

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: P252580

Luminaire Tested: **LE_6B20D010 EC6B10209050 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252580
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 EC6B10209050 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE 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: 2212.5 lumens
Efficiency: N/A
Efficacy: 106.4 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

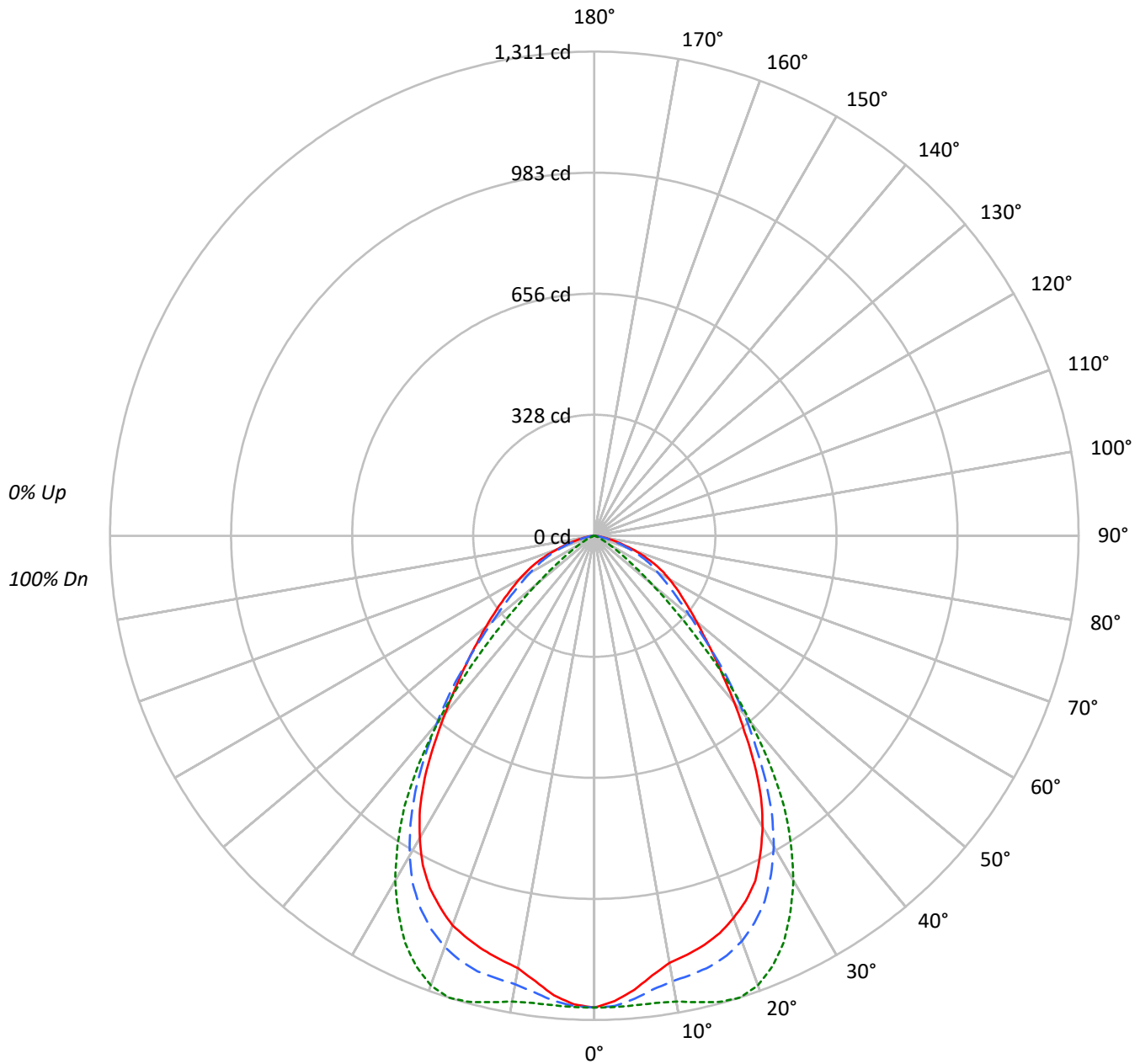
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	111	108	105	102	109	106	103	100	102	99	97		98	96	94		94
2	104	97	92	87	101	95	91	86	92	88	84		89	86	83		86
3	96	88	81	76	94	86	80	76	84	79	74		81	77	73		79
4	90	80	73	67	88	79	72	67	76	70	66		74	69	65		72
5	84	73	65	60	82	72	65	59	70	64	59		68	63	58		66
6	78	67	59	54	76	66	59	53	64	58	53		63	57	53		61
7	73	61	54	49	72	61	53	48	59	53	48		58	52	48		57
8	69	57	49	44	67	56	49	44	55	48	44		54	48	44		53
9	64	53	45	40	63	52	45	40	51	45	40		50	44	40		49
10	61	49	42	37	60	48	42	37	48	41	37		47	41	37		46

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	83338	83338	83338
5°	80847	83558	81823
10°	77774	84823	78755
15°	77498	88271	78403
20°	76481	89916	77926
25°	74202	87383	75793
30°	68636	81209	71198
35°	60219	71393	63747
40°	50180	55962	53450
45°	42239	36924	45099
50°	36579	20238	38822
55°	33088	10749	33918
60°	30454	5598	30454
65°	27571	2964	26892
70°	22242	1698	20563
75°	15250	1109	14141
80°	9994	564	8867
85°	6662	1123	5539



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	119.1	5.4
10°-20°	344.4	15.6
20°-30°	508.9	23.0
30°-40°	514.0	23.2
40°-50°	354.3	16.0
50°-60°	203.5	9.2
60°-70°	118.4	5.4
70°-80°	43.2	2.0
80°-90°	6.6	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°	972.4	44.0
0°-40°	1486.5	67.2
0°-60°	2044.2	92.4
0°-90°	2212.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2212.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1277	1277	1277	1277	1277	
5°	1234	1258	1276	1264	1249	116
15°	1147	1208	1307	1221	1161	323
