

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: P252258

Luminaire Tested: **LD6B20D010 EU6B10208027 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252258
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-7)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD6B20D010 EU6B10208027 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1802.0 lumens
Efficiency: N/A
Efficacy: 86.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.16
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

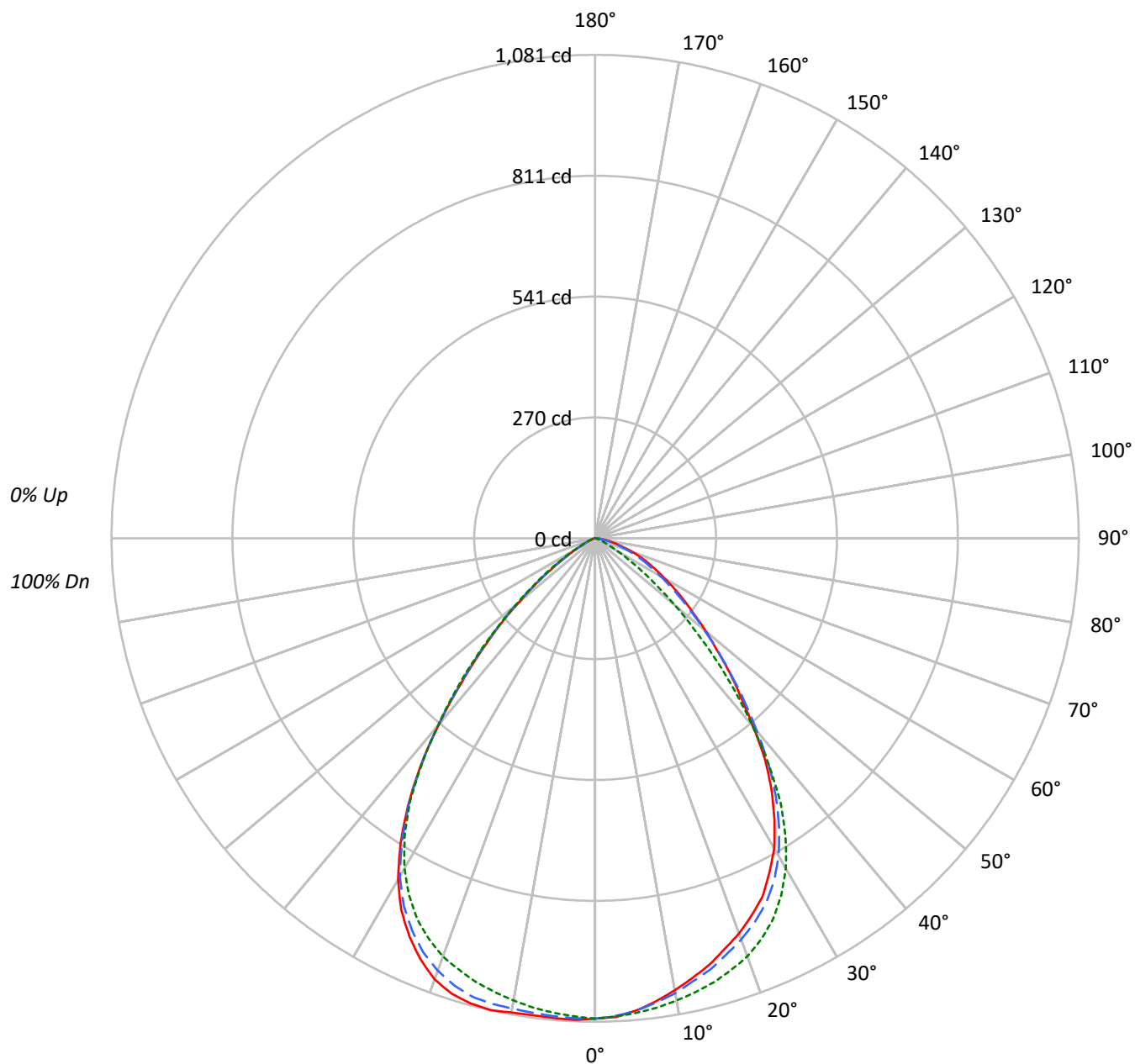
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	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	100		
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90		
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	85	82	80		
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	77	74	72		
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	69	66	64		
5	85	74	67	62	83	73	66	61	71	65	61	70	64	60	68	63	60	58		
6	79	68	61	55	78	67	60	55	66	59	55	64	59	54	63	58	54	52		
7	74	63	55	50	73	62	55	50	61	54	50	59	54	49	58	53	49	47		
8	70	58	51	46	68	57	50	46	56	50	45	55	49	45	54	49	45	43		
9	65	54	47	42	64	53	46	42	52	46	42	51	46	41	50	45	41	40		
10	62	50	43	39	61	50	43	38	49	43	38	48	42	38	47	42	38	37		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	70075	70075	70075
5°	69406	69747	70513
10°	67976	69526	71328
15°	66678	69393	72723
20°	65297	69080	72864
25°	63685	67702	70689
30°	60297	64207	66354
35°	54755	57551	58061
40°	46730	46509	46287
45°	39258	34830	33750
50°	32783	23567	22380
55°	27594	14457	13137
60°	23356	7620	6602
65°	20223	3998	3211
70°	16824	2480	1736
75°	12427	1638	983
80°	9731	977	488
85°	7785	973	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.2	5.6
10°-20°	289.8	16.1
20°-30°	428.0	23.8
30°-40°	441.1	24.5
40°-50°	304.7	16.9
50°-60°	150.2	8.3
60°-70°	60.9	3.4
70°-80°	21.7	1.2
80°-90°	4.5	0.2
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°	819.1	45.5
0°-40°	1260.2	69.9
0°-60°	1715.0	95.2
0°-90°	1802.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1802.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1074	1074	1074	1074	1074	
5°	1060	1060	1065	1073	1077	100
15°	987	998	1027	1061	1077	278
25°	885	902	940	968	982	404
35°	688	704	723	726	729	426
45°	426	428	378	372	366	329
55°	243	234	127	119	116	219
65°	131	118	26	21	21	130
75°	49	42	6	4	4	55
85°	10	8	1	0	0	13
