

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: P252144

Luminaire Tested: **LD6B15D010 EU6B10208040 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252144
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B15D010 EU6B10208040 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE 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: 1933.0 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

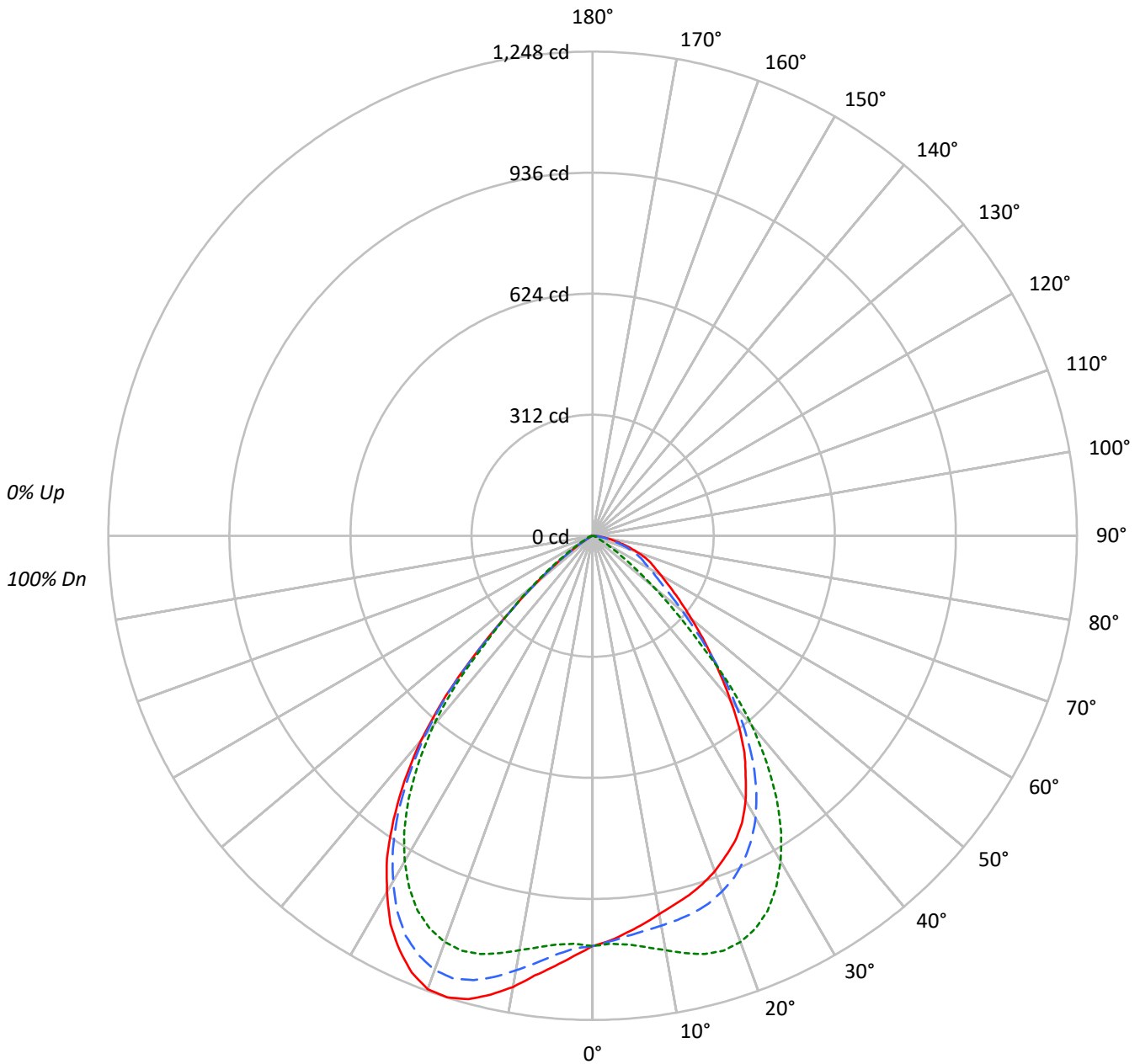
Input Watts (W): 14.39
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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			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	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72			
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44			
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40			
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37			

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	68992	68992	68992
5°	67206	69256	72897
10°	65571	71865	78225
15°	64800	75384	83516
20°	63873	77349	86333
25°	62512	76779	84784
30°	59408	72960	79816
35°	54349	65786	71258
40°	47011	54327	58466
45°	39646	35632	38244
50°	33656	20624	19396
55°	29209	9884	7473
60°	26383	4619	1853
65°	25595	2655	617
70°	22947	2117	572
75°	18855	1538	252
80°	14051	751	0
85°	12127	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.1	5.3
10°-20°	311.3	16.1
20°-30°	475.6	24.6
30°-40°	497.5	25.7
40°-50°	322.7	16.7
50°-60°	128.1	6.6
60°-70°	60.8	3.1
70°-80°	28.9	1.5
80°-90°	5.9	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°	889.1	46.0
0°-40°	1386.6	71.7
0°-60°	1837.4	95.1
0°-90°	1933.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1933.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1058	1058	1058	1058	1058	
5°	1026	1035	1058	1084	1113	97
15°	959	1006	1116	1186	1236	270
25°	868	923	1067	1138	1178	398
35°	682	724	826	874	895	422
45°	430	426	386	410	414	334
55°	257	218	87	68	66	233
65°	166	138	17	4	4	162
75°	75	61	6	2	1	81
85°	16	10	0	0	0	19
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°	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5
2.5°	1044.4	1046.4	1035.3	1032.2	1040.3	1043.3	1044.4	1041.3	1042.3	1046.4	1046.4
5°	1026.2	1028.2	1018.1	1015.0	1023.1	1025.2	1028.2	1027.2	1030.2	1036.3	1035.3
