

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: P#

Luminaire Tested: **LD4C25D010 EX4C259040 4LBSQLWWLI**

Issue Date: 2/18/2022

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P219529)
Test Lab: INNOVATION CENTER
Issue Date: 2/18/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C25D010 EX4C259040 4LBSQLWWLI
Description: 4 INCH 2500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 4000K, 90CRI LEDS
AND 4LBSQLWW TRIM WITH LI FINISH
Light Source: -
Ballast/Driver: -

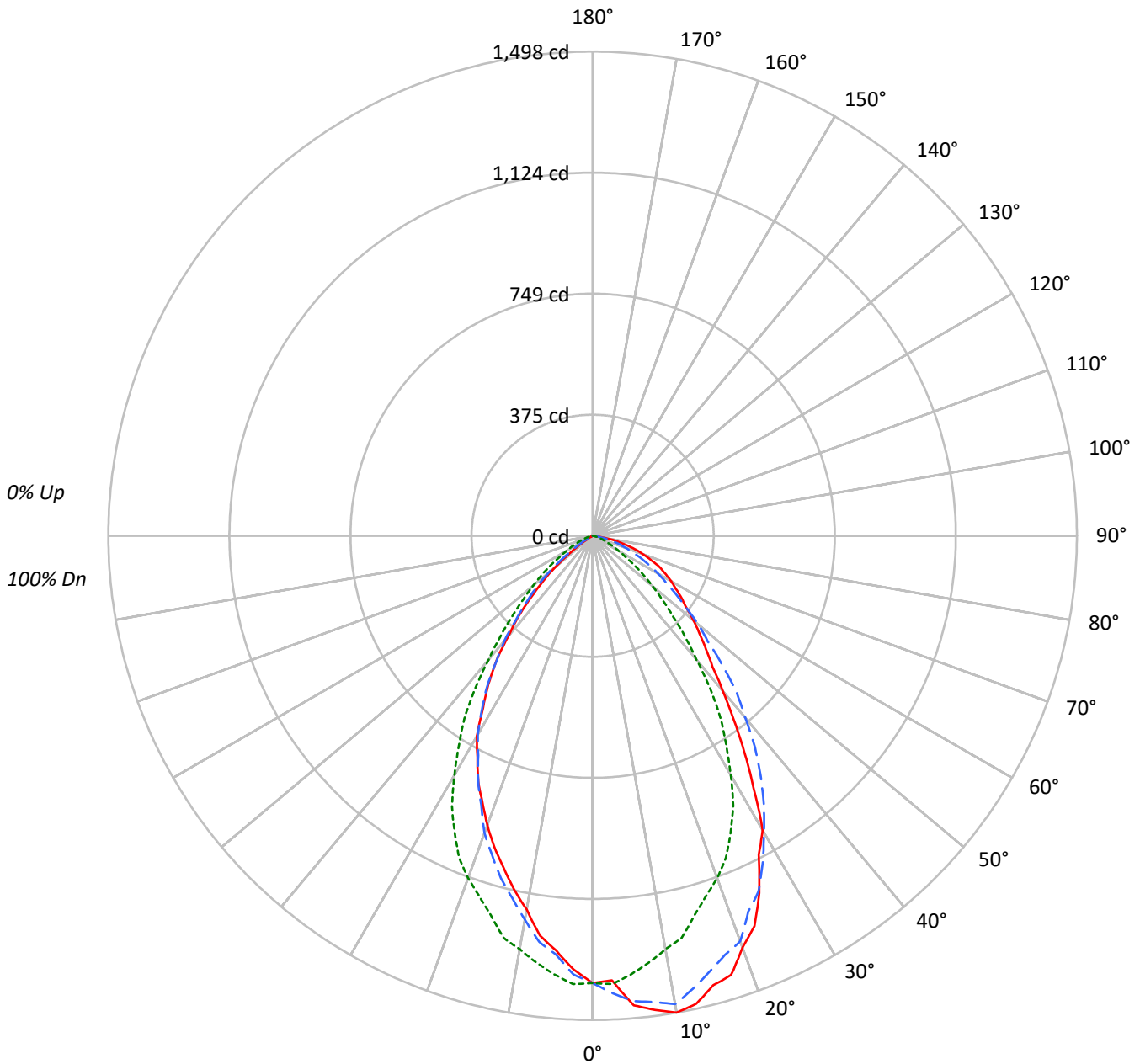
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1983.0 lumens
Efficiency: N/A
Efficacy: 63.0 lumens/watt
Spacing Criteria (0/90/45): 1.01 / 1 / 1.06
Luminous Opening: Rectangular (W 0.33' x L: 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

