

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: io LED

Report Number: P252589

Luminaire Tested: **LD6B30D010 EU6B30509027 6LBDW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252589
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: io LED
Catalog Number: LD6B30D010 EU6B30509027 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: 2419.0 lumens
Efficiency: N/A
Efficacy: 86.4 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

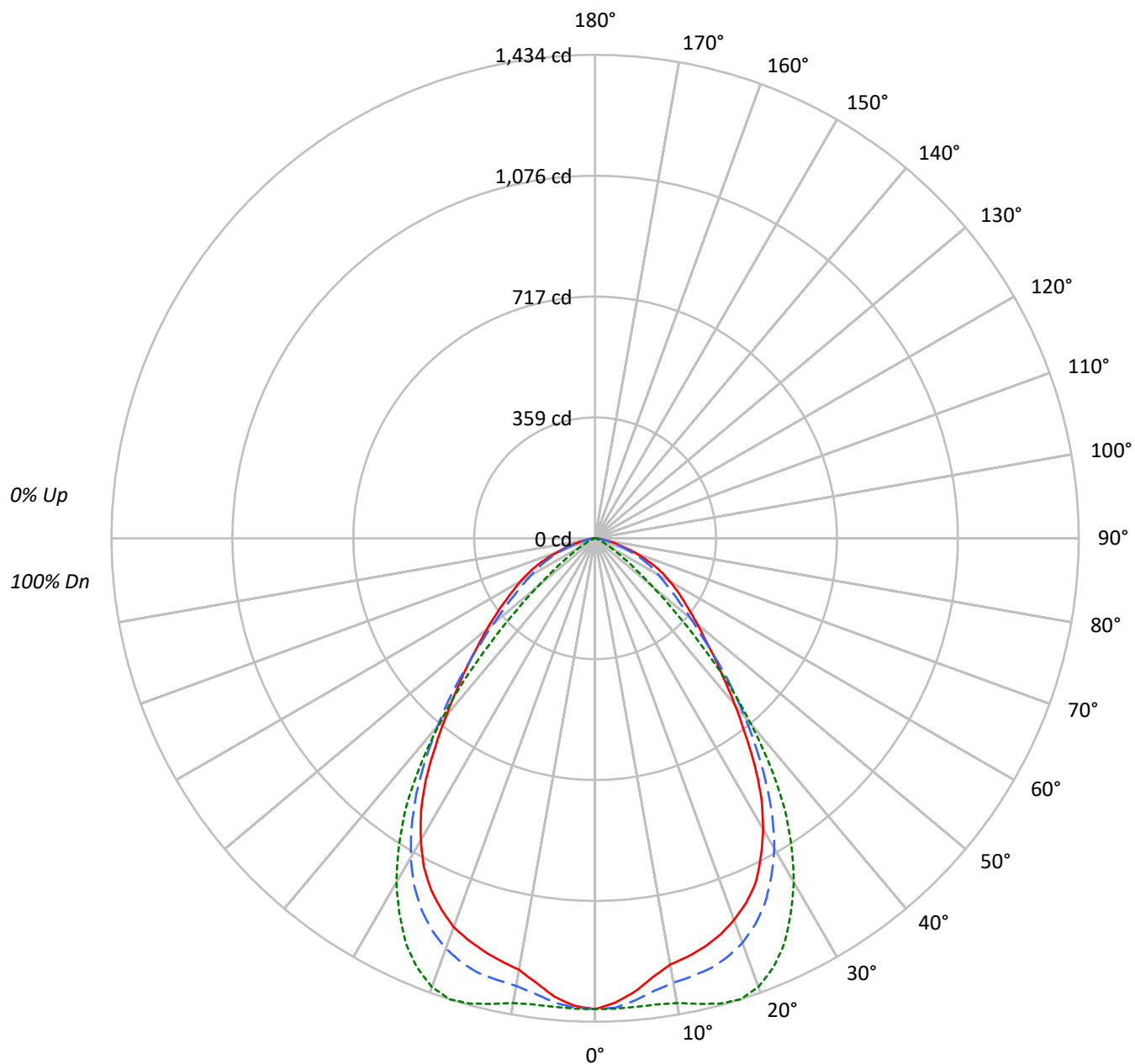
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	111	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	91115	91115	91115
5°	88398	91358	89453
10°	85035	92733	86101
15°	84732	96511	85718
20°	83626	98310	85195
25°	81127	95539	82869
30°	75047	88788	77842
35°	65842	78051	69697
40°	54864	61191	58441
45°	46178	40375	49306
50°	39990	22126	42446
55°	36182	11750	37092
60°	33286	6107	33286
65°	30164	3242	29408
70°	24340	1850	22490
75°	16687	1210	15477
80°	10933	601	9693
85°	7261	1198	6063



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.2	5.4
10°-20°	376.6	15.6
20°-30°	556.4	23.0
30°-40°	562.0	23.2
40°-50°	387.4	16.0
50°-60°	222.5	9.2
60°-70°	129.5	5.4
70°-80°	47.2	2.0
80°-90°	7.2	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°	1063.2	44.0
0°-40°	1625.2	67.2
0°-60°	2235.1	92.4
0°-90°	2419.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2419.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1397	1397	1397	1397	1397	
5°	1350	1376	1395	1382	1366	127
15°	1254	1321	1429	1335	1269	353
25°	1127	1193	1327	1217	1151	513
35°	827	883	980	924	875	513
45°	500	507	438	539	534	389
55°	318	279	103	291	326	286
65°	195	165	21	163	190	191
75°	66	53	5	52	61	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°	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6
2.5°	1378.8	1380.5	1382.1	1380.5	1382.1	1388.5	1383.7	1386.9	1386.9	1388.5	1393.4
5°	1349.8	1349.8	1353.0	1351.4	1356.2	1362.7	1357.9	1362.7	1364.3	1367.5	1375.6
7.5°	1312.7	1312.7	1314.3	1314.3	1320.7	1327.2	1324.0	1330.4	1336.9	1343.3	1353.0
10°	1283.6	1286.8	1286.8	1288.4	1294.9	1303.0	1301.3	1309.4	1315.9	1325.6	1338.5
12.5°	1270.7	1272.3	1272.3	1275.5	1282.0	1290.0	1288.4	1296.5	1306.2	1317.5	1330.4
15°	1254.5	1257.8	1256.1	1259.4	1265.8	1273.9	1272.3	1280.4	1291.7	1303.0	1320.7
