

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: P136449

Luminaire Tested: **LD6A30D010TE ERW6A30830 6LW111H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P136449  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23375)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6A30D010TE ERW6A30830 6LW111H  
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED SINGLE WALL WASH LUMINAIRE  
SEMI-SPECULAR CLEAR TRIM AND SPECULAR CLEAR KICKER  
Light Source: (1) HIGH LUMEN LED 3000K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

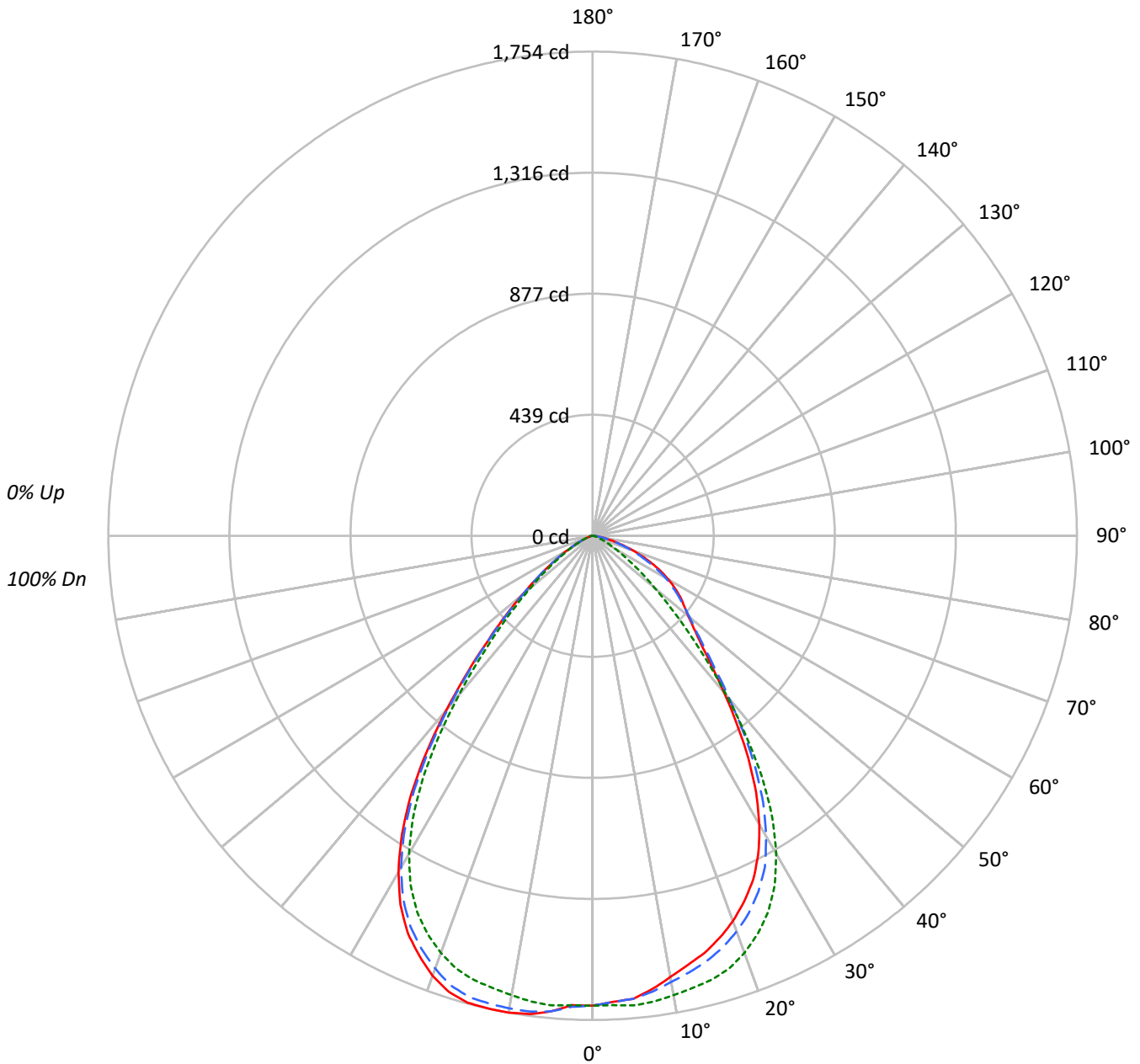
Lumens per Lamp: N/A  
Luminaire Lumens: 2781.1 lumens  
Efficiency: N/A  
Efficacy: 61.3 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.17 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 45.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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				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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80				80
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72				72
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64				64
5	85	74	67	62	83	73	67	61	71	65	61	70	64	60	68	63	60	58				58
6	79	68	61	56	78	68	61	55	66	60	55	64	59	55	63	58	54	52				52
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	49	48				48
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44				44
9	66	54	47	42	65	54	47	42	53	46	42	52	46	42	51	46	42	40				40
10	62	51	44	39	61	50	43	39	49	43	39	48	43	39	48	42	39	37				37

