

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: P136331

Luminaire Tested: **LD6A30D010TE ERW6A30840 6LW111LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P136331  
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 ERW6A30840 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**

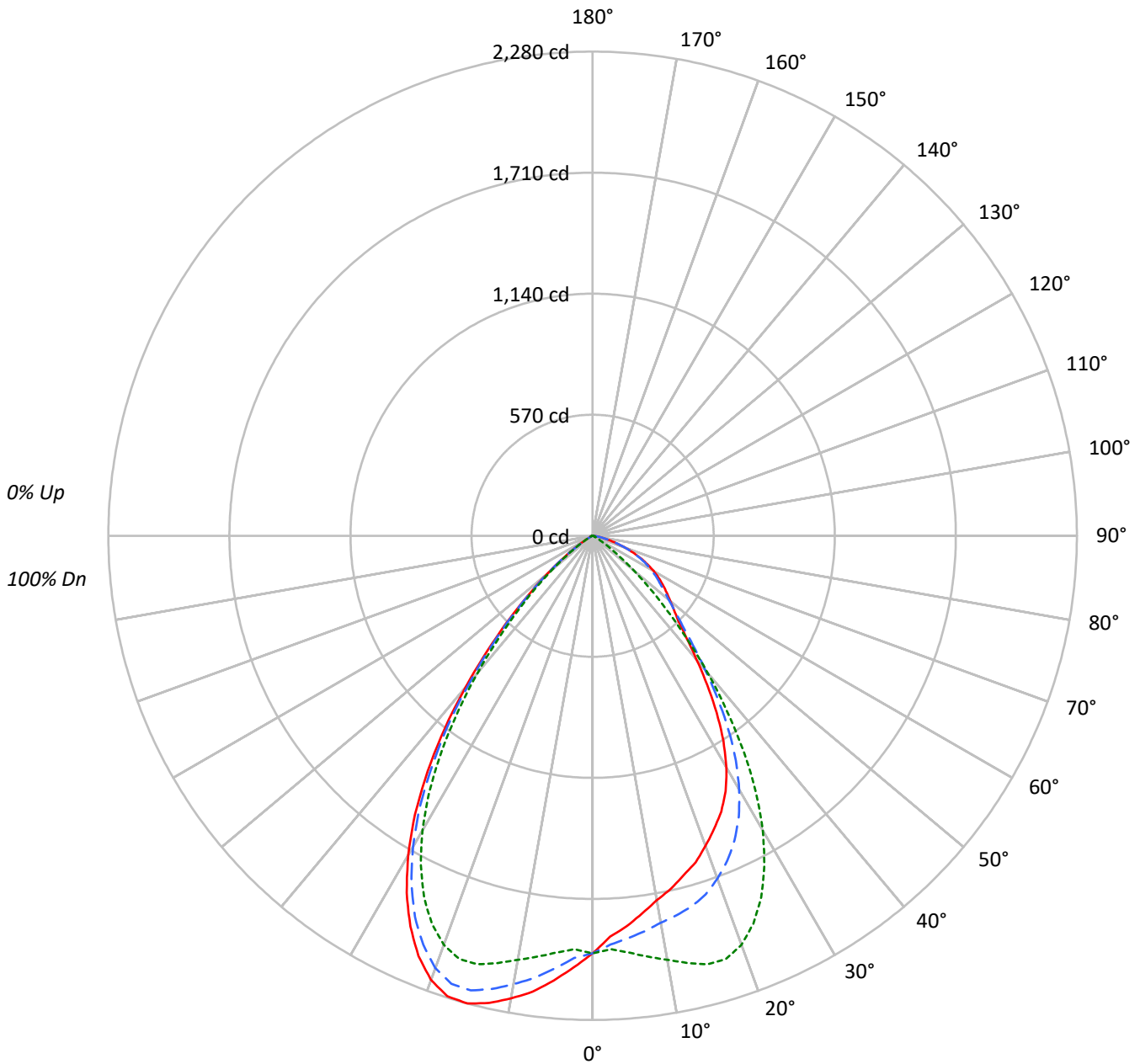
Lumens per Lamp: N/A  
Luminaire Lumens: 3084.0 lumens  
Efficiency: N/A  
Efficacy: 67.9 lumens/watt  
Spacing Criteria (0/90/45): 1.15 / 1.19 / 1.1  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 45.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	128270	128270	128270
5°	120855	129048	137666
10°	115422	134316	146525
15°	111748	141089	153982
20°	107856	142285	154476
25°	103147	135210	146108
30°	94882	120669	130756
35°	81086	98743	107830
40°	64845	71573	79238
45°	52840	45348	50819
50°	48333	24948	28287
55°	45918	10237	11977
60°	43228	3719	3719
65°	38609	2038	1698
70°	30978	1679	1259
75°	20468	1109	1109
80°	10708	827	827
85°	4940	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.7	6.2
10°-20°	568.7	18.4
20°-30°	818.2	26.5
30°-40°	751.6	24.4
40°-50°	431.5	14.0
50°-60°	190.7	6.2
60°-70°	93.7	3.0
70°-80°	36.0	1.2
80°-90°	4.1	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°	1576.6	51.1
0°-40°	2328.1	75.5
0°-60°	2950.3	95.7
0°-90°	3084.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3084.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1966	1966	1966	1966	1966	
5°	1845	1902	1970	2045	2102	173
15°	1654	1806	2089	2216	2280	466
25°	1433	1582	1878	1979	2030	655
35°	1018	1115	1240	1310	1354	632
45°	573	597	492	538	551	455
55°	404	384	90	99	105	361
65°	250	241	13	9	11	245
75°	81	86	4	4	4	91
85°	7	7	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°	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1
2.5°	1889.3	1900.2	1889.3	1904.6	1913.4	1917.8	1913.4	1902.4	1917.8	1926.6	1924.4
5°	1845.4	1854.2	1845.4	1860.7	1871.7	1882.7	1878.3	1871.7	1889.3	1902.4	1904.6
7.5°	1792.7	1803.7	1797.1	1812.5	1825.6	1838.8	1838.8	1836.6	1858.5	1878.3	1884.9
