

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: P136330

Luminaire Tested: **LD6A30D010TE ERW6A30835 6LW111LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P136330
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 ERW6A30835 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: 3023.0 lumens
Efficiency: N/A
Efficacy: 66.6 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

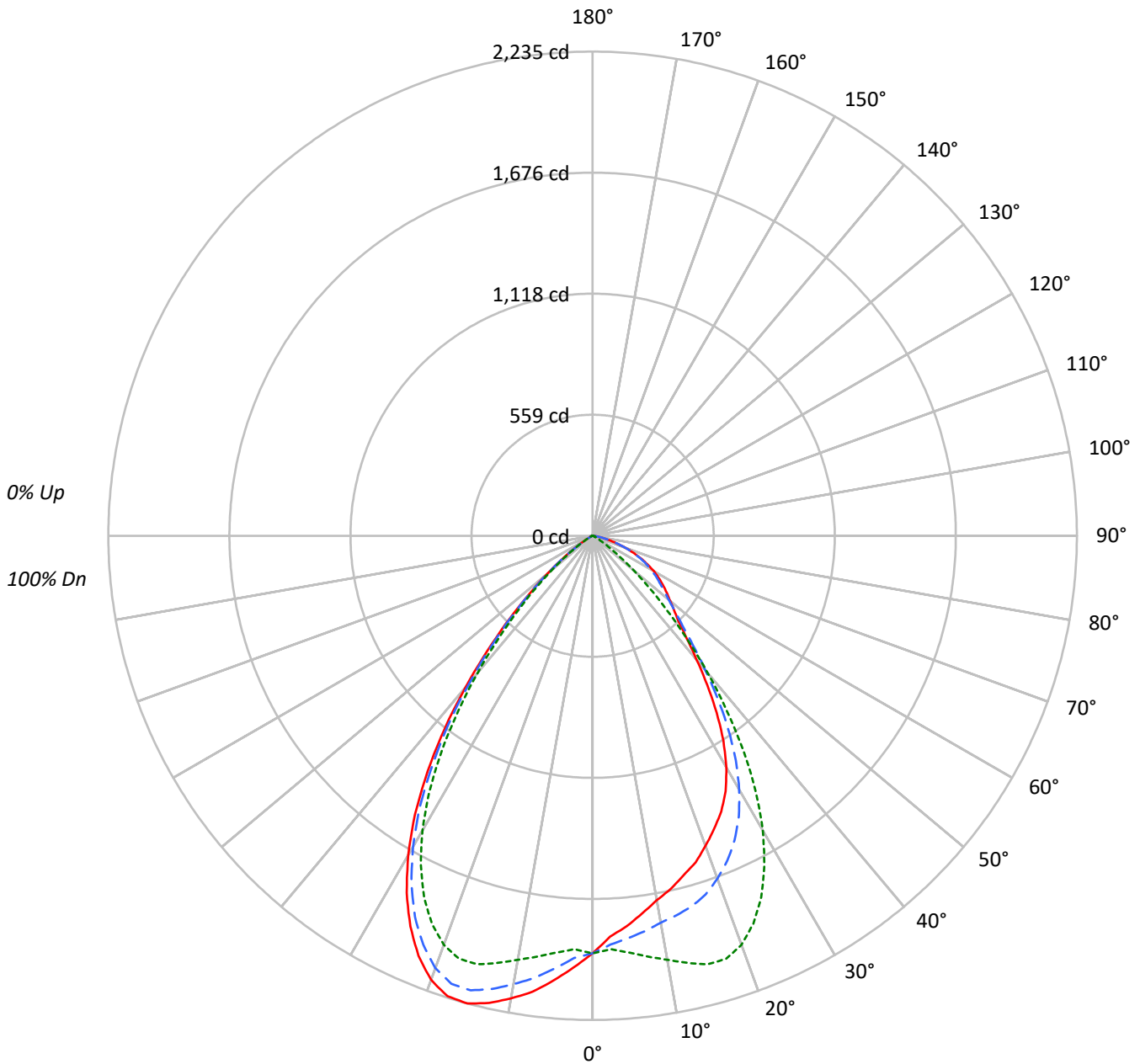
Input Watts (W): 45.4
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				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°	125732	125732	125732
5°	118465	126494	134942
10°	113137	131659	143630
15°	109540	138299	150943
20°	105724	139473	151422
25°	101103	132532	143221
30°	93007	118281	128165
35°	79485	96784	105696
40°	63568	70159	77671
45°	51797	44453	49813
50°	47368	24450	27729
55°	45020	10032	11738
60°	42380	3653	3653
65°	37852	1991	1667
70°	30368	1640	1240
75°	20065	1084	1084
80°	10520	827	827
85°	4866	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.0	6.2
10°-20°	557.4	18.4
20°-30°	802.0	26.5
30°-40°	736.7	24.4
40°-50°	423.0	14.0
50°-60°	186.9	6.2
60°-70°	91.8	3.0
70°-80°	35.2	1.2
80°-90°	4.0	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°	1545.4	51.1
0°-40°	2282.1	75.5
0°-60°	2892.0	95.7
0°-90°	3023.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3023.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1927	1927	1927	1927	1927	
5°	1809	1865	1932	2005	2060	170
15°	1622	1770	2048	2172	2235	457
25°	1404	1551	1841	1940	1990	642
35°	998	1093	1215	1284	1327	619
45°	561	585	482	527	540	446
55°	396	376	88	97	103	354
65°	245	237	13	9	11	240
75°	80	84	4	4	4	89
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°	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2
2.5°	1851.9	1862.7	1851.9	1867.0	1875.6	1879.9	1875.6	1864.8	1879.9	1888.5	1886.3
5°	1808.9	1817.5	1808.9	1823.9	1834.7	1845.4	1841.1	1834.7	1851.9	1864.8	1867.0
7.5°	1757.3	1768.0	1761.6	1776.6	1789.5	1802.4	1802.4	1800.3	1821.8	1841.1	1847.6
10°	1707.8	1716.4	1712.1	1727.1	1742.2	1757.3	1761.6	1763.7	1787.4	1813.2	1828.2
