

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: P879399

Luminaire Tested: **LD4C30D010 EU4309027 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: P879399
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 EU4309027 4LBLDWWLI
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LBLDWW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

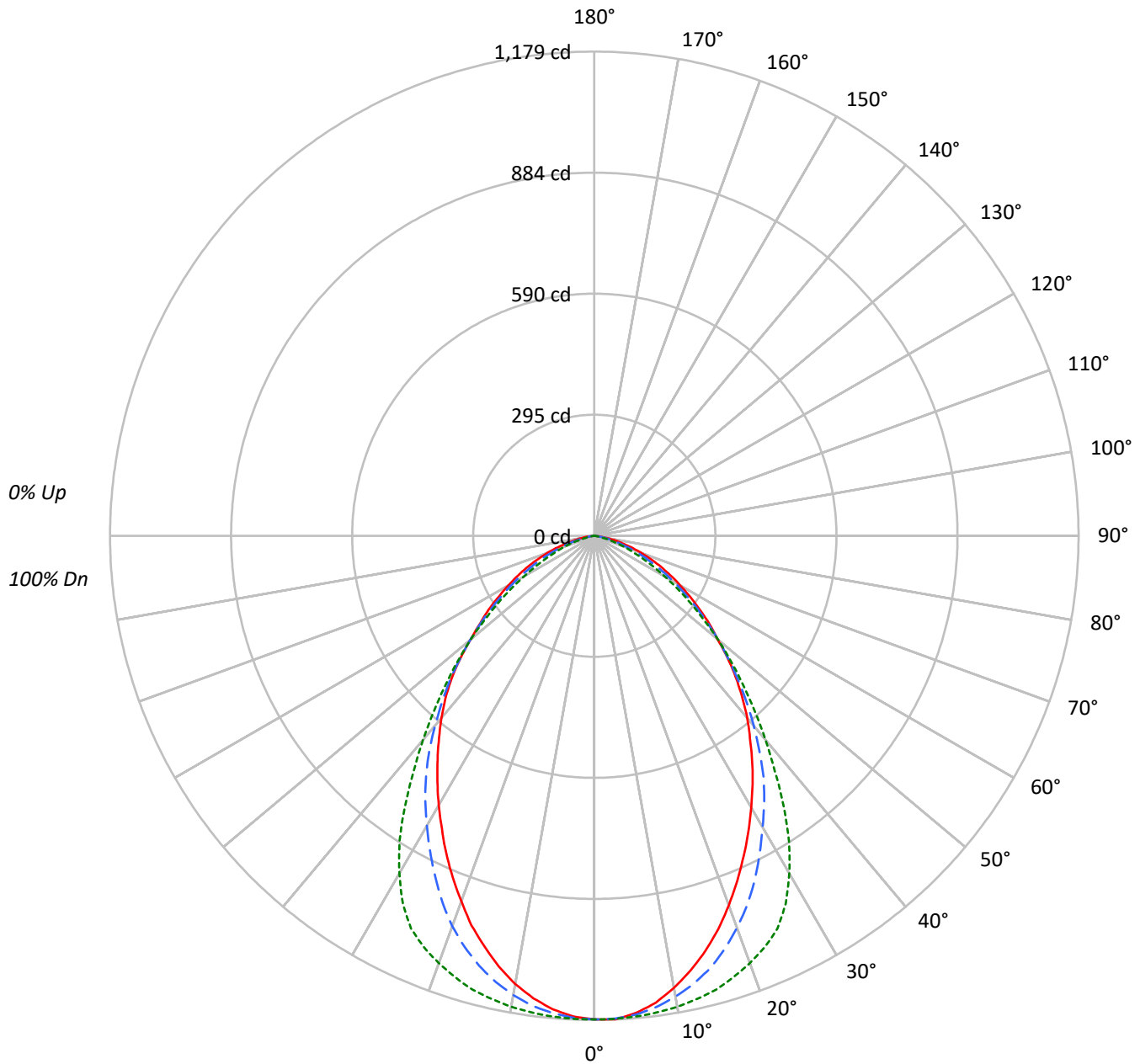
Lumens per Lamp: N/A
Luminaire Lumens: 2163.0 lumens
Efficiency: N/A
Efficacy: 68.4 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.19 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P879399

