

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: P252148

Luminaire Tested: **LE_6B15D010 EC6B10209030 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252148
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 EC6B10209030 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1992.5 lumens
Efficiency: N/A
Efficacy: 138.4 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

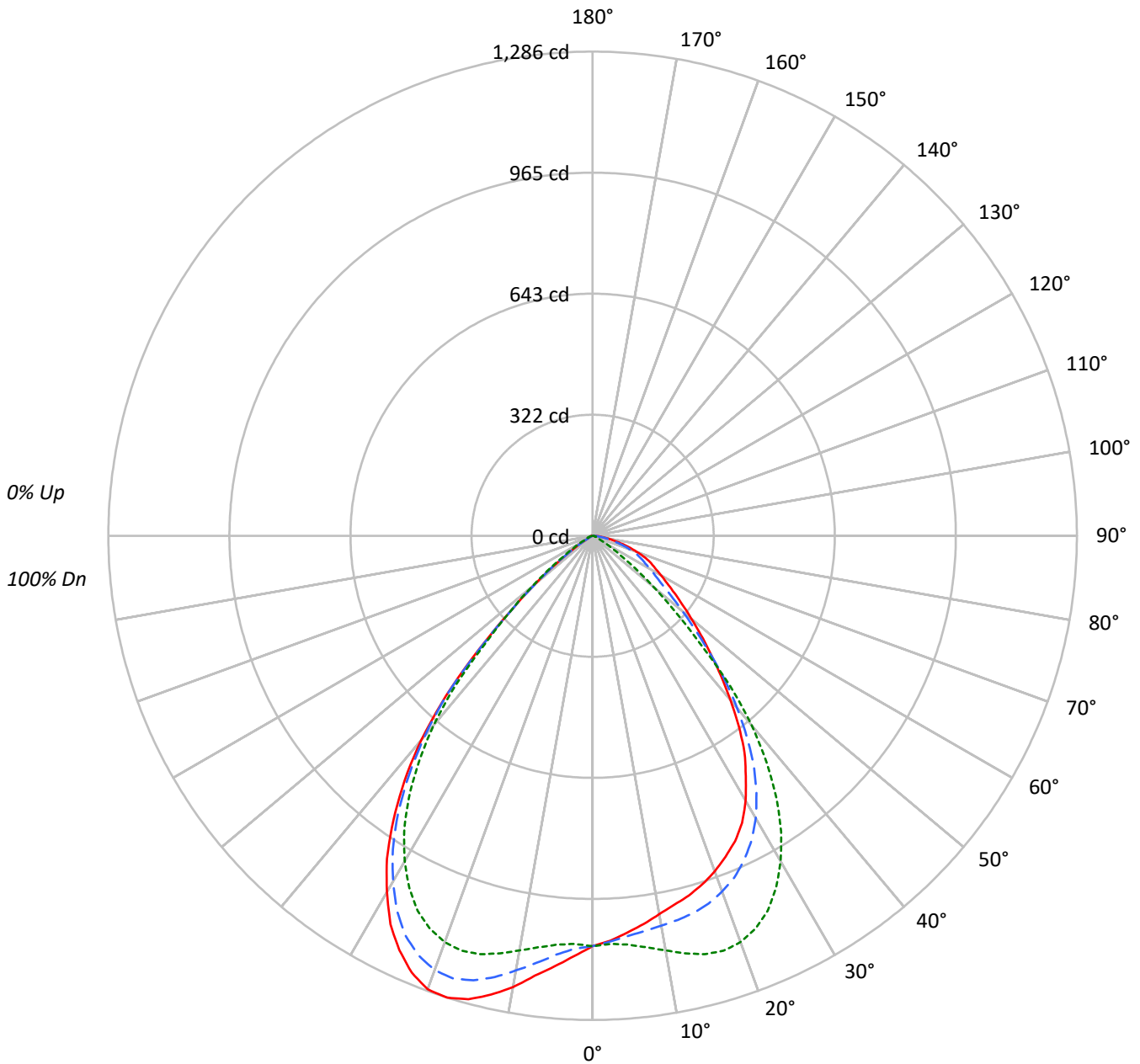
Input Watts (W): 14.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
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°	71112	71112	71112
5°	69275	71384	75143
10°	67585	74077	80636
15°	66799	77707	86082
20°	65845	79731	88992
25°	64434	79140	87397
30°	61239	75213	82272
35°	56022	67809	73448
40°	48459	56005	60263
45°	40864	36730	39415
50°	34702	21263	19995
55°	30119	10191	7712
60°	27192	4763	1905
65°	26382	2748	633
70°	23653	2194	591
75°	19435	1563	252
80°	14465	789	0
85°	12426	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.3	5.3
10°-20°	320.9	16.1
20°-30°	490.3	24.6
30°-40°	512.8	25.7
40°-50°	332.6	16.7
50°-60°	132.1	6.6
60°-70°	62.6	3.1
70°-80°	29.8	1.5
80°-90°	6.1	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°	916.5	46.0
0°-40°	1429.2	71.7
0°-60°	1894.0	95.1
0°-90°	1992.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1992.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1090	1090	1090	1090	1090	
5°	1058	1067	1090	1117	1147	100
15°	989	1037	1150	1222	1274	279
25°	895	952	1099	1173	1214	410
35°	703	746	851	901	922	435
45°	443	439	398	422	427	345
55°	265	225	90	70	68	240
65°	171	142	18	4	4	167
75°	77	62	6	2	1	83
85°	17	10	0	0	0	19
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°	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0
2.5°	1076.5	1078.6	1067.1	1064.0	1072.4	1075.5	1076.5	1073.4	1074.4	1078.6	1078.6
5°	1057.8	1059.9	1049.4	1046.2	1054.6	1056.8	1059.9	1058.8	1061.9	1068.1	1067.1
7.5°	1040.0	1043.1	1031.8	1027.5	1038.0	1043.1	1045.2	1045.2	1049.4	1057.8	1058.8
10°	1020.2	1024.4	1014.0	1011.9	1023.4	1028.6	1029.6	1031.8	1038.0	1049.4	1051.5
12.5°	1003.5	1007.8	1000.4	997.2	1009.8	1015.0	1017.1	1021.2	1028.6	1043.1	1045.2
15°	989.0	992.1	983.8	981.6	994.1	1000.4	1001.5	1007.8	1017.1	1033.8	1036.9
