

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: P136568

Luminaire Tested: **LD6A30D010TE ERW6A30827 6LW121LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136568
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 ERW6A30827 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 2700K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2773.0 lumens
Efficiency: N/A
Efficacy: 61.1 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

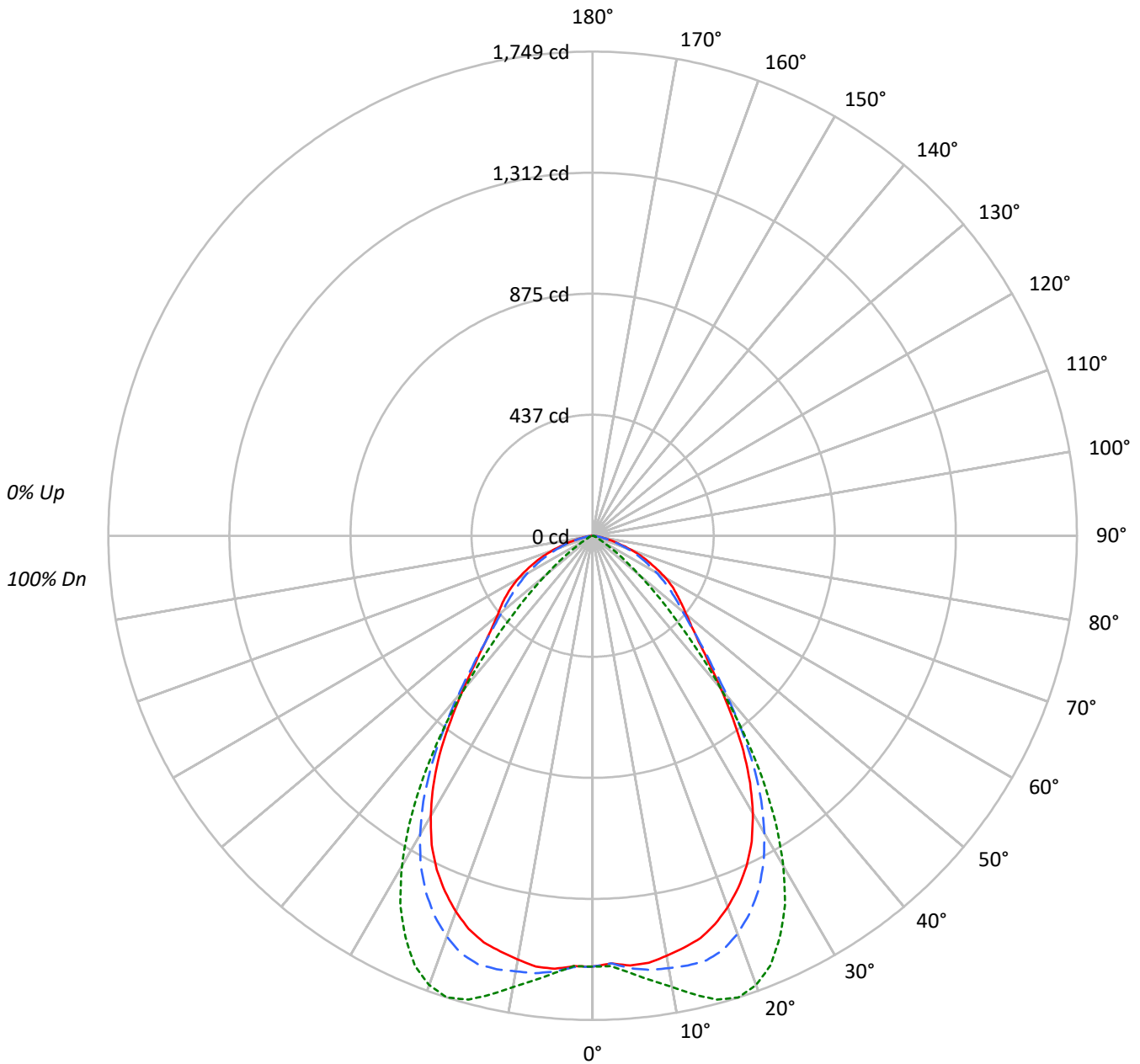
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P136568

