

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: P252552

Luminaire Tested: **LD6B10D010 EU6B10209035 6LBDW1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252552  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-8)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LD6B10D010 EU6B10209035 6LBDW1LI  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 918.0 lumens  
Efficiency: N/A  
Efficacy: 91.3 lumens/watt  
Spacing Criteria (0/90/45): 1.11 / 1.22 / 1.15  
Luminous Opening: Circular (Dia: 0.46' x H: 0')  
CIE Type: Direct

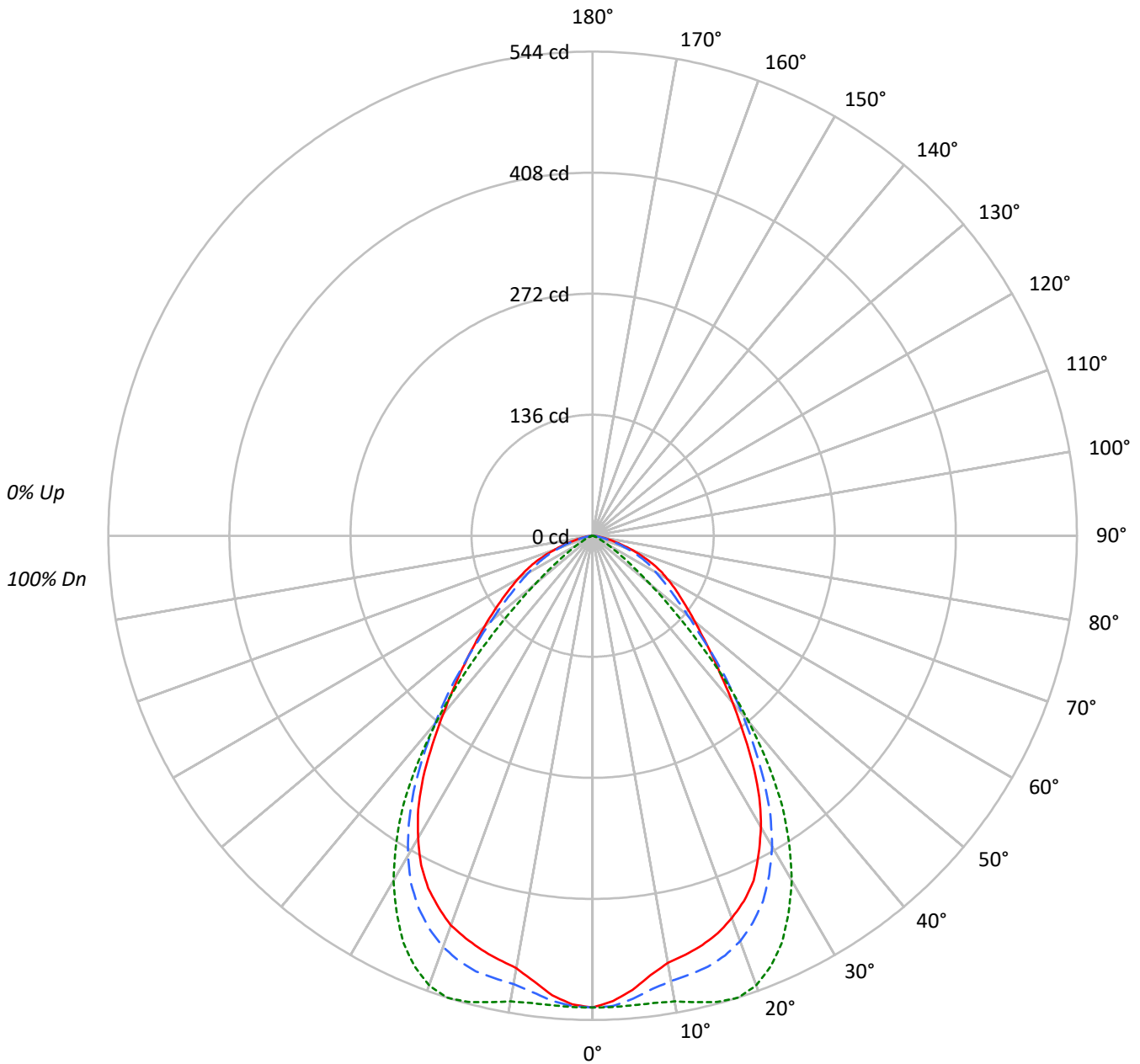
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252552

