

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: P252690

Luminaire Tested: **LD6B30D010 EU6B30508040 6LBDW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252690  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-9)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B30D010 EU6B30508040 6LBDW1H  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2858.0 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.25 / 1.21  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

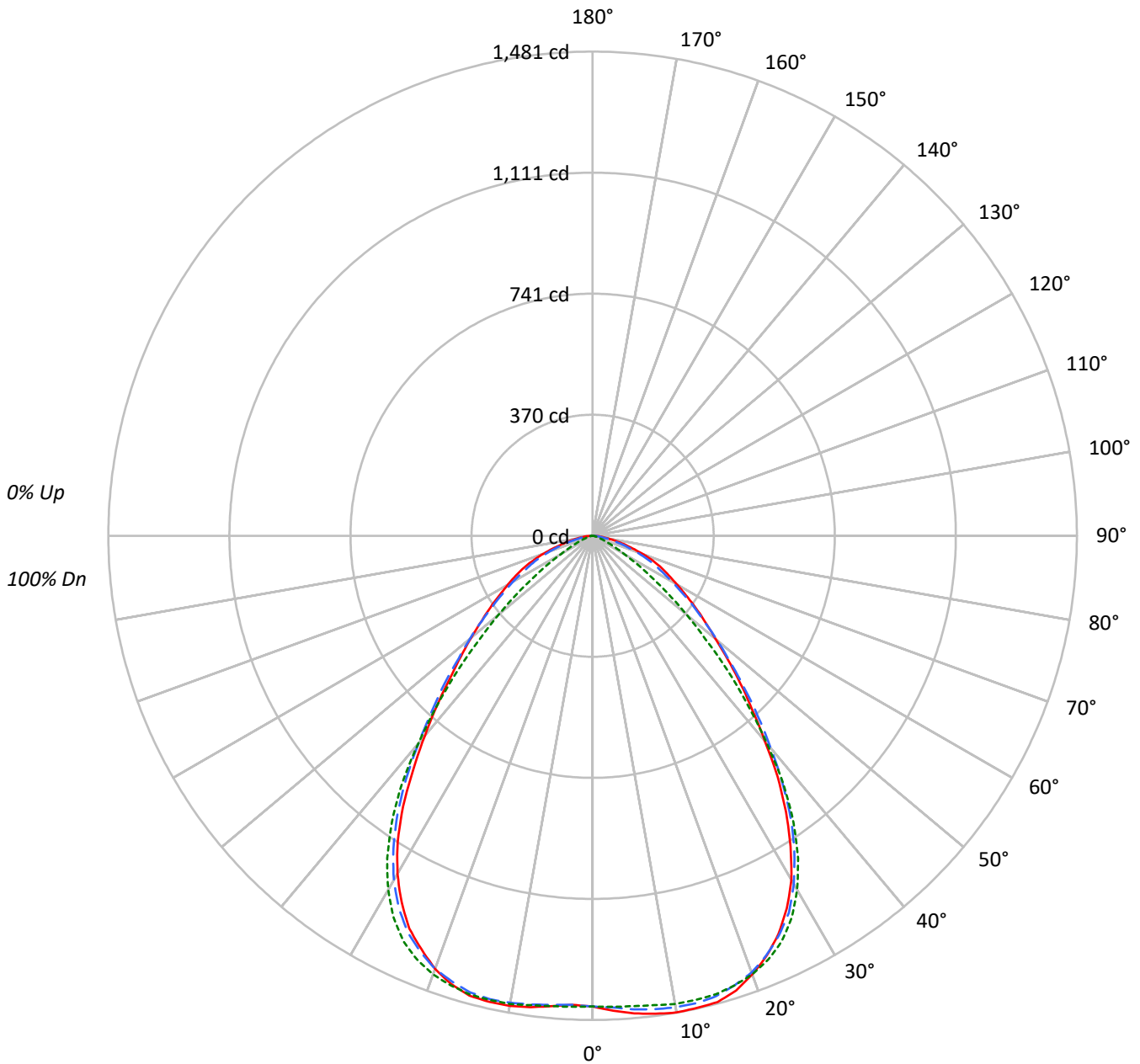
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252690

