

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: P880585

Luminaire Tested: **LD4C50D010 EU4509040 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: P880585
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 EU4509040 4LBDWNH
Description: 4 INCH 5000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBDWN TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

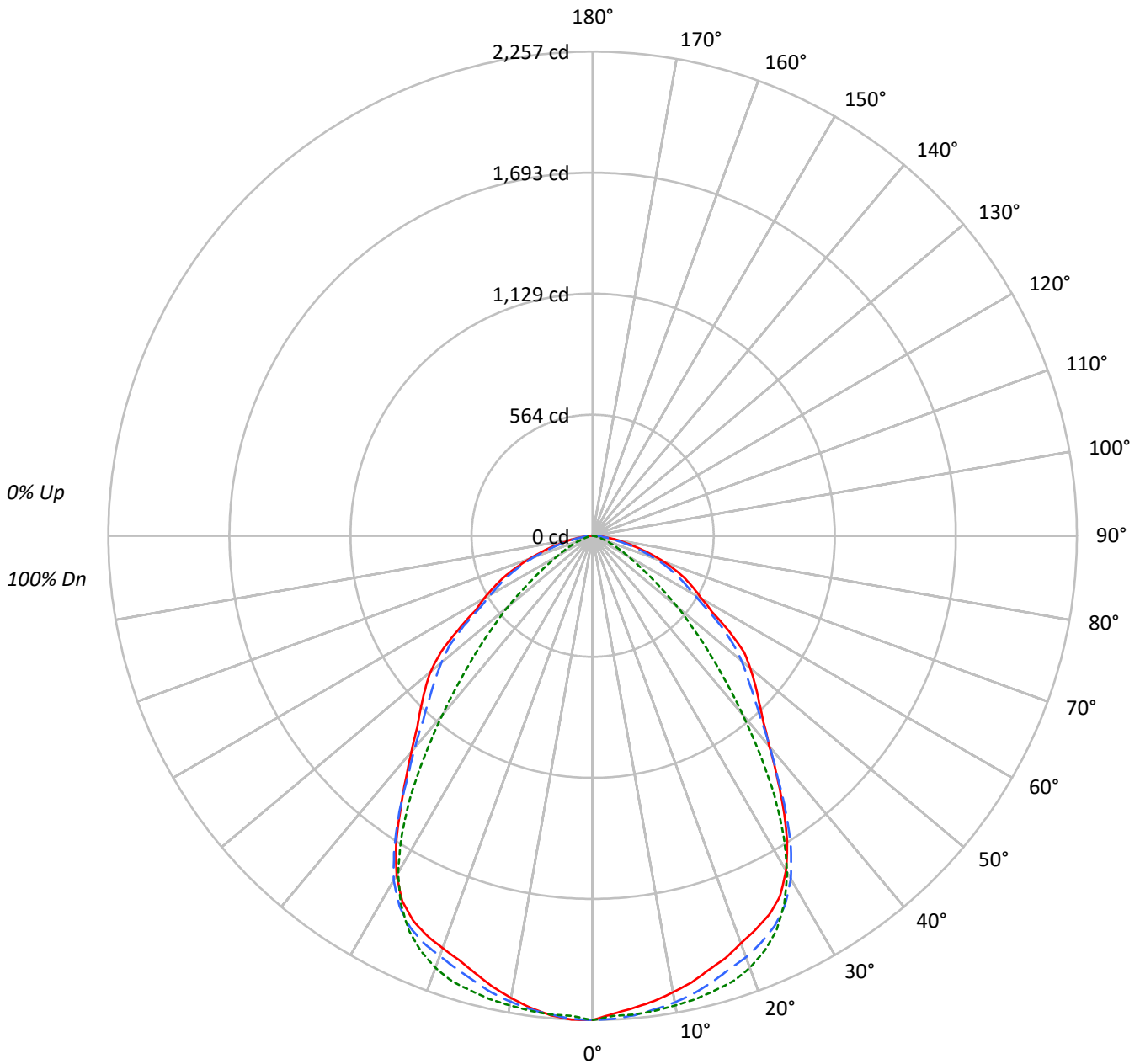
Lumens per Lamp: N/A
Luminaire Lumens: 4594.0 lumens
Efficiency: N/A
Efficacy: 78.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.19
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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: P880585

