

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: P252410

Luminaire Tested: **LD6B50D010TE EU6B30509040 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252410
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 EU6B30509040 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4194.0 lumens
Efficiency: N/A
Efficacy: 71.4 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

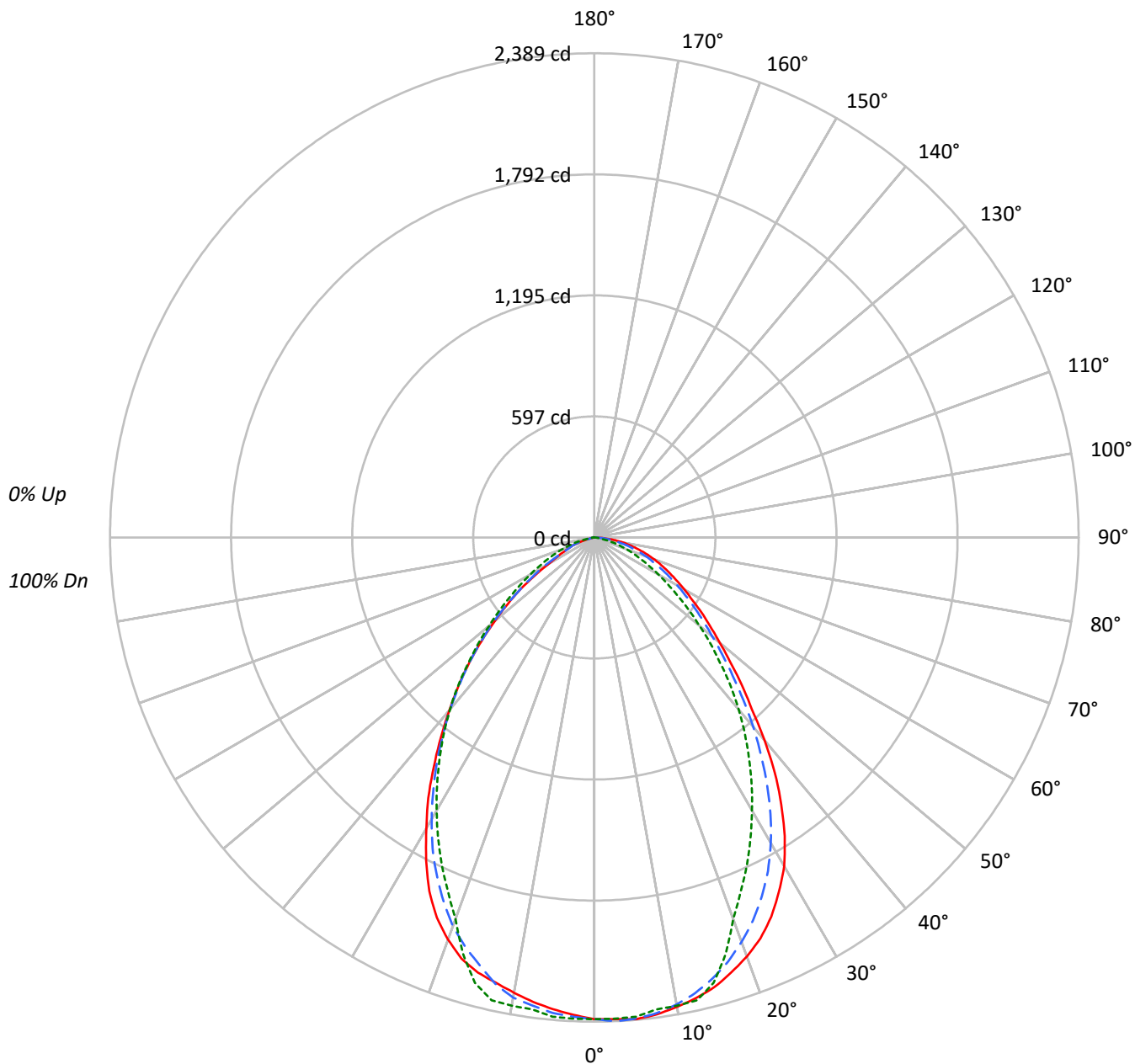
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252410

