

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: P857973

Luminaire Tested: **LX4C40D010 EX4C409050 4LBLWW***

Issue Date: 2/9/2022



Test Information

Test Method: LM-79-08
Report Number: P857973
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 EX4C409050 4LBLWW*
Description: 4 INCH 4000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 5000K, 90CRI LEDS
AND 4LRLWW TRIM WITH * FINISH
Light Source: -
Ballast/Driver: -

Summary

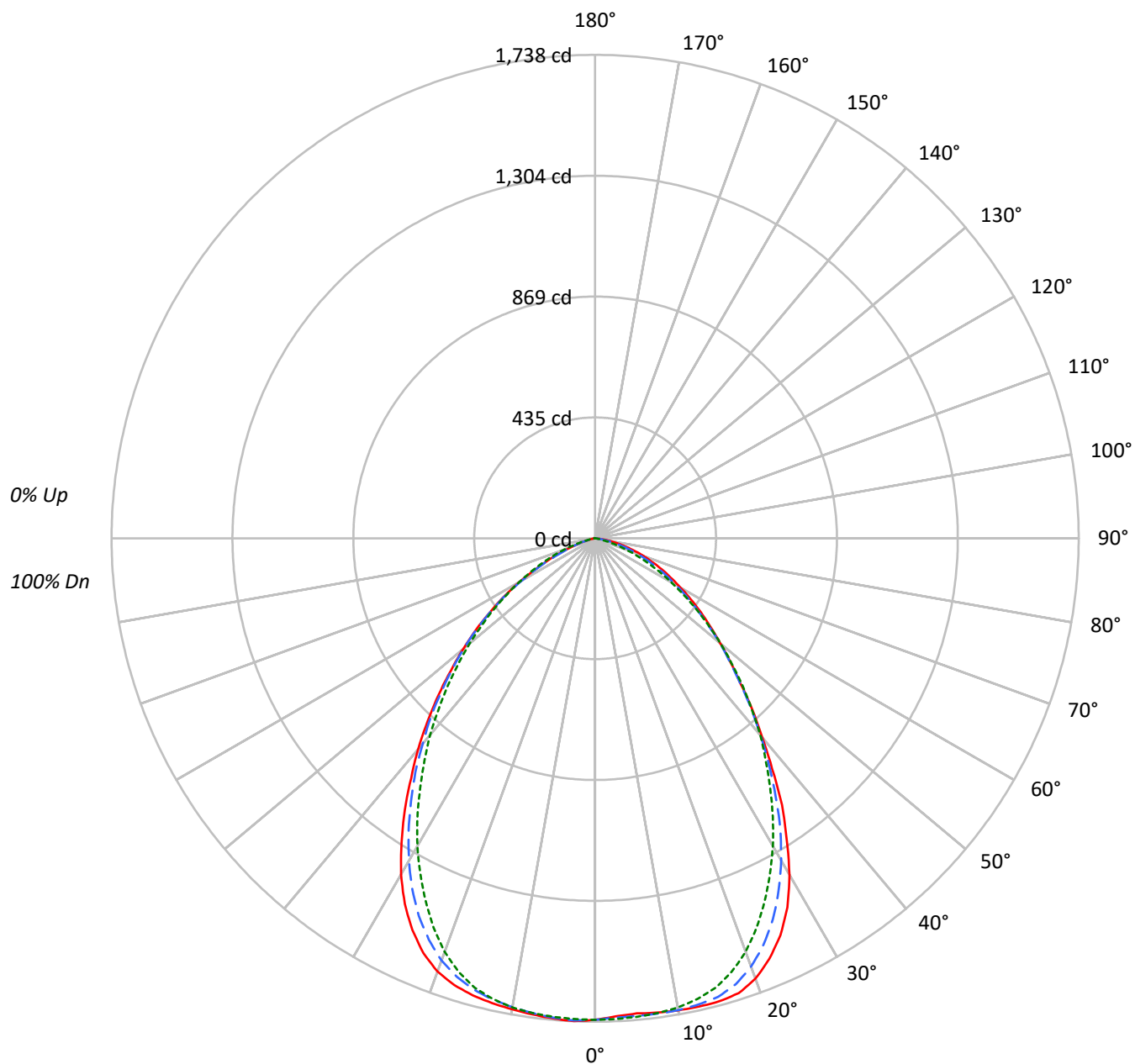
Lumens per Lamp: N/A
Luminaire Lumens: 3319.0 lumens
Efficiency: N/A
Efficacy: 70.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.12 / 1.18
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111			106	106	106			102
1	111	107	104	101	109	105	102	99		101	99	96			97	95	93			94
2	103	96	91	86	101	95	89	85		91	87	83			88	84	81			85
3	95	87	80	74	93	85	79	74		82	77	72			80	75	71			77
4	88	78	71	65	86	77	70	65		75	69	64			72	67	63			70
5	82	71	63	57	80	70	63	57		68	61	57			66	60	56			64
6	76	65	57	51	75	64	56	51		62	56	51			61	55	50			59
7	71	59	51	46	70	59	51	46		57	50	46			56	50	45			54
8	67	55	47	42	65	54	47	42		53	46	41			52	46	41			50
9	63	51	43	38	61	50	43	38		49	42	38			48	42	38			47
10	59	47	40	35	58	46	39	35		45	39	35			45	39	35			44