CATALOG NUMBER: LD4C50D010 EU4509040 4LBDWNH

Luminous Intensity Polar Plot





TEST NUMBER: P880585

CATALOG NUMBER: LD4C50D010 EU4509040 4LBDWNH

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	277317	277317	277317
5°	272395	276243	276662
10°	269470	277279	272938
15°	266343	279138	268543
20°	264234	280145	267411
25°	264086	274917	268315
30°	255687	257162	259134
35°	232283	221365	234368
40°	205519	174310	210507
45°	190646	132738	196710
50°	183194	98258	188508
55°	165868	67705	163640
60°	144205	46070	143370
65°	139331	33343	132238
70°	125971	22486	112250
75°	103810	14810	89001
80°	83554	9834	66362
85°	68647	4793	43979



TEST NUMBER: P880585

CATALOG NUMBER: LD4C50D010 EU4509040 4LBDWNH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	213.1	4.6
10°-20°	609.3	13.3
20°-30°	920.5	20.0
30°-40°	963.3	21.0
40°-50°	780.2	17.0
50°-60°	567.5	12.4
60°-70°	350.0	7.6
70°-80°	158.1	3.4
80°-90°	32.1	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°	1742.8	37.9
0°-40°	2706.1	58.9
0°-60°	4053.7	88.2
0°-90°	4594.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4594.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2257	2257	2257	2257	2257	
5°	2209	2243	2240	2240	2243	209
15°	2094	2153	2195	2146	2111	592
25°	1948	2007	2028	2014	1979	893
35°	1549	1570	1476	1570	1563	965
45°	1097	1063	764	1077	1132	853
55°	774	726	316	733	764	691
65°	479	431	115	424	455	469
75°	219	188	31	163	188	237
85°	49	38	3	28	31	56
90°	0	0	0	0	0	



