

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: P252574

Luminaire Tested: **LD6B20D010 EU6B10208050 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252574
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 EU6B10208050 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2103.0 lumens
Efficiency: N/A
Efficacy: 101.1 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

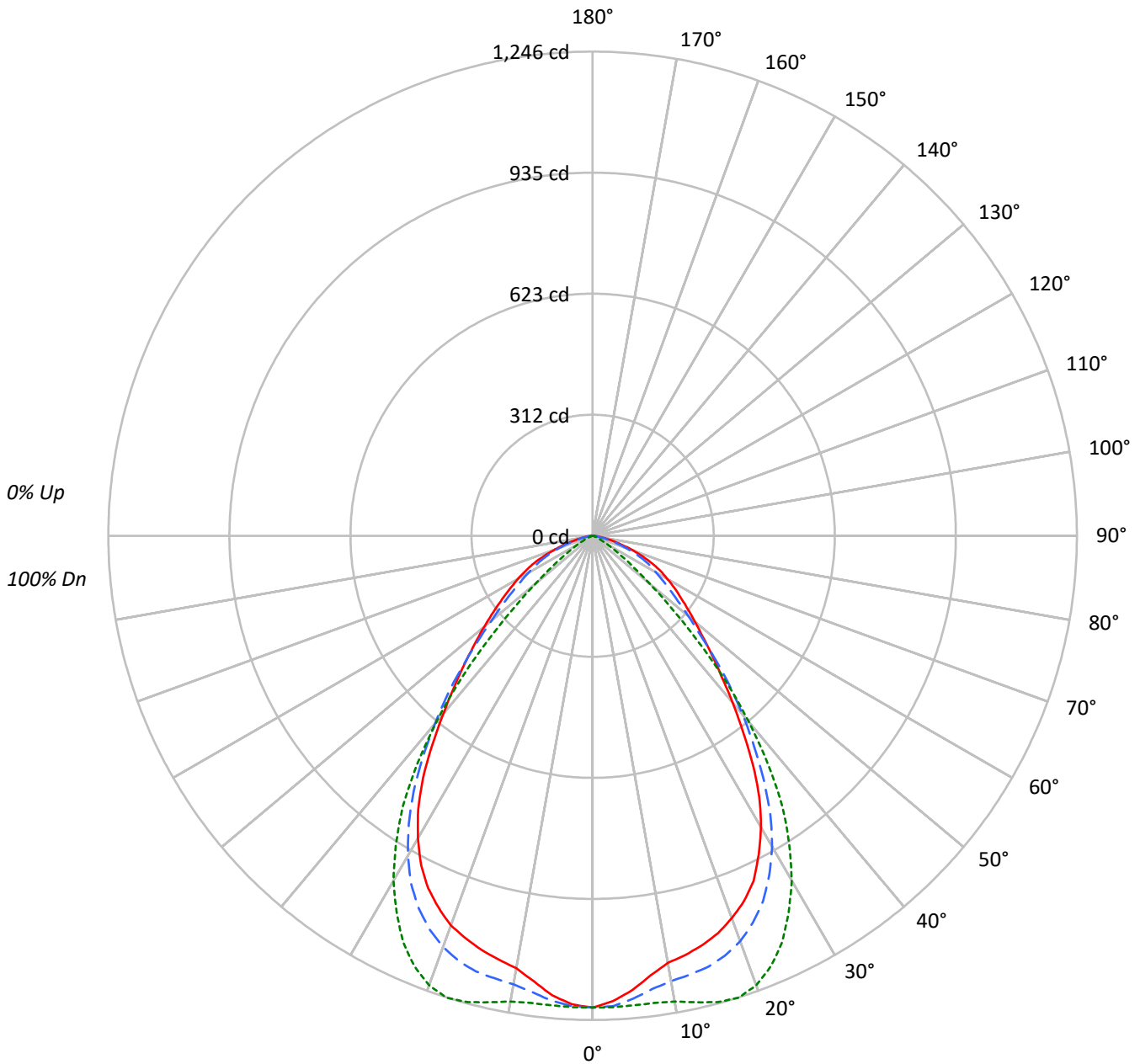
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252574