CATALOG NUMBER: LD6A30D010TE ERW6A30827 6LW121LI

Luminous Intensity Polar Plot





TEST NUMBER: P136568

CATALOG NUMBER: LD6A30D010TE ERW6A30827 6LW121LI

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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	101521	101521	101521
5°	102040	103860	102819
10°	102034	109659	102955
15°	101617	117165	102691
20°	99080	119888	100316
25°	94725	115162	95870
30°	87168	103772	88072
35°	75558	85044	76665
40°	61191	61191	62035
45°	49998	38825	50911
50°	44719	22157	45531
55°	42222	11283	43575
60°	39627	4919	40658
65°	34626	2763	35845
70°	28021	2270	29147
75°	19510	1512	20014
80°	11947	751	11947
85°	5914	1497	5914



TEST NUMBER: P136568

CATALOG NUMBER: LD6A30D010TE ERW6A30827 6LW121LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.3	5.5
10°-20°	453.6	16.4
20°-30°	659.9	23.8
30°-40°	627.1	22.6
40°-50°	406.3	14.7
50°-60°	254.9	9.2
60°-70°	152.4	5.5
70°-80°	59.4	2.1
80°-90°	8.1	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°	1264.8	45.6
0°-40°	1891.9	68.2
0°-60°	2553.0	92.1
0°-90°	2773.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2773.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1556	1556	1556	1556	1556	
5°	1558	1568	1586	1580	1570	148
15°	1504	1588	1735	1602	1520	422
25°	1316	1415	1600	1423	1332	601
35°	949	1012	1068	1016	963	588
45°	542	550	421	552	552	428
55°	371	341	99	345	383	333
65°	224	196	18	200	232	222
75°	77	68	6	70	79	86
85°	8	8	2	8	8	12
90°	0	0	0	0	0	



TEST NUMBER: P136568

CATALOG NUMBER: LD6A30D010TE ERW6A30827 6LW121LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1
2.5°	1546.2	1536.3	1564.0	1548.2	1550.1	1570.0	1554.1	1548.2	1568.0	1546.2	1556.1
5°	1558.1	1550.1	1577.9	1564.0	1566.0	1585.9	1572.0	1566.0	1587.9	1568.0	1577.9
7.5°	1556.1	1550.1	1575.9	1564.0	1566.0	1589.8	1575.9	1574.0	1599.8	1581.9	1595.8
10°	1540.2	1532.3	1560.1	1550.1	1554.1	1579.9	1568.0	1568.0	1597.8	1585.9	1605.7
12.5°	1524.3	1516.4	1544.2	1536.3	1540.2	1568.0	1560.1	1564.0	1597.8	1589.8	1615.6
15°	1504.5	1496.6	1526.3	1518.4	1522.4	1552.1	1548.2	1552.1	1589.8	1587.9	1617.6
17.5°	1470.8	1466.8	1492.6	1488.6	1492.6	1522.4	1520.4	1526.3	1568.0	1568.0	1605.7
20°	1427.1	1421.1	1448.9	1444.9	1446.9	1476.7	1476.7	1482.7	1526.3	1530.3	1568.0
22.5°	1375.5	1371.5	1399.3	1393.3	1397.3	1425.1	1425.1	1431.1	1472.7	1478.7	1518.4
25°	1315.9	1312.0	1337.8	1335.8	1337.8	1365.6	1363.6	1371.5	1411.2	1415.2	1452.9
27.5°	1244.5	1238.5	1264.3	1264.3	1266.3	1292.1	1292.1	1296.1	1331.8	1335.8	1371.5
30°	1157.1	1151.2	1175.0	1177.0	1177.0	1202.8	1202.8	1204.8	1238.5	1240.5	1272.3
32.5°	1057.9	1057.9	1075.8	1077.8	1077.8	1101.6	1103.6	1103.6	1133.3	1133.3	1159.1
35°	948.7	950.7	964.6	966.6	968.6	990.4	990.4	988.4	1014.2	1012.3	1034.1
37.5°	831.6	831.6	845.5	847.5	847.5	867.4	867.4	865.4	887.2	881.3	897.1
40°	718.5	718.5	730.4	734.4	732.4	748.3	748.3	746.3	762.2	754.2	762.2
42.5°	619.3	623.2	631.2	633.2	631.2	645.1	643.1	641.1	653.0	641.1	643.1
45°	541.9	545.8	551.8	553.8	551.8	561.7	559.7	555.7	561.7	549.8	543.8
47.5°	484.3	486.3	496.2	494.2	492.2	500.2	500.2	492.2	494.2	478.3	466.4
50°	440.6	442.6	450.6	450.6	446.6	454.5	450.6	442.6	440.6	422.8	404.9
52.5°	404.9	406.9	414.8	414.8	410.9	416.8	412.8	400.9	398.9	381.1	359.3
55°	371.2	373.1	381.1	381.1	377.1	381.1	375.1	365.2	361.2	341.4	317.6
57.5°	341.4	339.4	345.4	345.4	341.4	343.4	339.4	329.5	321.5	303.7	279.9
60°	303.7	301.7	305.7	305.7	301.7	303.7	299.7	287.8	283.8	266.0	242.1
62.5°	262.0	262.0	266.0	266.0	262.0	262.0	260.0	248.1	244.1	228.3	208.4
65°	224.3	224.3	228.3	228.3	224.3	226.3	222.3	214.4	210.4	196.5	178.6
67.5°	186.6	186.6	188.6	188.6	186.6	186.6	184.6	178.6	172.7	162.8	146.9
70°	146.9	146.9	148.9	148.9	146.9	146.9	146.9	140.9	138.9	129.0	117.1
72.5°	109.2	109.2	111.1	111.1	111.1	113.1	111.1	107.2	103.2	97.3	87.3
75°	77.4	77.4	77.4	79.4	77.4	77.4	79.4	75.4	73.4	67.5	61.5
77.5°	51.6	51.6	51.6	51.6	51.6	53.6	51.6	51.6	49.6	45.7	41.7
80°	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	29.8	29.8	25.8
82.5°	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	17.9	15.9	13.9
85°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	6.0
87.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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: P136568