12.5°	1669.1	1673.4	1669.1	1686.3	1701.3	1718.5	1727.1	1731.4	1761.6	1793.8	1813.2
15°	1621.8	1632.5	1628.2	1645.4	1662.6	1682.0	1692.7	1701.3	1733.6	1770.2	1798.1
17.5°	1580.9	1585.2	1580.9	1600.2	1615.3	1636.8	1649.7	1660.5	1694.9	1735.8	1765.9
20°	1522.8	1531.4	1529.3	1546.5	1563.7	1583.0	1595.9	1606.7	1643.3	1684.1	1718.5
22.5°	1464.7	1473.3	1473.3	1490.6	1503.5	1525.0	1535.7	1546.5	1580.9	1623.9	1654.0
25°	1404.5	1411.0	1408.8	1423.9	1438.9	1460.4	1469.0	1479.8	1512.1	1550.8	1578.7
27.5°	1329.2	1333.5	1337.8	1350.7	1361.5	1380.9	1387.3	1398.1	1423.9	1460.4	1486.3
30°	1234.6	1238.9	1245.4	1256.1	1264.7	1284.1	1288.4	1297.0	1322.8	1352.9	1376.6
32.5°	1122.8	1124.9	1135.7	1144.3	1155.0	1167.9	1178.7	1180.8	1200.2	1230.3	1247.5
35°	998.0	1000.2	1010.9	1017.4	1028.1	1041.0	1049.6	1051.8	1069.0	1092.6	1103.4
37.5°	869.0	881.9	879.7	886.2	896.9	907.7	916.3	916.3	929.2	948.5	952.8
40°	746.4	752.8	759.3	763.6	772.2	780.8	787.2	787.2	795.8	808.7	808.7
42.5°	641.0	651.7	651.7	656.0	662.5	671.1	675.4	673.2	677.5	684.0	679.7
45°	561.4	565.7	567.8	574.3	576.4	585.0	587.2	582.9	585.0	585.0	572.1
47.5°	509.8	509.8	509.8	514.1	516.2	522.7	522.7	516.2	514.1	511.9	494.7
50°	466.7	466.7	468.9	473.2	475.3	477.5	477.5	468.9	466.7	458.1	434.5
52.5°	430.2	432.3	432.3	436.6	438.8	440.9	438.8	430.2	423.7	415.1	387.2
55°	395.8	397.9	400.1	404.4	404.4	404.4	402.2	393.6	387.2	376.4	348.4
57.5°	361.3	363.5	363.5	367.8	369.9	369.9	367.8	359.2	352.7	344.1	314.0
60°	324.8	324.8	326.9	331.2	331.2	333.4	331.2	324.8	318.3	307.6	281.8
62.5°	283.9	286.1	288.2	292.5	294.7	294.7	294.7	288.2	283.9	275.3	249.5
65°	245.2	245.2	247.3	251.7	251.7	258.1	253.8	249.5	245.2	236.6	215.1
67.5°	200.0	202.2	202.2	206.5	208.6	210.8	210.8	206.5	204.3	197.9	178.5
70°	159.2	159.2	161.3	163.5	165.6	167.8	167.8	165.6	163.5	157.0	142.0
72.5°	116.1	118.3	118.3	120.4	124.8	126.9	126.9	126.9	122.6	118.3	107.5
75°	79.6	81.7	81.7	83.9	86.0	88.2	88.2	88.2	86.0	83.9	75.3
77.5°	49.5	49.5	51.6	51.6	53.8	55.9	58.1	58.1	55.9	53.8	49.5
80°	28.0	28.0	30.1	30.1	30.1	32.3	34.4	34.4	34.4	32.3	28.0
