

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: P273369

Luminaire Tested: **0.03-3W-840-91-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273369
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: 0.03-3W-840-91-ID-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 90 DEGREE ASYMMETRIC OPTIC.
HIGH OUTPUT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 324.5 lumens
Efficiency: N/A
Efficacy: 26.0 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

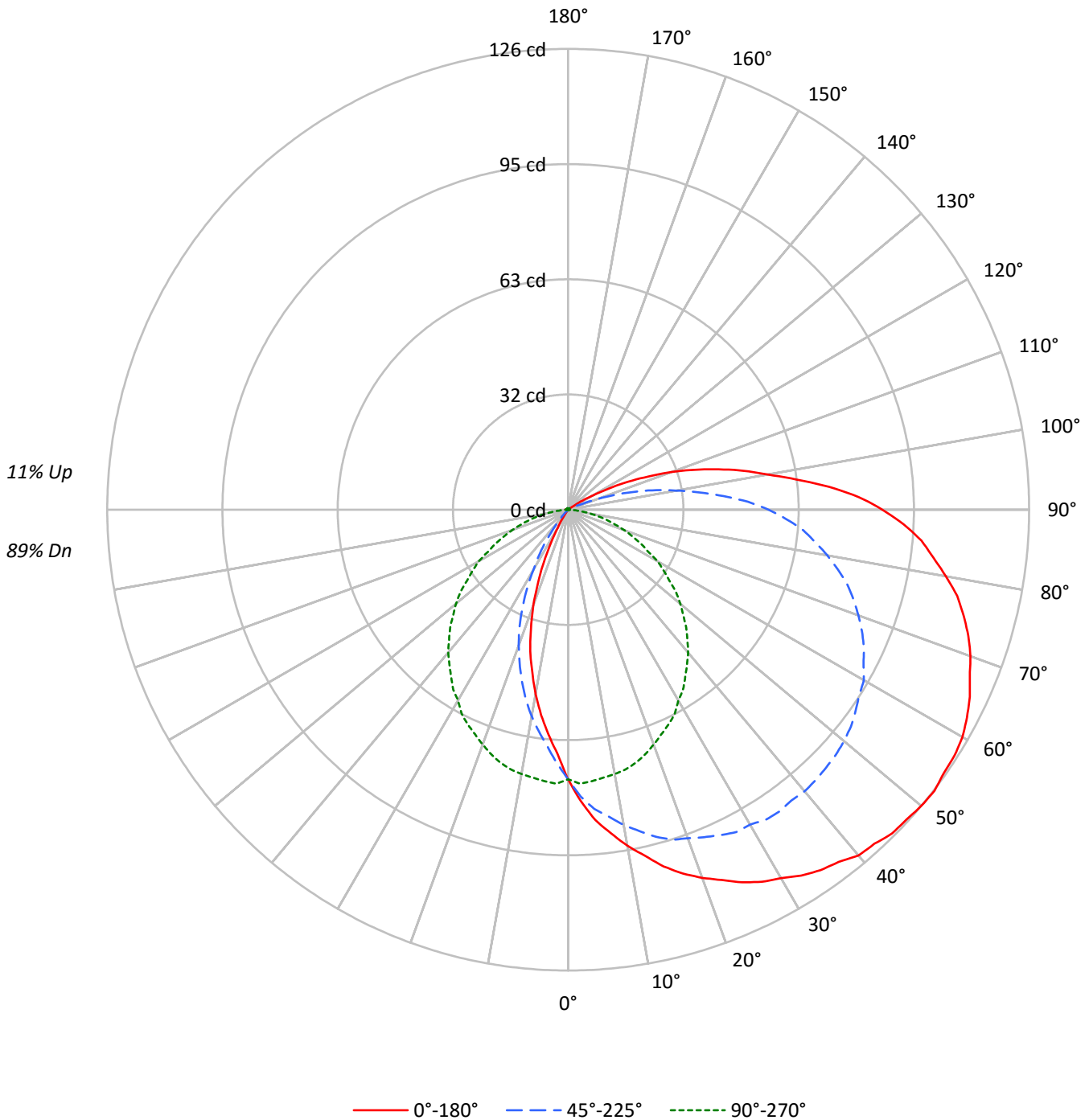
Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	72	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	46	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	36	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°	6528	6528	6528
5°	6966	6615	5044
10°	7133	6585	3915
15°	7304	6540	2893
20°	7401	6404	1921
25°	7491	6291	1053
30°	7541	6106	363
35°	7651	5974	83
40°	7758	5827	19
45°	7841	5631	0
50°	7921	5419	0
55°	7975	5100	0
60°	8066	4892	0
65°	8071	4453	0
70°	8085	4062	0
75°	8092	3574	0
80°	8013	2878	0
85°	7922	2009	25



