

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: P252408

Luminaire Tested: **LD6B50D010TE EU6B30509030 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252408
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B50D010TE EU6B30509030 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4128.0 lumens
Efficiency: N/A
Efficacy: 70.2 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.02 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

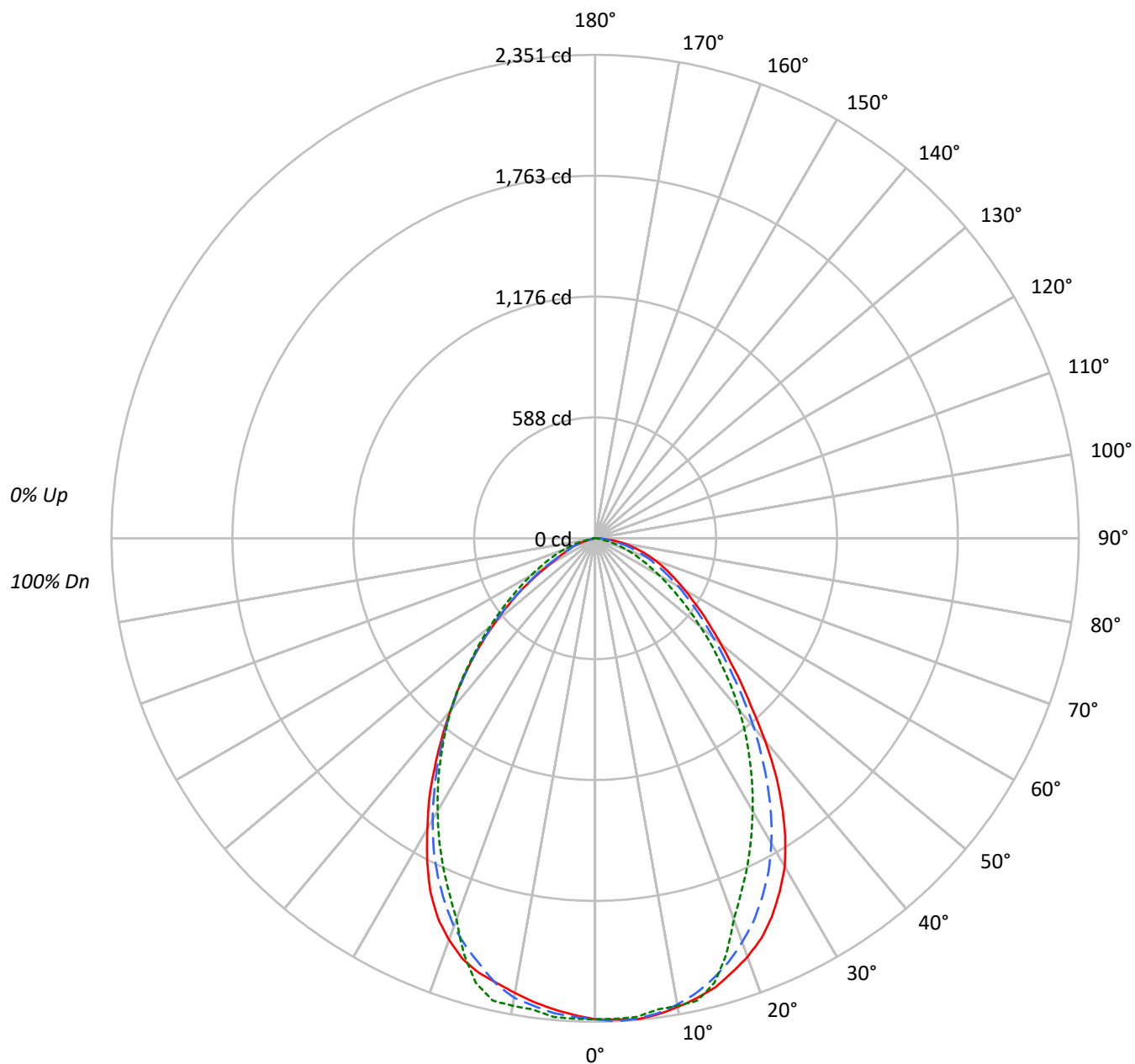
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252408

