

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: P880586

Luminaire Tested: **LD4C50D010 EU4509050 4LBDWNH**

Issue Date: 10/4/2024

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P880586
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P251940)
Test Lab: INNOVATION CENTER
Issue Date: 10/4/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C50D010 EU4509050 4LBDWNH
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBDWN TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

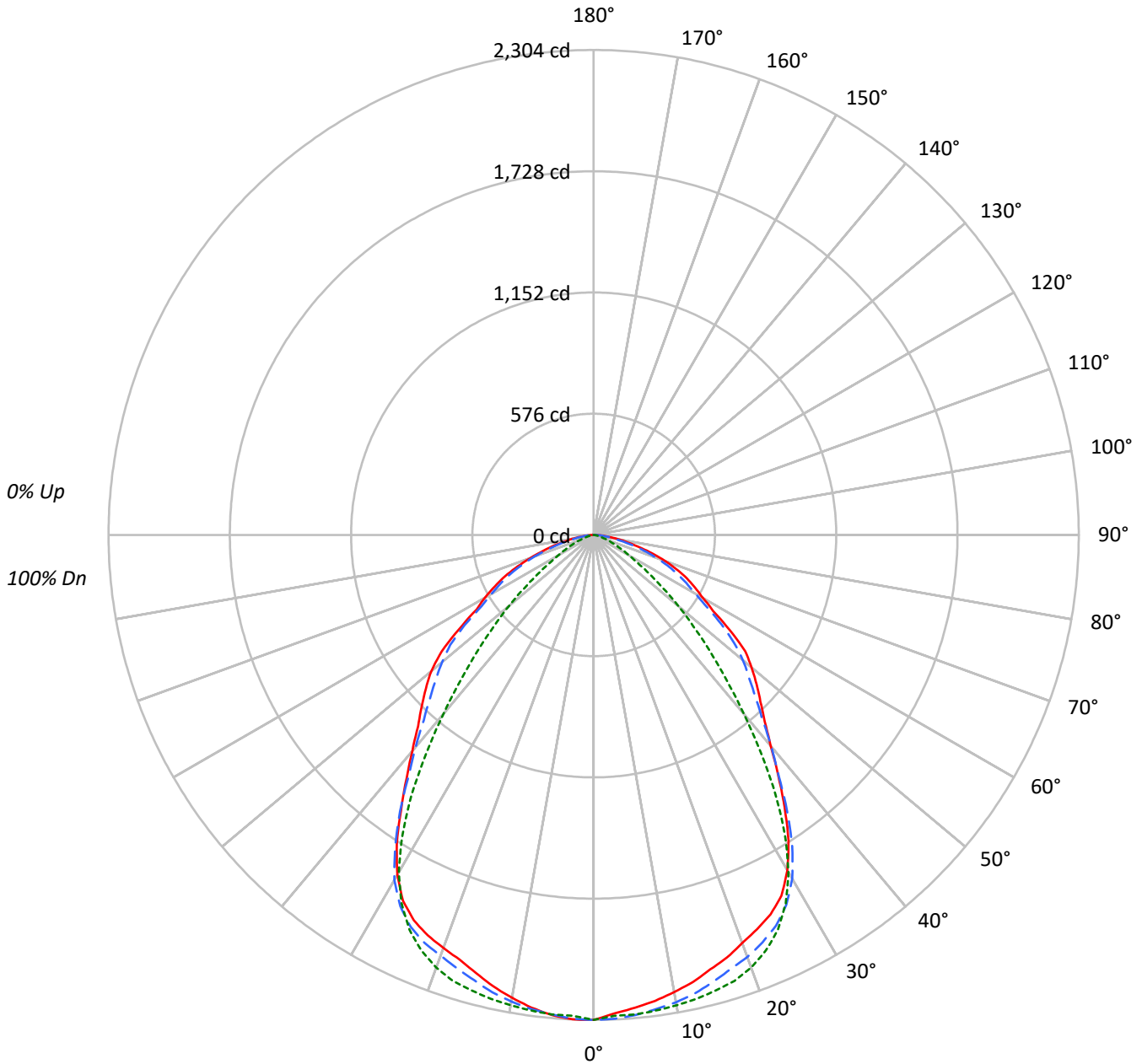
Lumens per Lamp: N/A
Luminaire Lumens: 4689.0 lumens
Efficiency: N/A
Efficacy: 80.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.19
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 58.4
Input Voltage (V): NR
Input Current (Ain): 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