17.5°	1233.5	1235.2	1236.8	1236.8	1243.2	1249.7	1249.7	1257.8	1270.7	1283.6	1303.0
20°	1204.5	1207.7	1207.7	1209.3	1214.2	1223.8	1222.2	1230.3	1243.2	1256.1	1277.1
22.5°	1170.6	1172.2	1172.2	1173.8	1181.9	1186.7	1188.3	1194.8	1206.1	1220.6	1240.0
25°	1127.0	1128.6	1127.0	1131.8	1135.0	1144.7	1141.5	1149.6	1162.5	1173.8	1193.2
27.5°	1064.0	1067.2	1067.2	1068.9	1076.9	1085.0	1085.0	1093.1	1104.4	1112.4	1131.8
30°	996.2	1001.0	996.2	1004.3	1007.5	1014.0	1018.8	1023.6	1033.3	1044.6	1062.4
32.5°	918.7	917.1	918.7	921.9	931.6	936.5	939.7	944.5	954.2	963.9	978.4
35°	826.7	829.9	831.5	838.0	838.0	846.0	847.7	850.9	865.4	871.9	883.2
37.5°	729.8	733.0	734.6	737.9	744.3	747.5	752.4	757.2	766.9	778.2	784.7
40°	644.2	644.2	645.8	649.1	653.9	655.5	660.4	666.8	673.3	683.0	689.4
42.5°	563.5	565.1	563.5	566.7	571.6	578.0	576.4	584.5	586.1	592.5	597.4
45°	500.5	500.5	497.3	500.5	500.5	507.0	505.4	508.6	507.0	510.2	507.0
47.5°	440.8	442.4	440.8	442.4	442.4	442.4	444.0	440.8	442.4	437.6	427.9
50°	394.0	395.6	392.3	394.0	392.3	390.7	392.3	387.5	385.9	379.4	369.7
52.5°	353.6	352.0	350.4	350.4	350.4	348.7	347.1	342.3	337.4	331.0	319.7
55°	318.1	316.5	314.8	314.8	311.6	310.0	310.0	305.2	300.3	292.2	279.3
57.5°	285.8	284.2	282.6	282.6	280.9	277.7	277.7	272.9	266.4	256.7	245.4
60°	255.1	255.1	255.1	253.5	253.5	250.3	250.3	245.4	239.0	229.3	216.4
62.5°	227.7	226.0	226.0	226.0	226.0	224.4	222.8	219.6	213.1	203.4	192.1
65°	195.4	195.4	195.4	195.4	193.7	193.7	193.7	188.9	185.7	176.0	164.7
67.5°	159.8	159.8	159.8	159.8	158.2	159.8	159.8	156.6	153.4	143.7	134.0
70°	127.6	125.9	124.3	125.9	124.3	124.3	125.9	122.7	121.1	113.0	103.3
72.5°	93.6	95.3	93.6	93.6	93.6	92.0	93.6	92.0	88.8	82.3	75.9
75°	66.2	67.8	67.8	66.2	66.2	66.2	64.6	64.6	61.4	56.5	53.3
77.5°	45.2	45.2	45.2	45.2	43.6	43.6	43.6	42.0	40.4	37.1	33.9
80°	29.1	29.1	29.1	29.1	27.4	27.4	27.4	25.8	25.8	22.6	19.4
82.5°	17.8	17.8	17.8	17.8	17.8	17.8	16.1	16.1	14.5	12.9	11.3
85°	9.7	9.7	9.7	9.7	9.7	9.7	9.7	8.1	8.1	6.5	4.8
87.5°	3.2	3.2	4.8	4.8	4.8	4.8	4.8	4.8	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°	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6
2.5°	1390.2	1391.8	1391.8	1391.8	1396.6	1398.2	1393.4	1388.5	1398.2	1396.6	1399.8
5°	1374.0	1378.8	1382.1	1383.7	1388.5	1391.8	1386.9	1385.3	1393.4	1395.0	1396.6
