

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: P857408

Luminaire Tested: **LX4C25D010 EX4C259040 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857408
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 EX4C259040 4LBSWNH
Description: 4 INCH 2500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

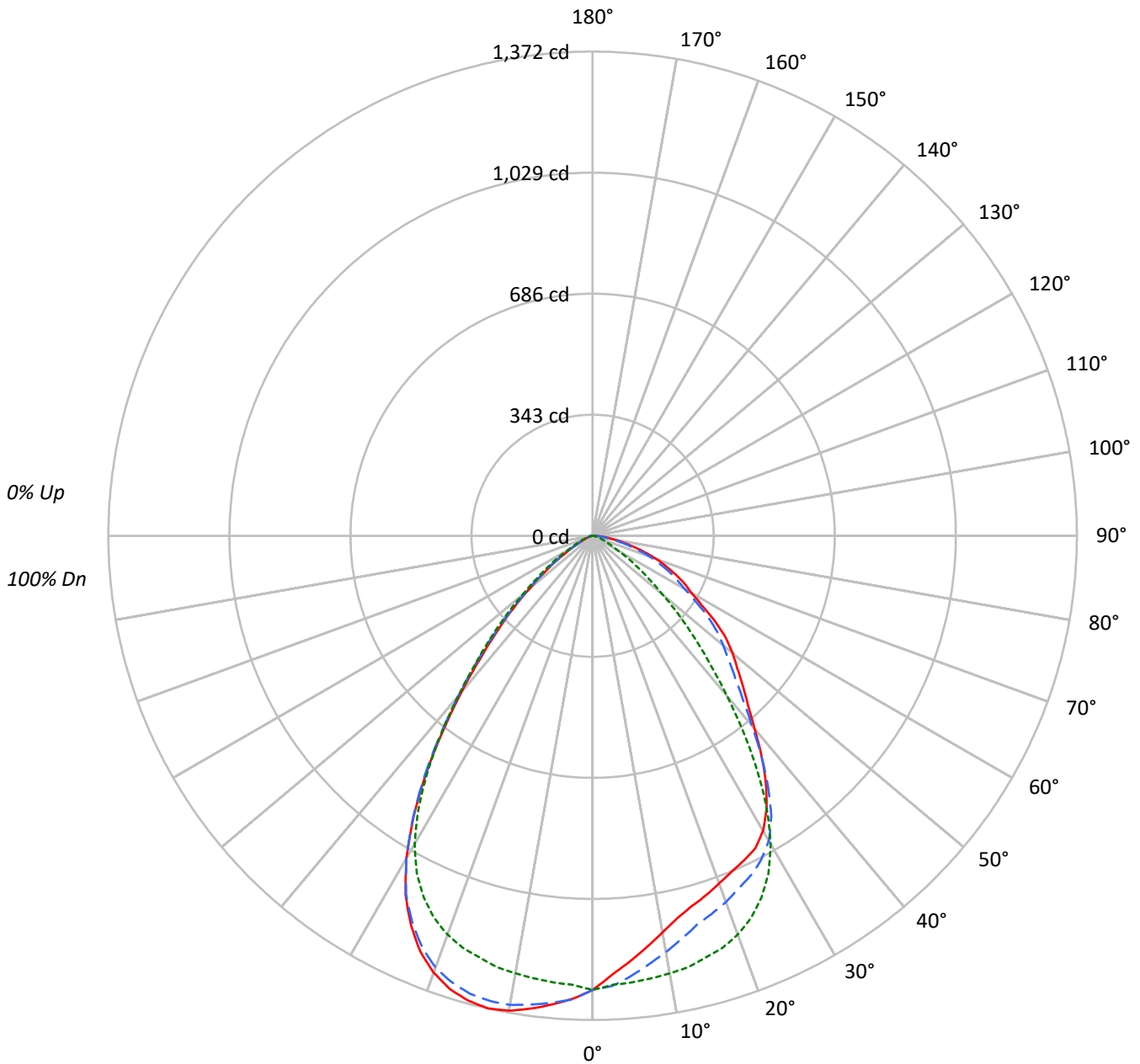
Lumens per Lamp: N/A
Luminaire Lumens: 2256.0 lumens
Efficiency: N/A
Efficacy: 71.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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				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°	158112	158112	158112
5°	149307	156669	164439
10°	142351	157034	170482
15°	138164	157369	173394
20°	137040	157199	172169
25°	137587	153325	165010
30°	136936	143051	149633
35°	128350	122141	123371
40°	114363	94701	92568
45°	104592	70591	66265
50°	98889	49463	44704
55°	90944	33392	28059
60°	79462	19558	15480
65°	75232	12529	8663
70°	68535	8944	5388
75°	56676	6313	3940
80°	44572	3537	2335
85°	39750	2396	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.6	5.4
10°-20°	348.9	15.5
20°-30°	517.1	22.9
30°-40°	517.9	23.0
40°-50°	361.9	16.0
50°-60°	215.4	9.5
60°-70°	112.4	5.0
70°-80°	50.0	2.2
80°-90°	10.9	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°	987.6	43.8
0°-40°	1505.4	66.7
0°-60°	2082.7	92.3
0°-90°	2256.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2256.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1287	1287	1287	1287	1287	
5°	1211	1252	1270	1328	1333	114
15°	1086	1141	1237	1343	1363	308
25°	1015	1062	1131	1209	1217	468
35°	856	866	814	829	823	531
45°	602	572	406	393	381	467
55°	425	398	156	136	131	377
65°	259	237	43	32	30	256
75°	119	104	13	8	8	129
85°	28	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°	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0
2.5°	1245.5	1260.5	1245.5	1250.5	1270.4	1252.2	1262.1	1262.1	1257.2	1268.7	1277.1
5°	1210.7	1225.6	1210.7	1217.3	1238.9	1220.6	1232.3	1229.0	1230.6	1240.6	1252.2
7.5°	1175.9	1187.5	1174.2	1182.5	1202.4	1187.5	1197.4	1197.4	1199.1	1214.0	1224.0
10°	1141.1	1151.0	1141.1	1147.7	1169.3	1156.0	1162.6	1164.3	1169.3	1182.5	1197.4
12.5°	1109.5	1117.8	1107.9	1117.8	1136.1	1122.8	1131.1	1132.7	1137.7	1152.7	1169.3
15°	1086.3	1094.6	1084.7	1092.9	1109.5	1099.6	1106.2	1109.5	1112.8	1126.1	1141.1
