

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: P252225

Luminaire Tested: **LD6B70D010TE EU6B60709027 6LBSW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252225  
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 EU6B60709027 6LBSW1LI  
Description: PORTFOLIO 6 INCH SINGLE 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: 7411.0 lumens  
Efficiency: N/A  
Efficacy: 93.3 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

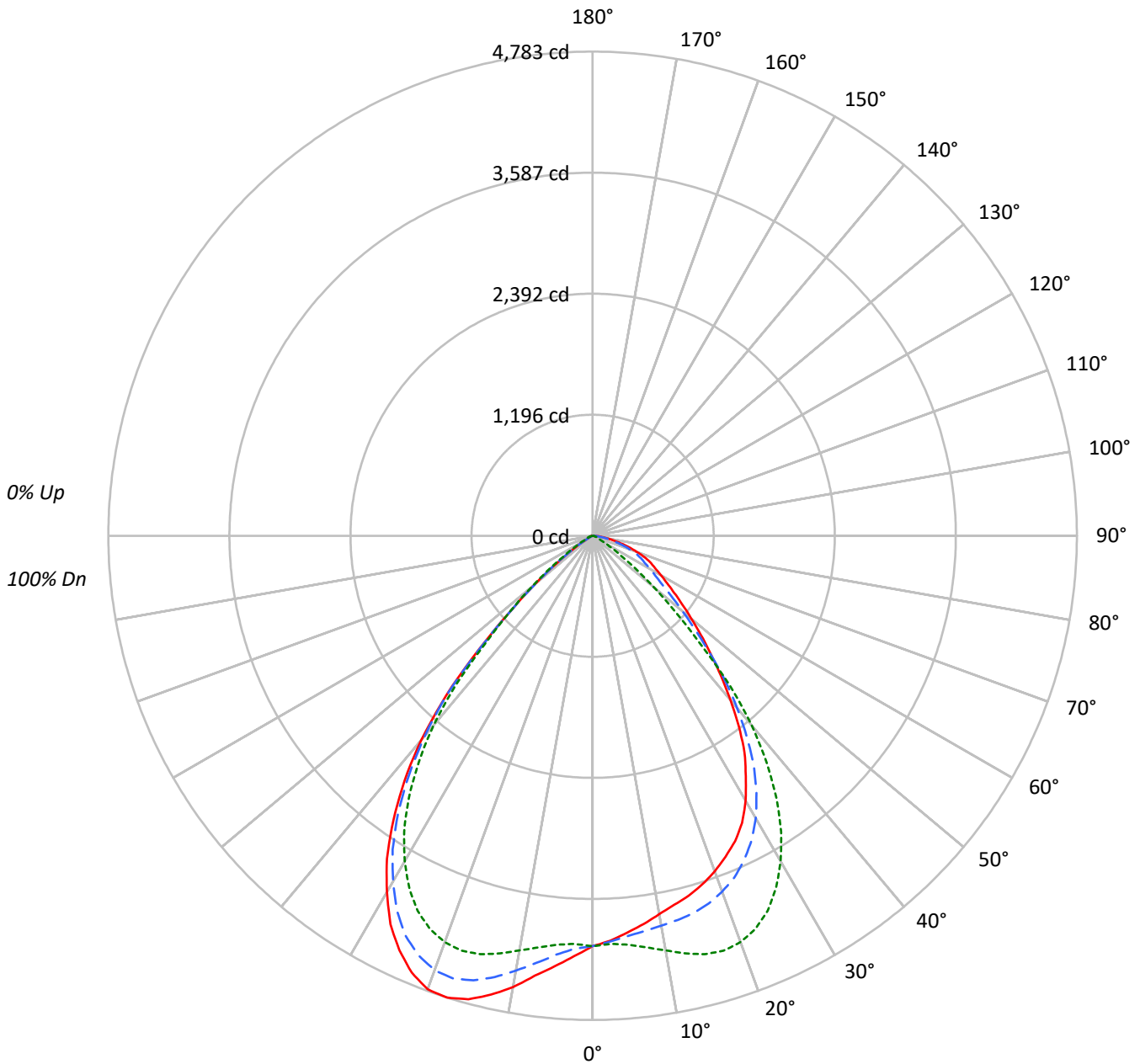
Input Watts (W): 79.45  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252225

