

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: P273344

Luminaire Tested: **0.03-1W-835-91-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273344
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-835-91-ID-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 90 DEGREE ASYMMETRIC OPTIC.
STANDARD OUTPUT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 132.3 lumens
Efficiency: N/A
Efficacy: 17.6 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

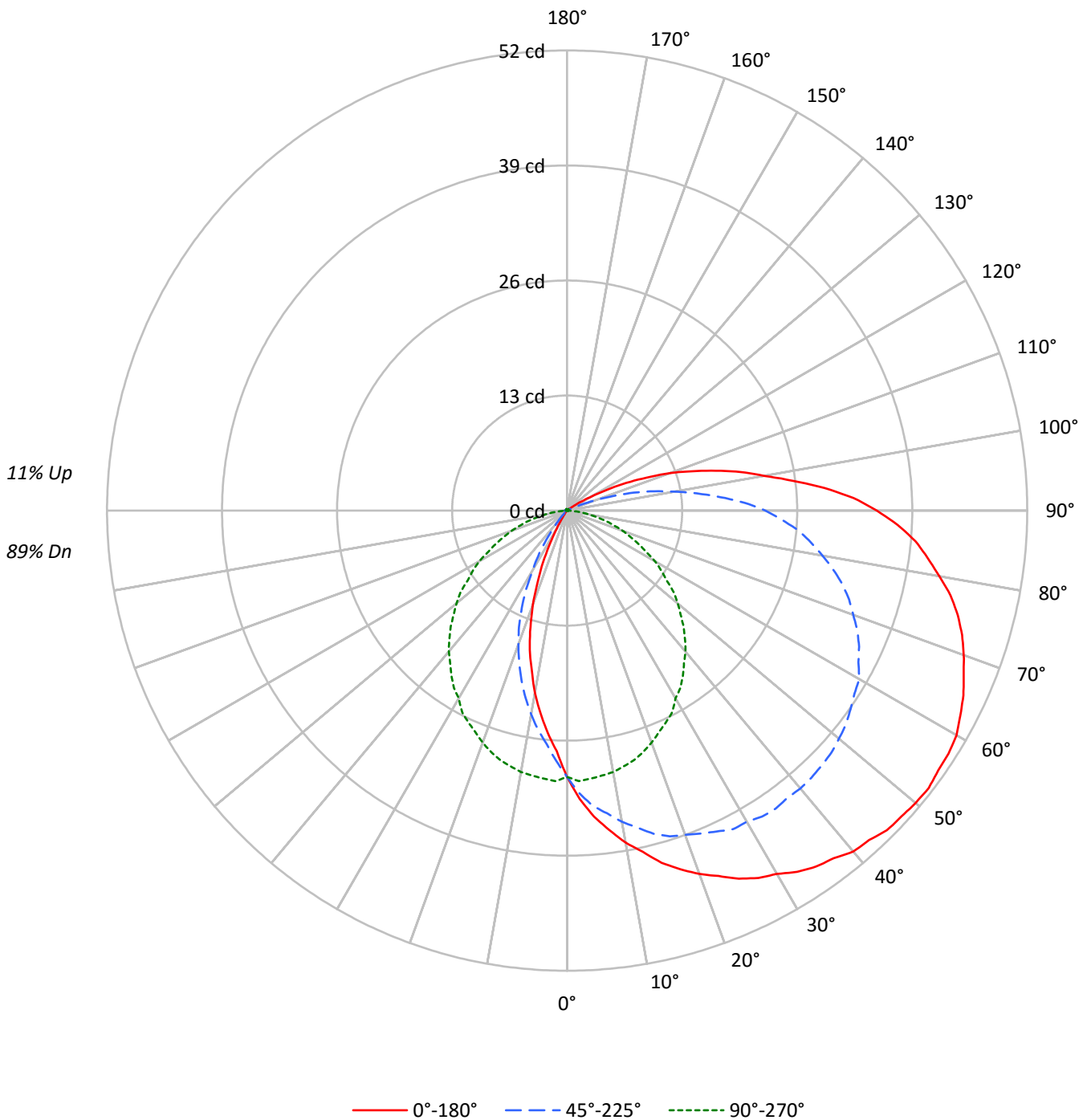
Input Watts (W): 7.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2666	2666	2666
5°	2837	2699	2060
10°	2913	2691	1598
15°	2979	2667	1179
20°	3020	2616	781
25°	3059	2563	427
30°	3073	2485	149
35°	3123	2441	32
40°	3162	2376	6
45°	3200	2297	0
50°	3231	2208	0
55°	3256	2073	0
60°	3294	1988	0
65°	3292	1810	0
70°	3296	1670	0
75°	3305	1462	0
80°	3265	1180	0
85°	3229	786	8



