

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: P857989

Luminaire Tested: **LX4C40D010 EX4C409730 4LBLWW***

Issue Date: 2/9/2022



Test Information

Test Method: LM-79-08
Report Number: P857989
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2107-320-1)
Test Lab: INNOVATION CENTER
Issue Date: 2/9/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LX4C40D010 EX4C409730 4LBLWW*
Description: 4 INCH 4000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 97CRI LEDS
AND 4LRLWW TRIM WITH * FINISH
Light Source: -
Ballast/Driver: -

Summary

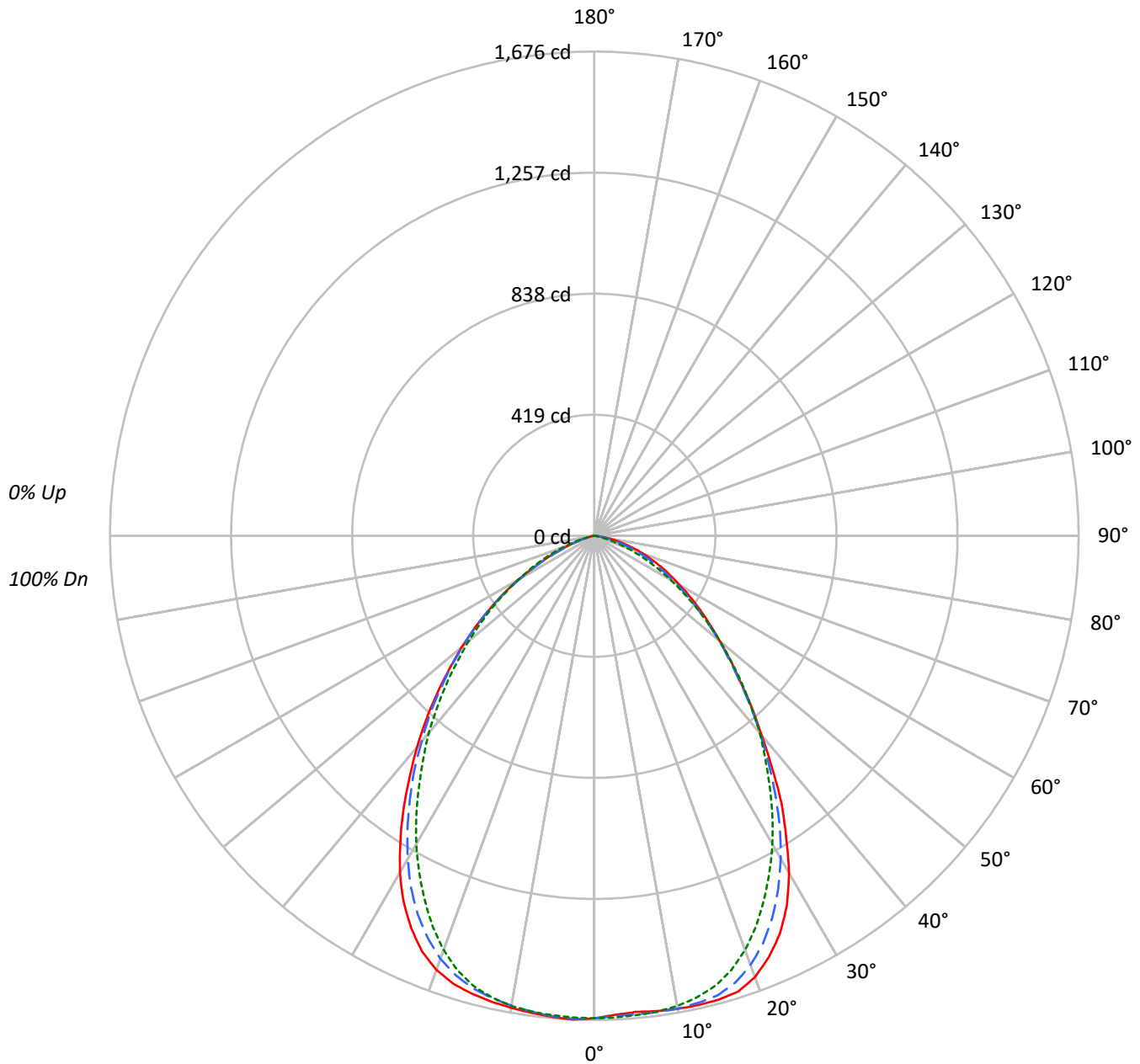
Lumens per Lamp: N/A
Luminaire Lumens: 3202.0 lumens
Efficiency: N/A
Efficacy: 68.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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	109	105	102	99	101	99	96	97	95	93	94	92	91	89		
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78		
3	95	87	80	74	93	85	79	74	82	77	72	80	75	71	77	73	70	68		
4	88	78	71	65	86	77	70	65	75	69	64	72	67	63	70	66	62	60		
5	82	71	63	57	80	70	63	57	68	61	57	66	60	56	64	59	55	54		
6	76	65	57	51	75	64	56	51	62	56	51	61	55	50	59	54	50	48		
7	71	59	51	46	70	59	51	46	57	50	46	56	50	45	54	49	45	43		
8	67	55	47	42	65	54	47	42	53	46	41	52	46	41	50	45	41	39		
9	63	51	43	38	61	50	43	38	49	42	38	48	42	38	47	41	37	36		
10	59	47	40	35	58	46	39	35	45	39	35	45	39	35	44	38	34	33		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	205190	205190	205190
5°	204037	205431	206196
10°	207407	206160	206946
15°	211462	205242	208676
20°	212528	199493	209011
25°	205988	188393	203182
30°	191198	174827	190843
35°	169308	158585	172503
40°	144336	142829	152981
45°	123999	125424	133259
50°	108235	108483	114236
55°	95635	91608	94714
60°	83835	74744	74425
65°	74215	57965	51599
70°	63291	39871	30640
75°	51217	21455	14003
80°	35021	5306	3537
85°	10572	1832	1832



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.7	5.0
10°-20°	459.5	14.4
20°-30°	663.9	20.7
30°-40°	686.4	21.4
40°-50°	567.1	17.7
50°-60°	391.4	12.2
60°-70°	204.9	6.4
70°-80°	64.5	2.0
80°-90°	5.5	0.2
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°	1282.2	40.0
