

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: P880587

Luminaire Tested: **LD4C55D010 EU4559027 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: P880587
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: LD4C55D010 EU4559027 4LBDWNH
Description: 4 INCH 5500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBDWN TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

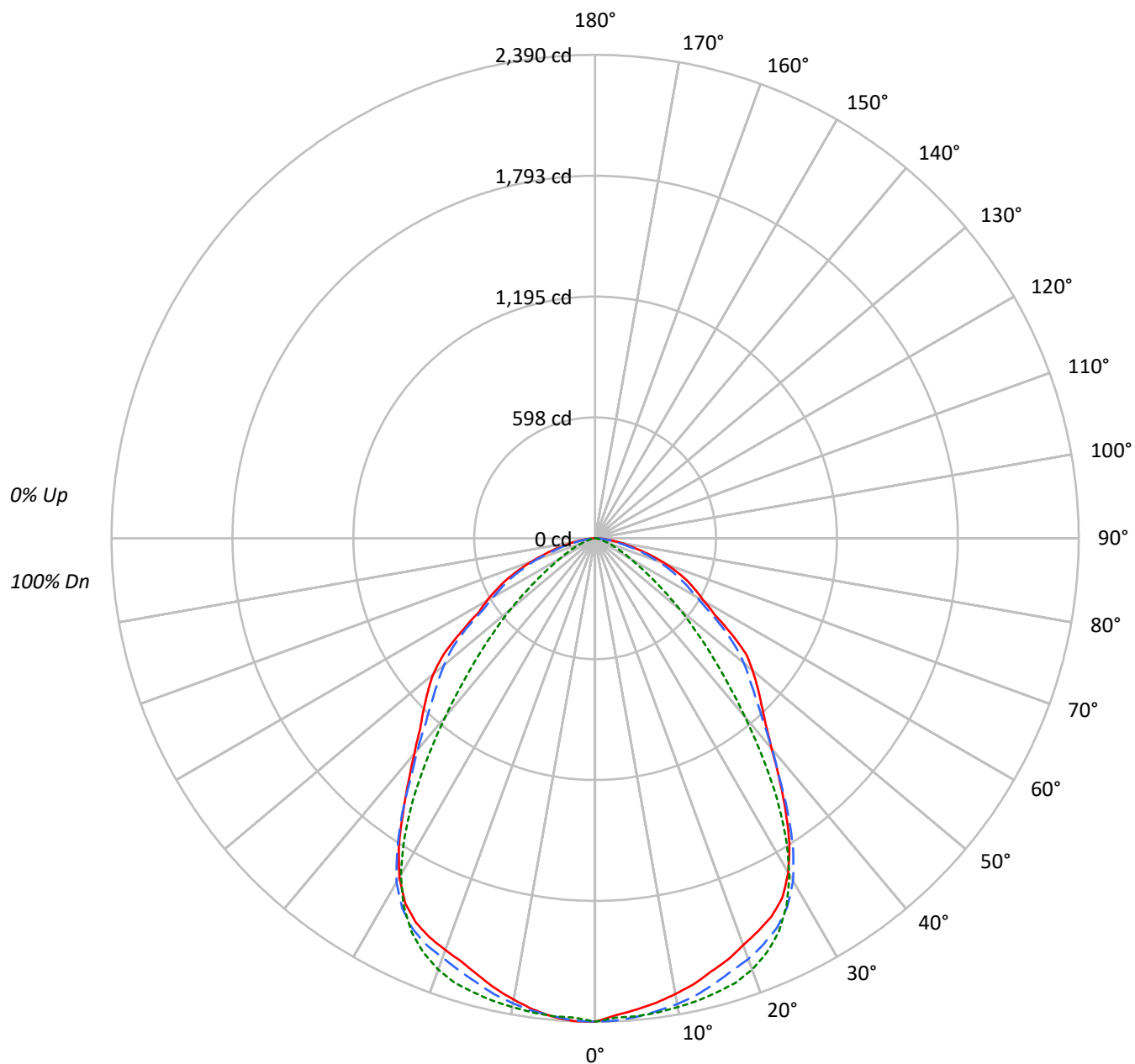
Lumens per Lamp: N/A
Luminaire Lumens: 4864.0 lumens
Efficiency: N/A
Efficacy: 76.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.19
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 63.9
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: P880587

