

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: P857605

Luminaire Tested: **LX4C30D010 EX4C309050 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857605
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 EX4C309050 4LBSWNH
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

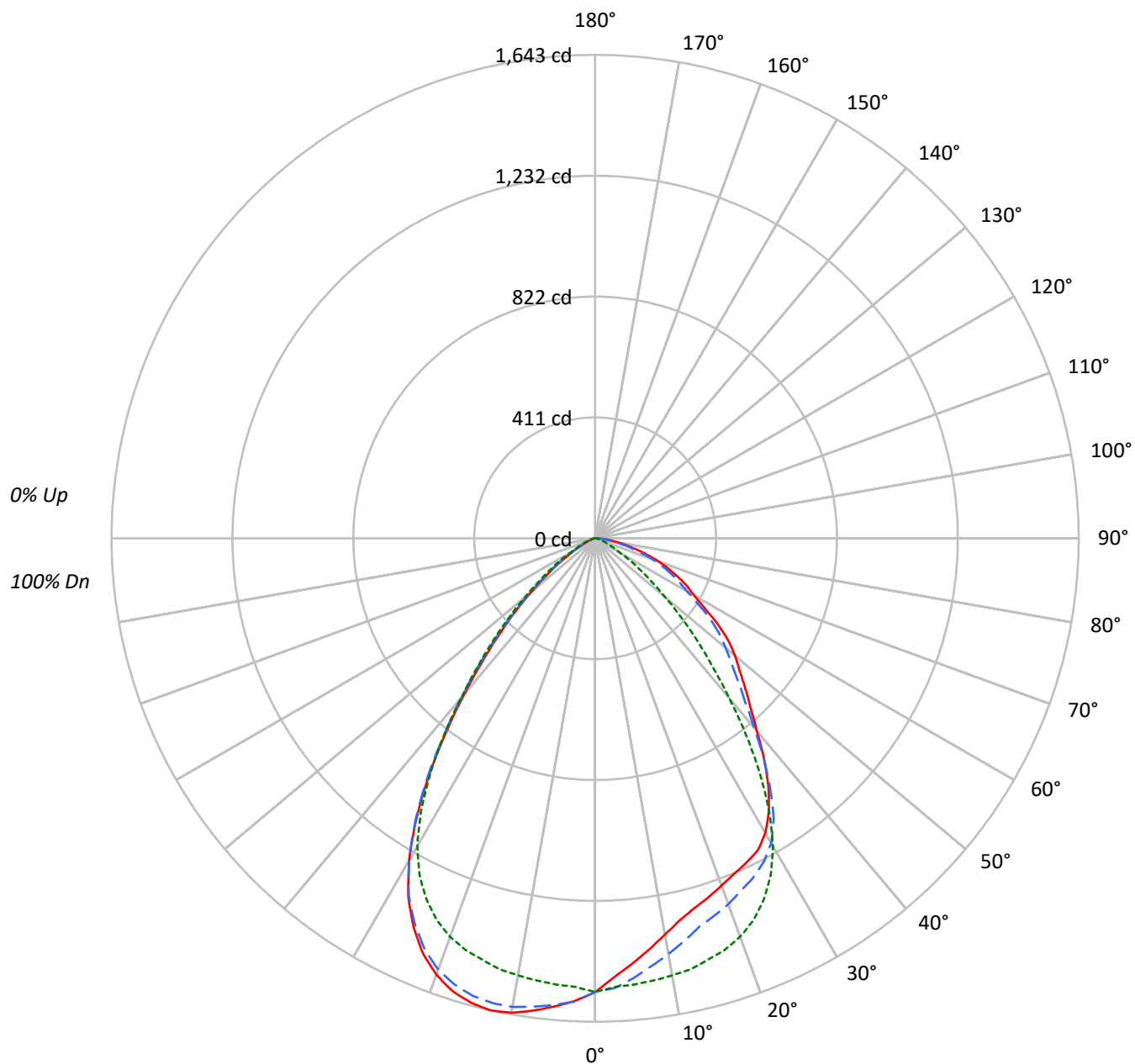
Lumens per Lamp: N/A
Luminaire Lumens: 2703.0 lumens
Efficiency: N/A
Efficacy: 85.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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°	189440	189440	189440
5°	178892	187722	197020
10°	170544	188146	204264
15°	165547	188542	207748
20°	164181	188354	206278
25°	164847	183703	197705
30°	164060	171394	179281
35°	153771	146332	147817
40°	137023	113448	110915
45°	125319	84577	79400
50°	118498	59249	53554
55°	108958	40010	33628
60°	95211	23416	18551
65°	90116	15000	10407
70°	82077	10704	6430
75°	67925	7547	4747
80°	53415	4245	2830
85°	47644	2819	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	145.7	5.4
10°-20°	418.0	15.5
20°-30°	619.6	22.9
30°-40°	620.5	23.0
40°-50°	433.6	16.0
50°-60°	258.0	9.5
60°-70°	134.7	5.0
70°-80°	59.9	2.2
80°-90°	13.1	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°	1183.3	43.8
0°-40°	1803.7	66.7
0°-60°	2495.4	92.3
0°-90°	2703.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2703.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1542	1542	1542	1542	1542	
5°	1451	1500	1522	1592	1598	136
15°	1302	1367	1482	1610	1633	369
25°	1216	1272	1355	1449	1458	560
35°	1025	1037	976	994	986	636
45°	721	686	487	471	457	560
55°	509	477	187	163	157	451
65°	310	284	52	38	36	307
75°	143	125	16	10	10	155
85°	34	26	2	2	0	38
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°	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0
2.5°	1492.3	1510.2	1492.3	1498.3	1522.2	1500.3	1512.2	1512.2	1506.3	1520.1	1530.1
5°	1450.6	1468.5	1450.6	1458.5	1484.4	1462.5	1476.4	1472.5	1474.5	1486.4	1500.3
7.5°	1408.9	1422.8	1406.9	1416.8	1440.7	1422.8	1434.7	1434.7	1436.7	1454.5	1466.5
10°	1367.1	1379.1	1367.1	1375.1	1401.0	1385.1	1393.0	1395.0	1401.0	1416.8	1434.7
12.5°	1329.4	1339.3	1327.4	1339.3	1361.1	1345.3	1355.2	1357.2	1363.2	1381.1	1401.0
15°	1301.6	1311.5	1299.6	1309.5	1329.4	1317.4	1325.4	1329.4	1333.3	1349.2	1367.1
