

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P136570

Luminaire Tested: **LD6A30D010TE ERW6A30835 6LW121LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136570
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23360)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A30D010TE ERW6A30835 6LW121LI
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED DOUBLE WALL WASH LUMINAIRE
SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER
Light Source: (1) HIGH LUMEN LED 3500K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2978.0 lumens
Efficiency: N/A
Efficacy: 65.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.24 / 1.14
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

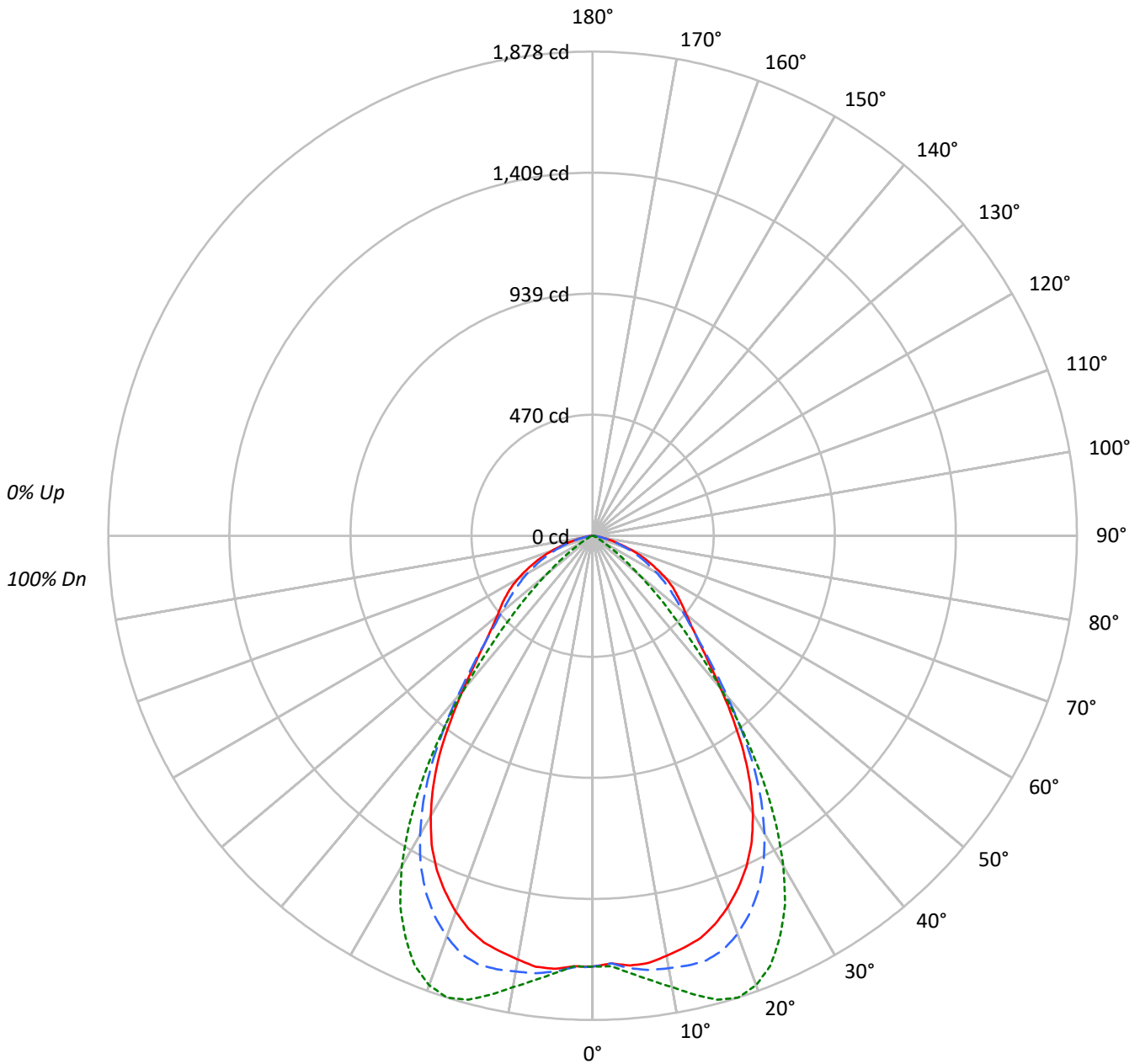
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			100
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89			89
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	83	81	79			79
3	97	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70			70
4	90	80	73	67	88	79	72	67	77	71	66	74	69	65	72	68	65	63			63
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56			56
6	78	67	60	54	77	66	59	54	65	58	54	63	57	53	62	57	53	51			51
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46			46
8	69	57	50	45	68	57	50	45	55	49	44	54	48	44	53	48	44	42			42
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	40	39			39
10	61	49	42	38	60	49	42	38	48	42	38	47	42	37	46	41	37	36			36

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	109024	109024	109024
5°	109584	111536	110422
10°	109579	117767	110566
15°	109128	125831	110283
20°	106405	128754	107738
25°	101729	123670	102960
30°	93617	111441	94581
35°	81149	91336	82336
40°	65714	65714	66625
45°	53689	41694	54676
50°	48028	23801	48891
55°	45338	12125	46794
60°	42550	5284	43672
65°	37188	2964	38500
70°	30081	2442	31302
75°	20947	1613	21502
80°	12812	789	12812
85°	6363	1572	6363



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.5	5.5
10°-20°	487.1	16.4
20°-30°	708.7	23.8
30°-40°	673.4	22.6
40°-50°	436.3	14.7
50°-60°	273.7	9.2
60°-70°	163.7	5.5
70°-80°	63.8	2.1
80°-90°	8.7	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°	1358.3	45.6
0°-40°	2031.7	68.2
0°-60°	2741.7	92.1
0°-90°	2978.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2978.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1671	1671	1671	1671	1671	