17.5°	1068.1	1074.7	1066.4	1076.4	1089.6	1078.1	1088.0	1088.0	1092.9	1106.2	1122.8
20°	1048.2	1054.8	1048.2	1056.5	1071.4	1061.5	1069.7	1069.7	1074.7	1089.6	1104.6
22.5°	1029.9	1033.3	1029.9	1036.6	1051.5	1043.2	1048.2	1049.8	1054.8	1068.1	1081.4
25°	1015.0	1021.6	1018.3	1024.9	1034.9	1026.6	1031.6	1033.3	1038.2	1049.8	1061.5
27.5°	998.4	1001.7	998.4	1006.7	1015.0	1008.4	1013.4	1011.7	1015.0	1024.9	1034.9
30°	965.3	968.6	968.6	973.5	980.2	976.9	981.8	976.9	980.2	988.5	998.4
32.5°	917.2	918.8	920.5	925.5	930.4	925.5	928.8	928.8	928.8	935.4	942.1
35°	855.8	859.1	857.5	860.8	865.7	864.1	864.1	862.4	859.1	862.4	865.7
37.5°	786.1	781.1	781.1	786.1	789.5	782.8	786.1	782.8	782.8	784.5	784.5
40°	713.1	708.2	713.1	714.8	716.5	713.1	711.5	708.2	703.2	704.9	701.6
42.5°	651.8	648.4	650.1	650.1	651.8	648.4	650.1	643.5	638.5	635.2	630.2
45°	602.0	597.1	602.0	598.7	598.7	597.1	595.4	592.1	585.4	580.5	572.2
47.5°	555.6	555.6	557.2	557.2	557.2	553.9	553.9	547.3	540.7	534.0	522.5
50°	517.4	514.1	520.8	520.8	515.8	514.1	515.8	507.5	502.6	494.2	482.6
52.5°	476.0	476.0	477.7	477.7	476.0	472.7	474.3	467.7	462.7	454.4	442.8
55°	424.6	421.3	426.2	426.2	424.6	422.9	424.6	419.6	414.7	408.0	398.0
57.5°	366.5	364.9	368.2	369.9	366.5	366.5	368.2	363.2	361.5	354.9	345.0
60°	323.4	321.8	325.1	326.8	323.4	323.4	323.4	316.7	313.4	306.8	300.2
62.5°	293.5	291.9	295.2	293.5	291.9	290.2	291.9	285.3	282.0	275.3	268.7
65°	258.8	260.4	262.1	262.1	260.4	258.8	258.8	255.4	252.1	245.5	237.2
67.5°	225.5	225.5	227.2	228.8	227.2	227.2	227.2	222.2	218.9	214.0	204.0
70°	190.8	189.1	194.1	194.1	190.8	192.4	190.8	189.1	185.7	179.1	170.9
72.5°	154.2	154.2	155.9	155.9	154.2	154.2	154.2	152.6	147.6	144.3	136.0
75°	119.4	119.4	121.1	122.7	119.4	119.4	121.1	117.7	114.4	109.5	104.5
77.5°	89.6	87.9	89.6	89.6	87.9	87.9	87.9	86.3	84.6	79.6	74.6
80°	63.0	61.4	63.0	63.0	63.0	61.4	61.4	59.7	59.7	56.4	51.4
82.5°	43.1	41.5	43.1	43.1	43.1	41.5	41.5	41.5	39.8	38.2	34.8
85°	28.2	26.5	26.5	28.2	26.5	26.5	26.5	26.5	24.9	23.2	21.6
87.5°	13.3	13.3	13.3	13.3	13.3	13.3	13.3	11.6	11.6	11.6	9.9
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°	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0
2.5°	1270.4	1267.1	1277.1	1273.8	1275.4	1267.1	1280.4	1273.8	1282.0	1273.8	1290.3
