

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: P857911

Luminaire Tested: **LX4C40D010 EX4C409030 4LBLWWH**

Issue Date: 2/14/2022



Test Information

Test Method: LM-79-08
Report Number: P857911
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-2)
Test Lab: INNOVATION CENTER
Issue Date: 2/14/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C40D010 EX4C409030 4LBLWWH
Description: 4 INCH 4000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LRLWW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

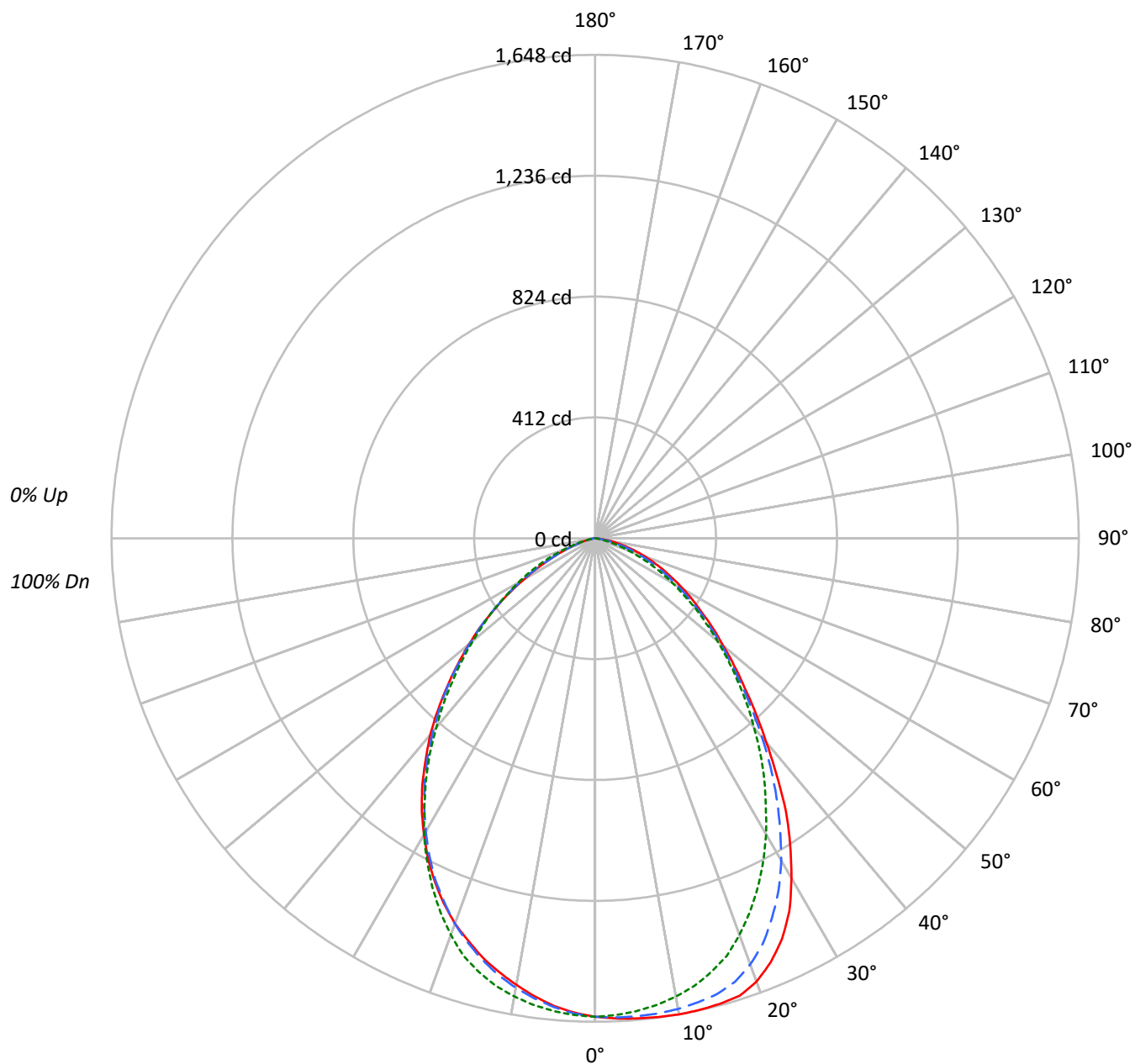
Lumens per Lamp: N/A
Luminaire Lumens: 3074.0 lumens
Efficiency: N/A
Efficacy: 65.4 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.09 / 1.17
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 47
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	107	104	101	108	105	102	99	101	98	96	97	95	93	94	92	90	88		
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77		
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68		
4	88	78	70	64	86	77	69	64	74	68	63	72	67	62	70	65	62	60		
5	82	71	63	57	80	69	62	57	67	61	56	66	60	55	64	59	55	53		
6	76	64	56	51	74	63	56	50	62	55	50	60	54	50	59	53	49	47		
7	71	59	51	46	69	58	51	45	57	50	45	55	49	45	54	49	44	43		
8	67	54	47	41	65	54	46	41	52	46	41	51	45	41	50	45	40	39		
9	62	50	43	38	61	50	42	37	49	42	37	47	41	37	47	41	37	35		
10	59	47	39	34	58	46	39	34	45	39	34	44	38	34	43	38	34	32		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	200386	200386	200386
5°	202632	199536	197366
10°	205598	197851	192837
15°	208981	194698	188224
20°	210305	188067	182654
25°	204266	177901	175190
30°	189836	165351	165450
35°	169923	150726	153936
40°	145491	135115	140054
45°	125233	119134	123599
50°	108865	103724	106839
55°	95807	89231	88417
60°	85236	74449	68601
65°	74767	59622	49593
70°	64225	42134	33585
75°	52119	24398	19651
80°	37284	10683	9763
85°	14096	4370	4370



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	153.7	5.0
10°-20°	435.1	14.2
20°-30°	621.4	20.2
30°-40°	650.0	21.1
40°-50°	544.7	17.7
50°-60°	381.2	12.4
60°-70°	207.6	6.8
70°-80°	72.0	2.3
80°-90°	8.3	0.3
