

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: P252374

Luminaire Tested: **LD6B20D010 EU6B10209730 6LBLWW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252374  
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: LD6B20D010 EU6B10209730 6LBLWW1LI  
Description: PORTFOLIO 6 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 97CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1376.0 lumens  
Efficiency: N/A  
Efficacy: 66.2 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

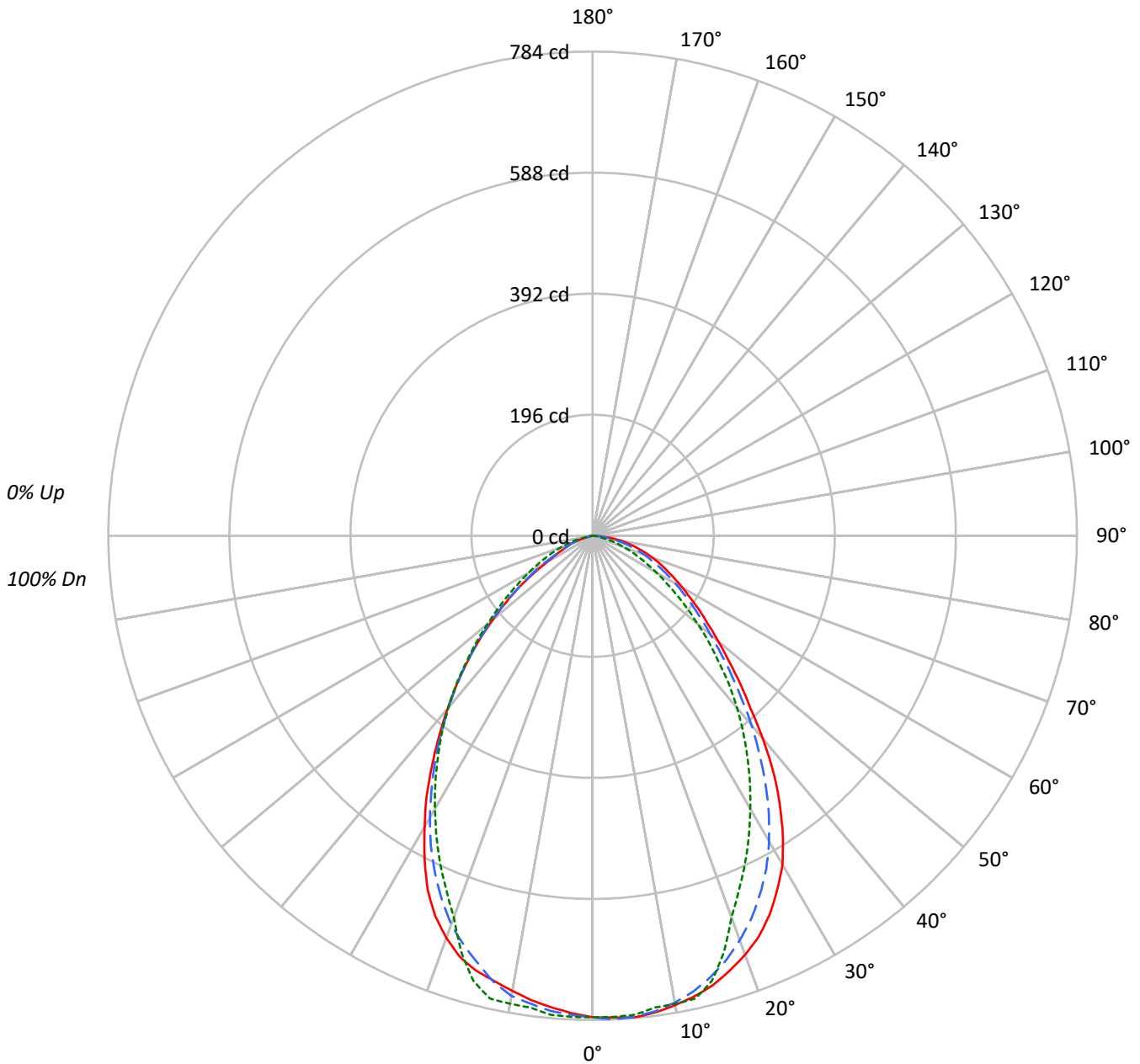
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252374