7.5°	1354.6	1362.7	1370.8	1374.0	1380.5	1383.7	1382.1	1382.1	1391.8	1395.0	1395.0
10°	1341.7	1353.0	1362.7	1370.8	1378.8	1383.7	1383.7	1385.3	1396.6	1399.8	1403.1
12.5°	1338.5	1353.0	1365.9	1377.2	1383.7	1391.8	1393.4	1398.2	1409.5	1414.4	1414.4
15°	1330.4	1349.8	1365.9	1380.5	1390.2	1399.8	1403.1	1412.8	1425.7	1428.9	1432.1
17.5°	1315.9	1335.3	1354.6	1372.4	1385.3	1393.4	1403.1	1412.8	1428.9	1433.7	1435.4
20°	1290.0	1312.7	1332.0	1349.8	1362.7	1374.0	1383.7	1395.0	1409.5	1416.0	1417.6
22.5°	1251.3	1273.9	1293.3	1312.7	1325.6	1335.3	1344.9	1357.9	1372.4	1378.8	1378.8
25°	1204.5	1225.5	1246.5	1261.0	1273.9	1285.2	1290.0	1304.6	1319.1	1327.2	1327.2
27.5°	1144.7	1164.1	1183.5	1199.6	1207.7	1217.4	1225.5	1238.4	1249.7	1256.1	1262.6
30°	1068.9	1088.2	1106.0	1122.1	1131.8	1141.5	1149.6	1159.3	1170.6	1178.6	1180.3
32.5°	986.5	1002.7	1020.4	1036.6	1046.2	1049.5	1057.5	1067.2	1076.9	1083.4	1085.0
35°	896.1	907.4	918.7	933.2	942.9	942.9	951.0	957.4	965.5	980.0	976.8
37.5°	789.5	805.7	813.7	818.6	825.0	831.5	833.1	841.2	850.9	854.1	859.0
40°	689.4	694.3	699.1	699.1	705.6	705.6	705.6	707.2	716.9	718.5	724.9
42.5°	589.3	589.3	584.5	579.6	581.2	579.6	571.6	571.6	576.4	582.9	582.9
45°	495.7	484.4	469.8	458.5	450.5	447.2	437.6	437.6	435.9	437.6	444.0
47.5°	416.6	397.2	373.0	350.4	342.3	335.8	321.3	314.8	311.6	313.2	316.5
50°	350.4	329.4	301.9	274.5	259.9	251.9	234.1	222.8	221.2	218.0	224.4
52.5°	301.9	276.1	247.0	214.7	200.2	187.3	167.9	158.2	151.8	151.8	153.4
55°	259.9	232.5	200.2	167.9	153.4	143.7	124.3	111.4	104.9	103.3	108.2
57.5°	224.4	198.6	166.3	134.0	119.5	108.2	88.8	77.5	72.7	69.4	71.0
60°	197.0	171.1	138.9	108.2	95.3	82.3	66.2	53.3	46.8	46.8	48.4
62.5°	171.1	146.9	117.9	88.8	77.5	66.2	48.4	37.1	32.3	30.7	32.3
65°	145.3	122.7	98.5	74.3	63.0	53.3	38.7	29.1	22.6	21.0	22.6
67.5°	117.9	100.1	79.1	59.7	50.1	42.0	29.1	21.0	16.1	14.5	16.1
70°	92.0	75.9	59.7	43.6	37.1	30.7	21.0	16.1	11.3	9.7	11.3
72.5°	66.2	54.9	42.0	30.7	25.8	21.0	14.5	11.3	8.1	6.5	8.1
75°	45.2	37.1	27.4	19.4	16.1	14.5	9.7	6.5	4.8	4.8	4.8
77.5°	29.1	22.6	17.8	12.9	9.7	8.1	4.8	3.2	3.2	3.2	3.2
80°	16.1	12.9	9.7	6.5	4.8	4.8	3.2	3.2	1.6	1.6	1.6
82.5°	9.7	6.5	4.8	3.2	3.2	1.6	1.6	1.6	1.6	1.6	1.6
85°	4.8	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°	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6