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°	1210.3	39.4
0°-40°	1860.3	60.5
0°-60°	2786.1	90.6
0°-90°	3074.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3074.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1631	1631	1631	1631	1631	
5°	1643	1636	1618	1604	1600	157
15°	1643	1609	1531	1487	1480	464
25°	1507	1427	1312	1287	1292	688
35°	1133	1077	1005	1013	1026	703
45°	721	704	686	708	711	561
55°	447	432	417	417	413	404
65°	257	235	205	172	171	256
75°	110	89	51	41	41	118
85°	10	6	3	3	3	18
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°	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1
2.5°	1638.7	1636.8	1637.4	1637.4	1637.4	1636.8	1637.4	1636.8	1636.8	1636.2	1634.9
5°	1643.1	1641.8	1641.8	1641.8	1641.2	1640.5	1640.5	1639.9	1638.7	1638.0	1635.5
7.5°	1646.2	1644.9	1644.9	1644.3	1643.7	1643.1	1642.4	1640.5	1638.7	1637.4	1634.3
10°	1648.1	1646.2	1646.2	1644.9	1643.7	1643.1	1641.8	1639.3	1636.8	1633.6	1629.3
12.5°	1646.8	1644.9	1644.3	1643.1	1640.5	1639.3	1638.0	1634.9	1630.5	1626.1	1620.5
15°	1643.1	1641.8	1640.5	1638.7	1635.5	1633.6	1632.4	1627.4	1621.7	1615.5	1608.6
17.5°	1635.5	1633.6	1631.1	1628.6	1624.2	1622.4	1619.2	1612.9	1604.8	1596.0	1585.3
20°	1608.6	1607.3	1604.8	1600.4	1593.5	1591.0	1586.6	1578.4	1567.8	1557.1	1545.8
22.5°	1564.0	1562.1	1558.4	1554.6	1548.3	1543.9	1540.2	1528.9	1517.0	1505.7	1495.0
25°	1506.9	1505.0	1500.0	1495.0	1488.7	1481.2	1477.4	1468.7	1456.7	1442.3	1426.6
27.5°	1433.5	1427.2	1425.4	1419.7	1410.3	1407.8	1402.2	1390.9	1379.6	1367.0	1353.8
30°	1338.2	1338.2	1334.4	1331.9	1323.1	1320.6	1314.3	1302.4	1296.1	1278.6	1268.5
32.5°	1237.2	1235.9	1232.8	1230.9	1225.9	1221.5	1215.2	1208.9	1195.1	1186.3	1172.5
35°	1133.0	1125.5	1126.7	1123.0	1119.8	1114.8	1114.2	1107.3	1094.7	1089.7	1077.2
37.5°	1014.4	1011.3	1015.7	1010.1	1006.9	1007.5	1002.5	998.1	993.1	984.3	981.8
40°	907.2	909.7	909.0	904.0	906.5	903.4	898.4	894.0	891.5	885.8	884.0
42.5°	811.2	807.4	806.2	806.2	806.8	806.8	804.3	801.1	801.1	795.5	789.8
45°	720.8	720.8	719.6	723.3	717.7	717.7	715.8	715.2	712.7	711.4	704.5
47.5°	643.0	642.4	641.8	641.2	640.5	640.5	636.8	633.6	633.0	629.2	625.5
