

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: P252409

Luminaire Tested: **LD6B50D010TE EU6B30509035 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252409
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 EU6B30509035 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4187.0 lumens
Efficiency: N/A
Efficacy: 71.2 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

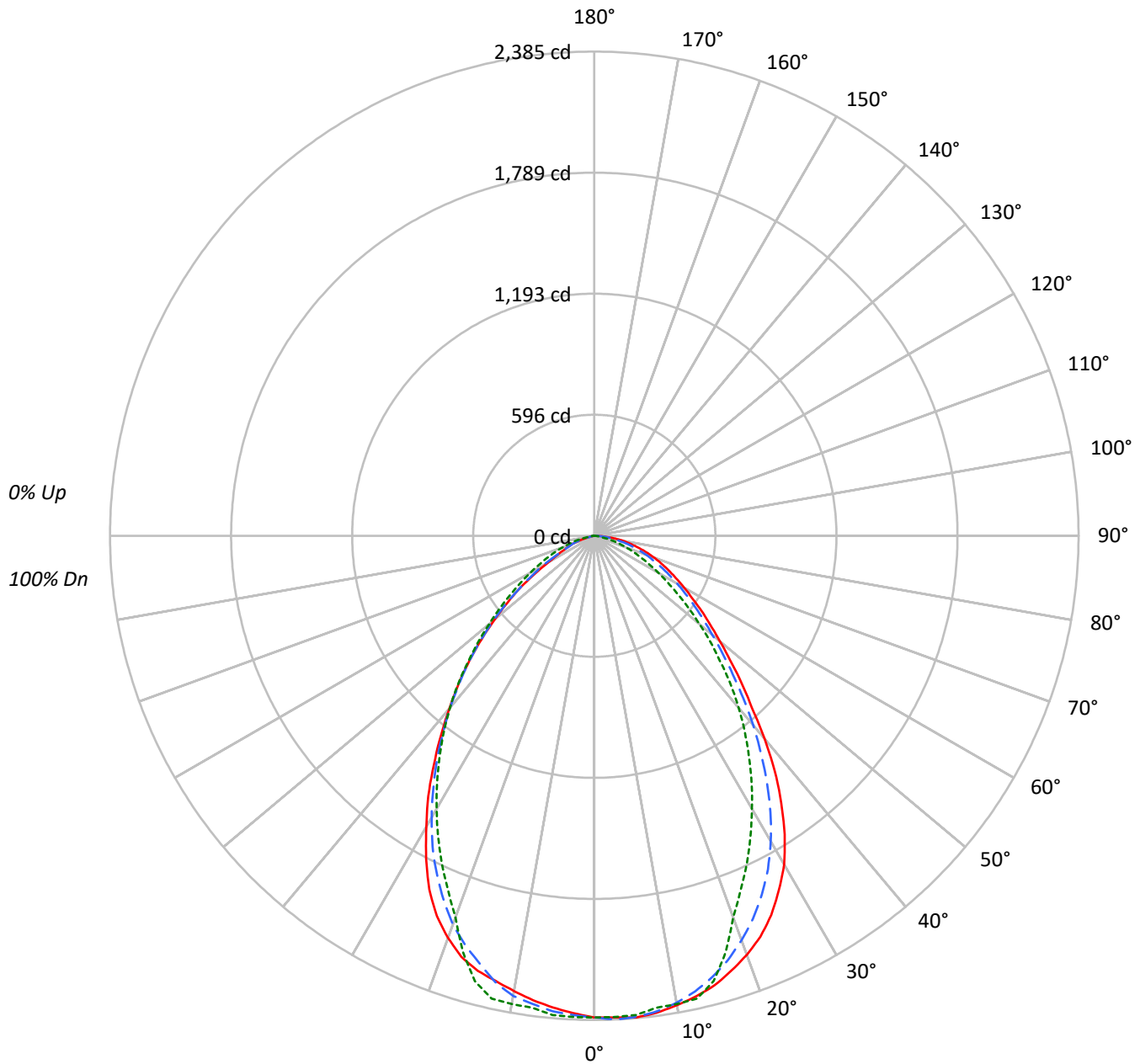
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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°	154777	154777	154777
5°	155971	155165	152742
10°	155528	155124	150838
15°	154827	153368	149829
20°	152519	138827	146312
25°	148376	127975	138398
30°	140889	116978	124639
35°	127845	105759	109686
40°	110996	94202	94466
45°	94663	81017	80159
50°	81928	68480	64734
55°	73239	57122	50115
60°	66741	47443	33769
65°	62305	38994	25209
70°	59362	31741	21154
75°	55909	22510	6982
80°	53238	11572	2329
85°	43790	6887	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.0	5.4
10°-20°	626.6	15.0
20°-30°	864.9	20.7
30°-40°	880.1	21.0
40°-50°	707.3	16.9
50°-60°	470.3	11.2
60°-70°	268.0	6.4
70°-80°	120.4	2.9
80°-90°	25.4	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°	1715.5	41.0
0°-40°	2595.6	62.0
0°-60°	3773.3	90.1
0°-90°	4187.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4187.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2372	2372	2372	2372	2372	
5°	2382	2379	2369	2351	2332	226
15°	2292	2249	2271	2181	2218	645
25°	2061	1950	1778	1836	1923	945
35°	1605	1482	1328	1353	1377	998
45°	1026	964	878	869	869	796
55°	644	601	502	447	441	579
65°	404	360	253	163	163	402
75°	222	185	89	37	28	237
85°	58	40	9	3	0	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4
2.5°	2375.5	2387.8	2384.7	2381.6	2384.7	2381.6	2375.5	2375.5	2369.3	2369.3	2384.7
5°	2381.6	2387.8	2384.7	2381.6	2381.6	2384.7	2372.4	2372.4	2366.2	2363.1	2378.6
7.5°	2369.3	2378.6	2372.4	2372.4	2369.3	2372.4	2360.1	2360.1	2350.8	2347.7	2363.1
10°	2347.7	2360.1	2353.9	2353.9	2353.9	2347.7	2341.6	2338.5	2329.3	2326.2	2335.4
12.5°	2323.1	2332.3	2329.3	2323.1	2323.1	2323.1	2310.8	2307.7	2295.4	2289.2	2298.4
15°	2292.3	2298.4	2295.4	2292.3	2286.1	2286.1	2273.8	2267.6	2255.3	2243.0	2249.1
17.5°	2246.1	2255.3	2249.1	2246.1	2236.8	2236.8	2224.5	2218.3	2199.9	2187.5	2190.6
20°	2196.8	2199.9	2196.8	2190.6	2181.4	2178.3	2166.0	2153.6	2138.2	2122.8	2119.7
