

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: P136574

Luminaire Tested: **LD6A30D010TE ERW6A30935 6LW121LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136574
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 ERW6A30935 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: 2718.9 lumens
Efficiency: N/A
Efficacy: 59.9 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

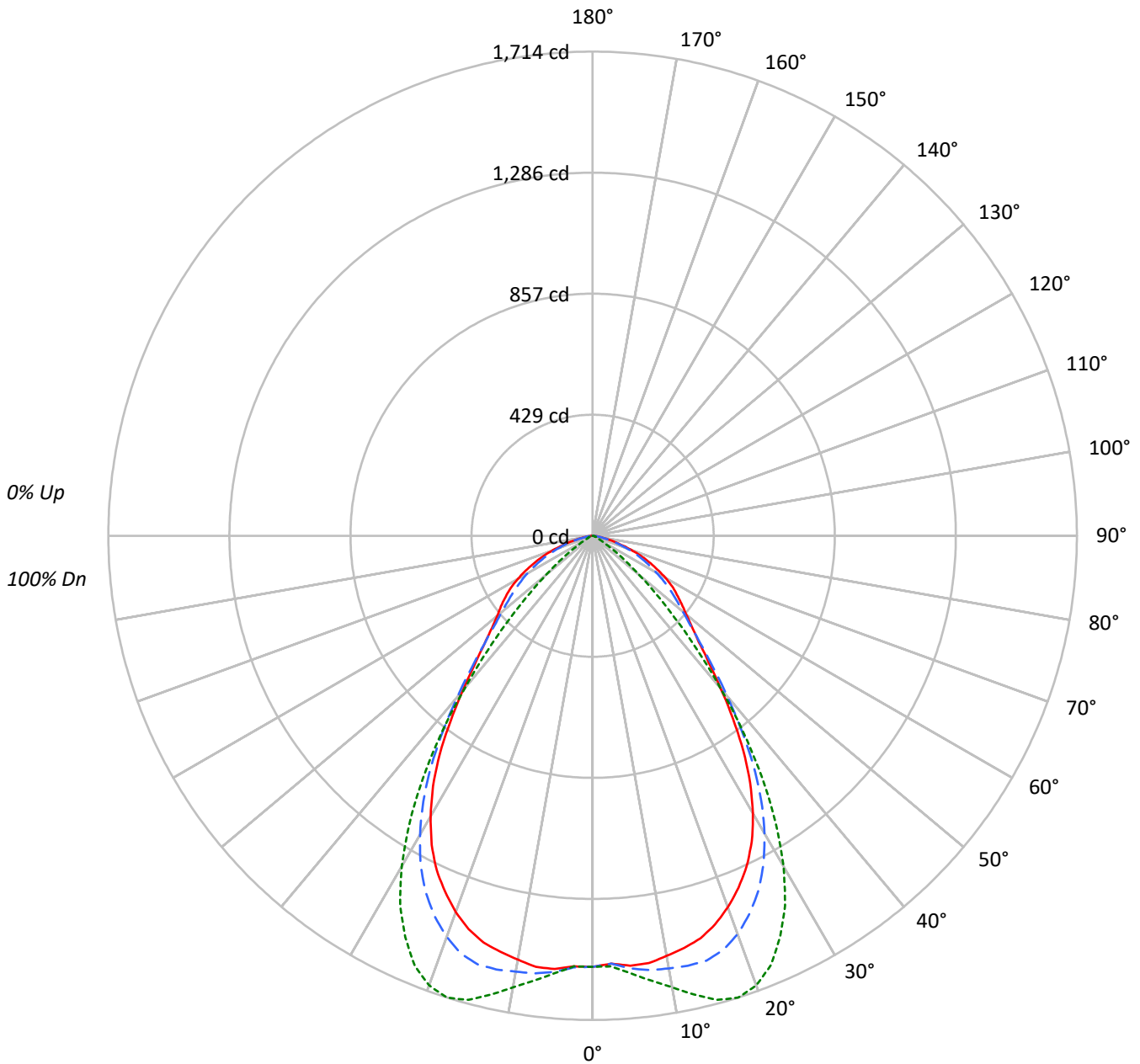
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	99538	99538	99538
5°	100049	101830	100815
10°	100046	107519	100947
15°	99631	114882	100685
20°	97150	117555	98365
25°	92882	112909	94005
30°	85473	101745	86355
35°	74093	83387	75176
40°	59999	59999	60825
45°	49020	38068	49915
50°	43846	21730	44638
55°	41391	11067	42722
60°	38844	4828	39875
65°	33947	2702	35151
70°	27468	2232	28574
75°	19132	1462	19636
80°	11684	714	11684
85°	5839	1422	5839



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.4	5.5
10°-20°	444.7	16.4
20°-30°	647.0	23.8
30°-40°	614.9	22.6
40°-50°	398.3	14.7
50°-60°	249.9	9.2
60°-70°	149.5	5.5
70°-80°	58.3	2.1
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°	1240.1	45.6
0°-40°	1855.0	68.2
0°-60°	2503.2	92.1
0°-90°	2718.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2718.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1526	1526	1526	1526	1526	
5°	1528	1537	1555	1549	1539	145
15°	1475	1557	1701	1570	1491	414
25°	1290	1388	1568	1395	1306	590
35°	930	992	1047	996	944	576
45°	531	539	413	541	541	420
55°	364	335	97	339	376	326
65°	220	193	18	197	228	218
75°	76	66	6	68	78	84
85°	8	8	2	8	8	12
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°	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7
2.5°	1516.0	1506.3	1533.6	1518.0	1519.9	1539.4	1523.8	1518.0	1537.4	1516.0	1525.7
5°	1527.7	1519.9	1547.2	1533.6	1535.5	1554.9	1541.3	1535.5	1556.8	1537.4	1547.2
7.5°	1525.7	1519.9	1545.3	1533.6	1535.5	1558.9	1545.3	1543.2	1568.5	1551.0	1564.7
10°	1510.2	1502.4	1529.6	1519.9	1523.8	1549.1	1537.4	1537.4	1566.6	1554.9	1574.4
12.5°	1494.6	1486.8	1514.0	1506.3	1510.2	1537.4	1529.6	1533.6	1566.6	1558.9	1584.1
15°	1475.1	1467.4	1496.6	1488.7	1492.7	1521.9	1518.0	1521.9	1558.9	1556.8	1586.1