10°	1742.3	1751.0	1746.6	1762.0	1777.4	1792.7	1797.1	1799.3	1823.4	1849.8	1865.1
12.5°	1702.8	1707.1	1702.8	1720.3	1735.7	1753.2	1762.0	1766.4	1797.1	1830.0	1849.8
15°	1654.5	1665.5	1661.1	1678.6	1696.2	1715.9	1726.9	1735.7	1768.6	1805.9	1834.4
17.5°	1612.8	1617.2	1612.8	1632.5	1647.9	1669.8	1683.0	1694.0	1729.1	1770.8	1801.5
20°	1553.5	1562.3	1560.1	1577.7	1595.2	1615.0	1628.1	1639.1	1676.4	1718.1	1753.2
22.5°	1494.3	1503.1	1503.1	1520.6	1533.8	1555.7	1566.7	1577.7	1612.8	1656.7	1687.4
25°	1432.9	1439.4	1437.2	1452.6	1468.0	1489.9	1498.7	1509.7	1542.6	1582.1	1610.6
27.5°	1356.1	1360.4	1364.8	1378.0	1389.0	1408.7	1415.3	1426.3	1452.6	1489.9	1516.2
30°	1259.5	1263.9	1270.5	1281.5	1290.2	1310.0	1314.4	1323.1	1349.5	1380.2	1404.3
32.5°	1145.4	1147.6	1158.6	1167.4	1178.3	1191.5	1202.5	1204.7	1224.4	1255.1	1272.7
35°	1018.1	1020.3	1031.3	1037.9	1048.9	1062.0	1070.8	1073.0	1090.6	1114.7	1125.7
37.5°	886.5	899.7	897.5	904.0	915.0	926.0	934.8	934.8	947.9	967.7	972.1
40°	761.4	768.0	774.6	779.0	787.7	796.5	803.1	803.1	811.9	825.0	825.0
42.5°	653.9	664.9	664.9	669.3	675.8	684.6	689.0	686.8	691.2	697.8	693.4
45°	572.7	577.1	579.3	585.9	588.1	596.8	599.0	594.6	596.8	596.8	583.7
47.5°	520.0	520.0	520.0	524.4	526.6	533.2	533.2	526.6	524.4	522.2	504.7
50°	476.2	476.2	478.4	482.7	484.9	487.1	487.1	478.4	476.2	467.4	443.2
52.5°	438.9	441.0	441.0	445.4	447.6	449.8	447.6	438.9	432.3	423.5	395.0
55°	403.7	405.9	408.1	412.5	412.5	412.5	410.3	401.6	395.0	384.0	355.5
57.5°	368.6	370.8	370.8	375.2	377.4	377.4	375.2	366.4	359.9	351.1	320.4
60°	331.3	331.3	333.5	337.9	337.9	340.1	337.9	331.3	324.8	313.8	287.4
62.5°	289.6	291.8	294.0	298.4	300.6	300.6	300.6	294.0	289.6	280.9	254.5
65°	250.1	250.1	252.3	256.7	256.7	263.3	258.9	254.5	250.1	241.4	219.4
67.5°	204.1	206.3	206.3	210.6	212.8	215.0	215.0	210.6	208.5	201.9	182.1
70°	162.4	162.4	164.6	166.8	169.0	171.2	171.2	169.0	166.8	160.2	144.8
72.5°	118.5	120.7	120.7	122.9	127.3	129.5	129.5	129.5	125.1	120.7	109.7
75°	81.2	83.4	83.4	85.6	87.8	90.0	90.0	90.0	87.8	85.6	76.8
