

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: P252394

Luminaire Tested: **LD6B40D010 EU6B30509027 6LBLWW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252394  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-5)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B40D010 EU6B30509027 6LBLWW1LI  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

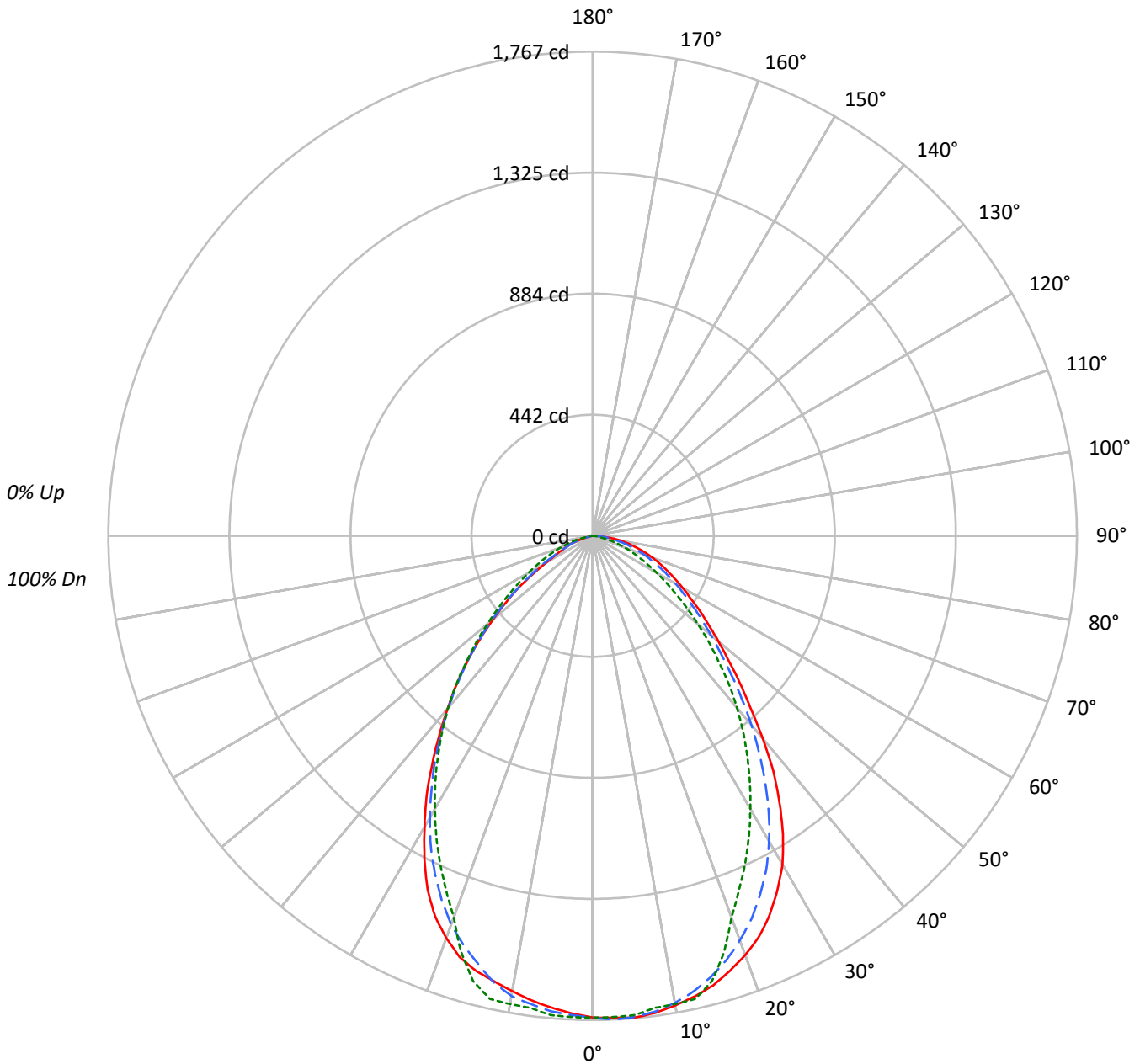
Lumens per Lamp: N/A  
Luminaire Lumens: 3103.0 lumens  
Efficiency: N/A  
Efficacy: 72.1 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.02 / 1.12  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 43.02  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage 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	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88																			
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77																			
3	95	86	80	74	93	85	79	73	82	77	72	79	75	71	77	73	70	68																			
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60																			
5	82	71	63	57	80	70	63	57	68	62	57	66	60	56	64	59	55	54																			
6	77	65	57	51	75	64	57	51	62	56	51	61	55	50	59	54	50	48																			
7	72	60	52	46	70	59	51	46	57	51	46	56	50	46	55	49	45	44																			
8	67	55	47	42	66	54	47	42	53	46	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	40	35	45	39	35	44	39	35	33																			

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

	0°	90°	180°
0°	114706	114706	114706
5°	115590	114994	113199
10°	115263	114965	111785
15°	114740	113660	111039
20°	113028	102885	108432
25°	109964	94840	102564
30°	104412	86694	92374
35°	94745	78378	81293
40°	82261	69810	70006
45°	70158	60046	59409
50°	60715	50758	47977
55°	54278	42335	37137
60°	49452	35152	25026
65°	46173	28899	18679
70°	43987	23520	15680
75°	41440	16687	5193
80°	39449	8566	1728
85°	32487	5165	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	166.0	5.4
10°-20°	464.4	15.0
20°-30°	641.0	20.7
30°-40°	652.3	21.0
40°-50°	524.2	16.9
50°-60°	348.6	11.2
60°-70°	198.6	6.4
70°-80°	89.2	2.9
80°-90°	18.8	0.6
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°	1271.4	41.0
