

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: P252261

Luminaire Tested: **LD6B20D010 EU6B10208040 6LBSW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252261
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 EU6B10208040 6LBSW1H
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1951.0 lumens
Efficiency: N/A
Efficacy: 93.8 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

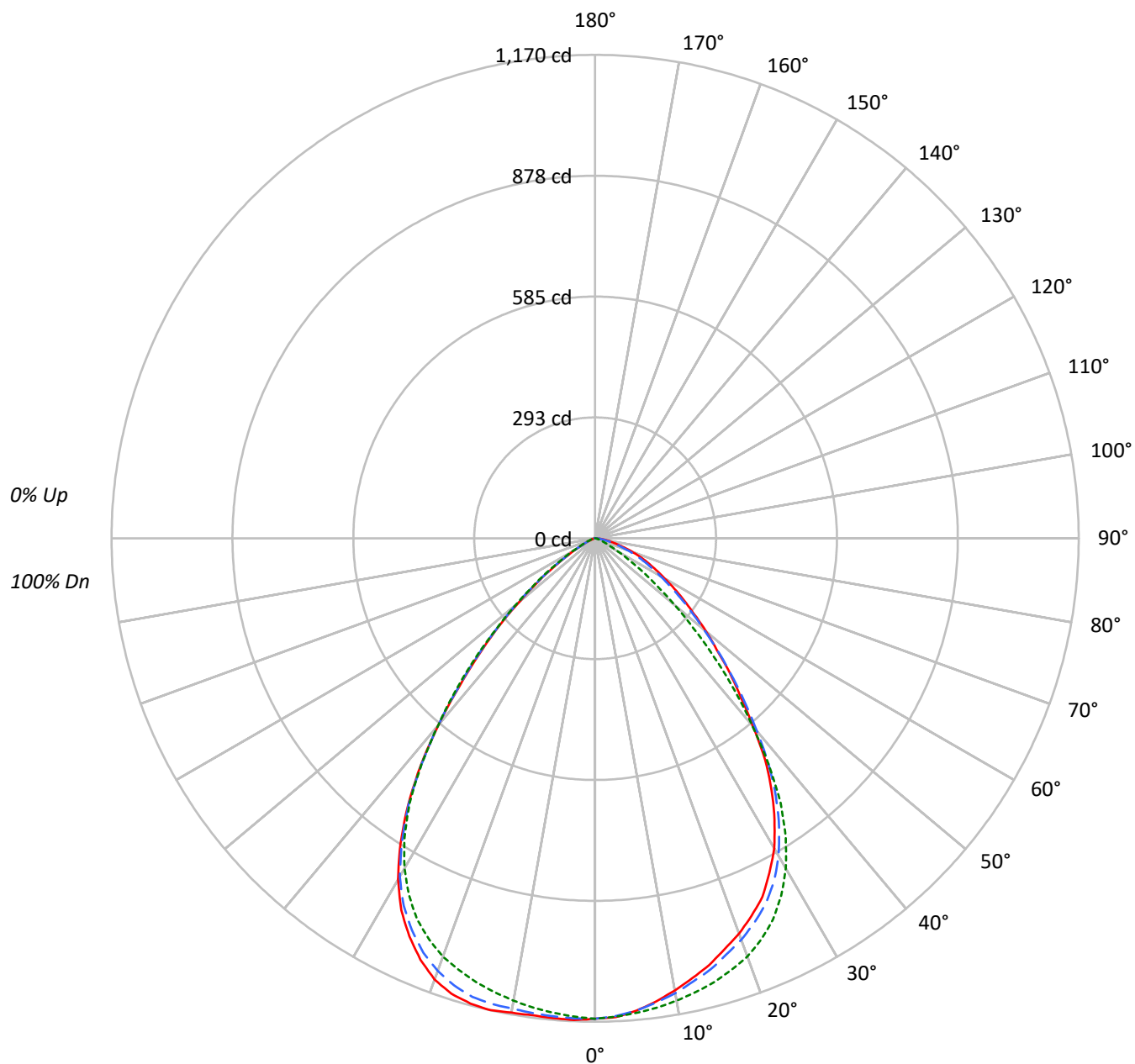
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																					
0	119	119	119	119		116	116	116	116		111	111	111		106	106	106		102	102	102
1	112	108	105	102		109	106	103	101		102	100	98		98	96	95		95	93	92
2	104	98	93	89		102	96	92	88		93	89	86		90	87	84		87	85	82
3	97	89	83	78		95	88	82	77		85	80	76		82	78	75		80	77	74
4	91	81	74	69		89	80	74	69		78	72	68		76	71	67		74	69	66
5	85	74	67	62		83	73	66	61		71	65	61		70	64	60		68	63	60
6	79	68	61	55		78	67	60	55		66	59	55		64	59	54		63	58	54
7	74	63	55	50		73	62	55	50		61	54	50		59	54	49		58	53	49
8	70	58	51	46		68	57	50	46		56	50	45		55	49	45		54	49	45
9	65	54	47	42		64	53	46	42		52	46	42		51	46	41		50	45	41
10	62	50	43	39		61	50	43	38		49	43	38		48	42	38		47	42	38

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	75868	75868	75868
5°	75150	75516	76342
10°	73600	75270	77224
15°	72189	75134	78734
20°	70698	74787	78884
25°	68954	73302	76535
30°	65284	69510	71838
35°	59287	62306	62863
40°	50597	50358	50120
45°	42506	37708	36546
50°	35493	25516	24237
55°	29869	15651	14218
60°	25287	8246	7150
65°	21905	4338	3473
70°	18217	2671	1869
75°	13461	1764	1059
80°	10557	1052	526
85°	8384	1048	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.6	5.6
10°-20°	313.8	16.1
20°-30°	463.4	23.8
30°-40°	477.6	24.5
40°-50°	329.9	16.9
50°-60°	162.6	8.3
60°-70°	65.9	3.4
70°-80°	23.5	1.2
80°-90°	4.8	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°	886.8	45.5
0°-40°	1364.4	69.9
0°-60°	1856.8	95.2
0°-90°	1951.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1951.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1163	1163	1163	1163	1163	
5°	1148	1148	1153	1162	1166	108
15°	1069	1080	1112	1149	1166	301
25°	958	976	1018	1048	1063	438
35°	744	763	782	786	789	461
45°	461	464	409	403	396	356
55°	263	253	138	129	125	237
65°	142	128	28	22	22	141
75°	53	45	7	4	4	60
85°	11	8	1	0	0	14
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°	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9
