

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: io LED

Report Number: P273339

Luminaire Tested: **0.03-1W-830-91-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P273339  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-246-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: 0.03-1W-830-91-ID-STD-UNV-AN-3F0  
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 90 DEGREE ASYMMETRIC OPTIC.  
STANDARD OUTPUT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 254.5 lumens  
Efficiency: N/A  
Efficacy: 33.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.22 / 1.4  
Luminous Opening: Rectangular w/ Sides (W: 2.92' x L: 0.04' x H: 0.04')  
CIE Type: Semi-Direct

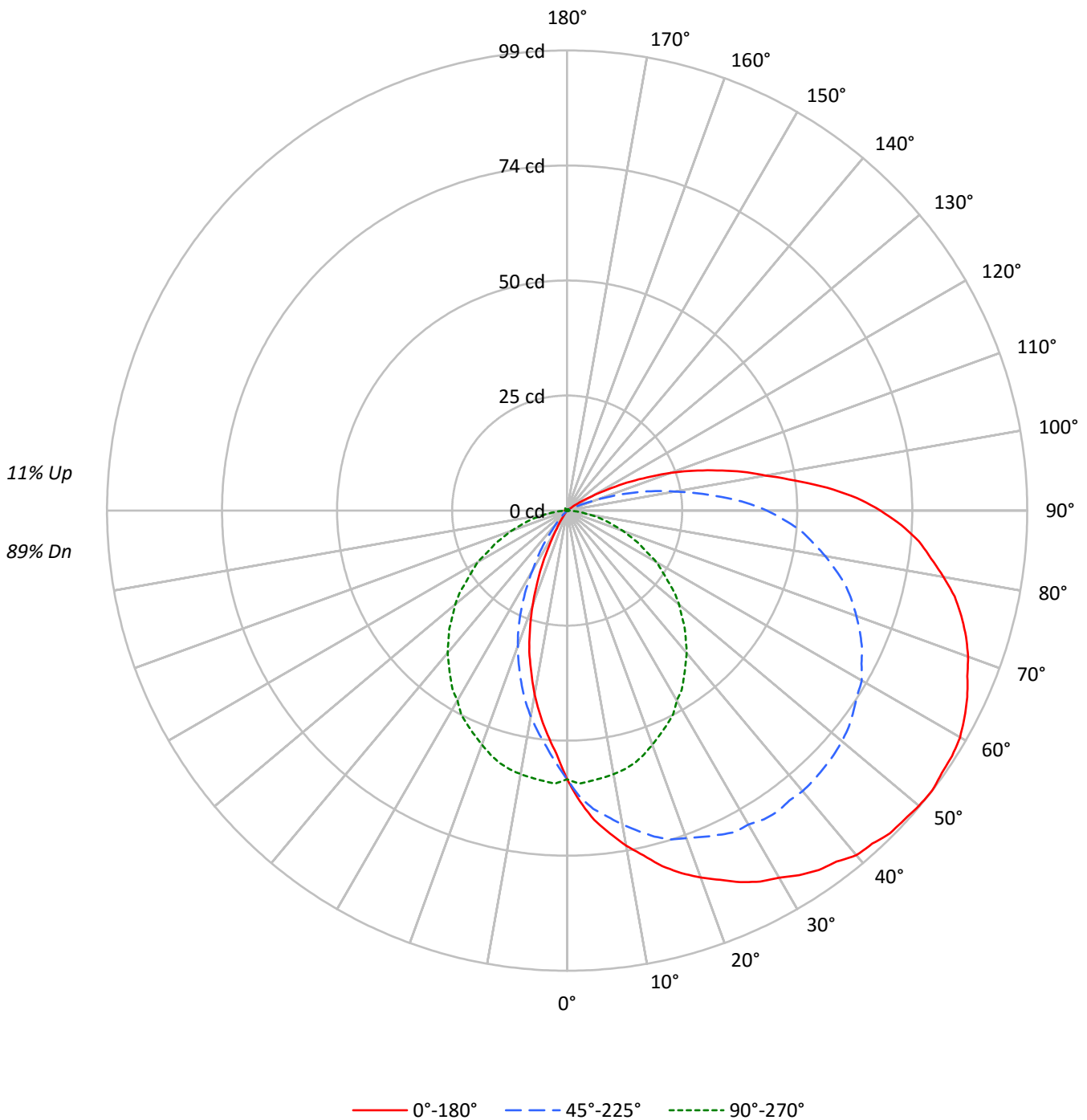
Input Watts (W): 7.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	92	92	92	89
1	102	95	89	84	98	92	86	82	85	81	77	79	76	73	74	71	68	65
2	91	81	72	65	87	78	70	63	72	66	60	67	62	57	62	58	54	51
3	82	70	60	52	78	67	58	51	62	55	49	58	52	47	54	49	44	41
4	75	61	51	43	71	59	50	42	55	47	41	51	44	39	48	42	37	34
5	68	54	44	37	65	52	43	36	49	41	35	45	39	33	42	37	32	29
6	63	48	39	32	60	47	38	31	44	36	30	41	34	29	38	32	28	25
7	58	44	34	28	56	42	33	27	40	32	26	37	30	25	35	29	24	22
8	54	40	31	24	52	38	30	24	36	29	23	34	27	22	32	26	22	19
9	50	36	28	22	48	35	27	21	33	26	21	31	25	20	30	24	19	17
10	47	33	25	20	45	32	25	19	31	24	19	29	23	18	27	22	18	16

