

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: P252572

Luminaire Tested: **LD6B20D010 EU6B10208035 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252572
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 EU6B10208035 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2082.0 lumens
Efficiency: N/A
Efficacy: 100.1 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

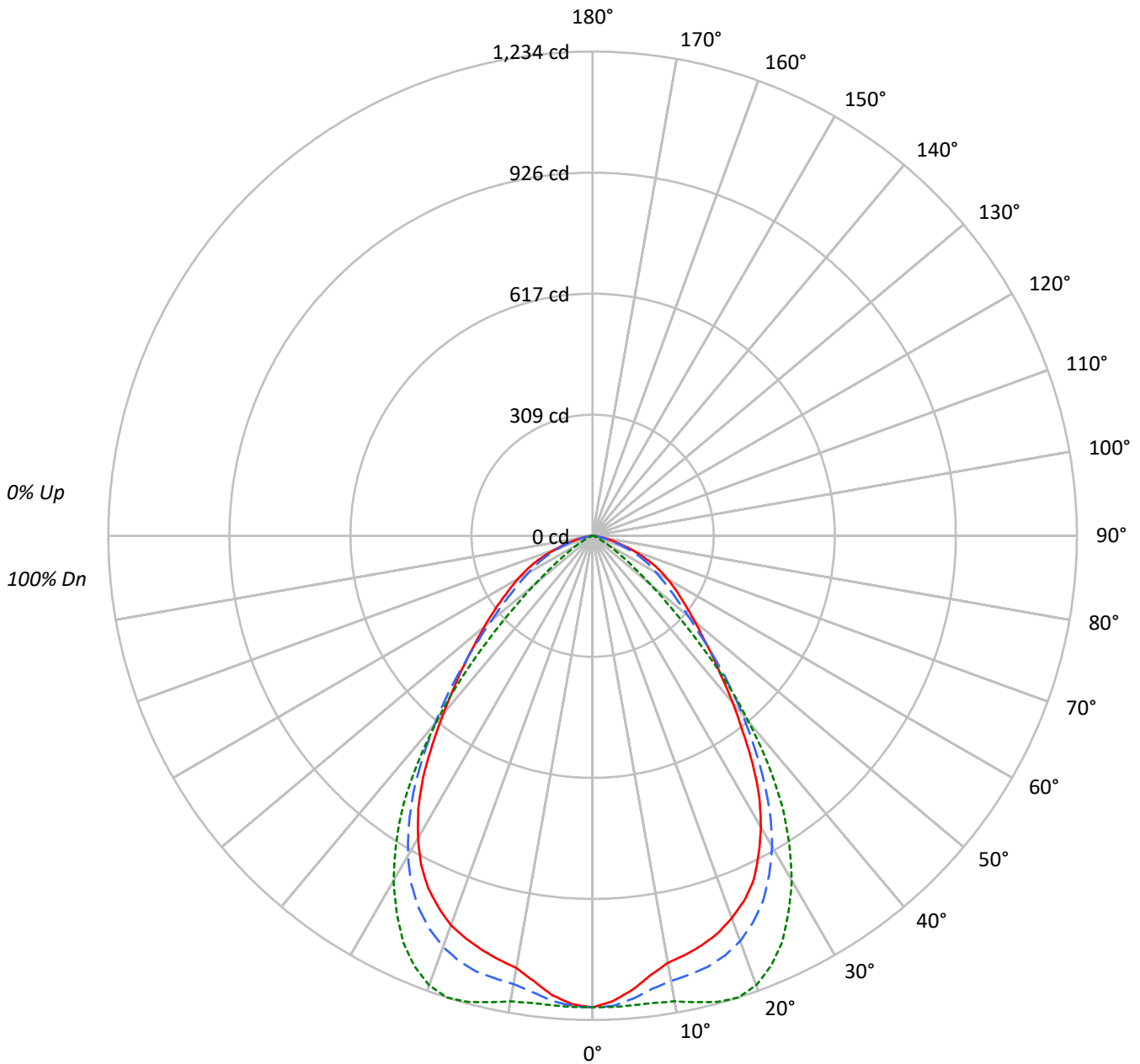
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	78419	78419	78419
5°	76080	78634	76990
10°	73190	79814	74111
15°	72932	83063	73776
20°	71976	84611	73323
25°	69826	82229	71323
30°	64591	76418	67002
35°	56667	67180	59988
40°	47224	52666	50299
45°	39747	34747	42442
50°	34417	19041	36529
55°	31143	10112	31928
60°	28654	5258	28654
65°	25950	2794	25317
70°	20944	1583	19342
75°	14368	1059	13309
80°	9393	526	8341
85°	6213	1048	5165



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	5.4
10°-20°	324.1	15.6
20°-30°	478.9	23.0
30°-40°	483.7	23.2
40°-50°	333.4	16.0
50°-60°	191.5	9.2
60°-70°	111.5	5.4
70°-80°	40.7	2.0
80°-90°	6.2	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°	915.1	44.0
0°-40°	1398.8	67.2
0°-60°	1923.7	92.4
0°-90°	2082.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2082.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1202	1202	1202	1202	1202	
5°	1162	1184	1201	1190	1176	109
15°	1080	1137	1230	1149	1092	304
25°	970	1027	1142	1048	991	442
35°	712	760	844	795	753	442
45°	431	436	377	464	460	335
55°	274	240	89	250	281	246
65°	168	142	18	140	164	165
75°	57	46	4	44	53	64
85°	8	4	1	6	7	11
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°	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0
2.5°	1186.8	1188.1	1189.5	1188.1	1189.5	1195.1	1190.9	1193.7	1193.7	1195.1	1199.3
5°	1161.7	1161.7	1164.5	1163.1	1167.3	1172.9	1168.7	1172.9	1174.2	1177.0	1184.0
7.5°	1129.8	1129.8	1131.2	1131.2	1136.7	1142.3	1139.5	1145.1	1150.6	1156.2	1164.5
10°	1104.8	1107.5	1107.5	1108.9	1114.5	1121.4	1120.1	1127.0	1132.6	1140.9	1152.0
12.5°	1093.7	1095.0	1095.0	1097.8	1103.4	1110.3	1108.9	1115.9	1124.2	1133.9	1145.1
15°	1079.8	1082.5	1081.1	1083.9	1089.5	1096.4	1095.0	1102.0	1111.7	1121.4	1136.7