7.5°	1009.0	1012.0	1000.9	996.8	1007.0	1012.0	1014.0	1014.0	1018.1	1026.2	1027.2
10°	989.8	993.8	983.7	981.7	992.8	997.9	998.9	1000.9	1007.0	1018.1	1020.1
12.5°	973.6	977.6	970.6	967.5	979.7	984.7	986.7	990.8	997.9	1012.0	1014.0
15°	959.4	962.5	954.4	952.4	964.5	970.6	971.6	977.6	986.7	1002.9	1005.9
17.5°	941.2	943.3	937.2	935.2	947.3	953.4	954.4	961.5	972.6	988.8	993.8
20°	920.0	922.0	916.0	913.9	926.1	933.2	934.2	940.2	953.4	970.6	975.6
22.5°	894.7	898.8	891.7	889.7	901.8	907.9	910.9	916.0	929.1	946.3	953.4
25°	868.4	868.4	863.4	862.4	873.5	880.6	879.6	886.6	899.8	917.0	923.0
27.5°	834.1	833.1	828.0	827.0	839.1	845.2	843.2	850.2	862.4	879.6	885.6
30°	788.6	790.6	783.5	781.5	791.6	801.7	800.7	807.8	819.9	836.1	840.1
32.5°	734.0	736.0	735.0	732.0	741.1	746.1	749.1	754.2	764.3	781.5	785.5
35°	682.4	679.4	675.3	675.3	684.4	692.5	689.5	695.6	705.7	722.9	723.9
37.5°	618.7	617.7	615.7	613.7	623.8	625.8	626.8	630.9	640.0	654.1	652.1
40°	552.0	553.0	552.0	548.0	554.0	562.1	561.1	563.1	571.2	581.3	578.3
42.5°	489.3	489.3	489.3	485.3	492.4	496.4	498.4	497.4	499.4	508.5	504.5
45°	429.7	430.7	429.7	428.7	429.7	431.7	429.7	428.7	428.7	431.7	425.6
47.5°	378.1	378.1	375.1	372.0	375.1	376.1	373.1	370.0	369.0	368.0	357.9
50°	331.6	330.6	329.6	324.5	327.6	328.6	324.5	322.5	318.5	313.4	301.3
52.5°	291.2	290.2	289.1	284.1	286.1	287.1	283.1	279.0	274.0	269.9	254.8
55°	256.8	255.8	255.8	252.7	250.7	252.7	248.7	245.7	238.6	233.5	218.4
57.5°	227.5	227.5	225.5	222.4	223.4	223.4	219.4	215.3	209.3	203.2	191.1
60°	202.2	202.2	202.2	199.2	199.2	199.2	197.1	193.1	188.0	182.0	169.8
62.5°	182.0	182.0	181.0	177.9	178.9	178.9	176.9	172.9	167.8	163.8	151.6
65°	165.8	165.8	165.8	162.8	162.8	163.8	161.8	157.7	153.7	148.6	137.5
67.5°	145.6	144.6	144.6	142.6	143.6	144.6	142.6	139.5	134.5	131.4	121.3
70°	120.3	121.3	122.3	119.3	120.3	120.3	119.3	116.3	113.2	110.2	101.1
72.5°	98.1	98.1	97.1	96.0	96.0	97.1	95.0	92.0	90.0	88.0	80.9
75°	74.8	73.8	74.8	72.8	72.8	72.8	70.8	69.8	68.7	65.7	60.7
77.5°	54.6	53.6	53.6	51.6	52.6	52.6	51.6	49.5	47.5	46.5	42.5
80°	37.4	37.4	37.4	36.4	36.4	35.4	35.4	34.4	32.4	31.3	29.3
82.5°	25.3	25.3	25.3	24.3	24.3	24.3	23.3	22.2	21.2	20.2	18.2
85°	16.2	16.2	16.2	15.2	15.2	15.2	14.2	14.2	13.1	12.1	10.1
87.5°	9.1	9.1	9.1	8.1	8.1	8.1	8.1	8.1	7.1	6.1	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5
