

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: P252695

Luminaire Tested: **LD6B30D010 EU6B30509035 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252695
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 EU6B30509035 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2390.0 lumens
Efficiency: N/A
Efficacy: 85.4 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

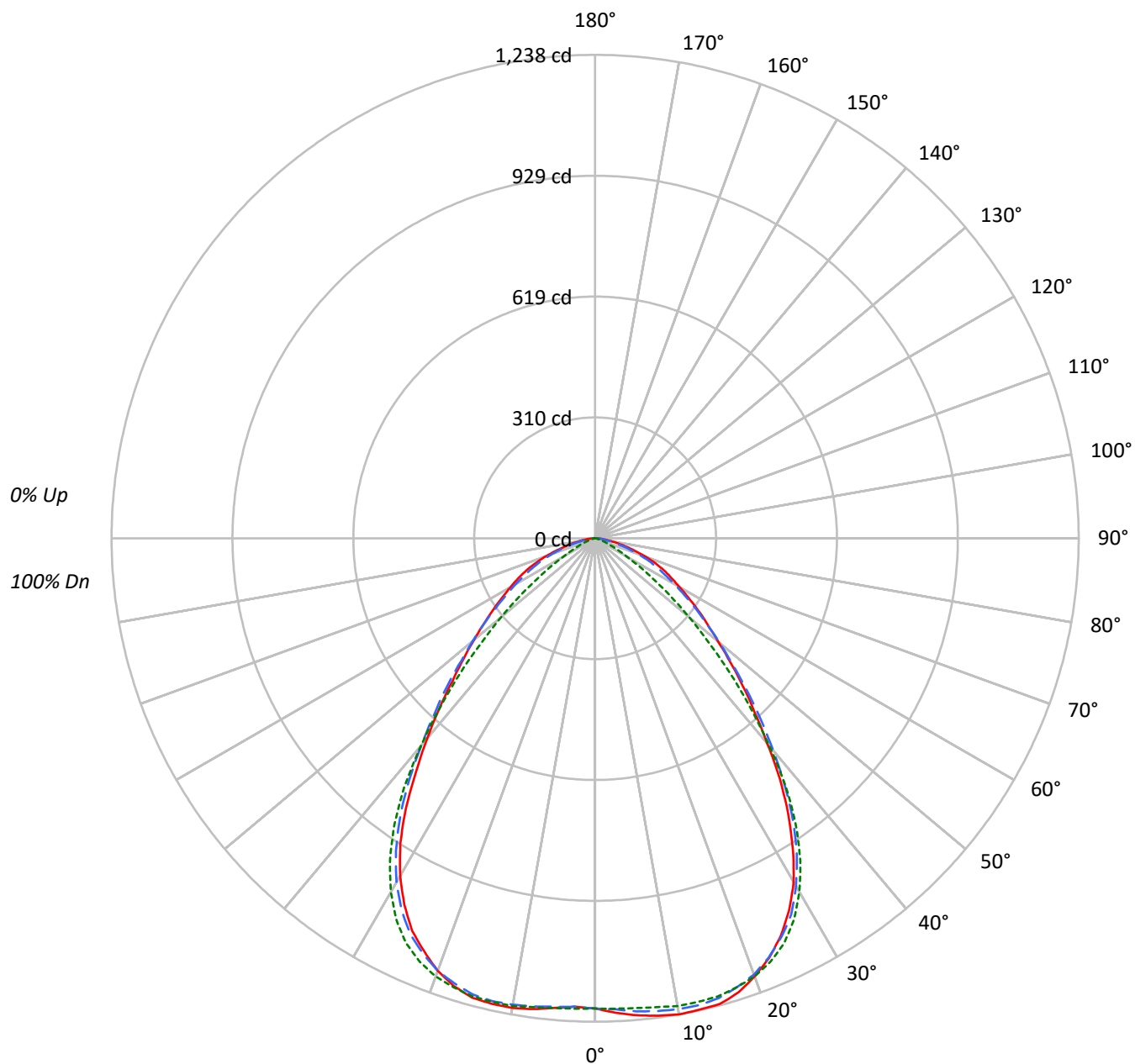
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	111	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	78556	78556	78556
5°	80310	79079	79079
10°	82027	80563	80901
15°	83401	82023	82253
20°	82890	82890	81827
25°	80918	82387	79817
30°	76599	78776	75190
35°	68637	71353	67283
40°	58313	59037	56857
45°	49343	45099	47618
50°	41664	31809	41147
55°	36614	20531	36227
60°	32451	12226	32673
65°	29979	7364	29979
70°	25999	4216	25332
75°	20619	2571	19309
80°	15366	1916	14728
85°	13998	1273	12725



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.9	4.9
10°-20°	343.1	14.4
20°-30°	516.0	21.6
30°-40°	542.5	22.7
40°-50°	405.3	17.0
50°-60°	252.3	10.6
60°-70°	143.5	6.0
70°-80°	59.1	2.5
80°-90°	12.2	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°	975.0	40.8
0°-40°	1517.6	63.5
0°-60°	2175.2	91.0
0°-90°	2390.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2390.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1204	1204	1204	1204	1204	
5°	1226	1216	1208	1204	1208	117
15°	1235	1220	1214	1209	1218	347
25°	1124	1128	1144	1119	1109	515
35°	862	884	896	870	845	535
45°	535	547	489	536	516	414
55°	322	315	180	310	318	290
65°	194	174	48	174	194	191
75°	82	65	10	63	77	89
85°	19	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°	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1
2.5°	1216.1	1214.4	1216.1	1212.6	1210.9	1210.9	1212.6	1209.2	1207.5	1209.2	1207.5
5°	1226.3	1222.9	1224.6	1222.9	1219.5	1219.5	1221.2	1216.1	1216.1	1217.8	1216.1
7.5°	1233.1	1233.1	1233.1	1229.7	1228.0	1226.3	1229.7	1224.6	1222.9	1222.9	1221.2
10°	1238.2	1236.5	1238.2	1234.8	1231.4	1229.7	1233.1	1229.7	1226.3	1229.7	1224.6
12.5°	1236.5	1236.5	1236.5	1234.8	1231.4	1229.7	1233.1	1228.0	1226.3	1228.0	1224.6
15°	1234.8	1229.7	1231.4	1229.7	1224.6	1224.6	1226.3	1221.2	1217.8	1222.9	1219.5
17.5°	1219.5	1216.1	1217.8	1214.4	1210.9	1209.2	1210.9	1209.2	1205.8	1209.2	1205.8