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.0	2.2
10°-20°	19.9	6.1
20°-30°	29.5	9.1
30°-40°	35.8	11.0
40°-50°	40.4	12.4
50°-60°	42.9	13.2
60°-70°	42.3	13.0
70°-80°	38.7	11.9
80°-90°	32.0	9.9
90°-100°	21.5	6.6
100°-110°	10.6	3.3
110°-120°	3.2	1.0
120°-130°	0.4	0.1
130°-140°	0.2	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°	56.3	17.4
0°-40°	92.1	28.4
0°-60°	175.4	54.0
0°-90°	288.4	88.9
90°-120°	35.3	10.9
90°-150°	36.0	11.1
90°-180°	36.0	11.1
0°-180°	324.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	74	74	74	74	74	
5°	85	82	74	65	62	8
15°	101	93	72	49	40	29
25°	112	98	65	30	16	52
35°	120	101	56	11	1	75
45°	125	100	46	1	0	97
55°	125	96	34	0	0	113
65°	121	89	22	0	0	120
75°	112	79	11	0	0	118
85°	97	64	2	0	0	81
90°	86	55	0	0	0	47
95°	72	43	0	0	0	55
105°	43	19	0	0	0	45
115°	18	2	0	0	0	18
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°	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
2.5°	79.8	79.3	79.5	79.3	79.3	79.0	78.8	78.8	78.5	78.3	78.5
5°	85.2	84.6	84.9	84.4	83.9	83.6	83.4	83.1	82.6	82.4	82.1
7.5°	89.2	89.0	88.7	88.5	88.0	87.7	87.2	86.7	86.2	85.7	84.6
10°	93.3	92.6	92.6	92.3	91.8	91.3	90.8	90.5	89.2	88.7	87.5
12.5°	96.9	96.6	96.6	95.6	95.1	94.8	94.1	93.6	92.3	91.3	90.0
15°	101.0	100.7	100.5	99.9	99.2	98.4	97.7	96.4	95.4	93.8	92.6
17.5°	104.3	104.0	103.8	102.8	102.2	101.5	100.7	99.2	97.7	96.1	94.6
20°	107.1	106.8	106.3	105.6	104.3	103.8	102.8	101.5	99.7	97.9	95.6
22.5°	109.6	109.4	108.9	107.9	106.8	106.1	105.0	103.3	101.5	99.4	96.9
25°	112.4	112.2	111.4	110.4	108.9	108.1	107.3	105.6	103.3	101.0	98.2
27.5°	114.7	114.5	113.7	112.7	111.2	110.4	109.4	107.1	104.8	102.2	99.4
30°	116.3	116.3	115.5	114.2	112.7	111.7	110.7	108.4	105.6	102.8	99.4
32.5°	118.6	118.6	117.8	116.5	114.7	113.7	112.4	109.9	106.8	103.8	100.5
35°	120.3	119.8	119.1	117.8	116.0	115.0	113.7	110.7	107.6	104.0	100.7
37.5°	121.4	121.1	120.3	119.1	117.0	115.8	114.2	111.2	108.1	104.0	100.2
40°	123.4	122.6	121.9	120.6	118.6	117.0	115.5	112.4	108.6	104.8	100.5
42.5°	123.9	123.9	122.6	121.1	119.1	117.5	116.3	112.4	108.9	104.3	100.2
45°	125.2	124.7	123.7	121.9	119.6	118.0	116.8	112.9	108.9	104.5	99.7
47.5°	125.4	125.2	123.9	122.1	119.8	118.6	116.8	112.9	108.9	104.0	99.2
50°	126.0	125.7	124.4	122.4	119.8	118.8	117.0	112.9	108.4	103.8	98.4
52.5°	126.2	125.7	124.7	122.6	120.1	118.6	116.8	112.7	107.9	102.8	97.4
55°	125.4	125.2	123.9	121.9	119.1	117.5	115.8	111.7	106.8	101.5	95.9
57.5°	125.2	124.7	123.1	121.1	118.3	116.8	115.0	110.9	105.8	100.2	94.3
60°	124.4	123.9	122.6	120.3	117.5	116.0	114.0	109.6	104.8	99.2	93.3
62.5°	122.9	122.1	120.9	118.6	115.8	114.0	112.2	107.9	102.8	97.4	91.0
65°	121.1	120.9	119.6	117.3	114.2	112.4	110.7	106.1	101.0	95.4	89.2
67.5°	118.8	118.6	117.3	115.0	111.9	110.1	108.1	103.8	98.9	93.1	86.9
