

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: PORTFOLIO

Report Number: P252151

Luminaire Tested: **LE_6B15D010 EC6B10209050 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252151
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LE_6B15D010 EC6B10209050 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2032.5 lumens
Efficiency: N/A
Efficacy: 141.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

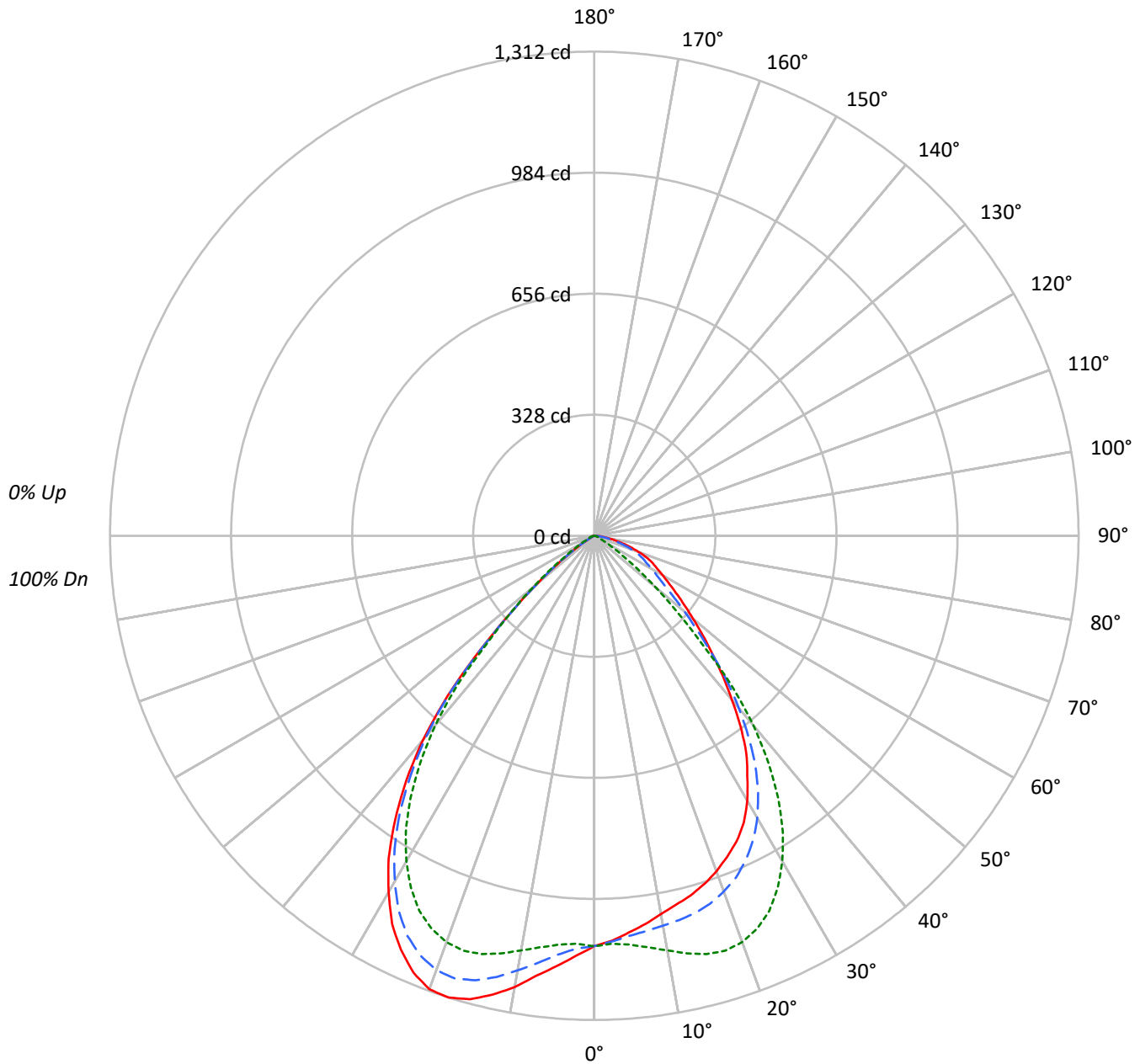
Input Watts (W): 14.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252151

CATALOG NUMBER: LE_6B15D010 EC6B10209050 6LBSW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P252151