CATALOG NUMBER: LD4C30D010 EU4309027 4LBLDWWLI

Luminous Intensity Polar Plot





TEST NUMBER: P879399

CATALOG NUMBER: LD4C30D010 EU4309027 4LBLDWWLI

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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	90	85	100	94	89	84	91	86	83	87	84	81	85	82	79	77		
3	95	86	79	74	93	84	78	73	82	76	72	79	74	70	77	73	69	67		
4	88	78	70	64	86	76	69	64	74	68	63	72	66	62	70	65	61	59		
5	82	70	62	57	80	69	62	56	67	61	56	65	60	55	64	59	55	53		
6	76	64	56	50	74	63	56	50	61	55	50	60	54	49	58	53	49	47		
7	71	59	51	45	69	58	50	45	56	50	45	55	49	45	54	48	44	42		
8	66	54	46	41	65	53	46	41	52	45	41	51	45	40	50	44	40	38		
9	62	50	42	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35		
10	59	46	39	34	57	46	39	34	45	39	34	44	38	34	43	38	34	32		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	144685	144685	144685
5°	143831	144917	142746
10°	139444	145270	138246
15°	133038	145591	131588
20°	125182	144766	123796
25°	116603	143050	115641
30°	108338	134709	107472
35°	100469	120491	99749
40°	92889	103906	92808
45°	84629	88695	85324
50°	74749	74998	75170
55°	66977	61322	67255
60°	59191	48699	59314
65°	52122	37122	51599
70°	43176	26581	43176
75°	33654	15284	32420
80°	21791	3750	20871
85°	8035	1269	6202



TEST NUMBER: P879399

CATALOG NUMBER: LD4C30D010 EU4309027 4LBLDWWLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.6	5.1
10°-20°	305.9	14.1
20°-30°	427.6	19.8
30°-40°	451.0	20.9
40°-50°	383.7	17.7
50°-60°	270.8	12.5
60°-70°	153.5	7.1
70°-80°	54.8	2.5
80°-90°	5.2	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°	844.0	39.0
0°-40°	1295.1	59.9
0°-60°	1949.5	90.1
0°-90°	2163.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2163.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1178	1178	1178	1178	1178	
5°	1166	1170	1175	1167	1158	110
15°	1046	1090	1145	1084	1035	293
25°	860	924	1055	916	853	396
35°	670	718	803	714	665	419
45°	487	494	510	496	491	375
55°	313	302	286	303	314	281
65°	179	154	128	154	178	178
75°	71	48	32	48	68	77
85°	6	2	1	2	4	10
90°	0	0	0	0	0	



