

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: P252145

Luminaire Tested: **LE_6B15D010 EC6B10208050 6LBSW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252145
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 EC6B10208050 6LBSW1LI
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2415.0 lumens
Efficiency: N/A
Efficacy: 167.7 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

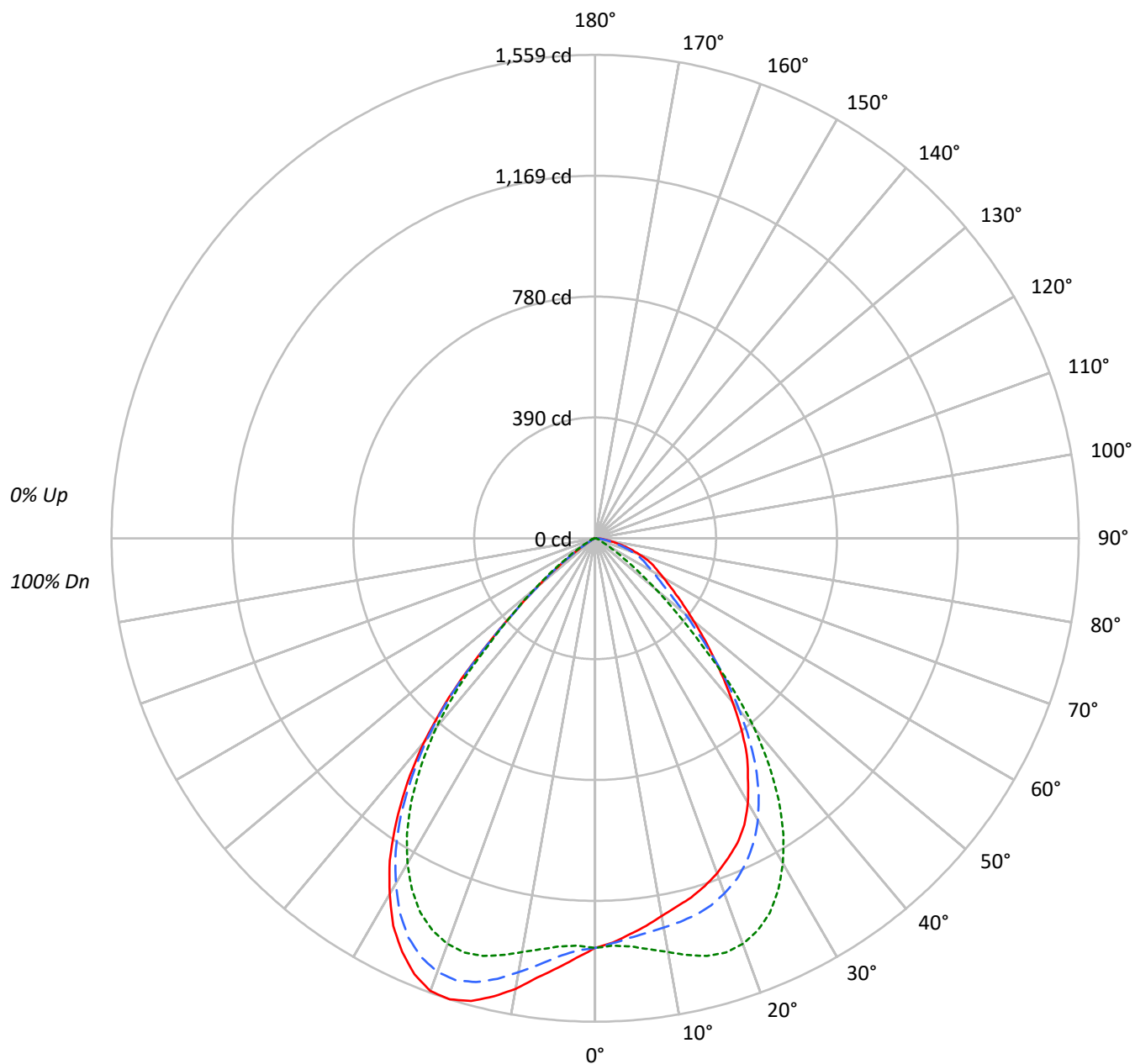
Input Watts (W): 14.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	112	108	105	103	109	106	103	101	102	100	98		98	96	95		95
2	105	98	93	89	102	97	92	88	93	89	86		90	87	84		87
3	98	89	83	78	95	88	82	78	85	80	76		83	78	75		80
4	91	82	75	69	89	80	74	69	78	72	68		76	71	67		74
5	85	75	67	62	83	74	67	62	72	66	61		70	65	61		68
6	80	69	61	56	78	68	61	56	66	60	55		64	59	55		63
7	74	63	56	51	73	62	55	50	61	55	50		60	54	50		58
8	70	58	51	46	69	58	51	46	57	50	46		55	50	46		54
9	66	54	47	42	64	54	47	42	53	46	42		52	46	42		51
10	62	50	43	39	61	50	43	39	49	43	39		48	43	39		47

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	86196	86196	86196
5°	83958	86525	91070
10°	81921	89778	97728
15°	80956	94187	104339
20°	79800	96636	107863
25°	78104	95927	105926
30°	74218	91153	99726
35°	67905	82193	89034
40°	58730	67877	73038
45°	49537	44517	47784
50°	42040	25770	24237
55°	36500	12353	9338
60°	32960	5767	2296
65°	31971	3319	772
70°	28651	2651	725
75°	23569	1916	302
80°	17583	939	0
85°	15121	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.6	5.3
10°-20°	388.9	16.1
20°-30°	594.2	24.6
30°-40°	621.5	25.7
40°-50°	403.2	16.7
50°-60°	160.1	6.6
60°-70°	75.9	3.1
70°-80°	36.1	1.5
80°-90°	7.4	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°	1110.8	46.0
0°-40°	1732.3	71.7
0°-60°	2295.6	95.1
0°-90°	2415.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2415.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1321	1321	1321	1321	1321	
5°	1282	1293	1321	1354	1391	121
15°	1199	1257	1394	1482	1545	338
25°	1085	1153	1333	1422	1472	497
35°	853	904	1032	1093	1118	527
45°	537	532	482	512	518	418
55°	321	273	109	85	82	291
65°	207	172	22	5	5	202
75°	94	76	8	2	1	101
85°	20	13	0	0	0	24
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°	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2
2.5°	1304.8	1307.2	1293.4	1289.6	1299.8	1303.5	1304.8	1301.0	1302.2	1307.2	1307.2
