

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: P857429

Luminaire Tested: **LX4C25D010 EX4C259050 4LBSWNH**

Issue Date: 2/18/2022

Test Information

Test Method: LM-79-08
Report Number: P857429
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P251634)
Test Lab: INNOVATION CENTER
Issue Date: 2/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C25D010 EX4C259050 4LBSWNH
Description: 4 INCH 2500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

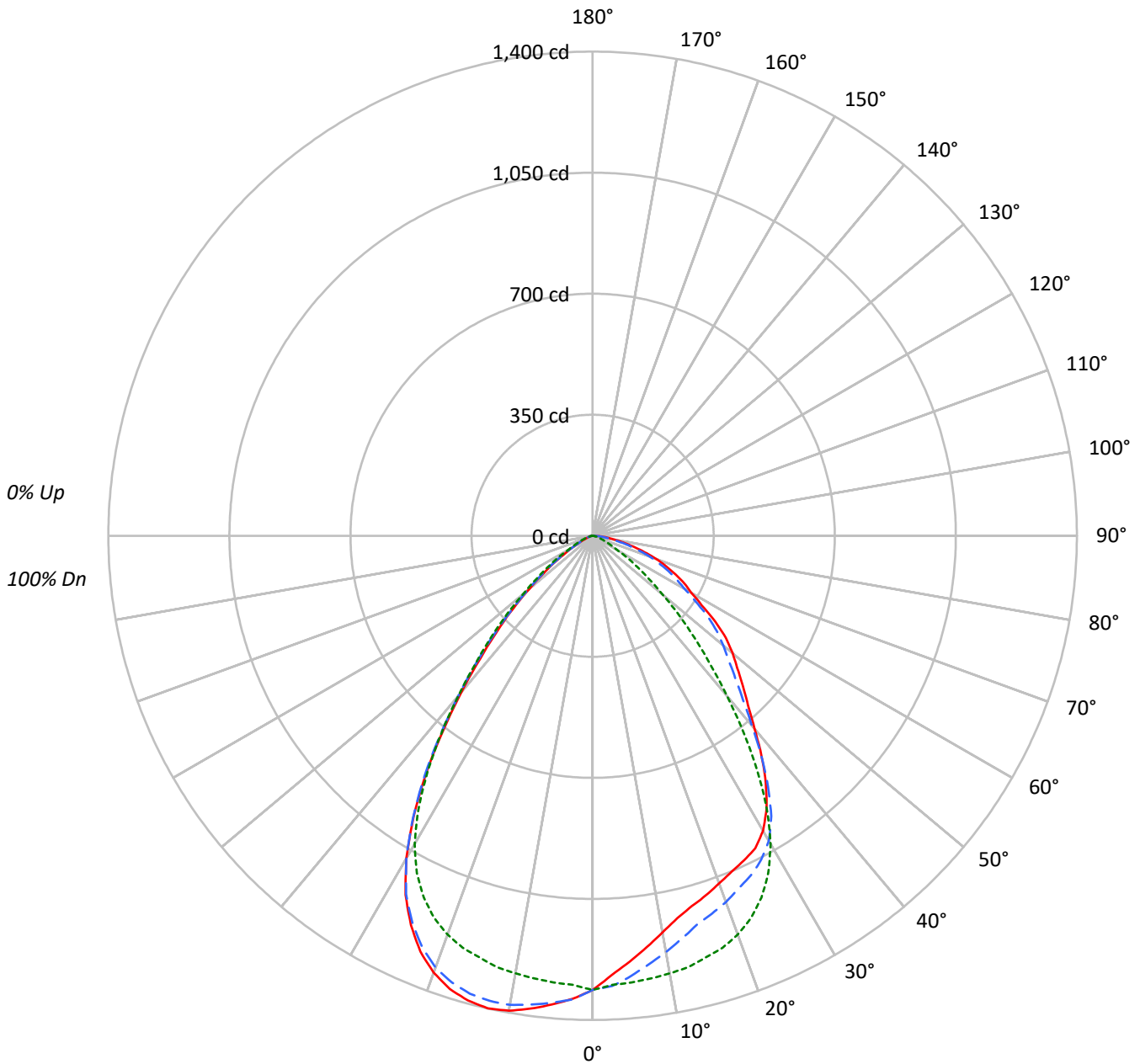
Lumens per Lamp: N/A
Luminaire Lumens: 2302.0 lumens
Efficiency: N/A
Efficacy: 73.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 31.5
Input Voltage (V):
Input Current (A_{in}): 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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0					
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100				
1	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89				89				
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79				79				
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	72	70				70				
4	90	80	72	67	88	78	72	66	76	70	66	74	69	65	72	68	64	62				62				
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56				56				
6	78	67	59	53	76	66	59	53	64	58	53	62	57	52	61	56	52	50				50				
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	56	51	47	46				46				
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42				42				
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38				38				
10	61	49	42	37	59	48	42	37	47	41	37	47	41	37	46	40	37	35				35				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	161343	161343	161343
5°	152353	159863	167793
10°	145245	160240	173962
15°	140987	160574	176930
20°	139824	160402	175673
25°	140393	156456	168371
30°	139717	145959	152683
35°	130959	124630	125890
40°	116704	96625	94460
45°	106729	72033	67620
50°	100915	50457	45603
55°	92808	34077	28637
60°	81083	19951	15799
65°	76744	12791	8837
70°	69900	9124	5496
75°	57862	6408	4035
80°	45491	3608	2405
85°	40596	2396	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.1	5.4
10°-20°	356.0	15.5
20°-30°	527.7	22.9
30°-40°	528.4	23.0
40°-50°	369.3	16.0
50°-60°	219.7	9.5
60°-70°	114.7	5.0
70°-80°	51.0	2.2
80°-90°	11.1	0.5
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°	1007.7	43.8
0°-40°	1536.1	66.7
0°-60°	2125.2	92.3
0°-90°	2302.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2302.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1313	1313	1313	1313	1313	
5°	1235	1278	1296	1356	1361	116
15°	1108	1164	1262	1371	1391	314
