

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: P136334

Luminaire Tested: **LD6A30D010TE ERW6A30935 6LW111LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136334
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 ERW6A30935 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 3500K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2760.0 lumens
Efficiency: N/A
Efficacy: 60.8 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

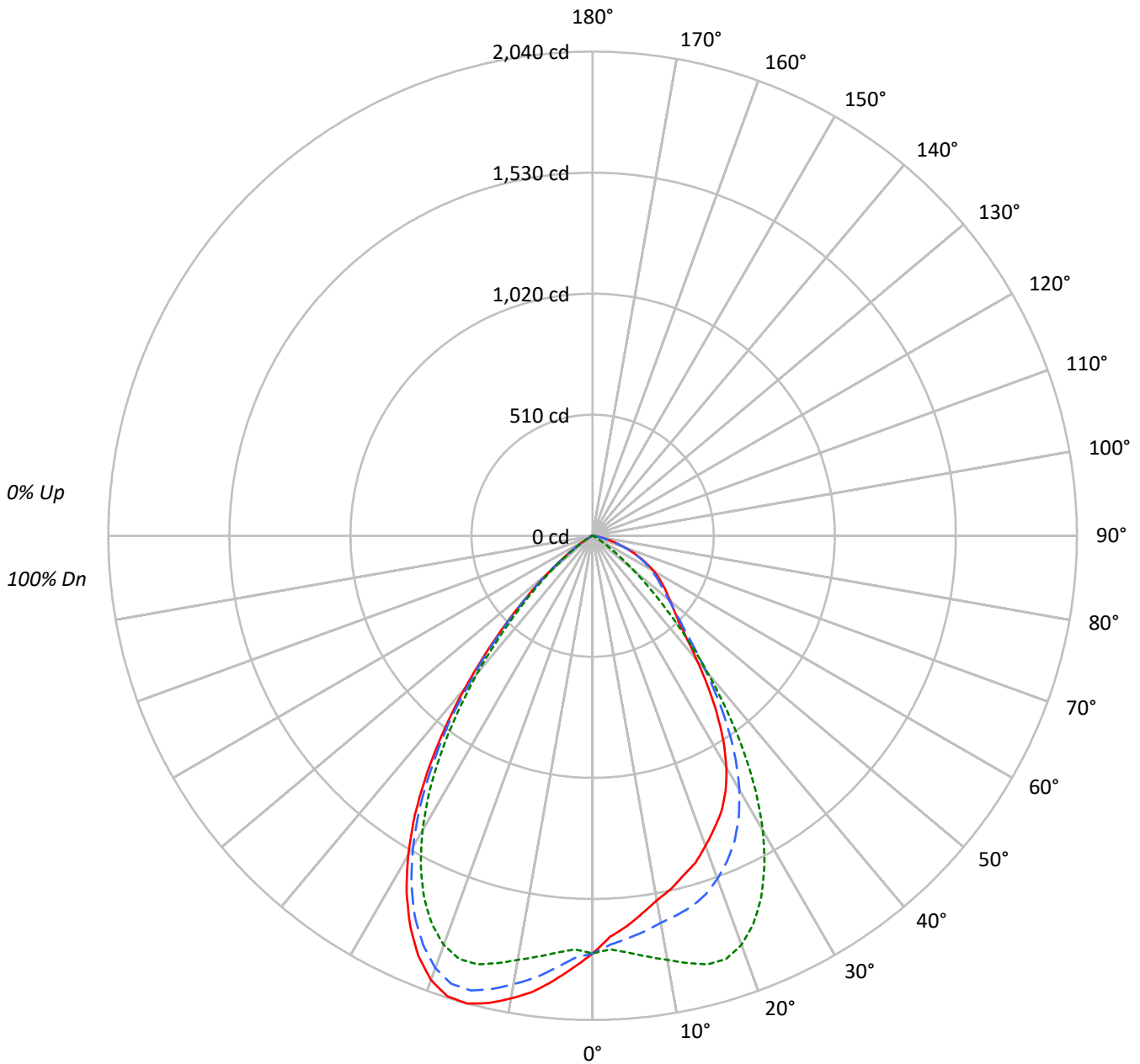
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	114791	114791	114791
5°	108156	115491	123199
10°	103292	120205	131136
15°	100010	126270	137813
20°	96525	127337	138251
25°	92306	121000	130761
30°	84916	107990	117015
35°	72572	88365	96497
40°	58040	64053	70917
45°	47295	40587	45477
50°	43248	22319	25313
55°	41107	9156	10715
60°	38688	3340	3340
65°	34564	1822	1528
70°	27716	1507	1125
75°	18326	983	983
80°	9618	751	751
85°	4416	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	169.8	6.2
10°-20°	508.9	18.4
20°-30°	732.2	26.5
30°-40°	672.6	24.4
40°-50°	386.2	14.0
50°-60°	170.6	6.2
60°-70°	83.8	3.0
70°-80°	32.2	1.2
80°-90°	3.6	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°	1410.9	51.1
0°-40°	2083.6	75.5
0°-60°	2640.4	95.7
0°-90°	2760.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2760.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1760	1760	1760	1760	1760	
5°	1652	1703	1764	1830	1881	155
15°	1481	1616	1870	1983	2040	417
25°	1282	1416	1681	1771	1816	586
35°	911	998	1110	1172	1212	565
45°	513	534	440	481	493	407
55°	361	344	80	88	94	323
65°	224	216	12	8	10	219
75°	73	77	4	4	4	81
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°	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5
2.5°	1690.8	1700.6	1690.8	1704.6	1712.4	1716.3	1712.4	1702.6	1716.3	1724.2	1722.2
5°	1651.5	1659.4	1651.5	1665.2	1675.1	1684.9	1680.9	1675.1	1690.8	1702.6	1704.6
7.5°	1604.4	1614.2	1608.3	1622.0	1633.8	1645.6	1645.6	1643.7	1663.3	1680.9	1686.9
10°	1559.2	1567.1	1563.1	1576.8	1590.6	1604.4	1608.3	1610.3	1631.9	1655.5	1669.1