CATALOG NUMBER: LD6B30D010 EU6B30508040 6LBDW1H

### 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	107	104	101	109	105	102	99	101	98	96	97	95	93	94	92	91	89																			
2	103	96	91	86	101	95	89	85	91	87	83	88	84	81	85	82	80	78																			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68																			
4	89	78	71	65	87	77	70	65	75	69	64	73	67	63	71	66	62	61																			
5	82	71	64	58	80	70	63	58	68	62	57	66	61	56	65	60	56	54																			
6	77	65	57	52	75	64	57	51	63	56	51	61	55	51	59	54	50	48																			
7	72	60	52	47	70	59	52	46	58	51	46	56	50	46	55	50	45	44																			
8	67	55	47	42	66	54	47	42	53	47	42	52	46	42	51	45	41	40																			
9	63	51	43	38	62	50	43	38	49	43	38	48	42	38	47	42	38	36																			
10	59	47	40	35	58	47	40	35	46	39	35	45	39	35	44	39	35	33																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	93940	93940	93940
5°	96034	94567	94567
10°	98092	96336	96741
15°	99733	98078	98355
20°	99122	99122	97851
25°	96762	98519	95445
30°	91598	94204	89910
35°	82081	85323	80456
40°	69725	70594	67996
45°	59003	53928	56936
50°	49814	38031	49195
55°	43780	24557	43325
60°	38805	14614	39066
65°	35845	8799	35845
70°	31073	5055	30310
75°	24652	3075	23090
80°	18372	2292	17583
85°	16768	1497	15270



TEST NUMBER: P252690

CATALOG NUMBER: LD6B30D010 EU6B30508040 6LBDW1H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	138.6	4.9
10°-20°	410.3	14.4
20°-30°	617.1	21.6
30°-40°	648.8	22.7
40°-50°	484.7	17.0
50°-60°	301.7	10.6
60°-70°	171.6	6.0
70°-80°	70.7	2.5
80°-90°	14.6	0.5
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°	1166.0	40.8
0°-40°	1814.7	63.5
0°-60°	2601.1	91.0
0°-90°	2858.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2858.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1440	1440	1440	1440	1440	
5°	1466	1454	1444	1440	1444	140
15°	1477	1458	1452	1446	1456	415
25°	1344	1348	1369	1338	1326	615
35°	1031	1057	1071	1041	1010	640
45°	640	654	584	642	617	496
55°	385	377	216	371	381	346
65°	232	208	57	208	232	229
75°	98	77	12	75	92	106
85°	22	14	2	12	20	25
90°	0	0	0	0	0	



