

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: P879406

Luminaire Tested: **LD4C30D010 EU4309050 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: P879406
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 EU4309050 4LBLDWWH
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LBLDWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

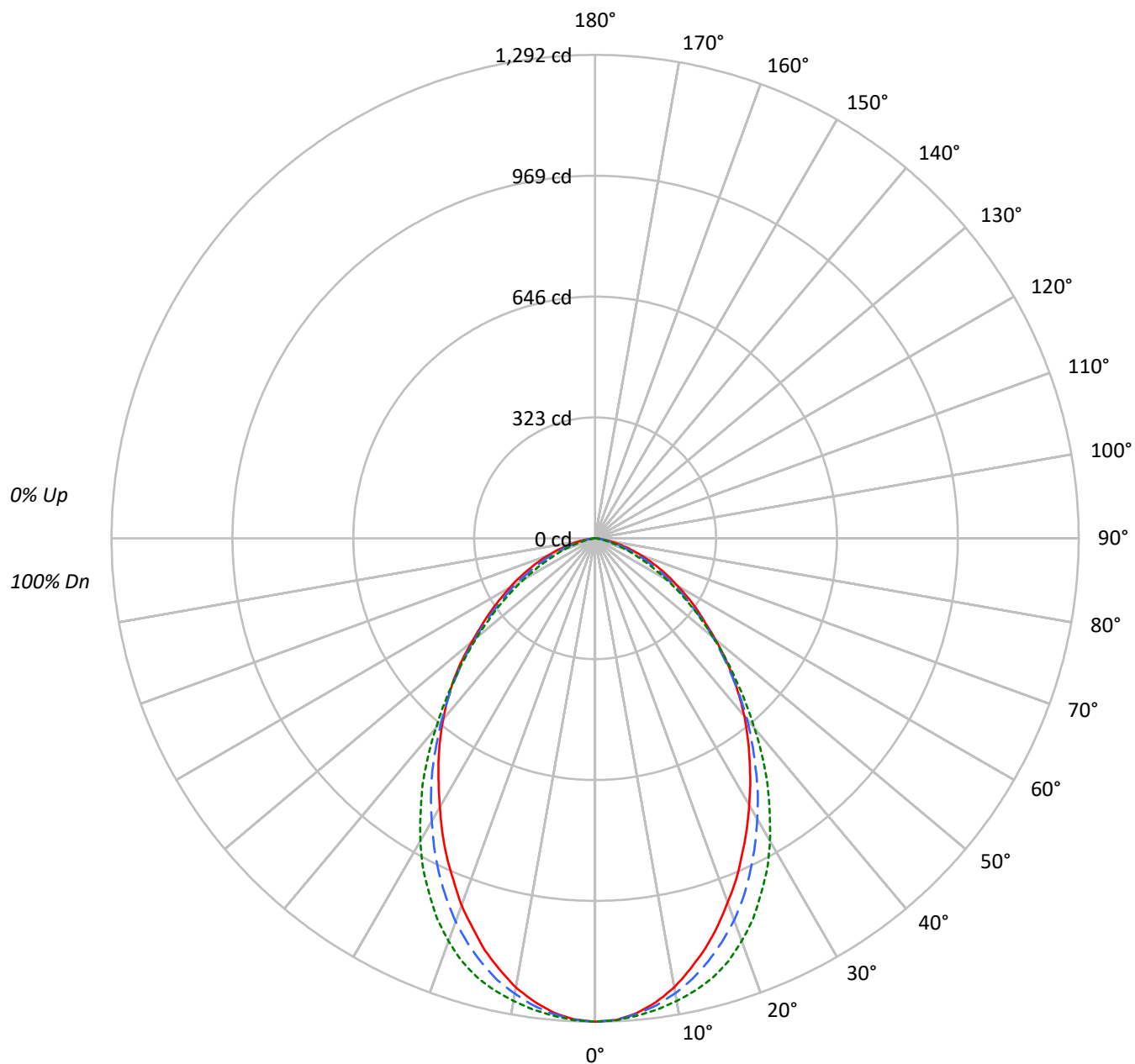
Lumens per Lamp: N/A
Luminaire Lumens: 2311.0 lumens
Efficiency: N/A
Efficacy: 73.1 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.1 / 1.12
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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°	158727	158727	158727
5°	157113	157989	156941
10°	152006	156622	152069
15°	144421	154609	144904
20°	135353	149747	136477
25°	126065	142088	127217
30°	116778	132539	117658
35°	107743	120476	109378
40°	99384	106151	101212
45°	90015	91996	92743
50°	79814	78801	81802
55°	71132	66356	72760
60°	62262	53859	64596
65°	54476	41657	56424
70°	45834	30496	48240
75°	35790	19841	37831
80°	23489	10400	25823
85°	8035	4652	10713



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.6	5.2
10°-20°	329.6	14.3
20°-30°	453.2	19.6
30°-40°	472.8	20.5
40°-50°	404.5	17.5
50°-60°	289.4	12.5
60°-70°	167.9	7.3
70°-80°	64.7	2.8
80°-90°	8.2	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°	903.4	39.1
0°-40°	1376.2	59.6
0°-60°	2070.1	89.6
0°-90°	2311.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2311.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1292	1292	1292	1292	1292	
5°	1274	1276	1281	1276	1273	120
15°	1136	1170	1216	1174	1139	318
25°	930	981	1048	987	938	428
35°	718	747	803	759	729	450
45°	518	514	530	527	534	399
55°	332	316	310	324	340	297
65°	187	166	143	171	194	187
75°	75	56	42	60	80	81
85°	6	4	3	5	8	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°	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0
2.5°	1288.7	1287.8	1288.2	1288.2	1288.2	1287.8	1288.7	1288.7	1288.2	1288.2	1288.2
5°	1274.0	1273.1	1273.5	1274.0	1274.0	1274.0	1274.5	1275.0	1275.4	1275.9	1276.4
7.5°	1250.3	1248.9	1250.3	1252.2	1252.2	1252.7	1253.1	1253.6	1255.0	1257.4	1258.8
10°	1218.5	1218.5	1219.0	1220.4	1222.8	1222.3	1223.7	1226.1	1228.9	1232.3	1234.6
12.5°	1178.2	1179.1	1180.5	1182.0	1184.3	1185.8	1188.1	1191.0	1195.7	1200.5	1205.7
