

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: P879400

Luminaire Tested: **LD4C30D010 EU4309030 4LBDWWH**

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: P879400
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-6)
Test Lab: INNOVATION CENTER
Issue Date: 10/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C30D010 EU4309030 4LBDWWH
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBDWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

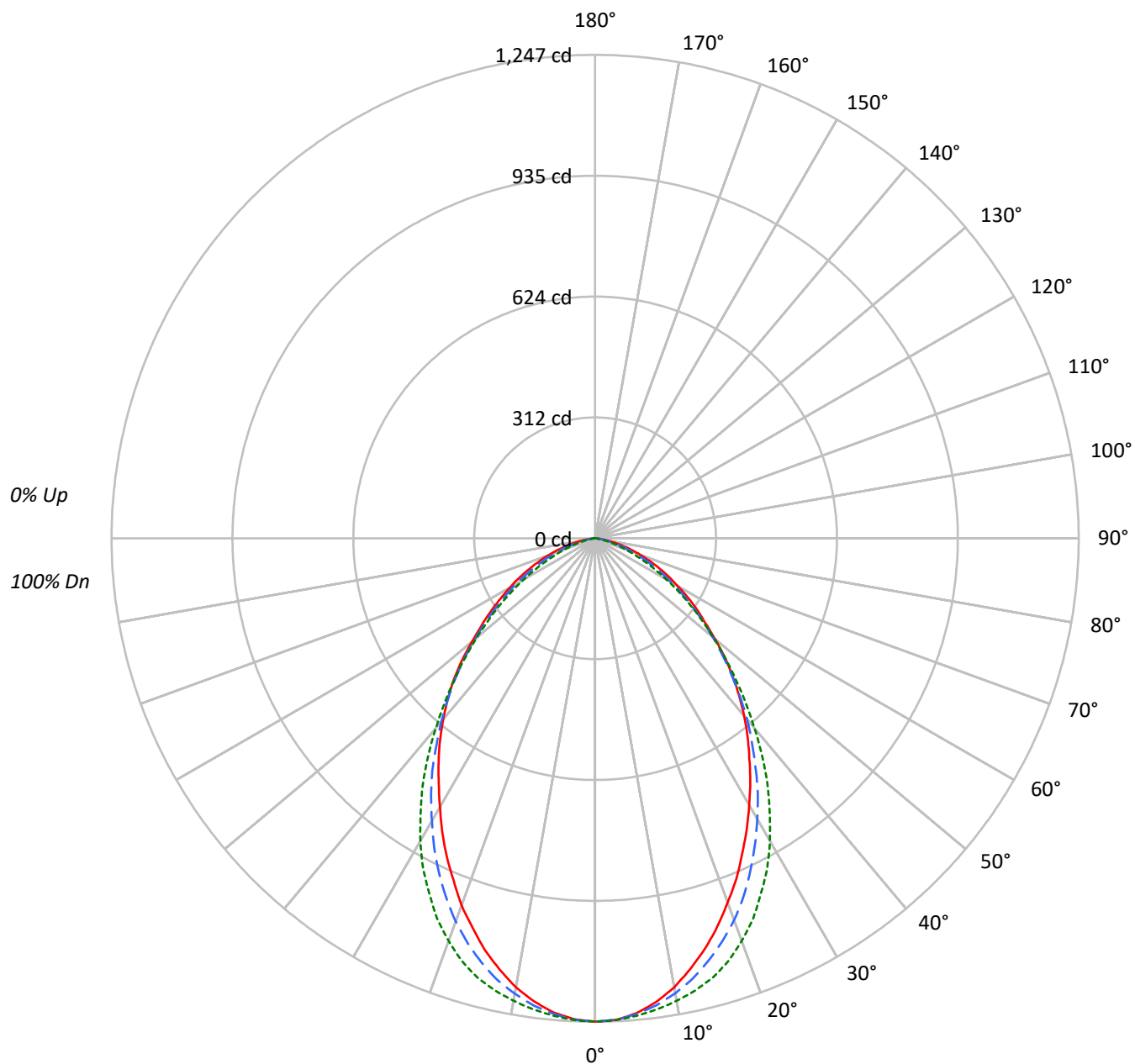
Lumens per Lamp: N/A
Luminaire Lumens: 2230.0 lumens
Efficiency: N/A
Efficacy: 70.6 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.1 / 1.12
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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	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	100	108	105	102	99	101	98	96	97	95	93	93	92	90	88		
2	103	96	90	85	100	94	89	84	90	86	82	87	84	80	84	81	79	77		
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69	67		
4	88	77	70	64	86	76	69	63	74	68	63	71	66	62	69	65	61	59		
5	81	70	62	56	80	69	62	56	67	61	56	65	59	55	63	58	54	52		
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	44	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°	153174	153174	153174
5°	151613	152452	151440
10°	146680	151133	146729
15°	139359	149191	139817
20°	130620	144505	131692
25°	121646	137099	122758
30°	112693	127886	113530
35°	103964	116262	105538
40°	95904	102431	97668
45°	86871	88782	89494
50°	77005	76049	78935
55°	68647	64042	70211
60°	60075	51967	62336
65°	52587	40203	54447
70°	44253	29454	46552
75°	34556	19129	36502
80°	22710	10046	24974
85°	7753	4511	10290



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.4	5.2
10°-20°	318.0	14.3
20°-30°	437.4	19.6
30°-40°	456.3	20.5
40°-50°	390.4	17.5
50°-60°	279.2	12.5
60°-70°	162.0	7.3
70°-80°	62.5	2.8
80°-90°	7.9	0.4
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°	871.7	39.1
0°-40°	1328.0	59.6
0°-60°	1997.6	89.6
0°-90°	2230.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2230.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1247	1247	1247	1247	1247	
5°	1229	1232	1236	1232	1228	116
15°	1096	1129	1173	1133	1099	307
25°	897	947	1011	953	906	413
35°	693	721	775	732	704	434
45°	500	496	511	508	515	385
55°	320	304	299	313	328	287
65°	181	160	138	165	187	180
75°	73	54	40	58	77	78
85°	6	4	3	5	7	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°	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8
