

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: P857533

Luminaire Tested: **LX4C30D010 EX4C309030 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P857533
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-2)
Test Lab: INNOVATION CENTER
Issue Date: 2/14/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C30D010 EX4C309030 4LBLWWH
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

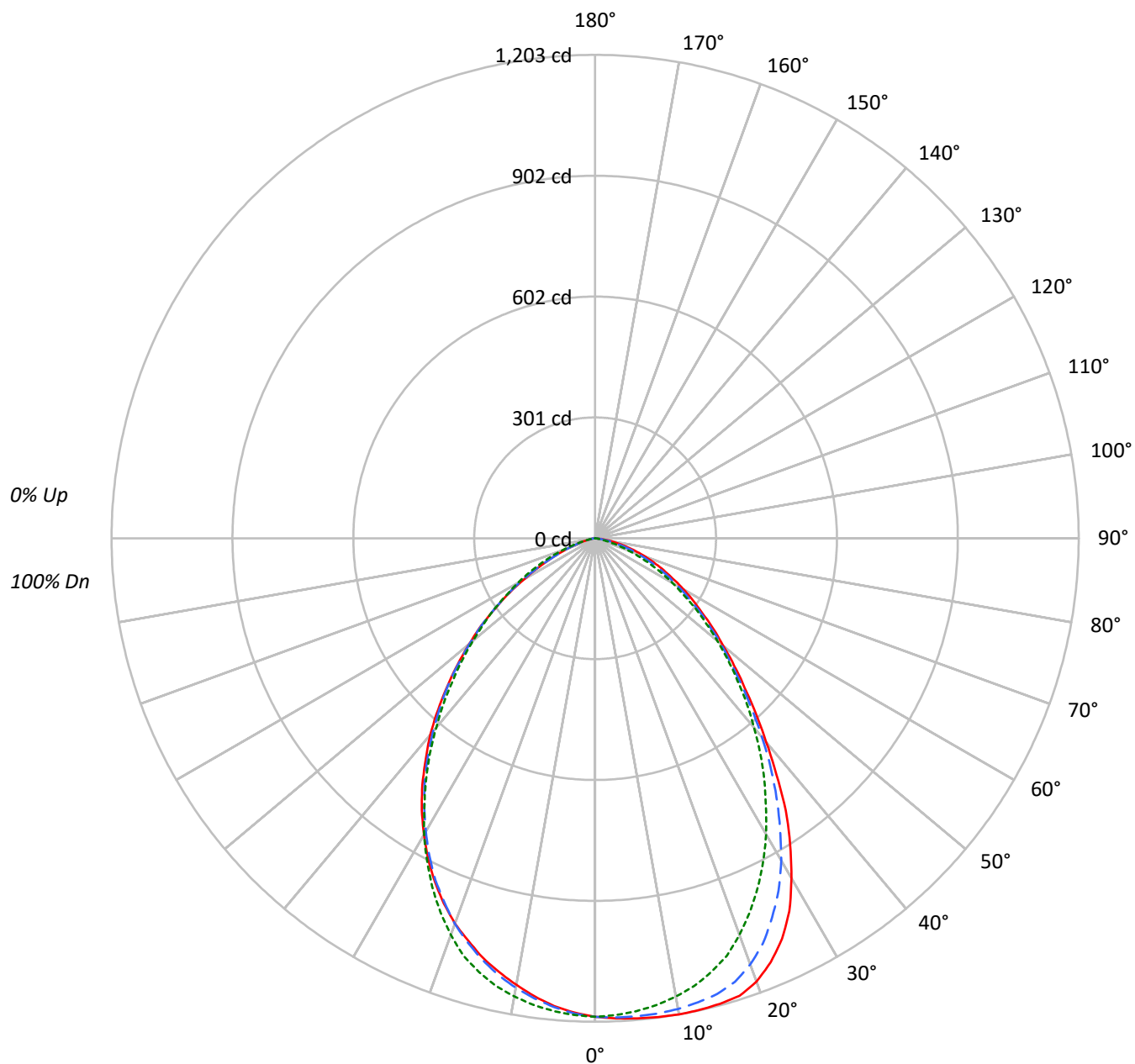
Lumens per Lamp: N/A
Luminaire Lumens: 2244.0 lumens
Efficiency: N/A
Efficacy: 71.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 31.6
Input Voltage (V):
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	94	92	90	88		
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77		
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68		
4	88	78	70	64	86	77	69	64	74	68	63	72	67	62	70	65	62	60		
5	82	71	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53		
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47		
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43		
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	40	39		
9	62	50	43	38	61	50	42	37	48	42	37	47	41	37	47	41	37	35		
10	59	47	39	34	58	46	39	34	45	39	34	44	38	34	43	38	34	32		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	146282	146282	146282
5°	147913	145657	144078
10°	150085	144422	140766
15°	152548	142119	137413
20°	153512	137288	133340
25°	149109	129874	127881
30°	138568	120708	120779
35°	124045	110038	112362
40°	106200	98646	102238
45°	91423	86975	90224
50°	79470	75705	77999
55°	69933	65135	64535
60°	62238	54350	50075
65°	54593	43546	36221
70°	46876	30747	24497
75°	38021	17848	14335
80°	27238	7782	7146
85°	10290	3242	3242



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.2	5.0
10°-20°	317.7	14.2
20°-30°	453.6	20.2
30°-40°	474.5	21.1
40°-50°	397.6	17.7
50°-60°	278.3	12.4
60°-70°	151.5	6.8
70°-80°	52.6	2.3
80°-90°	6.1	0.3
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°	883.5	39.4
0°-40°	1358.0	60.5
0°-60°	2033.8	90.6
0°-90°	2244.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2244.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1191	1191	1191	1191	1191	
5°	1199	1194	1181	1171	1168	115
15°	1199	1174	1117	1085	1080	339
25°	1100	1041	958	939	943	502
35°	827	786	734	739	749	513
45°	526	514	501	517	519	409
55°	326	316	304	304	301	295
65°	188	171	150	126	125	187
75°	80	65	38	30	30	86
85°	7	4	2	2	2	13
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°	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7