CATALOG NUMBER: LD4C55D010 EU4559027 4LBDWNH

Luminous Intensity Polar Plot





TEST NUMBER: P880587

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10		50	30	10			50	30	10			50
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	107	103	100	108	104	101	98		100	98	95			96	94	92			93
2	102	95	89	84	100	93	88	83		90	85	81			87	83	80			84
3	94	85	78	72	92	84	77	72		81	75	70			78	73	69			76
4	87	77	69	63	85	75	68	62		73	67	62			71	65	61			69
5	81	69	61	55	79	68	61	55		66	60	54			64	58	54			63
6	75	63	55	49	73	62	55	49		60	54	49			59	53	48			57
7	70	58	50	44	68	57	49	44		56	49	44			54	48	43			53
8	66	53	45	40	64	52	45	40		51	44	40			50	44	39			49
9	62	49	41	36	60	49	41	36		47	41	36			46	40	36			45
10	58	46	38	33	57	45	38	33		44	38	33			43	37	33			42

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	293608	293608	293608
5°	288403	292472	292916
10°	285313	293571	288968
15°	282000	295545	284327
20°	279753	296605	283126
25°	279607	291075	284080
30°	270709	272284	274369
35°	245946	234383	248151
40°	217595	184558	222888
45°	201852	140539	208263
50°	193974	104030	199593
55°	175613	71689	173257
60°	152682	48773	151798
65°	147499	35291	140028
70°	133371	23815	118823
75°	109933	15664	94222
80°	88436	10400	70253
85°	72735	5075	46516



TEST NUMBER: P880587

CATALOG NUMBER: LD4C55D010 EU4559027 4LBDWNH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	225.6	4.6
10°-20°	645.1	13.3
20°-30°	974.6	20.0
30°-40°	1019.9	21.0
40°-50°	826.0	17.0
50°-60°	600.8	12.4
60°-70°	370.6	7.6
70°-80°	167.4	3.4
80°-90°	34.0	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°	1845.2	37.9
0°-40°	2865.1	58.9
0°-60°	4292.0	88.2
0°-90°	4864.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4864.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2390	2390	2390	2390	2390	
5°	2339	2375	2372	2372	2375	222
15°	2217	2280	2324	2272	2236	627
25°	2063	2125	2147	2133	2096	945
35°	1640	1662	1563	1662	1655	1022
45°	1162	1125	809	1140	1199	903
55°	820	768	335	776	809	732
65°	507	456	121	449	482	497
75°	232	198	33	173	198	251
85°	52	40	4	29	33	59
90°	0	0	0	0	0	



