

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: P252705

Luminaire Tested: **LD6B40D010 EU6B30509024 6LBDW1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P252705
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: LD6B40D010 EU6B30509024 6LBDW1H
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2818.0 lumens
Efficiency: N/A
Efficacy: 65.5 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

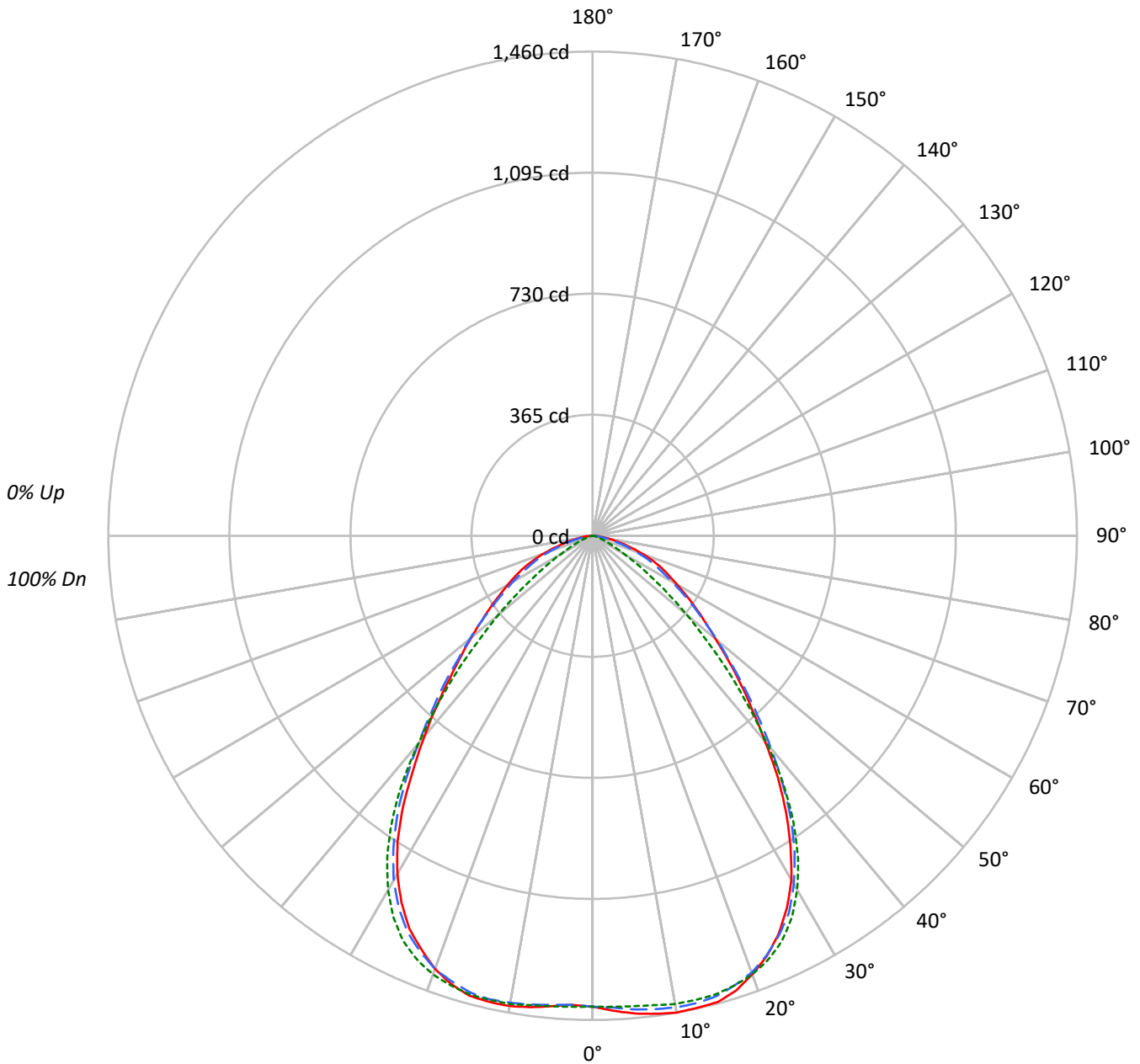
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	92629	92629	92629
5°	94692	93244	93244
10°	96714	94985	95389
15°	98334	96707	96977
20°	97733	97733	96477
25°	95409	97144	94106
30°	90317	92886	88652
35°	80926	84128	79326
40°	68754	69606	67042
45°	58182	53172	56143
50°	49124	37503	48505
55°	43166	24216	42711
60°	38257	14405	38518
65°	35336	8676	35336
70°	30654	4979	29872
75°	24300	3025	22787
80°	18109	2254	17358
85°	16543	1497	15046



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.7	4.9
10°-20°	404.5	14.4
20°-30°	608.4	21.6
30°-40°	639.7	22.7
40°-50°	477.9	17.0
50°-60°	297.5	10.6
60°-70°	169.2	6.0
70°-80°	69.7	2.5
80°-90°	14.4	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°	1149.7	40.8
0°-40°	1789.4	63.5
0°-60°	2564.7	91.0
0°-90°	2818.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2818.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	1420	1420	1420	1420	1420	
5°	1446	1434	1424	1420	1424	138
15°	1456	1438	1432	1426	1436	409
25°	1325	1329	1350	1319	1307	607
35°	1016	1042	1056	1026	996	631
45°	631	645	576	633	608	489
55°	380	372	213	366	376	341
65°	229	205	56	205	229	225
75°	96	76	12	74	90	105
85°	22	14	2	12	20	25
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°	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8
2.5°	1433.8	1431.8	1433.8	1429.8	1427.8	1427.8	1429.8	1425.8	1423.8	1425.8	1423.8
5°	1445.9	1441.9	1443.9	1441.9	1437.8	1437.8	1439.9	1433.8	1433.8	1435.8	1433.8
7.5°	1453.9	1453.9	1453.9	1449.9	1447.9	1445.9	1449.9	1443.9	1441.9	1441.9	1439.9
10°	1459.9	1457.9	1459.9	1455.9	1451.9	1449.9	1453.9	1449.9	1445.9	1449.9	1443.9
12.5°	1457.9	1457.9	1457.9	1455.9	1451.9	1449.9	1453.9	1447.9	1445.9	1447.9	1443.9
15°	1455.9	1449.9	1451.9	1449.9	1443.9	1443.9	1445.9	1439.9	1435.8	1441.9	1437.8
17.5°	1437.8	1433.8	1435.8	1431.8	1427.8	1425.8	1427.8	1425.8	1421.8	1425.8	1421.8
20°	1407.7	1407.7	1409.7	1405.7	1401.7	1399.7	1403.7	1399.7	1395.7	1401.7	1401.7