0°-40°	1968.6	61.5
0°-60°	2927.1	91.4
0°-90°	3202.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3202.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1670	1670	1670	1670	1670	
5°	1654	1663	1666	1669	1672	158
15°	1663	1647	1614	1621	1641	469
25°	1520	1458	1390	1446	1499	694
35°	1129	1091	1057	1113	1150	701
45°	714	711	722	755	767	556
55°	446	433	428	440	442	401
65°	255	231	199	166	178	253
75°	108	85	45	31	30	116
85°	8	4	1	1	1	16
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°	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2
2.5°	1659.5	1660.1	1660.1	1661.4	1661.4	1661.4	1662.0	1662.0	1662.6	1663.3	1663.9
5°	1654.5	1654.5	1655.7	1656.4	1657.6	1658.2	1659.5	1660.1	1661.4	1662.0	1662.6
7.5°	1659.5	1659.5	1660.1	1660.8	1660.8	1661.4	1661.4	1662.0	1662.6	1663.3	1663.3
10°	1662.6	1662.6	1662.6	1662.6	1663.3	1663.3	1663.3	1662.6	1662.6	1662.6	1662.0
12.5°	1663.9	1663.9	1663.3	1662.6	1663.3	1662.6	1662.6	1660.8	1659.5	1658.2	1656.4
15°	1662.6	1662.6	1662.0	1661.4	1660.8	1659.5	1658.9	1655.7	1653.2	1649.5	1647.0
17.5°	1654.5	1653.2	1652.0	1650.7	1648.2	1646.3	1645.1	1639.4	1635.0	1628.8	1621.9
20°	1625.6	1624.4	1622.5	1619.4	1616.2	1613.7	1609.9	1601.8	1597.4	1588.0	1581.1
22.5°	1578.6	1577.3	1578.0	1572.3	1566.0	1562.3	1559.8	1552.9	1545.4	1533.4	1525.9
25°	1519.6	1515.9	1515.9	1507.1	1504.0	1501.4	1498.3	1490.2	1478.9	1468.2	1458.2
27.5°	1443.1	1438.1	1435.6	1434.3	1426.8	1421.2	1416.8	1410.5	1401.1	1391.7	1377.9
30°	1347.8	1347.2	1344.0	1338.4	1332.7	1330.2	1325.2	1314.6	1305.8	1298.9	1290.1
32.5°	1235.5	1234.9	1234.9	1234.9	1231.1	1230.5	1223.0	1217.3	1210.4	1199.8	1194.1
35°	1128.9	1128.3	1128.9	1119.5	1117.0	1115.1	1114.5	1110.7	1101.3	1096.3	1091.3
37.5°	1008.5	1010.4	1009.1	1006.6	1009.7	1004.1	1008.5	1000.3	996.6	995.3	989.7
40°	900.0	905.0	900.0	900.6	903.8	898.1	898.1	896.9	894.3	893.1	891.8
42.5°	807.2	800.9	804.7	801.5	804.7	802.8	799.6	801.5	802.2	799.6	799.0
45°	713.7	715.0	716.2	714.3	714.3	712.5	717.5	714.3	714.3	715.0	710.6
47.5°	637.8	636.0	637.2	636.0	636.6	635.3	636.6	637.2	636.0	636.0	632.2
