

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: P857744

Luminaire Tested: **LX4C35D010 EX4C359030 4LBSWNH**

Issue Date: 2/18/2022



Test Information

Test Method: LM-79-08
Report Number: P857744
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: LX4C35D010 EX4C359030 4LBSWNH
Description: 4 INCH 3500 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 3000K, 90CRI LEDS
AND 4LCSW TRIM WITH H FINISH
Light Source: -
Ballast/Driver: -

Summary

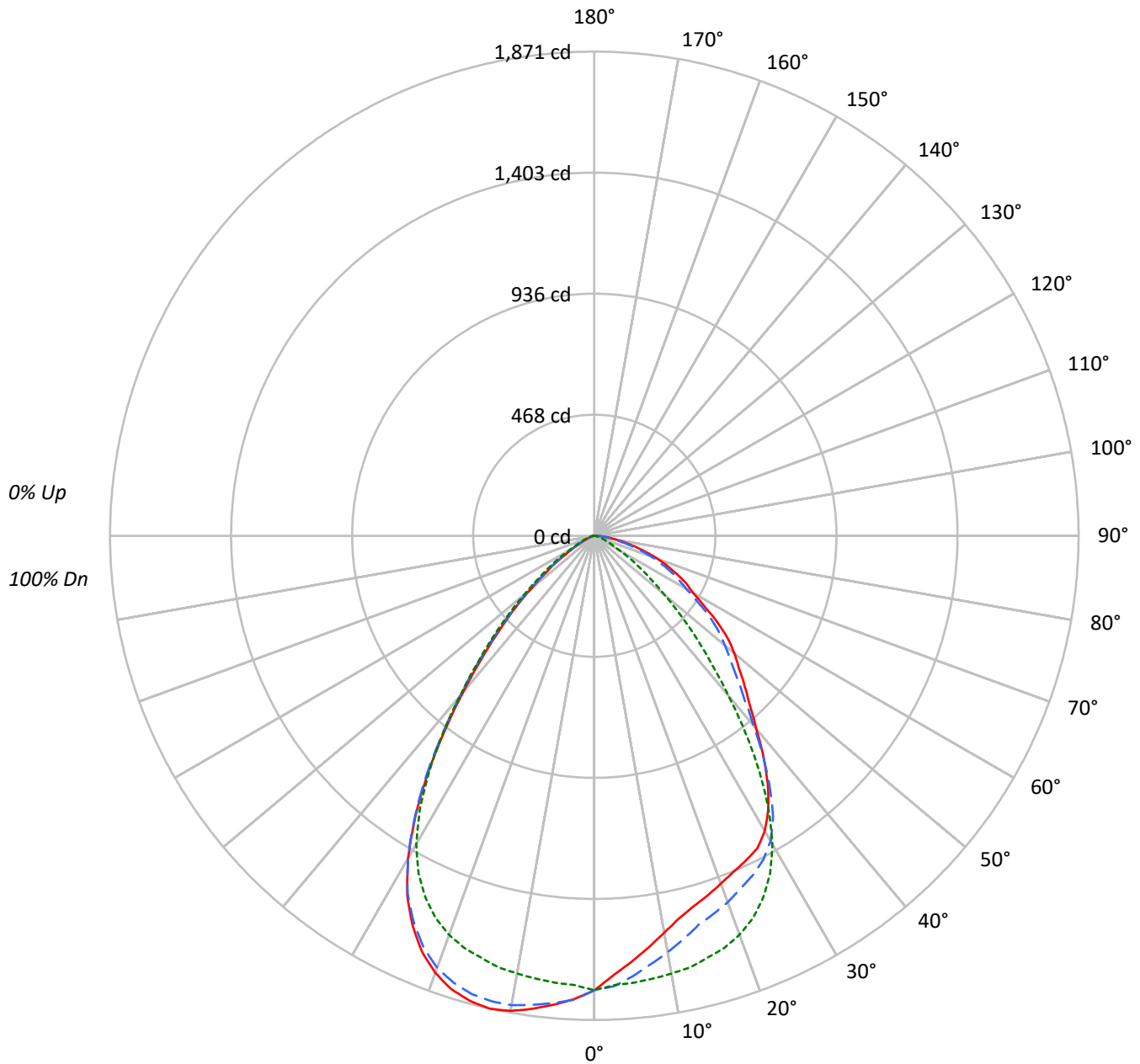
Lumens per Lamp: N/A
Luminaire Lumens: 3078.0 lumens
Efficiency: N/A
Efficacy: 76.2 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.17 / 1.15
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 40.4
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