2.5°	1243.5	1242.6	1243.1	1243.1	1243.1	1242.6	1243.5	1243.5	1243.1	1243.1	1243.1
5°	1229.4	1228.4	1228.9	1229.4	1229.4	1229.4	1229.8	1230.3	1230.7	1231.2	1231.6
7.5°	1206.5	1205.1	1206.5	1208.3	1208.3	1208.8	1209.2	1209.7	1211.0	1213.3	1214.7
10°	1175.8	1175.8	1176.2	1177.6	1179.9	1179.4	1180.8	1183.1	1185.9	1189.1	1191.4
12.5°	1136.9	1137.8	1139.2	1140.5	1142.8	1144.2	1146.5	1149.2	1153.8	1158.4	1163.4
15°	1095.7	1096.1	1096.6	1099.8	1102.1	1105.3	1107.1	1112.6	1116.7	1123.1	1128.6
17.5°	1049.4	1049.0	1050.3	1053.1	1058.6	1059.9	1062.2	1068.2	1074.1	1082.8	1090.2
20°	999.1	1001.8	1003.6	1007.3	1010.5	1014.2	1016.0	1023.3	1030.2	1038.4	1048.0
22.5°	951.4	949.1	952.3	956.5	959.2	962.0	965.2	973.0	980.3	990.4	1000.0
25°	897.4	898.8	901.1	904.3	907.9	911.6	915.3	923.5	927.6	938.2	946.9
27.5°	846.1	848.4	849.3	853.5	856.7	859.4	861.2	870.9	874.5	883.7	892.4
30°	794.4	796.7	796.7	801.3	803.5	806.3	810.9	817.3	822.8	829.2	835.6
32.5°	744.5	744.5	746.3	750.4	752.7	755.9	757.3	761.9	767.4	773.8	780.7
35°	693.2	694.6	696.4	696.4	700.5	702.4	704.2	708.8	712.4	715.2	720.7
37.5°	646.0	646.0	644.7	647.0	649.7	649.2	652.0	654.3	656.6	659.8	664.4
40°	598.0	598.0	596.1	597.5	599.3	598.9	598.0	600.3	602.1	604.4	609.0
42.5°	549.0	548.1	547.6	547.6	548.5	547.6	548.5	549.0	549.0	549.0	551.7
45°	500.0	502.3	499.5	498.6	497.2	495.9	495.4	495.9	497.7	495.4	495.9
47.5°	451.9	452.8	451.0	449.6	448.2	447.3	448.2	445.5	446.4	446.9	445.0
50°	402.9	401.1	401.1	399.7	400.2	399.7	398.8	397.9	397.9	395.6	394.2
52.5°	357.6	358.5	359.4	356.2	356.7	354.4	354.8	352.6	352.6	349.8	350.7
55°	320.5	319.1	319.1	317.8	317.3	315.0	314.6	313.2	310.0	308.1	304.5
57.5°	282.0	281.6	279.8	280.2	277.5	277.0	276.1	273.8	271.5	269.2	265.1
60°	244.5	245.0	245.0	244.0	242.7	240.4	240.8	237.6	234.4	230.3	226.6
62.5°	213.4	212.0	211.5	210.6	207.9	207.9	205.6	203.3	200.1	196.0	192.8
65°	180.9	181.3	179.9	178.6	175.8	175.4	173.5	171.7	168.5	164.4	159.8
67.5°	151.6	150.6	150.2	148.8	146.1	145.6	144.2	140.1	137.4	133.2	129.6
70°	123.2	122.2	122.7	120.4	117.7	116.3	115.8	112.6	108.5	105.3	101.6
72.5°	96.6	96.6	96.2	93.9	92.5	91.6	89.7	86.1	83.8	80.1	77.4
75°	72.8	72.3	71.4	70.1	68.2	67.3	66.4	64.1	60.9	56.8	54.5
77.5°	50.4	50.8	49.9	49.4	47.2	45.8	45.3	44.0	41.2	38.5	36.2
80°	32.1	31.6	31.1	30.2	29.8	29.3	27.9	27.0	24.3	22.9	21.5
82.5°	17.4	16.5	16.5	16.0	15.1	14.7	14.2	13.3	12.8	11.9	11.0
85°	5.5	6.0	5.5	5.5	5.5	5.0	5.0	5.0	4.6	4.6	4.1
