

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: P252573

Luminaire Tested: **LD6B20D010 EU6B10208040 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252573
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B20D010 EU6B10208040 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2104.0 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

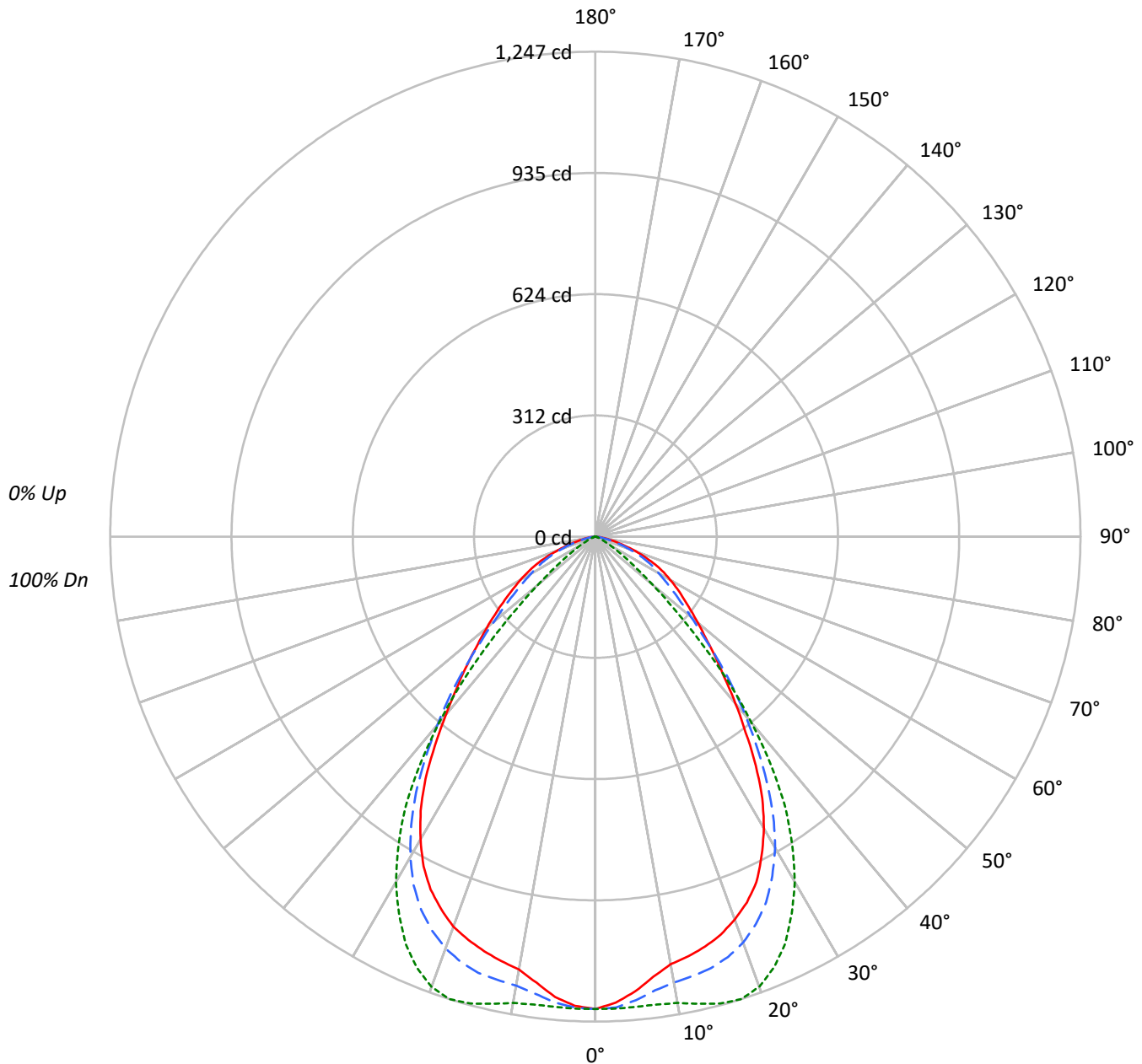
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	111	108	105	102		109	106	103	100		102	99	97		98	96	94		94	93	91
2	104	97	92	87		101	95	91	86		92	88	84		89	86	83		86	83	81
3	96	88	81	76		94	86	80	76		84	79	74		81	77	73		79	75	72
4	90	80	73	67		88	79	72	67		76	70	66		74	69	65		72	68	64
5	84	73	65	60		82	72	65	59		70	64	59		68	63	58		66	62	58
6	78	67	59	54		76	66	59	53		64	58	53		63	57	53		61	56	52
7	73	61	54	49		72	61	53	48		59	53	48		58	52	48		57	51	48
8	69	57	49	44		67	56	49	44		55	48	44		54	48	44		53	47	43
9	64	53	45	40		63	52	45	40		51	45	40		50	44	40		49	44	40
10	61	49	42	37		60	48	42	37		48	41	37		47	41	37		46	41	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	79248	79248	79248
5°	76885	79459	77808
10°	73958	80662	74892
15°	73702	83941	74553
20°	72732	85507	74100
25°	70560	83100	72079
30°	65276	77232	67710
35°	57264	67889	60617
40°	47718	53220	50827
45°	40163	35116	42884
50°	34783	19244	36914
55°	31473	10226	32269
60°	28954	5311	28954
65°	26228	2825	25580
70°	21154	1602	19552
75°	14519	1059	13461
80°	9505	526	8453
85°	6288	1048	5240



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.3	5.4
10°-20°	327.5	15.6
20°-30°	483.9	23.0
30°-40°	488.8	23.2
40°-50°	336.9	16.0
50°-60°	193.5	9.2
60°-70°	112.6	5.4
70°-80°	41.1	2.0
80°-90°	6.3	0.3
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°	924.8	44.0
0°-40°	1413.6	67.2
0°-60°	1944.0	92.4
0°-90°	2104.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2104.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1215	1215	1215	1215	1215	
5°	1174	1196	1213	1202	1188	110
15°	1091	1149	1243	1161	1104	307
25°	980	1038	1154	1059	1001	447
35°	719	768	852	803	761	446
45°	435	441	381	469	465	339
55°	277	243	90	253	284	249
65°	170	143	18	142	166	166
75°	58	46	4	45	53	65
85°	8	4	1	6	7	11
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°	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7
2.5°	1199.3	1200.7	1202.1	1200.7	1202.1	1207.7	1203.5	1206.3	1206.3	1207.7	1211.9
