

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: P252576

Luminaire Tested: **LE_6B20D010 EC6B10209027 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252576
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: PORTFOLIO
Catalog Number: LE_6B20D010 EC6B10209027 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2085.0 lumens
Efficiency: N/A
Efficacy: 100.2 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

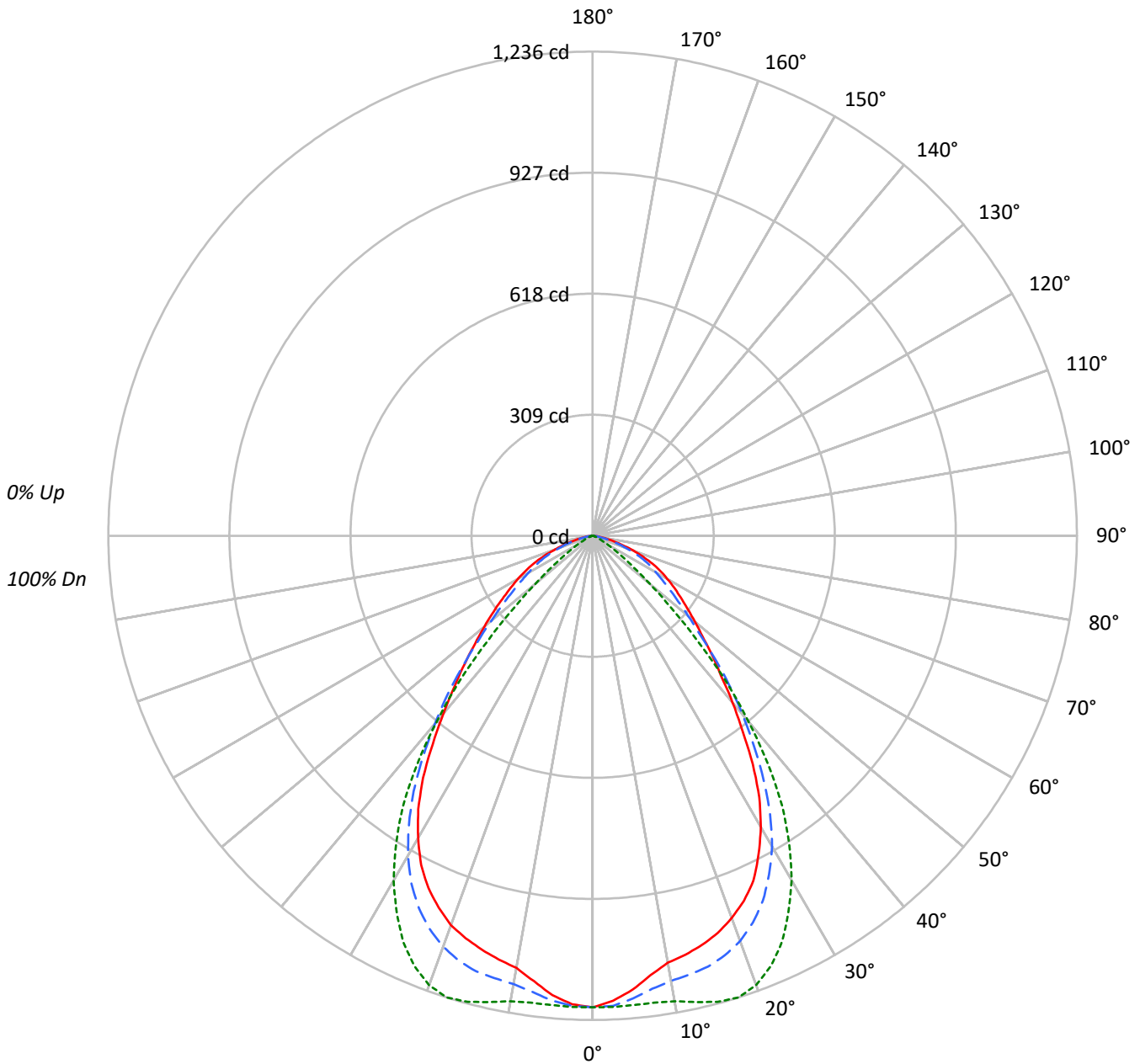
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P252576

CATALOG NUMBER: LE_6B20D010 EC6B10209027 6LBDW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P252576