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	111040	111040	111040
5°	110265	111863	113258
10°	107499	111944	116184
15°	105683	112485	118253
20°	103128	111598	117742
25°	99023	108244	114176
30°	90988	100178	105926
35°	78218	85267	91336
40°	62861	64164	70134
45°	51216	44462	49251
50°	45815	29718	33748
55°	44064	19427	22203
60°	41389	12344	13935
65°	36725	7533	8012
70°	29681	4654	4654
75°	20771	3075	3075
80°	13751	2292	2292
85°	6887	2321	2321



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	162.1	5.8
10°-20°	467.2	16.8
20°-30°	680.4	24.5
30°-40°	660.0	23.7
40°-50°	417.1	15.0
50°-60°	232.3	8.4
60°-70°	115.1	4.1
70°-80°	40.6	1.5
80°-90°	6.4	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°	1309.6	47.1
0°-40°	1969.6	70.8
0°-60°	2619.0	94.2
0°-90°	2781.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2781.1	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1702	1702	1702	1702	1702	
5°	1684	1684	1708	1729	1729	159
15°	1565	1595	1665	1729	1751	440
25°	1376	1421	1504	1562	1586	628
35°	982	1028	1071	1128	1147	609
45°	555	570	482	528	534	439
55°	387	378	171	195	195	345
65°	238	220	49	52	52	234
75°	82	76	12	12	12	92
85°	9	9	3	3	3	14
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°	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0
2.5°	1689.8	1674.5	1680.6	1677.6	1680.6	1677.6	1686.7	1677.6	1683.7	1689.8	1677.6
5°	1683.7	1668.4	1671.5	1671.5	1671.5	1671.5	1680.6	1671.5	1677.6	1683.7	1674.5
7.5°	1656.2	1644.0	1647.1	1647.1	1647.1	1647.1	1656.2	1650.1	1656.2	1665.4	1656.2
10°	1622.7	1610.5	1616.6	1616.6	1616.6	1616.6	1628.8	1622.7	1628.8	1641.0	1631.8
12.5°	1592.2	1583.0	1589.1	1589.1	1589.1	1592.2	1601.3	1598.3	1604.4	1619.6	1610.5
15°	1564.7	1555.6	1561.7	1561.7	1561.7	1564.7	1573.9	1576.9	1583.0	1595.2	1589.1
17.5°	1528.1	1519.0	1528.1	1528.1	1525.1	1531.2	1543.4	1543.4	1549.5	1564.7	1561.7
20°	1485.4	1476.2	1485.4	1485.4	1482.3	1488.4	1500.6	1503.7	1509.8	1525.1	1522.0
22.5°	1433.5	1430.5	1433.5	1439.6	1436.6	1439.6	1451.8	1454.9	1461.0	1479.3	1476.2
25°	1375.6	1372.5	1378.6	1381.7	1378.6	1381.7	1393.9	1396.9	1403.0	1421.3	1421.3
27.5°	1299.3	1296.3	1305.4	1305.4	1305.4	1311.5	1320.7	1326.8	1329.8	1351.2	1348.1
30°	1207.8	1204.8	1210.9	1213.9	1213.9	1213.9	1226.1	1235.3	1238.3	1256.6	1256.6
32.5°	1101.1	1101.1	1104.1	1110.2	1107.2	1113.3	1122.4	1128.5	1134.6	1149.9	1149.9
35°	982.1	985.2	988.2	994.3	991.3	994.3	1003.5	1009.6	1012.6	1027.9	1024.8
37.5°	857.1	860.1	863.2	866.2	866.2	869.3	878.4	881.5	884.5	896.7	890.6
40°	738.1	738.1	741.2	747.3	744.2	750.3	756.4	759.5	759.5	768.6	762.5
42.5°	634.4	637.5	640.5	643.6	643.6	646.6	652.7	655.8	655.8	658.8	649.7
45°	555.1	558.2	558.2	564.3	564.3	567.3	570.4	573.4	570.4	570.4	561.2
47.5°	497.2	500.2	503.3	506.3	506.3	509.4	512.4	512.4	509.4	506.3	494.1
50°	451.4	457.5	457.5	460.6	463.6	466.7	466.7	466.7	460.6	457.5	439.2
52.5°	417.9	420.9	424.0	427.0	427.0	430.1	433.1	430.1	424.0	414.8	396.5
55°	387.4	390.4	393.5	396.5	396.5	396.5	396.5	393.5	387.4	378.2	359.9
57.5°	353.8	356.9	359.9	363.0	363.0	363.0	363.0	359.9	353.8	341.6	320.3