2.5°	1160.1	1155.9	1158.7	1153.1	1160.1	1153.1	1154.5	1155.9	1154.5	1155.9	1157.3
5°	1147.5	1143.3	1147.5	1140.4	1147.5	1143.3	1143.3	1144.7	1144.7	1146.1	1147.5
7.5°	1130.6	1126.4	1130.6	1123.6	1132.0	1127.8	1127.8	1130.6	1129.2	1130.6	1133.4
10°	1111.0	1105.3	1109.5	1105.3	1113.8	1108.1	1111.0	1111.0	1111.0	1115.2	1118.0
12.5°	1089.9	1084.3	1089.9	1082.9	1091.3	1087.1	1088.5	1092.7	1094.1	1096.9	1098.3
15°	1068.8	1061.8	1064.6	1060.4	1068.8	1064.6	1066.0	1071.6	1071.6	1075.8	1080.1
17.5°	1042.1	1036.5	1042.1	1036.5	1043.5	1040.7	1043.5	1047.7	1047.7	1052.0	1056.2
20°	1018.3	1012.6	1016.8	1012.6	1021.1	1016.8	1018.3	1023.9	1025.3	1029.5	1033.7
22.5°	988.8	984.5	987.4	983.1	991.6	988.8	990.2	995.8	997.2	1000.0	1007.0
25°	957.9	949.4	953.6	950.8	959.3	955.1	957.9	963.5	966.3	970.5	976.1
27.5°	912.9	908.7	911.5	911.5	918.5	914.3	915.7	921.3	925.6	929.8	936.8
30°	866.6	859.5	862.4	863.8	869.4	866.6	869.4	875.0	876.4	882.0	887.6
32.5°	807.6	804.8	810.4	807.6	810.4	810.4	811.8	816.0	818.8	821.6	828.6
35°	744.4	738.8	744.4	741.6	748.6	744.4	748.6	752.8	752.8	758.4	762.6
37.5°	675.6	668.5	671.3	671.3	674.2	672.7	672.7	679.8	681.2	685.4	689.6
40°	594.1	591.3	596.9	595.5	596.9	596.9	598.3	602.5	605.3	606.7	608.1
42.5°	521.1	522.5	523.9	523.9	523.9	523.9	523.9	529.5	528.1	532.3	533.7
45°	460.7	455.1	457.9	456.5	460.7	456.5	460.7	464.9	462.1	466.3	463.5
47.5°	398.9	398.9	398.9	397.5	400.3	398.9	401.7	403.1	403.1	403.1	401.7
50°	349.7	345.5	346.9	346.9	348.3	346.9	349.7	351.1	351.1	348.3	342.7
52.5°	302.0	300.6	300.6	303.4	303.4	302.0	302.0	302.0	302.0	297.8	294.9
55°	262.6	259.8	261.2	261.2	261.2	261.2	262.6	261.2	261.2	257.0	252.8
57.5°	227.5	224.7	224.7	224.7	226.1	224.7	224.7	224.7	223.3	219.1	213.5
60°	193.8	192.4	193.8	193.8	195.2	193.8	193.8	193.8	191.0	186.8	181.2
62.5°	165.7	165.7	165.7	167.1	167.1	165.7	165.7	164.3	162.9	157.3	151.7
65°	141.9	140.4	141.9	141.9	143.3	143.3	141.9	140.4	139.0	133.4	127.8
67.5°	118.0	116.6	118.0	118.0	119.4	118.0	118.0	118.0	113.8	111.0	105.3
70°	95.5	94.1	94.1	94.1	95.5	92.7	94.1	94.1	91.3	87.1	81.5
72.5°	73.0	73.0	73.0	73.0	73.0	73.0	71.6	71.6	68.8	64.6	61.8
75°	53.4	53.4	54.8	54.8	53.4	53.4	53.4	52.0	50.6	47.8	44.9
77.5°	39.3	39.3	39.3	39.3	37.9	37.9	37.9	36.5	35.1	33.7	30.9
80°	28.1	28.1	28.1	26.7	28.1	26.7	26.7	26.7	23.9	22.5	21.1
82.5°	19.7	18.3	18.3	18.3	18.3	18.3	18.3	16.9	16.9	15.4	14.0
