

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: P252281

Luminaire Tested: **LD6B30D010 EU6B30509050 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252281
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B30D010 EU6B30509050 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2380.0 lumens
Efficiency: N/A
Efficacy: 85.0 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

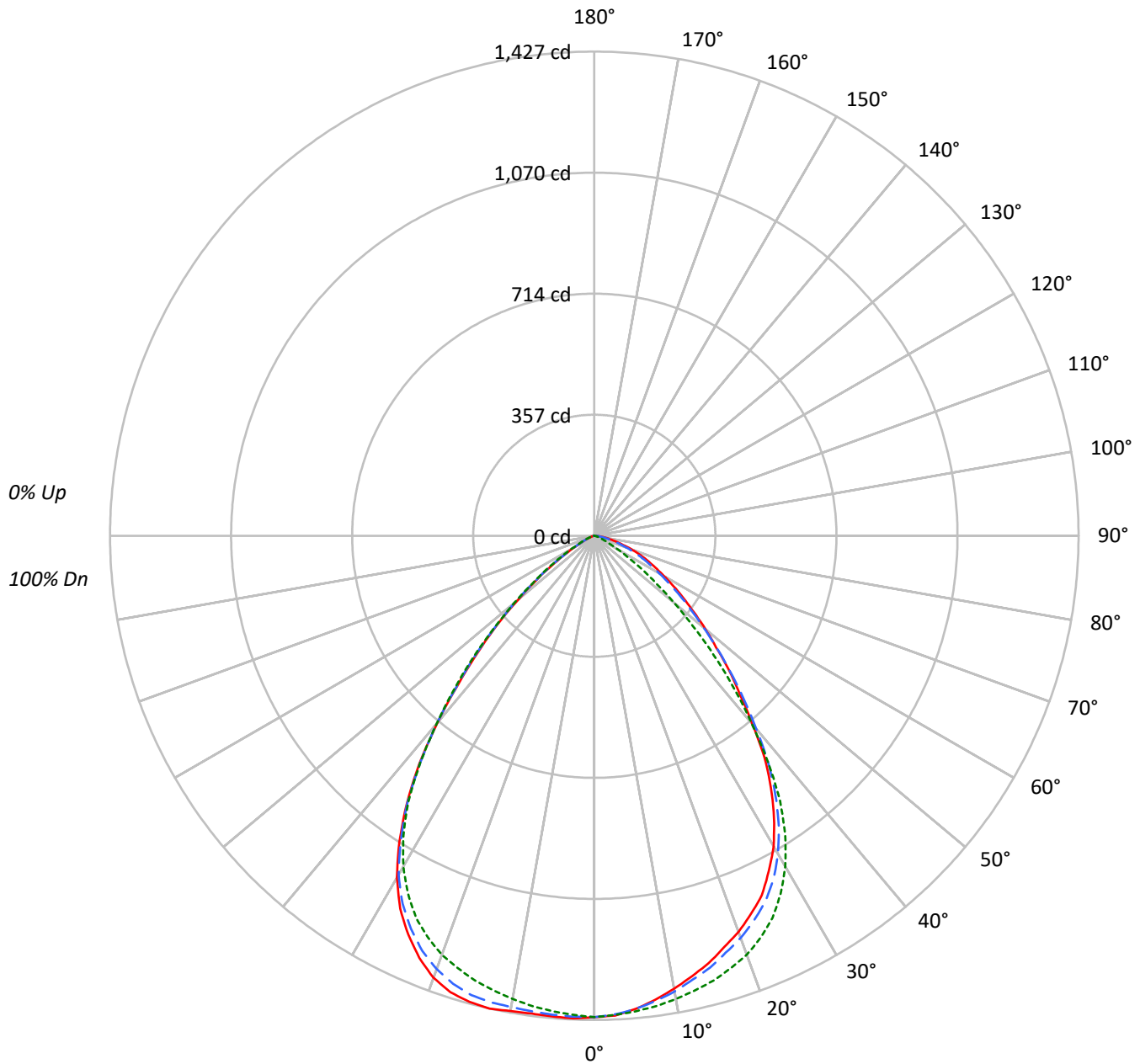
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252281

CATALOG NUMBER: LD6B30D010 EU6B30509050 6LBSW1H

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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90						
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80						
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72						
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64						
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58						
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52						
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47						
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43						
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40						
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37						