25°	1036	1083	1154	1234	1242	477
35°	873	883	831	846	839	541
45°	614	584	415	401	389	477
55°	433	406	159	139	134	384
65°	264	242	44	32	30	261
75°	122	107	14	8	8	132
85°	29	22	2	2	0	32
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°	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3
2.5°	1270.9	1286.2	1270.9	1276.0	1296.3	1277.7	1287.8	1287.8	1282.8	1294.6	1303.1
5°	1235.4	1250.6	1235.4	1242.1	1264.2	1245.5	1257.4	1254.0	1255.7	1265.9	1277.7
7.5°	1199.9	1211.7	1198.2	1206.6	1226.9	1211.7	1221.8	1221.8	1223.6	1238.8	1249.0
10°	1164.3	1174.5	1164.3	1171.1	1193.1	1179.6	1186.3	1188.0	1193.1	1206.6	1221.8
12.5°	1132.2	1140.6	1130.5	1140.6	1159.2	1145.7	1154.2	1155.8	1160.9	1176.2	1193.1
15°	1108.5	1117.0	1106.8	1115.2	1132.2	1122.0	1128.8	1132.2	1135.5	1149.1	1164.3
17.5°	1089.9	1096.7	1088.2	1098.3	1111.9	1100.0	1110.2	1110.2	1115.2	1128.8	1145.7
20°	1069.5	1076.3	1069.5	1078.0	1093.3	1083.1	1091.6	1091.6	1096.7	1111.9	1127.1
22.5°	1051.0	1054.3	1051.0	1057.7	1072.9	1064.5	1069.5	1071.3	1076.3	1089.9	1103.4
25°	1035.7	1042.5	1039.1	1045.8	1056.0	1047.6	1052.6	1054.3	1059.4	1071.3	1083.1
27.5°	1018.8	1022.2	1018.8	1027.3	1035.7	1028.9	1034.0	1032.3	1035.7	1045.8	1056.0
30°	984.9	988.3	988.3	993.4	1000.2	996.8	1001.9	996.8	1000.2	1008.6	1018.8
32.5°	935.9	937.6	939.2	944.3	949.4	944.3	947.7	947.7	947.7	954.5	961.3
35°	873.2	876.6	875.0	878.3	883.4	881.7	881.7	880.0	876.6	880.0	883.4
37.5°	802.2	797.1	797.1	802.2	805.6	798.8	802.2	798.8	798.8	800.5	800.5
40°	727.7	722.6	727.7	729.4	731.1	727.7	726.0	722.6	717.5	719.3	715.9
42.5°	665.1	661.7	663.4	663.4	665.1	661.7	663.4	656.6	651.5	648.1	643.1
45°	614.3	609.3	614.3	610.9	610.9	609.3	607.5	604.2	597.4	592.3	583.9
47.5°	566.9	566.9	568.6	568.6	568.6	565.2	565.2	558.4	551.7	544.9	533.1
50°	528.0	524.6	531.4	531.4	526.3	524.6	526.3	517.8	512.8	504.3	492.4
52.5°	485.7	485.7	487.4	487.4	485.7	482.3	484.0	477.2	472.1	463.7	451.8
55°	433.3	429.9	434.9	434.9	433.3	431.5	433.3	428.2	423.1	416.3	406.1
57.5°	374.0	372.3	375.7	377.4	374.0	374.0	375.7	370.6	368.9	362.1	352.0
60°	330.0	328.3	331.7	333.4	330.0	330.0	330.0	323.2	319.8	313.1	306.3
62.5°	299.5	297.9	301.2	299.5	297.9	296.1	297.9	291.1	287.7	280.9	274.2
65°	264.0	265.7	267.4	267.4	265.7	264.0	264.0	260.6	257.3	250.5	242.0
67.5°	230.1	230.1	231.9	233.5	231.9	231.9	231.9	226.7	223.4	218.3	208.2
70°	194.6	192.9	198.0	198.0	194.6	196.3	194.6	192.9	189.5	182.8	174.3
72.5°	157.4	157.4	159.1	159.1	157.4	157.4	157.4	155.7	150.6	147.2	138.8
75°	121.9	121.9	123.5	125.2	121.9	121.9	123.5	120.1	116.8	111.7	106.6