TEST NUMBER: P879399

CATALOG NUMBER: LD4C30D010 EU4309027 4LBLDWWLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7
2.5°	1178.6	1176.4	1176.4	1176.4	1176.4	1176.4	1176.4	1176.4	1176.4	1176.9	1176.9
5°	1166.3	1165.4	1165.0	1165.0	1165.0	1165.0	1165.4	1167.2	1168.1	1169.4	1170.3
7.5°	1146.9	1145.1	1146.0	1146.0	1146.9	1147.8	1149.1	1150.9	1153.5	1155.3	1157.5
10°	1117.8	1116.1	1118.3	1119.2	1121.8	1123.1	1125.3	1128.0	1133.3	1135.9	1139.4
12.5°	1083.9	1083.0	1083.9	1087.5	1090.1	1091.9	1094.5	1100.2	1105.5	1111.2	1117.4
15°	1046.0	1043.8	1045.2	1049.6	1054.0	1057.1	1059.3	1066.7	1073.8	1082.6	1090.1
17.5°	1003.8	1000.7	1004.2	1007.7	1013.5	1016.1	1019.2	1027.6	1037.2	1046.9	1055.3
20°	957.5	956.6	958.8	963.7	969.4	972.9	975.6	984.8	993.2	1006.4	1016.1
22.5°	909.5	910.4	912.2	917.4	921.4	926.2	930.2	938.6	948.3	960.6	972.9
25°	860.2	861.5	864.6	868.1	874.7	877.4	882.2	891.0	899.4	910.8	924.5
27.5°	812.6	813.1	816.6	818.3	824.5	830.2	832.4	841.7	851.4	860.2	872.1
30°	763.7	765.0	767.2	772.1	778.3	780.5	783.1	791.5	799.0	810.0	819.2
32.5°	717.0	716.2	718.8	721.4	728.5	732.5	733.8	743.5	750.1	761.1	769.9
35°	669.9	667.7	671.7	674.3	680.5	684.0	685.8	693.3	699.4	708.7	718.4
37.5°	622.8	624.5	626.3	628.5	631.6	632.5	637.8	639.5	647.4	654.5	659.8
40°	579.2	578.3	577.4	579.6	583.6	585.3	585.8	590.6	592.4	599.4	603.4
42.5°	532.5	532.9	532.5	532.9	535.1	535.1	536.5	539.5	540.9	543.1	547.9
45°	487.1	487.1	485.8	486.2	486.7	486.2	486.7	488.0	490.7	490.7	494.2
47.5°	440.0	439.1	440.9	439.6	438.7	438.2	439.6	438.2	440.9	440.9	441.8
50°	391.1	391.1	393.3	392.9	393.8	392.0	392.4	392.4	392.9	392.4	394.2
52.5°	353.2	352.4	351.5	349.3	350.2	348.4	348.4	348.8	347.5	347.1	344.9
55°	312.7	313.6	312.3	311.4	311.4	309.6	309.2	306.5	304.8	303.5	302.1
57.5°	276.2	277.0	276.6	274.4	271.8	272.2	271.3	268.7	264.7	262.1	259.9
60°	240.9	241.8	240.9	238.7	237.8	236.1	235.6	232.1	229.0	225.5	222.9
62.5°	209.2	209.2	208.8	205.7	203.5	203.9	201.7	199.1	195.1	190.3	186.3
65°	179.3	178.8	176.6	175.3	173.5	171.3	170.0	166.0	163.0	159.0	153.7
67.5°	149.3	148.0	147.1	145.8	141.8	141.4	139.6	136.1	131.7	128.6	124.2
70°	120.2	119.8	118.0	118.0	115.0	113.6	111.0	107.9	103.9	99.5	96.0
72.5°	95.1	94.3	92.5	90.7	88.1	87.2	85.0	81.9	78.4	74.0	69.6
75°	70.9	70.0	69.6	67.4	65.2	63.0	62.1	59.0	55.5	52.4	48.4
77.5°	49.8	48.9	47.6	46.2	44.9	43.6	42.3	39.6	36.6	33.9	30.4
80°	30.8	30.0	29.1	28.6	27.3	26.9	25.1	23.8	21.1	19.4	17.2
82.5°	15.9	15.9	15.0	14.5	13.7	13.2	12.8	11.5	10.1	8.8	7.5
85°	5.7	5.7	5.3	4.8	4.8	4.4	4.4	4.0	3.1	3.1	2.2
87.5°	0.4	0.4	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4	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: P879399

