

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: P879403

Luminaire Tested: **LD4C30D010 EU4309035 4LBDWWLI**

Issue Date: 10/1/2024

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: P879403
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-5)
Test Lab: INNOVATION CENTER
Issue Date: 10/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C30D010 EU4309035 4LBDWWLI
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3500K, 90CRI LEDS
AND 4LBDWW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

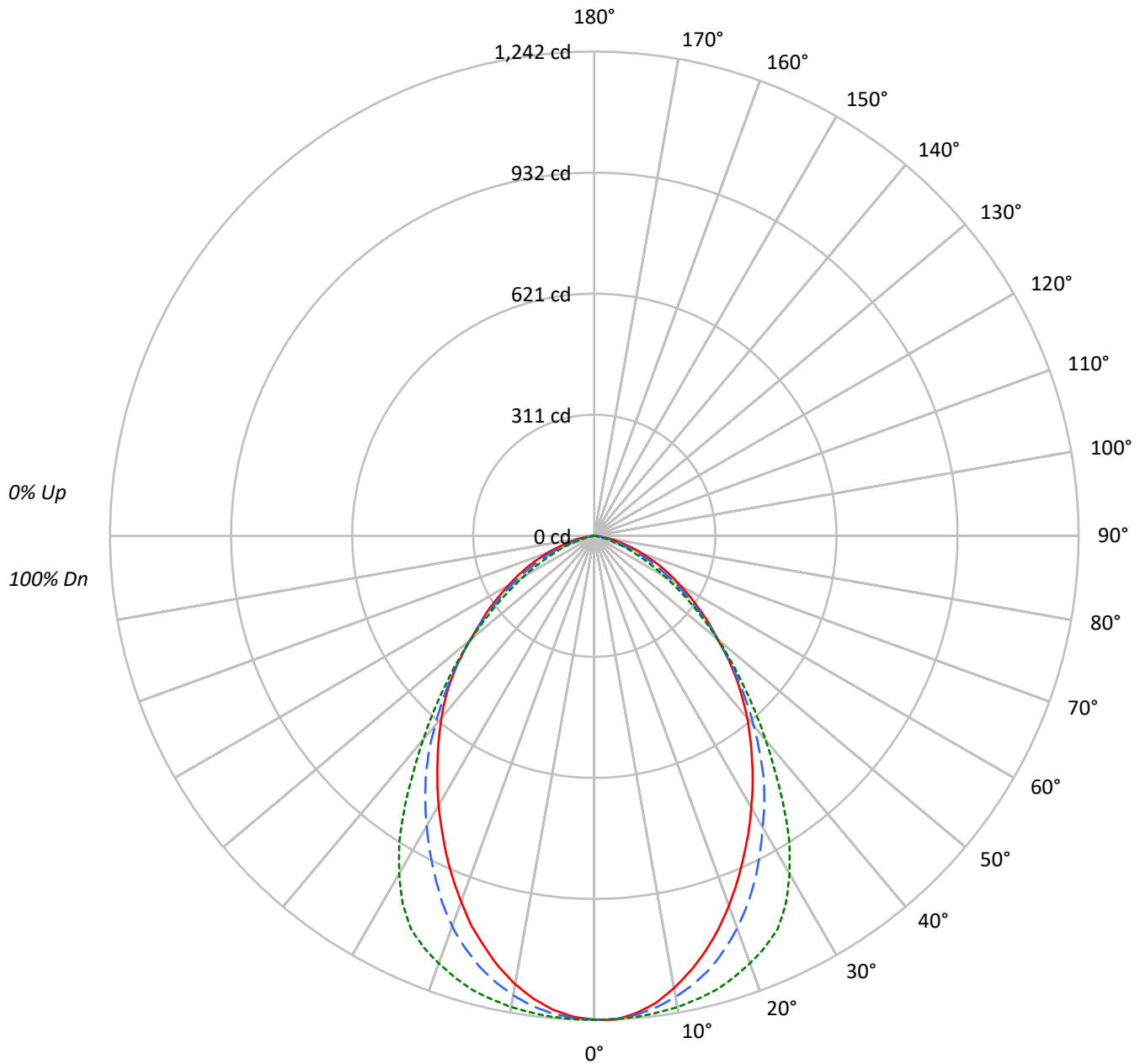
Lumens per Lamp: N/A
Luminaire Lumens: 2280.0 lumens
Efficiency: N/A
Efficacy: 72.2 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.19 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 31.6
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

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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
RW	70	50	30	10		70	50	30	10		50	30	10		50	30	10		50	30	10
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	111	107	104	101		108	105	102	99		101	98	96		97	95	93		93	92	90
2	103	96	90	85		100	94	89	84		91	86	83		87	84	81		85	82	79
3	95	86	79	74		93	84	78	73		82	76	72		79	74	70		77	73	69
4	88	78	70	64		86	76	69	64		74	68	63		72	66	62		70	65	61
5	82	70	62	57		80	69	62	56		67	61	56		65	60	55		64	59	55
6	76	64	56	50		74	63	56	50		61	55	50		60	54	49		58	53	49
7	71	59	51	45		69	58	50	45		56	50	45		55	49	45		54	48	44
8	66	54	46	41		65	53	46	41		52	45	41		51	45	40		50	44	40
9	62	50	42	37		61	49	42	37		48	42	37		47	41	37		46	41	37
10	59	46	39	34		57	46	39	34		45	39	34		44	38	34		43	38	34

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	152510	152510	152510
5°	151613	152760	150466
10°	146991	153129	145719
15°	140237	153464	138710
20°	131954	152597	130503
25°	122907	150790	121904
30°	114196	142001	113274
35°	105898	127000	105133
40°	97908	109519	97828
45°	89216	93490	89946
50°	78801	79069	79241
55°	70597	64642	70896
60°	62410	51328	62508
65°	54942	39128	54389
70°	45511	28018	45511
75°	35458	16091	34176
80°	22993	3962	22003
85°	8458	1269	6484