20°	1193.9	1193.9	1195.6	1192.2	1188.8	1187.1	1190.5	1187.1	1183.7	1188.8	1188.8
22.5°	1163.3	1163.3	1163.3	1161.6	1159.9	1159.9	1159.9	1158.1	1156.4	1159.9	1161.6
25°	1124.1	1122.4	1124.1	1125.8	1124.1	1122.4	1124.1	1124.1	1120.7	1127.5	1127.5
27.5°	1074.7	1074.7	1078.1	1076.4	1076.4	1074.7	1078.1	1078.1	1076.4	1081.5	1086.6
30°	1016.8	1013.4	1016.8	1016.8	1018.5	1018.5	1020.2	1020.2	1020.2	1025.3	1028.7
32.5°	941.8	943.5	948.7	947.0	945.3	950.4	950.4	953.8	955.5	958.9	960.6
35°	861.8	863.5	863.5	865.2	868.6	865.2	873.7	872.0	873.7	880.5	883.9
37.5°	776.6	771.5	780.0	776.6	778.3	778.3	781.7	783.5	788.6	797.1	797.1
40°	684.7	686.4	689.8	691.5	693.2	693.2	693.2	698.3	700.0	710.2	708.5
42.5°	604.6	604.6	608.0	609.7	609.7	609.7	609.7	614.8	618.2	621.7	625.1
45°	534.8	529.7	533.1	533.1	536.5	534.8	538.2	541.6	543.3	548.4	546.7
47.5°	468.4	466.7	468.4	470.1	468.4	470.1	471.8	473.5	475.2	475.2	475.2
50°	410.5	410.5	412.2	413.9	413.9	413.9	413.9	415.6	415.6	419.0	415.6
52.5°	362.8	364.5	364.5	362.8	364.5	364.5	366.2	366.2	364.5	364.5	359.4
55°	321.9	320.2	321.9	320.2	321.9	321.9	320.2	320.2	318.5	316.8	315.1
57.5°	282.7	282.7	282.7	282.7	281.0	282.7	281.0	279.3	279.3	275.9	270.8
60°	248.7	248.7	248.7	248.7	248.7	247.0	248.7	247.0	243.6	240.1	233.3
62.5°	219.7	218.0	219.7	218.0	218.0	216.3	216.3	214.6	211.2	207.8	201.0
65°	194.2	195.9	194.2	194.2	192.5	190.8	190.8	189.1	183.9	180.5	173.7
67.5°	166.9	165.2	165.2	165.2	163.5	163.5	163.5	160.1	156.7	151.6	144.8
70°	136.3	136.3	136.3	134.5	134.5	132.8	132.8	131.1	127.7	124.3	115.8
72.5°	107.3	107.3	107.3	103.9	105.6	103.9	103.9	100.5	98.8	93.7	88.6
75°	81.8	81.8	80.0	80.0	78.3	76.6	76.6	74.9	73.2	69.8	64.7
77.5°	59.6	59.6	59.6	57.9	56.2	54.5	54.5	52.8	51.1	49.4	46.0
80°	40.9	40.9	40.9	40.9	39.2	37.5	37.5	35.8	35.8	34.1	30.7
82.5°	27.3	27.3	27.3	27.3	25.5	25.5	25.5	23.8	22.1	22.1	18.7
85°	18.7	18.7	17.0	17.0	17.0	17.0	15.3	15.3	13.6	11.9	11.9
87.5°	10.2	10.2	10.2	10.2	8.5	8.5	8.5	8.5	6.8	6.8	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°	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1
2.5°	1212.6	1212.6	1210.9	1205.8	1207.5	1205.8	1207.5	1205.8	1200.7	1205.8	1200.7
5°	1219.5	1221.2	1217.8	1210.9	1212.6	1210.9	1210.9	1209.2	1204.1	1207.5	1204.1
7.5°	1226.3	1224.6	1222.9	1216.1	1217.8	1216.1	1216.1	1212.6	1207.5	1210.9	1205.8