CATALOG NUMBER: LE_6B15D010 EC6B10209050 6LBSW1LI

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	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90		
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80		
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72		
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65		
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58		
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53		
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48		
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44		
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40		
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	72548	72548	72548
5°	70664	72825	76649
10°	68950	75561	82252
15°	68143	79267	87811
20°	67164	81334	90777
25°	65730	80731	89154
30°	62459	76720	83929
35°	57145	69171	74929
40°	49430	57129	61473
45°	41685	37468	40218
50°	35382	21680	20391
55°	30711	10396	7860
60°	27740	4854	1944
65°	26923	2794	648
70°	24130	2251	610
75°	19813	1613	277
80°	14803	789	0
85°	12725	0	0



TEST NUMBER: P252151

CATALOG NUMBER: LE_6B15D010 EC6B10209050 6LBSW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	107.4	5.3
10°-20°	327.3	16.1
20°-30°	500.1	24.6
30°-40°	523.1	25.7
40°-50°	339.3	16.7
50°-60°	134.7	6.6
60°-70°	63.9	3.1
70°-80°	30.4	1.5
80°-90°	6.2	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°	934.9	46.0
0°-40°	1457.9	71.7
0°-60°	1932.0	95.1
0°-90°	2032.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2032.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1112	1112	1112	1112	1112	
5°	1079	1088	1112	1140	1170	102
15°	1009	1058	1174	1247	1300	284
25°	913	970	1122	1197	1238	418
35°	718	761	868	920	941	444
45°	452	448	406	430	436	352
55°	270	230	91	71	69	245
65°	174	145	18	4	4	170
75°	79	64	6	2	1	85
85°	17	11	0	0	0	20
90°	0	0	0	0	0	



TEST NUMBER: P252151

CATALOG NUMBER: LE_6B15D010 EC6B10209050 6LBSW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0
2.5°	1098.1	1100.2	1088.5	1085.4	1093.9	1097.0	1098.1	1094.9	1096.0	1100.2	1100.2
5°	1079.0	1081.1	1070.5	1067.2	1075.8	1077.9	1081.1	1080.0	1083.2	1089.6	1088.5
7.5°	1060.9	1064.1	1052.4	1048.1	1058.8	1064.1	1066.2	1066.2	1070.5	1079.0	1080.0
10°	1040.8	1045.0	1034.4	1032.2	1043.9	1049.2	1050.2	1052.4	1058.8	1070.5	1072.6
12.5°	1023.8	1028.0	1020.5	1017.4	1030.1	1035.4	1037.5	1041.8	1049.2	1064.1	1066.2
15°	1008.9	1012.0	1003.5	1001.4	1014.1	1020.5	1021.6	1028.0	1037.5	1054.5	1057.8
17.5°	989.8	991.9	985.4	983.2	996.1	1002.5	1003.5	1011.0	1022.6	1039.6	1045.0
20°	967.4	969.5	963.1	961.0	973.8	981.1	982.2	988.6	1002.5	1020.5	1025.9
22.5°	940.8	945.0	937.6	935.5	948.2	954.6	957.8	963.1	976.9	995.0	1002.5
25°	913.1	913.1	907.9	906.8	918.5	925.9	924.9	932.2	946.1	964.1	970.5
27.5°	877.0	876.0	870.6	869.6	882.4	888.8	886.6	894.0	906.8	924.9	931.2
30°	829.1	831.2	823.9	821.8	832.4	843.0	841.9	849.4	862.1	879.1	883.4
32.5°	771.8	773.9	772.9	769.6	779.2	784.5	787.8	793.0	803.6	821.8	826.0
35°	717.5	714.4	710.1	710.1	719.6	728.1	725.0	731.4	742.0	760.1	761.1
37.5°	650.6	649.5	647.4	645.2	655.9	658.0	659.1	663.4	672.9	687.8	685.6
40°	580.4	581.5	580.4	576.1	582.5	591.0	590.0	592.1	600.6	611.2	608.0
42.5°	514.5	514.5	514.5	510.2	517.8	522.0	524.1	523.0	525.1	534.8	530.5
45°	451.8	452.9	451.8	450.8	451.8	453.9	451.8	450.8	450.8	453.9	447.5
47.5°	397.6	397.6	394.4	391.2	394.4	395.5	392.2	389.1	388.0	387.0	376.4
50°	348.6	347.6	346.5	341.2	344.4	345.5	341.2	339.1	334.9	329.5	316.8
52.5°	306.1	305.1	304.0	298.8	300.9	301.9	297.6	293.4	288.1	283.9	267.9
55°	270.0	269.0	269.0	265.8	263.6	265.8	261.5	258.4	250.9	245.5	229.6
57.5°	239.1	239.1	237.0	233.9	234.9	234.9	230.6	226.4	220.0	213.6	200.9
60°	212.6	212.6	212.6	209.4	209.4	209.4	207.2	203.0	197.8	191.4	178.6
62.5°	191.4	191.4	190.2	187.1	188.1	188.1	186.0	181.8	176.5	172.2	159.5
65°	174.4	174.4	174.4	171.1	171.1	172.2	170.1	165.9	161.6	156.2	144.6
67.5°	153.1	152.0	152.0	149.9	151.0	152.0	149.9	146.8	141.4	138.2	127.6
70°	126.5	127.6	128.6	125.5	126.5	126.5	125.5	122.2	119.0	115.9	106.2
72.5°	103.1	103.1	102.0	101.0	101.0	102.0	99.9	96.8	94.6	92.5	85.0
75°	78.6	77.6	78.6	76.5	76.5	76.5	74.4	73.4	72.2	69.1	63.8
77.5°	57.4	56.4	56.4	54.2	55.2	55.2	54.2	52.1	50.0	48.9	44.6
80°	39.4	39.4	39.4	38.2	38.2	37.2	37.2	36.1	34.0	33.0	30.9
82.5°	26.6	26.6	26.6	25.5	25.5	25.5	24.5	23.4	22.4	21.2	19.1
85°	17.0	17.0	17.0	16.0	16.0	16.0	14.9	14.9	13.9	12.8	10.6
87.5°	9.6	9.6	9.6	8.5	8.5	8.5	8.5	8.5	7.5	6.4	5.4
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: P252151