17.5°	970.2	972.2	966.0	964.0	976.5	982.8	983.8	991.0	1002.5	1019.2	1024.4
20°	948.4	950.4	944.1	942.1	954.6	961.9	962.9	969.1	982.8	1000.4	1005.6
22.5°	922.2	926.5	919.1	917.1	929.6	935.9	939.0	944.1	957.8	975.4	982.8
25°	895.1	895.1	890.0	888.9	900.4	907.6	906.6	913.9	927.5	945.2	951.5
27.5°	859.8	858.8	853.5	852.5	865.0	871.2	869.1	876.4	888.9	906.6	912.9
30°	812.9	814.9	807.6	805.5	816.0	826.4	825.4	832.6	845.1	861.9	866.0
32.5°	756.6	758.6	757.6	754.5	763.9	769.1	772.2	777.4	787.9	805.5	809.8
35°	703.4	700.2	696.1	696.1	705.5	713.9	710.8	717.0	727.4	745.1	746.1
37.5°	637.8	636.8	634.6	632.6	643.0	645.1	646.1	650.2	659.6	674.2	672.1
40°	569.0	570.0	569.0	564.9	571.1	579.4	578.4	580.5	588.8	599.2	596.1
42.5°	504.4	504.4	504.4	500.2	507.5	511.6	513.8	512.8	514.8	524.1	520.0
45°	442.9	444.0	442.9	441.9	442.9	445.0	442.9	441.9	441.9	445.0	438.8
47.5°	389.8	389.8	386.6	383.5	386.6	387.6	384.5	381.4	380.4	379.4	368.9
50°	341.9	340.8	339.8	334.5	337.6	338.8	334.5	332.4	328.2	323.0	310.5
52.5°	300.1	299.1	298.0	292.9	294.9	296.0	291.8	287.6	282.4	278.2	262.6
55°	264.8	263.6	263.6	260.5	258.5	260.5	256.4	253.2	246.0	240.8	225.1
57.5°	234.5	234.5	232.4	229.2	230.2	230.2	226.1	222.0	215.8	209.5	197.0
60°	208.4	208.4	208.4	205.2	205.2	205.2	203.2	199.0	193.9	187.6	175.1
62.5°	187.6	187.6	186.5	183.4	184.5	184.5	182.4	178.2	173.0	168.9	156.4
65°	170.9	170.9	170.9	167.8	167.8	168.9	166.8	162.6	158.4	153.2	141.8
67.5°	150.1	149.0	149.0	147.0	148.0	149.0	147.0	143.8	138.6	135.5	125.0
70°	124.0	125.0	126.1	123.0	124.0	124.0	123.0	119.9	116.8	113.6	104.2
72.5°	101.1	101.1	100.0	99.0	99.0	100.0	98.0	94.9	92.8	90.6	83.4
75°	77.1	76.1	77.1	75.0	75.0	75.0	73.0	71.9	70.9	67.8	62.5
77.5°	56.2	55.2	55.2	53.1	54.2	54.2	53.1	51.1	49.0	47.9	43.8
80°	38.5	38.5	38.5	37.5	37.5	36.5	36.5	35.4	33.4	32.2	30.2
82.5°	26.0	26.0	26.0	25.0	25.0	25.0	24.0	22.9	21.9	20.9	18.8
85°	16.6	16.6	16.6	15.6	15.6	15.6	14.6	14.6	13.5	12.5	10.4
87.5°	9.4	9.4	9.4	8.4	8.4	8.4	8.4	8.4	7.2	6.2	5.2
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°	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0
2.5°	1085.9	1071.2	1080.6	1080.6	1077.5	1085.9	1091.1	1095.2	1094.2	1084.9	1083.8