5°	1282.0	1284.6	1271.9	1268.1	1278.2	1280.8	1284.6	1283.2	1287.1	1294.6	1293.4
7.5°	1260.6	1264.4	1250.5	1245.4	1258.0	1264.4	1266.9	1266.9	1271.9	1282.0	1283.2
10°	1236.6	1241.6	1229.0	1226.5	1240.4	1246.6	1247.9	1250.5	1258.0	1271.9	1274.5
12.5°	1216.4	1221.4	1212.6	1208.8	1223.9	1230.2	1232.8	1237.9	1246.6	1264.4	1266.9
15°	1198.6	1202.5	1192.4	1189.9	1205.0	1212.6	1213.9	1221.4	1232.8	1253.0	1256.8
17.5°	1176.0	1178.5	1170.9	1168.4	1183.5	1191.1	1192.4	1201.2	1215.1	1235.2	1241.6
20°	1149.4	1152.0	1144.4	1141.9	1157.0	1165.9	1167.1	1174.6	1191.1	1212.6	1218.9
22.5°	1117.9	1122.9	1114.0	1111.5	1126.6	1134.2	1138.0	1144.4	1160.8	1182.2	1191.1
25°	1085.0	1085.0	1078.6	1077.4	1091.4	1100.1	1098.9	1107.8	1124.1	1145.6	1153.2
27.5°	1042.0	1040.8	1034.5	1033.2	1048.4	1056.0	1053.4	1062.2	1077.4	1098.9	1106.5
30°	985.2	987.8	978.9	976.4	989.0	1001.6	1000.4	1009.2	1024.4	1044.6	1049.6
32.5°	917.0	919.5	918.2	914.5	925.9	932.1	936.0	942.2	954.9	976.4	981.4
35°	852.6	848.8	843.8	843.8	855.1	865.2	861.4	869.0	881.6	903.1	904.4
37.5°	773.0	771.8	769.2	766.8	779.4	781.9	783.1	788.1	799.5	817.2	814.8
40°	689.6	690.9	689.6	684.6	692.1	702.2	701.0	703.5	713.6	726.2	722.5
42.5°	611.4	611.4	611.4	606.2	615.1	620.1	622.8	621.5	624.0	635.4	630.2
45°	536.9	538.1	536.9	535.5	536.9	539.4	536.9	535.5	535.5	539.4	531.8
47.5°	472.4	472.4	468.6	464.9	468.6	469.9	466.1	462.2	461.0	459.8	447.1
50°	414.2	413.0	411.8	405.5	409.2	410.5	405.5	402.9	397.9	391.5	376.4
52.5°	363.8	362.5	361.2	354.9	357.5	358.8	353.6	348.6	342.2	337.2	318.2
55°	320.9	319.6	319.6	315.8	313.2	315.8	310.8	306.9	298.1	291.8	272.9
57.5°	284.2	284.2	281.6	277.9	279.1	279.1	274.1	269.0	261.5	253.9	238.8
60°	252.6	252.6	252.6	248.9	248.9	248.9	246.2	241.2	234.9	227.4	212.2
62.5°	227.4	227.4	226.1	222.2	223.6	223.6	221.0	216.0	209.6	204.6	189.5
65°	207.1	207.1	207.1	203.4	203.4	204.6	202.1	197.0	192.0	185.6	171.8
67.5°	181.9	180.6	180.6	178.1	179.4	180.6	178.1	174.2	168.0	164.2	151.6
70°	150.2	151.6	152.9	149.0	150.2	150.2	149.0	145.2	141.5	137.6	126.2
72.5°	122.5	122.5	121.2	120.0	120.0	121.2	118.8	115.0	112.4	109.9	101.0
75°	93.5	92.2	93.5	91.0	91.0	91.0	88.4	87.1	85.9	82.1	75.8
77.5°	68.2	67.0	67.0	64.4	65.6	65.6	64.4	61.9	59.4	58.1	53.0
80°	46.8	46.8	46.8	45.5	45.5	44.2	44.2	43.0	40.4	39.1	36.6
82.5°	31.6	31.6	31.6	30.4	30.4	30.4	29.0	27.8	26.5	25.2	22.8