CATALOG NUMBER: LD6A30D010TE ERW6A30827 6LW121LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1
2.5°	1554.1	1556.1	1556.1	1562.1	1568.0	1552.1	1560.1	1556.1	1552.1	1568.0	1558.1
5°	1579.9	1581.9	1581.9	1589.8	1597.8	1579.9	1587.9	1585.9	1581.9	1595.8	1585.9
7.5°	1599.8	1605.7	1609.7	1619.6	1629.5	1613.7	1623.6	1619.6	1617.6	1631.5	1617.6
10°	1613.7	1625.6	1631.5	1647.4	1661.3	1645.4	1659.3	1655.3	1653.4	1665.3	1649.4
12.5°	1629.5	1645.4	1661.3	1679.2	1699.0	1685.1	1703.0	1697.0	1697.0	1706.9	1687.1
15°	1639.5	1659.3	1681.1	1706.9	1730.8	1720.8	1740.7	1734.7	1734.7	1742.7	1720.8
17.5°	1629.5	1655.3	1681.1	1710.9	1738.7	1732.7	1754.6	1748.6	1746.6	1754.6	1728.8
20°	1595.8	1625.6	1655.3	1685.1	1716.9	1712.9	1736.7	1726.8	1728.8	1732.7	1706.9
22.5°	1542.2	1574.0	1603.7	1635.5	1665.3	1663.3	1685.1	1679.2	1677.2	1683.1	1655.3
25°	1478.7	1506.5	1534.3	1562.1	1591.8	1587.9	1609.7	1599.8	1601.7	1603.7	1579.9
27.5°	1393.3	1419.1	1441.0	1464.8	1492.6	1486.6	1508.5	1504.5	1498.5	1500.5	1480.7
30°	1288.1	1310.0	1325.9	1345.7	1367.5	1361.6	1381.4	1377.5	1373.5	1373.5	1361.6
32.5°	1169.1	1184.9	1194.9	1208.8	1224.6	1218.7	1234.6	1230.6	1226.6	1226.6	1218.7
35°	1036.1	1046.0	1046.0	1053.9	1065.8	1055.9	1069.8	1067.8	1061.9	1063.9	1061.9
37.5°	891.2	895.2	887.2	887.2	895.2	881.3	893.2	893.2	887.2	889.2	889.2
40°	750.3	748.3	732.4	724.5	724.5	710.6	720.5	718.5	714.5	716.5	720.5
42.5°	625.2	613.3	591.5	575.6	571.6	555.7	561.7	559.7	555.7	559.7	565.7
45°	520.0	498.2	468.4	446.6	436.7	420.8	422.8	420.8	418.8	422.8	432.7
47.5°	436.7	406.9	369.2	341.4	327.5	309.6	309.6	307.6	307.6	317.6	323.5
50°	371.2	335.4	291.8	260.0	240.2	224.3	220.3	218.3	220.3	228.3	240.2
52.5°	321.5	277.9	230.2	196.5	174.7	156.8	152.8	150.8	152.8	160.8	172.7
55°	277.9	232.2	182.6	144.9	121.1	105.2	99.2	99.2	99.2	109.2	121.1
57.5°	238.2	192.5	142.9	105.2	83.4	67.5	61.5	59.5	63.5	69.5	81.4
60°	204.4	160.8	113.1	79.4	57.6	43.7	37.7	37.7	37.7	45.7	57.6
62.5°	174.7	135.0	91.3	59.5	41.7	29.8	23.8	23.8	25.8	29.8	41.7
65°	148.9	115.1	77.4	51.6	33.7	23.8	19.8	17.9	19.8	23.8	33.7
67.5°	123.1	95.3	65.5	43.7	29.8	19.8	17.9	15.9	15.9	21.8	27.8
70°	97.3	75.4	53.6	35.7	23.8	15.9	13.9	11.9	13.9	17.9	23.8
72.5°	73.4	57.6	39.7	27.8	17.9	13.9	9.9	9.9	9.9	13.9	17.9
75°	51.6	41.7	29.8	19.8	11.9	7.9	7.9	6.0	7.9	9.9	11.9
77.5°	33.7	27.8	19.8	11.9	7.9	6.0	4.0	4.0	4.0	6.0	7.9
80°	21.8	17.9	11.9	7.9	6.0	4.0	2.0	2.0	2.0	4.0	4.0
82.5°	11.9	9.9	6.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0
85°	6.0	4.0	4.0	2.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0
87.5°	2.0	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: P136568