TEST NUMBER: P857744

CATALOG NUMBER: LX4C35D010 EX4C359030 4LBSWNH

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°	215731	215731	215731
5°	203705	213755	224361
10°	194209	214256	232594
15°	188504	214705	236568
20°	186968	214489	234897
25°	187715	209187	225141
30°	186828	195170	204149
35°	175112	166639	168334
40°	156044	129197	126294
45°	142711	96322	90415
50°	134935	67468	60988
55°	124079	45558	38275
60°	108406	26684	21131
65°	102616	17093	11831
70°	93500	12213	7328
75°	77324	8592	5411
80°	60844	4811	3184
85°	54269	3242	0



TEST NUMBER: P857744

CATALOG NUMBER: LX4C35D010 EX4C359030 4LBSWNH

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.9	5.4
10°-20°	476.0	15.5
20°-30°	705.6	22.9
30°-40°	706.5	23.0
40°-50°	493.8	16.0
50°-60°	293.8	9.5
60°-70°	153.3	5.0
70°-80°	68.2	2.2
80°-90°	14.9	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°	1347.4	43.8
0°-40°	2054.0	66.7
0°-60°	2841.6	92.3
0°-90°	3078.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3078.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1756	1756	1756	1756	1756	
5°	1652	1708	1733	1812	1819	155
15°	1482	1557	1688	1833	1860	420
25°	1385	1448	1543	1650	1661	638
35°	1168	1181	1111	1131	1122	724
45°	821	781	554	536	520	638
55°	579	543	213	186	179	514
65°	353	324	59	43	41	349
75°	163	142	18	11	11	176
85°	38	29	2	2	0	43
90°	0	0	0	0	0	



TEST NUMBER: P857744

CATALOG NUMBER: LX4C35D010 EX4C359030 4LBSWNH

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0
2.5°	1699.4	1719.8	1699.4	1706.2	1733.3	1708.4	1722.0	1722.0	1715.2	1731.0	1742.4
5°	1651.8	1672.2	1651.8	1660.9	1690.3	1665.4	1681.3	1676.7	1679.0	1692.6	1708.4
7.5°	1604.4	1620.2	1602.1	1613.4	1640.6	1620.2	1633.7	1633.7	1636.0	1656.3	1670.0
10°	1556.8	1570.4	1556.8	1565.9	1595.3	1577.2	1586.3	1588.5	1595.3	1613.4	1633.7
12.5°	1513.8	1525.1	1511.6	1525.1	1550.0	1531.9	1543.2	1545.5	1552.3	1572.7	1595.3
15°	1482.1	1493.5	1479.9	1491.2	1513.8	1500.2	1509.3	1513.8	1518.3	1536.4	1556.8
17.5°	1457.3	1466.3	1455.0	1468.6	1486.7	1470.9	1484.4	1484.4	1491.2	1509.3	1531.9
20°	1430.1	1439.1	1430.1	1441.4	1461.8	1448.2	1459.5	1459.5	1466.3	1486.7	1507.1
22.5°	1405.2	1409.7	1405.2	1414.3	1434.6	1423.3	1430.1	1432.4	1439.1	1457.3	1475.4
25°	1384.8	1393.9	1389.3	1398.4	1412.0	1400.7	1407.4	1409.7	1416.5	1432.4	1448.2
27.5°	1362.2	1366.7	1362.2	1373.6	1384.8	1375.8	1382.6	1380.3	1384.8	1398.4	1412.0
30°	1317.0	1321.5	1321.5	1328.2	1337.4	1332.8	1339.6	1332.8	1337.4	1348.6	1362.2
32.5°	1251.3	1253.6	1255.8	1262.7	1269.4	1262.7	1267.2	1267.2	1267.2	1276.3	1285.3
35°	1167.6	1172.1	1169.9	1174.4	1181.2	1178.9	1178.9	1176.6	1172.1	1176.6	1181.2
37.5°	1072.6	1065.8	1065.8	1072.6	1077.1	1068.1	1072.6	1068.1	1068.1	1070.3	1070.3
40°	973.0	966.2	973.0	975.3	977.5	973.0	970.8	966.2	959.4	961.7	957.2
42.5°	889.3	884.7	887.0	887.0	889.3	884.7	887.0	878.0	871.1	866.6	859.9
45°	821.4	814.6	821.4	816.9	816.9	814.6	812.3	807.8	798.8	792.0	780.7
47.5°	758.1	758.1	760.3	760.3	760.3	755.7	755.7	746.7	737.6	728.6	712.8
50°	706.0	701.5	710.5	710.5	703.8	701.5	703.8	692.4	685.7	674.3	658.4
52.5°	649.4	649.4	651.7	651.7	649.4	644.9	647.2	638.1	631.3	620.0	604.2
55°	579.3	574.8	581.5	581.5	579.3	577.0	579.3	572.5	565.7	556.7	543.0
57.5°	500.1	497.8	502.3	504.6	500.1	500.1	502.3	495.6	493.3	484.2	470.7
60°	441.2	439.0	443.5	445.8	441.2	441.2	441.2	432.2	427.6	418.6	409.5
62.5°	400.5	398.3	402.8	400.5	398.3	396.0	398.3	389.2	384.7	375.7	366.6
65°	353.0	355.3	357.6	357.6	355.3	353.0	353.0	348.5	344.0	334.9	323.6
67.5°	307.7	307.7	310.0	312.2	310.0	310.0	310.0	303.2	298.7	291.9	278.3
70°	260.3	257.9	264.8	264.8	260.3	262.5	260.3	257.9	253.4	244.4	233.1
72.5°	210.4	210.4	212.7	212.7	210.4	210.4	210.4	208.2	201.4	196.8	185.6
75°	162.9	162.9	165.2	167.5	162.9	162.9	165.2	160.6	156.1	149.4	142.5
77.5°	122.2	119.9	122.2	122.2	119.9	119.9	119.9	117.7	115.4	108.6	101.8
80°	86.0	83.7	86.0	86.0	86.0	83.7	83.7	81.4	81.4	76.9	70.2
82.5°	58.8	56.6	58.8	58.8	58.8	56.6	56.6	56.6	54.3	52.1	47.5
85°	38.5	36.2	36.2	38.5	36.2	36.2	36.2	36.2	34.0	31.7	29.4
87.5°	18.1	18.1	18.1	18.1	18.1	18.1	18.1	15.9	15.9	15.9	13.6
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: P857744