CATALOG NUMBER: LE_6B20D010 EC6B10209027 6LBDW1LI

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					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	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°	78537	78537	78537
5°	76191	78745	77108
10°	73296	79927	74210
15°	73026	83185	73884
20°	72073	84736	73427
25°	69926	82344	71424
30°	64681	76531	67092
35°	56746	67283	60068
40°	47284	52735	50375
45°	39803	34793	42497
50°	34458	19071	36579
55°	31177	10135	31973
60°	28693	5271	28693
65°	25996	2794	25348
70°	20983	1602	19380
75°	14368	1033	13335
80°	9393	526	8341
85°	6288	1048	5240



TEST NUMBER: P252576

CATALOG NUMBER: LE_6B20D010 EC6B10209027 6LBDW1LI

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.3	5.4
10°-20°	324.6	15.6
20°-30°	479.6	23.0
30°-40°	484.4	23.2
40°-50°	333.9	16.0
50°-60°	191.8	9.2
60°-70°	111.6	5.4
70°-80°	40.7	2.0
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°	916.4	44.0
0°-40°	1400.8	67.2
0°-60°	1926.4	92.4
0°-90°	2085.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2085.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1204	1204	1204	1204	1204	
5°	1163	1186	1202	1191	1177	109
15°	1081	1138	1232	1151	1094	305
25°	971	1028	1144	1049	992	443
35°	712	761	845	796	754	442
45°	431	437	377	465	461	335
55°	274	241	89	250	281	247
65°	168	142	18	140	164	165
75°	57	46	4	44	53	64
85°	8	4	1	6	7	11
90°	0	0	0	0	0	



TEST NUMBER: P252576

CATALOG NUMBER: LE_6B20D010 EC6B10209027 6LBDW1LI

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8
2.5°	1188.5	1189.9	1191.2	1189.9	1191.2	1196.9	1192.6	1195.4	1195.4	1196.9	1201.0
5°	1163.4	1163.4	1166.2	1164.8	1169.0	1174.5	1170.4	1174.5	1176.0	1178.8	1185.6
7.5°	1131.4	1131.4	1132.8	1132.8	1138.4	1143.9	1141.1	1146.8	1152.2	1157.9	1166.2
10°	1106.4	1109.1	1109.1	1110.5	1116.1	1123.0	1121.6	1128.6	1134.2	1142.5	1153.6
12.5°	1095.2	1096.6	1096.6	1099.4	1105.0	1111.9	1110.5	1117.5	1125.9	1135.6	1146.8
15°	1081.2	1084.1	1082.8	1085.5	1091.0	1098.0	1096.6	1103.6	1113.4	1123.0	1138.4
17.5°	1063.2	1064.6	1066.0	1066.0	1071.6	1077.1	1077.1	1084.1	1095.2	1106.4	1123.0
20°	1038.1	1041.0	1041.0	1042.4	1046.5	1054.9	1053.5	1060.4	1071.6	1082.8	1100.8
22.5°	1009.0	1010.4	1010.4	1011.8	1018.6	1022.9	1024.2	1029.9	1039.5	1052.1	1068.8
25°	971.4	972.8	971.4	975.5	978.4	986.6	983.9	990.9	1002.0	1011.8	1028.4
27.5°	917.1	919.9	919.9	921.2	928.2	935.1	935.1	942.1	951.9	958.9	975.5
30°	858.6	862.9	858.6	865.6	868.4	874.0	878.1	882.2	890.6	900.4	915.8
32.5°	791.9	790.5	791.9	794.6	803.0	807.1	810.0	814.1	822.5	830.9	843.4
35°	712.5	715.2	716.8	722.2	722.2	729.2	730.6	733.4	745.9	751.5	761.2
37.5°	629.0	631.8	633.2	636.0	641.5	644.4	648.5	652.6	661.0	670.8	676.4
40°	555.2	555.2	556.6	559.5	563.6	565.0	569.1	574.8	580.4	588.6	594.2
42.5°	485.6	487.1	485.6	488.5	492.6	498.2	496.9	503.8	505.1	510.8	514.9
45°	431.4	431.4	428.6	431.4	431.4	437.0	435.6	438.4	437.0	439.8	437.0
47.5°	379.9	381.2	379.9	381.2	381.2	381.2	382.8	379.9	381.2	377.1	368.8
50°	339.5	341.0	338.1	339.5	338.1	336.8	338.1	334.0	332.6	327.0	318.6
52.5°	304.8	303.4	302.0	302.0	302.0	300.6	299.2	295.0	290.9	285.2	275.5
55°	274.1	272.8	271.4	271.4	268.6	267.2	267.2	263.0	258.9	251.9	240.8
57.5°	246.4	244.9	243.5	243.5	242.1	239.4	239.4	235.2	229.6	221.2	211.5
60°	219.9	219.9	219.9	218.5	218.5	215.8	215.8	211.5	206.0	197.6	186.5
62.5°	196.2	194.9	194.9	194.9	194.9	193.5	192.0	189.2	183.8	175.4	165.6
65°	168.4	168.4	168.4	168.4	167.0	167.0	167.0	162.9	160.0	151.8	142.0
67.5°	137.8	137.8	137.8	137.8	136.4	137.8	137.8	135.0	132.2	123.9	115.5
70°	110.0	108.5	107.1	108.5	107.1	107.1	108.5	105.8	104.4	97.4	89.1
72.5°	80.8	82.1	80.8	80.8	80.8	79.4	80.8	79.4	76.5	71.0	65.4
75°	57.0	58.5	58.5	57.0	57.0	57.0	55.6	55.6	52.9	48.8	45.9
77.5°	39.0	39.0	39.0	39.0	37.6	37.6	37.6	36.1	34.8	32.0	29.2
80°	25.0	25.0	25.0	25.0	23.6	23.6	23.6	22.2	22.2	19.5	16.8
82.5°	15.2	15.2	15.2	15.2	15.2	15.2	13.9	13.9	12.5	11.1	9.8
85°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	7.0	7.0	5.6	4.1
87.5°	2.8	2.8	4.1	4.1	4.1	4.1	4.1	4.1	2.8	2.8	2.8
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: P252576

