

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: P252262

Luminaire Tested: **LD6B20D010 EU6B10208050 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252262
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: LD6B20D010 EU6B10208050 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1950.0 lumens
Efficiency: N/A
Efficacy: 93.7 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

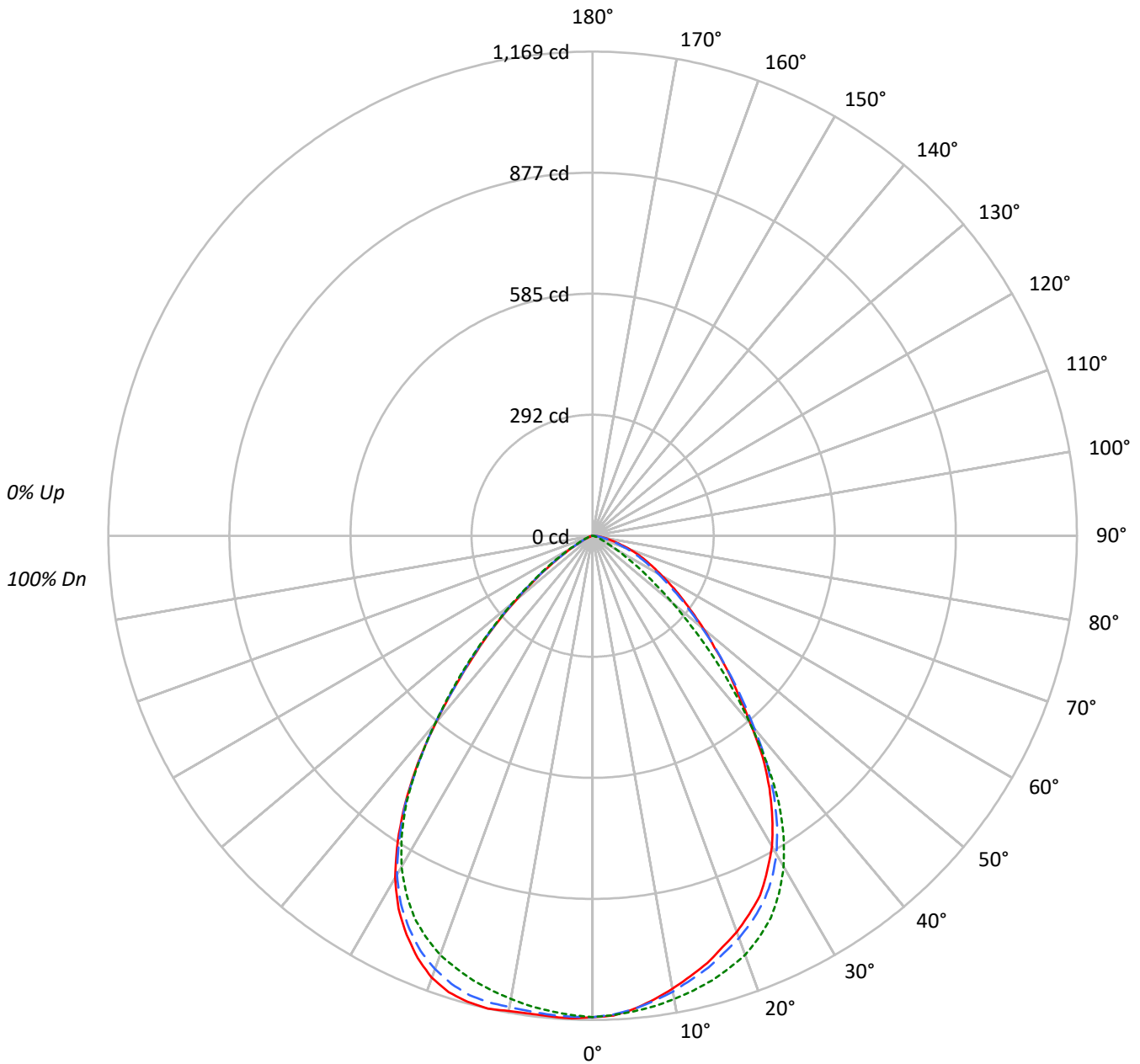
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	112	108	105	103	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°	75829	75829	75829
5°	75110	75477	76302
10°	73561	75230	77184
15°	72155	75093	78693
20°	70656	74753	78842
25°	68919	73259	76499
30°	65246	69480	71808
35°	59255	62274	62831
40°	50571	50333	50094
45°	42478	37690	36527
50°	35473	25506	24217
55°	29858	15651	14207
60°	25274	8246	7137
65°	21890	4338	3473
70°	18217	2671	1869
75°	13435	1764	1059
80°	10557	1052	526
85°	8384	1048	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.5	5.6
10°-20°	313.6	16.1
20°-30°	463.2	23.8
30°-40°	477.3	24.5
40°-50°	329.7	16.9
50°-60°	162.5	8.3
60°-70°	65.8	3.4
70°-80°	23.5	1.2
80°-90°	4.8	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°	886.3	45.5
0°-40°	1363.7	69.9
0°-60°	1855.8	95.2
0°-90°	1950.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1950.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1162	1162	1162	1162	1162	
5°	1147	1147	1152	1161	1165	108
15°	1068	1080	1112	1148	1165	301
25°	957	976	1018	1047	1063	438
35°	744	762	782	786	789	461
45°	460	463	408	403	396	356
55°	262	253	138	129	125	237
65°	142	128	28	22	22	141
75°	53	45	7	4	4	60
85°	11	8	1	0	0	14
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°	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3
2.5°	1159.5	1155.3	1158.1	1152.5	1159.5	1152.5	1153.9	1155.3	1153.9	1155.3	1156.7
5°	1146.9	1142.7	1146.9	1139.9	1146.9	1142.7	1142.7	1144.1	1144.1	1145.5	1146.9
7.5°	1130.0	1125.8	1130.0	1123.0	1131.4	1127.2	1127.2	1130.0	1128.6	1130.0	1132.8
10°	1110.4	1104.8	1109.0	1104.8	1113.2	1107.6	1110.4	1110.4	1110.4	1114.6	1117.4
12.5°	1089.3	1083.7	1089.3	1082.3	1090.7	1086.5	1087.9	1092.1	1093.5	1096.3	1097.7
15°	1068.3	1061.2	1064.1	1059.8	1068.3	1064.1	1065.5	1071.1	1071.1	1075.3	1079.5
