

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: P858632

Luminaire Tested: **LD4C30W2N2050D010 4LBSWNL_2700K**

Issue Date: 11/9/2023



Test Information

Test Method: LM-79-08
Report Number: P858632
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P251556)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 11/9/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD4C30W2N2050D010 4LBSWNLI_2700K
Description: 4 INCH 3000 LUMEN PORTFOLIO LED DOWNLIGHT WITH, 2700K, W2N2050 LEDS
AND 4LBSWNLI TRIM WITH FINISH

Light Source: -
Ballast/Driver: -

Summary

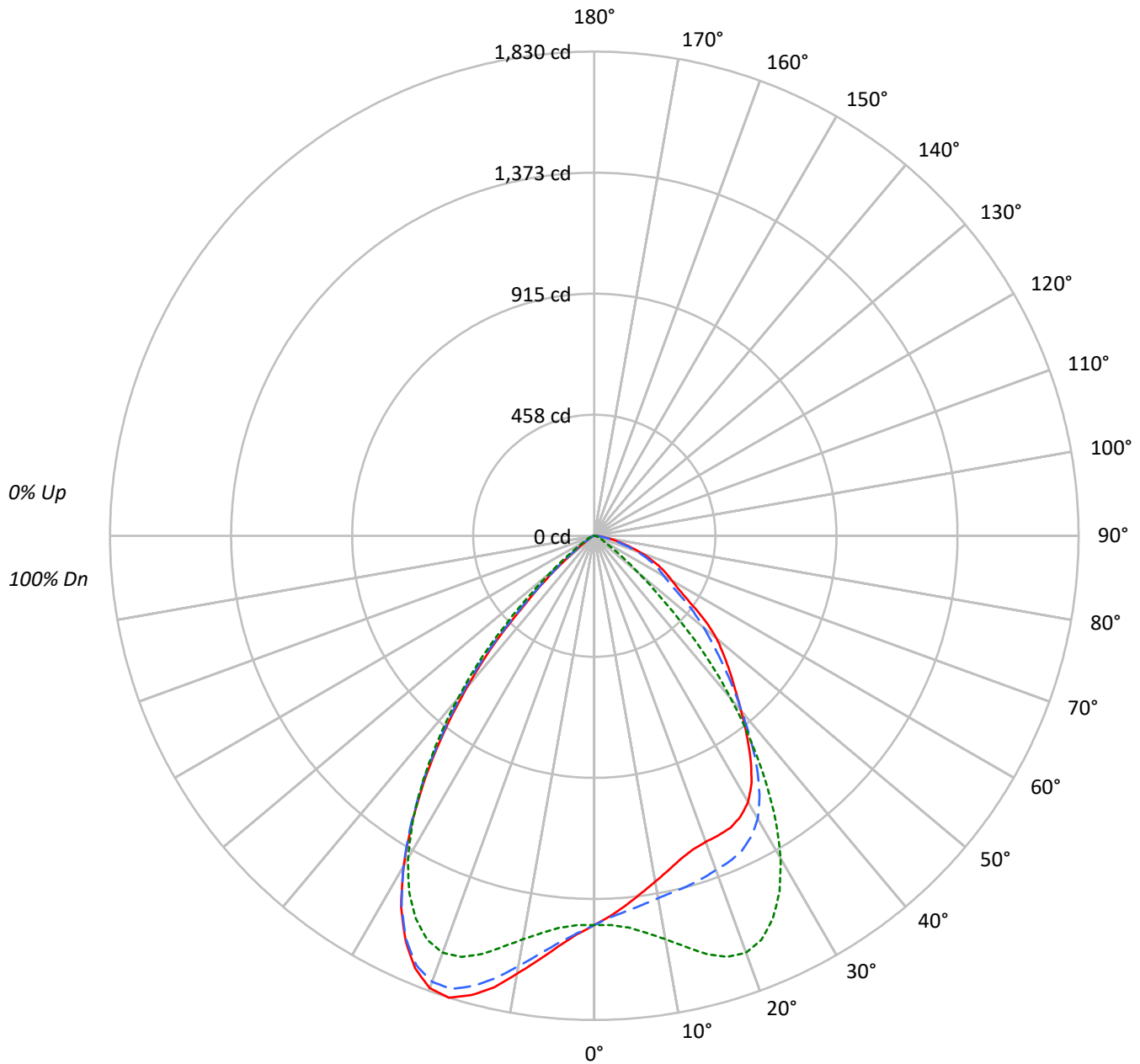
Lumens per Lamp: N/A
Luminaire Lumens: 2715.0 lumens
Efficiency: N/A
Efficacy: 68.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.19
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 39.6
Input Voltage (V): NR
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					0
RW	70	50	30	10	70	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
1	112	108	105	102	109	106	103	101		102	100	98		98	96	95		95	93	92
2	104	98	93	89	102	96	92	88		93	89	86		90	87	84		87	85	82
3	97	89	83	78	95	88	82	77		85	80	76		82	78	75		80	77	74
4	91	81	75	69	89	80	74	69		78	72	68		76	71	67		74	70	66
5	85	75	67	62	83	74	67	62		72	66	61		70	65	60		68	64	60
6	79	69	61	56	78	68	61	56		66	60	55		64	59	55		63	58	54
7	75	63	56	51	73	62	55	51		61	55	50		60	54	50		58	53	50
8	70	58	51	46	69	58	51	46		57	50	46		55	50	46		54	49	45
9	66	54	47	42	65	54	47	42		53	46	42		52	46	42		51	46	42
10	62	51	44	39	61	50	43	39		49	43	39		48	43	39		47	42	39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	180754	180754	180754
5°	172677	183332	192100
10°	165566	193123	209653
15°	160739	208129	228657
20°	160965	219221	237799
25°	165064	216357	228856
30°	164840	199709	204348
35°	154401	168798	166504
40°	138306	128748	120136
45°	125476	81745	67064
50°	115268	41474	28631
55°	94628	18527	9467
60°	83049	10393	5184
65°	78168	7820	3924
70°	66919	6214	3448
75°	51027	4557	2753
80°	36648	2688	1415
85°	27064	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.9	5.3
10°-20°	445.4	16.4
20°-30°	689.1	25.4
30°-40°	678.9	25.0
40°-50°	416.9	15.4
50°-60°	185.4	6.8
60°-70°	103.5	3.8
70°-80°	44.8	1.7
80°-90°	8.0	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°	1277.4	47.0
0°-40°	1956.3	72.1
0°-60°	2558.6	94.2
0°-90°	2715.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2715.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1471	1471	1471	1471	1471	
5°	1400	1423	1487	1544	1558	131
15°	1264	1370	1636	1761	1798	359
25°	1218	1316	1596	1682	1688	559
35°	1030	1072	1126	1122	1110	639
45°	722	686	470	411	386	559
55°	442	400	86	50	44	406