CATALOG NUMBER: LE_6B20D010 EC6B10209027 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8
2.5°	1198.2	1199.6	1199.6	1199.6	1203.8	1205.1	1201.0	1196.9	1205.1	1203.8	1206.5
5°	1184.2	1188.5	1191.2	1192.6	1196.9	1199.6	1195.4	1194.0	1201.0	1202.4	1203.8
7.5°	1167.6	1174.5	1181.5	1184.2	1189.9	1192.6	1191.2	1191.2	1199.6	1202.4	1202.4
10°	1156.5	1166.2	1174.5	1181.5	1188.5	1192.6	1192.6	1194.0	1203.8	1206.5	1209.4
12.5°	1153.6	1166.2	1177.4	1187.1	1192.6	1199.6	1201.0	1205.1	1214.9	1219.1	1219.1
15°	1146.8	1163.4	1177.4	1189.9	1198.2	1206.5	1209.4	1217.8	1228.9	1231.6	1234.4
17.5°	1134.2	1150.9	1167.6	1182.9	1194.0	1201.0	1209.4	1217.8	1231.6	1235.8	1237.1
20°	1111.9	1131.4	1148.1	1163.4	1174.5	1184.2	1192.6	1202.4	1214.9	1220.5	1221.9
22.5°	1078.5	1098.0	1114.8	1131.4	1142.5	1150.9	1159.2	1170.4	1182.9	1188.5	1188.5
25°	1038.1	1056.2	1074.4	1086.9	1098.0	1107.8	1111.9	1124.5	1137.0	1143.9	1143.9
27.5°	986.6	1003.4	1020.1	1034.0	1041.0	1049.2	1056.2	1067.4	1077.1	1082.8	1088.2
30°	921.2	938.0	953.2	967.2	975.5	983.9	990.9	999.2	1009.0	1015.9	1017.2
32.5°	850.2	864.2	879.5	893.4	901.8	904.6	911.5	919.9	928.2	933.8	935.1
35°	772.4	782.1	791.9	804.4	812.8	812.8	819.6	825.2	832.2	844.8	842.0
37.5°	680.5	694.4	701.4	705.6	711.1	716.8	718.1	725.0	733.4	736.1	740.4
40°	594.2	598.4	602.6	602.6	608.1	608.1	608.1	609.5	617.9	619.2	624.9
42.5°	508.0	508.0	503.8	499.6	501.0	499.6	492.6	492.6	496.9	502.4	502.4
45°	427.2	417.5	405.0	395.2	388.2	385.5	377.1	377.1	375.8	377.1	382.8
47.5°	359.0	342.4	321.5	302.0	295.0	289.5	277.0	271.4	268.6	270.0	272.8
50°	302.0	283.9	260.2	236.6	224.0	217.1	201.8	192.0	190.6	187.9	193.5
52.5°	260.2	238.0	212.9	185.1	172.6	161.4	144.8	136.4	130.9	130.9	132.2
55°	224.0	200.4	172.6	144.8	132.2	123.9	107.1	96.0	90.5	89.1	93.2
57.5°	193.5	171.1	143.4	115.5	103.0	93.2	76.5	66.8	62.6	59.9	61.2
60°	169.8	147.5	119.6	93.2	82.1	71.0	57.0	45.9	40.4	40.4	41.8
62.5°	147.5	126.6	101.6	76.5	66.8	57.0	41.8	32.0	27.9	26.5	27.9
65°	125.2	105.8	84.9	64.0	54.2	45.9	33.4	25.0	19.5	18.1	19.5
67.5°	101.6	86.2	68.2	51.5	43.1	36.1	25.0	18.1	13.9	12.5	13.9
70°	79.4	65.4	51.5	37.6	32.0	26.5	18.1	13.9	9.8	8.4	9.8
72.5°	57.0	47.4	36.1	26.5	22.2	18.1	12.5	9.8	7.0	5.6	7.0
75°	39.0	32.0	23.6	16.8	13.9	12.5	8.4	5.6	4.1	4.1	4.1
77.5°	25.0	19.5	15.2	11.1	8.4	7.0	4.1	2.8	2.8	2.8	2.8
80°	13.9	11.1	8.4	5.6	4.1	4.1	2.8	2.8	1.4	1.4	1.4
82.5°	8.4	5.6	4.1	2.8	2.8	1.4	1.4	1.4	1.4	1.4	1.4
85°	4.1	2.8	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
87.5°	1.4	1.4	1.4	1.4	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: P252576