50°	569.6	573.4	572.2	569.0	567.8	568.4	565.9	564.0	563.4	557.1	557.7
52.5°	508.2	507.5	508.8	506.9	503.8	504.4	501.9	499.4	496.9	493.7	491.2
55°	447.3	450.4	449.2	447.3	446.7	445.4	443.5	440.4	439.8	432.9	432.3
57.5°	396.5	395.9	394.6	391.5	390.8	389.0	389.0	386.5	382.7	378.9	375.8
60°	346.9	346.9	345.0	344.4	341.9	341.3	340.7	338.1	333.8	330.6	325.6
62.5°	299.3	300.5	299.3	297.4	295.5	293.0	291.7	289.8	286.1	282.9	278.5
65°	257.2	256.6	256.0	253.5	252.8	250.3	249.7	245.9	242.2	239.7	234.6
67.5°	217.1	215.2	215.2	213.9	212.7	210.8	209.5	205.8	201.4	198.9	193.9
70°	178.8	177.5	177.5	177.5	174.4	172.5	171.9	170.0	163.7	161.2	156.2
72.5°	143.7	143.0	142.4	140.5	138.6	138.6	136.1	132.4	129.2	126.1	122.3
75°	109.8	111.0	109.8	107.3	106.7	105.4	103.5	100.4	97.2	93.5	89.1
77.5°	80.3	79.0	77.8	77.8	76.5	74.0	73.4	70.9	67.1	64.6	60.2
80°	52.7	52.1	50.8	49.6	48.9	48.3	47.7	45.2	41.4	39.5	35.8
82.5°	28.9	28.2	28.2	27.6	25.7	25.7	25.1	22.6	20.7	19.4	17.6
85°	10.0	10.0	10.0	9.4	9.4	9.4	8.8	8.2	7.5	6.9	5.6
87.5°	1.3	0.6	1.3	0.6	1.3	0.6	0.6	0.6	0.6	0.6	0.6
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°	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1
2.5°	1633.6	1632.4	1631.8	1631.1	1630.5	1629.9	1629.3	1628.0	1627.4	1626.7	1625.5
5°	1633.6	1631.1	1629.9	1628.0	1626.7	1625.5	1623.6	1621.7	1619.8	1618.0	1616.1
7.5°	1631.1	1627.4	1624.9	1621.1	1619.8	1618.0	1614.2	1611.7	1608.6	1604.8	1600.4
10°	1624.9	1620.5	1615.5	1610.4	1608.6	1605.4	1600.4	1596.0	1591.0	1586.0	1581.6
12.5°	1614.8	1607.9	1601.7	1594.8	1591.0	1587.9	1581.0	1574.7	1568.4	1562.8	1555.2
15°	1599.8	1591.6	1583.5	1574.0	1569.7	1565.9	1555.9	1548.3	1538.3	1530.8	1523.2
17.5°	1575.3	1562.8	1552.7	1540.8	1534.5	1530.1	1521.4	1509.4	1500.0	1491.9	1483.1
20°	1533.3	1521.4	1507.5	1494.4	1487.5	1481.8	1469.3	1456.7	1447.3	1438.5	1429.1
22.5°	1478.1	1463.0	1453.0	1436.7	1431.0	1424.1	1409.1	1397.8	1387.1	1378.3	1369.5
25°	1410.9	1397.8	1384.0	1368.9	1362.0	1353.8	1341.3	1329.4	1322.5	1312.4	1301.8
27.5°	1333.8	1323.1	1306.2	1293.0	1286.1	1279.8	1267.9	1257.2	1247.2	1240.3	1230.3
30°	1252.2	1239.7	1224.6	1210.8	1207.0	1199.5	1188.8	1180.7	1170.0	1165.6	1161.2