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	212684	212684	212684
5°	211486	212929	213731
10°	214992	213695	214505
15°	219195	212746	216295
20°	220293	206788	216646
25°	213524	195279	210610
30°	198177	181211	197808
35°	175502	164374	178817
40°	149613	148041	158578
45°	128534	130010	138142
50°	112191	112439	118403
55°	99148	94971	98163
60°	86882	77471	77152
65°	76918	60087	53488
70°	65626	41344	31753
75°	53068	22215	14525
80°	36365	5518	3679
85°	10995	1832	1832



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.5	5.0
10°-20°	476.3	14.4
20°-30°	688.2	20.7
30°-40°	711.5	21.4
40°-50°	587.9	17.7
50°-60°	405.7	12.2
60°-70°	212.4	6.4
70°-80°	66.9	2.0
80°-90°	5.7	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°	1329.0	40.0
0°-40°	2040.5	61.5
0°-60°	3034.1	91.4
0°-90°	3319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3319.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1731	1731	1731	1731	1731	
5°	1715	1723	1727	1730	1733	164
15°	1723	1707	1673	1680	1701	486
25°	1575	1512	1441	1498	1554	719
35°	1170	1131	1096	1153	1192	726
45°	740	737	748	783	795	577
55°	463	449	443	456	458	416
65°	265	240	207	172	184	262
75°	112	88	47	32	31	120
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°	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2
2.5°	1720.1	1720.8	1720.8	1722.1	1722.1	1722.1	1722.7	1722.7	1723.4	1724.0	1724.7
5°	1714.9	1714.9	1716.2	1716.9	1718.2	1718.8	1720.1	1720.8	1722.1	1722.7	1723.4
7.5°	1720.1	1720.1	1720.8	1721.4	1721.4	1722.1	1722.1	1722.7	1723.4	1724.0	1724.0
10°	1723.4	1723.4	1723.4	1723.4	1724.0	1724.0	1724.0	1723.4	1723.4	1723.4	1722.7
12.5°	1724.7	1724.7	1724.0	1723.4	1724.0	1723.4	1723.4	1721.4	1720.1	1718.8	1716.9
15°	1723.4	1723.4	1722.7	1722.1	1721.4	1720.1	1719.5	1716.2	1713.6	1709.7	1707.1
17.5°	1714.9	1713.6	1712.3	1711.0	1708.4	1706.5	1705.2	1699.3	1694.8	1688.3	1681.1
20°	1685.0	1683.7	1681.8	1678.5	1675.3	1672.7	1668.8	1660.3	1655.8	1646.0	1638.9
22.5°	1636.3	1635.0	1635.6	1629.8	1623.3	1619.4	1616.8	1609.6	1601.8	1589.5	1581.7
25°	1575.2	1571.3	1571.3	1562.2	1558.9	1556.3	1553.1	1544.6	1532.9	1521.9	1511.5
27.5°	1495.9	1490.7	1488.1	1486.8	1479.0	1473.1	1468.5	1462.0	1452.3	1442.5	1428.2
30°	1397.0	1396.4	1393.1	1387.3	1381.4	1378.8	1373.6	1362.6	1353.5	1346.3	1337.2