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°	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1
2.5°	1071.5	1067.6	1070.2	1065.0	1071.5	1065.0	1066.3	1067.6	1066.3	1067.6	1068.9
5°	1059.8	1055.9	1059.8	1053.3	1059.8	1055.9	1055.9	1057.2	1057.2	1058.5	1059.8
7.5°	1044.3	1040.4	1044.3	1037.8	1045.6	1041.7	1041.7	1044.3	1043.0	1044.3	1046.9
10°	1026.1	1020.9	1024.8	1020.9	1028.7	1023.5	1026.1	1026.1	1026.1	1030.0	1032.6
12.5°	1006.6	1001.5	1006.6	1000.2	1007.9	1004.1	1005.3	1009.2	1010.5	1013.1	1014.4
15°	987.2	980.7	983.3	979.4	987.2	983.3	984.6	989.8	989.8	993.7	997.6
17.5°	962.5	957.4	962.5	957.4	963.8	961.2	963.8	967.7	967.7	971.6	975.5
20°	940.5	935.3	939.2	935.3	943.1	939.2	940.5	945.7	947.0	950.9	954.8
22.5°	913.2	909.4	911.9	908.1	915.8	913.2	914.5	919.7	921.0	923.6	930.1
25°	884.7	876.9	880.8	878.2	886.0	882.1	884.7	889.9	892.5	896.4	901.6
27.5°	843.2	839.3	841.9	841.9	848.4	844.5	845.8	851.0	854.9	858.8	865.2
30°	800.4	793.9	796.5	797.8	803.0	800.4	803.0	808.2	809.5	814.7	819.8
32.5°	745.9	743.3	748.5	745.9	748.5	748.5	749.8	753.7	756.3	758.9	765.4
35°	687.5	682.3	687.5	684.9	691.4	687.5	691.4	695.3	695.3	700.5	704.4
37.5°	624.0	617.5	620.1	620.1	622.7	621.4	621.4	627.9	629.2	633.0	636.9
40°	548.7	546.1	551.3	550.0	551.3	551.3	552.6	556.5	559.1	560.4	561.7
42.5°	481.3	482.6	483.9	483.9	483.9	483.9	483.9	489.1	487.8	491.6	492.9
45°	425.5	420.3	422.9	421.6	425.5	421.6	425.5	429.4	426.8	430.7	428.1
47.5°	368.4	368.4	368.4	367.1	369.7	368.4	371.0	372.3	372.3	372.3	371.0
50°	323.0	319.1	320.4	320.4	321.7	320.4	323.0	324.3	324.3	321.7	316.5
52.5°	278.9	277.6	277.6	280.2	280.2	278.9	278.9	278.9	278.9	275.0	272.4
55°	242.6	240.0	241.3	241.3	241.3	241.3	242.6	241.3	241.3	237.4	233.5
57.5°	210.2	207.6	207.6	207.6	208.9	207.6	207.6	207.6	206.3	202.4	197.2
60°	179.0	177.7	179.0	179.0	180.3	179.0	179.0	179.0	176.4	172.5	167.3
62.5°	153.1	153.1	153.1	154.4	154.4	153.1	153.1	151.8	150.5	145.3	140.1
65°	131.0	129.7	131.0	131.0	132.3	132.3	131.0	129.7	128.4	123.2	118.0
67.5°	109.0	107.7	109.0	109.0	110.3	109.0	109.0	109.0	105.1	102.5	97.3
70°	88.2	86.9	86.9	86.9	88.2	85.6	86.9	86.9	84.3	80.4	75.2
72.5°	67.5	67.5	67.5	67.5	67.5	67.5	66.2	66.2	63.6	59.7	57.1
75°	49.3	49.3	50.6	50.6	49.3	49.3	49.3	48.0	46.7	44.1	41.5
77.5°	36.3	36.3	36.3	36.3	35.0	35.0	35.0	33.7	32.4	31.1	28.5
80°	25.9	25.9	25.9	24.6	25.9	24.6	24.6	24.6	22.1	20.8	19.5