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.5	5.1
10°-20°	322.4	14.1
20°-30°	450.7	19.8
30°-40°	475.4	20.9
40°-50°	404.5	17.7
50°-60°	285.4	12.5
60°-70°	161.8	7.1
70°-80°	57.7	2.5
80°-90°	5.5	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°	889.7	39.0
0°-40°	1365.1	59.9
0°-60°	2055.0	90.1
0°-90°	2280.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2280.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1241	1241	1241	1241	1241	
5°	1229	1234	1239	1230	1220	116
15°	1103	1149	1207	1143	1091	309
25°	907	974	1112	966	899	417
35°	706	757	847	753	701	441
45°	514	521	538	523	518	395
55°	330	318	302	319	331	296
65°	189	162	135	162	187	187
75°	75	51	34	50	72	81
85°	6	2	1	2	5	11
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°	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4
2.5°	1242.4	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.1	1240.5	1240.5
5°	1229.4	1228.4	1228.0	1228.0	1228.0	1228.0	1228.4	1230.3	1231.2	1232.6	1233.6
7.5°	1208.9	1207.1	1208.0	1208.0	1208.9	1209.9	1211.3	1213.1	1215.9	1217.8	1220.1
10°	1178.3	1176.4	1178.8	1179.7	1182.5	1183.9	1186.2	1189.0	1194.6	1197.3	1201.1
12.5°	1142.6	1141.6	1142.6	1146.3	1149.1	1150.9	1153.7	1159.7	1165.3	1171.3	1177.8
15°	1102.6	1100.3	1101.7	1106.3	1111.0	1114.2	1116.6	1124.5	1131.9	1141.2	1149.1
17.5°	1058.1	1054.8	1058.5	1062.2	1068.3	1071.1	1074.3	1083.1	1093.3	1103.6	1112.4
20°	1009.3	1008.4	1010.7	1015.8	1021.8	1025.6	1028.3	1038.1	1046.9	1060.8	1071.1
22.5°	958.7	959.6	961.5	967.1	971.2	976.4	980.5	989.4	999.6	1012.6	1025.6
25°	906.7	908.1	911.4	915.1	922.0	924.8	929.9	939.2	948.0	960.1	974.5
27.5°	856.6	857.0	860.7	862.6	869.1	875.1	877.5	887.2	897.4	906.7	919.2
30°	805.0	806.4	808.8	813.9	820.4	822.7	825.5	834.3	842.2	853.8	863.5
32.5°	755.8	754.9	757.7	760.5	767.9	772.1	773.5	783.7	790.6	802.3	811.5
35°	706.1	703.8	708.0	710.8	717.3	721.0	722.9	730.8	737.3	747.0	757.2
37.5°	656.5	658.3	660.2	662.5	665.8	666.7	672.3	674.1	682.5	689.9	695.5
40°	610.5	609.6	608.7	611.0	615.2	617.0	617.5	622.6	624.4	631.9	636.0
42.5°	561.3	561.8	561.3	561.8	564.1	564.1	565.5	568.7	570.1	572.4	577.5