TEST NUMBER: P252690

CATALOG NUMBER: LD6B30D010 EU6B30508040 6LBDW1H

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9
2.5°	1454.2	1452.1	1454.2	1450.1	1448.1	1448.1	1450.1	1446.0	1444.0	1446.0	1444.0
5°	1466.4	1462.3	1464.4	1462.3	1458.3	1458.3	1460.3	1454.2	1454.2	1456.2	1454.2
7.5°	1474.5	1474.5	1474.5	1470.5	1468.4	1466.4	1470.5	1464.4	1462.3	1462.3	1460.3
10°	1480.7	1478.6	1480.7	1476.6	1472.5	1470.5	1474.5	1470.5	1466.4	1470.5	1464.4
12.5°	1478.6	1478.6	1478.6	1476.6	1472.5	1470.5	1474.5	1468.4	1466.4	1468.4	1464.4
15°	1476.6	1470.5	1472.5	1470.5	1464.4	1464.4	1466.4	1460.3	1456.2	1462.3	1458.3
17.5°	1458.3	1454.2	1456.2	1452.1	1448.1	1446.0	1448.1	1446.0	1442.0	1446.0	1442.0
20°	1427.7	1427.7	1429.7	1425.7	1421.6	1419.6	1423.6	1419.6	1415.5	1421.6	1421.6
22.5°	1391.0	1391.0	1391.0	1389.0	1387.0	1387.0	1387.0	1384.9	1382.9	1387.0	1389.0
25°	1344.2	1342.2	1344.2	1346.2	1344.2	1342.2	1344.2	1344.2	1340.1	1348.3	1348.3
27.5°	1285.1	1285.1	1289.2	1287.2	1287.2	1285.1	1289.2	1289.2	1287.2	1293.3	1299.4
30°	1215.9	1211.8	1215.9	1215.9	1217.9	1217.9	1220.0	1220.0	1220.0	1226.1	1230.1
32.5°	1126.3	1128.3	1134.4	1132.4	1130.3	1136.5	1136.5	1140.5	1142.6	1146.6	1148.7
35°	1030.6	1032.6	1032.6	1034.6	1038.7	1034.6	1044.8	1042.8	1044.8	1053.0	1057.0
37.5°	928.7	922.6	932.8	928.7	930.8	930.8	934.8	936.9	943.0	953.2	953.2
40°	818.7	820.8	824.8	826.9	828.9	828.9	828.9	835.0	837.1	849.3	847.3
42.5°	723.0	723.0	727.1	729.1	729.1	729.1	729.1	735.2	739.3	743.4	747.5
45°	639.5	633.4	637.5	637.5	641.5	639.5	643.6	647.7	649.7	655.8	653.8
47.5°	560.1	558.0	560.1	562.1	560.1	562.1	564.2	566.2	568.2	568.2	568.2
50°	490.8	490.8	492.9	494.9	494.9	494.9	494.9	496.9	496.9	501.0	496.9
52.5°	433.8	435.8	435.8	433.8	435.8	435.8	437.9	437.9	435.8	435.8	429.7
55°	384.9	382.9	384.9	382.9	384.9	384.9	382.9	382.9	380.9	378.8	376.8
57.5°	338.1	338.1	338.1	338.1	336.0	338.1	336.0	334.0	334.0	329.9	323.8
60°	297.4	297.4	297.4	297.4	297.4	295.3	297.4	295.3	291.2	287.2	279.0
62.5°	262.7	260.7	262.7	260.7	260.7	258.7	258.7	256.6	252.5	248.5	240.3
65°	232.2	234.2	232.2	232.2	230.1	228.1	228.1	226.1	220.0	215.9	207.7
67.5°	199.6	197.6	197.6	197.6	195.5	195.5	195.5	191.4	187.4	181.3	173.1
70°	162.9	162.9	162.9	160.9	160.9	158.9	158.9	156.8	152.7	148.7	138.5
72.5°	128.3	128.3	128.3	124.2	126.3	124.2	124.2	120.2	118.1	112.0	105.9
75°	97.8	97.8	95.7	95.7	93.7	91.6	91.6	89.6	87.6	83.5	77.4
77.5°	71.3	71.3	71.3	69.2	67.2	65.2	65.2	63.1	61.1	59.1	55.0
80°	48.9	48.9	48.9	48.9	46.8	44.8	44.8	42.8	42.8	40.7	36.7
82.5°	32.6	32.6	32.6	32.6	30.5	30.5	30.5	28.5	26.5	26.5	22.4
85°	22.4	22.4	20.4	20.4	20.4	20.4	18.3	18.3	16.3	14.3	14.3
87.5°	12.2	12.2	12.2	12.2	10.2	10.2	10.2	10.2	8.1	8.1	6.1
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: P252690