50°	566.3	565.1	569.5	565.7	565.7	565.1	565.7	564.5	562.6	562.6	563.8
52.5°	504.2	501.7	501.1	504.2	499.9	499.9	500.5	499.2	496.7	495.5	492.3
55°	446.5	445.9	446.5	444.0	442.8	442.8	439.6	438.4	437.8	434.6	432.7
57.5°	392.6	390.7	391.4	390.7	388.2	387.6	385.1	385.1	382.6	380.1	376.9
60°	341.2	341.2	343.1	340.6	338.7	337.4	336.2	334.9	330.5	326.1	322.4
62.5°	295.4	296.0	295.4	293.5	292.3	291.0	289.8	286.0	282.2	279.7	275.3
65°	255.3	254.6	252.8	251.5	248.4	248.4	245.9	244.0	239.6	235.8	231.4
67.5°	213.9	212.6	212.6	212.6	208.8	208.2	207.0	203.2	199.4	194.4	190.7
70°	176.2	177.5	175.6	173.7	171.8	171.2	169.3	165.6	161.2	156.2	153.0
72.5°	140.5	141.7	139.9	139.2	135.5	134.2	133.6	130.5	125.4	122.3	117.3
75°	107.9	108.5	107.2	106.0	103.5	102.9	99.7	97.2	94.1	89.1	84.7
77.5°	77.8	76.5	76.5	74.0	71.5	71.5	70.9	67.1	62.7	59.0	55.2
80°	49.5	48.9	47.0	45.8	43.9	43.3	42.6	39.5	36.4	33.9	31.4
82.5°	25.1	24.5	23.8	23.2	22.0	20.7	21.3	18.8	17.6	15.1	13.2
85°	7.5	8.2	8.2	7.5	6.9	6.9	6.9	6.3	5.0	4.4	3.8
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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2
2.5°	1664.5	1665.1	1665.8	1666.4	1666.4	1667.0	1667.6	1668.3	1668.9	1668.9	1669.5
5°	1663.3	1664.5	1664.5	1665.1	1665.1	1665.1	1665.8	1665.8	1665.8	1665.8	1666.4
7.5°	1663.9	1663.9	1663.9	1663.3	1663.3	1662.6	1662.6	1662.6	1661.4	1661.4	1661.4
10°	1660.8	1660.1	1659.5	1658.2	1657.6	1657.0	1655.7	1654.5	1653.2	1652.6	1651.3
12.5°	1654.5	1652.0	1649.5	1647.0	1645.7	1645.1	1642.6	1640.7	1638.8	1636.9	1635.7
15°	1641.9	1638.2	1633.8	1628.8	1627.5	1626.3	1621.9	1618.1	1615.6	1613.7	1610.6
17.5°	1616.8	1609.3	1604.3	1596.8	1593.6	1592.4	1585.5	1581.7	1577.3	1576.1	1573.6
20°	1572.3	1565.4	1556.0	1549.1	1545.4	1541.6	1535.9	1530.9	1525.9	1525.9	1522.8
22.5°	1516.5	1507.7	1495.8	1487.0	1486.4	1478.9	1473.9	1468.2	1466.3	1462.6	1462.6
25°	1446.3	1438.7	1425.6	1418.0	1414.3	1412.4	1404.2	1396.7	1392.9	1389.8	1392.3
27.5°	1368.5	1357.2	1347.2	1337.8	1334.6	1330.9	1323.3	1320.2	1313.3	1312.7	1312.0
30°	1279.4	1268.1	1258.1	1253.7	1247.4	1244.3	1238.7	1234.9	1232.4	1232.4	1231.1
