

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: P879401

Luminaire Tested: **LD4C30D010 EU4309030 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: P879401
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 EU4309030 4LBLDWWLI
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LBLDWW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

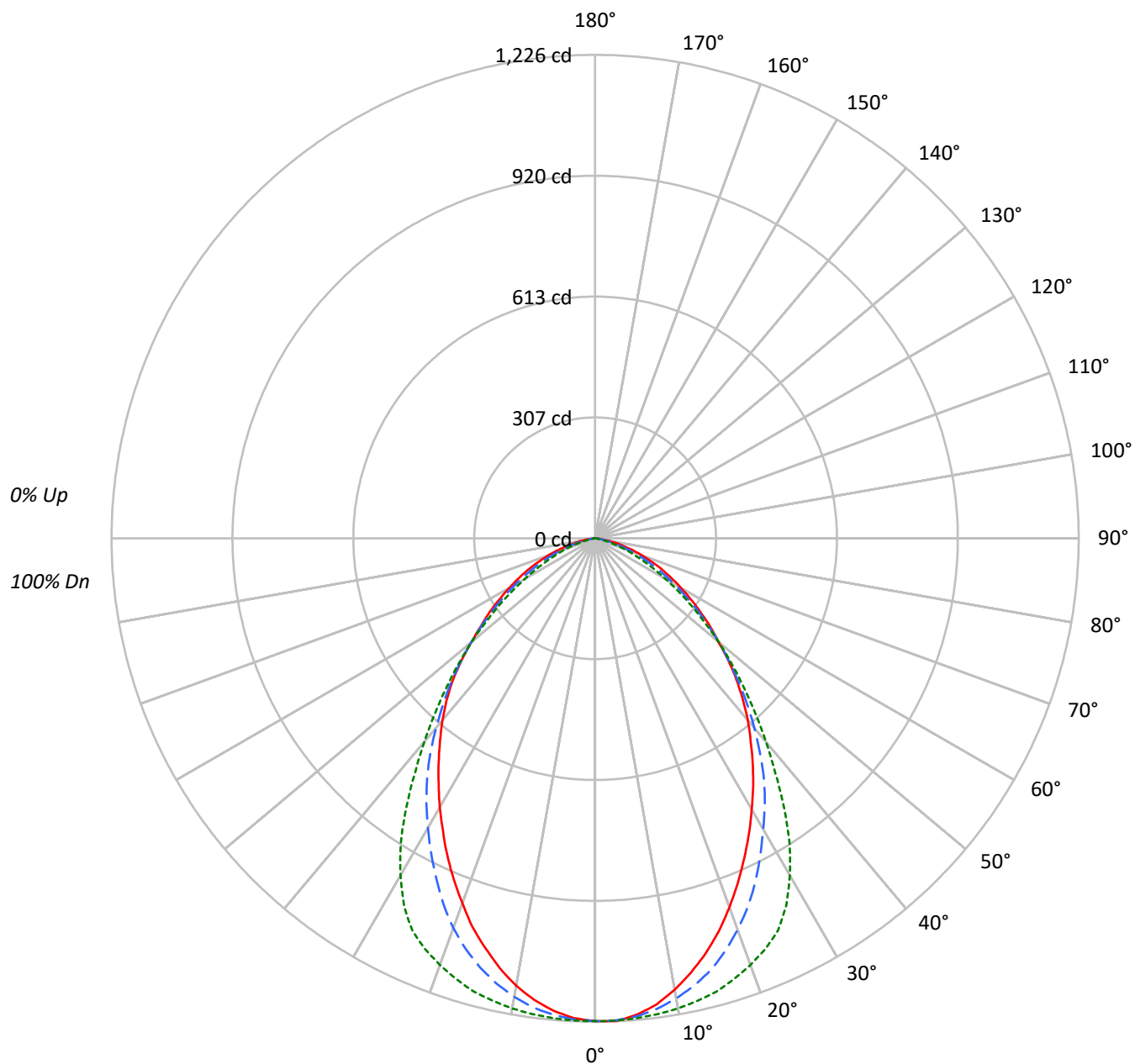
Lumens per Lamp: N/A
Luminaire Lumens: 2249.0 lumens
Efficiency: N/A
Efficacy: 71.2 lumens/watt
Spacing Criteria (0/90/45): 1 / 1.19 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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	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°	150446	150446	150446
5°	149554	150676	148419
10°	144995	151046	143735
15°	138329	151378	136815
20°	130163	150519	128725
25°	121239	148743	120250
30°	112650	140057	111742
35°	104459	125275	103709
40°	96577	108028	96513
45°	88000	92222	88712
50°	77731	77979	78171
55°	69633	63764	69933
60°	61550	50640	61672
65°	54186	38604	53662
70°	44900	27622	44900
75°	34983	15854	33702
80°	22710	3891	21720
85°	8458	1269	6484



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.0	5.1
10°-20°	318.0	14.1
20°-30°	444.6	19.8
30°-40°	469.0	20.9
40°-50°	399.0	17.7
50°-60°	281.5	12.5
60°-70°	159.6	7.1
70°-80°	56.9	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°	877.6	39.0
0°-40°	1346.5	59.9
0°-60°	2027.0	90.1
0°-90°	2249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2249.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1225	1225	1225	1225	1225	
5°	1213	1217	1222	1213	1204	114
15°	1088	1133	1190	1127	1076	305
25°	894	961	1097	952	887	412
35°	696	747	835	743	692	435
45°	506	514	531	516	511	389
55°	325	314	298	315	326	292
65°	186	160	133	160	185	185
75°	74	50	33	50	71	80
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°	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6
2.5°	1225.5	1223.2	1223.2	1223.2	1223.2	1223.2	1223.2	1223.2	1223.2	1223.7	1223.7
5°	1212.7	1211.7	1211.3	1211.3	1211.3	1211.3	1211.7	1213.6	1214.5	1215.9	1216.8
7.5°	1192.5	1190.7	1191.6	1191.6	1192.5	1193.4	1194.8	1196.6	1199.4	1201.2	1203.5
10°	1162.3	1160.5	1162.7	1163.7	1166.4	1167.8	1170.1	1172.8	1178.3	1181.1	1184.7
12.5°	1127.0	1126.1	1127.0	1130.7	1133.4	1135.3	1138.0	1144.0	1149.5	1155.4	1161.8