82.5°	18.2	16.9	16.9	16.9	16.9	16.9	16.9	15.6	15.6	14.3	13.0
85°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	9.1	7.8	7.8
87.5°	5.2	6.5	6.5	6.5	6.5	6.5	6.5	5.2	5.2	5.2	3.9
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°	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1
2.5°	1068.9	1068.9	1071.5	1067.6	1074.1	1070.2	1068.9	1075.4	1071.5	1070.2	1072.8
5°	1059.8	1061.1	1062.4	1059.8	1066.3	1062.4	1062.4	1068.9	1066.3	1065.0	1068.9
7.5°	1048.2	1049.5	1052.1	1050.8	1055.9	1053.3	1054.6	1061.1	1058.5	1058.5	1062.4
10°	1033.9	1036.5	1039.1	1039.1	1045.6	1043.0	1043.0	1050.8	1048.2	1049.5	1054.6
12.5°	1017.0	1020.9	1024.8	1026.1	1032.6	1028.7	1030.0	1039.1	1037.8	1039.1	1044.3
15°	998.9	1004.1	1007.9	1007.9	1015.7	1011.8	1015.7	1024.8	1022.2	1027.4	1033.9
17.5°	978.1	983.3	988.5	989.8	997.6	995.0	1000.2	1009.2	1009.2	1011.8	1019.6
20°	958.6	965.1	967.7	971.6	979.4	978.1	980.7	991.1	991.1	995.0	1002.8
22.5°	932.7	939.2	944.4	948.3	954.8	954.8	958.6	967.7	967.7	970.3	978.1
25°	904.2	911.9	915.8	919.7	926.2	924.9	928.8	936.6	937.9	940.5	948.3
27.5°	867.8	874.3	879.5	882.1	891.2	886.0	889.9	899.0	897.7	900.3	906.8
30°	822.4	828.9	834.1	834.1	841.9	841.9	845.8	849.7	849.7	852.3	857.5
32.5°	769.3	777.0	777.0	780.9	786.1	780.9	786.1	791.3	788.7	792.6	796.5
35°	708.3	712.2	713.5	713.5	717.4	716.1	714.8	718.7	716.1	722.6	726.4
37.5°	634.3	639.5	636.9	639.5	638.2	634.3	634.3	640.8	635.6	636.9	640.8
40°	563.0	563.0	561.7	555.2	556.5	552.6	551.3	552.6	547.4	546.1	551.3
42.5°	489.1	487.8	483.9	474.8	476.1	469.6	464.4	464.4	461.8	460.5	461.8
45°	422.9	419.0	412.5	402.1	399.5	394.4	384.0	381.4	377.5	377.5	378.8
47.5°	361.9	356.7	346.4	334.7	328.2	321.7	311.3	307.4	301.0	298.4	301.0
50°	311.3	302.3	289.3	272.4	265.9	258.1	247.8	241.3	234.8	232.2	230.9
52.5°	264.6	251.7	238.7	217.9	212.7	205.0	190.7	184.2	177.7	172.5	172.5
55°	224.4	212.7	194.6	175.1	167.3	159.6	145.3	136.2	129.7	127.1	124.5
57.5°	188.1	175.1	158.3	137.5	129.7	121.9	107.7	98.6	92.1	88.2	85.6
60°	158.3	144.0	127.1	109.0	99.9	92.1	77.8	68.8	62.3	58.4	55.8
62.5°	129.7	118.0	101.2	84.3	76.5	68.8	57.1	48.0	41.5	38.9	35.0
65°	109.0	97.3	81.7	67.5	61.0	53.2	42.8	35.0	29.8	25.9	23.4
67.5°	88.2	79.1	66.2	53.2	46.7	41.5	32.4	25.9	20.8	18.2	16.9
70°	70.1	61.0	50.6	40.2	36.3	31.1	24.6	18.2	15.6	13.0	11.7
72.5°	51.9	45.4	37.6	29.8	25.9	23.4	16.9	14.3	10.4	9.1	7.8
75°	37.6	32.4	27.2	20.8	18.2	16.9	13.0	9.1	7.8	6.5	5.2