5°	1174.0	1174.0	1176.8	1175.4	1179.6	1185.3	1181.0	1185.3	1186.7	1189.5	1196.5
7.5°	1141.7	1141.7	1143.1	1143.1	1148.7	1154.4	1151.5	1157.2	1162.8	1168.4	1176.8
10°	1116.4	1119.2	1119.2	1120.7	1126.3	1133.3	1131.9	1138.9	1144.5	1153.0	1164.2
12.5°	1105.2	1106.6	1106.6	1109.4	1115.0	1122.1	1120.7	1127.7	1136.1	1145.9	1157.2
15°	1091.2	1094.0	1092.6	1095.4	1101.0	1108.0	1106.6	1113.6	1123.5	1133.3	1148.7
17.5°	1072.9	1074.3	1075.7	1075.7	1081.3	1087.0	1087.0	1094.0	1105.2	1116.4	1133.3
20°	1047.6	1050.4	1050.4	1051.8	1056.1	1064.5	1063.1	1070.1	1081.3	1092.6	1110.8
22.5°	1018.1	1019.5	1019.5	1020.9	1028.0	1032.2	1033.6	1039.2	1049.0	1061.7	1078.5
25°	980.2	981.6	980.2	984.4	987.2	995.7	992.9	999.9	1011.1	1020.9	1037.8
27.5°	925.5	928.3	928.3	929.7	936.7	943.7	943.7	950.7	960.6	967.6	984.4
30°	866.5	870.7	866.5	873.5	876.3	881.9	886.1	890.3	898.8	908.6	924.0
32.5°	799.1	797.7	799.1	801.9	810.3	814.5	817.3	821.5	830.0	838.4	851.0
35°	719.0	721.8	723.2	728.8	728.8	735.9	737.3	740.1	752.7	758.3	768.2
37.5°	634.8	637.6	639.0	641.8	647.4	650.2	654.4	658.6	667.1	676.9	682.5
40°	560.3	560.3	561.7	564.5	568.8	570.2	574.4	580.0	585.6	594.0	599.6
42.5°	490.1	491.5	490.1	492.9	497.1	502.7	501.3	508.4	509.8	515.4	519.6
45°	435.3	435.3	432.5	435.3	435.3	441.0	439.6	442.4	441.0	443.8	441.0
47.5°	383.4	384.8	383.4	384.8	384.8	384.8	386.2	383.4	384.8	380.6	372.1
50°	342.7	344.1	341.3	342.7	341.3	339.8	341.3	337.0	335.6	330.0	321.6
52.5°	307.5	306.1	304.7	304.7	304.7	303.3	301.9	297.7	293.5	287.9	278.1
55°	276.7	275.2	273.8	273.8	271.0	269.6	269.6	265.4	261.2	254.2	242.9
57.5°	248.6	247.2	245.8	245.8	244.4	241.5	241.5	237.3	231.7	223.3	213.5
60°	221.9	221.9	221.9	220.5	220.5	217.7	217.7	213.5	207.8	199.4	188.2
62.5°	198.0	196.6	196.6	196.6	196.6	195.2	193.8	191.0	185.4	176.9	167.1
65°	169.9	169.9	169.9	169.9	168.5	168.5	168.5	164.3	161.5	153.1	143.2
67.5°	139.0	139.0	139.0	139.0	137.6	139.0	139.0	136.2	133.4	125.0	116.6
70°	110.9	109.5	108.1	109.5	108.1	108.1	109.5	106.7	105.3	98.3	89.9
72.5°	81.5	82.9	81.5	81.5	81.5	80.0	81.5	80.0	77.2	71.6	66.0
75°	57.6	59.0	59.0	57.6	57.6	57.6	56.2	56.2	53.4	49.2	46.3
77.5°	39.3	39.3	39.3	39.3	37.9	37.9	37.9	36.5	35.1	32.3	29.5
80°	25.3	25.3	25.3	25.3	23.9	23.9	23.9	22.5	22.5	19.7	16.9
82.5°	15.4	15.4	15.4	15.4	15.4	15.4	14.0	14.0	12.6	11.2	9.8
85°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	7.0	7.0	5.6	4.2
87.5°	2.8	2.8	4.2	4.2	4.2	4.2	4.2	4.2	2.8	2.8	2.8
