

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: P857521

Luminaire Tested: **LX4C30D010 EX4C309027 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857521
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: LX4C30D010 EX4C309027 4LBSWNH
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

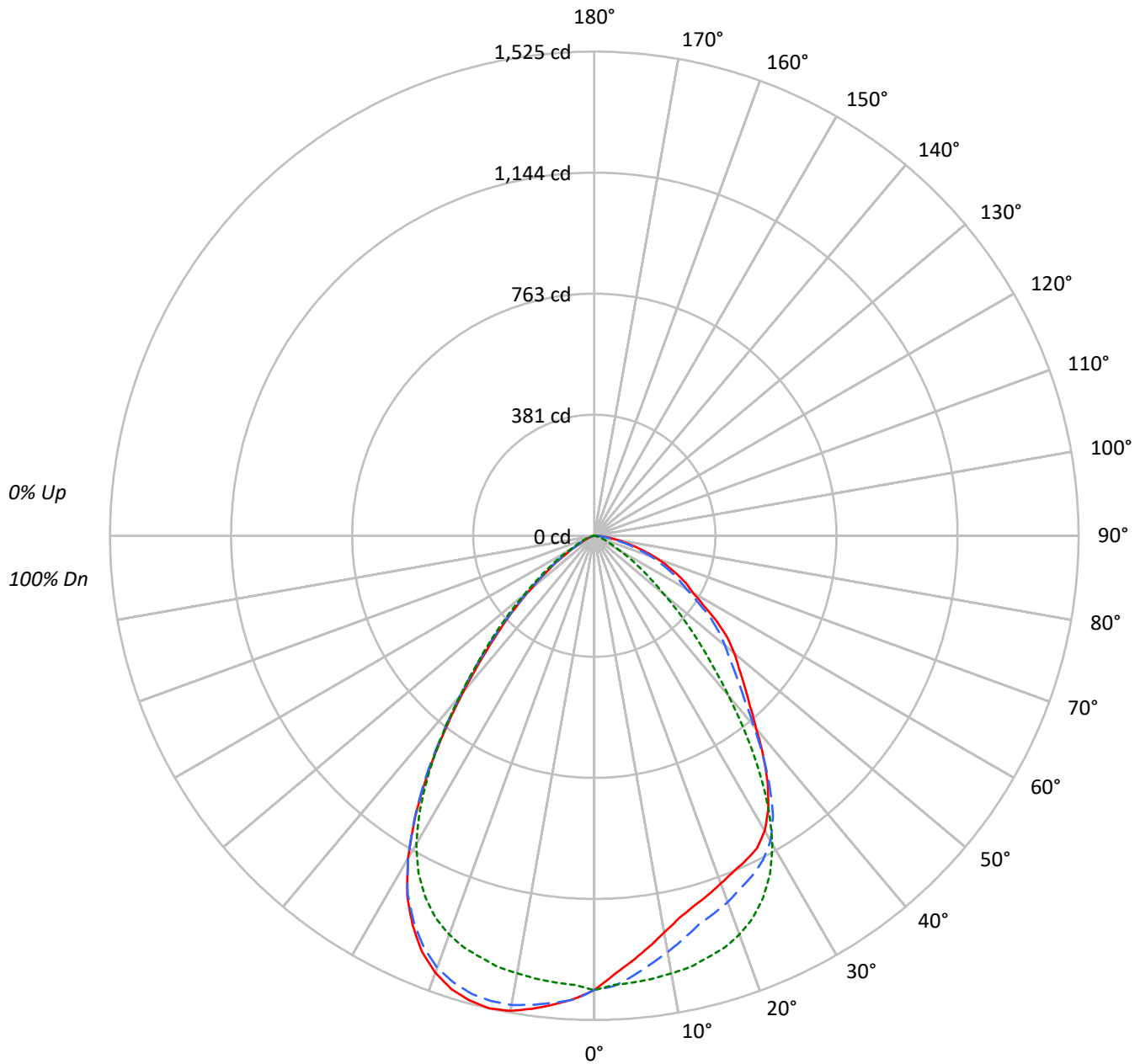
Lumens per Lamp: N/A
Luminaire Lumens: 2508.0 lumens
Efficiency: N/A
Efficacy: 79.4 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 31.6
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	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89		
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79		
3	96	88	81	76	94	86	80	75	83	78	74	81	76	73	78	75	72	70		
4	90	80	72	67	88	78	72	66	76	70	66	74	69	65	72	68	64	62		
5	83	73	65	60	82	72	65	59	70	63	59	68	62	58	66	61	58	56		
6	78	67	59	53	76	66	59	53	64	58	53	62	57	52	61	56	52	50		
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	56	51	47	46		
8	68	57	49	44	67	56	49	44	55	48	44	54	48	43	52	47	43	42		
9	64	52	45	40	63	52	45	40	51	44	40	50	44	40	49	44	40	38		
10	61	49	42	37	59	48	42	37	47	41	37	47	41	37	46	40	37	35		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	175779	175779	175779
5°	165980	174169	182814
10°	158244	174573	189518
15°	153604	174946	192765
20°	152336	174757	191400
25°	152959	170459	183445
30°	152229	159024	166344
35°	142688	135774	137153
40°	127144	105269	102912
45°	116285	78479	73666
50°	109936	54987	49693
55°	101097	37119	31186
60°	88332	21745	17199
65°	83633	13924	9651
70°	76186	9950	5963
75°	63036	6978	4414
80°	49524	3962	2618
85°	44261	2678	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.2	5.4
10°-20°	387.8	15.5
20°-30°	574.9	22.9
30°-40°	575.7	23.0
40°-50°	402.3	16.0
50°-60°	239.4	9.5
60°-70°	124.9	5.0
70°-80°	55.6	2.2
80°-90°	12.1	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°	1097.9	43.8
0°-40°	1673.6	66.7
0°-60°	2315.4	92.3
0°-90°	2508.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2508.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1431	1431	1431	1431	1431	
5°	1346	1392	1412	1477	1482	126
15°	1208	1268	1376	1493	1516	342
25°	1128	1180	1258	1344	1353	520
35°	951	962	905	922	914	590
45°	669	636	452	437	424	520
55°	472	442	173	151	146	419
65°	288	264	48	35	33	285
75°	133	116	15	9	9	144
85°	31	24	2	2	0	35
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°	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8