CATALOG NUMBER: LE_6B20D010 EC6B10209027 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8
2.5°	1201.0	1202.4	1198.2	1203.8	1199.6	1205.1	1205.1	1199.6	1201.0	1198.2	1203.8
5°	1198.2	1198.2	1195.4	1199.6	1194.0	1199.6	1198.2	1188.5	1191.2	1185.6	1191.2
7.5°	1198.2	1195.4	1191.2	1195.4	1188.5	1192.6	1187.1	1177.4	1174.5	1167.6	1167.6
10°	1202.4	1198.2	1192.6	1194.0	1187.1	1188.5	1180.1	1166.2	1162.0	1153.6	1150.9
12.5°	1212.1	1208.0	1199.6	1202.4	1192.6	1192.6	1181.5	1164.8	1156.5	1145.4	1142.5
15°	1226.0	1219.1	1209.4	1210.8	1201.0	1195.4	1181.5	1162.0	1150.9	1135.6	1131.4
17.5°	1228.9	1221.9	1209.4	1209.4	1196.9	1189.9	1173.1	1150.9	1137.0	1121.6	1113.4
20°	1213.5	1206.5	1192.6	1191.2	1180.1	1170.4	1152.2	1130.0	1116.1	1099.4	1092.5
22.5°	1181.5	1173.1	1160.6	1159.2	1148.1	1142.5	1123.0	1100.8	1086.9	1070.1	1064.6
25°	1134.2	1130.0	1117.5	1116.1	1106.4	1099.4	1082.8	1061.9	1049.2	1032.6	1027.0
27.5°	1078.5	1074.4	1061.9	1061.9	1050.8	1046.5	1031.2	1011.8	1002.0	986.6	979.8
30°	1011.8	1006.1	999.2	997.8	988.1	983.9	970.0	951.9	942.1	929.6	926.9
32.5°	932.4	928.2	924.0	922.6	912.9	908.8	899.0	880.9	872.5	861.4	857.2
35°	840.5	837.8	833.6	832.2	828.0	823.9	814.1	800.2	796.0	787.6	783.5
37.5°	734.8	737.6	734.8	734.8	730.6	732.0	723.6	715.2	711.1	705.6	702.8
40°	620.6	626.2	630.4	630.4	629.0	634.6	633.2	626.2	624.9	622.1	620.6
42.5°	505.1	508.0	516.2	521.9	520.5	534.4	535.8	541.4	545.5	542.8	544.1
45°	384.1	392.5	403.6	409.1	416.1	434.2	443.9	455.1	464.8	470.4	469.0
47.5°	277.0	286.6	299.2	307.5	320.1	342.4	367.4	381.2	395.2	402.1	409.1
50°	200.4	210.1	225.5	238.0	246.4	277.0	303.4	321.5	336.8	346.5	353.5
52.5°	140.5	151.8	168.4	179.5	192.0	221.2	251.9	272.8	289.5	302.0	309.0
55°	97.4	110.0	125.2	136.4	150.2	180.9	210.1	232.4	250.5	261.6	270.0
57.5°	68.2	79.4	94.6	104.4	118.2	147.5	176.8	199.0	217.1	228.2	238.0
60°	45.9	57.0	72.4	82.1	93.2	122.5	148.9	172.6	189.2	200.4	210.1
62.5°	32.0	41.8	57.0	66.8	76.5	101.6	126.6	147.5	164.2	176.8	185.1
65°	25.0	33.4	45.9	54.2	64.0	84.9	105.8	123.9	140.5	153.1	158.6
67.5°	18.1	26.5	36.1	43.1	50.1	68.2	86.2	100.2	115.5	125.2	132.2
70°	12.5	18.1	26.5	32.0	37.6	51.5	65.4	77.9	89.1	96.0	101.6
72.5°	9.8	12.5	18.1	22.2	26.5	36.1	47.4	57.0	65.4	71.0	76.5
75°	5.6	8.4	12.5	15.2	18.1	25.0	32.0	39.0	44.5	48.8	51.5
77.5°	2.8	4.1	7.0	8.4	11.1	15.2	20.9	25.0	29.2	32.0	34.8
80°	2.8	2.8	4.1	4.1	5.6	8.4	11.1	13.9	16.8	19.5	20.9
82.5°	1.4	1.4	2.8	2.8	2.8	4.1	5.6	8.4	9.8	11.1	12.5
85°	1.4	1.4	1.4	1.4	1.4	2.8	2.8	4.1	5.6	7.0	7.0
87.5°	0.0	0.0	1.4	1.4	1.4	1.4	1.4	2.8	2.8	2.8	4.1
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: P252576

