

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: P136333

Luminaire Tested: **LD6A30D010TE ERW6A30930 6LW111LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136333
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 ERW6A30930 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: 2690.6 lumens
Efficiency: N/A
Efficacy: 59.3 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

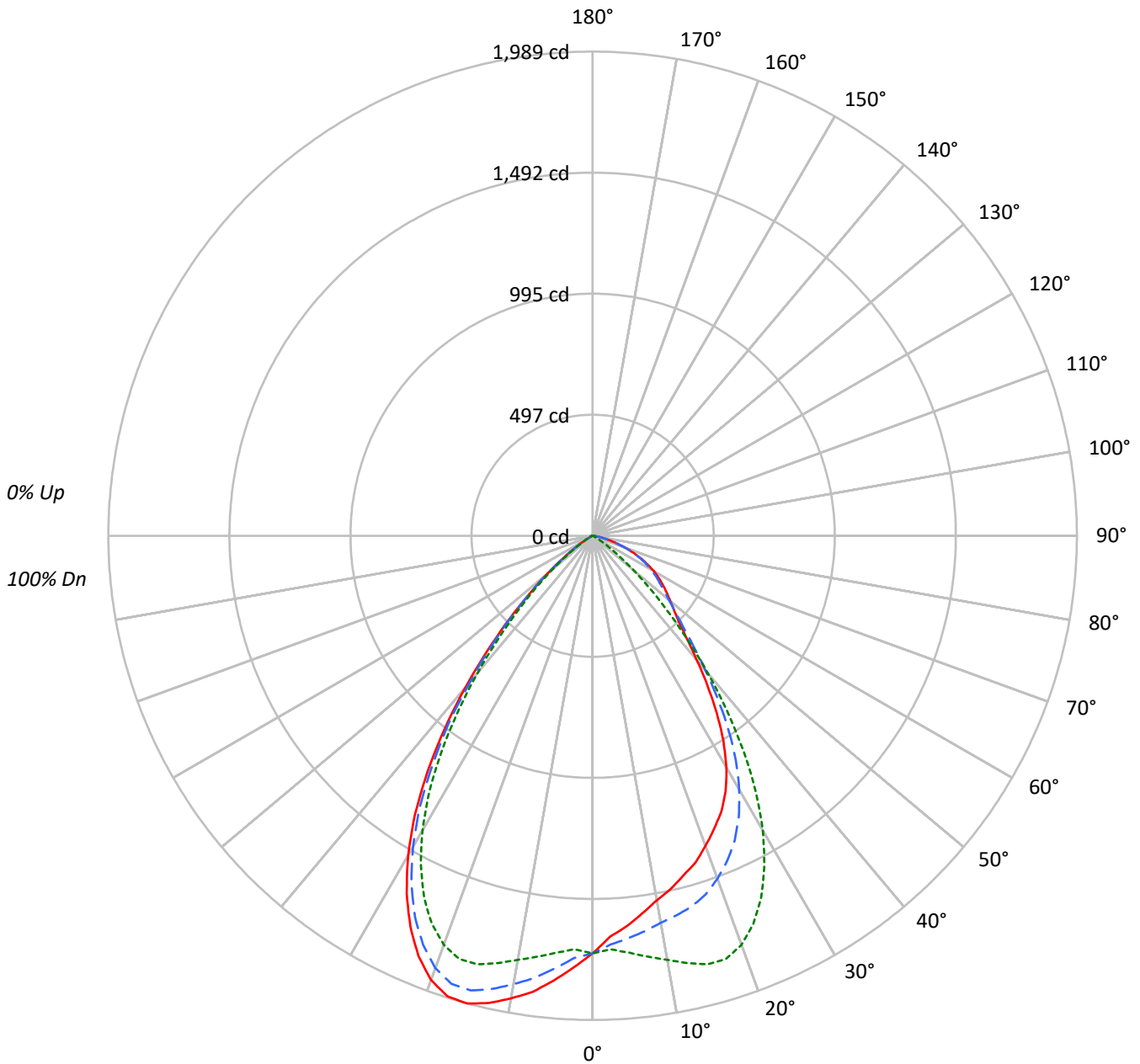
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	112	109	106	103	110	107	104	102	103	100	98	99	97	95	95	94	93	91																			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82																			
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74																			
4	92	83	76	71	90	82	76	71	80	74	70	77	73	69	75	71	68	66																			
5	86	76	69	64	84	75	69	64	73	68	63	72	67	63	70	66	62	60																			
6	81	70	63	58	79	70	63	58	68	62	57	66	61	57	65	60	57	55																			
7	76	65	58	53	75	64	58	53	63	57	53	62	56	52	60	56	52	50																			
8	72	60	53	49	70	60	53	48	59	53	48	58	52	48	56	51	48	46																			
9	68	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	43																			
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	45	41	39																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	111907	111907	111907
5°	105439	112584	120102
10°	100702	117178	127837
15°	97497	123089	134348
20°	94095	124137	134773
25°	89989	117962	127471
30°	82784	105278	114077
35°	70748	86143	94068
40°	56576	62443	69129
45°	46104	39563	44333
50°	42162	21761	24674
55°	40060	8929	10442
60°	37722	3249	3249
65°	33684	1775	1482
70°	27029	1469	1106
75°	17847	958	958
80°	9355	714	714
85°	4342	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	165.5	6.2
10°-20°	496.1	18.4
20°-30°	713.8	26.5
30°-40°	655.7	24.4
40°-50°	376.5	14.0
50°-60°	166.3	6.2
60°-70°	81.7	3.0
70°-80°	31.4	1.2
80°-90°	3.5	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°	1375.5	51.1
0°-40°	2031.2	75.5
0°-60°	2574.0	95.7
0°-90°	2690.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2690.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1715	1715	1715	1715	1715	
5°	1610	1660	1719	1784	1834	151
15°	1444	1576	1822	1934	1989	407
