

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: P252570

Luminaire Tested: **LE_6B20D010 EC6B10208027 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252570
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 EC6B10208027 6LBDW1LI
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2430.0 lumens
Efficiency: N/A
Efficacy: 116.8 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

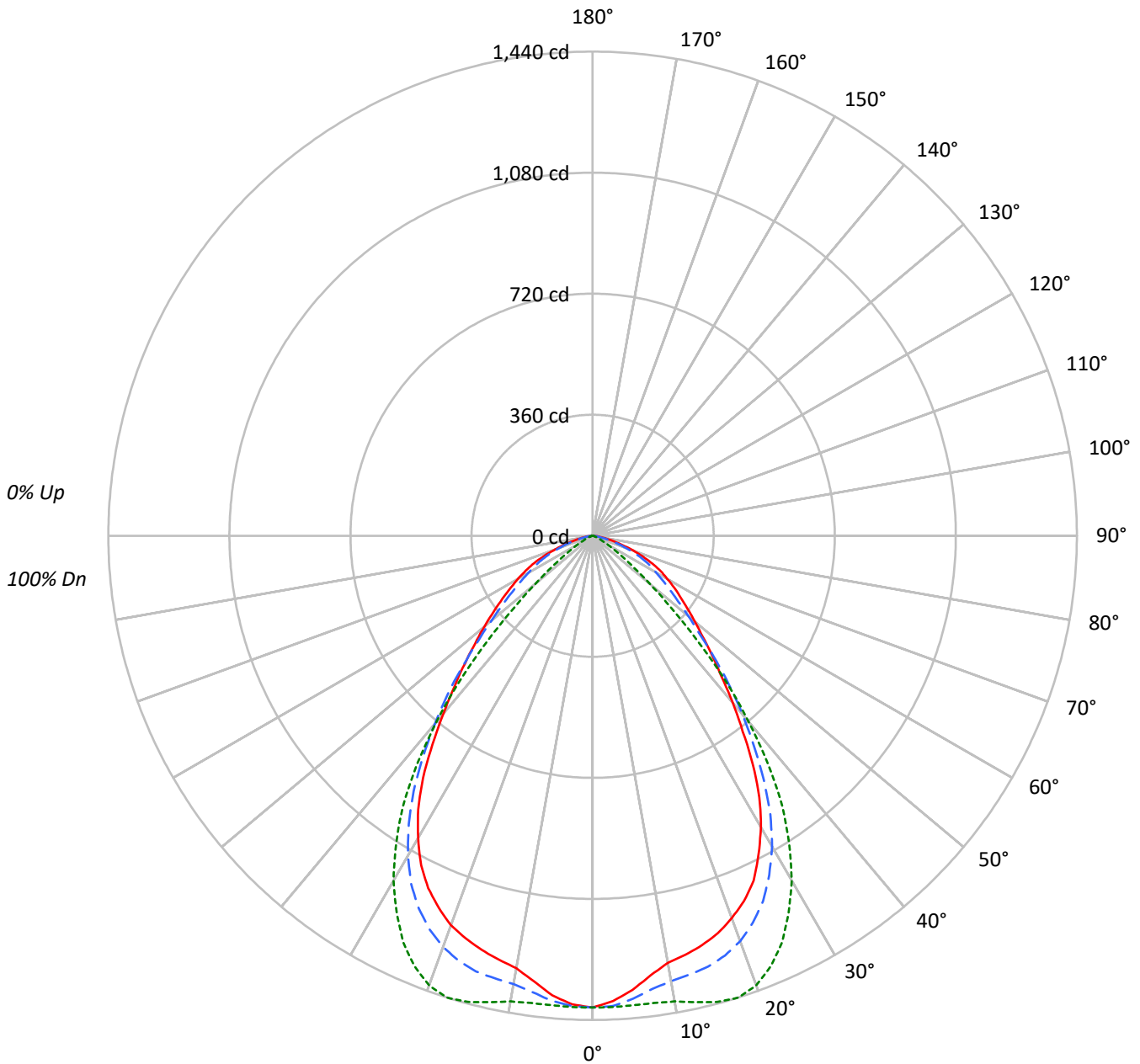
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	91533	91533	91533
5°	88798	91777	89859
10°	85419	93157	86492
15°	85117	96950	86109
20°	84007	98754	85576
25°	81494	95970	83244
30°	75394	89195	78196
35°	66136	78410	70015
40°	55111	61473	58713
45°	46390	40550	49537
50°	40172	22228	42639
55°	36341	11807	37262
60°	33429	6133	33429
65°	30288	3257	29547
70°	24435	1869	22585
75°	16763	1235	15528
80°	10971	601	9768
85°	7336	1198	6063



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.8	5.4
10°-20°	378.3	15.6
20°-30°	558.9	23.0
30°-40°	564.6	23.2
40°-50°	389.1	16.0
50°-60°	223.5	9.2
60°-70°	130.1	5.4
70°-80°	47.5	2.0
80°-90°	7.3	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°	1068.0	44.0
0°-40°	1632.6	67.2
0°-60°	2245.2	92.4
0°-90°	2430.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2430.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1403	1403	1403	1403	1403	
5°	1356	1382	1401	1388	1372	127
15°	1260	1327	1435	1341	1275	355
25°	1132	1199	1333	1223	1156	516
35°	830	887	984	928	879	515
45°	503	509	440	542	537	391
55°	320	281	104	292	328	288
65°	196	165	21	164	191	192
75°	66	54	5	52	62	75
85°	10	5	2	6	8	12
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°	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0
2.5°	1385.1	1386.8	1388.4	1386.8	1388.4	1394.9	1390.0	1393.2	1393.2	1394.9	1399.8
5°	1355.9	1355.9	1359.1	1357.5	1362.4	1368.9	1364.0	1368.9	1370.5	1373.8	1381.9
7.5°	1318.6	1318.6	1320.2	1320.2	1326.8	1333.2	1330.0	1336.5	1343.0	1349.4	1359.1
10°	1289.4	1292.6	1292.6	1294.2	1300.8	1308.9	1307.2	1315.4	1321.9	1331.6	1344.6
12.5°	1276.5	1278.1	1278.1	1281.4	1287.8	1295.9	1294.2	1302.4	1312.1	1323.5	1336.5
15°	1260.2	1263.5	1261.9	1265.1	1271.6	1279.8	1278.1	1286.1	1297.5	1308.9	1326.8
17.5°	1239.1	1240.8	1242.4	1242.4	1248.9	1255.4	1255.4	1263.5	1276.5	1289.4	1308.9