5°	1673	1684	1703	1697	1686	159
15°	1616	1705	1863	1720	1633	454
25°	1413	1520	1718	1528	1430	646
35°	1019	1087	1147	1091	1034	631
45°	582	590	452	593	593	459
55°	399	367	107	371	411	358
65°	241	211	19	215	249	238
75°	83	72	6	75	85	93
85°	8	8	2	8	8	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1
2.5°	1660.5	1649.8	1679.7	1662.6	1664.7	1686.1	1669.0	1662.6	1683.9	1660.5	1671.1
5°	1673.3	1664.7	1694.6	1679.7	1681.8	1703.1	1688.2	1681.8	1705.2	1683.9	1694.6
7.5°	1671.1	1664.7	1692.5	1679.7	1681.8	1707.4	1692.5	1690.3	1718.0	1698.8	1713.8
10°	1654.1	1645.6	1675.4	1664.7	1669.0	1696.7	1683.9	1683.9	1715.9	1703.1	1724.4
12.5°	1637.0	1628.5	1658.3	1649.8	1654.1	1683.9	1675.4	1679.7	1715.9	1707.4	1735.1
15°	1615.7	1607.2	1639.2	1630.6	1634.9	1666.9	1662.6	1666.9	1707.4	1705.2	1737.2
17.5°	1579.5	1575.2	1602.9	1598.7	1602.9	1634.9	1632.8	1639.2	1683.9	1683.9	1724.4
20°	1532.6	1526.2	1556.0	1551.8	1553.9	1585.9	1585.9	1592.3	1639.2	1643.4	1683.9
22.5°	1477.2	1472.9	1502.7	1496.3	1500.6	1530.5	1530.5	1536.8	1581.6	1588.0	1630.6
25°	1413.2	1409.0	1436.7	1434.5	1436.7	1466.5	1464.4	1472.9	1515.5	1519.8	1560.3
27.5°	1336.5	1330.1	1357.8	1357.8	1359.9	1387.6	1387.6	1391.9	1430.3	1434.5	1472.9
30°	1242.7	1236.3	1261.9	1264.0	1264.0	1291.7	1291.7	1293.9	1330.1	1332.2	1366.3
32.5°	1136.1	1136.1	1155.3	1157.4	1157.4	1183.0	1185.1	1185.1	1217.1	1217.1	1244.8
35°	1018.9	1021.0	1035.9	1038.1	1040.2	1063.6	1063.6	1061.5	1089.2	1087.1	1110.5
37.5°	893.1	893.1	908.0	910.2	910.2	931.5	931.5	929.4	952.8	946.4	963.5
40°	771.6	771.6	784.4	788.7	786.5	803.6	803.6	801.5	818.5	810.0	818.5
42.5°	665.0	669.3	677.8	680.0	677.8	692.8	690.6	688.5	701.3	688.5	690.6
45°	581.9	586.2	592.6	594.7	592.6	603.2	601.1	596.8	603.2	590.4	584.0
47.5°	520.1	522.2	532.9	530.8	528.6	537.2	537.2	528.6	530.8	513.7	500.9
50°	473.2	475.3	483.9	483.9	479.6	488.1	483.9	475.3	473.2	454.0	434.8
52.5°	434.8	437.0	445.5	445.5	441.2	447.6	443.4	430.6	428.4	409.3	385.8
55°	398.6	400.7	409.3	409.3	405.0	409.3	402.9	392.2	387.9	366.6	341.0
57.5°	366.6	364.5	370.9	370.9	366.6	368.8	364.5	353.8	345.3	326.1	300.5
60°	326.1	324.0	328.3	328.3	324.0	326.1	321.9	309.1	304.8	285.6	260.0
62.5°	281.4	281.4	285.6	285.6	281.4	281.4	279.2	266.4	262.2	245.1	223.8
65°	240.9	240.9	245.1	245.1	240.9	243.0	238.7	230.2	225.9	211.0	191.8
