

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: P252260

Luminaire Tested: **LD6B20D010 EU6B10208035 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252260
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 EU6B10208035 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1930.0 lumens
Efficiency: N/A
Efficacy: 92.8 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

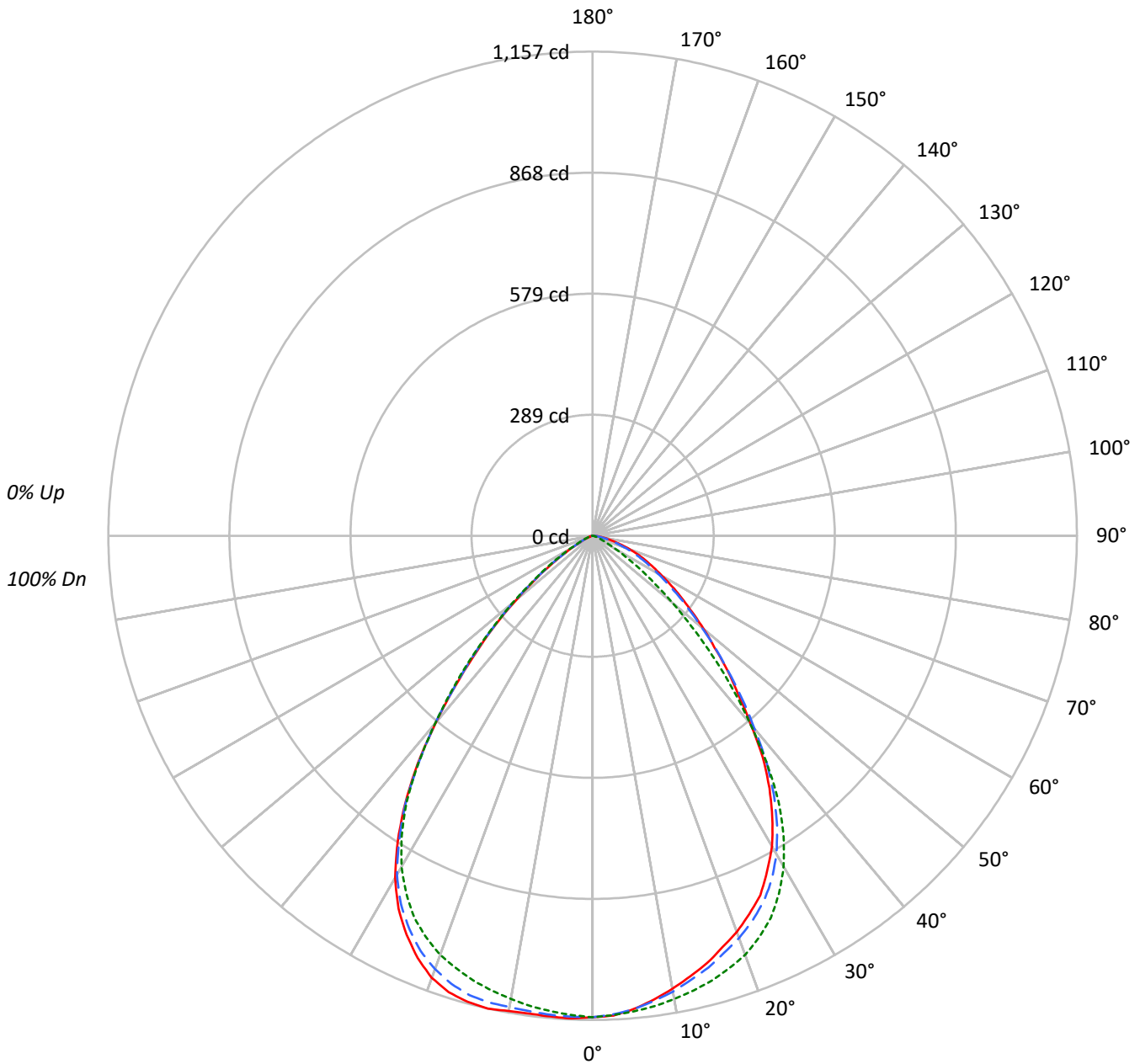
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	75053	75053	75053
5°	74338	74704	75523
10°	72806	74462	76396
15°	71412	74323	77890
20°	69934	73982	78037
25°	68213	72511	75714
30°	64576	68764	71070
35°	58650	61637	62186
40°	50052	49813	49575
45°	42045	37302	36149
50°	35118	25242	23973
55°	29551	15492	14070
60°	25013	8155	7072
65°	21658	4292	3427
70°	18026	2651	1850
75°	13309	1739	1059
80°	10445	1052	526
85°	8309	1048	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.4	5.6
10°-20°	310.4	16.1
20°-30°	458.4	23.8
30°-40°	472.4	24.5
40°-50°	326.3	16.9
50°-60°	160.8	8.3
60°-70°	65.2	3.4
70°-80°	23.2	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°	877.3	45.5
0°-40°	1349.7	69.9
0°-60°	1836.8	95.2
0°-90°	1930.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1930.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1150	1150	1150	1150	1150	
5°	1135	1135	1141	1149	1153	107
15°	1057	1068	1100	1136	1153	298
25°	948	966	1007	1036	1052	433
35°	736	754	774	778	781	456
45°	456	458	404	399	392	352
55°	260	250	136	128	124	235
65°	140	126	28	22	22	139
75°	53	44	7	4	4	59
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°	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4
2.5°	1147.6	1143.5	1146.2	1140.7	1147.6	1140.7	1142.1	1143.5	1142.1	1143.5	1144.8
5°	1135.1	1130.9	1135.1	1128.2	1135.1	1130.9	1130.9	1132.3	1132.3	1133.7	1135.1
7.5°	1118.4	1114.3	1118.4	1111.5	1119.8	1115.7	1115.7	1118.4	1117.1	1118.4	1121.2
10°	1099.0	1093.4	1097.6	1093.4	1101.8	1096.2	1099.0	1099.0	1099.0	1103.2	1105.9
12.5°	1078.2	1072.6	1078.2	1071.2	1079.5	1075.4	1076.8	1080.9	1082.3	1085.1	1086.5
15°	1057.3	1050.4	1053.1	1049.0	1057.3	1053.1	1054.5	1060.1	1060.1	1064.3	1068.4