CATALOG NUMBER: LD6A30D010TE ERW6A30827 6LW121LI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1	1556.1
2.5°	1560.1	1554.1	1562.1	1568.0	1566.0	1560.1	1570.0	1554.1	1560.1	1554.1	1544.2
5°	1587.9	1581.9	1587.9	1591.8	1589.8	1579.9	1587.9	1574.0	1577.9	1570.0	1560.1
7.5°	1617.6	1609.7	1611.7	1613.7	1607.7	1593.8	1599.8	1581.9	1583.9	1574.0	1562.1
10°	1645.4	1633.5	1631.5	1627.6	1615.6	1597.8	1599.8	1577.9	1575.9	1562.1	1548.2
12.5°	1681.1	1661.3	1653.4	1645.4	1627.6	1603.7	1599.8	1574.0	1570.0	1554.1	1538.2
15°	1706.9	1685.1	1671.2	1655.3	1631.5	1601.7	1593.8	1564.0	1556.1	1538.2	1522.4
17.5°	1712.9	1685.1	1665.3	1645.4	1617.6	1581.9	1570.0	1538.2	1528.3	1508.5	1492.6
20°	1687.1	1657.3	1635.5	1609.7	1581.9	1540.2	1528.3	1494.6	1482.7	1464.8	1448.9
22.5°	1637.5	1603.7	1581.9	1556.1	1528.3	1488.6	1474.7	1443.0	1431.1	1413.2	1397.3
25°	1566.0	1534.3	1512.4	1488.6	1462.8	1423.1	1411.2	1381.4	1371.5	1353.6	1337.8
27.5°	1466.8	1437.0	1425.1	1401.3	1377.5	1343.7	1331.8	1306.0	1296.1	1284.2	1266.3
30°	1347.7	1321.9	1315.9	1294.1	1276.2	1246.5	1236.5	1214.7	1204.8	1194.9	1179.0
32.5°	1210.7	1190.9	1190.9	1173.0	1161.1	1137.3	1129.4	1111.5	1103.6	1095.6	1081.7
35°	1055.9	1042.0	1050.0	1038.1	1032.1	1016.2	1010.3	996.4	990.4	984.5	970.6
37.5°	891.2	881.3	897.1	899.1	899.1	885.2	881.3	873.3	869.4	863.4	851.5
40°	728.4	726.4	750.3	754.2	766.1	758.2	760.2	754.2	750.3	746.3	738.4
42.5°	577.6	585.5	615.3	633.2	645.1	645.1	651.0	649.0	647.1	643.1	637.1
45°	448.6	464.4	500.2	522.0	545.8	551.8	561.7	561.7	563.7	561.7	555.7
47.5°	343.4	367.2	408.9	442.6	468.4	480.3	494.2	498.2	500.2	500.2	496.2
50°	260.0	289.8	337.4	375.1	410.9	426.7	442.6	448.6	456.5	454.5	450.6
52.5°	196.5	230.2	281.8	327.5	365.2	383.1	400.9	408.9	416.8	416.8	414.8
55°	144.9	180.6	236.2	283.8	323.5	345.4	363.2	371.2	381.1	383.1	381.1
57.5°	105.2	140.9	194.5	246.1	283.8	307.6	325.5	333.4	343.4	345.4	345.4
60°	77.4	113.1	164.7	212.4	248.1	271.9	285.8	295.7	303.7	307.6	307.6
62.5°	59.5	91.3	138.9	182.6	214.4	234.2	248.1	256.0	264.0	266.0	268.0
65°	49.6	77.4	117.1	154.8	182.6	200.5	212.4	220.3	226.3	228.3	228.3
67.5°	41.7	65.5	97.3	127.0	150.8	164.7	174.7	180.6	186.6	188.6	188.6
70°	33.7	51.6	77.4	101.2	119.1	131.0	138.9	144.9	148.9	148.9	148.9
72.5°	25.8	39.7	57.6	75.4	89.3	99.2	105.2	107.2	111.1	111.1	111.1
75°	17.9	27.8	41.7	53.6	61.5	69.5	73.4	75.4	77.4	79.4	77.4
77.5°	11.9	17.9	25.8	33.7	41.7	45.7	47.6	49.6	51.6	51.6	51.6
80°	7.9	11.9	15.9	21.8	25.8	27.8	29.8	29.8	31.8	31.8	31.8
82.5°	4.0	6.0	9.9	11.9	13.9	15.9	15.9	15.9	17.9	17.9	15.9
85°	2.0	2.0	4.0	6.0	6.0	7.9	7.9	7.9	7.9	7.9	7.9
87.5°	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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: P136568