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

	0°	90°	180°
0°	5119	5119	5119
5°	5461	5186	3957
10°	5597	5167	3074
15°	5728	5134	2271
20°	5805	5026	1506
25°	5878	4932	826
30°	5913	4788	285
35°	6003	4689	64
40°	6086	4570	13
45°	6150	4421	0
50°	6211	4254	0
55°	6258	3995	0
60°	6328	3838	0
65°	6332	3498	0
70°	6344	3190	0
75°	6350	2794	0
80°	6285	2265	0
85°	6213	1572	16



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	5.5	2.2
10°-20°	15.6	6.1
20°-30°	23.1	9.1
30°-40°	28.1	11.0
40°-50°	31.7	12.4
50°-60°	33.6	13.2
60°-70°	33.1	13.0
70°-80°	30.4	11.9
80°-90°	25.1	9.9
90°-100°	16.8	6.6
100°-110°	8.3	3.2
110°-120°	2.5	1.0
120°-130°	0.3	0.1
130°-140°	0.1	0.1
140°-150°	0.1	0.0
150°-160°	0.1	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	44.2	17.4
0°-40°	72.3	28.4
0°-60°	137.5	54.1
0°-90°	226.2	88.9
90°-120°	27.6	10.9
90°-150°	28.2	11.1
90°-180°	28.0	11.0
0°-180°	254.5	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	58	58	58	58	58	
5°	67	64	58	51	48	7
15°	79	73	56	38	31	23
25°	88	77	51	23	12	41
35°	94	79	44	8	1	59
45°	98	78	36	1	0	76
55°	98	75	26	0	0	88
65°	95	70	17	0	0	94
75°	88	62	9	0	0	93
85°	76	51	2	0	0	63
90°	67	43	0	0	0	37
95°	56	33	0	0	0	43
105°	33	15	0	0	0	36
115°	14	2	0	0	0	14
125°	2	0	0	0	0	2
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8
2.5°	62.6	62.2	62.4	62.2	62.2	62.0	61.8	61.8	61.6	61.4	61.6
5°	66.8	66.4	66.6	66.2	65.8	65.6	65.4	65.2	64.8	64.6	64.4
7.5°	70.0	69.8	69.6	69.4	69.0	68.8	68.4	68.0	67.6	67.2	66.4
10°	73.2	72.6	72.6	72.4	72.0	71.6	71.2	71.0	70.0	69.6	68.6
12.5°	76.0	75.8	75.8	75.0	74.6	74.4	73.8	73.4	72.4	71.6	70.6
15°	79.2	79.0	78.8	78.4	77.8	77.2	76.6	75.6	74.8	73.6	72.6
17.5°	81.8	81.6	81.4	80.6	80.2	79.6	79.0	77.8	76.6	75.4	74.2
20°	84.0	83.8	83.4	82.8	81.8	81.4	80.6	79.6	78.2	76.8	75.0
22.5°	86.0	85.8	85.4	84.6	83.8	83.2	82.4	81.0	79.6	78.0	76.0
25°	88.2	88.0	87.4	86.6	85.4	84.8	84.2	82.8	81.0	79.2	77.0
27.5°	90.0	89.8	89.2	88.4	87.2	86.6	85.8	84.0	82.2	80.2	78.0
