

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: P879407

Luminaire Tested: **LD4C30D010 EU4309050 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: P879407
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 EU4309050 4LBLDWWLI
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBLDWW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

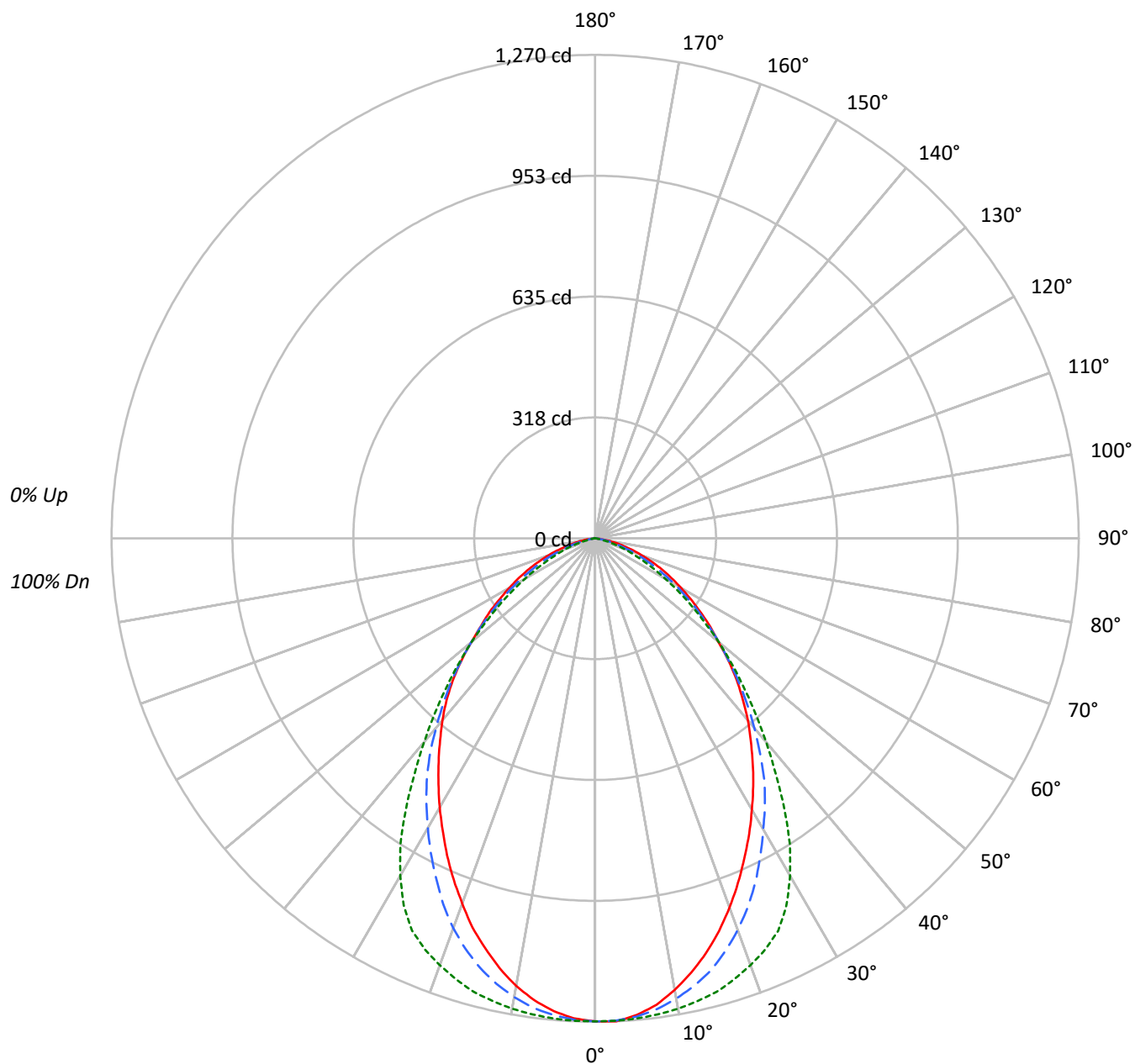
Lumens per Lamp: N/A
Luminaire Lumens: 2331.0 lumens
Efficiency: N/A
Efficacy: 73.8 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.19 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	155926	155926	155926
5°	155004	156176	153833
10°	150285	156560	148975
15°	143378	156898	141814
20°	134908	156010	133418
25°	125658	154165	124628
30°	116750	145164	115814
35°	108268	129850	107488
40°	100105	111973	100025
45°	91214	95575	91944
50°	80560	80827	81018
55°	72182	66077	72481
60°	63786	52483	63908
65°	56162	40000	55610
70°	46552	28628	46552
75°	36265	16424	34936
80°	23489	4033	22498
85°	8739	1269	6625



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.1	5.1
10°-20°	329.6	14.1
20°-30°	460.8	19.8
30°-40°	486.1	20.9
40°-50°	413.5	17.7
50°-60°	291.8	12.5
60°-70°	165.4	7.1
70°-80°	59.0	2.5
80°-90°	5.7	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°	909.6	39.0
0°-40°	1395.6	59.9
0°-60°	2100.9	90.1
0°-90°	2331.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2331.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1269	1269	1269	1269	1269	
5°	1257	1261	1266	1257	1247	118
15°	1127	1175	1234	1168	1115	316
25°	927	996	1137	987	919	427
35°	722	774	866	770	717	451
45°	525	533	550	535	529	404
55°	337	326	308	327	338	303
65°	193	166	138	166	191	191
75°	76	52	35	51	74	83
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°	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2
2.5°	1270.2	1267.8	1267.8	1267.8	1267.8	1267.8	1267.8	1267.8	1267.8	1268.3	1268.3
5°	1256.9	1255.9	1255.5	1255.5	1255.5	1255.5	1255.9	1257.8	1258.8	1260.2	1261.1
7.5°	1236.0	1234.1	1235.0	1235.0	1236.0	1236.9	1238.4	1240.3	1243.1	1245.0	1247.4
10°	1204.7	1202.8	1205.1	1206.1	1208.9	1210.4	1212.7	1215.6	1221.3	1224.1	1227.9
12.5°	1168.1	1167.2	1168.1	1171.9	1174.8	1176.7	1179.5	1185.7	1191.4	1197.5	1204.2
15°	1127.3	1124.9	1126.3	1131.1	1135.8	1139.2	1141.5	1149.6	1157.2	1166.7	1174.8