25°	1250	1380	1639	1727	1771	571
35°	888	972	1082	1143	1181	551
45°	500	521	429	469	480	397
55°	352	335	78	86	92	315
65°	218	210	12	8	10	214
75°	71	75	4	4	4	79
85°	6	6	0	0	0	9
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°	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3
2.5°	1648.2	1657.8	1648.2	1661.7	1669.3	1673.2	1669.3	1659.7	1673.2	1680.8	1678.9
5°	1610.0	1617.7	1610.0	1623.4	1633.0	1642.6	1638.7	1633.0	1648.2	1659.7	1661.7
7.5°	1564.1	1573.6	1567.9	1581.3	1592.7	1604.2	1604.2	1602.3	1621.5	1638.7	1644.4
10°	1520.1	1527.6	1523.8	1537.2	1550.6	1564.1	1567.9	1569.8	1590.8	1613.8	1627.2
12.5°	1485.5	1489.4	1485.5	1500.9	1514.3	1529.5	1537.2	1541.1	1567.9	1596.6	1613.8
15°	1443.5	1453.0	1449.2	1464.5	1479.8	1497.0	1506.6	1514.3	1543.0	1575.6	1600.4
17.5°	1407.0	1410.9	1407.0	1424.3	1437.7	1456.9	1468.3	1477.9	1508.5	1544.9	1571.7
20°	1355.3	1363.0	1361.1	1376.4	1391.8	1408.9	1420.4	1430.0	1462.6	1499.0	1529.5
22.5°	1303.7	1311.3	1311.3	1326.7	1338.2	1357.3	1366.9	1376.4	1407.0	1445.4	1472.1
25°	1250.1	1255.8	1253.9	1267.3	1280.8	1299.8	1307.5	1317.1	1345.8	1380.3	1405.1
27.5°	1183.1	1186.9	1190.7	1202.2	1211.8	1229.0	1234.7	1244.3	1267.3	1299.8	1322.8
30°	1098.9	1102.7	1108.4	1118.0	1125.6	1142.9	1146.7	1154.4	1177.3	1204.2	1225.2
32.5°	999.3	1001.2	1010.8	1018.5	1028.0	1039.5	1049.0	1051.0	1068.2	1095.1	1110.3
35°	888.3	890.2	899.8	905.5	915.1	926.5	934.2	936.1	951.4	972.5	982.1
37.5°	773.4	784.9	783.0	788.7	798.3	807.8	815.5	815.5	827.0	844.3	848.1
40°	664.3	670.1	675.8	679.6	687.2	694.9	700.6	700.6	708.3	719.8	719.8
42.5°	570.4	580.0	580.0	583.9	589.6	597.3	601.1	599.2	603.0	608.8	605.0
45°	499.7	503.5	505.4	511.1	513.0	520.7	522.6	518.8	520.7	520.7	509.2
47.5°	453.7	453.7	453.7	457.5	459.4	465.2	465.2	459.4	457.5	455.6	440.3
50°	415.4	415.4	417.3	421.2	423.1	425.0	425.0	417.3	415.4	407.7	386.7
52.5°	382.9	384.8	384.8	388.6	390.5	392.4	390.5	382.9	377.2	369.5	344.6
55°	352.2	354.2	356.1	359.9	359.9	359.9	358.0	350.3	344.6	335.0	310.1
57.5°	321.6	323.6	323.6	327.4	329.2	329.2	327.4	319.7	314.0	306.3	279.5
60°	289.1	289.1	291.0	294.8	294.8	296.7	294.8	289.1	283.3	273.7	250.8
62.5°	252.7	254.6	256.6	260.4	262.3	262.3	262.3	256.6	252.7	245.0	222.0