17.5°	1442.1	1438.2	1463.4	1459.6	1463.4	1492.7	1490.7	1496.6	1537.4	1537.4	1574.4
20°	1399.3	1393.4	1420.6	1416.8	1418.7	1447.9	1447.9	1453.8	1496.6	1500.4	1537.4
22.5°	1348.7	1344.8	1372.0	1366.1	1370.0	1397.3	1397.3	1403.1	1444.0	1449.8	1488.7
25°	1290.3	1286.4	1311.7	1309.7	1311.7	1338.9	1337.0	1344.8	1383.7	1387.6	1424.6
27.5°	1220.2	1214.4	1239.7	1239.7	1241.6	1266.9	1266.9	1270.8	1305.9	1309.7	1344.8
30°	1134.6	1128.7	1152.1	1154.0	1154.0	1179.3	1179.3	1181.3	1214.4	1216.3	1247.4
32.5°	1037.3	1037.3	1054.8	1056.7	1056.7	1080.1	1082.0	1082.0	1111.2	1111.2	1136.5
35°	930.3	932.2	945.8	947.8	949.7	971.1	971.1	969.1	994.4	992.5	1013.9
37.5°	815.4	815.4	829.0	831.0	831.0	850.5	850.5	848.5	869.9	864.1	879.7
40°	704.5	704.5	716.2	720.1	718.1	733.7	733.7	731.8	747.3	739.5	747.3
42.5°	607.1	611.1	618.8	620.8	618.8	632.5	630.5	628.6	640.3	628.6	630.5
45°	531.3	535.2	541.0	543.0	541.0	550.7	548.8	544.9	550.7	539.0	533.2
47.5°	474.9	476.8	486.5	484.6	482.6	490.5	490.5	482.6	484.6	469.0	457.3
50°	432.0	433.9	441.8	441.8	437.9	445.6	441.8	433.9	432.0	414.5	397.0
52.5°	397.0	399.0	406.7	406.7	402.8	408.7	404.8	393.1	391.1	373.7	352.2
55°	363.9	365.8	373.7	373.7	369.8	373.7	367.8	358.1	354.2	334.7	311.3
57.5°	334.7	332.8	338.6	338.6	334.7	336.7	332.8	323.0	315.3	297.7	274.4
60°	297.7	295.8	299.7	299.7	295.8	297.7	293.9	282.2	278.3	260.8	237.4
62.5°	256.9	256.9	260.8	260.8	256.9	256.9	254.9	243.2	239.4	223.8	204.3
65°	219.9	219.9	223.8	223.8	219.9	221.9	217.9	210.2	206.2	192.6	175.1
67.5°	183.0	183.0	184.9	184.9	183.0	183.0	181.0	175.1	169.3	159.6	144.0
70°	144.0	144.0	146.0	146.0	144.0	144.0	144.0	138.1	136.2	126.5	114.9
72.5°	107.0	107.0	109.0	109.0	109.0	110.9	109.0	105.1	101.2	95.3	85.6
75°	75.9	75.9	75.9	77.9	75.9	75.9	77.9	74.0	72.0	66.2	60.3
77.5°	50.6	50.6	50.6	50.6	50.6	52.6	50.6	50.6	48.7	44.7	40.9
80°	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1	29.2	29.2	25.3
82.5°	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	15.6	13.6
85°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	5.8
87.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
