

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: P252571

Luminaire Tested: **LD6B20D010 EU6B10208030 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252571
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 EU6B10208030 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2032.0 lumens
Efficiency: N/A
Efficacy: 97.7 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

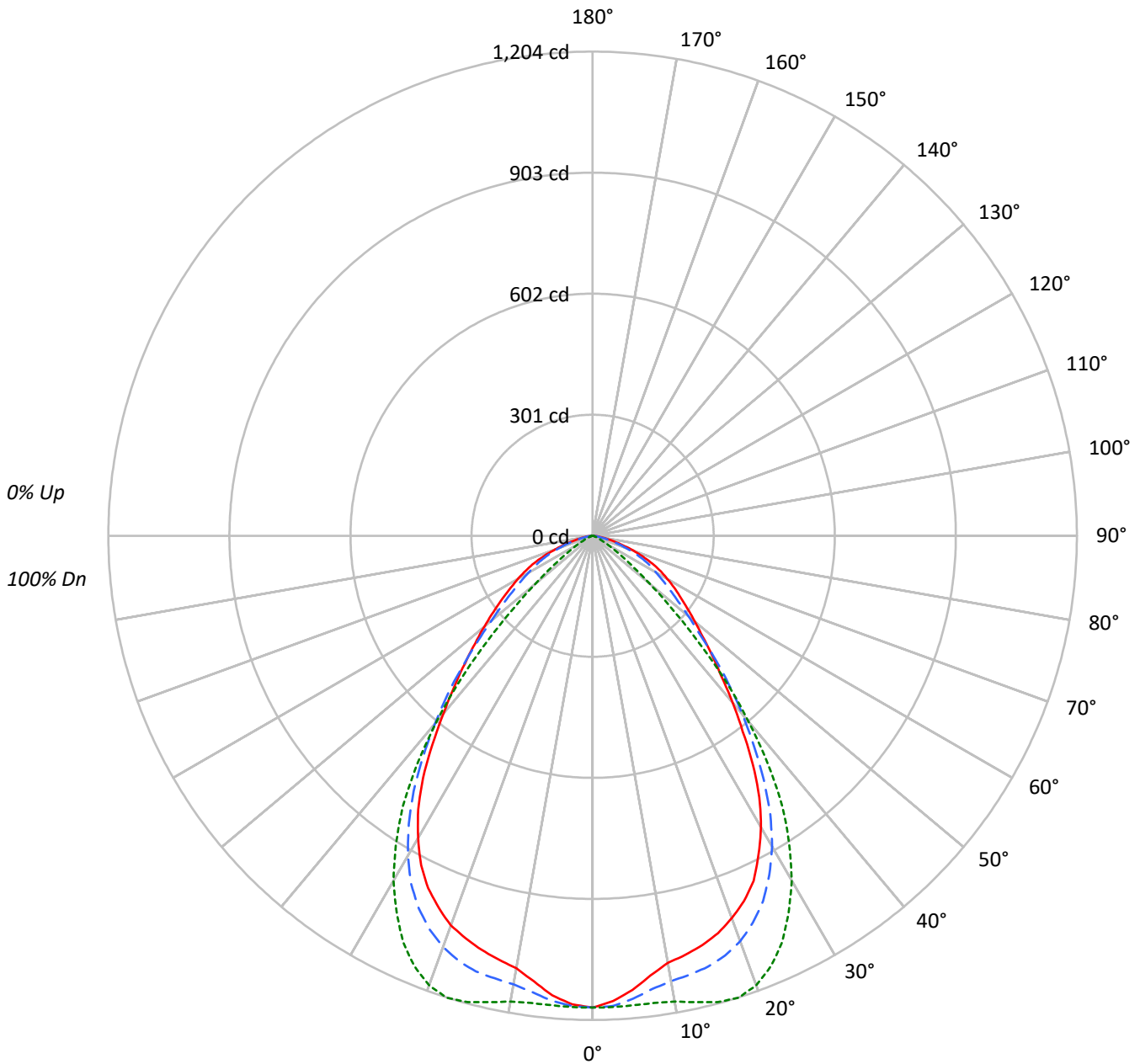
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	76540	76540	76540
5°	74252	76741	75143
10°	71428	77900	72329
15°	71176	81071	72000
20°	70247	82584	71566
25°	68148	80256	69610
30°	63039	74588	65389
35°	55305	65571	58546
40°	46092	51397	49089
45°	38788	33907	41417
50°	33585	18584	35656
55°	30392	9873	31166
60°	27962	5128	27962
65°	25333	2717	24700
70°	20429	1545	18884
75°	14015	1033	12982
80°	9167	526	8153
85°	6063	1048	5090



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.4	5.4
10°-20°	316.3	15.6
20°-30°	467.4	23.0
30°-40°	472.1	23.2
40°-50°	325.4	16.0
50°-60°	186.9	9.2
60°-70°	108.8	5.4
70°-80°	39.7	2.0
80°-90°	6.1	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°	893.1	44.0
0°-40°	1365.2	67.2
0°-60°	1877.5	92.4
0°-90°	2032.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2032.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1173	1173	1173	1173	1173	
5°	1134	1156	1172	1161	1147	106
15°	1054	1109	1200	1122	1066	297
25°	947	1002	1115	1023	967	431
35°	694	742	823	776	735	431
45°	420	426	368	453	449	327
55°	267	235	87	244	274	241
65°	164	138	18	137	160	161
75°	56	45	4	43	52	63
85°	8	4	1	5	7	10
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°	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2
2.5°	1158.3	1159.6	1161.0	1159.6	1161.0	1166.4	1162.3	1165.0	1165.0	1166.4	1170.5
5°	1133.8	1133.8	1136.6	1135.2	1139.3	1144.7	1140.6	1144.7	1146.0	1148.8	1155.5
7.5°	1102.6	1102.6	1104.0	1104.0	1109.4	1114.9	1112.1	1117.6	1123.0	1128.4	1136.6
10°	1078.2	1080.9	1080.9	1082.3	1087.7	1094.5	1093.2	1099.9	1105.4	1113.5	1124.3
12.5°	1067.4	1068.7	1068.7	1071.5	1076.9	1083.7	1082.3	1089.1	1097.2	1106.7	1117.6
15°	1053.8	1056.5	1055.2	1057.9	1063.3	1070.1	1068.7	1075.5	1085.0	1094.5	1109.4
17.5°	1036.2	1037.5	1038.9	1038.9	1044.3	1049.8	1049.8	1056.5	1067.4	1078.2	1094.5