15°	1135.5	1135.9	1136.4	1139.7	1142.1	1145.4	1147.3	1153.0	1157.3	1163.9	1169.6
17.5°	1087.5	1087.1	1088.5	1091.3	1097.0	1098.4	1100.8	1107.0	1113.2	1122.2	1129.8
20°	1035.3	1038.2	1040.1	1043.9	1047.2	1051.0	1052.9	1060.5	1067.6	1076.1	1086.1
22.5°	986.0	983.6	986.9	991.2	994.1	996.9	1000.2	1008.3	1015.9	1026.3	1036.3
25°	930.0	931.4	933.8	937.1	940.9	944.7	948.5	957.0	961.3	972.2	981.2
27.5°	876.9	879.2	880.2	884.5	887.8	890.6	892.5	902.5	906.3	915.8	924.8
30°	823.2	825.6	825.6	830.4	832.7	835.6	840.3	847.0	852.7	859.3	865.9
32.5°	771.5	771.5	773.4	777.7	780.1	783.4	784.8	789.6	795.2	801.9	809.0
35°	718.4	719.8	721.7	721.7	726.0	727.9	729.8	734.5	738.3	741.2	746.8
37.5°	669.5	669.5	668.1	670.5	673.3	672.8	675.7	678.0	680.4	683.7	688.5
40°	619.7	619.7	617.8	619.2	621.1	620.6	619.7	622.1	624.0	626.3	631.1
42.5°	568.9	568.0	567.5	567.5	568.4	567.5	568.4	568.9	568.9	568.9	571.8
45°	518.1	520.5	517.7	516.7	515.3	513.9	513.4	513.9	515.8	513.4	513.9
47.5°	468.3	469.3	467.4	466.0	464.5	463.6	464.5	461.7	462.6	463.1	461.2
50°	417.6	415.7	415.7	414.2	414.7	414.2	413.3	412.3	412.3	410.0	408.5
52.5°	370.6	371.5	372.5	369.2	369.6	367.3	367.7	365.4	365.4	362.5	363.5
55°	332.1	330.7	330.7	329.3	328.8	326.4	326.0	324.6	321.2	319.3	315.5
57.5°	292.3	291.8	289.9	290.4	287.5	287.1	286.1	283.7	281.4	279.0	274.7
60°	253.4	253.9	253.9	252.9	251.5	249.1	249.6	246.3	242.9	238.7	234.9
62.5°	221.1	219.7	219.2	218.3	215.4	215.4	213.0	210.7	207.4	203.1	199.8
65°	187.4	187.9	186.5	185.1	182.2	181.7	179.8	177.9	174.6	170.3	165.6
67.5°	157.1	156.1	155.6	154.2	151.4	150.9	149.5	145.2	142.3	138.1	134.3
70°	127.6	126.7	127.2	124.8	121.9	120.5	120.0	116.7	112.5	109.1	105.3
72.5°	100.1	100.1	99.6	97.3	95.8	94.9	93.0	89.2	86.8	83.0	80.2
75°	75.4	75.0	74.0	72.6	70.7	69.8	68.8	66.4	63.1	58.8	56.5
77.5°	52.2	52.7	51.7	51.2	48.9	47.4	47.0	45.6	42.7	39.9	37.5
80°	33.2	32.7	32.3	31.3	30.8	30.4	28.9	28.0	25.1	23.7	22.3
82.5°	18.0	17.1	17.1	16.6	15.7	15.2	14.7	13.8	13.3	12.3	11.4
85°	5.7	6.2	5.7	5.7	5.7	5.2	5.2	5.2	4.7	4.7	4.3
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°	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0
2.5°	1288.2	1288.7	1288.7	1289.2	1289.2	1289.2	1289.2	1289.2	1289.2	1289.2	1289.2
5°	1277.8	1277.8	1278.8	1279.7	1279.7	1279.7	1280.2	1281.1	1281.1	1281.1	1280.7