32.5°	1280.7	1280.0	1280.0	1280.0	1276.1	1275.5	1267.7	1261.8	1254.7	1243.6	1237.8
35°	1170.2	1169.5	1170.2	1160.4	1157.8	1155.9	1155.2	1151.3	1141.6	1136.4	1131.2
37.5°	1045.3	1047.3	1046.0	1043.4	1046.6	1040.8	1045.3	1036.9	1033.0	1031.7	1025.8
40°	932.9	938.1	932.9	933.5	936.8	930.9	930.9	929.6	927.0	925.7	924.4
42.5°	836.7	830.2	834.1	830.8	834.1	832.1	828.9	830.8	831.5	828.9	828.2
45°	739.8	741.1	742.4	740.5	740.5	738.5	743.7	740.5	740.5	741.1	736.6
47.5°	661.1	659.2	660.5	659.2	659.8	658.5	659.8	660.5	659.2	659.2	655.3
50°	587.0	585.7	590.3	586.4	586.4	585.7	586.4	585.1	583.1	583.1	584.4
52.5°	522.7	520.1	519.4	522.7	518.1	518.1	518.8	517.5	514.9	513.6	510.3
55°	462.9	462.2	462.9	460.3	459.0	459.0	455.7	454.4	453.8	450.5	448.6
57.5°	407.0	405.0	405.7	405.0	402.4	401.8	399.2	399.2	396.6	394.0	390.7
60°	353.6	353.6	355.6	353.0	351.0	349.7	348.4	347.1	342.6	338.0	334.1
62.5°	306.2	306.8	306.2	304.2	302.9	301.6	300.3	296.4	292.5	289.9	285.4
65°	264.6	263.9	262.0	260.7	257.4	257.4	254.8	252.9	248.3	244.4	239.9
67.5°	221.7	220.4	220.4	220.4	216.5	215.8	214.5	210.6	206.7	201.5	197.6
70°	182.7	184.0	182.0	180.1	178.1	177.5	175.5	171.6	167.1	161.9	158.6
72.5°	145.6	146.9	145.0	144.3	140.4	139.1	138.5	135.2	130.0	126.8	121.6
75°	111.8	112.5	111.2	109.9	107.3	106.6	103.4	100.8	97.5	92.3	87.8
77.5°	80.6	79.3	79.3	76.7	74.1	74.1	73.5	69.6	65.0	61.1	57.2
80°	51.4	50.7	48.8	47.5	45.5	44.9	44.2	41.0	37.7	35.1	32.5
82.5°	26.0	25.4	24.7	24.1	22.8	21.5	22.1	19.5	18.2	15.6	13.7
85°	7.8	8.5	8.5	7.8	7.2	7.2	7.2	6.5	5.2	4.6	3.9
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°	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2
2.5°	1725.3	1726.0	1726.6	1727.3	1727.3	1727.9	1728.6	1729.2	1729.9	1729.9	1730.5
5°	1724.0	1725.3	1725.3	1726.0	1726.0	1726.0	1726.6	1726.6	1726.6	1726.6	1727.3
7.5°	1724.7	1724.7	1724.7	1724.0	1724.0	1723.4	1723.4	1723.4	1722.1	1722.1	1722.1
10°	1721.4	1720.8	1720.1	1718.8	1718.2	1717.5	1716.2	1714.9	1713.6	1713.0	1711.7
12.5°	1714.9	1712.3	1709.7	1707.1	1705.8	1705.2	1702.6	1700.6	1698.7	1696.7	1695.4
15°	1701.9	1698.0	1693.5	1688.3	1687.0	1685.7	1681.1	1677.2	1674.6	1672.7	1669.4
17.5°	1675.9	1668.1	1662.9	1655.1	1651.9	1650.6	1643.4	1639.5	1635.0	1633.7	1631.1
20°	1629.8	1622.6	1612.9	1605.7	1601.8	1597.9	1592.1	1586.9	1581.7	1581.7	1578.4