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°	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7
2.5°	1209.1	1210.5	1210.5	1210.5	1214.7	1216.1	1211.9	1207.7	1216.1	1214.7	1217.6
5°	1195.1	1199.3	1202.1	1203.5	1207.7	1210.5	1206.3	1204.9	1211.9	1213.3	1214.7
7.5°	1178.2	1185.3	1192.3	1195.1	1200.7	1203.5	1202.1	1202.1	1210.5	1213.3	1213.3
10°	1167.0	1176.8	1185.3	1192.3	1199.3	1203.5	1203.5	1204.9	1214.7	1217.6	1220.4
12.5°	1164.2	1176.8	1188.1	1197.9	1203.5	1210.5	1211.9	1216.1	1226.0	1230.2	1230.2
15°	1157.2	1174.0	1188.1	1200.7	1209.1	1217.6	1220.4	1228.8	1240.0	1242.8	1245.6
17.5°	1144.5	1161.4	1178.2	1193.7	1204.9	1211.9	1220.4	1228.8	1242.8	1247.0	1248.4
20°	1122.1	1141.7	1158.6	1174.0	1185.3	1195.1	1203.5	1213.3	1226.0	1231.6	1233.0
22.5°	1088.4	1108.0	1124.9	1141.7	1153.0	1161.4	1169.8	1181.0	1193.7	1199.3	1199.3
25°	1047.6	1065.9	1084.1	1096.8	1108.0	1117.8	1122.1	1134.7	1147.3	1154.4	1154.4
27.5°	995.7	1012.5	1029.4	1043.4	1050.4	1058.9	1065.9	1077.1	1087.0	1092.6	1098.2
30°	929.7	946.5	962.0	976.0	984.4	992.9	999.9	1008.3	1018.1	1025.2	1026.6
32.5°	858.0	872.1	887.5	901.6	910.0	912.8	919.8	928.3	936.7	942.3	943.7
35°	779.4	789.2	799.1	811.7	820.1	820.1	827.1	832.8	839.8	852.4	849.6
37.5°	686.7	700.8	707.8	712.0	717.6	723.2	724.6	731.7	740.1	742.9	747.1
40°	599.6	603.9	608.1	608.1	613.7	613.7	613.7	615.1	623.5	624.9	630.5
42.5°	512.6	512.6	508.4	504.2	505.6	504.2	497.1	497.1	501.3	507.0	507.0
45°	431.1	421.3	408.7	398.8	391.8	389.0	380.6	380.6	379.2	380.6	386.2
47.5°	362.3	345.5	324.4	304.7	297.7	292.1	279.5	273.8	271.0	272.4	275.2
50°	304.7	286.5	262.6	238.7	226.1	219.1	203.6	193.8	192.4	189.6	195.2
52.5°	262.6	240.1	214.9	186.8	174.1	162.9	146.1	137.6	132.0	132.0	133.4
55°	226.1	202.2	174.1	146.1	133.4	125.0	108.1	96.9	91.3	89.9	94.1
57.5°	195.2	172.7	144.6	116.6	103.9	94.1	77.2	67.4	63.2	60.4	61.8
60°	171.3	148.9	120.8	94.1	82.9	71.6	57.6	46.3	40.7	40.7	42.1
62.5°	148.9	127.8	102.5	77.2	67.4	57.6	42.1	32.3	28.1	26.7	28.1
65°	126.4	106.7	85.7	64.6	54.8	46.3	33.7	25.3	19.7	18.3	19.7
67.5°	102.5	87.1	68.8	52.0	43.5	36.5	25.3	18.3	14.0	12.6	14.0
70°	80.0	66.0	52.0	37.9	32.3	26.7	18.3	14.0	9.8	8.4	9.8
72.5°	57.6	47.7	36.5	26.7	22.5	18.3	12.6	9.8	7.0	5.6	7.0
75°	39.3	32.3	23.9	16.9	14.0	12.6	8.4	5.6	4.2	4.2	4.2
77.5°	25.3	19.7	15.4	11.2	8.4	7.0	4.2	2.8	2.8	2.8	2.8
80°	14.0	11.2	8.4	5.6	4.2	4.2	2.8	2.8	1.4	1.4	1.4
