

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: P252223

Luminaire Tested: **LD6B70D010TE EU6B60708050 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252223  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B70D010TE EU6B60708050 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9340.0 lumens  
Efficiency: N/A  
Efficacy: 117.6 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.29 / 1.21  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

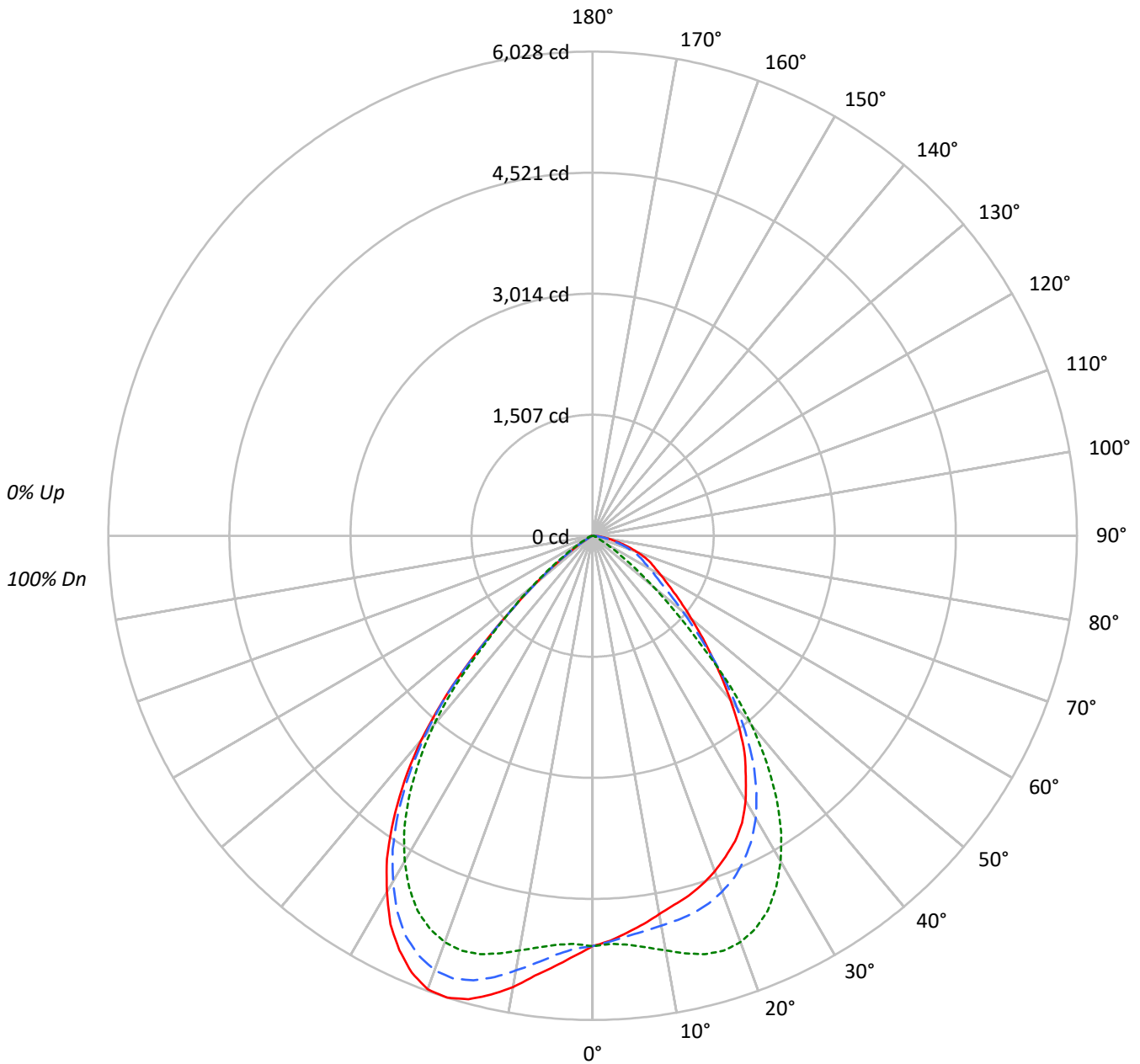
Input Watts (W): 79.45  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252223

