

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: P252570

Luminaire Tested: **LD6B20D010 EU6B10208027 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252570
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 EU6B10208027 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1944.0 lumens
Efficiency: N/A
Efficacy: 93.5 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

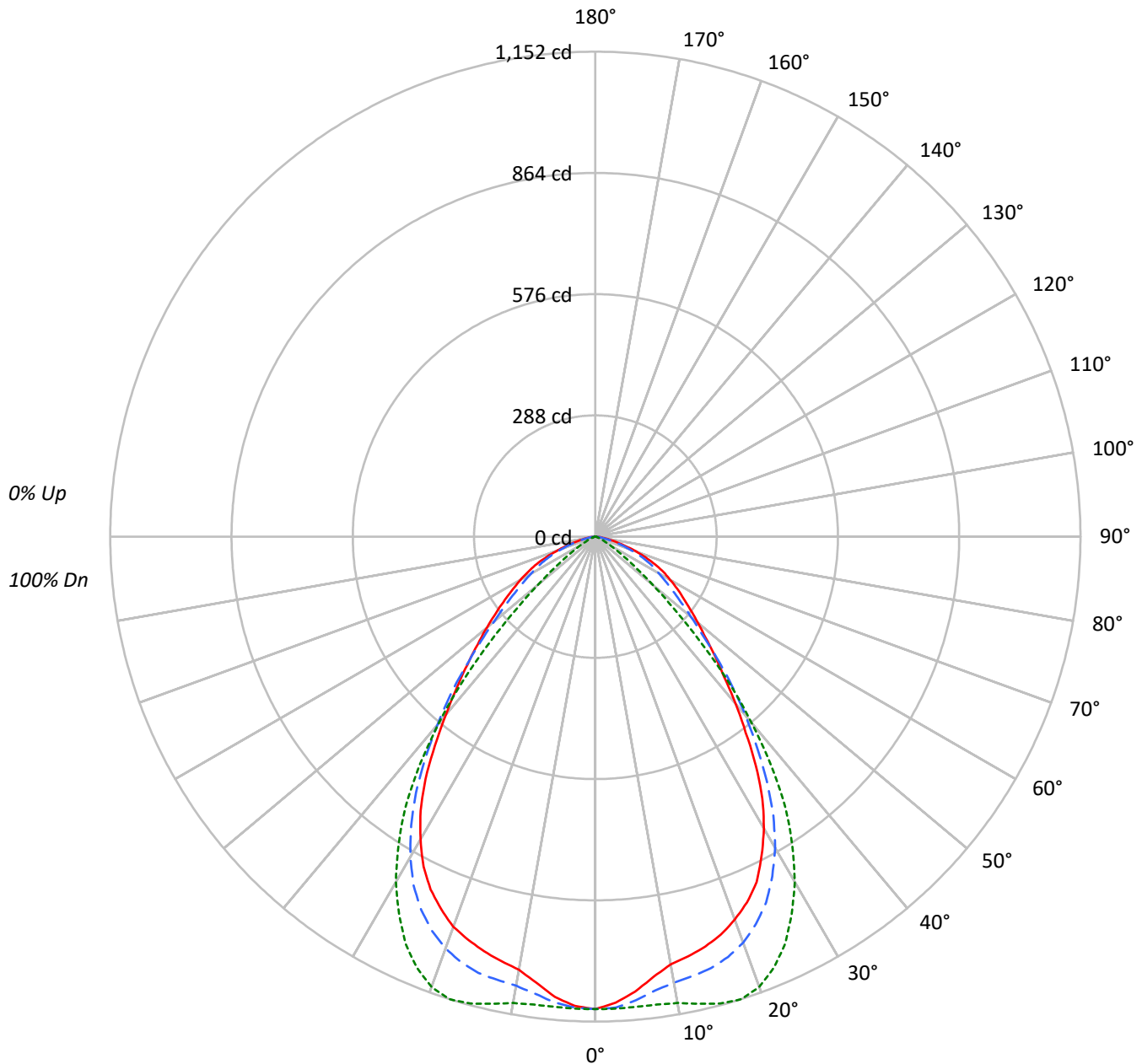
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
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	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°	73226	73226	73226
5°	71037	73421	71888
10°	68334	74528	69195
15°	68096	77559	68886
20°	67206	79002	68463
25°	65197	76779	66593
30°	60312	71356	62557
35°	52908	62728	56014
40°	44090	49175	46969
45°	37109	32440	39627
50°	32134	17782	34113
55°	29073	9441	29812
60°	26749	4906	26749
65°	24236	2609	23634
70°	19552	1488	18064
75°	13410	983	12427
80°	8792	488	7815
85°	5839	973	4866



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.7	5.4
10°-20°	302.6	15.6
20°-30°	447.1	23.0
30°-40°	451.6	23.2
40°-50°	311.3	16.0
50°-60°	178.8	9.2
60°-70°	104.1	5.4
70°-80°	38.0	2.0
80°-90°	5.8	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°	854.4	44.0
0°-40°	1306.1	67.2
0°-60°	1796.2	92.4
0°-90°	1944.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1944.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1122	1122	1122	1122	1122	
5°	1085	1106	1121	1111	1098	102
15°	1008	1061	1148	1073	1020	284
25°	906	959	1067	978	925	413
35°	664	710	788	742	703	412
45°	402	407	352	433	430	313
55°	256	224	83	234	262	230
65°	157	132	17	131	153	154
75°	53	43	4	42	49	60
85°	8	4	1	5	6	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°	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4
2.5°	1108.1	1109.4	1110.7	1109.4	1110.7	1115.9	1112.0	1114.6	1114.6	1115.9	1119.8
5°	1084.7	1084.7	1087.3	1086.0	1089.9	1095.1	1091.2	1095.1	1096.4	1099.0	1105.5
7.5°	1054.9	1054.9	1056.2	1056.2	1061.4	1066.6	1064.0	1069.2	1074.4	1079.5	1087.3
10°	1031.5	1034.1	1034.1	1035.4	1040.6	1047.1	1045.8	1052.3	1057.5	1065.3	1075.7
12.5°	1021.2	1022.5	1022.5	1025.1	1030.2	1036.7	1035.4	1041.9	1049.7	1058.8	1069.2
15°	1008.2	1010.8	1009.5	1012.1	1017.3	1023.8	1022.5	1028.9	1038.0	1047.1	1061.4