CATALOG NUMBER: LD6B20D010 EU6B10209730 6LBLWW1LI

### Luminous Intensity Polar Plot





TEST NUMBER: P252374

CATALOG NUMBER: LD6B20D010 EU6B10209730 6LBLWW1LI

**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°	50868	50868	50868
5°	51259	50990	50198
10°	51116	50977	49573
15°	50879	50400	49238
20°	50120	45621	48086
25°	48763	42054	45480
30°	46300	38443	40959
35°	42012	34757	36047
40°	36476	30958	31043
45°	31111	26627	26341
50°	26927	22502	21274
55°	24068	18768	16470
60°	21934	15593	11104
65°	20470	12813	8290
70°	19514	10434	6962
75°	18376	7411	2294
80°	17508	3795	751
85°	14372	2246	0



TEST NUMBER: P252374

CATALOG NUMBER: LD6B20D010 EU6B10209730 6LBLWW1LI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.6	5.4
10°-20°	205.9	15.0
20°-30°	284.2	20.7
30°-40°	289.2	21.0
40°-50°	232.4	16.9
50°-60°	154.6	11.2
60°-70°	88.1	6.4
70°-80°	39.6	2.9
80°-90°	8.3	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°	563.8	41.0
0°-40°	853.0	62.0
0°-60°	1240.0	90.1
0°-90°	1376.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1376.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	780	780	780	780	780	
5°	783	782	779	773	766	74
15°	753	739	746	717	729	212
25°	677	641	584	604	632	310
35°	528	487	436	444	453	328
45°	337	317	289	286	286	261
55°	212	197	165	147	145	190
65°	133	118	83	54	54	132
75°	73	61	29	12	9	78
85°	19	13	3	1	0	23
90°	0	0	0	0	0	



TEST NUMBER: P252374

CATALOG NUMBER: LD6B20D010 EU6B10209730 6LBLWW1LI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7
2.5°	780.7	784.7	783.7	782.7	783.7	782.7	780.7	780.7	778.6	778.6	783.7
5°	782.7	784.7	783.7	782.7	782.7	783.7	779.7	779.7	777.6	776.6	781.7
7.5°	778.6	781.7	779.7	779.7	778.6	779.7	775.6	775.6	772.6	771.6	776.6
10°	771.6	775.6	773.6	773.6	773.6	771.6	769.5	768.5	765.5	764.5	767.5
12.5°	763.5	766.5	765.5	763.5	763.5	763.5	759.4	758.4	754.3	752.3	755.4
15°	753.3	755.4	754.3	753.3	751.3	751.3	747.3	745.2	741.2	737.1	739.2
17.5°	738.1	741.2	739.2	738.1	735.1	735.1	731.1	729.0	723.0	718.9	719.9
20°	721.9	723.0	721.9	719.9	716.9	715.9	711.8	707.8	702.7	697.6	696.6
22.5°	702.7	703.7	700.7	698.7	695.6	694.6	689.5	686.5	678.4	672.3	671.3
25°	677.4	678.4	678.4	673.3	671.3	669.3	664.2	659.2	652.1	644.0	640.9
27.5°	647.0	650.0	648.0	643.0	638.9	637.9	632.8	628.8	619.7	612.6	608.5
30°	614.6	613.6	612.6	609.5	603.5	602.5	597.4	592.3	585.2	576.1	571.1
32.5°	573.1	573.1	572.1	569.0	563.0	560.9	556.9	550.8	542.7	535.6	530.6
35°	527.5	528.5	527.5	521.5	517.4	515.4	513.4	506.3	499.2	491.1	487.0
37.5°	479.9	476.9	477.9	472.9	467.8	469.8	463.7	460.7	452.6	446.5	442.5
40°	428.3	430.3	426.3	424.3	421.2	418.2	418.2	413.1	409.1	402.0	400.0
42.5°	377.7	380.7	379.7	377.7	373.6	374.6	369.6	367.6	362.5	359.5	356.4
45°	337.2	337.2	337.2	335.1	334.1	332.1	329.1	326.0	323.0	318.9	316.9
47.5°	297.7	297.7	298.7	296.7	294.6	293.6	291.6	291.6	286.5	282.5	280.5
50°	265.3	265.3	265.3	263.3	261.2	261.2	259.2	257.2	254.1	251.1	249.1
52.5°	235.9	235.9	235.9	233.9	232.9	231.9	230.9	229.8	225.8	223.8	221.7
55°	211.6	210.6	210.6	209.6	207.6	207.6	206.6	204.5	201.5	198.5	197.4
57.5°	187.3	188.3	187.3	187.3	185.3	185.3	183.3	182.3	179.2	177.2	175.2
60°	168.1	168.1	168.1	167.1	165.0	166.1	164.0	163.0	160.0	156.9	154.9
62.5°	148.8	149.9	149.9	148.8	146.8	146.8	145.8	144.8	141.8	138.7	135.7
65°	132.6	132.6	132.6	131.6	130.6	130.6	129.6	128.6	125.6	121.5	118.5
67.5°	117.5	116.4	116.4	116.4	115.4	114.4	113.4	112.4	109.4	106.3	102.3
70°	102.3	102.3	102.3	101.3	99.2	100.2	99.2	98.2	95.2	92.1	89.1
72.5°	88.1	88.1	87.1	86.1	86.1	85.1	85.1	84.0	81.0	77.0	73.9
75°	72.9	72.9	72.9	72.9	70.9	71.9	69.9	68.9	66.8	63.8	60.8
77.5°	59.7	59.7	59.7	58.7	57.7	57.7	56.7	55.7	52.7	50.6	46.6
80°	46.6	46.6	46.6	46.6	45.6	44.6	43.5	42.5	40.5	37.5	34.4
82.5°	34.4	34.4	33.4	33.4	33.4	32.4	31.4	30.4	28.4	26.3	24.3
85°	19.2	20.3	20.3	18.2	19.2	18.2	18.2	16.2	16.2	14.2	13.2
87.5°	7.1	6.1	6.1	6.1	6.1	6.1	6.1	5.1	5.1	5.1	4.1
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: P252374