CATALOG NUMBER: LD6B70D010TE EU6B60708050 6LBSW1LI

### Luminous Intensity Polar Plot





TEST NUMBER: P252223

CATALOG NUMBER: LD6B70D010TE EU6B60708050 6LBSW1LI

**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	112	108	105	103	109	106	103	101	102	100	98	98	96	95	95	93	92	90																			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80																			
3	98	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72																			
4	91	82	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	65																			
5	85	75	67	62	83	74	67	62	72	66	61	70	65	61	68	64	60	58																			
6	80	69	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53																			
7	74	63	56	51	73	62	55	50	61	55	50	60	54	50	58	53	50	48																			
8	70	58	51	46	69	58	51	46	57	50	46	55	50	46	54	49	45	44																			
9	66	54	47	42	64	54	47	42	53	46	42	52	46	42	51	45	42	40																			
10	62	50	43	39	61	50	43	39	49	43	39	48	43	39	47	42	38	37																			

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

	0°	90°	180°
0°	333360	333360	333360
5°	324718	334633	352231
10°	316820	347241	377986
15°	313118	364254	403523
20°	308634	373750	417163
25°	302064	370989	409667
30°	287043	352545	385669
35°	262618	317868	344317
40°	227154	262514	282486
45°	191550	172174	184796
50°	162628	99659	93712
55°	141133	47784	36114
60°	127480	22312	8925
65°	123668	12813	3010
70°	110883	10243	2804
75°	91123	7386	1235
80°	67890	3682	0
85°	58537	0	0



TEST NUMBER: P252223

CATALOG NUMBER: LD6B70D010TE EU6B60708050 6LBSW1LI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	493.6	5.3
10°-20°	1504.2	16.1
20°-30°	2298.2	24.6
30°-40°	2403.7	25.7
40°-50°	1559.3	16.7
50°-60°	619.1	6.6
60°-70°	293.7	3.1
70°-80°	139.7	1.5
80°-90°	28.5	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°	4295.9	46.0
0°-40°	6699.7	71.7
0°-60°	8878.1	95.1
0°-90°	9340.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9340.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	5110	5110	5110	5110	5110	
5°	4958	5002	5110	5237	5378	468
15°	4636	4861	5393	5730	5974	1306
25°	4196	4460	5154	5500	5691	1922
35°	3297	3498	3991	4226	4323	2039
45°	2076	2057	1866	1978	2003	1615
55°	1241	1055	420	327	318	1124
65°	801	664	83	20	20	783
75°	362	293	29	10	5	390
85°	78	49	0	0	0	91
90°	0	0	0	0	0	