77.5°	91.4	89.7	91.4	91.4	89.7	89.7	89.7	88.0	86.3	81.2	76.2
80°	64.3	62.6	64.3	64.3	64.3	62.6	62.6	60.9	60.9	57.5	52.5
82.5°	44.0	42.3	44.0	44.0	44.0	42.3	42.3	42.3	40.6	38.9	35.6
85°	28.8	27.1	27.1	28.8	27.1	27.1	27.1	27.1	25.4	23.7	22.0
87.5°	13.5	13.5	13.5	13.5	13.5	13.5	13.5	11.9	11.9	11.9	10.1
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°	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3
2.5°	1296.3	1293.0	1303.1	1299.7	1301.4	1293.0	1306.5	1299.7	1308.1	1299.7	1316.6
5°	1274.3	1270.9	1286.2	1284.5	1286.2	1279.4	1294.6	1293.0	1303.1	1296.3	1314.9
7.5°	1250.6	1247.2	1264.2	1265.9	1269.3	1262.5	1282.8	1282.8	1293.0	1291.2	1311.5
10°	1223.6	1225.2	1242.1	1245.5	1252.4	1249.0	1267.5	1272.7	1286.2	1284.5	1309.9
12.5°	1198.2	1198.2	1220.2	1226.9	1232.0	1230.3	1252.4	1259.1	1274.3	1277.7	1301.4
15°	1172.8	1174.5	1194.8	1204.9	1211.7	1210.0	1233.7	1242.1	1260.8	1262.5	1291.2
17.5°	1152.5	1150.8	1172.8	1181.2	1191.4	1189.7	1215.1	1225.2	1243.9	1249.0	1276.0
20°	1135.5	1133.9	1154.2	1164.3	1171.1	1169.4	1194.8	1206.6	1223.6	1226.9	1254.0
22.5°	1115.2	1111.9	1132.2	1140.6	1147.4	1145.7	1167.7	1176.2	1193.1	1196.5	1221.8
25°	1091.6	1088.2	1106.8	1111.9	1117.0	1113.6	1132.2	1137.3	1150.8	1154.2	1179.6
27.5°	1064.5	1056.0	1071.3	1071.3	1074.6	1069.5	1083.1	1088.2	1100.0	1100.0	1123.7
30°	1022.2	1010.4	1018.8	1017.1	1018.8	1012.0	1020.5	1022.2	1030.7	1028.9	1045.8
32.5°	962.9	946.0	951.1	946.0	941.0	930.8	941.0	937.6	944.3	937.6	952.8
35°	881.7	864.8	863.1	856.3	851.3	842.8	842.8	834.4	836.0	831.0	841.1
37.5°	793.7	771.7	768.3	754.8	746.3	736.2	736.2	729.4	720.9	717.5	726.0
40°	707.4	683.7	675.3	653.2	644.8	634.6	627.8	619.4	616.0	602.5	609.3
42.5°	632.9	607.5	589.0	565.2	556.8	541.5	531.4	521.2	516.2	500.9	507.7
45°	570.3	539.9	519.6	489.1	477.2	460.3	445.1	433.3	421.4	414.6	411.2
47.5°	517.8	485.7	458.6	424.8	406.1	390.9	370.6	358.8	343.6	335.1	330.0
50°	473.9	438.3	407.9	368.9	350.3	333.4	309.7	291.1	277.6	264.0	260.6
52.5°	434.9	397.7	363.9	319.8	297.9	277.6	252.2	231.9	220.0	204.8	203.1
55°	389.2	357.1	319.8	274.2	252.2	231.9	204.8	184.5	169.2	159.1	155.7
57.5°	340.2	309.7	274.2	228.5	206.4	184.5	159.1	140.4	126.9	118.5	116.8
60°	294.5	265.7	231.9	186.1	164.1	145.5	118.5	99.8	88.0	81.2	77.8
62.5°	260.6	233.5	201.4	159.1	138.8	120.1	94.8	77.8	67.7	60.9	57.5
65°	228.5	201.4	172.6	133.7	116.8	99.8	76.2	60.9	50.7	44.0	40.6
67.5°	194.6	171.0	143.8	111.7	94.8	81.2	60.9	47.4	38.9	33.8	30.4
70°	160.7	138.8	116.8	89.7	77.8	64.3	47.4	37.2	28.8	25.4	22.0