17.5°	1081.7	1078.4	1082.2	1086.0	1092.2	1095.0	1098.3	1107.4	1117.8	1128.2	1137.3
20°	1031.9	1030.9	1033.3	1038.5	1044.7	1048.5	1051.4	1061.3	1070.3	1084.6	1095.0
22.5°	980.2	981.1	983.0	988.7	993.0	998.2	1002.5	1011.5	1021.9	1035.2	1048.5
25°	927.0	928.4	931.7	935.5	942.7	945.5	950.7	960.2	969.2	981.6	996.3
27.5°	875.7	876.2	880.0	881.9	888.5	894.7	897.1	907.1	917.5	927.0	939.8
30°	823.0	824.5	826.8	832.1	838.7	841.1	843.9	852.9	861.0	872.9	882.9
32.5°	772.7	771.8	774.6	777.5	785.1	789.3	790.8	801.2	808.3	820.2	829.7
35°	721.9	719.6	723.8	726.7	733.3	737.1	739.0	747.1	753.7	763.7	774.2
37.5°	671.2	673.1	675.0	677.3	680.6	681.6	687.3	689.2	697.7	705.3	711.0
40°	624.2	623.2	622.3	624.6	628.9	630.8	631.3	636.5	638.4	646.0	650.3
42.5°	573.9	574.3	573.9	574.3	576.7	576.7	578.1	581.4	582.9	585.2	590.5
45°	525.0	525.0	523.5	524.0	524.5	524.0	524.5	525.9	528.8	528.8	532.6
47.5°	474.2	473.2	475.1	473.7	472.8	472.3	473.7	472.3	475.1	475.1	476.1
50°	421.5	421.5	423.9	423.4	424.3	422.4	422.9	422.9	423.4	422.9	424.8
52.5°	380.7	379.7	378.8	376.4	377.3	375.4	375.4	375.9	374.5	374.0	371.7
55°	337.0	338.0	336.5	335.6	335.6	333.7	333.2	330.4	328.5	327.0	325.6
57.5°	297.6	298.6	298.1	295.7	292.9	293.3	292.4	289.5	285.3	282.4	280.0
60°	259.6	260.6	259.6	257.3	256.3	254.4	253.9	250.1	246.8	243.0	240.2
62.5°	225.5	225.5	225.0	221.7	219.3	219.8	217.4	214.5	210.3	205.0	200.8
65°	193.2	192.7	190.3	188.9	187.0	184.6	183.2	178.9	175.6	171.3	165.7
67.5°	160.9	159.5	158.5	157.1	152.8	152.4	150.5	146.7	141.9	138.6	133.9
70°	129.6	129.1	127.2	127.2	123.9	122.5	119.6	116.3	112.0	107.3	103.5
72.5°	102.5	101.6	99.7	97.8	94.9	94.0	91.6	88.3	84.5	79.7	75.0
75°	76.4	75.5	75.0	72.6	70.2	67.9	66.9	63.6	59.8	56.5	52.2
77.5°	53.6	52.7	51.3	49.8	48.4	47.0	45.6	42.7	39.4	36.5	32.8
80°	33.2	32.3	31.3	30.9	29.4	29.0	27.1	25.6	22.8	20.9	18.5
82.5°	17.1	17.1	16.1	15.7	14.7	14.2	13.8	12.3	10.9	9.5	8.1
85°	6.2	6.2	5.7	5.2	5.2	4.7	4.7	4.3	3.3	3.3	2.4
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°	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2
2.5°	1268.7	1268.3	1268.7	1268.7	1269.2	1269.2	1269.2	1268.7	1269.2	1268.7	1268.7
5°	1261.1	1262.6	1263.5	1264.5	1264.9	1265.4	1265.4	1265.9	1266.4	1266.4	1265.9