20°	1011.8	1014.5	1014.5	1015.8	1019.9	1028.1	1026.7	1033.5	1044.3	1055.2	1072.8
22.5°	983.3	984.7	984.7	986.0	992.8	996.9	998.2	1003.6	1013.1	1025.3	1041.6
25°	946.7	948.0	946.7	950.7	953.5	961.6	958.9	965.7	976.5	986.0	1002.3
27.5°	893.8	896.5	896.5	897.9	904.6	911.4	911.4	918.2	927.7	934.5	950.7
30°	836.8	840.9	836.8	843.6	846.3	851.7	855.8	859.9	868.0	877.5	892.4
32.5°	771.7	770.4	771.7	774.4	782.6	786.6	789.4	793.4	801.6	809.7	821.9
35°	694.4	697.1	698.5	703.9	703.9	710.7	712.0	714.8	727.0	732.4	741.9
37.5°	613.0	615.7	617.1	619.8	625.2	628.0	632.0	636.1	644.2	653.7	659.1
40°	541.2	541.2	542.5	545.2	549.3	550.6	554.7	560.1	565.6	573.7	579.1
42.5°	473.3	474.7	473.3	476.1	480.1	485.5	484.2	491.0	492.3	497.8	501.8
45°	420.4	420.4	417.7	420.4	420.4	425.9	424.5	427.2	425.9	428.6	425.9
47.5°	370.3	371.6	370.3	371.6	371.6	371.6	373.0	370.3	371.6	367.5	359.4
50°	330.9	332.3	329.6	330.9	329.6	328.2	329.6	325.5	324.1	318.7	310.6
52.5°	297.0	295.7	294.3	294.3	294.3	293.0	291.6	287.5	283.5	278.0	268.5
55°	267.2	265.8	264.5	264.5	261.8	260.4	260.4	256.3	252.3	245.5	234.6
57.5°	240.1	238.7	237.3	237.3	236.0	233.3	233.3	229.2	223.8	215.6	206.2
60°	214.3	214.3	214.3	212.9	212.9	210.2	210.2	206.2	200.7	192.6	181.7
62.5°	191.2	189.9	189.9	189.9	189.9	188.5	187.2	184.5	179.0	170.9	161.4
65°	164.1	164.1	164.1	164.1	162.8	162.8	162.8	158.7	156.0	147.8	138.3
67.5°	134.3	134.3	134.3	134.3	132.9	134.3	134.3	131.6	128.8	120.7	112.6
70°	107.1	105.8	104.4	105.8	104.4	104.4	105.8	103.1	101.7	94.9	86.8
72.5°	78.7	80.0	78.7	78.7	78.7	77.3	78.7	77.3	74.6	69.2	63.7
75°	55.6	57.0	57.0	55.6	55.6	55.6	54.3	54.3	51.5	47.5	44.8
77.5°	38.0	38.0	38.0	38.0	36.6	36.6	36.6	35.3	33.9	31.2	28.5
80°	24.4	24.4	24.4	24.4	23.1	23.1	23.1	21.7	21.7	19.0	16.3
82.5°	14.9	14.9	14.9	14.9	14.9	14.9	13.6	13.6	12.2	10.9	9.5
85°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	6.8	6.8	5.4	4.1
87.5°	2.7	2.7	4.1	4.1	4.1	4.1	4.1	4.1	2.7	2.7	2.7
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°	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2
2.5°	1167.7	1169.1	1169.1	1169.1	1173.2	1174.5	1170.5	1166.4	1174.5	1173.2	1175.9
5°	1154.2	1158.3	1161.0	1162.3	1166.4	1169.1	1165.0	1163.7	1170.5	1171.8	1173.2
7.5°	1137.9	1144.7	1151.5	1154.2	1159.6	1162.3	1161.0	1161.0	1169.1	1171.8	1171.8
