

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: P252393

Luminaire Tested: **LD6B40D010 EU6B30509024 6LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252393
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 EU6B30509024 6LBLWW1LI
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2730.0 lumens
Efficiency: N/A
Efficacy: 63.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.03 / 1.12
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

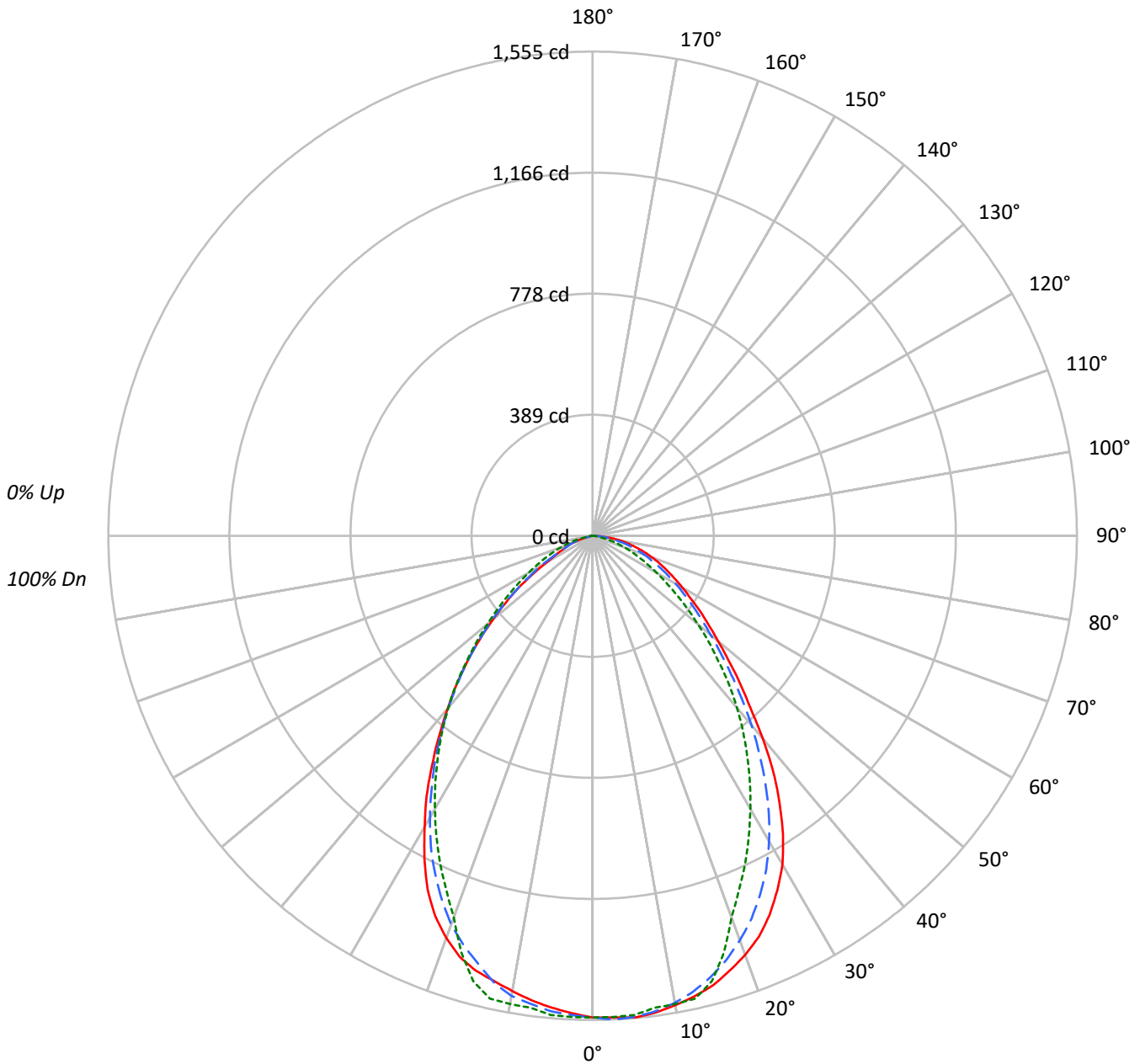
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	100914	100914	100914
5°	101699	101169	99590
10°	101411	101146	98350
15°	100948	99996	97693
20°	99441	90520	95400
25°	96741	83438	90233
30°	91862	76275	81270
35°	83356	68956	71520
40°	72374	61421	61592
45°	61725	52821	52268
50°	53418	44648	42202
55°	47761	37240	32679
60°	43515	30924	22012
65°	40631	25425	16441
70°	38703	20696	13791
75°	36449	14696	4562
80°	34715	7552	1503
85°	28595	4491	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	146.1	5.4
10°-20°	408.5	15.0
20°-30°	563.9	20.7
30°-40°	573.9	21.0
40°-50°	461.2	16.9
50°-60°	306.7	11.2
60°-70°	174.7	6.4
70°-80°	78.5	2.9
80°-90°	16.5	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°	1118.5	41.0
0°-40°	1692.4	62.0
0°-60°	2460.2	90.1
0°-90°	2730.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2730.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1547	1547	1547	1547	1547	
5°	1553	1551	1545	1533	1521	147
15°	1495	1466	1480	1422	1446	421
25°	1344	1272	1159	1197	1254	616
35°	1047	966	866	882	898	650
45°	669	629	572	566	566	519
55°	420	392	327	291	287	377
65°	263	235	165	106	106	262
75°	145	120	58	24	18	154
85°	38	26	6	2	0	45
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°	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8
2.5°	1548.8	1556.9	1554.9	1552.9	1554.9	1552.9	1548.8	1548.8	1544.8	1544.8	1554.9
5°	1552.9	1556.9	1554.9	1552.9	1552.9	1554.9	1546.8	1546.8	1542.8	1540.8	1550.9
7.5°	1544.8	1550.9	1546.8	1546.8	1544.8	1546.8	1538.8	1538.8	1532.8	1530.8	1540.8
10°	1530.8	1538.8	1534.8	1534.8	1534.8	1530.8	1526.8	1524.7	1518.7	1516.7	1522.7
12.5°	1514.7	1520.7	1518.7	1514.7	1514.7	1514.7	1506.7	1504.7	1496.6	1492.6	1498.6
15°	1494.6	1498.6	1496.6	1494.6	1490.6	1490.6	1482.6	1478.5	1470.5	1462.5	1466.5
17.5°	1464.5	1470.5	1466.5	1464.5	1458.4	1458.4	1450.4	1446.4	1434.3	1426.3	1428.3