87.5°	0.5	0.9	0.5	0.5	0.9	0.5	0.5	0.9	0.5	0.5	0.9
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°	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8
2.5°	1243.1	1243.5	1243.5	1244.0	1244.0	1244.0	1244.0	1244.0	1244.0	1244.0	1244.0
5°	1233.0	1233.0	1233.9	1234.8	1234.8	1234.8	1235.3	1236.2	1236.2	1236.2	1235.8
7.5°	1216.5	1218.4	1220.2	1222.0	1222.5	1222.9	1223.9	1225.7	1225.7	1225.7	1225.7
10°	1195.0	1199.1	1201.4	1204.2	1205.5	1206.5	1209.2	1209.7	1211.0	1211.5	1211.0
12.5°	1167.5	1173.0	1178.1	1182.7	1184.5	1186.3	1189.1	1191.8	1193.2	1194.6	1194.1
15°	1136.9	1142.8	1150.6	1155.6	1159.3	1162.0	1166.2	1169.8	1172.1	1173.0	1173.0
17.5°	1099.8	1107.1	1115.3	1123.6	1125.9	1130.5	1135.0	1140.1	1142.8	1143.3	1142.8
20°	1058.6	1066.8	1073.7	1081.9	1087.0	1089.2	1095.7	1102.1	1104.8	1105.3	1104.8
22.5°	1009.6	1017.4	1026.5	1035.2	1039.3	1043.5	1050.3	1056.7	1060.4	1063.2	1060.4
25°	955.1	966.1	974.8	982.1	988.1	992.2	1000.9	1005.9	1011.9	1011.4	1011.9
27.5°	901.5	910.7	920.3	929.0	932.7	937.2	944.1	952.3	957.4	960.6	960.1
30°	846.6	853.9	862.2	869.9	875.9	879.5	889.6	893.3	899.7	901.5	900.2
32.5°	788.4	793.5	801.7	812.2	814.5	818.2	824.6	833.8	836.1	837.0	837.4
35°	726.6	736.2	743.1	749.5	751.3	754.6	761.9	768.7	771.0	775.2	773.3
37.5°	669.4	674.9	678.1	684.5	690.0	692.7	696.4	701.0	705.6	707.4	706.9
40°	612.2	614.9	617.7	624.5	625.0	625.0	630.5	636.9	636.9	638.7	638.7
42.5°	553.6	554.0	557.7	561.3	562.3	563.2	568.7	569.6	572.3	573.7	575.5
45°	496.8	499.5	501.8	502.3	504.6	505.0	506.4	507.8	511.9	511.0	511.9
47.5°	445.0	446.4	447.8	447.8	449.2	448.7	451.0	449.6	452.4	453.3	454.7
50°	394.2	396.5	395.1	396.0	395.6	397.0	396.0	396.0	396.0	397.9	399.3
52.5°	347.5	348.0	346.6	347.1	347.1	346.1	347.1	346.6	346.1	346.1	346.6
55°	304.5	302.6	301.7	299.9	297.6	300.4	299.0	298.1	299.9	299.0	299.9
57.5°	262.8	260.5	258.7	257.8	254.6	256.4	254.6	253.7	253.7	253.7	255.9
60°	223.4	221.1	218.9	216.1	215.7	214.7	213.8	211.5	212.0	211.5	212.4
62.5°	189.1	184.5	181.3	179.0	178.6	177.2	175.8	173.5	174.0	174.0	174.4
65°	157.5	152.5	147.9	144.7	144.7	142.4	140.1	140.1	137.4	138.3	138.7
67.5°	125.9	121.8	117.2	114.9	113.5	111.7	110.3	109.4	108.1	108.1	109.0
70°	97.5	93.4	91.1	87.5	87.0	85.6	83.8	82.4	82.0	82.0	81.5
72.5°	73.7	70.1	67.3	65.0	63.6	62.3	60.4	60.0	59.1	59.1	60.0
75°	51.3	49.0	46.7	44.4	43.5	43.0	41.7	40.7	40.7	40.3	40.7
77.5°	34.3	32.1	29.8	28.8	27.9	27.0	26.6	26.1	24.7	24.7	24.7