CATALOG NUMBER: LX4C35D010 EX4C359030 4LBSWNH

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0
2.5°	1733.3	1728.8	1742.4	1737.9	1740.1	1728.8	1746.9	1737.9	1749.1	1737.9	1760.5
5°	1703.9	1699.4	1719.8	1717.5	1719.8	1710.7	1731.0	1728.8	1742.4	1733.3	1758.2
7.5°	1672.2	1667.7	1690.3	1692.6	1697.1	1688.1	1715.2	1715.2	1728.8	1726.5	1753.6
10°	1636.0	1638.2	1660.9	1665.4	1674.5	1670.0	1694.8	1701.7	1719.8	1717.5	1751.4
12.5°	1602.1	1602.1	1631.5	1640.6	1647.3	1645.1	1674.5	1683.6	1703.9	1708.4	1740.1
15°	1568.2	1570.4	1597.5	1611.1	1620.2	1617.9	1649.6	1660.9	1685.8	1688.1	1726.5
17.5°	1540.9	1538.7	1568.2	1579.4	1593.0	1590.8	1624.7	1638.2	1663.2	1670.0	1706.2
20°	1518.3	1516.1	1543.2	1556.8	1565.9	1563.6	1597.5	1613.4	1636.0	1640.6	1676.7
22.5°	1491.2	1486.7	1513.8	1525.1	1534.2	1531.9	1561.3	1572.7	1595.3	1599.8	1633.7
25°	1459.5	1455.0	1479.9	1486.7	1493.5	1489.0	1513.8	1520.6	1538.7	1543.2	1577.2
27.5°	1423.3	1412.0	1432.4	1432.4	1436.9	1430.1	1448.2	1455.0	1470.9	1470.9	1502.5
30°	1366.7	1350.9	1362.2	1360.0	1362.2	1353.2	1364.5	1366.7	1378.1	1375.8	1398.4
32.5°	1287.5	1264.9	1271.7	1264.9	1258.2	1244.6	1258.2	1253.6	1262.7	1253.6	1273.9
35°	1178.9	1156.3	1154.0	1145.0	1138.2	1126.9	1126.9	1115.6	1117.8	1111.1	1124.7
37.5°	1061.2	1031.9	1027.4	1009.3	997.9	984.3	984.3	975.3	963.9	959.4	970.8
40°	945.8	914.2	902.9	873.5	862.1	848.5	839.5	828.2	823.7	805.6	814.6
42.5°	846.3	812.3	787.5	755.7	744.5	724.1	710.5	696.9	690.2	669.8	678.8
45°	762.6	721.9	694.7	653.9	638.1	615.5	595.1	579.3	563.4	554.4	549.9
47.5°	692.4	649.4	613.2	568.0	543.0	522.7	495.6	479.7	459.4	448.0	441.2
50°	633.6	586.1	545.3	493.3	468.4	445.8	414.1	389.2	371.1	353.0	348.5
52.5°	581.5	531.8	486.5	427.6	398.3	371.1	337.2	310.0	294.1	273.8	271.5
55°	520.4	477.5	427.6	366.6	337.2	310.0	273.8	246.7	226.3	212.7	208.2
57.5°	454.9	414.1	366.6	305.5	276.0	246.7	212.7	187.8	169.7	158.4	156.1
60°	393.8	355.3	310.0	248.9	219.4	194.6	158.4	133.5	117.7	108.6	104.0
62.5°	348.5	312.2	269.3	212.7	185.6	160.6	126.8	104.0	90.5	81.4	76.9
65°	305.5	269.3	230.8	178.7	156.1	133.5	101.8	81.4	67.9	58.8	54.3
67.5°	260.3	228.6	192.3	149.4	126.8	108.6	81.4	63.3	52.1	45.2	40.7
70°	214.9	185.6	156.1	119.9	104.0	86.0	63.3	49.8	38.5	34.0	29.4
72.5°	169.7	147.1	122.2	92.8	79.2	67.9	49.8	36.2	29.4	24.9	20.4
75°	126.8	110.9	90.5	70.2	58.8	49.8	36.2	27.1	22.6	18.1	15.9
77.5°	90.5	76.9	63.3	47.5	43.0	36.2	24.9	20.4	15.9	11.4	9.0
80°	61.1	54.3	43.0	34.0	27.1	24.9	18.1	13.6	9.0	6.8	6.8
82.5°	40.7	34.0	27.1	20.4	18.1	15.9	11.4	9.0	6.8	4.5	4.5
85°	24.9	20.4	15.9	11.4	11.4	9.0	6.8	4.5	2.3	2.3	2.3
87.5°	11.4	9.0	6.8	4.5	4.5	2.3	2.3	2.3	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: P857744