15°	1087.6	1085.3	1086.7	1091.3	1095.9	1099.1	1101.4	1109.2	1116.5	1125.6	1133.4
17.5°	1043.7	1040.5	1044.1	1047.8	1053.8	1056.5	1059.7	1068.4	1078.5	1088.6	1097.3
20°	995.6	994.7	997.0	1002.0	1008.0	1011.6	1014.4	1024.0	1032.7	1046.4	1056.5
22.5°	945.7	946.6	948.4	953.9	958.0	963.1	967.2	975.9	986.0	998.8	1011.6
25°	894.4	895.8	899.0	902.6	909.5	912.2	917.3	926.4	935.1	947.0	961.2
27.5°	844.9	845.4	849.0	850.9	857.3	863.2	865.5	875.1	885.2	894.4	906.7
30°	794.1	795.5	797.8	802.8	809.2	811.5	814.2	822.9	830.7	842.2	851.8
32.5°	745.5	744.6	747.4	750.1	757.5	761.6	763.0	773.0	779.9	791.3	800.5
35°	696.5	694.3	698.4	701.1	707.5	711.2	713.0	720.8	727.2	736.8	746.9
37.5°	647.5	649.4	651.2	653.5	656.7	657.6	663.1	664.9	673.2	680.5	686.0
40°	602.2	601.3	600.4	602.7	606.8	608.6	609.1	614.1	615.9	623.3	627.4
42.5°	553.7	554.1	553.7	554.1	556.4	556.4	557.8	561.0	562.4	564.7	569.7
45°	506.5	506.5	505.1	505.6	506.0	505.6	506.0	507.4	510.2	510.2	513.8
47.5°	457.5	456.6	458.4	457.0	456.1	455.7	457.0	455.7	458.4	458.4	459.3
50°	406.7	406.7	409.0	408.5	409.4	407.6	408.0	408.0	408.5	408.0	409.9
52.5°	367.3	366.4	365.4	363.2	364.1	362.2	362.2	362.7	361.3	360.9	358.6
55°	325.1	326.1	324.7	323.8	323.8	321.9	321.5	318.7	316.9	315.5	314.2
57.5°	287.1	288.1	287.6	285.3	282.6	283.0	282.1	279.4	275.2	272.5	270.2
60°	250.5	251.4	250.5	248.2	247.3	245.5	245.0	241.3	238.1	234.5	231.7
62.5°	217.5	217.5	217.1	213.9	211.6	212.0	209.7	207.0	202.9	197.8	193.7
65°	186.4	185.9	183.6	182.3	180.4	178.1	176.8	172.6	169.4	165.3	159.8
67.5°	155.2	153.9	153.0	151.6	147.5	147.0	145.2	141.5	136.9	133.7	129.1
70°	125.0	124.6	122.7	122.7	119.5	118.2	115.4	112.2	108.1	103.5	99.8
72.5°	98.9	98.0	96.2	94.3	91.6	90.7	88.4	85.2	81.5	76.9	72.4
75°	73.7	72.8	72.4	70.1	67.8	65.5	64.6	61.4	57.7	54.5	50.4
77.5°	51.7	50.8	49.5	48.1	46.7	45.3	44.0	41.2	38.0	35.3	31.6
80°	32.1	31.1	30.2	29.8	28.4	27.9	26.1	24.7	22.0	20.1	17.9
82.5°	16.5	16.5	15.6	15.1	14.2	13.7	13.3	11.9	10.5	9.2	7.8
85°	6.0	6.0	5.5	5.0	5.0	4.6	4.6	4.1	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°	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6
2.5°	1224.1	1223.7	1224.1	1224.1	1224.6	1224.6	1224.6	1224.1	1224.6	1224.1	1224.1
5°	1216.8	1218.2	1219.1	1220.0	1220.4	1220.9	1220.9	1221.4	1221.8	1221.8	1221.4