17.5°	1030.9	1025.4	1030.9	1025.4	1032.3	1029.5	1032.3	1036.5	1036.5	1040.6	1044.8
20°	1007.3	1001.7	1005.9	1001.7	1010.1	1005.9	1007.3	1012.9	1014.2	1018.4	1022.6
22.5°	978.1	973.9	976.7	972.6	980.9	978.1	979.5	985.1	986.5	989.2	996.2
25°	947.6	939.2	943.4	940.6	948.9	944.8	947.6	953.1	955.9	960.1	965.6
27.5°	903.1	898.9	901.7	901.7	908.6	904.5	905.9	911.4	915.6	919.8	926.7
30°	857.2	850.3	853.1	854.5	860.0	857.2	860.0	865.6	867.0	872.5	878.1
32.5°	798.9	796.1	801.7	798.9	801.7	801.7	803.1	807.2	810.0	812.8	819.7
35°	736.4	730.8	736.4	733.6	740.5	736.4	740.5	744.7	744.7	750.3	754.4
37.5°	668.3	661.3	664.1	664.1	666.9	665.5	665.5	672.5	673.8	678.0	682.2
40°	587.7	584.9	590.5	589.1	590.5	590.5	591.9	596.0	598.8	600.2	601.6
42.5°	515.5	516.8	518.2	518.2	518.2	518.2	518.2	523.8	522.4	526.6	528.0
45°	455.7	450.2	452.9	451.5	455.7	451.5	455.7	459.9	457.1	461.3	458.5
47.5°	394.6	394.6	394.6	393.2	396.0	394.6	397.4	398.7	398.7	398.7	397.4
50°	346.0	341.8	343.2	343.2	344.6	343.2	346.0	347.3	347.3	344.6	339.0
52.5°	298.7	297.3	297.3	300.1	300.1	298.7	298.7	298.7	298.7	294.5	291.8
55°	259.8	257.0	258.4	258.4	258.4	258.4	259.8	258.4	258.4	254.3	250.1
57.5°	225.1	222.3	222.3	222.3	223.7	222.3	222.3	222.3	220.9	216.7	211.2
60°	191.7	190.3	191.7	191.7	193.1	191.7	191.7	191.7	189.0	184.8	179.2
62.5°	163.9	163.9	163.9	165.3	165.3	163.9	163.9	162.6	161.2	155.6	150.1
65°	140.3	138.9	140.3	140.3	141.7	141.7	140.3	138.9	137.5	132.0	126.4
67.5°	116.7	115.3	116.7	116.7	118.1	116.7	116.7	116.7	112.5	109.8	104.2
70°	94.5	93.1	93.1	93.1	94.5	91.7	93.1	93.1	90.3	86.1	80.6
72.5°	72.2	72.2	72.2	72.2	72.2	72.2	70.9	70.9	68.1	63.9	61.1
75°	52.8	52.8	54.2	54.2	52.8	52.8	52.8	51.4	50.0	47.2	44.5
77.5°	38.9	38.9	38.9	38.9	37.5	37.5	37.5	36.1	34.7	33.3	30.6
80°	27.8	27.8	27.8	26.4	27.8	26.4	26.4	26.4	23.6	22.2	20.8
82.5°	19.5	18.1	18.1	18.1	18.1	18.1	18.1	16.7	16.7	15.3	13.9
85°	11.1	11.1	11.1	11.1	11.1	11.1	11.1	11.1	9.7	8.3	8.3
87.5°	5.6	6.9	6.9	6.9	6.9	6.9	6.9	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°	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4