45°	513.5	513.5	512.1	512.5	513.0	512.5	513.0	514.4	517.2	517.2	520.9
47.5°	463.8	462.9	464.7	463.3	462.4	461.9	463.3	461.9	464.7	464.7	465.7
50°	412.3	412.3	414.6	414.1	415.1	413.2	413.7	413.7	414.1	413.7	415.5
52.5°	372.3	371.4	370.5	368.2	369.1	367.2	367.2	367.7	366.3	365.8	363.5
55°	329.6	330.6	329.2	328.2	328.2	326.4	325.9	323.1	321.3	319.9	318.5
57.5°	291.1	292.0	291.6	289.2	286.5	286.9	286.0	283.2	279.0	276.2	273.9
60°	254.0	254.9	254.0	251.6	250.7	248.8	248.4	244.7	241.4	237.7	234.9
62.5°	220.5	220.5	220.1	216.8	214.5	215.0	212.6	209.8	205.7	200.6	196.4
65°	189.0	188.5	186.2	184.8	182.9	180.6	179.2	175.0	171.8	167.6	162.0
67.5°	157.4	156.0	155.1	153.7	149.5	149.0	147.2	143.5	138.8	135.6	130.9
70°	126.7	126.3	124.4	124.4	121.2	119.8	117.0	113.7	109.6	104.9	101.2
72.5°	100.3	99.4	97.5	95.6	92.9	91.9	89.6	86.4	82.6	78.0	73.4
75°	74.7	73.8	73.4	71.0	68.7	66.4	65.5	62.2	58.5	55.2	51.1
77.5°	52.5	51.5	50.1	48.7	47.4	46.0	44.6	41.8	38.5	35.7	32.0
80°	32.5	31.6	30.6	30.2	28.8	28.3	26.5	25.1	22.3	20.4	18.1
82.5°	16.7	16.7	15.8	15.3	14.4	13.9	13.5	12.1	10.7	9.3	7.9
85°	6.0	6.0	5.6	5.1	5.1	4.6	4.6	4.2	3.2	3.2	2.3
87.5°	0.5	0.5	0.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5	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°	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4
2.5°	1241.0	1240.5	1241.0	1241.0	1241.4	1241.4	1241.4	1241.0	1241.4	1241.0	1241.0
5°	1233.6	1234.9	1235.9	1236.8	1237.3	1237.7	1237.7	1238.2	1238.7	1238.7	1238.2
7.5°	1221.9	1224.7	1227.5	1229.4	1230.3	1231.2	1232.6	1233.6	1234.5	1234.0	1233.6
10°	1206.6	1211.3	1215.0	1218.7	1220.6	1221.9	1224.3	1226.1	1227.1	1227.5	1226.1
12.5°	1184.8	1191.3	1197.3	1203.4	1206.2	1208.0	1212.7	1215.9	1217.8	1217.8	1216.4
15°	1157.4	1166.7	1175.5	1183.4	1188.1	1190.8	1197.8	1202.4	1205.2	1206.6	1204.3
17.5°	1124.5	1135.1	1145.8	1156.0	1160.7	1164.8	1174.6	1181.1	1187.1	1188.1	1185.3
20°	1082.2	1095.7	1107.7	1120.3	1125.4	1131.9	1143.0	1153.7	1163.0	1167.2	1159.3
22.5°	1034.8	1049.7	1060.8	1076.2	1083.1	1090.1	1104.5	1118.0	1134.2	1143.0	1129.1