82.5°	8.4	5.6	4.2	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4
85°	4.2	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
87.5°	1.4	1.4	1.4	1.4	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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7
2.5°	1211.9	1213.3	1209.1	1214.7	1210.5	1216.1	1216.1	1210.5	1211.9	1209.1	1214.7
5°	1209.1	1209.1	1206.3	1210.5	1204.9	1210.5	1209.1	1199.3	1202.1	1196.5	1202.1
7.5°	1209.1	1206.3	1202.1	1206.3	1199.3	1203.5	1197.9	1188.1	1185.3	1178.2	1178.2
10°	1213.3	1209.1	1203.5	1204.9	1197.9	1199.3	1190.9	1176.8	1172.6	1164.2	1161.4
12.5°	1223.2	1219.0	1210.5	1213.3	1203.5	1203.5	1192.3	1175.4	1167.0	1155.8	1153.0
15°	1237.2	1230.2	1220.4	1221.8	1211.9	1206.3	1192.3	1172.6	1161.4	1145.9	1141.7
17.5°	1240.0	1233.0	1220.4	1220.4	1207.7	1200.7	1183.8	1161.4	1147.3	1131.9	1123.5
20°	1224.6	1217.6	1203.5	1202.1	1190.9	1181.0	1162.8	1140.3	1126.3	1109.4	1102.4
22.5°	1192.3	1183.8	1171.2	1169.8	1158.6	1153.0	1133.3	1110.8	1096.8	1079.9	1074.3
25°	1144.5	1140.3	1127.7	1126.3	1116.4	1109.4	1092.6	1071.5	1058.9	1042.0	1036.4
27.5°	1088.4	1084.1	1071.5	1071.5	1060.3	1056.1	1040.6	1020.9	1011.1	995.7	988.6
30°	1020.9	1015.3	1008.3	1006.9	997.1	992.9	978.8	960.6	950.7	938.1	935.3
32.5°	940.9	936.7	932.5	931.1	921.2	917.0	907.2	888.9	880.5	869.3	865.1
35°	848.2	845.4	841.2	839.8	835.6	831.4	821.5	807.5	803.3	794.8	790.6
37.5°	741.5	744.3	741.5	741.5	737.3	738.7	730.3	721.8	717.6	712.0	709.2
40°	626.3	631.9	636.2	636.2	634.8	640.4	639.0	631.9	630.5	627.7	626.3
42.5°	509.8	512.6	521.0	526.6	525.2	539.3	540.7	546.3	550.5	547.7	549.1
45°	387.6	396.0	407.3	412.9	419.9	438.2	448.0	459.2	469.0	474.7	473.3
47.5°	279.5	289.3	301.9	310.4	323.0	345.5	370.7	384.8	398.8	405.9	412.9
50°	202.2	212.1	227.5	240.1	248.6	279.5	306.1	324.4	339.8	349.7	356.7
52.5°	141.8	153.1	169.9	181.2	193.8	223.3	254.2	275.2	292.1	304.7	311.8
55°	98.3	110.9	126.4	137.6	151.7	182.6	212.1	234.5	252.8	264.0	272.4
57.5°	68.8	80.0	95.5	105.3	119.4	148.9	178.3	200.8	219.1	230.3	240.1
60°	46.3	57.6	73.0	82.9	94.1	123.6	150.3	174.1	191.0	202.2	212.1
62.5°	32.3	42.1	57.6	67.4	77.2	102.5	127.8	148.9	165.7	178.3	186.8
65°	25.3	33.7	46.3	54.8	64.6	85.7	106.7	125.0	141.8	154.5	160.1
67.5°	18.3	26.7	36.5	43.5	50.6	68.8	87.1	101.1	116.6	126.4	133.4
70°	12.6	18.3	26.7	32.3	37.9	52.0	66.0	78.6	89.9	96.9	102.5
72.5°	9.8	12.6	18.3	22.5	26.7	36.5	47.7	57.6	66.0	71.6	77.2