12.5°	1523.9	1527.8	1523.9	1539.6	1553.3	1569.0	1576.8	1580.8	1608.3	1637.7	1655.5
15°	1480.7	1490.5	1486.5	1502.3	1518.0	1535.7	1545.4	1553.3	1582.8	1616.2	1641.7
17.5°	1443.4	1447.3	1443.4	1461.0	1474.8	1494.4	1506.2	1516.0	1547.4	1584.8	1612.3
20°	1390.3	1398.2	1396.3	1412.0	1427.7	1445.3	1457.1	1466.9	1500.3	1537.6	1569.0
22.5°	1337.3	1345.1	1345.1	1360.9	1372.7	1392.3	1402.1	1412.0	1443.4	1482.6	1510.1
25°	1282.3	1288.2	1286.2	1300.0	1313.7	1333.3	1341.2	1351.1	1380.5	1415.9	1441.4
27.5°	1213.6	1217.5	1221.4	1233.2	1243.0	1260.8	1266.6	1276.5	1300.0	1333.3	1357.0
30°	1127.2	1131.1	1137.1	1146.8	1154.7	1172.4	1176.3	1184.2	1207.7	1235.2	1256.8
32.5°	1025.1	1027.0	1036.9	1044.7	1054.5	1066.3	1076.2	1078.1	1095.8	1123.3	1139.0
35°	911.2	913.2	923.0	928.9	938.7	950.4	958.3	960.3	976.0	997.5	1007.4
37.5°	793.4	805.2	803.2	809.1	818.9	828.7	836.6	836.6	848.4	866.0	869.9
40°	681.5	687.3	693.2	697.2	705.0	712.9	718.7	718.7	726.6	738.3	738.3
42.5°	585.2	595.0	595.0	598.9	604.9	612.7	616.6	614.6	618.6	624.5	620.6
45°	512.6	516.5	518.4	524.3	526.3	534.1	536.1	532.2	534.1	534.1	522.3
47.5°	465.4	465.4	465.4	469.4	471.3	477.2	477.2	471.3	469.4	467.4	451.7
50°	426.1	426.1	428.1	432.0	433.9	436.0	436.0	428.1	426.1	418.2	396.7
52.5°	392.8	394.7	394.7	398.6	400.6	402.5	400.6	392.8	386.8	379.0	353.5
55°	361.4	363.3	365.3	369.2	369.2	369.2	367.2	359.4	353.5	343.7	318.1
57.5°	329.9	331.9	331.9	335.8	337.7	337.7	335.8	327.9	322.0	314.2	286.7
60°	296.5	296.5	298.5	302.4	302.4	304.4	302.4	296.5	290.6	280.8	257.3
62.5°	259.2	261.2	263.1	267.1	269.1	269.1	269.1	263.1	259.2	251.3	227.8
65°	223.9	223.9	225.8	229.8	229.8	235.6	231.7	227.8	223.9	216.0	196.4
67.5°	182.6	184.6	184.6	188.5	190.5	192.5	192.5	188.5	186.5	180.7	163.0
70°	145.3	145.3	147.3	149.3	151.2	153.2	153.2	151.2	149.3	143.3	129.6
72.5°	106.0	108.0	108.0	109.9	113.9	115.9	115.9	115.9	111.9	108.0	98.1
75°	72.7	74.6	74.6	76.6	78.5	80.5	80.5	80.5	78.5	76.6	68.7
77.5°	45.2	45.2	47.1	47.1	49.1	51.0	53.0	53.0	51.0	49.1	45.2
