

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: P252694

Luminaire Tested: **LD6B30D010 EU6B30509030 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252694
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B30D010 EU6B30509030 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2356.0 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

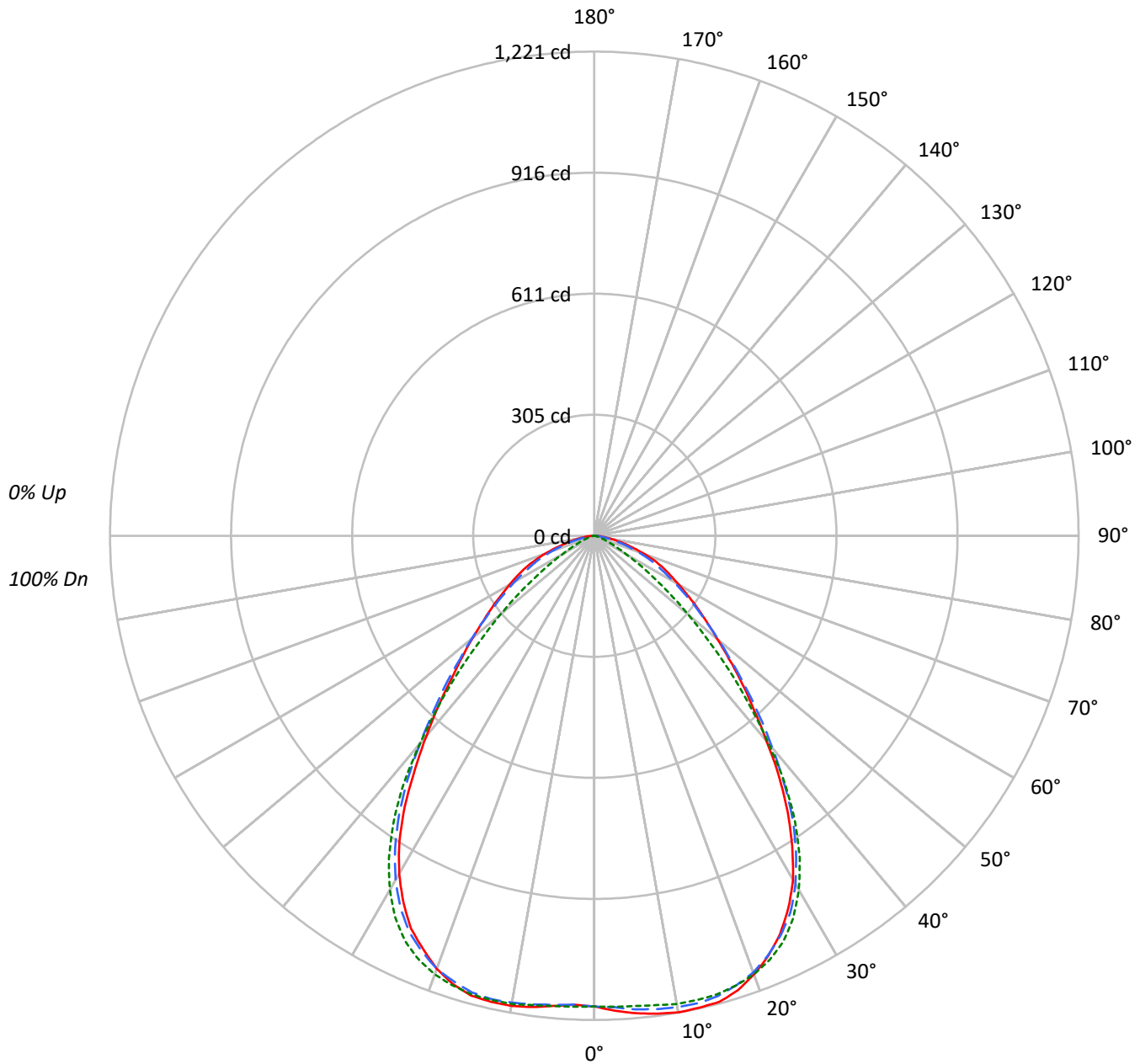
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89						
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78						
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68						
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61						
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54						
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48						
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44						
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40						
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36						
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33						

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	77441	77441	77441
5°	79164	77959	77959
10°	80861	79417	79748
15°	82212	80855	81077
20°	81709	81709	80661
25°	79767	81214	78680
30°	75507	77661	74121
35°	67658	70334	66320
40°	57478	58194	56047
45°	48642	44462	46935
50°	41065	31352	40558
55°	36091	20246	35715
60°	31981	12043	32203
65°	29547	7256	29547
70°	25618	4158	24988
75°	20317	2546	19057
80°	15141	1879	14502
85°	13848	1273	12576



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.3	4.9
10°-20°	338.2	14.4
20°-30°	508.7	21.6
30°-40°	534.8	22.7
40°-50°	399.5	17.0
50°-60°	248.7	10.6
60°-70°	141.5	6.0
70°-80°	58.3	2.5
80°-90°	12.0	0.5
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°	961.2	40.8
0°-40°	1496.0	63.5
0°-60°	2144.2	91.0
0°-90°	2356.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2356.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1187	1187	1187	1187	1187	
5°	1209	1199	1190	1187	1190	116
15°	1217	1202	1197	1192	1200	342
25°	1108	1112	1128	1103	1093	507
35°	850	871	883	858	833	527
45°	527	539	482	529	509	409
55°	317	311	178	306	314	285
65°	191	171	47	171	191	188
75°	81	64	10	62	76	88
85°	18	12	2	10	17	21
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°	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0
2.5°	1198.8	1197.1	1198.8	1195.4	1193.7	1193.7	1195.4	1192.0	1190.4	1192.0	1190.4
5°	1208.8	1205.5	1207.2	1205.5	1202.1	1202.1	1203.8	1198.8	1198.8	1200.4	1198.8