TEST NUMBER: P880586

CATALOG NUMBER: LD4C50D010 EU4509050 4LBDWNH

Luminous Intensity Polar Plot





TEST NUMBER: P880586

CATALOG NUMBER: LD4C50D010 EU4509050 4LBDWNH

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	100	100
1	111	107	103	100	108	104	101	98	100	98	95	96	94	92	93	91	89	88	88	88	88
2	102	95	89	84	100	93	88	83	90	85	81	87	83	80	84	81	78	76	76	76	76
3	94	85	78	72	92	84	77	72	81	75	70	78	73	69	76	72	68	66	66	66	66
4	87	77	69	63	85	75	68	62	73	67	62	71	65	61	69	64	60	58	58	58	58
5	81	69	61	55	79	68	61	55	66	60	54	64	58	54	63	57	53	51	51	51	51
6	75	63	55	49	73	62	55	49	60	54	49	59	53	48	57	52	48	46	46	46	46
7	70	58	50	44	68	57	49	44	56	49	44	54	48	43	53	47	43	41	41	41	41
8	66	53	45	40	64	52	45	40	51	44	40	50	44	39	49	43	39	37	37	37	37
9	62	49	41	36	60	49	41	36	47	41	36	46	40	36	45	40	36	34	34	34	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31	31	31	31

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	283054	283054	283054
5°	278031	281953	282384
10°	275046	283005	278576
15°	271850	284912	274101
20°	269699	285937	272942
25°	269549	280596	273859
30°	260964	262482	264496
35°	237098	225939	239212
40°	209753	177919	214869
45°	194590	135483	200775
50°	186979	100284	192407
55°	169295	69097	167024
60°	147178	47028	146343
65°	142209	34041	134970
70°	128558	22953	114549
75°	105946	15094	90852
80°	85252	10046	67706
85°	70056	4934	44825



TEST NUMBER: P880586

CATALOG NUMBER: LD4C50D010 EU4509050 4LBDWNH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.5	4.6
10°-20°	621.9	13.3
20°-30°	939.5	20.0
30°-40°	983.2	21.0
40°-50°	796.3	17.0
50°-60°	579.2	12.4
60°-70°	357.2	7.6
70°-80°	161.4	3.4
80°-90°	32.8	0.7
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°	1778.8	37.9
0°-40°	2762.0	58.9
0°-60°	4137.6	88.2
0°-90°	4689.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4689.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2304	2304	2304	2304	2304	
5°	2254	2290	2286	2286	2290	214
15°	2137	2198	2240	2191	2155	604
25°	1988	2049	2070	2056	2020	911
35°	1581	1602	1506	1602	1595	985
45°	1120	1085	780	1099	1156	871
55°	790	741	323	748	780	705
65°	489	440	117	432	464	479
75°	223	191	32	166	191	242
85°	50	39	4	28	32	57
90°	0	0	0	0	0	