67.5°	200.4	200.4	202.5	202.5	200.4	200.4	198.2	191.8	185.4	174.8	157.7
70°	157.7	157.7	159.9	159.9	157.7	157.7	157.7	151.3	149.2	138.6	125.8
72.5°	117.2	117.2	119.4	119.4	119.4	121.5	119.4	115.1	110.8	104.4	93.8
75°	83.1	83.1	83.1	85.3	83.1	83.1	85.3	81.0	78.9	72.5	66.1
77.5°	55.4	55.4	55.4	55.4	55.4	57.6	55.4	55.4	53.3	49.0	44.8
80°	34.1	34.1	34.1	34.1	34.1	34.1	34.1	34.1	32.0	32.0	27.7
82.5°	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	19.2	17.1	14.9
85°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	6.4
87.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1
2.5°	1669.0	1671.1	1671.1	1677.5	1683.9	1666.9	1675.4	1671.1	1666.9	1683.9	1673.3
5°	1696.7	1698.8	1698.8	1707.4	1715.9	1696.7	1705.2	1703.1	1698.8	1713.8	1703.1
7.5°	1718.0	1724.4	1728.7	1739.3	1750.0	1733.0	1743.6	1739.3	1737.2	1752.1	1737.2
10°	1733.0	1745.7	1752.1	1769.2	1784.1	1767.1	1782.0	1777.7	1775.6	1788.4	1771.3
12.5°	1750.0	1767.1	1784.1	1803.3	1824.6	1809.7	1828.9	1822.5	1822.5	1833.1	1811.8
15°	1760.7	1782.0	1805.4	1833.1	1858.7	1848.1	1869.4	1863.0	1863.0	1871.5	1848.1
17.5°	1750.0	1777.7	1805.4	1837.4	1867.2	1860.8	1884.3	1877.9	1875.8	1884.3	1856.6
20°	1713.8	1745.7	1777.7	1809.7	1843.8	1839.5	1865.1	1854.5	1856.6	1860.8	1833.1
22.5°	1656.2	1690.3	1722.3	1756.4	1788.4	1786.2	1809.7	1803.3	1801.2	1807.6	1777.7
25°	1588.0	1617.8	1647.7	1677.5	1709.5	1705.2	1728.7	1718.0	1720.2	1722.3	1696.7
27.5°	1496.3	1524.1	1547.5	1573.1	1602.9	1596.5	1620.0	1615.7	1609.3	1611.5	1590.1
30°	1383.4	1406.8	1423.9	1445.2	1468.6	1462.2	1483.6	1479.3	1475.0	1475.0	1462.2
32.5°	1255.5	1272.5	1283.2	1298.1	1315.2	1308.8	1325.8	1321.6	1317.3	1317.3	1308.8
35°	1112.7	1123.3	1123.3	1131.9	1144.6	1134.0	1148.9	1146.8	1140.4	1142.5	1140.4
37.5°	957.1	961.3	952.8	952.8	961.3	946.4	959.2	959.2	952.8	954.9	954.9
40°	805.7	803.6	786.5	778.0	778.0	763.1	773.8	771.6	767.4	769.5	773.8
42.5°	671.4	658.6	635.2	618.2	613.9	596.8	603.2	601.1	596.8	601.1	607.5
45°	558.5	535.0	503.0	479.6	468.9	451.9	454.0	451.9	449.8	454.0	464.7
47.5°	468.9	437.0	396.5	366.6	351.7	332.5	332.5	330.4	330.4	341.0	347.4
50°	398.6	360.2	313.3	279.2	257.9	240.9	236.6	234.5	236.6	245.1	257.9
52.5°	345.3	298.4	247.3	211.0	187.6	168.4	164.1	162.0	164.1	172.7	185.4
55°	298.4	249.4	196.1	155.6	130.0	113.0	106.6	106.6	106.6	117.2	130.0