72.5°	126.9	110.0	91.4	69.4	59.2	50.7	37.2	27.1	22.0	18.6	15.3
75°	94.8	82.9	67.7	52.5	44.0	37.2	27.1	20.3	16.9	13.5	11.9
77.5°	67.7	57.5	47.4	35.6	32.2	27.1	18.6	15.3	11.9	8.5	6.8
80°	45.7	40.6	32.2	25.4	20.3	18.6	13.5	10.1	6.8	5.1	5.1
82.5°	30.4	25.4	20.3	15.3	13.5	11.9	8.5	6.8	5.1	3.4	3.4
85°	18.6	15.3	11.9	8.5	8.5	6.8	5.1	3.4	1.7	1.7	1.7
87.5°	8.5	6.8	5.1	3.4	3.4	1.7	1.7	1.7	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°	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3
2.5°	1330.2	1320.0	1313.3	1321.7	1325.1	1320.0	1325.1	1333.6	1342.0	1343.7	1320.0
5°	1331.9	1321.7	1318.3	1328.4	1330.2	1328.4	1333.6	1345.4	1355.6	1359.0	1335.3
7.5°	1331.9	1325.1	1323.4	1335.3	1336.9	1335.3	1343.7	1357.2	1367.4	1374.2	1350.5
10°	1328.4	1325.1	1326.8	1336.9	1340.3	1340.3	1352.2	1367.4	1377.5	1384.3	1360.6
12.5°	1323.4	1323.4	1323.4	1335.3	1338.7	1340.3	1350.5	1370.8	1377.5	1387.7	1364.0
15°	1314.9	1314.9	1314.9	1326.8	1331.9	1331.9	1343.7	1362.3	1370.8	1380.9	1357.2
17.5°	1299.7	1299.7	1301.4	1311.5	1316.6	1316.6	1328.4	1348.8	1353.9	1365.7	1342.0
20°	1277.7	1277.7	1279.4	1289.6	1294.6	1291.2	1306.5	1323.4	1328.4	1338.7	1314.9
22.5°	1245.5	1245.5	1245.5	1255.7	1259.1	1257.4	1272.7	1287.8	1287.8	1301.4	1276.0
25°	1198.2	1201.5	1198.2	1208.3	1211.7	1210.0	1223.6	1237.1	1233.7	1249.0	1223.6
27.5°	1140.6	1138.9	1138.9	1147.4	1147.4	1145.7	1155.8	1171.1	1167.7	1177.9	1154.2
30°	1061.1	1066.1	1057.7	1069.5	1064.5	1061.1	1067.9	1081.4	1076.3	1084.8	1066.1
32.5°	969.7	962.9	962.9	962.9	966.3	957.9	964.6	971.4	966.3	974.8	954.5
35°	849.5	851.3	846.2	847.9	849.5	839.4	846.2	852.9	846.2	851.3	832.6
37.5°	729.4	731.1	719.3	726.0	719.3	715.9	722.6	726.0	719.3	724.3	704.0
40°	609.3	605.9	604.2	604.2	605.9	597.4	602.5	607.5	602.5	605.9	587.2
42.5°	504.3	502.7	499.3	500.9	495.8	494.2	495.8	500.9	495.8	499.3	485.7
45°	412.9	409.5	404.5	406.1	406.1	397.7	402.7	406.1	401.1	402.7	390.9
47.5°	328.3	323.2	323.2	321.5	321.5	318.2	323.2	321.5	316.4	319.8	308.0
50°	255.5	252.2	252.2	252.2	252.2	247.0	248.8	252.2	247.0	247.0	240.3
52.5°	199.7	194.6	191.3	191.3	191.3	189.5	189.5	191.3	186.1	186.1	184.5
55°	150.6	148.9	143.8	143.8	143.8	138.8	140.4	140.4	138.8	138.8	133.7
57.5°	111.7	106.6	103.2	103.2	99.8	99.8	98.2	99.8	96.5	96.5	93.1
60°	74.4	71.0	69.4	67.7	67.7	66.0	67.7	66.0	66.0	64.3	62.6
62.5°	54.1	50.7	47.4	47.4	47.4	45.7	45.7	45.7	45.7	45.7	44.0
65°	38.9	35.6	35.6	33.8	33.8	32.2	32.2	32.2	32.2	32.2	30.4
67.5°	27.1	25.4	23.7	23.7	23.7	23.7	23.7	23.7	22.0	22.0	22.0
70°	20.3	18.6	16.9	16.9	16.9	16.9	16.9	15.3	16.9	16.9	15.3