20°	1210.0	1213.2	1213.2	1214.9	1219.6	1229.4	1227.8	1235.9	1248.9	1261.9	1283.0
22.5°	1175.9	1177.5	1177.5	1179.1	1187.2	1192.1	1193.8	1200.2	1211.6	1226.1	1245.6
25°	1132.1	1133.8	1132.1	1137.0	1140.2	1150.0	1146.8	1154.8	1167.8	1179.1	1198.6
27.5°	1068.9	1072.1	1072.1	1073.8	1081.9	1089.9	1089.9	1098.0	1109.4	1117.5	1137.0
30°	1000.8	1005.6	1000.8	1008.9	1012.1	1018.6	1023.4	1028.2	1038.0	1049.4	1067.2
32.5°	922.9	921.2	922.9	926.1	935.9	940.8	944.0	948.9	958.5	968.2	982.9
35°	830.4	833.6	835.2	841.8	841.8	849.9	851.5	854.8	869.4	875.9	887.2
37.5°	733.1	736.4	738.0	741.2	747.8	751.0	755.9	760.6	770.4	781.8	788.2
40°	647.1	647.1	648.8	652.0	656.9	658.5	663.4	669.9	676.4	686.1	692.5
42.5°	566.0	567.6	566.0	569.2	574.1	580.6	579.0	587.1	588.8	595.2	600.1
45°	502.8	502.8	499.5	502.8	502.8	509.2	507.6	510.9	509.2	512.5	509.2
47.5°	442.8	444.4	442.8	444.4	444.4	444.4	446.0	442.8	444.4	439.5	429.8
50°	395.8	397.4	394.1	395.8	394.1	392.5	394.1	389.2	387.6	381.1	371.4
52.5°	355.2	353.6	352.0	352.0	352.0	350.4	348.8	343.9	339.0	332.5	321.1
55°	319.5	317.9	316.2	316.2	313.0	311.4	311.4	306.5	301.6	293.6	280.6
57.5°	287.1	285.5	283.9	283.9	282.2	279.0	279.0	274.1	267.6	257.9	246.5
60°	256.2	256.2	256.2	254.6	254.6	251.4	251.4	246.5	240.0	230.4	217.4
62.5°	228.8	227.1	227.1	227.1	227.1	225.5	223.9	220.6	214.1	204.4	193.0
65°	196.2	196.2	196.2	196.2	194.6	194.6	194.6	189.8	186.5	176.8	165.4
67.5°	160.6	160.6	160.6	160.6	159.0	160.6	160.6	157.4	154.1	144.4	134.6
70°	128.1	126.5	124.9	126.5	124.9	124.9	126.5	123.2	121.6	113.5	103.8
72.5°	94.1	95.8	94.1	94.1	94.1	92.5	94.1	92.5	89.2	82.8	76.2
75°	66.5	68.1	68.1	66.5	66.5	66.5	64.9	64.9	61.6	56.8	53.5
77.5°	45.4	45.4	45.4	45.4	43.8	43.8	43.8	42.1	40.5	37.2	34.0
80°	29.2	29.2	29.2	29.2	27.6	27.6	27.6	26.0	26.0	22.8	19.5
82.5°	17.9	17.9	17.9	17.9	17.9	17.9	16.2	16.2	14.6	13.0	11.4
85°	9.8	9.8	9.8	9.8	9.8	9.8	9.8	8.1	8.1	6.5	4.9
87.5°	3.2	3.2	4.9	4.9	4.9	4.9	4.9	4.9	3.2	3.2	3.2
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°	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0
2.5°	1396.5	1398.1	1398.1	1398.1	1403.0	1404.6	1399.8	1394.9	1404.6	1403.0	1406.2
5°	1380.2	1385.1	1388.4	1390.0	1394.9	1398.1	1393.2	1391.6	1399.8	1401.4	1403.0
7.5°	1360.8	1368.9	1377.0	1380.2	1386.8	1390.0	1388.4	1388.4	1398.1	1401.4	1401.4