85°	20.2	20.2	20.2	19.0	19.0	19.0	17.6	17.6	16.4	15.1	12.6
87.5°	11.4	11.4	11.4	10.1	10.1	10.1	10.1	10.1	8.9	7.6	6.4
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°	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2
2.5°	1316.1	1298.5	1309.9	1309.9	1306.0	1316.1	1322.5	1327.5	1326.2	1314.9	1313.6
5°	1306.0	1290.9	1303.5	1304.8	1301.0	1314.9	1323.8	1330.0	1331.2	1321.2	1322.5
7.5°	1298.5	1285.9	1302.2	1307.2	1306.0	1318.6	1328.8	1338.9	1343.9	1336.4	1337.6
10°	1294.6	1284.6	1302.2	1309.9	1311.1	1325.0	1340.1	1354.0	1360.4	1355.2	1359.1
12.5°	1289.6	1283.2	1303.5	1314.9	1319.9	1333.9	1352.8	1369.2	1379.2	1376.8	1384.4
15°	1284.6	1279.5	1303.5	1319.9	1326.2	1338.9	1360.4	1384.4	1395.8	1394.5	1404.5
17.5°	1271.9	1270.6	1295.9	1313.6	1322.5	1337.6	1357.9	1386.9	1398.2	1400.8	1413.4
20°	1251.8	1251.8	1279.5	1298.5	1308.6	1322.5	1347.8	1375.5	1389.4	1391.9	1405.9
22.5°	1223.9	1226.5	1253.0	1271.9	1287.1	1297.2	1323.8	1352.8	1365.4	1369.2	1384.4
25°	1187.2	1189.9	1215.1	1234.0	1250.5	1261.9	1287.1	1313.6	1328.8	1332.6	1343.9
27.5°	1139.2	1144.4	1168.4	1187.2	1201.2	1208.8	1235.2	1263.1	1274.5	1278.2	1289.6
30°	1083.8	1085.0	1109.0	1125.4	1139.2	1145.6	1168.4	1197.4	1206.2	1210.0	1226.5
32.5°	1015.5	1014.2	1037.0	1052.1	1063.5	1071.1	1095.1	1114.0	1122.9	1129.2	1138.0
35°	933.4	932.1	948.6	966.2	975.1	977.6	1001.6	1021.9	1026.9	1032.0	1043.4
37.5°	841.2	841.2	855.1	864.0	874.0	877.9	889.2	912.0	920.8	919.5	928.4
40°	744.0	738.9	749.0	757.9	760.4	761.6	773.0	790.8	797.0	797.0	803.4
42.5°	641.6	634.1	635.4	640.4	642.9	634.1	641.6	653.0	649.2	654.2	655.5
45°	533.0	521.6	516.6	505.2	507.8	498.9	493.9	496.4	495.1	482.5	485.0
47.5°	444.6	424.4	415.5	399.1	395.4	385.2	378.9	367.5	357.5	357.5	351.1
50°	370.1	349.9	332.2	313.2	306.9	298.1	284.2	269.0	261.5	253.9	247.6
52.5°	310.8	289.2	267.8	247.6	238.8	227.4	208.4	193.2	179.4	171.8	164.2
55°	262.8	238.8	216.0	194.5	183.1	171.8	152.9	135.1	118.8	108.6	102.2
57.5°	226.1	203.4	179.4	156.6	146.5	133.9	113.6	94.8	79.6	68.2	61.9
60°	199.6	176.9	155.4	131.4	121.2	108.6	87.1	69.5	54.4	44.2	36.6
62.5°	176.9	156.6	133.9	112.4	102.2	89.6	69.5	51.8	37.9	27.8	21.5
65°	160.4	140.2	121.2	99.8	91.0	78.2	59.4	43.0	30.4	21.5	15.1
67.5°	141.5	123.8	104.9	87.1	78.2	68.2	50.5	36.6	25.2	17.6	12.6
70°	118.8	104.9	88.4	72.0	65.6	56.9	41.6	30.4	20.2	13.9	10.1
72.5°	94.8	83.4	70.8	58.1	53.0	44.2	34.1	24.0	15.1	10.1	7.6