TEST NUMBER: P880585

CATALOG NUMBER: LD4C50D010 EU4509040 4LBDWNH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3
2.5°	2229.5	2229.5	2250.4	2274.6	2253.9	2232.9	2246.8	2240.0	2264.3	2264.3	2253.9
5°	2208.8	2215.6	2232.9	2253.9	2236.6	2215.6	2232.9	2226.1	2250.4	2250.4	2243.4
7.5°	2187.9	2191.3	2212.2	2236.6	2219.0	2198.3	2212.2	2208.8	2229.5	2232.9	2226.1
10°	2160.1	2163.5	2184.4	2208.8	2191.3	2174.0	2187.9	2184.4	2212.2	2212.2	2208.8
12.5°	2132.3	2135.8	2156.7	2177.4	2160.1	2142.8	2156.7	2156.7	2184.4	2187.9	2184.4
15°	2094.1	2100.9	2118.5	2139.2	2128.9	2108.0	2121.9	2121.9	2146.2	2153.0	2153.0
17.5°	2062.9	2066.3	2083.6	2104.6	2090.7	2073.2	2087.1	2087.1	2111.4	2118.5	2118.5
20°	2021.1	2028.1	2045.4	2066.3	2055.9	2042.0	2052.5	2052.5	2080.2	2087.1	2090.7
22.5°	1986.5	1993.3	2007.2	2035.2	2017.6	2007.2	2021.1	2017.6	2049.0	2052.5	2052.5
25°	1948.2	1955.3	1972.6	1989.9	1979.4	1969.2	1979.4	1979.4	2003.8	2007.2	2007.2
27.5°	1892.7	1896.1	1913.4	1930.9	1920.5	1906.6	1920.5	1917.0	1941.2	1944.8	1941.2
30°	1802.4	1809.4	1816.2	1840.6	1830.1	1819.7	1833.5	1826.7	1851.1	1851.1	1847.4
32.5°	1687.7	1687.7	1701.8	1719.1	1705.2	1698.1	1708.6	1712.0	1729.5	1729.5	1719.1
35°	1548.8	1555.9	1566.1	1576.6	1566.1	1559.3	1569.8	1566.1	1587.1	1580.0	1569.8
37.5°	1410.0	1413.4	1423.9	1437.8	1423.9	1413.4	1416.9	1413.4	1430.7	1430.7	1413.4
40°	1281.5	1288.5	1295.3	1309.2	1295.3	1288.5	1291.9	1281.5	1302.4	1295.3	1284.9
42.5°	1177.2	1180.6	1191.1	1198.2	1184.3	1180.6	1184.3	1177.2	1187.7	1180.6	1159.9
45°	1097.3	1097.3	1101.0	1111.2	1097.3	1093.9	1093.9	1086.9	1097.3	1083.5	1062.7
47.5°	1027.9	1031.4	1035.0	1041.8	1031.4	1021.1	1024.5	1010.6	1017.5	1007.0	979.2
50°	958.5	965.4	969.0	975.8	965.4	958.5	961.9	948.1	948.1	930.8	906.4
52.5°	889.1	892.5	889.1	895.9	889.1	878.6	882.1	868.2	868.2	847.5	823.1
55°	774.4	777.8	781.5	788.3	781.5	771.0	777.8	767.6	767.6	753.5	725.7
57.5°	659.7	663.4	666.8	670.2	670.2	663.4	666.8	659.7	656.3	645.9	625.1
60°	586.9	586.9	586.9	590.3	586.9	583.5	583.5	576.4	576.4	562.6	541.8
62.5°	531.4	534.8	534.8	538.2	534.8	531.4	528.0	520.9	517.5	503.6	486.1
65°	479.3	479.3	475.8	482.7	479.3	475.8	475.8	468.8	462.0	448.1	430.6
67.5°	416.7	420.1	416.7	420.1	420.1	416.7	413.3	406.2	402.8	392.3	371.6
70°	350.7	350.7	350.7	354.3	350.7	350.7	354.3	343.9	340.4	326.3	309.0
72.5°	284.7	288.3	288.3	284.7	288.3	281.3	281.3	281.3	277.9	264.0	246.5
75°	218.7	222.3	222.3	225.7	222.3	218.7	218.7	215.3	211.9	201.4	187.5
77.5°	163.2	163.2	166.6	166.6	166.6	163.2	163.2	156.3	156.3	149.3	135.4
80°	118.1	118.1	114.7	118.1	118.1	114.7	114.7	111.1	111.1	104.2	93.8
82.5°	76.5	79.9	79.9	79.9	79.9	76.5	76.5	76.5	72.8	69.4	62.6
85°	48.7	48.7	48.7	48.7	52.1	48.7	52.1	48.7	48.7	41.6	38.2
87.5°	20.9	20.9	20.9	24.3	24.3	20.9	20.9	20.9	20.9	20.9	17.3
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: P880585