25°	985.6	998.2	1011.6	1026.5	1036.2	1043.7	1060.4	1077.6	1099.4	1112.4	1092.9
27.5°	932.7	943.9	960.1	976.4	983.8	993.1	1013.0	1031.6	1052.5	1064.1	1049.7
30°	877.9	891.9	907.2	922.0	932.7	941.5	957.8	973.6	991.2	1001.0	990.3
32.5°	823.6	837.1	850.1	866.3	872.4	880.2	894.6	908.1	921.6	930.4	917.9
35°	766.5	778.6	790.6	801.8	804.6	813.9	825.5	833.4	839.9	846.8	838.5
37.5°	704.3	713.6	719.6	731.7	736.3	737.7	747.0	752.6	759.5	760.9	760.5
40°	641.2	649.5	654.6	662.0	665.8	665.8	672.3	677.4	682.5	682.9	682.5
42.5°	582.2	586.4	590.5	595.2	594.3	599.8	602.6	604.9	608.7	608.7	609.6
45°	522.8	526.0	529.7	530.7	534.4	534.4	536.7	537.6	539.5	538.1	536.2
47.5°	467.5	468.9	469.4	473.6	474.5	471.2	474.0	474.5	474.0	474.0	473.1
50°	415.1	416.0	415.5	414.1	414.6	416.0	414.6	412.7	413.7	413.7	414.6
52.5°	364.0	362.1	361.2	361.2	359.3	359.3	357.0	356.1	355.6	353.8	356.1
55°	317.1	314.3	310.1	309.2	307.8	307.3	304.6	302.2	301.3	301.8	301.3
57.5°	272.1	267.9	265.1	264.2	262.8	260.0	256.7	254.4	254.0	253.0	253.0
60°	231.2	226.6	222.4	218.2	218.7	216.8	213.6	212.2	210.8	208.9	210.3
62.5°	194.1	189.0	184.3	180.1	177.3	176.0	173.6	171.3	169.9	168.5	170.4
65°	157.4	153.2	148.1	143.9	142.5	141.1	138.8	135.1	134.6	134.6	135.6
67.5°	124.4	119.8	115.1	112.4	110.5	108.6	107.7	105.9	104.5	103.5	104.0
70°	95.6	91.0	87.3	84.5	83.1	82.6	79.4	78.9	78.5	78.0	77.5
72.5°	69.6	65.9	62.7	60.8	59.0	57.6	56.6	55.2	54.8	54.8	54.8
75°	47.8	45.0	41.3	39.0	38.1	36.7	35.3	34.4	33.4	33.9	33.9
77.5°	28.8	26.0	23.7	21.8	21.4	20.0	18.6	17.6	16.2	16.2	16.7
80°	15.8	13.5	11.6	10.2	9.3	8.8	7.4	7.0	6.0	5.6	5.6
82.5°	7.0	5.6	4.6	4.2	3.7	3.2	2.8	2.3	2.3	1.9	2.3
85°	2.3	1.9	1.4	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
87.5°	0.5	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4
2.5°	1240.5	1240.5	1240.1	1240.1	1240.1	1239.1	1239.1	1238.7	1238.2	1237.7	1236.8
5°	1237.3	1236.8	1235.9	1235.4	1234.9	1233.6	1232.2	1231.2	1229.8	1228.0	1227.1
7.5°	1232.6	1231.2	1229.4	1228.4	1227.1	1223.8	1221.5	1219.2	1216.8	1213.6	1209.9
10°	1224.7	1221.9	1219.2	1217.3	1215.0	1210.8	1206.2	1202.4	1197.3	1192.7	1187.6