CATALOG NUMBER: LD6B50D010TE EU6B30509030 6LBLWW1LI

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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	107	104	101	108	105	102	99	101	98	96		97	95	93		93
2	103	96	90	86	100	94	89	85	91	86	83		88	84	81		85
3	95	86	80	74	93	85	79	73	82	77	72		79	75	71		77
4	88	78	71	65	86	77	70	64	74	68	64		72	67	63		70
5	82	71	63	57	80	70	63	57	68	62	57		66	60	56		64
6	77	65	57	51	75	64	57	51	62	56	51		61	55	50		59
7	72	60	52	46	70	59	51	46	57	51	46		56	50	46		55
8	67	55	47	42	66	54	47	42	53	46	42		52	46	42		51
9	63	51	43	38	62	50	43	38	49	43	38		48	42	38		47
10	59	47	40	35	58	47	40	35	46	40	35		45	39	35		44

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	152598	152598	152598
5°	153777	152978	150594
10°	153342	152938	148711
15°	152645	151206	147721
20°	150366	136870	144250
25°	146288	126168	136448
30°	138900	115335	122884
35°	126045	104270	108141
40°	109429	92873	93129
45°	93325	79873	79033
50°	80781	67515	63821
55°	72216	56314	49410
60°	65789	46764	33299
65°	61425	38454	24854
70°	58522	31283	20868
75°	55128	22207	6882
80°	52486	11421	2292
85°	43191	6812	0



TEST NUMBER: P252408

CATALOG NUMBER: LD6B50D010TE EU6B30509030 6LBLWW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	220.9	5.4
10°-20°	617.8	15.0
20°-30°	852.7	20.7
30°-40°	867.7	21.0
40°-50°	697.4	16.9
50°-60°	463.7	11.2
60°-70°	264.2	6.4
70°-80°	118.7	2.9
80°-90°	25.0	0.6
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°	1691.3	41.0
0°-40°	2559.0	62.0
0°-60°	3720.1	90.1
0°-90°	4128.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4128.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2339	2339	2339	2339	2339	
5°	2348	2345	2336	2318	2300	223
15°	2260	2218	2239	2151	2187	636
25°	2032	1923	1753	1810	1896	931
35°	1583	1461	1309	1334	1358	984
45°	1012	951	866	857	857	784
55°	635	592	495	440	434	571
65°	398	355	249	161	161	396
75°	219	182	88	36	27	234
85°	58	40	9	3	0	69
90°	0	0	0	0	0	



