

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: P136569

Luminaire Tested: **LD6A30D010TE ERW6A30830 6LW121LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P136569  
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 ERW6A30830 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 3000K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

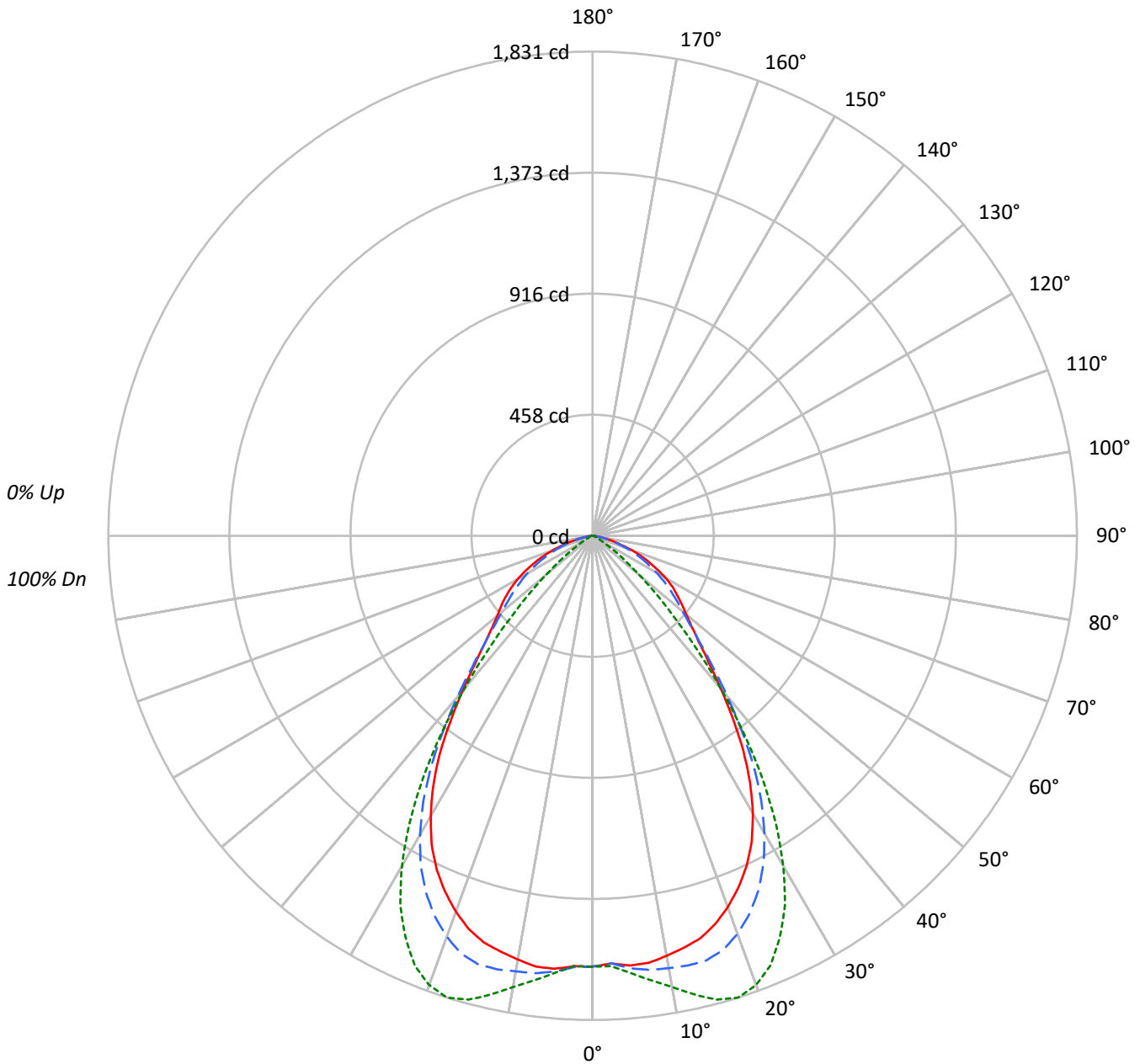
Lumens per Lamp: N/A  
Luminaire Lumens: 2903.0 lumens  
Efficiency: N/A  
Efficacy: 63.9 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.24 / 1.14  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 45.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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									
RC	80									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°	106277	106277	106277
5°	106820	108726	107639
10°	106817	114800	107784
15°	106379	122663	107500
20°	103725	125504	105023
25°	99167	120561	100369
30°	91259	108631	92201
35°	79103	89034	80265
40°	64062	64062	64947
45°	52341	40642	53292
50°	46820	23202	47663
55°	44201	11818	45611
60°	41480	5154	42563
65°	36247	2887	37528
70°	29337	2384	30520
75°	20418	1563	20947
80°	12473	789	12473
85°	6213	1572	6213



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.4	5.5
10°-20°	474.9	16.4
20°-30°	690.8	23.8
30°-40°	656.5	22.6
40°-50°	425.3	14.7
50°-60°	266.8	9.2
60°-70°	159.6	5.5
70°-80°	62.2	2.1
80°-90°	8.5	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°	1324.1	45.6
0°-40°	1980.6	68.2
0°-60°	2672.7	92.1
0°-90°	2903.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2903.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1629	1629	1629	1629	1629	
5°	1631	1642	1660	1654	1644	155
15°	1575	1662	1816	1677	1592	442
25°	1378	1482	1675	1490	1394	630
35°	993	1060	1118	1064	1008	615
45°	567	576	440	578	578	448
55°	389	357	104	362	401	349
65°	235	206	19	210	243	232
75°	81	71	6	73	83	90
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°	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0
2.5°	1618.7	1608.3	1637.4	1620.7	1622.8	1643.6	1627.0	1620.7	1641.5	1618.7	1629.0
5°	1631.1	1622.8	1651.9	1637.4	1639.4	1660.2	1645.7	1639.4	1662.3	1641.5	1651.9
