

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: P252571

Luminaire Tested: **LE_6B20D010 EC6B10208030 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252571
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 EC6B10208030 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2540.0 lumens
Efficiency: N/A
Efficacy: 122.1 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

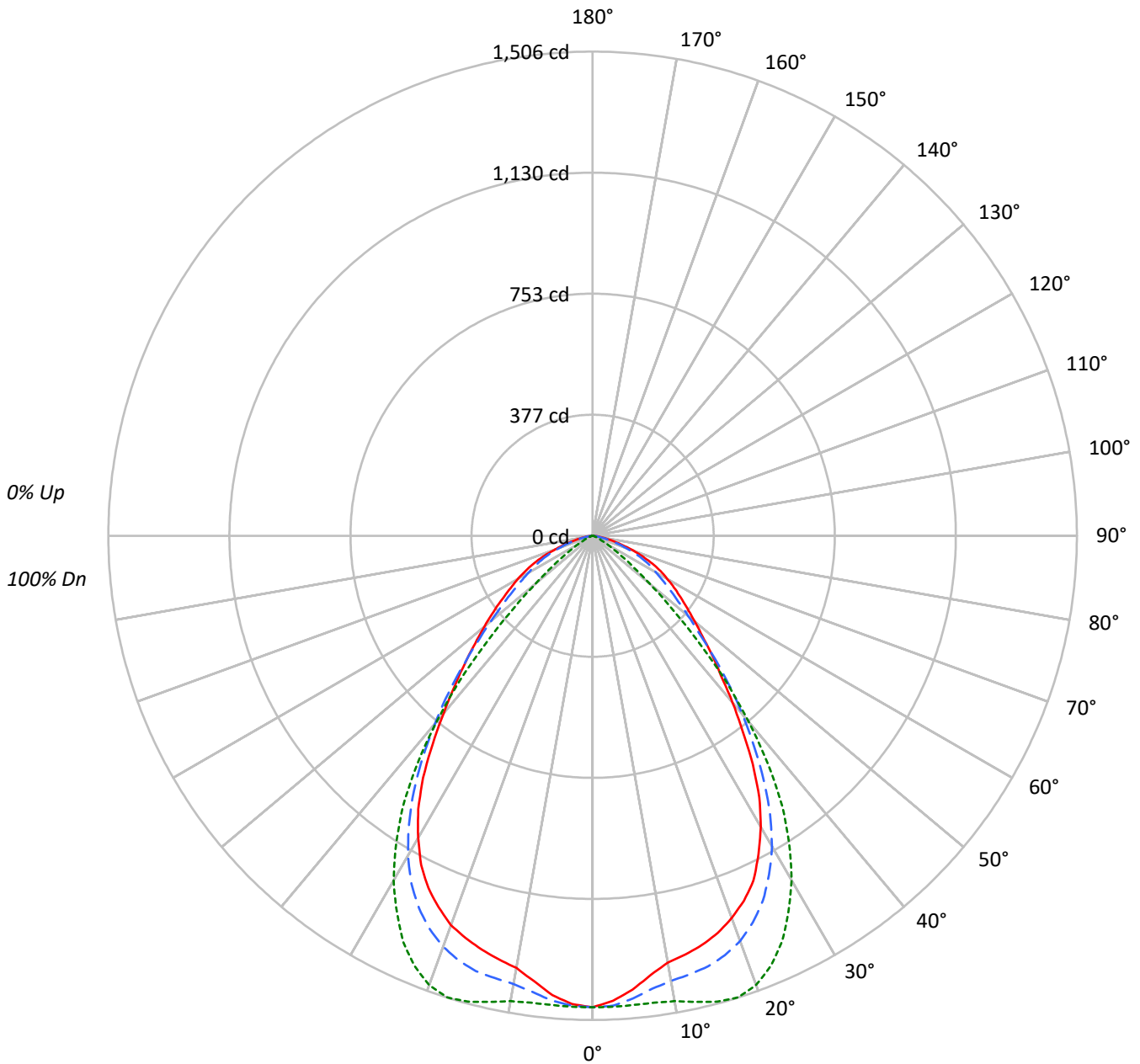
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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	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°	95675	95675	95675
5°	92812	95930	93926
10°	89288	97377	90414
15°	88966	101340	90000
20°	87812	103232	89457
25°	85187	100318	87016
30°	78799	93233	81737
35°	69131	81962	73185
40°	57615	64249	61362
45°	48485	42386	51769
50°	41979	23233	44567
55°	37990	12341	38957
60°	34956	6407	34956
65°	31662	3396	30874
70°	25542	1927	23615
75°	17519	1286	16233
80°	11459	676	10182
85°	7560	1347	6363



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.7	5.4
10°-20°	395.4	15.6
20°-30°	584.2	23.0
30°-40°	590.1	23.2
40°-50°	406.7	16.0
50°-60°	233.6	9.2
60°-70°	136.0	5.4
70°-80°	49.6	2.0
80°-90°	7.6	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°	1116.4	44.0
0°-40°	1706.5	67.2
0°-60°	2346.8	92.4
0°-90°	2540.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2540.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1466	1466	1466	1466	1466	
5°	1417	1444	1465	1451	1434	133
15°	1317	1387	1500	1402	1332	371
25°	1183	1253	1394	1278	1209	539
35°	868	927	1029	970	919	539
45°	526	532	459	566	561	409
55°	334	293	108	305	342	301
65°	205	173	22	171	200	201
75°	70	56	5	54	64	78
85°	10	5	2	7	8	13
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°	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5
2.5°	1447.9	1449.5	1451.2	1449.5	1451.2	1458.0	1452.9	1456.2	1456.2	1458.0	1463.1
5°	1417.2	1417.2	1420.8	1419.0	1424.1	1430.9	1425.8	1430.9	1432.5	1436.0	1444.4
7.5°	1378.2	1378.2	1380.0	1380.0	1386.8	1393.6	1390.1	1397.0	1403.8	1410.5	1420.8
10°	1347.8	1351.1	1351.1	1352.9	1359.6	1368.1	1366.5	1374.9	1381.8	1391.9	1405.4
12.5°	1334.2	1335.9	1335.9	1339.4	1346.1	1354.6	1352.9	1361.4	1371.5	1383.4	1397.0
15°	1317.2	1320.6	1319.0	1322.4	1329.1	1337.6	1335.9	1344.4	1356.2	1368.1	1386.8