20°	1432.3	1434.3	1432.3	1428.3	1422.3	1420.3	1412.2	1404.2	1394.2	1384.1	1382.1
22.5°	1394.2	1396.2	1390.1	1386.1	1380.1	1378.1	1368.1	1362.0	1346.0	1333.9	1331.9
25°	1343.9	1346.0	1346.0	1335.9	1331.9	1327.9	1317.8	1307.8	1293.7	1277.7	1271.6
27.5°	1283.7	1289.7	1285.7	1275.6	1267.6	1265.6	1255.6	1247.5	1229.4	1215.4	1207.3
30°	1219.4	1217.4	1215.4	1209.3	1197.3	1195.3	1185.2	1175.2	1161.1	1143.1	1133.0
32.5°	1137.0	1137.0	1135.0	1129.0	1116.9	1112.9	1104.9	1092.8	1076.8	1062.7	1052.7
35°	1046.6	1048.6	1046.6	1034.6	1026.5	1022.5	1018.5	1004.4	990.4	974.3	966.3
37.5°	952.2	946.2	948.2	938.1	928.1	932.1	920.1	914.0	898.0	885.9	877.9
40°	849.8	853.8	845.7	841.7	835.7	829.7	829.7	819.6	811.6	797.5	793.5
42.5°	749.3	755.3	753.3	749.3	741.3	743.3	733.2	729.2	719.2	713.2	707.1
45°	669.0	669.0	669.0	664.9	662.9	658.9	652.9	646.9	640.8	632.8	628.8
47.5°	590.6	590.6	592.6	588.6	584.6	582.6	578.6	578.6	568.5	560.5	556.5
50°	526.3	526.3	526.3	522.3	518.3	518.3	514.3	510.3	504.2	498.2	494.2
52.5°	468.1	468.1	468.1	464.1	462.0	460.0	458.0	456.0	448.0	444.0	439.9
55°	419.9	417.8	417.8	415.8	411.8	411.8	409.8	405.8	399.8	393.7	391.7
57.5°	371.6	373.7	371.6	371.6	367.6	367.6	363.6	361.6	355.6	351.6	347.5
60°	333.5	333.5	333.5	331.5	327.4	329.5	325.4	323.4	317.4	311.4	307.4
62.5°	295.3	297.3	297.3	295.3	291.3	291.3	289.3	287.3	281.2	275.2	269.2
65°	263.2	263.2	263.2	261.2	259.1	259.1	257.1	255.1	249.1	241.1	235.0
67.5°	233.0	231.0	231.0	231.0	229.0	227.0	225.0	223.0	217.0	210.9	202.9
70°	202.9	202.9	202.9	200.9	196.9	198.9	196.9	194.9	188.8	182.8	176.8
72.5°	174.8	174.8	172.8	170.8	170.8	168.7	168.7	166.7	160.7	152.7	146.6
75°	144.6	144.6	144.6	144.6	140.6	142.6	138.6	136.6	132.6	126.6	120.5
77.5°	118.5	118.5	118.5	116.5	114.5	114.5	112.5	110.5	104.5	100.4	92.4
80°	92.4	92.4	92.4	92.4	90.4	88.4	86.4	84.4	80.4	74.3	68.3
82.5°	68.3	68.3	66.3	66.3	66.3	64.3	62.3	60.3	56.2	52.2	48.2
85°	38.2	40.2	40.2	36.2	38.2	36.2	36.2	32.1	32.1	28.1	26.1
87.5°	14.1	12.1	12.1	12.1	12.1	12.1	12.1	10.0	10.0	10.0	8.0
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):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8
2.5°	1546.8	1544.8	1552.9	1552.9	1540.8	1546.8	1548.8	1544.8	1544.8	1546.8	1540.8
5°	1542.8	1538.8	1546.8	1548.8	1536.8	1542.8	1544.8	1540.8	1542.8	1544.8	1536.8