CATALOG NUMBER: LD6B30D010 EU6B30508040 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9
2.5°	1450.1	1450.1	1448.1	1442.0	1444.0	1442.0	1444.0	1442.0	1435.8	1442.0	1435.8
5°	1458.3	1460.3	1456.2	1448.1	1450.1	1448.1	1448.1	1446.0	1439.9	1444.0	1439.9
7.5°	1466.4	1464.4	1462.3	1454.2	1456.2	1454.2	1454.2	1450.1	1444.0	1448.1	1442.0
10°	1470.5	1470.5	1466.4	1458.3	1458.3	1456.2	1458.3	1456.2	1448.1	1454.2	1450.1
12.5°	1470.5	1468.4	1468.4	1458.3	1460.3	1458.3	1460.3	1456.2	1450.1	1454.2	1452.1
15°	1464.4	1464.4	1462.3	1452.1	1454.2	1454.2	1456.2	1452.1	1446.0	1452.1	1448.1
17.5°	1452.1	1452.1	1450.1	1442.0	1446.0	1446.0	1448.1	1444.0	1437.9	1442.0	1442.0
20°	1427.7	1429.7	1429.7	1423.6	1427.7	1427.7	1429.7	1427.7	1425.7	1427.7	1423.6
22.5°	1399.2	1403.3	1403.3	1397.2	1401.2	1401.2	1407.3	1405.3	1401.2	1403.3	1401.2
25°	1356.4	1360.5	1364.6	1360.5	1364.6	1364.6	1370.7	1368.6	1364.6	1368.6	1362.5
27.5°	1307.5	1309.6	1313.6	1309.6	1315.7	1313.6	1319.8	1317.7	1311.6	1317.7	1315.7
30°	1238.3	1246.4	1252.5	1246.4	1252.5	1252.5	1256.6	1254.6	1252.5	1250.5	1250.5
32.5°	1160.9	1169.0	1169.0	1167.0	1171.1	1171.1	1173.1	1169.0	1167.0	1169.0	1171.1
35°	1065.2	1069.2	1073.3	1071.3	1073.3	1075.4	1073.3	1075.4	1069.2	1071.3	1071.3
37.5°	961.3	965.4	965.4	959.3	963.3	963.3	959.3	959.3	955.2	959.3	951.1
40°	851.3	847.3	849.3	845.2	841.1	841.1	839.1	831.0	826.9	828.9	831.0
42.5°	743.4	743.4	737.3	727.1	716.9	716.9	710.8	706.7	698.6	702.6	700.6
45°	651.7	641.5	633.4	617.1	611.0	606.9	596.7	586.6	582.5	584.5	582.5
47.5°	564.2	556.0	535.6	513.2	507.1	501.0	488.8	476.6	472.5	468.4	468.4
50°	490.8	476.6	454.2	429.7	419.6	409.4	393.1	380.9	372.7	374.7	374.7
52.5°	423.6	407.3	380.9	350.3	338.1	325.9	311.6	297.4	291.2	289.2	289.2
55°	364.6	346.2	319.8	285.1	274.9	260.7	242.4	226.1	217.9	215.9	220.0
57.5°	311.6	295.3	264.8	230.1	217.9	203.7	185.3	171.1	160.9	158.9	160.9
60°	268.8	246.4	220.0	187.4	171.1	158.9	138.5	126.3	116.1	112.0	114.1
62.5°	226.1	205.7	179.2	146.6	134.4	122.2	103.9	89.6	81.5	79.4	81.5
65°	193.5	173.1	148.7	120.2	107.9	95.7	79.4	65.2	59.1	57.0	59.1
67.5°	160.9	142.6	122.2	95.7	85.5	75.4	59.1	48.9	40.7	38.7	40.7
70°	130.3	114.1	93.7	75.4	65.2	57.0	44.8	34.6	28.5	26.5	28.5
72.5°	97.8	85.5	71.3	55.0	48.9	42.8	32.6	24.4	20.4	18.3	20.4
75°	71.3	61.1	50.9	38.7	34.6	30.5	22.4	16.3	14.3	12.2	14.3
77.5°	48.9	42.8	34.6	26.5	22.4	20.4	14.3	12.2	10.2	8.1	8.1
80°	32.6	28.5	22.4	18.3	16.3	14.3	10.2	8.1	6.1	6.1	6.1
82.5°	20.4	16.3	14.3	10.2	8.1	8.1	6.1	4.1	4.1	4.1	4.1
85°	12.2	10.2	8.1	6.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0
87.5°	6.1	4.1	4.1	2.0	2.0	2.0	2.0	2.0	0.0	0.0	2.0
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: P252690