TEST NUMBER: P880586

CATALOG NUMBER: LD4C50D010 EU4509050 4LBDWNH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0
2.5°	2275.6	2275.6	2297.0	2321.6	2300.5	2279.1	2293.3	2286.3	2311.1	2311.1	2300.5
5°	2254.5	2261.4	2279.1	2300.5	2282.8	2261.4	2279.1	2272.1	2297.0	2297.0	2289.8
7.5°	2233.1	2236.6	2258.0	2282.8	2264.9	2243.8	2258.0	2254.5	2275.6	2279.1	2272.1
10°	2204.8	2208.3	2229.6	2254.5	2236.6	2218.9	2233.1	2229.6	2258.0	2258.0	2254.5
12.5°	2176.4	2179.9	2201.3	2222.4	2204.8	2187.1	2201.3	2201.3	2229.6	2233.1	2229.6
15°	2137.4	2144.4	2162.3	2183.4	2172.9	2151.6	2165.7	2165.7	2190.6	2197.6	2197.6
17.5°	2105.6	2109.1	2126.7	2148.1	2133.9	2116.0	2130.2	2130.2	2155.1	2162.3	2162.3
20°	2062.9	2070.0	2087.7	2109.1	2098.4	2084.2	2094.9	2094.9	2123.2	2130.2	2133.9
22.5°	2027.5	2034.5	2048.7	2077.2	2059.4	2048.7	2062.9	2059.4	2091.4	2094.9	2094.9
25°	1988.5	1995.7	2013.4	2031.0	2020.3	2009.9	2020.3	2020.3	2045.2	2048.7	2048.7
27.5°	1931.8	1935.3	1953.0	1970.9	1960.2	1946.0	1960.2	1956.7	1981.3	1985.0	1981.3
30°	1839.6	1846.8	1853.8	1878.7	1868.0	1857.3	1871.5	1864.5	1889.3	1889.3	1885.6
32.5°	1722.6	1722.6	1737.0	1754.6	1740.4	1733.3	1743.9	1747.4	1765.3	1765.3	1754.6
35°	1580.9	1588.1	1598.5	1609.2	1598.5	1591.6	1602.2	1598.5	1619.9	1612.7	1602.2
37.5°	1439.2	1442.7	1453.3	1467.5	1453.3	1442.7	1446.2	1442.7	1460.3	1460.3	1442.7
40°	1307.9	1315.1	1322.1	1336.3	1322.1	1315.1	1318.6	1307.9	1329.3	1322.1	1311.4
42.5°	1201.6	1205.1	1215.7	1222.9	1208.8	1205.1	1208.8	1201.6	1212.3	1205.1	1183.9
45°	1120.0	1120.0	1123.7	1134.2	1120.0	1116.6	1116.6	1109.4	1120.0	1105.9	1084.7
47.5°	1049.2	1052.7	1056.4	1063.4	1052.7	1042.2	1045.7	1031.5	1038.5	1027.8	999.5
50°	978.3	985.3	989.0	996.0	985.3	978.3	981.8	967.7	967.7	950.0	925.2
52.5°	907.5	911.0	907.5	914.5	907.5	896.8	900.3	886.1	886.1	865.0	840.1
55°	790.4	793.9	797.6	804.6	797.6	786.9	793.9	783.5	783.5	769.1	740.7
57.5°	673.4	677.1	680.6	684.1	684.1	677.1	680.6	673.4	669.9	659.2	638.1
60°	599.0	599.0	599.0	602.5	599.0	595.6	595.6	588.4	588.4	574.2	553.0
62.5°	542.4	545.9	545.9	549.3	545.9	542.4	538.9	531.7	528.2	514.0	496.1
65°	489.2	489.2	485.7	492.7	489.2	485.7	485.7	478.5	471.5	457.3	439.5
67.5°	425.3	428.8	425.3	428.8	428.8	425.3	421.8	414.6	411.1	400.5	379.3
70°	357.9	357.9	357.9	361.6	357.9	357.9	361.6	351.0	347.5	333.1	315.4
72.5°	290.6	294.3	294.3	290.6	294.3	287.1	287.1	287.1	283.6	269.4	251.6
75°	223.2	226.9	226.9	230.4	226.9	223.2	223.2	219.7	216.2	205.6	191.4
77.5°	166.5	166.5	170.0	170.0	170.0	166.5	166.5	159.6	159.6	152.4	138.2
80°	120.5	120.5	117.1	120.5	120.5	117.1	117.1	113.4	113.4	106.4	95.7
82.5°	78.0	81.5	81.5	81.5	81.5	78.0	78.0	78.0	74.3	70.8	63.9
85°	49.7	49.7	49.7	49.7	53.2	49.7	53.2	49.7	49.7	42.5	39.0
87.5°	21.4	21.4	21.4	24.9	24.9	21.4	21.4	21.4	21.4	21.4	17.7
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: P880586