7.5°	1528.8	1528.8	1534.8	1536.8	1524.7	1530.8	1530.8	1526.8	1528.8	1528.8	1522.7
10°	1514.7	1508.7	1514.7	1514.7	1504.7	1506.7	1510.7	1508.7	1516.7	1526.8	1526.8
12.5°	1488.6	1482.6	1492.6	1492.6	1486.6	1494.6	1504.7	1510.7	1518.7	1522.7	1510.7
15°	1456.4	1458.4	1476.5	1490.6	1484.6	1496.6	1506.7	1502.6	1492.6	1480.5	1462.5
17.5°	1414.3	1408.2	1424.3	1432.3	1424.3	1428.3	1436.4	1428.3	1412.2	1402.2	1378.1
20°	1366.0	1350.0	1350.0	1346.0	1331.9	1331.9	1329.9	1315.8	1309.8	1303.8	1293.7
22.5°	1311.8	1293.7	1287.7	1275.6	1263.6	1261.6	1255.6	1241.5	1233.5	1229.4	1217.4
25°	1249.5	1233.5	1223.4	1211.4	1193.3	1189.3	1183.2	1169.2	1165.2	1159.1	1149.1
27.5°	1185.2	1165.2	1151.1	1139.0	1123.0	1121.0	1108.9	1098.9	1090.8	1086.8	1078.8
30°	1110.9	1088.8	1078.8	1062.7	1050.6	1046.6	1036.6	1022.5	1016.5	1012.5	1006.5
32.5°	1028.5	1010.5	1000.4	986.4	970.3	972.3	960.2	948.2	944.2	940.2	934.1
35°	948.2	930.1	918.1	906.0	896.0	891.9	883.9	873.9	867.8	865.8	861.8
37.5°	859.8	845.7	835.7	823.6	815.6	811.6	807.6	797.5	793.5	793.5	785.5
40°	773.4	761.4	753.3	747.3	737.3	735.3	731.2	725.2	723.2	721.2	715.2
42.5°	695.1	679.0	673.0	669.0	662.9	658.9	656.9	652.9	650.9	648.9	642.8
45°	620.7	606.7	600.7	596.6	590.6	588.6	586.6	580.6	576.5	572.5	570.5
47.5°	548.4	538.4	536.4	526.3	522.3	518.3	514.3	510.3	508.2	506.2	498.2
50°	486.1	480.1	470.1	464.1	460.0	458.0	450.0	444.0	442.0	439.9	433.9
52.5°	429.9	421.9	415.8	405.8	403.8	399.8	395.8	387.7	383.7	381.7	375.7
55°	379.7	373.7	365.6	357.6	351.6	349.5	343.5	335.5	331.5	327.4	323.4
57.5°	337.5	327.4	319.4	311.4	307.4	301.3	295.3	291.3	285.3	279.2	273.2
60°	297.3	289.3	279.2	271.2	267.2	263.2	255.1	249.1	243.1	237.0	231.0
62.5°	259.1	251.1	241.1	233.0	229.0	225.0	217.0	210.9	204.9	198.9	190.8
65°	225.0	217.0	208.9	200.9	196.9	192.9	184.8	176.8	170.8	164.7	156.7
67.5°	196.9	186.8	178.8	170.8	166.7	162.7	154.7	148.7	140.6	134.6	126.6
70°	166.7	158.7	152.7	144.6	140.6	136.6	128.6	120.5	114.5	108.5	100.4
72.5°	140.6	130.6	124.6	116.5	112.5	110.5	102.5	96.4	90.4	82.4	76.3
75°	112.5	104.5	96.4	90.4	86.4	84.4	76.3	70.3	64.3	58.3	52.2
77.5°	86.4	80.4	72.3	66.3	62.3	60.3	52.2	46.2	40.2	36.2	30.1
80°	64.3	56.2	52.2	46.2	44.2	40.2	36.2	30.1	26.1	20.1	16.1
82.5°	44.2	38.2	34.2	30.1	28.1	26.1	22.1	18.1	14.1	12.1	10.0
85°	24.1	20.1	18.1	16.1	14.1	14.1	12.1	10.0	8.0	6.0	4.0
