

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: P136335

Luminaire Tested: **LD6A30D010TE ERW6A30940 6LW111LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136335
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 ERW6A30940 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 4000K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2815.7 lumens
Efficiency: N/A
Efficacy: 62.0 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

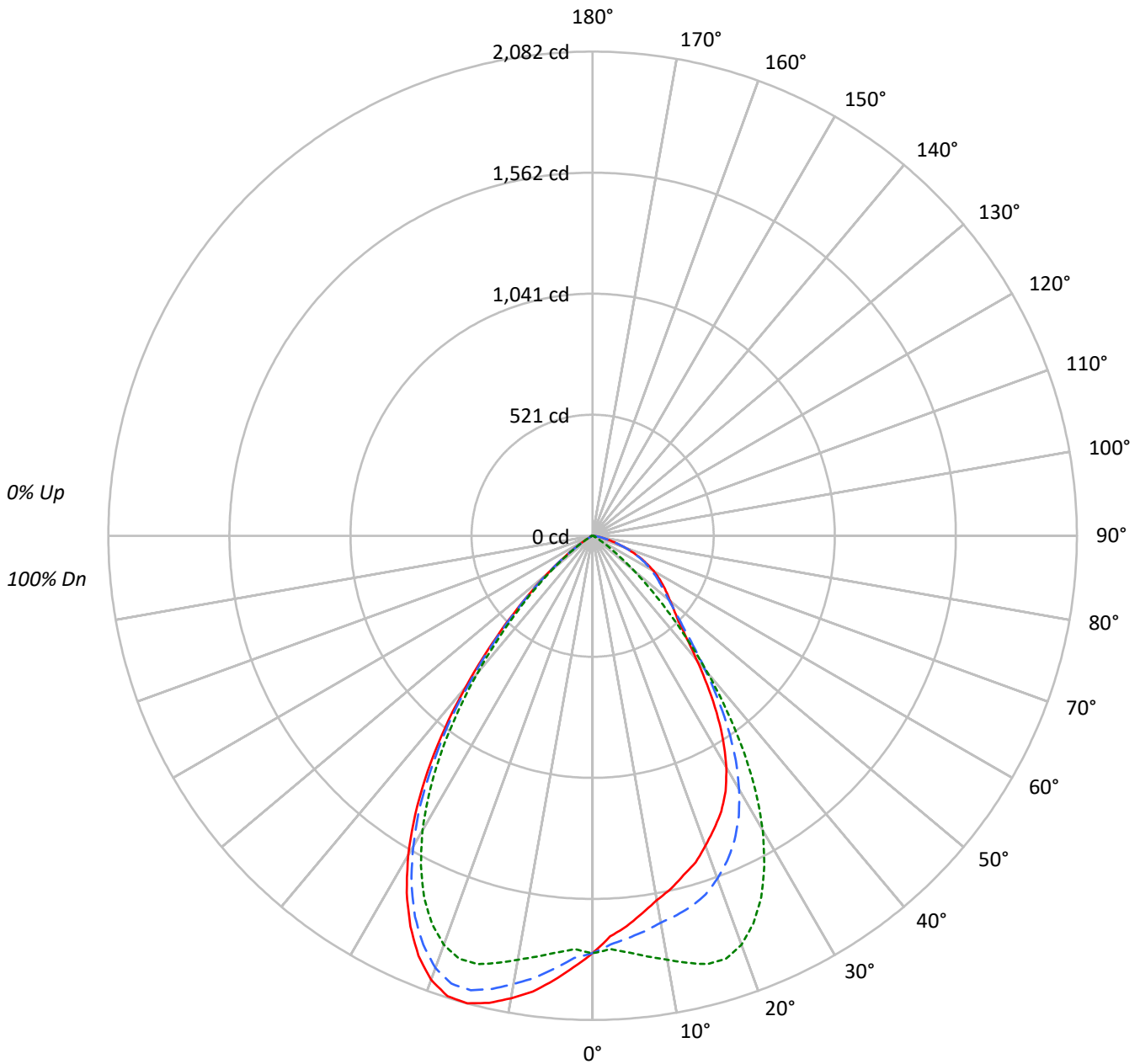
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	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°	117107	117107	117107
5°	110344	117823	125688
10°	105379	122630	133779
15°	102029	128816	140589
20°	98469	129906	141035
25°	94171	123447	133396
30°	86626	110168	119381
35°	74029	90149	98448
40°	59207	65348	72348
45°	48245	41399	46400
50°	44131	22776	25831
55°	41926	9350	10931
60°	39471	3393	3393
65°	35243	1868	1544
70°	28288	1526	1145
75°	18678	1008	1008
80°	9768	751	751
85°	4491	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.2	6.2
10°-20°	519.2	18.4
20°-30°	747.0	26.5
30°-40°	686.2	24.4
40°-50°	394.0	14.0
50°-60°	174.1	6.2
60°-70°	85.5	3.0
70°-80°	32.8	1.2
80°-90°	3.7	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°	1439.4	51.1
0°-40°	2125.6	75.5
0°-60°	2693.7	95.7
0°-90°	2815.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2815.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1795	1795	1795	1795	1795	
5°	1685	1737	1799	1867	1919	158
15°	1511	1649	1907	2023	2082	426
25°	1308	1444	1715	1807	1853	598
35°	930	1018	1132	1196	1236	577
45°	523	545	449	491	503	415
55°	369	351	82	90	96	330
65°	228	220	12	8	10	223
75°	74	78	4	4	4	83
85°	6	6	0	0	0	10
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°	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0
2.5°	1724.9	1734.9	1724.9	1738.9	1746.9	1751.0	1746.9	1736.9	1751.0	1759.0	1757.0
5°	1684.9	1692.9	1684.9	1698.8	1708.9	1718.9	1714.9	1708.9	1724.9	1736.9	1738.9
7.5°	1636.7	1646.8	1640.8	1654.8	1666.8	1678.8	1678.8	1676.8	1696.8	1714.9	1720.9