CATALOG NUMBER: LD4C30D010 EU4309027 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7
2.5°	1177.3	1176.9	1177.3	1177.3	1177.7	1177.7	1177.7	1177.3	1177.7	1177.3	1177.3
5°	1170.3	1171.6	1172.5	1173.3	1173.8	1174.2	1174.2	1174.7	1175.1	1175.1	1174.7
7.5°	1159.2	1161.9	1164.5	1166.3	1167.2	1168.1	1169.4	1170.3	1171.1	1170.7	1170.3
10°	1144.7	1149.1	1152.6	1156.2	1157.9	1159.2	1161.4	1163.2	1164.1	1164.5	1163.2
12.5°	1124.0	1130.2	1135.9	1141.6	1144.3	1146.0	1150.4	1153.5	1155.3	1155.3	1154.0
15°	1098.0	1106.8	1115.2	1122.7	1127.1	1129.7	1136.3	1140.7	1143.4	1144.7	1142.5
17.5°	1066.7	1076.9	1087.0	1096.7	1101.1	1105.1	1114.3	1120.5	1126.2	1127.1	1124.4
20°	1026.7	1039.4	1050.9	1062.8	1067.6	1073.8	1084.4	1094.5	1103.3	1107.3	1099.8
22.5°	981.7	995.8	1006.4	1020.9	1027.6	1034.2	1047.8	1060.6	1076.0	1084.4	1071.2
25°	935.1	946.9	959.7	973.8	983.1	990.1	1006.0	1022.3	1043.0	1055.3	1036.8
27.5°	884.8	895.4	910.8	926.2	933.3	942.1	961.0	978.7	998.5	1009.5	995.8
30°	832.9	846.1	860.6	874.7	884.8	893.2	908.6	923.6	940.3	949.6	939.5
32.5°	781.3	794.1	806.4	821.9	827.6	835.1	848.7	861.5	874.3	882.6	870.8
35°	727.2	738.6	750.1	760.6	763.3	772.1	783.1	790.6	796.8	803.4	795.4
37.5°	668.1	677.0	682.7	694.1	698.5	699.9	708.7	714.0	720.6	721.9	721.4
40°	608.2	616.2	621.0	628.1	631.6	631.6	637.8	642.6	647.4	647.9	647.4
42.5°	552.3	556.3	560.2	564.6	563.8	569.1	571.7	573.9	577.4	577.4	578.3
45°	495.9	499.0	502.5	503.4	506.9	506.9	509.2	510.0	511.8	510.5	508.7
47.5°	443.5	444.8	445.3	449.3	450.1	447.0	449.7	450.1	449.7	449.7	448.8
50°	393.8	394.6	394.2	392.9	393.3	394.6	393.3	391.6	392.4	392.4	393.3
52.5°	345.3	343.5	342.7	342.7	340.9	340.9	338.7	337.8	337.4	335.6	337.8
55°	300.8	298.2	294.2	293.3	292.0	291.6	288.9	286.7	285.8	286.3	285.8
57.5°	258.1	254.1	251.5	250.6	249.3	246.6	243.6	241.4	240.9	240.0	240.0
60°	219.3	214.9	211.0	207.0	207.4	205.7	202.6	201.3	200.0	198.2	199.5
62.5°	184.1	179.3	174.9	170.9	168.2	166.9	164.7	162.5	161.2	159.9	161.6
65°	149.3	145.3	140.5	136.5	135.2	133.9	131.7	128.2	127.7	127.7	128.6
67.5°	118.0	113.6	109.2	106.6	104.8	103.1	102.2	100.4	99.1	98.2	98.7
70°	90.7	86.3	82.8	80.2	78.8	78.4	75.3	74.9	74.4	74.0	73.6
72.5°	66.1	62.5	59.5	57.7	55.9	54.6	53.7	52.4	52.0	52.0	52.0
75°	45.4	42.7	39.2	37.0	36.1	34.8	33.5	32.6	31.7	32.2	32.2
77.5°	27.3	24.7	22.5	20.7	20.3	18.9	17.6	16.7	15.4	15.4	15.9
80°	15.0	12.8	11.0	9.7	8.8	8.4	7.0	6.6	5.7	5.3	5.3
82.5°	6.6	5.3	4.4	4.0	3.5	3.1	2.6	2.2	2.2	1.8	2.2
85°	2.2	1.8	1.3	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
87.5°	0.4	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: P879399