80°	25.6	25.6	27.5	27.5	27.5	29.5	31.4	31.4	31.4	29.5	25.6
82.5°	13.8	13.8	13.8	13.8	13.8	15.7	15.7	15.7	15.7	15.7	13.8
85°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
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°	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5
2.5°	1722.2	1736.0	1745.7	1730.0	1743.8	1757.5	1773.2	1743.8	1771.3	1755.6	1761.5
5°	1712.4	1728.1	1741.8	1732.1	1749.7	1767.4	1788.9	1763.5	1794.9	1783.1	1792.9
7.5°	1698.6	1720.3	1739.9	1736.0	1759.5	1783.1	1810.6	1788.9	1822.3	1816.5	1828.3
10°	1686.9	1716.3	1741.8	1741.8	1773.2	1800.7	1830.2	1814.5	1853.8	1847.9	1863.6
12.5°	1679.0	1716.3	1749.7	1755.6	1792.9	1824.4	1859.7	1844.0	1887.2	1881.2	1898.9
15°	1671.2	1714.3	1753.6	1765.4	1806.6	1844.0	1881.2	1869.5	1914.7	1908.7	1926.4
17.5°	1645.6	1696.7	1739.9	1755.6	1800.7	1840.1	1879.3	1869.5	1914.7	1908.7	1926.4
20°	1602.4	1653.4	1700.6	1718.3	1763.5	1804.6	1842.0	1834.1	1879.3	1873.4	1889.1
22.5°	1547.4	1596.6	1641.7	1659.4	1702.6	1739.9	1777.2	1769.3	1812.6	1802.7	1820.4
25°	1470.8	1521.9	1565.1	1578.9	1618.1	1655.5	1688.8	1680.9	1722.2	1710.4	1728.1
27.5°	1392.3	1429.6	1464.9	1476.8	1512.1	1543.5	1574.9	1567.1	1606.3	1592.6	1610.3
30°	1286.2	1315.7	1347.1	1353.0	1386.4	1412.0	1439.4	1433.5	1466.9	1455.1	1470.8
32.5°	1162.5	1188.1	1209.6	1211.6	1239.1	1260.8	1284.3	1280.4	1309.8	1300.0	1311.8
35°	1027.0	1042.7	1056.5	1054.5	1076.2	1091.9	1113.4	1109.5	1137.1	1127.2	1139.0
37.5°	883.7	891.5	895.5	887.6	903.3	915.1	930.8	928.9	952.4	944.6	956.4
40°	744.3	744.3	738.3	724.6	734.4	740.4	752.1	752.1	769.8	761.9	771.8
42.5°	616.6	608.8	595.0	575.4	577.4	585.2	585.2	585.2	598.9	591.1	608.8
45°	512.6	494.8	473.3	447.7	439.9	443.8	439.9	439.9	449.7	443.8	457.6
47.5°	432.0	410.4	373.1	341.7	327.9	325.9	320.1	320.1	325.9	325.9	331.9
50°	371.1	339.7	294.5	257.3	237.7	231.7	223.9	219.9	225.8	223.9	227.8
52.5°	322.0	282.8	229.8	186.5	166.9	153.2	147.3	139.4	141.4	141.4	143.3
55°	280.8	235.6	178.7	133.6	111.9	96.2	88.4	80.5	80.5	78.5	80.5