7.5°	1205.3	1208.1	1210.8	1212.7	1213.6	1214.5	1215.9	1216.8	1217.7	1217.2	1216.8
10°	1190.2	1194.8	1198.5	1202.1	1204.0	1205.3	1207.6	1209.5	1210.4	1210.8	1209.5
12.5°	1168.7	1175.1	1181.1	1187.0	1189.8	1191.6	1196.2	1199.4	1201.2	1201.2	1199.8
15°	1141.7	1150.8	1159.5	1167.3	1171.9	1174.7	1181.5	1186.1	1188.8	1190.2	1187.9
17.5°	1109.2	1119.7	1130.2	1140.3	1144.9	1149.0	1158.6	1165.0	1171.0	1171.9	1169.2
20°	1067.5	1080.8	1092.7	1105.0	1110.1	1116.5	1127.5	1138.0	1147.2	1151.3	1143.5
22.5°	1020.8	1035.4	1046.4	1061.5	1068.4	1075.3	1089.5	1102.8	1118.8	1127.5	1113.7
25°	972.2	984.6	997.9	1012.5	1022.2	1029.5	1046.0	1062.9	1084.4	1097.3	1078.0
27.5°	920.0	931.0	947.0	963.1	970.4	979.6	999.3	1017.6	1038.2	1049.6	1035.4
30°	866.0	879.7	894.8	909.5	920.0	928.7	944.8	960.3	977.7	987.3	976.8
32.5°	812.4	825.7	838.5	854.5	860.5	868.3	882.5	895.8	909.0	917.7	905.4
35°	756.1	768.0	779.9	790.9	793.6	802.8	814.2	822.0	828.4	835.3	827.1
37.5°	694.7	703.9	709.8	721.7	726.3	727.7	736.8	742.3	749.2	750.6	750.1
40°	632.4	640.7	645.7	653.0	656.7	656.7	663.1	668.2	673.2	673.6	673.2
42.5°	574.3	578.4	582.5	587.1	586.2	591.7	594.4	596.7	600.4	600.4	601.3
45°	515.7	518.9	522.5	523.4	527.1	527.1	529.4	530.3	532.1	530.8	528.9
47.5°	461.2	462.5	463.0	467.1	468.0	464.8	467.6	468.0	467.6	467.6	466.7
50°	409.4	410.3	409.9	408.5	409.0	410.3	409.0	407.1	408.0	408.0	409.0
52.5°	359.0	357.2	356.3	356.3	354.5	354.5	352.2	351.3	350.8	349.0	351.3
55°	312.8	310.0	305.9	305.0	303.6	303.2	300.4	298.1	297.2	297.7	297.2
57.5°	268.4	264.2	261.5	260.6	259.2	256.5	253.2	251.0	250.5	249.6	249.6
60°	228.1	223.5	219.4	215.2	215.7	213.9	210.7	209.3	207.9	206.1	207.5
62.5°	191.4	186.4	181.8	177.7	174.9	173.6	171.3	169.0	167.6	166.2	168.1
65°	155.2	151.1	146.1	142.0	140.6	139.2	136.9	133.3	132.8	132.8	133.7
67.5°	122.7	118.2	113.6	110.8	109.0	107.2	106.2	104.4	103.0	102.1	102.6
70°	94.3	89.8	86.1	83.3	82.0	81.5	78.3	77.9	77.4	76.9	76.5
72.5°	68.7	65.0	61.8	60.0	58.2	56.8	55.9	54.5	54.0	54.0	54.0
75°	47.2	44.4	40.8	38.5	37.6	36.2	34.8	33.9	33.0	33.4	33.4
77.5°	28.4	25.6	23.4	21.5	21.1	19.7	18.3	17.4	16.0	16.0	16.5
80°	15.6	13.3	11.4	10.1	9.2	8.7	7.3	6.9	6.0	5.5	5.5
82.5°	6.9	5.5	4.6	4.1	3.7	3.2	2.7	2.3	2.3	1.8	2.3