CATALOG NUMBER: LD6B20D010 EU6B10208050 6LBDW1LI

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	79215	79215	79215
5°	76852	79426	77769
10°	73925	80623	74853
15°	73661	83901	74519
20°	72698	85465	74065
25°	70531	83056	72043
30°	65246	77194	67672
35°	57240	67857	60593
40°	47701	53194	50810
45°	40144	35097	42866
50°	34763	19234	36894
55°	31450	10214	32246
60°	28941	5311	28941
65°	26212	2810	25564
70°	21154	1602	19552
75°	14519	1059	13435
80°	9505	526	8453
85°	6288	1048	5240



TEST NUMBER: P252574

CATALOG NUMBER: LD6B20D010 EU6B10208050 6LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.2	5.4
10°-20°	327.4	15.6
20°-30°	483.7	23.0
30°-40°	488.6	23.2
40°-50°	336.8	16.0
50°-60°	193.4	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°	924.3	44.0
0°-40°	1412.9	67.2
0°-60°	1943.1	92.4
0°-90°	2103.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2103.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1214	1214	1214	1214	1214	
5°	1174	1196	1213	1202	1188	110
15°	1091	1148	1242	1161	1103	307
25°	980	1037	1154	1058	1001	446
35°	719	768	852	803	761	446
45°	435	441	380	469	465	338
55°	276	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	



TEST NUMBER: P252574

CATALOG NUMBER: LD6B20D010 EU6B10208050 6LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2
2.5°	1198.7	1200.1	1201.5	1200.1	1201.5	1207.1	1202.9	1205.7	1205.7	1207.1	1211.4
5°	1173.5	1173.5	1176.3	1174.9	1179.1	1184.7	1180.5	1184.7	1186.1	1188.9	1195.9
7.5°	1141.2	1141.2	1142.6	1142.6	1148.2	1153.8	1151.0	1156.6	1162.2	1167.8	1176.3
10°	1115.9	1118.7	1118.7	1120.1	1125.7	1132.8	1131.4	1138.4	1144.0	1152.4	1163.6
12.5°	1104.7	1106.1	1106.1	1108.9	1114.5	1121.5	1120.1	1127.1	1135.6	1145.4	1156.6
15°	1090.6	1093.5	1092.0	1094.9	1100.5	1107.5	1106.1	1113.1	1122.9	1132.8	1148.2
17.5°	1072.4	1073.8	1075.2	1075.2	1080.8	1086.4	1086.4	1093.5	1104.7	1115.9	1132.8
20°	1047.1	1049.9	1049.9	1051.3	1055.6	1064.0	1062.6	1069.6	1080.8	1092.0	1110.3
22.5°	1017.7	1019.1	1019.1	1020.5	1027.5	1031.7	1033.1	1038.7	1048.5	1061.2	1078.0
25°	979.8	981.2	979.8	984.0	986.8	995.2	992.4	999.4	1010.6	1020.5	1037.3
27.5°	925.0	927.8	927.8	929.2	936.2	943.3	943.3	950.3	960.1	967.1	984.0
30°	866.1	870.3	866.1	873.1	875.9	881.5	885.7	889.9	898.3	908.2	923.6
32.5°	798.7	797.3	798.7	801.5	809.9	814.1	816.9	821.1	829.6	838.0	850.6
35°	718.7	721.5	722.9	728.5	728.5	735.5	736.9	739.7	752.4	758.0	767.8
37.5°	634.5	637.3	638.7	641.5	647.1	649.9	654.1	658.3	666.7	676.6	682.2
40°	560.1	560.1	561.5	564.3	568.5	569.9	574.1	579.7	585.3	593.7	599.4
42.5°	489.9	491.3	489.9	492.7	496.9	502.5	501.1	508.1	509.5	515.1	519.4
45°	435.1	435.1	432.3	435.1	435.1	440.7	439.3	442.2	440.7	443.6	440.7
47.5°	383.2	384.6	383.2	384.6	384.6	384.6	386.0	383.2	384.6	380.4	372.0
50°	342.5	343.9	341.1	342.5	341.1	339.7	341.1	336.9	335.5	329.9	321.4
52.5°	307.4	306.0	304.6	304.6	304.6	303.2	301.8	297.6	293.4	287.8	277.9
55°	276.5	275.1	273.7	273.7	270.9	269.5	269.5	265.3	261.1	254.1	242.8
57.5°	248.4	247.0	245.6	245.6	244.2	241.4	241.4	237.2	231.6	223.2	213.4
60°	221.8	221.8	221.8	220.4	220.4	217.6	217.6	213.4	207.7	199.3	188.1
62.5°	197.9	196.5	196.5	196.5	196.5	195.1	193.7	190.9	185.3	176.9	167.0
65°	169.8	169.8	169.8	169.8	168.4	168.4	168.4	164.2	161.4	153.0	143.2
67.5°	139.0	139.0	139.0	139.0	137.6	139.0	139.0	136.2	133.3	124.9	116.5
70°	110.9	109.5	108.1	109.5	108.1	108.1	109.5	106.7	105.3	98.3	89.8
72.5°	81.4	82.8	81.4	81.4	81.4	80.0	81.4	80.0	77.2	71.6	66.0
75°	57.6	59.0	59.0	57.6	57.6	57.6	56.1	56.1	53.3	49.1	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	16.8
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