CATALOG NUMBER: LD6B10D010 EU6B10209035 6LBDW1LI

### Luminous Intensity Polar Plot





TEST NUMBER: P252552

CATALOG NUMBER: LD6B10D010 EU6B10209035 6LBDW1LI

**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	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	89																			
2	104	97	92	87	101	95	91	86	92	88	84	89	86	83	86	83	81	79																			
3	96	88	81	76	94	86	80	76	84	79	74	81	77	73	79	75	72	70																			
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62																			
5	84	73	65	60	82	72	65	59	70	64	59	68	63	58	66	62	58	56																			
6	78	67	59	54	76	66	59	53	64	58	53	63	57	53	61	56	52	50																			
7	73	61	54	49	72	61	53	48	59	53	48	58	52	48	57	51	48	46																			
8	69	57	49	44	67	56	49	44	55	48	44	54	48	44	53	47	43	42																			
9	64	53	45	40	63	52	45	40	51	45	40	50	44	40	49	44	40	38																			
10	61	49	42	37	60	48	42	37	48	41	37	47	41	37	46	41	37	35																			

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

	0°	90°	180°
0°	34578	34578	34578
5°	33544	34670	33950
10°	32269	35190	32673
15°	32157	36628	32528
20°	31735	37310	32332
25°	30788	36259	31450
30°	28484	33697	29538
35°	24984	29620	26450
40°	20823	23225	22177
45°	17521	15316	18711
50°	15174	8394	16107
55°	13729	4459	14081
60°	12631	2323	12631
65°	11439	1235	11161
70°	9232	706	8527
75°	6327	454	5873
80°	4133	225	3682
85°	2770	449	2321



TEST NUMBER: P252552

CATALOG NUMBER: LD6B10D010 EU6B10209035 6LBDW1LI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	49.4	5.4
10°-20°	142.9	15.6
20°-30°	211.2	23.0
30°-40°	213.3	23.2
40°-50°	147.0	16.0
50°-60°	84.4	9.2
60°-70°	49.1	5.4
70°-80°	17.9	2.0
80°-90°	2.7	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°	403.5	44.0
0°-40°	616.8	67.2
0°-60°	848.2	92.4
0°-90°	918.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	918.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	530	530	530	530	530	
5°	512	522	529	524	518	48
15°	476	501	542	507	482	134
25°	428	453	504	462	437	195
35°	314	335	372	350	332	195
45°	190	192	166	205	203	148
55°	121	106	39	110	124	109
65°	74	62	8	62	72	73
75°	25	20	2	20	23	28
85°	4	2	1	2	3	5
90°	0	0	0	0	0	