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.8	2.2
10°-20°	8.1	6.1
20°-30°	12.0	9.1
30°-40°	14.6	11.0
40°-50°	16.5	12.4
50°-60°	17.5	13.2
60°-70°	17.2	13.0
70°-80°	15.8	11.9
80°-90°	13.1	9.9
90°-100°	8.8	6.6
100°-110°	4.3	3.2
110°-120°	1.3	1.0
120°-130°	0.2	0.1
130°-140°	0.1	0.1
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°	23.0	17.4
0°-40°	37.6	28.4
0°-60°	71.5	54.1
0°-90°	117.6	88.9
90°-120°	14.4	10.9
90°-150°	14.6	11.1
90°-180°	15.0	11.3
0°-180°	132.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	30	30	30	30	30	
5°	35	34	30	26	25	3
15°	41	38	29	20	16	12
25°	46	40	26	12	6	21
35°	49	41	23	4	0	31
45°	51	41	19	0	0	39
55°	51	39	14	0	0	46
65°	49	36	9	0	0	49
75°	46	32	4	0	0	48
85°	40	26	1	0	0	33
90°	35	22	0	0	0	19
95°	29	17	0	0	0	22
105°	17	8	0	0	0	19
115°	7	1	0	0	0	8
125°	1	0	0	0	0	1
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°	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1
2.5°	32.6	32.3	32.4	32.3	32.3	32.2	32.1	32.1	32.0	31.9	32.0
5°	34.7	34.5	34.6	34.4	34.2	34.1	34.0	33.9	33.7	33.6	33.5
7.5°	36.4	36.3	36.2	36.1	35.9	35.8	35.6	35.4	35.2	34.9	34.5
10°	38.1	37.8	37.8	37.6	37.4	37.2	37.0	36.9	36.4	36.2	35.7
12.5°	39.5	39.4	39.4	39.0	38.8	38.7	38.4	38.2	37.6	37.2	36.7
15°	41.2	41.1	41.0	40.8	40.5	40.1	39.8	39.3	38.9	38.3	37.8
17.5°	42.5	42.4	42.3	41.9	41.7	41.4	41.1	40.5	39.8	39.2	38.6
20°	43.7	43.6	43.4	43.1	42.5	42.3	41.9	41.4	40.7	39.9	39.0
22.5°	44.7	44.6	44.4	44.0	43.6	43.3	42.8	42.1	41.4	40.6	39.5
25°	45.9	45.8	45.4	45.0	44.4	44.1	43.8	43.1	42.1	41.2	40.0
27.5°	46.8	46.7	46.4	46.0	45.3	45.0	44.6	43.7	42.7	41.7	40.6
30°	47.4	47.4	47.1	46.6	46.0	45.6	45.1	44.2	43.1	41.9	40.6
32.5°	48.4	48.4	48.0	47.5	46.8	46.4	45.9	44.8	43.6	42.3	41.0
35°	49.1	48.9	48.6	48.0	47.3	46.9	46.4	45.1	43.9	42.4	41.1
37.5°	49.5	49.4	49.1	48.6	47.7	47.2	46.6	45.3	44.1	42.4	40.9
40°	50.3	50.0	49.7	49.2	48.4	47.7	47.1	45.9	44.3	42.7	41.0
42.5°	50.5	50.5	50.0	49.4	48.6	47.9	47.4	45.9	44.4	42.5	40.9
45°	51.1	50.9	50.4	49.7	48.8	48.2	47.6	46.1	44.4	42.6	40.7
47.5°	51.2	51.1	50.5	49.8	48.9	48.4	47.6	46.1	44.4	42.4	40.5
50°	51.4	51.3	50.8	49.9	48.9	48.5	47.7	46.1	44.2	42.3	40.1
52.5°	51.5	51.3	50.9	50.0	49.0	48.4	47.6	46.0	44.0	41.9	39.7
55°	51.2	51.1	50.5	49.7	48.6	47.9	47.2	45.6	43.6	41.4	39.1
57.5°	51.1	50.9	50.2	49.4	48.3	47.6	46.9	45.2	43.2	40.9	38.5
60°	50.8	50.5	50.0	49.1	47.9	47.3	46.5	44.7	42.7	40.5	38.1
62.5°	50.1	49.8	49.3	48.4	47.2	46.5	45.8	44.0	41.9	39.7	37.1
65°	49.4	49.3	48.8	47.8	46.6	45.9	45.1	43.3	41.2	38.9	36.4
67.5°	48.5	48.4	47.8	46.9	45.7	44.9	44.1	42.3	40.4	38.0	35.5