17.5°	991.3	992.6	993.9	993.9	999.1	1004.3	1004.3	1010.8	1021.2	1031.5	1047.1
20°	968.0	970.6	970.6	971.9	975.7	983.5	982.2	988.7	999.1	1009.5	1026.4
22.5°	940.7	942.0	942.0	943.3	949.8	953.7	955.0	960.2	969.3	980.9	996.5
25°	905.7	907.0	905.7	909.6	912.2	920.0	917.4	923.8	934.2	943.3	958.9
27.5°	855.1	857.7	857.7	859.0	865.5	871.9	871.9	878.4	887.5	894.0	909.6
30°	800.6	804.5	800.6	807.1	809.7	814.9	818.7	822.6	830.4	839.5	853.8
32.5°	738.3	737.0	738.3	740.9	748.7	752.6	755.2	759.1	766.8	774.6	786.3
35°	664.3	666.9	668.2	673.4	673.4	679.9	681.2	683.8	695.5	700.7	709.8
37.5°	586.5	589.1	590.4	593.0	598.2	600.8	604.7	608.5	616.3	625.4	630.6
40°	517.7	517.7	519.0	521.6	525.5	526.8	530.7	535.9	541.1	548.9	554.0
42.5°	452.8	454.1	452.8	455.4	459.3	464.5	463.2	469.7	471.0	476.2	480.1
45°	402.2	402.2	399.6	402.2	402.2	407.4	406.1	408.7	407.4	410.0	407.4
47.5°	354.2	355.5	354.2	355.5	355.5	355.5	356.8	354.2	355.5	351.6	343.8
50°	316.6	317.9	315.3	316.6	315.3	314.0	315.3	311.4	310.1	304.9	297.1
52.5°	284.2	282.9	281.6	281.6	281.6	280.3	279.0	275.1	271.2	266.0	256.9
55°	255.6	254.3	253.0	253.0	250.4	249.1	249.1	245.2	241.3	234.9	224.5
57.5°	229.7	228.4	227.1	227.1	225.8	223.2	223.2	219.3	214.1	206.3	197.2
60°	205.0	205.0	205.0	203.7	203.7	201.1	201.1	197.2	192.0	184.3	173.9
62.5°	183.0	181.7	181.7	181.7	181.7	180.4	179.1	176.5	171.3	163.5	154.4
65°	157.0	157.0	157.0	157.0	155.7	155.7	155.7	151.8	149.2	141.4	132.3
67.5°	128.5	128.5	128.5	128.5	127.2	128.5	128.5	125.9	123.3	115.5	107.7
70°	102.5	101.2	99.9	101.2	99.9	99.9	101.2	98.6	97.3	90.8	83.0
72.5°	75.3	76.6	75.3	75.3	75.3	74.0	75.3	74.0	71.4	66.2	61.0
75°	53.2	54.5	54.5	53.2	53.2	53.2	51.9	51.9	49.3	45.4	42.8
77.5°	36.3	36.3	36.3	36.3	35.0	35.0	35.0	33.7	32.4	29.8	27.2
80°	23.4	23.4	23.4	23.4	22.1	22.1	22.1	20.8	20.8	18.2	15.6
82.5°	14.3	14.3	14.3	14.3	14.3	14.3	13.0	13.0	11.7	10.4	9.1
85°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	6.5	6.5	5.2	3.9
87.5°	2.6	2.6	3.9	3.9	3.9	3.9	3.9	3.9	2.6	2.6	2.6
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°	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4
2.5°	1117.2	1118.5	1118.5	1118.5	1122.4	1123.7	1119.8	1115.9	1123.7	1122.4	1125.0
5°	1104.2	1108.1	1110.7	1112.0	1115.9	1118.5	1114.6	1113.3	1119.8	1121.1	1122.4