85°	2.3	1.8	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°	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6
2.5°	1223.7	1223.7	1223.2	1223.2	1223.2	1222.3	1222.3	1221.8	1221.4	1220.9	1220.0
5°	1220.4	1220.0	1219.1	1218.6	1218.2	1216.8	1215.4	1214.5	1213.1	1211.3	1210.4
7.5°	1215.9	1214.5	1212.7	1211.7	1210.4	1207.2	1204.9	1202.6	1200.3	1197.1	1193.4
10°	1208.1	1205.3	1202.6	1200.8	1198.5	1194.3	1189.8	1186.1	1181.1	1176.5	1171.4
12.5°	1197.1	1193.9	1188.4	1185.6	1182.9	1176.9	1171.0	1163.2	1156.3	1149.9	1144.0
15°	1183.4	1177.4	1171.0	1167.3	1163.2	1153.6	1144.4	1136.2	1127.0	1119.2	1109.6
17.5°	1163.2	1154.5	1145.3	1141.2	1135.7	1124.7	1113.7	1102.3	1091.8	1082.1	1070.2
20°	1133.0	1123.4	1111.5	1105.0	1100.5	1085.8	1075.3	1062.5	1051.5	1039.6	1026.3
22.5°	1097.7	1084.4	1071.2	1062.0	1057.0	1042.3	1028.1	1016.7	1004.7	991.0	981.4
25°	1057.9	1041.4	1025.4	1016.2	1008.4	992.8	979.1	967.2	952.5	940.6	931.0
27.5°	1013.0	994.2	975.4	966.3	959.0	942.0	927.4	915.0	900.8	890.3	880.2
30°	959.4	942.5	924.6	917.3	908.6	891.2	874.2	863.2	847.7	836.7	825.7
32.5°	892.6	881.6	867.4	857.3	852.7	836.7	822.5	809.2	795.9	787.2	776.2
35°	819.3	809.7	797.8	792.3	786.3	776.2	764.8	753.3	742.8	734.6	724.5
37.5°	745.1	735.5	728.1	722.2	718.5	709.4	702.5	693.8	686.5	678.7	673.2
40°	668.2	665.4	657.6	654.9	654.0	643.9	637.9	631.1	626.5	621.9	618.7
42.5°	599.9	595.3	589.4	589.8	587.1	581.6	577.5	572.9	569.7	567.4	564.2
45°	532.6	528.9	526.2	528.5	523.9	522.1	518.9	518.4	516.1	512.0	510.6
47.5°	468.5	468.0	468.5	467.1	466.2	465.3	465.7	463.4	461.2	459.8	458.0
50°	409.9	410.3	411.2	412.6	409.4	410.8	410.3	409.9	409.9	408.5	409.4
52.5°	353.1	353.5	354.5	355.8	356.3	356.3	357.7	358.6	360.4	362.7	362.7
55°	299.5	302.7	304.5	306.8	305.5	308.2	309.6	313.7	315.1	315.1	316.9
57.5°	251.9	255.1	256.5	259.2	260.1	262.4	266.1	268.4	271.6	274.3	277.1
60°	208.4	209.7	213.4	217.5	216.6	222.1	224.9	228.5	232.6	234.5	238.1
62.5°	169.4	171.3	174.0	175.4	178.6	181.3	187.8	191.4	195.1	199.7	203.3
65°	134.6	136.5	139.2	142.0	143.3	147.5	150.7	157.1	160.3	165.3	169.4
67.5°	103.0	105.8	108.1	109.9	110.8	114.9	120.0	122.7	128.7	133.7	136.9
70°	76.9	79.2	82.0	81.5	83.3	86.6	90.2	94.3	98.9	103.5	107.2
72.5°	53.6	55.9	57.7	58.2	60.0	62.3	65.0	68.2	71.9	76.5	81.5