CATALOG NUMBER: LD6B50D010TE EU6B30509040 6LBLWW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P252410

CATALOG NUMBER: LD6B50D010TE EU6B30509040 6LBLWW1LI

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	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	111	107	104	101	108	105	102	99		101	98	96		97	95	93		93	92	90
2	103	96	90	86	100	94	89	85		91	86	83		88	84	81		85	82	79
3	95	86	80	74	93	85	79	73		82	77	72		79	75	71		77	73	70
4	88	78	71	65	86	77	70	64		74	68	64		72	67	63		70	66	62
5	82	71	63	57	80	70	63	57		68	62	57		66	60	56		64	59	55
6	77	65	57	51	75	64	57	51		62	56	51		61	55	50		59	54	50
7	72	60	52	46	70	59	51	46		57	51	46		56	50	46		55	49	45
8	67	55	47	42	66	54	47	42		53	46	42		52	46	42		51	45	41
9	63	51	43	38	62	50	43	38		49	43	38		48	42	38		47	42	38
10	59	47	40	35	58	47	40	35		46	40	35		45	39	35		44	39	35

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	155038	155038	155038
5°	156233	155427	152997
10°	155793	155382	151090
15°	155083	153624	150078
20°	152769	139057	146555
25°	148628	128184	138629
30°	141122	117174	124850
35°	128060	105935	109869
40°	111184	94355	94619
45°	94820	81156	80298
50°	82070	68601	64836
55°	73365	57213	50195
60°	66846	47521	33821
65°	62413	39072	25255
70°	59457	31798	21192
75°	56010	22560	7008
80°	53350	11609	2329
85°	43865	6962	0



TEST NUMBER: P252410

CATALOG NUMBER: LD6B50D010TE EU6B30509040 6LBLWW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.4	5.4
10°-20°	627.6	15.0
20°-30°	866.3	20.7
30°-40°	881.6	21.0
40°-50°	708.5	16.9
50°-60°	471.1	11.2
60°-70°	268.5	6.4
70°-80°	120.6	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°	1718.4	41.0
0°-40°	2600.0	62.0
0°-60°	3779.6	90.1
0°-90°	4194.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4194.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2376	2376	2376	2376	2376	
5°	2386	2382	2373	2355	2336	226
15°	2296	2253	2274	2185	2222	646
25°	2065	1954	1781	1839	1926	946
35°	1608	1484	1330	1355	1380	999
45°	1028	966	880	870	870	797
55°	645	602	503	448	441	580
65°	404	361	253	164	164	403
75°	222	185	90	37	28	237
85°	59	40	9	3	0	70
90°	0	0	0	0	0	