22.5°	2138.2	2141.3	2132.1	2125.9	2116.7	2113.6	2098.2	2088.9	2064.3	2045.8	2042.7
25°	2061.2	2064.3	2064.3	2048.9	2042.7	2036.6	2021.2	2005.7	1984.2	1959.5	1950.3
27.5°	1968.8	1978.0	1971.9	1956.5	1944.1	1941.0	1925.6	1913.3	1885.6	1864.0	1851.7
30°	1870.2	1867.1	1864.0	1854.8	1836.3	1833.2	1817.8	1802.4	1780.8	1753.1	1737.7
32.5°	1743.9	1743.9	1740.8	1731.5	1713.0	1706.9	1694.6	1676.1	1651.4	1629.9	1614.5
35°	1605.2	1608.3	1605.2	1586.7	1574.4	1568.2	1562.1	1540.5	1518.9	1494.3	1482.0
37.5°	1460.4	1451.2	1454.2	1438.8	1423.4	1429.6	1411.1	1401.9	1377.2	1358.7	1346.4
40°	1303.3	1309.4	1297.1	1290.9	1281.7	1272.5	1272.5	1257.1	1244.7	1223.2	1217.0
42.5°	1149.2	1158.5	1155.4	1149.2	1136.9	1140.0	1124.6	1118.4	1103.0	1093.8	1084.5
45°	1026.0	1026.0	1026.0	1019.8	1016.7	1010.6	1001.3	992.1	982.8	970.5	964.4
47.5°	905.8	905.8	908.9	902.7	896.6	893.5	887.3	887.3	871.9	859.6	853.4
50°	807.2	807.2	807.2	801.1	794.9	794.9	788.7	782.6	773.3	764.1	757.9
52.5°	717.9	717.9	717.9	711.7	708.6	705.6	702.5	699.4	687.1	680.9	674.7
55°	643.9	640.9	640.9	637.8	631.6	631.6	628.5	622.4	613.1	603.9	600.8
57.5°	570.0	573.1	570.0	570.0	563.8	563.8	557.7	554.6	545.3	539.2	533.0
60°	511.5	511.5	511.5	508.4	502.2	505.3	499.1	496.0	486.8	477.6	471.4
62.5°	452.9	456.0	456.0	452.9	446.7	446.7	443.7	440.6	431.3	422.1	412.9
65°	403.6	403.6	403.6	400.5	397.5	397.5	394.4	391.3	382.0	369.7	360.5
67.5°	357.4	354.3	354.3	354.3	351.2	348.2	345.1	342.0	332.8	323.5	311.2
70°	311.2	311.2	311.2	308.1	301.9	305.0	301.9	298.9	289.6	280.4	271.1
72.5°	268.0	268.0	265.0	261.9	261.9	258.8	258.8	255.7	246.5	234.2	224.9
75°	221.8	221.8	221.8	221.8	215.7	218.8	212.6	209.5	203.3	194.1	184.9
77.5°	181.8	181.8	181.8	178.7	175.6	175.6	172.5	169.5	160.2	154.1	141.7
80°	141.7	141.7	141.7	141.7	138.6	135.6	132.5	129.4	123.2	114.0	104.8
82.5°	104.8	104.8	101.7	101.7	101.7	98.6	95.5	92.4	86.3	80.1	73.9
85°	58.5	61.6	61.6	55.5	58.5	55.5	55.5	49.3	49.3	43.1	40.1
87.5°	21.6	18.5	18.5	18.5	18.5	18.5	18.5	15.4	15.4	15.4	12.3
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4
2.5°	2372.4	2369.3	2381.6	2381.6	2363.1	2372.4	2375.5	2369.3	2369.3	2372.4	2363.1
5°	2366.2	2360.1	2372.4	2375.5	2357.0	2366.2	2369.3	2363.1	2366.2	2369.3	2357.0
7.5°	2344.7	2344.7	2353.9	2357.0	2338.5	2347.7	2347.7	2341.6	2344.7	2344.7	2335.4