TEST NUMBER: P252408

CATALOG NUMBER: LD6B50D010TE EU6B30509030 6LBLWW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0
2.5°	2342.0	2354.1	2351.1	2348.1	2351.1	2348.1	2342.0	2342.0	2335.9	2335.9	2351.1
5°	2348.1	2354.1	2351.1	2348.1	2348.1	2351.1	2339.0	2339.0	2332.9	2329.8	2345.0
7.5°	2335.9	2345.0	2339.0	2339.0	2335.9	2339.0	2326.8	2326.8	2317.7	2314.7	2329.8
10°	2314.7	2326.8	2320.7	2320.7	2320.7	2314.7	2308.6	2305.5	2296.4	2293.4	2302.5
12.5°	2290.4	2299.5	2296.4	2290.4	2290.4	2290.4	2278.2	2275.2	2263.0	2256.9	2266.1
15°	2260.0	2266.1	2263.0	2260.0	2253.9	2253.9	2241.8	2235.7	2223.5	2211.4	2217.5
17.5°	2214.4	2223.5	2217.5	2214.4	2205.3	2205.3	2193.2	2187.1	2168.9	2156.7	2159.7
20°	2165.8	2168.9	2165.8	2159.7	2150.6	2147.6	2135.4	2123.3	2108.1	2092.9	2089.9
22.5°	2108.1	2111.1	2102.0	2096.0	2086.8	2083.8	2068.6	2059.5	2035.2	2017.0	2013.9
25°	2032.2	2035.2	2035.2	2020.0	2013.9	2007.9	1992.7	1977.5	1956.2	1931.9	1922.8
27.5°	1941.0	1950.1	1944.1	1928.9	1916.7	1913.7	1898.5	1886.4	1859.0	1837.8	1825.6
30°	1843.8	1840.8	1837.8	1828.6	1810.4	1807.4	1792.2	1777.0	1755.7	1728.4	1713.2
32.5°	1719.3	1719.3	1716.2	1707.1	1688.9	1682.8	1670.7	1652.5	1628.2	1606.9	1591.7
35°	1582.6	1585.6	1582.6	1564.4	1552.2	1546.1	1540.1	1518.8	1497.5	1473.2	1461.1
37.5°	1439.8	1430.7	1433.8	1418.6	1403.4	1409.5	1391.2	1382.1	1357.8	1339.6	1327.4
40°	1284.9	1291.0	1278.8	1272.8	1263.6	1254.5	1254.5	1239.3	1227.2	1205.9	1199.9
42.5°	1133.0	1142.1	1139.1	1133.0	1120.9	1123.9	1108.7	1102.7	1087.5	1078.4	1069.2
45°	1011.5	1011.5	1011.5	1005.4	1002.4	996.3	987.2	978.1	969.0	956.8	950.8
47.5°	893.1	893.1	896.1	890.0	883.9	880.9	874.8	874.8	859.6	847.5	841.4
50°	795.9	795.9	795.9	789.8	783.7	783.7	777.6	771.6	762.4	753.3	747.3
52.5°	707.8	707.8	707.8	701.7	698.7	695.6	692.6	689.5	677.4	671.3	665.2
55°	634.9	631.8	631.8	628.8	622.7	622.7	619.7	613.6	604.5	595.4	592.3
57.5°	562.0	565.0	562.0	562.0	555.9	555.9	549.8	546.8	537.7	531.6	525.5
60°	504.2	504.2	504.2	501.2	495.1	498.2	492.1	489.1	479.9	470.8	464.8
62.5°	446.5	449.6	449.6	446.5	440.5	440.5	437.4	434.4	425.3	416.2	407.0
65°	397.9	397.9	397.9	394.9	391.9	391.9	388.8	385.8	376.7	364.5	355.4
67.5°	352.4	349.3	349.3	349.3	346.3	343.2	340.2	337.2	328.1	318.9	306.8
70°	306.8	306.8	306.8	303.8	297.7	300.7	297.7	294.6	285.5	276.4	267.3
72.5°	264.3	264.3	261.2	258.2	258.2	255.2	255.2	252.1	243.0	230.9	221.7
75°	218.7	218.7	218.7	218.7	212.6	215.7	209.6	206.6	200.5	191.4	182.3
77.5°	179.2	179.2	179.2	176.2	173.1	173.1	170.1	167.1	158.0	151.9	139.7
80°	139.7	139.7	139.7	139.7	136.7	133.7	130.6	127.6	121.5	112.4	103.3
82.5°	103.3	103.3	100.2	100.2	100.2	97.2	94.2	91.1	85.1	79.0	72.9
85°	57.7	60.8	60.8	54.7	57.7	54.7	54.7	48.6	48.6	42.5	39.5
87.5°	21.3	18.2	18.2	18.2	18.2	18.2	18.2	15.2	15.2	15.2	12.2
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: P252408