7.5°	1249.3	1252.1	1255.0	1256.9	1257.8	1258.8	1260.2	1261.1	1262.1	1261.6	1261.1
10°	1233.6	1238.4	1242.2	1246.0	1247.9	1249.3	1251.7	1253.6	1254.5	1255.0	1253.6
12.5°	1211.3	1218.0	1224.1	1230.3	1233.1	1235.0	1239.8	1243.1	1245.0	1245.0	1243.6
15°	1183.3	1192.8	1201.8	1209.9	1214.6	1217.5	1224.6	1229.3	1232.2	1233.6	1231.2
17.5°	1149.6	1160.5	1171.4	1181.9	1186.6	1190.9	1200.9	1207.5	1213.7	1214.6	1211.8
20°	1106.4	1120.2	1132.5	1145.3	1150.6	1157.2	1168.6	1179.5	1189.0	1193.3	1185.2
22.5°	1058.0	1073.2	1084.6	1100.2	1107.4	1114.5	1129.2	1143.0	1159.6	1168.6	1154.4
25°	1007.7	1020.5	1034.3	1049.5	1059.4	1067.0	1084.1	1101.7	1124.0	1137.3	1117.3
27.5°	953.6	965.0	981.6	998.2	1005.8	1015.3	1035.7	1054.7	1076.0	1087.9	1073.2
30°	897.6	911.8	927.5	942.7	953.6	962.6	979.2	995.3	1013.4	1023.3	1012.4
32.5°	842.0	855.8	869.1	885.7	891.9	899.9	914.7	928.4	942.2	951.2	938.4
35°	783.6	796.0	808.3	819.7	822.6	832.1	843.9	852.0	858.6	865.8	857.2
37.5°	720.0	729.5	735.7	748.0	752.8	754.2	763.7	769.4	776.5	778.0	777.5
40°	655.5	664.0	669.3	676.9	680.6	680.6	687.3	692.5	697.7	698.2	697.7
42.5°	595.2	599.5	603.8	608.5	607.6	613.2	616.1	618.5	622.3	622.3	623.2
45°	534.5	537.8	541.6	542.5	546.3	546.3	548.7	549.6	551.5	550.1	548.2
47.5°	478.0	479.4	479.9	484.1	485.1	481.8	484.6	485.1	484.6	484.6	483.7
50°	424.3	425.3	424.8	423.4	423.9	425.3	423.9	422.0	422.9	422.9	423.9
52.5°	372.1	370.2	369.3	369.3	367.4	367.4	365.0	364.1	363.6	361.7	364.1
55°	324.2	321.3	317.1	316.1	314.7	314.2	311.4	309.0	308.0	308.5	308.0
57.5°	278.1	273.9	271.0	270.1	268.7	265.8	262.5	260.1	259.6	258.7	258.7
60°	236.4	231.6	227.4	223.1	223.6	221.7	218.3	216.9	215.5	213.6	215.0
62.5°	198.4	193.2	188.4	184.2	181.3	179.9	177.5	175.1	173.7	172.3	174.2
65°	160.9	156.6	151.4	147.1	145.7	144.3	141.9	138.1	137.6	137.6	138.6
67.5°	127.2	122.5	117.7	114.9	113.0	111.1	110.1	108.2	106.8	105.8	106.3
70°	97.8	93.0	89.2	86.4	85.0	84.5	81.2	80.7	80.2	79.7	79.3
72.5°	71.2	67.4	64.1	62.2	60.3	58.9	57.9	56.5	56.0	56.0	56.0
75°	48.9	46.0	42.2	39.9	38.9	37.5	36.1	35.1	34.2	34.6	34.6
77.5°	29.4	26.6	24.2	22.3	21.8	20.4	19.0	18.0	16.6	16.6	17.1
80°	16.1	13.8	11.9	10.4	9.5	9.0	7.6	7.1	6.2	5.7	5.7
82.5°	7.1	5.7	4.7	4.3	3.8	3.3	2.8	2.4	2.4	1.9	2.4
