

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: P858964

Luminaire Tested: **LX4C50D010 EX4C509027 4LBSWNH**

Issue Date: 2/18/2022

Test Information

Test Method: LM-79-08
Report Number: P858964
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: LX4C50D010 EX4C509027 4LBSWNH
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

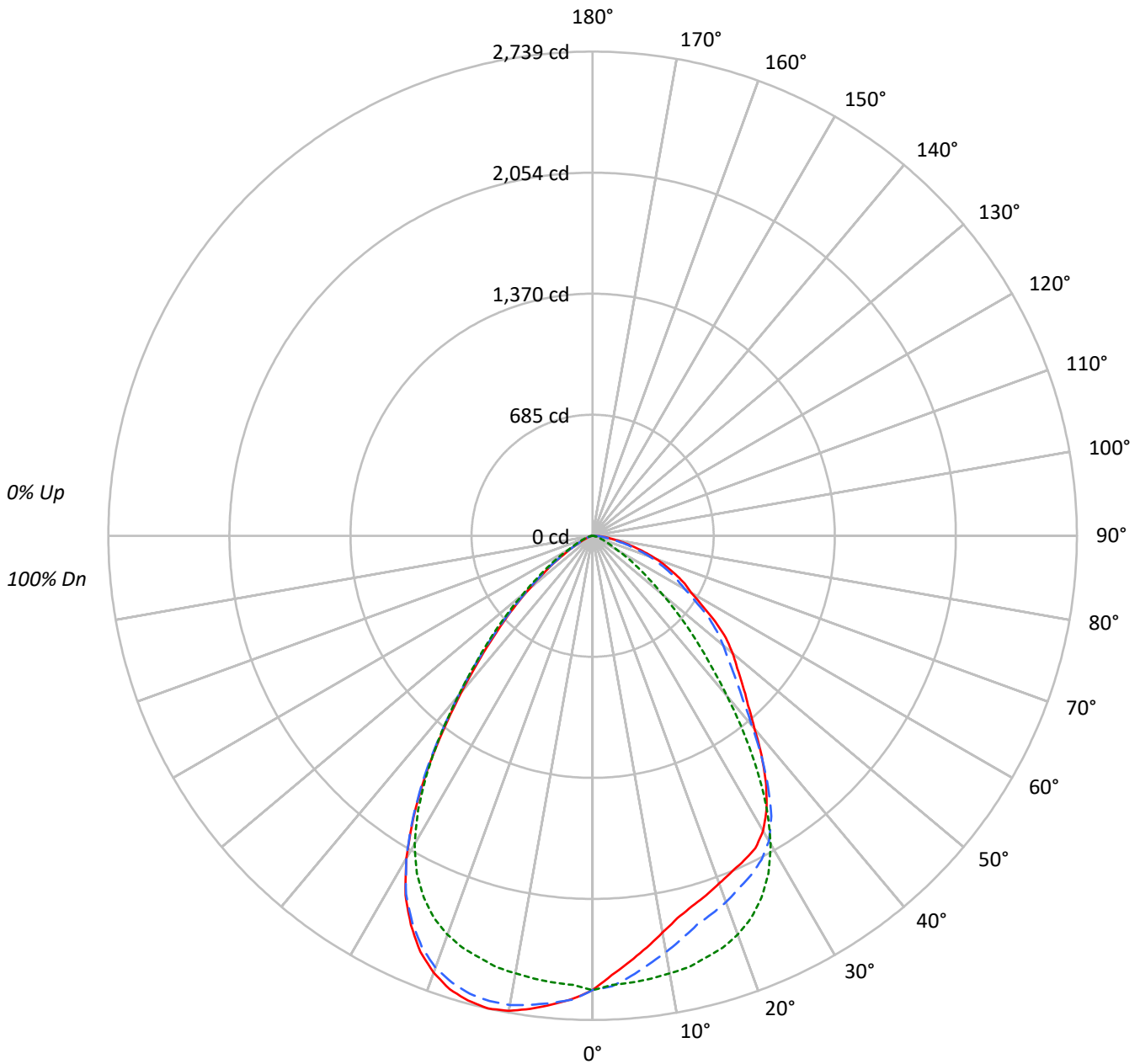
Lumens per Lamp: N/A
Luminaire Lumens: 4505.0 lumens
Efficiency: N/A
Efficacy: 77.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 58.4
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									
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	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79																			
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	72	70																			
4	90	80	72	67	88	78	72	66	76	70	66	74	69	65	72	68	64	62																			
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56																			
6	78	67	59	53	76	66	59	53	64	58	53	62	57	52	61	56	52	50																			
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	56	51	47	46																			
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42																			
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38																			
10	61	49	42	37	59	48	42	37	47	41	37	47	41	37	46	40	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	315733	315733	315733
5°	298145	312857	328372
10°	284252	313581	340427
15°	275907	314242	346242
20°	273648	313915	343788
25°	274740	306175	329518
30°	273433	285647	298798
35°	256295	243892	246366
40°	228388	189097	184847
45°	208871	140973	132339
50°	197491	98755	89256
55°	181610	66677	56032
60°	158678	39043	30910
65°	150203	25029	17325
70°	136819	17852	10740
75°	113209	12579	7880
80°	89002	7075	4669
85°	79360	4793	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	242.8	5.4
10°-20°	696.6	15.5
20°-30°	1032.7	22.9
30°-40°	1034.1	23.0
40°-50°	722.7	16.0
50°-60°	430.0	9.5
60°-70°	224.4	5.0
70°-80°	99.8	2.2
80°-90°	21.8	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°	1972.1	43.8
0°-40°	3006.2	66.7
0°-60°	4159.0	92.3
0°-90°	4505.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4505.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2570	2570	2570	2570	2570	
5°	2418	2500	2537	2653	2663	227
15°	2169	2279	2471	2683	2722	614
25°	2027	2120	2259	2414	2431	934
35°	1709	1729	1626	1656	1643	1060
45°	1202	1143	811	785	762	933
55°	848	795	311	272	262	752
65°	517	474	86	63	60	511
75°	238	209	26	17	17	258
85°	56	43	3	3	0	63