TEST NUMBER: P252410

CATALOG NUMBER: LD6B50D010TE EU6B30509040 6LBLWW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4
2.5°	2379.4	2391.8	2388.7	2385.6	2388.7	2385.6	2379.4	2379.4	2373.3	2373.3	2388.7
5°	2385.6	2391.8	2388.7	2385.6	2385.6	2388.7	2376.4	2376.4	2370.2	2367.1	2382.5
7.5°	2373.3	2382.5	2376.4	2376.4	2373.3	2376.4	2364.0	2364.0	2354.8	2351.7	2367.1
10°	2351.7	2364.0	2357.8	2357.8	2357.8	2351.7	2345.5	2342.4	2333.1	2330.1	2339.3
12.5°	2327.0	2336.2	2333.1	2327.0	2327.0	2327.0	2314.6	2311.5	2299.2	2293.0	2302.3
15°	2296.1	2302.3	2299.2	2296.1	2289.9	2289.9	2277.6	2271.4	2259.1	2246.7	2252.9
17.5°	2249.8	2259.1	2252.9	2249.8	2240.6	2240.6	2228.2	2222.0	2203.5	2191.2	2194.3
20°	2200.4	2203.5	2200.4	2194.3	2185.0	2181.9	2169.6	2157.2	2141.8	2126.4	2123.3
22.5°	2141.8	2144.9	2135.6	2129.5	2120.2	2117.1	2101.7	2092.4	2067.7	2049.2	2046.1
25°	2064.7	2067.7	2067.7	2052.3	2046.1	2040.0	2024.5	2009.1	1987.5	1962.8	1953.5
27.5°	1972.1	1981.3	1975.2	1959.7	1947.4	1944.3	1928.9	1916.5	1888.7	1867.1	1854.8
30°	1873.3	1870.2	1867.1	1857.9	1839.4	1836.3	1820.8	1805.4	1783.8	1756.0	1740.6
32.5°	1746.8	1746.8	1743.7	1734.4	1715.9	1709.7	1697.4	1678.9	1654.2	1632.6	1617.2
35°	1607.9	1611.0	1607.9	1589.4	1577.0	1570.9	1564.7	1543.1	1521.5	1496.8	1484.5
37.5°	1462.8	1453.6	1456.7	1441.2	1425.8	1432.0	1413.5	1404.2	1379.5	1361.0	1348.7
40°	1305.5	1311.6	1299.3	1293.1	1283.8	1274.6	1274.6	1259.2	1246.8	1225.2	1219.0
42.5°	1151.1	1160.4	1157.3	1151.1	1138.8	1141.9	1126.5	1120.3	1104.9	1095.6	1086.3
45°	1027.7	1027.7	1027.7	1021.5	1018.4	1012.3	1003.0	993.7	984.5	972.1	966.0
47.5°	907.3	907.3	910.4	904.2	898.1	895.0	888.8	888.8	873.4	861.0	854.9
50°	808.6	808.6	808.6	802.4	796.2	796.2	790.1	783.9	774.6	765.4	759.2
52.5°	719.1	719.1	719.1	712.9	709.8	706.7	703.6	700.6	688.2	682.0	675.9
55°	645.0	641.9	641.9	638.8	632.7	632.7	629.6	623.4	614.1	604.9	601.8
57.5°	570.9	574.0	570.9	570.9	564.8	564.8	558.6	555.5	546.3	540.1	533.9
60°	512.3	512.3	512.3	509.2	503.0	506.1	500.0	496.9	487.6	478.4	472.2
62.5°	453.7	456.8	456.8	453.7	447.5	447.5	444.4	441.3	432.1	422.8	413.5
65°	404.3	404.3	404.3	401.2	398.1	398.1	395.0	391.9	382.7	370.3	361.1
67.5°	358.0	354.9	354.9	354.9	351.8	348.7	345.7	342.6	333.3	324.0	311.7
70°	311.7	311.7	311.7	308.6	302.4	305.5	302.4	299.4	290.1	280.8	271.6
72.5°	268.5	268.5	265.4	262.3	262.3	259.2	259.2	256.2	246.9	234.5	225.3
75°	222.2	222.2	222.2	222.2	216.0	219.1	212.9	209.9	203.7	194.4	185.2
77.5°	182.1	182.1	182.1	179.0	175.9	175.9	172.8	169.7	160.5	154.3	142.0
80°	142.0	142.0	142.0	142.0	138.9	135.8	132.7	129.6	123.4	114.2	104.9
82.5°	104.9	104.9	101.8	101.8	101.8	98.8	95.7	92.6	86.4	80.2	74.1
85°	58.6	61.7	61.7	55.6	58.6	55.6	55.6	49.4	49.4	43.2	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