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	92550	92550	92550
5°	91673	92118	93133
10°	89778	91825	94210
15°	88061	91648	96052
20°	86243	91235	96234
25°	84115	89420	93365
30°	79635	84795	87635
35°	72325	76004	76689
40°	61720	61430	61140
45°	51852	46003	44582
50°	43298	31129	29566
55°	36443	19098	17346
60°	30846	10060	8716
65°	26706	5295	4230
70°	22222	3262	2289
75°	16410	2168	1286
80°	12887	1277	639
85°	10255	1273	0



TEST NUMBER: P252281

CATALOG NUMBER: LD6B30D010 EU6B30509050 6LBSW1H

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.7	5.6
10°-20°	382.8	16.1
20°-30°	565.3	23.8
30°-40°	582.6	24.5
40°-50°	402.4	16.9
50°-60°	198.3	8.3
60°-70°	80.4	3.4
70°-80°	28.6	1.2
80°-90°	5.9	0.2
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°	1081.8	45.5
0°-40°	1664.4	69.9
0°-60°	2265.1	95.2
0°-90°	2380.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2380.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1419	1419	1419	1419	1419	
5°	1400	1400	1407	1417	1422	132
15°	1304	1318	1357	1402	1422	367
25°	1168	1191	1242	1278	1297	534
35°	908	930	954	960	963	563
45°	562	565	499	492	483	434
55°	320	308	168	158	152	290
65°	173	156	34	27	27	172
75°	65	55	9	5	5	73
85°	14	10	2	0	0	17
90°	0	0	0	0	0	



TEST NUMBER: P252281

CATALOG NUMBER: LD6B30D010 EU6B30509050 6LBSW1H

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6
2.5°	1415.2	1410.1	1413.5	1406.6	1415.2	1406.6	1408.3	1410.1	1408.3	1410.1	1411.8
5°	1399.8	1394.6	1399.8	1391.2	1399.8	1394.6	1394.6	1396.4	1396.4	1398.1	1399.8
7.5°	1379.2	1374.1	1379.2	1370.7	1380.9	1375.8	1375.8	1379.2	1377.5	1379.2	1382.6
10°	1355.2	1348.4	1353.5	1348.4	1358.7	1351.8	1355.2	1355.2	1355.2	1360.4	1363.8
12.5°	1329.5	1322.7	1329.5	1321.0	1331.2	1326.1	1327.8	1333.0	1334.7	1338.1	1339.8
15°	1303.8	1295.3	1298.7	1293.6	1303.8	1298.7	1300.4	1307.3	1307.3	1312.4	1317.5
17.5°	1271.3	1264.4	1271.3	1264.4	1273.0	1269.6	1273.0	1278.1	1278.1	1283.3	1288.4
20°	1242.2	1235.3	1240.4	1235.3	1245.6	1240.4	1242.2	1249.0	1250.7	1255.9	1261.0
22.5°	1206.2	1201.0	1204.5	1199.3	1209.6	1206.2	1207.9	1214.7	1216.5	1219.9	1228.4
25°	1168.5	1158.2	1163.3	1159.9	1170.2	1165.1	1168.5	1175.3	1178.8	1183.9	1190.8
27.5°	1113.7	1108.5	1111.9	1111.9	1120.5	1115.4	1117.1	1123.9	1129.1	1134.2	1142.8
30°	1057.1	1048.5	1052.0	1053.7	1060.5	1057.1	1060.5	1067.4	1069.1	1076.0	1082.8
32.5°	985.2	981.7	988.6	985.2	988.6	988.6	990.3	995.4	998.9	1002.3	1010.9
35°	908.1	901.2	908.1	904.6	913.2	908.1	913.2	918.3	918.3	925.2	930.3
37.5°	824.1	815.5	819.0	819.0	822.4	820.7	820.7	829.2	831.0	836.1	841.2
40°	724.7	721.3	728.2	726.4	728.2	728.2	729.9	735.0	738.4	740.2	741.9
42.5°	635.6	637.4	639.1	639.1	639.1	639.1	639.1	645.9	644.2	649.3	651.1
45°	562.0	555.1	558.5	556.8	562.0	556.8	562.0	567.1	563.7	568.8	565.4
47.5°	486.6	486.6	486.6	484.9	488.3	486.6	490.0	491.7	491.7	491.7	490.0
50°	426.6	421.5	423.2	423.2	424.9	423.2	426.6	428.3	428.3	424.9	418.0
52.5°	368.4	366.6	366.6	370.1	370.1	368.4	368.4	368.4	368.4	363.2	359.8
55°	320.4	317.0	318.7	318.7	318.7	318.7	320.4	318.7	318.7	313.5	308.4
57.5°	277.6	274.1	274.1	274.1	275.8	274.1	274.1	274.1	272.4	267.3	260.4
60°	236.4	234.7	236.4	236.4	238.2	236.4	236.4	236.4	233.0	227.9	221.0
62.5°	202.2	202.2	202.2	203.9	203.9	202.2	202.2	200.5	198.7	191.9	185.0
65°	173.0	171.3	173.0	173.0	174.8	174.8	173.0	171.3	169.6	162.8	155.9
67.5°	143.9	142.2	143.9	143.9	145.6	143.9	143.9	143.9	138.8	135.4	128.5
70°	116.5	114.8	114.8	114.8	116.5	113.1	114.8	114.8	111.4	106.2	99.4
72.5°	89.1	89.1	89.1	89.1	89.1	89.1	87.4	87.4	84.0	78.8	75.4
75°	65.1	65.1	66.8	66.8	65.1	65.1	65.1	63.4	61.7	58.3	54.8
77.5°	48.0	48.0	48.0	48.0	46.3	46.3	46.3	44.5	42.8	41.1	37.7
80°	34.3	34.3	34.3	32.6	34.3	32.6	32.6	32.6	29.1	27.4	25.7
82.5°	24.0	22.3	22.3	22.3	22.3	22.3	22.3	20.6	20.6	18.8	17.1
85°	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	12.0	10.3	10.3
87.5°	6.9	8.6	8.6	8.6	8.6	8.6	8.6	6.9	6.9	6.9	5.1
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: P252281

