
12.5°	2942.2	2942.2	2941.1	2940.0	2941.1	2940.0	2940.0	2936.7	2934.4	2932.2	2928.9
15°	2940.0	2940.0	2938.9	2937.8	2936.7	2934.4	2933.3	2927.8	2923.3	2916.7	2912.3
17.5°	2925.6	2923.3	2921.1	2918.9	2914.5	2911.1	2908.9	2898.9	2891.2	2880.1	2867.9
20°	2874.6	2872.3	2869.0	2863.5	2857.9	2853.5	2846.8	2832.4	2824.6	2808.0	2795.8
22.5°	2791.4	2789.2	2790.3	2780.3	2769.2	2762.5	2758.1	2745.9	2732.6	2711.5	2698.2
25°	2687.1	2680.5	2680.5	2664.9	2659.4	2655.0	2649.4	2635.0	2615.0	2596.2	2578.4
27.5°	2551.8	2543.0	2538.5	2536.3	2523.0	2513.0	2505.3	2494.2	2477.5	2460.9	2436.5
30°	2383.3	2382.2	2376.6	2366.6	2356.6	2352.2	2343.3	2324.5	2309.0	2296.8	2281.2
32.5°	2184.7	2183.6	2183.6	2183.6	2177.0	2175.9	2162.6	2152.6	2140.4	2121.5	2111.6
35°	1996.2	1995.1	1996.2	1979.6	1975.1	1971.8	1970.7	1964.1	1947.4	1938.5	1929.7
37.5°	1783.3	1786.6	1784.4	1780.0	1785.5	1775.5	1783.3	1768.9	1762.2	1760.0	1750.0
40°	1591.4	1600.3	1591.4	1592.5	1598.1	1588.1	1588.1	1585.9	1581.4	1579.2	1577.0
42.5°	1427.3	1416.2	1422.9	1417.3	1422.9	1419.5	1414.0	1417.3	1418.4	1414.0	1412.9
45°	1262.1	1264.3	1266.5	1263.2	1263.2	1259.8	1268.7	1263.2	1263.2	1264.3	1256.5
47.5°	1127.9	1124.5	1126.8	1124.5	1125.6	1123.4	1125.6	1126.8	1124.5	1124.5	1117.9
50°	1001.4	999.2	1007.0	1000.3	1000.3	999.2	1000.3	998.1	994.8	994.8	997.0
52.5°	891.6	887.2	886.1	891.6	883.9	883.9	885.0	882.8	878.3	876.1	870.6
55°	789.6	788.5	789.6	785.2	783.0	783.0	777.4	775.2	774.1	768.5	765.2
57.5°	694.2	690.9	692.0	690.9	686.5	685.4	680.9	680.9	676.5	672.1	666.5
60°	603.3	603.3	606.6	602.2	598.9	596.6	594.4	592.2	584.4	576.7	570.0
62.5°	522.3	523.5	522.3	519.0	516.8	514.6	512.4	505.7	499.1	494.6	486.9
65°	451.4	450.3	446.9	444.7	439.2	439.2	434.7	431.4	423.6	417.0	409.2
67.5°	378.2	376.0	376.0	376.0	369.3	368.2	366.0	359.3	352.7	343.8	337.1
70°	311.6	313.8	310.5	307.2	303.9	302.8	299.4	292.8	285.0	276.1	270.6
72.5°	248.4	250.6	247.3	246.2	239.5	237.3	236.2	230.7	221.8	216.3	207.4
75°	190.7	191.9	189.6	187.4	183.0	181.9	176.3	171.9	166.4	157.5	149.7
77.5°	137.5	135.3	135.3	130.9	126.4	126.4	125.3	118.7	110.9	104.2	97.6
80°	87.6	86.5	83.2	81.0	77.6	76.5	75.4	69.9	64.3	59.9	55.5
82.5°	44.4	43.3	42.1	41.0	38.8	36.6	37.7	33.3	31.1	26.6	23.3
85°	13.3	14.4	14.4	13.3	12.2	12.2	12.2	11.1	8.9	7.8	6.7
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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3
2.5°	2943.3	2944.4	2945.5	2946.6	2946.6	2947.7	2948.9	2950.0	2951.1	2951.1	2952.2
