

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: P136329

Luminaire Tested: **LD6A30D010TE ERW6A30830 6LW111LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136329
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23359-R2)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6A30D010TE ERW6A30830 6LW111LI
Description: PORTFOLIO 6 INCH 60 DEGREE CUTOFF RECESSED SINGLE 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: 2947.0 lumens
Efficiency: N/A
Efficacy: 64.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 1.19 / 1.1
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

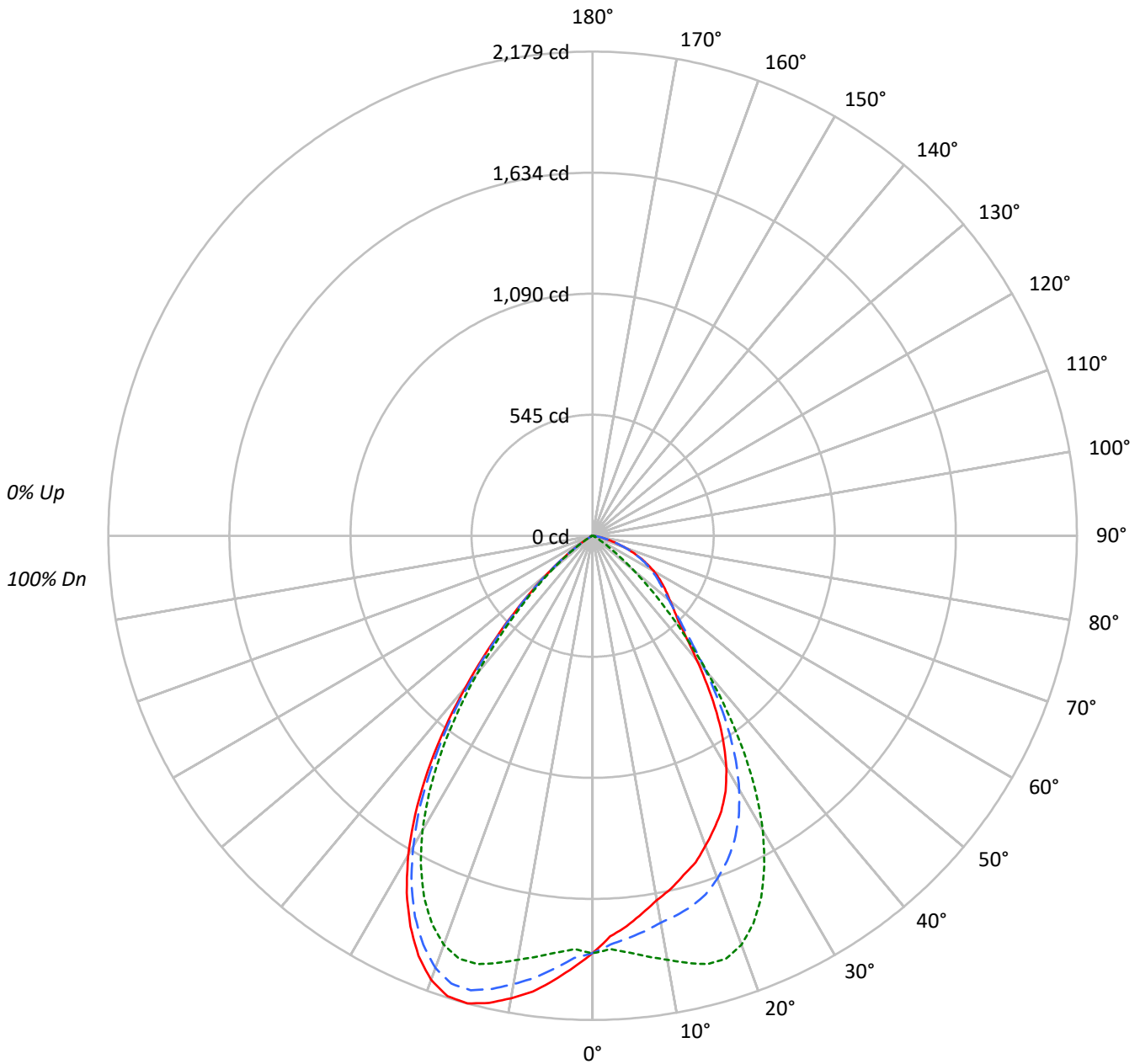
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P136329