82.5°	15.1	15.1	15.1	15.1	15.1	17.2	17.2	17.2	17.2	17.2	15.1
85°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
87.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
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°	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2
2.5°	1886.3	1901.4	1912.1	1894.9	1910.0	1925.0	1942.2	1910.0	1940.1	1922.9	1929.3
5°	1875.6	1892.8	1907.8	1897.1	1916.4	1935.8	1959.4	1931.5	1965.9	1953.0	1963.7
7.5°	1860.5	1884.2	1905.7	1901.4	1927.2	1953.0	1983.1	1959.4	1996.0	1989.6	2002.5
10°	1847.6	1879.9	1907.8	1907.8	1942.2	1972.3	2004.6	1987.4	2030.4	2024.0	2041.2
12.5°	1839.0	1879.9	1916.4	1922.9	1963.7	1998.2	2036.9	2019.7	2067.0	2060.5	2079.9
15°	1830.4	1877.7	1920.7	1933.6	1978.8	2019.7	2060.5	2047.6	2097.1	2090.6	2110.0
17.5°	1802.4	1858.4	1905.7	1922.9	1972.3	2015.4	2058.4	2047.6	2097.1	2090.6	2110.0
20°	1755.1	1811.0	1862.7	1882.0	1931.5	1976.6	2017.5	2008.9	2058.4	2051.9	2069.1
22.5°	1694.9	1748.7	1798.1	1817.5	1864.8	1905.7	1946.5	1937.9	1985.3	1974.5	1993.9
25°	1611.0	1666.9	1714.2	1729.3	1772.3	1813.2	1849.7	1841.1	1886.3	1873.4	1892.8
27.5°	1525.0	1565.8	1604.5	1617.5	1656.2	1690.6	1725.0	1716.4	1759.4	1744.4	1763.7
30°	1408.8	1441.1	1475.5	1481.9	1518.5	1546.5	1576.6	1570.1	1606.7	1593.8	1611.0
32.5°	1273.3	1301.3	1324.9	1327.1	1357.2	1380.9	1406.7	1402.4	1434.6	1423.9	1436.8
35°	1124.9	1142.1	1157.2	1155.0	1178.7	1195.9	1219.5	1215.2	1245.4	1234.6	1247.5
37.5°	967.9	976.5	980.8	972.2	989.4	1002.3	1019.5	1017.4	1043.2	1034.6	1047.5
40°	815.2	815.2	808.7	793.7	804.4	810.9	823.8	823.8	843.1	834.5	845.3
42.5°	675.4	666.8	651.7	630.2	632.4	641.0	641.0	641.0	656.0	647.4	666.8
45°	561.4	542.0	518.4	490.4	481.8	486.1	481.8	481.8	492.5	486.1	501.2
47.5°	473.2	449.5	408.7	374.3	359.2	357.0	350.6	350.6	357.0	357.0	363.5
50°	406.5	372.1	322.6	281.8	260.3	253.8	245.2	240.9	247.3	245.2	249.5
52.5°	352.7	309.7	251.7	204.3	182.8	167.8	161.3	152.7	154.9	154.9	157.0
55°	307.6	258.1	195.7	146.3	122.6	105.4	96.8	88.2	88.2	86.0	88.2
57.5°	273.2	221.5	159.2	109.7	83.9	66.7	58.1	49.5	47.3	47.3	47.3