17.5°	1295.2	1296.9	1298.6	1298.6	1305.4	1312.2	1312.2	1320.6	1334.2	1347.8	1368.1
20°	1264.8	1268.1	1268.1	1269.8	1274.9	1285.1	1283.4	1291.9	1305.4	1319.0	1341.0
22.5°	1229.1	1230.9	1230.9	1232.5	1241.0	1246.1	1247.8	1254.5	1266.4	1281.6	1302.0
25°	1183.4	1185.0	1183.4	1188.4	1191.9	1202.0	1198.6	1207.1	1220.6	1232.5	1252.9
27.5°	1117.2	1120.6	1120.6	1122.4	1130.8	1139.2	1139.2	1147.8	1159.6	1168.1	1188.4
30°	1046.0	1051.1	1046.0	1054.5	1057.9	1064.6	1069.8	1074.9	1085.0	1096.9	1115.5
32.5°	964.6	963.0	964.6	968.0	978.2	983.2	986.8	991.8	1002.0	1012.1	1027.4
35°	868.0	871.4	873.1	879.9	879.9	888.4	890.0	893.5	908.8	915.5	927.4
37.5°	766.2	769.6	771.4	774.8	781.5	785.0	790.0	795.1	805.2	817.1	823.9
40°	676.5	676.5	678.1	681.5	686.6	688.2	693.4	700.1	707.0	717.1	723.9
42.5°	591.6	593.4	591.6	595.1	600.1	606.9	605.2	613.8	615.4	622.2	627.2
45°	525.5	525.5	522.1	525.5	525.5	532.4	530.6	534.0	532.4	535.8	532.4
47.5°	462.9	464.5	462.9	464.5	464.5	464.5	466.2	462.9	464.5	459.4	449.2
50°	413.6	415.4	412.0	413.6	412.0	410.2	412.0	406.9	405.1	398.4	388.2
52.5°	371.2	369.6	367.9	367.9	367.9	366.2	364.5	359.4	354.4	347.5	335.6
55°	334.0	332.2	330.6	330.6	327.2	325.5	325.5	320.4	315.4	306.9	293.2
57.5°	300.1	298.4	296.6	296.6	295.0	291.6	291.6	286.5	279.8	269.5	257.8
60°	267.9	267.9	267.9	266.1	266.1	262.8	262.8	257.8	250.9	240.8	227.1
62.5°	239.0	237.4	237.4	237.4	237.4	235.6	234.0	230.6	223.8	213.6	201.8
65°	205.1	205.1	205.1	205.1	203.5	203.5	203.5	198.4	195.0	184.8	172.9
67.5°	167.9	167.9	167.9	167.9	166.1	167.9	167.9	164.5	161.0	150.9	140.8
70°	133.9	132.2	130.5	132.2	130.5	130.5	132.2	128.9	127.1	118.6	108.5
72.5°	98.4	100.0	98.4	98.4	98.4	96.6	98.4	96.6	93.2	86.5	79.6
75°	69.5	71.2	71.2	69.5	69.5	69.5	67.9	67.9	64.4	59.4	56.0
77.5°	47.5	47.5	47.5	47.5	45.8	45.8	45.8	44.1	42.4	39.0	35.6
80°	30.5	30.5	30.5	30.5	28.9	28.9	28.9	27.1	27.1	23.8	20.4
82.5°	18.6	18.6	18.6	18.6	18.6	18.6	17.0	17.0	15.2	13.6	11.9
85°	10.1	10.1	10.1	10.1	10.1	10.1	10.1	8.5	8.5	6.8	5.1
87.5°	3.4	3.4	5.1	5.1	5.1	5.1	5.1	5.1	3.4	3.4	3.4
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°	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5
2.5°	1459.6	1461.4	1461.4	1461.4	1466.5	1468.1	1463.1	1458.0	1468.1	1466.5	1469.9
5°	1442.8	1447.9	1451.2	1452.9	1458.0	1461.4	1456.2	1454.6	1463.1	1464.8	1466.5
7.5°	1422.4	1430.9	1439.4	1442.8	1449.5	1452.9	1451.2	1451.2	1461.4	1464.8	1464.8