25°	1031	1091	1214	1114	1053	470
35°	756	808	896	845	800	469
45°	458	464	400	493	489	356
55°	291	256	94	266	298	262
65°	179	151	19	149	174	175
75°	60	49	4	47	56	68
85°	9	4	2	6	7	11
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°	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4
2.5°	1261.1	1262.6	1264.1	1262.6	1264.1	1270.0	1265.6	1268.5	1268.5	1270.0	1274.4
5°	1234.5	1234.5	1237.5	1236.0	1240.5	1246.4	1242.0	1246.4	1247.9	1250.8	1258.2
7.5°	1200.6	1200.6	1202.1	1202.1	1208.0	1213.9	1210.9	1216.9	1222.8	1228.6	1237.5
10°	1174.0	1177.0	1177.0	1178.5	1184.4	1191.8	1190.2	1197.6	1203.5	1212.4	1224.2
12.5°	1162.2	1163.6	1163.6	1166.6	1172.5	1179.9	1178.5	1185.9	1194.8	1205.0	1216.9
15°	1147.4	1150.4	1148.9	1151.9	1157.8	1165.1	1163.6	1171.0	1181.4	1191.8	1208.0
17.5°	1128.2	1129.8	1131.2	1131.2	1137.1	1143.0	1143.0	1150.4	1162.2	1174.0	1191.8
20°	1101.6	1104.6	1104.6	1106.1	1110.5	1119.4	1117.9	1125.2	1137.1	1148.9	1168.1
22.5°	1070.6	1072.1	1072.1	1073.6	1081.0	1085.4	1086.9	1092.8	1103.1	1116.4	1134.1
25°	1030.8	1032.2	1030.8	1035.2	1038.1	1047.0	1044.0	1051.5	1063.2	1073.6	1091.4
27.5°	973.1	976.1	976.1	977.6	985.0	992.4	992.4	999.8	1010.1	1017.5	1035.2
30°	911.1	915.6	911.1	918.5	921.5	927.4	931.9	936.2	945.1	955.5	971.8
32.5°	840.2	838.8	840.2	843.2	852.1	856.5	859.5	863.9	872.8	881.6	894.9
35°	756.1	759.0	760.5	766.4	766.4	773.9	775.2	778.2	791.5	797.5	807.8
37.5°	667.5	670.5	671.9	674.9	680.8	683.8	688.1	692.6	701.5	711.8	717.8
40°	589.2	589.2	590.8	593.6	598.1	599.5	604.0	609.9	615.8	624.6	630.6
42.5°	515.4	516.9	515.4	518.4	522.8	528.6	527.2	534.6	536.0	542.0	546.4
45°	457.8	457.8	454.9	457.8	457.8	463.8	462.2	465.1	463.8	466.6	463.8
47.5°	403.1	404.6	403.1	404.6	404.6	404.6	406.1	403.1	404.6	400.2	391.4
50°	360.4	361.8	358.9	360.4	358.9	357.4	358.9	354.4	353.0	347.0	338.1
52.5°	323.4	321.9	320.5	320.5	320.5	319.0	317.5	313.1	308.6	302.8	292.4
55°	290.9	289.5	288.0	288.0	285.0	283.5	283.5	279.1	274.6	267.2	255.5