17.5°	1279.7	1287.7	1277.7	1289.6	1305.5	1291.7	1303.6	1303.6	1309.5	1325.4	1345.3
20°	1255.8	1263.8	1255.8	1265.8	1283.7	1271.8	1281.7	1281.7	1287.7	1305.5	1323.4
22.5°	1234.0	1238.0	1234.0	1242.0	1259.8	1249.9	1255.8	1257.9	1263.8	1279.7	1295.6
25°	1216.1	1224.1	1220.1	1228.0	1239.9	1230.0	1236.0	1238.0	1243.9	1257.9	1271.8
27.5°	1196.2	1200.2	1196.2	1206.2	1216.1	1208.2	1214.2	1212.1	1216.1	1228.0	1239.9
30°	1156.5	1160.5	1160.5	1166.4	1174.4	1170.5	1176.4	1170.5	1174.4	1184.3	1196.2
32.5°	1098.9	1100.9	1102.8	1108.8	1114.8	1108.8	1112.8	1112.8	1112.8	1120.8	1128.7
35°	1025.3	1029.3	1027.4	1031.3	1037.3	1035.3	1035.3	1033.3	1029.3	1033.3	1037.3
37.5°	941.9	935.9	935.9	941.9	945.9	937.9	941.9	937.9	937.9	939.9	939.9
40°	854.4	848.5	854.4	856.5	858.4	854.4	852.5	848.5	842.5	844.5	840.6
42.5°	781.0	776.9	779.0	779.0	781.0	776.9	779.0	771.0	765.0	761.0	755.1
45°	721.3	715.4	721.3	717.3	717.3	715.4	713.4	709.4	701.5	695.5	685.6
47.5°	665.7	665.7	667.6	667.6	667.6	663.7	663.7	655.7	647.8	639.8	626.0
50°	620.0	616.0	623.9	623.9	618.0	616.0	618.0	608.1	602.1	592.2	578.2
52.5°	570.3	570.3	572.3	572.3	570.3	566.3	568.3	560.4	554.4	544.5	530.5
55°	508.7	504.8	510.7	510.7	508.7	506.7	508.7	502.7	496.8	488.9	476.9
57.5°	439.2	437.2	441.1	443.1	439.2	439.2	441.1	435.2	433.2	425.2	413.3
60°	387.5	385.5	389.5	391.5	387.5	387.5	387.5	379.5	375.5	367.6	359.6
62.5°	351.7	349.8	353.7	351.7	349.8	347.7	349.8	341.8	337.8	329.9	321.9
65°	310.0	312.0	314.0	314.0	312.0	310.0	310.0	306.1	302.1	294.1	284.2
67.5°	270.2	270.2	272.2	274.2	272.2	272.2	272.2	266.2	262.3	256.4	244.4
70°	228.5	226.5	232.5	232.5	228.5	230.5	228.5	226.5	222.5	214.6	204.7
72.5°	184.8	184.8	186.8	186.8	184.8	184.8	184.8	182.8	176.8	172.9	163.0
75°	143.1	143.1	145.0	147.1	143.1	143.1	145.0	141.1	137.1	131.2	125.2
77.5°	107.3	105.3	107.3	107.3	105.3	105.3	105.3	103.4	101.3	95.3	89.4
80°	75.5	73.5	75.5	75.5	75.5	73.5	73.5	71.5	71.5	67.5	61.6
82.5°	51.6	49.7	51.6	51.6	51.6	49.7	49.7	49.7	47.7	45.7	41.8
85°	33.8	31.8	31.8	33.8	31.8	31.8	31.8	31.8	29.8	27.8	25.9
87.5°	15.9	15.9	15.9	15.9	15.9	15.9	15.9	13.9	13.9	13.9	11.9
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°	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0
2.5°	1522.2	1518.2	1530.1	1526.1	1528.1	1518.2	1534.1	1526.1	1536.0	1526.1	1546.0