75°	72.0	63.1	53.0	44.2	39.1	34.1	25.2	17.6	11.4	7.6	5.0
77.5°	49.2	45.5	37.9	30.4	27.8	24.0	16.4	11.4	7.6	5.0	2.5
80°	34.1	30.4	25.2	20.2	17.6	15.1	10.1	7.6	3.8	2.5	1.2
82.5°	21.5	17.6	15.1	12.6	11.4	8.9	6.4	3.8	2.5	1.2	1.2
85°	11.4	10.1	8.9	6.4	6.4	5.0	3.8	2.5	1.2	0.0	0.0
87.5°	6.4	5.0	3.8	2.5	2.5	1.2	1.2	1.2	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°	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2
2.5°	1328.8	1328.8	1327.5	1342.6	1325.0	1342.6	1333.9	1342.6	1330.0	1328.8	1330.0
5°	1338.9	1342.6	1343.9	1357.9	1341.4	1362.9	1355.2	1362.9	1354.0	1356.5	1360.4
7.5°	1359.1	1365.4	1364.1	1381.9	1365.4	1389.4	1384.4	1395.8	1386.9	1389.4	1394.5
10°	1381.9	1389.4	1390.6	1408.4	1393.2	1422.2	1415.9	1428.5	1421.0	1424.8	1431.1
12.5°	1408.4	1417.2	1418.5	1438.6	1422.2	1452.5	1448.8	1461.4	1455.1	1458.9	1466.5
15°	1428.5	1441.2	1443.8	1463.9	1446.2	1477.9	1475.2	1491.8	1481.6	1487.9	1494.2
17.5°	1438.6	1450.0	1455.1	1474.0	1458.9	1490.5	1487.9	1501.9	1494.2	1500.5	1508.1
20°	1432.4	1446.2	1450.0	1469.0	1453.9	1485.4	1481.6	1495.5	1487.9	1493.0	1500.5
22.5°	1409.6	1423.5	1428.5	1446.2	1432.4	1461.4	1460.1	1472.8	1462.6	1469.0	1475.2
25°	1369.2	1384.4	1386.9	1403.2	1388.1	1418.5	1415.9	1429.9	1422.2	1426.0	1434.9
27.5°	1311.1	1328.8	1332.6	1346.5	1335.1	1360.4	1360.4	1371.8	1362.9	1362.9	1371.8
30°	1241.6	1259.2	1261.9	1273.2	1263.1	1285.9	1287.1	1298.5	1284.6	1292.1	1293.4
32.5°	1157.0	1168.4	1176.0	1186.0	1170.9	1200.0	1196.1	1205.0	1197.4	1197.4	1203.8
35°	1054.6	1068.6	1072.4	1085.0	1072.4	1095.1	1095.1	1100.1	1092.6	1092.6	1102.6
37.5°	943.5	953.6	954.9	967.5	957.4	976.4	975.1	978.9	971.4	976.4	976.4
40°	813.4	821.0	823.5	829.9	828.6	842.5	841.2	843.8	840.0	841.2	843.8
42.5°	661.9	672.0	677.0	682.1	674.5	693.5	689.6	693.5	692.1	693.5	697.2
45°	487.5	495.1	498.9	500.1	497.6	509.0	517.9	510.2	511.5	509.0	514.1
47.5°	352.4	353.6	351.1	358.8	352.4	357.5	360.0	361.2	353.6	352.4	357.5
50°	241.2	247.6	238.8	242.5	241.2	246.2	243.8	245.0	237.5	241.2	238.8
52.5°	160.4	159.1	156.6	157.9	155.4	155.4	155.4	157.9	152.9	150.2	147.8
55°	97.2	94.8	89.6	88.4	88.4	89.6	87.1	84.6	84.6	83.4	83.4
57.5°	56.9	53.0	50.5	49.2	46.8	45.5	44.2	44.2	41.6	41.6	41.6
60°	31.6	27.8	25.2	22.8	22.8	21.5	20.2	19.0	19.0	19.0	17.6
62.5°	16.4	13.9	11.4	10.1	10.1	8.9	7.6	7.6	7.6	7.6	6.4