7.5°	1088.6	1095.1	1101.6	1104.2	1109.4	1112.0	1110.7	1110.7	1118.5	1121.1	1121.1
10°	1078.3	1087.3	1095.1	1101.6	1108.1	1112.0	1112.0	1113.3	1122.4	1125.0	1127.6
12.5°	1075.7	1087.3	1097.7	1106.8	1112.0	1118.5	1119.8	1123.7	1132.7	1136.6	1136.6
15°	1069.2	1084.7	1097.7	1109.4	1117.2	1125.0	1127.6	1135.3	1145.7	1148.3	1150.9
17.5°	1057.5	1073.1	1088.6	1102.9	1113.3	1119.8	1127.6	1135.3	1148.3	1152.2	1153.5
20°	1036.7	1054.9	1070.5	1084.7	1095.1	1104.2	1112.0	1121.1	1132.7	1137.9	1139.2
22.5°	1005.6	1023.8	1039.3	1054.9	1065.3	1073.1	1080.8	1091.2	1102.9	1108.1	1108.1
25°	968.0	984.8	1001.7	1013.4	1023.8	1032.8	1036.7	1048.4	1060.1	1066.6	1066.6
27.5°	920.0	935.5	951.1	964.1	970.6	978.3	984.8	995.2	1004.3	1009.5	1014.7
30°	859.0	874.5	888.8	901.8	909.6	917.4	923.8	931.6	940.7	947.2	948.5
32.5°	792.8	805.8	820.0	833.0	840.8	843.4	849.9	857.7	865.5	870.6	871.9
35°	720.1	729.2	738.3	750.0	757.8	757.8	764.2	769.4	775.9	787.6	785.0
37.5°	634.5	647.5	654.0	657.9	663.0	668.2	669.5	676.0	683.8	686.4	690.3
40°	554.0	557.9	561.8	561.8	567.0	567.0	567.0	568.3	576.1	577.4	582.6
42.5°	473.6	473.6	469.7	465.8	467.1	465.8	459.3	459.3	463.2	468.4	468.4
45°	398.3	389.3	377.6	368.5	362.0	359.4	351.6	351.6	350.3	351.6	356.8
47.5°	334.8	319.2	299.7	281.6	275.1	269.9	258.2	253.0	250.4	251.7	254.3
50°	281.6	264.7	242.6	220.6	208.9	202.4	188.1	179.1	177.8	175.2	180.4
52.5°	242.6	221.9	198.5	172.6	160.9	150.5	134.9	127.2	122.0	122.0	123.3
55°	208.9	186.8	160.9	134.9	123.3	115.5	99.9	89.5	84.3	83.0	86.9
57.5°	180.4	159.6	133.6	107.7	96.0	86.9	71.4	62.3	58.4	55.8	57.1
60°	158.3	137.5	111.6	86.9	76.6	66.2	53.2	42.8	37.6	37.6	38.9
62.5°	137.5	118.1	94.7	71.4	62.3	53.2	38.9	29.8	26.0	24.7	26.0
65°	116.8	98.6	79.1	59.7	50.6	42.8	31.1	23.4	18.2	16.9	18.2
67.5°	94.7	80.4	63.6	48.0	40.2	33.7	23.4	16.9	13.0	11.7	13.0
70°	74.0	61.0	48.0	35.0	29.8	24.7	16.9	13.0	9.1	7.8	9.1
72.5°	53.2	44.1	33.7	24.7	20.8	16.9	11.7	9.1	6.5	5.2	6.5
75°	36.3	29.8	22.1	15.6	13.0	11.7	7.8	5.2	3.9	3.9	3.9
77.5°	23.4	18.2	14.3	10.4	7.8	6.5	3.9	2.6	2.6	2.6	2.6
80°	13.0	10.4	7.8	5.2	3.9	3.9	2.6	2.6	1.3	1.3	1.3
82.5°	7.8	5.2	3.9	2.6	2.6	1.3	1.3	1.3	1.3	1.3	1.3
85°	3.9	2.6	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
87.5°	1.3	1.3	1.3	1.3	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°	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4