CATALOG NUMBER: LD4C50D010 EU4509040 4LBDWNH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3
2.5°	2253.9	2257.3	2246.8	2260.7	2250.4	2253.9	2257.3	2253.9	2240.0	2240.0	2278.2
5°	2240.0	2246.8	2236.6	2253.9	2246.8	2246.8	2253.9	2250.4	2236.6	2240.0	2274.6
7.5°	2226.1	2236.6	2229.5	2246.8	2236.6	2236.6	2243.4	2243.4	2229.5	2232.9	2264.3
10°	2205.2	2219.0	2215.6	2232.9	2222.7	2222.7	2232.9	2232.9	2219.0	2222.7	2253.9
12.5°	2187.9	2201.7	2198.3	2215.6	2208.8	2212.2	2215.6	2222.7	2205.2	2212.2	2240.0
15°	2160.1	2174.0	2174.0	2191.3	2184.4	2191.3	2198.3	2208.8	2194.7	2194.7	2222.7
17.5°	2128.9	2146.2	2146.2	2160.1	2160.1	2163.5	2177.4	2187.9	2174.0	2177.4	2201.7
20°	2094.1	2115.0	2115.0	2132.3	2128.9	2135.8	2146.2	2156.7	2142.8	2142.8	2170.6
22.5°	2059.3	2076.8	2080.2	2090.7	2090.7	2094.1	2104.6	2111.4	2094.1	2094.1	2121.9
25°	2010.8	2028.1	2031.5	2038.6	2031.5	2031.5	2038.6	2045.4	2028.1	2028.1	2052.5
27.5°	1944.8	1962.1	1962.1	1958.7	1951.6	1955.3	1951.6	1955.3	1937.8	1934.3	1958.7
30°	1847.4	1857.9	1857.9	1854.5	1844.0	1844.0	1833.5	1837.2	1812.8	1812.8	1833.5
32.5°	1715.6	1725.9	1719.1	1712.0	1698.1	1691.3	1684.3	1680.8	1656.5	1656.5	1680.8
35°	1559.3	1566.1	1555.9	1542.0	1524.5	1514.0	1503.8	1489.9	1472.4	1476.0	1489.9
37.5°	1399.6	1399.6	1385.7	1357.9	1344.0	1326.5	1309.2	1309.2	1281.5	1278.0	1288.5
40°	1264.2	1250.3	1225.9	1187.7	1163.3	1146.0	1121.7	1107.8	1086.9	1086.9	1104.4
42.5°	1142.6	1114.9	1083.5	1031.4	1007.0	986.3	955.1	941.2	916.9	913.2	923.7
45°	1035.0	1007.0	961.9	906.4	875.2	850.9	805.6	788.3	767.6	764.0	771.0
47.5°	948.1	916.9	861.3	788.3	757.1	725.7	680.7	656.3	639.0	628.6	639.0
50°	871.6	830.0	771.0	694.5	652.9	625.1	569.6	545.3	520.9	514.1	517.5
52.5°	788.3	746.7	684.1	604.2	566.0	524.3	472.2	437.6	416.7	406.2	416.7
55°	698.0	656.3	594.0	514.1	472.2	434.2	378.5	350.7	326.3	316.1	326.3
57.5°	600.8	562.6	507.0	427.2	388.9	354.3	302.2	274.4	250.1	243.0	250.1
60°	517.5	486.1	430.6	354.3	322.9	284.7	239.6	211.9	190.9	187.5	190.9
62.5°	462.0	427.2	375.0	302.2	270.8	239.6	198.0	170.2	152.7	149.3	152.7
65°	406.2	368.2	319.5	256.9	225.7	201.4	159.8	135.4	118.1	114.7	118.1
67.5°	343.9	309.0	267.4	211.9	187.5	163.2	128.6	104.2	90.3	86.9	90.3
70°	284.7	253.5	211.9	170.2	145.9	128.6	97.2	79.9	66.0	62.6	66.0
72.5°	225.7	198.0	163.2	128.6	114.7	97.2	76.5	58.9	48.7	45.1	48.7
75°	173.6	152.7	124.9	93.8	83.3	72.8	52.1	41.6	34.8	31.2	34.8
77.5°	121.5	107.6	86.9	69.4	58.9	52.1	38.2	27.8	24.3	20.9	24.3
80°	83.3	72.8	58.9	45.1	38.2	31.2	24.3	17.3	13.9	13.9	13.9
82.5°	55.5	45.1	34.8	27.8	24.3	20.9	13.9	10.5	10.5	7.0	7.0
85°	31.2	27.8	20.9	17.3	13.9	10.5	7.0	7.0	3.4	3.4	3.4
87.5°	13.9	10.5	7.0	7.0	3.4	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