2.5°	1053.5	1039.3	1048.4	1048.4	1045.4	1053.5	1058.5	1062.6	1061.5	1052.4	1051.4
5°	1045.4	1033.2	1043.3	1044.4	1041.3	1052.4	1059.5	1064.6	1065.6	1057.5	1058.5
7.5°	1039.3	1029.2	1042.3	1046.4	1045.4	1055.5	1063.6	1071.7	1075.7	1069.6	1070.6
10°	1036.3	1028.2	1042.3	1048.4	1049.4	1060.5	1072.7	1083.8	1088.8	1084.8	1087.8
12.5°	1032.2	1027.2	1043.3	1052.4	1056.5	1067.6	1082.8	1095.9	1104.0	1102.0	1108.1
15°	1028.2	1024.1	1043.3	1056.5	1061.5	1071.7	1088.8	1108.1	1117.2	1116.1	1124.2
17.5°	1018.1	1017.1	1037.3	1051.4	1058.5	1070.6	1086.8	1110.1	1119.2	1121.2	1131.3
20°	1001.9	1001.9	1024.1	1039.3	1047.4	1058.5	1078.7	1101.0	1112.1	1114.1	1125.2
22.5°	979.7	981.7	1002.9	1018.1	1030.2	1038.3	1059.5	1082.8	1092.9	1095.9	1108.1
25°	950.3	952.4	972.6	987.7	1000.9	1010.0	1030.2	1051.4	1063.6	1066.6	1075.7
27.5°	911.9	916.0	935.2	950.3	961.5	967.5	988.8	1011.0	1020.1	1023.1	1032.2
30°	867.4	868.4	887.7	900.8	911.9	917.0	935.2	958.4	965.5	968.5	981.7
32.5°	812.8	811.8	830.0	842.2	851.3	857.3	876.5	891.7	898.8	903.8	910.9
35°	747.1	746.1	759.3	773.4	780.5	782.5	801.7	817.9	821.9	826.0	835.1
37.5°	673.3	673.3	684.4	691.5	699.6	702.6	711.7	729.9	737.0	736.0	743.1
40°	595.5	591.4	599.5	606.6	608.6	609.6	618.7	632.9	637.9	637.9	643.0
42.5°	513.6	507.5	508.5	512.6	514.6	507.5	513.6	522.7	519.7	523.7	524.7
45°	426.6	417.5	413.5	404.4	406.4	399.3	395.3	397.3	396.3	386.2	388.2
47.5°	355.9	339.7	332.6	319.5	316.4	308.4	303.3	294.2	286.1	286.1	281.1
50°	296.2	280.0	265.9	250.7	245.7	238.6	227.5	215.3	209.3	203.2	198.2
52.5°	248.7	231.5	214.3	198.2	191.1	182.0	166.8	154.7	143.6	137.5	131.4
55°	210.3	191.1	172.9	155.7	146.6	137.5	122.3	108.2	95.0	86.9	81.9
57.5°	181.0	162.8	143.6	125.4	117.3	107.2	91.0	75.8	63.7	54.6	49.5
60°	159.7	141.5	124.4	105.1	97.1	86.9	69.8	55.6	43.5	35.4	29.3
62.5°	141.5	125.4	107.2	90.0	81.9	71.8	55.6	41.5	30.3	22.2	17.2
65°	128.4	112.2	97.1	79.9	72.8	62.7	47.5	34.4	24.3	17.2	12.1
67.5°	113.2	99.1	83.9	69.8	62.7	54.6	40.4	29.3	20.2	14.2	10.1
70°	95.0	83.9	70.8	57.6	52.6	45.5	33.4	24.3	16.2	11.1	8.1
72.5°	75.8	66.7	56.6	46.5	42.5	35.4	27.3	19.2	12.1	8.1	6.1
75°	57.6	50.5	42.5	35.4	31.3	27.3	20.2	14.2	9.1	6.1	4.0
77.5°	39.4	36.4	30.3	24.3	22.2	19.2	13.1	9.1	6.1	4.0	2.0
80°	27.3	24.3	20.2	16.2	14.2	12.1	8.1	6.1	3.0	2.0	1.0