17.5°	1061.7	1063.1	1064.5	1064.5	1070.0	1075.6	1075.6	1082.5	1093.7	1104.8	1121.4
20°	1036.7	1039.5	1039.5	1040.8	1045.0	1053.4	1052.0	1058.9	1070.0	1081.1	1099.2
22.5°	1007.5	1008.9	1008.9	1010.3	1017.2	1021.4	1022.8	1028.3	1038.1	1050.6	1067.2
25°	970.0	971.4	970.0	974.1	976.9	985.3	982.5	989.4	1000.5	1010.3	1026.9
27.5°	915.8	918.6	918.6	919.9	926.9	933.8	933.8	940.8	950.5	957.5	974.1
30°	857.4	861.6	857.4	864.4	867.1	872.7	876.9	881.0	889.4	899.1	914.4
32.5°	790.7	789.3	790.7	793.5	801.8	806.0	808.8	812.9	821.3	829.6	842.1
35°	711.5	714.3	715.7	721.2	721.2	728.2	729.6	732.3	744.8	750.4	760.1
37.5°	628.1	630.9	632.3	635.1	640.6	643.4	647.6	651.7	660.1	669.8	675.4
40°	554.5	554.5	555.9	558.6	562.8	564.2	568.4	573.9	579.5	587.8	593.4
42.5°	485.0	486.4	485.0	487.8	491.9	497.5	496.1	503.1	504.4	510.0	514.2
45°	430.8	430.8	428.0	430.8	430.8	436.3	435.0	437.7	436.3	439.1	436.3
47.5°	379.4	380.8	379.4	380.8	380.8	380.8	382.2	379.4	380.8	376.6	368.3
50°	339.1	340.5	337.7	339.1	337.7	336.3	337.7	333.5	332.1	326.6	318.2
52.5°	304.3	302.9	301.6	301.6	301.6	300.2	298.8	294.6	290.4	284.9	275.1
55°	273.8	272.4	271.0	271.0	268.2	266.8	266.8	262.6	258.5	251.5	240.4
57.5°	246.0	244.6	243.2	243.2	241.8	239.0	239.0	234.8	229.3	221.0	211.2
60°	219.6	219.6	219.6	218.2	218.2	215.4	215.4	211.2	205.7	197.3	186.2
62.5°	195.9	194.6	194.6	194.6	194.6	193.2	191.8	189.0	183.4	175.1	165.4
65°	168.1	168.1	168.1	168.1	166.8	166.8	166.8	162.6	159.8	151.5	141.7
67.5°	137.6	137.6	137.6	137.6	136.2	137.6	137.6	134.8	132.0	123.7	115.3
70°	109.8	108.4	107.0	108.4	107.0	107.0	108.4	105.6	104.2	97.3	88.9
72.5°	80.6	82.0	80.6	80.6	80.6	79.2	80.6	79.2	76.4	70.9	65.3
75°	57.0	58.4	58.4	57.0	57.0	57.0	55.6	55.6	52.8	48.6	45.9
77.5°	38.9	38.9	38.9	38.9	37.5	37.5	37.5	36.1	34.7	32.0	29.2
80°	25.0	25.0	25.0	25.0	23.6	23.6	23.6	22.2	22.2	19.5	16.7
82.5°	15.3	15.3	15.3	15.3	15.3	15.3	13.9	13.9	12.5	11.1	9.7
85°	8.3	8.3	8.3	8.3	8.3	8.3	8.3	6.9	6.9	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0
2.5°	1196.5	1197.9	1197.9	1197.9	1202.0	1203.4	1199.3	1195.1	1203.4	1202.0	1204.8
5°	1182.6	1186.8	1189.5	1190.9	1195.1	1197.9	1193.7	1192.3	1199.3	1200.7	1202.0
7.5°	1165.9	1172.9	1179.8	1182.6	1188.1	1190.9	1189.5	1189.5	1197.9	1200.7	1200.7