CATALOG NUMBER: LE_6B15D010 EC6B10209050 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0
2.5°	1107.6	1092.8	1102.4	1102.4	1099.1	1107.6	1113.0	1117.2	1116.2	1106.6	1105.5
5°	1099.1	1086.4	1097.0	1098.1	1094.9	1106.6	1114.1	1119.4	1120.5	1112.0	1113.0
7.5°	1092.8	1082.1	1096.0	1100.2	1099.1	1109.8	1118.4	1126.9	1131.1	1124.8	1125.8
10°	1089.6	1081.1	1096.0	1102.4	1103.4	1115.1	1127.9	1139.6	1144.9	1140.6	1143.9
12.5°	1085.4	1080.0	1097.0	1106.6	1110.9	1122.6	1138.5	1152.4	1160.9	1158.8	1165.1
15°	1081.1	1076.9	1097.0	1110.9	1116.2	1126.9	1144.9	1165.1	1174.6	1173.6	1182.1
17.5°	1070.5	1069.4	1090.6	1105.5	1113.0	1125.8	1142.8	1167.2	1176.8	1178.9	1189.5
20°	1053.5	1053.5	1076.9	1092.8	1101.2	1113.0	1134.2	1157.6	1169.4	1171.5	1183.1
22.5°	1030.1	1032.2	1054.5	1070.5	1083.2	1091.8	1114.1	1138.5	1149.1	1152.4	1165.1
25°	999.2	1001.4	1022.6	1038.6	1052.4	1062.0	1083.2	1105.5	1118.4	1121.5	1131.1
27.5°	958.9	963.1	983.2	999.2	1011.0	1017.4	1039.6	1063.0	1072.6	1075.8	1085.4
30°	912.1	913.1	933.4	947.1	958.9	964.1	983.2	1007.8	1015.2	1018.4	1032.2
32.5°	854.6	853.6	872.8	885.5	895.1	901.5	921.6	937.6	945.0	950.4	957.8
35°	785.6	784.5	798.4	813.2	820.6	822.8	843.0	860.0	864.2	868.5	878.1
37.5°	708.0	708.0	719.6	727.1	735.6	738.8	748.4	767.5	775.0	773.9	781.4
40°	626.1	621.9	630.4	637.9	640.0	641.0	650.6	665.5	670.8	670.8	676.1
42.5°	540.0	533.6	534.8	539.0	541.1	533.6	540.0	549.6	546.4	550.6	551.8
45°	448.6	439.0	434.8	425.2	427.4	419.9	415.6	417.8	416.8	406.1	408.2
47.5°	374.2	357.1	349.8	335.9	332.8	324.2	318.9	309.4	300.9	300.9	295.5
50°	311.5	294.5	279.6	263.6	258.4	250.9	239.1	226.4	220.0	213.6	208.4
52.5°	261.5	243.4	225.4	208.4	200.9	191.4	175.4	162.6	151.0	144.6	138.2
55°	221.1	200.9	181.8	163.8	154.1	144.6	128.6	113.8	99.9	91.4	86.1
57.5°	190.2	171.1	151.0	131.9	123.2	112.6	95.6	79.8	67.0	57.4	52.1
60°	168.0	148.9	130.8	110.5	102.0	91.4	73.4	58.5	45.8	37.2	30.9
62.5°	148.9	131.9	112.6	94.6	86.1	75.5	58.5	43.6	31.9	23.4	18.1
65°	135.0	118.0	102.0	84.0	76.5	65.9	50.0	36.1	25.5	18.1	12.8
67.5°	119.0	104.1	88.2	73.4	65.9	57.4	42.5	30.9	21.2	14.9	10.6
70°	99.9	88.2	74.4	60.6	55.2	47.9	35.1	25.5	17.0	11.8	8.5
72.5°	79.8	70.1	59.5	48.9	44.6	37.2	28.8	20.2	12.8	8.5	6.4
75°	60.6	53.1	44.6	37.2	33.0	28.8	21.2	14.9	9.6	6.4	4.2
77.5°	41.5	38.2	31.9	25.5	23.4	20.2	13.9	9.6	6.4	4.2	2.1
80°	28.8	25.5	21.2	17.0	14.9	12.8	8.5	6.4	3.2	2.1	1.1
82.5°	18.1	14.9	12.8	10.6	9.6	7.5	5.4	3.2	2.1	1.1	1.1
85°	9.6	8.5	7.5	5.4	5.4	4.2	3.2	2.1	1.1	0.0	0.0
87.5°	5.4	4.2	3.2	2.1	2.1	1.1	1.1	1.1	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