CATALOG NUMBER: LD6B70D010TE EU6B60709027 6LBSW1LI

### Luminous Intensity Polar Plot





TEST NUMBER: P252225

CATALOG NUMBER: LD6B70D010TE EU6B60709027 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°	264512	264512	264512
5°	257650	265522	279484
10°	251388	275528	299920
15°	248447	289026	320183
20°	244892	296560	331003
25°	239681	294369	325063
30°	227763	279735	306019
35°	208381	252217	273203
40°	180244	208298	224147
45°	151987	136616	146626
50°	129043	79076	74356
55°	111981	37911	28652
60°	101149	17706	7085
65°	98135	10173	2393
70°	87993	8126	2213
75°	72294	5873	983
80°	53876	2931	0
85°	46410	0	0



TEST NUMBER: P252225

CATALOG NUMBER: LD6B70D010TE EU6B60709027 6LBSW1LI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	391.6	5.3
10°-20°	1193.5	16.1
20°-30°	1823.6	24.6
30°-40°	1907.3	25.7
40°-50°	1237.3	16.7
50°-60°	491.3	6.6
60°-70°	233.0	3.1
70°-80°	110.8	1.5
80°-90°	22.6	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°	3408.7	46.0
0°-40°	5316.0	71.7
0°-60°	7044.5	95.1
0°-90°	7411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7411.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	4054	4054	4054	4054	4054	
5°	3934	3969	4054	4155	4268	371
15°	3678	3857	4279	4547	4740	1037
25°	3330	3539	4089	4364	4516	1525
35°	2616	2775	3167	3353	3430	1618
45°	1647	1632	1481	1570	1589	1282
55°	984	837	333	260	252	892
65°	636	527	66	16	16	621
75°	287	233	23	8	4	309
85°	62	39	0	0	0	72
90°	0	0	0	0	0	



TEST NUMBER: P252225

CATALOG NUMBER: LD6B70D010TE EU6B60709027 6LBSW1LI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4
2.5°	4004.0	4011.8	3969.1	3957.5	3988.5	4000.1	4004.0	3992.4	3996.3	4011.8	4011.8
5°	3934.2	3942.0	3903.2	3891.6	3922.6	3930.4	3942.0	3938.1	3949.7	3973.0	3969.1
7.5°	3868.3	3880.0	3837.3	3821.8	3860.6	3880.0	3887.7	3887.7	3903.2	3934.2	3938.1
10°	3794.7	3810.2	3771.4	3763.7	3806.3	3825.7	3829.6	3837.3	3860.6	3903.2	3911.0
12.5°	3732.7	3748.2	3721.1	3709.4	3755.9	3775.3	3783.1	3798.6	3825.7	3880.0	3887.7
15°	3678.4	3690.0	3659.0	3651.3	3697.8	3721.1	3724.9	3748.2	3783.1	3845.1	3856.7
17.5°	3608.7	3616.4	3593.1	3585.4	3631.9	3655.2	3659.0	3686.2	3728.8	3790.8	3810.2
20°	3527.3	3535.0	3511.7	3504.0	3550.5	3577.6	3581.5	3604.8	3655.2	3721.1	3740.4
22.5°	3430.3	3445.9	3418.7	3411.0	3457.5	3480.7	3492.4	3511.7	3562.1	3628.0	3655.2
25°	3329.6	3329.6	3310.2	3306.3	3349.0	3376.1	3372.2	3399.3	3449.7	3515.6	3538.9
27.5°	3197.8	3193.9	3174.5	3170.7	3217.2	3240.4	3232.7	3259.8	3306.3	3372.2	3395.5
30°	3023.4	3031.1	3004.0	2996.2	3035.0	3073.7	3069.9	3097.0	3143.5	3205.5	3221.0
32.5°	2814.0	2821.8	2817.9	2806.3	2841.2	2860.6	2872.2	2891.6	2930.3	2996.2	3011.7
35°	2616.4	2604.7	2589.2	2589.2	2624.1	2655.1	2643.5	2666.8	2705.5	2771.4	2775.3
37.5°	2372.2	2368.3	2360.5	2352.8	2391.6	2399.3	2403.2	2418.7	2453.6	2507.8	2500.1
40°	2116.4	2120.2	2116.4	2100.8	2124.1	2155.1	2151.2	2159.0	2190.0	2228.8	2217.1
42.5°	1876.0	1876.0	1876.0	1860.5	1887.7	1903.2	1910.9	1907.0	1914.8	1949.7	1934.2
45°	1647.3	1651.2	1647.3	1643.5	1647.3	1655.1	1647.3	1643.5	1643.5	1655.1	1631.8
47.5°	1449.7	1449.7	1438.0	1426.4	1438.0	1441.9	1430.3	1418.7	1414.8	1410.9	1372.1
50°	1271.4	1267.5	1263.6	1244.2	1255.9	1259.7	1244.2	1236.5	1221.0	1201.6	1155.1
52.5°	1116.3	1112.4	1108.6	1089.2	1096.9	1100.8	1085.3	1069.8	1050.4	1034.9	976.8
55°	984.5	980.7	980.7	969.0	961.3	969.0	953.5	941.9	914.8	895.4	837.2
57.5°	872.1	872.1	864.4	852.7	856.6	856.6	841.1	825.6	802.4	779.1	732.6
60°	775.2	775.2	775.2	763.6	763.6	763.6	755.8	740.3	721.0	697.7	651.2
62.5°	697.7	697.7	693.8	682.2	686.1	686.1	678.3	662.8	643.4	627.9	581.4
65°	635.7	635.7	635.7	624.1	624.1	627.9	620.2	604.7	589.2	569.8	527.1
67.5°	558.2	554.3	554.3	546.5	550.4	554.3	546.5	534.9	515.5	503.9	465.1
70°	461.3	465.1	469.0	457.4	461.3	461.3	457.4	445.8	434.1	422.5	387.6
72.5°	376.0	376.0	372.1	368.2	368.2	372.1	364.4	352.7	345.0	337.2	310.1
75°	286.8	283.0	286.8	279.1	279.1	279.1	271.3	267.5	263.6	251.9	232.6
77.5°	209.3	205.4	205.4	197.7	201.6	201.6	197.7	189.9	182.2	178.3	162.8
80°	143.4	143.4	143.4	139.5	139.5	135.7	135.7	131.8	124.0	120.2	112.4
82.5°	96.9	96.9	96.9	93.0	93.0	93.0	89.2	85.3	81.4	77.5	69.8
85°	62.0	62.0	62.0	58.1	58.1	58.1	54.3	54.3	50.4	46.5	38.8
87.5°	34.9	34.9	34.9	31.0	31.0	31.0	31.0	31.0	27.1	23.3	19.4
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: P252225