CATALOG NUMBER: LD6A30D010TE ERW6A30830 6LW111LI

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	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91				91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82				82
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74				74
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	75	71	68	66				66
5	86	76	69	64	84	75	69	64	73	68	63	72	67	63	70	66	62	60				60
6	81	70	63	58	79	70	63	58	68	62	57	66	61	57	65	60	57	55				55
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	60	56	52	50				50
8	72	60	53	49	70	60	53	48	59	53	48	58	52	48	56	51	48	46				46
9	68	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	43				43
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	122568	122568	122568
5°	115485	123311	131549
10°	110295	128347	140020
15°	106784	134821	147147
20°	103065	135967	147617
25°	98562	129206	139615
30°	90671	115313	124948
35°	77486	94354	103036
40°	61966	68396	75712
45°	50496	43336	48559
50°	46181	23831	27028
55°	43882	9782	11443
60°	41310	3562	3562
65°	36895	1945	1621
70°	29605	1602	1202
75°	19561	1059	1059
80°	10257	789	789
85°	4716	0	0



TEST NUMBER: P136329

CATALOG NUMBER: LD6A30D010TE ERW6A30830 6LW111LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.3	6.2
10°-20°	543.4	18.4
20°-30°	781.8	26.5
30°-40°	718.2	24.4
40°-50°	412.4	14.0
50°-60°	182.2	6.2
60°-70°	89.5	3.0
70°-80°	34.3	1.2
80°-90°	3.9	0.1
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°	1506.5	51.1
0°-40°	2224.7	75.5
0°-60°	2819.3	95.7
0°-90°	2947.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2947.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1879	1879	1879	1879	1879	
5°	1763	1818	1883	1954	2009	165
15°	1581	1726	1996	2118	2179	446
25°	1369	1512	1795	1891	1940	625
35°	973	1065	1185	1252	1294	603
45°	547	570	470	514	526	435
55°	386	367	86	94	101	345
65°	239	231	13	8	10	234
75°	78	82	4	4	4	87
85°	6	6	0	0	0	10
90°	0	0	0	0	0	