CATALOG NUMBER: LD6B20D010 EU6B10209730 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7
2.5°	779.7	778.6	782.7	782.7	776.6	779.7	780.7	778.6	778.6	779.7	776.6
5°	777.6	775.6	779.7	780.7	774.6	777.6	778.6	776.6	777.6	778.6	774.6
7.5°	770.5	770.5	773.6	774.6	768.5	771.6	771.6	769.5	770.5	770.5	767.5
10°	763.5	760.4	763.5	763.5	758.4	759.4	761.4	760.4	764.5	769.5	769.5
12.5°	750.3	747.3	752.3	752.3	749.3	753.3	758.4	761.4	765.5	767.5	761.4
15°	734.1	735.1	744.2	751.3	748.3	754.3	759.4	757.4	752.3	746.2	737.1
17.5°	712.8	709.8	717.9	721.9	717.9	719.9	724.0	719.9	711.8	706.8	694.6
20°	688.5	680.4	680.4	678.4	671.3	671.3	670.3	663.2	660.2	657.1	652.1
22.5°	661.2	652.1	649.0	643.0	636.9	635.9	632.8	625.7	621.7	619.7	613.6
25°	629.8	621.7	616.6	610.6	601.4	599.4	596.4	589.3	587.3	584.2	579.2
27.5°	597.4	587.3	580.2	574.1	566.0	565.0	558.9	553.9	549.8	547.8	543.7
30°	559.9	548.8	543.7	535.6	529.6	527.5	522.5	515.4	512.3	510.3	507.3
32.5°	518.4	509.3	504.2	497.2	489.1	490.1	484.0	477.9	475.9	473.9	470.8
35°	477.9	468.8	462.7	456.7	451.6	449.6	445.5	440.5	437.4	436.4	434.4
37.5°	433.4	426.3	421.2	415.1	411.1	409.1	407.0	402.0	400.0	400.0	395.9
40°	389.8	383.8	379.7	376.7	371.6	370.6	368.6	365.5	364.5	363.5	360.5
42.5°	350.3	342.2	339.2	337.2	334.1	332.1	331.1	329.1	328.1	327.0	324.0
45°	312.9	305.8	302.7	300.7	297.7	296.7	295.7	292.6	290.6	288.6	287.6
47.5°	276.4	271.4	270.3	265.3	263.3	261.2	259.2	257.2	256.2	255.2	251.1
50°	245.0	242.0	236.9	233.9	231.9	230.9	226.8	223.8	222.8	221.7	218.7
52.5°	216.7	212.6	209.6	204.5	203.5	201.5	199.5	195.4	193.4	192.4	189.3
55°	191.4	188.3	184.3	180.2	177.2	176.2	173.1	169.1	167.1	165.0	163.0
57.5°	170.1	165.0	161.0	156.9	154.9	151.9	148.8	146.8	143.8	140.7	137.7
60°	149.9	145.8	140.7	136.7	134.7	132.6	128.6	125.6	122.5	119.5	116.4
62.5°	130.6	126.6	121.5	117.5	115.4	113.4	109.4	106.3	103.3	100.2	96.2
65°	113.4	109.4	105.3	101.3	99.2	97.2	93.2	89.1	86.1	83.0	79.0
67.5°	99.2	94.2	90.1	86.1	84.0	82.0	78.0	74.9	70.9	67.8	63.8
70°	84.0	80.0	77.0	72.9	70.9	68.9	64.8	60.8	57.7	54.7	50.6
72.5°	70.9	65.8	62.8	58.7	56.7	55.7	51.6	48.6	45.6	41.5	38.5
75°	56.7	52.7	48.6	45.6	43.5	42.5	38.5	35.4	32.4	29.4	26.3
77.5°	43.5	40.5	36.5	33.4	31.4	30.4	26.3	23.3	20.3	18.2	15.2
80°	32.4	28.4	26.3	23.3	22.3	20.3	18.2	15.2	13.2	10.1	8.1
82.5°	22.3	19.2	17.2	15.2	14.2	13.2	11.1	9.1	7.1	6.1	5.1
85°	12.2	10.1	9.1	8.1	7.1	7.1	6.1	5.1	4.1	3.0	2.0
87.5°	4.1	3.0	3.0	3.0	3.0	2.0	2.0	2.0	1.0	1.0	1.0
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: P252374