30°	91.2	91.2	90.6	89.6	88.4	87.6	86.8	85.0	82.8	80.6	78.0
32.5°	93.0	93.0	92.4	91.4	90.0	89.2	88.2	86.2	83.8	81.4	78.8
35°	94.4	94.0	93.4	92.4	91.0	90.2	89.2	86.8	84.4	81.6	79.0
37.5°	95.2	95.0	94.4	93.4	91.8	90.8	89.6	87.2	84.8	81.6	78.6
40°	96.8	96.2	95.6	94.6	93.0	91.8	90.6	88.2	85.2	82.2	78.8
42.5°	97.2	97.2	96.2	95.0	93.4	92.2	91.2	88.2	85.4	81.8	78.6
45°	98.2	97.8	97.0	95.6	93.8	92.6	91.6	88.6	85.4	82.0	78.2
47.5°	98.4	98.2	97.2	95.8	94.0	93.0	91.6	88.6	85.4	81.6	77.8
50°	98.8	98.6	97.6	96.0	94.0	93.2	91.8	88.6	85.0	81.4	77.2
52.5°	99.0	98.6	97.8	96.2	94.2	93.0	91.6	88.4	84.6	80.6	76.4
55°	98.4	98.2	97.2	95.6	93.4	92.2	90.8	87.6	83.8	79.6	75.2
57.5°	98.2	97.8	96.6	95.0	92.8	91.6	90.2	87.0	83.0	78.6	74.0
60°	97.6	97.2	96.2	94.4	92.2	91.0	89.4	86.0	82.2	77.8	73.2
62.5°	96.4	95.8	94.8	93.0	90.8	89.4	88.0	84.6	80.6	76.4	71.4
65°	95.0	94.8	93.8	92.0	89.6	88.2	86.8	83.2	79.2	74.8	70.0
67.5°	93.2	93.0	92.0	90.2	87.8	86.4	84.8	81.4	77.6	73.0	68.2
70°	91.8	91.6	90.4	88.6	86.2	84.6	83.2	79.8	75.8	71.2	66.2
72.5°	90.0	89.4	88.6	86.8	84.4	82.8	81.2	77.6	73.8	69.2	64.2
75°	87.8	87.2	86.2	84.6	82.2	80.6	79.0	75.4	71.4	67.0	62.0
77.5°	85.4	84.8	83.8	82.0	79.6	78.0	76.4	73.0	68.8	64.2	59.2
80°	82.2	81.8	80.8	79.2	76.8	75.4	73.8	70.2	66.0	61.4	56.4
82.5°	79.0	79.0	77.8	76.2	73.8	72.2	70.6	67.0	63.2	58.8	53.4
85°	76.0	75.4	74.6	72.8	70.6	69.0	67.2	64.0	60.0	55.4	50.6
87.5°	72.0	71.4	70.6	69.0	66.8	65.4	63.4	60.2	56.0	51.8	46.8
90°	67.4	67.2	66.2	64.4	62.2	60.8	59.4	56.2	52.2	47.8	43.0
92.5°	62.4	62.0	61.4	59.6	57.6	56.2	54.6	51.4	47.4	43.2	38.6
95°	56.2	55.8	55.0	53.4	51.4	50.2	48.4	45.4	41.6	37.8	33.4
97.5°	49.4	49.2	48.2	47.0	45.0	43.8	42.4	39.6	36.2	32.6	28.4
100°	43.4	43.2	42.6	41.4	39.6	38.4	37.0	34.6	31.4	27.8	23.6
102.5°	38.6	38.4	37.6	36.4	34.8	33.6	32.4	29.8	26.8	23.0	19.4
105°	33.4	33.2	32.4	31.4	29.8	28.6	27.6	25.0	21.8	18.4	15.0
107.5°	28.4	28.0	27.4	26.4	24.8	24.0	22.6	20.2	17.4	14.2	10.6
110°	23.8	23.2	22.6	21.6	20.0	19.2	18.0	15.6	13.0	10.0	6.8



