

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: P857542

Luminaire Tested: **LX4C30D010 EX4C309030 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857542
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
Light Source: -
Ballast/Driver: -

Summary

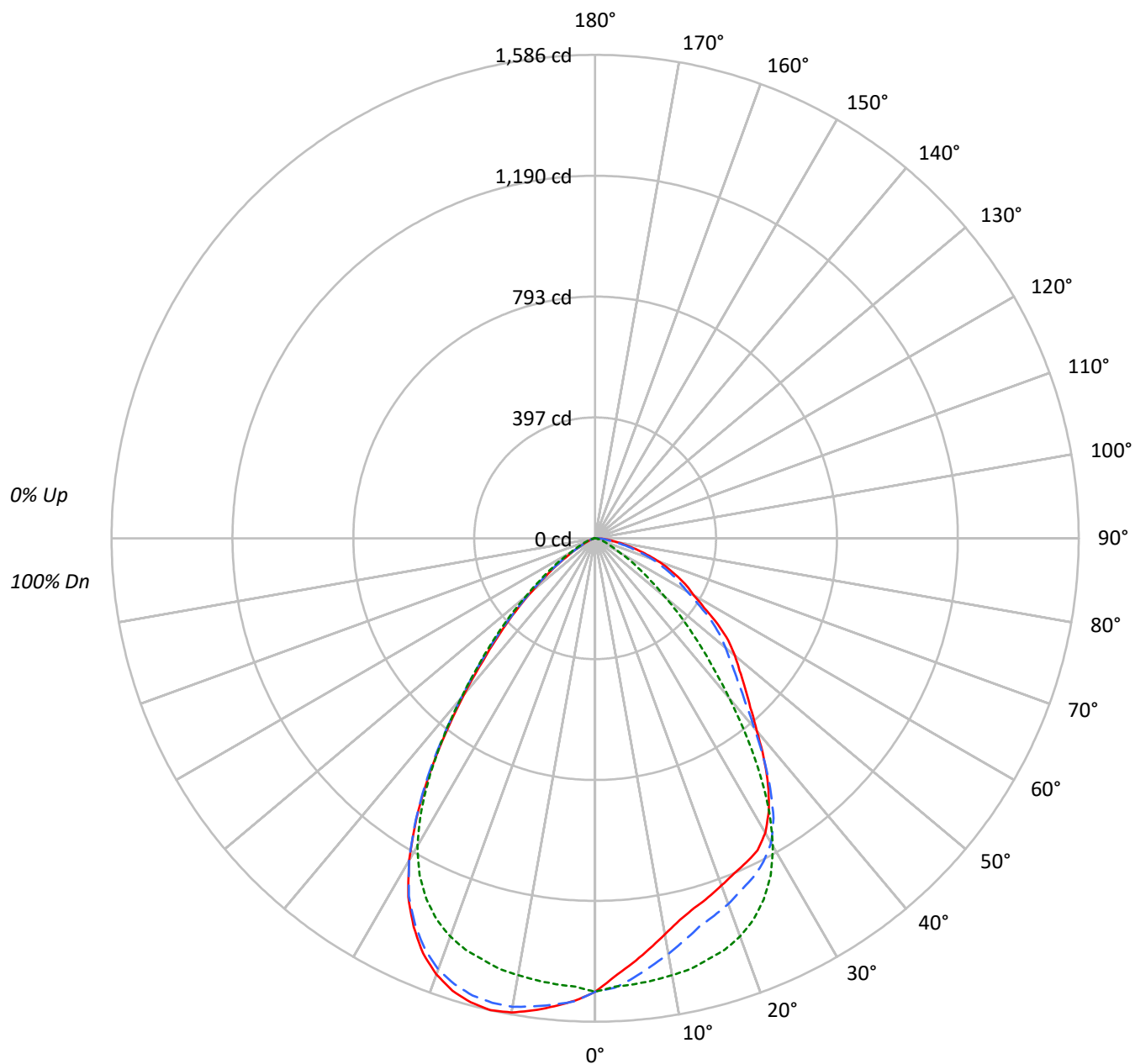
Lumens per Lamp: N/A
Luminaire Lumens: 2608.0 lumens
Efficiency: N/A
Efficacy: 82.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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°	182781	182781	182781
5°	172603	181124	190102
10°	164556	181534	197078
15°	159722	181916	200447
20°	158415	181726	199022
25°	159059	177250	190765
30°	158300	165365	172983
35°	148372	141188	142628
40°	132212	109471	107017
45°	120924	81606	76620
50°	114332	57166	51661
55°	105145	38597	32428
60°	91845	22605	17887
65°	86947	14477	10029
70°	79203	10345	6214
75°	65552	7262	4557
80°	51505	4103	2688
85°	45952	2819	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.6	5.4
10°-20°	403.3	15.5
20°-30°	597.8	22.9
30°-40°	598.7	23.0
40°-50°	418.4	16.0
50°-60°	249.0	9.5
60°-70°	129.9	5.0
70°-80°	57.8	2.2
80°-90°	12.6	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°	1141.7	43.8
0°-40°	1740.3	66.7
0°-60°	2407.7	92.3
0°-90°	2608.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2608.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1488	1488	1488	1488	1488	
5°	1400	1448	1469	1536	1542	131
15°	1256	1319	1430	1553	1576	356
25°	1173	1227	1308	1398	1407	541
35°	989	1001	941	959	951	613
45°	696	662	470	454	441	540
55°	491	460	180	157	151	436
65°	299	274	50	36	34	296
75°	138	121	15	10	10	149
85°	33	25	2	2	0	36
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°	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8
2.5°	1439.9	1457.2	1439.9	1445.7	1468.7	1447.5	1459.0	1459.0	1453.3	1466.7	1476.3
5°	1399.6	1416.9	1399.6	1407.3	1432.2	1411.1	1424.5	1420.7	1422.7	1434.2	1447.5
7.5°	1359.4	1372.8	1357.4	1367.0	1390.0	1372.8	1384.3	1384.3	1386.2	1403.4	1415.0
10°	1319.1	1330.6	1319.1	1326.8	1351.7	1336.4	1344.0	1345.9	1351.7	1367.0	1384.3
12.5°	1282.6	1292.3	1280.8	1292.3	1313.3	1298.0	1307.6	1309.5	1315.3	1332.5	1351.7
15°	1255.8	1265.4	1253.9	1263.5	1282.6	1271.1	1278.8	1282.6	1286.5	1301.8	1319.1
17.5°	1234.8	1242.4	1232.8	1244.3	1259.6	1246.3	1257.8	1257.8	1263.5	1278.8	1298.0