2.5°	1196.2	1194.8	1195.3	1195.3	1195.3	1194.8	1195.3	1194.8	1194.8	1194.4	1193.5
5°	1199.4	1198.5	1198.5	1198.5	1198.0	1197.6	1197.6	1197.1	1196.2	1195.8	1193.9
7.5°	1201.7	1200.8	1200.8	1200.3	1199.9	1199.4	1199.0	1197.6	1196.2	1195.3	1193.0
10°	1203.1	1201.7	1201.7	1200.8	1199.9	1199.4	1198.5	1196.7	1194.8	1192.6	1189.3
12.5°	1202.2	1200.8	1200.3	1199.4	1197.6	1196.7	1195.8	1193.5	1190.3	1187.1	1182.9
15°	1199.4	1198.5	1197.6	1196.2	1193.9	1192.6	1191.6	1188.0	1183.9	1179.3	1174.2
17.5°	1193.9	1192.6	1190.7	1188.9	1185.7	1184.3	1182.0	1177.4	1171.5	1165.1	1157.3
20°	1174.2	1173.3	1171.5	1168.3	1163.2	1161.4	1158.2	1152.3	1144.5	1136.7	1128.4
22.5°	1141.7	1140.3	1137.6	1134.8	1130.3	1127.1	1124.3	1116.1	1107.4	1099.1	1091.3
25°	1100.0	1098.7	1095.0	1091.3	1086.8	1081.3	1078.5	1072.1	1063.4	1052.9	1041.4
27.5°	1046.5	1041.9	1040.5	1036.4	1029.5	1027.7	1023.6	1015.3	1007.1	997.9	988.3
30°	976.8	976.8	974.1	972.3	965.9	964.0	959.4	950.7	946.2	933.3	926.0
32.5°	903.1	902.2	899.9	898.5	894.9	891.7	887.1	882.5	872.4	866.0	855.9
35°	827.1	821.6	822.5	819.8	817.5	813.8	813.4	808.3	799.2	795.5	786.3
37.5°	740.5	738.2	741.5	737.3	735.0	735.5	731.8	728.6	725.0	718.6	716.7
40°	662.2	664.1	663.6	659.9	661.8	659.5	655.8	652.6	650.8	646.7	645.3
42.5°	592.2	589.4	588.5	588.5	588.9	588.9	587.1	584.8	584.8	580.7	576.6
45°	526.2	526.2	525.3	528.0	523.9	523.9	522.5	522.1	520.3	519.3	514.3
47.5°	469.4	469.0	468.5	468.0	467.6	467.6	464.8	462.5	462.1	459.3	456.6
50°	415.8	418.6	417.7	415.4	414.5	414.9	413.1	411.7	411.3	406.7	407.1
52.5°	371.0	370.5	371.4	370.0	367.7	368.2	366.4	364.5	362.7	360.4	358.6
55°	326.5	328.8	327.9	326.5	326.1	325.2	323.8	321.5	321.0	316.0	315.5
57.5°	289.4	289.0	288.1	285.8	285.3	283.9	283.9	282.1	279.4	276.6	274.3
60°	253.3	253.3	251.9	251.4	249.6	249.1	248.7	246.8	243.6	241.4	237.7
62.5°	218.5	219.4	218.5	217.1	215.7	213.9	213.0	211.6	208.8	206.5	203.3
65°	187.8	187.3	186.9	185.0	184.6	182.7	182.3	179.5	176.8	174.9	171.3
67.5°	158.5	157.1	157.1	156.2	155.3	153.9	153.0	150.2	147.0	145.2	141.5
70°	130.5	129.6	129.6	129.6	127.3	125.9	125.5	124.1	119.5	117.7	114.0
72.5°	104.9	104.4	104.0	102.6	101.2	101.2	99.4	96.6	94.3	92.1	89.3
75°	80.1	81.1	80.1	78.3	77.9	76.9	75.6	73.3	71.0	68.2	65.0
77.5°	58.6	57.7	56.8	56.8	55.9	54.0	53.6	51.8	49.0	47.2	44.0
80°	38.5	38.0	37.1	36.2	35.7	35.3	34.8	33.0	30.2	28.9	26.1
82.5°	21.1	20.6	20.6	20.2	18.8	18.8	18.3	16.5	15.1	14.2	12.8