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	18.6	18.6	17.8	16.8	15.4	14.4	13.4	11.0	8.6	6.0	3.4
115°	14.2	13.8	13.2	12.2	11.0	10.2	9.0	7.2	4.8	3.0	1.6
117.5°	9.8	9.4	9.0	8.2	7.0	6.2	5.4	3.8	2.6	1.4	0.2
120°	6.2	5.6	5.4	4.6	3.8	3.4	3.0	2.0	1.2	0.2	0.2
122.5°	3.6	3.4	3.2	2.8	2.2	1.8	1.2	0.6	0.2	0.2	0.2
125°	1.6	1.4	1.2	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.0
127.5°	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.2	0.0	0.0	0.0
130°	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.4	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2
135°	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2
137.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.4
140°	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.2
142.5°	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
145°	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2
147.5°	0.0	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.4
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
152.5°	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2
155°	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.2	0.0
160°	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
162.5°	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.2	0.2	0.2
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
167.5°	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.2	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.0
180°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8
2.5°	60.8	60.8	60.4	60.4	60.2	60.0	59.8	59.6	59.2	58.8	58.0
5°	63.4	62.8	62.4	62.0	61.8	61.6	60.6	59.8	59.4	58.4	57.2
7.5°	65.6	64.8	64.0	63.2	62.8	62.2	61.2	60.4	59.2	58.0	56.4
10°	67.6	66.6	65.6	64.4	63.8	63.4	62.0	60.6	59.2	57.6	55.8
12.5°	69.4	68.2	66.8	65.4	64.8	64.0	62.4	60.6	58.8	57.0	54.6
15°	71.0	69.4	67.8	66.2	65.2	64.4	62.4	60.6	58.4	56.2	53.4
17.5°	72.2	70.2	68.6	66.8	65.6	64.6	62.4	60.2	57.8	55.0	52.0
20°	73.2	70.8	68.8	66.8	65.6	64.4	62.0	59.6	56.8	53.6	50.6
22.5°	74.0	71.6	69.0	66.8	65.4	64.2	61.4	58.8	55.6	52.2	48.6