CATALOG NUMBER: LD4C50D010 EU4509050 4LBDWNH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0
2.5°	2300.5	2304.0	2293.3	2307.4	2297.0	2300.5	2304.0	2300.5	2286.3	2286.3	2325.3
5°	2286.3	2293.3	2282.8	2300.5	2293.3	2293.3	2300.5	2297.0	2282.8	2286.3	2321.6
7.5°	2272.1	2282.8	2275.6	2293.3	2282.8	2282.8	2289.8	2289.8	2275.6	2279.1	2311.1
10°	2250.8	2264.9	2261.4	2279.1	2268.6	2268.6	2279.1	2279.1	2264.9	2268.6	2300.5
12.5°	2233.1	2247.3	2243.8	2261.4	2254.5	2258.0	2261.4	2268.6	2250.8	2258.0	2286.3
15°	2204.8	2218.9	2218.9	2236.6	2229.6	2236.6	2243.8	2254.5	2240.1	2240.1	2268.6
17.5°	2172.9	2190.6	2190.6	2204.8	2204.8	2208.3	2222.4	2233.1	2218.9	2222.4	2247.3
20°	2137.4	2158.8	2158.8	2176.4	2172.9	2179.9	2190.6	2201.3	2187.1	2187.1	2215.4
22.5°	2101.9	2119.7	2123.2	2133.9	2133.9	2137.4	2148.1	2155.1	2137.4	2137.4	2165.7
25°	2052.4	2070.0	2073.5	2080.7	2073.5	2073.5	2080.7	2087.7	2070.0	2070.0	2094.9
27.5°	1985.0	2002.7	2002.7	1999.2	1992.0	1995.7	1992.0	1995.7	1977.8	1974.3	1999.2
30°	1885.6	1896.3	1896.3	1892.8	1882.1	1882.1	1871.5	1875.2	1850.3	1850.3	1871.5
32.5°	1751.1	1761.6	1754.6	1747.4	1733.3	1726.3	1719.1	1715.6	1690.7	1690.7	1715.6
35°	1591.6	1598.5	1588.1	1573.9	1556.0	1545.3	1534.9	1520.7	1502.8	1506.5	1520.7
37.5°	1428.5	1428.5	1414.3	1386.0	1371.8	1353.9	1336.3	1336.3	1307.9	1304.5	1315.1
40°	1290.3	1276.1	1251.3	1212.3	1187.4	1169.7	1144.9	1130.7	1109.4	1109.4	1127.2
42.5°	1166.3	1137.9	1105.9	1052.7	1027.8	1006.7	974.9	960.7	935.8	932.1	942.8
45°	1056.4	1027.8	981.8	925.2	893.3	868.5	822.3	804.6	783.5	779.8	786.9
47.5°	967.7	935.8	879.2	804.6	772.8	740.7	694.7	669.9	652.2	641.5	652.2
50°	889.6	847.1	786.9	708.9	666.4	638.1	581.4	556.5	531.7	524.7	528.2
52.5°	804.6	762.1	698.2	616.7	577.7	535.2	482.0	446.7	425.3	414.6	425.3
55°	712.4	669.9	606.2	524.7	482.0	443.2	386.3	357.9	333.1	322.6	333.1
57.5°	613.2	574.2	517.5	436.0	397.0	361.6	308.5	280.1	255.3	248.1	255.3
60°	528.2	496.1	439.5	361.6	329.6	290.6	244.6	216.2	194.9	191.4	194.9
62.5°	471.5	436.0	382.8	308.5	276.4	244.6	202.1	173.7	155.9	152.4	155.9
65°	414.6	375.8	326.1	262.2	230.4	205.6	163.1	138.2	120.5	117.1	120.5
67.5°	351.0	315.4	272.9	216.2	191.4	166.5	131.2	106.4	92.2	88.7	92.2
70°	290.6	258.8	216.2	173.7	148.9	131.2	99.2	81.5	67.4	63.9	67.4
72.5°	230.4	202.1	166.5	131.2	117.1	99.2	78.0	60.2	49.7	46.0	49.7
75°	177.2	155.9	127.5	95.7	85.0	74.3	53.2	42.5	35.5	31.8	35.5
77.5°	124.0	109.9	88.7	70.8	60.2	53.2	39.0	28.3	24.9	21.4	24.9
80°	85.0	74.3	60.2	46.0	39.0	31.8	24.9	17.7	14.2	14.2	14.2
82.5°	56.7	46.0	35.5	28.3	24.9	21.4	14.2	10.7	10.7	7.2	7.2
85°	31.8	28.3	21.4	17.7	14.2	10.7	7.2	7.2	3.5	3.5	3.5
87.5°	14.2	10.7	7.2	7.2	3.5	3.5	3.5	3.5	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: P880586

