

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: P252648

Luminaire Tested: **LD6B10D010 EU6B10208027 6LBDW1H**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P252648  
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: LD6B10D010 EU6B10208027 6LBDW1H  
Description: PORTFOLIO 6 INCH DOUBLE WALLWASH RECESSED DOWNLIGHT, WITH HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 949.0 lumens  
Efficiency: N/A  
Efficacy: 94.4 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

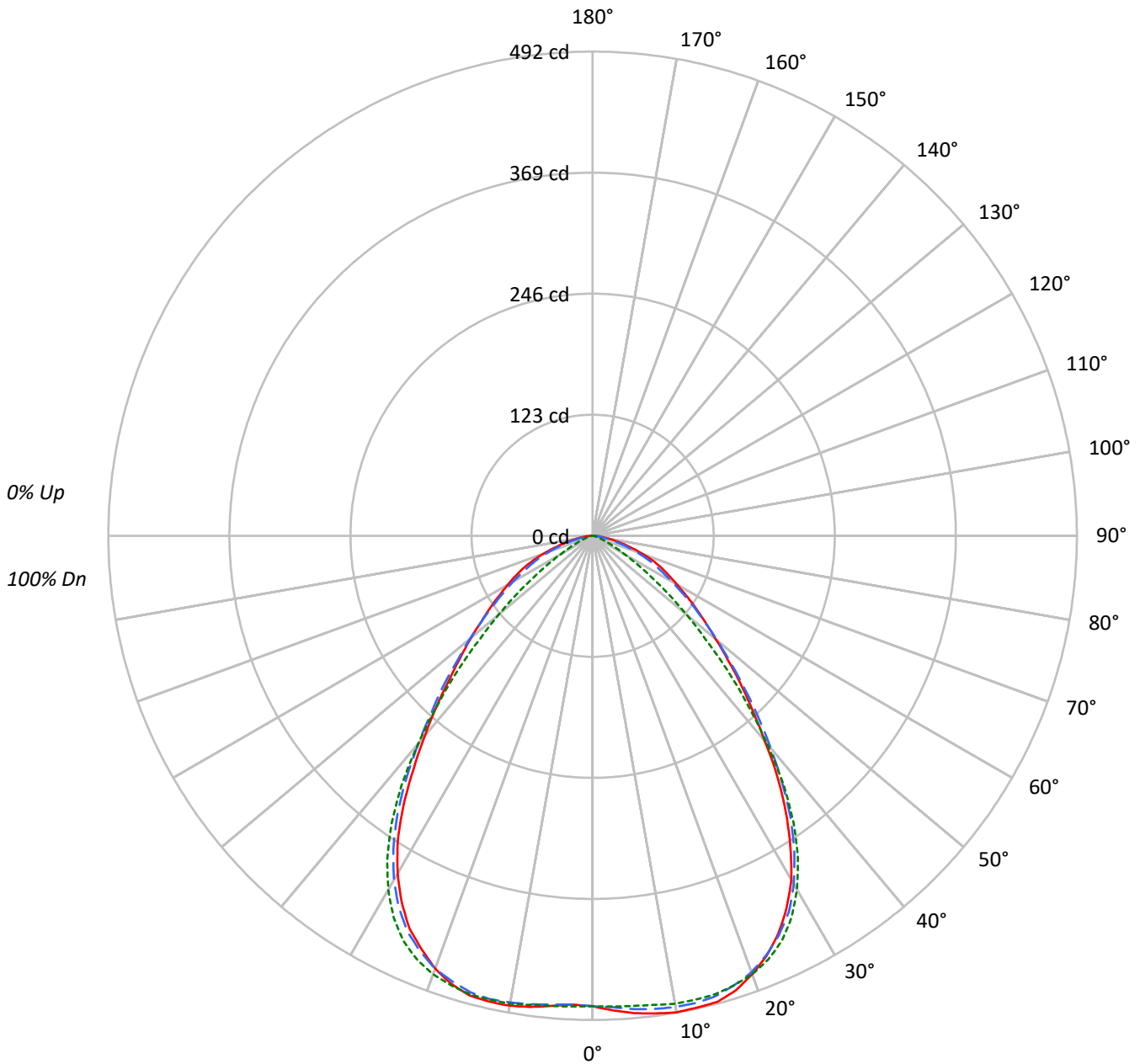
Input Watts (W): 10.05  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P252648