25°	74.8	72.0	69.0	66.8	65.2	63.8	60.8	57.8	54.6	50.8	46.8
27.5°	75.4	72.4	69.4	66.4	64.8	63.2	60.0	57.0	53.4	49.4	45.0
30°	75.4	72.2	69.0	65.8	64.0	62.4	58.8	55.4	51.4	47.2	42.8
32.5°	75.8	72.4	69.2	65.6	63.8	62.0	58.2	54.4	50.4	45.8	41.2
35°	75.6	72.2	68.8	64.8	62.8	60.8	57.0	53.0	48.8	43.8	39.0
37.5°	75.2	71.6	67.8	64.0	61.8	59.6	55.4	51.0	46.6	41.8	36.6
40°	75.4	71.4	67.4	63.4	61.2	58.8	54.6	50.0	45.2	40.0	34.8
42.5°	74.8	70.6	66.2	62.0	59.8	57.4	52.8	48.2	43.2	37.8	32.2
45°	74.4	70.0	65.6	61.2	58.8	56.4	51.6	46.6	41.4	35.8	30.2
47.5°	73.6	69.2	64.6	59.8	57.2	54.6	49.6	44.6	39.2	33.4	27.6
50°	72.8	68.2	63.4	58.2	55.8	53.2	47.8	42.6	37.2	31.4	25.2
52.5°	72.0	67.2	62.2	57.0	54.4	51.8	46.2	40.6	35.2	29.2	23.2
55°	70.6	65.6	60.4	55.2	52.6	49.6	43.8	38.4	32.6	26.4	20.4
57.5°	69.4	64.4	58.8	53.4	50.6	47.6	41.8	36.2	30.2	24.2	18.0
60°	68.2	63.0	57.4	52.0	48.8	46.0	40.0	34.2	28.2	22.2	16.2
62.5°	66.4	60.8	55.6	49.6	46.4	43.6	37.4	31.4	25.6	19.2	13.4
65°	64.8	59.4	53.6	47.6	44.4	41.6	35.4	29.4	23.2	17.2	11.4
67.5°	62.8	57.2	51.6	45.6	42.2	39.2	32.8	26.8	20.8	14.8	9.0
70°	61.0	55.2	49.4	43.2	40.0	36.8	30.6	24.4	18.4	12.8	7.2
72.5°	58.8	53.2	47.2	41.2	37.6	34.6	28.2	22.0	16.2	10.6	5.4
75°	56.6	50.8	44.8	38.8	35.4	32.2	25.8	19.6	14.0	8.6	4.0
77.5°	54.0	48.4	42.4	36.2	32.8	29.6	23.4	17.4	11.6	6.6	2.2
80°	51.0	45.4	39.4	33.6	30.4	27.0	21.0	14.8	9.4	4.8	1.2
82.5°	48.0	42.6	36.8	30.8	27.6	24.6	18.6	12.6	7.2	3.0	0.4
85°	45.2	39.6	33.8	28.0	24.8	22.0	16.2	10.6	5.4	1.8	0.4
87.5°	41.6	36.0	30.4	24.6	21.8	18.8	13.4	8.0	3.4	0.6	0.2
90°	37.4	32.2	26.8	21.2	18.2	15.8	10.4	5.8	2.0	0.2	0.2
92.5°	33.2	28.2	22.8	17.6	15.0	12.4	7.6	3.4	0.6	0.4	0.6
95°	28.4	23.6	18.4	13.6	11.4	9.0	4.6	1.4	0.6	0.2	0.4
97.5°	23.8	19.2	14.4	9.8	7.6	5.4	1.8	0.4	0.2	0.2	0.2
100°	19.0	15.0	10.6	6.2	4.2	2.6	0.2	0.0	0.0	0.0	0.2
102.5°	15.0	11.0	7.0	3.2	1.8	0.8	0.2	0.2	0.2	0.2	0.4
105°	10.8	7.2	3.4	1.2	0.4	0.0	0.0	0.0	0.2	0.2	0.2
107.5°	7.2	3.6	1.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
110°	3.6	1.6	0.4	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2