CATALOG NUMBER: LD4C50D010 EU4509050 4LBDWNH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0
2.5°	2314.6	2304.0	2318.1	2304.0	2297.0	2304.0	2297.0	2318.1	2300.5	2286.3	2300.5
5°	2311.1	2297.0	2311.1	2300.5	2289.8	2293.3	2286.3	2307.4	2286.3	2275.6	2282.8
7.5°	2304.0	2293.3	2300.5	2289.8	2279.1	2282.8	2275.6	2293.3	2272.1	2261.4	2268.6
10°	2293.3	2282.8	2286.3	2279.1	2268.6	2268.6	2261.4	2275.6	2250.8	2236.6	2243.8
12.5°	2279.1	2264.9	2272.1	2261.4	2247.3	2247.3	2240.1	2250.8	2225.9	2211.7	2215.4
15°	2261.4	2247.3	2247.3	2236.6	2222.4	2222.4	2208.3	2218.9	2190.6	2176.4	2176.4
17.5°	2240.1	2222.4	2222.4	2211.7	2194.1	2190.6	2179.9	2190.6	2158.8	2144.4	2144.4
20°	2208.3	2194.1	2190.6	2183.4	2165.7	2162.3	2148.1	2151.6	2126.7	2116.0	2112.6
22.5°	2165.7	2151.6	2155.1	2144.4	2130.2	2126.7	2112.6	2123.2	2098.4	2087.7	2091.4
25°	2091.4	2084.2	2091.4	2087.7	2077.2	2077.2	2070.0	2077.2	2055.9	2048.7	2052.4
27.5°	2006.2	2002.7	2006.2	2006.2	1999.2	1999.2	1999.2	2009.9	1988.5	1985.0	1985.0
30°	1882.1	1882.1	1885.6	1889.3	1889.3	1896.3	1892.8	1907.0	1892.8	1885.6	1892.8
32.5°	1719.1	1733.3	1743.9	1743.9	1743.9	1751.1	1758.1	1768.8	1754.6	1758.1	1758.1
35°	1534.9	1545.3	1552.5	1570.2	1559.7	1584.4	1591.6	1605.7	1602.2	1609.2	1605.7
37.5°	1329.3	1343.5	1357.7	1382.5	1378.8	1407.1	1421.3	1449.6	1442.7	1456.8	1463.8
40°	1137.9	1159.1	1180.4	1198.1	1212.3	1240.6	1268.9	1304.5	1315.1	1325.6	1329.3
42.5°	953.5	974.9	1010.2	1035.0	1056.4	1102.4	1141.4	1183.9	1194.6	1215.7	1222.9
45°	804.6	822.3	865.0	896.8	914.5	981.8	1027.8	1081.0	1098.9	1123.7	1134.2
47.5°	666.4	698.2	740.7	779.8	804.6	875.5	935.8	992.5	1017.4	1045.7	1059.9
50°	545.9	581.4	638.1	673.4	708.9	786.9	854.3	914.5	939.3	971.2	985.3
52.5°	446.7	485.7	538.9	577.7	616.7	698.2	769.1	826.0	857.8	879.2	900.3
55°	351.0	393.5	446.7	489.2	521.0	609.7	669.9	726.6	747.9	765.6	776.3
57.5°	272.9	304.8	357.9	393.5	432.5	510.3	570.7	613.2	630.9	652.2	659.2
60°	212.8	244.6	294.3	329.6	365.1	439.5	499.9	542.4	560.0	577.7	588.4
62.5°	170.0	202.1	248.1	280.1	311.9	379.3	432.5	475.0	496.1	514.0	524.7
65°	134.7	163.1	202.1	233.9	258.8	318.9	372.1	411.1	432.5	450.2	460.8
67.5°	106.4	131.2	166.5	187.9	212.8	262.2	308.5	343.8	361.6	382.8	393.5
70°	81.5	99.2	131.2	148.9	166.5	209.1	244.6	280.1	297.8	311.9	318.9
72.5°	60.2	74.3	99.2	113.4	124.0	159.6	187.9	212.8	226.9	241.1	248.1
75°	42.5	53.2	70.8	81.5	88.7	113.4	138.2	155.9	166.5	177.2	187.9
77.5°	28.3	35.5	46.0	53.2	60.2	78.0	92.2	106.4	117.1	127.5	131.2
80°	17.7	24.9	31.8	35.5	39.0	49.7	63.9	70.8	78.0	85.0	88.7
82.5°	10.7	14.2	17.7	21.4	24.9	31.8	39.0	46.0	49.7	56.7	60.2
85°	3.5	7.2	7.2	10.7	10.7	17.7	21.4	24.9	28.3	31.8	35.5
87.5°	0.0	0.0	3.5	3.5	3.5	3.5	7.2	7.2	7.2	7.2	7.2
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: P880586