57.5°	249.4	202.2	145.3	100.2	76.6	60.9	53.0	45.2	43.2	43.2	43.2
60°	221.9	176.8	119.8	78.5	55.0	39.3	31.4	25.6	23.6	21.6	21.6
62.5°	194.4	153.2	102.1	64.8	41.3	29.5	21.6	15.7	13.8	11.8	11.8
65°	166.9	131.6	88.4	55.0	35.3	23.6	15.7	11.8	9.9	7.9	7.9
67.5°	137.5	108.0	74.6	45.2	29.5	19.6	13.8	9.9	7.9	5.9	5.9
70°	109.9	86.4	58.9	37.3	23.6	15.7	9.9	7.9	5.9	5.9	5.9
72.5°	82.4	64.8	45.2	27.5	17.7	11.8	7.9	5.9	3.9	3.9	3.9
75°	58.9	47.1	31.4	19.6	11.8	7.9	5.9	3.9	3.9	3.9	3.9
77.5°	37.3	29.5	19.6	11.8	7.9	3.9	3.9	2.0	2.0	2.0	2.0
80°	21.6	17.7	11.8	7.9	3.9	2.0	2.0	2.0	2.0	2.0	2.0
82.5°	11.8	7.9	5.9	3.9	2.0	2.0	2.0	0.0	0.0	0.0	0.0
85°	3.9	3.9	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°	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5	1759.5
2.5°	1777.2	1773.2	1787.0	1792.9	1788.9	1781.1	1806.6	1812.6	1794.9	1802.7	1802.7
5°	1812.6	1812.6	1830.2	1838.1	1838.1	1830.2	1859.7	1869.5	1851.8	1859.7	1861.6
7.5°	1851.8	1851.8	1873.4	1883.2	1885.2	1879.3	1908.7	1916.6	1904.8	1912.6	1914.7
10°	1887.2	1887.2	1912.6	1922.5	1924.5	1918.6	1948.1	1957.8	1944.1	1952.0	1953.9
12.5°	1924.5	1926.4	1952.0	1961.8	1961.8	1955.9	1985.3	1995.2	1979.5	1989.2	1987.3
15°	1952.0	1953.9	1979.5	1989.2	1991.3	1983.4	2010.9	2022.7	2007.0	2012.8	2012.8
17.5°	1950.0	1952.0	1975.5	1985.3	1985.3	1979.5	2003.0	2016.7	2001.0	2007.0	2004.9
20°	1910.7	1912.6	1938.2	1946.1	1946.1	1938.2	1959.8	1973.5	1957.8	1961.8	1959.8
22.5°	1840.1	1842.0	1865.5	1873.4	1875.4	1865.5	1887.2	1902.9	1885.2	1887.2	1885.2
25°	1747.8	1747.8	1773.2	1773.2	1783.1	1771.3	1787.0	1808.7	1790.9	1790.9	1785.0
27.5°	1628.0	1628.0	1653.4	1653.4	1665.2	1653.4	1679.0	1688.8	1673.1	1671.2	1671.2
30°	1488.6	1488.6	1512.1	1512.1	1521.9	1512.1	1537.6	1547.4	1531.7	1529.7	1531.7
32.5°	1329.4	1329.4	1353.0	1351.1	1362.8	1355.0	1378.5	1386.4	1374.6	1368.8	1372.7
35°	1154.7	1164.5	1178.2	1176.3	1188.1	1172.4	1201.8	1207.7	1197.9	1199.9	1193.9
37.5°	970.1	979.9	989.7	989.7	999.6	995.6	1013.2	1019.2	1011.3	1013.2	1007.4
40°	785.5	795.3	803.2	803.2	813.0	801.2	824.8	830.6	822.8	814.9	818.9