TEST NUMBER: P252223

CATALOG NUMBER: LD6B70D010TE EU6B60708050 6LBSW1LI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7
2.5°	5046.2	5056.0	5002.2	4987.6	5026.7	5041.3	5046.2	5031.6	5036.4	5056.0	5056.0
5°	4958.3	4968.1	4919.2	4904.5	4943.6	4953.4	4968.1	4963.2	4977.8	5007.1	5002.2
7.5°	4875.2	4889.9	4836.2	4816.6	4865.5	4889.9	4899.7	4899.7	4919.2	4958.3	4963.2
10°	4782.4	4802.0	4753.1	4743.3	4797.1	4821.5	4826.4	4836.2	4865.5	4919.2	4929.0
12.5°	4704.3	4723.8	4689.6	4675.0	4733.6	4758.0	4767.8	4787.3	4821.5	4889.9	4899.7
15°	4635.9	4650.5	4611.4	4601.7	4660.3	4689.6	4694.5	4723.8	4767.8	4845.9	4860.6
17.5°	4547.9	4557.7	4528.4	4518.6	4577.3	4606.6	4611.4	4645.6	4699.4	4777.5	4802.0
20°	4445.4	4455.1	4425.8	4416.0	4474.7	4508.9	4513.7	4543.1	4606.6	4689.6	4714.0
22.5°	4323.2	4342.8	4308.6	4298.8	4357.4	4386.7	4401.4	4425.8	4489.3	4572.4	4606.6
25°	4196.2	4196.2	4171.8	4166.9	4220.6	4254.8	4250.0	4284.2	4347.7	4430.7	4460.0
27.5°	4030.1	4025.2	4000.8	3995.9	4054.6	4083.9	4074.1	4108.3	4166.9	4250.0	4279.3
30°	3810.3	3820.1	3785.9	3776.1	3825.0	3873.8	3868.9	3903.1	3961.7	4039.9	4059.4
32.5°	3546.5	3556.3	3551.4	3536.7	3580.7	3605.1	3619.8	3644.2	3693.1	3776.1	3795.7
35°	3297.4	3282.7	3263.2	3263.2	3307.1	3346.2	3331.6	3360.9	3409.7	3492.8	3497.7
37.5°	2989.6	2984.7	2975.0	2965.2	3014.0	3023.8	3028.7	3048.2	3092.2	3160.6	3150.8
40°	2667.2	2672.1	2667.2	2647.7	2677.0	2716.1	2711.2	2720.9	2760.0	2808.9	2794.2
42.5°	2364.3	2364.3	2364.3	2344.8	2379.0	2398.5	2408.3	2403.4	2413.2	2457.2	2437.6
45°	2076.1	2081.0	2076.1	2071.2	2076.1	2085.9	2076.1	2071.2	2071.2	2085.9	2056.6
47.5°	1827.0	1827.0	1812.3	1797.7	1812.3	1817.2	1802.6	1787.9	1783.0	1778.1	1729.3
50°	1602.3	1597.4	1592.5	1568.1	1582.7	1587.6	1568.1	1558.3	1538.8	1514.4	1455.7
52.5°	1406.9	1402.0	1397.1	1372.7	1382.5	1387.3	1367.8	1348.3	1323.8	1304.3	1231.0
55°	1240.8	1235.9	1235.9	1221.3	1211.5	1221.3	1201.7	1187.1	1152.9	1128.4	1055.2
57.5°	1099.1	1099.1	1089.4	1074.7	1079.6	1079.6	1060.0	1040.5	1011.2	981.9	923.3
60°	977.0	977.0	977.0	962.3	962.3	962.3	952.6	933.0	908.6	879.3	820.7
62.5°	879.3	879.3	874.4	859.8	864.6	864.6	854.9	835.3	810.9	791.4	732.8
65°	801.1	801.1	801.1	786.5	786.5	791.4	781.6	762.1	742.5	718.1	664.4
67.5°	703.4	698.6	698.6	688.8	693.7	698.6	688.8	674.1	649.7	635.1	586.2
70°	581.3	586.2	591.1	576.4	581.3	581.3	576.4	561.8	547.1	532.5	488.5
72.5°	473.8	473.8	469.0	464.1	464.1	469.0	459.2	444.5	434.8	425.0	390.8
75°	361.5	356.6	361.5	351.7	351.7	351.7	342.0	337.1	332.2	317.5	293.1
77.5°	263.8	258.9	258.9	249.1	254.0	254.0	249.1	239.4	229.6	224.7	205.2
80°	180.7	180.7	180.7	175.9	175.9	171.0	171.0	166.1	156.3	151.4	141.7
82.5°	122.1	122.1	122.1	117.2	117.2	117.2	112.4	107.5	102.6	97.7	87.9
85°	78.2	78.2	78.2	73.3	73.3	73.3	68.4	68.4	63.5	58.6	48.9
87.5°	44.0	44.0	44.0	39.1	39.1	39.1	39.1	39.1	34.2	29.3	24.4
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: P252223