2.5°	1384.7	1401.3	1384.7	1390.2	1412.3	1392.0	1403.1	1403.1	1397.6	1410.5	1419.7
5°	1345.9	1362.5	1345.9	1353.3	1377.3	1357.0	1369.9	1366.2	1368.1	1379.2	1392.0
7.5°	1307.3	1320.1	1305.4	1314.6	1336.7	1320.1	1331.2	1331.2	1333.1	1349.6	1360.7
10°	1268.5	1279.6	1268.5	1275.9	1299.9	1285.1	1292.5	1294.3	1299.9	1314.6	1331.2
12.5°	1233.5	1242.7	1231.7	1242.7	1263.0	1248.2	1257.5	1259.3	1264.8	1281.5	1299.9
15°	1207.7	1216.9	1205.9	1215.0	1233.5	1222.4	1229.8	1233.5	1237.1	1251.9	1268.5
17.5°	1187.4	1194.8	1185.5	1196.6	1211.3	1198.5	1209.5	1209.5	1215.0	1229.8	1248.2
20°	1165.2	1172.6	1165.2	1174.5	1191.1	1180.1	1189.2	1189.2	1194.8	1211.3	1228.0
22.5°	1145.0	1148.7	1145.0	1152.4	1168.9	1159.7	1165.2	1167.1	1172.6	1187.4	1202.2
25°	1128.4	1135.7	1132.1	1139.4	1150.5	1141.3	1146.8	1148.7	1154.2	1167.1	1180.1
27.5°	1109.9	1113.6	1109.9	1119.2	1128.4	1121.0	1126.6	1124.7	1128.4	1139.4	1150.5
30°	1073.1	1076.8	1076.8	1082.3	1089.7	1086.0	1091.5	1086.0	1089.7	1098.9	1109.9
32.5°	1019.6	1021.5	1023.3	1028.8	1034.3	1028.8	1032.5	1032.5	1032.5	1039.9	1047.3
35°	951.4	955.1	953.2	956.9	962.4	960.6	960.6	958.7	955.1	958.7	962.4
37.5°	874.0	868.4	868.4	874.0	877.6	870.3	874.0	870.3	870.3	872.1	872.1
40°	792.8	787.3	792.8	794.7	796.5	792.8	791.0	787.3	781.7	783.6	779.9
42.5°	724.6	720.9	722.8	722.8	724.6	720.9	722.8	715.4	709.8	706.1	700.6
45°	669.3	663.8	669.3	665.6	665.6	663.8	661.9	658.2	650.8	645.4	636.1
47.5°	617.7	617.7	619.5	619.5	619.5	615.8	615.8	608.4	601.0	593.7	580.8
50°	575.2	571.6	578.9	578.9	573.4	571.6	573.4	564.2	558.7	549.4	536.5
52.5°	529.1	529.1	531.0	531.0	529.1	525.4	527.3	520.0	514.4	505.2	492.3
55°	472.0	468.3	473.8	473.8	472.0	470.2	472.0	466.5	461.0	453.6	442.5
57.5°	407.5	405.6	409.3	411.2	407.5	407.5	409.3	403.8	401.9	394.6	383.5
60°	359.5	357.7	361.4	363.3	359.5	359.5	359.5	352.1	348.4	341.1	333.7
62.5°	326.3	324.5	328.2	326.3	324.5	322.6	324.5	317.1	313.5	306.1	298.7
65°	287.7	289.5	291.3	291.3	289.5	287.7	287.7	284.0	280.3	272.9	263.7
67.5°	250.7	250.7	252.6	254.4	252.6	252.6	252.6	247.0	243.4	237.9	226.8
70°	212.1	210.2	215.7	215.7	212.1	213.9	212.1	210.2	206.5	199.1	189.9
72.5°	171.4	171.4	173.3	173.3	171.4	171.4	171.4	169.6	164.1	160.4	151.2
75°	132.8	132.8	134.6	136.5	132.8	132.8	134.6	130.9	127.2	121.7	116.1
77.5°	99.6	97.7	99.6	99.6	97.7	97.7	97.7	95.9	94.0	88.5	83.0
80°	70.0	68.2	70.0	70.0	70.0	68.2	68.2	66.3	66.3	62.7	57.2
82.5°	47.9	46.1	47.9	47.9	47.9	46.1	46.1	46.1	44.2	42.4	38.7
85°	31.4	29.5	29.5	31.4	29.5	29.5	29.5	29.5	27.7	25.8	24.0