TEST NUMBER: P252410

CATALOG NUMBER: LD6B50D010TE EU6B30509040 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4
2.5°	2376.4	2373.3	2385.6	2385.6	2367.1	2376.4	2379.4	2373.3	2373.3	2376.4	2367.1
5°	2370.2	2364.0	2376.4	2379.4	2360.9	2370.2	2373.3	2367.1	2370.2	2373.3	2360.9
7.5°	2348.6	2348.6	2357.8	2360.9	2342.4	2351.7	2351.7	2345.5	2348.6	2348.6	2339.3
10°	2327.0	2317.7	2327.0	2327.0	2311.5	2314.6	2320.8	2317.7	2330.1	2345.5	2345.5
12.5°	2286.9	2277.6	2293.0	2293.0	2283.8	2296.1	2311.5	2320.8	2333.1	2339.3	2320.8
15°	2237.5	2240.6	2268.3	2289.9	2280.7	2299.2	2314.6	2308.5	2293.0	2274.5	2246.7
17.5°	2172.7	2163.4	2188.1	2200.4	2188.1	2194.3	2206.6	2194.3	2169.6	2154.2	2117.1
20°	2098.6	2073.9	2073.9	2067.7	2046.1	2046.1	2043.0	2021.4	2012.2	2002.9	1987.5
22.5°	2015.3	1987.5	1978.2	1959.7	1941.2	1938.1	1928.9	1907.3	1894.9	1888.7	1870.2
25°	1919.6	1894.9	1879.5	1861.0	1833.2	1827.0	1817.8	1796.2	1790.0	1780.7	1765.3
27.5°	1820.8	1790.0	1768.4	1749.9	1725.2	1722.1	1703.6	1688.1	1675.8	1669.6	1657.3
30°	1706.7	1672.7	1657.3	1632.6	1614.1	1607.9	1592.5	1570.9	1561.6	1555.4	1546.2
32.5°	1580.1	1552.3	1536.9	1515.3	1490.6	1493.7	1475.2	1456.7	1450.5	1444.3	1435.1
35°	1456.7	1428.9	1410.4	1391.9	1376.4	1370.3	1357.9	1342.5	1333.2	1330.1	1324.0
37.5°	1320.9	1299.3	1283.8	1265.3	1253.0	1246.8	1240.6	1225.2	1219.0	1219.0	1206.7
40°	1188.2	1169.7	1157.3	1148.1	1132.6	1129.5	1123.4	1114.1	1111.0	1107.9	1098.7
42.5°	1067.8	1043.1	1033.9	1027.7	1018.4	1012.3	1009.2	1003.0	999.9	996.8	987.6
45°	953.6	932.0	922.8	916.6	907.3	904.2	901.2	891.9	885.7	879.6	876.5
47.5°	842.5	827.1	824.0	808.6	802.4	796.2	790.1	783.9	780.8	777.7	765.4
50°	746.9	737.6	722.2	712.9	706.7	703.6	691.3	682.0	679.0	675.9	666.6
52.5°	660.4	648.1	638.8	623.4	620.3	614.1	608.0	595.6	589.5	586.4	577.1
55°	583.3	574.0	561.7	549.3	540.1	537.0	527.7	515.4	509.2	503.0	496.9
57.5°	518.5	503.0	490.7	478.4	472.2	462.9	453.7	447.5	438.2	429.0	419.7
60°	456.8	444.4	429.0	416.6	410.5	404.3	391.9	382.7	373.4	364.2	354.9
62.5°	398.1	385.8	370.3	358.0	351.8	345.7	333.3	324.0	314.8	305.5	293.2
65°	345.7	333.3	321.0	308.6	302.4	296.3	283.9	271.6	262.3	253.1	240.7
67.5°	302.4	287.0	274.7	262.3	256.2	250.0	237.6	228.4	216.0	206.8	194.4
70°	256.2	243.8	234.5	222.2	216.0	209.9	197.5	185.2	175.9	166.7	154.3
72.5°	216.0	200.6	191.3	179.0	172.8	169.7	157.4	148.1	138.9	126.5	117.3
75°	172.8	160.5	148.1	138.9	132.7	129.6	117.3	108.0	98.8	89.5	80.2
77.5°	132.7	123.4	111.1	101.8	95.7	92.6	80.2	71.0	61.7	55.6	46.3
80°	98.8	86.4	80.2	71.0	67.9	61.7	55.6	46.3	40.1	30.9	24.7
82.5°	67.9	58.6	52.5	46.3	43.2	40.1	33.9	27.8	21.6	18.5	15.4
85°	37.0	30.9	27.8	24.7	21.6	21.6	18.5	15.4	12.3	9.3	6.2
87.5°	12.3	9.3	9.3	9.3	9.3	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