CATALOG NUMBER: LD6B20D010 EU6B10209730 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7
2.5°	778.6	778.6	778.6	777.6	777.6	777.6	776.6	780.7	776.6	775.6	778.6
5°	777.6	775.6	775.6	775.6	775.6	774.6	773.6	775.6	772.6	771.6	771.6
7.5°	771.6	770.5	770.5	769.5	768.5	767.5	766.5	767.5	764.5	763.5	763.5
10°	772.6	770.5	770.5	767.5	765.5	762.4	759.4	760.4	756.4	753.3	753.3
12.5°	760.4	755.4	752.3	749.3	747.3	746.2	742.2	744.2	740.2	739.2	739.2
15°	733.1	727.0	721.9	719.9	719.9	717.9	714.9	718.9	716.9	717.9	723.0
17.5°	690.5	687.5	684.5	683.5	684.5	686.5	688.5	694.6	694.6	697.6	702.7
20°	653.1	651.1	653.1	653.1	654.1	658.1	662.2	667.3	669.3	672.3	679.4
22.5°	616.6	616.6	618.7	621.7	620.7	627.8	628.8	637.9	637.9	644.0	650.0
25°	581.2	581.2	583.2	584.2	586.3	590.3	594.4	601.4	603.5	609.5	614.6
27.5°	546.8	545.8	545.8	546.8	548.8	553.9	555.9	564.0	567.0	571.1	576.1
30°	508.3	507.3	509.3	511.3	510.3	515.4	518.4	524.5	526.5	530.6	534.6
32.5°	471.8	471.8	471.8	473.9	473.9	477.9	477.9	485.0	485.0	488.0	492.1
35°	434.4	434.4	435.4	436.4	437.4	438.4	439.4	443.5	444.5	445.5	447.5
37.5°	398.9	397.9	398.9	398.9	396.9	401.0	401.0	405.0	402.0	405.0	406.0
40°	362.5	362.5	361.5	361.5	361.5	363.5	361.5	364.5	362.5	364.5	363.5
42.5°	325.0	325.0	323.0	325.0	324.0	324.0	324.0	326.0	323.0	325.0	326.0
45°	287.6	286.5	286.5	285.5	285.5	285.5	286.5	286.5	285.5	287.6	287.6
47.5°	251.1	250.1	250.1	250.1	250.1	251.1	248.1	250.1	248.1	248.1	248.1
50°	219.7	218.7	217.7	216.7	215.7	215.7	214.7	214.7	212.6	211.6	210.6
52.5°	189.3	188.3	186.3	186.3	185.3	184.3	181.2	181.2	178.2	177.2	177.2
55°	162.0	159.0	158.0	155.9	155.9	153.9	151.9	149.9	146.8	144.8	144.8
57.5°	136.7	133.7	131.6	130.6	129.6	127.6	123.5	122.5	118.5	117.5	116.4
60°	114.4	111.4	108.3	106.3	105.3	102.3	98.2	96.2	94.2	91.1	88.1
62.5°	93.2	90.1	86.1	85.1	83.0	80.0	77.0	73.9	71.9	68.9	66.8
65°	74.9	71.9	68.9	66.8	64.8	61.8	58.7	55.7	53.7	52.7	51.6
67.5°	60.8	56.7	53.7	52.7	50.6	48.6	45.6	44.6	42.5	42.5	42.5
70°	47.6	44.6	41.5	40.5	39.5	37.5	35.4	35.4	35.4	35.4	35.4
72.5°	35.4	33.4	30.4	29.4	28.4	27.3	25.3	26.3	25.3	25.3	25.3
75°	22.3	20.3	18.2	17.2	16.2	15.2	14.2	13.2	12.2	11.1	11.1
77.5°	12.2	10.1	9.1	8.1	8.1	7.1	6.1	6.1	5.1	5.1	5.1
80°	7.1	6.1	5.1	4.1	4.1	3.0	3.0	3.0	3.0	2.0	2.0
82.5°	4.1	3.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0
85°	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0
87.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
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: P252374