10°	1408.9	1420.8	1430.9	1439.4	1447.9	1452.9	1452.9	1454.6	1466.5	1469.9	1473.2
12.5°	1405.4	1420.8	1434.2	1446.1	1452.9	1461.4	1463.1	1468.1	1480.0	1485.1	1485.1
15°	1397.0	1417.2	1434.2	1449.5	1459.6	1469.9	1473.2	1483.4	1497.0	1500.4	1503.8
17.5°	1381.8	1402.0	1422.4	1441.0	1454.6	1463.1	1473.2	1483.4	1500.4	1505.5	1507.1
20°	1354.6	1378.2	1398.6	1417.2	1430.9	1442.8	1452.9	1464.8	1480.0	1486.9	1488.5
22.5°	1313.9	1337.6	1358.0	1378.2	1391.9	1402.0	1412.2	1425.8	1441.0	1447.9	1447.9
25°	1264.8	1286.8	1308.8	1324.0	1337.6	1349.5	1354.6	1369.9	1385.1	1393.6	1393.6
27.5°	1202.0	1222.4	1242.6	1259.6	1268.1	1278.2	1286.8	1300.4	1312.2	1319.0	1325.8
30°	1122.4	1142.6	1161.2	1178.2	1188.4	1198.6	1207.1	1217.2	1229.1	1237.6	1239.2
32.5°	1035.9	1052.8	1071.5	1088.4	1098.6	1102.0	1110.5	1120.6	1130.8	1137.6	1139.2
35°	940.9	952.8	964.6	979.9	990.1	990.1	998.5	1005.4	1013.9	1029.1	1025.6
37.5°	829.0	846.0	854.5	859.5	866.4	873.1	874.8	883.2	893.5	896.9	901.9
40°	723.9	729.0	734.1	734.1	740.9	740.9	740.9	742.5	752.8	754.4	761.2
42.5°	618.8	618.8	613.8	608.6	610.4	608.6	600.1	600.1	605.2	612.0	612.0
45°	520.5	508.6	493.4	481.5	473.0	469.6	459.4	459.4	457.8	459.4	466.2
47.5°	437.4	417.0	391.6	367.9	359.4	352.6	337.4	330.6	327.2	328.9	332.2
50°	367.9	345.9	317.0	288.2	273.0	264.5	245.9	234.0	232.2	228.9	235.6
52.5°	317.0	289.9	259.4	225.5	210.2	196.6	176.4	166.1	159.4	159.4	161.0
55°	273.0	244.1	210.2	176.4	161.0	150.9	130.5	117.0	110.2	108.5	113.6
57.5°	235.6	208.5	174.6	140.8	125.5	113.6	93.2	81.4	76.2	72.9	74.6
60°	206.9	179.8	145.8	113.6	100.0	86.5	69.5	56.0	49.1	49.1	50.9
62.5°	179.8	154.2	123.8	93.2	81.4	69.5	50.9	39.0	33.9	32.2	33.9
65°	152.6	128.9	103.4	78.0	66.1	56.0	40.8	30.5	23.8	22.0	23.8
67.5°	123.8	105.1	83.1	62.8	52.5	44.1	30.5	22.0	17.0	15.2	17.0
70°	96.6	79.6	62.8	45.8	39.0	32.2	22.0	17.0	11.9	10.1	11.9
72.5°	69.5	57.6	44.1	32.2	27.1	22.0	15.2	11.9	8.5	6.8	8.5
75°	47.5	39.0	28.9	20.4	17.0	15.2	10.1	6.8	5.1	5.1	5.1
77.5°	30.5	23.8	18.6	13.6	10.1	8.5	5.1	3.4	3.4	3.4	3.4
80°	17.0	13.6	10.1	6.8	5.1	5.1	3.4	3.4	1.8	1.8	1.8
82.5°	10.1	6.8	5.1	3.4	3.4	1.8	1.8	1.8	1.8	1.8	1.8
85°	5.1	3.4	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
87.5°	1.8	1.8	1.8	1.8	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°	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5