CATALOG NUMBER: LD6B10D010 EU6B10208027 6LBDW1H

### Luminous Intensity Polar Plot





TEST NUMBER: P252648

CATALOG NUMBER: LD6B10D010 EU6B10208027 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°	31192	31192	31192
5°	31887	31402	31402
10°	32574	31991	32123
15°	33116	32569	32657
20°	32916	32916	32492
25°	32127	32717	31695
30°	30412	31278	29855
35°	27254	28329	26713
40°	23157	23438	22577
45°	19597	17908	18905
50°	16544	12626	16341
55°	14536	8155	14389
60°	12878	4854	12970
65°	11902	2918	11902
70°	10320	1679	10053
75°	8192	1033	7663
80°	6086	751	5861
85°	5539	524	5090



TEST NUMBER: P252648

CATALOG NUMBER: LD6B10D010 EU6B10208027 6LBDW1H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.0	4.9
10°-20°	136.2	14.4
20°-30°	204.9	21.6
30°-40°	215.4	22.7
40°-50°	160.9	17.0
50°-60°	100.2	10.6
60°-70°	57.0	6.0
70°-80°	23.5	2.5
80°-90°	4.9	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°	387.2	40.8
0°-40°	602.6	63.5
0°-60°	863.7	91.0
0°-90°	949.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	949.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	478	478	478	478	478	
5°	487	483	480	478	480	47
15°	490	484	482	480	484	138
25°	446	448	454	444	440	204
35°	342	351	356	346	335	212
45°	212	217	194	213	205	165
55°	128	125	72	123	126	115
65°	77	69	19	69	77	76
75°	32	26	4	25	30	35
85°	7	5	1	4	7	8
90°	0	0	0	0	0	



TEST NUMBER: P252648

CATALOG NUMBER: LD6B10D010 EU6B10208027 6LBDW1H

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1
2.5°	482.9	482.2	482.9	481.5	480.8	480.8	481.5	480.2	479.5	480.2	479.5
5°	486.9	485.6	486.2	485.6	484.2	484.2	484.9	482.9	482.9	483.5	482.9
7.5°	489.6	489.6	489.6	488.3	487.6	486.9	488.3	486.2	485.6	485.6	484.9
10°	491.7	491.0	491.7	490.3	488.9	488.3	489.6	488.3	486.9	488.3	486.2
12.5°	491.0	491.0	491.0	490.3	488.9	488.3	489.6	487.6	486.9	487.6	486.2
15°	490.3	488.3	488.9	488.3	486.2	486.2	486.9	484.9	483.5	485.6	484.2
17.5°	484.2	482.9	483.5	482.2	480.8	480.2	480.8	480.2	478.8	480.2	478.8
20°	474.1	474.1	474.7	473.4	472.0	471.4	472.7	471.4	470.0	472.0	472.0
22.5°	461.9	461.9	461.9	461.2	460.5	460.5	460.5	459.9	459.2	460.5	461.2
25°	446.3	445.7	446.3	447.0	446.3	445.7	446.3	446.3	445.0	447.7	447.7
27.5°	426.7	426.7	428.1	427.4	427.4	426.7	428.1	428.1	427.4	429.4	431.5
30°	403.7	402.4	403.7	403.7	404.4	404.4	405.1	405.1	405.1	407.1	408.5
32.5°	374.0	374.7	376.7	376.0	375.3	377.4	377.4	378.7	379.4	380.7	381.4
35°	342.2	342.9	342.9	343.5	344.9	343.5	346.9	346.3	346.9	349.6	351.0
37.5°	308.4	306.4	309.7	308.4	309.1	309.1	310.4	311.1	313.1	316.5	316.5
40°	271.9	272.5	273.9	274.6	275.2	275.2	275.2	277.3	277.9	282.0	281.3
42.5°	240.1	240.1	241.4	242.1	242.1	242.1	242.1	244.1	245.5	246.8	248.2
45°	212.4	210.3	211.7	211.7	213.0	212.4	213.7	215.1	215.7	217.8	217.1
47.5°	186.0	185.3	186.0	186.7	186.0	186.7	187.3	188.0	188.7	188.7	188.7
50°	163.0	163.0	163.7	164.3	164.3	164.3	164.3	165.0	165.0	166.4	165.0
52.5°	144.0	144.7	144.7	144.0	144.7	144.7	145.4	145.4	144.7	144.7	142.7
55°	127.8	127.1	127.8	127.1	127.8	127.8	127.1	127.1	126.5	125.8	125.1
57.5°	112.3	112.3	112.3	112.3	111.6	112.3	111.6	110.9	110.9	109.6	107.5
60°	98.7	98.7	98.7	98.7	98.7	98.1	98.7	98.1	96.7	95.4	92.6
62.5°	87.2	86.6	87.2	86.6	86.6	85.9	85.9	85.2	83.9	82.5	79.8
65°	77.1	77.8	77.1	77.1	76.4	75.7	75.7	75.1	73.0	71.7	69.0
67.5°	66.3	65.6	65.6	65.6	64.9	64.9	64.9	63.6	62.2	60.2	57.5
70°	54.1	54.1	54.1	53.4	53.4	52.7	52.7	52.1	50.7	49.4	46.0
72.5°	42.6	42.6	42.6	41.3	41.9	41.3	41.3	39.9	39.2	37.2	35.2
75°	32.5	32.5	31.8	31.8	31.1	30.4	30.4	29.8	29.1	27.7	25.7
77.5°	23.7	23.7	23.7	23.0	22.3	21.6	21.6	21.0	20.3	19.6	18.3
80°	16.2	16.2	16.2	16.2	15.6	14.9	14.9	14.2	14.2	13.5	12.2
82.5°	10.8	10.8	10.8	10.8	10.1	10.1	10.1	9.5	8.8	8.8	7.4
85°	7.4	7.4	6.8	6.8	6.8	6.8	6.1	6.1	5.4	4.7	4.7
87.5°	4.1	4.1	4.1	4.1	3.4	3.4	3.4	3.4	2.7	2.7	2.0
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: P252648