65°	218.2	218.2	220.1	224.0	224.0	229.7	225.9	222.0	218.2	210.5	191.5
67.5°	178.0	180.0	180.0	183.8	185.7	187.6	187.6	183.8	181.9	176.1	158.9
70°	141.7	141.7	143.6	145.5	147.4	149.4	149.4	147.4	145.5	139.8	126.4
72.5°	103.4	105.3	105.3	107.2	111.0	112.9	112.9	112.9	109.1	105.3	95.7
75°	70.8	72.8	72.8	74.7	76.6	78.5	78.5	78.5	76.6	74.7	67.0
77.5°	44.0	44.0	45.9	45.9	47.8	49.8	51.7	51.7	49.8	47.8	44.0
80°	24.9	24.9	26.8	26.8	26.8	28.8	30.6	30.6	30.6	28.8	24.9
82.5°	13.4	13.4	13.4	13.4	13.4	15.3	15.3	15.3	15.3	15.3	13.4
85°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	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°	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3
2.5°	1678.9	1692.3	1701.9	1686.6	1700.0	1713.3	1728.7	1700.0	1726.8	1711.4	1717.2
5°	1669.3	1684.7	1698.1	1688.5	1705.7	1722.9	1744.0	1719.1	1749.8	1738.3	1747.8
7.5°	1655.9	1677.0	1696.2	1692.3	1715.3	1738.3	1765.0	1744.0	1776.5	1770.8	1782.3
10°	1644.4	1673.2	1698.1	1698.1	1728.7	1755.5	1784.2	1768.8	1807.2	1801.4	1816.8
12.5°	1636.8	1673.2	1705.7	1711.4	1747.8	1778.4	1812.9	1797.6	1839.7	1833.9	1851.2
15°	1629.2	1671.2	1709.5	1721.0	1761.3	1797.6	1833.9	1822.4	1866.5	1860.8	1878.0
17.5°	1604.2	1654.0	1696.2	1711.4	1755.5	1793.8	1832.0	1822.4	1866.5	1860.8	1878.0
20°	1562.1	1611.9	1657.8	1675.1	1719.1	1759.4	1795.7	1788.0	1832.0	1826.3	1841.6
22.5°	1508.5	1556.4	1600.4	1617.7	1659.7	1696.2	1732.5	1724.8	1766.9	1757.4	1774.6
25°	1433.9	1483.6	1525.7	1539.1	1577.5	1613.8	1646.3	1638.7	1678.9	1667.4	1684.7
27.5°	1357.3	1393.7	1428.1	1439.6	1474.0	1504.7	1535.3	1527.6	1566.0	1552.6	1569.8
30°	1253.9	1282.7	1313.3	1319.0	1351.5	1376.4	1403.3	1397.5	1430.0	1418.5	1433.9
32.5°	1133.3	1158.2	1179.2	1181.1	1208.0	1229.0	1252.0	1248.2	1276.9	1267.3	1278.8
35°	1001.2	1016.5	1030.0	1028.0	1049.0	1064.4	1085.5	1081.6	1108.4	1098.9	1110.3
37.5°	861.5	869.1	872.9	865.3	880.6	892.1	907.4	905.5	928.4	920.9	932.3
40°	725.6	725.6	719.8	706.4	716.0	721.7	733.2	733.2	750.4	742.8	752.3
42.5°	601.1	593.4	580.0	560.9	562.9	570.4	570.4	570.4	583.9	576.2	593.4
45°	499.7	482.4	461.3	436.5	428.8	432.7	428.8	428.8	438.4	432.7	446.1
47.5°	421.2	400.1	363.7	333.1	319.7	317.8	312.1	312.1	317.8	317.8	323.6