85°	2.4	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°	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2
2.5°	1268.3	1268.3	1267.8	1267.8	1267.8	1266.8	1266.8	1266.4	1265.9	1265.4	1264.5
5°	1264.9	1264.5	1263.5	1263.0	1262.6	1261.1	1259.7	1258.8	1257.3	1255.5	1254.5
7.5°	1260.2	1258.8	1256.9	1255.9	1254.5	1251.2	1248.8	1246.4	1244.1	1240.7	1236.9
10°	1252.1	1249.3	1246.4	1244.5	1242.2	1237.9	1233.1	1229.3	1224.1	1219.4	1214.2
12.5°	1240.7	1237.4	1231.7	1228.9	1226.0	1219.9	1213.7	1205.6	1198.5	1191.8	1185.7
15°	1226.5	1220.3	1213.7	1209.9	1205.6	1195.6	1186.2	1177.6	1168.1	1160.0	1150.1
17.5°	1205.6	1196.6	1187.1	1182.8	1177.1	1165.7	1154.4	1142.5	1131.6	1121.6	1109.3
20°	1174.3	1164.3	1152.0	1145.3	1140.6	1125.4	1114.5	1101.2	1089.8	1077.5	1063.7
22.5°	1137.7	1124.0	1110.2	1100.7	1095.5	1080.3	1065.6	1053.7	1041.4	1027.1	1017.2
25°	1096.4	1079.4	1062.7	1053.2	1045.2	1029.0	1014.8	1002.5	987.3	974.9	965.0
27.5°	1049.9	1030.5	1011.0	1001.5	993.9	976.4	961.2	948.4	933.6	922.7	912.3
30°	994.4	976.8	958.3	950.7	941.7	923.7	906.1	894.7	878.6	867.2	855.8
32.5°	925.1	913.7	899.0	888.5	883.8	867.2	852.5	838.7	824.9	815.9	804.5
35°	849.1	839.2	826.8	821.1	815.0	804.5	792.7	780.8	769.9	761.3	750.9
37.5°	772.3	762.3	754.7	748.5	744.7	735.2	728.1	719.1	711.5	703.4	697.7
40°	692.5	689.7	681.6	678.8	677.8	667.4	661.2	654.1	649.3	644.6	641.3
42.5°	621.8	617.0	610.9	611.3	608.5	602.8	598.5	593.8	590.5	588.1	584.8
45°	552.0	548.2	545.4	547.7	543.0	541.1	537.8	537.3	534.9	530.7	529.2
47.5°	485.6	485.1	485.6	484.1	483.2	482.2	482.7	480.3	478.0	476.5	474.7
50°	424.8	425.3	426.2	427.7	424.3	425.8	425.3	424.8	424.8	423.4	424.3
52.5°	366.0	366.4	367.4	368.8	369.3	369.3	370.7	371.7	373.5	375.9	375.9
55°	310.4	313.7	315.6	318.0	316.6	319.4	320.9	325.1	326.6	326.6	328.5
57.5°	261.1	264.4	265.8	268.7	269.6	272.0	275.8	278.1	281.5	284.3	287.2
60°	216.0	217.4	221.2	225.5	224.5	230.2	233.1	236.9	241.1	243.0	246.8
62.5°	175.6	177.5	180.4	181.8	185.1	188.0	194.6	198.4	202.2	206.9	210.7
65°	139.5	141.4	144.3	147.1	148.6	152.8	156.2	162.8	166.1	171.3	175.6
67.5°	106.8	109.6	112.0	113.9	114.9	119.1	124.4	127.2	133.4	138.6	141.9
70°	79.7	82.1	85.0	84.5	86.4	89.7	93.5	97.8	102.5	107.3	111.1
72.5°	55.5	57.9	59.8	60.3	62.2	64.6	67.4	70.7	74.5	79.3	84.5
75°	35.1	35.6	37.5	38.4	39.4	42.2	44.6	47.9	51.3	55.1	58.4