87.5°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	12.9	12.9	12.9	11.1
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°	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8
2.5°	1412.3	1408.7	1419.7	1416.0	1417.8	1408.7	1423.4	1416.0	1425.2	1416.0	1434.5
5°	1388.4	1384.7	1401.3	1399.4	1401.3	1393.9	1410.5	1408.7	1419.7	1412.3	1432.6
7.5°	1362.5	1358.9	1377.3	1379.2	1382.9	1375.5	1397.6	1397.6	1408.7	1406.8	1428.9
10°	1333.1	1334.9	1353.3	1357.0	1364.4	1360.7	1381.0	1386.5	1401.3	1399.4	1427.1
12.5°	1305.4	1305.4	1329.4	1336.7	1342.2	1340.4	1364.4	1371.8	1388.4	1392.0	1417.8
15°	1277.8	1279.6	1301.7	1312.8	1320.1	1318.3	1344.1	1353.3	1373.6	1375.5	1406.8
17.5°	1255.6	1253.8	1277.8	1286.9	1298.0	1296.2	1323.8	1334.9	1355.2	1360.7	1390.2
20°	1237.1	1235.3	1257.5	1268.5	1275.9	1274.1	1301.7	1314.6	1333.1	1336.7	1366.2
22.5°	1215.0	1211.3	1233.5	1242.7	1250.1	1248.2	1272.2	1281.5	1299.9	1303.6	1331.2
25°	1189.2	1185.5	1205.9	1211.3	1216.9	1213.2	1233.5	1239.0	1253.8	1257.5	1285.1
27.5°	1159.7	1150.5	1167.1	1167.1	1170.8	1165.2	1180.1	1185.5	1198.5	1198.5	1224.3
30°	1113.6	1100.8	1109.9	1108.1	1109.9	1102.6	1111.8	1113.6	1122.9	1121.0	1139.4
32.5°	1049.1	1030.7	1036.2	1030.7	1025.2	1014.1	1025.2	1021.5	1028.8	1021.5	1038.0
35°	960.6	942.2	940.3	932.9	927.4	918.2	918.2	909.0	910.8	905.3	916.4
37.5°	864.7	840.8	837.1	822.4	813.1	802.0	802.0	794.7	785.4	781.7	791.0
40°	770.7	744.9	735.7	711.7	702.5	691.4	684.0	674.8	671.2	656.4	663.8
42.5°	689.6	661.9	641.7	615.8	606.6	590.0	578.9	567.9	562.4	545.8	553.1
45°	621.4	588.2	566.1	532.8	520.0	501.5	484.9	472.0	459.1	451.7	448.0
47.5°	564.2	529.1	499.6	462.8	442.5	425.9	403.8	390.9	374.3	365.1	359.5
50°	516.3	477.5	444.4	401.9	381.7	363.3	337.4	317.1	302.4	287.7	284.0
52.5°	473.8	433.3	396.4	348.4	324.5	302.4	274.7	252.6	239.7	223.1	221.2
55°	424.0	389.1	348.4	298.7	274.7	252.6	223.1	201.0	184.4	173.3	169.6
57.5°	370.6	337.4	298.7	248.9	224.9	201.0	173.3	153.0	138.3	129.1	127.2
60°	320.8	289.5	252.6	202.8	178.8	158.6	129.1	108.8	95.9	88.5	84.8
62.5°	284.0	254.4	219.4	173.3	151.2	130.9	103.3	84.8	73.7	66.3	62.7
65°	248.9	219.4	188.1	145.6	127.2	108.8	83.0	66.3	55.3	47.9	44.2
67.5°	212.1	186.3	156.7	121.7	103.3	88.5	66.3	51.6	42.4	36.9	33.2
70°	175.1	151.2	127.2	97.7	84.8	70.0	51.6	40.5	31.4	27.7	24.0
72.5°	138.3	119.8	99.6	75.6	64.5	55.3	40.5	29.5	24.0	20.3	16.6
75°	103.3	90.3	73.7	57.2	47.9	40.5	29.5	22.1	18.4	14.7	12.9