TEST NUMBER: P136329

CATALOG NUMBER: LD6A30D010TE ERW6A30830 6LW111LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7
2.5°	1805.3	1815.8	1805.3	1820.0	1828.4	1832.6	1828.4	1817.9	1832.6	1841.0	1838.9
5°	1763.4	1771.8	1763.4	1778.1	1788.6	1799.1	1794.9	1788.6	1805.3	1817.9	1820.0
7.5°	1713.1	1723.6	1717.3	1732.0	1744.5	1757.1	1757.1	1755.0	1776.0	1794.9	1801.1
10°	1664.9	1673.2	1669.0	1683.7	1698.4	1713.1	1717.3	1719.4	1742.4	1767.6	1782.3
12.5°	1627.1	1631.3	1627.1	1643.9	1658.6	1675.3	1683.7	1687.9	1717.3	1748.7	1767.6
15°	1581.0	1591.5	1587.3	1604.0	1620.8	1639.7	1650.2	1658.6	1690.0	1725.7	1752.9
17.5°	1541.1	1545.3	1541.1	1560.0	1574.7	1595.7	1608.2	1618.7	1652.3	1692.1	1721.5
20°	1484.5	1492.9	1490.8	1507.6	1524.4	1543.2	1555.8	1566.3	1602.0	1641.8	1675.3
22.5°	1427.9	1436.3	1436.3	1453.1	1465.7	1486.6	1497.1	1507.6	1541.1	1583.1	1612.4
25°	1369.2	1375.5	1373.4	1388.1	1402.8	1423.7	1432.1	1442.6	1474.0	1511.8	1539.0
27.5°	1295.8	1300.0	1304.2	1316.8	1327.3	1346.1	1352.4	1362.9	1388.1	1423.7	1448.9
30°	1203.6	1207.8	1214.0	1224.5	1232.9	1251.8	1256.0	1264.4	1289.5	1318.9	1341.9
32.5°	1094.5	1096.6	1107.1	1115.5	1126.0	1138.6	1149.0	1151.1	1170.0	1199.4	1216.1
35°	972.9	975.0	985.5	991.8	1002.3	1014.8	1023.2	1025.3	1042.1	1065.2	1075.7
37.5°	847.1	859.7	857.6	863.9	874.4	884.8	893.2	893.2	905.8	924.7	928.9
40°	727.6	733.9	740.2	744.4	752.7	761.1	767.4	767.4	775.8	788.4	788.4
42.5°	624.8	635.3	635.3	639.5	645.8	654.2	658.4	656.3	660.5	666.8	662.6
45°	547.3	551.5	553.6	559.8	561.9	570.3	572.4	568.2	570.3	570.3	557.7
47.5°	496.9	496.9	496.9	501.1	503.2	509.5	509.5	503.2	501.1	499.0	482.3
50°	455.0	455.0	457.1	461.3	463.4	465.5	465.5	457.1	455.0	446.6	423.6
52.5°	419.4	421.5	421.5	425.6	427.7	429.8	427.7	419.4	413.1	404.7	377.4
55°	385.8	387.9	390.0	394.2	394.2	394.2	392.1	383.7	377.4	366.9	339.7
57.5°	352.3	354.4	354.4	358.6	360.6	360.6	358.6	350.2	343.9	335.5	306.1
60°	316.6	316.6	318.7	322.9	322.9	325.0	322.9	316.6	310.3	299.8	274.7
62.5°	276.8	278.9	281.0	285.2	287.3	287.3	287.3	281.0	276.8	268.4	243.2
65°	239.0	239.0	241.1	245.3	245.3	251.6	247.4	243.2	239.0	230.6	209.7
67.5°	195.0	197.1	197.1	201.3	203.4	205.5	205.5	201.3	199.2	192.9	174.0
70°	155.2	155.2	157.3	159.4	161.5	163.6	163.6	161.5	159.4	153.1	138.4
72.5°	113.2	115.3	115.3	117.4	121.6	123.7	123.7	123.7	119.5	115.3	104.8
75°	77.6	79.7	79.7	81.8	83.9	86.0	86.0	86.0	83.9	81.8	73.4
77.5°	48.2	48.2	50.3	50.3	52.4	54.5	56.6	56.6	54.5	52.4	48.2
80°	27.3	27.3	29.4	29.4	29.4	31.5	33.5	33.5	33.5	31.5	27.3
82.5°	14.7	14.7	14.7	14.7	14.7	16.8	16.8	16.8	16.8	16.8	14.7
85°	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
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