5°	1496.3	1492.3	1510.2	1508.2	1510.2	1502.3	1520.1	1518.2	1530.1	1522.2	1544.0
7.5°	1468.5	1464.5	1484.4	1486.4	1490.4	1482.4	1506.3	1506.3	1518.2	1516.2	1540.0
10°	1436.7	1438.7	1458.5	1462.5	1470.5	1466.5	1488.4	1494.3	1510.2	1508.2	1538.0
12.5°	1406.9	1406.9	1432.7	1440.7	1446.6	1444.7	1470.5	1478.5	1496.3	1500.3	1528.1
15°	1377.1	1379.1	1402.9	1414.8	1422.8	1420.8	1448.6	1458.5	1480.4	1482.4	1516.2
17.5°	1353.2	1351.3	1377.1	1387.0	1398.9	1397.0	1426.7	1438.7	1460.5	1466.5	1498.3
20°	1333.3	1331.4	1355.2	1367.1	1375.1	1373.1	1402.9	1416.8	1436.7	1440.7	1472.5
22.5°	1309.5	1305.5	1329.4	1339.3	1347.3	1345.3	1371.1	1381.1	1401.0	1404.9	1434.7
25°	1281.7	1277.7	1299.6	1305.5	1311.5	1307.6	1329.4	1335.4	1351.3	1355.2	1385.1
27.5°	1249.9	1239.9	1257.9	1257.9	1261.8	1255.8	1271.8	1277.7	1291.7	1291.7	1319.5
30°	1200.2	1186.4	1196.2	1194.3	1196.2	1188.3	1198.3	1200.2	1210.2	1208.2	1228.0
32.5°	1130.7	1110.8	1116.8	1110.8	1104.9	1093.0	1104.9	1100.9	1108.8	1100.9	1118.7
35°	1035.3	1015.4	1013.4	1005.5	999.6	989.6	989.6	979.7	981.6	975.7	987.6
37.5°	931.9	906.2	902.2	886.3	876.3	864.4	864.4	856.5	846.5	842.5	852.5
40°	830.6	802.8	792.9	767.0	757.1	745.1	737.2	727.3	723.3	707.4	715.4
42.5°	743.2	713.4	691.6	663.7	653.8	635.9	623.9	612.0	606.1	588.2	596.1
45°	669.7	633.9	610.1	574.2	560.4	540.5	522.6	508.7	494.8	486.8	482.9
47.5°	608.1	570.3	538.5	498.8	476.9	459.0	435.2	421.3	403.4	393.5	387.5
50°	556.4	514.7	478.9	433.2	411.4	391.5	363.6	341.8	325.9	310.0	306.1
52.5°	510.7	467.0	427.3	375.5	349.8	325.9	296.1	272.2	258.3	240.5	238.4
55°	457.0	419.3	375.5	321.9	296.1	272.2	240.5	216.6	198.7	186.8	182.8
57.5°	399.4	363.6	321.9	268.3	242.4	216.6	186.8	164.9	149.0	139.1	137.1
60°	345.8	312.0	272.2	218.6	192.7	170.9	139.1	117.2	103.4	95.3	91.4
62.5°	306.1	274.2	236.5	186.8	163.0	141.1	111.3	91.4	79.5	71.5	67.5
65°	268.3	236.5	202.7	157.0	137.1	117.2	89.4	71.5	59.6	51.6	47.7
67.5°	228.5	200.7	168.9	131.2	111.3	95.3	71.5	55.6	45.7	39.7	35.8
70°	188.7	163.0	137.1	105.3	91.4	75.5	55.6	43.7	33.8	29.8	25.9
72.5°	149.0	129.2	107.3	81.5	69.6	59.6	43.7	31.8	25.9	21.9	17.9
75°	111.3	97.4	79.5	61.6	51.6	43.7	31.8	23.8	19.9	15.9	13.9
77.5°	79.5	67.5	55.6	41.8	37.8	31.8	21.9	17.9	13.9	10.0	7.9
80°	53.7	47.7	37.8	29.8	23.8	21.9	15.9	11.9	7.9	6.0	6.0
82.5°	35.8	29.8	23.8	17.9	15.9	13.9	10.0	7.9	6.0	4.0	4.0