22.5°	1371.6	1371.6	1371.6	1369.6	1367.6	1367.6	1367.6	1365.5	1363.5	1367.6	1369.6
25°	1325.4	1323.4	1325.4	1327.4	1325.4	1323.4	1325.4	1325.4	1321.4	1329.4	1329.4
27.5°	1267.1	1267.1	1271.2	1269.2	1269.2	1267.1	1271.2	1271.2	1269.2	1275.2	1281.2
30°	1198.9	1194.9	1198.9	1198.9	1200.9	1200.9	1202.9	1202.9	1202.9	1208.9	1212.9
32.5°	1110.5	1112.5	1118.5	1116.5	1114.5	1120.6	1120.6	1124.6	1126.6	1130.6	1132.6
35°	1016.1	1018.1	1018.1	1020.1	1024.2	1020.1	1030.2	1028.2	1030.2	1038.2	1042.2
37.5°	915.7	909.7	919.7	915.7	917.7	917.7	921.7	923.8	929.8	939.8	939.8
40°	807.3	809.3	813.3	815.3	817.3	817.3	817.3	823.3	825.4	837.4	835.4
42.5°	712.9	712.9	716.9	718.9	718.9	718.9	718.9	724.9	729.0	733.0	737.0
45°	630.6	624.5	628.6	628.6	632.6	630.6	634.6	638.6	640.6	646.6	644.6
47.5°	552.2	550.2	552.2	554.3	552.2	554.3	556.3	558.3	560.3	560.3	560.3
50°	484.0	484.0	486.0	488.0	488.0	488.0	488.0	490.0	490.0	494.0	490.0
52.5°	427.7	429.7	429.7	427.7	429.7	429.7	431.8	431.8	429.7	429.7	423.7
55°	379.5	377.5	379.5	377.5	379.5	379.5	377.5	377.5	375.5	373.5	371.5
57.5°	333.4	333.4	333.4	333.4	331.3	333.4	331.3	329.3	329.3	325.3	319.3
60°	293.2	293.2	293.2	293.2	293.2	291.2	293.2	291.2	287.2	283.2	275.1
62.5°	259.1	257.0	259.1	257.0	257.0	255.0	255.0	253.0	249.0	245.0	237.0
65°	228.9	230.9	228.9	228.9	226.9	224.9	224.9	222.9	216.9	212.9	204.8
67.5°	196.8	194.8	194.8	194.8	192.8	192.8	192.8	188.8	184.8	178.7	170.7
70°	160.7	160.7	160.7	158.6	158.6	156.6	156.6	154.6	150.6	146.6	136.6
72.5°	126.5	126.5	126.5	122.5	124.5	122.5	122.5	118.5	116.5	110.4	104.4
75°	96.4	96.4	94.4	94.4	92.4	90.4	90.4	88.4	86.4	82.3	76.3
77.5°	70.3	70.3	70.3	68.3	66.3	64.3	64.3	62.3	60.2	58.2	54.2
80°	48.2	48.2	48.2	48.2	46.2	44.2	44.2	42.2	42.2	40.2	36.1
82.5°	32.1	32.1	32.1	32.1	30.1	30.1	30.1	28.1	26.1	26.1	22.1
85°	22.1	22.1	20.1	20.1	20.1	20.1	18.1	18.1	16.1	14.1	14.1
87.5°	12.0	12.0	12.0	12.0	10.0	10.0	10.0	10.0	8.0	8.0	6.0
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°	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8
2.5°	1429.8	1429.8	1427.8	1421.8	1423.8	1421.8	1423.8	1421.8	1415.8	1421.8	1415.8
5°	1437.8	1439.9	1435.8	1427.8	1429.8	1427.8	1427.8	1425.8	1419.8	1423.8	1419.8
7.5°	1445.9	1443.9	1441.9	1433.8	1435.8	1433.8	1433.8	1429.8	1423.8	1427.8	1421.8
10°	1449.9	1449.9	1445.9	1437.8	1437.8	1435.8	1437.8	1435.8	1427.8	1433.8	1429.8