10°	1154.8	1164.5	1172.9	1179.8	1186.8	1190.9	1190.9	1192.3	1202.0	1204.8	1207.6
12.5°	1152.0	1164.5	1175.6	1185.4	1190.9	1197.9	1199.3	1203.4	1213.2	1217.3	1217.3
15°	1145.1	1161.7	1175.6	1188.1	1196.5	1204.8	1207.6	1215.9	1227.1	1229.8	1232.6
17.5°	1132.6	1149.2	1165.9	1181.2	1192.3	1199.3	1207.6	1215.9	1229.8	1234.0	1235.4
20°	1110.3	1129.8	1146.5	1161.7	1172.9	1182.6	1190.9	1200.7	1213.2	1218.7	1220.1
22.5°	1077.0	1096.4	1113.1	1129.8	1140.9	1149.2	1157.6	1168.7	1181.2	1186.8	1186.8
25°	1036.7	1054.7	1072.8	1085.3	1096.4	1106.2	1110.3	1122.8	1135.3	1142.3	1142.3
27.5°	985.3	1001.9	1018.6	1032.5	1039.5	1047.8	1054.7	1065.9	1075.6	1081.1	1086.7
30°	919.9	936.6	951.9	965.8	974.1	982.5	989.4	997.8	1007.5	1014.4	1015.8
32.5°	849.1	863.0	878.3	892.2	900.5	903.3	910.2	918.6	926.9	932.5	933.8
35°	771.3	781.0	790.7	803.2	811.6	811.6	818.5	824.1	831.0	843.5	840.7
37.5°	679.5	693.4	700.4	704.5	710.1	715.7	717.1	724.0	732.3	735.1	739.3
40°	593.4	597.5	601.7	601.7	607.3	607.3	607.3	608.7	617.0	618.4	624.0
42.5°	507.2	507.2	503.1	498.9	500.3	498.9	491.9	491.9	496.1	501.7	501.7
45°	426.6	416.9	404.4	394.7	387.7	384.9	376.6	376.6	375.2	376.6	382.2
47.5°	358.5	341.9	321.0	301.6	294.6	289.0	276.5	271.0	268.2	269.6	272.4
50°	301.6	283.5	259.9	236.2	223.7	216.8	201.5	191.8	190.4	187.6	193.2
52.5°	259.9	237.6	212.6	184.8	172.3	161.2	144.5	136.2	130.6	130.6	132.0
55°	223.7	200.1	172.3	144.5	132.0	123.7	107.0	95.9	90.3	88.9	93.1
57.5°	193.2	170.9	143.1	115.3	102.8	93.1	76.4	66.7	62.5	59.8	61.1
60°	169.5	147.3	119.5	93.1	82.0	70.9	57.0	45.9	40.3	40.3	41.7
62.5°	147.3	126.5	101.4	76.4	66.7	57.0	41.7	32.0	27.8	26.4	27.8
65°	125.1	105.6	84.8	63.9	54.2	45.9	33.4	25.0	19.5	18.1	19.5
67.5°	101.4	86.2	68.1	51.4	43.1	36.1	25.0	18.1	13.9	12.5	13.9
70°	79.2	65.3	51.4	37.5	32.0	26.4	18.1	13.9	9.7	8.3	9.7
72.5°	57.0	47.2	36.1	26.4	22.2	18.1	12.5	9.7	6.9	5.6	6.9
75°	38.9	32.0	23.6	16.7	13.9	12.5	8.3	5.6	4.2	4.2	4.2
77.5°	25.0	19.5	15.3	11.1	8.3	6.9	4.2	2.8	2.8	2.8	2.8
80°	13.9	11.1	8.3	5.6	4.2	4.2	2.8	2.8	1.4	1.4	1.4
82.5°	8.3	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0
2.5°	1199.3	1200.7	1196.5	1202.0	1197.9	1203.4	1203.4	1197.9	1199.3	1196.5	1202.0