20°	1211.7	1219.4	1211.7	1221.3	1238.6	1227.1	1236.6	1236.6	1242.4	1259.6	1276.9
22.5°	1190.7	1194.5	1190.7	1198.3	1215.5	1206.0	1211.7	1213.6	1219.4	1234.8	1250.1
25°	1173.4	1181.0	1177.2	1184.9	1196.4	1186.8	1192.5	1194.5	1200.2	1213.6	1227.1
27.5°	1154.2	1158.0	1154.2	1163.8	1173.4	1165.7	1171.5	1169.5	1173.4	1184.9	1196.4
30°	1115.9	1119.7	1119.7	1125.4	1133.2	1129.3	1135.0	1129.3	1133.2	1142.7	1154.2
32.5°	1060.3	1062.2	1064.1	1069.9	1075.6	1069.9	1073.7	1073.7	1073.7	1081.4	1089.0
35°	989.3	993.1	991.3	995.1	1000.8	998.9	998.9	997.0	993.1	997.0	1000.8
37.5°	908.8	903.0	903.0	908.8	912.6	905.0	908.8	905.0	905.0	906.9	906.9
40°	824.4	818.7	824.4	826.4	828.2	824.4	822.5	818.7	812.9	814.9	811.0
42.5°	753.5	749.6	751.6	751.6	753.5	749.6	751.6	743.9	738.1	734.3	728.6
45°	696.0	690.3	696.0	692.1	692.1	690.3	688.3	684.5	676.8	671.1	661.5
47.5°	642.3	642.3	644.2	644.2	644.2	640.3	640.3	632.7	625.0	617.3	604.0
50°	598.2	594.3	602.0	602.0	596.3	594.3	596.3	586.7	581.0	571.4	557.9
52.5°	550.2	550.2	552.2	552.2	550.2	546.4	548.4	540.7	534.9	525.4	511.9
55°	490.9	487.0	492.7	492.7	490.9	488.9	490.9	485.1	479.4	471.7	460.1
57.5°	423.7	421.8	425.6	427.6	423.7	423.7	425.6	419.9	418.0	410.3	398.8
60°	373.8	372.0	375.8	377.7	373.8	373.8	373.8	366.2	362.3	354.7	347.0
62.5°	339.3	337.5	341.3	339.3	337.5	335.5	337.5	329.8	326.0	318.3	310.6
65°	299.1	301.0	303.0	303.0	301.0	299.1	299.1	295.3	291.5	283.8	274.2
67.5°	260.7	260.7	262.7	264.6	262.7	262.7	262.7	256.9	253.1	247.3	235.8
70°	220.5	218.6	224.3	224.3	220.5	222.4	220.5	218.6	214.7	207.1	197.5
72.5°	178.3	178.3	180.2	180.2	178.3	178.3	178.3	176.4	170.6	166.8	157.2
75°	138.1	138.1	139.9	141.9	138.1	138.1	139.9	136.1	132.3	126.6	120.8
77.5°	103.6	101.6	103.6	103.6	101.6	101.6	101.6	99.7	97.8	92.0	86.3
80°	72.8	70.9	72.8	72.8	72.8	70.9	70.9	69.0	69.0	65.2	59.4
82.5°	49.8	48.0	49.8	49.8	49.8	48.0	48.0	48.0	46.0	44.1	40.3
85°	32.6	30.7	30.7	32.6	30.7	30.7	30.7	30.7	28.8	26.8	25.0
87.5°	15.3	15.3	15.3	15.3	15.3	15.3	15.3	13.5	13.5	13.5	11.5
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°	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8
2.5°	1468.7	1464.8	1476.3	1472.5	1474.4	1464.8	1480.2	1472.5	1482.0	1472.5	1491.7
5°	1443.7	1439.9	1457.2	1455.2	1457.2	1449.5	1466.7	1464.8	1476.3	1468.7	1489.7
