

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: P857702

Luminaire Tested: **LX4C30D010 EX4C309030 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857702
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 EX4C309030 4LBSWNH
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH, DIM TO WARM
Light Source: -
Ballast/Driver: -

Summary

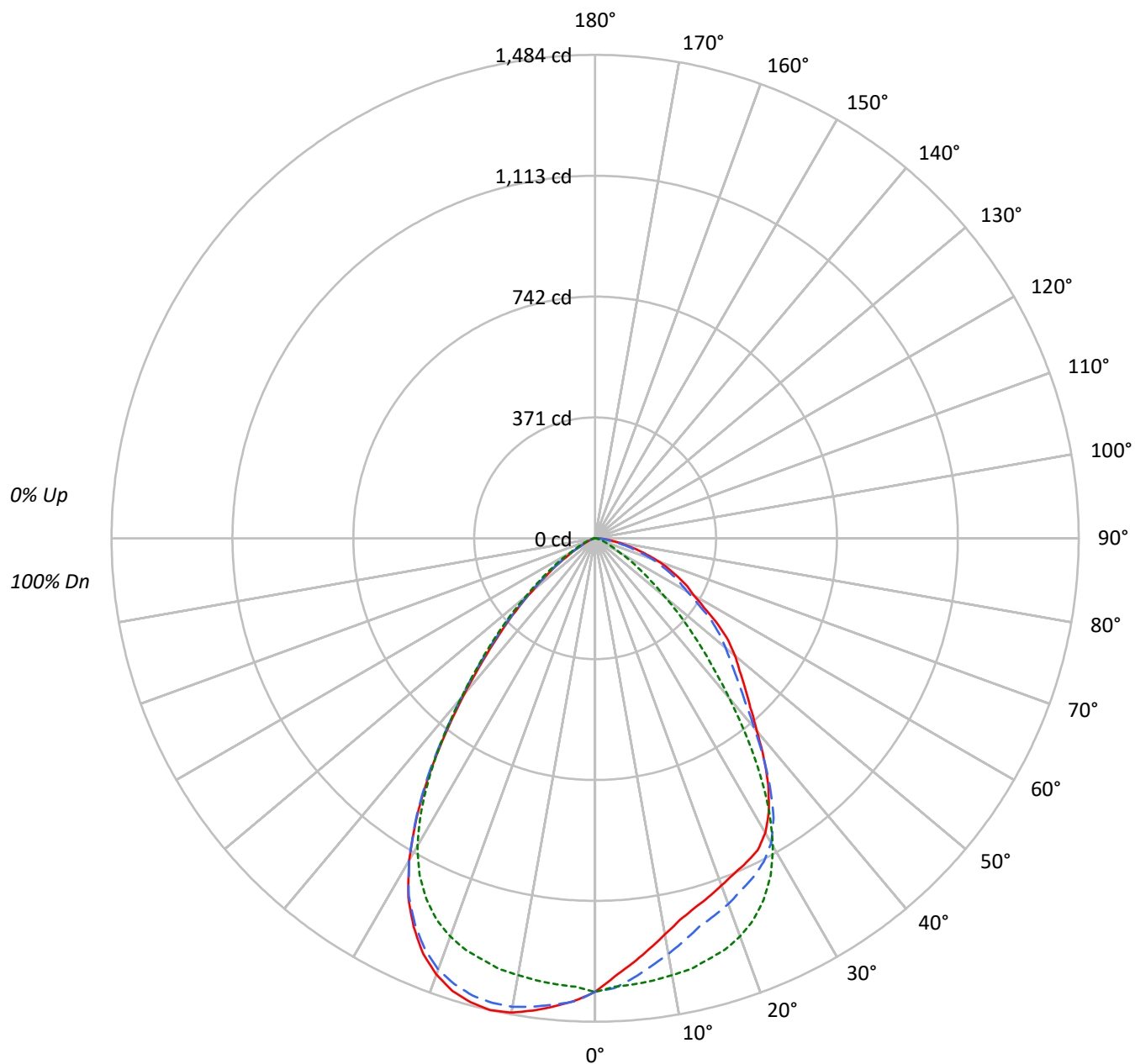
Lumens per Lamp: N/A
Luminaire Lumens: 2440.6 lumens
Efficiency: N/A
Efficacy: 69.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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°	171049	171049	171049
5°	161516	169495	177905
10°	154002	169883	184428
15°	149470	170240	187576
20°	148257	170064	186249
25°	148852	165877	178524
30°	148143	154740	161875
35°	138863	132129	133464
40°	123712	102447	100153
45°	113158	76359	71703
50°	106992	53496	48355
55°	98398	36134	30351
60°	85948	21155	16757
65°	81366	13546	9360
70°	74139	9698	5819
75°	61375	6788	4272
80°	48250	3820	2547
85°	42992	2537	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.5	5.4
10°-20°	377.4	15.5
20°-30°	559.5	22.9
30°-40°	560.2	23.0
40°-50°	391.5	16.0
50°-60°	233.0	9.5
60°-70°	121.6	5.0
70°-80°	54.1	2.2
80°-90°	11.8	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°	1068.4	43.8
0°-40°	1628.6	66.7
0°-60°	2253.2	92.3
0°-90°	2440.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2440.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1392	1392	1392	1392	1392	
5°	1310	1355	1374	1437	1443	123
15°	1175	1234	1338	1453	1475	333
25°	1098	1148	1224	1308	1317	506
35°	926	936	881	897	890	574
45°	651	619	440	425	413	506
55°	459	431	169	147	142	408
65°	280	257	47	34	32	277
75°	129	113	14	9	9	140
85°	30	23	2	2	0	34
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°	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3
2.5°	1347.5	1363.7	1347.5	1352.9	1374.4	1354.6	1365.4	1365.4	1360.0	1372.6	1381.6
5°	1309.7	1325.9	1309.7	1317.0	1340.3	1320.5	1333.0	1329.5	1331.4	1342.2	1354.6
7.5°	1272.1	1284.7	1270.3	1279.2	1300.8	1284.7	1295.5	1295.5	1297.2	1313.3	1324.2
10°	1234.5	1245.3	1234.5	1241.7	1265.0	1250.6	1257.8	1259.5	1265.0	1279.2	1295.5
12.5°	1200.3	1209.3	1198.6	1209.3	1229.0	1214.7	1223.7	1225.4	1230.9	1247.0	1265.0
15°	1175.2	1184.2	1173.4	1182.4	1200.3	1189.5	1196.7	1200.3	1204.0	1218.3	1234.5