85°	7.3	7.3	7.3	6.9	6.9	6.9	6.4	6.0	5.5	5.0	4.1
87.5°	0.9	0.5	0.9	0.5	0.9	0.5	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	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°	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7
2.5°	1192.6	1191.6	1191.2	1190.7	1190.3	1189.8	1189.3	1188.4	1188.0	1187.5	1186.6
5°	1192.6	1190.7	1189.8	1188.4	1187.5	1186.6	1185.2	1183.9	1182.5	1181.1	1179.7
7.5°	1190.7	1188.0	1186.1	1183.4	1182.5	1181.1	1178.4	1176.5	1174.2	1171.5	1168.3
10°	1186.1	1182.9	1179.3	1175.6	1174.2	1171.9	1168.3	1165.1	1161.4	1157.7	1154.5
12.5°	1178.8	1173.8	1169.2	1164.2	1161.4	1159.1	1154.1	1149.5	1144.9	1140.8	1135.3
15°	1167.8	1161.9	1155.9	1149.0	1145.8	1143.1	1135.8	1130.3	1122.9	1117.4	1112.0
17.5°	1150.0	1140.8	1133.5	1124.8	1120.2	1117.0	1110.6	1101.9	1095.0	1089.1	1082.6
20°	1119.3	1110.6	1100.5	1090.9	1085.8	1081.7	1072.6	1063.4	1056.5	1050.1	1043.3
22.5°	1079.0	1068.0	1060.7	1048.8	1044.6	1039.6	1028.6	1020.4	1012.6	1006.2	999.7
25°	1030.0	1020.4	1010.3	999.3	994.3	988.3	979.1	970.4	965.4	958.1	950.3
27.5°	973.6	965.9	953.5	943.9	938.8	934.3	925.6	917.8	910.4	905.4	898.1
30°	914.1	904.9	894.0	883.9	881.1	875.6	867.9	861.9	854.1	850.9	847.7
32.5°	848.6	838.1	829.8	823.4	817.9	813.4	809.2	799.6	798.2	790.0	789.1
35°	777.2	772.6	764.8	759.3	754.7	751.5	744.7	740.1	735.0	733.7	730.5
37.5°	709.9	704.4	697.0	692.0	688.8	688.3	683.3	680.5	676.9	675.0	671.4
40°	639.3	637.0	630.6	629.7	624.7	624.2	621.5	618.3	615.1	615.1	615.5
42.5°	574.3	571.5	568.8	565.6	562.8	562.8	561.5	560.6	559.6	558.3	560.6
45°	513.4	509.7	507.9	504.7	506.1	503.3	502.4	502.4	501.0	500.6	503.8
47.5°	456.6	452.5	450.6	449.7	449.7	450.2	446.1	447.4	447.0	447.9	449.3
50°	404.8	401.2	398.4	398.4	398.9	397.1	395.2	396.6	395.2	396.1	399.3
52.5°	356.8	353.1	351.7	351.7	349.0	348.5	349.4	347.6	348.1	348.5	350.3
55°	312.3	310.0	307.8	305.5	305.9	305.0	303.2	302.7	303.6	304.1	306.4
57.5°	272.5	269.3	266.1	265.2	264.2	264.2	262.0	261.5	262.4	260.1	260.1
60°	234.5	232.6	228.5	227.2	227.2	224.9	223.0	223.9	221.7	221.2	221.7
62.5°	199.2	197.8	195.1	192.3	191.4	190.5	188.2	187.3	186.4	184.6	181.8
65°	168.5	165.3	162.1	160.3	158.9	156.6	155.3	153.4	150.7	149.8	147.0
67.5°	137.8	134.6	131.4	130.1	128.7	127.3	125.0	122.7	119.5	115.9	112.7
70°	110.8	106.7	104.9	101.2	100.3	98.5	95.3	93.0	89.8	85.6	82.4
72.5°	84.7	82.0	79.2	76.0	73.7	72.4	69.6	65.9	62.3	60.0	56.8
75°	60.9	59.5	55.9	52.2	51.3	49.5	46.3	44.0	41.2	37.6	34.8