TEST NUMBER: P#
CATALOG NUMBER: LD4C25D010 EX4C259040 4LBSQLWWLI

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: LD4C25D010 EX4C259040 4LBSQLWWLI

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64
5	85	75	67	62	83	74	67	62	72	66	61	70	65	60	68	64	60	58
6	80	69	61	56	78	68	61	56	66	60	55	65	59	55	63	58	54	53
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48
8	70	59	52	47	69	58	51	46	57	51	46	56	50	46	55	50	46	44
9	66	55	48	43	65	54	47	43	53	47	43	52	46	42	51	46	42	41
10	62	51	44	40	61	51	44	40	50	44	39	49	43	39	48	43	39	38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	133483	133483	133483
5°	141228	131910	124840
10°	146760	127253	115065
15°	143825	121449	106216
20°	139154	115650	97763
25°	129801	107550	89185
30°	117176	95182	79841
35°	96518	81476	66234
40°	78774	62890	50975
45°	67682	47760	36666
50°	61260	36357	23162
55°	56372	26226	8378
60°	54111	17928	1274
65°	52261	12123	388
70°	46775	8407	480
75°	38362	4325	0
80°	24004	1834	0
85°	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: LD4C25D010 EX4C259040 4LBSQLWWLI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.6	6.5
10°-20°	349.2	17.6
20°-30°	466.3	23.5
30°-40°	442.7	22.3
40°-50°	306.0	15.4
50°-60°	169.1	8.5
60°-70°	84.0	4.2
70°-80°	33.1	1.7
80°-90°	3.1	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°	945.1	47.7
0°-40°	1387.8	70.0
0°-60°	1862.8	93.9
0°-90°	1983.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1983.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1383	1383	1383	1383	1383	
5°	1458	1445	1362	1300	1289	140
15°	1440	1397	1216	1096	1063	407
25°	1219	1214	1010	838	838	556
35°	819	906	692	569	562	513
45°	496	569	350	287	269	387
55°	335	315	156	80	50	302
65°	229	166	53	2	2	222
75°	103	63	12	0	0	110
85°	0	2	0	0	0	9
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: LD4C25D010 EX4C259040 4LBSQLWWLI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4
2.5°	1376.8	1414.9	1418.2	1414.9	1419.9	1418.2	1426.5	1418.2	1428.2	1413.3	1416.6
5°	1458.1	1443.1	1474.6	1458.1	1458.1	1456.4	1451.4	1449.7	1456.4	1434.9	1444.8
7.5°	1479.6	1501.2	1529.4	1494.6	1496.2	1496.2	1486.3	1482.9	1482.9	1443.1	1454.7
10°	1497.9	1484.6	1499.5	1486.3	1497.9	1496.2	1502.8	1481.3	1496.2	1473.0	1471.3
12.5°	1482.9	1477.9	1497.9	1476.3	1469.7	1471.3	1463.1	1458.1	1463.1	1436.5	1434.9
15°	1439.8	1444.8	1474.6	1451.4	1448.1	1444.8	1434.9	1418.2	1431.5	1395.0	1396.7
17.5°	1424.9	1416.6	1421.6	1401.6	1406.7	1403.3	1401.6	1386.8	1383.4	1360.2	1360.2
20°	1355.2	1373.4	1373.4	1360.2	1360.2	1358.6	1337.0	1350.2	1335.3	1328.7	1335.3
22.5°	1307.1	1308.8	1308.8	1297.1	1298.8	1292.2	1280.6	1272.3	1280.6	1272.3	1259.0
25°	1219.2	1222.5	1242.4	1220.9	1217.5	1224.2	1214.2	1209.2	1207.6	1187.7	1214.2
27.5°	1113.0	1146.2	1144.6	1136.2	1146.2	1132.9	1128.0	1129.6	1134.6	1132.9	1139.6
30°	1051.7	1056.6	1061.6	1055.0	1056.6	1051.7	1051.7	1053.3	1066.6	1061.6	1059.9
32.5°	927.2	943.8	957.1	957.1	958.8	963.8	962.1	996.9	1005.2	988.7	985.3
35°	819.4	831.1	842.6	844.3	865.9	867.5	869.2	879.1	902.3	907.4	905.7
37.5°	716.6	728.2	731.5	746.4	758.1	769.6	783.0	796.2	816.1	832.7	824.4
40°	625.4	630.3	638.6	645.3	668.5	668.5	675.1	701.7	723.2	736.5	734.8
42.5°	549.1	550.7	557.3	569.0	590.5	585.5	590.5	608.8	640.3	641.9	660.2
45°	496.0	494.3	499.3	500.9	514.2	520.9	524.2	537.4	564.0	567.3	569.0
47.5°	447.9	446.2	454.5	457.8	462.8	469.4	469.4	471.1	481.0	489.4	482.7
50°	408.1	408.1	408.1	411.4	419.7	418.0	419.7	426.3	431.3	427.9	426.3
52.5°	364.9	371.5	376.5	378.2	379.9	379.9	381.5	378.2	376.5	371.5	361.6
55°	335.1	341.7	341.7	341.7	341.7	348.3	340.1	341.7	341.7	328.4	315.2
57.5°	305.2	311.9	316.8	310.2	316.8	310.2	306.9	305.2	301.9	288.6	268.7
60°	280.4	283.7	282.0	280.4	283.7	278.7	275.4	268.7	265.4	247.1	233.9
62.5°	252.2	253.8	255.5	252.2	248.8	247.1	240.5	230.6	223.9	209.0	197.4
65°	228.9	223.9	222.3	220.6	217.3	212.3	207.4	195.7	190.7	177.5	165.8
67.5°	194.1	192.4	195.7	190.7	182.5	182.5	177.5	167.5	155.9	147.7	136.0
70°	165.8	164.2	160.9	155.9	154.3	147.7	147.7	136.0	132.7	117.8	107.8
72.5°	136.0	136.0	131.0	126.1	121.1	117.8	116.1	107.8	102.9	94.6	86.2
75°	102.9	102.9	101.2	96.2	92.9	89.6	87.9	81.3	76.3	68.0	63.0
77.5°	73.0	73.0	66.4	63.0	64.7	61.3	58.0	56.4	54.7	49.8	43.2
80°	43.2	41.5	36.5	38.1	36.5	36.5	34.8	33.1	29.8	26.5	23.2
82.5°	11.6	13.3	13.3	13.3	14.9	11.6	11.6	11.6	13.3	13.3	8.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7	1.7
87.5°	1.7	3.3	6.6	6.6	6.6	6.6	6.6	5.0	5.0	5.0	3.3
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: P#

