

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: P252668

Luminaire Tested: **LD6B15D010 EU6B10209030 6LBDW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252668  
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: LD6B15D010 EU6B10209030 6LBDW1H  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1169.0 lumens  
Efficiency: N/A  
Efficacy: 81.2 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

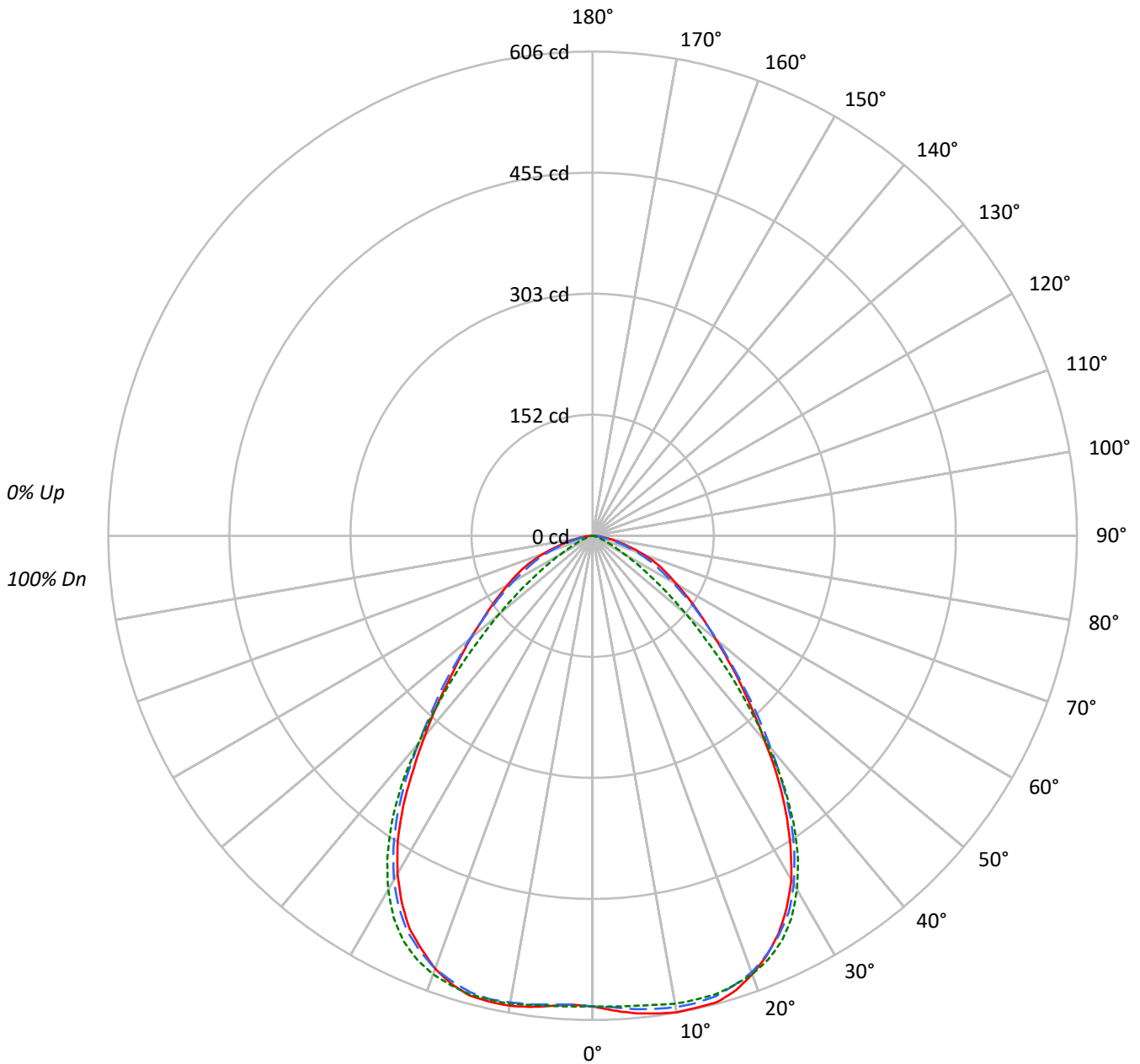
Input Watts (W): 14.39  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252668