CATALOG NUMBER: LD6B30D010 EU6B30509050 6LBSW1H

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6
2.5°	1411.8	1411.8	1415.2	1410.1	1418.6	1413.5	1411.8	1420.3	1415.2	1413.5	1416.9
5°	1399.8	1401.5	1403.2	1399.8	1408.3	1403.2	1403.2	1411.8	1408.3	1406.6	1411.8
7.5°	1384.4	1386.1	1389.5	1387.8	1394.6	1391.2	1392.9	1401.5	1398.1	1398.1	1403.2
10°	1365.5	1368.9	1372.4	1372.4	1380.9	1377.5	1377.5	1387.8	1384.4	1386.1	1392.9
12.5°	1343.2	1348.4	1353.5	1355.2	1363.8	1358.7	1360.4	1372.4	1370.7	1372.4	1379.2
15°	1319.3	1326.1	1331.2	1331.2	1341.5	1336.4	1341.5	1353.5	1350.1	1356.9	1365.5
17.5°	1291.8	1298.7	1305.5	1307.3	1317.5	1314.1	1321.0	1333.0	1333.0	1336.4	1346.7
20°	1266.1	1274.7	1278.1	1283.3	1293.6	1291.8	1295.3	1309.0	1309.0	1314.1	1324.4
22.5°	1231.9	1240.4	1247.3	1252.4	1261.0	1261.0	1266.1	1278.1	1278.1	1281.6	1291.8
25°	1194.2	1204.5	1209.6	1214.7	1223.3	1221.6	1226.7	1237.0	1238.7	1242.2	1252.4
27.5°	1146.2	1154.8	1161.6	1165.1	1177.0	1170.2	1175.3	1187.3	1185.6	1189.0	1197.6
30°	1086.2	1094.8	1101.7	1101.7	1111.9	1111.9	1117.1	1122.2	1122.2	1125.6	1132.5
32.5°	1016.0	1026.3	1026.3	1031.4	1038.3	1031.4	1038.3	1045.1	1041.7	1046.8	1052.0
35°	935.5	940.6	942.3	942.3	947.5	945.8	944.0	949.2	945.8	954.3	959.5
37.5°	837.8	844.7	841.2	844.7	843.0	837.8	837.8	846.4	839.5	841.2	846.4
40°	743.6	743.6	741.9	733.3	735.0	729.9	728.2	729.9	723.0	721.3	728.2
42.5°	645.9	644.2	639.1	627.1	628.8	620.2	613.4	613.4	609.9	608.2	609.9
45°	558.5	553.4	544.8	531.1	527.7	520.8	507.1	503.7	498.6	498.6	500.3
47.5°	478.0	471.2	457.5	442.0	433.5	424.9	411.2	406.1	397.5	394.1	397.5
50°	411.2	399.2	382.1	359.8	351.2	341.0	327.2	318.7	310.1	306.7	305.0
52.5°	349.5	332.4	315.3	287.8	281.0	270.7	251.9	243.3	234.7	227.9	227.9
55°	296.4	281.0	257.0	231.3	221.0	210.7	191.9	179.9	171.3	167.9	164.5
57.5°	248.4	231.3	209.0	181.6	171.3	161.1	142.2	130.2	121.6	116.5	113.1
60°	209.0	190.2	167.9	143.9	131.9	121.6	102.8	90.8	82.2	77.1	73.7
62.5°	171.3	155.9	133.6	111.4	101.1	90.8	75.4	63.4	54.8	51.4	46.3
65°	143.9	128.5	107.9	89.1	80.5	70.2	56.5	46.3	39.4	34.3	30.8
67.5°	116.5	104.5	87.4	70.2	61.7	54.8	42.8	34.3	27.4	24.0	22.3
70°	92.5	80.5	66.8	53.1	48.0	41.1	32.6	24.0	20.6	17.1	15.4
72.5°	68.5	60.0	49.7	39.4	34.3	30.8	22.3	18.8	13.7	12.0	10.3
75°	49.7	42.8	36.0	27.4	24.0	22.3	17.1	12.0	10.3	8.6	6.9
77.5°	34.3	30.8	24.0	18.8	17.1	15.4	12.0	8.6	6.9	5.1	5.1
80°	22.3	18.8	15.4	12.0	12.0	10.3	6.9	5.1	5.1	3.4	3.4
82.5°	13.7	12.0	10.3	8.6	6.9	6.9	5.1	3.4	3.4	1.7	1.7
85°	8.6	6.9	5.1	5.1	3.4	3.4	3.4	1.7	1.7	1.7	1.7
87.5°	3.4	3.4	3.4	1.7	1.7	1.7	1.7	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: P252281