2.5°	1144.8	1144.8	1147.6	1143.5	1150.4	1146.2	1144.8	1151.8	1147.6	1146.2	1149.0
5°	1135.1	1136.5	1137.9	1135.1	1142.1	1137.9	1137.9	1144.8	1142.1	1140.7	1144.8
7.5°	1122.6	1124.0	1126.8	1125.4	1130.9	1128.2	1129.6	1136.5	1133.7	1133.7	1137.9
10°	1107.3	1110.1	1112.9	1112.9	1119.8	1117.1	1117.1	1125.4	1122.6	1124.0	1129.6
12.5°	1089.3	1093.4	1097.6	1099.0	1105.9	1101.8	1103.2	1112.9	1111.5	1112.9	1118.4
15°	1069.8	1075.4	1079.5	1079.5	1087.9	1083.7	1087.9	1097.6	1094.8	1100.4	1107.3
17.5°	1047.6	1053.1	1058.7	1060.1	1068.4	1065.6	1071.2	1080.9	1080.9	1083.7	1092.0
20°	1026.7	1033.7	1036.5	1040.6	1049.0	1047.6	1050.4	1061.5	1061.5	1065.6	1074.0
22.5°	999.0	1005.9	1011.5	1015.6	1022.6	1022.6	1026.7	1036.5	1036.5	1039.2	1047.6
25°	968.4	976.7	980.9	985.1	992.0	990.6	994.8	1003.1	1004.5	1007.3	1015.6
27.5°	929.5	936.4	942.0	944.8	954.5	948.9	953.1	962.8	961.4	964.2	971.2
30°	880.9	887.8	893.4	893.4	901.7	901.7	905.9	910.0	910.0	912.8	918.4
32.5°	823.9	832.2	832.2	836.4	842.0	836.4	842.0	847.5	844.7	848.9	853.1
35°	758.6	762.8	764.2	764.2	768.3	766.9	765.5	769.7	766.9	773.9	778.0
37.5°	679.4	685.0	682.2	685.0	683.6	679.4	679.4	686.3	680.8	682.2	686.3
40°	603.0	603.0	601.6	594.7	596.0	591.9	590.5	591.9	586.3	584.9	590.5
42.5°	523.8	522.4	518.2	508.5	509.9	503.0	497.4	497.4	494.6	493.2	494.6
45°	452.9	448.8	441.8	430.7	427.9	422.4	411.3	408.5	404.3	404.3	405.7
47.5°	387.6	382.1	371.0	358.5	351.5	344.6	333.4	329.3	322.3	319.6	322.3
50°	333.4	323.7	309.8	291.8	284.8	276.5	265.4	258.4	251.5	248.7	247.3
52.5°	283.4	269.5	255.6	233.4	227.9	219.5	204.2	197.3	190.3	184.8	184.8
55°	240.4	227.9	208.4	187.6	179.2	170.9	155.6	145.9	138.9	136.2	133.4
57.5°	201.5	187.6	169.5	147.3	138.9	130.6	115.3	105.6	98.6	94.5	91.7
60°	169.5	154.2	136.2	116.7	107.0	98.6	83.4	73.6	66.7	62.5	59.7
62.5°	138.9	126.4	108.4	90.3	82.0	73.6	61.1	51.4	44.5	41.7	37.5
65°	116.7	104.2	87.5	72.2	65.3	57.0	45.8	37.5	32.0	27.8	25.0
67.5°	94.5	84.8	70.9	57.0	50.0	44.5	34.7	27.8	22.2	19.5	18.1
70°	75.0	65.3	54.2	43.1	38.9	33.3	26.4	19.5	16.7	13.9	12.5
72.5°	55.6	48.6	40.3	32.0	27.8	25.0	18.1	15.3	11.1	9.7	8.3
75°	40.3	34.7	29.2	22.2	19.5	18.1	13.9	9.7	8.3	6.9	5.6