32.5°	1162.5	1148.1	1136.8	1128.0	1120.5	1114.2	1108.5	1095.4	1093.5	1082.2	1080.9
35°	1064.6	1058.4	1047.7	1040.2	1033.9	1029.5	1020.1	1013.8	1006.9	1005.0	1000.6
37.5°	972.4	964.9	954.8	947.9	943.6	942.9	936.0	932.3	927.2	924.7	919.7
40°	875.8	872.7	863.9	862.6	855.7	855.1	851.3	846.9	842.5	842.5	843.2
42.5°	786.7	782.9	779.2	774.8	771.0	771.0	769.1	767.9	766.6	764.8	767.9
45°	703.3	698.3	695.7	691.4	693.2	689.5	688.2	688.2	686.3	685.7	690.1
47.5°	625.5	619.8	617.3	616.1	616.1	616.7	611.0	612.9	612.3	613.6	615.4
50°	554.6	549.6	545.8	545.8	546.4	543.9	541.4	543.3	541.4	542.7	547.1
52.5°	488.7	483.7	481.8	481.8	478.0	477.4	478.7	476.2	476.8	477.4	479.9
55°	427.9	424.7	421.6	418.4	419.1	417.8	415.3	414.7	415.9	416.6	419.7
57.5°	373.3	368.9	364.5	363.2	362.0	362.0	358.9	358.2	359.5	356.3	356.3
60°	321.2	318.7	313.1	311.2	311.2	308.0	305.5	306.8	303.6	303.0	303.6
62.5°	272.9	271.0	267.3	263.5	262.2	261.0	257.8	256.6	255.3	252.8	249.1
65°	230.9	226.5	222.1	219.6	217.7	214.6	212.7	210.2	206.4	205.1	201.4
67.5°	188.8	184.4	180.1	178.2	176.3	174.4	171.3	168.1	163.7	158.7	154.3
70°	151.8	146.2	143.7	138.6	137.4	134.9	130.5	127.4	123.0	117.3	112.9
72.5°	116.1	112.3	108.5	104.1	101.0	99.1	95.4	90.3	85.3	82.2	77.8
75°	83.4	81.6	76.5	71.5	70.3	67.8	63.4	60.2	56.5	51.4	47.7
77.5°	56.5	52.7	49.6	45.2	43.9	41.4	38.9	35.8	33.3	30.1	27.6
80°	33.3	30.1	28.2	25.1	23.8	22.6	20.7	18.2	16.3	15.1	14.4
82.5°	16.3	13.8	13.2	11.3	10.7	10.0	8.8	8.2	6.9	6.9	6.9
85°	5.6	4.4	4.4	3.8	3.1	3.1	3.1	3.1	3.1	3.1	3.1
87.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.3	0.6
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°	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1
2.5°	1624.9	1624.2	1623.6	1623.0	1623.0	1622.4	1622.4	1621.7	1621.7	1621.1	1621.1
5°	1613.6	1611.7	1610.4	1609.2	1609.2	1607.3	1606.0	1604.8	1604.2	1604.2	1602.9
7.5°	1597.9	1595.4	1592.9	1591.0	1590.4	1587.2	1584.7	1584.7	1582.2	1581.0	1579.7
10°	1577.2	1572.8	1569.0	1567.1	1564.6	1562.8	1559.6	1557.7	1555.9	1552.7	1552.1
12.5°	1549.0	1545.8	1540.2	1537.7	1536.4	1532.6	1527.6	1525.1	1524.5	1522.0	1520.1