CATALOG NUMBER: LE_6B20D010 EC6B10209027 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8	1203.8
2.5°	1199.6	1202.4	1201.0	1203.8	1199.6	1198.2	1201.0	1196.9
5°	1184.2	1185.6	1184.2	1184.2	1181.5	1178.8	1181.5	1177.4
7.5°	1160.6	1160.6	1156.5	1156.5	1150.9	1148.1	1148.1	1146.8
10°	1141.1	1137.0	1132.8	1134.2	1125.9	1123.0	1121.6	1120.2
12.5°	1131.4	1128.6	1121.6	1121.6	1113.4	1110.5	1109.1	1107.8
15°	1120.2	1114.8	1109.1	1107.8	1100.8	1098.0	1096.6	1093.9
17.5°	1100.8	1096.6	1089.6	1089.6	1082.8	1081.2	1078.5	1077.1
20°	1079.9	1074.4	1068.8	1068.8	1060.4	1060.4	1056.2	1057.6
22.5°	1050.8	1046.5	1041.0	1041.0	1034.0	1032.6	1028.4	1027.0
25°	1015.9	1010.4	1006.1	1004.8	999.2	996.4	995.0	992.2
27.5°	970.0	965.8	961.6	958.9	951.9	950.5	946.4	947.8
30°	912.9	910.1	908.8	906.0	897.6	894.9	894.9	890.6
32.5°	850.2	846.1	843.4	839.1	832.2	830.9	826.6	828.0
35°	773.8	768.2	764.0	765.4	757.0	755.6	752.9	754.2
37.5°	694.4	688.9	683.2	681.9	675.0	675.0	670.8	670.8
40°	612.4	606.8	604.0	604.0	595.6	597.0	592.9	591.5
42.5°	538.6	533.0	531.6	530.2	526.0	524.6	520.5	521.9
45°	469.0	467.6	467.6	464.8	460.6	459.2	460.6	460.6
47.5°	407.8	409.1	407.8	407.8	405.0	407.8	405.0	406.4
50°	356.2	359.0	359.0	359.0	357.6	359.0	359.0	360.4
52.5°	313.1	317.2	315.9	317.2	315.9	318.6	317.2	318.6
55°	275.5	278.4	279.8	281.1	281.1	281.1	281.1	281.1
57.5°	240.8	244.9	246.4	247.8	247.8	250.5	247.8	247.8
60°	212.9	217.1	218.5	219.9	219.9	221.2	218.5	219.9
62.5°	187.9	192.0	192.0	193.5	193.5	193.5	190.6	192.0
65°	162.9	164.2	165.6	165.6	164.2	164.2	162.9	164.2
67.5°	135.0	136.4	135.0	135.0	133.6	133.6	130.9	132.2
70°	104.4	104.4	105.8	104.4	103.0	104.4	103.0	101.6
72.5°	77.9	77.9	77.9	76.5	76.5	75.1	76.5	76.5
75°	52.9	52.9	54.2	54.2	54.2	54.2	52.9	52.9
77.5°	34.8	34.8	34.8	34.8	36.1	34.8	34.8	34.8
80°	22.2	22.2	23.6	23.6	22.2	22.2	22.2	22.2
82.5°	13.9	13.9	13.9	13.9	13.9	13.9	13.9	13.9
85°	8.4	8.4	8.4	8.4	7.0	7.0	7.0	7.0
87.5°	4.1	4.1	4.1	4.1	4.1	4.1	2.8	2.8
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)