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°	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0
2.5°	2487.2	2517.1	2487.2	2497.2	2536.9	2500.4	2520.3	2520.3	2510.4	2533.6	2550.2
5°	2417.6	2447.5	2417.6	2430.9	2474.0	2437.5	2460.7	2454.1	2457.5	2477.3	2500.4
7.5°	2348.2	2371.3	2344.8	2361.4	2401.1	2371.3	2391.1	2391.1	2394.5	2424.2	2444.2
10°	2278.6	2298.4	2278.6	2291.8	2334.9	2308.4	2321.7	2324.9	2334.9	2361.4	2391.1
12.5°	2215.6	2232.2	2212.4	2232.2	2268.6	2242.1	2258.7	2262.0	2272.0	2301.8	2334.9
15°	2169.3	2185.9	2166.0	2182.5	2215.6	2195.7	2209.0	2215.6	2222.2	2248.7	2278.6
17.5°	2132.9	2146.2	2129.5	2149.4	2175.9	2152.8	2172.6	2172.6	2182.5	2209.0	2242.1
20°	2093.1	2106.3	2093.1	2109.7	2139.5	2119.7	2136.2	2136.2	2146.2	2175.9	2205.7
22.5°	2056.7	2063.3	2056.7	2069.9	2099.7	2083.2	2093.1	2096.4	2106.3	2132.9	2159.4
25°	2026.8	2040.1	2033.5	2046.7	2066.6	2050.1	2059.9	2063.3	2073.2	2096.4	2119.7
27.5°	1993.7	2000.4	1993.7	2010.4	2026.8	2013.6	2023.6	2020.2	2026.8	2046.7	2066.6
30°	1927.5	1934.1	1934.1	1944.0	1957.4	1950.8	1960.6	1950.8	1957.4	1973.9	1993.7
32.5°	1831.5	1834.8	1838.1	1848.1	1857.9	1848.1	1854.7	1854.7	1854.7	1867.9	1881.2
35°	1708.9	1715.5	1712.3	1718.9	1728.8	1725.5	1725.5	1722.1	1715.5	1722.1	1728.8
37.5°	1569.9	1559.9	1559.9	1569.9	1576.5	1563.2	1569.9	1563.2	1563.2	1566.5	1566.5
40°	1424.1	1414.2	1424.1	1427.4	1430.7	1424.1	1420.8	1414.2	1404.2	1407.6	1401.0
42.5°	1301.6	1294.9	1298.3	1298.3	1301.6	1294.9	1298.3	1285.0	1275.0	1268.4	1258.5
45°	1202.2	1192.3	1202.2	1195.6	1195.6	1192.3	1188.9	1182.3	1169.1	1159.2	1142.6
47.5°	1109.5	1109.5	1112.7	1112.7	1112.7	1106.1	1106.1	1092.9	1079.6	1066.4	1043.3
50°	1033.3	1026.7	1039.9	1039.9	1030.0	1026.7	1030.0	1013.4	1003.6	986.9	963.7
52.5°	950.5	950.5	953.8	953.8	950.5	943.8	947.2	934.0	924.0	907.5	884.2
55°	847.9	841.3	851.1	851.1	847.9	844.5	847.9	837.9	828.0	814.8	794.8
57.5°	732.0	728.6	735.2	738.6	732.0	732.0	735.2	725.3	722.0	708.7	688.9
60°	645.8	642.5	649.1	652.5	645.8	645.8	645.8	632.5	625.9	612.6	599.4
62.5°	586.2	582.9	589.5	586.2	582.9	579.5	582.9	569.7	563.1	549.8	536.6
65°	516.7	520.0	523.3	523.3	520.0	516.7	516.7	510.1	503.5	490.2	473.6
67.5°	450.4	450.4	453.7	457.0	453.7	453.7	453.7	443.7	437.1	427.3	407.4
70°	380.9	377.5	387.5	387.5	380.9	384.2	380.9	377.5	370.9	357.7	341.2
72.5°	307.9	307.9	311.3	311.3	307.9	307.9	307.9	304.7	294.7	288.1	271.6
75°	238.5	238.5	241.7	245.1	238.5	238.5	241.7	235.1	228.5	218.6	208.6
77.5°	178.9	175.5	178.9	178.9	175.5	175.5	175.5	172.3	168.9	158.9	149.0
80°	125.8	122.6	125.8	125.8	125.8	122.6	122.6	119.2	119.2	112.6	102.7