12.5°	1213.6	1210.3	1204.8	1202.0	1199.2	1193.2	1187.1	1179.2	1172.3	1165.8	1159.7
15°	1199.7	1193.6	1187.1	1183.4	1179.2	1169.5	1160.2	1151.8	1142.6	1134.7	1124.9
17.5°	1179.2	1170.4	1161.1	1157.0	1151.4	1140.2	1129.1	1117.5	1106.8	1097.1	1085.0
20°	1148.6	1138.8	1126.8	1120.3	1115.6	1100.8	1090.1	1077.1	1066.0	1053.9	1040.4
22.5°	1112.8	1099.4	1085.9	1076.6	1071.5	1056.7	1042.3	1030.7	1018.6	1004.7	994.9
25°	1072.5	1055.7	1039.5	1030.2	1022.3	1006.5	992.6	980.5	965.7	953.6	943.9
27.5°	1027.0	1007.9	988.9	979.6	972.2	955.0	940.1	927.6	913.2	902.5	892.3
30°	972.6	955.5	937.4	929.9	921.1	903.5	886.3	875.1	859.4	848.2	837.1
32.5°	904.9	893.7	879.3	869.1	864.5	848.2	833.8	820.4	806.9	798.1	786.9
35°	830.6	820.8	808.8	803.2	797.1	786.9	775.3	763.7	753.0	744.7	734.5
37.5°	755.4	745.6	738.2	732.1	728.4	719.1	712.2	703.4	695.9	688.0	682.5
40°	677.4	674.6	666.7	663.9	663.0	652.8	646.7	639.8	635.1	630.5	627.2
42.5°	608.2	603.5	597.5	598.0	595.2	589.6	585.4	580.8	577.5	575.2	572.0
45°	539.9	536.2	533.4	535.8	531.1	529.3	526.0	525.5	523.2	519.0	517.7
47.5°	474.9	474.5	474.9	473.6	472.6	471.7	472.2	469.8	467.5	466.1	464.3
50°	415.5	416.0	416.9	418.3	415.1	416.4	416.0	415.5	415.5	414.1	415.1
52.5°	357.9	358.4	359.3	360.7	361.2	361.2	362.6	363.5	365.4	367.7	367.7
55°	303.6	306.9	308.7	311.1	309.7	312.5	313.8	318.0	319.4	319.4	321.3
57.5°	255.3	258.6	260.0	262.8	263.7	266.0	269.7	272.1	275.3	278.1	280.9
60°	211.2	212.6	216.3	220.5	219.6	225.2	228.0	231.7	235.8	237.7	241.4
62.5°	171.8	173.6	176.4	177.8	181.1	183.8	190.3	194.1	197.8	202.4	206.1
65°	136.5	138.4	141.1	143.9	145.3	149.5	152.7	159.2	162.5	167.6	171.8
67.5°	104.5	107.2	109.6	111.4	112.4	116.5	121.6	124.4	130.5	135.6	138.8
70°	78.0	80.3	83.1	82.6	84.5	87.7	91.5	95.6	100.3	104.9	108.6
72.5°	54.3	56.6	58.5	59.0	60.8	63.1	65.9	69.2	72.9	77.5	82.6
75°	34.4	34.8	36.7	37.6	38.5	41.3	43.6	46.9	50.1	53.9	57.1
77.5°	17.2	18.6	19.5	20.4	20.9	23.2	25.5	28.3	31.1	34.8	38.1
80°	6.5	7.0	8.4	8.8	9.7	11.1	13.0	14.4	16.7	19.5	21.4
82.5°	2.3	2.8	3.2	3.2	3.7	4.6	5.1	6.5	7.9	8.8	9.7
85°	0.9	0.9	0.9	0.9	0.9	1.4	1.4	1.9	2.3	2.8	2.8