7.5°	1215.5	1215.5	1215.5	1212.2	1210.5	1208.8	1212.2	1207.2	1205.5	1205.5	1203.8
10°	1220.6	1218.9	1220.6	1217.2	1213.9	1212.2	1215.5	1212.2	1208.8	1212.2	1207.2
12.5°	1218.9	1218.9	1218.9	1217.2	1213.9	1212.2	1215.5	1210.5	1208.8	1210.5	1207.2
15°	1217.2	1212.2	1213.9	1212.2	1207.2	1207.2	1208.8	1203.8	1200.4	1205.5	1202.1
17.5°	1202.1	1198.8	1200.4	1197.1	1193.7	1192.0	1193.7	1192.0	1188.7	1192.0	1188.7
20°	1176.9	1176.9	1178.6	1175.3	1171.9	1170.2	1173.6	1170.2	1166.9	1171.9	1171.9
22.5°	1146.7	1146.7	1146.7	1145.0	1143.4	1143.4	1143.4	1141.7	1140.0	1143.4	1145.0
25°	1108.1	1106.4	1108.1	1109.8	1108.1	1106.4	1108.1	1108.1	1104.7	1111.5	1111.5
27.5°	1059.4	1059.4	1062.8	1061.1	1061.1	1059.4	1062.8	1062.8	1061.1	1066.1	1071.2
30°	1002.3	999.0	1002.3	1002.3	1004.0	1004.0	1005.7	1005.7	1005.7	1010.7	1014.1
32.5°	928.4	930.1	935.2	933.5	931.8	936.8	936.8	940.2	941.9	945.2	946.9
35°	849.5	851.2	851.2	852.9	856.3	852.9	861.3	859.6	861.3	868.0	871.4
37.5°	765.6	760.6	768.9	765.6	767.3	767.3	770.6	772.3	777.3	785.7	785.7
40°	674.9	676.6	680.0	681.6	683.3	683.3	683.3	688.4	690.0	700.1	698.4
42.5°	596.0	596.0	599.4	601.1	601.1	601.1	601.1	606.1	609.5	612.8	616.2
45°	527.2	522.1	525.5	525.5	528.9	527.2	530.5	533.9	535.6	540.6	538.9
47.5°	461.7	460.0	461.7	463.4	461.7	463.4	465.1	466.7	468.4	468.4	468.4
50°	404.6	404.6	406.3	408.0	408.0	408.0	408.0	409.7	409.7	413.0	409.7
52.5°	357.6	359.3	359.3	357.6	359.3	359.3	361.0	361.0	359.3	359.3	354.3
55°	317.3	315.6	317.3	315.6	317.3	317.3	315.6	315.6	314.0	312.3	310.6
57.5°	278.7	278.7	278.7	278.7	277.0	278.7	277.0	275.3	275.3	272.0	266.9
60°	245.1	245.1	245.1	245.1	245.1	243.4	245.1	243.4	240.1	236.7	230.0
62.5°	216.6	214.9	216.6	214.9	214.9	213.2	213.2	211.5	208.2	204.8	198.1
65°	191.4	193.1	191.4	191.4	189.7	188.0	188.0	186.4	181.3	178.0	171.3
67.5°	164.5	162.9	162.9	162.9	161.2	161.2	161.2	157.8	154.5	149.4	142.7
70°	134.3	134.3	134.3	132.6	132.6	131.0	131.0	129.3	125.9	122.6	114.2
72.5°	105.8	105.8	105.8	102.4	104.1	102.4	102.4	99.1	97.4	92.3	87.3
75°	80.6	80.6	78.9	78.9	77.2	75.6	75.6	73.9	72.2	68.8	63.8
77.5°	58.8	58.8	58.8	57.1	55.4	53.7	53.7	52.0	50.4	48.7	45.3
80°	40.3	40.3	40.3	40.3	38.6	36.9	36.9	35.3	35.3	33.6	30.2
82.5°	26.9	26.9	26.9	26.9	25.2	25.2	25.2	23.5	21.8	21.8	18.5
85°	18.5	18.5	16.8	16.8	16.8	16.8	15.1	15.1	13.4	11.8	11.8