10°	2323.1	2313.8	2323.1	2323.1	2307.7	2310.8	2316.9	2313.8	2326.2	2341.6	2341.6
12.5°	2283.0	2273.8	2289.2	2289.2	2280.0	2292.3	2307.7	2316.9	2329.3	2335.4	2316.9
15°	2233.7	2236.8	2264.6	2286.1	2276.9	2295.4	2310.8	2304.6	2289.2	2270.7	2243.0
17.5°	2169.0	2159.8	2184.4	2196.8	2184.4	2190.6	2202.9	2190.6	2166.0	2150.6	2113.6
20°	2095.1	2070.4	2070.4	2064.3	2042.7	2042.7	2039.6	2018.1	2008.8	1999.6	1984.2
22.5°	2011.9	1984.2	1974.9	1956.5	1938.0	1934.9	1925.6	1904.1	1891.7	1885.6	1867.1
25°	1916.4	1891.7	1876.3	1857.9	1830.1	1824.0	1814.7	1793.2	1787.0	1777.8	1762.3
27.5°	1817.8	1787.0	1765.4	1746.9	1722.3	1719.2	1700.7	1685.3	1673.0	1666.8	1654.5
30°	1703.8	1669.9	1654.5	1629.9	1611.4	1605.2	1589.8	1568.2	1559.0	1552.8	1543.6
32.5°	1577.5	1549.8	1534.4	1512.8	1488.1	1491.2	1472.7	1454.2	1448.1	1441.9	1432.7
35°	1454.2	1426.5	1408.0	1389.5	1374.1	1368.0	1355.7	1340.2	1331.0	1327.9	1321.8
37.5°	1318.7	1297.1	1281.7	1263.2	1250.9	1244.7	1238.6	1223.2	1217.0	1217.0	1204.7
40°	1186.2	1167.7	1155.4	1146.1	1130.7	1127.7	1121.5	1112.2	1109.2	1106.1	1096.8
42.5°	1066.0	1041.4	1032.1	1026.0	1016.7	1010.6	1007.5	1001.3	998.3	995.2	985.9
45°	952.0	930.5	921.2	915.1	905.8	902.7	899.7	890.4	884.3	878.1	875.0
47.5°	841.1	825.7	822.6	807.2	801.1	794.9	788.7	782.6	779.5	776.4	764.1
50°	745.6	736.4	721.0	711.7	705.6	702.5	690.1	680.9	677.8	674.7	665.5
52.5°	659.3	647.0	637.8	622.4	619.3	613.1	607.0	594.6	588.5	585.4	576.2
55°	582.3	573.1	560.7	548.4	539.2	536.1	526.9	514.5	508.4	502.2	496.0
57.5°	517.6	502.2	489.9	477.6	471.4	462.2	452.9	446.7	437.5	428.3	419.0
60°	456.0	443.7	428.3	415.9	409.8	403.6	391.3	382.0	372.8	363.6	354.3
62.5°	397.5	385.1	369.7	357.4	351.2	345.1	332.8	323.5	314.3	305.0	292.7
65°	345.1	332.8	320.4	308.1	301.9	295.8	283.5	271.1	261.9	252.6	240.3
67.5°	301.9	286.5	274.2	261.9	255.7	249.6	237.2	228.0	215.7	206.4	194.1
70°	255.7	243.4	234.2	221.8	215.7	209.5	197.2	184.9	175.6	166.4	154.1
72.5°	215.7	200.3	191.0	178.7	172.5	169.5	157.1	147.9	138.6	126.3	117.1
75°	172.5	160.2	147.9	138.6	132.5	129.4	117.1	107.8	98.6	89.3	80.1
77.5°	132.5	123.2	110.9	101.7	95.5	92.4	80.1	70.9	61.6	55.5	46.2
80°	98.6	86.3	80.1	70.9	67.8	61.6	55.5	46.2	40.1	30.8	24.6
82.5°	67.8	58.5	52.4	46.2	43.1	40.1	33.9	27.7	21.6	18.5	15.4
85°	37.0	30.8	27.7	24.6	21.6	21.6	18.5	15.4	12.3	9.2	6.2
87.5°	12.3	9.2	9.2	9.2	9.2	6.2	6.2	6.2	3.1	3.1	3.1
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4