80°	19.7	18.8	17.9	16.5	16.5	16.0	15.1	14.7	14.2	14.2	14.2
82.5°	10.1	9.6	8.7	8.2	8.2	8.2	7.8	7.8	7.3	7.3	7.3
85°	4.1	3.7	3.2	3.2	3.2	3.2	3.2	3.2	3.7	3.2	3.7
87.5°	0.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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°	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8
2.5°	1244.0	1243.5	1243.5	1243.5	1243.5	1243.5	1243.1	1243.1	1242.6	1242.6	1242.6
5°	1236.2	1235.8	1235.3	1234.8	1234.4	1233.9	1233.5	1233.0	1231.6	1231.2	1230.3
7.5°	1225.2	1224.3	1222.9	1222.5	1221.6	1220.2	1218.4	1217.5	1215.6	1213.3	1212.4
10°	1210.6	1208.8	1207.4	1205.1	1204.6	1202.8	1198.2	1195.9	1192.7	1190.0	1186.8
12.5°	1192.7	1190.9	1187.7	1184.5	1182.7	1178.5	1174.4	1170.7	1166.6	1160.7	1156.1
15°	1170.7	1168.0	1161.6	1160.7	1157.9	1151.5	1146.0	1139.2	1132.7	1126.3	1120.8
17.5°	1141.4	1135.5	1132.3	1128.2	1125.0	1116.7	1110.8	1103.0	1094.3	1087.0	1079.2
20°	1103.0	1096.6	1091.1	1088.8	1084.7	1077.3	1070.0	1060.4	1051.7	1042.5	1035.7
22.5°	1057.2	1053.1	1044.8	1042.1	1037.1	1029.7	1021.0	1011.9	1003.6	993.6	984.4
25°	1008.2	1002.3	995.8	990.4	986.7	979.8	968.8	962.0	952.8	941.8	935.0
27.5°	956.0	949.1	940.0	936.3	933.1	924.0	914.8	906.1	898.8	889.2	883.2
30°	895.6	890.5	884.6	880.0	875.4	868.1	859.9	849.8	842.0	837.4	829.2
32.5°	834.2	830.1	822.3	820.0	815.0	809.0	803.1	795.8	787.5	780.7	774.2
35°	768.7	764.6	759.1	755.0	753.2	749.1	742.6	736.2	732.1	724.3	721.1
37.5°	703.3	701.9	696.4	692.3	690.9	685.9	682.7	678.1	672.1	670.3	666.6
40°	636.0	635.1	631.8	631.4	628.6	627.3	622.7	619.0	616.3	614.9	612.6
42.5°	574.2	573.2	570.5	571.0	568.2	567.3	566.8	563.6	561.3	558.6	559.0
45°	513.3	512.3	510.5	509.6	511.0	510.5	509.6	508.2	508.2	508.7	507.3
47.5°	454.7	455.6	453.7	454.7	454.7	453.3	453.3	455.1	455.6	456.5	457.4
50°	399.3	402.0	401.1	402.5	402.9	403.4	402.0	404.3	403.8	408.0	407.0
52.5°	348.9	349.3	351.2	351.6	352.1	352.6	354.8	356.7	357.1	359.0	362.2
55°	300.4	300.8	304.5	304.5	306.8	307.2	310.4	311.3	312.7	317.8	318.7
57.5°	254.6	257.3	259.1	260.1	261.4	263.7	265.6	269.7	272.0	275.2	278.4
60°	213.4	216.6	218.9	219.8	221.6	224.4	226.6	231.2	235.3	239.0	241.3
62.5°	175.4	178.1	179.9	183.1	183.1	185.4	190.9	193.7	198.3	201.5	205.6
65°	141.5	143.3	146.5	146.5	148.3	152.0	156.6	160.7	165.3	169.9	174.0
67.5°	110.8	112.2	114.0	115.8	116.8	121.3	125.0	130.9	135.1	138.3	143.3
70°	83.8	84.7	87.0	88.8	90.2	93.4	97.5	101.6	105.8	109.4	114.5
72.5°	60.0	61.8	64.1	65.5	66.4	68.7	72.8	76.9	80.6	84.2	87.0