82.5°	17.2	14.2	12.1	10.1	9.1	7.1	5.1	3.0	2.0	1.0	1.0
85°	9.1	8.1	7.1	5.1	5.1	4.0	3.0	2.0	1.0	0.0	0.0
87.5°	5.1	4.0	3.0	2.0	2.0	1.0	1.0	1.0	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°	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5
2.5°	1063.6	1063.6	1062.6	1074.7	1060.5	1074.7	1067.6	1074.7	1064.6	1063.6	1064.6
5°	1071.7	1074.7	1075.7	1086.8	1073.7	1090.9	1084.8	1090.9	1083.8	1085.8	1088.8
7.5°	1087.8	1092.9	1091.9	1106.0	1092.9	1112.1	1108.1	1117.2	1110.1	1112.1	1116.1
10°	1106.0	1112.1	1113.1	1127.3	1115.1	1138.4	1133.3	1143.4	1137.4	1140.4	1145.5
12.5°	1127.3	1134.3	1135.4	1151.5	1138.4	1162.6	1159.6	1169.7	1164.7	1167.7	1173.8
15°	1143.4	1153.5	1155.6	1171.7	1157.6	1182.9	1180.8	1194.0	1185.9	1191.0	1196.0
17.5°	1151.5	1160.6	1164.7	1179.8	1167.7	1193.0	1191.0	1202.1	1196.0	1201.1	1207.1
20°	1146.5	1157.6	1160.6	1175.8	1163.7	1188.9	1185.9	1197.0	1191.0	1195.0	1201.1
22.5°	1128.3	1139.4	1143.4	1157.6	1146.5	1169.7	1168.7	1178.8	1170.7	1175.8	1180.8
25°	1095.9	1108.1	1110.1	1123.2	1111.1	1135.4	1133.3	1144.4	1138.4	1141.4	1148.5
27.5°	1049.4	1063.6	1066.6	1077.7	1068.6	1088.8	1088.8	1097.9	1090.9	1090.9	1097.9
30°	993.8	1008.0	1010.0	1019.1	1011.0	1029.2	1030.2	1039.3	1028.2	1034.3	1035.3
32.5°	926.1	935.2	941.2	949.3	937.2	960.4	957.4	964.5	958.4	958.4	963.5
35°	844.2	855.3	858.3	868.4	858.3	876.5	876.5	880.6	874.5	874.5	882.6
37.5°	755.2	763.3	764.3	774.4	766.3	781.5	780.5	783.5	777.5	781.5	781.5
40°	651.1	657.1	659.2	664.2	663.2	674.3	673.3	675.3	672.3	673.3	675.3
42.5°	529.8	537.9	541.9	545.9	539.9	555.0	552.0	555.0	554.0	555.0	558.1
45°	390.2	396.3	399.3	400.4	398.3	407.4	414.5	408.4	409.5	407.4	411.5
47.5°	282.1	283.1	281.1	287.1	282.1	286.1	288.1	289.1	283.1	282.1	286.1
50°	193.1	198.2	191.1	194.1	193.1	197.1	195.1	196.1	190.1	193.1	191.1
52.5°	128.4	127.4	125.4	126.4	124.4	124.4	124.4	126.4	122.3	120.3	118.3
55°	77.8	75.8	71.8	70.8	70.8	71.8	69.8	67.7	67.7	66.7	66.7
57.5°	45.5	42.5	40.4	39.4	37.4	36.4	35.4	35.4	33.4	33.4	33.4
60°	25.3	22.2	20.2	18.2	18.2	17.2	16.2	15.2	15.2	15.2	14.2
62.5°	13.1	11.1	9.1	8.1	8.1	7.1	6.1	6.1	6.1	6.1	5.1
65°	9.1	7.1	6.1	5.1	5.1	4.0	4.0	4.0	4.0	4.0	4.0
67.5°	7.1	6.1	5.1	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0
70°	6.1	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