5°	2941.1	2943.3	2943.3	2944.4	2944.4	2944.4	2945.5	2945.5	2945.5	2945.5	2946.6
7.5°	2942.2	2942.2	2942.2	2941.1	2941.1	2940.0	2940.0	2940.0	2937.8	2937.8	2937.8
10°	2936.7	2935.5	2934.4	2932.2	2931.1	2930.0	2927.8	2925.6	2923.3	2922.2	2920.0
12.5°	2925.6	2921.1	2916.7	2912.3	2910.0	2908.9	2904.5	2901.2	2897.8	2894.5	2892.3
15°	2903.4	2896.7	2889.0	2880.1	2877.9	2875.7	2867.9	2861.2	2856.8	2853.5	2847.9
17.5°	2859.0	2845.7	2836.8	2823.5	2818.0	2815.8	2803.6	2796.9	2789.2	2786.9	2782.5
20°	2780.3	2768.1	2751.5	2739.3	2732.6	2725.9	2716.0	2707.1	2698.2	2698.2	2692.7
22.5°	2681.6	2666.1	2645.0	2629.5	2628.4	2615.0	2606.2	2596.2	2592.9	2586.2	2586.2
25°	2557.4	2544.1	2520.8	2507.5	2500.8	2497.5	2483.1	2469.8	2463.1	2457.6	2462.0
27.5°	2419.9	2399.9	2382.2	2365.5	2360.0	2353.3	2340.0	2334.5	2322.3	2321.2	2320.0
30°	2262.4	2242.4	2224.7	2216.9	2205.8	2200.3	2190.3	2183.6	2179.2	2179.2	2177.0
32.5°	2097.1	2079.4	2070.5	2053.9	2048.3	2040.6	2033.9	2027.3	2029.5	2027.3	2028.4
35°	1918.6	1914.1	1897.5	1887.5	1887.5	1886.4	1875.3	1870.9	1868.7	1869.8	1875.3
37.5°	1748.9	1735.6	1724.5	1717.9	1723.4	1716.7	1715.6	1715.6	1722.3	1717.9	1726.7
40°	1568.1	1567.0	1562.6	1564.8	1565.9	1558.2	1560.4	1561.5	1565.9	1574.8	1575.9
42.5°	1410.7	1409.6	1409.6	1409.6	1407.3	1402.9	1407.3	1415.1	1414.0	1420.6	1426.2
45°	1258.7	1256.5	1260.9	1257.6	1264.3	1266.5	1263.2	1265.4	1272.0	1276.5	1285.3
47.5°	1120.1	1120.1	1121.2	1123.4	1116.8	1122.3	1124.5	1129.0	1132.3	1134.5	1139.0
50°	991.5	991.5	989.2	989.2	989.2	992.6	988.1	993.7	994.8	1003.7	1009.2
52.5°	872.8	867.2	870.6	868.4	863.9	861.7	863.9	865.0	871.7	873.9	880.6
55°	759.7	759.7	750.8	748.6	751.9	750.8	749.7	749.7	753.0	756.3	761.9
57.5°	659.9	653.2	646.6	645.4	642.1	643.2	643.2	642.1	639.9	641.0	642.1
60°	565.6	561.2	551.2	551.2	550.1	549.0	543.4	542.3	536.8	537.9	533.4
62.5°	479.1	476.9	463.6	459.1	459.1	455.8	450.3	449.1	441.4	441.4	436.9
65°	401.5	394.8	387.0	379.3	379.3	374.8	371.5	361.5	356.0	352.7	346.0
67.5°	330.5	320.5	312.7	306.1	301.7	300.5	292.8	286.1	277.3	271.7	261.7
70°	261.7	254.0	246.2	239.5	235.1	230.7	222.9	212.9	206.3	196.3	189.6
72.5°	197.4	190.7	184.1	175.2	169.7	166.4	158.6	149.7	138.6	132.0	123.1
75°	142.0	134.2	125.3	117.6	114.2	110.9	102.0	95.4	87.6	79.8	71.0
77.5°	92.0	83.2	76.5	67.6	66.5	64.3	55.5	48.8	43.3	38.8	33.3
80°	48.8	44.4	38.8	33.3	31.1	27.7	23.3	20.0	16.6	13.3	11.1
82.5°	21.1	17.7	14.4	12.2	11.1	10.0	7.8	6.7	5.5	5.5	4.4
85°	5.5	4.4	4.4	3.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2