0°-40°	1923.6	62.0
0°-60°	2796.4	90.1
0°-90°	3103.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3103.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	1758	1758	1758	1758	1758	
5°	1765	1763	1756	1742	1728	168
15°	1699	1667	1683	1617	1644	478
25°	1528	1445	1318	1361	1425	700
35°	1190	1098	984	1002	1021	739
45°	760	715	651	644	644	590
55°	477	445	372	331	326	429
65°	299	267	187	121	121	298
75°	164	137	66	27	21	176
85°	43	30	7	2	0	52
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°	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2
2.5°	1760.5	1769.6	1767.3	1765.0	1767.3	1765.0	1760.5	1760.5	1755.9	1755.9	1767.3
5°	1765.0	1769.6	1767.3	1765.0	1765.0	1767.3	1758.2	1758.2	1753.6	1751.3	1762.8
7.5°	1755.9	1762.8	1758.2	1758.2	1755.9	1758.2	1749.1	1749.1	1742.2	1739.9	1751.3
10°	1739.9	1749.1	1744.5	1744.5	1744.5	1739.9	1735.4	1733.1	1726.2	1723.9	1730.8
12.5°	1721.7	1728.5	1726.2	1721.7	1721.7	1721.7	1712.5	1710.2	1701.1	1696.5	1703.4
15°	1698.8	1703.4	1701.1	1698.8	1694.3	1694.3	1685.1	1680.6	1671.4	1662.3	1666.9
17.5°	1664.6	1671.4	1666.9	1664.6	1657.7	1657.7	1648.6	1644.0	1630.3	1621.2	1623.5
20°	1628.0	1630.3	1628.0	1623.5	1616.6	1614.3	1605.2	1596.1	1584.7	1573.2	1571.0
22.5°	1584.7	1586.9	1580.1	1575.5	1568.7	1566.4	1555.0	1548.1	1529.8	1516.1	1513.9
25°	1527.6	1529.8	1529.8	1518.4	1513.9	1509.3	1497.9	1486.5	1470.5	1452.2	1445.4
27.5°	1459.1	1465.9	1461.3	1449.9	1440.8	1438.5	1427.1	1418.0	1397.4	1381.4	1372.3
30°	1386.0	1383.7	1381.4	1374.6	1360.9	1358.6	1347.2	1335.8	1319.8	1299.2	1287.8
32.5°	1292.4	1292.4	1290.1	1283.2	1269.5	1265.0	1255.8	1242.1	1223.9	1207.9	1196.5
35°	1189.6	1191.9	1189.6	1175.9	1166.8	1162.2	1157.7	1141.7	1125.7	1107.4	1098.3
37.5°	1082.3	1075.5	1077.7	1066.3	1054.9	1059.5	1045.8	1038.9	1020.7	1007.0	997.8
40°	965.9	970.4	961.3	956.7	949.9	943.0	943.0	931.6	922.5	906.5	901.9
42.5°	851.7	858.5	856.3	851.7	842.6	844.8	833.4	828.9	817.4	810.6	803.7
45°	760.4	760.4	760.4	755.8	753.5	748.9	742.1	735.2	728.4	719.3	714.7
47.5°	671.3	671.3	673.6	669.0	664.5	662.2	657.6	657.6	646.2	637.1	632.5