60°	317.2	320.3	323.3	326.4	326.4	326.4	323.3	320.3	314.2	305.0	283.7
62.5°	277.6	280.6	283.7	283.7	283.7	280.6	280.6	277.6	271.5	262.3	241.0
65°	237.9	237.9	241.0	241.0	241.0	241.0	237.9	234.9	228.8	219.6	204.4
67.5°	195.2	198.3	198.3	198.3	198.3	198.3	195.2	195.2	189.1	180.0	167.8
70°	155.6	155.6	158.6	158.6	158.6	158.6	155.6	155.6	149.5	143.4	131.2
72.5°	115.9	115.9	115.9	119.0	119.0	119.0	115.9	115.9	112.9	106.8	97.6
75°	82.4	82.4	82.4	85.4	85.4	85.4	85.4	82.4	79.3	76.3	70.2
77.5°	54.9	58.0	54.9	54.9	54.9	58.0	54.9	54.9	54.9	51.9	45.8
80°	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	33.6	33.6	30.5
82.5°	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	21.4	18.3	18.3
85°	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
87.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
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°	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0
2.5°	1686.7	1692.8	1698.9	1692.8	1683.7	1702.0	1698.9	1702.0	1698.9	1692.8	1711.1
5°	1683.7	1689.8	1698.9	1692.8	1686.7	1705.0	1702.0	1708.1	1708.1	1702.0	1720.3
7.5°	1665.4	1671.5	1686.7	1680.6	1674.5	1692.8	1695.9	1702.0	1705.0	1698.9	1720.3
10°	1644.0	1650.1	1665.4	1662.3	1659.3	1680.6	1683.7	1689.8	1692.8	1689.8	1711.1
12.5°	1622.7	1631.8	1647.1	1644.0	1644.0	1665.4	1668.4	1677.6	1683.7	1680.6	1705.0
15°	1601.3	1613.5	1631.8	1628.8	1628.8	1653.2	1656.2	1665.4	1671.5	1671.5	1695.9
17.5°	1573.9	1586.1	1604.4	1601.3	1607.4	1625.7	1631.8	1644.0	1650.1	1647.1	1674.5
20°	1534.2	1549.5	1567.8	1564.7	1567.8	1592.2	1598.3	1607.4	1613.5	1613.5	1637.9
22.5°	1488.4	1503.7	1522.0	1519.0	1525.1	1543.4	1549.5	1561.7	1567.8	1564.7	1589.1
25°	1433.5	1448.8	1464.0	1464.0	1467.1	1488.4	1494.5	1503.7	1512.8	1509.8	1531.2
27.5°	1360.3	1375.6	1390.8	1387.8	1390.8	1412.2	1418.3	1427.4	1436.6	1433.5	1454.9
30°	1265.8	1281.0	1293.2	1290.2	1293.2	1314.6	1317.6	1329.8	1339.0	1339.0	1357.3
32.5°	1156.0	1171.2	1177.3	1171.2	1177.3	1192.6	1198.7	1210.9	1217.0	1220.0	1238.3
35°	1030.9	1040.1	1043.1	1037.0	1037.0	1052.3	1058.4	1070.6	1076.7	1079.7	1095.0
37.5°	893.7	899.8	893.7	884.5	887.6	893.7	902.8	912.0	921.1	924.2	939.4
40°	759.5	756.4	747.3	732.0	729.0	738.1	744.2	753.4	759.5	765.6	774.7
42.5°	640.5	634.4	616.1	597.8	594.8	594.8	597.8	607.0	613.1	616.1	628.3
45°	546.0	533.8	506.3	485.0	472.8	475.8	475.8	481.9	485.0	491.1	500.2
47.5°	472.8	451.4	417.9	390.4	378.2	375.2	375.2	378.2	381.3	387.4	393.5
50°	414.8	387.4	347.7	317.2	302.0	295.9	295.9	292.8	298.9	302.0	308.1
52.5°	369.1	335.5	289.8	256.2	237.9	231.8	228.8	228.8	228.8	231.8	237.9
55°	326.4	289.8	241.0	207.4	186.1	180.0	173.9	170.8	173.9	176.9	180.0
57.5°	289.8	250.1	201.3	164.7	146.4	137.3	131.2	128.1	128.1	131.2	134.2
60°	253.2	213.5	164.7	131.2	112.9	103.7	97.6	94.6	94.6	97.6	97.6
62.5°	213.5	176.9	134.2	103.7	85.4	76.3	70.2	70.2	67.1	67.1	70.2
65°	180.0	146.4	109.8	82.4	64.1	58.0	51.9	48.8	48.8	45.8	48.8
67.5°	146.4	119.0	88.5	64.1	48.8	42.7	36.6	36.6	33.6	33.6	33.6
70°	115.9	94.6	70.2	48.8	39.7	30.5	27.5	24.4	24.4	24.4	24.4