77.5°	27.8	25.0	19.5	15.3	13.9	12.5	9.7	6.9	5.6	4.2	4.2
80°	18.1	15.3	12.5	9.7	9.7	8.3	5.6	4.2	4.2	2.8	2.8
82.5°	11.1	9.7	8.3	6.9	5.6	5.6	4.2	2.8	2.8	1.4	1.4
85°	6.9	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°	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4
2.5°	1149.0	1149.0	1151.8	1147.6	1150.4	1150.4	1153.2	1147.6	1150.4	1151.8	1154.6
5°	1143.5	1144.8	1147.6	1146.2	1147.6	1147.6	1150.4	1143.5	1149.0	1149.0	1153.2
7.5°	1137.9	1137.9	1140.7	1139.3	1142.1	1143.5	1146.2	1140.7	1146.2	1146.2	1150.4
10°	1130.9	1130.9	1135.1	1133.7	1137.9	1139.3	1143.5	1137.9	1143.5	1144.8	1149.0
12.5°	1121.2	1122.6	1126.8	1126.8	1130.9	1133.7	1137.9	1135.1	1142.1	1143.5	1149.0
15°	1110.1	1112.9	1118.4	1117.1	1121.2	1125.4	1130.9	1126.8	1136.5	1139.3	1144.8
17.5°	1096.2	1099.0	1103.2	1103.2	1107.3	1110.1	1117.1	1114.3	1122.6	1124.0	1130.9
20°	1075.4	1079.5	1085.1	1083.7	1087.9	1090.7	1096.2	1093.4	1101.8	1104.5	1111.5
22.5°	1050.4	1053.1	1057.3	1057.3	1061.5	1064.3	1069.8	1065.6	1074.0	1075.4	1080.9
25°	1017.0	1019.8	1022.6	1024.0	1028.1	1029.5	1032.3	1029.5	1036.5	1037.9	1044.8
27.5°	973.9	975.3	979.5	979.5	982.3	983.7	987.8	982.3	992.0	992.0	996.2
30°	922.5	921.2	926.7	923.9	926.7	926.7	930.9	928.1	935.0	932.3	936.4
32.5°	854.5	857.2	857.2	854.5	860.0	858.6	858.6	855.9	860.0	861.4	864.2
35°	775.3	779.4	779.4	780.8	782.2	778.0	779.4	771.1	778.0	779.4	780.8
37.5°	689.1	685.0	687.7	683.6	690.5	682.2	682.2	676.6	682.2	682.2	683.6
40°	590.5	589.1	591.9	589.1	587.7	586.3	583.5	579.4	584.9	582.1	586.3
42.5°	497.4	496.0	496.0	493.2	491.8	491.8	489.1	486.3	484.9	484.9	491.8
45°	401.5	404.3	401.5	400.1	402.9	400.1	401.5	396.0	398.7	396.0	398.7
47.5°	320.9	322.3	319.6	316.8	320.9	316.8	316.8	312.6	318.2	318.2	315.4
50°	248.7	247.3	244.5	247.3	245.9	245.9	245.9	241.8	244.5	240.4	243.1
52.5°	183.4	182.0	182.0	180.6	182.0	180.6	180.6	179.2	179.2	177.8	179.2
55°	133.4	132.0	129.2	129.2	129.2	130.6	129.2	127.8	127.8	126.4	127.8
57.5°	90.3	87.5	87.5	87.5	87.5	86.1	86.1	84.8	86.1	84.8	86.1
60°	58.4	58.4	55.6	55.6	55.6	55.6	55.6	54.2	55.6	55.6	55.6