57.5°	261.4	259.9	258.4	258.4	257.0	254.0	254.0	249.6	243.6	234.8	224.5
60°	233.4	233.4	233.4	231.9	231.9	228.9	228.9	224.5	218.5	209.8	197.9
62.5°	208.2	206.8	206.8	206.8	206.8	205.2	203.8	200.9	194.9	186.1	175.8
65°	178.6	178.6	178.6	178.6	177.2	177.2	177.2	172.8	169.9	161.0	150.6
67.5°	146.2	146.2	146.2	146.2	144.8	146.2	146.2	143.2	140.2	131.4	122.6
70°	116.6	115.1	113.8	115.1	113.8	113.8	115.1	112.2	110.8	103.4	94.5
72.5°	85.6	87.1	85.6	85.6	85.6	84.1	85.6	84.1	81.2	75.4	69.4
75°	60.5	62.0	62.0	60.5	60.5	60.5	59.1	59.1	56.1	51.6	48.8
77.5°	41.4	41.4	41.4	41.4	39.9	39.9	39.9	38.4	36.9	34.0	31.0
80°	26.6	26.6	26.6	26.6	25.1	25.1	25.1	23.6	23.6	20.6	17.8
82.5°	16.2	16.2	16.2	16.2	16.2	16.2	14.8	14.8	13.2	11.9	10.4
85°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	7.4	7.4	5.9	4.4
87.5°	3.0	3.0	4.4	4.4	4.4	4.4	4.4	4.4	3.0	3.0	3.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4
2.5°	1271.5	1273.0	1273.0	1273.0	1277.4	1278.9	1274.4	1270.0	1278.9	1277.4	1280.4
5°	1256.8	1261.1	1264.1	1265.6	1270.0	1273.0	1268.5	1267.0	1274.4	1275.9	1277.4
7.5°	1239.0	1246.4	1253.8	1256.8	1262.6	1265.6	1264.1	1264.1	1273.0	1275.9	1275.9
10°	1227.1	1237.5	1246.4	1253.8	1261.1	1265.6	1265.6	1267.0	1277.4	1280.4	1283.2
12.5°	1224.2	1237.5	1249.4	1259.6	1265.6	1273.0	1274.4	1278.9	1289.2	1293.6	1293.6
15°	1216.9	1234.5	1249.4	1262.6	1271.5	1280.4	1283.2	1292.1	1304.0	1306.9	1309.9
17.5°	1203.5	1221.2	1239.0	1255.2	1267.0	1274.4	1283.2	1292.1	1306.9	1311.4	1312.9
20°	1179.9	1200.6	1218.4	1234.5	1246.4	1256.8	1265.6	1275.9	1289.2	1295.1	1296.6
22.5°	1144.5	1165.1	1182.9	1200.6	1212.4	1221.2	1230.1	1242.0	1255.2	1261.1	1261.1
25°	1101.6	1120.9	1140.0	1153.4	1165.1	1175.5	1179.9	1193.2	1206.5	1213.9	1213.9
27.5°	1047.0	1064.8	1082.5	1097.2	1104.6	1113.5	1120.9	1132.6	1143.0	1148.9	1154.9
30°	977.6	995.4	1011.6	1026.4	1035.2	1044.0	1051.5	1060.2	1070.6	1078.0	1079.5
32.5°	902.2	917.0	933.2	948.1	956.9	959.9	967.2	976.1	985.0	990.9	992.4
35°	819.6	829.9	840.2	853.5	862.4	862.4	869.8	875.8	883.1	896.4	893.4