65°	269	242	27	15	14	263
75°	108	92	10	6	6	118
85°	19	15	0	0	0	24
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°	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3
2.5°	1436.7	1436.7	1436.7	1436.7	1440.5	1434.8	1440.5	1440.5	1446.3	1448.2	1442.5
5°	1400.2	1398.3	1400.2	1400.2	1404.0	1402.1	1407.8	1411.7	1419.4	1423.3	1423.3
7.5°	1361.8	1361.8	1361.8	1365.6	1371.3	1369.5	1375.2	1381.0	1392.5	1400.2	1406.0
10°	1327.2	1325.3	1331.0	1333.0	1338.7	1338.7	1348.3	1354.1	1367.5	1382.9	1390.6
12.5°	1294.5	1292.6	1296.5	1302.3	1311.8	1311.8	1319.5	1329.1	1348.3	1365.6	1379.0
15°	1263.8	1265.8	1271.5	1275.3	1286.8	1286.8	1296.5	1308.0	1329.1	1350.3	1369.5
17.5°	1242.7	1244.6	1248.5	1254.2	1265.8	1265.8	1275.3	1288.8	1311.8	1334.8	1357.9
20°	1231.2	1233.1	1236.9	1242.7	1252.3	1254.2	1261.9	1277.3	1298.4	1323.3	1344.5
22.5°	1225.4	1229.3	1233.1	1236.9	1246.5	1246.5	1256.1	1267.6	1288.8	1313.8	1333.0
25°	1217.7	1221.5	1223.5	1229.3	1236.9	1236.9	1242.7	1256.1	1275.3	1296.5	1315.7
27.5°	1196.6	1200.5	1202.3	1208.1	1215.8	1213.8	1221.5	1231.2	1248.5	1267.6	1283.0
30°	1162.0	1164.0	1167.8	1169.7	1175.5	1175.5	1181.2	1190.8	1202.3	1219.6	1235.0
32.5°	1106.3	1110.2	1112.1	1114.0	1119.8	1117.8	1119.8	1125.5	1137.0	1152.4	1162.0
35°	1029.5	1037.2	1037.2	1041.0	1043.0	1041.0	1041.0	1048.7	1054.5	1066.0	1071.8
37.5°	945.0	950.8	948.8	952.7	954.6	948.8	952.7	954.6	962.3	968.0	970.0
40°	862.4	864.3	864.3	864.3	864.3	862.4	864.3	866.2	872.0	872.0	866.2
42.5°	787.5	789.4	789.4	785.5	789.4	787.5	787.5	787.5	787.5	779.8	774.0
45°	722.2	724.1	724.1	722.2	722.2	718.3	716.4	714.5	708.7	699.1	685.7
47.5°	660.7	664.5	666.5	662.6	660.7	656.9	656.9	645.3	637.7	626.1	607.0
50°	603.1	607.0	607.0	603.1	603.1	597.3	591.6	587.7	576.2	562.8	539.7
52.5°	530.1	535.9	535.9	534.0	534.0	526.3	524.3	516.7	507.0	491.7	472.5
55°	441.8	449.5	447.5	445.6	441.8	441.8	441.8	436.0	430.2	418.7	399.5
57.5°	378.4	380.3	380.3	378.4	378.4	374.5	374.5	368.8	366.8	355.3	340.0
60°	338.0	338.0	340.0	338.0	336.1	334.2	332.3	328.5	322.7	315.0	303.5
62.5°	305.4	307.3	307.3	305.4	303.5	301.5	299.6	295.8	292.0	286.2	274.7
65°	268.9	272.7	270.8	268.9	267.0	265.0	265.0	261.2	257.4	253.5	242.0
67.5°	228.5	230.5	232.4	228.5	228.5	226.7	226.7	222.8	220.9	213.2	205.5
70°	186.3	188.2	188.2	186.3	186.3	184.4	184.4	182.5	180.5	174.8	167.1
72.5°	146.0	147.9	146.0	144.0	144.0	144.0	142.1	140.2	138.3	134.5	128.7
75°	107.5	107.5	109.5	107.5	105.7	105.7	103.7	103.7	99.9	98.0	92.2
77.5°	76.8	78.7	76.8	76.8	74.9	73.0	73.0	71.0	71.0	69.2	65.3
80°	51.8	51.8	53.8	51.8	50.0	51.8	50.0	48.0	48.0	46.1	42.3
82.5°	32.7	34.5	32.7	32.7	32.7	32.7	32.7	30.7	30.7	28.8	26.9