77.5°	50.5	50.5	52.7	52.7	54.9	57.1	59.2	59.2	57.1	54.9	50.5
80°	28.5	28.5	30.7	30.7	30.7	32.9	35.1	35.1	35.1	32.9	28.5
82.5°	15.4	15.4	15.4	15.4	15.4	17.6	17.6	17.6	17.6	17.6	15.4
85°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
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°	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1
2.5°	1924.4	1939.7	1950.7	1933.2	1948.5	1963.9	1981.4	1948.5	1979.2	1961.7	1968.3
5°	1913.4	1931.0	1946.3	1935.3	1955.1	1974.8	1999.0	1970.5	2005.6	1992.4	2003.4
7.5°	1898.0	1922.2	1944.1	1939.7	1966.1	1992.4	2023.1	1999.0	2036.3	2029.7	2042.9
10°	1884.9	1917.8	1946.3	1946.3	1981.4	2012.1	2045.1	2027.5	2071.4	2064.8	2082.4
12.5°	1876.1	1917.8	1955.1	1961.7	2003.4	2038.5	2078.0	2060.4	2108.7	2102.1	2121.9
15°	1867.3	1915.6	1959.5	1972.6	2018.7	2060.4	2102.1	2088.9	2139.4	2132.8	2152.6
17.5°	1838.8	1895.8	1944.1	1961.7	2012.1	2056.0	2099.9	2088.9	2139.4	2132.8	2152.6
20°	1790.5	1847.6	1900.2	1920.0	1970.5	2016.5	2058.2	2049.4	2099.9	2093.3	2110.9
22.5°	1729.1	1783.9	1834.4	1854.2	1902.4	1944.1	1985.8	1977.0	2025.3	2014.3	2034.1
25°	1643.5	1700.6	1748.8	1764.2	1808.1	1849.8	1887.1	1878.3	1924.4	1911.2	1931.0
27.5°	1555.7	1597.4	1636.9	1650.1	1689.6	1724.7	1759.8	1751.0	1794.9	1779.6	1799.3
30°	1437.2	1470.2	1505.3	1511.9	1549.2	1577.7	1608.4	1601.8	1639.1	1626.0	1643.5
32.5°	1299.0	1327.5	1351.7	1353.9	1384.6	1408.7	1435.1	1430.7	1463.6	1452.6	1465.8
35°	1147.6	1165.2	1180.5	1178.3	1202.5	1220.0	1244.2	1239.8	1270.5	1259.5	1272.7
37.5°	987.4	996.2	1000.6	991.8	1009.4	1022.5	1040.1	1037.9	1064.2	1055.4	1068.6
40°	831.6	831.6	825.0	809.7	820.7	827.2	840.4	840.4	860.2	851.4	862.3
42.5°	689.0	680.2	664.9	642.9	645.1	653.9	653.9	653.9	669.3	660.5	680.2
45°	572.7	553.0	528.8	500.3	491.5	495.9	491.5	491.5	502.5	495.9	511.3
47.5°	482.7	458.6	416.9	381.8	366.4	364.2	357.7	357.7	364.2	364.2	370.8
50°	414.7	379.6	329.1	287.4	265.5	258.9	250.1	245.8	252.3	250.1	254.5
52.5°	359.9	316.0	256.7	208.5	186.5	171.2	164.6	155.8	158.0	158.0	160.2
55°	313.8	263.3	199.7	149.2	125.1	107.5	98.7	90.0	90.0	87.8	90.0