CATALOG NUMBER: LD6B70D010TE EU6B60708050 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7
2.5°	5090.2	5021.8	5065.8	5065.8	5051.1	5090.2	5114.6	5134.1	5129.3	5085.3	5080.4
5°	5051.1	4992.5	5041.3	5046.2	5031.6	5085.3	5119.5	5143.9	5148.8	5109.7	5114.6
7.5°	5021.8	4972.9	5036.4	5056.0	5051.1	5099.9	5139.0	5178.1	5197.6	5168.3	5173.2
10°	5007.1	4968.1	5036.4	5065.8	5070.6	5124.4	5183.0	5236.7	5261.2	5241.6	5256.3
12.5°	4987.6	4963.2	5041.3	5085.3	5104.8	5158.6	5231.8	5295.3	5334.4	5324.7	5354.0
15°	4968.1	4948.5	5041.3	5104.8	5129.3	5178.1	5261.2	5354.0	5397.9	5393.0	5432.1
17.5°	4919.2	4914.3	5012.0	5080.4	5114.6	5173.2	5251.4	5363.7	5407.7	5417.5	5466.3
20°	4841.0	4841.0	4948.5	5021.8	5060.9	5114.6	5212.3	5319.8	5373.5	5383.3	5437.0
22.5°	4733.6	4743.3	4845.9	4919.2	4977.8	5016.9	5119.5	5231.8	5280.7	5295.3	5354.0
25°	4591.9	4601.7	4699.4	4772.7	4836.2	4880.1	4977.8	5080.4	5139.0	5153.7	5197.6
27.5°	4406.3	4425.8	4518.6	4591.9	4645.6	4675.0	4777.5	4885.0	4929.0	4943.6	4987.6
30°	4191.3	4196.2	4289.0	4352.5	4406.3	4430.7	4518.6	4631.0	4665.2	4679.8	4743.3
32.5°	3927.5	3922.7	4010.6	4069.2	4113.2	4142.5	4235.3	4308.6	4342.8	4367.2	4401.4
35°	3610.0	3605.1	3668.6	3737.0	3771.2	3781.0	3873.8	3952.0	3971.5	3991.1	4035.0
37.5°	3253.4	3253.4	3307.1	3341.3	3380.4	3395.1	3439.0	3527.0	3561.2	3556.3	3590.5
40°	2877.3	2857.7	2896.8	2931.0	2940.8	2945.7	2989.6	3058.0	3082.4	3082.4	3106.9
42.5°	2481.6	2452.3	2457.2	2476.7	2486.5	2452.3	2481.6	2525.5	2510.9	2530.4	2535.3
45°	2061.5	2017.5	1998.0	1954.0	1963.8	1929.6	1910.0	1919.8	1914.9	1866.1	1875.8
47.5°	1719.5	1641.4	1607.2	1543.7	1529.0	1489.9	1465.5	1421.5	1382.5	1382.5	1358.0
50°	1431.3	1353.1	1284.8	1211.5	1187.1	1152.9	1099.1	1040.5	1011.2	981.9	957.5
52.5°	1201.7	1118.7	1035.6	957.5	923.3	879.3	806.0	747.4	693.7	664.4	635.1
55°	1016.1	923.3	835.3	752.3	708.3	664.4	591.1	522.7	459.2	420.1	395.7
57.5°	874.4	786.5	693.7	605.7	566.7	517.8	439.7	366.4	307.8	263.8	239.4
60°	771.8	683.9	600.9	508.0	469.0	420.1	337.1	268.7	210.1	171.0	141.7
62.5°	683.9	605.7	517.8	434.8	395.7	346.8	268.7	200.3	146.6	107.5	83.0
65°	620.4	542.2	469.0	385.9	351.7	302.9	229.6	166.1	117.2	83.0	58.6
67.5°	547.1	478.7	405.5	337.1	302.9	263.8	195.4	141.7	97.7	68.4	48.9
70°	459.2	405.5	342.0	278.4	254.0	219.8	161.2	117.2	78.2	53.7	39.1
72.5°	366.4	322.4	273.6	224.7	205.2	171.0	131.9	92.8	58.6	39.1	29.3
75°	278.4	244.3	205.2	171.0	151.4	131.9	97.7	68.4	44.0	29.3	19.5
77.5°	190.5	175.9	146.6	117.2	107.5	92.8	63.5	44.0	29.3	19.5	9.8
80°	131.9	117.2	97.7	78.2	68.4	58.6	39.1	29.3	14.7	9.8	4.9
82.5°	83.0	68.4	58.6	48.9	44.0	34.2	24.4	14.7	9.8	4.9	4.9
85°	44.0	39.1	34.2	24.4	24.4	19.5	14.7	9.8	4.9	0.0	0.0
87.5°	24.4	19.5	14.7	9.8	9.8	4.9	4.9	4.9	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