TEST NUMBER: P252574

CATALOG NUMBER: LD6B20D010 EU6B10208050 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2
2.5°	1208.6	1210.0	1210.0	1210.0	1214.2	1215.6	1211.4	1207.1	1215.6	1214.2	1217.0
5°	1194.5	1198.7	1201.5	1202.9	1207.1	1210.0	1205.7	1204.3	1211.4	1212.8	1214.2
7.5°	1177.7	1184.7	1191.7	1194.5	1200.1	1202.9	1201.5	1201.5	1210.0	1212.8	1212.8
10°	1166.4	1176.3	1184.7	1191.7	1198.7	1202.9	1202.9	1204.3	1214.2	1217.0	1219.8
12.5°	1163.6	1176.3	1187.5	1197.3	1202.9	1210.0	1211.4	1215.6	1225.4	1229.6	1229.6
15°	1156.6	1173.5	1187.5	1200.1	1208.6	1217.0	1219.8	1228.2	1239.4	1242.2	1245.0
17.5°	1144.0	1160.8	1177.7	1193.1	1204.3	1211.4	1219.8	1228.2	1242.2	1246.5	1247.9
20°	1121.5	1141.2	1158.0	1173.5	1184.7	1194.5	1202.9	1212.8	1225.4	1231.0	1232.4
22.5°	1087.8	1107.5	1124.3	1141.2	1152.4	1160.8	1169.2	1180.5	1193.1	1198.7	1198.7
25°	1047.1	1065.4	1083.6	1096.3	1107.5	1117.3	1121.5	1134.2	1146.8	1153.8	1153.8
27.5°	995.2	1012.0	1028.9	1042.9	1049.9	1058.4	1065.4	1076.6	1086.4	1092.0	1097.7
30°	929.2	946.1	961.5	975.5	984.0	992.4	999.4	1007.8	1017.7	1024.7	1026.1
32.5°	857.6	871.7	887.1	901.2	909.6	912.4	919.4	927.8	936.2	941.9	943.3
35°	779.0	788.9	798.7	811.3	819.7	819.7	826.8	832.4	839.4	852.0	849.2
37.5°	686.4	700.4	707.4	711.7	717.3	722.9	724.3	731.3	739.7	742.5	746.7
40°	599.4	603.6	607.8	607.8	613.4	613.4	613.4	614.8	623.2	624.6	630.2
42.5°	512.3	512.3	508.1	503.9	505.3	503.9	496.9	496.9	501.1	506.7	506.7
45°	430.9	421.1	408.5	398.6	391.6	388.8	380.4	380.4	379.0	380.4	386.0
47.5°	362.1	345.3	324.2	304.6	297.6	292.0	279.3	273.7	270.9	272.3	275.1
50°	304.6	286.3	262.5	238.6	226.0	219.0	203.5	193.7	192.3	189.5	195.1
52.5°	262.5	240.0	214.8	186.7	174.1	162.8	146.0	137.6	131.9	131.9	133.3
55°	226.0	202.1	174.1	146.0	133.3	124.9	108.1	96.9	91.2	89.8	94.0
57.5°	195.1	172.7	144.6	116.5	103.9	94.0	77.2	67.4	63.2	60.4	61.8
60°	171.2	148.8	120.7	94.0	82.8	71.6	57.6	46.3	40.7	40.7	42.1
62.5°	148.8	127.7	102.5	77.2	67.4	57.6	42.1	32.3	28.1	26.7	28.1
65°	126.3	106.7	85.6	64.6	54.7	46.3	33.7	25.3	19.7	18.2	19.7
67.5°	102.5	87.0	68.8	51.9	43.5	36.5	25.3	18.2	14.0	12.6	14.0
70°	80.0	66.0	51.9	37.9	32.3	26.7	18.2	14.0	9.8	8.4	9.8
72.5°	57.6	47.7	36.5	26.7	22.5	18.2	12.6	9.8	7.0	5.6	7.0
75°	39.3	32.3	23.9	16.8	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