12.5°	1449.9	1447.9	1447.9	1437.8	1439.9	1437.8	1439.9	1435.8	1429.8	1433.8	1431.8
15°	1443.9	1443.9	1441.9	1431.8	1433.8	1433.8	1435.8	1431.8	1425.8	1431.8	1427.8
17.5°	1431.8	1431.8	1429.8	1421.8	1425.8	1425.8	1427.8	1423.8	1417.8	1421.8	1421.8
20°	1407.7	1409.7	1409.7	1403.7	1407.7	1407.7	1409.7	1407.7	1405.7	1407.7	1403.7
22.5°	1379.6	1383.6	1383.6	1377.6	1381.6	1381.6	1387.6	1385.6	1381.6	1383.6	1381.6
25°	1337.4	1341.5	1345.5	1341.5	1345.5	1345.5	1351.5	1349.5	1345.5	1349.5	1343.5
27.5°	1289.2	1291.2	1295.3	1291.2	1297.3	1295.3	1301.3	1299.3	1293.3	1299.3	1297.3
30°	1221.0	1229.0	1235.0	1229.0	1235.0	1235.0	1239.0	1237.0	1235.0	1233.0	1233.0
32.5°	1144.7	1152.7	1152.7	1150.7	1154.7	1154.7	1156.7	1152.7	1150.7	1152.7	1154.7
35°	1050.3	1054.3	1058.3	1056.3	1058.3	1060.3	1058.3	1060.3	1054.3	1056.3	1056.3
37.5°	947.9	951.9	951.9	945.8	949.9	949.9	945.8	945.8	941.8	945.8	937.8
40°	839.4	835.4	837.4	833.4	829.4	829.4	827.4	819.3	815.3	817.3	819.3
42.5°	733.0	733.0	727.0	716.9	706.9	706.9	700.8	696.8	688.8	692.8	690.8
45°	642.6	632.6	624.5	608.5	602.4	598.4	588.4	578.3	574.3	576.3	574.3
47.5°	556.3	548.2	528.1	506.1	500.0	494.0	482.0	469.9	465.9	461.9	461.9
50°	484.0	469.9	447.8	423.7	413.7	403.6	387.6	375.5	367.5	369.5	369.5
52.5°	417.7	401.6	375.5	345.4	333.4	321.3	307.2	293.2	287.2	285.2	285.2
55°	359.5	341.4	315.3	281.1	271.1	257.0	239.0	222.9	214.9	212.9	216.9
57.5°	307.2	291.2	261.1	226.9	214.9	200.8	182.7	168.7	158.6	156.6	158.6
60°	265.1	243.0	216.9	184.8	168.7	156.6	136.6	124.5	114.5	110.4	112.5
62.5°	222.9	202.8	176.7	144.6	132.5	120.5	102.4	88.4	80.3	78.3	80.3
65°	190.8	170.7	146.6	118.5	106.4	94.4	78.3	64.3	58.2	56.2	58.2
67.5°	158.6	140.6	120.5	94.4	84.3	74.3	58.2	48.2	40.2	38.2	40.2
70°	128.5	112.5	92.4	74.3	64.3	56.2	44.2	34.1	28.1	26.1	28.1
72.5°	96.4	84.3	70.3	54.2	48.2	42.2	32.1	24.1	20.1	18.1	20.1
75°	70.3	60.2	50.2	38.2	34.1	30.1	22.1	16.1	14.1	12.0	14.1
77.5°	48.2	42.2	34.1	26.1	22.1	20.1	14.1	12.0	10.0	8.0	8.0
80°	32.1	28.1	22.1	18.1	16.1	14.1	10.0	8.0	6.0	6.0	6.0
82.5°	20.1	16.1	14.1	10.0	8.0	8.0	6.0	4.0	4.0	4.0	4.0
85°	12.0	10.0	8.0	6.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0
87.5°	6.0	4.0	4.0	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



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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8