57.5°	278.7	226.0	162.4	111.9	85.6	68.0	59.2	50.5	48.3	48.3	48.3
60°	248.0	197.5	133.9	87.8	61.4	43.9	35.1	28.5	26.3	24.1	24.1
62.5°	217.2	171.2	114.1	72.4	46.1	32.9	24.1	17.6	15.4	13.2	13.2
65°	186.5	147.0	98.7	61.4	39.5	26.3	17.6	13.2	11.0	8.8	8.8
67.5°	153.6	120.7	83.4	50.5	32.9	21.9	15.4	11.0	8.8	6.6	6.6
70°	122.9	96.5	65.8	41.7	26.3	17.6	11.0	8.8	6.6	6.6	6.6
72.5°	92.2	72.4	50.5	30.7	19.7	13.2	8.8	6.6	4.4	4.4	4.4
75°	65.8	52.7	35.1	21.9	13.2	8.8	6.6	4.4	4.4	4.4	4.4
77.5°	41.7	32.9	21.9	13.2	8.8	4.4	4.4	2.2	2.2	2.2	2.2
80°	24.1	19.7	13.2	8.8	4.4	2.2	2.2	2.2	2.2	2.2	2.2
82.5°	13.2	8.8	6.6	4.4	2.2	2.2	2.2	0.0	0.0	0.0	0.0
85°	4.4	4.4	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°	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1	1966.1
2.5°	1985.8	1981.4	1996.8	2003.4	1999.0	1990.2	2018.7	2025.3	2005.6	2014.3	2014.3
5°	2025.3	2025.3	2045.1	2053.8	2053.8	2045.1	2078.0	2088.9	2069.2	2078.0	2080.2
7.5°	2069.2	2069.2	2093.3	2104.3	2106.5	2099.9	2132.8	2141.6	2128.4	2137.2	2139.4
10°	2108.7	2108.7	2137.2	2148.2	2150.4	2143.8	2176.7	2187.7	2172.3	2181.1	2183.3
12.5°	2150.4	2152.6	2181.1	2192.1	2192.1	2185.5	2218.4	2229.4	2211.8	2222.8	2220.6
15°	2181.1	2183.3	2211.8	2222.8	2225.0	2216.2	2246.9	2260.1	2242.5	2249.1	2249.1
17.5°	2178.9	2181.1	2207.4	2218.4	2218.4	2211.8	2238.2	2253.5	2236.0	2242.5	2240.4
20°	2135.0	2137.2	2165.7	2174.5	2174.5	2165.7	2189.9	2205.2	2187.7	2192.1	2189.9
22.5°	2056.0	2058.2	2084.6	2093.3	2095.5	2084.6	2108.7	2126.2	2106.5	2108.7	2106.5
25°	1952.9	1952.9	1981.4	1981.4	1992.4	1979.2	1996.8	2020.9	2001.2	2001.2	1994.6
27.5°	1819.1	1819.1	1847.6	1847.6	1860.7	1847.6	1876.1	1887.1	1869.5	1867.3	1867.3
30°	1663.3	1663.3	1689.6	1689.6	1700.6	1689.6	1718.1	1729.1	1711.5	1709.3	1711.5
32.5°	1485.5	1485.5	1511.9	1509.7	1522.8	1514.0	1540.4	1549.2	1536.0	1529.4	1533.8
35°	1290.2	1301.2	1316.6	1314.4	1327.5	1310.0	1342.9	1349.5	1338.5	1340.7	1334.1
37.5°	1084.0	1094.9	1105.9	1105.9	1116.9	1112.5	1132.2	1138.8	1130.0	1132.2	1125.7
40°	877.7	888.7	897.5	897.5	908.4	895.3	921.6	928.2	919.4	910.6	915.0