7.5°	1629.0	1622.8	1649.8	1637.4	1639.4	1664.4	1649.8	1647.8	1674.8	1656.1	1670.6
10°	1612.4	1604.1	1633.2	1622.8	1627.0	1654.0	1641.5	1641.5	1672.7	1660.2	1681.0
12.5°	1595.8	1587.5	1616.6	1608.3	1612.4	1641.5	1633.2	1637.4	1672.7	1664.4	1691.4
15°	1575.0	1566.7	1597.9	1589.6	1593.7	1624.9	1620.7	1624.9	1664.4	1662.3	1693.5
17.5°	1539.7	1535.5	1562.6	1558.4	1562.6	1593.7	1591.6	1597.9	1641.5	1641.5	1681.0
20°	1494.0	1487.8	1516.8	1512.7	1514.8	1545.9	1545.9	1552.2	1597.9	1602.0	1641.5
22.5°	1440.0	1435.8	1464.9	1458.7	1462.8	1491.9	1491.9	1498.1	1541.8	1548.0	1589.6
25°	1377.6	1373.5	1400.5	1398.4	1400.5	1429.6	1427.5	1435.8	1477.4	1481.5	1521.0
27.5°	1302.8	1296.6	1323.6	1323.6	1325.7	1352.7	1352.7	1356.8	1394.3	1398.4	1435.8
30°	1211.4	1205.2	1230.1	1232.2	1232.2	1259.2	1259.2	1261.3	1296.6	1298.7	1331.9
32.5°	1107.5	1107.5	1126.2	1128.3	1128.3	1153.2	1155.3	1155.3	1186.5	1186.5	1213.5
35°	993.2	995.3	1009.8	1011.9	1014.0	1036.9	1036.9	1034.8	1061.8	1059.7	1082.6
37.5°	870.6	870.6	885.2	887.3	887.3	908.0	908.0	906.0	928.8	922.6	939.2
40°	752.2	752.2	764.7	768.8	766.7	783.4	783.4	781.3	797.9	789.6	797.9
42.5°	648.3	652.5	660.8	662.8	660.8	675.3	673.2	671.2	683.6	671.2	673.2
45°	567.3	571.4	577.6	579.7	577.6	588.0	586.0	581.8	588.0	575.6	569.3
47.5°	507.0	509.1	519.5	517.4	515.3	523.6	523.6	515.3	517.4	500.8	488.3
50°	461.3	463.4	471.7	471.7	467.5	475.8	471.7	463.4	461.3	442.6	423.9
52.5°	423.9	426.0	434.3	434.3	430.1	436.4	432.2	419.7	417.7	399.0	376.1
55°	388.6	390.6	399.0	399.0	394.8	399.0	392.7	382.3	378.2	357.4	332.5
57.5°	357.4	355.3	361.5	361.5	357.4	359.5	355.3	344.9	336.6	317.9	293.0
60°	317.9	315.8	320.0	320.0	315.8	317.9	313.8	301.3	297.1	278.4	253.5
62.5°	274.3	274.3	278.4	278.4	274.3	274.3	272.2	259.7	255.6	239.0	218.2
65°	234.8	234.8	239.0	239.0	234.8	236.9	232.7	224.4	220.3	205.7	187.0
67.5°	195.3	195.3	197.4	197.4	195.3	195.3	193.2	187.0	180.8	170.4	153.8
70°	153.8	153.8	155.8	155.8	153.8	153.8	153.8	147.5	145.5	135.1	122.6
72.5°	114.3	114.3	116.4	116.4	116.4	118.4	116.4	112.2	108.0	101.8	91.4
75°	81.0	81.0	81.0	83.1	81.0	81.0	83.1	79.0	76.9	70.6	64.4
77.5°	54.0	54.0	54.0	54.0	54.0	56.1	54.0	54.0	51.9	47.8	43.6