CATALOG NUMBER: LD6B15D010 EU6B10209030 6LBDW1H

### Luminous Intensity Polar Plot





TEST NUMBER: P252668

CATALOG NUMBER: LD6B15D010 EU6B10209030 6LBDW1H

**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°	38427	38427	38427
5°	39281	38678	38678
10°	40119	39404	39569
15°	40795	40120	40228
20°	40546	40546	40025
25°	39577	40297	39038
30°	37463	38533	36778
35°	33570	34900	32909
40°	28522	28880	27815
45°	24136	22060	23287
50°	20380	15559	20127
55°	17903	10044	17721
60°	15867	5976	15984
65°	14665	3597	14665
70°	12704	2060	12399
75°	10083	1260	9453
80°	7514	939	7214
85°	6887	599	6213



TEST NUMBER: P252668

CATALOG NUMBER: LD6B15D010 EU6B10209030 6LBDW1H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.7	4.9
10°-20°	167.8	14.4
20°-30°	252.4	21.6
30°-40°	265.4	22.7
40°-50°	198.2	17.0
50°-60°	123.4	10.6
60°-70°	70.2	6.0
70°-80°	28.9	2.5
80°-90°	6.0	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°	476.9	40.8
0°-40°	742.3	63.5
0°-60°	1063.9	91.0
0°-90°	1169.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1169.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	589	589	589	589	589	
5°	600	595	591	589	591	57
15°	604	596	594	592	596	170
25°	550	552	560	547	542	252
35°	422	432	438	426	413	262
45°	262	267	239	262	252	203
55°	157	154	88	152	156	142
65°	95	85	23	85	95	94
75°	40	32	5	31	38	43
85°	9	6	1	5	8	10
90°	0	0	0	0	0	



TEST NUMBER: P252668

CATALOG NUMBER: LD6B15D010 EU6B10209030 6LBDW1H

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0
2.5°	594.8	594.0	594.8	593.1	592.3	592.3	593.1	591.5	590.6	591.5	590.6
5°	599.8	598.1	599.0	598.1	596.5	596.5	597.3	594.8	594.8	595.6	594.8
7.5°	603.1	603.1	603.1	601.5	600.6	599.8	601.5	599.0	598.1	598.1	597.3
10°	605.6	604.8	605.6	604.0	602.3	601.5	603.1	601.5	599.8	601.5	599.0
12.5°	604.8	604.8	604.8	604.0	602.3	601.5	603.1	600.6	599.8	600.6	599.0
15°	604.0	601.5	602.3	601.5	599.0	599.0	599.8	597.3	595.6	598.1	596.5
17.5°	596.5	594.8	595.6	594.0	592.3	591.5	592.3	591.5	589.8	591.5	589.8
20°	584.0	584.0	584.8	583.1	581.5	580.6	582.3	580.6	579.0	581.5	581.5
22.5°	569.0	569.0	569.0	568.1	567.3	567.3	567.3	566.5	565.6	567.3	568.1
25°	549.8	549.0	549.8	550.6	549.8	549.0	549.8	549.8	548.1	551.5	551.5
27.5°	525.7	525.7	527.3	526.5	526.5	525.7	527.3	527.3	526.5	529.0	531.5
30°	497.3	495.7	497.3	497.3	498.2	498.2	499.0	499.0	499.0	501.5	503.2
32.5°	460.7	461.5	464.0	463.2	462.3	464.8	464.8	466.5	467.3	469.0	469.8
35°	421.5	422.4	422.4	423.2	424.9	423.2	427.4	426.5	427.4	430.7	432.4
37.5°	379.9	377.4	381.5	379.9	380.7	380.7	382.4	383.2	385.7	389.9	389.9
40°	334.9	335.7	337.4	338.2	339.1	339.1	339.1	341.6	342.4	347.4	346.5
42.5°	295.7	295.7	297.4	298.2	298.2	298.2	298.2	300.7	302.4	304.1	305.7
45°	261.6	259.1	260.7	260.7	262.4	261.6	263.2	264.9	265.7	268.2	267.4
47.5°	229.1	228.3	229.1	229.9	229.1	229.9	230.8	231.6	232.4	232.4	232.4
50°	200.8	200.8	201.6	202.4	202.4	202.4	202.4	203.3	203.3	204.9	203.3
52.5°	177.4	178.3	178.3	177.4	178.3	178.3	179.1	179.1	178.3	178.3	175.8
55°	157.4	156.6	157.4	156.6	157.4	157.4	156.6	156.6	155.8	154.9	154.1
57.5°	138.3	138.3	138.3	138.3	137.5	138.3	137.5	136.6	136.6	135.0	132.5
60°	121.6	121.6	121.6	121.6	121.6	120.8	121.6	120.8	119.1	117.5	114.1
62.5°	107.5	106.6	107.5	106.6	106.6	105.8	105.8	105.0	103.3	101.6	98.3
65°	95.0	95.8	95.0	95.0	94.1	93.3	93.3	92.5	90.0	88.3	85.0
67.5°	81.6	80.8	80.8	80.8	80.0	80.0	80.0	78.3	76.6	74.1	70.8
70°	66.6	66.6	66.6	65.8	65.8	65.0	65.0	64.1	62.5	60.8	56.6
72.5°	52.5	52.5	52.5	50.8	51.6	50.8	50.8	49.2	48.3	45.8	43.3
75°	40.0	40.0	39.2	39.2	38.3	37.5	37.5	36.7	35.8	34.2	31.7
77.5°	29.2	29.2	29.2	28.3	27.5	26.7	26.7	25.8	25.0	24.2	22.5
80°	20.0	20.0	20.0	20.0	19.2	18.3	18.3	17.5	17.5	16.7	15.0
82.5°	13.3	13.3	13.3	13.3	12.5	12.5	12.5	11.7	10.8	10.8	9.2
85°	9.2	9.2	8.3	8.3	8.3	8.3	7.5	7.5	6.7	5.8	5.8
87.5°	5.0	5.0	5.0	5.0	4.2	4.2	4.2	4.2	3.3	3.3	2.5
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: P252668