TEST NUMBER: P252410

CATALOG NUMBER: LD6B50D010TE EU6B30509040 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4
2.5°	2373.3	2373.3	2373.3	2370.2	2370.2	2370.2	2367.1	2379.4	2367.1	2364.0	2373.3
5°	2370.2	2364.0	2364.0	2364.0	2364.0	2360.9	2357.8	2364.0	2354.8	2351.7	2351.7
7.5°	2351.7	2348.6	2348.6	2345.5	2342.4	2339.3	2336.2	2339.3	2330.1	2327.0	2327.0
10°	2354.8	2348.6	2348.6	2339.3	2333.1	2323.9	2314.6	2317.7	2305.4	2296.1	2296.1
12.5°	2317.7	2302.3	2293.0	2283.8	2277.6	2274.5	2262.2	2268.3	2256.0	2252.9	2252.9
15°	2234.4	2215.9	2200.4	2194.3	2194.3	2188.1	2178.8	2191.2	2185.0	2188.1	2203.5
17.5°	2104.8	2095.5	2086.3	2083.2	2086.3	2092.4	2098.6	2117.1	2117.1	2126.4	2141.8
20°	1990.6	1984.4	1990.6	1990.6	1993.7	2006.0	2018.4	2033.8	2040.0	2049.2	2070.8
22.5°	1879.5	1879.5	1885.7	1894.9	1891.8	1913.4	1916.5	1944.3	1944.3	1962.8	1981.3
25°	1771.5	1771.5	1777.6	1780.7	1786.9	1799.2	1811.6	1833.2	1839.4	1857.9	1873.3
27.5°	1666.5	1663.4	1663.4	1666.5	1672.7	1688.1	1694.3	1719.0	1728.3	1740.6	1756.0
30°	1549.3	1546.2	1552.3	1558.5	1555.4	1570.9	1580.1	1598.6	1604.8	1617.2	1629.5
32.5°	1438.2	1438.2	1438.2	1444.3	1444.3	1456.7	1456.7	1478.3	1478.3	1487.5	1499.9
35°	1324.0	1324.0	1327.1	1330.1	1333.2	1336.3	1339.4	1351.7	1354.8	1357.9	1364.1
37.5°	1216.0	1212.9	1216.0	1216.0	1209.8	1222.1	1222.1	1234.5	1225.2	1234.5	1237.6
40°	1104.9	1104.9	1101.8	1101.8	1101.8	1107.9	1101.8	1111.0	1104.9	1111.0	1107.9
42.5°	990.7	990.7	984.5	990.7	987.6	987.6	987.6	993.7	984.5	990.7	993.7
45°	876.5	873.4	873.4	870.3	870.3	870.3	873.4	873.4	870.3	876.5	876.5
47.5°	765.4	762.3	762.3	762.3	762.3	765.4	756.1	762.3	756.1	756.1	756.1
50°	669.7	666.6	663.5	660.4	657.4	657.4	654.3	654.3	648.1	645.0	641.9
52.5°	577.1	574.0	567.9	567.9	564.8	561.7	552.4	552.4	543.2	540.1	540.1
55°	493.8	484.5	481.4	475.3	475.3	469.1	462.9	456.8	447.5	441.3	441.3
57.5°	416.6	407.4	401.2	398.1	395.0	388.9	376.5	373.4	361.1	358.0	354.9
60°	348.7	339.5	330.2	324.0	321.0	311.7	299.4	293.2	287.0	277.8	268.5
62.5°	283.9	274.7	262.3	259.2	253.1	243.8	234.5	225.3	219.1	209.9	203.7
65°	228.4	219.1	209.9	203.7	197.5	188.3	179.0	169.7	163.6	160.5	157.4
67.5°	185.2	172.8	163.6	160.5	154.3	148.1	138.9	135.8	129.6	129.6	129.6
70°	145.1	135.8	126.5	123.4	120.4	114.2	108.0	108.0	108.0	108.0	108.0
72.5°	108.0	101.8	92.6	89.5	86.4	83.3	77.2	80.2	77.2	77.2	77.2
75°	67.9	61.7	55.6	52.5	49.4	46.3	43.2	40.1	37.0	33.9	33.9
77.5°	37.0	30.9	27.8	24.7	24.7	21.6	18.5	18.5	15.4	15.4	15.4
80°	21.6	18.5	15.4	12.3	12.3	9.3	9.3	9.3	9.3	6.2	6.2
82.5°	12.3	9.3	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: P252410