CATALOG NUMBER: LD6B20D010 EU6B10209730 6LBLWW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	779.7	779.7	779.7	779.7	779.7	779.7	779.7	779.7
2.5°	773.6	776.6	773.6	776.6	776.6	776.6	776.6	773.6
5°	768.5	770.5	767.5	769.5	770.5	769.5	769.5	766.5
7.5°	759.4	761.4	758.4	761.4	762.4	761.4	760.4	758.4
10°	750.3	751.3	748.3	750.3	752.3	752.3	751.3	748.3
12.5°	736.1	739.2	736.1	738.1	740.2	741.2	741.2	738.1
15°	719.9	725.0	723.0	726.0	729.0	730.0	730.0	729.0
17.5°	703.7	708.8	705.7	710.8	713.8	715.9	716.9	714.9
20°	680.4	686.5	684.5	688.5	692.6	695.6	695.6	692.6
22.5°	650.0	658.1	657.1	660.2	665.2	666.2	668.3	666.2
25°	616.6	622.7	621.7	624.7	630.8	630.8	631.8	631.8
27.5°	578.2	584.2	583.2	585.2	589.3	590.3	591.3	589.3
30°	536.6	539.7	539.7	542.7	545.8	546.8	546.8	543.7
32.5°	491.1	495.1	497.2	496.1	499.2	501.2	500.2	500.2
35°	449.6	450.6	451.6	452.6	453.6	455.6	453.6	452.6
37.5°	405.0	408.1	406.0	408.1	410.1	409.1	408.1	408.1
40°	364.5	365.5	363.5	365.5	366.5	366.5	366.5	364.5
42.5°	324.0	326.0	324.0	326.0	326.0	326.0	326.0	325.0
45°	283.5	285.5	285.5	286.5	286.5	285.5	285.5	285.5
47.5°	246.0	248.1	246.0	248.1	249.1	247.1	247.1	247.1
50°	210.6	209.6	209.6	210.6	210.6	210.6	210.6	209.6
52.5°	174.2	175.2	175.2	175.2	176.2	175.2	176.2	176.2
55°	142.8	142.8	142.8	143.8	142.8	142.8	143.8	144.8
57.5°	114.4	113.4	112.4	112.4	113.4	112.4	112.4	112.4
60°	88.1	87.1	86.1	86.1	86.1	86.1	86.1	85.1
62.5°	65.8	65.8	65.8	66.8	66.8	66.8	66.8	67.8
65°	52.7	52.7	52.7	52.7	52.7	52.7	52.7	53.7
67.5°	42.5	42.5	42.5	43.5	43.5	43.5	43.5	43.5
70°	35.4	35.4	36.5	35.4	36.5	36.5	36.5	36.5
72.5°	24.3	24.3	24.3	24.3	24.3	23.3	24.3	23.3
75°	10.1	10.1	10.1	10.1	10.1	10.1	10.1	9.1
77.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
80°	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
82.5°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	1.0	1.0	1.0	1.0	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)