7.5°	1416.9	1413.0	1432.2	1434.2	1438.0	1430.3	1453.3	1453.3	1464.8	1462.9	1485.9
10°	1386.2	1388.1	1407.3	1411.1	1418.8	1415.0	1436.0	1441.8	1457.2	1455.2	1484.0
12.5°	1357.4	1357.4	1382.4	1390.0	1395.8	1393.9	1418.8	1426.5	1443.7	1447.5	1474.4
15°	1328.7	1330.6	1353.6	1365.1	1372.8	1370.9	1397.7	1407.3	1428.4	1430.3	1462.9
17.5°	1305.6	1303.8	1328.7	1338.3	1349.8	1347.9	1376.6	1388.1	1409.2	1415.0	1445.7
20°	1286.5	1284.6	1307.6	1319.1	1326.8	1324.9	1353.6	1367.0	1386.2	1390.0	1420.7
22.5°	1263.5	1259.6	1282.6	1292.3	1299.9	1298.0	1322.9	1332.5	1351.7	1355.5	1384.3
25°	1236.6	1232.8	1253.9	1259.6	1265.4	1261.6	1282.6	1288.4	1303.8	1307.6	1336.4
27.5°	1206.0	1196.4	1213.6	1213.6	1217.5	1211.7	1227.1	1232.8	1246.3	1246.3	1273.1
30°	1158.0	1144.7	1154.2	1152.3	1154.2	1146.5	1156.2	1158.0	1167.7	1165.7	1184.9
32.5°	1090.9	1071.8	1077.5	1071.8	1066.0	1054.5	1066.0	1062.2	1069.9	1062.2	1079.4
35°	998.9	979.8	977.8	970.1	964.4	954.8	954.8	945.3	947.1	941.4	952.9
37.5°	899.2	874.3	870.5	855.1	845.5	834.0	834.0	826.4	816.7	812.9	822.5
40°	801.4	774.6	765.0	740.1	730.5	719.0	711.3	701.7	697.9	682.6	690.3
42.5°	717.1	688.3	667.3	640.3	630.8	613.5	602.0	590.5	584.8	567.5	575.2
45°	646.1	611.6	588.6	554.1	540.7	521.5	504.2	490.9	477.4	469.7	465.9
47.5°	586.7	550.2	519.6	481.2	460.1	442.9	419.9	406.5	389.2	379.6	373.8
50°	536.9	496.6	462.1	418.0	396.9	377.7	350.8	329.8	314.5	299.1	295.3
52.5°	492.7	450.6	412.2	362.3	337.5	314.5	285.7	262.7	249.2	232.0	230.1
55°	441.0	404.6	362.3	310.6	285.7	262.7	232.0	209.0	191.7	180.2	176.4
57.5°	385.4	350.8	310.6	258.8	233.9	209.0	180.2	159.1	143.8	134.2	132.3
60°	333.6	301.0	262.7	210.9	185.9	164.9	134.2	113.1	99.7	92.0	88.2
62.5°	295.3	264.6	228.2	180.2	157.2	136.1	107.4	88.2	76.7	69.0	65.2
65°	258.8	228.2	195.6	151.4	132.3	113.1	86.3	69.0	57.5	49.8	46.0
67.5°	220.5	193.7	162.9	126.6	107.4	92.0	69.0	53.7	44.1	38.3	34.5
70°	182.1	157.2	132.3	101.6	88.2	72.8	53.7	42.2	32.6	28.8	25.0
72.5°	143.8	124.6	103.6	78.6	67.1	57.5	42.2	30.7	25.0	21.1	17.3
75°	107.4	93.9	76.7	59.4	49.8	42.2	30.7	23.0	19.2	15.3	13.5
77.5°	76.7	65.2	53.7	40.3	36.5	30.7	21.1	17.3	13.5	9.6	7.7
80°	51.8	46.0	36.5	28.8	23.0	21.1	15.3	11.5	7.7	5.8	5.8
82.5°	34.5	28.8	23.0	17.3	15.3	13.5	9.6	7.7	5.8	3.8	3.8
85°	21.1	17.3	13.5	9.6	9.6	7.7	5.8	3.8	2.0	2.0	2.0
87.5°	9.6	7.7	5.8	3.8	3.8	2.0	2.0	2.0	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8