CATALOG NUMBER: LD6B50D010TE EU6B30509040 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4	2376.4
2.5°	2357.8	2367.1	2357.8	2367.1	2367.1	2367.1	2367.1	2357.8
5°	2342.4	2348.6	2339.3	2345.5	2348.6	2345.5	2345.5	2336.2
7.5°	2314.6	2320.8	2311.5	2320.8	2323.9	2320.8	2317.7	2311.5
10°	2286.9	2289.9	2280.7	2286.9	2293.0	2293.0	2289.9	2280.7
12.5°	2243.6	2252.9	2243.6	2249.8	2256.0	2259.1	2259.1	2249.8
15°	2194.3	2209.7	2203.5	2212.8	2222.0	2225.1	2225.1	2222.0
17.5°	2144.9	2160.3	2151.1	2166.5	2175.8	2181.9	2185.0	2178.8
20°	2073.9	2092.4	2086.3	2098.6	2110.9	2120.2	2120.2	2110.9
22.5°	1981.3	2006.0	2002.9	2012.2	2027.6	2030.7	2036.9	2030.7
25°	1879.5	1898.0	1894.9	1904.2	1922.7	1922.7	1925.8	1925.8
27.5°	1762.2	1780.7	1777.6	1783.8	1796.2	1799.2	1802.3	1796.2
30°	1635.7	1644.9	1644.9	1654.2	1663.4	1666.5	1666.5	1657.3
32.5°	1496.8	1509.1	1515.3	1512.2	1521.5	1527.7	1524.6	1524.6
35°	1370.3	1373.3	1376.4	1379.5	1382.6	1388.8	1382.6	1379.5
37.5°	1234.5	1243.7	1237.6	1243.7	1249.9	1246.8	1243.7	1243.7
40°	1111.0	1114.1	1107.9	1114.1	1117.2	1117.2	1117.2	1111.0
42.5°	987.6	993.7	987.6	993.7	993.7	993.7	993.7	990.7
45°	864.1	870.3	870.3	873.4	873.4	870.3	870.3	870.3
47.5°	749.9	756.1	749.9	756.1	759.2	753.0	753.0	753.0
50°	641.9	638.8	638.8	641.9	641.9	641.9	641.9	638.8
52.5°	530.8	533.9	533.9	533.9	537.0	533.9	537.0	537.0
55°	435.2	435.2	435.2	438.2	435.2	435.2	438.2	441.3
57.5°	348.7	345.7	342.6	342.6	345.7	342.6	342.6	342.6
60°	268.5	265.4	262.3	262.3	262.3	262.3	262.3	259.2
62.5°	200.6	200.6	200.6	203.7	203.7	203.7	203.7	206.8
65°	160.5	160.5	160.5	160.5	160.5	160.5	160.5	163.6
67.5°	129.6	129.6	129.6	132.7	132.7	132.7	132.7	132.7
70°	108.0	108.0	111.1	108.0	111.1	111.1	111.1	111.1
72.5°	74.1	74.1	74.1	74.1	74.1	71.0	74.1	71.0
75°	30.9	30.9	30.9	30.9	30.9	30.9	30.9	27.8
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



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)