CATALOG NUMBER: LD6B30D010 EU6B30508040 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9
2.5°	1439.9	1435.8	1435.8	1437.9	1439.9	1442.0	1437.9	1435.8	1435.8	1442.0	1437.9
5°	1439.9	1437.9	1437.9	1437.9	1442.0	1444.0	1439.9	1437.9	1439.9	1446.0	1444.0
7.5°	1446.0	1442.0	1444.0	1444.0	1446.0	1450.1	1446.0	1444.0	1446.0	1452.1	1448.1
10°	1450.1	1446.0	1448.1	1446.0	1452.1	1454.2	1450.1	1448.1	1450.1	1458.3	1456.2
12.5°	1452.1	1450.1	1450.1	1448.1	1454.2	1456.2	1452.1	1450.1	1452.1	1458.3	1456.2
15°	1448.1	1446.0	1446.0	1446.0	1450.1	1454.2	1448.1	1446.0	1446.0	1452.1	1450.1
17.5°	1439.9	1435.8	1435.8	1435.8	1437.9	1439.9	1433.8	1431.8	1429.7	1435.8	1433.8
20°	1425.7	1421.6	1417.5	1417.5	1419.6	1419.6	1415.5	1409.4	1409.4	1411.4	1407.3
22.5°	1399.2	1397.2	1393.1	1391.0	1395.1	1393.1	1384.9	1378.8	1376.8	1378.8	1374.7
25°	1362.5	1358.5	1356.4	1354.4	1356.4	1354.4	1346.2	1338.1	1338.1	1338.1	1332.0
27.5°	1311.6	1307.5	1305.5	1305.5	1307.5	1303.5	1295.3	1287.2	1283.1	1283.1	1277.0
30°	1246.4	1246.4	1244.4	1242.4	1240.3	1240.3	1228.1	1220.0	1215.9	1217.9	1213.9
32.5°	1167.0	1165.0	1162.9	1156.8	1158.9	1156.8	1146.6	1140.5	1134.4	1130.3	1128.3
35°	1065.2	1065.2	1063.1	1063.1	1063.1	1061.1	1050.9	1044.8	1040.7	1038.7	1032.6
37.5°	953.2	951.1	949.1	949.1	949.1	949.1	943.0	936.9	936.9	934.8	930.8
40°	826.9	828.9	831.0	828.9	835.0	841.1	833.0	828.9	826.9	833.0	824.8
42.5°	704.7	702.6	712.8	714.9	714.9	725.1	727.1	729.1	727.1	731.2	731.2
45°	586.6	584.5	594.7	598.8	609.0	621.2	627.3	637.5	641.5	645.6	641.5
47.5°	474.5	482.7	490.8	501.0	509.2	529.5	541.8	551.9	556.0	562.1	562.1
50°	380.9	389.0	403.3	411.4	421.6	446.0	466.4	480.7	488.8	494.9	492.9
52.5°	293.3	307.5	325.9	334.0	348.3	376.8	399.2	415.5	425.7	431.8	433.8
55°	226.1	238.3	256.6	268.8	283.1	313.6	342.2	360.5	370.7	378.8	382.9
57.5°	167.0	181.3	201.6	211.8	228.1	262.7	287.2	309.6	321.8	332.0	334.0
60°	122.2	136.5	154.8	167.0	183.3	217.9	246.4	266.8	281.1	289.2	293.3
62.5°	87.6	101.8	120.2	132.4	146.6	177.2	205.7	226.1	240.3	250.5	256.6
65°	63.1	77.4	95.7	105.9	118.1	146.6	173.1	193.5	207.7	220.0	224.0
67.5°	46.8	57.0	73.3	83.5	95.7	118.1	140.5	158.9	173.1	183.3	187.4
70°	34.6	42.8	57.0	63.1	71.3	91.6	110.0	126.3	138.5	146.6	150.7
72.5°	24.4	30.5	40.7	46.8	53.0	69.2	83.5	95.7	103.9	112.0	116.1
75°	16.3	20.4	28.5	32.6	36.7	48.9	59.1	69.2	75.4	81.5	83.5
77.5°	10.2	14.3	20.4	22.4	26.5	32.6	40.7	46.8	50.9	55.0	59.1
80°	6.1	8.1	12.2	14.3	16.3	22.4	26.5	30.5	34.6	38.7	40.7
82.5°	4.1	6.1	8.1	8.1	10.2	12.2	16.3	20.4	22.4	24.4	26.5
85°	2.0	2.0	4.1	4.1	6.1	6.1	8.1	10.2	12.2	14.3	16.3
87.5°	2.0	2.0	2.0	2.0	4.1	4.1	6.1	6.1	6.1	8.1	8.1
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: P252690