77.5°	41.2	38.5	36.2	33.0	32.1	30.2	28.4	26.1	24.3	22.0	20.2
80°	24.3	22.0	20.6	18.3	17.4	16.5	15.1	13.3	11.9	11.0	10.5
82.5°	11.9	10.1	9.6	8.2	7.8	7.3	6.4	6.0	5.0	5.0	5.0
85°	4.1	3.2	3.2	2.7	2.3	2.3	2.3	2.3	2.3	2.3	2.3
87.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.9	0.5
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°	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7
2.5°	1186.1	1185.7	1185.2	1184.8	1184.8	1184.3	1184.3	1183.9	1183.9	1183.4	1183.4
5°	1177.9	1176.5	1175.6	1174.7	1174.7	1173.3	1172.4	1171.5	1171.0	1171.0	1170.1
7.5°	1166.4	1164.6	1162.8	1161.4	1161.0	1158.7	1156.8	1156.8	1155.0	1154.1	1153.2
10°	1151.3	1148.1	1145.4	1144.0	1142.2	1140.8	1138.5	1137.1	1135.8	1133.5	1133.0
12.5°	1130.7	1128.4	1124.3	1122.5	1121.6	1118.8	1115.2	1113.3	1112.9	1111.0	1109.7
15°	1107.4	1102.3	1098.7	1096.4	1096.4	1091.8	1090.0	1087.2	1085.4	1084.0	1083.6
17.5°	1077.1	1072.1	1068.4	1065.2	1064.3	1060.7	1057.9	1057.0	1054.7	1055.6	1053.3
20°	1038.2	1034.1	1031.3	1027.2	1027.2	1024.9	1024.0	1021.7	1020.8	1019.9	1020.8
22.5°	996.5	991.5	986.9	986.5	986.5	983.3	982.8	982.3	980.5	981.9	981.4
25°	947.5	943.9	941.1	940.7	940.7	938.8	937.0	937.9	939.3	938.8	940.2
27.5°	896.7	893.0	892.1	891.7	890.8	890.3	891.2	891.2	892.6	894.4	896.2
30°	841.7	840.8	839.5	839.0	838.1	840.4	841.3	842.7	842.2	845.0	846.8
32.5°	786.8	785.0	784.5	785.4	786.8	786.3	789.1	790.0	790.9	794.1	795.5
35°	731.4	730.9	730.0	730.0	730.5	734.1	734.1	737.3	739.2	740.1	743.7
37.5°	671.8	673.7	674.6	676.0	676.4	677.8	678.7	681.9	683.7	685.6	687.4
40°	617.3	616.4	620.5	617.8	618.7	622.8	624.7	624.2	627.0	629.7	631.5
42.5°	559.2	560.6	561.5	562.4	564.7	565.1	567.4	570.6	571.5	574.8	575.7
45°	502.9	503.3	505.1	507.0	508.3	512.0	512.9	514.3	517.0	517.0	518.4
47.5°	449.7	451.6	451.6	454.3	456.6	456.1	459.3	460.3	459.8	462.1	463.0
50°	398.9	401.6	401.2	403.0	403.9	404.4	407.1	408.1	406.2	408.5	409.0
52.5°	350.3	351.7	353.6	354.0	353.1	355.4	354.5	356.3	355.8	357.7	355.8
55°	305.9	305.5	305.5	306.4	305.5	306.4	307.3	305.5	304.1	305.9	305.5
57.5°	261.5	261.5	260.6	262.0	260.6	259.2	258.8	257.4	256.0	256.0	255.5
60°	219.8	218.9	217.1	216.6	216.6	214.3	213.4	211.6	211.6	209.8	207.9
62.5°	180.9	178.6	177.2	177.2	176.3	174.0	169.9	167.2	166.2	163.5	163.0
65°	144.3	142.0	140.6	137.8	135.6	134.6	130.5	127.3	125.9	123.2	123.7
67.5°	110.8	107.2	103.0	101.2	99.8	96.6	95.3	93.0	91.6	91.6	91.6
70°	79.7	76.5	72.4	71.0	70.1	67.3	65.9	65.5	66.9	66.4	66.9