80°	33.2	33.2	33.2	33.2	33.2	33.2	33.2	33.2	31.2	31.2	27.0
82.5°	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	18.7	16.6	14.5
85°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	6.2
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°	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0
2.5°	1627.0	1629.0	1629.0	1635.3	1641.5	1624.9	1633.2	1629.0	1624.9	1641.5	1631.1
5°	1654.0	1656.1	1656.1	1664.4	1672.7	1654.0	1662.3	1660.2	1656.1	1670.6	1660.2
7.5°	1674.8	1681.0	1685.2	1695.5	1705.9	1689.3	1699.7	1695.5	1693.5	1708.0	1693.5
10°	1689.3	1701.8	1708.0	1724.6	1739.2	1722.6	1737.1	1732.9	1730.9	1743.3	1726.7
12.5°	1705.9	1722.6	1739.2	1757.9	1778.7	1764.1	1782.8	1776.6	1776.6	1787.0	1766.2
15°	1716.3	1737.1	1760.0	1787.0	1811.9	1801.5	1822.3	1816.1	1816.1	1824.4	1801.5
17.5°	1705.9	1732.9	1760.0	1791.1	1820.2	1814.0	1836.8	1830.6	1828.5	1836.8	1809.8
20°	1670.6	1701.8	1732.9	1764.1	1797.4	1793.2	1818.1	1807.7	1809.8	1814.0	1787.0
22.5°	1614.5	1647.8	1678.9	1712.2	1743.3	1741.3	1764.1	1757.9	1755.8	1762.0	1732.9
25°	1548.0	1577.1	1606.2	1635.3	1666.5	1662.3	1685.2	1674.8	1676.8	1678.9	1654.0
27.5°	1458.7	1485.7	1508.5	1533.5	1562.6	1556.3	1579.2	1575.0	1568.8	1570.9	1550.1
30°	1348.5	1371.4	1388.0	1408.8	1431.7	1425.4	1446.2	1442.0	1437.9	1437.9	1425.4
32.5°	1223.9	1240.5	1250.9	1265.4	1282.0	1275.8	1292.4	1288.3	1284.1	1284.1	1275.8
35°	1084.6	1095.0	1095.0	1103.3	1115.8	1105.4	1120.0	1117.9	1111.7	1113.7	1111.7
37.5°	933.0	937.1	928.8	928.8	937.1	922.6	935.0	935.0	928.8	930.9	930.9
40°	785.4	783.4	766.7	758.4	758.4	743.9	754.3	752.2	748.0	750.1	754.3
42.5°	654.5	642.1	619.2	602.6	598.4	581.8	588.0	586.0	581.8	586.0	592.2
45°	544.4	521.5	490.4	467.5	457.1	440.5	442.6	440.5	438.4	442.6	453.0
47.5°	457.1	426.0	386.5	357.4	342.8	324.1	324.1	322.1	322.1	332.5	338.7
50°	388.6	351.2	305.4	272.2	251.4	234.8	230.6	228.6	230.6	239.0	251.4
52.5°	336.6	290.9	241.0	205.7	182.9	164.2	160.0	157.9	160.0	168.3	180.8
55°	290.9	243.1	191.2	151.7	126.8	110.1	103.9	103.9	103.9	114.3	126.8
57.5°	249.3	201.6	149.6	110.1	87.3	70.6	64.4	62.3	66.5	72.7	85.2
60°	214.0	168.3	118.4	83.1	60.3	45.7	39.5	39.5	39.5	47.8	60.3
62.5°	182.9	141.3	95.6	62.3	43.6	31.2	24.9	24.9	27.0	31.2	43.6