CATALOG NUMBER: LD6B50D010TE EU6B30509030 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0
2.5°	2339.0	2335.9	2348.1	2348.1	2329.8	2339.0	2342.0	2335.9	2335.9	2339.0	2329.8
5°	2332.9	2326.8	2339.0	2342.0	2323.8	2332.9	2335.9	2329.8	2332.9	2335.9	2323.8
7.5°	2311.6	2311.6	2320.7	2323.8	2305.5	2314.7	2314.7	2308.6	2311.6	2311.6	2302.5
10°	2290.4	2281.2	2290.4	2290.4	2275.2	2278.2	2284.3	2281.2	2293.4	2308.6	2308.6
12.5°	2250.9	2241.8	2256.9	2256.9	2247.8	2260.0	2275.2	2284.3	2296.4	2302.5	2284.3
15°	2202.3	2205.3	2232.6	2253.9	2244.8	2263.0	2278.2	2272.1	2256.9	2238.7	2211.4
17.5°	2138.5	2129.4	2153.7	2165.8	2153.7	2159.7	2171.9	2159.7	2135.4	2120.3	2083.8
20°	2065.6	2041.3	2041.3	2035.2	2013.9	2013.9	2010.9	1989.6	1980.5	1971.4	1956.2
22.5°	1983.6	1956.2	1947.1	1928.9	1910.7	1907.6	1898.5	1877.2	1865.1	1859.0	1840.8
25°	1889.4	1865.1	1849.9	1831.7	1804.3	1798.3	1789.2	1767.9	1761.8	1752.7	1737.5
27.5°	1792.2	1761.8	1740.6	1722.3	1698.0	1695.0	1676.8	1661.6	1649.4	1643.3	1631.2
30°	1679.8	1646.4	1631.2	1606.9	1588.7	1582.6	1567.4	1546.1	1537.0	1531.0	1521.8
32.5°	1555.3	1527.9	1512.7	1491.5	1467.2	1470.2	1452.0	1433.8	1427.7	1421.6	1412.5
35°	1433.8	1406.4	1388.2	1370.0	1354.8	1348.7	1336.5	1321.4	1312.2	1309.2	1303.1
37.5°	1300.1	1278.8	1263.6	1245.4	1233.3	1227.2	1221.1	1205.9	1199.9	1199.9	1187.7
40°	1169.5	1151.3	1139.1	1130.0	1114.8	1111.8	1105.7	1096.6	1093.5	1090.5	1081.4
42.5°	1051.0	1026.7	1017.6	1011.5	1002.4	996.3	993.3	987.2	984.2	981.1	972.0
45°	938.6	917.4	908.2	902.2	893.1	890.0	887.0	877.9	871.8	865.7	862.7
47.5°	829.3	814.1	811.0	795.9	789.8	783.7	777.6	771.6	768.5	765.5	753.3
50°	735.1	726.0	710.8	701.7	695.6	692.6	680.4	671.3	668.3	665.2	656.1
52.5°	650.0	637.9	628.8	613.6	610.6	604.5	598.4	586.3	580.2	577.1	568.0
55°	574.1	565.0	552.8	540.7	531.6	528.5	519.4	507.3	501.2	495.1	489.1
57.5°	510.3	495.1	483.0	470.8	464.8	455.6	446.5	440.5	431.3	422.2	413.1
60°	449.6	437.4	422.2	410.1	404.0	397.9	385.8	376.7	367.6	358.4	349.3
62.5°	391.9	379.7	364.5	352.4	346.3	340.2	328.1	318.9	309.8	300.7	288.6
65°	340.2	328.1	315.9	303.8	297.7	291.6	279.5	267.3	258.2	249.1	236.9
67.5°	297.7	282.5	270.3	258.2	252.1	246.0	233.9	224.8	212.6	203.5	191.4
70°	252.1	240.0	230.9	218.7	212.6	206.6	194.4	182.3	173.1	164.0	151.9
72.5°	212.6	197.4	188.3	176.2	170.1	167.1	154.9	145.8	136.7	124.5	115.4
75°	170.1	158.0	145.8	136.7	130.6	127.6	115.4	106.3	97.2	88.1	79.0
77.5°	130.6	121.5	109.4	100.2	94.2	91.1	79.0	69.9	60.8	54.7	45.6
80°	97.2	85.1	79.0	69.9	66.8	60.8	54.7	45.6	39.5	30.4	24.3
82.5°	66.8	57.7	51.6	45.6	42.5	39.5	33.4	27.3	21.3	18.2	15.2
85°	36.5	30.4	27.3	24.3	21.3	21.3	18.2	15.2	12.2	9.1	6.1
87.5°	12.2	9.1	9.1	9.1	9.1	6.1	6.1	6.1	3.0	3.0	3.0
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: P252408