70°	117.0	116.8	115.2	112.9	109.9	107.9	106.1	101.7	96.6	90.8	84.4
72.5°	114.7	114.0	112.9	110.7	107.6	105.6	103.5	98.9	94.1	88.2	81.8
75°	111.9	111.2	109.9	107.9	104.8	102.8	100.7	96.1	91.0	85.4	79.0
77.5°	108.9	108.1	106.8	104.5	101.5	99.4	97.4	93.1	87.7	81.8	75.5
80°	104.8	104.3	103.0	101.0	97.9	96.1	94.1	89.5	84.1	78.3	71.9
82.5°	100.7	100.7	99.2	97.1	94.1	92.0	90.0	85.4	80.6	75.0	68.1
85°	96.9	96.1	95.1	92.8	90.0	88.0	85.7	81.6	76.5	70.6	64.5
87.5°	91.8	91.0	90.0	88.0	85.2	83.4	80.8	76.7	71.4	66.0	59.7
90°	85.9	85.7	84.4	82.1	79.3	77.5	75.7	71.6	66.5	60.9	54.8
92.5°	79.5	79.0	78.3	76.0	73.4	71.6	69.6	65.5	60.4	55.1	49.2
95°	71.6	71.1	70.1	68.1	65.5	64.0	61.7	57.9	53.0	48.2	42.6
97.5°	63.0	62.7	61.4	59.9	57.4	55.8	54.1	50.5	46.1	41.6	36.2
100°	55.3	55.1	54.3	52.8	50.5	49.0	47.2	44.1	40.0	35.4	30.1
102.5°	49.2	49.0	47.9	46.4	44.4	42.8	41.3	38.0	34.2	29.3	24.7
105°	42.6	42.3	41.3	40.0	38.0	36.5	35.2	31.9	27.8	23.5	19.1
107.5°	36.2	35.7	34.9	33.7	31.6	30.6	28.8	25.8	22.2	18.1	13.5
110°	30.3	29.6	28.8	27.5	25.5	24.5	22.9	19.9	16.6	12.7	8.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	23.7	23.7	22.7	21.4	19.6	18.4	17.1	14.0	11.0	7.6	4.3
115°	18.1	17.6	16.8	15.6	14.0	13.0	11.5	9.2	6.1	3.8	2.0
117.5°	12.5	12.0	11.5	10.5	8.9	7.9	6.9	4.8	3.3	1.8	0.3
120°	7.9	7.1	6.9	5.9	4.8	4.3	3.8	2.5	1.5	0.3	0.3
122.5°	4.6	4.3	4.1	3.6	2.8	2.3	1.5	0.8	0.3	0.3	0.3
125°	2.0	1.8	1.5	0.8	0.5	0.3	0.3	0.3	0.3	0.3	0.0
127.5°	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.3	0.0	0.0	0.0
130°	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.5	0.0	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3
135°	0.0	0.0	0.0	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3
137.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.5
140°	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.3
142.5°	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
145°	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3
147.5°	0.0	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.5
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
152.5°	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3
155°	0.3	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.3	0.3
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.3	0.0
160°	0.0	0.0	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
162.5°	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.3	0.3	0.3
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
167.5°	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3
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	0.3	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3
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	0.3	0.3	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0
180°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3