CATALOG NUMBER: LD4C50D010 EU4509050 4LBDWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0	2304.0
2.5°	2314.6	2304.0	2297.0	2293.3	2318.1	2286.3	2300.5	2304.0
5°	2300.5	2289.8	2282.8	2279.1	2300.5	2272.1	2282.8	2289.8
7.5°	2279.1	2272.1	2261.4	2258.0	2279.1	2247.3	2261.4	2264.9
10°	2254.5	2243.8	2236.6	2233.1	2250.8	2218.9	2233.1	2233.1
12.5°	2222.4	2215.4	2201.3	2201.3	2215.4	2187.1	2197.6	2197.6
15°	2179.9	2172.9	2158.8	2158.8	2172.9	2144.4	2155.1	2155.1
17.5°	2144.4	2137.4	2126.7	2123.2	2137.4	2109.1	2119.7	2116.0
20°	2116.0	2109.1	2094.9	2094.9	2105.6	2077.2	2087.7	2087.7
22.5°	2091.4	2087.7	2073.5	2073.5	2087.7	2059.4	2066.6	2059.4
25°	2052.4	2048.7	2034.5	2038.2	2045.2	2016.9	2027.5	2020.3
27.5°	1988.5	1988.5	1974.3	1970.9	1981.3	1956.7	1963.7	1960.2
30°	1889.3	1892.8	1875.2	1875.2	1878.7	1857.3	1868.0	1864.5
32.5°	1754.6	1758.1	1743.9	1740.4	1751.1	1733.3	1740.4	1740.4
35°	1605.7	1609.2	1598.5	1598.5	1609.2	1598.5	1598.5	1595.0
37.5°	1456.8	1463.8	1456.8	1460.3	1467.5	1456.8	1463.8	1460.3
40°	1336.3	1343.5	1332.8	1339.8	1347.0	1336.3	1347.0	1339.8
42.5°	1226.4	1237.1	1229.9	1237.1	1244.1	1237.1	1244.1	1233.6
45°	1144.9	1152.1	1148.4	1152.1	1159.1	1155.6	1159.1	1155.6
47.5°	1066.9	1081.0	1074.0	1081.0	1091.7	1084.7	1091.7	1081.0
50°	996.0	1006.7	1003.2	1010.2	1013.7	1010.2	1017.4	1006.7
52.5°	903.8	914.5	911.0	911.0	918.0	911.0	918.0	911.0
55°	783.5	786.9	786.9	790.4	786.9	783.5	786.9	779.8
57.5°	666.4	673.4	662.9	673.4	669.9	666.4	666.4	659.2
60°	591.8	602.5	595.6	602.5	599.0	599.0	599.0	595.6
62.5°	531.7	538.9	531.7	535.2	535.2	535.2	531.7	528.2
65°	464.3	475.0	467.8	471.5	467.8	464.3	467.8	464.3
67.5°	397.0	400.5	400.5	397.0	397.0	397.0	397.0	390.0
70°	322.6	326.1	322.6	329.6	326.1	322.6	326.1	318.9
72.5°	251.6	255.3	251.6	255.3	251.6	251.6	251.6	251.6
75°	187.9	191.4	191.4	191.4	191.4	191.4	184.4	191.4
77.5°	134.7	134.7	134.7	138.2	134.7	134.7	134.7	134.7
80°	92.2	92.2	92.2	95.7	92.2	95.7	92.2	95.7
82.5°	60.2	60.2	60.2	60.2	60.2	60.2	60.2	60.2
85°	31.8	35.5	35.5	31.8	31.8	31.8	31.8	31.8
87.5°	7.2	3.5	3.5	3.5	3.5	3.5	3.5	3.5
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)