85°	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	9.8	8.4	8.4
87.5°	5.6	7.0	7.0	7.0	7.0	7.0	7.0	5.6	5.6	5.6	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



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9
2.5°	1157.3	1157.3	1160.1	1155.9	1162.9	1158.7	1157.3	1164.3	1160.1	1158.7	1161.5
5°	1147.5	1148.9	1150.3	1147.5	1154.5	1150.3	1150.3	1157.3	1154.5	1153.1	1157.3
7.5°	1134.8	1136.2	1139.0	1137.6	1143.3	1140.4	1141.8	1148.9	1146.1	1146.1	1150.3
10°	1119.4	1122.2	1125.0	1125.0	1132.0	1129.2	1129.2	1137.6	1134.8	1136.2	1141.8
12.5°	1101.1	1105.3	1109.5	1111.0	1118.0	1113.8	1115.2	1125.0	1123.6	1125.0	1130.6
15°	1081.5	1087.1	1091.3	1091.3	1099.7	1095.5	1099.7	1109.5	1106.7	1112.4	1119.4
17.5°	1059.0	1064.6	1070.2	1071.6	1080.1	1077.2	1082.9	1092.7	1092.7	1095.5	1103.9
20°	1037.9	1044.9	1047.7	1052.0	1060.4	1059.0	1061.8	1073.0	1073.0	1077.2	1085.7
22.5°	1009.8	1016.8	1022.5	1026.7	1033.7	1033.7	1037.9	1047.7	1047.7	1050.6	1059.0
25°	978.9	987.4	991.6	995.8	1002.8	1001.4	1005.6	1014.0	1015.4	1018.3	1026.7
27.5°	939.6	946.6	952.2	955.1	964.9	959.3	963.5	973.3	971.9	974.7	981.7
30°	890.4	897.5	903.1	903.1	911.5	911.5	915.7	919.9	919.9	922.7	928.4
32.5°	832.9	841.3	841.3	845.5	851.1	845.5	851.1	856.7	853.9	858.1	862.4
35°	766.9	771.1	772.5	772.5	776.7	775.3	773.9	778.1	775.3	782.3	786.5
37.5°	686.8	692.4	689.6	692.4	691.0	686.8	686.8	693.8	688.2	689.6	693.8
40°	609.5	609.5	608.1	601.1	602.5	598.3	596.9	598.3	592.7	591.3	596.9
42.5°	529.5	528.1	523.9	514.0	515.4	508.4	502.8	502.8	500.0	498.6	500.0
45°	457.9	453.6	446.6	435.4	432.6	427.0	415.7	412.9	408.7	408.7	410.1
47.5°	391.9	386.2	375.0	362.4	355.3	348.3	337.1	332.9	325.8	323.0	325.8
50°	337.1	327.2	313.2	294.9	287.9	279.5	268.3	261.2	254.2	251.4	250.0
52.5°	286.5	272.5	258.4	236.0	230.3	221.9	206.5	199.4	192.4	186.8	186.8
55°	243.0	230.3	210.7	189.6	181.2	172.8	157.3	147.5	140.4	137.6	134.8
57.5°	203.7	189.6	171.3	148.9	140.4	132.0	116.6	106.7	99.7	95.5	92.7
60°	171.3	155.9	137.6	118.0	108.1	99.7	84.3	74.4	67.4	63.2	60.4
62.5°	140.4	127.8	109.6	91.3	82.9	74.4	61.8	52.0	44.9	42.1	37.9
65°	118.0	105.3	88.5	73.0	66.0	57.6	46.3	37.9	32.3	28.1	25.3
67.5°	95.5	85.7	71.6	57.6	50.6	44.9	35.1	28.1	22.5	19.7	18.3
70°	75.8	66.0	54.8	43.5	39.3	33.7	26.7	19.7	16.9	14.0	12.6
72.5°	56.2	49.2	40.7	32.3	28.1	25.3	18.3	15.4	11.2	9.8	8.4