CATALOG NUMBER: LD4C25D010 EX4C259040 4LBSQLWWLI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4
2.5°	1400.0	1398.3	1400.0	1388.4	1414.9	1395.0	1391.7	1388.4	1400.0	1388.4	1371.8
5°	1429.9	1413.3	1408.3	1403.3	1418.2	1395.0	1390.1	1391.7	1383.4	1361.9	1363.5
7.5°	1439.8	1424.9	1410.0	1378.4	1391.7	1386.8	1373.4	1363.5	1350.2	1332.0	1328.7
10°	1443.1	1426.5	1405.0	1395.0	1375.1	1368.5	1363.5	1346.9	1330.4	1298.8	1290.5
12.5°	1433.2	1413.3	1386.8	1378.4	1363.5	1341.9	1330.4	1313.7	1298.8	1273.9	1255.7
15°	1390.1	1373.4	1365.2	1337.0	1330.4	1317.0	1293.8	1270.6	1249.1	1215.8	1205.9
17.5°	1340.3	1333.7	1325.4	1303.8	1302.2	1288.9	1267.3	1247.4	1219.2	1167.8	1151.2
20°	1288.9	1288.9	1262.3	1254.1	1270.6	1244.1	1227.5	1209.2	1151.2	1126.3	1096.5
22.5°	1250.7	1232.5	1217.5	1204.3	1205.9	1189.3	1166.1	1129.6	1108.0	1078.2	1043.4
25°	1176.1	1182.7	1149.6	1144.6	1149.6	1111.3	1099.8	1069.9	1038.4	1010.2	983.6
27.5°	1129.6	1111.3	1089.8	1071.6	1071.6	1056.6	1023.5	1016.9	968.7	942.2	909.0
30°	1059.9	1046.7	1028.4	1001.9	998.6	987.0	960.4	943.8	894.1	854.3	836.0
32.5°	972.0	967.1	952.1	922.3	912.4	899.0	865.9	837.7	814.5	769.6	748.1
35°	909.0	890.8	859.3	834.4	826.1	802.9	776.3	756.4	731.5	691.7	663.5
37.5°	814.5	796.2	766.3	736.5	736.5	713.3	676.8	656.9	622.1	598.8	575.6
40°	731.5	708.3	678.5	643.6	638.6	605.4	590.5	557.3	535.8	499.3	496.0
42.5°	638.6	617.1	590.5	564.0	544.1	527.5	489.4	464.5	441.3	423.0	418.0
45°	554.0	525.8	502.6	469.4	449.5	429.6	404.7	388.2	369.9	350.0	338.4
47.5°	481.0	457.8	424.6	394.8	374.9	364.9	336.7	318.5	303.6	290.3	282.0
50°	406.4	378.2	360.0	326.8	323.4	300.2	277.0	262.1	253.8	242.2	230.6
52.5°	350.0	323.4	298.6	273.7	260.4	252.2	230.6	215.6	204.1	195.7	189.1
55°	295.2	272.0	252.2	227.3	218.9	207.4	182.5	179.2	167.5	155.9	147.7
57.5°	253.8	232.2	209.0	192.4	177.5	169.2	149.3	136.0	129.4	119.4	111.1
60°	215.6	192.4	174.2	154.3	147.7	136.0	121.1	109.5	101.2	92.9	84.6
62.5°	180.8	160.9	141.0	124.4	114.4	107.8	96.2	86.2	78.0	71.4	64.7
65°	149.3	131.0	114.4	97.9	92.9	84.6	76.3	68.0	61.3	53.1	46.5
67.5°	122.8	106.2	89.6	78.0	73.0	69.7	59.7	51.4	46.5	41.5	34.8
70°	96.2	84.6	71.4	61.3	56.4	51.4	44.8	39.8	33.1	29.8	24.9
72.5°	74.7	64.7	53.1	44.8	41.5	38.1	31.5	26.5	23.2	19.9	16.6
75°	53.1	44.8	38.1	29.8	28.2	26.5	21.6	18.3	14.9	11.6	9.9
77.5°	36.5	29.8	23.2	19.9	18.3	14.9	13.3	9.9	8.3	6.6	5.0
80°	19.9	14.9	11.6	9.9	8.3	6.6	6.6	5.0	3.3	3.3	1.7
82.5°	6.6	5.0	3.3	1.7	1.7	1.7	1.7	1.7	1.7	0.0	1.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	1.7	1.7	1.7	1.7	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