65°	155.8	120.5	81.0	54.0	35.3	24.9	20.8	18.7	20.8	24.9	35.3
67.5°	128.8	99.7	68.6	45.7	31.2	20.8	18.7	16.6	16.6	22.9	29.1
70°	101.8	79.0	56.1	37.4	24.9	16.6	14.5	12.5	14.5	18.7	24.9
72.5°	76.9	60.3	41.6	29.1	18.7	14.5	10.4	10.4	10.4	14.5	18.7
75°	54.0	43.6	31.2	20.8	12.5	8.3	8.3	6.2	8.3	10.4	12.5
77.5°	35.3	29.1	20.8	12.5	8.3	6.2	4.2	4.2	4.2	6.2	8.3
80°	22.9	18.7	12.5	8.3	6.2	4.2	2.1	2.1	2.1	4.2	4.2
82.5°	12.5	10.4	6.2	4.2	4.2	2.1	2.1	2.1	2.1	2.1	2.1
85°	6.2	4.2	4.2	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°	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0	1629.0
2.5°	1633.2	1627.0	1635.3	1641.5	1639.4	1633.2	1643.6	1627.0	1633.2	1627.0	1616.6
5°	1662.3	1656.1	1662.3	1666.5	1664.4	1654.0	1662.3	1647.8	1651.9	1643.6	1633.2
7.5°	1693.5	1685.2	1687.2	1689.3	1683.1	1668.5	1674.8	1656.1	1658.1	1647.8	1635.3
10°	1722.6	1710.1	1708.0	1703.9	1691.4	1672.7	1674.8	1651.9	1649.8	1635.3	1620.7
12.5°	1760.0	1739.2	1730.9	1722.6	1703.9	1678.9	1674.8	1647.8	1643.6	1627.0	1610.3
15°	1787.0	1764.1	1749.6	1732.9	1708.0	1676.8	1668.5	1637.4	1629.0	1610.3	1593.7
17.5°	1793.2	1764.1	1743.3	1722.6	1693.5	1656.1	1643.6	1610.3	1600.0	1579.2	1562.6
20°	1766.2	1735.0	1712.2	1685.2	1656.1	1612.4	1600.0	1564.6	1552.2	1533.5	1516.8
22.5°	1714.2	1678.9	1656.1	1629.0	1600.0	1558.4	1543.9	1510.6	1498.1	1479.4	1462.8
25°	1639.4	1606.2	1583.3	1558.4	1531.4	1489.8	1477.4	1446.2	1435.8	1417.1	1400.5
27.5°	1535.5	1504.4	1491.9	1467.0	1442.0	1406.7	1394.3	1367.2	1356.8	1344.4	1325.7
30°	1410.9	1383.9	1377.6	1354.8	1336.1	1304.9	1294.5	1271.7	1261.3	1250.9	1234.3
32.5°	1267.5	1246.7	1246.7	1228.0	1215.6	1190.6	1182.3	1163.6	1155.3	1147.0	1132.4
35°	1105.4	1090.9	1099.2	1086.7	1080.5	1063.9	1057.6	1043.1	1036.9	1030.6	1016.1
37.5°	933.0	922.6	939.2	941.3	941.3	926.7	922.6	914.3	910.1	903.9	891.4
40°	762.6	760.5	785.4	789.6	802.1	793.7	795.8	789.6	785.4	781.3	773.0
42.5°	604.7	613.0	644.1	662.8	675.3	675.3	681.5	679.5	677.4	673.2	667.0
45°	469.6	486.2	523.6	546.5	571.4	577.6	588.0	588.0	590.1	588.0	581.8
47.5°	359.5	384.4	428.0	463.4	490.4	502.8	517.4	521.5	523.6	523.6	519.5
50°	272.2	303.4	353.2	392.7	430.1	446.7	463.4	469.6	477.9	475.8	471.7