82.5°	86.1	82.8	86.1	86.1	86.1	82.8	82.8	82.8	79.5	76.2	69.6
85°	56.3	53.0	53.0	56.3	53.0	53.0	53.0	53.0	49.7	46.3	43.1
87.5°	26.5	26.5	26.5	26.5	26.5	26.5	26.5	23.2	23.2	23.2	19.9
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°	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0
2.5°	2536.9	2530.3	2550.2	2543.6	2546.8	2530.3	2556.8	2543.6	2560.0	2543.6	2576.7
5°	2493.8	2487.2	2517.1	2513.7	2517.1	2503.8	2533.6	2530.3	2550.2	2536.9	2573.3
7.5°	2447.5	2440.9	2474.0	2477.3	2484.0	2470.7	2510.4	2510.4	2530.3	2526.9	2566.7
10°	2394.5	2397.8	2430.9	2437.5	2450.9	2444.2	2480.6	2490.6	2517.1	2513.7	2563.4
12.5°	2344.8	2344.8	2387.9	2401.1	2411.0	2407.8	2450.9	2464.1	2493.8	2500.4	2546.8
15°	2295.2	2298.4	2338.2	2358.0	2371.3	2368.0	2414.4	2430.9	2467.3	2470.7	2526.9
17.5°	2255.3	2252.1	2295.2	2311.7	2331.5	2328.3	2377.9	2397.8	2434.2	2444.2	2497.2
20°	2222.2	2219.0	2258.7	2278.6	2291.8	2288.6	2338.2	2361.4	2394.5	2401.1	2454.1
22.5°	2182.5	2175.9	2215.6	2232.2	2245.5	2242.1	2285.2	2301.8	2334.9	2341.5	2391.1
25°	2136.2	2129.5	2166.0	2175.9	2185.9	2179.3	2215.6	2225.6	2252.1	2258.7	2308.4
27.5°	2083.2	2066.6	2096.4	2096.4	2103.1	2093.1	2119.7	2129.5	2152.8	2152.8	2199.1
30°	2000.4	1977.3	1993.7	1990.5	1993.7	1980.5	1997.1	2000.4	2017.0	2013.6	2046.7
32.5°	1884.4	1851.3	1861.3	1851.3	1841.5	1821.6	1841.5	1834.8	1848.1	1834.8	1864.6
35°	1725.5	1692.4	1689.0	1675.8	1665.9	1649.3	1649.3	1632.8	1636.1	1626.2	1646.1
37.5°	1553.2	1510.3	1503.6	1477.2	1460.5	1440.7	1440.7	1427.4	1410.8	1404.2	1420.8
40°	1384.3	1338.0	1321.5	1278.4	1261.8	1241.9	1228.7	1212.2	1205.6	1179.1	1192.3
42.5°	1238.7	1188.9	1152.6	1106.1	1089.6	1059.8	1039.9	1020.0	1010.2	980.3	993.6
45°	1116.1	1056.5	1016.8	957.1	934.0	900.9	871.0	847.9	824.7	811.4	804.8
47.5°	1013.4	950.5	897.5	831.3	794.8	765.1	725.3	702.1	672.4	655.8	645.8
50°	927.3	857.8	798.2	722.0	685.6	652.5	606.0	569.7	543.2	516.7	510.1
52.5°	851.1	778.3	712.1	625.9	582.9	543.2	493.5	453.7	430.5	400.8	397.4
55°	761.7	698.9	625.9	536.6	493.5	453.7	400.8	361.0	331.2	311.3	304.7
57.5°	665.7	606.0	536.6	447.1	404.0	361.0	311.3	274.8	248.4	231.9	228.5
60°	576.3	520.0	453.7	364.3	321.2	284.8	231.9	195.4	172.3	158.9	152.3
62.5°	510.1	457.0	394.2	311.3	271.6	235.1	185.5	152.3	132.4	119.2	112.6
65°	447.1	394.2	337.8	261.6	228.5	195.4	149.0	119.2	99.3	86.1	79.5
67.5°	380.9	334.6	281.5	218.6	185.5	158.9	119.2	92.7	76.2	66.2	59.6
70°	314.6	271.6	228.5	175.5	152.3	125.8	92.7	72.8	56.3	49.7	43.1
72.5°	248.4	215.3	178.9	135.8	115.9	99.3	72.8	53.0	43.1	36.5	29.9