CATALOG NUMBER: LD6B70D010TE EU6B60709027 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4
2.5°	4038.9	3984.6	4019.5	4019.5	4007.9	4038.9	4058.3	4073.8	4069.9	4035.0	4031.1
5°	4007.9	3961.4	4000.1	4004.0	3992.4	4035.0	4062.2	4081.5	4085.4	4054.4	4058.3
7.5°	3984.6	3945.9	3996.3	4011.8	4007.9	4046.6	4077.7	4108.7	4124.2	4100.9	4104.8
10°	3973.0	3942.0	3996.3	4019.5	4023.4	4066.0	4112.5	4155.2	4174.6	4159.1	4170.7
12.5°	3957.5	3938.1	4000.1	4035.0	4050.5	4093.2	4151.3	4201.7	4232.7	4225.0	4248.2
15°	3942.0	3926.5	4000.1	4050.5	4069.9	4108.7	4174.6	4248.2	4283.1	4279.2	4310.2
17.5°	3903.2	3899.4	3976.9	4031.1	4058.3	4104.8	4166.8	4256.0	4290.8	4298.6	4337.4
20°	3841.2	3841.2	3926.5	3984.6	4015.6	4058.3	4135.8	4221.1	4263.7	4271.5	4314.1
22.5°	3755.9	3763.7	3845.1	3903.2	3949.7	3980.8	4062.2	4151.3	4190.1	4201.7	4248.2
25°	3643.5	3651.3	3728.8	3787.0	3837.3	3872.2	3949.7	4031.1	4077.7	4089.3	4124.2
27.5°	3496.2	3511.7	3585.4	3643.5	3686.2	3709.4	3790.8	3876.1	3911.0	3922.6	3957.5
30°	3325.7	3329.6	3403.2	3453.6	3496.2	3515.6	3585.4	3674.5	3701.7	3713.3	3763.7
32.5°	3116.4	3112.5	3182.3	3228.8	3263.7	3286.9	3360.6	3418.7	3445.9	3465.2	3492.4
35°	2864.4	2860.6	2911.0	2965.2	2992.4	3000.1	3073.7	3135.8	3151.3	3166.8	3201.7
37.5°	2581.5	2581.5	2624.1	2651.3	2682.3	2693.9	2728.8	2798.5	2825.7	2821.8	2848.9
40°	2283.0	2267.5	2298.5	2325.7	2333.4	2337.3	2372.2	2426.4	2445.8	2445.8	2465.2
42.5°	1969.1	1945.8	1949.7	1965.2	1972.9	1945.8	1969.1	2003.9	1992.3	2007.8	2011.7
45°	1635.7	1600.8	1585.3	1550.4	1558.2	1531.1	1515.6	1523.3	1519.4	1480.7	1488.4
47.5°	1364.4	1302.4	1275.2	1224.8	1213.2	1182.2	1162.8	1127.9	1096.9	1096.9	1077.6
50°	1135.7	1073.7	1019.4	961.3	941.9	914.8	872.1	825.6	802.4	779.1	759.7
52.5°	953.5	887.6	821.7	759.7	732.6	697.7	639.6	593.0	550.4	527.1	503.9
55°	806.2	732.6	662.8	596.9	562.0	527.1	469.0	414.7	364.4	333.3	314.0
57.5°	693.8	624.1	550.4	480.6	449.6	410.9	348.8	290.7	244.2	209.3	189.9
60°	612.4	542.7	476.8	403.1	372.1	333.3	267.5	213.2	166.7	135.7	112.4
62.5°	542.7	480.6	410.9	345.0	314.0	275.2	213.2	158.9	116.3	85.3	65.9
65°	492.3	430.2	372.1	306.2	279.1	240.3	182.2	131.8	93.0	65.9	46.5
67.5°	434.1	379.9	321.7	267.5	240.3	209.3	155.0	112.4	77.5	54.3	38.8
70°	364.4	321.7	271.3	220.9	201.6	174.4	127.9	93.0	62.0	42.6	31.0
72.5°	290.7	255.8	217.1	178.3	162.8	135.7	104.7	73.6	46.5	31.0	23.3
75°	220.9	193.8	162.8	135.7	120.2	104.7	77.5	54.3	34.9	23.3	15.5
77.5°	151.2	139.5	116.3	93.0	85.3	73.6	50.4	34.9	23.3	15.5	7.8
80°	104.7	93.0	77.5	62.0	54.3	46.5	31.0	23.3	11.6	7.8	3.9
82.5°	65.9	54.3	46.5	38.8	34.9	27.1	19.4	11.6	7.8	3.9	3.9
85°	34.9	31.0	27.1	19.4	19.4	15.5	11.6	7.8	3.9	0.0	0.0
87.5°	19.4	15.5	11.6	7.8	7.8	3.9	3.9	3.9	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: P252225