CATALOG NUMBER: LD4C30D010 EU4309027 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7
2.5°	1176.9	1176.9	1176.4	1176.4	1176.4	1175.5	1175.5	1175.1	1174.7	1174.2	1173.3
5°	1173.8	1173.3	1172.5	1172.0	1171.6	1170.3	1168.9	1168.1	1166.7	1165.0	1164.1
7.5°	1169.4	1168.1	1166.3	1165.4	1164.1	1161.0	1158.8	1156.6	1154.4	1151.3	1147.8
10°	1161.9	1159.2	1156.6	1154.8	1152.6	1148.7	1144.3	1140.7	1135.9	1131.5	1126.6
12.5°	1151.3	1148.2	1142.9	1140.3	1137.7	1131.9	1126.2	1118.7	1112.1	1105.9	1100.2
15°	1138.1	1132.4	1126.2	1122.7	1118.7	1109.5	1100.7	1092.7	1083.9	1076.4	1067.2
17.5°	1118.7	1110.4	1101.5	1097.6	1092.3	1081.7	1071.2	1060.1	1050.0	1040.8	1029.3
20°	1089.7	1080.4	1069.0	1062.8	1058.4	1044.3	1034.2	1021.8	1011.3	999.8	987.0
22.5°	1055.7	1043.0	1030.2	1021.4	1016.5	1002.4	988.8	977.8	966.3	953.1	943.9
25°	1017.4	1001.6	986.1	977.3	969.9	954.9	941.7	930.2	916.1	904.7	895.4
27.5°	974.3	956.2	938.1	929.3	922.3	906.0	891.9	880.0	866.3	856.2	846.5
30°	922.7	906.4	889.3	882.2	873.8	857.1	840.8	830.2	815.3	804.7	794.1
32.5°	858.4	847.8	834.2	824.5	820.1	804.7	791.0	778.3	765.5	757.1	746.5
35°	787.9	778.7	767.2	762.0	756.2	746.5	735.5	724.5	714.4	706.5	696.8
37.5°	716.6	707.3	700.3	694.6	691.1	682.2	675.6	667.3	660.2	652.7	647.4
40°	642.6	640.0	632.5	629.8	629.0	619.3	613.5	606.9	602.5	598.1	595.0
42.5°	577.0	572.6	566.8	567.3	564.6	559.4	555.4	551.0	547.9	545.7	542.6
45°	512.2	508.7	506.1	508.3	503.9	502.1	499.0	498.6	496.4	492.4	491.1
47.5°	450.6	450.1	450.6	449.3	448.4	447.5	447.9	445.7	443.5	442.2	440.4
50°	394.2	394.6	395.5	396.8	393.8	395.1	394.6	394.2	394.2	392.9	393.8
52.5°	339.6	340.0	340.9	342.2	342.7	342.7	344.0	344.9	346.6	348.8	348.8
55°	288.0	291.1	292.9	295.1	293.8	296.4	297.7	301.7	303.0	303.0	304.8
57.5°	242.2	245.3	246.6	249.3	250.2	252.4	255.9	258.1	261.2	263.8	266.5
60°	200.4	201.7	205.2	209.2	208.3	213.6	216.3	219.8	223.7	225.5	229.0
62.5°	163.0	164.7	167.4	168.7	171.8	174.4	180.6	184.1	187.6	192.0	195.6
65°	129.5	131.3	133.9	136.5	137.9	141.8	144.9	151.1	154.2	159.0	163.0
67.5°	99.1	101.7	103.9	105.7	106.6	110.6	115.4	118.0	123.8	128.6	131.7
70°	74.0	76.2	78.8	78.4	80.2	83.2	86.8	90.7	95.1	99.5	103.1
72.5°	51.5	53.7	55.5	55.9	57.7	59.9	62.5	65.6	69.1	73.6	78.4
75°	32.6	33.0	34.8	35.7	36.6	39.2	41.4	44.5	47.6	51.1	54.2
77.5°	16.3	17.6	18.5	19.4	19.8	22.0	24.2	26.9	29.5	33.0	36.1
80°	6.2	6.6	7.9	8.4	9.2	10.6	12.3	13.7	15.9	18.5	20.3
82.5°	2.2	2.6	3.1	3.1	3.5	4.4	4.8	6.2	7.5	8.4	9.2
85°	0.9	0.9	0.9	0.9	0.9	1.3	1.3	1.8	2.2	2.6	2.6
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: P879399