TEST NUMBER: P252223

CATALOG NUMBER: LD6B70D010TE EU6B60708050 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7
2.5°	5139.0	5139.0	5134.1	5192.8	5124.4	5192.8	5158.6	5192.8	5143.9	5139.0	5143.9
5°	5178.1	5192.8	5197.6	5251.4	5187.9	5270.9	5241.6	5270.9	5236.7	5246.5	5261.2
7.5°	5256.3	5280.7	5275.8	5344.2	5280.7	5373.5	5354.0	5397.9	5363.7	5373.5	5393.0
10°	5344.2	5373.5	5378.4	5446.8	5388.2	5500.5	5476.1	5524.9	5495.6	5510.3	5534.7
12.5°	5446.8	5481.0	5485.9	5564.0	5500.5	5617.8	5603.1	5652.0	5627.5	5642.2	5671.5
15°	5524.9	5573.8	5583.6	5661.7	5593.3	5715.5	5705.7	5769.2	5730.1	5754.5	5779.0
17.5°	5564.0	5608.0	5627.5	5700.8	5642.2	5764.3	5754.5	5808.3	5779.0	5803.4	5832.7
20°	5539.6	5593.3	5608.0	5681.3	5622.6	5744.8	5730.1	5783.8	5754.5	5774.1	5803.4
22.5°	5451.7	5505.4	5524.9	5593.3	5539.6	5652.0	5647.1	5695.9	5656.8	5681.3	5705.7
25°	5295.3	5354.0	5363.7	5427.2	5368.6	5485.9	5476.1	5529.8	5500.5	5515.2	5549.4
27.5°	5070.6	5139.0	5153.7	5207.4	5163.5	5261.2	5261.2	5305.1	5270.9	5270.9	5305.1
30°	4802.0	4870.4	4880.1	4924.1	4885.0	4972.9	4977.8	5021.8	4968.1	4997.4	5002.2
32.5°	4474.7	4518.6	4547.9	4587.0	4528.4	4640.8	4626.1	4660.3	4631.0	4631.0	4655.4
35°	4079.0	4132.7	4147.4	4196.2	4147.4	4235.3	4235.3	4254.8	4225.5	4225.5	4264.6
37.5°	3649.1	3688.2	3693.1	3741.9	3702.8	3776.1	3771.2	3785.9	3756.6	3776.1	3776.1
40°	3145.9	3175.3	3185.0	3209.4	3204.6	3258.3	3253.4	3263.2	3248.5	3253.4	3263.2
42.5°	2559.7	2598.8	2618.4	2637.9	2608.6	2681.9	2667.2	2681.9	2677.0	2681.9	2696.5
45°	1885.6	1914.9	1929.6	1934.5	1924.7	1968.7	2002.9	1973.5	1978.4	1968.7	1988.2
47.5°	1362.9	1367.8	1358.0	1387.3	1362.9	1382.5	1392.2	1397.1	1367.8	1362.9	1382.5
50°	933.0	957.5	923.3	937.9	933.0	952.6	942.8	947.7	918.4	933.0	923.3
52.5°	620.4	615.5	605.7	610.6	600.9	600.9	600.9	610.6	591.1	581.3	571.5
55°	376.1	366.4	346.8	342.0	342.0	346.8	337.1	327.3	327.3	322.4	322.4
57.5°	219.8	205.2	195.4	190.5	180.7	175.9	171.0	171.0	161.2	161.2	161.2
60°	122.1	107.5	97.7	87.9	87.9	83.0	78.2	73.3	73.3	73.3	68.4
62.5°	63.5	53.7	44.0	39.1	39.1	34.2	29.3	29.3	29.3	29.3	24.4
65°	44.0	34.2	29.3	24.4	24.4	19.5	19.5	19.5	19.5	19.5	19.5
67.5°	34.2	29.3	24.4	19.5	19.5	19.5	14.7	14.7	14.7	14.7	14.7
70°	29.3	19.5	19.5	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
72.5°	19.5	19.5	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
75°	14.7	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
77.5°	4.9	4.9	4.9	4.9	4.9	4.9	0.0	0.0	0.0	0.0	0.0
80°	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	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