7.5°	1260.7	1262.6	1264.5	1266.4	1266.9	1267.4	1268.3	1270.2	1270.2	1270.2	1270.2
10°	1238.4	1242.7	1245.1	1247.9	1249.3	1250.3	1253.1	1253.6	1255.0	1255.5	1255.0
12.5°	1210.0	1215.6	1220.9	1225.6	1227.5	1229.4	1232.3	1235.1	1236.5	1237.9	1237.5
15°	1178.2	1184.3	1192.4	1197.6	1201.4	1204.3	1208.5	1212.3	1214.7	1215.6	1215.6
17.5°	1139.7	1147.3	1155.9	1164.4	1166.8	1171.5	1176.3	1181.5	1184.3	1184.8	1184.3
20°	1097.0	1105.6	1112.7	1121.2	1126.4	1128.8	1135.5	1142.1	1144.9	1145.4	1144.9
22.5°	1046.3	1054.3	1063.8	1072.8	1077.1	1081.4	1088.5	1095.1	1098.9	1101.8	1098.9
25°	989.8	1001.2	1010.2	1017.8	1024.0	1028.2	1037.2	1042.5	1048.6	1048.2	1048.6
27.5°	934.3	943.8	953.7	962.7	966.5	971.3	978.4	986.9	992.2	995.5	995.0
30°	877.3	884.9	893.5	901.5	907.7	911.5	921.9	925.7	932.4	934.3	932.8
32.5°	817.1	822.3	830.8	841.7	844.1	847.9	854.6	864.0	866.4	867.4	867.8
35°	753.0	763.0	770.1	776.7	778.6	782.0	789.6	796.7	799.0	803.3	801.4
37.5°	693.7	699.4	702.7	709.4	715.1	717.9	721.7	726.4	731.2	733.1	732.6
40°	634.4	637.2	640.1	647.2	647.7	647.7	653.4	660.0	660.0	661.9	661.9
42.5°	573.7	574.1	577.9	581.7	582.7	583.6	589.3	590.3	593.1	594.5	596.4
45°	514.8	517.7	520.0	520.5	522.9	523.4	524.8	526.2	530.5	529.5	530.5
47.5°	461.2	462.6	464.1	464.1	465.5	465.0	467.4	466.0	468.8	469.7	471.2
50°	408.5	410.9	409.5	410.4	410.0	411.4	410.4	410.4	410.4	412.3	413.8
52.5°	360.1	360.6	359.2	359.7	359.7	358.7	359.7	359.2	358.7	358.7	359.2
55°	315.5	313.6	312.7	310.8	308.4	311.3	309.8	308.9	310.8	309.8	310.8
57.5°	272.4	270.0	268.1	267.1	263.8	265.7	263.8	262.9	262.9	262.9	265.2
60°	231.6	229.2	226.8	224.0	223.5	222.5	221.6	219.2	219.7	219.2	220.2
62.5°	196.0	191.2	187.9	185.5	185.1	183.6	182.2	179.8	180.3	180.3	180.8
65°	163.2	158.0	153.3	149.9	149.9	147.6	145.2	145.2	142.3	143.3	143.8
67.5°	130.5	126.2	121.5	119.1	117.7	115.8	114.4	113.4	112.0	112.0	112.9
70°	101.1	96.8	94.4	90.6	90.2	88.7	86.8	85.4	84.9	84.9	84.5
72.5°	76.4	72.6	69.8	67.4	66.0	64.5	62.6	62.2	61.2	61.2	62.2
75°	53.1	50.8	48.4	46.0	45.1	44.6	43.2	42.2	42.2	41.8	42.2
77.5°	35.6	33.2	30.8	29.9	28.9	28.0	27.5	27.0	25.6	25.6	25.6
80°	20.4	19.5	18.5	17.1	17.1	16.6	15.7	15.2	14.7	14.7	14.7
82.5°	10.4	10.0	9.0	8.5	8.5	8.5	8.1	8.1	7.6	7.6	7.6
85°	4.3	3.8	3.3	3.3	3.3	3.3	3.3	3.3	3.8	3.3	3.8