72.5°	85.4	70.2	51.9	36.6	27.5	24.4	21.4	18.3	15.3	15.3	15.3
75°	61.0	48.8	36.6	27.5	21.4	18.3	15.3	12.2	12.2	12.2	12.2
77.5°	42.7	33.6	27.5	18.3	15.3	12.2	9.2	9.2	9.2	9.2	6.1
80°	27.5	21.4	18.3	12.2	9.2	9.2	6.1	6.1	6.1	6.1	6.1
82.5°	15.3	12.2	9.2	9.2	6.1	6.1	3.1	3.1	3.1	3.1	3.1
85°	6.1	6.1	6.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
87.5°	3.1	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°	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0	1702.0
2.5°	1692.8	1705.0	1705.0	1711.1	1702.0	1708.1	1717.2	1714.2	1705.0	1708.1	1711.1
5°	1705.0	1717.2	1720.3	1729.4	1720.3	1729.4	1741.6	1738.6	1729.4	1735.5	1738.6
7.5°	1705.0	1720.3	1726.4	1735.5	1729.4	1738.6	1753.8	1750.8	1741.6	1747.7	1753.8
10°	1698.9	1714.2	1723.3	1732.5	1726.4	1738.6	1750.8	1750.8	1744.7	1750.8	1759.9
12.5°	1692.8	1708.1	1717.2	1726.4	1720.3	1735.5	1750.8	1747.7	1744.7	1750.8	1759.9
15°	1683.7	1698.9	1708.1	1717.2	1714.2	1729.4	1744.7	1744.7	1738.6	1747.7	1756.9
17.5°	1662.3	1677.6	1689.8	1695.9	1692.8	1708.1	1723.3	1723.3	1717.2	1726.4	1735.5
20°	1625.7	1641.0	1653.2	1659.3	1656.2	1668.4	1683.7	1686.7	1680.6	1689.8	1698.9
22.5°	1580.0	1592.2	1604.4	1610.5	1607.4	1619.6	1634.9	1637.9	1631.8	1641.0	1647.1
25°	1525.1	1534.2	1546.4	1552.5	1549.5	1561.7	1576.9	1576.9	1573.9	1580.0	1586.1
27.5°	1448.8	1461.0	1470.1	1476.2	1476.2	1485.4	1497.6	1500.6	1497.6	1503.7	1512.8
30°	1354.2	1360.3	1372.5	1375.6	1378.6	1387.8	1400.0	1400.0	1396.9	1403.0	1412.2
32.5°	1235.3	1244.4	1253.6	1256.6	1259.7	1268.8	1278.0	1281.0	1278.0	1284.1	1293.2
35°	1095.0	1104.1	1113.3	1116.3	1119.4	1128.5	1137.7	1140.7	1137.7	1143.8	1152.9
37.5°	939.4	945.5	954.7	957.7	963.8	969.9	976.0	982.1	979.1	985.2	991.3
40°	780.8	783.9	793.0	796.1	802.2	808.3	814.4	817.4	817.4	820.5	823.5
42.5°	631.4	637.5	643.6	646.6	652.7	655.8	661.9	664.9	664.9	668.0	671.0
45°	503.3	509.4	515.5	518.5	524.6	527.7	530.7	533.8	530.7	530.7	536.8
47.5°	396.5	402.6	408.7	411.8	414.8	417.9	420.9	420.9	420.9	424.0	424.0
50°	311.1	314.2	320.3	320.3	326.4	326.4	329.4	329.4	329.4	329.4	332.5
52.5°	241.0	244.0	250.1	250.1	253.2	256.2	256.2	256.2	256.2	259.3	256.2
55°	183.0	186.1	189.1	189.1	195.2	195.2	195.2	195.2	195.2	195.2	195.2
57.5°	137.3	140.3	143.4	143.4	143.4	146.4	143.4	146.4	146.4	146.4	146.4
60°	100.7	103.7	103.7	103.7	106.8	106.8	106.8	106.8	106.8	106.8	106.8
62.5°	70.2	70.2	73.2	73.2	73.2	76.3	73.2	73.2	76.3	76.3	73.2
65°	48.8	48.8	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9	51.9
67.5°	33.6	33.6	33.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6	36.6
70°	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4
72.5°	15.3	15.3	15.3	15.3	18.3	18.3	18.3	18.3	18.3	18.3	18.3
75°	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
77.5°	6.1	6.1	9.2	9.2	9.2	6.1	6.1	6.1	9.2	9.2	6.1
80°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
82.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
85°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.0	3.1	3.1	3.1
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: P136449