60°	243.0	193.6	131.2	86.0	60.2	43.0	34.4	28.0	25.8	23.7	23.7
62.5°	212.9	167.8	111.8	71.0	45.2	32.3	23.7	17.2	15.1	12.9	12.9
65°	182.8	144.1	96.8	60.2	38.7	25.8	17.2	12.9	10.8	8.6	8.6
67.5°	150.6	118.3	81.7	49.5	32.3	21.5	15.1	10.8	8.6	6.5	6.5
70°	120.4	94.6	64.5	40.9	25.8	17.2	10.8	8.6	6.5	6.5	6.5
72.5°	90.3	71.0	49.5	30.1	19.4	12.9	8.6	6.5	4.3	4.3	4.3
75°	64.5	51.6	34.4	21.5	12.9	8.6	6.5	4.3	4.3	4.3	4.3
77.5°	40.9	32.3	21.5	12.9	8.6	4.3	4.3	2.2	2.2	2.2	2.2
80°	23.7	19.4	12.9	8.6	4.3	2.2	2.2	2.2	2.2	2.2	2.2
82.5°	12.9	8.6	6.5	4.3	2.2	2.2	2.2	0.0	0.0	0.0	0.0
85°	4.3	4.3	2.2	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0
87.5°	2.2	2.2	2.2	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°	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2	1927.2
2.5°	1946.5	1942.2	1957.3	1963.7	1959.4	1950.8	1978.8	1985.3	1965.9	1974.5	1974.5
5°	1985.3	1985.3	2004.6	2013.2	2013.2	2004.6	2036.9	2047.6	2028.3	2036.9	2039.0
7.5°	2028.3	2028.3	2051.9	2062.7	2064.8	2058.4	2090.6	2099.2	2086.3	2094.9	2097.1
10°	2067.0	2067.0	2094.9	2105.7	2107.9	2101.4	2133.7	2144.4	2129.4	2138.0	2140.1
12.5°	2107.9	2110.0	2138.0	2148.7	2148.7	2142.3	2174.5	2185.3	2168.1	2178.8	2176.7
15°	2138.0	2140.1	2168.1	2178.8	2181.0	2172.4	2202.5	2215.4	2198.2	2204.6	2204.6
17.5°	2135.8	2138.0	2163.8	2174.5	2174.5	2168.1	2193.9	2208.9	2191.7	2198.2	2196.0
20°	2092.8	2094.9	2122.9	2131.5	2131.5	2122.9	2146.6	2161.6	2144.4	2148.7	2146.6
22.5°	2015.4	2017.5	2043.3	2051.9	2054.1	2043.3	2067.0	2084.2	2064.8	2067.0	2064.8
25°	1914.3	1914.3	1942.2	1942.2	1953.0	1940.1	1957.3	1981.0	1961.6	1961.6	1955.1
27.5°	1783.1	1783.1	1811.0	1811.0	1823.9	1811.0	1839.0	1849.7	1832.5	1830.4	1830.4
30°	1630.4	1630.4	1656.2	1656.2	1666.9	1656.2	1684.1	1694.9	1677.7	1675.5	1677.7
32.5°	1456.1	1456.1	1481.9	1479.8	1492.7	1484.1	1509.9	1518.5	1505.6	1499.2	1503.5
35°	1264.7	1275.5	1290.5	1288.4	1301.3	1284.1	1316.3	1322.8	1312.0	1314.2	1307.7
37.5°	1062.5	1073.3	1084.0	1084.0	1094.8	1090.5	1109.8	1116.3	1107.7	1109.8	1103.4
40°	860.3	871.1	879.7	879.7	890.5	877.6	903.4	909.8	901.2	892.6	896.9