72.5°	53.6	50.4	48.5	47.6	46.7	45.3	46.3	46.7	45.8	46.3	46.7
75°	32.5	31.6	30.2	29.8	29.8	30.2	29.8	29.8	30.2	30.2	30.7
77.5°	18.8	17.9	17.9	17.4	18.3	17.9	17.9	17.9	18.3	18.3	18.3
80°	10.1	10.1	10.1	10.1	10.5	10.1	10.5	10.5	10.5	10.5	10.5
82.5°	5.0	5.0	5.0	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.0
85°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
87.5°	0.5	0.9	0.9	0.9	0.9	0.9	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	0.0	0.0	0.0



TEST NUMBER: P857533

CATALOG NUMBER: LX4C30D010 EX4C309030 4LBLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7	1190.7
2.5°	1182.5	1182.5	1182.5	1181.6	1182.0	1182.0	1181.6	1181.6
5°	1169.7	1169.2	1168.3	1168.3	1167.4	1168.3	1167.8	1168.3
7.5°	1152.3	1152.3	1150.9	1150.9	1150.4	1150.0	1149.5	1150.0
10°	1131.6	1131.6	1130.7	1130.3	1130.7	1128.9	1128.9	1128.4
12.5°	1108.7	1107.8	1106.9	1107.4	1106.9	1105.5	1105.1	1105.5
15°	1082.2	1080.8	1081.3	1079.9	1079.9	1079.4	1080.4	1080.4
17.5°	1052.9	1052.0	1051.0	1051.5	1050.6	1051.0	1050.6	1050.1
20°	1020.4	1019.9	1019.9	1018.1	1018.5	1018.1	1018.5	1019.9
22.5°	982.8	982.3	982.8	981.4	982.3	982.3	983.7	983.7
25°	941.6	941.1	942.0	942.5	943.0	944.3	943.0	943.4
27.5°	895.8	897.2	898.5	899.0	900.8	899.5	898.5	899.9
30°	849.5	849.5	849.1	850.9	852.3	853.7	851.4	851.4
32.5°	796.4	798.7	798.7	799.2	800.5	800.5	800.5	802.4
35°	745.6	746.9	747.4	745.6	746.5	746.0	749.2	749.2
37.5°	688.8	688.8	689.2	692.5	692.5	691.1	692.0	692.0
40°	634.7	635.2	633.4	634.3	636.6	635.7	636.6	637.5
42.5°	575.7	578.9	577.0	578.0	577.5	578.0	578.4	578.4
45°	519.3	520.3	520.3	520.7	521.6	522.5	519.8	519.3
47.5°	464.4	464.8	466.2	463.9	466.7	463.9	466.7	463.5
50°	409.0	410.8	409.4	410.3	409.0	409.0	408.5	408.1
52.5°	356.3	355.8	355.8	355.4	355.4	356.3	355.4	356.8
55°	303.6	304.1	303.2	302.7	302.3	303.6	302.3	301.3
57.5°	253.7	254.6	252.8	253.7	250.5	251.9	252.3	252.8
60°	207.5	206.1	206.1	204.3	204.3	205.6	203.8	203.8
62.5°	160.7	161.7	160.3	162.1	162.1	164.0	163.0	164.0
65°	123.2	123.7	124.1	124.1	124.1	126.9	125.9	124.6
67.5°	93.0	93.4	93.9	93.4	94.8	93.9	93.9	94.3
70°	67.3	67.8	68.2	68.2	67.8	68.2	68.2	68.2
72.5°	46.7	47.2	46.7	47.2	47.6	47.2	47.2	47.6
75°	30.7	30.7	30.2	30.2	30.2	30.2	30.7	30.2
77.5°	17.9	18.3	17.9	18.3	18.3	18.3	18.3	18.3
80°	10.5	10.5	10.5	10.1	10.5	10.5	10.5	10.1
82.5°	5.5	5.5	5.0	5.0	5.5	5.5	5.5	5.5
85°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
87.5°	0.5	0.5	0.5	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)