CATALOG NUMBER: LX4C35D010 EX4C359030 4LBSWNH

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0
2.5°	1778.6	1765.0	1756.0	1767.2	1771.7	1765.0	1771.7	1783.1	1794.5	1796.7	1765.0
5°	1780.9	1767.2	1762.7	1776.3	1778.6	1776.3	1783.1	1799.0	1812.5	1817.1	1785.4
7.5°	1780.9	1771.7	1769.5	1785.4	1787.6	1785.4	1796.7	1814.8	1828.3	1837.4	1805.7
10°	1776.3	1771.7	1774.0	1787.6	1792.1	1792.1	1808.0	1828.3	1841.9	1851.0	1819.3
12.5°	1769.5	1769.5	1769.5	1785.4	1789.9	1792.1	1805.7	1832.9	1841.9	1855.5	1823.8
15°	1758.2	1758.2	1758.2	1774.0	1780.9	1780.9	1796.7	1821.6	1832.9	1846.4	1814.8
17.5°	1737.9	1737.9	1740.1	1753.6	1760.5	1760.5	1776.3	1803.5	1810.2	1826.1	1794.5
20°	1708.4	1708.4	1710.7	1724.3	1731.0	1726.5	1746.9	1769.5	1776.3	1789.9	1758.2
22.5°	1665.4	1665.4	1665.4	1679.0	1683.6	1681.3	1701.7	1722.0	1722.0	1740.1	1706.2
25°	1602.1	1606.6	1602.1	1615.6	1620.2	1617.9	1636.0	1654.1	1649.6	1670.0	1636.0
27.5°	1525.1	1522.8	1522.8	1534.2	1534.2	1531.9	1545.5	1565.9	1561.3	1574.9	1543.2
30°	1418.8	1425.5	1414.3	1430.1	1423.3	1418.8	1427.8	1445.9	1439.1	1450.5	1425.5
32.5°	1296.6	1287.5	1287.5	1287.5	1292.0	1280.8	1289.8	1298.9	1292.0	1303.4	1276.3
35°	1135.9	1138.2	1131.4	1133.7	1135.9	1122.4	1131.4	1140.4	1131.4	1138.2	1113.3
37.5°	975.3	977.5	961.7	970.8	961.7	957.2	966.2	970.8	961.7	968.5	941.3
40°	814.6	810.1	807.8	807.8	810.1	798.8	805.6	812.3	805.6	810.1	785.2
42.5°	674.3	672.1	667.6	669.8	663.0	660.7	663.0	669.8	663.0	667.6	649.4
45°	552.1	547.6	540.8	543.0	543.0	531.8	538.5	543.0	536.3	538.5	522.7
47.5°	439.0	432.2	432.2	429.9	429.9	425.4	432.2	429.9	423.1	427.6	411.8
50°	341.7	337.2	337.2	337.2	337.2	330.3	332.6	337.2	330.3	330.3	321.3
52.5°	267.0	260.3	255.7	255.7	255.7	253.4	253.4	255.7	248.9	248.9	246.7
55°	201.4	199.1	192.3	192.3	192.3	185.6	187.8	187.8	185.6	185.6	178.7
57.5°	149.4	142.5	138.0	138.0	133.5	133.5	131.3	133.5	129.0	129.0	124.4
60°	99.5	95.0	92.8	90.5	90.5	88.3	90.5	88.3	88.3	86.0	83.7
62.5°	72.4	67.9	63.3	63.3	63.3	61.1	61.1	61.1	61.1	61.1	58.8
65°	52.1	47.5	47.5	45.2	45.2	43.0	43.0	43.0	43.0	43.0	40.7
67.5°	36.2	34.0	31.7	31.7	31.7	31.7	31.7	31.7	29.4	29.4	29.4
70°	27.1	24.9	22.6	22.6	22.6	22.6	22.6	20.4	22.6	22.6	20.4
72.5°	18.1	18.1	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
75°	13.6	13.6	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
77.5°	9.0	9.0	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
80°	6.8	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
82.5°	4.5	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
85°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	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: P857744