32.5°	1186.0	1175.9	1170.9	1161.5	1158.4	1154.0	1150.2	1146.5	1147.7	1146.5	1147.1
35°	1085.0	1082.5	1073.1	1067.4	1067.4	1066.8	1060.5	1058.0	1056.8	1057.4	1060.5
37.5°	989.0	981.5	975.3	971.5	974.6	970.9	970.2	970.2	974.0	971.5	976.5
40°	886.8	886.2	883.7	884.9	885.6	881.2	882.4	883.1	885.6	890.6	891.2
42.5°	797.8	797.1	797.1	797.1	795.9	793.4	795.9	800.3	799.6	803.4	806.5
45°	711.8	710.6	713.1	711.2	715.0	716.2	714.3	715.6	719.4	721.9	726.9
47.5°	633.4	633.4	634.1	635.3	631.6	634.7	636.0	638.5	640.3	641.6	644.1
50°	560.7	560.7	559.4	559.4	559.4	561.3	558.8	561.9	562.6	567.6	570.7
52.5°	493.6	490.4	492.3	491.1	488.6	487.3	488.6	489.2	493.0	494.2	498.0
55°	429.6	429.6	424.6	423.3	425.2	424.6	424.0	424.0	425.8	427.7	430.9
57.5°	373.2	369.4	365.6	365.0	363.1	363.8	363.8	363.1	361.9	362.5	363.1
60°	319.9	317.3	311.7	311.7	311.1	310.4	307.3	306.7	303.6	304.2	301.7
62.5°	270.9	269.7	262.2	259.6	259.6	257.8	254.6	254.0	249.6	249.6	247.1
65°	227.0	223.3	218.9	214.5	214.5	212.0	210.1	204.5	201.3	199.4	195.7
67.5°	186.9	181.3	176.9	173.1	170.6	170.0	165.6	161.8	156.8	153.7	148.0
70°	148.0	143.6	139.2	135.5	133.0	130.5	126.1	120.4	116.7	111.0	107.2
72.5°	111.6	107.9	104.1	99.1	96.0	94.1	89.7	84.7	78.4	74.6	69.6
75°	80.3	75.9	70.9	66.5	64.6	62.7	57.7	53.9	49.5	45.2	40.1
77.5°	52.1	47.0	43.3	38.3	37.6	36.4	31.4	27.6	24.5	22.0	18.8
80°	27.6	25.1	22.0	18.8	17.6	15.7	13.2	11.3	9.4	7.5	6.3
82.5°	11.9	10.0	8.2	6.9	6.3	5.6	4.4	3.8	3.1	3.1	2.5
85°	3.1	2.5	2.5	1.9	1.3	1.3	1.3	1.3	1.3	1.3	1.3
87.5°	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.0	0.6	0.6	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°	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2
2.5°	1670.2	1670.8	1671.4	1671.4	1672.0	1672.7	1672.7	1673.3	1673.9	1674.5	1674.5
5°	1667.0	1667.0	1667.0	1667.6	1667.6	1667.6	1667.6	1668.9	1668.9	1669.5	1670.2
7.5°	1660.8	1660.8	1660.8	1660.8	1660.1	1660.8	1660.1	1660.1	1661.4	1662.0	1662.6
10°	1650.7	1650.1	1650.1	1649.5	1649.5	1649.5	1650.1	1650.7	1651.3	1652.0	1653.9
12.5°	1635.0	1634.4	1634.4	1633.8	1633.8	1634.4	1635.0	1636.3	1638.8	1640.1	1642.6
15°	1609.9	1609.3	1609.9	1610.6	1611.8	1613.7	1615.6	1617.5	1621.2	1624.4	1627.5