5°	1196.5	1196.5	1193.7	1197.9	1192.3	1197.9	1196.5	1186.8	1189.5	1184.0	1189.5
7.5°	1196.5	1193.7	1189.5	1193.7	1186.8	1190.9	1185.4	1175.6	1172.9	1165.9	1165.9
10°	1200.7	1196.5	1190.9	1192.3	1185.4	1186.8	1178.4	1164.5	1160.4	1152.0	1149.2
12.5°	1210.4	1206.2	1197.9	1200.7	1190.9	1190.9	1179.8	1163.1	1154.8	1143.7	1140.9
15°	1224.3	1217.3	1207.6	1209.0	1199.3	1193.7	1179.8	1160.4	1149.2	1133.9	1129.8
17.5°	1227.1	1220.1	1207.6	1207.6	1195.1	1188.1	1171.5	1149.2	1135.3	1120.1	1111.7
20°	1211.8	1204.8	1190.9	1189.5	1178.4	1168.7	1150.6	1128.4	1114.5	1097.8	1090.9
22.5°	1179.8	1171.5	1159.0	1157.6	1146.5	1140.9	1121.4	1099.2	1085.3	1068.6	1063.1
25°	1132.6	1128.4	1115.9	1114.5	1104.8	1097.8	1081.1	1060.3	1047.8	1031.1	1025.6
27.5°	1077.0	1072.8	1060.3	1060.3	1049.2	1045.0	1029.7	1010.3	1000.5	985.3	978.3
30°	1010.3	1004.7	997.8	996.4	986.6	982.5	968.6	950.5	940.8	928.3	925.5
32.5°	931.1	926.9	922.7	921.3	911.6	907.4	897.7	879.6	871.3	860.2	856.0
35°	839.3	836.6	832.4	831.0	826.8	822.7	812.9	799.0	794.9	786.5	782.4
37.5°	733.7	736.5	733.7	733.7	729.6	731.0	722.6	714.3	710.1	704.5	701.8
40°	619.8	625.3	629.5	629.5	628.1	633.7	632.3	625.3	624.0	621.2	619.8
42.5°	504.4	507.2	515.6	521.1	519.7	533.6	535.0	540.6	544.7	542.0	543.4
45°	383.5	391.9	403.0	408.6	415.5	433.6	443.3	454.4	464.1	469.7	468.3
47.5°	276.5	286.3	298.8	307.1	319.6	341.9	366.9	380.8	394.7	401.6	408.6
50°	200.1	209.8	225.1	237.6	246.0	276.5	302.9	321.0	336.3	346.0	353.0
52.5°	140.4	151.5	168.1	179.3	191.8	221.0	251.5	272.4	289.0	301.6	308.5
55°	97.3	109.8	125.1	136.2	150.1	180.7	209.8	232.1	250.1	261.3	269.6
57.5°	68.1	79.2	94.5	104.2	118.1	147.3	176.5	198.7	216.8	227.9	237.6
60°	45.9	57.0	72.3	82.0	93.1	122.3	148.7	172.3	189.0	200.1	209.8
62.5°	32.0	41.7	57.0	66.7	76.4	101.4	126.5	147.3	164.0	176.5	184.8
65°	25.0	33.4	45.9	54.2	63.9	84.8	105.6	123.7	140.4	152.9	158.4
67.5°	18.1	26.4	36.1	43.1	50.0	68.1	86.2	100.1	115.3	125.1	132.0
70°	12.5	18.1	26.4	32.0	37.5	51.4	65.3	77.8	88.9	95.9	101.4
72.5°	9.7	12.5	18.1	22.2	26.4	36.1	47.2	57.0	65.3	70.9	76.4
75°	5.6	8.3	12.5	15.3	18.1	25.0	32.0	38.9	44.5	48.6	51.4
77.5°	2.8	4.2	6.9	8.3	11.1	15.3	20.8	25.0	29.2	32.0	34.7