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°	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0
2.5°	1289.2	1288.7	1288.7	1288.7	1288.7	1288.7	1288.2	1288.2	1287.8	1287.8	1287.8
5°	1281.1	1280.7	1280.2	1279.7	1279.2	1278.8	1278.3	1277.8	1276.4	1275.9	1275.0
7.5°	1269.7	1268.8	1267.4	1266.9	1265.9	1264.5	1262.6	1261.7	1259.8	1257.4	1256.5
10°	1254.6	1252.7	1251.2	1248.9	1248.4	1246.5	1241.7	1239.4	1236.0	1233.2	1229.9
12.5°	1236.0	1234.2	1230.8	1227.5	1225.6	1221.3	1217.1	1213.3	1209.0	1202.8	1198.1
15°	1213.3	1210.4	1203.8	1202.8	1200.0	1193.3	1187.7	1180.5	1173.9	1167.2	1161.6
17.5°	1182.9	1176.7	1173.4	1169.1	1165.8	1157.3	1151.1	1143.0	1134.0	1126.4	1118.4
20°	1143.0	1136.4	1130.7	1128.3	1124.1	1116.5	1108.9	1098.9	1089.9	1080.4	1073.3
22.5°	1095.6	1091.3	1082.8	1079.9	1074.7	1067.1	1058.1	1048.6	1040.1	1029.6	1020.2
25°	1044.8	1038.7	1032.0	1026.3	1022.5	1015.4	1004.0	996.9	987.4	976.0	968.9
27.5°	990.7	983.6	974.1	970.3	967.0	957.5	948.0	939.0	931.4	921.5	915.3
30°	928.1	922.9	916.7	912.0	907.2	899.6	891.1	880.7	872.6	867.8	859.3
32.5°	864.5	860.3	852.2	849.8	844.6	838.4	832.3	824.7	816.1	809.0	802.4
35°	796.7	792.4	786.7	782.4	780.5	776.3	769.6	763.0	758.7	750.6	747.3
37.5°	728.8	727.4	721.7	717.4	716.0	710.8	707.5	702.7	696.6	694.7	690.9
40°	659.1	658.1	654.8	654.3	651.5	650.1	645.3	641.5	638.7	637.2	634.9
42.5°	595.0	594.1	591.2	591.7	588.8	587.9	587.4	584.1	581.7	578.9	579.4
45°	531.9	531.0	529.1	528.1	529.5	529.1	528.1	526.7	526.7	527.2	525.7
47.5°	471.2	472.1	470.2	471.2	471.2	469.7	469.7	471.6	472.1	473.1	474.0
50°	413.8	416.6	415.7	417.1	417.6	418.0	416.6	419.0	418.5	422.8	421.8
52.5°	361.6	362.0	363.9	364.4	364.9	365.4	367.7	369.6	370.1	372.0	375.3
55°	311.3	311.7	315.5	315.5	317.9	318.4	321.7	322.7	324.1	329.3	330.2
57.5°	263.8	266.7	268.6	269.5	270.9	273.3	275.2	279.5	281.8	285.2	288.5
60°	221.1	224.4	226.8	227.8	229.7	232.5	234.9	239.6	243.9	247.7	250.1
62.5°	181.7	184.6	186.5	189.8	189.8	192.2	197.9	200.7	205.5	208.8	213.0
65°	146.6	148.5	151.8	151.8	153.7	157.5	162.3	166.5	171.3	176.0	180.3
67.5°	114.8	116.3	118.1	120.0	121.0	125.7	129.5	135.7	140.0	143.3	148.5
70°	86.8	87.8	90.2	92.1	93.5	96.8	101.1	105.3	109.6	113.4	118.6
72.5°	62.2	64.1	66.4	67.9	68.8	71.2	75.4	79.7	83.5	87.3	90.2
75°	42.7	44.1	45.1	46.5	47.9	49.8	52.7	55.5	59.8	63.6	66.9