10°	1590.7	1598.7	1594.6	1608.7	1622.8	1636.7	1640.8	1642.8	1664.8	1688.9	1702.8
12.5°	1554.7	1558.6	1554.7	1570.6	1584.7	1600.7	1608.7	1612.7	1640.8	1670.8	1688.9
15°	1510.6	1520.6	1516.6	1532.6	1548.6	1566.6	1576.7	1584.7	1614.7	1648.8	1674.8
17.5°	1472.5	1476.5	1472.5	1490.5	1504.5	1524.5	1536.6	1546.6	1578.7	1616.7	1644.8
20°	1418.3	1426.4	1424.4	1440.4	1456.4	1474.5	1486.5	1496.5	1530.6	1568.6	1600.7
22.5°	1364.3	1372.3	1372.3	1388.3	1400.4	1420.4	1430.4	1440.4	1472.5	1512.6	1540.6
25°	1308.2	1314.2	1312.2	1326.2	1340.3	1360.3	1368.3	1378.4	1408.4	1444.5	1470.5
27.5°	1238.1	1242.0	1246.1	1258.1	1268.2	1286.1	1292.2	1302.2	1326.2	1360.3	1384.3
30°	1149.9	1153.9	1160.0	1170.0	1178.0	1196.0	1200.0	1208.0	1232.1	1260.1	1282.1
32.5°	1045.8	1047.8	1057.8	1065.8	1075.8	1087.8	1097.9	1099.9	1117.9	1145.9	1162.0
35°	929.5	931.5	941.6	947.6	957.6	969.6	977.6	979.6	995.7	1017.7	1027.8
37.5°	809.4	821.4	819.4	825.4	835.4	845.4	853.5	853.5	865.4	883.5	887.5
40°	695.2	701.2	707.2	711.2	719.2	727.2	733.2	733.2	741.3	753.2	753.2
42.5°	597.0	607.1	607.1	611.1	617.0	625.0	629.1	627.0	631.1	637.1	633.1
45°	522.9	526.9	528.9	534.9	536.9	544.9	546.9	542.9	544.9	544.9	532.9
47.5°	474.8	474.8	474.8	478.8	480.8	486.8	486.8	480.8	478.8	476.8	460.8
50°	434.8	434.8	436.8	440.7	442.7	444.7	444.7	436.8	434.8	426.7	404.6
52.5°	400.7	402.6	402.6	406.7	408.7	410.7	408.7	400.7	394.7	386.7	360.6
55°	368.6	370.6	372.6	376.6	376.6	376.6	374.6	366.7	360.6	350.6	324.6
57.5°	336.5	338.5	338.5	342.6	344.6	344.6	342.6	334.5	328.6	320.6	292.5
60°	302.5	302.5	304.5	308.5	308.5	310.5	308.5	302.5	296.5	286.5	262.4
62.5°	264.4	266.4	268.4	272.4	274.4	274.4	274.4	268.4	264.4	256.5	232.4
65°	228.3	228.3	230.3	234.4	234.4	240.4	236.4	232.4	228.3	220.4	200.3
67.5°	186.3	188.4	188.4	192.3	194.3	196.3	196.3	192.3	190.4	184.3	166.3
70°	148.3	148.3	150.3	152.3	154.3	156.3	156.3	154.3	152.3	146.3	132.2
72.5°	108.2	110.2	110.2	112.2	116.2	118.2	118.2	118.2	114.2	110.2	100.2
75°	74.1	76.1	76.1	78.2	80.2	82.2	82.2	82.2	80.2	78.2	70.1
77.5°	46.1	46.1	48.1	48.1	50.1	52.1	54.0	54.0	52.1	50.1	46.1