77.5°	17.6	19.0	19.9	20.9	21.4	23.7	26.1	29.0	31.8	35.6	38.9
80°	6.6	7.1	8.5	9.0	10.0	11.4	13.3	14.7	17.1	19.9	21.8
82.5°	2.4	2.8	3.3	3.3	3.8	4.7	5.2	6.6	8.1	9.0	10.0
85°	0.9	0.9	0.9	0.9	0.9	1.4	1.4	1.9	2.4	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: P879407

CATALOG NUMBER: LD4C30D010 EU4309050 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2	1269.2
2.5°	1264.0	1264.0	1263.5	1263.0	1263.0	1263.0	1262.6	1262.6
5°	1252.6	1251.2	1250.7	1249.8	1249.3	1248.8	1247.4	1247.4
7.5°	1234.1	1232.2	1230.8	1229.3	1227.4	1226.0	1226.0	1224.1
10°	1209.4	1205.6	1203.7	1201.8	1199.4	1196.6	1195.6	1194.2
12.5°	1179.5	1171.9	1170.0	1166.7	1162.9	1161.0	1157.7	1157.7
15°	1142.5	1134.4	1130.1	1128.2	1123.5	1120.2	1118.8	1115.0
17.5°	1099.3	1093.1	1086.5	1083.6	1078.4	1074.1	1072.2	1071.8
20°	1055.6	1045.7	1041.4	1037.1	1030.9	1027.1	1024.3	1020.5
22.5°	1005.3	996.3	990.1	987.3	982.1	975.4	970.7	970.7
25°	952.1	944.1	940.8	934.6	928.4	926.0	920.3	919.4
27.5°	901.4	893.3	886.6	883.3	876.2	872.9	868.1	866.2
30°	848.7	839.2	834.4	834.0	825.4	822.1	818.3	816.4
32.5°	796.0	787.9	783.2	780.3	776.5	770.8	767.5	765.6
35°	743.8	738.6	734.3	731.0	724.8	721.9	719.1	716.7
37.5°	689.2	684.4	682.5	679.7	676.9	671.6	670.7	668.8
40°	636.5	630.3	630.3	628.4	625.6	625.1	623.7	623.7
42.5°	581.4	578.6	578.1	578.6	576.7	575.8	574.3	577.6
45°	526.9	528.3	525.9	526.4	525.4	527.3	527.3	529.2
47.5°	476.5	474.7	475.6	476.5	478.0	478.0	477.5	477.0
50°	422.9	424.8	426.7	424.3	425.3	425.8	423.4	423.9
52.5°	376.9	377.3	378.8	377.3	378.8	378.3	379.2	377.3
55°	332.3	332.3	334.2	334.6	335.1	336.5	337.0	338.4
57.5°	289.1	291.4	293.8	293.3	295.2	297.1	295.7	297.1
60°	251.6	253.5	255.8	256.8	258.2	259.2	259.2	260.1
62.5°	213.6	217.4	219.3	221.2	221.2	223.1	225.0	225.5
65°	179.4	183.7	185.1	186.5	187.5	189.4	191.8	191.3
67.5°	147.1	150.0	151.9	152.8	155.7	156.6	158.5	160.4
70°	115.3	119.1	120.6	122.5	124.8	126.7	128.6	129.6
72.5°	88.3	91.1	92.1	94.0	96.4	98.3	99.2	100.6
75°	61.7	66.5	66.9	68.3	70.2	72.6	74.0	73.6
77.5°	40.8	44.1	44.6	46.5	48.4	50.3	50.8	51.3
80°	24.2	26.1	26.6	27.5	29.0	29.9	30.9	31.8
82.5°	11.4	12.3	13.3	13.3	14.2	15.2	15.2	15.7
85°	3.8	3.8	4.3	4.3	4.7	4.7	5.2	4.7
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)