85°	21.9	17.9	13.9	10.0	10.0	7.9	6.0	4.0	2.0	2.0	2.0
87.5°	10.0	7.9	6.0	4.0	4.0	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°	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0
2.5°	1561.9	1550.0	1542.0	1551.9	1555.9	1550.0	1555.9	1565.9	1575.8	1577.8	1550.0
5°	1563.9	1551.9	1547.9	1559.9	1561.9	1559.9	1565.9	1579.8	1591.7	1595.7	1567.9
7.5°	1563.9	1555.9	1553.9	1567.9	1569.8	1567.9	1577.8	1593.7	1605.6	1613.5	1585.7
10°	1559.9	1555.9	1557.9	1569.8	1573.8	1573.8	1587.7	1605.6	1617.5	1625.4	1597.6
12.5°	1553.9	1553.9	1553.9	1567.9	1571.9	1573.8	1585.7	1609.6	1617.5	1629.4	1601.6
15°	1544.0	1544.0	1544.0	1557.9	1563.9	1563.9	1577.8	1599.7	1609.6	1621.5	1593.7
17.5°	1526.1	1526.1	1528.1	1540.0	1546.0	1546.0	1559.9	1583.8	1589.7	1603.6	1575.8
20°	1500.3	1500.3	1502.3	1514.2	1520.1	1516.2	1534.1	1553.9	1559.9	1571.9	1544.0
22.5°	1462.5	1462.5	1462.5	1474.5	1478.5	1476.4	1494.3	1512.2	1512.2	1528.1	1498.3
25°	1406.9	1410.8	1406.9	1418.8	1422.8	1420.8	1436.7	1452.6	1448.6	1466.5	1436.7
27.5°	1339.3	1337.3	1337.3	1347.3	1347.3	1345.3	1357.2	1375.1	1371.1	1383.0	1355.2
30°	1245.9	1251.9	1242.0	1255.8	1249.9	1245.9	1253.9	1269.8	1263.8	1273.7	1251.9
32.5°	1138.6	1130.7	1130.7	1130.7	1134.6	1124.7	1132.7	1140.6	1134.6	1144.6	1120.8
35°	997.5	999.6	993.6	995.6	997.5	985.6	993.6	1001.5	993.6	999.6	977.7
37.5°	856.5	858.4	844.5	852.5	844.5	840.6	848.5	852.5	844.5	850.5	826.6
40°	715.4	711.4	709.4	709.4	711.4	701.5	707.4	713.4	707.4	711.4	689.5
42.5°	592.2	590.2	586.2	588.2	582.2	580.2	582.2	588.2	582.2	586.2	570.3
45°	484.8	480.8	474.9	476.9	476.9	467.0	472.9	476.9	471.0	472.9	459.0
47.5°	385.5	379.5	379.5	377.6	377.6	373.6	379.5	377.6	371.6	375.5	361.7
50°	300.1	296.1	296.1	296.1	296.1	290.1	292.1	296.1	290.1	290.1	282.1
52.5°	234.5	228.5	224.6	224.6	224.6	222.5	222.5	224.6	218.6	218.6	216.6
55°	176.8	174.9	168.9	168.9	168.9	163.0	164.9	164.9	163.0	163.0	157.0
57.5°	131.2	125.2	121.2	121.2	117.2	117.2	115.3	117.2	113.3	113.3	109.3
60°	87.4	83.4	81.5	79.5	79.5	77.5	79.5	77.5	77.5	75.5	73.5
62.5°	63.6	59.6	55.6	55.6	55.6	53.7	53.7	53.7	53.7	53.7	51.6
65°	45.7	41.8	41.8	39.7	39.7	37.8	37.8	37.8	37.8	37.8	35.8
67.5°	31.8	29.8	27.8	27.8	27.8	27.8	27.8	27.8	25.9	25.9	25.9
70°	23.8	21.9	19.9	19.9	19.9	19.9	19.9	17.9	19.9	19.9	17.9