80°	26.0	26.0	28.0	28.0	28.0	30.0	32.0	32.0	32.0	30.0	26.0
82.5°	14.1	14.1	14.1	14.1	14.1	16.1	16.1	16.1	16.1	16.1	14.1
85°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0
2.5°	1757.0	1770.9	1781.0	1765.0	1779.0	1793.0	1809.0	1779.0	1807.0	1791.0	1797.1
5°	1746.9	1763.0	1777.0	1766.9	1785.0	1803.0	1825.1	1799.1	1831.1	1819.1	1829.1
7.5°	1732.9	1755.0	1775.0	1770.9	1795.0	1819.1	1847.1	1825.1	1859.1	1853.1	1865.2
10°	1720.9	1751.0	1777.0	1777.0	1809.0	1837.0	1867.2	1851.1	1891.2	1885.2	1901.2
12.5°	1712.9	1751.0	1785.0	1791.0	1829.1	1861.2	1897.2	1881.1	1925.2	1919.2	1937.3
15°	1704.8	1748.9	1789.0	1801.0	1843.1	1881.1	1919.2	1907.2	1953.3	1947.2	1965.3
17.5°	1678.8	1730.9	1775.0	1791.0	1837.0	1877.1	1917.2	1907.2	1953.3	1947.2	1965.3
20°	1634.7	1686.9	1734.9	1753.0	1799.1	1841.1	1879.1	1871.1	1917.2	1911.2	1927.3
22.5°	1578.7	1628.7	1674.8	1692.9	1736.9	1775.0	1813.0	1805.0	1849.1	1839.1	1857.1
25°	1500.5	1552.6	1596.7	1610.7	1650.8	1688.9	1722.9	1714.9	1757.0	1744.9	1763.0
27.5°	1420.4	1458.4	1494.5	1506.5	1542.6	1574.7	1606.7	1598.7	1638.7	1624.8	1642.8
30°	1312.2	1342.3	1374.3	1380.4	1414.4	1440.4	1468.5	1462.4	1496.5	1484.5	1500.5
32.5°	1186.0	1212.0	1234.1	1236.1	1264.1	1286.1	1310.2	1306.2	1336.3	1326.2	1338.3
35°	1047.8	1063.8	1077.8	1075.8	1097.9	1113.9	1136.0	1131.9	1160.0	1149.9	1162.0
37.5°	901.5	909.5	913.5	905.5	921.6	933.5	949.6	947.6	971.6	963.6	975.6
40°	759.3	759.3	753.2	739.3	749.3	755.2	767.3	767.3	785.4	777.3	787.3
42.5°	629.1	621.0	607.1	587.0	589.0	597.0	597.0	597.0	611.1	603.0	621.0
45°	522.9	504.9	482.8	456.8	448.7	452.8	448.7	448.7	458.8	452.8	466.8
47.5°	440.7	418.7	380.6	348.6	334.5	332.5	326.6	326.6	332.5	332.5	338.5
50°	378.6	346.6	300.5	262.4	242.4	236.4	228.3	224.4	230.3	228.3	232.4
52.5°	328.6	288.5	234.4	190.4	170.3	156.3	150.3	142.2	144.3	144.3	146.3
55°	286.5	240.4	182.3	136.2	114.2	98.1	90.1	82.2	82.2	80.2	82.2
57.5°	254.5	206.3	148.3	102.2	78.2	62.1	54.0	46.1	44.1	44.1	44.1
60°	226.4	180.3	122.3	80.2	56.1	40.1	32.0	26.0	24.0	22.0	22.0
62.5°	198.3	156.3	104.2	66.1	42.1	30.0	22.0	16.1	14.1	12.1	12.1