75°	5.6	8.4	12.6	15.4	18.3	25.3	32.3	39.3	44.9	49.2	52.0
77.5°	2.8	4.2	7.0	8.4	11.2	15.4	21.1	25.3	29.5	32.3	35.1
80°	2.8	2.8	4.2	4.2	5.6	8.4	11.2	14.0	16.9	19.7	21.1
82.5°	1.4	1.4	2.8	2.8	2.8	4.2	5.6	8.4	9.8	11.2	12.6
85°	1.4	1.4	1.4	1.4	1.4	2.8	2.8	4.2	5.6	7.0	7.0
87.5°	0.0	0.0	1.4	1.4	1.4	1.4	1.4	2.8	2.8	2.8	4.2
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: P252573

CATALOG NUMBER: LD6B20D010 EU6B10208040 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7	1214.7
2.5°	1210.5	1213.3	1211.9	1214.7	1210.5	1209.1	1211.9	1207.7
5°	1195.1	1196.5	1195.1	1195.1	1192.3	1189.5	1192.3	1188.1
7.5°	1171.2	1171.2	1167.0	1167.0	1161.4	1158.6	1158.6	1157.2
10°	1151.5	1147.3	1143.1	1144.5	1136.1	1133.3	1131.9	1130.5
12.5°	1141.7	1138.9	1131.9	1131.9	1123.5	1120.7	1119.2	1117.8
15°	1130.5	1124.9	1119.2	1117.8	1110.8	1108.0	1106.6	1103.8
17.5°	1110.8	1106.6	1099.6	1099.6	1092.6	1091.2	1088.4	1087.0
20°	1089.8	1084.1	1078.5	1078.5	1070.1	1070.1	1065.9	1067.3
22.5°	1060.3	1056.1	1050.4	1050.4	1043.4	1042.0	1037.8	1036.4
25°	1025.2	1019.5	1015.3	1013.9	1008.3	1005.5	1004.1	1001.3
27.5°	978.8	974.6	970.4	967.6	960.6	959.2	954.9	956.3
30°	921.2	918.4	917.0	914.2	905.8	903.0	903.0	898.8
32.5°	858.0	853.8	851.0	846.8	839.8	838.4	834.2	835.6
35°	780.8	775.2	771.0	772.4	764.0	762.6	759.7	761.1
37.5°	700.8	695.1	689.5	688.1	681.1	681.1	676.9	676.9
40°	617.9	612.3	609.5	609.5	601.1	602.5	598.2	596.8
42.5°	543.5	537.9	536.5	535.0	530.8	529.4	525.2	526.6
45°	473.3	471.9	471.9	469.0	464.8	463.4	464.8	464.8
47.5°	411.5	412.9	411.5	411.5	408.7	411.5	408.7	410.1
50°	359.5	362.3	362.3	362.3	360.9	362.3	362.3	363.7
52.5°	316.0	320.2	318.8	320.2	318.8	321.6	320.2	321.6
55°	278.1	280.9	282.3	283.7	283.7	283.7	283.7	283.7
57.5°	242.9	247.2	248.6	250.0	250.0	252.8	250.0	250.0
60°	214.9	219.1	220.5	221.9	221.9	223.3	220.5	221.9
62.5°	189.6	193.8	193.8	195.2	195.2	195.2	192.4	193.8
65°	164.3	165.7	167.1	167.1	165.7	165.7	164.3	165.7
67.5°	136.2	137.6	136.2	136.2	134.8	134.8	132.0	133.4
70°	105.3	105.3	106.7	105.3	103.9	105.3	103.9	102.5
72.5°	78.6	78.6	78.6	77.2	77.2	75.8	77.2	77.2
75°	53.4	53.4	54.8	54.8	54.8	54.8	53.4	53.4
77.5°	35.1	35.1	35.1	35.1	36.5	35.1	35.1	35.1
80°	22.5	22.5	23.9	23.9	22.5	22.5	22.5	22.5
82.5°	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
85°	8.4	8.4	8.4	8.4	7.0	7.0	7.0	7.0
87.5°	4.2	4.2	4.2	4.2	4.2	4.2	2.8	2.8
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)