17.5°	1155.5	1162.7	1153.7	1164.5	1178.7	1166.3	1177.1	1177.1	1182.4	1196.7	1214.7
20°	1134.0	1141.1	1134.0	1142.9	1159.1	1148.3	1157.3	1157.3	1162.7	1178.7	1194.9
22.5°	1114.2	1117.8	1114.2	1121.4	1137.5	1128.6	1134.0	1135.7	1141.1	1155.5	1169.9
25°	1098.1	1105.2	1101.6	1108.8	1119.6	1110.7	1116.0	1117.8	1123.2	1135.7	1148.3
27.5°	1080.2	1083.7	1080.2	1089.1	1098.1	1090.8	1096.3	1094.4	1098.1	1108.8	1119.6
30°	1044.3	1047.8	1047.8	1053.2	1060.4	1056.9	1062.2	1056.9	1060.4	1069.4	1080.2
32.5°	992.3	994.0	995.8	1001.2	1006.6	1001.2	1004.8	1004.8	1004.8	1012.0	1019.1
35°	925.9	929.4	927.7	931.2	936.5	934.8	934.8	933.0	929.4	933.0	936.5
37.5°	850.5	845.1	845.1	850.5	854.0	846.9	850.5	846.9	846.9	848.6	848.6
40°	771.4	766.2	771.4	773.4	775.0	771.4	769.7	766.2	760.8	762.6	758.9
42.5°	705.1	701.5	703.4	703.4	705.1	701.5	703.4	696.2	690.8	687.2	681.8
45°	651.3	646.0	651.3	647.7	647.7	646.0	644.1	640.5	633.4	628.0	619.1
47.5°	601.1	601.1	602.9	602.9	602.9	599.2	599.2	592.1	584.9	577.7	565.3
50°	559.8	556.2	563.3	563.3	558.0	556.2	558.0	549.1	543.7	534.7	522.1
52.5°	514.9	514.9	516.7	516.7	514.9	511.3	513.2	506.0	500.6	491.7	479.0
55°	459.4	455.7	461.1	461.1	459.4	457.5	459.4	454.0	448.6	441.5	430.6
57.5°	396.5	394.8	398.3	400.2	396.5	396.5	398.3	392.9	391.2	384.0	373.2
60°	349.8	348.1	351.6	353.5	349.8	349.8	349.8	342.7	339.0	331.9	324.7
62.5°	317.6	315.8	319.4	317.6	315.8	314.0	315.8	308.6	305.1	297.8	290.7
65°	279.9	281.7	283.6	283.6	281.7	279.9	279.9	276.4	272.8	265.6	256.6
67.5°	243.9	243.9	245.9	247.6	245.9	245.9	245.9	240.4	236.9	231.4	220.6
70°	206.4	204.6	210.0	210.0	206.4	208.1	206.4	204.6	200.9	193.8	184.8
72.5°	166.8	166.8	168.7	168.7	166.8	166.8	166.8	165.1	159.7	156.1	147.1
75°	129.3	129.3	130.9	132.7	129.3	129.3	130.9	127.4	123.8	118.5	113.0
77.5°	96.9	95.1	96.9	96.9	95.1	95.1	95.1	93.3	91.5	86.1	80.8
80°	68.2	66.3	68.2	68.2	68.2	66.3	66.3	64.6	64.6	61.0	55.5
82.5°	46.6	45.0	46.6	46.6	46.6	45.0	45.0	45.0	43.0	41.3	37.7
85°	30.5	28.7	28.7	30.5	28.7	28.7	28.7	28.7	27.0	25.1	23.4
87.5°	14.3	14.3	14.3	14.3	14.3	14.3	14.3	12.6	12.6	12.6	10.8
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°	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3
2.5°	1374.4	1370.8	1381.6	1378.0	1379.7	1370.8	1385.2	1378.0	1386.9	1378.0	1396.0
5°	1351.0	1347.5	1363.7	1361.8	1363.7	1356.4	1372.6	1370.8	1381.6	1374.4	1394.1