TEST NUMBER: P880587

CATALOG NUMBER: LD4C55D010 EU4559027 4LBDWNH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9
2.5°	2360.5	2360.5	2382.7	2408.3	2386.3	2364.2	2378.9	2371.6	2397.4	2397.4	2386.3
5°	2338.6	2345.8	2364.2	2386.3	2368.0	2345.8	2364.2	2356.9	2382.7	2382.7	2375.2
7.5°	2316.4	2320.1	2342.2	2368.0	2349.5	2327.5	2342.2	2338.6	2360.5	2364.2	2356.9
10°	2287.1	2290.7	2312.8	2338.6	2320.1	2301.7	2316.4	2312.8	2342.2	2342.2	2338.6
12.5°	2257.7	2261.3	2283.4	2305.4	2287.1	2268.7	2283.4	2283.4	2312.8	2316.4	2312.8
15°	2217.2	2224.4	2243.0	2264.9	2254.0	2231.9	2246.6	2246.6	2272.4	2279.6	2279.6
17.5°	2184.2	2187.8	2206.1	2228.3	2213.6	2195.0	2209.7	2209.7	2235.5	2243.0	2243.0
20°	2139.8	2147.3	2165.6	2187.8	2176.7	2162.0	2173.1	2173.1	2202.5	2209.7	2213.6
22.5°	2103.2	2110.4	2125.1	2154.8	2136.2	2125.1	2139.8	2136.2	2169.5	2173.1	2173.1
25°	2062.7	2070.2	2088.5	2106.8	2095.7	2084.9	2095.7	2095.7	2121.5	2125.1	2125.1
27.5°	2003.9	2007.6	2025.9	2044.4	2033.3	2018.6	2033.3	2029.7	2055.3	2059.1	2055.3
30°	1908.3	1915.8	1923.0	1948.8	1937.7	1926.6	1941.3	1934.1	1959.8	1959.8	1956.0
32.5°	1786.9	1786.9	1801.8	1820.1	1805.4	1797.9	1809.0	1812.6	1831.2	1831.2	1820.1
35°	1639.9	1647.3	1658.2	1669.3	1658.2	1651.0	1662.0	1658.2	1680.4	1672.9	1662.0
37.5°	1492.9	1496.5	1507.6	1522.3	1507.6	1496.5	1500.1	1496.5	1514.8	1514.8	1496.5
40°	1356.8	1364.2	1371.5	1386.2	1371.5	1364.2	1367.8	1356.8	1378.9	1371.5	1360.4
42.5°	1246.4	1250.0	1261.1	1268.6	1253.9	1250.0	1253.9	1246.4	1257.5	1250.0	1228.1
45°	1161.8	1161.8	1165.7	1176.5	1161.8	1158.2	1158.2	1150.8	1161.8	1147.1	1125.2
47.5°	1088.4	1092.0	1095.8	1103.0	1092.0	1081.1	1084.7	1070.0	1077.3	1066.2	1036.8
50°	1014.9	1022.1	1025.9	1033.2	1022.1	1014.9	1018.5	1003.8	1003.8	985.5	959.7
52.5°	941.4	945.0	941.4	948.6	941.4	930.3	933.9	919.2	919.2	897.3	871.5
55°	819.9	823.6	827.4	834.6	827.4	816.3	823.6	812.7	812.7	797.8	768.4
57.5°	698.5	702.4	706.0	709.6	709.6	702.4	706.0	698.5	694.9	683.8	661.9
60°	621.4	621.4	621.4	625.0	621.4	617.8	617.8	610.3	610.3	595.6	573.7
62.5°	562.6	566.2	566.2	569.8	566.2	562.6	559.0	551.5	547.9	533.2	514.7
65°	507.4	507.4	503.8	511.0	507.4	503.8	503.8	496.3	489.1	474.4	455.9
67.5°	441.2	444.8	441.2	444.8	444.8	441.2	437.6	430.1	426.5	415.4	393.5
70°	371.3	371.3	371.3	375.1	371.3	371.3	375.1	364.1	360.4	345.5	327.2
72.5°	301.4	305.3	305.3	301.4	305.3	297.8	297.8	297.8	294.2	279.5	261.0
75°	231.6	235.4	235.4	239.0	235.4	231.6	231.6	227.9	224.3	213.2	198.5
77.5°	172.8	172.8	176.4	176.4	176.4	172.8	172.8	165.5	165.5	158.1	143.4
80°	125.0	125.0	121.4	125.0	125.0	121.4	121.4	117.6	117.6	110.4	99.3
82.5°	81.0	84.6	84.6	84.6	84.6	81.0	81.0	81.0	77.1	73.5	66.3
85°	51.6	51.6	51.6	51.6	55.2	51.6	55.2	51.6	51.6	44.1	40.5
87.5°	22.2	22.2	22.2	25.8	25.8	22.2	22.2	22.2	22.2	22.2	18.3
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: P880587