65°	170.3	134.2	90.1	56.1	36.1	24.0	16.1	12.1	10.0	8.0	8.0
67.5°	140.2	110.2	76.1	46.1	30.0	20.0	14.1	10.0	8.0	6.0	6.0
70°	112.2	88.1	60.1	38.1	24.0	16.1	10.0	8.0	6.0	6.0	6.0
72.5°	84.2	66.1	46.1	28.0	18.0	12.1	8.0	6.0	4.0	4.0	4.0
75°	60.1	48.1	32.0	20.0	12.1	8.0	6.0	4.0	4.0	4.0	4.0
77.5°	38.1	30.0	20.0	12.1	8.0	4.0	4.0	2.0	2.0	2.0	2.0
80°	22.0	18.0	12.1	8.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0
82.5°	12.1	8.0	6.0	4.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0
85°	4.0	4.0	2.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.0	2.0	2.0	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°	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0	1795.0
2.5°	1813.0	1809.0	1823.1	1829.1	1825.1	1817.1	1843.1	1849.1	1831.1	1839.1	1839.1
5°	1849.1	1849.1	1867.2	1875.1	1875.1	1867.2	1897.2	1907.2	1889.2	1897.2	1899.2
7.5°	1889.2	1889.2	1911.2	1921.2	1923.2	1917.2	1947.2	1955.3	1943.2	1951.3	1953.3
10°	1925.2	1925.2	1951.3	1961.3	1963.3	1957.3	1987.3	1997.4	1983.3	1991.3	1993.4
12.5°	1963.3	1965.3	1991.3	2001.4	2001.4	1995.4	2025.4	2035.4	2019.4	2029.4	2027.4
15°	1991.3	1993.4	2019.4	2029.4	2031.4	2023.4	2051.4	2063.5	2047.4	2053.4	2053.4
17.5°	1989.3	1991.3	2015.4	2025.4	2025.4	2019.4	2043.5	2057.4	2041.5	2047.4	2045.5
20°	1949.3	1951.3	1977.3	1985.3	1985.3	1977.3	1999.4	2013.3	1997.4	2001.4	1999.4
22.5°	1877.1	1879.1	1903.2	1911.2	1913.2	1903.2	1925.2	1941.2	1923.2	1925.2	1923.2
25°	1783.0	1783.0	1809.0	1809.0	1819.1	1807.0	1823.1	1845.1	1827.1	1827.1	1821.1
27.5°	1660.8	1660.8	1686.9	1686.9	1698.8	1686.9	1712.9	1722.9	1706.9	1704.8	1704.8
30°	1518.6	1518.6	1542.6	1542.6	1552.6	1542.6	1568.6	1578.7	1562.6	1560.6	1562.6
32.5°	1356.3	1356.3	1380.4	1378.4	1390.3	1382.3	1406.4	1414.4	1402.4	1396.3	1400.4
35°	1178.0	1188.0	1202.1	1200.0	1212.0	1196.0	1226.1	1232.1	1222.1	1224.1	1218.0
37.5°	989.7	999.6	1009.7	1009.7	1019.7	1015.7	1033.7	1039.7	1031.7	1033.7	1027.8
40°	801.3	811.4	819.4	819.4	829.4	817.4	841.4	847.4	839.4	831.4	835.4
42.5°	623.0	633.1	641.1	639.1	649.1	647.0	661.1	665.1	659.1	657.1	653.1