75°	40.7	35.1	29.5	22.5	19.7	18.3	14.0	9.8	8.4	7.0	5.6
77.5°	28.1	25.3	19.7	15.4	14.0	12.6	9.8	7.0	5.6	4.2	4.2
80°	18.3	15.4	12.6	9.8	9.8	8.4	5.6	4.2	4.2	2.8	2.8
82.5°	11.2	9.8	8.4	7.0	5.6	5.6	4.2	2.8	2.8	1.4	1.4
85°	7.0	5.6	4.2	4.2	2.8	2.8	2.8	1.4	1.4	1.4	1.4
87.5°	2.8	2.8	2.8	1.4	1.4	1.4	1.4	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°	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9
2.5°	1161.5	1161.5	1164.3	1160.1	1162.9	1162.9	1165.7	1160.1	1162.9	1164.3	1167.1
5°	1155.9	1157.3	1160.1	1158.7	1160.1	1160.1	1162.9	1155.9	1161.5	1161.5	1165.7
7.5°	1150.3	1150.3	1153.1	1151.7	1154.5	1155.9	1158.7	1153.1	1158.7	1158.7	1162.9
10°	1143.3	1143.3	1147.5	1146.1	1150.3	1151.7	1155.9	1150.3	1155.9	1157.3	1161.5
12.5°	1133.4	1134.8	1139.0	1139.0	1143.3	1146.1	1150.3	1147.5	1154.5	1155.9	1161.5
15°	1122.2	1125.0	1130.6	1129.2	1133.4	1137.6	1143.3	1139.0	1148.9	1151.7	1157.3
17.5°	1108.1	1111.0	1115.2	1115.2	1119.4	1122.2	1129.2	1126.4	1134.8	1136.2	1143.3
20°	1087.1	1091.3	1096.9	1095.5	1099.7	1102.5	1108.1	1105.3	1113.8	1116.6	1123.6
22.5°	1061.8	1064.6	1068.8	1068.8	1073.0	1075.8	1081.5	1077.2	1085.7	1087.1	1092.7
25°	1028.1	1030.9	1033.7	1035.1	1039.3	1040.7	1043.5	1040.7	1047.7	1049.2	1056.2
27.5°	984.5	986.0	990.2	990.2	993.0	994.4	998.6	993.0	1002.8	1002.8	1007.0
30°	932.6	931.2	936.8	934.0	936.8	936.8	941.0	938.2	945.2	942.4	946.6
32.5°	863.8	866.6	866.6	863.8	869.4	868.0	868.0	865.2	869.4	870.8	873.6
35°	783.7	787.9	787.9	789.3	790.7	786.5	787.9	779.5	786.5	787.9	789.3
37.5°	696.6	692.4	695.2	691.0	698.0	689.6	689.6	684.0	689.6	689.6	691.0
40°	596.9	595.5	598.3	595.5	594.1	592.7	589.9	585.7	591.3	588.5	592.7
42.5°	502.8	501.4	501.4	498.6	497.2	497.2	494.4	491.6	490.2	490.2	497.2
45°	405.9	408.7	405.9	404.5	407.3	404.5	405.9	400.3	403.1	400.3	403.1
47.5°	324.4	325.8	323.0	320.2	324.4	320.2	320.2	316.0	321.6	321.6	318.8
50°	251.4	250.0	247.2	250.0	248.6	248.6	248.6	244.4	247.2	243.0	245.8
52.5°	185.4	184.0	184.0	182.6	184.0	182.6	182.6	181.2	181.2	179.8	181.2
55°	134.8	133.4	130.6	130.6	130.6	132.0	130.6	129.2	129.2	127.8	129.2
57.5°	91.3	88.5	88.5	88.5	88.5	87.1	87.1	85.7	87.1	85.7	87.1
60°	59.0	59.0	56.2	56.2	56.2	56.2	56.2	54.8	56.2	56.2	56.2
62.5°	36.5	36.5	35.1	33.7	35.1	33.7	33.7	33.7	35.1	33.7	35.1
65°	23.9	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
67.5°	16.9	15.4	15.4	15.4	15.4	15.4	15.4	14.0	15.4	15.4	15.4