2.5°	2369.3	2369.3	2369.3	2366.2	2366.2	2366.2	2363.1	2375.5	2363.1	2360.1	2369.3
5°	2366.2	2360.1	2360.1	2360.1	2360.1	2357.0	2353.9	2360.1	2350.8	2347.7	2347.7
7.5°	2347.7	2344.7	2344.7	2341.6	2338.5	2335.4	2332.3	2335.4	2326.2	2323.1	2323.1
10°	2350.8	2344.7	2344.7	2335.4	2329.3	2320.0	2310.8	2313.8	2301.5	2292.3	2292.3
12.5°	2313.8	2298.4	2289.2	2280.0	2273.8	2270.7	2258.4	2264.6	2252.2	2249.1	2249.1
15°	2230.7	2212.2	2196.8	2190.6	2190.6	2184.4	2175.2	2187.5	2181.4	2184.4	2199.9
17.5°	2101.3	2092.0	2082.8	2079.7	2082.8	2088.9	2095.1	2113.6	2113.6	2122.8	2138.2
20°	1987.3	1981.1	1987.3	1987.3	1990.3	2002.7	2015.0	2030.4	2036.6	2045.8	2067.4
22.5°	1876.3	1876.3	1882.5	1891.7	1888.7	1910.2	1913.3	1941.0	1941.0	1959.5	1978.0
25°	1768.5	1768.5	1774.7	1777.8	1783.9	1796.2	1808.6	1830.1	1836.3	1854.8	1870.2
27.5°	1663.8	1660.7	1660.7	1663.8	1669.9	1685.3	1691.5	1716.1	1725.4	1737.7	1753.1
30°	1546.7	1543.6	1549.8	1555.9	1552.8	1568.2	1577.5	1596.0	1602.1	1614.5	1626.8
32.5°	1435.8	1435.8	1435.8	1441.9	1441.9	1454.2	1454.2	1475.8	1475.8	1485.1	1497.4
35°	1321.8	1321.8	1324.8	1327.9	1331.0	1334.1	1337.2	1349.5	1352.6	1355.7	1361.8
37.5°	1213.9	1210.8	1213.9	1213.9	1207.8	1220.1	1220.1	1232.4	1223.2	1232.4	1235.5
40°	1103.0	1103.0	1099.9	1099.9	1099.9	1106.1	1099.9	1109.2	1103.0	1109.2	1106.1
42.5°	989.0	989.0	982.8	989.0	985.9	985.9	985.9	992.1	982.8	989.0	992.1
45°	875.0	871.9	871.9	868.8	868.8	868.8	871.9	871.9	868.8	875.0	875.0
47.5°	764.1	761.0	761.0	761.0	761.0	764.1	754.9	761.0	754.9	754.9	754.9
50°	668.6	665.5	662.4	659.3	656.3	656.3	653.2	653.2	647.0	643.9	640.9
52.5°	576.2	573.1	566.9	566.9	563.8	560.7	551.5	551.5	542.3	539.2	539.2
55°	493.0	483.7	480.6	474.5	474.5	468.3	462.2	456.0	446.7	440.6	440.6
57.5°	415.9	406.7	400.5	397.5	394.4	388.2	375.9	372.8	360.5	357.4	354.3
60°	348.2	338.9	329.7	323.5	320.4	311.2	298.9	292.7	286.5	277.3	268.0
62.5°	283.5	274.2	261.9	258.8	252.6	243.4	234.2	224.9	218.8	209.5	203.3
65°	228.0	218.8	209.5	203.3	197.2	187.9	178.7	169.5	163.3	160.2	157.1
67.5°	184.9	172.5	163.3	160.2	154.1	147.9	138.6	135.6	129.4	129.4	129.4
70°	144.8	135.6	126.3	123.2	120.2	114.0	107.8	107.8	107.8	107.8	107.8
72.5°	107.8	101.7	92.4	89.3	86.3	83.2	77.0	80.1	77.0	77.0	77.0
75°	67.8	61.6	55.5	52.4	49.3	46.2	43.1	40.1	37.0	33.9	33.9
77.5°	37.0	30.8	27.7	24.6	24.6	21.6	18.5	18.5	15.4	15.4	15.4