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: P879403

CATALOG NUMBER: LD4C30D010 EU4309035 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4	1241.4
2.5°	1236.3	1236.3	1235.9	1235.4	1235.4	1235.4	1234.9	1234.9
5°	1225.2	1223.8	1223.3	1222.4	1221.9	1221.5	1220.1	1220.1
7.5°	1207.1	1205.2	1203.8	1202.4	1200.6	1199.2	1199.2	1197.3
10°	1182.9	1179.2	1177.4	1175.5	1173.2	1170.4	1169.5	1168.1
12.5°	1153.7	1146.3	1144.4	1141.2	1137.5	1135.6	1132.3	1132.3
15°	1117.5	1109.6	1105.4	1103.6	1098.9	1095.7	1094.3	1090.6
17.5°	1075.2	1069.2	1062.7	1059.9	1054.8	1050.6	1048.8	1048.3
20°	1032.5	1022.8	1018.6	1014.4	1008.4	1004.7	1001.9	998.2
22.5°	983.3	974.5	968.5	965.7	960.6	954.1	949.4	949.4
25°	931.3	923.4	920.2	914.1	908.1	905.8	900.2	899.3
27.5°	881.6	873.7	867.2	864.0	857.0	853.8	849.1	847.3
30°	830.1	820.8	816.2	815.7	807.4	804.1	800.4	798.5
32.5°	778.6	770.7	766.0	763.3	759.5	754.0	750.7	748.9
35°	727.5	722.4	718.2	715.0	708.9	706.1	703.4	701.0
37.5°	674.1	669.5	667.6	664.8	662.0	656.9	656.0	654.2
40°	622.6	616.5	616.5	614.7	611.9	611.4	610.0	610.0
42.5°	568.7	565.9	565.5	565.9	564.1	563.2	561.8	565.0
45°	515.3	516.7	514.4	514.9	513.9	515.8	515.8	517.7
47.5°	466.1	464.3	465.2	466.1	467.5	467.5	467.1	466.6
50°	413.7	415.5	417.4	415.1	416.0	416.4	414.1	414.6
52.5°	368.6	369.1	370.5	369.1	370.5	370.0	370.9	369.1
55°	325.0	325.0	326.8	327.3	327.8	329.2	329.6	331.0
57.5°	282.7	285.1	287.4	286.9	288.8	290.6	289.2	290.6
60°	246.1	247.9	250.2	251.2	252.6	253.5	253.5	254.4
62.5°	208.9	212.6	214.5	216.3	216.3	218.2	220.1	220.5
65°	175.5	179.7	181.1	182.5	183.4	185.2	187.6	187.1
67.5°	143.9	146.7	148.6	149.5	152.3	153.2	155.1	156.9
70°	112.8	116.5	117.9	119.8	122.1	124.0	125.8	126.7
72.5°	86.4	89.1	90.1	91.9	94.2	96.1	97.0	98.4
75°	60.4	65.0	65.5	66.9	68.7	71.0	72.4	72.0
77.5°	39.9	43.2	43.6	45.5	47.4	49.2	49.7	50.1
80°	23.7	25.5	26.0	26.9	28.3	29.2	30.2	31.1
82.5°	11.1	12.1	13.0	13.0	13.9	14.9	14.9	15.3
85°	3.7	3.7	4.2	4.2	4.6	4.6	5.1	4.6
87.5°	0.5	0.5	0.0	0.5	0.5	0.5	0.5	0.5
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)