22.5°	1571.9	1562.8	1550.5	1541.4	1540.7	1532.9	1527.7	1521.9	1519.9	1516.0	1516.0
25°	1499.1	1491.3	1477.7	1469.8	1465.9	1464.0	1455.5	1447.7	1443.8	1440.6	1443.2
27.5°	1418.5	1406.8	1396.4	1386.6	1383.4	1379.5	1371.7	1368.4	1361.3	1360.6	1360.0
30°	1326.2	1314.5	1304.1	1299.5	1293.0	1289.8	1283.9	1280.0	1277.4	1277.4	1276.1
32.5°	1229.3	1218.9	1213.7	1204.0	1200.7	1196.2	1192.3	1188.4	1189.7	1188.4	1189.0
35°	1124.7	1122.1	1112.3	1106.5	1106.5	1105.8	1099.3	1096.7	1095.4	1096.0	1099.3
37.5°	1025.2	1017.4	1010.9	1007.0	1010.2	1006.3	1005.7	1005.7	1009.6	1007.0	1012.2
40°	919.2	918.6	916.0	917.3	917.9	913.4	914.7	915.3	917.9	923.1	923.8
42.5°	826.9	826.3	826.3	826.3	825.0	822.4	825.0	829.5	828.9	832.8	836.0
45°	737.9	736.6	739.2	737.2	741.1	742.4	740.5	741.8	745.7	748.3	753.5
47.5°	656.6	656.6	657.2	658.5	654.6	657.9	659.2	661.8	663.7	665.0	667.6
50°	581.2	581.2	579.9	579.9	579.9	581.8	579.2	582.5	583.1	588.3	591.6
52.5°	511.6	508.4	510.3	509.0	506.4	505.1	506.4	507.1	511.0	512.3	516.2
55°	445.3	445.3	440.1	438.8	440.8	440.1	439.5	439.5	441.4	443.4	446.6
57.5°	386.8	382.9	379.0	378.4	376.4	377.1	377.1	376.4	375.1	375.8	376.4
60°	331.5	328.9	323.1	323.1	322.4	321.8	318.5	317.9	314.6	315.3	312.7
62.5°	280.8	279.5	271.7	269.1	269.1	267.2	263.9	263.3	258.7	258.7	256.1
65°	235.3	231.4	226.9	222.3	222.3	219.7	217.8	211.9	208.7	206.7	202.8
67.5°	193.7	187.9	183.3	179.4	176.8	176.2	171.6	167.7	162.5	159.3	153.4
70°	153.4	148.9	144.3	140.4	137.8	135.2	130.7	124.8	120.9	115.1	111.2
72.5°	115.7	111.8	107.9	102.7	99.5	97.5	93.0	87.8	81.3	77.4	72.2
75°	83.2	78.7	73.5	68.9	67.0	65.0	59.8	55.9	51.4	46.8	41.6
77.5°	54.0	48.8	44.9	39.7	39.0	37.7	32.5	28.6	25.4	22.8	19.5
80°	28.6	26.0	22.8	19.5	18.2	16.3	13.7	11.7	9.8	7.8	6.5
82.5°	12.4	10.4	8.5	7.2	6.5	5.9	4.6	3.9	3.3	3.3	2.6
85°	3.3	2.6	2.6	2.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3
87.5°	0.0	0.0	0.0	0.0	0.7	0.7	0.7	0.0	0.7	0.7	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°	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2
2.5°	1731.2	1731.8	1732.5	1732.5	1733.1	1733.8	1733.8	1734.4	1735.1	1735.7	1735.7
5°	1727.9	1727.9	1727.9	1728.6	1728.6	1728.6	1728.6	1729.9	1729.9	1730.5	1731.2
7.5°	1721.4	1721.4	1721.4	1721.4	1720.8	1721.4	1720.8	1720.8	1722.1	1722.7	1723.4
10°	1711.0	1710.4	1710.4	1709.7	1709.7	1709.7	1710.4	1711.0	1711.7	1712.3	1714.3