10°	1229.7	1229.7	1226.3	1219.5	1219.5	1217.8	1219.5	1217.8	1210.9	1216.1	1212.6
12.5°	1229.7	1228.0	1228.0	1219.5	1221.2	1219.5	1221.2	1217.8	1212.6	1216.1	1214.4
15°	1224.6	1224.6	1222.9	1214.4	1216.1	1216.1	1217.8	1214.4	1209.2	1214.4	1210.9
17.5°	1214.4	1214.4	1212.6	1205.8	1209.2	1209.2	1210.9	1207.5	1202.4	1205.8	1205.8
20°	1193.9	1195.6	1195.6	1190.5	1193.9	1193.9	1195.6	1193.9	1192.2	1193.9	1190.5
22.5°	1170.1	1173.5	1173.5	1168.4	1171.8	1171.8	1176.9	1175.2	1171.8	1173.5	1171.8
25°	1134.3	1137.7	1141.1	1137.7	1141.1	1141.1	1146.2	1144.5	1141.1	1144.5	1139.4
27.5°	1093.4	1095.1	1098.5	1095.1	1100.2	1098.5	1103.6	1101.9	1096.8	1101.9	1100.2
30°	1035.5	1042.3	1047.4	1042.3	1047.4	1047.4	1050.8	1049.1	1047.4	1045.7	1045.7
32.5°	970.8	977.6	977.6	975.9	979.3	979.3	981.0	977.6	975.9	977.6	979.3
35°	890.8	894.2	897.6	895.9	897.6	899.3	897.6	899.3	894.2	895.9	895.9
37.5°	803.9	807.3	807.3	802.2	805.6	805.6	802.2	802.2	798.8	802.2	795.4
40°	711.9	708.5	710.2	706.8	703.4	703.4	701.7	694.9	691.5	693.2	694.9
42.5°	621.7	621.7	616.5	608.0	599.5	599.5	594.4	591.0	584.2	587.6	585.9
45°	545.0	536.5	529.7	516.1	510.9	507.5	499.0	490.5	487.1	488.8	487.1
47.5°	471.8	465.0	447.9	429.2	424.1	419.0	408.8	398.5	395.1	391.7	391.7
50°	410.5	398.5	379.8	359.4	350.9	342.3	328.7	318.5	311.7	313.4	313.4
52.5°	354.3	340.6	318.5	292.9	282.7	272.5	260.6	248.7	243.6	241.8	241.8
55°	304.9	289.5	267.4	238.4	229.9	218.0	202.7	189.1	182.2	180.5	183.9
57.5°	260.6	247.0	221.4	192.5	182.2	170.3	155.0	143.1	134.5	132.8	134.5
60°	224.8	206.1	183.9	156.7	143.1	132.8	115.8	105.6	97.1	93.7	95.4
62.5°	189.1	172.0	149.9	122.6	112.4	102.2	86.9	74.9	68.1	66.4	68.1
65°	161.8	144.8	124.3	100.5	90.3	80.0	66.4	54.5	49.4	47.7	49.4
67.5°	134.5	119.2	102.2	80.0	71.5	63.0	49.4	40.9	34.1	32.4	34.1
70°	109.0	95.4	78.3	63.0	54.5	47.7	37.5	29.0	23.8	22.1	23.8
72.5°	81.8	71.5	59.6	46.0	40.9	35.8	27.3	20.4	17.0	15.3	17.0
75°	59.6	51.1	42.6	32.4	29.0	25.5	18.7	13.6	11.9	10.2	11.9
77.5°	40.9	35.8	29.0	22.1	18.7	17.0	11.9	10.2	8.5	6.8	6.8
80°	27.3	23.8	18.7	15.3	13.6	11.9	8.5	6.8	5.1	5.1	5.1
82.5°	17.0	13.6	11.9	8.5	6.8	6.8	5.1	3.4	3.4	3.4	3.4
85°	10.2	8.5	6.8	5.1	3.4	3.4	1.7	1.7	1.7	1.7	1.7
87.5°	5.1	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°	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1