CATALOG NUMBER: LD6B30D010 EU6B30508040 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9	1439.9
2.5°	1433.8	1439.9	1433.8	1437.9	1435.8	1435.8	1433.8	1435.8
5°	1439.9	1448.1	1439.9	1446.0	1442.0	1442.0	1442.0	1444.0
7.5°	1446.0	1454.2	1448.1	1454.2	1452.1	1450.1	1450.1	1454.2
10°	1452.1	1458.3	1454.2	1460.3	1458.3	1456.2	1456.2	1460.3
12.5°	1452.1	1460.3	1456.2	1462.3	1460.3	1458.3	1458.3	1460.3
15°	1446.0	1456.2	1450.1	1456.2	1454.2	1452.1	1452.1	1456.2
17.5°	1427.7	1435.8	1431.8	1435.8	1435.8	1433.8	1435.8	1437.9
20°	1403.3	1409.4	1405.3	1409.4	1409.4	1405.3	1407.3	1409.4
22.5°	1368.6	1374.7	1370.7	1374.7	1372.7	1370.7	1370.7	1368.6
25°	1325.9	1334.0	1327.9	1332.0	1327.9	1323.8	1323.8	1325.9
27.5°	1272.9	1279.0	1270.9	1275.0	1270.9	1266.8	1266.8	1264.8
30°	1203.7	1205.7	1199.6	1203.7	1199.6	1197.6	1193.5	1193.5
32.5°	1120.2	1122.2	1116.1	1116.1	1112.0	1112.0	1103.9	1110.0
35°	1022.4	1024.4	1022.4	1020.4	1014.3	1012.2	1010.2	1010.2
37.5°	920.6	920.6	914.5	912.4	908.4	904.3	906.3	900.2
40°	816.7	814.7	808.6	810.6	808.6	802.4	800.4	798.4
42.5°	718.9	718.9	712.8	714.9	710.8	708.8	702.6	704.7
45°	633.4	633.4	627.3	627.3	625.3	619.1	621.2	617.1
47.5°	556.0	556.0	554.0	554.0	547.9	545.8	545.8	545.8
50°	488.8	488.8	488.8	488.8	486.8	484.7	482.7	484.7
52.5°	431.8	435.8	433.8	433.8	431.8	429.7	427.7	427.7
55°	380.9	382.9	382.9	384.9	382.9	380.9	382.9	380.9
57.5°	336.0	340.1	340.1	340.1	340.1	340.1	338.1	336.0
60°	297.4	299.4	299.4	301.4	301.4	301.4	299.4	299.4
62.5°	258.7	262.7	264.8	264.8	266.8	264.8	264.8	264.8
65°	228.1	232.2	234.2	232.2	234.2	234.2	232.2	232.2
67.5°	191.4	195.5	195.5	195.5	195.5	197.6	195.5	195.5
70°	154.8	158.9	156.8	158.9	158.9	158.9	158.9	158.9
72.5°	118.1	120.2	122.2	122.2	124.2	122.2	122.2	122.2
75°	85.5	89.6	89.6	89.6	89.6	91.6	91.6	91.6
77.5°	61.1	63.1	63.1	65.2	65.2	65.2	65.2	67.2
80°	42.8	42.8	44.8	44.8	46.8	46.8	46.8	46.8
82.5°	28.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
85°	16.3	18.3	18.3	18.3	18.3	20.4	20.4	20.4
87.5°	10.2	10.2	10.2	10.2	10.2	10.2	8.1	8.1
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)