87.5°	0.0	0.0	0.0	0.0	1.1	1.1	1.1	0.0	1.1	1.1	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°	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3
2.5°	2953.3	2954.4	2955.5	2955.5	2956.6	2957.7	2957.7	2958.8	2959.9	2961.1	2961.1
5°	2947.7	2947.7	2947.7	2948.9	2948.9	2948.9	2948.9	2951.1	2951.1	2952.2	2953.3
7.5°	2936.7	2936.7	2936.7	2936.7	2935.5	2936.7	2935.5	2935.5	2937.8	2938.9	2940.0
10°	2918.9	2917.8	2917.8	2916.7	2916.7	2916.7	2917.8	2918.9	2920.0	2921.1	2924.5
12.5°	2891.2	2890.1	2890.1	2889.0	2889.0	2890.1	2891.2	2893.4	2897.8	2900.1	2904.5
15°	2846.8	2845.7	2846.8	2847.9	2850.2	2853.5	2856.8	2860.1	2866.8	2872.3	2877.9
17.5°	2782.5	2783.6	2784.7	2786.9	2790.3	2794.7	2803.6	2812.4	2820.2	2829.1	2838.0
20°	2693.8	2698.2	2699.3	2707.1	2709.3	2719.3	2729.3	2742.6	2754.8	2765.9	2778.1
22.5°	2587.3	2590.6	2595.1	2604.0	2609.5	2622.8	2635.0	2650.5	2663.8	2678.3	2696.0
25°	2466.4	2467.5	2480.9	2480.9	2494.2	2505.3	2519.7	2536.3	2556.3	2575.1	2587.3
27.5°	2328.9	2334.5	2344.4	2348.9	2358.9	2376.6	2388.8	2408.8	2428.7	2445.4	2458.7
30°	2184.7	2189.2	2205.8	2208.0	2215.8	2231.3	2248.0	2266.8	2282.3	2301.2	2313.4
32.5°	2032.8	2045.0	2055.0	2062.8	2065.0	2088.3	2097.1	2110.4	2128.2	2147.0	2159.2
35°	1885.3	1890.9	1905.3	1909.7	1916.4	1929.7	1947.4	1958.5	1967.4	1979.6	1994.0
37.5°	1728.9	1745.6	1748.9	1762.2	1764.4	1776.6	1785.5	1798.8	1809.9	1821.0	1823.2
40°	1583.7	1589.2	1601.4	1604.7	1607.0	1623.6	1634.7	1638.0	1643.6	1653.5	1666.8
42.5°	1436.2	1441.7	1455.0	1451.7	1461.7	1469.4	1475.0	1488.3	1493.8	1497.2	1497.2
45°	1290.9	1293.1	1302.0	1306.4	1312.0	1316.4	1326.4	1333.0	1335.2	1345.2	1348.6
47.5°	1152.3	1154.5	1161.1	1168.9	1166.7	1172.2	1183.3	1186.6	1187.7	1194.4	1197.7
50°	1015.9	1021.4	1030.3	1028.1	1034.7	1038.0	1048.0	1050.2	1050.2	1051.3	1052.4
52.5°	888.3	892.8	895.0	897.2	900.5	906.1	910.5	908.3	912.7	917.2	913.8
55°	761.9	765.2	770.8	773.0	773.0	774.1	771.9	781.9	777.4	776.3	777.4
57.5°	646.6	642.1	641.0	646.6	648.8	647.7	644.3	648.8	648.8	646.6	643.2
60°	534.5	531.2	530.1	531.2	526.8	523.5	525.7	523.5	517.9	515.7	516.8
62.5°	432.5	429.2	420.3	420.3	418.1	417.0	408.1	409.2	404.8	398.1	400.4
65°	338.2	329.4	324.9	323.8	316.1	309.4	307.2	299.4	292.8	291.7	292.8
67.5°	254.0	244.0	236.2	232.9	228.5	222.9	215.1	208.5	210.7	209.6	214.0
70°	176.3	169.7	161.9	156.4	158.6	151.9	147.5	147.5	148.6	149.7	151.9
72.5°	117.6	108.7	105.4	102.0	99.8	95.4	97.6	97.6	96.5	97.6	95.4
75°	66.5	62.1	58.8	57.7	55.5	55.5	55.5	55.5	54.3	53.2	53.2