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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
2.5°	77.5	77.5	77.0	77.0	76.7	76.5	76.2	76.0	75.5	75.0	73.9
5°	80.8	80.1	79.5	79.0	78.8	78.5	77.3	76.2	75.7	74.5	72.9
7.5°	83.6	82.6	81.6	80.6	80.1	79.3	78.0	77.0	75.5	73.9	71.9
10°	86.2	84.9	83.6	82.1	81.3	80.8	79.0	77.3	75.5	73.4	71.1
12.5°	88.5	86.9	85.2	83.4	82.6	81.6	79.5	77.3	75.0	72.7	69.6
15°	90.5	88.5	86.4	84.4	83.1	82.1	79.5	77.3	74.5	71.6	68.1
17.5°	92.0	89.5	87.5	85.2	83.6	82.4	79.5	76.7	73.7	70.1	66.3
20°	93.3	90.3	87.7	85.2	83.6	82.1	79.0	76.0	72.4	68.3	64.5
22.5°	94.3	91.3	88.0	85.2	83.4	81.8	78.3	75.0	70.9	66.5	62.0
25°	95.4	91.8	88.0	85.2	83.1	81.3	77.5	73.7	69.6	64.8	59.7
27.5°	96.1	92.3	88.5	84.6	82.6	80.6	76.5	72.7	68.1	63.0	57.4
30°	96.1	92.0	88.0	83.9	81.6	79.5	75.0	70.6	65.5	60.2	54.6
32.5°	96.6	92.3	88.2	83.6	81.3	79.0	74.2	69.4	64.3	58.4	52.5
35°	96.4	92.0	87.7	82.6	80.1	77.5	72.7	67.6	62.2	55.8	49.7
37.5°	95.9	91.3	86.4	81.6	78.8	76.0	70.6	65.0	59.4	53.3	46.7
40°	96.1	91.0	85.9	80.8	78.0	75.0	69.6	63.7	57.6	51.0	44.4
42.5°	95.4	90.0	84.4	79.0	76.2	73.2	67.3	61.4	55.1	48.2	41.0
45°	94.8	89.2	83.6	78.0	75.0	71.9	65.8	59.4	52.8	45.6	38.5
47.5°	93.8	88.2	82.4	76.2	72.9	69.6	63.2	56.9	50.0	42.6	35.2
50°	92.8	86.9	80.8	74.2	71.1	67.8	60.9	54.3	47.4	40.0	32.1
52.5°	91.8	85.7	79.3	72.7	69.4	66.0	58.9	51.8	44.9	37.2	29.6
55°	90.0	83.6	77.0	70.4	67.1	63.2	55.8	49.0	41.6	33.7	26.0
57.5°	88.5	82.1	75.0	68.1	64.5	60.7	53.3	46.1	38.5	30.9	22.9
60°	86.9	80.3	73.2	66.3	62.2	58.6	51.0	43.6	36.0	28.3	20.7
62.5°	84.6	77.5	70.9	63.2	59.2	55.6	47.7	40.0	32.6	24.5	17.1
65°	82.6	75.7	68.3	60.7	56.6	53.0	45.1	37.5	29.6	21.9	14.5
67.5°	80.1	72.9	65.8	58.1	53.8	50.0	41.8	34.2	26.5	18.9	11.5
70°	77.8	70.4	63.0	55.1	51.0	46.9	39.0	31.1	23.5	16.3	9.2
72.5°	75.0	67.8	60.2	52.5	47.9	44.1	36.0	28.0	20.7	13.5	6.9
75°	72.2	64.8	57.1	49.5	45.1	41.0	32.9	25.0	17.8	11.0	5.1
77.5°	68.8	61.7	54.1	46.1	41.8	37.7	29.8	22.2	14.8	8.4	2.8
80°	65.0	57.9	50.2	42.8	38.8	34.4	26.8	18.9	12.0	6.1	1.5
82.5°	61.2	54.3	46.9	39.3	35.2	31.4	23.7	16.1	9.2	3.8	0.5
85°	57.6	50.5	43.1	35.7	31.6	28.0	20.7	13.5	6.9	2.3	0.5
87.5°	53.0	45.9	38.8	31.4	27.8	24.0	17.1	10.2	4.3	0.8	0.3
90°	47.7	41.0	34.2	27.0	23.2	20.1	13.3	7.4	2.5	0.3	0.3
92.5°	42.3	36.0	29.1	22.4	19.1	15.8	9.7	4.3	0.8	0.5	0.8
95°	36.2	30.1	23.5	17.3	14.5	11.5	5.9	1.8	0.8	0.3	0.5
97.5°	30.3	24.5	18.4	12.5	9.7	6.9	2.3	0.5	0.3	0.3	0.3
100°	24.2	19.1	13.5	7.9	5.4	3.3	0.3	0.0	0.0	0.0	0.3
102.5°	19.1	14.0	8.9	4.1	2.3	1.0	0.3	0.3	0.3	0.3	0.5
105°	13.8	9.2	4.3	1.5	0.5	0.0	0.0	0.0	0.3	0.3	0.3
107.5°	9.2	4.6	1.8	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
110°	4.6	2.0	0.5	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3