CATALOG NUMBER: LD6B15D010 EU6B10209030 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0
2.5°	593.1	593.1	592.3	589.8	590.6	589.8	590.6	589.8	587.3	589.8	587.3
5°	596.5	597.3	595.6	592.3	593.1	592.3	592.3	591.5	589.0	590.6	589.0
7.5°	599.8	599.0	598.1	594.8	595.6	594.8	594.8	593.1	590.6	592.3	589.8
10°	601.5	601.5	599.8	596.5	596.5	595.6	596.5	595.6	592.3	594.8	593.1
12.5°	601.5	600.6	600.6	596.5	597.3	596.5	597.3	595.6	593.1	594.8	594.0
15°	599.0	599.0	598.1	594.0	594.8	594.8	595.6	594.0	591.5	594.0	592.3
17.5°	594.0	594.0	593.1	589.8	591.5	591.5	592.3	590.6	588.1	589.8	589.8
20°	584.0	584.8	584.8	582.3	584.0	584.0	584.8	584.0	583.1	584.0	582.3
22.5°	572.3	574.0	574.0	571.5	573.1	573.1	575.6	574.8	573.1	574.0	573.1
25°	554.8	556.5	558.1	556.5	558.1	558.1	560.6	559.8	558.1	559.8	557.3
27.5°	534.8	535.7	537.3	535.7	538.2	537.3	539.8	539.0	536.5	539.0	538.2
30°	506.5	509.8	512.3	509.8	512.3	512.3	514.0	513.2	512.3	511.5	511.5
32.5°	474.8	478.2	478.2	477.3	479.0	479.0	479.8	478.2	477.3	478.2	479.0
35°	435.7	437.4	439.0	438.2	439.0	439.9	439.0	439.9	437.4	438.2	438.2
37.5°	393.2	394.9	394.9	392.4	394.0	394.0	392.4	392.4	390.7	392.4	389.0
40°	348.2	346.5	347.4	345.7	344.1	344.1	343.2	339.9	338.2	339.1	339.9
42.5°	304.1	304.1	301.6	297.4	293.2	293.2	290.7	289.1	285.7	287.4	286.6
45°	266.6	262.4	259.1	252.4	249.9	248.2	244.1	239.9	238.3	239.1	238.3
47.5°	230.8	227.4	219.1	209.9	207.4	204.9	199.9	194.9	193.3	191.6	191.6
50°	200.8	194.9	185.8	175.8	171.6	167.4	160.8	155.8	152.4	153.3	153.3
52.5°	173.3	166.6	155.8	143.3	138.3	133.3	127.5	121.6	119.1	118.3	118.3
55°	149.1	141.6	130.8	116.6	112.5	106.6	99.1	92.5	89.1	88.3	90.0
57.5°	127.5	120.8	108.3	94.1	89.1	83.3	75.8	70.0	65.8	65.0	65.8
60°	110.0	100.8	90.0	76.6	70.0	65.0	56.6	51.6	47.5	45.8	46.7
62.5°	92.5	84.1	73.3	60.0	55.0	50.0	42.5	36.7	33.3	32.5	33.3
65°	79.1	70.8	60.8	49.2	44.2	39.2	32.5	26.7	24.2	23.3	24.2
67.5°	65.8	58.3	50.0	39.2	35.0	30.8	24.2	20.0	16.7	15.8	16.7
70°	53.3	46.7	38.3	30.8	26.7	23.3	18.3	14.2	11.7	10.8	11.7
72.5°	40.0	35.0	29.2	22.5	20.0	17.5	13.3	10.0	8.3	7.5	8.3
75°	29.2	25.0	20.8	15.8	14.2	12.5	9.2	6.7	5.8	5.0	5.8
77.5°	20.0	17.5	14.2	10.8	9.2	8.3	5.8	5.0	4.2	3.3	3.3
80°	13.3	11.7	9.2	7.5	6.7	5.8	4.2	3.3	2.5	2.5	2.5
82.5°	8.3	6.7	5.8	4.2	3.3	3.3	2.5	1.7	1.7	1.7	1.7
85°	5.0	4.2	3.3	2.5	1.7	1.7	0.8	0.8	0.8	0.8	0.8
87.5°	2.5	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.8
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: P252668