17.5°	1573.6	1574.2	1574.8	1576.1	1578.0	1580.5	1585.5	1590.5	1594.9	1599.9	1604.9
20°	1523.4	1525.9	1526.5	1530.9	1532.2	1537.8	1543.5	1551.0	1557.9	1564.2	1571.1
22.5°	1463.2	1465.1	1467.6	1472.6	1475.7	1483.3	1490.2	1498.9	1506.5	1514.6	1524.7
25°	1394.8	1395.5	1403.0	1403.0	1410.5	1416.8	1424.9	1434.3	1445.6	1456.3	1463.2
27.5°	1317.1	1320.2	1325.8	1328.3	1334.0	1344.0	1350.9	1362.2	1373.5	1382.9	1390.4
30°	1235.5	1238.0	1247.4	1248.7	1253.1	1261.9	1271.3	1281.9	1290.7	1301.4	1308.3
32.5°	1149.6	1156.5	1162.1	1166.5	1167.8	1181.0	1186.0	1193.5	1203.5	1214.2	1221.1
35°	1066.2	1069.3	1077.5	1080.0	1083.8	1091.3	1101.3	1107.6	1112.6	1119.5	1127.7
37.5°	977.8	987.2	989.0	996.6	997.8	1004.7	1009.7	1017.3	1023.5	1029.8	1031.1
40°	895.6	898.7	905.6	907.5	908.8	918.2	924.5	926.3	929.5	935.1	942.6
42.5°	812.2	815.3	822.8	821.0	826.6	831.0	834.1	841.7	844.8	846.7	846.7
45°	730.0	731.3	736.3	738.8	741.9	744.5	750.1	753.9	755.1	760.8	762.6
47.5°	651.6	652.9	656.6	661.0	659.8	662.9	669.2	671.1	671.7	675.5	677.3
50°	574.5	577.6	582.6	581.4	585.2	587.0	592.7	593.9	593.9	594.6	595.2
52.5°	502.4	504.9	506.1	507.4	509.3	512.4	514.9	513.7	516.2	518.7	516.8
55°	430.9	432.7	435.9	437.1	437.1	437.8	436.5	442.2	439.6	439.0	439.6
57.5°	365.6	363.1	362.5	365.6	366.9	366.3	364.4	366.9	366.9	365.6	363.8
60°	302.3	300.4	299.8	300.4	297.9	296.0	297.3	296.0	292.9	291.6	292.3
62.5°	244.6	242.7	237.7	237.7	236.4	235.8	230.8	231.4	228.9	225.2	226.4
65°	191.3	186.3	183.8	183.1	178.7	175.0	173.7	169.3	165.6	164.9	165.6
67.5°	143.6	138.0	133.6	131.7	129.2	126.1	121.7	117.9	119.2	118.5	121.0
70°	99.7	96.0	91.6	88.4	89.7	85.9	83.4	83.4	84.0	84.7	85.9
72.5°	66.5	61.5	59.6	57.7	56.4	53.9	55.2	55.2	54.6	55.2	53.9
75°	37.6	35.1	33.2	32.6	31.4	31.4	31.4	31.4	30.7	30.1	30.1
77.5°	16.9	15.7	15.1	14.4	14.4	14.4	13.8	13.2	13.2	13.2	12.5
80°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
82.5°	2.5	2.5	3.1	3.1	3.1	2.5	3.1	3.1	2.5	2.5	3.1
85°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
87.5°	0.6	0.6	0.6	0.0	0.6	0.6	0.6	0.6	0.0	0.6	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: P857989