2.5°	1419.8	1415.8	1415.8	1417.8	1419.8	1421.8	1417.8	1415.8	1415.8	1421.8	1417.8
5°	1419.8	1417.8	1417.8	1417.8	1421.8	1423.8	1419.8	1417.8	1419.8	1425.8	1423.8
7.5°	1425.8	1421.8	1423.8	1423.8	1425.8	1429.8	1425.8	1423.8	1425.8	1431.8	1427.8
10°	1429.8	1425.8	1427.8	1425.8	1431.8	1433.8	1429.8	1427.8	1429.8	1437.8	1435.8
12.5°	1431.8	1429.8	1429.8	1427.8	1433.8	1435.8	1431.8	1429.8	1431.8	1437.8	1435.8
15°	1427.8	1425.8	1425.8	1425.8	1429.8	1433.8	1427.8	1425.8	1425.8	1431.8	1429.8
17.5°	1419.8	1415.8	1415.8	1415.8	1417.8	1419.8	1413.7	1411.7	1409.7	1415.8	1413.7
20°	1405.7	1401.7	1397.7	1397.7	1399.7	1399.7	1395.7	1389.6	1389.6	1391.7	1387.6
22.5°	1379.6	1377.6	1373.6	1371.6	1375.6	1373.6	1365.5	1359.5	1357.5	1359.5	1355.5
25°	1343.5	1339.4	1337.4	1335.4	1337.4	1335.4	1327.4	1319.4	1319.4	1319.4	1313.3
27.5°	1293.3	1289.2	1287.2	1287.2	1289.2	1285.2	1277.2	1269.2	1265.1	1265.1	1259.1
30°	1229.0	1229.0	1227.0	1225.0	1223.0	1223.0	1210.9	1202.9	1198.9	1200.9	1196.9
32.5°	1150.7	1148.7	1146.7	1140.6	1142.6	1140.6	1130.6	1124.6	1118.5	1114.5	1112.5
35°	1050.3	1050.3	1048.3	1048.3	1048.3	1046.3	1036.2	1030.2	1026.2	1024.2	1018.1
37.5°	939.8	937.8	935.8	935.8	935.8	935.8	929.8	923.8	923.8	921.7	917.7
40°	815.3	817.3	819.3	817.3	823.3	829.4	821.3	817.3	815.3	821.3	813.3
42.5°	694.8	692.8	702.9	704.9	704.9	714.9	716.9	718.9	716.9	720.9	720.9
45°	578.3	576.3	586.4	590.4	600.4	612.5	618.5	628.6	632.6	636.6	632.6
47.5°	467.9	475.9	484.0	494.0	502.0	522.1	534.2	544.2	548.2	554.3	554.3
50°	375.5	383.6	397.6	405.6	415.7	439.8	459.9	473.9	482.0	488.0	486.0
52.5°	289.2	303.2	321.3	329.3	343.4	371.5	393.6	409.7	419.7	425.7	427.7
55°	222.9	235.0	253.0	265.1	279.1	309.3	337.4	355.4	365.5	373.5	377.5
57.5°	164.7	178.7	198.8	208.8	224.9	259.1	283.2	305.2	317.3	327.3	329.3
60°	120.5	134.5	152.6	164.7	180.7	214.9	243.0	263.1	277.1	285.2	289.2
62.5°	86.4	100.4	118.5	130.5	144.6	174.7	202.8	222.9	237.0	247.0	253.0
65°	62.3	76.3	94.4	104.4	116.5	144.6	170.7	190.8	204.8	216.9	220.9
67.5°	46.2	56.2	72.3	82.3	94.4	116.5	138.6	156.6	170.7	180.7	184.8
70°	34.1	42.2	56.2	62.3	70.3	90.4	108.4	124.5	136.6	144.6	148.6
72.5°	24.1	30.1	40.2	46.2	52.2	68.3	82.3	94.4	102.4	110.4	114.5
75°	16.1	20.1	28.1	32.1	36.1	48.2	58.2	68.3	74.3	80.3	82.3
77.5°	10.0	14.1	20.1	22.1	26.1	32.1	40.2	46.2	50.2	54.2	58.2
80°	6.0	8.0	12.0	14.1	16.1	22.1	26.1	30.1	34.1	38.2	40.2