77.5°	26.6	28.0	29.4	29.9	30.4	32.3	34.2	37.0	39.9	42.7	45.1
80°	15.7	16.1	16.6	17.1	18.0	19.5	20.4	22.3	24.2	26.1	28.5
82.5°	8.1	8.5	9.0	9.0	9.0	9.5	10.9	11.9	12.3	13.3	14.7
85°	3.3	3.3	3.3	3.8	3.8	4.3	4.3	4.7	4.7	5.2	5.7
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: P879406

CATALOG NUMBER: LD4C30D010 EU4309050 4LBLDWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0	1292.0
2.5°	1287.3	1287.3	1287.3	1286.8	1287.3	1287.3	1287.3	1286.8
5°	1275.0	1274.0	1274.0	1273.5	1273.1	1273.1	1273.5	1272.6
7.5°	1254.6	1253.1	1252.2	1252.2	1251.7	1251.2	1251.2	1248.9
10°	1228.0	1225.1	1225.1	1224.2	1220.4	1219.9	1219.0	1219.0
12.5°	1194.8	1191.4	1189.5	1187.2	1184.8	1182.9	1182.4	1180.5
15°	1155.4	1151.1	1147.8	1146.8	1143.0	1140.2	1140.2	1139.3
17.5°	1112.7	1106.0	1103.7	1101.3	1096.1	1095.6	1094.7	1090.4
20°	1064.3	1058.1	1054.8	1052.4	1049.1	1044.4	1043.4	1043.9
22.5°	1013.5	1005.0	1002.1	999.8	996.4	992.2	992.2	988.8
25°	960.8	953.3	950.4	947.6	942.3	940.4	938.1	938.5
27.5°	907.2	900.1	897.7	892.5	889.2	886.8	884.5	884.5
30°	851.2	847.4	843.6	843.2	836.5	833.7	831.3	829.4
32.5°	797.1	792.4	790.5	788.6	785.3	781.5	781.0	777.7
35°	744.0	739.3	736.9	735.0	731.2	729.8	728.3	729.3
37.5°	688.0	687.1	685.6	683.3	680.9	680.4	678.5	680.9
40°	633.0	632.5	630.6	631.1	631.1	630.1	631.1	631.1
42.5°	579.8	579.8	577.9	578.9	579.4	580.3	581.7	582.7
45°	528.1	527.6	528.1	529.1	528.1	530.5	532.4	533.8
47.5°	475.0	475.4	477.3	477.8	478.8	482.1	482.1	482.1
50°	424.2	426.6	425.6	428.5	428.0	429.9	428.0	428.0
52.5°	375.8	378.2	378.6	379.1	382.0	382.4	382.4	382.0
55°	332.6	335.9	334.5	336.9	338.3	339.3	340.7	339.7
57.5°	292.8	294.2	295.6	296.1	298.0	298.9	299.9	298.9
60°	253.4	256.2	258.6	259.1	260.0	261.0	261.4	262.9
62.5°	216.4	221.1	222.1	222.5	224.9	226.3	227.3	228.2
65°	183.6	186.9	189.3	190.7	192.6	192.6	194.1	194.1
67.5°	151.8	155.2	156.6	157.5	160.4	160.9	163.2	163.2
70°	122.9	125.3	126.2	127.6	130.5	132.4	133.3	134.3
72.5°	94.9	97.7	99.2	101.1	103.0	104.4	104.9	106.3
75°	69.3	73.5	74.0	75.9	77.3	79.2	80.2	79.7
77.5°	48.4	49.8	51.7	52.7	54.1	55.5	56.9	56.9
80°	29.9	31.8	32.3	32.7	34.6	35.6	36.5	36.5
82.5°	15.7	16.6	17.6	18.0	19.0	19.0	19.5	19.9
85°	6.2	6.6	6.6	6.6	7.1	7.6	7.6	7.6
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)