2.5°	1393.4	1395.0	1390.2	1396.6	1391.8	1398.2	1398.2	1391.8	1393.4	1390.2	1396.6
5°	1390.2	1390.2	1386.9	1391.8	1385.3	1391.8	1390.2	1378.8	1382.1	1375.6	1382.1
7.5°	1390.2	1386.9	1382.1	1386.9	1378.8	1383.7	1377.2	1365.9	1362.7	1354.6	1354.6
10°	1395.0	1390.2	1383.7	1385.3	1377.2	1378.8	1369.2	1353.0	1348.2	1338.5	1335.3
12.5°	1406.3	1401.5	1391.8	1395.0	1383.7	1383.7	1370.8	1351.4	1341.7	1328.8	1325.6
15°	1422.4	1414.4	1403.1	1404.7	1393.4	1386.9	1370.8	1348.2	1335.3	1317.5	1312.7
17.5°	1425.7	1417.6	1403.1	1403.1	1388.5	1380.5	1361.1	1335.3	1319.1	1301.3	1291.7
20°	1407.9	1399.8	1383.7	1382.1	1369.2	1357.9	1336.9	1311.0	1294.9	1275.5	1267.4
22.5°	1370.8	1361.1	1346.6	1344.9	1332.0	1325.6	1303.0	1277.1	1261.0	1241.6	1235.2
25°	1315.9	1311.0	1296.5	1294.9	1283.6	1275.5	1256.1	1231.9	1217.4	1198.0	1191.6
27.5°	1251.3	1246.5	1231.9	1231.9	1219.0	1214.2	1196.4	1173.8	1162.5	1144.7	1136.7
30°	1173.8	1167.3	1159.3	1157.7	1146.3	1141.5	1125.4	1104.4	1093.1	1078.5	1075.3
32.5°	1081.8	1076.9	1072.1	1070.5	1059.2	1054.3	1043.0	1022.0	1012.3	999.4	994.6
35°	975.2	972.0	967.1	965.5	960.7	955.8	944.5	928.4	923.5	913.9	909.0
37.5°	852.5	855.7	852.5	852.5	847.7	849.3	839.6	829.9	825.0	818.6	815.4
40°	720.1	726.6	731.4	731.4	729.8	736.2	734.6	726.6	724.9	721.7	720.1
42.5°	586.1	589.3	599.0	605.5	603.9	620.0	621.6	628.1	632.9	629.7	631.3
45°	445.6	455.3	468.2	474.7	482.8	503.7	515.1	528.0	539.3	545.7	544.1
47.5°	321.3	332.6	347.1	356.8	371.4	397.2	426.2	442.4	458.5	466.6	474.7
50°	232.5	243.8	261.6	276.1	285.8	321.3	352.0	373.0	390.7	402.0	410.1
52.5°	163.1	176.0	195.4	208.3	222.8	256.7	292.2	316.5	335.8	350.4	358.4
55°	113.0	127.6	145.3	158.2	174.4	209.9	243.8	269.6	290.6	303.5	313.2
57.5°	79.1	92.0	109.8	121.1	137.2	171.1	205.1	230.9	251.9	264.8	276.1
60°	53.3	66.2	84.0	95.3	108.2	142.1	172.8	200.2	219.6	232.5	243.8
62.5°	37.1	48.4	66.2	77.5	88.8	117.9	146.9	171.1	190.5	205.1	214.7
65°	29.1	38.7	53.3	63.0	74.3	98.5	122.7	143.7	163.1	177.6	184.1
67.5°	21.0	30.7	42.0	50.1	58.1	79.1	100.1	116.2	134.0	145.3	153.4
70°	14.5	21.0	30.7	37.1	43.6	59.7	75.9	90.4	103.3	111.4	117.9
72.5°	11.3	14.5	21.0	25.8	30.7	42.0	54.9	66.2	75.9	82.3	88.8
75°	6.5	9.7	14.5	17.8	21.0	29.1	37.1	45.2	51.7	56.5	59.7
77.5°	3.2	4.8	8.1	9.7	12.9	17.8	24.2	29.1	33.9	37.1	40.4