CATALOG NUMBER: LD4C55D010 EU4559027 4LBDWNH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9
2.5°	2386.3	2389.9	2378.9	2393.6	2382.7	2386.3	2389.9	2386.3	2371.6	2371.6	2412.1
5°	2371.6	2378.9	2368.0	2386.3	2378.9	2378.9	2386.3	2382.7	2368.0	2371.6	2408.3
7.5°	2356.9	2368.0	2360.5	2378.9	2368.0	2368.0	2375.2	2375.2	2360.5	2364.2	2397.4
10°	2334.8	2349.5	2345.8	2364.2	2353.3	2353.3	2364.2	2364.2	2349.5	2353.3	2386.3
12.5°	2316.4	2331.1	2327.5	2345.8	2338.6	2342.2	2345.8	2353.3	2334.8	2342.2	2371.6
15°	2287.1	2301.7	2301.7	2320.1	2312.8	2320.1	2327.5	2338.6	2323.7	2323.7	2353.3
17.5°	2254.0	2272.4	2272.4	2287.1	2287.1	2290.7	2305.4	2316.4	2301.7	2305.4	2331.1
20°	2217.2	2239.3	2239.3	2257.7	2254.0	2261.3	2272.4	2283.4	2268.7	2268.7	2298.1
22.5°	2180.3	2198.9	2202.5	2213.6	2213.6	2217.2	2228.3	2235.5	2217.2	2217.2	2246.6
25°	2129.0	2147.3	2150.9	2158.4	2150.9	2150.9	2158.4	2165.6	2147.3	2147.3	2173.1
27.5°	2059.1	2077.4	2077.4	2073.8	2066.4	2070.2	2066.4	2070.2	2051.7	2048.0	2073.8
30°	1956.0	1967.1	1967.1	1963.5	1952.4	1952.4	1941.3	1945.1	1919.4	1919.4	1941.3
32.5°	1816.5	1827.3	1820.1	1812.6	1797.9	1790.7	1783.2	1779.6	1753.8	1753.8	1779.6
35°	1651.0	1658.2	1647.3	1632.6	1614.1	1603.0	1592.2	1577.5	1558.9	1562.8	1577.5
37.5°	1481.8	1481.8	1467.1	1437.7	1423.0	1404.5	1386.2	1386.2	1356.8	1353.1	1364.2
40°	1338.4	1323.7	1298.0	1257.5	1231.7	1213.4	1187.6	1172.9	1150.8	1150.8	1169.3
42.5°	1209.8	1180.4	1147.1	1092.0	1066.2	1044.3	1011.2	996.5	970.8	966.9	978.0
45°	1095.8	1066.2	1018.5	959.7	926.7	900.9	853.0	834.6	812.7	808.9	816.3
47.5°	1003.8	970.8	912.0	834.6	801.6	768.4	720.7	694.9	676.6	665.5	676.6
50°	922.8	878.7	816.3	735.4	691.3	661.9	603.1	577.3	551.5	544.3	547.9
52.5°	834.6	790.5	724.3	639.7	599.2	555.1	500.0	463.3	441.2	430.1	441.2
55°	739.0	694.9	628.9	544.3	500.0	459.7	400.7	371.3	345.5	334.7	345.5
57.5°	636.1	595.6	536.8	452.3	411.8	375.1	320.0	290.6	264.8	257.3	264.8
60°	547.9	514.7	455.9	375.1	341.9	301.4	253.7	224.3	202.2	198.5	202.2
62.5°	489.1	452.3	397.1	320.0	286.7	253.7	209.6	180.2	161.7	158.1	161.7
65°	430.1	389.8	338.3	272.0	239.0	213.2	169.1	143.4	125.0	121.4	125.0
67.5°	364.1	327.2	283.1	224.3	198.5	172.8	136.1	110.4	95.7	92.0	95.7
70°	301.4	268.4	224.3	180.2	154.4	136.1	102.9	84.6	69.9	66.3	69.9
72.5°	239.0	209.6	172.8	136.1	121.4	102.9	81.0	62.4	51.6	47.7	51.6
75°	183.8	161.7	132.3	99.3	88.2	77.1	55.2	44.1	36.9	33.0	36.9
77.5°	128.7	114.0	92.0	73.5	62.4	55.2	40.5	29.4	25.8	22.2	25.8
80°	88.2	77.1	62.4	47.7	40.5	33.0	25.8	18.3	14.7	14.7	14.7
82.5°	58.8	47.7	36.9	29.4	25.8	22.2	14.7	11.1	11.1	7.5	7.5
85°	33.0	29.4	22.2	18.3	14.7	11.1	7.5	7.5	3.6	3.6	3.6
87.5°	14.7	11.1	7.5	7.5	3.6	3.6	3.6	3.6	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: P880587