2.5°	1463.1	1464.8	1459.6	1466.5	1461.4	1468.1	1468.1	1461.4	1463.1	1459.6	1466.5
5°	1459.6	1459.6	1456.2	1461.4	1454.6	1461.4	1459.6	1447.9	1451.2	1444.4	1451.2
7.5°	1459.6	1456.2	1451.2	1456.2	1447.9	1452.9	1446.1	1434.2	1430.9	1422.4	1422.4
10°	1464.8	1459.6	1452.9	1454.6	1446.1	1447.9	1437.6	1420.8	1415.6	1405.4	1402.0
12.5°	1476.6	1471.5	1461.4	1464.8	1452.9	1452.9	1439.4	1419.0	1408.9	1395.2	1391.9
15°	1493.6	1485.1	1473.2	1475.0	1463.1	1456.2	1439.4	1415.6	1402.0	1383.4	1378.2
17.5°	1497.0	1488.5	1473.2	1473.2	1458.0	1449.5	1429.1	1402.0	1385.1	1366.5	1356.2
20°	1478.4	1469.9	1452.9	1451.2	1437.6	1425.8	1403.8	1376.6	1359.6	1339.4	1330.9
22.5°	1439.4	1429.1	1413.9	1412.2	1398.6	1391.9	1368.1	1341.0	1324.0	1303.8	1296.9
25°	1381.8	1376.6	1361.4	1359.6	1347.8	1339.4	1319.0	1293.5	1278.2	1258.0	1251.1
27.5°	1313.9	1308.8	1293.5	1293.5	1280.0	1274.9	1256.2	1232.5	1220.6	1202.0	1193.5
30°	1232.5	1225.8	1217.2	1215.5	1203.8	1198.6	1181.6	1159.6	1147.8	1132.5	1129.1
32.5°	1135.9	1130.8	1125.8	1124.0	1112.1	1107.0	1095.2	1073.1	1063.0	1049.4	1044.4
35°	1024.0	1020.6	1015.5	1013.9	1008.8	1003.6	991.8	974.9	969.8	959.5	954.5
37.5°	895.1	898.5	895.1	895.1	890.0	891.8	881.6	871.4	866.4	859.5	856.1
40°	756.1	762.9	768.0	768.0	766.2	773.1	771.4	762.9	761.2	757.9	756.1
42.5°	615.4	618.8	629.0	635.8	634.0	651.0	652.8	659.5	664.6	661.1	662.9
45°	467.9	478.1	491.6	498.4	506.9	529.0	540.9	554.4	566.2	573.0	571.4
47.5°	337.4	349.2	364.5	374.6	389.9	417.0	447.6	464.5	481.5	490.0	498.4
50°	244.1	256.0	274.6	289.9	300.1	337.4	369.6	391.6	410.2	422.1	430.6
52.5°	171.2	184.8	205.1	218.8	234.0	269.5	306.9	332.2	352.6	367.9	376.4
55°	118.6	133.9	152.6	166.1	183.1	220.4	256.0	283.1	305.1	318.8	328.9
57.5°	83.1	96.6	115.2	127.1	144.1	179.8	215.2	242.4	264.5	278.0	289.9
60°	56.0	69.5	88.1	100.0	113.6	149.2	181.4	210.2	230.6	244.1	256.0
62.5°	39.0	50.9	69.5	81.4	93.2	123.8	154.2	179.8	200.0	215.2	225.5
65°	30.5	40.8	56.0	66.1	78.0	103.4	128.9	150.9	171.2	186.5	193.2
67.5°	22.0	32.2	44.1	52.5	61.0	83.1	105.1	122.1	140.8	152.6	161.0
70°	15.2	22.0	32.2	39.0	45.8	62.8	79.6	95.0	108.5	117.0	123.8
72.5°	11.9	15.2	22.0	27.1	32.2	44.1	57.6	69.5	79.6	86.5	93.2
75°	6.8	10.1	15.2	18.6	22.0	30.5	39.0	47.5	54.2	59.4	62.8
77.5°	3.4	5.1	8.5	10.1	13.6	18.6	25.4	30.5	35.6	39.0	42.4