CATALOG NUMBER: LX4C35D010 EX4C359030 4LBSWNH

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0	1756.0
2.5°	1799.0	1796.7	1792.1	1799.0	1780.9	1774.0	1771.7	1792.1
5°	1823.8	1819.3	1819.3	1826.1	1805.7	1801.2	1796.7	1819.3
7.5°	1846.4	1841.9	1841.9	1848.7	1830.6	1826.1	1821.6	1844.2
10°	1860.0	1860.0	1860.0	1864.5	1848.7	1844.2	1841.9	1864.5
12.5°	1866.8	1866.8	1864.5	1873.6	1853.3	1853.3	1848.7	1871.4
15°	1857.8	1857.8	1857.8	1864.5	1846.4	1841.9	1841.9	1860.0
17.5°	1835.2	1835.2	1832.9	1839.7	1819.3	1819.3	1817.1	1837.4
20°	1801.2	1801.2	1796.7	1805.7	1785.4	1778.6	1776.3	1796.7
22.5°	1746.9	1744.6	1742.4	1746.9	1728.8	1724.3	1722.0	1740.1
25°	1676.7	1674.5	1670.0	1674.5	1654.1	1647.3	1647.3	1660.9
27.5°	1577.2	1577.2	1570.4	1577.2	1554.5	1552.3	1550.0	1565.9
30°	1455.0	1445.9	1441.4	1450.5	1427.8	1427.8	1423.3	1439.1
32.5°	1303.4	1294.3	1292.0	1296.6	1276.3	1269.4	1278.5	1287.5
35°	1129.2	1131.4	1122.4	1122.4	1104.3	1106.5	1108.8	1122.4
37.5°	961.7	957.2	954.9	957.2	943.6	939.1	934.6	948.1
40°	805.6	794.2	792.0	792.0	780.7	778.5	780.7	787.5
42.5°	658.4	656.2	647.2	651.7	640.3	644.9	642.6	642.6
45°	531.8	534.0	524.9	531.8	522.7	515.9	515.9	520.4
47.5°	420.9	420.9	418.6	418.6	411.8	414.1	409.5	416.4
50°	325.8	325.8	321.3	323.6	319.1	319.1	316.8	319.1
52.5°	248.9	246.7	246.7	244.4	239.9	242.2	244.4	239.9
55°	181.0	183.3	178.7	181.0	176.5	178.7	176.5	178.7
57.5°	124.4	126.8	122.2	126.8	122.2	124.4	122.2	122.2
60°	86.0	86.0	83.7	86.0	83.7	83.7	81.4	86.0
62.5°	58.8	58.8	58.8	58.8	58.8	56.6	58.8	58.8
65°	43.0	40.7	40.7	40.7	40.7	40.7	40.7	40.7
67.5°	29.4	29.4	29.4	29.4	29.4	29.4	29.4	29.4
70°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
72.5°	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
75°	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4
77.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
80°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
82.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
85°	2.3	2.3	2.3	0.0	2.3	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)