52.5°	205.7	241.0	295.1	342.8	382.3	401.0	419.7	428.0	436.4	436.4	434.3
55°	151.7	189.1	247.3	297.1	338.7	361.5	380.3	388.6	399.0	401.0	399.0
57.5°	110.1	147.5	203.6	257.7	297.1	322.1	340.8	349.1	359.5	361.5	361.5
60°	81.0	118.4	172.5	222.3	259.7	284.7	299.2	309.6	317.9	322.1	322.1
62.5°	62.3	95.6	145.5	191.2	224.4	245.2	259.7	268.0	276.4	278.4	280.5
65°	51.9	81.0	122.6	162.1	191.2	209.9	222.3	230.6	236.9	239.0	239.0
67.5°	43.6	68.6	101.8	133.0	157.9	172.5	182.9	189.1	195.3	197.4	197.4
70°	35.3	54.0	81.0	106.0	124.7	137.1	145.5	151.7	155.8	155.8	155.8
72.5°	27.0	41.6	60.3	79.0	93.5	103.9	110.1	112.2	116.4	116.4	116.4
75°	18.7	29.1	43.6	56.1	64.4	72.7	76.9	79.0	81.0	83.1	81.0
77.5°	12.5	18.7	27.0	35.3	43.6	47.8	49.9	51.9	54.0	54.0	54.0
80°	8.3	12.5	16.6	22.9	27.0	29.1	31.2	31.2	33.2	33.2	33.2
82.5°	4.2	6.2	10.4	12.5	14.5	16.6	16.6	16.6	18.7	18.7	16.6
85°	2.1	2.1	4.2	6.2	6.2	8.3	8.3	8.3	8.3	8.3	8.3
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: P136569

CATALOG NUMBER: LD6A30D010TE ERW6A30830 6LW121LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1629.0	1629.0	1629.0	1629.0
2.5°	1620.7	1624.9	1608.3	1629.0
5°	1635.3	1639.4	1622.8	1643.6
7.5°	1637.4	1639.4	1622.8	1643.6
10°	1622.8	1622.8	1606.2	1627.0
12.5°	1610.3	1608.3	1589.6	1610.3
15°	1591.6	1589.6	1570.9	1591.6
17.5°	1560.5	1558.4	1539.7	1558.4
20°	1512.7	1510.6	1494.0	1512.7
22.5°	1460.7	1456.6	1440.0	1456.6
25°	1400.5	1396.3	1379.7	1394.3
27.5°	1323.6	1319.4	1302.8	1317.4
30°	1232.2	1225.9	1213.5	1223.9
32.5°	1128.3	1124.1	1109.6	1122.0
35°	1014.0	1007.8	997.4	1007.8
37.5°	889.3	885.2	874.8	881.0
40°	768.8	766.7	758.4	762.6
42.5°	664.9	660.8	654.5	658.7
45°	581.8	579.7	573.5	577.6
47.5°	519.5	517.4	511.2	515.3
50°	473.8	471.7	467.5	469.6
52.5°	436.4	434.3	430.1	436.4
55°	403.1	401.0	394.8	401.0
57.5°	365.7	363.6	357.4	365.7
60°	324.1	324.1	317.9	326.2
62.5°	282.6	282.6	278.4	284.7
65°	243.1	241.0	239.0	243.1
67.5°	199.5	197.4	197.4	201.6
70°	157.9	155.8	155.8	160.0
72.5°	118.4	116.4	116.4	118.4
75°	83.1	81.0	81.0	83.1
77.5°	54.0	54.0	54.0	54.0
80°	33.2	33.2	33.2	33.2
82.5°	18.7	18.7	16.6	18.7
85°	8.3	8.3	8.3	8.3
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)