80°	21.6	18.5	15.4	12.3	12.3	9.2	9.2	9.2	9.2	6.2	6.2
82.5°	12.3	9.2	6.2	6.2	6.2	6.2	3.1	3.1	3.1	3.1	3.1
85°	6.2	6.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.0
87.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
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: P252409

CATALOG NUMBER: LD6B50D010TE EU6B30509035 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4	2372.4
2.5°	2353.9	2363.1	2353.9	2363.1	2363.1	2363.1	2363.1	2353.9
5°	2338.5	2344.7	2335.4	2341.6	2344.7	2341.6	2341.6	2332.3
7.5°	2310.8	2316.9	2307.7	2316.9	2320.0	2316.9	2313.8	2307.7
10°	2283.0	2286.1	2276.9	2283.0	2289.2	2289.2	2286.1	2276.9
12.5°	2239.9	2249.1	2239.9	2246.1	2252.2	2255.3	2255.3	2246.1
15°	2190.6	2206.0	2199.9	2209.1	2218.3	2221.4	2221.4	2218.3
17.5°	2141.3	2156.7	2147.5	2162.9	2172.1	2178.3	2181.4	2175.2
20°	2070.4	2088.9	2082.8	2095.1	2107.4	2116.7	2116.7	2107.4
22.5°	1978.0	2002.7	1999.6	2008.8	2024.2	2027.3	2033.5	2027.3
25°	1876.3	1894.8	1891.7	1901.0	1919.5	1919.5	1922.6	1922.6
27.5°	1759.3	1777.8	1774.7	1780.8	1793.2	1796.2	1799.3	1793.2
30°	1632.9	1642.2	1642.2	1651.4	1660.7	1663.8	1663.8	1654.5
32.5°	1494.3	1506.6	1512.8	1509.7	1518.9	1525.1	1522.0	1522.0
35°	1368.0	1371.1	1374.1	1377.2	1380.3	1386.5	1380.3	1377.2
37.5°	1232.4	1241.7	1235.5	1241.7	1247.8	1244.7	1241.7	1241.7
40°	1109.2	1112.2	1106.1	1112.2	1115.3	1115.3	1115.3	1109.2
42.5°	985.9	992.1	985.9	992.1	992.1	992.1	992.1	989.0
45°	862.7	868.8	868.8	871.9	871.9	868.8	868.8	868.8
47.5°	748.7	754.9	748.7	754.9	757.9	751.8	751.8	751.8
50°	640.9	637.8	637.8	640.9	640.9	640.9	640.9	637.8
52.5°	529.9	533.0	533.0	533.0	536.1	533.0	536.1	536.1
55°	434.4	434.4	434.4	437.5	434.4	434.4	437.5	440.6
57.5°	348.2	345.1	342.0	342.0	345.1	342.0	342.0	342.0
60°	268.0	265.0	261.9	261.9	261.9	261.9	261.9	258.8
62.5°	200.3	200.3	200.3	203.3	203.3	203.3	203.3	206.4
65°	160.2	160.2	160.2	160.2	160.2	160.2	160.2	163.3
67.5°	129.4	129.4	129.4	132.5	132.5	132.5	132.5	132.5
70°	107.8	107.8	110.9	107.8	110.9	110.9	110.9	110.9
72.5°	73.9	73.9	73.9	73.9	73.9	70.9	73.9	70.9
75°	30.8	30.8	30.8	30.8	30.8	30.8	30.8	27.7
77.5°	12.3	12.3	12.3	12.3	12.3	12.3	12.3	12.3
80°	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
82.5°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.1	3.1	3.1	3.1	3.1	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)