50°	598.2	598.2	598.2	593.7	589.1	589.1	584.5	580.0	573.1	566.3	561.7
52.5°	532.0	532.0	532.0	527.5	525.2	522.9	520.6	518.3	509.2	504.6	500.1
55°	477.2	474.9	474.9	472.7	468.1	468.1	465.8	461.2	454.4	447.5	445.3
57.5°	422.4	424.7	422.4	422.4	417.9	417.9	413.3	411.0	404.2	399.6	395.0
60°	379.0	379.0	379.0	376.8	372.2	374.5	369.9	367.6	360.8	353.9	349.4
62.5°	335.7	337.9	337.9	335.7	331.1	331.1	328.8	326.5	319.7	312.8	306.0
65°	299.1	299.1	299.1	296.8	294.6	294.6	292.3	290.0	283.1	274.0	267.2
67.5°	264.9	262.6	262.6	262.6	260.3	258.0	255.7	253.5	246.6	239.8	230.6
70°	230.6	230.6	230.6	228.3	223.8	226.1	223.8	221.5	214.6	207.8	200.9
72.5°	198.7	198.7	196.4	194.1	194.1	191.8	191.8	189.5	182.7	173.5	166.7
75°	164.4	164.4	164.4	164.4	159.8	162.1	157.6	155.3	150.7	143.9	137.0
77.5°	134.7	134.7	134.7	132.4	130.2	130.2	127.9	125.6	118.7	114.2	105.0
80°	105.0	105.0	105.0	105.0	102.8	100.5	98.2	95.9	91.3	84.5	77.6
82.5°	77.6	77.6	75.4	75.4	75.4	73.1	70.8	68.5	63.9	59.4	54.8
85°	43.4	45.7	45.7	41.1	43.4	41.1	41.1	36.5	36.5	32.0	29.7
87.5°	16.0	13.7	13.7	13.7	13.7	13.7	13.7	11.4	11.4	11.4	9.1
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°	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2
2.5°	1758.2	1755.9	1765.0	1765.0	1751.3	1758.2	1760.5	1755.9	1755.9	1758.2	1751.3
5°	1753.6	1749.1	1758.2	1760.5	1746.8	1753.6	1755.9	1751.3	1753.6	1755.9	1746.8
7.5°	1737.6	1737.6	1744.5	1746.8	1733.1	1739.9	1739.9	1735.4	1737.6	1737.6	1730.8
10°	1721.7	1714.8	1721.7	1721.7	1710.2	1712.5	1717.1	1714.8	1723.9	1735.4	1735.4
12.5°	1692.0	1685.1	1696.5	1696.5	1689.7	1698.8	1710.2	1717.1	1726.2	1730.8	1717.1
15°	1655.4	1657.7	1678.3	1694.3	1687.4	1701.1	1712.5	1708.0	1696.5	1682.8	1662.3
17.5°	1607.5	1600.6	1618.9	1628.0	1618.9	1623.5	1632.6	1623.5	1605.2	1593.8	1566.4
20°	1552.7	1534.4	1534.4	1529.8	1513.9	1513.9	1511.6	1495.6	1488.7	1481.9	1470.5
22.5°	1491.0	1470.5	1463.6	1449.9	1436.2	1433.9	1427.1	1411.1	1402.0	1397.4	1383.7
25°	1420.2	1402.0	1390.6	1376.9	1356.3	1351.7	1344.9	1328.9	1324.3	1317.5	1306.1
27.5°	1347.2	1324.3	1308.4	1294.7	1276.4	1274.1	1260.4	1249.0	1239.9	1235.3	1226.2