75°	185.5	162.3	132.4	102.7	86.1	72.8	53.0	39.7	33.1	26.5	23.2
77.5°	132.4	112.6	92.7	69.6	63.0	53.0	36.5	29.9	23.2	16.6	13.2
80°	89.5	79.5	63.0	49.7	39.7	36.5	26.5	19.9	13.2	10.0	10.0
82.5°	59.6	49.7	39.7	29.9	26.5	23.2	16.6	13.2	10.0	6.6	6.6
85°	36.5	29.9	23.2	16.6	16.6	13.2	10.0	6.6	3.4	3.4	3.4
87.5°	16.6	13.2	10.0	6.6	6.6	3.4	3.4	3.4	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°	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0
2.5°	2603.1	2583.3	2570.0	2586.5	2593.1	2583.3	2593.1	2609.8	2626.4	2629.6	2583.3
5°	2606.5	2586.5	2579.9	2599.8	2603.1	2599.8	2609.8	2633.0	2652.9	2659.5	2613.1
7.5°	2606.5	2593.1	2589.9	2613.1	2616.4	2613.1	2629.6	2656.1	2676.0	2689.2	2642.9
10°	2599.8	2593.1	2596.5	2616.4	2623.0	2623.0	2646.2	2676.0	2695.8	2709.1	2662.7
12.5°	2589.9	2589.9	2589.9	2613.1	2619.8	2623.0	2642.9	2682.6	2695.8	2715.7	2669.4
15°	2573.3	2573.3	2573.3	2596.5	2606.5	2606.5	2629.6	2666.1	2682.6	2702.5	2656.1
17.5°	2543.6	2543.6	2546.8	2566.7	2576.7	2576.7	2599.8	2639.6	2649.5	2672.7	2626.4
20°	2500.4	2500.4	2503.8	2523.7	2533.6	2526.9	2556.8	2589.9	2599.8	2619.8	2573.3
22.5°	2437.5	2437.5	2437.5	2457.5	2464.1	2460.7	2490.6	2520.3	2520.3	2546.8	2497.2
25°	2344.8	2351.4	2344.8	2364.7	2371.3	2368.0	2394.5	2421.0	2414.4	2444.2	2394.5
27.5°	2232.2	2228.9	2228.9	2245.5	2245.5	2242.1	2262.0	2291.8	2285.2	2305.1	2258.7
30°	2076.6	2086.4	2069.9	2093.1	2083.2	2076.6	2089.8	2116.3	2106.3	2122.9	2086.4
32.5°	1897.7	1884.4	1884.4	1884.4	1891.0	1874.6	1887.8	1901.0	1891.0	1907.7	1867.9
35°	1662.6	1665.9	1655.9	1659.3	1662.6	1642.7	1655.9	1669.2	1655.9	1665.9	1629.4
37.5°	1427.4	1430.7	1407.6	1420.8	1407.6	1401.0	1414.2	1420.8	1407.6	1417.4	1377.7
40°	1192.3	1185.7	1182.3	1182.3	1185.7	1169.1	1179.1	1188.9	1179.1	1185.7	1149.2
42.5°	986.9	983.7	977.1	980.3	970.3	967.1	970.3	980.3	970.3	977.1	950.5
45°	808.0	801.4	791.5	794.8	794.8	778.3	788.2	794.8	784.9	788.2	765.1
47.5°	642.5	632.5	632.5	629.3	629.3	622.6	632.5	629.3	619.3	625.9	602.8
50°	500.1	493.5	493.5	493.5	493.5	483.5	486.8	493.5	483.5	483.5	470.2
52.5°	390.8	380.9	374.3	374.3	374.3	370.9	370.9	374.3	364.3	364.3	361.0
55°	294.7	291.5	281.5	281.5	281.5	271.6	274.8	274.8	271.6	271.6	261.6
57.5°	218.6	208.6	202.0	202.0	195.4	195.4	192.1	195.4	188.8	188.8	182.1
60°	145.7	139.0	135.8	132.4	132.4	129.2	132.4	129.2	129.2	125.8	122.6
62.5°	105.9	99.3	92.7	92.7	92.7	89.5	89.5	89.5	89.5	89.5	86.1
65°	76.2	69.6	69.6	66.2	66.2	63.0	63.0	63.0	63.0	63.0	59.6
67.5°	53.0	49.7	46.3	46.3	46.3	46.3	46.3	46.3	43.1	43.1	43.1