15°	1517.0	1510.1	1505.0	1501.9	1501.9	1495.6	1493.1	1489.4	1486.8	1485.0	1484.3
17.5°	1475.6	1468.7	1463.6	1459.2	1458.0	1453.0	1449.2	1447.9	1444.8	1446.1	1442.9
20°	1422.2	1416.6	1412.8	1407.2	1407.2	1404.0	1402.8	1399.6	1398.4	1397.1	1398.4
22.5°	1365.1	1358.2	1352.0	1351.3	1351.3	1346.9	1346.3	1345.7	1343.2	1345.1	1344.4
25°	1298.0	1293.0	1289.2	1288.6	1288.6	1286.1	1283.6	1284.8	1286.7	1286.1	1288.0
27.5°	1228.4	1223.4	1222.1	1221.5	1220.2	1219.6	1220.8	1220.8	1222.7	1225.2	1227.7
30°	1153.1	1151.8	1150.0	1149.3	1148.1	1151.2	1152.5	1154.3	1153.7	1157.5	1160.0
32.5°	1077.8	1075.3	1074.7	1075.9	1077.8	1077.2	1080.9	1082.2	1083.5	1087.8	1089.7
35°	1001.9	1001.3	1000.0	1000.0	1000.6	1005.7	1005.7	1010.1	1012.6	1013.8	1018.8
37.5°	920.3	922.8	924.1	926.0	926.6	928.5	929.7	934.1	936.7	939.2	941.7
40°	845.7	844.4	850.1	846.3	847.6	853.2	855.7	855.1	858.9	862.6	865.1
42.5°	766.0	767.9	769.1	770.4	773.5	774.2	777.3	781.7	782.9	787.3	788.6
45°	688.8	689.5	692.0	694.5	696.4	701.4	702.6	704.5	708.3	708.3	710.2
47.5°	616.1	618.6	618.6	622.3	625.5	624.9	629.2	630.5	629.9	633.0	634.3
50°	546.4	550.2	549.6	552.1	553.3	554.0	557.7	559.0	556.5	559.6	560.2
52.5°	479.9	481.8	484.3	485.0	483.7	486.8	485.6	488.1	487.5	490.0	487.5
55°	419.1	418.4	418.4	419.7	418.4	419.7	421.0	418.4	416.6	419.1	418.4
57.5°	358.2	358.2	357.0	358.9	357.0	355.1	354.5	352.6	350.7	350.7	350.1
60°	301.1	299.9	297.4	296.7	296.7	293.6	292.4	289.8	289.8	287.3	284.8
62.5°	247.8	244.7	242.8	242.8	241.5	238.4	232.8	229.0	227.7	224.0	223.3
65°	197.6	194.5	192.6	188.8	185.7	184.4	178.8	174.4	172.5	168.8	169.4
67.5°	151.8	146.8	141.2	138.6	136.8	132.4	130.5	127.4	125.5	125.5	125.5
70°	109.2	104.8	99.1	97.2	96.0	92.2	90.3	89.7	91.6	91.0	91.6
72.5°	73.4	69.0	66.5	65.2	64.0	62.1	63.4	64.0	62.7	63.4	64.0
75°	44.5	43.3	41.4	40.8	40.8	41.4	40.8	40.8	41.4	41.4	42.0
77.5°	25.7	24.5	24.5	23.8	25.1	24.5	24.5	24.5	25.1	25.1	25.1
80°	13.8	13.8	13.8	13.8	14.4	13.8	14.4	14.4	14.4	14.4	14.4
82.5°	6.9	6.9	6.9	7.5	7.5	7.5	7.5	7.5	7.5	7.5	6.9
85°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
87.5°	0.6	1.3	1.3	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6