CATALOG NUMBER: LD6B15D010 EU6B10209030 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0
2.5°	589.0	587.3	587.3	588.1	589.0	589.8	588.1	587.3	587.3	589.8	588.1
5°	589.0	588.1	588.1	588.1	589.8	590.6	589.0	588.1	589.0	591.5	590.6
7.5°	591.5	589.8	590.6	590.6	591.5	593.1	591.5	590.6	591.5	594.0	592.3
10°	593.1	591.5	592.3	591.5	594.0	594.8	593.1	592.3	593.1	596.5	595.6
12.5°	594.0	593.1	593.1	592.3	594.8	595.6	594.0	593.1	594.0	596.5	595.6
15°	592.3	591.5	591.5	591.5	593.1	594.8	592.3	591.5	591.5	594.0	593.1
17.5°	589.0	587.3	587.3	587.3	588.1	589.0	586.5	585.6	584.8	587.3	586.5
20°	583.1	581.5	579.8	579.8	580.6	580.6	579.0	576.5	576.5	577.3	575.6
22.5°	572.3	571.5	569.8	569.0	570.6	569.8	566.5	564.0	563.1	564.0	562.3
25°	557.3	555.6	554.8	554.0	554.8	554.0	550.6	547.3	547.3	547.3	544.8
27.5°	536.5	534.8	534.0	534.0	534.8	533.2	529.8	526.5	524.8	524.8	522.3
30°	509.8	509.8	509.0	508.2	507.3	507.3	502.3	499.0	497.3	498.2	496.5
32.5°	477.3	476.5	475.7	473.2	474.0	473.2	469.0	466.5	464.0	462.3	461.5
35°	435.7	435.7	434.9	434.9	434.9	434.0	429.9	427.4	425.7	424.9	422.4
37.5°	389.9	389.0	388.2	388.2	388.2	388.2	385.7	383.2	383.2	382.4	380.7
40°	338.2	339.1	339.9	339.1	341.6	344.1	340.7	339.1	338.2	340.7	337.4
42.5°	288.2	287.4	291.6	292.4	292.4	296.6	297.4	298.2	297.4	299.1	299.1
45°	239.9	239.1	243.3	244.9	249.1	254.1	256.6	260.7	262.4	264.1	262.4
47.5°	194.1	197.4	200.8	204.9	208.3	216.6	221.6	225.8	227.4	229.9	229.9
50°	155.8	159.1	164.9	168.3	172.4	182.4	190.8	196.6	199.9	202.4	201.6
52.5°	120.0	125.8	133.3	136.6	142.5	154.1	163.3	169.9	174.1	176.6	177.4
55°	92.5	97.5	105.0	110.0	115.8	128.3	140.0	147.5	151.6	154.9	156.6
57.5°	68.3	74.1	82.5	86.6	93.3	107.5	117.5	126.6	131.6	135.8	136.6
60°	50.0	55.8	63.3	68.3	75.0	89.1	100.8	109.1	115.0	118.3	120.0
62.5°	35.8	41.7	49.2	54.1	60.0	72.5	84.1	92.5	98.3	102.5	105.0
65°	25.8	31.7	39.2	43.3	48.3	60.0	70.8	79.1	85.0	90.0	91.6
67.5°	19.2	23.3	30.0	34.2	39.2	48.3	57.5	65.0	70.8	75.0	76.6
70°	14.2	17.5	23.3	25.8	29.2	37.5	45.0	51.6	56.6	60.0	61.6
72.5°	10.0	12.5	16.7	19.2	21.7	28.3	34.2	39.2	42.5	45.8	47.5
75°	6.7	8.3	11.7	13.3	15.0	20.0	24.2	28.3	30.8	33.3	34.2
77.5°	4.2	5.8	8.3	9.2	10.8	13.3	16.7	19.2	20.8	22.5	24.2
80°	2.5	3.3	5.0	5.8	6.7	9.2	10.8	12.5	14.2	15.8	16.7
82.5°	1.7	2.5	3.3	3.3	4.2	5.0	6.7	8.3	9.2	10.0	10.8
85°	0.8	0.8	1.7	1.7	2.5	2.5	3.3	4.2	5.0	5.8	6.7
87.5°	0.8	0.8	0.8	0.8	1.7	1.7	2.5	2.5	2.5	3.3	3.3
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: P252668