10°	1347.9	1359.1	1368.9	1377.0	1385.1	1390.0	1390.0	1391.6	1403.0	1406.2	1409.5
12.5°	1344.6	1359.1	1372.1	1383.5	1390.0	1398.1	1399.8	1404.6	1415.9	1420.8	1420.8
15°	1336.5	1355.9	1372.1	1386.8	1396.5	1406.2	1409.5	1419.1	1432.1	1435.4	1438.6
17.5°	1321.9	1341.4	1360.8	1378.6	1391.6	1399.8	1409.5	1419.1	1435.4	1440.2	1441.9
20°	1295.9	1318.6	1338.1	1355.9	1368.9	1380.2	1390.0	1401.4	1415.9	1422.4	1424.0
22.5°	1257.0	1279.8	1299.1	1318.6	1331.6	1341.4	1351.0	1364.0	1378.6	1385.1	1385.1
25°	1210.0	1231.0	1252.1	1266.8	1279.8	1291.0	1295.9	1310.5	1325.1	1333.2	1333.2
27.5°	1150.0	1169.4	1188.9	1205.1	1213.2	1222.9	1231.0	1244.0	1255.4	1261.9	1268.4
30°	1073.8	1093.1	1111.0	1127.2	1137.0	1146.8	1154.8	1164.5	1175.9	1184.0	1185.6
32.5°	991.0	1007.2	1025.0	1041.2	1051.0	1054.2	1062.4	1072.1	1081.9	1088.2	1089.9
35°	900.1	911.5	922.9	937.5	947.2	947.2	955.2	961.8	969.9	984.5	981.2
37.5°	793.1	809.4	817.5	822.4	828.8	835.2	836.9	845.0	854.8	858.0	862.9
40°	692.5	697.4	702.2	702.2	708.8	708.8	708.8	710.4	720.1	721.8	728.2
42.5°	592.0	592.0	587.1	582.2	583.9	582.2	574.1	574.1	579.0	585.5	585.5
45°	497.9	486.6	472.0	460.6	452.5	449.2	439.5	439.5	437.9	439.5	446.0
47.5°	418.5	399.0	374.6	352.0	343.9	337.4	322.8	316.2	313.0	314.6	317.9
50°	352.0	330.9	303.2	275.8	261.1	253.0	235.1	223.9	222.2	219.0	225.5
52.5°	303.2	277.4	248.1	215.8	201.1	188.1	168.6	159.0	152.5	152.5	154.1
55°	261.1	233.5	201.1	168.6	154.1	144.4	124.9	111.9	105.4	103.8	108.6
57.5°	225.5	199.5	167.0	134.6	120.0	108.6	89.2	77.9	73.0	69.8	71.4
60°	197.9	171.9	139.5	108.6	95.8	82.8	66.5	53.5	47.0	47.0	48.6
62.5°	171.9	147.6	118.4	89.2	77.9	66.5	48.6	37.2	32.5	30.9	32.5
65°	146.0	123.2	98.9	74.6	63.2	53.5	38.9	29.2	22.8	21.1	22.8
67.5°	118.4	100.5	79.5	60.0	50.2	42.1	29.2	21.1	16.2	14.6	16.2
70°	92.5	76.2	60.0	43.8	37.2	30.9	21.1	16.2	11.4	9.8	11.4
72.5°	66.5	55.1	42.1	30.9	26.0	21.1	14.6	11.4	8.1	6.5	8.1
75°	45.4	37.2	27.6	19.5	16.2	14.6	9.8	6.5	4.9	4.9	4.9
77.5°	29.2	22.8	17.9	13.0	9.8	8.1	4.9	3.2	3.2	3.2	3.2
80°	16.2	13.0	9.8	6.5	4.9	4.9	3.2	3.2	1.6	1.6	1.6
82.5°	9.8	6.5	4.9	3.2	3.2	1.6	1.6	1.6	1.6	1.6	1.6
85°	4.9	3.2	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
87.5°	1.6	1.6	1.6	1.6	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°	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0