CATALOG NUMBER: LD4C30D010 EU4309027 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7	1177.7
2.5°	1172.9	1172.9	1172.5	1172.0	1172.0	1172.0	1171.6	1171.6
5°	1162.3	1161.0	1160.6	1159.7	1159.2	1158.8	1157.5	1157.5
7.5°	1145.1	1143.4	1142.1	1140.7	1139.0	1137.7	1137.7	1135.9
10°	1122.2	1118.7	1117.0	1115.2	1113.0	1110.4	1109.5	1108.2
12.5°	1094.5	1087.5	1085.7	1082.6	1079.1	1077.3	1074.2	1074.2
15°	1060.1	1052.7	1048.7	1046.9	1042.5	1039.4	1038.1	1034.6
17.5°	1020.1	1014.3	1008.2	1005.5	1000.7	996.7	995.0	994.5
20°	979.5	970.3	966.3	962.4	956.6	953.1	950.5	946.9
22.5°	932.9	924.5	918.8	916.1	911.3	905.1	900.7	900.7
25°	883.5	876.0	873.0	867.2	861.5	859.3	854.0	853.1
27.5°	836.4	828.9	822.7	819.7	813.1	810.0	805.6	803.8
30°	787.5	778.7	774.3	773.9	765.9	762.8	759.3	757.6
32.5°	738.6	731.1	726.7	724.1	720.6	715.3	712.2	710.4
35°	690.2	685.3	681.4	678.3	672.6	669.9	667.3	665.1
37.5°	639.5	635.1	633.4	630.7	628.1	623.2	622.3	620.6
40°	590.6	584.9	584.9	583.1	580.5	580.1	578.7	578.7
42.5°	539.5	536.9	536.5	536.9	535.1	534.3	532.9	536.0
45°	488.9	490.2	488.0	488.4	487.6	489.3	489.3	491.1
47.5°	442.2	440.4	441.3	442.2	443.5	443.5	443.1	442.6
50°	392.4	394.2	396.0	393.8	394.6	395.1	392.9	393.3
52.5°	349.7	350.2	351.5	350.2	351.5	351.0	351.9	350.2
55°	308.3	308.3	310.1	310.5	311.0	312.3	312.7	314.0
57.5°	268.2	270.4	272.6	272.2	274.0	275.7	274.4	275.7
60°	233.4	235.2	237.4	238.3	239.6	240.5	240.5	241.4
62.5°	198.2	201.7	203.5	205.2	205.2	207.0	208.8	209.2
65°	166.5	170.5	171.8	173.1	174.0	175.7	177.9	177.5
67.5°	136.5	139.2	140.9	141.8	144.5	145.3	147.1	148.9
70°	107.0	110.6	111.9	113.6	115.8	117.6	119.4	120.2
72.5°	81.9	84.6	85.4	87.2	89.4	91.2	92.1	93.4
75°	57.3	61.7	62.1	63.4	65.2	67.4	68.7	68.3
77.5°	37.9	41.0	41.4	43.2	44.9	46.7	47.1	47.6
80°	22.5	24.2	24.7	25.5	26.9	27.7	28.6	29.5
82.5°	10.6	11.5	12.3	12.3	13.2	14.1	14.1	14.5
85°	3.5	3.5	4.0	4.0	4.4	4.4	4.8	4.4
87.5°	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4
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)