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°	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7
2.5°	1523.8	1525.7	1525.7	1531.6	1537.4	1521.9	1529.6	1525.7	1521.9	1537.4	1527.7
5°	1549.1	1551.0	1551.0	1558.9	1566.6	1549.1	1556.8	1554.9	1551.0	1564.7	1554.9
7.5°	1568.5	1574.4	1578.3	1588.0	1597.8	1582.2	1591.9	1588.0	1586.1	1599.7	1586.1
10°	1582.2	1593.8	1599.7	1615.3	1628.9	1613.4	1627.0	1623.0	1621.1	1632.8	1617.2
12.5°	1597.8	1613.4	1628.9	1646.4	1665.9	1652.3	1669.8	1663.9	1663.9	1673.6	1654.2
15°	1607.5	1627.0	1648.3	1673.6	1697.0	1687.3	1706.8	1700.9	1700.9	1708.7	1687.3
17.5°	1597.8	1623.0	1648.3	1677.5	1704.8	1698.9	1720.4	1714.5	1712.6	1720.4	1695.1
20°	1564.7	1593.8	1623.0	1652.3	1683.4	1679.5	1702.8	1693.2	1695.1	1698.9	1673.6
22.5°	1512.1	1543.2	1572.5	1603.6	1632.8	1630.8	1652.3	1646.4	1644.5	1650.3	1623.0
25°	1449.8	1477.1	1504.4	1531.6	1560.8	1556.8	1578.3	1568.5	1570.5	1572.5	1549.1
27.5°	1366.1	1391.5	1412.9	1436.2	1463.4	1457.6	1479.1	1475.1	1469.3	1471.3	1451.8
30°	1263.0	1284.4	1300.0	1319.5	1340.8	1335.0	1354.5	1350.6	1346.7	1346.7	1335.0
32.5°	1146.3	1161.8	1171.6	1185.2	1200.8	1194.9	1210.5	1206.6	1202.7	1202.7	1194.9
35°	1015.9	1025.6	1025.6	1033.4	1045.0	1035.3	1048.9	1047.0	1041.2	1043.1	1041.2
37.5°	873.8	877.7	869.9	869.9	877.7	864.1	875.7	875.7	869.9	871.8	871.8
40°	735.6	733.7	718.1	710.3	710.3	696.7	706.5	704.5	700.6	702.6	706.5
42.5°	613.0	601.3	579.9	564.4	560.5	544.9	550.7	548.8	544.9	548.8	554.6
45°	509.9	488.5	459.2	437.9	428.1	412.6	414.5	412.6	410.7	414.5	424.3
47.5°	428.1	399.0	362.0	334.7	321.1	303.6	303.6	301.7	301.7	311.3	317.2
50°	363.9	328.9	286.0	254.9	235.5	219.9	216.0	214.1	216.0	223.8	235.5
52.5°	315.3	272.4	225.8	192.6	171.3	153.7	149.8	147.9	149.8	157.7	169.3
55°	272.4	227.7	179.0	142.1	118.7	103.2	97.3	97.3	97.3	107.0	118.7
57.5°	233.5	188.8	140.1	103.2	81.7	66.2	60.3	58.3	62.3	68.1	79.8
60°	200.4	157.7	110.9	77.9	56.4	42.8	37.0	37.0	37.0	44.7	56.4
62.5°	171.3	132.3	89.6	58.3	40.9	29.2	23.4	23.4	25.3	29.2	40.9
65°	146.0	112.8	75.9	50.6	33.1	23.4	19.4	17.5	19.4	23.4	33.1
67.5°	120.7	93.4	64.2	42.8	29.2	19.4	17.5	15.6	15.6	21.4	27.2
70°	95.3	74.0	52.6	35.1	23.4	15.6	13.6	11.7	13.6	17.5	23.4