CATALOG NUMBER: LD4C55D010 EU4559027 4LBDWNH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9
2.5°	2401.0	2389.9	2404.6	2389.9	2382.7	2389.9	2382.7	2404.6	2386.3	2371.6	2386.3
5°	2397.4	2382.7	2397.4	2386.3	2375.2	2378.9	2371.6	2393.6	2371.6	2360.5	2368.0
7.5°	2389.9	2378.9	2386.3	2375.2	2364.2	2368.0	2360.5	2378.9	2356.9	2345.8	2353.3
10°	2378.9	2368.0	2371.6	2364.2	2353.3	2353.3	2345.8	2360.5	2334.8	2320.1	2327.5
12.5°	2364.2	2349.5	2356.9	2345.8	2331.1	2331.1	2323.7	2334.8	2309.0	2294.3	2298.1
15°	2345.8	2331.1	2331.1	2320.1	2305.4	2305.4	2290.7	2301.7	2272.4	2257.7	2257.7
17.5°	2323.7	2305.4	2305.4	2294.3	2276.0	2272.4	2261.3	2272.4	2239.3	2224.4	2224.4
20°	2290.7	2276.0	2272.4	2264.9	2246.6	2243.0	2228.3	2231.9	2206.1	2195.0	2191.4
22.5°	2246.6	2231.9	2235.5	2224.4	2209.7	2206.1	2191.4	2202.5	2176.7	2165.6	2169.5
25°	2169.5	2162.0	2169.5	2165.6	2154.8	2154.8	2147.3	2154.8	2132.6	2125.1	2129.0
27.5°	2081.0	2077.4	2081.0	2081.0	2073.8	2073.8	2073.8	2084.9	2062.7	2059.1	2059.1
30°	1952.4	1952.4	1956.0	1959.8	1959.8	1967.1	1963.5	1978.2	1963.5	1956.0	1963.5
32.5°	1783.2	1797.9	1809.0	1809.0	1809.0	1816.5	1823.7	1834.8	1820.1	1823.7	1823.7
35°	1592.2	1603.0	1610.5	1628.8	1617.9	1643.5	1651.0	1665.7	1662.0	1669.3	1665.7
37.5°	1378.9	1393.6	1408.3	1434.1	1430.3	1459.7	1474.4	1503.7	1496.5	1511.2	1518.4
40°	1180.4	1202.3	1224.5	1242.8	1257.5	1286.9	1316.3	1353.1	1364.2	1375.1	1378.9
42.5°	989.1	1011.2	1047.9	1073.7	1095.8	1143.5	1184.0	1228.1	1239.2	1261.1	1268.6
45°	834.6	853.0	897.3	930.3	948.6	1018.5	1066.2	1121.4	1139.9	1165.7	1176.5
47.5°	691.3	724.3	768.4	808.9	834.6	908.1	970.8	1029.6	1055.3	1084.7	1099.4
50°	566.2	603.1	661.9	698.5	735.4	816.3	886.2	948.6	974.4	1007.4	1022.1
52.5°	463.3	503.8	559.0	599.2	639.7	724.3	797.8	856.8	889.8	912.0	933.9
55°	364.1	408.2	463.3	507.4	540.4	632.5	694.9	753.7	775.8	794.2	805.2
57.5°	283.1	316.1	371.3	408.2	448.6	529.4	592.0	636.1	654.4	676.6	683.8
60°	220.7	253.7	305.3	341.9	378.8	455.9	518.5	562.6	580.9	599.2	610.3
62.5°	176.4	209.6	257.3	290.6	323.6	393.5	448.6	492.7	514.7	533.2	544.3
65°	139.7	169.1	209.6	242.6	268.4	330.8	386.0	426.5	448.6	467.0	478.0
67.5°	110.4	136.1	172.8	194.9	220.7	272.0	320.0	356.6	375.1	397.1	408.2
70°	84.6	102.9	136.1	154.4	172.8	216.9	253.7	290.6	308.9	323.6	330.8
72.5°	62.4	77.1	102.9	117.6	128.7	165.5	194.9	220.7	235.4	250.1	257.3
75°	44.1	55.2	73.5	84.6	92.0	117.6	143.4	161.7	172.8	183.8	194.9
77.5°	29.4	36.9	47.7	55.2	62.4	81.0	95.7	110.4	121.4	132.3	136.1
80°	18.3	25.8	33.0	36.9	40.5	51.6	66.3	73.5	81.0	88.2	92.0
82.5°	11.1	14.7	18.3	22.2	25.8	33.0	40.5	47.7	51.6	58.8	62.4
85°	3.6	7.5	7.5	11.1	11.1	18.3	22.2	25.8	29.4	33.0	36.9
87.5°	0.0	0.0	3.6	3.6	3.6	3.6	7.5	7.5	7.5	7.5	7.5
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: P880587