2.5°	1119.8	1121.1	1117.2	1122.4	1118.5	1123.7	1123.7	1118.5	1119.8	1117.2	1122.4
5°	1117.2	1117.2	1114.6	1118.5	1113.3	1118.5	1117.2	1108.1	1110.7	1105.5	1110.7
7.5°	1117.2	1114.6	1110.7	1114.6	1108.1	1112.0	1106.8	1097.7	1095.1	1088.6	1088.6
10°	1121.1	1117.2	1112.0	1113.3	1106.8	1108.1	1100.3	1087.3	1083.4	1075.7	1073.1
12.5°	1130.2	1126.3	1118.5	1121.1	1112.0	1112.0	1101.6	1086.0	1078.3	1067.9	1065.3
15°	1143.1	1136.6	1127.6	1128.9	1119.8	1114.6	1101.6	1083.4	1073.1	1058.8	1054.9
17.5°	1145.7	1139.2	1127.6	1127.6	1115.9	1109.4	1093.8	1073.1	1060.1	1045.8	1038.0
20°	1131.5	1125.0	1112.0	1110.7	1100.3	1091.2	1074.4	1053.6	1040.6	1025.1	1018.6
22.5°	1101.6	1093.8	1082.1	1080.8	1070.5	1065.3	1047.1	1026.4	1013.4	997.8	992.6
25°	1057.5	1053.6	1041.9	1040.6	1031.5	1025.1	1009.5	990.0	978.3	962.8	957.6
27.5°	1005.6	1001.7	990.0	990.0	979.6	975.7	961.5	943.3	934.2	920.0	913.5
30°	943.3	938.1	931.6	930.3	921.3	917.4	904.4	887.5	878.4	866.8	864.2
32.5°	869.3	865.5	861.6	860.3	851.2	847.3	838.2	821.3	813.6	803.2	799.3
35°	783.7	781.1	777.2	775.9	772.0	768.1	759.1	746.1	742.2	734.4	730.5
37.5°	685.1	687.7	685.1	685.1	681.2	682.5	674.7	666.9	663.0	657.9	655.3
40°	578.7	583.9	587.8	587.8	586.5	591.7	590.4	583.9	582.6	580.0	578.7
42.5°	471.0	473.6	481.4	486.6	485.3	498.3	499.6	504.7	508.6	506.0	507.3
45°	358.1	365.9	376.3	381.5	388.0	404.8	413.9	424.3	433.4	438.6	437.3
47.5°	258.2	267.3	279.0	286.8	298.4	319.2	342.5	355.5	368.5	375.0	381.5
50°	186.8	195.9	210.2	221.9	229.7	258.2	282.9	299.7	314.0	323.1	329.6
52.5°	131.1	141.4	157.0	167.4	179.1	206.3	234.9	254.3	269.9	281.6	288.1
55°	90.8	102.5	116.8	127.2	140.1	168.7	195.9	216.7	233.6	243.9	251.7
57.5°	63.6	74.0	88.2	97.3	110.3	137.5	164.8	185.5	202.4	212.8	221.9
60°	42.8	53.2	67.5	76.6	86.9	114.2	138.8	160.9	176.5	186.8	195.9
62.5°	29.8	38.9	53.2	62.3	71.4	94.7	118.1	137.5	153.1	164.8	172.6
65°	23.4	31.1	42.8	50.6	59.7	79.1	98.6	115.5	131.1	142.7	147.9
67.5°	16.9	24.7	33.7	40.2	46.7	63.6	80.4	93.4	107.7	116.8	123.3
70°	11.7	16.9	24.7	29.8	35.0	48.0	61.0	72.7	83.0	89.5	94.7
72.5°	9.1	11.7	16.9	20.8	24.7	33.7	44.1	53.2	61.0	66.2	71.4
75°	5.2	7.8	11.7	14.3	16.9	23.4	29.8	36.3	41.5	45.4	48.0
77.5°	2.6	3.9	6.5	7.8	10.4	14.3	19.5	23.4	27.2	29.8	32.4