2.5°	1204.1	1200.7	1200.7	1202.4	1204.1	1205.8	1202.4	1200.7	1200.7	1205.8	1202.4
5°	1204.1	1202.4	1202.4	1202.4	1205.8	1207.5	1204.1	1202.4	1204.1	1209.2	1207.5
7.5°	1209.2	1205.8	1207.5	1207.5	1209.2	1212.6	1209.2	1207.5	1209.2	1214.4	1210.9
10°	1212.6	1209.2	1210.9	1209.2	1214.4	1216.1	1212.6	1210.9	1212.6	1219.5	1217.8
12.5°	1214.4	1212.6	1212.6	1210.9	1216.1	1217.8	1214.4	1212.6	1214.4	1219.5	1217.8
15°	1210.9	1209.2	1209.2	1209.2	1212.6	1216.1	1210.9	1209.2	1209.2	1214.4	1212.6
17.5°	1204.1	1200.7	1200.7	1200.7	1202.4	1204.1	1199.0	1197.3	1195.6	1200.7	1199.0
20°	1192.2	1188.8	1185.4	1185.4	1187.1	1187.1	1183.7	1178.6	1178.6	1180.3	1176.9
22.5°	1170.1	1168.4	1165.0	1163.3	1166.7	1165.0	1158.1	1153.0	1151.3	1153.0	1149.6
25°	1139.4	1136.0	1134.3	1132.6	1134.3	1132.6	1125.8	1119.0	1119.0	1119.0	1113.9
27.5°	1096.8	1093.4	1091.7	1091.7	1093.4	1090.0	1083.2	1076.4	1073.0	1073.0	1067.9
30°	1042.3	1042.3	1040.6	1038.9	1037.2	1037.2	1027.0	1020.2	1016.8	1018.5	1015.1
32.5°	975.9	974.2	972.5	967.4	969.1	967.4	958.9	953.8	948.7	945.3	943.5
35°	890.8	890.8	889.0	889.0	889.0	887.3	878.8	873.7	870.3	868.6	863.5
37.5°	797.1	795.4	793.7	793.7	793.7	793.7	788.6	783.5	783.5	781.7	778.3
40°	691.5	693.2	694.9	693.2	698.3	703.4	696.6	693.2	691.5	696.6	689.8
42.5°	589.3	587.6	596.1	597.8	597.8	606.3	608.0	609.7	608.0	611.4	611.4
45°	490.5	488.8	497.3	500.7	509.2	519.5	524.6	533.1	536.5	539.9	536.5
47.5°	396.8	403.6	410.5	419.0	425.8	442.8	453.0	461.6	465.0	470.1	470.1
50°	318.5	325.3	337.2	344.0	352.6	373.0	390.0	401.9	408.8	413.9	412.2
52.5°	245.3	257.2	272.5	279.3	291.2	315.1	333.8	347.4	356.0	361.1	362.8
55°	189.1	199.3	214.6	224.8	236.7	262.3	286.1	301.5	310.0	316.8	320.2
57.5°	139.7	151.6	168.6	177.1	190.8	219.7	240.1	258.9	269.1	277.6	279.3
60°	102.2	114.1	129.4	139.7	153.3	182.2	206.1	223.1	235.0	241.8	245.3
62.5°	73.2	85.2	100.5	110.7	122.6	148.2	172.0	189.1	201.0	209.5	214.6
65°	52.8	64.7	80.0	88.6	98.8	122.6	144.8	161.8	173.7	183.9	187.3
67.5°	39.2	47.7	61.3	69.8	80.0	98.8	117.5	132.8	144.8	153.3	156.7
70°	29.0	35.8	47.7	52.8	59.6	76.6	92.0	105.6	115.8	122.6	126.0
72.5°	20.4	25.5	34.1	39.2	44.3	57.9	69.8	80.0	86.9	93.7	97.1
75°	13.6	17.0	23.8	27.3	30.7	40.9	49.4	57.9	63.0	68.1	69.8
77.5°	8.5	11.9	17.0	18.7	22.1	27.3	34.1	39.2	42.6	46.0	49.4