TEST NUMBER: P#

CATALOG NUMBER: LD4C25D010 EX4C259040 4LBSQLWWLI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4
2.5°	1381.8	1363.5	1368.5	1368.5	1365.2	1365.2	1361.9	1356.9	1358.6	1348.6	1327.0
5°	1366.8	1343.6	1340.3	1343.6	1330.4	1327.0	1320.4	1330.4	1300.5	1312.1	1298.8
7.5°	1323.7	1302.2	1297.1	1308.8	1292.2	1282.2	1280.6	1293.8	1267.3	1254.1	1239.1
10°	1275.6	1267.3	1252.4	1244.1	1239.1	1240.7	1227.5	1210.9	1205.9	1202.6	1189.3
12.5°	1232.5	1214.2	1201.0	1191.0	1187.7	1187.7	1166.1	1162.8	1147.9	1144.6	1124.7
15°	1181.0	1159.5	1151.2	1137.9	1126.3	1132.9	1108.0	1101.4	1096.5	1074.9	1078.2
17.5°	1136.2	1113.0	1093.2	1084.8	1074.9	1064.9	1041.7	1046.7	1035.1	1035.1	1005.2
20°	1078.2	1053.3	1038.4	1021.8	1021.8	1008.5	992.0	993.6	978.6	963.8	937.2
22.5°	1016.9	990.3	972.0	965.4	948.8	945.5	925.6	920.6	900.7	902.3	879.1
25°	952.1	925.6	900.7	902.3	887.5	880.8	869.2	846.0	837.7	827.7	821.1
27.5°	875.8	857.6	836.0	834.4	806.2	807.8	792.9	786.3	766.3	771.3	756.4
30°	806.2	779.7	759.7	754.8	743.1	739.8	716.6	706.6	710.0	696.7	688.4
32.5°	734.8	695.0	686.7	676.8	670.1	661.8	645.3	651.9	636.9	640.3	627.0
35°	640.3	623.7	602.1	602.1	595.5	588.9	577.3	583.9	569.0	562.3	549.1
37.5°	560.6	545.8	524.2	530.8	519.2	509.2	499.3	500.9	487.7	486.0	472.7
40°	474.4	466.1	451.2	451.2	442.9	442.9	437.9	432.9	424.6	414.7	399.7
42.5°	393.1	386.5	379.9	381.5	369.9	379.9	366.6	374.9	348.3	346.7	336.7
45°	333.4	318.5	320.1	313.5	306.9	310.2	298.6	301.9	287.0	283.7	273.7
47.5°	270.4	265.4	255.5	252.2	252.2	247.1	242.2	240.5	233.9	225.6	212.3
50°	222.3	204.1	200.7	195.7	192.4	192.4	185.8	175.9	177.5	169.2	155.9
52.5°	174.2	159.2	152.6	151.0	144.3	141.0	132.7	126.1	121.1	117.8	109.5
55°	134.3	121.1	112.8	112.8	102.9	102.9	91.2	86.2	79.6	73.0	68.0
57.5°	101.2	94.6	86.2	79.6	76.3	68.0	61.3	53.1	48.1	38.1	31.5
60°	76.3	69.7	61.3	56.4	53.1	44.8	36.5	29.8	18.3	14.9	13.3
62.5°	56.4	49.8	41.5	38.1	34.8	28.2	19.9	9.9	5.0	5.0	5.0
65°	41.5	33.1	26.5	23.2	19.9	14.9	6.6	3.3	1.7	1.7	1.7
67.5°	28.2	21.6	14.9	13.3	9.9	5.0	1.7	1.7	1.7	1.7	1.7
70°	18.3	13.3	6.6	5.0	3.3	1.7	1.7	1.7	1.7	1.7	1.7
72.5°	11.6	6.6	3.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	6.6	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	3.3	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	1.7	1.7
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: P#