37.5°	722.1	736.9	744.2	748.8	754.6	760.5	762.0	769.4	778.2	781.2	785.6
40°	630.6	635.0	639.4	639.4	645.4	645.4	645.4	646.9	655.6	657.1	663.0
42.5°	539.0	539.0	534.6	530.1	531.6	530.1	522.8	522.8	527.2	533.1	533.1
45°	453.4	443.0	429.8	419.4	412.0	409.0	400.2	400.2	398.8	400.2	406.1
47.5°	381.0	363.2	341.1	320.5	313.1	307.1	293.9	288.0	285.0	286.5	289.5
50°	320.5	301.2	276.1	251.0	237.8	230.4	214.1	203.8	202.4	199.4	205.2
52.5°	276.1	252.5	226.0	196.4	183.1	171.2	153.6	144.8	138.9	138.9	140.2
55°	237.8	212.6	183.1	153.6	140.2	131.4	113.8	101.9	96.0	94.5	99.0
57.5°	205.2	181.6	152.1	122.6	109.2	99.0	81.2	70.9	66.5	63.5	65.0
60°	180.1	156.5	127.0	99.0	87.1	75.4	60.5	48.8	42.9	42.9	44.2
62.5°	156.5	134.4	107.8	81.2	70.9	60.5	44.2	34.0	29.5	28.0	29.5
65°	132.9	112.2	90.1	67.9	57.6	48.8	35.5	26.6	20.6	19.2	20.6
67.5°	107.8	91.5	72.4	54.6	45.8	38.4	26.6	19.2	14.8	13.2	14.8
70°	84.1	69.4	54.6	39.9	34.0	28.0	19.2	14.8	10.4	8.9	10.4
72.5°	60.5	50.2	38.4	28.0	23.6	19.2	13.2	10.4	7.4	5.9	7.4
75°	41.4	34.0	25.1	17.8	14.8	13.2	8.9	5.9	4.4	4.4	4.4
77.5°	26.6	20.6	16.2	11.9	8.9	7.4	4.4	3.0	3.0	3.0	3.0
80°	14.8	11.9	8.9	5.9	4.4	4.4	3.0	3.0	1.5	1.5	1.5
82.5°	8.9	5.9	4.4	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5
85°	4.4	3.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
87.5°	1.5	1.5	1.5	1.5	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°	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4
2.5°	1274.4	1275.9	1271.5	1277.4	1273.0	1278.9	1278.9	1273.0	1274.4	1271.5	1277.4
5°	1271.5	1271.5	1268.5	1273.0	1267.0	1273.0	1271.5	1261.1	1264.1	1258.2	1264.1
7.5°	1271.5	1268.5	1264.1	1268.5	1261.1	1265.6	1259.6	1249.4	1246.4	1239.0	1239.0
10°	1275.9	1271.5	1265.6	1267.0	1259.6	1261.1	1252.2	1237.5	1233.1	1224.2	1221.2
12.5°	1286.2	1281.9	1273.0	1275.9	1265.6	1265.6	1253.8	1236.0	1227.1	1215.4	1212.4
15°	1301.0	1293.6	1283.2	1284.8	1274.4	1268.5	1253.8	1233.1	1221.2	1205.0	1200.6
17.5°	1304.0	1296.6	1283.2	1283.2	1270.0	1262.6	1244.9	1221.2	1206.5	1190.2	1181.4