17.5°	1041.6	1036.0	1041.6	1036.0	1043.0	1040.2	1043.0	1047.2	1047.2	1051.4	1055.6
20°	1017.7	1012.1	1016.3	1012.1	1020.5	1016.3	1017.7	1023.3	1024.8	1029.0	1033.2
22.5°	988.3	984.0	986.8	982.6	991.1	988.3	989.7	995.3	996.7	999.5	1006.5
25°	957.4	948.9	953.2	950.4	958.8	954.6	957.4	963.0	965.8	970.0	975.6
27.5°	912.4	908.2	911.0	911.0	918.1	913.9	915.3	920.9	925.1	929.3	936.3
30°	866.1	859.1	861.9	863.3	868.9	866.1	868.9	874.5	876.0	881.6	887.2
32.5°	807.2	804.4	810.0	807.2	810.0	810.0	811.4	815.6	818.4	821.2	828.2
35°	744.0	738.4	744.0	741.2	748.2	744.0	748.2	752.4	752.4	758.0	762.2
37.5°	675.2	668.2	671.0	671.0	673.8	672.4	672.4	679.4	680.8	685.0	689.3
40°	593.8	591.0	596.6	595.2	596.6	596.6	598.0	602.2	605.0	606.4	607.8
42.5°	520.8	522.2	523.6	523.6	523.6	523.6	523.6	529.2	527.8	532.0	533.4
45°	460.4	454.8	457.6	456.2	460.4	456.2	460.4	464.6	461.8	466.1	463.2
47.5°	398.7	398.7	398.7	397.3	400.1	398.7	401.5	402.9	402.9	402.9	401.5
50°	349.5	345.3	346.7	346.7	348.1	346.7	349.5	350.9	350.9	348.1	342.5
52.5°	301.8	300.4	300.4	303.2	303.2	301.8	301.8	301.8	301.8	297.6	294.8
55°	262.5	259.7	261.1	261.1	261.1	261.1	262.5	261.1	261.1	256.9	252.7
57.5°	227.4	224.6	224.6	224.6	226.0	224.6	224.6	224.6	223.2	219.0	213.4
60°	193.7	192.3	193.7	193.7	195.1	193.7	193.7	193.7	190.9	186.7	181.1
62.5°	165.6	165.6	165.6	167.0	167.0	165.6	165.6	164.2	162.8	157.2	151.6
65°	141.8	140.4	141.8	141.8	143.2	143.2	141.8	140.4	139.0	133.4	127.7
67.5°	117.9	116.5	117.9	117.9	119.3	117.9	117.9	117.9	113.7	110.9	105.3
70°	95.5	94.1	94.1	94.1	95.5	92.6	94.1	94.1	91.2	87.0	81.4
72.5°	73.0	73.0	73.0	73.0	73.0	73.0	71.6	71.6	68.8	64.6	61.8
75°	53.3	53.3	54.7	54.7	53.3	53.3	53.3	51.9	50.5	47.7	44.9
77.5°	39.3	39.3	39.3	39.3	37.9	37.9	37.9	36.5	35.1	33.7	30.9
80°	28.1	28.1	28.1	26.7	28.1	26.7	26.7	26.7	23.9	22.5	21.1
82.5°	19.7	18.2	18.2	18.2	18.2	18.2	18.2	16.8	16.8	15.4	14.0
85°	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	9.8	8.4	8.4
87.5°	5.6	7.0	7.0	7.0	7.0	7.0	7.0	5.6	5.6	5.6	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3
2.5°	1156.7	1156.7	1159.5	1155.3	1162.3	1158.1	1156.7	1163.7	1159.5	1158.1	1160.9
5°	1146.9	1148.3	1149.7	1146.9	1153.9	1149.7	1149.7	1156.7	1153.9	1152.5	1156.7