72.5°	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
75°	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
80°	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	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	0.0	0.0	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: P252144

CATALOG NUMBER: LD6B15D010 EU6B10208040 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5	1057.5
2.5°	1073.7	1072.7	1073.7	1075.7	1071.7	1083.8	1077.7	1083.8
5°	1096.9	1097.9	1099.0	1102.0	1096.9	1112.1	1104.0	1113.1
7.5°	1127.3	1128.3	1129.3	1132.3	1129.3	1144.4	1135.4	1143.4
10°	1158.6	1160.6	1160.6	1165.7	1162.6	1176.8	1170.7	1180.8
12.5°	1187.9	1189.9	1192.0	1195.0	1193.0	1208.1	1203.1	1211.2
15°	1211.2	1215.2	1216.2	1220.3	1218.3	1234.4	1228.4	1236.5
17.5°	1222.3	1226.3	1226.3	1231.4	1229.4	1246.6	1238.5	1247.6
20°	1216.2	1219.3	1220.3	1225.3	1223.3	1240.5	1232.4	1243.5
22.5°	1197.0	1198.0	1199.0	1204.1	1203.1	1218.3	1211.2	1218.3
25°	1161.6	1164.7	1163.7	1167.7	1167.7	1179.8	1171.7	1177.8
27.5°	1111.1	1114.1	1114.1	1119.2	1115.1	1127.3	1119.2	1128.3
30°	1049.4	1052.4	1050.4	1054.5	1050.4	1062.6	1056.5	1059.5
32.5°	975.6	975.6	976.6	977.6	975.6	986.7	980.7	986.7
35°	887.7	889.7	890.7	891.7	889.7	897.8	890.7	894.7
37.5°	788.6	793.6	792.6	793.6	790.6	800.7	794.6	796.7
40°	682.4	682.4	681.4	683.4	680.4	688.5	684.4	686.5
42.5°	559.1	562.1	558.1	563.1	555.0	566.2	562.1	559.1
45°	419.6	415.5	414.5	415.5	412.5	413.5	416.5	414.5
47.5°	286.1	286.1	284.1	281.1	285.1	286.1	282.1	282.1
50°	192.1	192.1	190.1	189.1	191.1	190.1	188.0	191.1
52.5°	122.3	118.3	118.3	120.3	118.3	116.3	119.3	117.3
55°	66.7	64.7	64.7	66.7	64.7	64.7	63.7	65.7
57.5°	32.4	33.4	32.4	32.4	32.4	32.4	31.3	32.4
60°	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
62.5°	6.1	6.1	5.1	5.1	5.1	5.1	5.1	5.1
65°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
67.5°	3.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0
70°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
72.5°	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0
75°	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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



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— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)