70°	11.2	11.2	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
72.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
75°	5.6	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
77.5°	4.2	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
80°	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
85°	1.4	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	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
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: P252261

CATALOG NUMBER: LD6B20D010 EU6B10208040 6LBSW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9	1162.9
2.5°	1162.9	1164.3	1161.5	1162.9	1160.1	1162.9	1164.3	1167.1
5°	1160.1	1161.5	1158.7	1161.5	1158.7	1161.5	1162.9	1165.7
7.5°	1157.3	1160.1	1157.3	1160.1	1157.3	1160.1	1161.5	1164.3
10°	1157.3	1161.5	1158.7	1162.9	1158.7	1161.5	1164.3	1165.7
12.5°	1157.3	1161.5	1160.1	1162.9	1161.5	1164.3	1167.1	1169.9
15°	1154.5	1158.7	1155.9	1160.1	1158.7	1160.1	1165.7	1165.7
17.5°	1139.0	1143.3	1143.3	1146.1	1146.1	1150.3	1153.1	1155.9
20°	1119.4	1123.6	1122.2	1126.4	1126.4	1130.6	1133.4	1136.2
22.5°	1089.9	1095.5	1094.1	1098.3	1096.9	1099.7	1105.3	1103.9
25°	1052.0	1059.0	1057.6	1060.4	1059.0	1059.0	1061.8	1063.2
27.5°	1005.6	1009.8	1008.4	1011.2	1008.4	1011.2	1014.0	1015.4
30°	945.2	948.0	946.6	948.0	946.6	949.4	950.8	953.6
32.5°	872.2	876.4	872.2	875.0	873.6	873.6	879.2	876.4
35°	785.1	786.5	787.9	787.9	785.1	786.5	789.3	789.3
37.5°	688.2	695.2	686.8	691.0	689.6	689.6	689.6	693.8
40°	587.1	588.5	585.7	585.7	585.7	584.3	589.9	588.5
42.5°	491.6	493.0	491.6	487.4	488.8	488.8	493.0	487.4
45°	398.9	401.7	400.3	400.3	397.5	397.5	398.9	396.1
47.5°	316.0	318.8	314.6	316.0	313.2	316.0	314.6	317.4
50°	240.2	243.0	241.6	243.0	243.0	240.2	244.4	238.8
52.5°	179.8	181.2	179.8	178.4	177.0	177.0	179.8	178.4
55°	127.8	126.4	126.4	126.4	127.8	127.8	126.4	125.0
57.5°	85.7	85.7	84.3	84.3	85.7	82.9	84.3	82.9
60°	54.8	54.8	54.8	54.8	53.4	54.8	54.8	54.8
62.5°	33.7	33.7	33.7	33.7	33.7	33.7	33.7	33.7
65°	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
67.5°	14.0	15.4	15.4	15.4	14.0	14.0	14.0	14.0
70°	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
72.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
75°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
77.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.4	1.4	1.4	1.4	1.4	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)