65°	11.4	8.9	7.6	6.4	6.4	5.0	5.0	5.0	5.0	5.0	5.0
67.5°	8.9	7.6	6.4	5.0	5.0	5.0	3.8	3.8	3.8	3.8	3.8
70°	7.6	5.0	5.0	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
72.5°	5.0	5.0	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
75°	3.8	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
77.5°	1.2	1.2	1.2	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0
80°	1.2	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: P252145

CATALOG NUMBER: LE_6B15D010 EC6B10208050 6LBSW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2	1321.2
2.5°	1341.4	1340.1	1341.4	1343.9	1338.9	1354.0	1346.5	1354.0
5°	1370.5	1371.8	1373.0	1376.8	1370.5	1389.4	1379.2	1390.6
7.5°	1408.4	1409.6	1410.9	1414.6	1410.9	1429.9	1418.5	1428.5
10°	1447.5	1450.0	1450.0	1456.4	1452.5	1470.2	1462.6	1475.2
12.5°	1484.1	1486.6	1489.1	1493.0	1490.5	1509.4	1503.1	1513.1
15°	1513.1	1518.2	1519.5	1524.5	1522.0	1542.2	1534.6	1544.8
17.5°	1527.1	1532.1	1532.1	1538.5	1535.9	1557.4	1547.2	1558.6
20°	1519.5	1523.2	1524.5	1530.9	1528.4	1549.9	1539.8	1553.6
22.5°	1495.5	1496.8	1498.0	1504.4	1503.1	1522.0	1513.1	1522.0
25°	1451.2	1455.1	1453.9	1458.9	1458.9	1474.0	1463.9	1471.5
27.5°	1388.1	1391.9	1391.9	1398.2	1393.2	1408.4	1398.2	1409.6
30°	1311.1	1314.9	1312.4	1317.4	1312.4	1327.5	1319.9	1323.8
32.5°	1218.9	1218.9	1220.1	1221.4	1218.9	1232.8	1225.2	1232.8
35°	1109.0	1111.5	1112.8	1114.0	1111.5	1121.6	1112.8	1117.9
37.5°	985.2	991.5	990.2	991.5	987.8	1000.4	992.8	995.4
40°	852.6	852.6	851.4	853.9	850.0	860.1	855.1	857.6
42.5°	698.5	702.2	697.2	703.5	693.5	707.4	702.2	698.5
45°	524.1	519.1	517.9	519.1	515.4	516.6	520.4	517.9
47.5°	357.5	357.5	354.9	351.1	356.2	357.5	352.4	352.4
50°	240.0	240.0	237.5	236.2	238.8	237.5	234.9	238.8
52.5°	152.9	147.8	147.8	150.2	147.8	145.2	149.0	146.5
55°	83.4	80.9	80.9	83.4	80.9	80.9	79.6	82.1
57.5°	40.4	41.6	40.4	40.4	40.4	40.4	39.1	40.4
60°	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6
62.5°	7.6	7.6	6.4	6.4	6.4	6.4	6.4	6.4
65°	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
67.5°	3.8	3.8	3.8	3.8	3.8	5.0	3.8	3.8
70°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
72.5°	3.8	3.8	5.0	5.0	5.0	5.0	5.0	5.0
75°	2.5	2.5	2.5	1.2	1.2	1.2	1.2	1.2
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



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— 0°-180° - - 45°-225° - - - 90°-270°













(END OF REPORT)