TEST NUMBER: P273369

CATALOG NUMBER: 0.03-3W-840-91-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	2.0	0.5	0.0	0.0	0.3	0.3	0.0	0.0	0.3	0.3	0.3
115°	0.5	0.0	0.3	0.0	0.0	0.3	0.3	0.0	0.0	0.3	0.3
117.5°	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.3	0.3	0.3	0.3
120°	0.3	0.3	0.0	0.3	0.0	0.3	0.3	0.3	0.3	0.0	0.3
122.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
125°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.5
127.5°	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.3	0.3	0.3	0.0
130°	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.3
132.5°	0.3	0.3	0.5	0.3	0.3	0.0	0.3	0.5	0.3	0.3	0.3
135°	0.0	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3
137.5°	0.3	0.5	0.5	0.5	0.3	0.3	0.3	0.5	0.5	0.8	0.3
140°	0.0	0.0	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3
142.5°	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3
145°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
147.5°	0.3	0.3	0.3	0.5	0.3	0.3	0.5	0.5	0.5	0.5	0.3
150°	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.0
152.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
155°	0.3	0.0	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3
157.5°	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
160°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.5	0.3	0.5
162.5°	0.0	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3
165°	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.3
167.5°	0.3	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.3	0.0	0.3
170°	0.3	0.0	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3
172.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
175°	0.3	0.0	0.0	0.0	0.3	0.0	0.3	0.0	0.3	0.3	0.0
177.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3
180°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3