CATALOG NUMBER: LD6B30D010 EU6B30509050 6LBSW1H

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6
2.5°	1416.9	1416.9	1420.3	1415.2	1418.6	1418.6	1422.1	1415.2	1418.6	1420.3	1423.8
5°	1410.1	1411.8	1415.2	1413.5	1415.2	1415.2	1418.6	1410.1	1416.9	1416.9	1422.1
7.5°	1403.2	1403.2	1406.6	1404.9	1408.3	1410.1	1413.5	1406.6	1413.5	1413.5	1418.6
10°	1394.6	1394.6	1399.8	1398.1	1403.2	1404.9	1410.1	1403.2	1410.1	1411.8	1416.9
12.5°	1382.6	1384.4	1389.5	1389.5	1394.6	1398.1	1403.2	1399.8	1408.3	1410.1	1416.9
15°	1368.9	1372.4	1379.2	1377.5	1382.6	1387.8	1394.6	1389.5	1401.5	1404.9	1411.8
17.5°	1351.8	1355.2	1360.4	1360.4	1365.5	1368.9	1377.5	1374.1	1384.4	1386.1	1394.6
20°	1326.1	1331.2	1338.1	1336.4	1341.5	1345.0	1351.8	1348.4	1358.7	1362.1	1370.7
22.5°	1295.3	1298.7	1303.8	1303.8	1309.0	1312.4	1319.3	1314.1	1324.4	1326.1	1333.0
25°	1254.1	1257.6	1261.0	1262.7	1267.9	1269.6	1273.0	1269.6	1278.1	1279.8	1288.4
27.5°	1201.0	1202.7	1207.9	1207.9	1211.3	1213.0	1218.2	1211.3	1223.3	1223.3	1228.4
30°	1137.6	1135.9	1142.8	1139.4	1142.8	1142.8	1147.9	1144.5	1153.1	1149.6	1154.8
32.5°	1053.7	1057.1	1057.1	1053.7	1060.5	1058.8	1058.8	1055.4	1060.5	1062.3	1065.7
35°	956.0	961.2	961.2	962.9	964.6	959.5	961.2	950.9	959.5	961.2	962.9
37.5°	849.8	844.7	848.1	843.0	851.5	841.2	841.2	834.4	841.2	841.2	843.0
40°	728.2	726.4	729.9	726.4	724.7	723.0	719.6	714.5	721.3	717.9	723.0
42.5°	613.4	611.7	611.7	608.2	606.5	606.5	603.1	599.7	597.9	597.9	606.5
45°	495.1	498.6	495.1	493.4	496.9	493.4	495.1	488.3	491.7	488.3	491.7
47.5°	395.8	397.5	394.1	390.6	395.8	390.6	390.6	385.5	392.3	392.3	388.9
50°	306.7	305.0	301.5	305.0	303.3	303.3	303.3	298.1	301.5	296.4	299.8
52.5°	226.2	224.4	224.4	222.7	224.4	222.7	222.7	221.0	221.0	219.3	221.0
55°	164.5	162.8	159.3	159.3	159.3	161.1	159.3	157.6	157.6	155.9	157.6
57.5°	111.4	107.9	107.9	107.9	107.9	106.2	106.2	104.5	106.2	104.5	106.2
60°	72.0	72.0	68.5	68.5	68.5	68.5	68.5	66.8	68.5	68.5	68.5
62.5°	44.5	44.5	42.8	41.1	42.8	41.1	41.1	41.1	42.8	41.1	42.8
65°	29.1	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4
67.5°	20.6	18.8	18.8	18.8	18.8	18.8	18.8	17.1	18.8	18.8	18.8
70°	13.7	13.7	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
72.5°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
75°	6.9	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
77.5°	5.1	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
80°	3.4	3.4	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
82.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
85°	1.7	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	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
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: P252281