30°	1262.7	1237.6	1226.2	1207.9	1194.2	1189.6	1178.2	1162.2	1155.4	1150.8	1144.0
32.5°	1169.1	1148.5	1137.1	1121.1	1102.9	1105.1	1091.4	1077.7	1073.2	1068.6	1061.8
35°	1077.7	1057.2	1043.5	1029.8	1018.4	1013.8	1004.7	993.3	986.4	984.1	979.6
37.5°	977.3	961.3	949.9	936.2	927.0	922.5	917.9	906.5	901.9	901.9	892.8
40°	879.1	865.4	856.3	849.4	838.0	835.7	831.1	824.3	822.0	819.7	812.9
42.5°	790.0	771.8	764.9	760.4	753.5	748.9	746.7	742.1	739.8	737.5	730.7
45°	705.6	689.6	682.7	678.2	671.3	669.0	666.7	659.9	655.3	650.8	648.5
47.5°	623.4	611.9	609.7	598.2	593.7	589.1	584.5	580.0	577.7	575.4	566.3
50°	552.6	545.7	534.3	527.5	522.9	520.6	511.5	504.6	502.3	500.1	493.2
52.5°	488.6	479.5	472.7	461.2	459.0	454.4	449.8	440.7	436.1	433.8	427.0
55°	431.6	424.7	415.6	406.4	399.6	397.3	390.5	381.3	376.8	372.2	367.6
57.5°	383.6	372.2	363.1	353.9	349.4	342.5	335.7	331.1	324.2	317.4	310.5
60°	337.9	328.8	317.4	308.3	303.7	299.1	290.0	283.1	276.3	269.4	262.6
62.5°	294.6	285.4	274.0	264.9	260.3	255.7	246.6	239.8	232.9	226.1	216.9
65°	255.7	246.6	237.5	228.3	223.8	219.2	210.1	200.9	194.1	187.2	178.1
67.5°	223.8	212.4	203.2	194.1	189.5	185.0	175.8	169.0	159.8	153.0	143.9
70°	189.5	180.4	173.5	164.4	159.8	155.3	146.1	137.0	130.2	123.3	114.2
72.5°	159.8	148.4	141.6	132.4	127.9	125.6	116.5	109.6	102.8	93.6	86.8
75°	127.9	118.7	109.6	102.8	98.2	95.9	86.8	79.9	73.1	66.2	59.4
77.5°	98.2	91.3	82.2	75.4	70.8	68.5	59.4	52.5	45.7	41.1	34.3
80°	73.1	63.9	59.4	52.5	50.2	45.7	41.1	34.3	29.7	22.8	18.3
82.5°	50.2	43.4	38.8	34.3	32.0	29.7	25.1	20.6	16.0	13.7	11.4
85°	27.4	22.8	20.6	18.3	16.0	16.0	13.7	11.4	9.1	6.9	4.6
87.5°	9.1	6.9	6.9	6.9	6.9	4.6	4.6	4.6	2.3	2.3	2.3
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°	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2
2.5°	1755.9	1755.9	1755.9	1753.6	1753.6	1753.6	1751.3	1760.5	1751.3	1749.1	1755.9
5°	1753.6	1749.1	1749.1	1749.1	1749.1	1746.8	1744.5	1749.1	1742.2	1739.9	1739.9
7.5°	1739.9	1737.6	1737.6	1735.4	1733.1	1730.8	1728.5	1730.8	1723.9	1721.7	1721.7
10°	1742.2	1737.6	1737.6	1730.8	1726.2	1719.4	1712.5	1714.8	1705.7	1698.8	1698.8
12.5°	1714.8	1703.4	1696.5	1689.7	1685.1	1682.8	1673.7	1678.3	1669.1	1666.9	1666.9