82.5°	4.0	6.0	8.0	8.0	10.0	12.0	16.1	20.1	22.1	24.1	26.1
85°	2.0	2.0	4.0	4.0	6.0	6.0	8.0	10.0	12.0	14.1	16.1
87.5°	2.0	2.0	2.0	2.0	4.0	4.0	6.0	6.0	6.0	8.0	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



TEST NUMBER: P252705

CATALOG NUMBER: LD6B40D010 EU6B30509024 6LBDW1H

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8	1419.8
2.5°	1413.7	1419.8	1413.7	1417.8	1415.8	1415.8	1413.7	1415.8
5°	1419.8	1427.8	1419.8	1425.8	1421.8	1421.8	1421.8	1423.8
7.5°	1425.8	1433.8	1427.8	1433.8	1431.8	1429.8	1429.8	1433.8
10°	1431.8	1437.8	1433.8	1439.9	1437.8	1435.8	1435.8	1439.9
12.5°	1431.8	1439.9	1435.8	1441.9	1439.9	1437.8	1437.8	1439.9
15°	1425.8	1435.8	1429.8	1435.8	1433.8	1431.8	1431.8	1435.8
17.5°	1407.7	1415.8	1411.7	1415.8	1415.8	1413.7	1415.8	1417.8
20°	1383.6	1389.6	1385.6	1389.6	1389.6	1385.6	1387.6	1389.6
22.5°	1349.5	1355.5	1351.5	1355.5	1353.5	1351.5	1351.5	1349.5
25°	1307.3	1315.3	1309.3	1313.3	1309.3	1305.3	1305.3	1307.3
27.5°	1255.1	1261.1	1253.1	1257.1	1253.1	1249.1	1249.1	1247.1
30°	1186.8	1188.8	1182.8	1186.8	1182.8	1180.8	1176.8	1176.8
32.5°	1104.5	1106.5	1100.5	1100.5	1096.5	1096.5	1088.4	1094.4
35°	1008.1	1010.1	1008.1	1006.1	1000.1	998.1	996.0	996.0
37.5°	907.7	907.7	901.7	899.7	895.6	891.6	893.6	887.6
40°	805.3	803.3	797.2	799.2	797.2	791.2	789.2	787.2
42.5°	708.9	708.9	702.9	704.9	700.8	698.8	692.8	694.8
45°	624.5	624.5	618.5	618.5	616.5	610.5	612.5	608.5
47.5°	548.2	548.2	546.2	546.2	540.2	538.2	538.2	538.2
50°	482.0	482.0	482.0	482.0	480.0	477.9	475.9	477.9
52.5°	425.7	429.7	427.7	427.7	425.7	423.7	421.7	421.7
55°	375.5	377.5	377.5	379.5	377.5	375.5	377.5	375.5
57.5°	331.3	335.4	335.4	335.4	335.4	335.4	333.4	331.3
60°	293.2	295.2	295.2	297.2	297.2	297.2	295.2	295.2
62.5°	255.0	259.1	261.1	261.1	263.1	261.1	261.1	261.1
65°	224.9	228.9	230.9	228.9	230.9	230.9	228.9	228.9
67.5°	188.8	192.8	192.8	192.8	192.8	194.8	192.8	192.8
70°	152.6	156.6	154.6	156.6	156.6	156.6	156.6	156.6
72.5°	116.5	118.5	120.5	120.5	122.5	120.5	120.5	120.5
75°	84.3	88.4	88.4	88.4	88.4	90.4	90.4	90.4
77.5°	60.2	62.3	62.3	64.3	64.3	64.3	64.3	66.3
80°	42.2	42.2	44.2	44.2	46.2	46.2	46.2	46.2
82.5°	28.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1
85°	16.1	18.1	18.1	18.1	18.1	20.1	20.1	20.1
87.5°	10.0	10.0	10.0	10.0	10.0	10.0	8.0	8.0
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)