CATALOG NUMBER: LD6B10D010 EU6B10208027 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1
2.5°	481.5	481.5	480.8	478.8	479.5	478.8	479.5	478.8	476.8	478.8	476.8
5°	484.2	484.9	483.5	480.8	481.5	480.8	480.8	480.2	478.1	479.5	478.1
7.5°	486.9	486.2	485.6	482.9	483.5	482.9	482.9	481.5	479.5	480.8	478.8
10°	488.3	488.3	486.9	484.2	484.2	483.5	484.2	483.5	480.8	482.9	481.5
12.5°	488.3	487.6	487.6	484.2	484.9	484.2	484.9	483.5	481.5	482.9	482.2
15°	486.2	486.2	485.6	482.2	482.9	482.9	483.5	482.2	480.2	482.2	480.8
17.5°	482.2	482.2	481.5	478.8	480.2	480.2	480.8	479.5	477.5	478.8	478.8
20°	474.1	474.7	474.7	472.7	474.1	474.1	474.7	474.1	473.4	474.1	472.7
22.5°	464.6	466.0	466.0	463.9	465.3	465.3	467.3	466.6	465.3	466.0	465.3
25°	450.4	451.8	453.1	451.8	453.1	453.1	455.1	454.5	453.1	454.5	452.4
27.5°	434.2	434.8	436.2	434.8	436.9	436.2	438.2	437.5	435.5	437.5	436.9
30°	411.2	413.9	415.9	413.9	415.9	415.9	417.3	416.6	415.9	415.2	415.2
32.5°	385.5	388.2	388.2	387.5	388.9	388.9	389.5	388.2	387.5	388.2	388.9
35°	353.7	355.0	356.4	355.7	356.4	357.1	356.4	357.1	355.0	355.7	355.7
37.5°	319.2	320.6	320.6	318.5	319.9	319.9	318.5	318.5	317.2	318.5	315.8
40°	282.7	281.3	282.0	280.7	279.3	279.3	278.6	275.9	274.6	275.2	275.9
42.5°	246.8	246.8	244.8	241.4	238.0	238.0	236.0	234.7	232.0	233.3	232.6
45°	216.4	213.0	210.3	204.9	202.9	201.5	198.1	194.8	193.4	194.1	193.4
47.5°	187.3	184.6	177.9	170.4	168.4	166.4	162.3	158.2	156.9	155.5	155.5
50°	163.0	158.2	150.8	142.7	139.3	135.9	130.5	126.5	123.8	124.4	124.4
52.5°	140.7	135.3	126.5	116.3	112.3	108.2	103.5	98.7	96.7	96.0	96.0
55°	121.1	115.0	106.2	94.7	91.3	86.6	80.5	75.1	72.4	71.7	73.0
57.5°	103.5	98.1	87.9	76.4	72.4	67.6	61.5	56.8	53.4	52.7	53.4
60°	89.3	81.8	73.0	62.2	56.8	52.7	46.0	41.9	38.5	37.2	37.9
62.5°	75.1	68.3	59.5	48.7	44.6	40.6	34.5	29.8	27.1	26.4	27.1
65°	64.2	57.5	49.4	39.9	35.8	31.8	26.4	21.6	19.6	18.9	19.6
67.5°	53.4	47.3	40.6	31.8	28.4	25.0	19.6	16.2	13.5	12.8	13.5
70°	43.3	37.9	31.1	25.0	21.6	18.9	14.9	11.5	9.5	8.8	9.5
72.5°	32.5	28.4	23.7	18.3	16.2	14.2	10.8	8.1	6.8	6.1	6.8
75°	23.7	20.3	16.9	12.8	11.5	10.1	7.4	5.4	4.7	4.1	4.7
77.5°	16.2	14.2	11.5	8.8	7.4	6.8	4.7	4.1	3.4	2.7	2.7
80°	10.8	9.5	7.4	6.1	5.4	4.7	3.4	2.7	2.0	2.0	2.0
82.5°	6.8	5.4	4.7	3.4	2.7	2.7	2.0	1.4	1.4	1.4	1.4
85°	4.1	3.4	2.7	2.0	1.4	1.4	0.7	0.7	0.7	0.7	0.7
87.5°	2.0	1.4	1.4	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.7
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: P252648