57.5°	255.8	206.8	153.5	113.0	89.5	72.5	66.1	63.9	68.2	74.6	87.4
60°	219.5	172.7	121.5	85.3	61.8	46.9	40.5	40.5	40.5	49.0	61.8
62.5°	187.6	144.9	98.1	63.9	44.8	32.0	25.6	25.6	27.7	32.0	44.8
65°	159.9	123.6	83.1	55.4	36.2	25.6	21.3	19.2	21.3	25.6	36.2
67.5°	132.2	102.3	70.3	46.9	32.0	21.3	19.2	17.1	17.1	23.4	29.8
70°	104.4	81.0	57.6	38.4	25.6	17.1	14.9	12.8	14.9	19.2	25.6
72.5°	78.9	61.8	42.6	29.8	19.2	14.9	10.7	10.7	10.7	14.9	19.2
75°	55.4	44.8	32.0	21.3	12.8	8.5	8.5	6.4	8.5	10.7	12.8
77.5°	36.2	29.8	21.3	12.8	8.5	6.4	4.3	4.3	4.3	6.4	8.5
80°	23.4	19.2	12.8	8.5	6.4	4.3	2.1	2.1	2.1	4.3	4.3
82.5°	12.8	10.7	6.4	4.3	4.3	2.1	2.1	2.1	2.1	2.1	2.1
85°	6.4	4.3	4.3	2.1	2.1	2.1	0.0	2.1	2.1	2.1	2.1
87.5°	2.1	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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1	1671.1
2.5°	1675.4	1669.0	1677.5	1683.9	1681.8	1675.4	1686.1	1669.0	1675.4	1669.0	1658.3
5°	1705.2	1698.8	1705.2	1709.5	1707.4	1696.7	1705.2	1690.3	1694.6	1686.1	1675.4
7.5°	1737.2	1728.7	1730.8	1733.0	1726.6	1711.6	1718.0	1698.8	1701.0	1690.3	1677.5
10°	1767.1	1754.3	1752.1	1747.9	1735.1	1715.9	1718.0	1694.6	1692.5	1677.5	1662.6
12.5°	1805.4	1784.1	1775.6	1767.1	1747.9	1722.3	1718.0	1690.3	1686.1	1669.0	1652.0
15°	1833.1	1809.7	1794.8	1777.7	1752.1	1720.2	1711.6	1679.7	1671.1	1652.0	1634.9
17.5°	1839.5	1809.7	1788.4	1767.1	1737.2	1698.8	1686.1	1652.0	1641.3	1620.0	1602.9
20°	1811.8	1779.8	1756.4	1728.7	1698.8	1654.1	1641.3	1605.1	1592.3	1573.1	1556.0
22.5°	1758.5	1722.3	1698.8	1671.1	1641.3	1598.7	1583.7	1549.6	1536.8	1517.7	1500.6
25°	1681.8	1647.7	1624.2	1598.7	1571.0	1528.3	1515.5	1483.6	1472.9	1453.7	1436.7
27.5°	1575.2	1543.2	1530.5	1504.9	1479.3	1443.1	1430.3	1402.6	1391.9	1379.1	1359.9
30°	1447.3	1419.6	1413.2	1389.8	1370.6	1338.6	1328.0	1304.5	1293.9	1283.2	1266.1
32.5°	1300.2	1278.9	1278.9	1259.7	1247.0	1221.4	1212.9	1193.7	1185.1	1176.6	1161.7
35°	1134.0	1119.1	1127.6	1114.8	1108.4	1091.4	1085.0	1070.0	1063.6	1057.2	1042.3
37.5°	957.1	946.4	963.5	965.6	965.6	950.7	946.4	937.9	933.6	927.2	914.4
40°	782.3	780.1	805.7	810.0	822.8	814.3	816.4	810.0	805.7	801.5	792.9
42.5°	620.3	628.8	660.8	680.0	692.8	692.8	699.1	697.0	694.9	690.6	684.2
45°	481.7	498.8	537.2	560.6	586.2	592.6	603.2	603.2	605.4	603.2	596.8
47.5°	368.8	394.3	439.1	475.3	503.0	515.8	530.8	535.0	537.2	537.2	532.9