12.5°	1694.8	1694.1	1694.1	1693.5	1693.5	1694.1	1694.8	1696.1	1698.7	1700.0	1702.6
15°	1668.8	1668.1	1668.8	1669.4	1670.7	1672.7	1674.6	1676.6	1680.5	1683.7	1687.0
17.5°	1631.1	1631.7	1632.4	1633.7	1635.6	1638.2	1643.4	1648.6	1653.2	1658.4	1663.6
20°	1579.1	1581.7	1582.3	1586.9	1588.2	1594.0	1599.9	1607.7	1614.8	1621.3	1628.5
22.5°	1516.7	1518.6	1521.2	1526.4	1529.7	1537.5	1544.6	1553.7	1561.5	1570.0	1580.4
25°	1445.8	1446.4	1454.2	1454.2	1462.0	1468.5	1477.0	1486.8	1498.5	1509.5	1516.7
27.5°	1365.2	1368.4	1374.3	1376.9	1382.7	1393.1	1400.3	1412.0	1423.7	1433.4	1441.2
30°	1280.7	1283.3	1293.0	1294.3	1298.9	1308.0	1317.7	1328.8	1337.9	1348.9	1356.1
32.5°	1191.6	1198.8	1204.6	1209.2	1210.5	1224.1	1229.3	1237.1	1247.5	1258.6	1265.7
35°	1105.2	1108.4	1116.9	1119.5	1123.4	1131.2	1141.6	1148.1	1153.3	1160.4	1168.9
37.5°	1013.5	1023.2	1025.2	1033.0	1034.3	1041.4	1046.6	1054.4	1060.9	1067.4	1068.7
40°	928.3	931.6	938.7	940.7	942.0	951.7	958.2	960.2	963.4	969.3	977.1
42.5°	841.9	845.1	852.9	851.0	856.8	861.4	864.6	872.4	875.7	877.6	877.6
45°	756.7	758.0	763.2	765.8	769.1	771.7	777.5	781.4	782.7	788.6	790.5
47.5°	675.4	676.7	680.6	685.2	683.9	687.1	693.6	695.6	696.2	700.1	702.1
50°	595.5	598.7	603.9	602.6	606.5	608.5	614.3	615.6	615.6	616.3	616.9
52.5°	520.7	523.3	524.6	525.9	527.9	531.1	533.7	532.4	535.0	537.6	535.7
55°	446.6	448.6	451.8	453.1	453.1	453.8	452.5	458.3	455.7	455.1	455.7
57.5°	379.0	376.4	375.8	379.0	380.3	379.7	377.7	380.3	380.3	379.0	377.1
60°	313.3	311.4	310.7	311.4	308.8	306.8	308.1	306.8	303.6	302.3	302.9
62.5°	253.5	251.6	246.4	246.4	245.1	244.4	239.2	239.9	237.3	233.4	234.7
65°	198.3	193.1	190.5	189.8	185.3	181.4	180.1	175.5	171.6	171.0	171.6
67.5°	148.9	143.0	138.5	136.5	133.9	130.7	126.1	122.2	123.5	122.9	125.5
70°	103.4	99.5	94.9	91.7	93.0	89.1	86.5	86.5	87.1	87.8	89.1
72.5°	68.9	63.7	61.8	59.8	58.5	55.9	57.2	57.2	56.6	57.2	55.9
75°	39.0	36.4	34.5	33.8	32.5	32.5	32.5	32.5	31.9	31.2	31.2
77.5°	17.6	16.3	15.6	15.0	15.0	15.0	14.3	13.7	13.7	13.7	13.0
80°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
82.5°	2.6	2.6	3.3	3.3	3.3	2.6	3.3	3.3	2.6	2.6	3.3
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°	0.7	0.7	0.7	0.0	0.7	0.7	0.7	0.7	0.0	0.7	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: P857973