TEST NUMBER: P252223

CATALOG NUMBER: LD6B70D010TE EU6B60708050 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7	5109.7
2.5°	5187.9	5183.0	5187.9	5197.6	5178.1	5236.7	5207.4	5236.7
5°	5300.2	5305.1	5310.0	5324.7	5300.2	5373.5	5334.4	5378.4
7.5°	5446.8	5451.7	5456.6	5471.2	5456.6	5529.8	5485.9	5524.9
10°	5598.2	5608.0	5608.0	5632.4	5617.8	5686.1	5656.8	5705.7
12.5°	5739.9	5749.7	5759.4	5774.1	5764.3	5837.6	5813.2	5852.2
15°	5852.2	5871.8	5876.7	5896.2	5886.4	5964.6	5935.3	5974.4
17.5°	5906.0	5925.5	5925.5	5949.9	5940.2	6023.2	5984.1	6028.1
20°	5876.7	5891.3	5896.2	5920.6	5910.9	5993.9	5954.8	6008.6
22.5°	5783.8	5788.7	5793.6	5818.0	5813.2	5886.4	5852.2	5886.4
25°	5612.9	5627.5	5622.6	5642.2	5642.2	5700.8	5661.7	5691.0
27.5°	5368.6	5383.3	5383.3	5407.7	5388.2	5446.8	5407.7	5451.7
30°	5070.6	5085.3	5075.5	5095.1	5075.5	5134.1	5104.8	5119.5
32.5°	4714.0	4714.0	4718.9	4723.8	4714.0	4767.8	4738.5	4767.8
35°	4289.0	4298.8	4303.7	4308.6	4298.8	4337.9	4303.7	4323.2
37.5°	3810.3	3834.7	3829.8	3834.7	3820.1	3868.9	3839.6	3849.4
40°	3297.4	3297.4	3292.5	3302.3	3287.6	3326.7	3307.1	3316.9
42.5°	2701.4	2716.1	2696.5	2720.9	2681.9	2735.6	2716.1	2701.4
45°	2027.3	2007.7	2002.9	2007.7	1993.1	1998.0	2012.6	2002.9
47.5°	1382.5	1382.5	1372.7	1358.0	1377.6	1382.5	1362.9	1362.9
50°	928.2	928.2	918.4	913.5	923.3	918.4	908.6	923.3
52.5°	591.1	571.5	571.5	581.3	571.5	561.8	576.4	566.7
55°	322.4	312.6	312.6	322.4	312.6	312.6	307.8	317.5
57.5°	156.3	161.2	156.3	156.3	156.3	156.3	151.4	156.3
60°	68.4	68.4	68.4	68.4	68.4	68.4	68.4	68.4
62.5°	29.3	29.3	24.4	24.4	24.4	24.4	24.4	24.4
65°	19.5	19.5	19.5	19.5	19.5	19.5	19.5	19.5
67.5°	14.7	14.7	14.7	14.7	14.7	19.5	14.7	14.7
70°	14.7	14.7	14.7	14.7	14.7	14.7	14.7	14.7
72.5°	14.7	14.7	19.5	19.5	19.5	19.5	19.5	19.5
75°	9.8	9.8	9.8	4.9	4.9	4.9	4.9	4.9
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	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



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°    - - 45°-225°    - - - - 90°-270°















(END OF REPORT)