87.5°	10.1	10.1	10.1	10.1	8.4	8.4	8.4	8.4	6.7	6.7	5.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0
2.5°	1195.4	1195.4	1193.7	1188.7	1190.4	1188.7	1190.4	1188.7	1183.6	1188.7	1183.6
5°	1202.1	1203.8	1200.4	1193.7	1195.4	1193.7	1193.7	1192.0	1187.0	1190.4	1187.0
7.5°	1208.8	1207.2	1205.5	1198.8	1200.4	1198.8	1198.8	1195.4	1190.4	1193.7	1188.7
10°	1212.2	1212.2	1208.8	1202.1	1202.1	1200.4	1202.1	1200.4	1193.7	1198.8	1195.4
12.5°	1212.2	1210.5	1210.5	1202.1	1203.8	1202.1	1203.8	1200.4	1195.4	1198.8	1197.1
15°	1207.2	1207.2	1205.5	1197.1	1198.8	1198.8	1200.4	1197.1	1192.0	1197.1	1193.7
17.5°	1197.1	1197.1	1195.4	1188.7	1192.0	1192.0	1193.7	1190.4	1185.3	1188.7	1188.7
20°	1176.9	1178.6	1178.6	1173.6	1176.9	1176.9	1178.6	1176.9	1175.3	1176.9	1173.6
22.5°	1153.4	1156.8	1156.8	1151.7	1155.1	1155.1	1160.1	1158.5	1155.1	1156.8	1155.1
25°	1118.2	1121.5	1124.9	1121.5	1124.9	1124.9	1129.9	1128.2	1124.9	1128.2	1123.2
27.5°	1077.9	1079.6	1082.9	1079.6	1084.6	1082.9	1087.9	1086.3	1081.2	1086.3	1084.6
30°	1020.8	1027.5	1032.5	1027.5	1032.5	1032.5	1035.9	1034.2	1032.5	1030.9	1030.9
32.5°	957.0	963.7	963.7	962.0	965.4	965.4	967.1	963.7	962.0	963.7	965.4
35°	878.1	881.4	884.8	883.1	884.8	886.5	884.8	886.5	881.4	883.1	883.1
37.5°	792.5	795.8	795.8	790.8	794.1	794.1	790.8	790.8	787.4	790.8	784.1
40°	701.8	698.4	700.1	696.8	693.4	693.4	691.7	685.0	681.6	683.3	685.0
42.5°	612.8	612.8	607.8	599.4	591.0	591.0	585.9	582.6	575.9	579.2	577.6
45°	537.3	528.9	522.1	508.7	503.7	500.3	491.9	483.5	480.2	481.9	480.2
47.5°	465.1	458.3	441.6	423.1	418.1	413.0	402.9	392.9	389.5	386.2	386.2
50°	404.6	392.9	374.4	354.3	345.9	337.5	324.0	314.0	307.2	308.9	308.9
52.5°	349.2	335.8	314.0	288.8	278.7	268.6	256.9	245.1	240.1	238.4	238.4
55°	300.5	285.4	263.6	235.1	226.7	214.9	199.8	186.4	179.6	178.0	181.3
57.5°	256.9	243.4	218.3	189.7	179.6	167.9	152.8	141.0	132.6	131.0	132.6
60°	221.6	203.2	181.3	154.5	141.0	131.0	114.2	104.1	95.7	92.3	94.0
62.5°	186.4	169.6	147.7	120.9	110.8	100.7	85.6	73.9	67.2	65.5	67.2
65°	159.5	142.7	122.6	99.1	89.0	78.9	65.5	53.7	48.7	47.0	48.7
67.5°	132.6	117.5	100.7	78.9	70.5	62.1	48.7	40.3	33.6	31.9	33.6
70°	107.5	94.0	77.2	62.1	53.7	47.0	36.9	28.5	23.5	21.8	23.5
72.5°	80.6	70.5	58.8	45.3	40.3	35.3	26.9	20.1	16.8	15.1	16.8
75°	58.8	50.4	42.0	31.9	28.5	25.2	18.5	13.4	11.8	10.1	11.8
77.5°	40.3	35.3	28.5	21.8	18.5	16.8	11.8	10.1	8.4	6.7	6.7
80°	26.9	23.5	18.5	15.1	13.4	11.8	8.4	6.7	5.0	5.0	5.0
82.5°	16.8	13.4	11.8	8.4	6.7	6.7	5.0	3.4	3.4	3.4	3.4