10°	1127.1	1136.6	1144.7	1151.5	1158.3	1162.3	1162.3	1163.7	1173.2	1175.9	1178.6
12.5°	1124.3	1136.6	1147.4	1156.9	1162.3	1169.1	1170.5	1174.5	1184.0	1188.1	1188.1
15°	1117.6	1133.8	1147.4	1159.6	1167.7	1175.9	1178.6	1186.7	1197.6	1200.3	1203.0
17.5°	1105.4	1121.6	1137.9	1152.8	1163.7	1170.5	1178.6	1186.7	1200.3	1204.4	1205.7
20°	1083.7	1102.6	1118.9	1133.8	1144.7	1154.2	1162.3	1171.8	1184.0	1189.5	1190.8
22.5°	1051.1	1070.1	1086.4	1102.6	1113.5	1121.6	1129.8	1140.6	1152.8	1158.3	1158.3
25°	1011.8	1029.4	1047.0	1059.2	1070.1	1079.6	1083.7	1095.9	1108.1	1114.9	1114.9
27.5°	961.6	977.9	994.1	1007.7	1014.5	1022.6	1029.4	1040.3	1049.8	1055.2	1060.6
30°	897.9	914.1	929.0	942.6	950.7	958.9	965.7	973.8	983.3	990.1	991.4
32.5°	828.7	842.2	857.2	870.7	878.9	881.6	888.4	896.5	904.6	910.1	911.4
35°	752.7	762.2	771.7	783.9	792.1	792.1	798.8	804.3	811.1	823.3	820.5
37.5°	663.2	676.8	683.6	687.6	693.1	698.5	699.8	706.6	714.8	717.5	721.5
40°	579.1	583.2	587.3	587.3	592.7	592.7	592.7	594.0	602.2	603.5	609.0
42.5°	495.0	495.0	491.0	486.9	488.3	486.9	480.1	480.1	484.2	489.6	489.6
45°	416.4	406.9	394.7	385.2	378.4	375.7	367.5	367.5	366.2	367.5	373.0
47.5°	349.9	333.6	313.3	294.3	287.5	282.1	269.9	264.5	261.8	263.1	265.8
50°	294.3	276.7	253.6	230.6	218.4	211.6	196.7	187.2	185.8	183.1	188.5
52.5°	253.6	231.9	207.5	180.4	168.2	157.3	141.1	132.9	127.5	127.5	128.8
55°	218.4	195.3	168.2	141.1	128.8	120.7	104.4	93.6	88.2	86.8	90.9
57.5°	188.5	166.8	139.7	112.6	100.4	90.9	74.6	65.1	61.0	58.3	59.7
60°	165.5	143.8	116.6	90.9	80.0	69.2	55.6	44.8	39.3	39.3	40.7
62.5°	143.8	123.4	99.0	74.6	65.1	55.6	40.7	31.2	27.1	25.8	27.1
65°	122.1	103.1	82.7	62.4	52.9	44.8	32.6	24.4	19.0	17.6	19.0
67.5°	99.0	84.1	66.5	50.2	42.0	35.3	24.4	17.6	13.6	12.2	13.6
70°	77.3	63.7	50.2	36.6	31.2	25.8	17.6	13.6	9.5	8.1	9.5
72.5°	55.6	46.1	35.3	25.8	21.7	17.6	12.2	9.5	6.8	5.4	6.8
75°	38.0	31.2	23.1	16.3	13.6	12.2	8.1	5.4	4.1	4.1	4.1
77.5°	24.4	19.0	14.9	10.9	8.1	6.8	4.1	2.7	2.7	2.7	2.7
80°	13.6	10.9	8.1	5.4	4.1	4.1	2.7	2.7	1.4	1.4	1.4
82.5°	8.1	5.4	4.1	2.7	2.7	1.4	1.4	1.4	1.4	1.4	1.4
85°	4.1	2.7	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°	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2