CATALOG NUMBER: LD6B15D010 EU6B10209030 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	589.0	589.0	589.0	589.0	589.0	589.0	589.0	589.0
2.5°	586.5	589.0	586.5	588.1	587.3	587.3	586.5	587.3
5°	589.0	592.3	589.0	591.5	589.8	589.8	589.8	590.6
7.5°	591.5	594.8	592.3	594.8	594.0	593.1	593.1	594.8
10°	594.0	596.5	594.8	597.3	596.5	595.6	595.6	597.3
12.5°	594.0	597.3	595.6	598.1	597.3	596.5	596.5	597.3
15°	591.5	595.6	593.1	595.6	594.8	594.0	594.0	595.6
17.5°	584.0	587.3	585.6	587.3	587.3	586.5	587.3	588.1
20°	574.0	576.5	574.8	576.5	576.5	574.8	575.6	576.5
22.5°	559.8	562.3	560.6	562.3	561.5	560.6	560.6	559.8
25°	542.3	545.6	543.1	544.8	543.1	541.5	541.5	542.3
27.5°	520.7	523.2	519.8	521.5	519.8	518.2	518.2	517.3
30°	492.3	493.2	490.7	492.3	490.7	489.8	488.2	488.2
32.5°	458.2	459.0	456.5	456.5	454.8	454.8	451.5	454.0
35°	418.2	419.0	418.2	417.4	414.9	414.0	413.2	413.2
37.5°	376.5	376.5	374.0	373.2	371.5	369.9	370.7	368.2
40°	334.1	333.2	330.7	331.6	330.7	328.2	327.4	326.6
42.5°	294.1	294.1	291.6	292.4	290.7	289.9	287.4	288.2
45°	259.1	259.1	256.6	256.6	255.7	253.2	254.1	252.4
47.5°	227.4	227.4	226.6	226.6	224.1	223.3	223.3	223.3
50°	199.9	199.9	199.9	199.9	199.1	198.3	197.4	198.3
52.5°	176.6	178.3	177.4	177.4	176.6	175.8	174.9	174.9
55°	155.8	156.6	156.6	157.4	156.6	155.8	156.6	155.8
57.5°	137.5	139.1	139.1	139.1	139.1	139.1	138.3	137.5
60°	121.6	122.5	122.5	123.3	123.3	123.3	122.5	122.5
62.5°	105.8	107.5	108.3	108.3	109.1	108.3	108.3	108.3
65°	93.3	95.0	95.8	95.0	95.8	95.8	95.0	95.0
67.5°	78.3	80.0	80.0	80.0	80.0	80.8	80.0	80.0
70°	63.3	65.0	64.1	65.0	65.0	65.0	65.0	65.0
72.5°	48.3	49.2	50.0	50.0	50.8	50.0	50.0	50.0
75°	35.0	36.7	36.7	36.7	36.7	37.5	37.5	37.5
77.5°	25.0	25.8	25.8	26.7	26.7	26.7	26.7	27.5
80°	17.5	17.5	18.3	18.3	19.2	19.2	19.2	19.2
82.5°	11.7	12.5	12.5	12.5	12.5	12.5	12.5	12.5
85°	6.7	7.5	7.5	7.5	7.5	8.3	8.3	8.3
87.5°	4.2	4.2	4.2	4.2	4.2	4.2	3.3	3.3
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)