80°	2.6	2.6	3.9	3.9	5.2	7.8	10.4	13.0	15.6	18.2	19.5
82.5°	1.3	1.3	2.6	2.6	2.6	3.9	5.2	7.8	9.1	10.4	11.7
85°	1.3	1.3	1.3	1.3	1.3	2.6	2.6	3.9	5.2	6.5	6.5
87.5°	0.0	0.0	1.3	1.3	1.3	1.3	1.3	2.6	2.6	2.6	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



TEST NUMBER: P252570

CATALOG NUMBER: LD6B20D010 EU6B10208027 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4	1122.4
2.5°	1118.5	1121.1	1119.8	1122.4	1118.5	1117.2	1119.8	1115.9
5°	1104.2	1105.5	1104.2	1104.2	1101.6	1099.0	1101.6	1097.7
7.5°	1082.1	1082.1	1078.3	1078.3	1073.1	1070.5	1070.5	1069.2
10°	1064.0	1060.1	1056.2	1057.5	1049.7	1047.1	1045.8	1044.5
12.5°	1054.9	1052.3	1045.8	1045.8	1038.0	1035.4	1034.1	1032.8
15°	1044.5	1039.3	1034.1	1032.8	1026.4	1023.8	1022.5	1019.9
17.5°	1026.4	1022.5	1016.0	1016.0	1009.5	1008.2	1005.6	1004.3
20°	1006.9	1001.7	996.5	996.5	988.7	988.7	984.8	986.1
22.5°	979.6	975.7	970.6	970.6	964.1	962.8	958.9	957.6
25°	947.2	942.0	938.1	936.8	931.6	929.0	927.7	925.1
27.5°	904.4	900.5	896.6	894.0	887.5	886.2	882.3	883.6
30°	851.2	848.6	847.3	844.7	836.9	834.3	834.3	830.4
32.5°	792.8	788.9	786.3	782.4	775.9	774.6	770.7	772.0
35°	721.4	716.2	712.3	713.6	705.9	704.6	702.0	703.3
37.5°	647.5	642.3	637.1	635.8	629.3	629.3	625.4	625.4
40°	570.9	565.7	563.1	563.1	555.3	556.6	552.8	551.5
42.5°	502.1	497.0	495.7	494.4	490.5	489.2	485.3	486.6
45°	437.3	436.0	436.0	433.4	429.5	428.2	429.5	429.5
47.5°	380.2	381.5	380.2	380.2	377.6	380.2	377.6	378.9
50°	332.2	334.8	334.8	334.8	333.5	334.8	334.8	336.1
52.5°	291.9	295.8	294.5	295.8	294.5	297.1	295.8	297.1
55°	256.9	259.5	260.8	262.1	262.1	262.1	262.1	262.1
57.5°	224.5	228.4	229.7	231.0	231.0	233.6	231.0	231.0
60°	198.5	202.4	203.7	205.0	205.0	206.3	203.7	205.0
62.5°	175.2	179.1	179.1	180.4	180.4	180.4	177.8	179.1
65°	151.8	153.1	154.4	154.4	153.1	153.1	151.8	153.1
67.5°	125.9	127.2	125.9	125.9	124.6	124.6	122.0	123.3
70°	97.3	97.3	98.6	97.3	96.0	97.3	96.0	94.7
72.5°	72.7	72.7	72.7	71.4	71.4	70.1	71.4	71.4
75°	49.3	49.3	50.6	50.6	50.6	50.6	49.3	49.3
77.5°	32.4	32.4	32.4	32.4	33.7	32.4	32.4	32.4
80°	20.8	20.8	22.1	22.1	20.8	20.8	20.8	20.8
82.5°	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
85°	7.8	7.8	7.8	7.8	6.5	6.5	6.5	6.5
87.5°	3.9	3.9	3.9	3.9	3.9	3.9	2.6	2.6
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)