TEST NUMBER: P880585

CATALOG NUMBER: LD4C50D010 EU4509040 4LBDWNH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3
2.5°	2267.7	2257.3	2271.2	2257.3	2250.4	2257.3	2250.4	2271.2	2253.9	2240.0	2253.9
5°	2264.3	2250.4	2264.3	2253.9	2243.4	2246.8	2240.0	2260.7	2240.0	2229.5	2236.6
7.5°	2257.3	2246.8	2253.9	2243.4	2232.9	2236.6	2229.5	2246.8	2226.1	2215.6	2222.7
10°	2246.8	2236.6	2240.0	2232.9	2222.7	2222.7	2215.6	2229.5	2205.2	2191.3	2198.3
12.5°	2232.9	2219.0	2226.1	2215.6	2201.7	2201.7	2194.7	2205.2	2180.8	2166.9	2170.6
15°	2215.6	2201.7	2201.7	2191.3	2177.4	2177.4	2163.5	2174.0	2146.2	2132.3	2132.3
17.5°	2194.7	2177.4	2177.4	2166.9	2149.6	2146.2	2135.8	2146.2	2115.0	2100.9	2100.9
20°	2163.5	2149.6	2146.2	2139.2	2121.9	2118.5	2104.6	2108.0	2083.6	2073.2	2069.8
22.5°	2121.9	2108.0	2111.4	2100.9	2087.1	2083.6	2069.8	2080.2	2055.9	2045.4	2049.0
25°	2049.0	2042.0	2049.0	2045.4	2035.2	2035.2	2028.1	2035.2	2014.2	2007.2	2010.8
27.5°	1965.5	1962.1	1965.5	1965.5	1958.7	1958.7	1958.7	1969.2	1948.2	1944.8	1944.8
30°	1844.0	1844.0	1847.4	1851.1	1851.1	1857.9	1854.5	1868.4	1854.5	1847.4	1854.5
32.5°	1684.3	1698.1	1708.6	1708.6	1708.6	1715.6	1722.5	1732.9	1719.1	1722.5	1722.5
35°	1503.8	1514.0	1521.1	1538.4	1528.1	1552.3	1559.3	1573.2	1569.8	1576.6	1573.2
37.5°	1302.4	1316.3	1330.1	1354.5	1350.9	1378.6	1392.5	1420.3	1413.4	1427.3	1434.2
40°	1114.9	1135.6	1156.5	1173.8	1187.7	1215.5	1243.2	1278.0	1288.5	1298.7	1302.4
42.5°	934.2	955.1	989.7	1014.1	1035.0	1080.0	1118.3	1159.9	1170.4	1191.1	1198.2
45°	788.3	805.6	847.5	878.6	895.9	961.9	1007.0	1059.1	1076.6	1101.0	1111.2
47.5°	652.9	684.1	725.7	764.0	788.3	857.7	916.9	972.4	996.8	1024.5	1038.4
50°	534.8	569.6	625.1	659.7	694.5	771.0	837.0	895.9	920.3	951.5	965.4
52.5°	437.6	475.8	528.0	566.0	604.2	684.1	753.5	809.2	840.4	861.3	882.1
55°	343.9	385.5	437.6	479.3	510.4	597.4	656.3	711.8	732.8	750.1	760.5
57.5°	267.4	298.6	350.7	385.5	423.7	500.0	559.1	600.8	618.1	639.0	645.9
60°	208.4	239.6	288.3	322.9	357.7	430.6	489.7	531.4	548.7	566.0	576.4
62.5°	166.6	198.0	243.0	274.4	305.6	371.6	423.7	465.4	486.1	503.6	514.1
65°	132.0	159.8	198.0	229.2	253.5	312.5	364.6	402.8	423.7	441.0	451.5
67.5°	104.2	128.6	163.2	184.1	208.4	256.9	302.2	336.8	354.3	375.0	385.5
70°	79.9	97.2	128.6	145.9	163.2	204.8	239.6	274.4	291.7	305.6	312.5
72.5°	58.9	72.8	97.2	111.1	121.5	156.3	184.1	208.4	222.3	236.2	243.0
75°	41.6	52.1	69.4	79.9	86.9	111.1	135.4	152.7	163.2	173.6	184.1
77.5°	27.8	34.8	45.1	52.1	58.9	76.5	90.3	104.2	114.7	124.9	128.6
80°	17.3	24.3	31.2	34.8	38.2	48.7	62.6	69.4	76.5	83.3	86.9
82.5°	10.5	13.9	17.3	20.9	24.3	31.2	38.2	45.1	48.7	55.5	58.9
85°	3.4	7.0	7.0	10.5	10.5	17.3	20.9	24.3	27.8	31.2	34.8
87.5°	0.0	0.0	3.4	3.4	3.4	3.4	7.0	7.0	7.0	7.0	7.0
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: P880585