CATALOG NUMBER: LD6B70D010TE EU6B60709027 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4
2.5°	4077.7	4077.7	4073.8	4120.3	4066.0	4120.3	4093.2	4120.3	4081.5	4077.7	4081.5
5°	4108.7	4120.3	4124.2	4166.8	4116.4	4182.3	4159.1	4182.3	4155.2	4162.9	4174.6
7.5°	4170.7	4190.1	4186.2	4240.5	4190.1	4263.7	4248.2	4283.1	4256.0	4263.7	4279.2
10°	4240.5	4263.7	4267.6	4321.9	4275.3	4364.5	4345.1	4383.9	4360.6	4372.2	4391.6
12.5°	4321.9	4349.0	4352.9	4414.9	4364.5	4457.5	4445.9	4484.6	4465.3	4476.9	4500.2
15°	4383.9	4422.6	4430.4	4492.4	4438.1	4535.0	4527.3	4577.7	4546.7	4566.0	4585.4
17.5°	4414.9	4449.8	4465.3	4523.4	4476.9	4573.8	4566.0	4608.7	4585.4	4604.8	4628.1
20°	4395.5	4438.1	4449.8	4507.9	4461.4	4558.3	4546.7	4589.3	4566.0	4581.6	4604.8
22.5°	4325.7	4368.4	4383.9	4438.1	4395.5	4484.6	4480.8	4519.5	4488.5	4507.9	4527.3
25°	4201.7	4248.2	4256.0	4306.3	4259.8	4352.9	4345.1	4387.7	4364.5	4376.1	4403.3
27.5°	4023.4	4077.7	4089.3	4131.9	4097.0	4174.6	4174.6	4209.4	4182.3	4182.3	4209.4
30°	3810.2	3864.5	3872.2	3907.1	3876.1	3945.9	3949.7	3984.6	3942.0	3965.3	3969.1
32.5°	3550.5	3585.4	3608.7	3639.7	3593.1	3682.3	3670.7	3697.8	3674.5	3674.5	3693.9
35°	3236.5	3279.2	3290.8	3329.6	3290.8	3360.6	3360.6	3376.1	3352.8	3352.8	3383.8
37.5°	2895.4	2926.5	2930.3	2969.1	2938.1	2996.2	2992.4	3004.0	2980.7	2996.2	2996.2
40°	2496.2	2519.5	2527.2	2546.6	2542.7	2585.4	2581.5	2589.2	2577.6	2581.5	2589.2
42.5°	2031.1	2062.1	2077.6	2093.1	2069.8	2128.0	2116.4	2128.0	2124.1	2128.0	2139.6
45°	1496.2	1519.4	1531.1	1534.9	1527.2	1562.1	1589.2	1565.9	1569.8	1562.1	1577.6
47.5°	1081.4	1085.3	1077.6	1100.8	1081.4	1096.9	1104.7	1108.6	1085.3	1081.4	1096.9
50°	740.3	759.7	732.6	744.2	740.3	755.8	748.1	752.0	728.7	740.3	732.6
52.5°	492.3	488.4	480.6	484.5	476.8	476.8	476.8	484.5	469.0	461.3	453.5
55°	298.5	290.7	275.2	271.3	271.3	275.2	267.5	259.7	259.7	255.8	255.8
57.5°	174.4	162.8	155.0	151.2	143.4	139.5	135.7	135.7	127.9	127.9	127.9
60°	96.9	85.3	77.5	69.8	69.8	65.9	62.0	58.1	58.1	58.1	54.3
62.5°	50.4	42.6	34.9	31.0	31.0	27.1	23.3	23.3	23.3	23.3	19.4
65°	34.9	27.1	23.3	19.4	19.4	15.5	15.5	15.5	15.5	15.5	15.5
67.5°	27.1	23.3	19.4	15.5	15.5	15.5	11.6	11.6	11.6	11.6	11.6
70°	23.3	15.5	15.5	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
72.5°	15.5	15.5	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
75°	11.6	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
77.5°	3.9	3.9	3.9	3.9	3.9	3.9	0.0	0.0	0.0	0.0	0.0
80°	3.9	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: P252225