5°	1077.5	1065.0	1075.5	1076.5	1073.4	1084.9	1092.1	1097.4	1098.4	1090.0	1091.1
7.5°	1071.2	1060.9	1074.4	1078.6	1077.5	1088.0	1096.2	1104.6	1108.9	1102.5	1103.6
10°	1068.1	1059.9	1074.4	1080.6	1081.8	1093.1	1105.6	1117.1	1122.4	1118.2	1121.4
12.5°	1064.0	1058.8	1075.5	1084.9	1089.0	1100.5	1116.1	1129.6	1138.0	1135.9	1142.1
15°	1059.9	1055.6	1075.5	1089.0	1094.2	1104.6	1122.4	1142.1	1151.5	1150.5	1158.9
17.5°	1049.4	1048.4	1069.2	1083.8	1091.1	1103.6	1120.2	1144.2	1153.6	1155.8	1166.1
20°	1032.8	1032.8	1055.6	1071.2	1079.6	1091.1	1112.0	1134.9	1146.4	1148.4	1159.9
22.5°	1009.8	1011.9	1033.8	1049.4	1061.9	1070.2	1092.1	1116.1	1126.5	1129.6	1142.1
25°	979.6	981.6	1002.5	1018.1	1031.8	1041.1	1061.9	1083.8	1096.2	1099.4	1108.9
27.5°	940.0	944.1	964.0	979.6	991.0	997.2	1019.2	1042.1	1051.5	1054.6	1064.0
30°	894.1	895.1	915.0	928.5	940.0	945.2	964.0	987.9	995.2	998.4	1011.9
32.5°	837.9	836.9	855.6	868.1	877.5	883.8	903.5	919.1	926.5	931.6	939.0
35°	770.1	769.1	782.6	797.2	804.5	806.6	826.4	843.1	847.2	851.4	860.8
37.5°	694.0	694.0	705.5	712.8	721.1	724.2	733.6	752.4	759.8	758.6	766.0
40°	613.8	609.6	618.0	625.2	627.4	628.4	637.8	652.4	657.6	657.6	662.8
42.5°	529.4	523.1	524.1	528.4	530.5	523.1	529.4	538.8	535.6	539.9	540.9
45°	439.8	430.4	426.2	416.9	418.9	411.6	407.5	409.5	408.5	398.1	400.1
47.5°	366.9	350.1	342.9	329.2	326.1	317.9	312.6	303.2	294.9	294.9	289.8
50°	305.4	288.6	274.1	258.5	253.2	246.0	234.5	222.0	215.8	209.5	204.2
52.5°	256.4	238.6	220.9	204.2	197.0	187.6	172.0	159.5	148.0	141.8	135.5
55°	216.8	197.0	178.2	160.5	151.1	141.8	126.1	111.5	98.0	89.6	84.4
57.5°	186.5	167.8	148.0	129.2	120.9	110.5	93.8	78.1	65.6	56.2	51.1
60°	164.6	145.9	128.1	108.4	100.0	89.6	71.9	57.4	44.8	36.5	30.2
62.5°	145.9	129.2	110.5	92.8	84.4	74.0	57.4	42.8	31.2	22.9	17.8
65°	132.4	115.6	100.0	82.4	75.0	64.6	49.0	35.4	25.0	17.8	12.5
67.5°	116.8	102.1	86.5	71.9	64.6	56.2	41.6	30.2	20.9	14.6	10.4
70°	98.0	86.5	73.0	59.4	54.2	46.9	34.4	25.0	16.6	11.5	8.4
72.5°	78.1	68.8	58.4	47.9	43.8	36.5	28.1	19.8	12.5	8.4	6.2
75°	59.4	52.1	43.8	36.5	32.2	28.1	20.9	14.6	9.4	6.2	4.1
77.5°	40.6	37.5	31.2	25.0	22.9	19.8	13.5	9.4	6.2	4.1	2.1