87.5°	8.0	6.0	6.0	6.0	6.0	4.0	4.0	4.0	2.0	2.0	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8
2.5°	1544.8	1544.8	1544.8	1542.8	1542.8	1542.8	1540.8	1548.8	1540.8	1538.8	1544.8
5°	1542.8	1538.8	1538.8	1538.8	1538.8	1536.8	1534.8	1538.8	1532.8	1530.8	1530.8
7.5°	1530.8	1528.8	1528.8	1526.8	1524.7	1522.7	1520.7	1522.7	1516.7	1514.7	1514.7
10°	1532.8	1528.8	1528.8	1522.7	1518.7	1512.7	1506.7	1508.7	1500.6	1494.6	1494.6
12.5°	1508.7	1498.6	1492.6	1486.6	1482.6	1480.5	1472.5	1476.5	1468.5	1466.5	1466.5
15°	1454.4	1442.4	1432.3	1428.3	1428.3	1424.3	1418.3	1426.3	1422.3	1424.3	1434.3
17.5°	1370.1	1364.0	1358.0	1356.0	1358.0	1362.0	1366.0	1378.1	1378.1	1384.1	1394.2
20°	1295.7	1291.7	1295.7	1295.7	1297.7	1305.8	1313.8	1323.9	1327.9	1333.9	1348.0
22.5°	1223.4	1223.4	1227.4	1233.5	1231.4	1245.5	1247.5	1265.6	1265.6	1277.7	1289.7
25°	1153.1	1153.1	1157.1	1159.1	1163.1	1171.2	1179.2	1193.3	1197.3	1209.3	1219.4
27.5°	1084.8	1082.8	1082.8	1084.8	1088.8	1098.9	1102.9	1118.9	1125.0	1133.0	1143.1
30°	1008.5	1006.5	1010.5	1014.5	1012.5	1022.5	1028.5	1040.6	1044.6	1052.7	1060.7
32.5°	936.1	936.1	936.1	940.2	940.2	948.2	948.2	962.3	962.3	968.3	976.3
35°	861.8	861.8	863.8	865.8	867.8	869.8	871.9	879.9	881.9	883.9	887.9
37.5°	791.5	789.5	791.5	791.5	787.5	795.5	795.5	803.6	797.5	803.6	805.6
40°	719.2	719.2	717.2	717.2	717.2	721.2	717.2	723.2	719.2	723.2	721.2
42.5°	644.9	644.9	640.8	644.9	642.8	642.8	642.8	646.9	640.8	644.9	646.9
45°	570.5	568.5	568.5	566.5	566.5	566.5	568.5	568.5	566.5	570.5	570.5
47.5°	498.2	496.2	496.2	496.2	496.2	498.2	492.2	496.2	492.2	492.2	492.2
50°	435.9	433.9	431.9	429.9	427.9	427.9	425.9	425.9	421.9	419.9	417.8
52.5°	375.7	373.7	369.6	369.6	367.6	365.6	359.6	359.6	353.6	351.6	351.6
55°	321.4	315.4	313.4	309.4	309.4	305.4	301.3	297.3	291.3	287.3	287.3
57.5°	271.2	265.2	261.2	259.1	257.1	253.1	245.1	243.1	235.0	233.0	231.0
60°	227.0	221.0	215.0	210.9	208.9	202.9	194.9	190.8	186.8	180.8	174.8
62.5°	184.8	178.8	170.8	168.7	164.7	158.7	152.7	146.6	142.6	136.6	132.6
65°	148.7	142.6	136.6	132.6	128.6	122.5	116.5	110.5	106.5	104.5	102.5
67.5°	120.5	112.5	106.5	104.5	100.4	96.4	90.4	88.4	84.4	84.4	84.4
70°	94.4	88.4	82.4	80.4	78.3	74.3	70.3	70.3	70.3	70.3	70.3
72.5°	70.3	66.3	60.3	58.3	56.2	54.2	50.2	52.2	50.2	50.2	50.2
75°	44.2	40.2	36.2	34.2	32.1	30.1	28.1	26.1	24.1	22.1	22.1
77.5°	24.1	20.1	18.1	16.1	16.1	14.1	12.1	12.1	10.0	10.0	10.0