CATALOG NUMBER: LD6B50D010TE EU6B30509030 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0
2.5°	2335.9	2335.9	2335.9	2332.9	2332.9	2332.9	2329.8	2342.0	2329.8	2326.8	2335.9
5°	2332.9	2326.8	2326.8	2326.8	2326.8	2323.8	2320.7	2326.8	2317.7	2314.7	2314.7
7.5°	2314.7	2311.6	2311.6	2308.6	2305.5	2302.5	2299.5	2302.5	2293.4	2290.4	2290.4
10°	2317.7	2311.6	2311.6	2302.5	2296.4	2287.3	2278.2	2281.2	2269.1	2260.0	2260.0
12.5°	2281.2	2266.1	2256.9	2247.8	2241.8	2238.7	2226.6	2232.6	2220.5	2217.5	2217.5
15°	2199.2	2181.0	2165.8	2159.7	2159.7	2153.7	2144.6	2156.7	2150.6	2153.7	2168.9
17.5°	2071.6	2062.5	2053.4	2050.4	2053.4	2059.5	2065.6	2083.8	2083.8	2092.9	2108.1
20°	1959.3	1953.2	1959.3	1959.3	1962.3	1974.4	1986.6	2001.8	2007.9	2017.0	2038.2
22.5°	1849.9	1849.9	1856.0	1865.1	1862.1	1883.3	1886.4	1913.7	1913.7	1931.9	1950.1
25°	1743.6	1743.6	1749.7	1752.7	1758.8	1770.9	1783.1	1804.3	1810.4	1828.6	1843.8
27.5°	1640.3	1637.3	1637.3	1640.3	1646.4	1661.6	1667.6	1691.9	1701.1	1713.2	1728.4
30°	1524.9	1521.8	1527.9	1534.0	1531.0	1546.1	1555.3	1573.5	1579.6	1591.7	1603.9
32.5°	1415.5	1415.5	1415.5	1421.6	1421.6	1433.8	1433.8	1455.0	1455.0	1464.1	1476.3
35°	1303.1	1303.1	1306.2	1309.2	1312.2	1315.3	1318.3	1330.5	1333.5	1336.5	1342.6
37.5°	1196.8	1193.8	1196.8	1196.8	1190.7	1202.9	1202.9	1215.0	1205.9	1215.0	1218.1
40°	1087.5	1087.5	1084.4	1084.4	1084.4	1090.5	1084.4	1093.5	1087.5	1093.5	1090.5
42.5°	975.1	975.1	969.0	975.1	972.0	972.0	972.0	978.1	969.0	975.1	978.1
45°	862.7	859.6	859.6	856.6	856.6	856.6	859.6	859.6	856.6	862.7	862.7
47.5°	753.3	750.3	750.3	750.3	750.3	753.3	744.2	750.3	744.2	744.2	744.2
50°	659.2	656.1	653.1	650.0	647.0	647.0	644.0	644.0	637.9	634.9	631.8
52.5°	568.0	565.0	558.9	558.9	555.9	552.8	543.7	543.7	534.6	531.6	531.6
55°	486.0	476.9	473.9	467.8	467.8	461.7	455.6	449.6	440.5	434.4	434.4
57.5°	410.1	401.0	394.9	391.9	388.8	382.7	370.6	367.6	355.4	352.4	349.3
60°	343.2	334.1	325.0	318.9	315.9	306.8	294.6	288.6	282.5	273.4	264.3
62.5°	279.5	270.3	258.2	255.2	249.1	240.0	230.9	221.7	215.7	206.6	200.5
65°	224.8	215.7	206.6	200.5	194.4	185.3	176.2	167.1	161.0	158.0	154.9
67.5°	182.3	170.1	161.0	158.0	151.9	145.8	136.7	133.7	127.6	127.6	127.6
70°	142.8	133.7	124.5	121.5	118.5	112.4	106.3	106.3	106.3	106.3	106.3
72.5°	106.3	100.2	91.1	88.1	85.1	82.0	75.9	79.0	75.9	75.9	75.9
75°	66.8	60.8	54.7	51.6	48.6	45.6	42.5	39.5	36.5	33.4	33.4
77.5°	36.5	30.4	27.3	24.3	24.3	21.3	18.2	18.2	15.2	15.2	15.2
80°	21.3	18.2	15.2	12.2	12.2	9.1	9.1	9.1	9.1	6.1	6.1
82.5°	12.2	9.1	6.1	6.1	6.1	6.1	3.0	3.0	3.0	3.0	3.0
85°	6.1	6.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0
87.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
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: P252408