2.5°	1507.0	1495.5	1487.8	1497.4	1501.2	1495.5	1501.2	1510.8	1520.4	1522.3	1495.5
5°	1508.9	1497.4	1493.5	1505.0	1507.0	1505.0	1510.8	1524.3	1535.8	1539.6	1512.8
7.5°	1508.9	1501.2	1499.3	1512.8	1514.7	1512.8	1522.3	1537.7	1549.2	1556.8	1530.0
10°	1505.0	1501.2	1503.2	1514.7	1518.5	1518.5	1531.9	1549.2	1560.7	1568.3	1541.5
12.5°	1499.3	1499.3	1499.3	1512.8	1516.6	1518.5	1530.0	1553.0	1560.7	1572.2	1545.3
15°	1489.7	1489.7	1489.7	1503.2	1508.9	1508.9	1522.3	1543.4	1553.0	1564.5	1537.7
17.5°	1472.5	1472.5	1474.4	1485.9	1491.7	1491.7	1505.0	1528.1	1533.8	1547.3	1520.4
20°	1447.5	1447.5	1449.5	1461.0	1466.7	1462.9	1480.2	1499.3	1505.0	1516.6	1489.7
22.5°	1411.1	1411.1	1411.1	1422.7	1426.5	1424.5	1441.8	1459.0	1459.0	1474.4	1445.7
25°	1357.4	1361.3	1357.4	1368.9	1372.8	1370.9	1386.2	1401.5	1397.7	1415.0	1386.2
27.5°	1292.3	1290.3	1290.3	1299.9	1299.9	1298.0	1309.5	1326.8	1322.9	1334.4	1307.6
30°	1202.2	1207.9	1198.3	1211.7	1206.0	1202.2	1209.8	1225.1	1219.4	1229.0	1207.9
32.5°	1098.6	1090.9	1090.9	1090.9	1094.7	1085.2	1092.9	1100.5	1094.7	1104.4	1081.4
35°	962.5	964.4	958.6	960.6	962.5	951.0	958.6	966.3	958.6	964.4	943.3
37.5°	826.4	828.2	814.9	822.5	814.9	811.0	818.7	822.5	814.9	820.6	797.6
40°	690.3	686.4	684.5	684.5	686.4	676.8	682.6	688.3	682.6	686.4	665.3
42.5°	571.4	569.5	565.6	567.5	561.7	559.9	561.7	567.5	561.7	565.6	550.2
45°	467.8	463.9	458.2	460.1	460.1	450.6	456.3	460.1	454.4	456.3	442.9
47.5°	372.0	366.2	366.2	364.3	364.3	360.5	366.2	364.3	358.5	362.3	349.0
50°	289.5	285.7	285.7	285.7	285.7	279.9	281.8	285.7	279.9	279.9	272.2
52.5°	226.2	220.5	216.7	216.7	216.7	214.7	214.7	216.7	210.9	210.9	209.0
55°	170.6	168.7	162.9	162.9	162.9	157.2	159.1	159.1	157.2	157.2	151.4
57.5°	126.6	120.8	116.9	116.9	113.1	113.1	111.2	113.1	109.3	109.3	105.4
60°	84.3	80.5	78.6	76.7	76.7	74.8	76.7	74.8	74.8	72.8	70.9
62.5°	61.3	57.5	53.7	53.7	53.7	51.8	51.8	51.8	51.8	51.8	49.8
65°	44.1	40.3	40.3	38.3	38.3	36.5	36.5	36.5	36.5	36.5	34.5
67.5°	30.7	28.8	26.8	26.8	26.8	26.8	26.8	26.8	25.0	25.0	25.0
70°	23.0	21.1	19.2	19.2	19.2	19.2	19.2	17.3	19.2	19.2	17.3
72.5°	15.3	15.3	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
75°	11.5	11.5	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
77.5°	7.7	7.7	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