TEST NUMBER: P252552

CATALOG NUMBER: LD6B10D010 EU6B10209035 6LBDW1LI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0
2.5°	523.3	523.9	524.5	523.9	524.5	526.9	525.1	526.3	526.3	526.9	528.8
5°	512.2	512.2	513.5	512.9	514.7	517.1	515.3	517.1	517.8	519.0	522.0
7.5°	498.1	498.1	498.8	498.8	501.2	503.7	502.4	504.9	507.3	509.8	513.5
10°	487.1	488.3	488.3	489.0	491.4	494.5	493.9	496.9	499.4	503.0	507.9
12.5°	482.2	482.8	482.8	484.1	486.5	489.6	489.0	492.0	495.7	500.0	504.9
15°	476.1	477.3	476.7	477.9	480.4	483.4	482.8	485.9	490.2	494.5	501.2
17.5°	468.1	468.7	469.3	469.3	471.8	474.2	474.2	477.3	482.2	487.1	494.5
20°	457.1	458.3	458.3	458.9	460.8	464.4	463.8	466.9	471.8	476.7	484.7
22.5°	444.2	444.8	444.8	445.5	448.5	450.4	451.0	453.4	457.7	463.2	470.6
25°	427.7	428.3	427.7	429.5	430.7	434.4	433.2	436.3	441.2	445.5	452.8
27.5°	403.8	405.0	405.0	405.6	408.7	411.8	411.8	414.8	419.1	422.2	429.5
30°	378.1	379.9	378.1	381.1	382.3	384.8	386.6	388.5	392.1	396.4	403.2
32.5°	348.6	348.0	348.6	349.9	353.5	355.4	356.6	358.4	362.1	365.8	371.3
35°	313.7	314.9	315.6	318.0	318.0	321.1	321.7	322.9	328.4	330.9	335.2
37.5°	277.0	278.2	278.8	280.0	282.5	283.7	285.5	287.4	291.0	295.3	297.8
40°	244.5	244.5	245.1	246.3	248.2	248.8	250.6	253.1	255.5	259.2	261.6
42.5°	213.8	214.5	213.8	215.1	216.9	219.4	218.7	221.8	222.4	224.9	226.7
45°	189.9	189.9	188.7	189.9	189.9	192.4	191.8	193.0	192.4	193.6	192.4
47.5°	167.3	167.9	167.3	167.9	167.9	167.9	168.5	167.3	167.9	166.0	162.4
50°	149.5	150.1	148.9	149.5	148.9	148.3	148.9	147.1	146.4	144.0	140.3
52.5°	134.2	133.6	133.0	133.0	133.0	132.3	131.7	129.9	128.1	125.6	121.3
55°	120.7	120.1	119.5	119.5	118.3	117.6	117.6	115.8	114.0	110.9	106.0
57.5°	108.5	107.8	107.2	107.2	106.6	105.4	105.4	103.6	101.1	97.4	93.1
60°	96.8	96.8	96.8	96.2	96.2	95.0	95.0	93.1	90.7	87.0	82.1
62.5°	86.4	85.8	85.8	85.8	85.8	85.2	84.6	83.3	80.9	77.2	72.9
65°	74.1	74.1	74.1	74.1	73.5	73.5	73.5	71.7	70.5	66.8	62.5
67.5°	60.7	60.7	60.7	60.7	60.0	60.7	60.7	59.4	58.2	54.5	50.9
70°	48.4	47.8	47.2	47.8	47.2	47.2	47.8	46.6	46.0	42.9	39.2
72.5°	35.5	36.2	35.5	35.5	35.5	34.9	35.5	34.9	33.7	31.2	28.8
75°	25.1	25.7	25.7	25.1	25.1	25.1	24.5	24.5	23.3	21.4	20.2
77.5°	17.2	17.2	17.2	17.2	16.5	16.5	16.5	15.9	15.3	14.1	12.9
80°	11.0	11.0	11.0	11.0	10.4	10.4	10.4	9.8	9.8	8.6	7.4
82.5°	6.7	6.7	6.7	6.7	6.7	6.7	6.1	6.1	5.5	4.9	4.3
85°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.1	3.1	2.5	1.8
87.5°	1.2	1.2	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.2	1.2
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: P252552

CATALOG NUMBER: LD6B10D010 EU6B10209035 6LBDW1LI

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0
2.5°	527.6	528.2	528.2	528.2	530.0	530.6	528.8	526.9	530.6	530.0	531.2
5°	521.4	523.3	524.5	525.1	526.9	528.2	526.3	525.7	528.8	529.4	530.0
7.5°	514.1	517.1	520.2	521.4	523.9	525.1	524.5	524.5	528.2	529.4	529.4
10°	509.2	513.5	517.1	520.2	523.3	525.1	525.1	525.7	530.0	531.2	532.5
12.5°	507.9	513.5	518.4	522.7	525.1	528.2	528.8	530.6	534.9	536.7	536.7
15°	504.9	512.2	518.4	523.9	527.6	531.2	532.5	536.1	541.0	542.3	543.5
17.5°	499.4	506.7	514.1	520.8	525.7	528.8	532.5	536.1	542.3	544.1	544.7
20°	489.6	498.1	505.5	512.2	517.1	521.4	525.1	529.4	534.9	537.4	538.0
22.5°	474.9	483.4	490.8	498.1	503.0	506.7	510.4	515.3	520.8	523.3	523.3
25°	457.1	465.1	473.0	478.5	483.4	487.7	489.6	495.1	500.6	503.7	503.7
27.5°	434.4	441.8	449.1	455.3	458.3	462.0	465.1	470.0	474.2	476.7	479.2
30°	405.6	413.0	419.7	425.8	429.5	433.2	436.3	439.9	444.2	447.3	447.9
32.5°	374.4	380.5	387.2	393.4	397.0	398.3	401.3	405.0	408.7	411.1	411.8
35°	340.1	344.4	348.6	354.2	357.8	357.8	360.9	363.3	366.4	371.9	370.7
37.5°	299.6	305.7	308.8	310.7	313.1	315.6	316.2	319.2	322.9	324.1	326.0
40°	261.6	263.5	265.3	265.3	267.8	267.8	267.8	268.4	272.0	272.7	275.1
42.5°	223.6	223.6	221.8	220.0	220.6	220.0	216.9	216.9	218.7	221.2	221.2
45°	188.1	183.8	178.3	174.0	171.0	169.7	166.0	166.0	165.4	166.0	168.5
47.5°	158.1	150.7	141.5	133.0	129.9	127.4	121.9	119.5	118.3	118.9	120.1
50°	133.0	125.0	114.6	104.2	98.6	95.6	88.8	84.6	83.9	82.7	85.2
52.5°	114.6	104.8	93.7	81.5	76.0	71.1	63.7	60.0	57.6	57.6	58.2
55°	98.6	88.2	76.0	63.7	58.2	54.5	47.2	42.3	39.8	39.2	41.1
57.5°	85.2	75.4	63.1	50.9	45.3	41.1	33.7	29.4	27.6	26.3	27.0
60°	74.8	64.9	52.7	41.1	36.2	31.2	25.1	20.2	17.8	17.8	18.4
62.5°	64.9	55.8	44.7	33.7	29.4	25.1	18.4	14.1	12.3	11.6	12.3
65°	55.1	46.6	37.4	28.2	23.9	20.2	14.7	11.0	8.6	8.0	8.6
67.5°	44.7	38.0	30.0	22.7	19.0	15.9	11.0	8.0	6.1	5.5	6.1
70°	34.9	28.8	22.7	16.5	14.1	11.6	8.0	6.1	4.3	3.7	4.3
72.5°	25.1	20.8	15.9	11.6	9.8	8.0	5.5	4.3	3.1	2.5	3.1
75°	17.2	14.1	10.4	7.4	6.1	5.5	3.7	2.5	1.8	1.8	1.8
77.5°	11.0	8.6	6.7	4.9	3.7	3.1	1.8	1.2	1.2	1.2	1.2
80°	6.1	4.9	3.7	2.5	1.8	1.8	1.2	1.2	0.6	0.6	0.6
82.5°	3.7	2.5	1.8	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6
85°	1.8	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
87.5°	0.6	0.6	0.6	0.6	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: P252552