CATALOG NUMBER: LD6B10D010 EU6B10208027 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1
2.5°	478.1	476.8	476.8	477.5	478.1	478.8	477.5	476.8	476.8	478.8	477.5
5°	478.1	477.5	477.5	477.5	478.8	479.5	478.1	477.5	478.1	480.2	479.5
7.5°	480.2	478.8	479.5	479.5	480.2	481.5	480.2	479.5	480.2	482.2	480.8
10°	481.5	480.2	480.8	480.2	482.2	482.9	481.5	480.8	481.5	484.2	483.5
12.5°	482.2	481.5	481.5	480.8	482.9	483.5	482.2	481.5	482.2	484.2	483.5
15°	480.8	480.2	480.2	480.2	481.5	482.9	480.8	480.2	480.2	482.2	481.5
17.5°	478.1	476.8	476.8	476.8	477.5	478.1	476.1	475.4	474.7	476.8	476.1
20°	473.4	472.0	470.7	470.7	471.4	471.4	470.0	468.0	468.0	468.7	467.3
22.5°	464.6	463.9	462.6	461.9	463.2	462.6	459.9	457.8	457.2	457.8	456.5
25°	452.4	451.1	450.4	449.7	450.4	449.7	447.0	444.3	444.3	444.3	442.3
27.5°	435.5	434.2	433.5	433.5	434.2	432.8	430.1	427.4	426.1	426.1	424.0
30°	413.9	413.9	413.2	412.5	411.9	411.9	407.8	405.1	403.7	404.4	403.1
32.5°	387.5	386.8	386.2	384.1	384.8	384.1	380.7	378.7	376.7	375.3	374.7
35°	353.7	353.7	353.0	353.0	353.0	352.3	349.0	346.9	345.6	344.9	342.9
37.5°	316.5	315.8	315.1	315.1	315.1	315.1	313.1	311.1	311.1	310.4	309.1
40°	274.6	275.2	275.9	275.2	277.3	279.3	276.6	275.2	274.6	276.6	273.9
42.5°	234.0	233.3	236.7	237.4	237.4	240.8	241.4	242.1	241.4	242.8	242.8
45°	194.8	194.1	197.5	198.8	202.2	206.3	208.3	211.7	213.0	214.4	213.0
47.5°	157.6	160.3	163.0	166.4	169.1	175.8	179.9	183.3	184.6	186.7	186.7
50°	126.5	129.2	133.9	136.6	140.0	148.1	154.9	159.6	162.3	164.3	163.7
52.5°	97.4	102.1	108.2	110.9	115.6	125.1	132.5	138.0	141.3	143.4	144.0
55°	75.1	79.1	85.2	89.3	94.0	104.1	113.6	119.7	123.1	125.8	127.1
57.5°	55.5	60.2	67.0	70.3	75.7	87.2	95.4	102.8	106.9	110.2	110.9
60°	40.6	45.3	51.4	55.5	60.9	72.4	81.8	88.6	93.3	96.0	97.4
62.5°	29.1	33.8	39.9	44.0	48.7	58.8	68.3	75.1	79.8	83.2	85.2
65°	21.0	25.7	31.8	35.2	39.2	48.7	57.5	64.2	69.0	73.0	74.4
67.5°	15.6	18.9	24.3	27.7	31.8	39.2	46.7	52.7	57.5	60.9	62.2
70°	11.5	14.2	18.9	21.0	23.7	30.4	36.5	41.9	46.0	48.7	50.0
72.5°	8.1	10.1	13.5	15.6	17.6	23.0	27.7	31.8	34.5	37.2	38.5
75°	5.4	6.8	9.5	10.8	12.2	16.2	19.6	23.0	25.0	27.1	27.7
77.5°	3.4	4.7	6.8	7.4	8.8	10.8	13.5	15.6	16.9	18.3	19.6
80°	2.0	2.7	4.1	4.7	5.4	7.4	8.8	10.1	11.5	12.8	13.5
82.5°	1.4	2.0	2.7	2.7	3.4	4.1	5.4	6.8	7.4	8.1	8.8
85°	0.7	0.7	1.4	1.4	2.0	2.0	2.7	3.4	4.1	4.7	5.4
87.5°	0.7	0.7	0.7	0.7	1.4	1.4	2.0	2.0	2.0	2.7	2.7
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: P252648