77.5°	73.7	62.7	51.6	38.7	35.1	29.5	20.3	16.6	12.9	9.3	7.4
80°	49.8	44.2	35.1	27.7	22.1	20.3	14.7	11.1	7.4	5.6	5.6
82.5°	33.2	27.7	22.1	16.6	14.7	12.9	9.3	7.4	5.6	3.7	3.7
85°	20.3	16.6	12.9	9.3	9.3	7.4	5.6	3.7	1.9	1.9	1.9
87.5°	9.3	7.4	5.6	3.7	3.7	1.9	1.9	1.9	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°	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8
2.5°	1449.2	1438.1	1430.8	1440.0	1443.6	1438.1	1443.6	1452.9	1462.1	1464.0	1438.1
5°	1451.1	1440.0	1436.3	1447.3	1449.2	1447.3	1452.9	1465.8	1476.9	1480.6	1454.8
7.5°	1451.1	1443.6	1441.8	1454.8	1456.6	1454.8	1464.0	1478.7	1489.8	1497.1	1471.3
10°	1447.3	1443.6	1445.5	1456.6	1460.3	1460.3	1473.2	1489.8	1500.8	1508.2	1482.4
12.5°	1441.8	1441.8	1441.8	1454.8	1458.5	1460.3	1471.3	1493.4	1500.8	1511.9	1486.1
15°	1432.6	1432.6	1432.6	1445.5	1451.1	1451.1	1464.0	1484.3	1493.4	1504.5	1478.7
17.5°	1416.0	1416.0	1417.8	1428.9	1434.5	1434.5	1447.3	1469.5	1475.0	1487.9	1462.1
20°	1392.0	1392.0	1393.9	1405.0	1410.5	1406.8	1423.4	1441.8	1447.3	1458.5	1432.6
22.5°	1357.0	1357.0	1357.0	1368.1	1371.8	1369.9	1386.5	1403.1	1403.1	1417.8	1390.2
25°	1305.4	1309.1	1305.4	1316.4	1320.1	1318.3	1333.1	1347.8	1344.1	1360.7	1333.1
27.5°	1242.7	1240.8	1240.8	1250.1	1250.1	1248.2	1259.3	1275.9	1272.2	1283.3	1257.5
30°	1156.1	1161.5	1152.4	1165.2	1159.7	1156.1	1163.4	1178.2	1172.6	1181.9	1161.5
32.5°	1056.5	1049.1	1049.1	1049.1	1052.8	1043.6	1051.0	1058.3	1052.8	1062.0	1039.9
35°	925.6	927.4	921.9	923.8	925.6	914.5	921.9	929.3	921.9	927.4	907.1
37.5°	794.7	796.5	783.6	791.0	783.6	779.9	787.3	791.0	783.6	789.1	767.0
40°	663.8	660.1	658.2	658.2	660.1	650.8	656.4	661.9	656.4	660.1	639.8
42.5°	549.4	547.6	543.9	545.8	540.2	538.4	540.2	545.8	540.2	543.9	529.1
45°	449.8	446.2	440.7	442.5	442.5	433.3	438.8	442.5	437.0	438.8	425.9
47.5°	357.7	352.1	352.1	350.3	350.3	346.6	352.1	350.3	344.8	348.4	335.6
50°	278.4	274.7	274.7	274.7	274.7	269.2	271.0	274.7	269.2	269.2	261.8
52.5°	217.6	212.1	208.4	208.4	208.4	206.5	206.5	208.4	202.8	202.8	201.0
55°	164.1	162.3	156.7	156.7	156.7	151.2	153.0	153.0	151.2	151.2	145.6
57.5°	121.7	116.1	112.5	112.5	108.8	108.8	107.0	108.8	105.1	105.1	101.4
60°	81.1	77.4	75.6	73.7	73.7	71.9	73.7	71.9	71.9	70.0	68.2
62.5°	59.0	55.3	51.6	51.6	51.6	49.8	49.8	49.8	49.8	49.8	47.9
65°	42.4	38.7	38.7	36.9	36.9	35.1	35.1	35.1	35.1	35.1	33.2
67.5°	29.5	27.7	25.8	25.8	25.8	25.8	25.8	25.8	24.0	24.0	24.0
70°	22.1	20.3	18.4	18.4	18.4	18.4	18.4	16.6	18.4	18.4	16.6