7.5°	1325.9	1322.4	1340.3	1342.2	1345.8	1338.5	1360.0	1360.0	1370.8	1369.0	1390.5
10°	1297.2	1299.1	1317.0	1320.5	1327.8	1324.2	1343.8	1349.3	1363.7	1361.8	1388.8
12.5°	1270.3	1270.3	1293.7	1300.8	1306.2	1304.5	1327.8	1335.0	1351.0	1354.6	1379.7
15°	1243.4	1245.3	1266.7	1277.5	1284.7	1282.9	1308.0	1317.0	1336.7	1338.5	1369.0
17.5°	1221.9	1220.1	1243.4	1252.4	1263.2	1261.4	1288.3	1299.1	1318.8	1324.2	1352.9
20°	1204.0	1202.1	1223.7	1234.5	1241.7	1239.9	1266.7	1279.2	1297.2	1300.8	1329.5
22.5°	1182.4	1178.7	1200.3	1209.3	1216.5	1214.7	1238.0	1247.0	1265.0	1268.6	1295.5
25°	1157.3	1153.7	1173.4	1178.7	1184.2	1180.7	1200.3	1205.7	1220.1	1223.7	1250.6
27.5°	1128.6	1119.6	1135.7	1135.7	1139.4	1134.0	1148.3	1153.7	1166.3	1166.3	1191.4
30°	1083.7	1071.2	1080.2	1078.3	1080.2	1072.9	1082.0	1083.7	1092.8	1090.8	1108.8
32.5°	1020.9	1003.1	1008.4	1003.1	997.6	986.8	997.6	994.0	1001.2	994.0	1010.1
35°	934.8	916.9	915.1	907.9	902.5	893.5	893.5	884.7	886.3	881.0	891.8
37.5°	841.5	818.2	814.7	800.2	791.3	780.5	780.5	773.4	764.3	760.8	769.7
40°	750.0	724.9	715.9	692.6	683.7	672.9	665.7	656.7	653.1	638.8	646.0
42.5°	671.0	644.1	624.5	599.2	590.3	574.1	563.3	552.6	547.3	531.1	538.3
45°	604.6	572.4	550.8	518.6	506.0	488.1	471.9	459.4	446.8	439.5	436.0
47.5°	549.1	514.9	486.2	450.3	430.6	414.5	392.9	380.4	364.3	355.2	349.8
50°	502.4	464.8	432.4	391.2	371.4	353.5	328.3	308.6	294.3	279.9	276.4
52.5°	461.1	421.7	385.7	339.0	315.8	294.3	267.3	245.9	233.2	217.1	215.3
55°	412.7	378.6	339.0	290.7	267.3	245.9	217.1	195.6	179.4	168.7	165.1
57.5°	360.7	328.3	290.7	242.2	218.9	195.6	168.7	148.9	134.6	125.6	123.8
60°	312.2	281.7	245.9	197.3	173.9	154.3	125.6	105.9	93.3	86.1	82.5
62.5°	276.4	247.6	213.5	168.7	147.1	127.4	100.5	82.5	71.8	64.6	61.0
65°	242.2	213.5	183.1	141.7	123.8	105.9	80.8	64.6	53.8	46.6	43.0
67.5°	206.4	181.3	152.5	118.5	100.5	86.1	64.6	50.2	41.3	35.8	32.2
70°	170.4	147.1	123.8	95.1	82.5	68.2	50.2	39.5	30.5	27.0	23.4
72.5°	134.6	116.6	96.9	73.5	62.8	53.8	39.5	28.7	23.4	19.7	16.2
75°	100.5	87.9	71.8	55.5	46.6	39.5	28.7	21.6	18.0	14.3	12.6
77.5°	71.8	61.0	50.2	37.7	34.2	28.7	19.7	16.2	12.6	9.0	7.2
80°	48.5	43.0	34.2	27.0	21.6	19.7	14.3	10.8	7.2	5.4	5.4
82.5°	32.2	27.0	21.6	16.2	14.3	12.6	9.0	7.2	5.4	3.6	3.6
85°	19.7	16.2	12.6	9.0	9.0	7.2	5.4	3.6	1.8	1.8	1.8