80°	3.4	3.4	5.1	5.1	6.8	10.1	13.6	17.0	20.4	23.8	25.4
82.5°	1.8	1.8	3.4	3.4	3.4	5.1	6.8	10.1	11.9	13.6	15.2
85°	1.8	1.8	1.8	1.8	1.8	3.4	3.4	5.1	6.8	8.5	8.5
87.5°	0.0	0.0	1.8	1.8	1.8	1.8	1.8	3.4	3.4	3.4	5.1
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: P252571

CATALOG NUMBER: LE_6B20D010 EC6B10208030 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5	1466.5
2.5°	1461.4	1464.8	1463.1	1466.5	1461.4	1459.6	1463.1	1458.0
5°	1442.8	1444.4	1442.8	1442.8	1439.4	1436.0	1439.4	1434.2
7.5°	1413.9	1413.9	1408.9	1408.9	1402.0	1398.6	1398.6	1397.0
10°	1390.1	1385.1	1380.0	1381.8	1371.5	1368.1	1366.5	1364.8
12.5°	1378.2	1374.9	1366.5	1366.5	1356.2	1352.9	1351.1	1349.5
15°	1364.8	1358.0	1351.1	1349.5	1341.0	1337.6	1335.9	1332.5
17.5°	1341.0	1335.9	1327.5	1327.5	1319.0	1317.2	1313.9	1312.2
20°	1315.6	1308.8	1302.0	1302.0	1291.9	1291.9	1286.8	1288.5
22.5°	1280.0	1274.9	1268.1	1268.1	1259.6	1258.0	1252.9	1251.1
25°	1237.6	1230.9	1225.8	1224.0	1217.2	1213.9	1212.1	1208.8
27.5°	1181.6	1176.6	1171.5	1168.1	1159.6	1157.9	1152.9	1154.5
30°	1112.1	1108.8	1107.0	1103.6	1093.5	1090.1	1090.1	1085.0
32.5°	1035.9	1030.8	1027.4	1022.2	1013.9	1012.1	1007.0	1008.8
35°	942.6	935.9	930.8	932.4	922.2	920.6	917.1	918.9
37.5°	846.0	839.2	832.4	830.8	822.2	822.2	817.1	817.1
40°	746.0	739.1	735.8	735.8	725.6	727.2	722.2	720.5
42.5°	656.1	649.4	647.6	645.9	640.9	639.1	634.0	635.8
45°	571.4	569.6	569.6	566.2	561.1	559.5	561.1	561.1
47.5°	496.8	498.4	496.8	496.8	493.4	496.8	493.4	495.0
50°	434.0	437.4	437.4	437.4	435.8	437.4	437.4	439.1
52.5°	381.5	386.5	384.9	386.5	384.9	388.2	386.5	388.2
55°	335.6	339.1	340.8	342.5	342.5	342.5	342.5	342.5
57.5°	293.2	298.4	300.1	301.8	301.8	305.1	301.8	301.8
60°	259.4	264.5	266.1	267.9	267.9	269.5	266.1	267.9
62.5°	228.9	234.0	234.0	235.6	235.6	235.6	232.2	234.0
65°	198.4	200.0	201.8	201.8	200.0	200.0	198.4	200.0
67.5°	164.5	166.1	164.5	164.5	162.8	162.8	159.4	161.0
70°	127.1	127.1	128.9	127.1	125.5	127.1	125.5	123.8
72.5°	95.0	95.0	95.0	93.2	93.2	91.5	93.2	93.2
75°	64.4	64.4	66.1	66.1	66.1	66.1	64.4	64.4
77.5°	42.4	42.4	42.4	42.4	44.1	42.4	42.4	42.4
80°	27.1	27.1	28.9	28.9	27.1	27.1	27.1	27.1
82.5°	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
85°	10.1	10.1	10.1	10.1	8.5	8.5	8.5	8.5
87.5°	5.1	5.1	5.1	5.1	5.1	5.1	3.4	3.4
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)