72.5°	13.5	13.5	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
75°	10.1	10.1	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
77.5°	6.8	6.8	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
80°	5.1	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
82.5°	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
85°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0
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: P857429

CATALOG NUMBER: LX4C25D010 EX4C259050 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3	1313.3
2.5°	1345.4	1343.7	1340.3	1345.4	1331.9	1326.8	1325.1	1340.3
5°	1364.0	1360.6	1360.6	1365.7	1350.5	1347.1	1343.7	1360.6
7.5°	1380.9	1377.5	1377.5	1382.6	1369.1	1365.7	1362.3	1379.3
10°	1391.1	1391.1	1391.1	1394.5	1382.6	1379.3	1377.5	1394.5
12.5°	1396.2	1396.2	1394.5	1401.2	1386.0	1386.0	1382.6	1399.6
15°	1389.4	1389.4	1389.4	1394.5	1380.9	1377.5	1377.5	1391.1
17.5°	1372.5	1372.5	1370.8	1375.9	1360.6	1360.6	1359.0	1374.2
20°	1347.1	1347.1	1343.7	1350.5	1335.3	1330.2	1328.4	1343.7
22.5°	1306.5	1304.8	1303.1	1306.5	1293.0	1289.6	1287.8	1301.4
25°	1254.0	1252.4	1249.0	1252.4	1237.1	1232.0	1232.0	1242.1
27.5°	1179.6	1179.6	1174.5	1179.6	1162.6	1160.9	1159.2	1171.1
30°	1088.2	1081.4	1078.0	1084.8	1067.9	1067.9	1064.5	1076.3
32.5°	974.8	968.0	966.3	969.7	954.5	949.4	956.2	962.9
35°	844.5	846.2	839.4	839.4	825.9	827.5	829.2	839.4
37.5°	719.3	715.9	714.1	715.9	705.7	702.3	699.0	709.1
40°	602.5	594.0	592.3	592.3	583.9	582.2	583.9	589.0
42.5°	492.4	490.8	484.0	487.4	478.9	482.3	480.6	480.6
45°	397.7	399.4	392.6	397.7	390.9	385.8	385.8	389.2
47.5°	314.8	314.8	313.1	313.1	308.0	309.7	306.3	311.4
50°	243.7	243.7	240.3	242.0	238.6	238.6	236.9	238.6
52.5°	186.1	184.5	184.5	182.8	179.4	181.1	182.8	179.4
55°	135.4	137.1	133.7	135.4	132.0	133.7	132.0	133.7
57.5°	93.1	94.8	91.4	94.8	91.4	93.1	91.4	91.4
60°	64.3	64.3	62.6	64.3	62.6	62.6	60.9	64.3
62.5°	44.0	44.0	44.0	44.0	44.0	42.3	44.0	44.0
65°	32.2	30.4	30.4	30.4	30.4	30.4	30.4	30.4
67.5°	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0
70°	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3
72.5°	11.9	11.9	11.9	11.9	11.9	11.9	11.9	11.9
75°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
77.5°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
80°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
82.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
85°	1.7	1.7	1.7	0.0	1.7	0.0	0.0	0.0
87.5°	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



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)