TEST NUMBER: P273339

CATALOG NUMBER: 0.03-1W-830-91-ID-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	1.6	0.4	0.0	0.0	0.2	0.2	0.0	0.0	0.2	0.2	0.2
115°	0.4	0.0	0.2	0.0	0.0	0.2	0.2	0.0	0.0	0.2	0.2
117.5°	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.2	0.2	0.2	0.2
120°	0.2	0.2	0.0	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2
122.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
125°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.4
127.5°	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.2	0.2	0.2	0.0
130°	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.2
132.5°	0.2	0.2	0.4	0.2	0.2	0.0	0.2	0.4	0.2	0.2	0.2
135°	0.0	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2
137.5°	0.2	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.4	0.6	0.2
140°	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2
142.5°	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
145°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
147.5°	0.2	0.2	0.2	0.4	0.2	0.2	0.4	0.4	0.4	0.4	0.2
150°	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.0
152.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
155°	0.2	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2
157.5°	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
160°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.4	0.2	0.4
162.5°	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2
165°	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.2
167.5°	0.2	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.2	0.0	0.2
170°	0.2	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2
172.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
175°	0.2	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.2	0.2	0.0
177.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2
180°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2



TEST NUMBER: P273339

CATALOG NUMBER: 0.03-1W-830-91-ID-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8
2.5°	57.6	57.0	56.8	56.6	56.2	55.6	55.4	54.8	54.4	54.2	53.6
5°	56.4	55.6	55.0	54.4	54.0	53.2	52.4	52.0	51.0	50.8	50.2
7.5°	55.2	54.0	53.0	52.4	51.8	50.6	49.6	48.8	48.0	47.2	46.6
10°	54.0	52.4	51.2	50.4	49.6	48.2	47.0	45.8	45.0	43.8	42.8
12.5°	52.6	50.6	49.2	48.2	47.4	45.6	44.2	43.0	41.8	40.4	39.2
15°	51.0	49.0	47.0	46.0	44.8	43.0	41.6	39.8	38.2	36.6	35.4
17.5°	49.2	46.8	44.8	43.4	42.6	40.2	38.2	36.2	34.6	33.2	31.4
20°	47.4	44.8	42.2	41.0	39.8	37.4	35.0	32.6	31.0	29.0	27.4
22.5°	45.4	42.6	39.6	38.2	37.0	34.0	31.8	29.2	27.4	25.0	23.0
25°	43.2	40.2	37.2	35.6	34.0	31.0	28.2	25.4	23.2	20.8	18.8
27.5°	41.4	37.8	34.4	32.8	31.2	27.8	25.0	22.2	19.2	17.0	14.6
30°	38.8	35.2	31.6	29.6	28.0	24.2	21.2	18.0	15.0	12.6	10.4
32.5°	37.0	33.0	29.2	27.2	25.4	21.4	18.2	14.8	11.8	9.0	7.0
35°	34.4	30.4	26.0	24.0	22.0	18.0	14.4	11.4	8.4	5.8	4.4
37.5°	31.8	27.4	23.0	21.0	18.8	14.8	11.0	7.8	5.2	3.4	2.6
40°	29.8	25.0	20.4	18.4	16.2	11.8	8.2	5.0	3.2	2.2	1.4
42.5°	27.2	22.2	17.6	15.2	13.0	8.8	5.2	3.2	2.0	1.0	0.4
45°	24.6	19.8	15.0	12.6	10.2	6.0	3.4	2.0	1.0	0.4	0.2
47.5°	22.2	17.0	12.2	9.8	7.6	3.8	2.2	1.0	0.2	0.2	0.0
50°	19.6	14.6	9.8	7.4	5.2	2.6	1.4	0.6	0.2	0.0	0.2
52.5°	17.6	12.6	7.4	5.2	3.6	1.8	0.8	0.6	0.4	0.2	0.4
55°	15.0	9.8	4.8	3.0	2.2	0.8	0.2	0.0	0.2	0.2	0.0
57.5°	12.8	7.6	3.2	2.2	1.4	0.4	0.2	0.0	0.0	0.2	0.0
60°	10.6	5.6	2.2	1.4	1.0	0.6	0.4	0.4	0.2	0.4	0.4
62.5°	8.0	3.6	1.0	0.6	0.2	0.2	0.0	0.2	0.2	0.0	0.0
65°	6.2	2.2	0.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2
67.5°	4.2	1.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.0
70°	2.8	0.6	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.0	0.0
72.5°	1.6	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
75°	0.8	0.4	0.2	0.2	0.4	0.0	0.2	0.2	0.2	0.0	0.2
77.5°	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.0	0.2	0.0
80°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.0	0.0
82.5°	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.0	0.2	0.0
85°	0.4	0.4	0.4	0.4	0.2	0.4	0.2	0.4	0.4	0.2	0.4
87.5°	0.2	0.4	0.4	0.2	0.2	0.4	0.2	0.2	0.2	0.2	0.2
90°	0.2	0.4	0.4	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2
92.5°	0.4	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.6	0.4	0.2
95°	0.6	0.4	0.6	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2
97.5°	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2
100°	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0
102.5°	0.2	0.2	0.4	0.2	0.2	0.4	0.4	0.2	0.2	0.2	0.2
105°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
107.5°	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.0	0.2
110°	0.2	0.2	0.2	0.0	0.0	0.2	0.0	0.2	0.2	0.2	0.0