50°	361.8	331.1	287.1	250.8	231.6	225.9	218.2	214.4	220.1	218.2	222.0
52.5°	314.0	275.6	224.0	181.9	162.7	149.4	143.6	135.9	137.9	137.9	139.8
55°	273.7	229.7	174.2	130.2	109.1	93.8	86.2	78.5	78.5	76.6	78.5
57.5°	243.1	197.2	141.7	97.6	74.7	59.3	51.7	44.0	42.1	42.1	42.1
60°	216.3	172.3	116.8	76.6	53.6	38.3	30.6	24.9	23.0	21.1	21.1
62.5°	189.5	149.4	99.5	63.2	40.2	28.8	21.1	15.3	13.4	11.5	11.5
65°	162.7	128.3	86.2	53.6	34.4	23.0	15.3	11.5	9.6	7.7	7.7
67.5°	134.0	105.3	72.8	44.0	28.8	19.2	13.4	9.6	7.7	5.8	5.8
70°	107.2	84.3	57.4	36.3	23.0	15.3	9.6	7.7	5.8	5.8	5.8
72.5°	80.4	63.2	44.0	26.8	17.3	11.5	7.7	5.8	3.8	3.8	3.8
75°	57.4	45.9	30.6	19.2	11.5	7.7	5.8	3.8	3.8	3.8	3.8
77.5°	36.3	28.8	19.2	11.5	7.7	3.8	3.8	1.9	1.9	1.9	1.9
80°	21.1	17.3	11.5	7.7	3.8	1.9	1.9	1.9	1.9	1.9	1.9
82.5°	11.5	7.7	5.8	3.8	1.9	1.9	1.9	0.0	0.0	0.0	0.0
85°	3.8	3.8	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0
87.5°	1.9	1.9	1.9	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°	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3	1715.3
2.5°	1732.5	1728.7	1742.1	1747.8	1744.0	1736.3	1761.3	1766.9	1749.8	1757.4	1757.4
5°	1766.9	1766.9	1784.2	1791.9	1791.9	1784.2	1812.9	1822.4	1805.3	1812.9	1814.9
7.5°	1805.3	1805.3	1826.3	1835.9	1837.8	1832.0	1860.8	1868.5	1857.0	1864.6	1866.5
10°	1839.7	1839.7	1864.6	1874.2	1876.1	1870.4	1899.0	1908.6	1895.2	1902.9	1904.8
12.5°	1876.1	1878.0	1902.9	1912.5	1912.5	1906.7	1935.5	1945.0	1929.7	1939.3	1937.4
15°	1902.9	1904.8	1929.7	1939.3	1941.2	1933.6	1960.3	1971.8	1956.5	1962.2	1962.2
17.5°	1901.0	1902.9	1925.9	1935.5	1935.5	1929.7	1952.6	1966.1	1950.7	1956.5	1954.6
20°	1862.7	1864.6	1889.5	1897.1	1897.1	1889.5	1910.5	1924.0	1908.6	1912.5	1910.5
22.5°	1793.8	1795.7	1818.7	1826.3	1828.2	1818.7	1839.7	1855.0	1837.8	1839.7	1837.8
25°	1703.7	1703.7	1728.7	1728.7	1738.3	1726.8	1742.1	1763.1	1745.9	1745.9	1740.2
27.5°	1587.0	1587.0	1611.9	1611.9	1623.4	1611.9	1636.8	1646.3	1631.1	1629.2	1629.2
30°	1451.1	1451.1	1474.0	1474.0	1483.6	1474.0	1499.0	1508.5	1493.2	1491.3	1493.2
32.5°	1296.0	1296.0	1319.0	1317.1	1328.6	1320.9	1343.9	1351.5	1340.1	1334.3	1338.2
35°	1125.6	1135.2	1148.6	1146.7	1158.2	1142.9	1171.6	1177.3	1167.7	1169.6	1164.0