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: P857911

CATALOG NUMBER: LX4C40D010 EX4C409030 4LBLWWH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1	1631.1
2.5°	1619.8	1619.8	1619.8	1618.6	1619.2	1619.2	1618.6	1618.6
5°	1602.3	1601.7	1600.4	1600.4	1599.1	1600.4	1599.8	1600.4
7.5°	1578.4	1578.4	1576.6	1576.6	1575.9	1575.3	1574.7	1575.3
10°	1550.2	1550.2	1549.0	1548.3	1549.0	1546.4	1546.4	1545.8
12.5°	1518.8	1517.6	1516.3	1517.0	1516.3	1514.5	1513.8	1514.5
15°	1482.5	1480.6	1481.2	1479.3	1479.3	1478.7	1479.9	1479.9
17.5°	1442.3	1441.0	1439.8	1440.4	1439.2	1439.8	1439.2	1438.5
20°	1397.8	1397.1	1397.1	1394.6	1395.3	1394.6	1395.3	1397.1
22.5°	1346.3	1345.7	1346.3	1344.4	1345.7	1345.7	1347.6	1347.6
25°	1289.9	1289.2	1290.5	1291.1	1291.7	1293.6	1291.7	1292.4
27.5°	1227.1	1229.0	1230.9	1231.5	1234.0	1232.1	1230.9	1232.8
30°	1163.8	1163.8	1163.1	1165.6	1167.5	1169.4	1166.3	1166.3
32.5°	1091.0	1094.1	1094.1	1094.7	1096.6	1096.6	1096.6	1099.1
35°	1021.3	1023.2	1023.9	1021.3	1022.6	1022.0	1026.4	1026.4
37.5°	943.6	943.6	944.2	948.6	948.6	946.7	947.9	947.9
40°	869.5	870.2	867.6	868.9	872.0	870.8	872.0	873.3
42.5°	788.6	793.0	790.5	791.7	791.1	791.7	792.4	792.4
45°	711.4	712.7	712.7	713.3	714.6	715.8	712.1	711.4
47.5°	636.1	636.8	638.7	635.5	639.3	635.5	639.3	634.9
50°	560.2	562.7	560.9	562.1	560.2	560.2	559.6	559.0
52.5°	488.1	487.5	487.5	486.8	486.8	488.1	486.8	488.7
55°	415.9	416.6	415.3	414.7	414.1	415.9	414.1	412.8
57.5°	347.6	348.8	346.3	347.6	343.2	345.0	345.7	346.3
60°	284.2	282.3	282.3	279.8	279.8	281.7	279.2	279.2
62.5°	220.2	221.5	219.6	222.1	222.1	224.6	223.3	224.6
65°	168.8	169.4	170.0	170.0	170.0	173.8	172.5	170.6
67.5°	127.4	128.0	128.6	128.0	129.9	128.6	128.6	129.2
70°	92.2	92.8	93.5	93.5	92.8	93.5	93.5	93.5
72.5°	64.0	64.6	64.0	64.6	65.2	64.6	64.6	65.2
75°	42.0	42.0	41.4	41.4	41.4	41.4	42.0	41.4
77.5°	24.5	25.1	24.5	25.1	25.1	25.1	25.1	25.1
80°	14.4	14.4	14.4	13.8	14.4	14.4	14.4	13.8
82.5°	7.5	7.5	6.9	6.9	7.5	7.5	7.5	7.5
85°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
87.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
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)