80°	5.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
82.5°	3.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
85°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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: P857542

CATALOG NUMBER: LX4C30D010 EX4C309030 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8	1487.8
2.5°	1524.3	1522.3	1518.5	1524.3	1508.9	1503.2	1501.2	1518.5
5°	1545.3	1541.5	1541.5	1547.3	1530.0	1526.2	1522.3	1541.5
7.5°	1564.5	1560.7	1560.7	1566.4	1551.1	1547.3	1543.4	1562.6
10°	1576.0	1576.0	1576.0	1579.8	1566.4	1562.6	1560.7	1579.8
12.5°	1581.8	1581.8	1579.8	1587.5	1570.3	1570.3	1566.4	1585.6
15°	1574.1	1574.1	1574.1	1579.8	1564.5	1560.7	1560.7	1576.0
17.5°	1554.9	1554.9	1553.0	1558.8	1541.5	1541.5	1539.6	1556.8
20°	1526.2	1526.2	1522.3	1530.0	1512.8	1507.0	1505.0	1522.3
22.5°	1480.2	1478.2	1476.3	1480.2	1464.8	1461.0	1459.0	1474.4
25°	1420.7	1418.8	1415.0	1418.8	1401.5	1395.8	1395.8	1407.3
27.5°	1336.4	1336.4	1330.6	1336.4	1317.1	1315.3	1313.3	1326.8
30°	1232.8	1225.1	1221.3	1229.0	1209.8	1209.8	1206.0	1219.4
32.5°	1104.4	1096.7	1094.7	1098.6	1081.4	1075.6	1083.3	1090.9
35°	956.8	958.6	951.0	951.0	935.6	937.5	939.5	951.0
37.5°	814.9	811.0	809.1	811.0	799.5	795.7	791.9	803.4
40°	682.6	673.0	671.1	671.1	661.5	659.6	661.5	667.3
42.5°	557.9	556.0	548.4	552.2	542.6	546.4	544.5	544.5
45°	450.6	452.5	444.8	450.6	442.9	437.1	437.1	441.0
47.5°	356.6	356.6	354.7	354.7	349.0	350.8	347.0	352.8
50°	276.1	276.1	272.2	274.2	270.3	270.3	268.4	270.3
52.5°	210.9	209.0	209.0	207.1	203.2	205.2	207.1	203.2
55°	153.4	155.3	151.4	153.4	149.6	151.4	149.6	151.4
57.5°	105.4	107.4	103.6	107.4	103.6	105.4	103.6	103.6
60°	72.8	72.8	70.9	72.8	70.9	70.9	69.0	72.8
62.5°	49.8	49.8	49.8	49.8	49.8	48.0	49.8	49.8
65°	36.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
67.5°	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
70°	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3
72.5°	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
75°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
77.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
80°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
82.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
85°	2.0	2.0	2.0	0.0	2.0	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)