CATALOG NUMBER: LD6B10D010 EU6B10209035 6LBDW1LI

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0
2.5°	528.8	529.4	527.6	530.0	528.2	530.6	530.6	528.2	528.8	527.6	530.0
5°	527.6	527.6	526.3	528.2	525.7	528.2	527.6	523.3	524.5	522.0	524.5
7.5°	527.6	526.3	524.5	526.3	523.3	525.1	522.7	518.4	517.1	514.1	514.1
10°	529.4	527.6	525.1	525.7	522.7	523.3	519.6	513.5	511.6	507.9	506.7
12.5°	533.7	531.8	528.2	529.4	525.1	525.1	520.2	512.9	509.2	504.3	503.0
15°	539.8	536.7	532.5	533.1	528.8	526.3	520.2	511.6	506.7	500.0	498.1
17.5°	541.0	538.0	532.5	532.5	526.9	523.9	516.5	506.7	500.6	493.9	490.2
20°	534.3	531.2	525.1	524.5	519.6	515.3	507.3	497.5	491.4	484.1	481.0
22.5°	520.2	516.5	511.0	510.4	505.5	503.0	494.5	484.7	478.5	471.2	468.7
25°	499.4	497.5	492.0	491.4	487.1	484.1	476.7	467.5	462.0	454.6	452.2
27.5°	474.9	473.0	467.5	467.5	462.6	460.8	454.0	445.5	441.2	434.4	431.4
30°	445.5	443.0	439.9	439.3	435.0	433.2	427.1	419.1	414.8	409.3	408.1
32.5°	410.5	408.7	406.8	406.2	401.9	400.1	395.8	387.9	384.2	379.3	377.4
35°	370.1	368.9	367.0	366.4	364.6	362.7	358.4	352.3	350.5	346.8	345.0
37.5°	323.5	324.7	323.5	323.5	321.7	322.3	318.6	314.9	313.1	310.7	309.4
40°	273.3	275.7	277.6	277.6	277.0	279.4	278.8	275.7	275.1	273.9	273.3
42.5°	222.4	223.6	227.3	229.8	229.2	235.3	235.9	238.4	240.2	239.0	239.6
45°	169.1	172.8	177.7	180.1	183.2	191.2	195.5	200.4	204.7	207.1	206.5
47.5°	121.9	126.2	131.7	135.4	140.9	150.7	161.8	167.9	174.0	177.1	180.1
50°	88.2	92.5	99.3	104.8	108.5	121.9	133.6	141.5	148.3	152.6	155.6
52.5°	61.9	66.8	74.1	79.0	84.6	97.4	110.9	120.1	127.4	133.0	136.0
55°	42.9	48.4	55.1	60.0	66.2	79.7	92.5	102.3	110.3	115.2	118.9
57.5°	30.0	34.9	41.7	46.0	52.1	64.9	77.8	87.6	95.6	100.5	104.8
60°	20.2	25.1	31.9	36.2	41.1	53.9	65.6	76.0	83.3	88.2	92.5
62.5°	14.1	18.4	25.1	29.4	33.7	44.7	55.8	64.9	72.3	77.8	81.5
65°	11.0	14.7	20.2	23.9	28.2	37.4	46.6	54.5	61.9	67.4	69.9
67.5°	8.0	11.6	15.9	19.0	22.1	30.0	38.0	44.1	50.9	55.1	58.2
70°	5.5	8.0	11.6	14.1	16.5	22.7	28.8	34.3	39.2	42.3	44.7
72.5°	4.3	5.5	8.0	9.8	11.6	15.9	20.8	25.1	28.8	31.2	33.7
75°	2.5	3.7	5.5	6.7	8.0	11.0	14.1	17.2	19.6	21.4	22.7
77.5°	1.2	1.8	3.1	3.7	4.9	6.7	9.2	11.0	12.9	14.1	15.3
80°	1.2	1.2	1.8	1.8	2.5	3.7	4.9	6.1	7.4	8.6	9.2
82.5°	0.6	0.6	1.2	1.2	1.2	1.8	2.5	3.7	4.3	4.9	5.5
85°	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.8	2.5	3.1	3.1
87.5°	0.0	0.0	0.6	0.6	0.6	0.6	0.6	1.2	1.2	1.2	1.8
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: P252552