70°	47.7	47.6	47.0	46.1	44.8	44.0	43.3	41.5	39.4	37.0	34.4
72.5°	46.8	46.5	46.1	45.1	43.9	43.1	42.2	40.4	38.4	36.0	33.4
75°	45.7	45.3	44.8	44.0	42.7	41.9	41.1	39.2	37.1	34.8	32.2
77.5°	44.4	44.1	43.6	42.6	41.4	40.6	39.7	38.0	35.8	33.4	30.8
80°	42.7	42.5	42.0	41.2	39.9	39.2	38.4	36.5	34.3	31.9	29.3
82.5°	41.1	41.1	40.5	39.6	38.4	37.5	36.7	34.8	32.9	30.6	27.8
85°	39.5	39.2	38.8	37.9	36.7	35.9	34.9	33.3	31.2	28.8	26.3
87.5°	37.4	37.1	36.7	35.9	34.7	34.0	33.0	31.3	29.1	26.9	24.3
90°	35.0	34.9	34.4	33.5	32.3	31.6	30.9	29.2	27.1	24.9	22.4
92.5°	32.4	32.2	31.9	31.0	30.0	29.2	28.4	26.7	24.6	22.5	20.1
95°	29.2	29.0	28.6	27.8	26.7	26.1	25.2	23.6	21.6	19.7	17.4
97.5°	25.7	25.6	25.1	24.4	23.4	22.8	22.0	20.6	18.8	17.0	14.8
100°	22.6	22.5	22.2	21.5	20.6	20.0	19.2	18.0	16.3	14.5	12.3
102.5°	20.1	20.0	19.6	18.9	18.1	17.5	16.8	15.5	13.9	12.0	10.1
105°	17.4	17.3	16.8	16.3	15.5	14.9	14.4	13.0	11.3	9.6	7.8
107.5°	14.8	14.6	14.2	13.7	12.9	12.5	11.8	10.5	9.0	7.4	5.5
110°	12.4	12.1	11.8	11.2	10.4	10.0	9.4	8.1	6.8	5.2	3.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	9.7	9.7	9.3	8.7	8.0	7.5	7.0	5.7	4.5	3.1	1.8
115°	7.4	7.2	6.9	6.3	5.7	5.3	4.7	3.7	2.5	1.6	0.8
117.5°	5.1	4.9	4.7	4.3	3.6	3.2	2.8	2.0	1.4	0.7	0.1
120°	3.2	2.9	2.8	2.4	2.0	1.8	1.6	1.0	0.6	0.1	0.1
122.5°	1.9	1.8	1.7	1.5	1.1	0.9	0.6	0.3	0.1	0.1	0.1
125°	0.8	0.7	0.6	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.0
127.5°	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0
130°	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.2	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
135°	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
137.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2
140°	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.1
142.5°	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
145°	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1
147.5°	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
152.5°	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
155°	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.1	0.0
160°	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
162.5°	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
167.5°	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
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	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
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	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0
180°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1