72.5°	72.0	56.4	38.9	27.2	17.5	13.6	9.8	9.8	9.8	13.6	17.5
75°	50.6	40.9	29.2	19.4	11.7	7.8	7.8	5.8	7.8	9.8	11.7
77.5°	33.1	27.2	19.4	11.7	7.8	5.8	3.9	3.9	3.9	5.8	7.8
80°	21.4	17.5	11.7	7.8	5.8	3.9	1.9	1.9	1.9	3.9	3.9
82.5°	11.7	9.8	5.8	3.9	3.9	1.9	1.9	1.9	1.9	1.9	1.9
85°	5.8	3.9	3.9	1.9	1.9	1.9	0.0	1.9	1.9	1.9	1.9
87.5°	1.9	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°	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7	1525.7
2.5°	1529.6	1523.8	1531.6	1537.4	1535.5	1529.6	1539.4	1523.8	1529.6	1523.8	1514.0
5°	1556.8	1551.0	1556.8	1560.8	1558.9	1549.1	1556.8	1543.2	1547.2	1539.4	1529.6
7.5°	1586.1	1578.3	1580.2	1582.2	1576.4	1562.7	1568.5	1551.0	1553.0	1543.2	1531.6
10°	1613.4	1601.7	1599.7	1595.8	1584.1	1566.6	1568.5	1547.2	1545.3	1531.6	1518.0
12.5°	1648.3	1628.9	1621.1	1613.4	1595.8	1572.5	1568.5	1543.2	1539.4	1523.8	1508.3
15°	1673.6	1652.3	1638.7	1623.0	1599.7	1570.5	1562.7	1533.6	1525.7	1508.3	1492.7
17.5°	1679.5	1652.3	1632.8	1613.4	1586.1	1551.0	1539.4	1508.3	1498.5	1479.1	1463.4
20°	1654.2	1625.0	1603.6	1578.3	1551.0	1510.2	1498.5	1465.5	1453.8	1436.2	1420.6
22.5°	1605.5	1572.5	1551.0	1525.7	1498.5	1459.6	1445.9	1414.8	1403.1	1385.7	1370.0
25°	1535.5	1504.4	1482.9	1459.6	1434.3	1395.3	1383.7	1354.5	1344.8	1327.2	1311.7
27.5°	1438.2	1408.9	1397.3	1374.0	1350.6	1317.6	1305.9	1280.6	1270.8	1259.1	1241.6
30°	1321.4	1296.1	1290.3	1268.9	1251.4	1222.1	1212.5	1191.0	1181.3	1171.6	1155.9
32.5°	1187.1	1167.6	1167.6	1150.1	1138.5	1115.1	1107.4	1089.8	1082.0	1074.2	1060.6
35°	1035.3	1021.7	1029.5	1017.8	1012.0	996.4	990.6	976.9	971.1	965.2	951.6
37.5°	873.8	864.1	879.7	881.6	881.6	868.0	864.1	856.3	852.4	846.5	834.8
40°	714.2	712.2	735.6	739.5	751.2	743.5	745.4	739.5	735.6	731.8	723.9
42.5°	566.3	574.1	603.3	620.8	632.5	632.5	638.3	636.4	634.4	630.5	624.7
45°	439.8	455.4	490.5	511.8	535.2	541.0	550.7	550.7	552.7	550.7	544.9
47.5°	336.7	360.0	400.9	433.9	459.2	470.9	484.6	488.5	490.5	490.5	486.5
50°	254.9	284.1	330.9	367.8	402.8	418.4	433.9	439.8	447.6	445.6	441.8
52.5°	192.6	225.8	276.4	321.1	358.1	375.6	393.1	400.9	408.7	408.7	406.7
55°	142.1	177.1	231.6	278.3	317.2	338.6	356.2	363.9	373.7	375.6	373.7