TEST NUMBER: P252574

CATALOG NUMBER: LD6B20D010 EU6B10208050 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2
2.5°	1211.4	1212.8	1208.6	1214.2	1210.0	1215.6	1215.6	1210.0	1211.4	1208.6	1214.2
5°	1208.6	1208.6	1205.7	1210.0	1204.3	1210.0	1208.6	1198.7	1201.5	1195.9	1201.5
7.5°	1208.6	1205.7	1201.5	1205.7	1198.7	1202.9	1197.3	1187.5	1184.7	1177.7	1177.7
10°	1212.8	1208.6	1202.9	1204.3	1197.3	1198.7	1190.3	1176.3	1172.1	1163.6	1160.8
12.5°	1222.6	1218.4	1210.0	1212.8	1202.9	1202.9	1191.7	1174.9	1166.4	1155.2	1152.4
15°	1236.6	1229.6	1219.8	1221.2	1211.4	1205.7	1191.7	1172.1	1160.8	1145.4	1141.2
17.5°	1239.4	1232.4	1219.8	1219.8	1207.1	1200.1	1183.3	1160.8	1146.8	1131.4	1122.9
20°	1224.0	1217.0	1202.9	1201.5	1190.3	1180.5	1162.2	1139.8	1125.7	1108.9	1101.9
22.5°	1191.7	1183.3	1170.7	1169.2	1158.0	1152.4	1132.8	1110.3	1096.3	1079.4	1073.8
25°	1144.0	1139.8	1127.1	1125.7	1115.9	1108.9	1092.0	1071.0	1058.4	1041.5	1035.9
27.5°	1087.8	1083.6	1071.0	1071.0	1059.8	1055.6	1040.1	1020.5	1010.6	995.2	988.2
30°	1020.5	1014.8	1007.8	1006.4	996.6	992.4	978.4	960.1	950.3	937.6	934.8
32.5°	940.5	936.2	932.0	930.6	920.8	916.6	906.8	888.5	880.1	868.9	864.7
35°	847.8	845.0	840.8	839.4	835.2	831.0	821.1	807.1	802.9	794.5	790.3
37.5°	741.1	743.9	741.1	741.1	736.9	738.3	729.9	721.5	717.3	711.7	708.8
40°	626.0	631.6	635.9	635.9	634.5	640.1	638.7	631.6	630.2	627.4	626.0
42.5°	509.5	512.3	520.8	526.4	525.0	539.0	540.4	546.0	550.2	547.4	548.8
45°	387.4	395.8	407.1	412.7	419.7	437.9	447.8	459.0	468.8	474.4	473.0
47.5°	279.3	289.2	301.8	310.2	322.8	345.3	370.6	384.6	398.6	405.7	412.7
50°	202.1	212.0	227.4	240.0	248.4	279.3	306.0	324.2	339.7	349.5	356.5
52.5°	141.8	153.0	169.8	181.1	193.7	223.2	254.1	275.1	292.0	304.6	311.6
55°	98.3	110.9	126.3	137.6	151.6	182.5	212.0	234.4	252.7	263.9	272.3
57.5°	68.8	80.0	95.4	105.3	119.3	148.8	178.3	200.7	219.0	230.2	240.0
60°	46.3	57.6	73.0	82.8	94.0	123.5	150.2	174.1	190.9	202.1	212.0
62.5°	32.3	42.1	57.6	67.4	77.2	102.5	127.7	148.8	165.6	178.3	186.7
65°	25.3	33.7	46.3	54.7	64.6	85.6	106.7	124.9	141.8	154.4	160.0
67.5°	18.2	26.7	36.5	43.5	50.5	68.8	87.0	101.1	116.5	126.3	133.3
70°	12.6	18.2	26.7	32.3	37.9	51.9	66.0	78.6	89.8	96.9	102.5
72.5°	9.8	12.6	18.2	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	18.2	25.3	32.3	39.3	44.9	49.1	51.9
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	16.8	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: P252574