80°	28.1	25.0	20.9	16.6	14.6	12.5	8.4	6.2	3.1	2.1	1.0
82.5°	17.8	14.6	12.5	10.4	9.4	7.2	5.2	3.1	2.1	1.0	1.0
85°	9.4	8.4	7.2	5.2	5.2	4.1	3.1	2.1	1.0	0.0	0.0
87.5°	5.2	4.1	3.1	2.1	2.1	1.0	1.0	1.0	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°	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0
2.5°	1096.2	1096.2	1095.2	1107.8	1093.1	1107.8	1100.5	1107.8	1097.4	1096.2	1097.4
5°	1104.6	1107.8	1108.9	1120.2	1106.8	1124.5	1118.2	1124.5	1117.1	1119.2	1122.4
7.5°	1121.4	1126.5	1125.5	1140.1	1126.5	1146.4	1142.1	1151.5	1144.2	1146.4	1150.5
10°	1140.1	1146.4	1147.4	1162.0	1149.5	1173.4	1168.2	1178.6	1172.4	1175.5	1180.8
12.5°	1162.0	1169.2	1170.2	1187.0	1173.4	1198.4	1195.2	1205.8	1200.5	1203.6	1209.9
15°	1178.6	1189.0	1191.1	1207.9	1193.2	1219.2	1217.2	1230.8	1222.4	1227.6	1232.9
17.5°	1187.0	1196.4	1200.5	1216.1	1203.6	1229.8	1227.6	1239.1	1232.9	1238.0	1244.2
20°	1181.8	1193.2	1196.4	1212.0	1199.5	1225.5	1222.4	1233.9	1227.6	1231.8	1238.0
22.5°	1163.0	1174.5	1178.6	1193.2	1181.8	1205.8	1204.8	1215.1	1206.8	1212.0	1217.2
25°	1129.6	1142.1	1144.2	1157.8	1145.2	1170.2	1168.2	1179.6	1173.4	1176.5	1183.9
27.5°	1081.8	1096.2	1099.4	1110.9	1101.5	1122.4	1122.4	1131.8	1124.5	1124.5	1131.8
30°	1024.4	1039.0	1041.1	1050.5	1042.1	1060.9	1061.9	1071.2	1059.9	1066.1	1067.1
32.5°	954.6	964.0	970.2	978.5	966.0	990.0	986.9	994.1	987.9	987.9	993.1
35°	870.1	881.6	884.8	895.1	884.8	903.5	903.5	907.6	901.4	901.4	909.8
37.5°	778.5	786.8	787.9	798.2	789.9	805.5	804.5	807.6	801.4	805.5	805.5
40°	671.1	677.4	679.5	684.6	683.6	695.1	694.0	696.1	693.0	694.0	696.1
42.5°	546.1	554.4	558.6	562.8	556.5	572.1	569.0	572.1	571.1	572.1	575.2
45°	402.2	408.5	411.6	412.6	410.6	420.0	427.2	421.0	422.0	420.0	424.1
47.5°	290.8	291.8	289.8	296.0	290.8	294.9	297.0	298.0	291.8	290.8	294.9
50°	199.0	204.2	197.0	200.1	199.0	203.2	201.1	202.1	195.9	199.0	197.0
52.5°	132.4	131.2	129.2	130.2	128.1	128.1	128.1	130.2	126.1	124.0	121.9
55°	80.2	78.1	74.0	73.0	73.0	74.0	71.9	69.9	69.9	68.8	68.8
57.5°	46.9	43.8	41.6	40.6	38.5	37.5	36.5	36.5	34.4	34.4	34.4
60°	26.0	22.9	20.9	18.8	18.8	17.8	16.6	15.6	15.6	15.6	14.6
62.5°	13.5	11.5	9.4	8.4	8.4	7.2	6.2	6.2	6.2	6.2	5.2
65°	9.4	7.2	6.2	5.2	5.2	4.1	4.1	4.1	4.1	4.1	4.1