50°	279.2	311.2	362.4	402.9	441.2	458.3	475.3	481.7	490.3	488.1	483.9
52.5°	211.0	247.3	302.7	351.7	392.2	411.4	430.6	439.1	447.6	447.6	445.5
55°	155.6	194.0	253.7	304.8	347.4	370.9	390.1	398.6	409.3	411.4	409.3
57.5°	113.0	151.3	208.9	264.3	304.8	330.4	349.6	358.1	368.8	370.9	370.9
60°	83.1	121.5	176.9	228.1	266.4	292.0	306.9	317.6	326.1	330.4	330.4
62.5°	63.9	98.1	149.2	196.1	230.2	251.5	266.4	275.0	283.5	285.6	287.8
65°	53.3	83.1	125.8	166.3	196.1	215.3	228.1	236.6	243.0	245.1	245.1
67.5°	44.8	70.3	104.4	136.4	162.0	176.9	187.6	194.0	200.4	202.5	202.5
70°	36.2	55.4	83.1	108.7	127.9	140.7	149.2	155.6	159.9	159.9	159.9
72.5°	27.7	42.6	61.8	81.0	95.9	106.6	113.0	115.1	119.4	119.4	119.4
75°	19.2	29.8	44.8	57.6	66.1	74.6	78.9	81.0	83.1	85.3	83.1
77.5°	12.8	19.2	27.7	36.2	44.8	49.0	51.2	53.3	55.4	55.4	55.4
80°	8.5	12.8	17.1	23.4	27.7	29.8	32.0	32.0	34.1	34.1	34.1
82.5°	4.3	6.4	10.7	12.8	14.9	17.1	17.1	17.1	19.2	19.2	17.1
85°	2.1	2.1	4.3	6.4	6.4	8.5	8.5	8.5	8.5	8.5	8.5
87.5°	0.0	0.0	0.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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: P136570

CATALOG NUMBER: LD6A30D010TE ERW6A30835 6LW121LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1671.1	1671.1	1671.1	1671.1
2.5°	1662.6	1666.9	1649.8	1671.1
5°	1677.5	1681.8	1664.7	1686.1
7.5°	1679.7	1681.8	1664.7	1686.1
10°	1664.7	1664.7	1647.7	1669.0
12.5°	1652.0	1649.8	1630.6	1652.0
15°	1632.8	1630.6	1611.5	1632.8
17.5°	1600.8	1598.7	1579.5	1598.7
20°	1551.8	1549.6	1532.6	1551.8
22.5°	1498.5	1494.2	1477.2	1494.2
25°	1436.7	1432.4	1415.4	1430.3
27.5°	1357.8	1353.5	1336.5	1351.4
30°	1264.0	1257.6	1244.8	1255.5
32.5°	1157.4	1153.2	1138.2	1151.0
35°	1040.2	1033.8	1023.1	1033.8
37.5°	912.3	908.0	897.4	903.8
40°	788.7	786.5	778.0	782.3
42.5°	682.1	677.8	671.4	675.7
45°	596.8	594.7	588.3	592.6
47.5°	532.9	530.8	524.4	528.6
50°	486.0	483.9	479.6	481.7
52.5°	447.6	445.5	441.2	447.6
55°	413.5	411.4	405.0	411.4
57.5°	375.2	373.0	366.6	375.2
60°	332.5	332.5	326.1	334.7
62.5°	289.9	289.9	285.6	292.0
65°	249.4	247.3	245.1	249.4
67.5°	204.6	202.5	202.5	206.8
70°	162.0	159.9	159.9	164.1
72.5°	121.5	119.4	119.4	121.5
75°	85.3	83.1	83.1	85.3
77.5°	55.4	55.4	55.4	55.4
80°	34.1	34.1	34.1	34.1
82.5°	19.2	19.2	17.1	19.2
85°	8.5	8.5	8.5	8.5
87.5°	2.1	2.1	2.1	2.1
90°	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)