CATALOG NUMBER: LD4C50D010 EU4509040 4LBDWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3	2257.3
2.5°	2267.7	2257.3	2250.4	2246.8	2271.2	2240.0	2253.9	2257.3
5°	2253.9	2243.4	2236.6	2232.9	2253.9	2226.1	2236.6	2243.4
7.5°	2232.9	2226.1	2215.6	2212.2	2232.9	2201.7	2215.6	2219.0
10°	2208.8	2198.3	2191.3	2187.9	2205.2	2174.0	2187.9	2187.9
12.5°	2177.4	2170.6	2156.7	2156.7	2170.6	2142.8	2153.0	2153.0
15°	2135.8	2128.9	2115.0	2115.0	2128.9	2100.9	2111.4	2111.4
17.5°	2100.9	2094.1	2083.6	2080.2	2094.1	2066.3	2076.8	2073.2
20°	2073.2	2066.3	2052.5	2052.5	2062.9	2035.2	2045.4	2045.4
22.5°	2049.0	2045.4	2031.5	2031.5	2045.4	2017.6	2024.7	2017.6
25°	2010.8	2007.2	1993.3	1996.9	2003.8	1976.0	1986.5	1979.4
27.5°	1948.2	1948.2	1934.3	1930.9	1941.2	1917.0	1923.9	1920.5
30°	1851.1	1854.5	1837.2	1837.2	1840.6	1819.7	1830.1	1826.7
32.5°	1719.1	1722.5	1708.6	1705.2	1715.6	1698.1	1705.2	1705.2
35°	1573.2	1576.6	1566.1	1566.1	1576.6	1566.1	1566.1	1562.7
37.5°	1427.3	1434.2	1427.3	1430.7	1437.8	1427.3	1434.2	1430.7
40°	1309.2	1316.3	1305.8	1312.6	1319.7	1309.2	1319.7	1312.6
42.5°	1201.6	1212.0	1205.0	1212.0	1218.9	1212.0	1218.9	1208.6
45°	1121.7	1128.7	1125.1	1128.7	1135.6	1132.2	1135.6	1132.2
47.5°	1045.2	1059.1	1052.3	1059.1	1069.6	1062.7	1069.6	1059.1
50°	975.8	986.3	982.9	989.7	993.1	989.7	996.8	986.3
52.5°	885.5	895.9	892.5	892.5	899.4	892.5	899.4	892.5
55°	767.6	771.0	771.0	774.4	771.0	767.6	771.0	764.0
57.5°	652.9	659.7	649.5	659.7	656.3	652.9	652.9	645.9
60°	579.9	590.3	583.5	590.3	586.9	586.9	586.9	583.5
62.5°	520.9	528.0	520.9	524.3	524.3	524.3	520.9	517.5
65°	454.9	465.4	458.3	462.0	458.3	454.9	458.3	454.9
67.5°	388.9	392.3	392.3	388.9	388.9	388.9	388.9	382.1
70°	316.1	319.5	316.1	322.9	319.5	316.1	319.5	312.5
72.5°	246.5	250.1	246.5	250.1	246.5	246.5	246.5	246.5
75°	184.1	187.5	187.5	187.5	187.5	187.5	180.7	187.5
77.5°	132.0	132.0	132.0	135.4	132.0	132.0	132.0	132.0
80°	90.3	90.3	90.3	93.8	90.3	93.8	90.3	93.8
82.5°	58.9	58.9	58.9	58.9	58.9	58.9	58.9	58.9
85°	31.2	34.8	34.8	31.2	31.2	31.2	31.2	31.2
87.5°	7.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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)