2.5°	31.6	31.6	31.4	31.4	31.3	31.2	31.1	31.0	30.8	30.6	30.2
5°	33.0	32.7	32.4	32.2	32.1	32.0	31.5	31.1	30.9	30.4	29.7
7.5°	34.1	33.7	33.3	32.9	32.7	32.3	31.8	31.4	30.8	30.2	29.3
10°	35.2	34.6	34.1	33.5	33.2	33.0	32.2	31.5	30.8	30.0	29.0
12.5°	36.1	35.5	34.7	34.0	33.7	33.3	32.4	31.5	30.6	29.6	28.4
15°	36.9	36.1	35.3	34.4	33.9	33.5	32.4	31.5	30.4	29.2	27.8
17.5°	37.5	36.5	35.7	34.7	34.1	33.6	32.4	31.3	30.1	28.6	27.0
20°	38.1	36.8	35.8	34.7	34.1	33.5	32.2	31.0	29.5	27.9	26.3
22.5°	38.5	37.2	35.9	34.7	34.0	33.4	31.9	30.6	28.9	27.1	25.3
25°	38.9	37.4	35.9	34.7	33.9	33.2	31.6	30.1	28.4	26.4	24.3
27.5°	39.2	37.6	36.1	34.5	33.7	32.9	31.2	29.6	27.8	25.7	23.4
30°	39.2	37.5	35.9	34.2	33.3	32.4	30.6	28.8	26.7	24.5	22.3
32.5°	39.4	37.6	36.0	34.1	33.2	32.2	30.3	28.3	26.2	23.8	21.4
35°	39.3	37.5	35.8	33.7	32.7	31.6	29.6	27.6	25.4	22.8	20.3
37.5°	39.1	37.2	35.3	33.3	32.1	31.0	28.8	26.5	24.2	21.7	19.0
40°	39.2	37.1	35.0	33.0	31.8	30.6	28.4	26.0	23.5	20.8	18.1
42.5°	38.9	36.7	34.4	32.2	31.1	29.8	27.5	25.1	22.5	19.7	16.7
45°	38.7	36.4	34.1	31.8	30.6	29.3	26.8	24.2	21.5	18.6	15.7
47.5°	38.3	36.0	33.6	31.1	29.7	28.4	25.8	23.2	20.4	17.4	14.4
50°	37.9	35.5	33.0	30.3	29.0	27.7	24.9	22.2	19.3	16.3	13.1
52.5°	37.4	34.9	32.3	29.6	28.3	26.9	24.0	21.1	18.3	15.2	12.1
55°	36.7	34.1	31.4	28.7	27.4	25.8	22.8	20.0	17.0	13.7	10.6
57.5°	36.1	33.5	30.6	27.8	26.3	24.8	21.7	18.8	15.7	12.6	9.4
60°	35.5	32.8	29.8	27.0	25.4	23.9	20.8	17.8	14.7	11.5	8.4
62.5°	34.5	31.6	28.9	25.8	24.1	22.7	19.4	16.3	13.3	10.0	7.0
65°	33.7	30.9	27.9	24.8	23.1	21.6	18.4	15.3	12.1	8.9	5.9
67.5°	32.7	29.7	26.8	23.7	21.9	20.4	17.1	13.9	10.8	7.7	4.7
70°	31.7	28.7	25.7	22.5	20.8	19.1	15.9	12.7	9.6	6.7	3.7
72.5°	30.6	27.7	24.5	21.4	19.6	18.0	14.7	11.4	8.4	5.5	2.8
75°	29.4	26.4	23.3	20.2	18.4	16.7	13.4	10.2	7.3	4.5	2.1
77.5°	28.1	25.2	22.0	18.8	17.1	15.4	12.2	9.0	6.0	3.4	1.1
80°	26.5	23.6	20.5	17.5	15.8	14.0	10.9	7.7	4.9	2.5	0.6
82.5°	25.0	22.2	19.1	16.0	14.4	12.8	9.7	6.6	3.7	1.6	0.2
85°	23.5	20.6	17.6	14.6	12.9	11.4	8.4	5.5	2.8	0.9	0.2
87.5°	21.6	18.7	15.8	12.8	11.3	9.8	7.0	4.2	1.8	0.3	0.1
90°	19.4	16.7	13.9	11.0	9.5	8.2	5.4	3.0	1.0	0.1	0.1
92.5°	17.3	14.7	11.9	9.2	7.8	6.4	4.0	1.8	0.3	0.2	0.3
95°	14.8	12.3	9.6	7.1	5.9	4.7	2.4	0.7	0.3	0.1	0.2
97.5°	12.4	10.0	7.5	5.1	4.0	2.8	0.9	0.2	0.1	0.1	0.1
100°	9.9	7.8	5.5	3.2	2.2	1.4	0.1	0.0	0.0	0.0	0.1
102.5°	7.8	5.7	3.6	1.7	0.9	0.4	0.1	0.1	0.1	0.1	0.2
105°	5.6	3.7	1.8	0.6	0.2	0.0	0.0	0.0	0.1	0.1	0.1
107.5°	3.7	1.9	0.7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
110°	1.9	0.8	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P273344