CATALOG NUMBER: LD6B20D010 EU6B10208050 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2	1214.2
2.5°	1210.0	1212.8	1211.4	1214.2	1210.0	1208.6	1211.4	1207.1
5°	1194.5	1195.9	1194.5	1194.5	1191.7	1188.9	1191.7	1187.5
7.5°	1170.7	1170.7	1166.4	1166.4	1160.8	1158.0	1158.0	1156.6
10°	1151.0	1146.8	1142.6	1144.0	1135.6	1132.8	1131.4	1129.9
12.5°	1141.2	1138.4	1131.4	1131.4	1122.9	1120.1	1118.7	1117.3
15°	1129.9	1124.3	1118.7	1117.3	1110.3	1107.5	1106.1	1103.3
17.5°	1110.3	1106.1	1099.1	1099.1	1092.0	1090.6	1087.8	1086.4
20°	1089.2	1083.6	1078.0	1078.0	1069.6	1069.6	1065.4	1066.8
22.5°	1059.8	1055.6	1049.9	1049.9	1042.9	1041.5	1037.3	1035.9
25°	1024.7	1019.1	1014.8	1013.4	1007.8	1005.0	1003.6	1000.8
27.5°	978.4	974.1	969.9	967.1	960.1	958.7	954.5	955.9
30°	920.8	918.0	916.6	913.8	905.4	902.6	902.6	898.3
32.5°	857.6	853.4	850.6	846.4	839.4	838.0	833.8	835.2
35°	780.4	774.8	770.6	772.0	763.6	762.2	759.4	760.8
37.5°	700.4	694.8	689.2	687.8	680.8	680.8	676.6	676.6
40°	617.6	612.0	609.2	609.2	600.8	602.2	598.0	596.6
42.5°	543.2	537.6	536.2	534.8	530.6	529.2	525.0	526.4
45°	473.0	471.6	471.6	468.8	464.6	463.2	464.6	464.6
47.5°	411.3	412.7	411.3	411.3	408.5	411.3	408.5	409.9
50°	359.3	362.1	362.1	362.1	360.7	362.1	362.1	363.5
52.5°	315.8	320.0	318.6	320.0	318.6	321.4	320.0	321.4
55°	277.9	280.7	282.1	283.5	283.5	283.5	283.5	283.5
57.5°	242.8	247.0	248.4	249.9	249.9	252.7	249.9	249.9
60°	214.8	219.0	220.4	221.8	221.8	223.2	220.4	221.8
62.5°	189.5	193.7	193.7	195.1	195.1	195.1	192.3	193.7
65°	164.2	165.6	167.0	167.0	165.6	165.6	164.2	165.6
67.5°	136.2	137.6	136.2	136.2	134.8	134.8	131.9	133.3
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°	53.3	53.3	54.7	54.7	54.7	54.7	53.3	53.3
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)