20°	1287.8	1280.4	1265.6	1264.1	1252.2	1242.0	1222.8	1199.1	1184.4	1166.6	1159.2
22.5°	1253.8	1244.9	1231.6	1230.1	1218.4	1212.4	1191.8	1168.1	1153.4	1135.6	1129.8
25°	1203.5	1199.1	1185.9	1184.4	1174.0	1166.6	1148.9	1126.8	1113.5	1095.8	1089.9
27.5°	1144.5	1140.0	1126.8	1126.8	1115.0	1110.5	1094.2	1073.6	1063.2	1047.0	1039.6
30°	1073.6	1067.8	1060.2	1058.9	1048.5	1044.0	1029.2	1010.1	999.8	986.5	983.5
32.5°	989.4	985.0	980.5	979.1	968.8	964.4	954.0	934.8	925.9	914.1	909.6
35°	892.0	889.0	884.6	883.1	878.6	874.2	863.9	849.1	844.8	835.9	831.4
37.5°	779.8	782.6	779.8	779.8	775.2	776.8	767.9	759.0	754.6	748.8	745.8
40°	658.6	664.5	669.0	669.0	667.5	673.4	671.9	664.5	663.0	660.1	658.6
42.5°	536.0	539.0	547.9	553.8	552.2	567.1	568.5	574.5	578.9	575.9	577.4
45°	407.6	416.5	428.2	434.1	441.5	460.8	471.1	482.9	493.2	499.1	497.6
47.5°	293.9	304.2	317.5	326.4	339.6	363.2	389.9	404.6	419.4	426.8	434.1
50°	212.6	223.0	239.2	252.5	261.4	293.9	321.9	341.1	357.4	367.8	375.1
52.5°	149.1	161.0	178.6	190.5	203.8	234.8	267.2	289.5	307.1	320.5	327.9
55°	103.4	116.6	132.9	144.8	159.5	192.0	223.0	246.6	265.9	277.6	286.5
57.5°	72.4	84.1	100.4	110.8	125.5	156.5	187.5	211.1	230.4	242.1	252.5
60°	48.8	60.5	76.8	87.1	99.0	130.0	158.0	183.1	200.9	212.6	223.0
62.5°	34.0	44.2	60.5	70.9	81.2	107.8	134.4	156.5	174.2	187.5	196.4
65°	26.6	35.5	48.8	57.6	67.9	90.1	112.2	131.4	149.1	162.5	168.4
67.5°	19.2	28.0	38.4	45.8	53.1	72.4	91.5	106.4	122.6	132.9	140.2
70°	13.2	19.2	28.0	34.0	39.9	54.6	69.4	82.8	94.5	101.9	107.8
72.5°	10.4	13.2	19.2	23.6	28.0	38.4	50.2	60.5	69.4	75.4	81.2
75°	5.9	8.9	13.2	16.2	19.2	26.6	34.0	41.4	47.2	51.6	54.6
77.5°	3.0	4.4	7.4	8.9	11.9	16.2	22.1	26.6	31.0	34.0	36.9
80°	3.0	3.0	4.4	4.4	5.9	8.9	11.9	14.8	17.8	20.6	22.1
82.5°	1.5	1.5	3.0	3.0	3.0	4.4	5.9	8.9	10.4	11.9	13.2
85°	1.5	1.5	1.5	1.5	1.5	3.0	3.0	4.4	5.9	7.4	7.4
87.5°	0.0	0.0	1.5	1.5	1.5	1.5	1.5	3.0	3.0	3.0	4.4
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: P252580