CATALOG NUMBER: LD6B10D010 EU6B10209035 6LBDW1LI

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	530.0	530.0	530.0	530.0	530.0	530.0	530.0	530.0
2.5°	528.2	529.4	528.8	530.0	528.2	527.6	528.8	526.9
5°	521.4	522.0	521.4	521.4	520.2	519.0	520.2	518.4
7.5°	511.0	511.0	509.2	509.2	506.7	505.5	505.5	504.9
10°	502.4	500.6	498.8	499.4	495.7	494.5	493.9	493.2
12.5°	498.1	496.9	493.9	493.9	490.2	489.0	488.3	487.7
15°	493.2	490.8	488.3	487.7	484.7	483.4	482.8	481.6
17.5°	484.7	482.8	479.8	479.8	476.7	476.1	474.9	474.2
20°	475.5	473.0	470.6	470.6	466.9	466.9	465.1	465.7
22.5°	462.6	460.8	458.3	458.3	455.3	454.6	452.8	452.2
25°	447.3	444.8	443.0	442.4	439.9	438.7	438.1	436.9
27.5°	427.1	425.2	423.4	422.2	419.1	418.5	416.7	417.3
30°	401.9	400.7	400.1	398.9	395.2	394.0	394.0	392.1
32.5°	374.4	372.5	371.3	369.5	366.4	365.8	364.0	364.6
35°	340.7	338.2	336.4	337.0	333.3	332.7	331.5	332.1
37.5°	305.7	303.3	300.8	300.2	297.2	297.2	295.3	295.3
40°	269.6	267.1	265.9	265.9	262.2	262.9	261.0	260.4
42.5°	237.1	234.7	234.1	233.4	231.6	231.0	229.2	229.8
45°	206.5	205.9	205.9	204.7	202.8	202.2	202.8	202.8
47.5°	179.5	180.1	179.5	179.5	178.3	179.5	178.3	178.9
50°	156.9	158.1	158.1	158.1	157.5	158.1	158.1	158.7
52.5°	137.9	139.7	139.1	139.7	139.1	140.3	139.7	140.3
55°	121.3	122.5	123.2	123.8	123.8	123.8	123.8	123.8
57.5°	106.0	107.8	108.5	109.1	109.1	110.3	109.1	109.1
60°	93.7	95.6	96.2	96.8	96.8	97.4	96.2	96.8
62.5°	82.7	84.6	84.6	85.2	85.2	85.2	83.9	84.6
65°	71.7	72.3	72.9	72.9	72.3	72.3	71.7	72.3
67.5°	59.4	60.0	59.4	59.4	58.8	58.8	57.6	58.2
70°	46.0	46.0	46.6	46.0	45.3	46.0	45.3	44.7
72.5°	34.3	34.3	34.3	33.7	33.7	33.1	33.7	33.7
75°	23.3	23.3	23.9	23.9	23.9	23.9	23.3	23.3
77.5°	15.3	15.3	15.3	15.3	15.9	15.3	15.3	15.3
80°	9.8	9.8	10.4	10.4	9.8	9.8	9.8	9.8
82.5°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
85°	3.7	3.7	3.7	3.7	3.1	3.1	3.1	3.1
87.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.2	1.2
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)