77.5°	29.9	27.7	26.6	25.5	25.5	25.5	24.4	23.3	23.3	23.3	22.2
80°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
82.5°	4.4	4.4	5.5	5.5	5.5	4.4	5.5	5.5	4.4	4.4	5.5
85°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
87.5°	1.1	1.1	1.1	0.0	1.1	1.1	1.1	1.1	0.0	1.1	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: P859499

CATALOG NUMBER: LX4C70D010 EX4C709040 4LBLWW*

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3	2953.3
2.5°	2962.2	2963.3	2963.3	2963.3	2964.4	2964.4	2964.4	2964.4
5°	2954.4	2955.5	2955.5	2955.5	2956.6	2956.6	2956.6	2956.6
7.5°	2941.1	2942.2	2942.2	2943.3	2943.3	2944.4	2944.4	2945.5
10°	2925.6	2927.8	2928.9	2930.0	2931.1	2932.2	2932.2	2933.3
12.5°	2908.9	2911.1	2912.3	2914.5	2916.7	2917.8	2918.9	2920.0
15°	2884.5	2889.0	2891.2	2892.3	2896.7	2898.9	2900.1	2901.2
17.5°	2845.7	2854.6	2857.9	2860.1	2864.6	2869.0	2872.3	2873.4
20°	2790.3	2800.2	2804.7	2810.2	2816.9	2822.4	2824.6	2826.9
22.5°	2712.6	2723.7	2730.4	2737.0	2742.6	2748.1	2757.0	2753.7
25°	2601.7	2620.6	2628.4	2631.7	2643.9	2650.5	2655.0	2650.5
27.5°	2477.5	2488.6	2495.3	2503.0	2511.9	2518.6	2520.8	2527.4
30°	2327.8	2346.7	2345.6	2353.3	2364.4	2371.1	2373.3	2378.8
32.5°	2172.5	2181.4	2188.1	2187.0	2191.4	2203.6	2199.2	2209.1
35°	2007.3	2008.4	2019.5	2018.4	2027.3	2027.3	2027.3	2033.9
37.5°	1831.0	1844.3	1838.7	1852.0	1847.6	1850.9	1850.9	1853.2
40°	1670.2	1674.6	1674.6	1679.0	1682.4	1679.0	1681.3	1686.8
42.5°	1503.8	1508.3	1509.4	1507.1	1510.5	1520.5	1512.7	1519.3
45°	1348.6	1351.9	1356.3	1353.0	1358.5	1355.2	1358.5	1356.3
47.5°	1202.2	1201.1	1199.9	1208.8	1201.1	1202.2	1206.6	1198.8
50°	1052.4	1059.1	1054.7	1058.0	1060.2	1060.2	1056.9	1056.9
52.5°	919.4	918.3	914.9	918.3	916.0	917.2	919.4	917.2
55°	781.9	786.3	784.1	783.0	784.1	784.1	790.7	781.9
57.5°	646.6	644.3	647.7	655.4	647.7	653.2	656.5	657.6
60°	517.9	517.9	524.6	521.2	527.9	533.4	537.9	535.7
62.5°	394.8	400.4	402.6	403.7	410.3	414.8	414.8	413.7
65°	292.8	300.5	300.5	305.0	307.2	307.2	309.4	313.8
67.5°	216.3	216.3	217.4	219.6	218.5	218.5	220.7	221.8
70°	150.8	148.6	151.9	150.8	150.8	149.7	150.8	150.8
72.5°	95.4	95.4	96.5	95.4	93.2	94.3	94.3	96.5
75°	51.0	53.2	51.0	51.0	52.1	49.9	51.0	52.1
77.5°	21.1	21.1	21.1	21.1	21.1	20.0	20.0	20.0
80°	10.0	10.0	10.0	10.0	10.0	10.0	8.9	8.9
82.5°	4.4	5.5	4.4	5.5	4.4	4.4	4.4	4.4
85°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
87.5°	0.0	1.1	0.0	1.1	0.0	0.0	0.0	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)