CATALOG NUMBER: LD4C55D010 EU4559027 4LBDWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9	2389.9
2.5°	2401.0	2389.9	2382.7	2378.9	2404.6	2371.6	2386.3	2389.9
5°	2386.3	2375.2	2368.0	2364.2	2386.3	2356.9	2368.0	2375.2
7.5°	2364.2	2356.9	2345.8	2342.2	2364.2	2331.1	2345.8	2349.5
10°	2338.6	2327.5	2320.1	2316.4	2334.8	2301.7	2316.4	2316.4
12.5°	2305.4	2298.1	2283.4	2283.4	2298.1	2268.7	2279.6	2279.6
15°	2261.3	2254.0	2239.3	2239.3	2254.0	2224.4	2235.5	2235.5
17.5°	2224.4	2217.2	2206.1	2202.5	2217.2	2187.8	2198.9	2195.0
20°	2195.0	2187.8	2173.1	2173.1	2184.2	2154.8	2165.6	2165.6
22.5°	2169.5	2165.6	2150.9	2150.9	2165.6	2136.2	2143.7	2136.2
25°	2129.0	2125.1	2110.4	2114.3	2121.5	2092.1	2103.2	2095.7
27.5°	2062.7	2062.7	2048.0	2044.4	2055.3	2029.7	2037.0	2033.3
30°	1959.8	1963.5	1945.1	1945.1	1948.8	1926.6	1937.7	1934.1
32.5°	1820.1	1823.7	1809.0	1805.4	1816.5	1797.9	1805.4	1805.4
35°	1665.7	1669.3	1658.2	1658.2	1669.3	1658.2	1658.2	1654.6
37.5°	1511.2	1518.4	1511.2	1514.8	1522.3	1511.2	1518.4	1514.8
40°	1386.2	1393.6	1382.5	1389.8	1397.2	1386.2	1397.2	1389.8
42.5°	1272.2	1283.3	1275.8	1283.3	1290.5	1283.3	1290.5	1279.7
45°	1187.6	1195.1	1191.2	1195.1	1202.3	1198.7	1202.3	1198.7
47.5°	1106.7	1121.4	1114.1	1121.4	1132.4	1125.2	1132.4	1121.4
50°	1033.2	1044.3	1040.6	1047.9	1051.5	1047.9	1055.3	1044.3
52.5°	937.5	948.6	945.0	945.0	952.2	945.0	952.2	945.0
55°	812.7	816.3	816.3	819.9	816.3	812.7	816.3	808.9
57.5°	691.3	698.5	687.7	698.5	694.9	691.3	691.3	683.8
60°	613.9	625.0	617.8	625.0	621.4	621.4	621.4	617.8
62.5°	551.5	559.0	551.5	555.1	555.1	555.1	551.5	547.9
65°	481.7	492.7	485.3	489.1	485.3	481.7	485.3	481.7
67.5°	411.8	415.4	415.4	411.8	411.8	411.8	411.8	404.5
70°	334.7	338.3	334.7	341.9	338.3	334.7	338.3	330.8
72.5°	261.0	264.8	261.0	264.8	261.0	261.0	261.0	261.0
75°	194.9	198.5	198.5	198.5	198.5	198.5	191.3	198.5
77.5°	139.7	139.7	139.7	143.4	139.7	139.7	139.7	139.7
80°	95.7	95.7	95.7	99.3	95.7	99.3	95.7	99.3
82.5°	62.4	62.4	62.4	62.4	62.4	62.4	62.4	62.4
85°	33.0	36.9	36.9	33.0	33.0	33.0	33.0	33.0
87.5°	7.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)