72.5°	14.7	14.7	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9
75°	11.1	11.1	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
77.5°	7.4	7.4	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
80°	5.6	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
82.5°	3.7	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
85°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	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: P857521

CATALOG NUMBER: LX4C30D010 EX4C309027 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8	1430.8
2.5°	1465.8	1464.0	1460.3	1465.8	1451.1	1445.5	1443.6	1460.3
5°	1486.1	1482.4	1482.4	1487.9	1471.3	1467.6	1464.0	1482.4
7.5°	1504.5	1500.8	1500.8	1506.4	1491.6	1487.9	1484.3	1502.7
10°	1515.6	1515.6	1515.6	1519.2	1506.4	1502.7	1500.8	1519.2
12.5°	1521.1	1521.1	1519.2	1526.6	1510.1	1510.1	1506.4	1524.8
15°	1513.7	1513.7	1513.7	1519.2	1504.5	1500.8	1500.8	1515.6
17.5°	1495.3	1495.3	1493.4	1499.0	1482.4	1482.4	1480.6	1497.1
20°	1467.6	1467.6	1464.0	1471.3	1454.8	1449.2	1447.3	1464.0
22.5°	1423.4	1421.5	1419.7	1423.4	1408.7	1405.0	1403.1	1417.8
25°	1366.2	1364.4	1360.7	1364.4	1347.8	1342.2	1342.2	1353.3
27.5°	1285.1	1285.1	1279.6	1285.1	1266.6	1264.8	1263.0	1275.9
30°	1185.5	1178.2	1174.5	1181.9	1163.4	1163.4	1159.7	1172.6
32.5°	1062.0	1054.7	1052.8	1056.5	1039.9	1034.3	1041.7	1049.1
35°	920.1	921.9	914.5	914.5	899.8	901.6	903.5	914.5
37.5°	783.6	779.9	778.1	779.9	768.9	765.2	761.5	772.6
40°	656.4	647.2	645.4	645.4	636.1	634.3	636.1	641.7
42.5°	536.5	534.7	527.3	531.0	521.8	525.4	523.6	523.6
45°	433.3	435.1	427.7	433.3	425.9	420.4	420.4	424.0
47.5°	342.9	342.9	341.1	341.1	335.6	337.4	333.7	339.3
50°	265.5	265.5	261.8	263.7	260.0	260.0	258.1	260.0
52.5°	202.8	201.0	201.0	199.1	195.4	197.3	199.1	195.4
55°	147.5	149.3	145.6	147.5	143.8	145.6	143.8	145.6
57.5°	101.4	103.3	99.6	103.3	99.6	101.4	99.6	99.6
60°	70.0	70.0	68.2	70.0	68.2	68.2	66.3	70.0
62.5°	47.9	47.9	47.9	47.9	47.9	46.1	47.9	47.9
65°	35.1	33.2	33.2	33.2	33.2	33.2	33.2	33.2
67.5°	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
70°	16.6	16.6	16.6	16.6	16.6	16.6	16.6	16.6
72.5°	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9
75°	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3
77.5°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
80°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
82.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
85°	1.9	1.9	1.9	0.0	1.9	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)