2.5°	1170.5	1171.8	1167.7	1173.2	1169.1	1174.5	1174.5	1169.1	1170.5	1167.7	1173.2
5°	1167.7	1167.7	1165.0	1169.1	1163.7	1169.1	1167.7	1158.3	1161.0	1155.5	1161.0
7.5°	1167.7	1165.0	1161.0	1165.0	1158.3	1162.3	1156.9	1147.4	1144.7	1137.9	1137.9
10°	1171.8	1167.7	1162.3	1163.7	1156.9	1158.3	1150.1	1136.6	1132.5	1124.3	1121.6
12.5°	1181.3	1177.2	1169.1	1171.8	1162.3	1162.3	1151.5	1135.2	1127.1	1116.2	1113.5
15°	1194.9	1188.1	1178.6	1180.0	1170.5	1165.0	1151.5	1132.5	1121.6	1106.7	1102.6
17.5°	1197.6	1190.8	1178.6	1178.6	1166.4	1159.6	1143.3	1121.6	1108.1	1093.2	1085.0
20°	1182.7	1175.9	1162.3	1161.0	1150.1	1140.6	1123.0	1101.3	1087.7	1071.5	1064.7
22.5°	1151.5	1143.3	1131.1	1129.8	1118.9	1113.5	1094.5	1072.8	1059.2	1043.0	1037.5
25°	1105.4	1101.3	1089.1	1087.7	1078.2	1071.5	1055.2	1034.8	1022.6	1006.4	1000.9
27.5°	1051.1	1047.0	1034.8	1034.8	1024.0	1019.9	1005.0	986.0	976.5	961.6	954.8
30°	986.0	980.6	973.8	972.4	963.0	958.9	945.3	927.7	918.2	906.0	903.3
32.5°	908.7	904.6	900.6	899.2	889.7	885.6	876.2	858.5	850.4	839.5	835.5
35°	819.2	816.5	812.4	811.1	807.0	802.9	793.4	779.9	775.8	767.6	763.6
37.5°	716.1	718.8	716.1	716.1	712.0	713.4	705.3	697.1	693.1	687.6	684.9
40°	604.9	610.3	614.4	614.4	613.0	618.5	617.1	610.3	609.0	606.3	604.9
42.5°	492.3	495.0	503.2	508.6	507.2	520.8	522.2	527.6	531.7	528.9	530.3
45°	374.3	382.5	393.3	398.7	405.5	423.2	432.7	443.5	453.0	458.4	457.1
47.5°	269.9	279.4	291.6	299.7	311.9	333.6	358.1	371.6	385.2	392.0	398.7
50°	195.3	204.8	219.7	231.9	240.1	269.9	295.7	313.3	328.2	337.7	344.5
52.5°	137.0	147.8	164.1	175.0	187.2	215.6	245.5	265.8	282.1	294.3	301.1
55°	94.9	107.1	122.1	132.9	146.5	176.3	204.8	226.5	244.1	255.0	263.1
57.5°	66.5	77.3	92.2	101.7	115.3	143.8	172.2	193.9	211.6	222.4	231.9
60°	44.8	55.6	70.5	80.0	90.9	119.4	145.1	168.2	184.5	195.3	204.8
62.5°	31.2	40.7	55.6	65.1	74.6	99.0	123.4	143.8	160.0	172.2	180.4
65°	24.4	32.6	44.8	52.9	62.4	82.7	103.1	120.7	137.0	149.2	154.6
67.5°	17.6	25.8	35.3	42.0	48.8	66.5	84.1	97.7	112.6	122.1	128.8
70°	12.2	17.6	25.8	31.2	36.6	50.2	63.7	76.0	86.8	93.6	99.0
72.5°	9.5	12.2	17.6	21.7	25.8	35.3	46.1	55.6	63.7	69.2	74.6
75°	5.4	8.1	12.2	14.9	17.6	24.4	31.2	38.0	43.4	47.5	50.2
77.5°	2.7	4.1	6.8	8.1	10.9	14.9	20.3	24.4	28.5	31.2	33.9
80°	2.7	2.7	4.1	4.1	5.4	8.1	10.9	13.6	16.3	19.0	20.3