2.5°	1399.8	1401.4	1396.5	1403.0	1398.1	1404.6	1404.6	1398.1	1399.8	1396.5	1403.0
5°	1396.5	1396.5	1393.2	1398.1	1391.6	1398.1	1396.5	1385.1	1388.4	1381.9	1388.4
7.5°	1396.5	1393.2	1388.4	1393.2	1385.1	1390.0	1383.5	1372.1	1368.9	1360.8	1360.8
10°	1401.4	1396.5	1390.0	1391.6	1383.5	1385.1	1375.4	1359.1	1354.2	1344.6	1341.4
12.5°	1412.8	1407.9	1398.1	1401.4	1390.0	1390.0	1377.0	1357.5	1347.9	1334.9	1331.6
15°	1428.9	1420.8	1409.5	1411.1	1399.8	1393.2	1377.0	1354.2	1341.4	1323.5	1318.6
17.5°	1432.1	1424.0	1409.5	1409.5	1394.9	1386.8	1367.2	1341.4	1325.1	1307.2	1297.5
20°	1414.4	1406.2	1390.0	1388.4	1375.4	1364.0	1343.0	1317.0	1300.8	1281.4	1273.2
22.5°	1377.0	1367.2	1352.6	1351.0	1338.1	1331.6	1308.9	1283.0	1266.8	1247.2	1240.8
25°	1321.9	1317.0	1302.4	1300.8	1289.4	1281.4	1261.9	1237.5	1222.9	1203.5	1197.0
27.5°	1257.0	1252.1	1237.5	1237.5	1224.5	1219.6	1201.9	1179.1	1167.8	1150.0	1141.9
30°	1179.1	1172.6	1164.5	1162.9	1151.6	1146.8	1130.5	1109.4	1098.0	1083.5	1080.2
32.5°	1086.6	1081.9	1077.0	1075.4	1064.0	1059.1	1047.8	1026.6	1017.0	1004.0	999.1
35°	979.6	976.4	971.5	969.9	965.0	960.1	948.9	932.6	927.8	918.0	913.1
37.5°	856.4	859.6	856.4	856.4	851.5	853.1	843.4	833.6	828.8	822.4	819.1
40°	723.4	729.9	734.8	734.8	733.1	739.6	738.0	729.9	728.2	725.0	723.4
42.5°	588.8	592.0	601.8	608.2	606.6	622.9	624.5	630.9	635.8	632.5	634.1
45°	447.6	457.4	470.4	476.9	485.0	506.0	517.4	530.4	541.8	548.2	546.6
47.5°	322.8	334.1	348.8	358.5	373.0	399.0	428.1	444.4	460.6	468.8	476.9
50°	233.5	244.9	262.8	277.4	287.1	322.8	353.6	374.6	392.5	403.9	412.0
52.5°	163.9	176.8	196.2	209.2	223.9	257.9	293.6	317.9	337.4	352.0	360.1
55°	113.5	128.1	146.0	159.0	175.1	210.9	244.9	270.9	292.0	304.9	314.6
57.5°	79.5	92.5	110.2	121.6	137.9	171.9	206.0	231.9	253.0	266.0	277.4
60°	53.5	66.5	84.4	95.8	108.6	142.8	173.5	201.1	220.6	233.5	244.9
62.5°	37.2	48.6	66.5	77.9	89.2	118.4	147.6	171.9	191.4	206.0	215.8
65°	29.2	38.9	53.5	63.2	74.6	98.9	123.2	144.4	163.9	178.4	184.9
67.5°	21.1	30.9	42.1	50.2	58.4	79.5	100.5	116.8	134.6	146.0	154.1
70°	14.6	21.1	30.9	37.2	43.8	60.0	76.2	90.9	103.8	111.9	118.4
72.5°	11.4	14.6	21.1	26.0	30.9	42.1	55.1	66.5	76.2	82.8	89.2
75°	6.5	9.8	14.6	17.9	21.1	29.2	37.2	45.4	51.9	56.8	60.0
77.5°	3.2	4.9	8.1	9.8	13.0	17.9	24.4	29.2	34.0	37.2	40.5
80°	3.2	3.2	4.9	4.9	6.5	9.8	13.0	16.2	19.5	22.8	24.4