87.5°	9.0	7.2	5.4	3.6	3.6	1.8	1.8	1.8	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°	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3
2.5°	1410.2	1399.6	1392.3	1401.3	1404.9	1399.6	1404.9	1413.8	1422.9	1424.6	1399.6
5°	1412.1	1401.3	1397.6	1408.4	1410.2	1408.4	1413.8	1426.5	1437.2	1440.8	1415.7
7.5°	1412.1	1404.9	1403.1	1415.7	1417.5	1415.7	1424.6	1439.0	1449.8	1456.9	1431.8
10°	1408.4	1404.9	1406.7	1417.5	1421.0	1421.0	1433.5	1449.8	1460.5	1467.6	1442.6
12.5°	1403.1	1403.1	1403.1	1415.7	1419.3	1421.0	1431.8	1453.4	1460.5	1471.3	1446.2
15°	1394.1	1394.1	1394.1	1406.7	1412.1	1412.1	1424.6	1444.3	1453.4	1464.1	1439.0
17.5°	1378.0	1378.0	1379.7	1390.5	1396.0	1396.0	1408.4	1430.1	1435.4	1448.0	1422.9
20°	1354.6	1354.6	1356.4	1367.2	1372.6	1369.0	1385.2	1403.1	1408.4	1419.3	1394.1
22.5°	1320.5	1320.5	1320.5	1331.4	1335.0	1333.0	1349.3	1365.4	1365.4	1379.7	1352.9
25°	1270.3	1273.9	1270.3	1281.1	1284.7	1282.9	1297.2	1311.6	1308.0	1324.2	1297.2
27.5°	1209.3	1207.5	1207.5	1216.5	1216.5	1214.7	1225.4	1241.7	1238.0	1248.7	1223.7
30°	1125.0	1130.4	1121.4	1134.0	1128.6	1125.0	1132.1	1146.5	1141.1	1150.1	1130.4
32.5°	1028.1	1020.9	1020.9	1020.9	1024.4	1015.6	1022.8	1029.9	1024.4	1033.5	1012.0
35°	900.7	902.5	897.1	899.0	900.7	889.9	897.1	904.3	897.1	902.5	882.7
37.5°	773.4	775.0	762.6	769.7	762.6	758.9	766.2	769.7	762.6	768.0	746.4
40°	646.0	642.4	640.5	640.5	642.4	633.4	638.8	644.1	638.8	642.4	622.6
42.5°	534.7	532.9	529.4	531.1	525.7	524.0	525.7	531.1	525.7	529.4	514.9
45°	437.8	434.1	428.7	430.6	430.6	421.7	427.0	430.6	425.2	427.0	414.5
47.5°	348.1	342.7	342.7	341.0	341.0	337.4	342.7	341.0	335.5	339.0	326.6
50°	270.9	267.3	267.3	267.3	267.3	261.9	263.8	267.3	261.9	261.9	254.7
52.5°	211.7	206.4	202.8	202.8	202.8	200.9	200.9	202.8	197.3	197.3	195.6
55°	159.7	157.9	152.5	152.5	152.5	147.1	148.9	148.9	147.1	147.1	141.7
57.5°	118.5	113.0	109.3	109.3	105.9	105.9	104.1	105.9	102.3	102.3	98.7
60°	78.9	75.4	73.5	71.8	71.8	70.0	71.8	70.0	70.0	68.2	66.3
62.5°	57.4	53.8	50.2	50.2	50.2	48.5	48.5	48.5	48.5	48.5	46.6
65°	41.3	37.7	37.7	35.8	35.8	34.2	34.2	34.2	34.2	34.2	32.2
67.5°	28.7	27.0	25.1	25.1	25.1	25.1	25.1	25.1	23.4	23.4	23.4
70°	21.6	19.7	18.0	18.0	18.0	18.0	18.0	16.2	18.0	18.0	16.2
72.5°	14.3	14.3	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