CATALOG NUMBER: 0.03-1W-835-91-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	0.8	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1	0.1
115°	0.2	0.0	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1
117.5°	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1
120°	0.1	0.1	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1
122.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
125°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
127.5°	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0
130°	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1
132.5°	0.1	0.1	0.2	0.1	0.1	0.0	0.1	0.2	0.1	0.1	0.1
135°	0.0	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
137.5°	0.1	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.3	0.1
140°	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1
142.5°	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
145°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
147.5°	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1
150°	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0
152.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
155°	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
157.5°	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
160°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2
162.5°	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
165°	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.1
167.5°	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.1
170°	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
172.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
175°	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.1	0.0
177.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1
180°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P273344

CATALOG NUMBER: 0.03-1W-835-91-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1
2.5°	30.0	29.6	29.5	29.4	29.2	28.9	28.8	28.5	28.3	28.2	27.9
5°	29.3	28.9	28.6	28.3	28.1	27.7	27.2	27.0	26.5	26.4	26.1
7.5°	28.7	28.1	27.6	27.2	26.9	26.3	25.8	25.4	25.0	24.5	24.2
10°	28.1	27.2	26.6	26.2	25.8	25.1	24.4	23.8	23.4	22.8	22.3
12.5°	27.4	26.3	25.6	25.1	24.6	23.7	23.0	22.4	21.7	21.0	20.4
15°	26.5	25.5	24.4	23.9	23.3	22.4	21.6	20.7	19.9	19.0	18.4
17.5°	25.6	24.3	23.3	22.6	22.2	20.9	19.9	18.8	18.0	17.3	16.3
20°	24.6	23.3	21.9	21.3	20.7	19.4	18.2	17.0	16.1	15.1	14.2
22.5°	23.6	22.2	20.6	19.9	19.2	17.7	16.5	15.2	14.2	13.0	12.0
25°	22.5	20.9	19.3	18.5	17.7	16.1	14.7	13.2	12.1	10.8	9.8
27.5°	21.5	19.7	17.9	17.1	16.2	14.5	13.0	11.5	10.0	8.8	7.6
30°	20.2	18.3	16.4	15.4	14.6	12.6	11.0	9.4	7.8	6.6	5.4
32.5°	19.2	17.2	15.2	14.1	13.2	11.1	9.5	7.7	6.1	4.7	3.6
35°	17.9	15.8	13.5	12.5	11.4	9.4	7.5	5.9	4.4	3.0	2.3
37.5°	16.5	14.2	12.0	10.9	9.8	7.7	5.7	4.1	2.7	1.8	1.4
40°	15.5	13.0	10.6	9.6	8.4	6.1	4.3	2.6	1.7	1.1	0.7
42.5°	14.1	11.5	9.2	7.9	6.8	4.6	2.7	1.7	1.0	0.5	0.2
45°	12.8	10.3	7.8	6.6	5.3	3.1	1.8	1.0	0.5	0.2	0.1
47.5°	11.5	8.8	6.3	5.1	4.0	2.0	1.1	0.5	0.1	0.1	0.0
50°	10.2	7.6	5.1	3.8	2.7	1.4	0.7	0.3	0.1	0.0	0.1
52.5°	9.2	6.6	3.8	2.7	1.9	0.9	0.4	0.3	0.2	0.1	0.2
55°	7.8	5.1	2.5	1.6	1.1	0.4	0.1	0.0	0.1	0.1	0.0
57.5°	6.7	4.0	1.7	1.1	0.7	0.2	0.1	0.0	0.0	0.1	0.0
60°	5.5	2.9	1.1	0.7	0.5	0.3	0.2	0.2	0.1	0.2	0.2
62.5°	4.2	1.9	0.5	0.3	0.1	0.1	0.0	0.1	0.1	0.0	0.0
65°	3.2	1.1	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
67.5°	2.2	0.6	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0
70°	1.5	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0
72.5°	0.8	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
75°	0.4	0.2	0.1	0.1	0.2	0.0	0.1	0.1	0.1	0.0	0.1
77.5°	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0
80°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0
82.5°	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.0	0.1	0.0
85°	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.2
87.5°	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
90°	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1
92.5°	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.1
95°	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
97.5°	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1
100°	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0
102.5°	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1
105°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
107.5°	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.1
110°	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.1	0.0