CATALOG NUMBER: LD6B10D010 EU6B10208027 6LBDW1H

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	478.1	478.1	478.1	478.1	478.1	478.1	478.1	478.1
2.5°	476.1	478.1	476.1	477.5	476.8	476.8	476.1	476.8
5°	478.1	480.8	478.1	480.2	478.8	478.8	478.8	479.5
7.5°	480.2	482.9	480.8	482.9	482.2	481.5	481.5	482.9
10°	482.2	484.2	482.9	484.9	484.2	483.5	483.5	484.9
12.5°	482.2	484.9	483.5	485.6	484.9	484.2	484.2	484.9
15°	480.2	483.5	481.5	483.5	482.9	482.2	482.2	483.5
17.5°	474.1	476.8	475.4	476.8	476.8	476.1	476.8	477.5
20°	466.0	468.0	466.6	468.0	468.0	466.6	467.3	468.0
22.5°	454.5	456.5	455.1	456.5	455.8	455.1	455.1	454.5
25°	440.3	443.0	440.9	442.3	440.9	439.6	439.6	440.3
27.5°	422.7	424.7	422.0	423.3	422.0	420.6	420.6	420.0
30°	399.7	400.4	398.3	399.7	398.3	397.6	396.3	396.3
32.5°	372.0	372.6	370.6	370.6	369.2	369.2	366.5	368.6
35°	339.5	340.2	339.5	338.8	336.8	336.1	335.4	335.4
37.5°	305.7	305.7	303.6	303.0	301.6	300.3	300.9	298.9
40°	271.2	270.5	268.5	269.2	268.5	266.5	265.8	265.1
42.5°	238.7	238.7	236.7	237.4	236.0	235.3	233.3	234.0
45°	210.3	210.3	208.3	208.3	207.6	205.6	206.3	204.9
47.5°	184.6	184.6	183.9	183.9	181.9	181.2	181.2	181.2
50°	162.3	162.3	162.3	162.3	161.6	161.0	160.3	161.0
52.5°	143.4	144.7	144.0	144.0	143.4	142.7	142.0	142.0
55°	126.5	127.1	127.1	127.8	127.1	126.5	127.1	126.5
57.5°	111.6	112.9	112.9	112.9	112.9	112.9	112.3	111.6
60°	98.7	99.4	99.4	100.1	100.1	100.1	99.4	99.4
62.5°	85.9	87.2	87.9	87.9	88.6	87.9	87.9	87.9
65°	75.7	77.1	77.8	77.1	77.8	77.8	77.1	77.1
67.5°	63.6	64.9	64.9	64.9	64.9	65.6	64.9	64.9
70°	51.4	52.7	52.1	52.7	52.7	52.7	52.7	52.7
72.5°	39.2	39.9	40.6	40.6	41.3	40.6	40.6	40.6
75°	28.4	29.8	29.8	29.8	29.8	30.4	30.4	30.4
77.5°	20.3	21.0	21.0	21.6	21.6	21.6	21.6	22.3
80°	14.2	14.2	14.9	14.9	15.6	15.6	15.6	15.6
82.5°	9.5	10.1	10.1	10.1	10.1	10.1	10.1	10.1
85°	5.4	6.1	6.1	6.1	6.1	6.8	6.8	6.8
87.5°	3.4	3.4	3.4	3.4	3.4	3.4	2.7	2.7
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)