CATALOG NUMBER: LD6B70D010TE EU6B60709027 6LBSW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4	4054.4
2.5°	4116.4	4112.5	4116.4	4124.2	4108.7	4155.2	4131.9	4155.2
5°	4205.6	4209.4	4213.3	4225.0	4205.6	4263.7	4232.7	4267.6
7.5°	4321.9	4325.7	4329.6	4341.2	4329.6	4387.7	4352.9	4383.9
10°	4442.0	4449.8	4449.8	4469.1	4457.5	4511.8	4488.5	4527.3
12.5°	4554.4	4562.2	4569.9	4581.6	4573.8	4631.9	4612.6	4643.6
15°	4643.6	4659.1	4662.9	4678.5	4670.7	4732.7	4709.5	4740.5
17.5°	4686.2	4701.7	4701.7	4721.1	4713.3	4779.2	4748.2	4783.1
20°	4662.9	4674.6	4678.5	4697.8	4690.1	4756.0	4725.0	4767.6
22.5°	4589.3	4593.2	4597.1	4616.4	4612.6	4670.7	4643.6	4670.7
25°	4453.6	4465.3	4461.4	4476.9	4476.9	4523.4	4492.4	4515.7
27.5°	4259.8	4271.5	4271.5	4290.8	4275.3	4321.9	4290.8	4325.7
30°	4023.4	4035.0	4027.3	4042.8	4027.3	4073.8	4050.5	4062.2
32.5°	3740.4	3740.4	3744.3	3748.2	3740.4	3783.1	3759.8	3783.1
35°	3403.2	3411.0	3414.8	3418.7	3411.0	3442.0	3414.8	3430.3
37.5°	3023.4	3042.7	3038.9	3042.7	3031.1	3069.9	3046.6	3054.4
40°	2616.4	2616.4	2612.5	2620.2	2608.6	2639.6	2624.1	2631.9
42.5°	2143.5	2155.1	2139.6	2159.0	2128.0	2170.6	2155.1	2143.5
45°	1608.6	1593.1	1589.2	1593.1	1581.4	1585.3	1597.0	1589.2
47.5°	1096.9	1096.9	1089.2	1077.6	1093.1	1096.9	1081.4	1081.4
50°	736.5	736.5	728.7	724.8	732.6	728.7	721.0	732.6
52.5°	469.0	453.5	453.5	461.3	453.5	445.8	457.4	449.6
55°	255.8	248.1	248.1	255.8	248.1	248.1	244.2	251.9
57.5°	124.0	127.9	124.0	124.0	124.0	124.0	120.2	124.0
60°	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3
62.5°	23.3	23.3	19.4	19.4	19.4	19.4	19.4	19.4
65°	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
67.5°	11.6	11.6	11.6	11.6	11.6	15.5	11.6	11.6
70°	11.6	11.6	11.6	11.6	11.6	11.6	11.6	11.6
72.5°	11.6	11.6	15.5	15.5	15.5	15.5	15.5	15.5
75°	7.8	7.8	7.8	3.9	3.9	3.9	3.9	3.9
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)