85°	10.1	8.4	6.7	5.0	3.4	3.4	1.7	1.7	1.7	1.7	1.7
87.5°	5.0	3.4	3.4	1.7	1.7	1.7	1.7	1.7	0.0	0.0	1.7
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):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0
2.5°	1187.0	1183.6	1183.6	1185.3	1187.0	1188.7	1185.3	1183.6	1183.6	1188.7	1185.3
5°	1187.0	1185.3	1185.3	1185.3	1188.7	1190.4	1187.0	1185.3	1187.0	1192.0	1190.4
7.5°	1192.0	1188.7	1190.4	1190.4	1192.0	1195.4	1192.0	1190.4	1192.0	1197.1	1193.7
10°	1195.4	1192.0	1193.7	1192.0	1197.1	1198.8	1195.4	1193.7	1195.4	1202.1	1200.4
12.5°	1197.1	1195.4	1195.4	1193.7	1198.8	1200.4	1197.1	1195.4	1197.1	1202.1	1200.4
15°	1193.7	1192.0	1192.0	1192.0	1195.4	1198.8	1193.7	1192.0	1192.0	1197.1	1195.4
17.5°	1187.0	1183.6	1183.6	1183.6	1185.3	1187.0	1182.0	1180.3	1178.6	1183.6	1182.0
20°	1175.3	1171.9	1168.5	1168.5	1170.2	1170.2	1166.9	1161.8	1161.8	1163.5	1160.1
22.5°	1153.4	1151.7	1148.4	1146.7	1150.1	1148.4	1141.7	1136.6	1135.0	1136.6	1133.3
25°	1123.2	1119.8	1118.2	1116.5	1118.2	1116.5	1109.8	1103.1	1103.1	1103.1	1098.0
27.5°	1081.2	1077.9	1076.2	1076.2	1077.9	1074.5	1067.8	1061.1	1057.7	1057.7	1052.7
30°	1027.5	1027.5	1025.8	1024.1	1022.5	1022.5	1012.4	1005.7	1002.3	1004.0	1000.6
32.5°	962.0	960.3	958.7	953.6	955.3	953.6	945.2	940.2	935.2	931.8	930.1
35°	878.1	878.1	876.4	876.4	876.4	874.7	866.3	861.3	857.9	856.3	851.2
37.5°	785.7	784.1	782.4	782.4	782.4	782.4	777.3	772.3	772.3	770.6	767.3
40°	681.6	683.3	685.0	683.3	688.4	693.4	686.7	683.3	681.6	686.7	680.0
42.5°	580.9	579.2	587.6	589.3	589.3	597.7	599.4	601.1	599.4	602.7	602.7
45°	483.5	481.9	490.2	493.6	502.0	512.1	517.1	525.5	528.9	532.2	528.9
47.5°	391.2	397.9	404.6	413.0	419.7	436.5	446.6	455.0	458.3	463.4	463.4
50°	314.0	320.7	332.4	339.1	347.5	367.7	384.5	396.2	402.9	408.0	406.3
52.5°	241.8	253.5	268.6	275.3	287.1	310.6	329.1	342.5	350.9	355.9	357.6
55°	186.4	196.4	211.5	221.6	233.4	258.6	282.1	297.2	305.6	312.3	315.6
57.5°	137.7	149.4	166.2	174.6	188.0	216.6	236.7	255.2	265.3	273.7	275.3
60°	100.7	112.5	127.6	137.7	151.1	179.6	203.2	219.9	231.7	238.4	241.8
62.5°	72.2	83.9	99.1	109.1	120.9	146.1	169.6	186.4	198.1	206.5	211.5
65°	52.0	63.8	78.9	87.3	97.4	120.9	142.7	159.5	171.3	181.3	184.7
67.5°	38.6	47.0	60.4	68.8	78.9	97.4	115.8	131.0	142.7	151.1	154.5
70°	28.5	35.3	47.0	52.0	58.8	75.6	90.7	104.1	114.2	120.9	124.2
72.5°	20.1	25.2	33.6	38.6	43.7	57.1	68.8	78.9	85.6	92.3	95.7