85°	19.2	19.2	19.2	19.2	19.2	19.2	19.2	17.3	17.3	17.3	15.4
87.5°	9.6	9.6	7.7	7.7	9.6	9.6	9.6	7.7	7.7	7.7	7.7
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°	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3
2.5°	1450.1	1452.0	1455.8	1461.6	1461.6	1457.8	1467.4	1467.4	1471.3	1473.2	1480.8
5°	1434.8	1438.6	1446.3	1455.8	1457.8	1455.8	1469.3	1475.1	1480.8	1486.6	1498.1
7.5°	1421.3	1429.0	1442.5	1455.8	1461.6	1461.6	1482.8	1490.5	1502.0	1513.5	1527.0
10°	1413.6	1425.1	1444.3	1465.5	1471.3	1477.0	1502.0	1517.3	1532.7	1548.1	1567.3
12.5°	1404.0	1425.1	1450.1	1477.0	1488.5	1496.2	1530.8	1550.0	1571.1	1590.3	1615.3
15°	1402.1	1427.1	1459.8	1494.3	1509.7	1521.2	1559.6	1586.5	1611.5	1636.4	1661.4
17.5°	1394.4	1425.1	1465.5	1503.9	1523.1	1538.5	1582.6	1615.3	1644.1	1669.1	1697.9
20°	1384.8	1419.4	1463.6	1505.8	1527.0	1542.3	1590.3	1621.1	1653.7	1676.8	1703.6
22.5°	1371.3	1406.0	1450.1	1492.3	1511.6	1525.0	1573.0	1600.0	1628.8	1651.8	1676.8
25°	1348.3	1381.0	1419.4	1454.0	1473.2	1484.7	1527.0	1551.9	1573.0	1596.1	1619.1
27.5°	1315.7	1340.6	1373.3	1398.3	1409.8	1421.3	1455.8	1477.0	1496.2	1515.4	1530.8
30°	1258.0	1277.3	1300.3	1321.5	1333.0	1334.8	1367.5	1379.0	1394.4	1407.8	1419.4
32.5°	1181.2	1196.6	1210.0	1221.5	1229.3	1231.2	1256.1	1260.0	1275.3	1275.3	1292.6
35°	1083.3	1091.0	1100.5	1100.5	1106.3	1100.5	1117.8	1121.7	1123.6	1125.5	1139.0
37.5°	971.8	975.7	981.5	970.0	970.0	964.2	970.0	973.8	966.1	966.1	975.7
40°	866.2	858.5	850.8	839.3	833.6	822.0	822.0	812.5	806.7	802.8	804.8
42.5°	764.5	747.2	729.8	704.9	693.3	681.8	670.3	656.9	653.0	643.5	637.7
45°	666.5	641.5	618.5	578.1	555.1	543.5	518.6	491.7	474.4	470.5	455.2
47.5°	583.9	547.4	509.0	461.0	438.0	416.8	380.3	357.3	334.2	322.7	313.0
50°	510.9	478.3	428.3	376.5	347.7	326.5	286.2	259.3	234.3	217.0	205.5
52.5°	447.5	411.0	365.0	305.4	276.6	253.5	209.3	178.6	157.5	140.2	126.8
55°	376.5	347.7	301.5	245.8	217.0	190.2	151.7	119.1	98.0	86.5	76.8
57.5°	324.6	299.6	255.5	201.7	174.8	149.8	111.4	84.5	67.2	55.7	50.0
60°	290.0	267.0	228.5	176.7	151.7	128.7	92.2	67.2	51.8	42.3	38.4
62.5°	261.2	238.2	203.6	155.5	134.5	111.4	78.7	55.7	42.3	34.5	28.8
65°	228.5	207.5	176.7	134.5	115.2	96.0	67.2	46.1	34.5	26.9	23.0
67.5°	194.0	174.8	147.9	111.4	96.0	80.7	53.8	38.4	28.8	23.0	19.2
70°	157.5	142.1	117.2	90.3	76.8	63.4	44.2	30.7	21.1	17.3	15.4
72.5°	121.0	107.5	90.3	69.2	57.6	48.0	32.7	23.0	17.3	13.5	11.5
75°	86.5	76.8	63.4	50.0	42.3	34.5	25.0	17.3	11.5	9.6	7.7
77.5°	59.5	53.8	44.2	34.5	28.8	25.0	17.3	11.5	9.6	7.7	5.8
80°	38.4	34.5	28.8	21.1	17.3	15.4	9.6	7.7	5.8	3.8	3.8
82.5°	23.0	21.1	17.3	11.5	9.6	7.7	5.8	3.8	3.8	2.0	2.0