15°	1653.2	1639.5	1628.0	1623.5	1623.5	1618.9	1612.1	1621.2	1616.6	1618.9	1630.3
17.5°	1557.3	1550.4	1543.6	1541.3	1543.6	1548.1	1552.7	1566.4	1566.4	1573.2	1584.7
20°	1472.8	1468.2	1472.8	1472.8	1475.0	1484.2	1493.3	1504.7	1509.3	1516.1	1532.1
22.5°	1390.6	1390.6	1395.1	1402.0	1399.7	1415.7	1418.0	1438.5	1438.5	1452.2	1465.9
25°	1310.6	1310.6	1315.2	1317.5	1322.1	1331.2	1340.3	1356.3	1360.9	1374.6	1386.0
27.5°	1233.0	1230.7	1230.7	1233.0	1237.6	1249.0	1253.6	1271.8	1278.7	1287.8	1299.2
30°	1146.2	1144.0	1148.5	1153.1	1150.8	1162.2	1169.1	1182.8	1187.3	1196.5	1205.6
32.5°	1064.0	1064.0	1064.0	1068.6	1068.6	1077.7	1077.7	1093.7	1093.7	1100.6	1109.7
35°	979.6	979.6	981.8	984.1	986.4	988.7	991.0	1000.1	1002.4	1004.7	1009.2
37.5°	899.6	897.4	899.6	899.6	895.1	904.2	904.2	913.3	906.5	913.3	915.6
40°	817.4	817.4	815.2	815.2	815.2	819.7	815.2	822.0	817.4	822.0	819.7
42.5°	733.0	733.0	728.4	733.0	730.7	730.7	730.7	735.2	728.4	733.0	735.2
45°	648.5	646.2	646.2	643.9	643.9	643.9	646.2	646.2	643.9	648.5	648.5
47.5°	566.3	564.0	564.0	564.0	564.0	566.3	559.4	564.0	559.4	559.4	559.4
50°	495.5	493.2	490.9	488.6	486.4	486.4	484.1	484.1	479.5	477.2	474.9
52.5°	427.0	424.7	420.1	420.1	417.9	415.6	408.7	408.7	401.9	399.6	399.6
55°	365.3	358.5	356.2	351.6	351.6	347.1	342.5	337.9	331.1	326.5	326.5
57.5°	308.3	301.4	296.8	294.6	292.3	287.7	278.6	276.3	267.2	264.9	262.6
60°	258.0	251.2	244.3	239.8	237.5	230.6	221.5	216.9	212.4	205.5	198.7
62.5°	210.1	203.2	194.1	191.8	187.2	180.4	173.5	166.7	162.1	155.3	150.7
65°	169.0	162.1	155.3	150.7	146.1	139.3	132.4	125.6	121.0	118.7	116.5
67.5°	137.0	127.9	121.0	118.7	114.2	109.6	102.8	100.5	95.9	95.9	95.9
70°	107.3	100.5	93.6	91.3	89.1	84.5	79.9	79.9	79.9	79.9	79.9
72.5°	79.9	75.4	68.5	66.2	63.9	61.7	57.1	59.4	57.1	57.1	57.1
75°	50.2	45.7	41.1	38.8	36.5	34.3	32.0	29.7	27.4	25.1	25.1
77.5°	27.4	22.8	20.6	18.3	18.3	16.0	13.7	13.7	11.4	11.4	11.4
80°	16.0	13.7	11.4	9.1	9.1	6.9	6.9	6.9	6.9	4.6	4.6
82.5°	9.1	6.9	4.6	4.6	4.6	4.6	2.3	2.3	2.3	2.3	2.3
85°	4.6	4.6	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	0.0