70°	39.7	36.5	33.1	33.1	33.1	33.1	33.1	29.9	33.1	33.1	29.9
72.5°	26.5	26.5	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
75°	19.9	19.9	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
77.5°	13.2	13.2	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
80°	10.0	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
82.5°	6.6	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
85°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	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: P858964

CATALOG NUMBER: LX4C50D010 EX4C509027 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0	2570.0
2.5°	2633.0	2629.6	2623.0	2633.0	2606.5	2596.5	2593.1	2623.0
5°	2669.4	2662.7	2662.7	2672.7	2642.9	2636.2	2629.6	2662.7
7.5°	2702.5	2695.8	2695.8	2705.8	2679.3	2672.7	2666.1	2699.2
10°	2722.3	2722.3	2722.3	2728.9	2705.8	2699.2	2695.8	2728.9
12.5°	2732.3	2732.3	2728.9	2742.2	2712.5	2712.5	2705.8	2738.9
15°	2719.1	2719.1	2719.1	2728.9	2702.5	2695.8	2695.8	2722.3
17.5°	2686.0	2686.0	2682.6	2692.6	2662.7	2662.7	2659.5	2689.2
20°	2636.2	2636.2	2629.6	2642.9	2613.1	2603.1	2599.8	2629.6
22.5°	2556.8	2553.4	2550.2	2556.8	2530.3	2523.7	2520.3	2546.8
25°	2454.1	2450.9	2444.2	2450.9	2421.0	2411.0	2411.0	2430.9
27.5°	2308.4	2308.4	2298.4	2308.4	2275.2	2272.0	2268.6	2291.8
30°	2129.5	2116.3	2109.7	2122.9	2089.8	2089.8	2083.2	2106.3
32.5°	1907.7	1894.4	1891.0	1897.7	1867.9	1857.9	1871.2	1884.4
35°	1652.7	1655.9	1642.7	1642.7	1616.2	1619.4	1622.8	1642.7
37.5°	1407.6	1401.0	1397.6	1401.0	1381.1	1374.5	1367.8	1387.7
40°	1179.1	1162.5	1159.2	1159.2	1142.6	1139.4	1142.6	1152.6
42.5°	963.7	960.5	947.2	953.8	937.2	943.8	940.6	940.6
45°	778.3	781.6	768.3	778.3	765.1	755.1	755.1	761.7
47.5°	616.0	616.0	612.6	612.6	602.8	606.0	599.4	609.4
50°	476.9	476.9	470.2	473.6	467.0	467.0	463.6	467.0
52.5°	364.3	361.0	361.0	357.7	351.0	354.4	357.7	351.0
55°	265.0	268.2	261.6	265.0	258.4	261.6	258.4	261.6
57.5°	182.1	185.5	178.9	185.5	178.9	182.1	178.9	178.9
60°	125.8	125.8	122.6	125.8	122.6	122.6	119.2	125.8
62.5°	86.1	86.1	86.1	86.1	86.1	82.8	86.1	86.1
65°	63.0	59.6	59.6	59.6	59.6	59.6	59.6	59.6
67.5°	43.1	43.1	43.1	43.1	43.1	43.1	43.1	43.1
70°	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9
72.5°	23.2	23.2	23.2	23.2	23.2	23.2	23.2	23.2
75°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
77.5°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
80°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
82.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
85°	3.4	3.4	3.4	0.0	3.4	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)