42.5°	668.9	679.7	688.3	686.1	696.9	694.7	709.8	714.1	707.6	705.5	701.2
45°	503.3	505.5	520.5	527.0	527.0	527.0	537.7	539.9	533.4	533.4	531.3
47.5°	363.5	367.8	378.6	382.9	385.0	382.9	387.2	395.8	389.3	389.3	391.5
50°	251.7	253.8	262.4	266.7	266.7	266.7	268.9	275.3	271.0	271.0	266.7
52.5°	161.3	161.3	167.8	169.9	169.9	169.9	172.1	176.4	172.1	174.2	176.4
55°	90.3	90.3	94.6	96.8	96.8	96.8	98.9	101.1	98.9	101.1	101.1
57.5°	47.3	47.3	49.5	49.5	51.6	51.6	51.6	53.8	53.8	53.8	53.8
60°	23.7	23.7	23.7	25.8	25.8	25.8	25.8	28.0	28.0	28.0	28.0
62.5°	12.9	12.9	12.9	12.9	12.9	12.9	12.9	15.1	15.1	15.1	15.1
65°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
67.5°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	8.6	8.6	8.6
70°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
72.5°	4.3	4.3	4.3	4.3	4.3	4.3	6.5	6.5	6.5	4.3	4.3
75°	2.2	4.3	4.3	2.2	2.2	4.3	4.3	4.3	4.3	4.3	4.3
77.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
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: P136330

CATALOG NUMBER: LD6A30D010TE ERW6A30835 6LW111LI

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	1927.2	1927.2	1927.2	1927.2
2.5°	1957.3	1959.4	1996.0	1993.9
5°	2021.8	2024.0	2060.5	2060.5
7.5°	2079.9	2082.0	2120.8	2122.9
10°	2122.9	2127.2	2163.8	2168.1
12.5°	2163.8	2163.8	2200.3	2208.9
15°	2189.6	2189.6	2224.0	2234.8
17.5°	2181.0	2181.0	2215.4	2228.3
20°	2133.7	2131.5	2163.8	2181.0
22.5°	2051.9	2054.1	2079.9	2099.2
25°	1948.7	1944.4	1972.3	1989.6
27.5°	1819.6	1821.8	1839.0	1858.4
30°	1664.8	1669.1	1682.0	1701.3
32.5°	1490.6	1497.0	1505.6	1525.0
35°	1299.1	1305.6	1309.9	1327.1
37.5°	1092.6	1101.2	1103.4	1120.6
40°	888.3	896.9	896.9	912.0
42.5°	696.9	703.3	701.2	714.1
45°	527.0	531.3	529.1	539.9
47.5°	385.0	389.3	385.0	393.6
50°	266.7	271.0	266.7	273.2
52.5°	172.1	174.2	169.9	176.4
55°	98.9	101.1	98.9	103.2
57.5°	55.9	53.8	51.6	55.9
60°	28.0	28.0	28.0	28.0
62.5°	15.1	15.1	15.1	15.1
65°	8.6	8.6	8.6	10.8
67.5°	8.6	8.6	8.6	8.6
70°	6.5	6.5	6.5	6.5
72.5°	4.3	4.3	4.3	4.3
75°	4.3	4.3	4.3	4.3
77.5°	2.2	2.2	2.2	2.2
80°	0.0	0.0	0.0	2.2
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)