75°	41.2	42.6	43.5	44.9	46.2	48.1	50.8	53.6	57.7	61.4	64.6
77.5°	25.6	27.0	28.4	28.8	29.3	31.1	33.0	35.7	38.5	41.2	43.5
80°	15.1	15.6	16.0	16.5	17.4	18.8	19.7	21.5	23.4	25.2	27.5
82.5°	7.8	8.2	8.7	8.7	8.7	9.2	10.5	11.4	11.9	12.8	14.2
85°	3.2	3.2	3.2	3.7	3.7	4.1	4.1	4.6	4.6	5.0	5.5
87.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
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: P879400

CATALOG NUMBER: LD4C30D010 EU4309030 4LBLDWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8	1246.8
2.5°	1242.2	1242.2	1242.2	1241.7	1242.2	1242.2	1242.2	1241.7
5°	1230.3	1229.4	1229.4	1228.9	1228.4	1228.4	1228.9	1228.0
7.5°	1210.6	1209.2	1208.3	1208.3	1207.8	1207.4	1207.4	1205.1
10°	1184.9	1182.2	1182.2	1181.3	1177.6	1177.2	1176.2	1176.2
12.5°	1152.9	1149.7	1147.9	1145.6	1143.3	1141.4	1141.0	1139.2
15°	1114.9	1110.8	1107.6	1106.6	1103.0	1100.2	1100.2	1099.3
17.5°	1073.7	1067.3	1065.0	1062.7	1057.7	1057.2	1056.3	1052.2
20°	1027.0	1021.0	1017.8	1015.5	1012.3	1007.8	1006.8	1007.3
22.5°	978.0	969.7	967.0	964.7	961.5	957.4	957.4	954.2
25°	927.2	919.8	917.1	914.3	909.3	907.5	905.2	905.6
27.5°	875.4	868.6	866.3	861.2	858.0	855.7	853.5	853.5
30°	821.4	817.7	814.1	813.6	807.2	804.5	802.2	800.3
32.5°	769.2	764.6	762.8	761.0	757.8	754.1	753.6	750.4
35°	717.9	713.3	711.1	709.2	705.6	704.2	702.8	703.7
37.5°	663.9	663.0	661.6	659.3	657.0	656.6	654.7	657.0
40°	610.8	610.3	608.5	609.0	609.0	608.0	609.0	609.0
42.5°	559.5	559.5	557.7	558.6	559.0	560.0	561.3	562.3
45°	509.6	509.1	509.6	510.5	509.6	511.9	513.7	515.1
47.5°	458.3	458.8	460.6	461.1	462.0	465.2	465.2	465.2
50°	409.3	411.6	410.7	413.4	413.0	414.8	413.0	413.0
52.5°	362.6	364.9	365.4	365.8	368.6	369.0	369.0	368.6
55°	321.0	324.2	322.8	325.1	326.5	327.4	328.7	327.8
57.5°	282.5	283.9	285.2	285.7	287.5	288.5	289.4	288.5
60°	244.5	247.2	249.5	250.0	250.9	251.8	252.3	253.7
62.5°	208.8	213.4	214.3	214.7	217.0	218.4	219.3	220.2
65°	177.2	180.4	182.7	184.1	185.9	185.9	187.3	187.3
67.5°	146.5	149.7	151.1	152.0	154.8	155.2	157.5	157.5
70°	118.6	120.9	121.8	123.2	125.9	127.7	128.7	129.6
72.5°	91.6	94.3	95.7	97.5	99.4	100.7	101.2	102.6
75°	66.8	71.0	71.4	73.3	74.6	76.5	77.4	76.9
77.5°	46.7	48.1	49.9	50.8	52.2	53.6	54.9	54.9
80°	28.8	30.7	31.1	31.6	33.4	34.3	35.3	35.3
82.5°	15.1	16.0	16.9	17.4	18.3	18.3	18.8	19.2
85°	6.0	6.4	6.4	6.4	6.9	7.3	7.3	7.3
87.5°	0.9	1.4	0.9	0.9	1.4	1.4	1.4	1.4
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)