5°	1248.9	1245.5	1260.5	1258.8	1260.5	1253.9	1268.7	1267.1	1277.1	1270.4	1288.6
7.5°	1225.6	1222.3	1238.9	1240.6	1243.9	1237.3	1257.2	1257.2	1267.1	1265.4	1285.3
10°	1199.1	1200.7	1217.3	1220.6	1227.3	1224.0	1242.2	1247.2	1260.5	1258.8	1283.7
12.5°	1174.2	1174.2	1195.8	1202.4	1207.4	1205.7	1227.3	1234.0	1248.9	1252.2	1275.4
15°	1149.4	1151.0	1170.9	1180.8	1187.5	1185.9	1209.1	1217.3	1235.6	1237.3	1265.4
17.5°	1129.4	1127.8	1149.4	1157.6	1167.6	1166.0	1190.8	1200.7	1219.0	1224.0	1250.5
20°	1112.8	1111.2	1131.1	1141.1	1147.7	1146.1	1170.9	1182.5	1199.1	1202.4	1229.0
22.5°	1092.9	1089.6	1109.5	1117.8	1124.5	1122.8	1144.4	1152.7	1169.3	1172.6	1197.4
25°	1069.7	1066.4	1084.7	1089.6	1094.6	1091.3	1109.5	1114.5	1127.8	1131.1	1156.0
27.5°	1043.2	1034.9	1049.8	1049.8	1053.2	1048.2	1061.5	1066.4	1078.1	1078.1	1101.3
30°	1001.7	990.2	998.4	996.8	998.4	991.8	1000.1	1001.7	1010.1	1008.4	1024.9
32.5°	943.7	927.1	932.1	927.1	922.2	912.2	922.2	918.8	925.5	918.8	933.7
35°	864.1	847.5	845.8	839.2	834.3	825.9	825.9	817.7	819.3	814.4	824.3
37.5°	777.8	756.3	753.0	739.7	731.4	721.5	721.5	714.8	706.5	703.2	711.5
40°	693.2	670.0	661.8	640.2	631.9	621.9	615.3	607.0	603.7	590.5	597.1
42.5°	620.3	595.4	577.2	553.9	545.7	530.7	520.8	510.8	505.9	490.9	497.6
45°	558.9	529.1	509.2	479.3	467.7	451.1	436.2	424.6	413.0	406.3	403.0
47.5°	507.5	476.0	449.4	416.3	398.0	383.1	363.2	351.6	336.7	328.4	323.4
50°	464.4	429.5	399.7	361.5	343.3	326.8	303.5	285.3	272.0	258.8	255.4
52.5°	426.2	389.8	356.6	313.4	291.9	272.0	247.1	227.2	215.6	200.7	199.0
55°	381.4	350.0	313.4	268.7	247.1	227.2	200.7	180.8	165.9	155.9	152.6
57.5°	333.4	303.5	268.7	223.9	202.3	180.8	155.9	137.6	124.4	116.1	114.4
60°	288.6	260.4	227.2	182.4	160.8	142.6	116.1	97.8	86.3	79.6	76.3
62.5°	255.4	228.8	197.4	155.9	136.0	117.7	92.9	76.3	66.3	59.7	56.4
65°	223.9	197.4	169.2	131.0	114.4	97.8	74.6	59.7	49.7	43.1	39.8
67.5°	190.8	167.5	141.0	109.5	92.9	79.6	59.7	46.4	38.2	33.2	29.8
70°	157.5	136.0	114.4	87.9	76.3	63.0	46.4	36.5	28.2	24.9	21.6
72.5°	124.4	107.8	89.6	68.0	58.1	49.7	36.5	26.5	21.6	18.3	15.0
75°	92.9	81.3	66.3	51.4	43.1	36.5	26.5	19.9	16.6	13.3	11.6
77.5°	66.3	56.4	46.4	34.8	31.5	26.5	18.3	15.0	11.6	8.3	6.6
80°	44.8	39.8	31.5	24.9	19.9	18.3	13.3	9.9	6.6	5.0	5.0