42.5°	610.7	620.6	628.4	626.4	636.3	634.3	648.0	652.0	646.0	644.1	640.2
45°	459.5	461.5	475.2	481.2	481.2	481.2	490.9	492.9	487.0	487.0	485.1
47.5°	331.9	335.8	345.7	349.6	351.5	349.6	353.5	361.4	355.4	355.4	357.4
50°	229.8	231.7	239.6	243.5	243.5	243.5	245.5	251.3	247.4	247.4	243.5
52.5°	147.3	147.3	153.2	155.1	155.1	155.1	157.1	161.1	157.1	159.0	161.1
55°	82.4	82.4	86.4	88.4	88.4	88.4	90.3	92.3	90.3	92.3	92.3
57.5°	43.2	43.2	45.2	45.2	47.1	47.1	47.1	49.1	49.1	49.1	49.1
60°	21.6	21.6	21.6	23.6	23.6	23.6	23.6	25.6	25.6	25.6	25.6
62.5°	11.8	11.8	11.8	11.8	11.8	11.8	11.8	13.8	13.8	13.8	13.8
65°	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
67.5°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	7.9	7.9	7.9
70°	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9
72.5°	3.9	3.9	3.9	3.9	3.9	3.9	5.9	5.9	5.9	3.9	3.9
75°	2.0	3.9	3.9	2.0	2.0	3.9	3.9	3.9	3.9	3.9	3.9
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: P136334

CATALOG NUMBER: LD6A30D010TE ERW6A30935 6LW111LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1759.5	1759.5	1759.5	1759.5
2.5°	1787.0	1788.9	1822.3	1820.4
5°	1845.9	1847.9	1881.2	1881.2
7.5°	1898.9	1900.9	1936.3	1938.2
10°	1938.2	1942.1	1975.5	1979.5
12.5°	1975.5	1975.5	2008.9	2016.7
15°	1999.1	1999.1	2030.5	2040.4
17.5°	1991.3	1991.3	2022.7	2034.4
20°	1948.1	1946.1	1975.5	1991.3
22.5°	1873.4	1875.4	1898.9	1916.6
25°	1779.2	1775.2	1800.7	1816.5
27.5°	1661.3	1663.3	1679.0	1696.7
30°	1520.0	1523.9	1535.7	1553.3
32.5°	1360.9	1366.8	1374.6	1392.3
35°	1186.1	1192.0	1195.9	1211.6
37.5°	997.5	1005.4	1007.4	1023.1
40°	811.0	818.9	818.9	832.7
42.5°	636.3	642.1	640.2	652.0
45°	481.2	485.1	483.1	492.9
47.5°	351.5	355.4	351.5	359.4
50°	243.5	247.4	243.5	249.4
52.5°	157.1	159.0	155.1	161.1
55°	90.3	92.3	90.3	94.2
57.5°	51.0	49.1	47.1	51.0
60°	25.6	25.6	25.6	25.6
62.5°	13.8	13.8	13.8	13.8
65°	7.9	7.9	7.9	9.9
67.5°	7.9	7.9	7.9	7.9
70°	5.9	5.9	5.9	5.9
72.5°	3.9	3.9	3.9	3.9
75°	3.9	3.9	3.9	3.9
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)