80°	2.8	2.8	4.2	4.2	5.6	8.3	11.1	13.9	16.7	19.5	20.8
82.5°	1.4	1.4	2.8	2.8	2.8	4.2	5.6	8.3	9.7	11.1	12.5
85°	1.4	1.4	1.4	1.4	1.4	2.8	2.8	4.2	5.6	6.9	6.9
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: P252572

CATALOG NUMBER: LD6B20D010 EU6B10208035 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0	1202.0
2.5°	1197.9	1200.7	1199.3	1202.0	1197.9	1196.5	1199.3	1195.1
5°	1182.6	1184.0	1182.6	1182.6	1179.8	1177.0	1179.8	1175.6
7.5°	1159.0	1159.0	1154.8	1154.8	1149.2	1146.5	1146.5	1145.1
10°	1139.5	1135.3	1131.2	1132.6	1124.2	1121.4	1120.1	1118.7
12.5°	1129.8	1127.0	1120.1	1120.1	1111.7	1108.9	1107.5	1106.2
15°	1118.7	1113.1	1107.5	1106.2	1099.2	1096.4	1095.0	1092.3
17.5°	1099.2	1095.0	1088.1	1088.1	1081.1	1079.8	1077.0	1075.6
20°	1078.4	1072.8	1067.2	1067.2	1058.9	1058.9	1054.7	1056.1
22.5°	1049.2	1045.0	1039.5	1039.5	1032.5	1031.1	1026.9	1025.6
25°	1014.4	1008.9	1004.7	1003.3	997.8	995.0	993.6	990.8
27.5°	968.6	964.4	960.2	957.5	950.5	949.1	945.0	946.3
30°	911.6	908.8	907.4	904.7	896.3	893.5	893.5	889.4
32.5°	849.1	844.9	842.1	838.0	831.0	829.6	825.4	826.8
35°	772.6	767.1	762.9	764.3	756.0	754.6	751.8	753.2
37.5°	693.4	687.9	682.3	680.9	674.0	674.0	669.8	669.8
40°	611.4	605.9	603.1	603.1	594.8	596.2	592.0	590.6
42.5°	537.8	532.2	530.8	529.5	525.3	523.9	519.7	521.1
45°	468.3	466.9	466.9	464.1	460.0	458.6	460.0	460.0
47.5°	407.2	408.6	407.2	407.2	404.4	407.2	404.4	405.8
50°	355.7	358.5	358.5	358.5	357.1	358.5	358.5	359.9
52.5°	312.7	316.8	315.4	316.8	315.4	318.2	316.8	318.2
55°	275.1	277.9	279.3	280.7	280.7	280.7	280.7	280.7
57.5°	240.4	244.6	246.0	247.4	247.4	250.1	247.4	247.4
60°	212.6	216.8	218.2	219.6	219.6	221.0	218.2	219.6
62.5°	187.6	191.8	191.8	193.2	193.2	193.2	190.4	191.8
65°	162.6	164.0	165.4	165.4	164.0	164.0	162.6	164.0
67.5°	134.8	136.2	134.8	134.8	133.4	133.4	130.6	132.0
70°	104.2	104.2	105.6	104.2	102.8	104.2	102.8	101.4
72.5°	77.8	77.8	77.8	76.4	76.4	75.0	76.4	76.4
75°	52.8	52.8	54.2	54.2	54.2	54.2	52.8	52.8
77.5°	34.7	34.7	34.7	34.7	36.1	34.7	34.7	34.7
80°	22.2	22.2	23.6	23.6	22.2	22.2	22.2	22.2
82.5°	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
85°	8.3	8.3	8.3	8.3	6.9	6.9	6.9	6.9
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)