CATALOG NUMBER: LD4C25D010 EX4C259040 4LBSQLWWLI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4	1383.4
2.5°	1350.2	1338.6	1345.2	1330.4	1337.0	1348.6	1340.3	1343.6
5°	1303.8	1297.1	1288.9	1267.3	1283.9	1297.1	1290.5	1288.9
7.5°	1254.1	1230.8	1242.4	1235.8	1232.5	1245.7	1230.8	1247.4
10°	1202.6	1186.0	1184.4	1172.8	1172.8	1182.7	1184.4	1174.4
12.5°	1126.3	1118.0	1118.0	1116.4	1114.7	1124.7	1126.3	1121.4
15°	1071.6	1068.3	1059.9	1058.3	1048.4	1063.3	1064.9	1063.3
17.5°	1005.2	1006.8	998.6	998.6	1005.2	1010.2	996.9	1010.2
20°	960.4	952.1	948.8	933.9	942.2	950.5	950.5	952.1
22.5°	895.7	882.5	887.5	879.1	874.1	885.8	885.8	890.8
25°	822.7	822.7	826.1	821.1	824.4	831.1	826.1	837.7
27.5°	753.1	759.7	759.7	753.1	756.4	776.3	784.6	771.3
30°	688.4	690.0	695.0	691.7	701.7	708.3	706.6	716.6
32.5°	615.4	623.7	627.0	622.1	625.4	640.3	632.0	630.3
35°	559.0	544.1	542.4	544.1	550.7	554.0	550.7	562.3
37.5°	477.7	472.7	466.1	467.8	472.7	479.4	482.7	491.0
40°	399.7	393.1	393.1	391.5	386.5	404.7	404.7	404.7
42.5°	331.8	330.1	321.8	321.8	328.4	333.4	330.1	341.7
45°	272.0	265.4	260.4	260.4	265.4	265.4	270.4	268.7
47.5°	214.0	207.4	209.0	204.1	209.0	215.6	207.4	209.0
50°	160.9	160.9	157.6	160.9	159.2	160.9	157.6	154.3
52.5°	109.5	124.4	126.1	119.4	104.5	91.2	82.9	89.6
55°	63.0	56.4	56.4	54.7	51.4	49.8	44.8	49.8
57.5°	31.5	28.2	28.2	28.2	26.5	24.9	21.6	21.6
60°	13.3	11.6	11.6	9.9	8.3	6.6	5.0	6.6
62.5°	5.0	3.3	3.3	3.3	3.3	3.3	3.3	3.3
65°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
67.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
70°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	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)