37.5°	945.7	955.3	964.9	964.9	974.4	970.6	987.8	993.5	985.9	987.8	982.1
40°	765.7	775.3	783.0	783.0	792.6	781.1	804.1	809.7	802.2	794.5	798.3
42.5°	595.4	605.0	612.6	610.7	620.3	618.4	631.7	635.5	629.8	627.9	624.1
45°	448.0	449.8	463.3	469.0	469.0	469.0	478.6	480.5	474.8	474.8	472.8
47.5°	323.6	327.4	336.9	340.7	342.6	340.7	344.6	352.2	346.5	346.5	348.4
50°	224.0	225.9	233.5	237.4	237.4	237.4	239.3	245.0	241.2	241.2	237.4
52.5°	143.6	143.6	149.4	151.2	151.2	151.2	153.1	156.9	153.1	155.0	156.9
55°	80.4	80.4	84.3	86.2	86.2	86.2	88.1	89.9	88.1	89.9	89.9
57.5°	42.1	42.1	44.0	44.0	45.9	45.9	45.9	47.8	47.8	47.8	47.8
60°	21.1	21.1	21.1	23.0	23.0	23.0	23.0	24.9	24.9	24.9	24.9
62.5°	11.5	11.5	11.5	11.5	11.5	11.5	11.5	13.4	13.4	13.4	13.4
65°	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7
67.5°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	7.7	7.7	7.7
70°	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
72.5°	3.8	3.8	3.8	3.8	3.8	3.8	5.8	5.8	5.8	3.8	3.8
75°	1.9	3.8	3.8	1.9	1.9	3.8	3.8	3.8	3.8	3.8	3.8
77.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
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: P136333

CATALOG NUMBER: LD6A30D010TE ERW6A30930 6LW111LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1715.3	1715.3	1715.3	1715.3
2.5°	1742.1	1744.0	1776.5	1774.6
5°	1799.5	1801.4	1833.9	1833.9
7.5°	1851.2	1853.1	1887.5	1889.5
10°	1889.5	1893.3	1925.9	1929.7
12.5°	1925.9	1925.9	1958.4	1966.1
15°	1948.8	1948.8	1979.5	1989.1
17.5°	1941.2	1941.2	1971.8	1983.3
20°	1899.0	1897.1	1925.9	1941.2
22.5°	1826.3	1828.2	1851.2	1868.5
25°	1734.4	1730.6	1755.5	1770.8
27.5°	1619.6	1621.5	1636.8	1654.0
30°	1481.7	1485.5	1497.0	1514.3
32.5°	1326.7	1332.4	1340.1	1357.3
35°	1156.3	1162.1	1165.8	1181.1
37.5°	972.5	980.2	982.1	997.4
40°	790.7	798.3	798.3	811.7
42.5°	620.3	626.0	624.1	635.5
45°	469.0	472.8	470.9	480.5
47.5°	342.6	346.5	342.6	350.3
50°	237.4	241.2	237.4	243.1
52.5°	153.1	155.0	151.2	156.9
55°	88.1	89.9	88.1	91.8
57.5°	49.8	47.8	45.9	49.8
60°	24.9	24.9	24.9	24.9
62.5°	13.4	13.4	13.4	13.4
65°	7.7	7.7	7.7	9.6
67.5°	7.7	7.7	7.7	7.7
70°	5.8	5.8	5.8	5.8
72.5°	3.8	3.8	3.8	3.8
75°	3.8	3.8	3.8	3.8
77.5°	1.9	1.9	1.9	1.9
80°	0.0	0.0	0.0	1.9
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)