TEST NUMBER: P252151

CATALOG NUMBER: LE_6B15D010 EC6B10209050 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0
2.5°	1118.4	1118.4	1117.2	1130.0	1115.1	1130.0	1122.6	1130.0	1119.4	1118.4	1119.4
5°	1126.9	1130.0	1131.1	1142.8	1129.0	1147.0	1140.6	1147.0	1139.6	1141.8	1144.9
7.5°	1143.9	1149.1	1148.1	1163.0	1149.1	1169.4	1165.1	1174.6	1167.2	1169.4	1173.6
10°	1163.0	1169.4	1170.4	1185.2	1172.5	1197.0	1191.6	1202.2	1195.9	1199.1	1204.4
12.5°	1185.2	1192.8	1193.8	1210.8	1197.0	1222.5	1219.2	1229.9	1224.6	1227.8	1234.1
15°	1202.2	1212.9	1215.0	1232.0	1217.1	1243.8	1241.6	1255.5	1247.0	1252.2	1257.6
17.5°	1210.8	1220.4	1224.6	1240.6	1227.8	1254.4	1252.2	1264.0	1257.6	1262.9	1269.2
20°	1205.5	1217.1	1220.4	1236.4	1223.5	1250.1	1247.0	1258.6	1252.2	1256.5	1262.9
22.5°	1186.4	1198.0	1202.2	1217.1	1205.5	1229.9	1228.9	1239.5	1231.0	1236.4	1241.6
25°	1152.4	1165.1	1167.2	1181.0	1168.2	1193.8	1191.6	1203.4	1197.0	1200.1	1207.6
27.5°	1103.4	1118.4	1121.5	1133.2	1123.6	1144.9	1144.9	1154.5	1147.0	1147.0	1154.5
30°	1045.0	1059.9	1062.0	1071.5	1063.0	1082.1	1083.2	1092.8	1081.1	1087.5	1088.5
32.5°	973.8	983.2	989.8	998.2	985.4	1009.9	1006.8	1014.1	1007.8	1007.8	1013.1
35°	887.6	899.4	902.5	913.1	902.5	921.6	921.6	925.9	919.5	919.5	928.0
37.5°	794.1	802.6	803.6	814.2	805.8	821.8	820.6	823.9	817.5	821.8	821.8
40°	684.6	691.0	693.1	698.4	697.4	709.0	708.0	710.1	706.9	708.0	710.1
42.5°	557.0	565.5	569.8	574.0	567.6	583.6	580.4	583.6	582.5	583.6	586.8
45°	410.4	416.8	419.9	421.0	418.9	428.4	435.9	429.5	430.5	428.4	432.6
47.5°	296.6	297.6	295.5	301.9	296.6	300.9	303.0	304.0	297.6	296.6	300.9
50°	203.0	208.4	200.9	204.1	203.0	207.2	205.1	206.2	199.9	203.0	200.9
52.5°	135.0	134.0	131.9	132.9	130.8	130.8	130.8	132.9	128.6	126.5	124.4
55°	81.9	79.8	75.5	74.4	74.4	75.5	73.4	71.2	71.2	70.1	70.1
57.5°	47.9	44.6	42.5	41.5	39.4	38.2	37.2	37.2	35.1	35.1	35.1
60°	26.6	23.4	21.2	19.1	19.1	18.1	17.0	16.0	16.0	16.0	14.9
62.5°	13.9	11.8	9.6	8.5	8.5	7.5	6.4	6.4	6.4	6.4	5.4
65°	9.6	7.5	6.4	5.4	5.4	4.2	4.2	4.2	4.2	4.2	4.2
67.5°	7.5	6.4	5.4	4.2	4.2	4.2	3.2	3.2	3.2	3.2	3.2
70°	6.4	4.2	4.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
72.5°	4.2	4.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
75°	3.2	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
77.5°	1.1	1.1	1.1	1.1	1.1	1.1	0.0	0.0	0.0	0.0	0.0
80°	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	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	0.0	0.0	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