7.5°	1134.2	1135.6	1138.5	1137.1	1142.7	1139.9	1141.3	1148.3	1145.5	1145.5	1149.7
10°	1118.8	1121.6	1124.4	1124.4	1131.4	1128.6	1128.6	1137.1	1134.2	1135.6	1141.3
12.5°	1100.6	1104.8	1109.0	1110.4	1117.4	1113.2	1114.6	1124.4	1123.0	1124.4	1130.0
15°	1080.9	1086.5	1090.7	1090.7	1099.2	1094.9	1099.2	1109.0	1106.2	1111.8	1118.8
17.5°	1058.4	1064.1	1069.7	1071.1	1079.5	1076.7	1082.3	1092.1	1092.1	1094.9	1103.4
20°	1037.4	1044.4	1047.2	1051.4	1059.8	1058.4	1061.2	1072.5	1072.5	1076.7	1085.1
22.5°	1009.3	1016.3	1021.9	1026.2	1033.2	1033.2	1037.4	1047.2	1047.2	1050.0	1058.4
25°	978.4	986.8	991.1	995.3	1002.3	1000.9	1005.1	1013.5	1014.9	1017.7	1026.2
27.5°	939.1	946.1	951.8	954.6	964.4	958.8	963.0	972.8	971.4	974.2	981.2
30°	890.0	897.0	902.6	902.6	911.0	911.0	915.3	919.5	919.5	922.3	927.9
32.5°	832.4	840.9	840.9	845.1	850.7	845.1	850.7	856.3	853.5	857.7	861.9
35°	766.5	770.7	772.1	772.1	776.3	774.9	773.5	777.7	774.9	781.9	786.1
37.5°	686.4	692.1	689.3	692.1	690.7	686.4	686.4	693.5	687.8	689.3	693.5
40°	609.2	609.2	607.8	600.8	602.2	598.0	596.6	598.0	592.4	591.0	596.6
42.5°	529.2	527.8	523.6	513.8	515.2	508.2	502.5	502.5	499.7	498.3	499.7
45°	457.6	453.4	446.4	435.2	432.4	426.7	415.5	412.7	408.5	408.5	409.9
47.5°	391.7	386.0	374.8	362.2	355.2	348.1	336.9	332.7	325.7	322.9	325.7
50°	336.9	327.1	313.0	294.8	287.8	279.3	268.1	261.1	254.1	251.3	249.9
52.5°	286.4	272.3	258.3	235.8	230.2	221.8	206.4	199.3	192.3	186.7	186.7
55°	242.9	230.2	210.6	189.5	181.1	172.7	157.2	147.4	140.4	137.6	134.8
57.5°	203.5	189.5	171.3	148.8	140.4	132.0	116.5	106.7	99.7	95.5	92.6
60°	171.3	155.8	137.6	117.9	108.1	99.7	84.2	74.4	67.4	63.2	60.4
62.5°	140.4	127.7	109.5	91.2	82.8	74.4	61.8	51.9	44.9	42.1	37.9
65°	117.9	105.3	88.4	73.0	66.0	57.6	46.3	37.9	32.3	28.1	25.3
67.5°	95.5	85.6	71.6	57.6	50.5	44.9	35.1	28.1	22.5	19.7	18.2
70°	75.8	66.0	54.7	43.5	39.3	33.7	26.7	19.7	16.8	14.0	12.6
72.5°	56.2	49.1	40.7	32.3	28.1	25.3	18.2	15.4	11.2	9.8	8.4
75°	40.7	35.1	29.5	22.5	19.7	18.2	14.0	9.8	8.4	7.0	5.6
77.5°	28.1	25.3	19.7	15.4	14.0	12.6	9.8	7.0	5.6	4.2	4.2
80°	18.2	15.4	12.6	9.8	9.8	8.4	5.6	4.2	4.2	2.8	2.8
82.5°	11.2	9.8	8.4	7.0	5.6	5.6	4.2	2.8	2.8	1.4	1.4
85°	7.0	5.6	4.2	4.2	2.8	2.8	2.8	1.4	1.4	1.4	1.4