CATALOG NUMBER: LD6B50D010TE EU6B30509030 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0	2339.0
2.5°	2320.7	2329.8	2320.7	2329.8	2329.8	2329.8	2329.8	2320.7
5°	2305.5	2311.6	2302.5	2308.6	2311.6	2308.6	2308.6	2299.5
7.5°	2278.2	2284.3	2275.2	2284.3	2287.3	2284.3	2281.2	2275.2
10°	2250.9	2253.9	2244.8	2250.9	2256.9	2256.9	2253.9	2244.8
12.5°	2208.3	2217.5	2208.3	2214.4	2220.5	2223.5	2223.5	2214.4
15°	2159.7	2174.9	2168.9	2178.0	2187.1	2190.1	2190.1	2187.1
17.5°	2111.1	2126.3	2117.2	2132.4	2141.5	2147.6	2150.6	2144.6
20°	2041.3	2059.5	2053.4	2065.6	2077.7	2086.8	2086.8	2077.7
22.5°	1950.1	1974.4	1971.4	1980.5	1995.7	1998.7	2004.8	1998.7
25°	1849.9	1868.1	1865.1	1874.2	1892.4	1892.4	1895.5	1895.5
27.5°	1734.5	1752.7	1749.7	1755.7	1767.9	1770.9	1774.0	1767.9
30°	1609.9	1619.0	1619.0	1628.2	1637.3	1640.3	1640.3	1631.2
32.5°	1473.2	1485.4	1491.5	1488.4	1497.5	1503.6	1500.6	1500.6
35°	1348.7	1351.7	1354.8	1357.8	1360.8	1366.9	1360.8	1357.8
37.5°	1215.0	1224.2	1218.1	1224.2	1230.2	1227.2	1224.2	1224.2
40°	1093.5	1096.6	1090.5	1096.6	1099.6	1099.6	1099.6	1093.5
42.5°	972.0	978.1	972.0	978.1	978.1	978.1	978.1	975.1
45°	850.5	856.6	856.6	859.6	859.6	856.6	856.6	856.6
47.5°	738.1	744.2	738.1	744.2	747.3	741.2	741.2	741.2
50°	631.8	628.8	628.8	631.8	631.8	631.8	631.8	628.8
52.5°	522.5	525.5	525.5	525.5	528.5	525.5	528.5	528.5
55°	428.3	428.3	428.3	431.3	428.3	428.3	431.3	434.4
57.5°	343.2	340.2	337.2	337.2	340.2	337.2	337.2	337.2
60°	264.3	261.2	258.2	258.2	258.2	258.2	258.2	255.2
62.5°	197.4	197.4	197.4	200.5	200.5	200.5	200.5	203.5
65°	158.0	158.0	158.0	158.0	158.0	158.0	158.0	161.0
67.5°	127.6	127.6	127.6	130.6	130.6	130.6	130.6	130.6
70°	106.3	106.3	109.4	106.3	109.4	109.4	109.4	109.4
72.5°	72.9	72.9	72.9	72.9	72.9	69.9	72.9	69.9
75°	30.4	30.4	30.4	30.4	30.4	30.4	30.4	27.3
77.5°	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
80°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
82.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)