82.5°	29.8	24.9	19.9	15.0	13.3	11.6	8.3	6.6	5.0	3.3	3.3
85°	18.3	15.0	11.6	8.3	8.3	6.6	5.0	3.3	1.7	1.7	1.7
87.5°	8.3	6.6	5.0	3.3	3.3	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°	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0
2.5°	1303.6	1293.6	1287.0	1295.3	1298.6	1293.6	1298.6	1306.9	1315.2	1316.9	1293.6
5°	1305.3	1295.3	1292.0	1301.9	1303.6	1301.9	1306.9	1318.5	1328.5	1331.8	1308.6
7.5°	1305.3	1298.6	1297.0	1308.6	1310.2	1308.6	1316.9	1330.1	1340.1	1346.7	1323.5
10°	1301.9	1298.6	1300.3	1310.2	1313.5	1313.5	1325.2	1340.1	1350.0	1356.6	1333.4
12.5°	1297.0	1297.0	1297.0	1308.6	1311.9	1313.5	1323.5	1343.4	1350.0	1360.0	1336.8
15°	1288.6	1288.6	1288.6	1300.3	1305.3	1305.3	1316.9	1335.1	1343.4	1353.3	1330.1
17.5°	1273.8	1273.8	1275.4	1285.3	1290.3	1290.3	1301.9	1321.9	1326.8	1338.4	1315.2
20°	1252.2	1252.2	1253.9	1263.8	1268.7	1265.4	1280.4	1297.0	1301.9	1311.9	1288.6
22.5°	1220.6	1220.6	1220.6	1230.6	1234.0	1232.3	1247.2	1262.1	1262.1	1275.4	1250.5
25°	1174.2	1177.5	1174.2	1184.2	1187.5	1185.9	1199.1	1212.4	1209.1	1224.0	1199.1
27.5°	1117.8	1116.2	1116.2	1124.5	1124.5	1122.8	1132.7	1147.7	1144.4	1154.3	1131.1
30°	1039.9	1044.8	1036.6	1048.2	1043.2	1039.9	1046.5	1059.8	1054.8	1063.1	1044.8
32.5°	950.3	943.7	943.7	943.7	947.0	938.7	945.4	952.0	947.0	955.3	935.4
35°	832.6	834.3	829.3	830.9	832.6	822.6	829.3	835.9	829.3	834.3	816.0
37.5°	714.8	716.5	704.9	711.5	704.9	701.6	708.2	711.5	704.9	709.8	689.9
40°	597.1	593.8	592.1	592.1	593.8	585.4	590.5	595.4	590.5	593.8	575.5
42.5°	494.2	492.6	489.3	490.9	485.9	484.3	485.9	490.9	485.9	489.3	476.0
45°	404.6	401.3	396.4	398.0	398.0	389.8	394.7	398.0	393.1	394.7	383.1
47.5°	321.8	316.7	316.7	315.1	315.1	311.8	316.7	315.1	310.1	313.4	301.9
50°	250.4	247.1	247.1	247.1	247.1	242.1	243.8	247.1	242.1	242.1	235.5
52.5°	195.7	190.8	187.4	187.4	187.4	185.7	185.7	187.4	182.4	182.4	180.8
55°	147.6	146.0	141.0	141.0	141.0	136.0	137.6	137.6	136.0	136.0	131.0
57.5°	109.5	104.5	101.2	101.2	97.8	97.8	96.2	97.8	94.5	94.5	91.2
60°	72.9	69.6	68.0	66.3	66.3	64.7	66.3	64.7	64.7	63.0	61.4
62.5°	53.1	49.7	46.4	46.4	46.4	44.8	44.8	44.8	44.8	44.8	43.1
65°	38.2	34.8	34.8	33.2	33.2	31.5	31.5	31.5	31.5	31.5	29.8
67.5°	26.5	24.9	23.2	23.2	23.2	23.2	23.2	23.2	21.6	21.6	21.6
70°	19.9	18.3	16.6	16.6	16.6	16.6	16.6	15.0	16.6	16.6	15.0