TEST NUMBER: P136329

CATALOG NUMBER: LD6A30D010TE ERW6A30830 6LW111LI

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7
2.5°	1838.9	1853.6	1864.1	1847.3	1862.0	1876.6	1893.4	1862.0	1891.3	1874.5	1880.8
5°	1828.4	1845.2	1859.9	1849.4	1868.2	1887.1	1910.2	1882.9	1916.5	1903.9	1914.4
7.5°	1813.7	1836.8	1857.8	1853.6	1878.7	1903.9	1933.2	1910.2	1945.8	1939.5	1952.1
10°	1801.1	1832.6	1859.9	1859.9	1893.4	1922.8	1954.2	1937.4	1979.4	1973.1	1989.9
12.5°	1792.8	1832.6	1868.2	1874.5	1914.4	1947.9	1985.7	1968.9	2015.0	2008.7	2027.6
15°	1784.4	1830.5	1872.4	1885.0	1929.1	1968.9	2008.7	1996.1	2044.4	2038.1	2057.0
17.5°	1757.1	1811.6	1857.8	1874.5	1922.8	1964.7	2006.6	1996.1	2044.4	2038.1	2057.0
20°	1711.0	1765.5	1815.8	1834.7	1882.9	1927.0	1966.8	1958.4	2006.6	2000.3	2017.1
22.5°	1652.3	1704.7	1752.9	1771.8	1817.9	1857.8	1897.6	1889.2	1935.3	1924.9	1943.7
25°	1570.5	1625.0	1671.1	1685.8	1727.8	1767.6	1803.2	1794.9	1838.9	1826.3	1845.2
27.5°	1486.6	1526.5	1564.2	1576.8	1614.5	1648.1	1681.6	1673.2	1715.2	1700.5	1719.4
30°	1373.4	1404.9	1438.4	1444.7	1480.3	1507.6	1537.0	1530.7	1566.3	1553.7	1570.5
32.5°	1241.3	1268.6	1291.6	1293.7	1323.1	1346.1	1371.3	1367.1	1398.6	1388.1	1400.7
35°	1096.6	1113.4	1128.1	1126.0	1149.0	1165.8	1188.9	1184.7	1214.0	1203.6	1216.1
37.5°	943.6	951.9	956.1	947.8	964.5	977.1	993.9	991.8	1016.9	1008.6	1021.1
40°	794.7	794.7	788.4	773.7	784.2	790.5	803.1	803.1	821.9	813.6	824.0
42.5°	658.4	650.0	635.3	614.4	616.5	624.8	624.8	624.8	639.5	631.1	650.0
45°	547.3	528.4	505.3	478.1	469.7	473.9	469.7	469.7	480.2	473.9	488.6
47.5°	461.3	438.2	398.4	364.8	350.2	348.1	341.8	341.8	348.1	348.1	354.4
50°	396.3	362.7	314.5	274.7	253.7	247.4	239.0	234.8	241.1	239.0	243.2
52.5°	343.9	301.9	245.3	199.2	178.2	163.6	157.3	148.9	151.0	151.0	153.1
55°	299.8	251.6	190.8	142.6	119.5	102.7	94.4	86.0	86.0	83.9	86.0
57.5°	266.3	216.0	155.2	106.9	81.8	65.0	56.6	48.2	46.1	46.1	46.1
60°	236.9	188.7	127.9	83.9	58.7	41.9	33.5	27.3	25.2	23.1	23.1
62.5°	207.6	163.6	109.0	69.2	44.0	31.5	23.1	16.8	14.7	12.6	12.6
65°	178.2	140.5	94.4	58.7	37.7	25.2	16.8	12.6	10.5	8.4	8.4
67.5°	146.8	115.3	79.7	48.2	31.5	21.0	14.7	10.5	8.4	6.3	6.3
70°	117.4	92.3	62.9	39.8	25.2	16.8	10.5	8.4	6.3	6.3	6.3
72.5°	88.1	69.2	48.2	29.4	18.9	12.6	8.4	6.3	4.2	4.2	4.2
75°	62.9	50.3	33.5	21.0	12.6	8.4	6.3	4.2	4.2	4.2	4.2
77.5°	39.8	31.5	21.0	12.6	8.4	4.2	4.2	2.1	2.1	2.1	2.1
80°	23.1	18.9	12.6	8.4	4.2	2.1	2.1	2.1	2.1	2.1	2.1
82.5°	12.6	8.4	6.3	4.2	2.1	2.1	2.1	0.0	0.0	0.0	0.0
85°	4.2	4.2	2.1	2.1	2.1	2.1	0.0	0.0	0.0	0.0	0.0
87.5°	2.1	2.1	2.1	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: P136329