72.5°	15.9	15.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
75°	11.9	11.9	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
77.5°	7.9	7.9	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
80°	6.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
82.5°	4.0	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: P857605

CATALOG NUMBER: LX4C30D010 EX4C309050 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0	1542.0
2.5°	1579.8	1577.8	1573.8	1579.8	1563.9	1557.9	1555.9	1573.8
5°	1601.6	1597.6	1597.6	1603.6	1585.7	1581.7	1577.8	1597.6
7.5°	1621.5	1617.5	1617.5	1623.5	1607.6	1603.6	1599.7	1619.5
10°	1633.4	1633.4	1633.4	1637.4	1623.5	1619.5	1617.5	1637.4
12.5°	1639.4	1639.4	1637.4	1645.3	1627.5	1627.5	1623.5	1643.4
15°	1631.4	1631.4	1631.4	1637.4	1621.5	1617.5	1617.5	1633.4
17.5°	1611.6	1611.6	1609.6	1615.6	1597.6	1597.6	1595.7	1613.5
20°	1581.7	1581.7	1577.8	1585.7	1567.9	1561.9	1559.9	1577.8
22.5°	1534.1	1532.1	1530.1	1534.1	1518.2	1514.2	1512.2	1528.1
25°	1472.5	1470.5	1466.5	1470.5	1452.6	1446.6	1446.6	1458.5
27.5°	1385.1	1385.1	1379.1	1385.1	1365.1	1363.2	1361.1	1375.1
30°	1277.7	1269.8	1265.8	1273.7	1253.9	1253.9	1249.9	1263.8
32.5°	1144.6	1136.7	1134.6	1138.6	1120.8	1114.8	1122.7	1130.7
35°	991.6	993.6	985.6	985.6	969.7	971.7	973.7	985.6
37.5°	844.5	840.6	838.5	840.6	828.7	824.7	820.7	832.6
40°	707.4	697.5	695.5	695.5	685.6	683.6	685.6	691.6
42.5°	578.2	576.3	568.3	572.3	562.3	566.3	564.4	564.4
45°	467.0	468.9	461.0	467.0	459.0	453.0	453.0	457.0
47.5°	369.6	369.6	367.6	367.6	361.7	363.6	359.6	365.6
50°	286.1	286.1	282.1	284.2	280.2	280.2	278.2	280.2
52.5°	218.6	216.6	216.6	214.6	210.6	212.7	214.6	210.6
55°	159.0	160.9	157.0	159.0	155.0	157.0	155.0	157.0
57.5°	109.3	111.3	107.3	111.3	107.3	109.3	107.3	107.3
60°	75.5	75.5	73.5	75.5	73.5	73.5	71.5	75.5
62.5°	51.6	51.6	51.6	51.6	51.6	49.7	51.6	51.6
65°	37.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8
67.5°	25.9	25.9	25.9	25.9	25.9	25.9	25.9	25.9
70°	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9
72.5°	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
75°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
77.5°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
80°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
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)