62.5°	36.1	36.1	34.7	33.3	34.7	33.3	33.3	33.3	34.7	33.3	34.7
65°	23.6	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
67.5°	16.7	15.3	15.3	15.3	15.3	15.3	15.3	13.9	15.3	15.3	15.3
70°	11.1	11.1	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
72.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
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: P252260

CATALOG NUMBER: LD6B20D010 EU6B10208035 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4	1150.4
2.5°	1150.4	1151.8	1149.0	1150.4	1147.6	1150.4	1151.8	1154.6
5°	1147.6	1149.0	1146.2	1149.0	1146.2	1149.0	1150.4	1153.2
7.5°	1144.8	1147.6	1144.8	1147.6	1144.8	1147.6	1149.0	1151.8
10°	1144.8	1149.0	1146.2	1150.4	1146.2	1149.0	1151.8	1153.2
12.5°	1144.8	1149.0	1147.6	1150.4	1149.0	1151.8	1154.6	1157.3
15°	1142.1	1146.2	1143.5	1147.6	1146.2	1147.6	1153.2	1153.2
17.5°	1126.8	1130.9	1130.9	1133.7	1133.7	1137.9	1140.7	1143.5
20°	1107.3	1111.5	1110.1	1114.3	1114.3	1118.4	1121.2	1124.0
22.5°	1078.2	1083.7	1082.3	1086.5	1085.1	1087.9	1093.4	1092.0
25°	1040.6	1047.6	1046.2	1049.0	1047.6	1047.6	1050.4	1051.8
27.5°	994.8	999.0	997.6	1000.3	997.6	1000.3	1003.1	1004.5
30°	935.0	937.8	936.4	937.8	936.4	939.2	940.6	943.4
32.5°	862.8	867.0	862.8	865.6	864.2	864.2	869.7	867.0
35°	776.7	778.0	779.4	779.4	776.7	778.0	780.8	780.8
37.5°	680.8	687.7	679.4	683.6	682.2	682.2	682.2	686.3
40°	580.8	582.1	579.4	579.4	579.4	578.0	583.5	582.1
42.5°	486.3	487.7	486.3	482.1	483.5	483.5	487.7	482.1
45°	394.6	397.4	396.0	396.0	393.2	393.2	394.6	391.8
47.5°	312.6	315.4	311.2	312.6	309.8	312.6	311.2	314.0
50°	237.6	240.4	239.0	240.4	240.4	237.6	241.8	236.2
52.5°	177.8	179.2	177.8	176.5	175.1	175.1	177.8	176.5
55°	126.4	125.0	125.0	125.0	126.4	126.4	125.0	123.7
57.5°	84.8	84.8	83.4	83.4	84.8	82.0	83.4	82.0
60°	54.2	54.2	54.2	54.2	52.8	54.2	54.2	54.2
62.5°	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3
65°	22.2	22.2	22.2	22.2	22.2	22.2	22.2	22.2
67.5°	13.9	15.3	15.3	15.3	13.9	13.9	13.9	13.9
70°	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
72.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
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)