80°	5.1	6.8	10.2	11.9	13.6	18.7	22.1	25.5	29.0	32.4	34.1
82.5°	3.4	5.1	6.8	6.8	8.5	10.2	13.6	17.0	18.7	20.4	22.1
85°	1.7	1.7	3.4	3.4	5.1	5.1	6.8	8.5	10.2	11.9	13.6
87.5°	1.7	1.7	1.7	1.7	3.4	3.4	5.1	5.1	5.1	6.8	6.8
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: P252695

CATALOG NUMBER: LD6B30D010 EU6B30509035 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1	1204.1
2.5°	1199.0	1204.1	1199.0	1202.4	1200.7	1200.7	1199.0	1200.7
5°	1204.1	1210.9	1204.1	1209.2	1205.8	1205.8	1205.8	1207.5
7.5°	1209.2	1216.1	1210.9	1216.1	1214.4	1212.6	1212.6	1216.1
10°	1214.4	1219.5	1216.1	1221.2	1219.5	1217.8	1217.8	1221.2
12.5°	1214.4	1221.2	1217.8	1222.9	1221.2	1219.5	1219.5	1221.2
15°	1209.2	1217.8	1212.6	1217.8	1216.1	1214.4	1214.4	1217.8
17.5°	1193.9	1200.7	1197.3	1200.7	1200.7	1199.0	1200.7	1202.4
20°	1173.5	1178.6	1175.2	1178.6	1178.6	1175.2	1176.9	1178.6
22.5°	1144.5	1149.6	1146.2	1149.6	1147.9	1146.2	1146.2	1144.5
25°	1108.8	1115.6	1110.5	1113.9	1110.5	1107.1	1107.1	1108.8
27.5°	1064.5	1069.6	1062.8	1066.2	1062.8	1059.4	1059.4	1057.7
30°	1006.6	1008.3	1003.2	1006.6	1003.2	1001.5	998.1	998.1
32.5°	936.7	938.4	933.3	933.3	929.9	929.9	923.1	928.2
35°	855.0	856.7	855.0	853.3	848.2	846.5	844.8	844.8
37.5°	769.8	769.8	764.7	763.0	759.6	756.2	757.9	752.8
40°	683.0	681.3	676.2	677.9	676.2	671.0	669.3	667.6
42.5°	601.2	601.2	596.1	597.8	594.4	592.7	587.6	589.3
45°	529.7	529.7	524.6	524.6	522.9	517.8	519.5	516.1
47.5°	465.0	465.0	463.3	463.3	458.1	456.4	456.4	456.4
50°	408.8	408.8	408.8	408.8	407.1	405.4	403.6	405.4
52.5°	361.1	364.5	362.8	362.8	361.1	359.4	357.7	357.7
55°	318.5	320.2	320.2	321.9	320.2	318.5	320.2	318.5
57.5°	281.0	284.4	284.4	284.4	284.4	284.4	282.7	281.0
60°	248.7	250.4	250.4	252.1	252.1	252.1	250.4	250.4
62.5°	216.3	219.7	221.4	221.4	223.1	221.4	221.4	221.4
65°	190.8	194.2	195.9	194.2	195.9	195.9	194.2	194.2
67.5°	160.1	163.5	163.5	163.5	163.5	165.2	163.5	163.5
70°	129.4	132.8	131.1	132.8	132.8	132.8	132.8	132.8
72.5°	98.8	100.5	102.2	102.2	103.9	102.2	102.2	102.2
75°	71.5	74.9	74.9	74.9	74.9	76.6	76.6	76.6
77.5°	51.1	52.8	52.8	54.5	54.5	54.5	54.5	56.2
80°	35.8	35.8	37.5	37.5	39.2	39.2	39.2	39.2
82.5°	23.8	25.5	25.5	25.5	25.5	25.5	25.5	25.5
85°	13.6	15.3	15.3	15.3	15.3	17.0	17.0	17.0
87.5°	8.5	8.5	8.5	8.5	8.5	8.5	6.8	6.8
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)