CATALOG NUMBER: LD6A30D010TE ERW6A30827 6LW121LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1556.1	1556.1	1556.1	1556.1
2.5°	1548.2	1552.1	1536.3	1556.1
5°	1562.1	1566.0	1550.1	1570.0
7.5°	1564.0	1566.0	1550.1	1570.0
10°	1550.1	1550.1	1534.3	1554.1
12.5°	1538.2	1536.3	1518.4	1538.2
15°	1520.4	1518.4	1500.5	1520.4
17.5°	1490.6	1488.6	1470.8	1488.6
20°	1444.9	1443.0	1427.1	1444.9
22.5°	1395.3	1391.4	1375.5	1391.4
25°	1337.8	1333.8	1317.9	1331.8
27.5°	1264.3	1260.4	1244.5	1258.4
30°	1177.0	1171.0	1159.1	1169.1
32.5°	1077.8	1073.8	1059.9	1071.8
35°	968.6	962.6	952.7	962.6
37.5°	849.5	845.5	835.6	841.6
40°	734.4	732.4	724.5	728.4
42.5°	635.1	631.2	625.2	629.2
45°	555.7	553.8	547.8	551.8
47.5°	496.2	494.2	488.3	492.2
50°	452.5	450.6	446.6	448.6
52.5°	416.8	414.8	410.9	416.8
55°	385.1	383.1	377.1	383.1
57.5°	349.3	347.3	341.4	349.3
60°	309.6	309.6	303.7	311.6
62.5°	269.9	269.9	266.0	271.9
65°	232.2	230.2	228.3	232.2
67.5°	190.5	188.6	188.6	192.5
70°	150.8	148.9	148.9	152.8
72.5°	113.1	111.1	111.1	113.1
75°	79.4	77.4	77.4	79.4
77.5°	51.6	51.6	51.6	51.6
80°	31.8	31.8	31.8	31.8
82.5°	17.9	17.9	15.9	17.9
85°	7.9	7.9	7.9	7.9
87.5°	2.0	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





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













(END OF REPORT)