TEST NUMBER: P252151

CATALOG NUMBER: LE_6B15D010 EC6B10209050 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0	1112.0
2.5°	1129.0	1127.9	1129.0	1131.1	1126.9	1139.6	1133.2	1139.6
5°	1153.4	1154.5	1155.5	1158.8	1153.4	1169.4	1160.9	1170.4
7.5°	1185.2	1186.4	1187.4	1190.6	1187.4	1203.4	1193.8	1202.2
10°	1218.2	1220.4	1220.4	1225.6	1222.5	1237.4	1231.0	1241.6
12.5°	1249.1	1251.2	1253.4	1256.5	1254.4	1270.4	1265.0	1273.5
15°	1273.5	1277.8	1278.9	1283.1	1281.0	1298.0	1291.6	1300.1
17.5°	1285.2	1289.5	1289.5	1294.8	1292.6	1310.8	1302.2	1311.8
20°	1278.9	1282.0	1283.1	1288.4	1286.2	1304.4	1295.9	1307.5
22.5°	1258.6	1259.8	1260.8	1266.1	1265.0	1281.0	1273.5	1281.0
25°	1221.4	1224.6	1223.5	1227.8	1227.8	1240.6	1232.0	1238.5
27.5°	1168.2	1171.5	1171.5	1176.8	1172.5	1185.2	1176.8	1186.4
30°	1103.4	1106.6	1104.5	1108.8	1104.5	1117.2	1110.9	1114.1
32.5°	1025.9	1025.9	1026.9	1028.0	1025.9	1037.5	1031.1	1037.5
35°	933.4	935.5	936.5	937.6	935.5	944.0	936.5	940.8
37.5°	829.1	834.5	833.4	834.5	831.2	841.9	835.5	837.6
40°	717.5	717.5	716.5	718.6	715.4	723.9	719.6	721.8
42.5°	587.9	591.0	586.8	592.1	583.6	595.2	591.0	587.9
45°	441.1	436.9	435.9	436.9	433.8	434.8	438.0	435.9
47.5°	300.9	300.9	298.8	295.5	299.8	300.9	296.6	296.6
50°	202.0	202.0	199.9	198.8	200.9	199.9	197.8	200.9
52.5°	128.6	124.4	124.4	126.5	124.4	122.2	125.5	123.2
55°	70.1	68.0	68.0	70.1	68.0	68.0	67.0	69.1
57.5°	34.0	35.1	34.0	34.0	34.0	34.0	33.0	34.0
60°	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9
62.5°	6.4	6.4	5.4	5.4	5.4	5.4	5.4	5.4
65°	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
67.5°	3.2	3.2	3.2	3.2	3.2	4.2	3.2	3.2
70°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
72.5°	3.2	3.2	4.2	4.2	4.2	4.2	4.2	4.2
75°	2.1	2.1	2.1	1.1	1.1	1.1	1.1	1.1
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)