77.5°	25.9	23.4	18.2	14.3	13.0	11.7	9.1	6.5	5.2	3.9	3.9
80°	16.9	14.3	11.7	9.1	9.1	7.8	5.2	3.9	3.9	2.6	2.6
82.5°	10.4	9.1	7.8	6.5	5.2	5.2	3.9	2.6	2.6	1.3	1.3
85°	6.5	5.2	3.9	3.9	2.6	2.6	2.6	1.3	1.3	1.3	1.3
87.5°	2.6	2.6	2.6	1.3	1.3	1.3	1.3	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°	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1
2.5°	1072.8	1072.8	1075.4	1071.5	1074.1	1074.1	1076.7	1071.5	1074.1	1075.4	1078.0
5°	1067.6	1068.9	1071.5	1070.2	1071.5	1071.5	1074.1	1067.6	1072.8	1072.8	1076.7
7.5°	1062.4	1062.4	1065.0	1063.7	1066.3	1067.6	1070.2	1065.0	1070.2	1070.2	1074.1
10°	1055.9	1055.9	1059.8	1058.5	1062.4	1063.7	1067.6	1062.4	1067.6	1068.9	1072.8
12.5°	1046.9	1048.2	1052.1	1052.1	1055.9	1058.5	1062.4	1059.8	1066.3	1067.6	1072.8
15°	1036.5	1039.1	1044.3	1043.0	1046.9	1050.8	1055.9	1052.1	1061.1	1063.7	1068.9
17.5°	1023.5	1026.1	1030.0	1030.0	1033.9	1036.5	1043.0	1040.4	1048.2	1049.5	1055.9
20°	1004.1	1007.9	1013.1	1011.8	1015.7	1018.3	1023.5	1020.9	1028.7	1031.3	1037.8
22.5°	980.7	983.3	987.2	987.2	991.1	993.7	998.9	995.0	1002.8	1004.1	1009.2
25°	949.6	952.2	954.8	956.1	959.9	961.2	963.8	961.2	967.7	969.0	975.5
27.5°	909.4	910.7	914.5	914.5	917.1	918.4	922.3	917.1	926.2	926.2	930.1
30°	861.4	860.1	865.2	862.7	865.2	865.2	869.1	866.5	873.0	870.4	874.3
32.5°	797.8	800.4	800.4	797.8	803.0	801.7	801.7	799.1	803.0	804.3	806.9
35°	723.9	727.7	727.7	729.0	730.3	726.4	727.7	720.0	726.4	727.7	729.0
37.5°	643.4	639.5	642.1	638.2	644.7	636.9	636.9	631.7	636.9	636.9	638.2
40°	551.3	550.0	552.6	550.0	548.7	547.4	544.8	540.9	546.1	543.5	547.4
42.5°	464.4	463.1	463.1	460.5	459.2	459.2	456.6	454.0	452.7	452.7	459.2
45°	374.9	377.5	374.9	373.6	376.2	373.6	374.9	369.7	372.3	369.7	372.3
47.5°	299.7	301.0	298.4	295.8	299.7	295.8	295.8	291.9	297.1	297.1	294.5
50°	232.2	230.9	228.3	230.9	229.6	229.6	229.6	225.7	228.3	224.4	227.0
52.5°	171.2	169.9	169.9	168.6	169.9	168.6	168.6	167.3	167.3	166.0	167.3
55°	124.5	123.2	120.6	120.6	120.6	121.9	120.6	119.3	119.3	118.0	119.3
57.5°	84.3	81.7	81.7	81.7	81.7	80.4	80.4	79.1	80.4	79.1	80.4
60°	54.5	54.5	51.9	51.9	51.9	51.9	51.9	50.6	51.9	51.9	51.9
62.5°	33.7	33.7	32.4	31.1	32.4	31.1	31.1	31.1	32.4	31.1	32.4
65°	22.1	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
67.5°	15.6	14.3	14.3	14.3	14.3	14.3	14.3	13.0	14.3	14.3	14.3
70°	10.4	10.4	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