75°	33.9	34.3	36.2	37.1	38.0	40.8	43.0	46.3	49.5	53.1	56.3
77.5°	16.9	18.3	19.2	20.1	20.6	22.9	25.2	27.9	30.7	34.3	37.6
80°	6.4	6.9	8.2	8.7	9.6	11.0	12.8	14.2	16.5	19.2	21.1
82.5°	2.3	2.7	3.2	3.2	3.7	4.6	5.0	6.4	7.8	8.7	9.6
85°	0.9	0.9	0.9	0.9	0.9	1.4	1.4	1.8	2.3	2.7	2.7
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: P879401

CATALOG NUMBER: LD4C30D010 EU4309030 4LBLDWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6	1224.6
2.5°	1219.5	1219.5	1219.1	1218.6	1218.6	1218.6	1218.2	1218.2
5°	1208.5	1207.2	1206.7	1205.8	1205.3	1204.9	1203.5	1203.5
7.5°	1190.7	1188.8	1187.5	1186.1	1184.3	1182.9	1182.9	1181.1
10°	1166.9	1163.2	1161.4	1159.5	1157.2	1154.5	1153.6	1152.2
12.5°	1138.0	1130.7	1128.9	1125.6	1122.0	1120.2	1116.9	1116.9
15°	1102.3	1094.5	1090.4	1088.6	1084.0	1080.8	1079.4	1075.7
17.5°	1060.6	1054.7	1048.3	1045.5	1040.5	1036.3	1034.5	1034.1
20°	1018.5	1008.9	1004.7	1000.6	994.7	991.0	988.3	984.6
22.5°	969.9	961.2	955.3	952.5	947.5	941.1	936.5	936.5
25°	918.7	910.9	907.7	901.7	895.8	893.5	888.0	887.1
27.5°	869.7	861.9	855.5	852.3	845.4	842.2	837.6	835.8
30°	818.8	809.7	805.1	804.6	796.4	793.2	789.5	787.7
32.5°	768.0	760.2	755.6	752.9	749.2	743.7	740.5	738.7
35°	717.6	712.6	708.5	705.2	699.3	696.5	693.8	691.5
37.5°	664.9	660.4	658.5	655.8	653.0	648.0	647.1	645.3
40°	614.1	608.2	608.2	606.3	603.6	603.1	601.8	601.8
42.5°	561.0	558.2	557.8	558.2	556.4	555.5	554.1	557.3
45°	508.3	509.7	507.4	507.9	507.0	508.8	508.8	510.6
47.5°	459.8	458.0	458.9	459.8	461.2	461.2	460.7	460.2
50°	408.0	409.9	411.7	409.4	410.3	410.8	408.5	409.0
52.5°	363.6	364.1	365.4	364.1	365.4	365.0	365.9	364.1
55°	320.6	320.6	322.4	322.9	323.3	324.7	325.1	326.5
57.5°	278.9	281.2	283.5	283.0	284.8	286.7	285.3	286.7
60°	242.7	244.5	246.8	247.8	249.1	250.0	250.0	251.0
62.5°	206.1	209.7	211.6	213.4	213.4	215.2	217.1	217.5
65°	173.1	177.2	178.6	180.0	180.9	182.7	185.0	184.6
67.5°	142.0	144.7	146.5	147.5	150.2	151.1	153.0	154.8
70°	111.3	114.9	116.3	118.2	120.4	122.3	124.1	125.0
72.5°	85.2	87.9	88.8	90.7	93.0	94.8	95.7	97.1
75°	59.5	64.1	64.6	65.9	67.8	70.1	71.4	71.0
77.5°	39.4	42.6	43.0	44.9	46.7	48.5	49.0	49.5
80°	23.4	25.2	25.6	26.6	27.9	28.9	29.8	30.7
82.5°	11.0	11.9	12.8	12.8	13.7	14.7	14.7	15.1
85°	3.7	3.7	4.1	4.1	4.6	4.6	5.0	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)