82.5°	1.6	1.6	3.2	3.2	3.2	4.9	6.5	9.8	11.4	13.0	14.6
85°	1.6	1.6	1.6	1.6	1.6	3.2	3.2	4.9	6.5	8.1	8.1
87.5°	0.0	0.0	1.6	1.6	1.6	1.6	1.6	3.2	3.2	3.2	4.9
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: P252570

CATALOG NUMBER: LE_6B20D010 EC6B10208027 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0	1403.0
2.5°	1398.1	1401.4	1399.8	1403.0	1398.1	1396.5	1399.8	1394.9
5°	1380.2	1381.9	1380.2	1380.2	1377.0	1373.8	1377.0	1372.1
7.5°	1352.6	1352.6	1347.9	1347.9	1341.4	1338.1	1338.1	1336.5
10°	1330.0	1325.1	1320.2	1321.9	1312.1	1308.9	1307.2	1305.6
12.5°	1318.6	1315.4	1307.2	1307.2	1297.5	1294.2	1292.6	1291.0
15°	1305.6	1299.1	1292.6	1291.0	1283.0	1279.8	1278.1	1274.9
17.5°	1283.0	1278.1	1270.0	1270.0	1261.9	1260.2	1257.0	1255.4
20°	1258.6	1252.1	1245.6	1245.6	1235.9	1235.9	1231.0	1232.6
22.5°	1224.5	1219.6	1213.2	1213.2	1205.1	1203.5	1198.6	1197.0
25°	1184.0	1177.5	1172.6	1171.0	1164.5	1161.2	1159.6	1156.4
27.5°	1130.5	1125.6	1120.8	1117.5	1109.4	1107.8	1102.9	1104.5
30°	1064.0	1060.8	1059.1	1055.9	1046.1	1042.9	1042.9	1038.0
32.5°	991.0	986.1	982.9	978.0	969.9	968.2	963.4	965.0
35°	901.8	895.2	890.4	892.0	882.4	880.8	877.5	879.1
37.5°	809.4	802.9	796.4	794.8	786.6	786.6	781.8	781.8
40°	713.6	707.1	703.9	703.9	694.1	695.8	691.0	689.4
42.5°	627.6	621.2	619.6	618.0	613.1	611.5	606.6	608.2
45°	546.6	545.0	545.0	541.8	536.9	535.2	536.9	536.9
47.5°	475.2	476.9	475.2	475.2	472.0	475.2	472.0	473.6
50°	415.2	418.5	418.5	418.5	416.9	418.5	418.5	420.1
52.5°	364.9	369.8	368.1	369.8	368.1	371.4	369.8	371.4
55°	321.1	324.4	326.0	327.6	327.6	327.6	327.6	327.6
57.5°	280.6	285.5	287.1	288.8	288.8	292.0	288.8	288.8
60°	248.1	253.0	254.6	256.2	256.2	257.9	254.6	256.2
62.5°	219.0	223.9	223.9	225.5	225.5	225.5	222.2	223.9
65°	189.8	191.4	193.0	193.0	191.4	191.4	189.8	191.4
67.5°	157.4	159.0	157.4	157.4	155.8	155.8	152.5	154.1
70°	121.6	121.6	123.2	121.6	120.0	121.6	120.0	118.4
72.5°	90.9	90.9	90.9	89.2	89.2	87.6	89.2	89.2
75°	61.6	61.6	63.2	63.2	63.2	63.2	61.6	61.6
77.5°	40.5	40.5	40.5	40.5	42.1	40.5	40.5	40.5
80°	26.0	26.0	27.6	27.6	26.0	26.0	26.0	26.0
82.5°	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
85°	9.8	9.8	9.8	9.8	8.1	8.1	8.1	8.1
87.5°	4.9	4.9	4.9	4.9	4.9	4.9	3.2	3.2
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)