75°	10.8	10.8	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
77.5°	7.2	7.2	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
80°	5.4	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
82.5°	3.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	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: P857702

CATALOG NUMBER: LX4C30D010 EX4C309030 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3	1392.3
2.5°	1426.5	1424.6	1421.0	1426.5	1412.1	1406.7	1404.9	1421.0
5°	1446.2	1442.6	1442.6	1448.0	1431.8	1428.3	1424.6	1442.6
7.5°	1464.1	1460.5	1460.5	1465.9	1451.5	1448.0	1444.3	1462.3
10°	1474.8	1474.8	1474.8	1478.4	1465.9	1462.3	1460.5	1478.4
12.5°	1480.3	1480.3	1478.4	1485.6	1469.5	1469.5	1465.9	1483.9
15°	1473.1	1473.1	1473.1	1478.4	1464.1	1460.5	1460.5	1474.8
17.5°	1455.1	1455.1	1453.4	1458.8	1442.6	1442.6	1440.8	1456.9
20°	1428.3	1428.3	1424.6	1431.8	1415.7	1410.2	1408.4	1424.6
22.5°	1385.2	1383.3	1381.6	1385.2	1370.8	1367.2	1365.4	1379.7
25°	1329.5	1327.8	1324.2	1327.8	1311.6	1306.2	1306.2	1317.0
27.5°	1250.6	1250.6	1245.3	1250.6	1232.5	1230.9	1229.0	1241.7
30°	1153.7	1146.5	1142.9	1150.1	1132.1	1132.1	1128.6	1141.1
32.5°	1033.5	1026.4	1024.4	1028.1	1012.0	1006.6	1013.7	1020.9
35°	895.4	897.1	889.9	889.9	875.6	877.3	879.2	889.9
37.5°	762.6	758.9	757.2	758.9	748.2	744.6	741.0	751.8
40°	638.8	629.9	628.0	628.0	619.1	617.2	619.1	624.5
42.5°	522.1	520.3	513.2	516.7	507.8	511.3	509.5	509.5
45°	421.7	423.5	416.2	421.7	414.5	409.0	409.0	412.7
47.5°	333.7	333.7	331.9	331.9	326.6	328.3	324.7	330.2
50°	258.4	258.4	254.7	256.6	253.0	253.0	251.1	253.0
52.5°	197.3	195.6	195.6	193.8	190.1	192.0	193.8	190.1
55°	143.5	145.4	141.7	143.5	140.0	141.7	140.0	141.7
57.5°	98.7	100.5	96.9	100.5	96.9	98.7	96.9	96.9
60°	68.2	68.2	66.3	68.2	66.3	66.3	64.6	68.2
62.5°	46.6	46.6	46.6	46.6	46.6	45.0	46.6	46.6
65°	34.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2
67.5°	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4
70°	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
72.5°	12.6	12.6	12.6	12.6	12.6	12.6	12.6	12.6
75°	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
77.5°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
80°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
85°	1.8	1.8	1.8	0.0	1.8	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)