CATALOG NUMBER: LD6B30D010 EU6B30509050 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6	1418.6
2.5°	1418.6	1420.3	1416.9	1418.6	1415.2	1418.6	1420.3	1423.8
5°	1415.2	1416.9	1413.5	1416.9	1413.5	1416.9	1418.6	1422.1
7.5°	1411.8	1415.2	1411.8	1415.2	1411.8	1415.2	1416.9	1420.3
10°	1411.8	1416.9	1413.5	1418.6	1413.5	1416.9	1420.3	1422.1
12.5°	1411.8	1416.9	1415.2	1418.6	1416.9	1420.3	1423.8	1427.2
15°	1408.3	1413.5	1410.1	1415.2	1413.5	1415.2	1422.1	1422.1
17.5°	1389.5	1394.6	1394.6	1398.1	1398.1	1403.2	1406.6	1410.1
20°	1365.5	1370.7	1368.9	1374.1	1374.1	1379.2	1382.6	1386.1
22.5°	1329.5	1336.4	1334.7	1339.8	1338.1	1341.5	1348.4	1346.7
25°	1283.3	1291.8	1290.1	1293.6	1291.8	1291.8	1295.3	1297.0
27.5°	1226.7	1231.9	1230.2	1233.6	1230.2	1233.6	1237.0	1238.7
30°	1153.1	1156.5	1154.8	1156.5	1154.8	1158.2	1159.9	1163.3
32.5°	1064.0	1069.1	1064.0	1067.4	1065.7	1065.7	1072.5	1069.1
35°	957.7	959.5	961.2	961.2	957.7	959.5	962.9	962.9
37.5°	839.5	848.1	837.8	843.0	841.2	841.2	841.2	846.4
40°	716.2	717.9	714.5	714.5	714.5	712.7	719.6	717.9
42.5°	599.7	601.4	599.7	594.5	596.2	596.2	601.4	594.5
45°	486.6	490.0	488.3	488.3	484.9	484.9	486.6	483.2
47.5°	385.5	388.9	383.8	385.5	382.1	385.5	383.8	387.2
50°	293.0	296.4	294.7	296.4	296.4	293.0	298.1	291.3
52.5°	219.3	221.0	219.3	217.6	215.9	215.9	219.3	217.6
55°	155.9	154.2	154.2	154.2	155.9	155.9	154.2	152.5
57.5°	104.5	104.5	102.8	102.8	104.5	101.1	102.8	101.1
60°	66.8	66.8	66.8	66.8	65.1	66.8	66.8	66.8
62.5°	41.1	41.1	41.1	41.1	41.1	41.1	41.1	41.1
65°	27.4	27.4	27.4	27.4	27.4	27.4	27.4	27.4
67.5°	17.1	18.8	18.8	18.8	17.1	17.1	17.1	17.1
70°	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
72.5°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
75°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
77.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
80°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
82.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.7	1.7	1.7	1.7	1.7	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)