87.5°	2.8	2.8	2.8	1.4	1.4	1.4	1.4	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°	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3
2.5°	1160.9	1160.9	1163.7	1159.5	1162.3	1162.3	1165.1	1159.5	1162.3	1163.7	1166.5
5°	1155.3	1156.7	1159.5	1158.1	1159.5	1159.5	1162.3	1155.3	1160.9	1160.9	1165.1
7.5°	1149.7	1149.7	1152.5	1151.1	1153.9	1155.3	1158.1	1152.5	1158.1	1158.1	1162.3
10°	1142.7	1142.7	1146.9	1145.5	1149.7	1151.1	1155.3	1149.7	1155.3	1156.7	1160.9
12.5°	1132.8	1134.2	1138.5	1138.5	1142.7	1145.5	1149.7	1146.9	1153.9	1155.3	1160.9
15°	1121.6	1124.4	1130.0	1128.6	1132.8	1137.1	1142.7	1138.5	1148.3	1151.1	1156.7
17.5°	1107.6	1110.4	1114.6	1114.6	1118.8	1121.6	1128.6	1125.8	1134.2	1135.6	1142.7
20°	1086.5	1090.7	1096.3	1094.9	1099.2	1102.0	1107.6	1104.8	1113.2	1116.0	1123.0
22.5°	1061.2	1064.1	1068.3	1068.3	1072.5	1075.3	1080.9	1076.7	1085.1	1086.5	1092.1
25°	1027.6	1030.4	1033.2	1034.6	1038.8	1040.2	1043.0	1040.2	1047.2	1048.6	1055.6
27.5°	984.0	985.4	989.7	989.7	992.5	993.9	998.1	992.5	1002.3	1002.3	1006.5
30°	932.1	930.7	936.3	933.5	936.3	936.3	940.5	937.7	944.7	941.9	946.1
32.5°	863.3	866.1	866.1	863.3	868.9	867.5	867.5	864.7	868.9	870.3	873.1
35°	783.3	787.5	787.5	788.9	790.3	786.1	787.5	779.1	786.1	787.5	788.9
37.5°	696.3	692.1	694.9	690.7	697.7	689.3	689.3	683.6	689.3	689.3	690.7
40°	596.6	595.2	598.0	595.2	593.8	592.4	589.6	585.4	591.0	588.2	592.4
42.5°	502.5	501.1	501.1	498.3	496.9	496.9	494.1	491.3	489.9	489.9	496.9
45°	405.7	408.5	405.7	404.3	407.1	404.3	405.7	400.1	402.9	400.1	402.9
47.5°	324.3	325.7	322.9	320.1	324.3	320.1	320.1	315.8	321.5	321.5	318.7
50°	251.3	249.9	247.1	249.9	248.5	248.5	248.5	244.3	247.1	242.9	245.7
52.5°	185.3	183.9	183.9	182.5	183.9	182.5	182.5	181.1	181.1	179.7	181.1
55°	134.8	133.4	130.6	130.6	130.6	132.0	130.6	129.1	129.1	127.7	129.1
57.5°	91.2	88.4	88.4	88.4	88.4	87.0	87.0	85.6	87.0	85.6	87.0
60°	59.0	59.0	56.2	56.2	56.2	56.2	56.2	54.7	56.2	56.2	56.2
62.5°	36.5	36.5	35.1	33.7	35.1	33.7	33.7	33.7	35.1	33.7	35.1
65°	23.9	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
67.5°	16.8	15.4	15.4	15.4	15.4	15.4	15.4	14.0	15.4	15.4	15.4
70°	11.2	11.2	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
72.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
75°	5.6	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