CATALOG NUMBER: LD6A30D010TE ERW6A30830 6LW111H

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1702.0	1702.0	1702.0	1702.0
2.5°	1711.1	1708.1	1711.1	1702.0
5°	1738.6	1735.5	1741.6	1729.4
7.5°	1756.9	1753.8	1759.9	1747.7
10°	1759.9	1759.9	1766.0	1753.8
12.5°	1759.9	1759.9	1766.0	1753.8
15°	1759.9	1756.9	1763.0	1750.8
17.5°	1738.6	1738.6	1744.7	1732.5
20°	1698.9	1698.9	1705.0	1695.9
22.5°	1650.1	1650.1	1653.2	1644.0
25°	1589.1	1586.1	1592.2	1586.1
27.5°	1512.8	1509.8	1512.8	1506.7
30°	1409.1	1406.1	1412.2	1406.1
32.5°	1293.2	1287.1	1293.2	1287.1
35°	1149.9	1143.8	1149.9	1146.8
37.5°	991.3	985.2	991.3	988.2
40°	823.5	820.5	826.6	823.5
42.5°	671.0	664.9	671.0	668.0
45°	536.8	530.7	536.8	533.8
47.5°	424.0	420.9	427.0	424.0
50°	332.5	329.4	332.5	332.5
52.5°	256.2	253.2	256.2	256.2
55°	195.2	192.2	195.2	195.2
57.5°	146.4	143.4	146.4	146.4
60°	106.8	106.8	106.8	106.8
62.5°	76.3	73.2	76.3	76.3
65°	51.9	51.9	51.9	51.9
67.5°	36.6	36.6	36.6	36.6
70°	24.4	24.4	24.4	24.4
72.5°	18.3	18.3	18.3	15.3
75°	12.2	12.2	12.2	12.2
77.5°	9.2	6.1	9.2	9.2
80°	6.1	6.1	6.1	6.1
82.5°	3.1	3.1	3.1	3.1
85°	3.1	3.1	3.1	3.1
87.5°	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0



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















(END OF REPORT)