CATALOG NUMBER: LX4C40D010 EX4C409730 4LBLWW*

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2	1670.2
2.5°	1675.2	1675.8	1675.8	1675.8	1676.4	1676.4	1676.4	1676.4
5°	1670.8	1671.4	1671.4	1671.4	1672.0	1672.0	1672.0	1672.0
7.5°	1663.3	1663.9	1663.9	1664.5	1664.5	1665.1	1665.1	1665.8
10°	1654.5	1655.7	1656.4	1657.0	1657.6	1658.2	1658.2	1658.9
12.5°	1645.1	1646.3	1647.0	1648.2	1649.5	1650.1	1650.7	1651.3
15°	1631.3	1633.8	1635.0	1635.7	1638.2	1639.4	1640.1	1640.7
17.5°	1609.3	1614.3	1616.2	1617.5	1620.0	1622.5	1624.4	1625.0
20°	1578.0	1583.6	1586.1	1589.3	1593.0	1596.2	1597.4	1598.7
22.5°	1534.1	1540.3	1544.1	1547.9	1551.0	1554.1	1559.1	1557.3
25°	1471.3	1482.0	1486.4	1488.3	1495.2	1498.9	1501.4	1498.9
27.5°	1401.1	1407.4	1411.1	1415.5	1420.5	1424.3	1425.6	1429.3
30°	1316.4	1327.1	1326.5	1330.9	1337.1	1340.9	1342.1	1345.3
32.5°	1228.6	1233.6	1237.4	1236.8	1239.3	1246.2	1243.7	1249.3
35°	1135.2	1135.8	1142.1	1141.5	1146.5	1146.5	1146.5	1150.2
37.5°	1035.5	1043.0	1039.9	1047.4	1044.9	1046.7	1046.7	1048.0
40°	944.5	947.0	947.0	949.5	951.4	949.5	950.8	953.9
42.5°	850.4	853.0	853.6	852.3	854.2	859.9	855.5	859.2
45°	762.6	764.5	767.0	765.1	768.3	766.4	768.3	767.0
47.5°	679.9	679.2	678.6	683.6	679.2	679.9	682.4	678.0
50°	595.2	598.9	596.4	598.3	599.6	599.6	597.7	597.7
52.5°	519.9	519.3	517.4	519.3	518.0	518.7	519.9	518.7
55°	442.2	444.7	443.4	442.8	443.4	443.4	447.2	442.2
57.5°	365.6	364.4	366.3	370.7	366.3	369.4	371.3	371.9
60°	292.9	292.9	296.7	294.8	298.5	301.7	304.2	302.9
62.5°	223.3	226.4	227.7	228.3	232.1	234.6	234.6	233.9
65°	165.6	170.0	170.0	172.5	173.7	173.7	175.0	177.5
67.5°	122.3	122.3	122.9	124.2	123.6	123.6	124.8	125.4
70°	85.3	84.0	85.9	85.3	85.3	84.7	85.3	85.3
72.5°	53.9	53.9	54.6	53.9	52.7	53.3	53.3	54.6
75°	28.8	30.1	28.8	28.8	29.5	28.2	28.8	29.5
77.5°	11.9	11.9	11.9	11.9	11.9	11.3	11.3	11.3
80°	5.6	5.6	5.6	5.6	5.6	5.6	5.0	5.0
82.5°	2.5	3.1	2.5	3.1	2.5	2.5	2.5	2.5
85°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
87.5°	0.0	0.6	0.0	0.6	0.0	0.0	0.0	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)