TEST NUMBER: P273344

CATALOG NUMBER: 0.03-1W-835-91-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°	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
120°	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.0
122.5°	0.1	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.2	0.1
125°	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
127.5°	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0
130°	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0
132.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
135°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
137.5°	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1
140°	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0
142.5°	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0
145°	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.0
147.5°	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1
150°	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
155°	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.0
157.5°	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0
160°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
162.5°	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
165°	0.1	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0
167.5°	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.0	0.1	0.0
170°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
172.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
175°	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
177.5°	0.1	0.1	0.1	0.2	0.0	0.1	0.1	0.1	0.0	0.1	0.0
180°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1



TEST NUMBER: P273344

CATALOG NUMBER: 0.03-1W-835-91-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1
2.5°	27.8	27.6	27.5	27.4	27.2	27.2	27.4	27.2
5°	25.9	25.6	25.5	25.4	25.3	25.2	25.3	25.2
7.5°	23.8	23.6	23.5	23.3	23.1	23.1	23.1	23.1
10°	21.9	21.6	21.4	21.2	21.0	20.9	20.9	20.9
12.5°	20.0	19.4	19.2	19.1	18.7	18.7	18.6	18.5
15°	17.9	17.4	17.2	16.8	16.6	16.3	16.4	16.3
17.5°	15.8	15.2	14.9	14.6	14.4	14.0	14.0	13.8
20°	13.5	12.9	12.6	12.3	11.9	11.5	11.5	11.3
22.5°	11.2	10.4	10.2	9.8	9.5	9.0	8.9	8.7
25°	8.8	8.1	7.7	7.4	7.0	6.6	6.3	6.4
27.5°	6.7	5.8	5.5	5.2	4.7	4.3	4.1	4.1
30°	4.4	3.5	3.2	3.0	2.6	2.4	2.2	2.3
32.5°	2.8	2.4	2.2	1.9	1.7	1.5	1.5	1.4
35°	1.7	1.4	1.1	1.0	0.7	0.6	0.5	0.5
37.5°	0.8	0.5	0.3	0.2	0.1	0.1	0.1	0.0
40°	0.4	0.2	0.1	0.1	0.0	0.1	0.1	0.1
42.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0
52.5°	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.0
55°	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.1	0.1	0.2	0.0	0.1	0.2	0.1	0.0
62.5°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.1	0.1	0.1	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°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
80°	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0
85°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
87.5°	0.1	0.1	0.1	0.0	0.1	0.1	0.0	0.1
90°	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1
92.5°	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.3
95°	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2
97.5°	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.1	0.1	0.0	0.1	0.2	0.1	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
107.5°	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1
110°	0.1	0.1	0.1	0.0	0.0	0.1	0.1	0.0



TEST NUMBER: P273344

CATALOG NUMBER: 0.03-1W-835-91-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	0.1	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.1
125°	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
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°	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0
135°	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.0
137.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	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	0.1	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0
155°	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
160°	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.0
162.5°	0.0	0.0	0.1	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	0.1	0.0	0.0	0.0	0.0	0.1	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

(END OF REPORT)