77.5°	4.2	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
80°	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
85°	1.4	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	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
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: P252262

CATALOG NUMBER: LD6B20D010 EU6B10208050 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3	1162.3
2.5°	1162.3	1163.7	1160.9	1162.3	1159.5	1162.3	1163.7	1166.5
5°	1159.5	1160.9	1158.1	1160.9	1158.1	1160.9	1162.3	1165.1
7.5°	1156.7	1159.5	1156.7	1159.5	1156.7	1159.5	1160.9	1163.7
10°	1156.7	1160.9	1158.1	1162.3	1158.1	1160.9	1163.7	1165.1
12.5°	1156.7	1160.9	1159.5	1162.3	1160.9	1163.7	1166.5	1169.3
15°	1153.9	1158.1	1155.3	1159.5	1158.1	1159.5	1165.1	1165.1
17.5°	1138.5	1142.7	1142.7	1145.5	1145.5	1149.7	1152.5	1155.3
20°	1118.8	1123.0	1121.6	1125.8	1125.8	1130.0	1132.8	1135.6
22.5°	1089.3	1094.9	1093.5	1097.7	1096.3	1099.2	1104.8	1103.4
25°	1051.4	1058.4	1057.0	1059.8	1058.4	1058.4	1061.2	1062.7
27.5°	1005.1	1009.3	1007.9	1010.7	1007.9	1010.7	1013.5	1014.9
30°	944.7	947.5	946.1	947.5	946.1	948.9	950.4	953.2
32.5°	871.7	876.0	871.7	874.5	873.1	873.1	878.8	876.0
35°	784.7	786.1	787.5	787.5	784.7	786.1	788.9	788.9
37.5°	687.8	694.9	686.4	690.7	689.3	689.3	689.3	693.5
40°	586.8	588.2	585.4	585.4	585.4	584.0	589.6	588.2
42.5°	491.3	492.7	491.3	487.1	488.5	488.5	492.7	487.1
45°	398.7	401.5	400.1	400.1	397.3	397.3	398.7	395.9
47.5°	315.8	318.7	314.4	315.8	313.0	315.8	314.4	317.3
50°	240.0	242.9	241.4	242.9	242.9	240.0	244.3	238.6
52.5°	179.7	181.1	179.7	178.3	176.9	176.9	179.7	178.3
55°	127.7	126.3	126.3	126.3	127.7	127.7	126.3	124.9
57.5°	85.6	85.6	84.2	84.2	85.6	82.8	84.2	82.8
60°	54.7	54.7	54.7	54.7	53.3	54.7	54.7	54.7
62.5°	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7
65°	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
67.5°	14.0	15.4	15.4	15.4	14.0	14.0	14.0	14.0
70°	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
72.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
75°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
77.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.4	1.4	1.4	1.4	1.4	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)