CATALOG NUMBER: LX4C40D010 EX4C409050 4LBLWW*

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2	1731.2
2.5°	1736.4	1737.0	1737.0	1737.0	1737.7	1737.7	1737.7	1737.7
5°	1731.8	1732.5	1732.5	1732.5	1733.1	1733.1	1733.1	1733.1
7.5°	1724.0	1724.7	1724.7	1725.3	1725.3	1726.0	1726.0	1726.6
10°	1714.9	1716.2	1716.9	1717.5	1718.2	1718.8	1718.8	1719.5
12.5°	1705.2	1706.5	1707.1	1708.4	1709.7	1710.4	1711.0	1711.7
15°	1690.9	1693.5	1694.8	1695.4	1698.0	1699.3	1700.0	1700.6
17.5°	1668.1	1673.3	1675.3	1676.6	1679.2	1681.8	1683.7	1684.4
20°	1635.6	1641.5	1644.1	1647.3	1651.2	1654.5	1655.8	1657.1
22.5°	1590.1	1596.6	1600.5	1604.4	1607.7	1610.9	1616.1	1614.2
25°	1525.1	1536.2	1540.7	1542.7	1549.8	1553.7	1556.3	1553.7
27.5°	1452.3	1458.8	1462.7	1467.2	1472.5	1476.4	1477.7	1481.6
30°	1364.5	1375.6	1374.9	1379.5	1386.0	1389.9	1391.2	1394.4
32.5°	1273.5	1278.7	1282.6	1282.0	1284.6	1291.7	1289.1	1295.0
35°	1176.7	1177.3	1183.8	1183.2	1188.4	1188.4	1188.4	1192.3
37.5°	1073.3	1081.1	1077.8	1085.6	1083.0	1085.0	1085.0	1086.3
40°	979.0	981.6	981.6	984.2	986.2	984.2	985.5	988.8
42.5°	881.5	884.1	884.8	883.5	885.4	891.3	886.7	890.6
45°	790.5	792.5	795.1	793.1	796.4	794.4	796.4	795.1
47.5°	704.7	704.0	703.4	708.6	704.0	704.7	707.3	702.7
50°	616.9	620.8	618.2	620.2	621.5	621.5	619.5	619.5
52.5°	538.9	538.3	536.3	538.3	537.0	537.6	538.9	537.6
55°	458.3	460.9	459.6	459.0	459.6	459.6	463.5	458.3
57.5°	379.0	377.7	379.7	384.2	379.7	382.9	384.9	385.5
60°	303.6	303.6	307.5	305.5	309.4	312.7	315.3	314.0
62.5°	231.4	234.7	236.0	236.6	240.5	243.1	243.1	242.5
65°	171.6	176.2	176.2	178.8	180.1	180.1	181.4	184.0
67.5°	126.8	126.8	127.4	128.7	128.1	128.1	129.4	130.0
70°	88.4	87.1	89.1	88.4	88.4	87.8	88.4	88.4
72.5°	55.9	55.9	56.6	55.9	54.6	55.3	55.3	56.6
75°	29.9	31.2	29.9	29.9	30.6	29.3	29.9	30.6
77.5°	12.4	12.4	12.4	12.4	12.4	11.7	11.7	11.7
80°	5.9	5.9	5.9	5.9	5.9	5.9	5.2	5.2
82.5°	2.6	3.3	2.6	3.3	2.6	2.6	2.6	2.6
85°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
87.5°	0.0	0.7	0.0	0.7	0.0	0.0	0.0	0.7
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)