80°	3.2	3.2	4.8	4.8	6.5	9.7	12.9	16.1	19.4	22.6	24.2
82.5°	1.6	1.6	3.2	3.2	3.2	4.8	6.5	9.7	11.3	12.9	14.5
85°	1.6	1.6	1.6	1.6	1.6	3.2	3.2	4.8	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	4.8
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: P252589

CATALOG NUMBER: LD6B30D010 EU6B30509027 6LBDW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6	1396.6
2.5°	1391.8	1395.0	1393.4	1396.6	1391.8	1390.2	1393.4	1388.5
5°	1374.0	1375.6	1374.0	1374.0	1370.8	1367.5	1370.8	1365.9
7.5°	1346.6	1346.6	1341.7	1341.7	1335.3	1332.0	1332.0	1330.4
10°	1324.0	1319.1	1314.3	1315.9	1306.2	1303.0	1301.3	1299.7
12.5°	1312.7	1309.4	1301.3	1301.3	1291.7	1288.4	1286.8	1285.2
15°	1299.7	1293.3	1286.8	1285.2	1277.1	1273.9	1272.3	1269.1
17.5°	1277.1	1272.3	1264.2	1264.2	1256.1	1254.5	1251.3	1249.7
20°	1252.9	1246.5	1240.0	1240.0	1230.3	1230.3	1225.5	1227.1
22.5°	1219.0	1214.2	1207.7	1207.7	1199.6	1198.0	1193.2	1191.6
25°	1178.6	1172.2	1167.3	1165.7	1159.3	1156.0	1154.4	1151.2
27.5°	1125.4	1120.5	1115.7	1112.4	1104.4	1102.8	1097.9	1099.5
30°	1059.2	1055.9	1054.3	1051.1	1041.4	1038.2	1038.2	1033.3
32.5°	986.5	981.7	978.4	973.6	965.5	963.9	959.1	960.7
35°	897.7	891.2	886.4	888.0	878.3	876.7	873.5	875.1
37.5°	805.7	799.2	792.8	791.1	783.1	783.1	778.2	778.2
40°	710.4	704.0	700.7	700.7	691.0	692.7	687.8	686.2
42.5°	624.8	618.4	616.8	615.2	610.3	608.7	603.9	605.5
45°	544.1	542.5	542.5	539.3	534.4	532.8	534.4	534.4
47.5°	473.1	474.7	473.1	473.1	469.8	473.1	469.8	471.5
50°	413.3	416.6	416.6	416.6	414.9	416.6	416.6	418.2
52.5°	363.3	368.1	366.5	368.1	366.5	369.7	368.1	369.7
55°	319.7	322.9	324.5	326.1	326.1	326.1	326.1	326.1
57.5°	279.3	284.2	285.8	287.4	287.4	290.6	287.4	287.4
60°	247.0	251.9	253.5	255.1	255.1	256.7	253.5	255.1
62.5°	218.0	222.8	222.8	224.4	224.4	224.4	221.2	222.8
65°	188.9	190.5	192.1	192.1	190.5	190.5	188.9	190.5
67.5°	156.6	158.2	156.6	156.6	155.0	155.0	151.8	153.4
70°	121.1	121.1	122.7	121.1	119.5	121.1	119.5	117.9
72.5°	90.4	90.4	90.4	88.8	88.8	87.2	88.8	88.8
75°	61.4	61.4	63.0	63.0	63.0	63.0	61.4	61.4
77.5°	40.4	40.4	40.4	40.4	42.0	40.4	40.4	40.4
80°	25.8	25.8	27.4	27.4	25.8	25.8	25.8	25.8
82.5°	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
85°	9.7	9.7	9.7	9.7	8.1	8.1	8.1	8.1
87.5°	4.8	4.8	4.8	4.8	4.8	4.8	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)