85°	13.5	11.5	7.7	5.8	5.8	3.8	3.8	2.0	2.0	0.0	0.0
87.5°	5.8	3.8	3.8	2.0	2.0	2.0	2.0	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3
2.5°	1477.0	1486.6	1484.7	1490.5	1488.5	1488.5	1498.1	1494.3	1503.9	1503.9	1505.8
5°	1498.1	1511.6	1511.6	1521.2	1519.3	1523.1	1532.7	1532.7	1544.3	1548.1	1548.1
7.5°	1528.8	1546.1	1550.0	1559.6	1561.5	1569.2	1576.9	1578.8	1594.2	1598.0	1600.0
10°	1571.1	1592.3	1598.0	1607.6	1611.5	1619.1	1628.8	1632.6	1651.8	1653.7	1661.4
12.5°	1623.0	1646.0	1651.8	1663.3	1665.3	1674.8	1688.3	1692.1	1711.3	1717.1	1722.8
15°	1672.9	1694.0	1703.6	1715.2	1717.1	1728.6	1740.1	1744.0	1761.3	1769.0	1774.8
17.5°	1707.5	1732.5	1738.3	1753.6	1753.6	1763.2	1774.8	1778.6	1795.8	1801.6	1805.5
20°	1715.2	1738.3	1745.9	1757.4	1759.3	1765.1	1774.8	1778.6	1793.9	1795.8	1801.6
22.5°	1686.3	1709.4	1713.3	1724.8	1726.7	1732.5	1740.1	1738.3	1757.4	1755.5	1757.4
25°	1624.9	1646.0	1646.0	1659.5	1657.6	1663.3	1667.1	1665.3	1682.5	1682.5	1682.5
27.5°	1536.5	1555.8	1557.7	1567.3	1561.5	1563.5	1567.3	1565.3	1576.9	1576.9	1576.9
30°	1427.1	1442.5	1436.7	1444.3	1440.5	1444.3	1440.5	1438.6	1442.5	1446.3	1444.3
32.5°	1290.7	1302.3	1302.3	1304.1	1304.1	1292.6	1288.8	1288.8	1286.8	1285.0	1285.0
35°	1133.2	1142.8	1139.0	1139.0	1137.0	1125.5	1119.8	1115.9	1121.7	1110.2	1117.8
37.5°	971.8	973.8	968.0	966.1	956.5	956.5	946.9	939.2	943.0	941.1	933.5
40°	795.2	802.8	791.3	787.5	793.3	785.5	776.0	766.3	774.0	764.5	768.3
42.5°	622.3	620.4	616.5	616.5	616.5	605.0	603.1	601.2	603.1	595.4	589.7
45°	449.5	443.7	438.0	438.0	430.2	426.4	426.4	420.6	411.0	411.0	399.5
47.5°	303.5	290.0	286.2	284.3	280.5	280.5	276.6	272.7	270.8	261.2	261.2
50°	197.8	184.4	180.5	178.6	180.5	176.7	172.8	169.0	165.2	163.3	159.5
52.5°	119.1	113.3	109.5	107.5	103.7	101.8	99.9	96.0	94.1	94.1	92.2
55°	71.0	65.3	57.6	57.6	57.6	55.7	53.8	51.8	50.0	50.0	48.0
57.5°	44.2	40.3	36.5	34.5	34.5	34.5	32.7	32.7	32.7	32.7	30.7
60°	32.7	28.8	26.9	26.9	26.9	25.0	25.0	25.0	25.0	23.0	23.0
62.5°	25.0	23.0	21.1	21.1	19.2	19.2	19.2	19.2	19.2	19.2	17.3
65°	21.1	17.3	17.3	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
67.5°	15.4	13.5	13.5	13.5	13.5	11.5	11.5	11.5	11.5	11.5	11.5
70°	11.5	11.5	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
72.5°	9.6	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
75°	7.7	7.7	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
77.5°	5.8	5.8	5.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
80°	3.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
82.5°	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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: P858632