75°	13.4	16.8	23.5	26.9	30.2	40.3	48.7	57.1	62.1	67.2	68.8
77.5°	8.4	11.8	16.8	18.5	21.8	26.9	33.6	38.6	42.0	45.3	48.7
80°	5.0	6.7	10.1	11.8	13.4	18.5	21.8	25.2	28.5	31.9	33.6
82.5°	3.4	5.0	6.7	6.7	8.4	10.1	13.4	16.8	18.5	20.1	21.8
85°	1.7	1.7	3.4	3.4	5.0	5.0	6.7	8.4	10.1	11.8	13.4
87.5°	1.7	1.7	1.7	1.7	3.4	3.4	5.0	5.0	5.0	6.7	6.7
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: P252694

CATALOG NUMBER: LD6B30D010 EU6B30509030 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0	1187.0
2.5°	1182.0	1187.0	1182.0	1185.3	1183.6	1183.6	1182.0	1183.6
5°	1187.0	1193.7	1187.0	1192.0	1188.7	1188.7	1188.7	1190.4
7.5°	1192.0	1198.8	1193.7	1198.8	1197.1	1195.4	1195.4	1198.8
10°	1197.1	1202.1	1198.8	1203.8	1202.1	1200.4	1200.4	1203.8
12.5°	1197.1	1203.8	1200.4	1205.5	1203.8	1202.1	1202.1	1203.8
15°	1192.0	1200.4	1195.4	1200.4	1198.8	1197.1	1197.1	1200.4
17.5°	1176.9	1183.6	1180.3	1183.6	1183.6	1182.0	1183.6	1185.3
20°	1156.8	1161.8	1158.5	1161.8	1161.8	1158.5	1160.1	1161.8
22.5°	1128.2	1133.3	1129.9	1133.3	1131.6	1129.9	1129.9	1128.2
25°	1093.0	1099.7	1094.7	1098.0	1094.7	1091.3	1091.3	1093.0
27.5°	1049.3	1054.4	1047.7	1051.0	1047.7	1044.3	1044.3	1042.6
30°	992.2	993.9	988.9	992.2	988.9	987.2	983.9	983.9
32.5°	923.4	925.1	920.1	920.1	916.7	916.7	910.0	915.0
35°	842.8	844.5	842.8	841.1	836.1	834.4	832.7	832.7
37.5°	758.9	758.9	753.8	752.2	748.8	745.4	747.1	742.1
40°	673.3	671.6	666.5	668.2	666.5	661.5	659.8	658.1
42.5°	592.7	592.7	587.6	589.3	585.9	584.3	579.2	580.9
45°	522.1	522.1	517.1	517.1	515.4	510.4	512.1	508.7
47.5°	458.3	458.3	456.7	456.7	451.6	450.0	450.0	450.0
50°	402.9	402.9	402.9	402.9	401.3	399.6	397.9	399.6
52.5°	355.9	359.3	357.6	357.6	355.9	354.3	352.6	352.6
55°	314.0	315.6	315.6	317.3	315.6	314.0	315.6	314.0
57.5°	277.0	280.4	280.4	280.4	280.4	280.4	278.7	277.0
60°	245.1	246.8	246.8	248.5	248.5	248.5	246.8	246.8
62.5°	213.2	216.6	218.3	218.3	219.9	218.3	218.3	218.3
65°	188.0	191.4	193.1	191.4	193.1	193.1	191.4	191.4
67.5°	157.8	161.2	161.2	161.2	161.2	162.9	161.2	161.2
70°	127.6	131.0	129.3	131.0	131.0	131.0	131.0	131.0
72.5°	97.4	99.1	100.7	100.7	102.4	100.7	100.7	100.7
75°	70.5	73.9	73.9	73.9	73.9	75.6	75.6	75.6
77.5°	50.4	52.0	52.0	53.7	53.7	53.7	53.7	55.4
80°	35.3	35.3	36.9	36.9	38.6	38.6	38.6	38.6
82.5°	23.5	25.2	25.2	25.2	25.2	25.2	25.2	25.2
85°	13.4	15.1	15.1	15.1	15.1	16.8	16.8	16.8
87.5°	8.4	8.4	8.4	8.4	8.4	8.4	6.7	6.7
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)