57.5°	103.2	138.1	190.7	241.3	278.3	301.7	319.2	326.9	336.7	338.6	338.6
60°	75.9	110.9	161.5	208.3	243.2	266.6	280.2	290.0	297.7	301.7	301.7
62.5°	58.3	89.6	136.2	179.0	210.2	229.6	243.2	251.1	258.8	260.8	262.8
65°	48.7	75.9	114.9	151.8	179.0	196.6	208.3	216.0	221.9	223.8	223.8
67.5°	40.9	64.2	95.3	124.5	147.9	161.5	171.3	177.1	183.0	184.9	184.9
70°	33.1	50.6	75.9	99.2	116.8	128.5	136.2	142.1	146.0	146.0	146.0
72.5°	25.3	38.9	56.4	74.0	87.6	97.3	103.2	105.1	109.0	109.0	109.0
75°	17.5	27.2	40.9	52.6	60.3	68.1	72.0	74.0	75.9	77.9	75.9
77.5°	11.7	17.5	25.3	33.1	40.9	44.7	46.7	48.7	50.6	50.6	50.6
80°	7.8	11.7	15.6	21.4	25.3	27.2	29.2	29.2	31.1	31.1	31.1
82.5°	3.9	5.8	9.8	11.7	13.6	15.6	15.6	15.6	17.5	17.5	15.6
85°	1.9	1.9	3.9	5.8	5.8	7.8	7.8	7.8	7.8	7.8	7.8
87.5°	0.0	0.0	0.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
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: P136574

CATALOG NUMBER: LD6A30D010TE ERW6A30935 6LW121LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1525.7	1525.7	1525.7	1525.7
2.5°	1518.0	1521.9	1506.3	1525.7
5°	1531.6	1535.5	1519.9	1539.4
7.5°	1533.6	1535.5	1519.9	1539.4
10°	1519.9	1519.9	1504.4	1523.8
12.5°	1508.3	1506.3	1488.7	1508.3
15°	1490.7	1488.7	1471.3	1490.7
17.5°	1461.5	1459.6	1442.1	1459.6
20°	1416.8	1414.8	1399.3	1416.8
22.5°	1368.1	1364.2	1348.7	1364.2
25°	1311.7	1307.8	1292.3	1305.9
27.5°	1239.7	1235.7	1220.2	1233.8
30°	1154.0	1148.2	1136.5	1146.3
32.5°	1056.7	1052.9	1039.2	1050.9
35°	949.7	943.9	934.1	943.9
37.5°	832.9	829.0	819.3	825.2
40°	720.1	718.1	710.3	714.2
42.5°	622.8	618.8	613.0	616.9
45°	544.9	543.0	537.1	541.0
47.5°	486.5	484.6	478.8	482.6
50°	443.7	441.8	437.9	439.8
52.5°	408.7	406.7	402.8	408.7
55°	377.5	375.6	369.8	375.6
57.5°	342.6	340.5	334.7	342.6
60°	303.6	303.6	297.7	305.6
62.5°	264.7	264.7	260.8	266.6
65°	227.7	225.8	223.8	227.7
67.5°	186.8	184.9	184.9	188.8
70°	147.9	146.0	146.0	149.8
72.5°	110.9	109.0	109.0	110.9
75°	77.9	75.9	75.9	77.9
77.5°	50.6	50.6	50.6	50.6
80°	31.1	31.1	31.1	31.1
82.5°	17.5	17.5	15.6	17.5
85°	7.8	7.8	7.8	7.8
87.5°	1.9	1.9	1.9	1.9
90°	0.0	0.0	0.0	0.0



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













(END OF REPORT)