CATALOG NUMBER: LD4C30W2N2050D010 4LBSWNL1_2700K

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3	1471.3
2.5°	1505.8	1515.4	1505.8	1505.8	1511.6	1509.7	1513.5	1507.8
5°	1550.0	1563.5	1553.8	1551.9	1561.5	1559.6	1561.5	1557.7
7.5°	1603.8	1617.3	1607.6	1607.6	1617.3	1615.3	1621.1	1617.3
10°	1665.3	1680.6	1667.1	1669.1	1682.5	1680.6	1680.6	1680.6
12.5°	1728.6	1744.0	1736.3	1736.3	1745.9	1747.8	1749.8	1747.8
15°	1780.5	1795.8	1786.3	1786.3	1799.7	1797.8	1799.7	1797.8
17.5°	1811.2	1826.6	1815.1	1815.1	1826.6	1826.6	1828.5	1830.4
20°	1803.5	1820.8	1811.2	1807.3	1820.8	1820.8	1818.9	1818.9
22.5°	1759.3	1774.8	1767.0	1763.2	1772.8	1769.0	1767.0	1769.0
25°	1682.5	1697.9	1682.5	1682.5	1690.2	1688.3	1690.2	1688.3
27.5°	1578.8	1590.3	1575.0	1573.0	1580.8	1576.9	1575.0	1580.8
30°	1440.5	1452.0	1444.3	1438.6	1448.2	1442.5	1438.6	1440.5
32.5°	1283.0	1290.7	1286.8	1277.3	1283.0	1279.2	1277.3	1279.2
35°	1110.2	1119.8	1104.4	1102.5	1112.1	1104.4	1100.5	1110.2
37.5°	931.5	943.0	929.6	931.5	925.8	927.7	923.8	929.6
40°	762.5	760.6	756.8	754.8	756.8	751.0	754.8	749.1
42.5°	580.0	583.9	582.0	580.0	582.0	574.3	570.5	578.1
45°	403.3	401.5	397.6	393.7	393.7	391.8	391.8	386.0
47.5°	259.3	257.4	249.7	251.6	255.5	251.6	245.8	253.5
50°	157.5	155.5	155.5	153.7	157.5	153.7	149.8	149.8
52.5°	88.3	88.3	86.5	86.5	86.5	86.5	84.5	82.6
55°	48.0	46.1	46.1	46.1	44.2	44.2	44.2	44.2
57.5°	30.7	30.7	30.7	30.7	30.7	30.7	28.8	28.8
60°	23.0	23.0	23.0	23.0	21.1	23.0	21.1	21.1
62.5°	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3
65°	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
67.5°	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5
70°	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6
72.5°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
75°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
77.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
80°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	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)