TEST NUMBER: P273339

CATALOG NUMBER: 0.03-1W-830-91-ID-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.2	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2
120°	0.0	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.0
122.5°	0.2	0.2	0.2	0.2	0.4	0.2	0.0	0.2	0.2	0.4	0.2
125°	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
127.5°	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.0	0.0	0.0	0.0
130°	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.0
132.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	0.2
135°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2
137.5°	0.2	0.4	0.4	0.4	0.4	0.4	0.2	0.4	0.2	0.4	0.2
140°	0.2	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.2	0.0	0.0
142.5°	0.2	0.2	0.0	0.0	0.0	0.2	0.0	0.2	0.2	0.0	0.0
145°	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.0
147.5°	0.2	0.2	0.4	0.4	0.2	0.2	0.4	0.2	0.2	0.2	0.2
150°	0.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.2	0.2	0.4	0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.2
155°	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.0
157.5°	0.0	0.0	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.0	0.0
160°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
162.5°	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0
165°	0.2	0.0	0.2	0.2	0.2	0.0	0.2	0.2	0.0	0.2	0.0
167.5°	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.2	0.0	0.2	0.0
170°	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
172.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.2
175°	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
177.5°	0.2	0.2	0.2	0.4	0.0	0.2	0.2	0.2	0.0	0.2	0.0
180°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2



TEST NUMBER: P273339

CATALOG NUMBER: 0.03-1W-830-91-ID-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	57.8	57.8	57.8	57.8	57.8	57.8	57.8	57.8
2.5°	53.4	53.0	52.8	52.6	52.4	52.4	52.6	52.4
5°	49.8	49.2	49.0	48.8	48.6	48.4	48.6	48.4
7.5°	45.8	45.4	45.2	44.8	44.4	44.4	44.4	44.4
10°	42.2	41.6	41.2	40.8	40.4	40.2	40.2	40.2
12.5°	38.4	37.4	37.0	36.8	36.0	36.0	35.8	35.6
15°	34.4	33.4	33.0	32.4	32.0	31.4	31.6	31.4
17.5°	30.4	29.2	28.6	28.0	27.6	27.0	27.0	26.6
20°	26.0	24.8	24.2	23.6	22.8	22.2	22.2	21.8
22.5°	21.6	20.0	19.6	18.8	18.2	17.4	17.2	16.8
25°	17.0	15.6	14.8	14.2	13.4	12.6	12.2	12.4
27.5°	12.8	11.2	10.6	10.0	9.0	8.2	7.8	7.8
30°	8.4	6.8	6.2	5.8	5.0	4.6	4.2	4.4
32.5°	5.4	4.6	4.2	3.6	3.2	2.8	2.8	2.6
35°	3.2	2.6	2.2	2.0	1.4	1.2	1.0	1.0
37.5°	1.6	1.0	0.6	0.4	0.2	0.2	0.2	0.0
40°	0.8	0.4	0.2	0.2	0.0	0.2	0.2	0.2
42.5°	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.2	0.2	0.0	0.0	0.2	0.0	0.0	0.0
52.5°	0.2	0.4	0.2	0.4	0.2	0.2	0.2	0.0
55°	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.2	0.2	0.4	0.0	0.2	0.4	0.2	0.0
62.5°	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0
80°	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.2	0.0	0.0	0.2	0.0	0.2	0.0
85°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
87.5°	0.2	0.2	0.2	0.0	0.2	0.2	0.0	0.2
90°	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.2
92.5°	0.4	0.2	0.2	0.4	0.2	0.2	0.2	0.6
95°	0.2	0.2	0.2	0.4	0.4	0.2	0.2	0.4
97.5°	0.0	0.2	0.0	0.0	0.2	0.2	0.2	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.2	0.2	0.0	0.2	0.4	0.2	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
107.5°	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2
110°	0.2	0.2	0.2	0.0	0.0	0.2	0.2	0.0



TEST NUMBER: P273339

CATALOG NUMBER: 0.03-1W-830-91-ID-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.2
125°	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.2	0.0	0.0	0.0	0.2	0.2	0.0	0.0
135°	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.0
137.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.2	0.2	0.2	0.2	0.0	0.0	0.2	0.0
155°	0.0	0.2	0.0	0.2	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
160°	0.2	0.0	0.2	0.2	0.2	0.2	0.0	0.0
162.5°	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

(END OF REPORT)