82.5°	1.4	1.4	2.7	2.7	2.7	4.1	5.4	8.1	9.5	10.9	12.2
85°	1.4	1.4	1.4	1.4	1.4	2.7	2.7	4.1	5.4	6.8	6.8
87.5°	0.0	0.0	1.4	1.4	1.4	1.4	1.4	2.7	2.7	2.7	4.1
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: P252571

CATALOG NUMBER: LD6B20D010 EU6B10208030 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2	1173.2
2.5°	1169.1	1171.8	1170.5	1173.2	1169.1	1167.7	1170.5	1166.4
5°	1154.2	1155.5	1154.2	1154.2	1151.5	1148.8	1151.5	1147.4
7.5°	1131.1	1131.1	1127.1	1127.1	1121.6	1118.9	1118.9	1117.6
10°	1112.1	1108.1	1104.0	1105.4	1097.2	1094.5	1093.2	1091.8
12.5°	1102.6	1099.9	1093.2	1093.2	1085.0	1082.3	1080.9	1079.6
15°	1091.8	1086.4	1080.9	1079.6	1072.8	1070.1	1068.7	1066.0
17.5°	1072.8	1068.7	1062.0	1062.0	1055.2	1053.8	1051.1	1049.8
20°	1052.5	1047.0	1041.6	1041.6	1033.5	1033.5	1029.4	1030.8
22.5°	1024.0	1019.9	1014.5	1014.5	1007.7	1006.4	1002.3	1000.9
25°	990.1	984.7	980.6	979.2	973.8	971.1	969.7	967.0
27.5°	945.3	941.3	937.2	934.5	927.7	926.3	922.3	923.6
30°	889.7	887.0	885.6	882.9	874.8	872.1	872.1	868.0
32.5°	828.7	824.6	821.9	817.8	811.1	809.7	805.6	807.0
35°	754.1	748.7	744.6	745.9	737.8	736.5	733.7	735.1
37.5°	676.8	671.4	665.9	664.6	657.8	657.8	653.7	653.7
40°	596.8	591.3	588.6	588.6	580.5	581.8	577.8	576.4
42.5°	524.9	519.5	518.1	516.7	512.7	511.3	507.2	508.6
45°	457.1	455.7	455.7	453.0	448.9	447.6	448.9	448.9
47.5°	397.4	398.7	397.4	397.4	394.7	397.4	394.7	396.0
50°	347.2	349.9	349.9	349.9	348.6	349.9	349.9	351.3
52.5°	305.2	309.2	307.9	309.2	307.9	310.6	309.2	310.6
55°	268.5	271.3	272.6	274.0	274.0	274.0	274.0	274.0
57.5°	234.6	238.7	240.1	241.4	241.4	244.1	241.4	241.4
60°	207.5	211.6	212.9	214.3	214.3	215.6	212.9	214.3
62.5°	183.1	187.2	187.2	188.5	188.5	188.5	185.8	187.2
65°	158.7	160.0	161.4	161.4	160.0	160.0	158.7	160.0
67.5°	131.6	132.9	131.6	131.6	130.2	130.2	127.5	128.8
70°	101.7	101.7	103.1	101.7	100.4	101.7	100.4	99.0
72.5°	76.0	76.0	76.0	74.6	74.6	73.2	74.6	74.6
75°	51.5	51.5	52.9	52.9	52.9	52.9	51.5	51.5
77.5°	33.9	33.9	33.9	33.9	35.3	33.9	33.9	33.9
80°	21.7	21.7	23.1	23.1	21.7	21.7	21.7	21.7
82.5°	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
85°	8.1	8.1	8.1	8.1	6.8	6.8	6.8	6.8
87.5°	4.1	4.1	4.1	4.1	4.1	4.1	2.7	2.7
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)