CATALOG NUMBER: LE_6B20D010 EC6B10209050 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4	1277.4
2.5°	1273.0	1275.9	1274.4	1277.4	1273.0	1271.5	1274.4	1270.0
5°	1256.8	1258.2	1256.8	1256.8	1253.8	1250.8	1253.8	1249.4
7.5°	1231.6	1231.6	1227.1	1227.1	1221.2	1218.4	1218.4	1216.9
10°	1210.9	1206.5	1202.1	1203.5	1194.8	1191.8	1190.2	1188.8
12.5°	1200.6	1197.6	1190.2	1190.2	1181.4	1178.5	1177.0	1175.5
15°	1188.8	1182.9	1177.0	1175.5	1168.1	1165.1	1163.6	1160.8
17.5°	1168.1	1163.6	1156.2	1156.2	1148.9	1147.4	1144.5	1143.0
20°	1146.0	1140.0	1134.1	1134.1	1125.2	1125.2	1120.9	1122.4
22.5°	1115.0	1110.5	1104.6	1104.6	1097.2	1095.8	1091.4	1089.9
25°	1078.0	1072.1	1067.8	1066.2	1060.2	1057.4	1055.9	1052.9
27.5°	1029.2	1024.9	1020.4	1017.5	1010.1	1008.6	1004.2	1005.6
30°	968.8	965.8	964.4	961.4	952.5	949.5	949.5	945.1
32.5°	902.2	897.9	894.9	890.5	883.1	881.6	877.2	878.6
35°	821.1	815.1	810.8	812.2	803.4	801.9	798.9	800.4
37.5°	736.9	731.0	725.1	723.6	716.2	716.2	711.8	711.8
40°	649.8	643.9	640.9	640.9	632.0	633.5	629.1	627.6
42.5°	571.5	565.6	564.1	562.6	558.2	556.8	552.2	553.8
45°	497.6	496.1	496.1	493.2	488.8	487.4	488.8	488.8
47.5°	432.6	434.1	432.6	432.6	429.8	432.6	429.8	431.2
50°	378.0	381.0	381.0	381.0	379.5	381.0	381.0	382.5
52.5°	332.2	336.8	335.2	336.8	335.2	338.1	336.8	338.1
55°	292.4	295.4	296.9	298.2	298.2	298.2	298.2	298.2
57.5°	255.5	259.9	261.4	262.9	262.9	265.9	262.9	262.9
60°	226.0	230.4	231.9	233.4	233.4	234.8	231.9	233.4
62.5°	199.4	203.8	203.8	205.2	205.2	205.2	202.4	203.8
65°	172.8	174.2	175.8	175.8	174.2	174.2	172.8	174.2
67.5°	143.2	144.8	143.2	143.2	141.8	141.8	138.9	140.2
70°	110.8	110.8	112.2	110.8	109.2	110.8	109.2	107.8
72.5°	82.8	82.8	82.8	81.2	81.2	79.8	81.2	81.2
75°	56.1	56.1	57.6	57.6	57.6	57.6	56.1	56.1
77.5°	36.9	36.9	36.9	36.9	38.4	36.9	36.9	36.9
80°	23.6	23.6	25.1	25.1	23.6	23.6	23.6	23.6
82.5°	14.8	14.8	14.8	14.8	14.8	14.8	14.8	14.8
85°	8.9	8.9	8.9	8.9	7.4	7.4	7.4	7.4
87.5°	4.4	4.4	4.4	4.4	4.4	4.4	3.0	3.0
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)