CATALOG NUMBER: LD6A30D010TE ERW6A30830 6LW111LI

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7	1878.7
2.5°	1897.6	1893.4	1908.1	1914.4	1910.2	1901.8	1929.1	1935.3	1916.5	1924.9	1924.9
5°	1935.3	1935.3	1954.2	1962.6	1962.6	1954.2	1985.7	1996.1	1977.3	1985.7	1987.8
7.5°	1977.3	1977.3	2000.3	2010.8	2012.9	2006.6	2038.1	2046.5	2033.9	2042.3	2044.4
10°	2015.0	2015.0	2042.3	2052.8	2054.9	2048.6	2080.0	2090.5	2075.8	2084.2	2086.3
12.5°	2054.9	2057.0	2084.2	2094.7	2094.7	2088.4	2119.9	2130.3	2113.6	2124.1	2122.0
15°	2084.2	2086.3	2113.6	2124.1	2126.2	2117.8	2147.1	2159.7	2142.9	2149.2	2149.2
17.5°	2082.1	2084.2	2109.4	2119.9	2119.9	2113.6	2138.7	2153.4	2136.6	2142.9	2140.8
20°	2040.2	2042.3	2069.5	2077.9	2077.9	2069.5	2092.6	2107.3	2090.5	2094.7	2092.6
22.5°	1964.7	1966.8	1992.0	2000.3	2002.4	1992.0	2015.0	2031.8	2012.9	2015.0	2012.9
25°	1866.1	1866.1	1893.4	1893.4	1903.9	1891.3	1908.1	1931.1	1912.3	1912.3	1906.0
27.5°	1738.2	1738.2	1765.5	1765.5	1778.1	1765.5	1792.8	1803.2	1786.5	1784.4	1784.4
30°	1589.4	1589.4	1614.5	1614.5	1625.0	1614.5	1641.8	1652.3	1635.5	1633.4	1635.5
32.5°	1419.5	1419.5	1444.7	1442.6	1455.2	1446.8	1472.0	1480.3	1467.8	1461.5	1465.7
35°	1232.9	1243.4	1258.1	1256.0	1268.6	1251.8	1283.2	1289.5	1279.0	1281.1	1274.9
37.5°	1035.8	1046.3	1056.8	1056.8	1067.3	1063.1	1081.9	1088.2	1079.8	1081.9	1075.7
40°	838.7	849.2	857.6	857.6	868.1	855.5	880.7	886.9	878.6	870.2	874.4
42.5°	652.1	662.6	671.0	668.9	679.4	677.3	691.9	696.1	689.8	687.7	683.6
45°	490.7	492.7	507.4	513.7	513.7	513.7	524.2	526.3	520.0	520.0	517.9
47.5°	354.4	358.6	369.0	373.2	375.3	373.2	377.4	385.8	379.5	379.5	381.6
50°	245.3	247.4	255.8	260.0	260.0	260.0	262.1	268.4	264.2	264.2	260.0
52.5°	157.3	157.3	163.6	165.6	165.6	165.6	167.7	171.9	167.7	169.8	171.9
55°	88.1	88.1	92.3	94.4	94.4	94.4	96.5	98.5	96.5	98.5	98.5
57.5°	46.1	46.1	48.2	48.2	50.3	50.3	50.3	52.4	52.4	52.4	52.4
60°	23.1	23.1	23.1	25.2	25.2	25.2	25.2	27.3	27.3	27.3	27.3
62.5°	12.6	12.6	12.6	12.6	12.6	12.6	12.6	14.7	14.7	14.7	14.7
65°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
67.5°	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	8.4	8.4	8.4
70°	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
72.5°	4.2	4.2	4.2	4.2	4.2	4.2	6.3	6.3	6.3	4.2	4.2
75°	2.1	4.2	4.2	2.1	2.1	4.2	4.2	4.2	4.2	4.2	4.2
77.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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: P136329

CATALOG NUMBER: LD6A30D010TE ERW6A30830 6LW111LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1878.7	1878.7	1878.7	1878.7
2.5°	1908.1	1910.2	1945.8	1943.7
5°	1971.0	1973.1	2008.7	2008.7
7.5°	2027.6	2029.7	2067.4	2069.5
10°	2069.5	2073.7	2109.4	2113.6
12.5°	2109.4	2109.4	2145.0	2153.4
15°	2134.5	2134.5	2168.1	2178.6
17.5°	2126.2	2126.2	2159.7	2172.3
20°	2080.0	2077.9	2109.4	2126.2
22.5°	2000.3	2002.4	2027.6	2046.5
25°	1899.7	1895.5	1922.8	1939.5
27.5°	1773.9	1776.0	1792.8	1811.6
30°	1622.9	1627.1	1639.7	1658.6
32.5°	1453.1	1459.4	1467.8	1486.6
35°	1266.5	1272.8	1276.9	1293.7
37.5°	1065.2	1073.6	1075.7	1092.4
40°	866.0	874.4	874.4	889.0
42.5°	679.4	685.7	683.6	696.1
45°	513.7	517.9	515.8	526.3
47.5°	375.3	379.5	375.3	383.7
50°	260.0	264.2	260.0	266.3
52.5°	167.7	169.8	165.6	171.9
55°	96.5	98.5	96.5	100.6
57.5°	54.5	52.4	50.3	54.5
60°	27.3	27.3	27.3	27.3
62.5°	14.7	14.7	14.7	14.7
65°	8.4	8.4	8.4	10.5
67.5°	8.4	8.4	8.4	8.4
70°	6.3	6.3	6.3	6.3
72.5°	4.2	4.2	4.2	4.2
75°	4.2	4.2	4.2	4.2
77.5°	2.1	2.1	2.1	2.1
80°	0.0	0.0	0.0	2.1
82.5°	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0
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)