67.5°	7.2	6.2	5.2	4.1	4.1	4.1	3.1	3.1	3.1	3.1	3.1
70°	6.2	4.1	4.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
72.5°	4.1	4.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
75°	3.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
77.5°	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
80°	1.0	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: P252148

CATALOG NUMBER: LE_6B15D010 EC6B10209030 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0	1090.0
2.5°	1106.8	1105.6	1106.8	1108.9	1104.6	1117.1	1110.9	1117.1
5°	1130.8	1131.8	1132.8	1135.9	1130.8	1146.4	1138.0	1147.4
7.5°	1162.0	1163.0	1164.0	1167.1	1164.0	1179.6	1170.2	1178.6
10°	1194.2	1196.4	1196.4	1201.5	1198.4	1213.0	1206.8	1217.2
12.5°	1224.5	1226.6	1228.6	1231.8	1229.8	1245.4	1240.1	1248.5
15°	1248.5	1252.6	1253.6	1257.9	1255.8	1272.4	1266.1	1274.5
17.5°	1259.9	1264.1	1264.1	1269.2	1267.2	1284.9	1276.6	1286.0
20°	1253.6	1256.8	1257.9	1263.0	1261.0	1278.6	1270.4	1281.8
22.5°	1233.9	1234.9	1236.0	1241.1	1240.1	1255.8	1248.5	1255.8
25°	1197.4	1200.5	1199.5	1203.6	1203.6	1216.1	1207.9	1214.1
27.5°	1145.2	1148.4	1148.4	1153.6	1149.5	1162.0	1153.6	1163.0
30°	1081.8	1084.9	1082.8	1086.9	1082.8	1095.2	1089.0	1092.1
32.5°	1005.6	1005.6	1006.6	1007.8	1005.6	1017.1	1010.9	1017.1
35°	915.0	917.1	918.1	919.1	917.1	925.4	918.1	922.2
37.5°	812.9	818.0	817.0	818.0	814.9	825.4	819.1	821.2
40°	703.4	703.4	702.4	704.5	701.4	709.6	705.5	707.6
42.5°	576.2	579.4	575.2	580.5	572.1	583.6	579.4	576.2
45°	432.5	428.2	427.2	428.2	425.1	426.2	429.4	427.2
47.5°	294.9	294.9	292.9	289.8	293.9	294.9	290.8	290.8
50°	198.0	198.0	195.9	194.9	197.0	195.9	193.9	197.0
52.5°	126.1	121.9	121.9	124.0	121.9	119.9	123.0	120.9
55°	68.8	66.8	66.8	68.8	66.8	66.8	65.6	67.8
57.5°	33.4	34.4	33.4	33.4	33.4	33.4	32.2	33.4
60°	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6
62.5°	6.2	6.2	5.2	5.2	5.2	5.2	5.2	5.2
65°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
67.5°	3.1	3.1	3.1	3.1	3.1	4.1	3.1	3.1
70°	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
72.5°	3.1	3.1	4.1	4.1	4.1	4.1	4.1	4.1
75°	2.1	2.1	2.1	1.0	1.0	1.0	1.0	1.0
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)