80°	14.1	12.1	10.0	8.0	8.0	6.0	6.0	6.0	6.0	4.0	4.0
82.5°	8.0	6.0	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0
85°	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0
87.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	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: P252393

CATALOG NUMBER: LD6B40D010 EU6B30509024 6LBLWW1LI

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8	1546.8
2.5°	1534.8	1540.8	1534.8	1540.8	1540.8	1540.8	1540.8	1534.8
5°	1524.7	1528.8	1522.7	1526.8	1528.8	1526.8	1526.8	1520.7
7.5°	1506.7	1510.7	1504.7	1510.7	1512.7	1510.7	1508.7	1504.7
10°	1488.6	1490.6	1484.6	1488.6	1492.6	1492.6	1490.6	1484.6
12.5°	1460.5	1466.5	1460.5	1464.5	1468.5	1470.5	1470.5	1464.5
15°	1428.3	1438.4	1434.3	1440.4	1446.4	1448.4	1448.4	1446.4
17.5°	1396.2	1406.2	1400.2	1410.2	1416.3	1420.3	1422.3	1418.3
20°	1350.0	1362.0	1358.0	1366.0	1374.1	1380.1	1380.1	1374.1
22.5°	1289.7	1305.8	1303.8	1309.8	1319.8	1321.8	1325.9	1321.8
25°	1223.4	1235.5	1233.5	1239.5	1251.5	1251.5	1253.5	1253.5
27.5°	1147.1	1159.1	1157.1	1161.1	1169.2	1171.2	1173.2	1169.2
30°	1064.7	1070.7	1070.7	1076.8	1082.8	1084.8	1084.8	1078.8
32.5°	974.3	982.3	986.4	984.4	990.4	994.4	992.4	992.4
35°	891.9	894.0	896.0	898.0	900.0	904.0	900.0	898.0
37.5°	803.6	809.6	805.6	809.6	813.6	811.6	809.6	809.6
40°	723.2	725.2	721.2	725.2	727.2	727.2	727.2	723.2
42.5°	642.8	646.9	642.8	646.9	646.9	646.9	646.9	644.9
45°	562.5	566.5	566.5	568.5	568.5	566.5	566.5	566.5
47.5°	488.2	492.2	488.2	492.2	494.2	490.2	490.2	490.2
50°	417.8	415.8	415.8	417.8	417.8	417.8	417.8	415.8
52.5°	345.5	347.5	347.5	347.5	349.5	347.5	349.5	349.5
55°	283.3	283.3	283.3	285.3	283.3	283.3	285.3	287.3
57.5°	227.0	225.0	223.0	223.0	225.0	223.0	223.0	223.0
60°	174.8	172.8	170.8	170.8	170.8	170.8	170.8	168.7
62.5°	130.6	130.6	130.6	132.6	132.6	132.6	132.6	134.6
65°	104.5	104.5	104.5	104.5	104.5	104.5	104.5	106.5
67.5°	84.4	84.4	84.4	86.4	86.4	86.4	86.4	86.4
70°	70.3	70.3	72.3	70.3	72.3	72.3	72.3	72.3
72.5°	48.2	48.2	48.2	48.2	48.2	46.2	48.2	46.2
75°	20.1	20.1	20.1	20.1	20.1	20.1	20.1	18.1
77.5°	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
80°	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
82.5°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.0	2.0	2.0	2.0	2.0	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)