72.5°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
75°	5.2	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
77.5°	3.9	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
80°	2.6	2.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
85°	1.3	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	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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: P252258

CATALOG NUMBER: LD6B20D010 EU6B10208027 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1	1074.1
2.5°	1074.1	1075.4	1072.8	1074.1	1071.5	1074.1	1075.4	1078.0
5°	1071.5	1072.8	1070.2	1072.8	1070.2	1072.8	1074.1	1076.7
7.5°	1068.9	1071.5	1068.9	1071.5	1068.9	1071.5	1072.8	1075.4
10°	1068.9	1072.8	1070.2	1074.1	1070.2	1072.8	1075.4	1076.7
12.5°	1068.9	1072.8	1071.5	1074.1	1072.8	1075.4	1078.0	1080.6
15°	1066.3	1070.2	1067.6	1071.5	1070.2	1071.5	1076.7	1076.7
17.5°	1052.1	1055.9	1055.9	1058.5	1058.5	1062.4	1065.0	1067.6
20°	1033.9	1037.8	1036.5	1040.4	1040.4	1044.3	1046.9	1049.5
22.5°	1006.6	1011.8	1010.5	1014.4	1013.1	1015.7	1020.9	1019.6
25°	971.6	978.1	976.8	979.4	978.1	978.1	980.7	982.0
27.5°	928.8	932.7	931.4	934.0	931.4	934.0	936.6	937.9
30°	873.0	875.6	874.3	875.6	874.3	876.9	878.2	880.8
32.5°	805.6	809.5	805.6	808.2	806.9	806.9	812.1	809.5
35°	725.1	726.4	727.7	727.7	725.1	726.4	729.0	729.0
37.5°	635.6	642.1	634.3	638.2	636.9	636.9	636.9	640.8
40°	542.2	543.5	540.9	540.9	540.9	539.6	544.8	543.5
42.5°	454.0	455.3	454.0	450.1	451.4	451.4	455.3	450.1
45°	368.4	371.0	369.7	369.7	367.1	367.1	368.4	365.8
47.5°	291.9	294.5	290.6	291.9	289.3	291.9	290.6	293.2
50°	221.8	224.4	223.1	224.4	224.4	221.8	225.7	220.5
52.5°	166.0	167.3	166.0	164.7	163.5	163.5	166.0	164.7
55°	118.0	116.8	116.8	116.8	118.0	118.0	116.8	115.5
57.5°	79.1	79.1	77.8	77.8	79.1	76.5	77.8	76.5
60°	50.6	50.6	50.6	50.6	49.3	50.6	50.6	50.6
62.5°	31.1	31.1	31.1	31.1	31.1	31.1	31.1	31.1
65°	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8
67.5°	13.0	14.3	14.3	14.3	13.0	13.0	13.0	13.0
70°	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
72.5°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
75°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
77.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
80°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	1.3	1.3	1.3	1.3	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)