45°	468.8	470.8	484.8	490.8	490.8	490.8	500.9	502.9	496.9	496.9	494.8
47.5°	338.5	342.6	352.6	356.6	358.6	356.6	360.6	368.6	362.6	362.6	364.7
50°	234.4	236.4	244.4	248.4	248.4	248.4	250.4	256.5	252.4	252.4	248.4
52.5°	150.3	150.3	156.3	158.2	158.2	158.2	160.2	164.2	160.2	162.2	164.2
55°	84.2	84.2	88.1	90.1	90.1	90.1	92.1	94.1	92.1	94.1	94.1
57.5°	44.1	44.1	46.1	46.1	48.1	48.1	48.1	50.1	50.1	50.1	50.1
60°	22.0	22.0	22.0	24.0	24.0	24.0	24.0	26.0	26.0	26.0	26.0
62.5°	12.1	12.1	12.1	12.1	12.1	12.1	12.1	14.1	14.1	14.1	14.1
65°	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
67.5°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	8.0	8.0	8.0
70°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
72.5°	4.0	4.0	4.0	4.0	4.0	4.0	6.0	6.0	6.0	4.0	4.0
75°	2.0	4.0	4.0	2.0	2.0	4.0	4.0	4.0	4.0	4.0	4.0
77.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
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: P136335

CATALOG NUMBER: LD6A30D010TE ERW6A30940 6LW111LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1795.0	1795.0	1795.0	1795.0
2.5°	1823.1	1825.1	1859.1	1857.1
5°	1883.2	1885.2	1919.2	1919.2
7.5°	1937.3	1939.3	1975.4	1977.3
10°	1977.3	1981.3	2015.4	2019.4
12.5°	2015.4	2015.4	2049.4	2057.4
15°	2039.5	2039.5	2071.5	2081.5
17.5°	2031.4	2031.4	2063.5	2075.5
20°	1987.3	1985.3	2015.4	2031.4
22.5°	1911.2	1913.2	1937.3	1955.3
25°	1815.0	1811.0	1837.0	1853.1
27.5°	1694.9	1696.8	1712.9	1730.9
30°	1550.6	1554.7	1566.6	1584.7
32.5°	1388.3	1394.3	1402.4	1420.4
35°	1210.0	1216.0	1220.0	1236.1
37.5°	1017.7	1025.8	1027.8	1043.7
40°	827.4	835.4	835.4	849.5
42.5°	649.1	655.1	653.1	665.1
45°	490.8	494.8	492.8	502.9
47.5°	358.6	362.6	358.6	366.7
50°	248.4	252.4	248.4	254.5
52.5°	160.2	162.2	158.2	164.2
55°	92.1	94.1	92.1	96.1
57.5°	52.1	50.1	48.1	52.1
60°	26.0	26.0	26.0	26.0
62.5°	14.1	14.1	14.1	14.1
65°	8.0	8.0	8.0	10.0
67.5°	8.0	8.0	8.0	8.0
70°	6.0	6.0	6.0	6.0
72.5°	4.0	4.0	4.0	4.0
75°	4.0	4.0	4.0	4.0
77.5°	2.0	2.0	2.0	2.0
80°	0.0	0.0	0.0	2.0
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)