72.5°	13.3	13.3	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
75°	9.9	9.9	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
77.5°	6.6	6.6	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
80°	5.0	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
82.5°	3.3	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: P857408

CATALOG NUMBER: LX4C25D010 EX4C259040 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0	1287.0
2.5°	1318.5	1316.9	1313.5	1318.5	1305.3	1300.3	1298.6	1313.5
5°	1336.8	1333.4	1333.4	1338.4	1323.5	1320.2	1316.9	1333.4
7.5°	1353.3	1350.0	1350.0	1355.0	1341.8	1338.4	1335.1	1351.7
10°	1363.3	1363.3	1363.3	1366.6	1355.0	1351.7	1350.0	1366.6
12.5°	1368.3	1368.3	1366.6	1373.2	1358.3	1358.3	1355.0	1371.6
15°	1361.7	1361.7	1361.7	1366.6	1353.3	1350.0	1350.0	1363.3
17.5°	1345.1	1345.1	1343.4	1348.4	1333.4	1333.4	1331.8	1346.7
20°	1320.2	1320.2	1316.9	1323.5	1308.6	1303.6	1301.9	1316.9
22.5°	1280.4	1278.7	1277.1	1280.4	1267.1	1263.8	1262.1	1275.4
25°	1229.0	1227.3	1224.0	1227.3	1212.4	1207.4	1207.4	1217.3
27.5°	1156.0	1156.0	1151.0	1156.0	1139.4	1137.7	1136.1	1147.7
30°	1066.4	1059.8	1056.5	1063.1	1046.5	1046.5	1043.2	1054.8
32.5°	955.3	948.7	947.0	950.3	935.4	930.4	937.0	943.7
35°	827.6	829.3	822.6	822.6	809.4	811.0	812.7	822.6
37.5°	704.9	701.6	699.9	701.6	691.6	688.3	685.0	694.9
40°	590.5	582.1	580.5	580.5	572.2	570.6	572.2	577.2
42.5°	482.6	481.0	474.3	477.7	469.3	472.7	471.0	471.0
45°	389.8	391.4	384.8	389.8	383.1	378.1	378.1	381.4
47.5°	308.5	308.5	306.8	306.8	301.9	303.5	300.2	305.2
50°	238.8	238.8	235.5	237.2	233.9	233.9	232.2	233.9
52.5°	182.4	180.8	180.8	179.1	175.8	177.5	179.1	175.8
55°	132.7	134.3	131.0	132.7	129.4	131.0	129.4	131.0
57.5°	91.2	92.9	89.6	92.9	89.6	91.2	89.6	89.6
60°	63.0	63.0	61.4	63.0	61.4	61.4	59.7	63.0
62.5°	43.1	43.1	43.1	43.1	43.1	41.5	43.1	43.1
65°	31.5	29.8	29.8	29.8	29.8	29.8	29.8	29.8
67.5°	21.6	21.6	21.6	21.6	21.6	21.6	21.6	21.6
70°	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0
72.5°	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
75°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
77.5°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
80°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
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)