42.5°	682.4	693.4	702.2	700.0	710.9	708.7	724.1	728.5	721.9	719.7	715.3
45°	513.5	515.7	531.0	537.6	537.6	537.6	548.6	550.8	544.2	544.2	542.0
47.5°	370.8	375.2	386.2	390.6	392.8	390.6	395.0	403.7	397.2	397.2	399.4
50°	256.7	258.9	267.7	272.1	272.1	272.1	274.3	280.9	276.5	276.5	272.1
52.5°	164.6	164.6	171.2	173.3	173.3	173.3	175.5	179.9	175.5	177.7	179.9
55°	92.2	92.2	96.5	98.7	98.7	98.7	100.9	103.1	100.9	103.1	103.1
57.5°	48.3	48.3	50.5	50.5	52.7	52.7	52.7	54.9	54.9	54.9	54.9
60°	24.1	24.1	24.1	26.3	26.3	26.3	26.3	28.5	28.5	28.5	28.5
62.5°	13.2	13.2	13.2	13.2	13.2	13.2	13.2	15.4	15.4	15.4	15.4
65°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8
67.5°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	8.8	8.8	8.8
70°	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6	6.6
72.5°	4.4	4.4	4.4	4.4	4.4	4.4	6.6	6.6	6.6	4.4	4.4
75°	2.2	4.4	4.4	2.2	2.2	4.4	4.4	4.4	4.4	4.4	4.4
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: P136331

CATALOG NUMBER: LD6A30D010TE ERW6A30840 6LW111LI

**CANDELA DISTRIBUTION (continued):**

	165°	170°	175°	180°
0°	1966.1	1966.1	1966.1	1966.1
2.5°	1996.8	1999.0	2036.3	2034.1
5°	2062.6	2064.8	2102.1	2102.1
7.5°	2121.9	2124.1	2163.6	2165.7
10°	2165.7	2170.1	2207.4	2211.8
12.5°	2207.4	2207.4	2244.7	2253.5
15°	2233.8	2233.8	2268.9	2279.8
17.5°	2225.0	2225.0	2260.1	2273.3
20°	2176.7	2174.5	2207.4	2225.0
22.5°	2093.3	2095.5	2121.9	2141.6
25°	1988.0	1983.6	2012.1	2029.7
27.5°	1856.4	1858.5	1876.1	1895.8
30°	1698.4	1702.8	1715.9	1735.7
32.5°	1520.6	1527.2	1536.0	1555.7
35°	1325.3	1331.9	1336.3	1353.9
37.5°	1114.7	1123.5	1125.7	1143.2
40°	906.2	915.0	915.0	930.4
42.5°	710.9	717.5	715.3	728.5
45°	537.6	542.0	539.8	550.8
47.5°	392.8	397.2	392.8	401.6
50°	272.1	276.5	272.1	278.7
52.5°	175.5	177.7	173.3	179.9
55°	100.9	103.1	100.9	105.3
57.5°	57.1	54.9	52.7	57.1
60°	28.5	28.5	28.5	28.5
62.5°	15.4	15.4	15.4	15.4
65°	8.8	8.8	8.8	11.0
67.5°	8.8	8.8	8.8	8.8
70°	6.6	6.6	6.6	6.6
72.5°	4.4	4.4	4.4	4.4
75°	4.4	4.4	4.4	4.4
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)