87.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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: P252394

CATALOG NUMBER: LD6B40D010 EU6B30509027 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2	1758.2
2.5°	1744.5	1751.3	1744.5	1751.3	1751.3	1751.3	1751.3	1744.5
5°	1733.1	1737.6	1730.8	1735.4	1737.6	1735.4	1735.4	1728.5
7.5°	1712.5	1717.1	1710.2	1717.1	1719.4	1717.1	1714.8	1710.2
10°	1692.0	1694.3	1687.4	1692.0	1696.5	1696.5	1694.3	1687.4
12.5°	1660.0	1666.9	1660.0	1664.6	1669.1	1671.4	1671.4	1664.6
15°	1623.5	1634.9	1630.3	1637.2	1644.0	1646.3	1646.3	1644.0
17.5°	1586.9	1598.4	1591.5	1602.9	1609.8	1614.3	1616.6	1612.1
20°	1534.4	1548.1	1543.6	1552.7	1561.8	1568.7	1568.7	1561.8
22.5°	1465.9	1484.2	1481.9	1488.7	1500.2	1502.4	1507.0	1502.4
25°	1390.6	1404.3	1402.0	1408.8	1422.5	1422.5	1424.8	1424.8
27.5°	1303.8	1317.5	1315.2	1319.8	1328.9	1331.2	1333.5	1328.9
30°	1210.2	1217.0	1217.0	1223.9	1230.7	1233.0	1233.0	1226.2
32.5°	1107.4	1116.6	1121.1	1118.8	1125.7	1130.3	1128.0	1128.0
35°	1013.8	1016.1	1018.4	1020.7	1022.9	1027.5	1022.9	1020.7
37.5°	913.3	920.2	915.6	920.2	924.8	922.5	920.2	920.2
40°	822.0	824.3	819.7	824.3	826.6	826.6	826.6	822.0
42.5°	730.7	735.2	730.7	735.2	735.2	735.2	735.2	733.0
45°	639.3	643.9	643.9	646.2	646.2	643.9	643.9	643.9
47.5°	554.9	559.4	554.9	559.4	561.7	557.1	557.1	557.1
50°	474.9	472.7	472.7	474.9	474.9	474.9	474.9	472.7
52.5°	392.7	395.0	395.0	395.0	397.3	395.0	397.3	397.3
55°	322.0	322.0	322.0	324.2	322.0	322.0	324.2	326.5
57.5°	258.0	255.7	253.5	253.5	255.7	253.5	253.5	253.5
60°	198.7	196.4	194.1	194.1	194.1	194.1	194.1	191.8
62.5°	148.4	148.4	148.4	150.7	150.7	150.7	150.7	153.0
65°	118.7	118.7	118.7	118.7	118.7	118.7	118.7	121.0
67.5°	95.9	95.9	95.9	98.2	98.2	98.2	98.2	98.2
70°	79.9	79.9	82.2	79.9	82.2	82.2	82.2	82.2
72.5°	54.8	54.8	54.8	54.8	54.8	52.5	54.8	52.5
75°	22.8	22.8	22.8	22.8	22.8	22.8	22.8	20.6
77.5°	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1
80°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
82.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.3	2.3	2.3	2.3	2.3	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)