TEST NUMBER: P273369

CATALOG NUMBER: 0.03-3W-840-91-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
2.5°	73.4	72.7	72.4	72.2	71.6	70.9	70.6	69.9	69.4	69.1	68.3
5°	71.9	70.9	70.1	69.4	68.8	67.8	66.8	66.3	65.0	64.8	64.0
7.5°	70.4	68.8	67.6	66.8	66.0	64.5	63.2	62.2	61.2	60.2	59.4
10°	68.8	66.8	65.3	64.3	63.2	61.4	59.9	58.4	57.4	55.8	54.6
12.5°	67.1	64.5	62.7	61.4	60.4	58.1	56.3	54.8	53.3	51.5	50.0
15°	65.0	62.5	59.9	58.6	57.1	54.8	53.0	50.7	48.7	46.7	45.1
17.5°	62.7	59.7	57.1	55.3	54.3	51.2	48.7	46.1	44.1	42.3	40.0
20°	60.4	57.1	53.8	52.3	50.7	47.7	44.6	41.6	39.5	37.0	34.9
22.5°	57.9	54.3	50.5	48.7	47.2	43.3	40.5	37.2	34.9	31.9	29.3
25°	55.1	51.2	47.4	45.4	43.3	39.5	36.0	32.4	29.6	26.5	24.0
27.5°	52.8	48.2	43.9	41.8	39.8	35.4	31.9	28.3	24.5	21.7	18.6
30°	49.5	44.9	40.3	37.7	35.7	30.9	27.0	22.9	19.1	16.1	13.3
32.5°	47.2	42.1	37.2	34.7	32.4	27.3	23.2	18.9	15.0	11.5	8.9
35°	43.9	38.8	33.1	30.6	28.0	22.9	18.4	14.5	10.7	7.4	5.6
37.5°	40.5	34.9	29.3	26.8	24.0	18.9	14.0	9.9	6.6	4.3	3.3
40°	38.0	31.9	26.0	23.5	20.7	15.0	10.5	6.4	4.1	2.8	1.8
42.5°	34.7	28.3	22.4	19.4	16.6	11.2	6.6	4.1	2.5	1.3	0.5
45°	31.4	25.2	19.1	16.1	13.0	7.6	4.3	2.5	1.3	0.5	0.3
47.5°	28.3	21.7	15.6	12.5	9.7	4.8	2.8	1.3	0.3	0.3	0.0
50°	25.0	18.6	12.5	9.4	6.6	3.3	1.8	0.8	0.3	0.0	0.3
52.5°	22.4	16.1	9.4	6.6	4.6	2.3	1.0	0.8	0.5	0.3	0.5
55°	19.1	12.5	6.1	3.8	2.8	1.0	0.3	0.0	0.3	0.3	0.0
57.5°	16.3	9.7	4.1	2.8	1.8	0.5	0.3	0.0	0.0	0.3	0.0
60°	13.5	7.1	2.8	1.8	1.3	0.8	0.5	0.5	0.3	0.5	0.5
62.5°	10.2	4.6	1.3	0.8	0.3	0.3	0.0	0.3	0.3	0.0	0.0
65°	7.9	2.8	0.8	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3
67.5°	5.4	1.5	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.0
70°	3.6	0.8	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.0	0.0
72.5°	2.0	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
75°	1.0	0.5	0.3	0.3	0.5	0.0	0.3	0.3	0.3	0.0	0.3
77.5°	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.0	0.3	0.0
80°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.0	0.0
82.5°	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.0	0.3	0.0
85°	0.5	0.5	0.5	0.5	0.3	0.5	0.3	0.5	0.5	0.3	0.5
87.5°	0.3	0.5	0.5	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.3
90°	0.3	0.5	0.5	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3
92.5°	0.5	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.8	0.5	0.3
95°	0.8	0.5	0.8	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3
97.5°	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3
100°	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.3	0.0
102.5°	0.3	0.3	0.5	0.3	0.3	0.5	0.5	0.3	0.3	0.3	0.3
105°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
107.5°	0.0	0.3	0.3	0.3	0.3	0.0	0.0	0.3	0.3	0.0	0.3
110°	0.3	0.3	0.3	0.0	0.0	0.3	0.0	0.3	0.3	0.3	0.0



TEST NUMBER: P273369

CATALOG NUMBER: 0.03-3W-840-91-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°	0.3	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3
120°	0.0	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.0	0.3	0.0
122.5°	0.3	0.3	0.3	0.3	0.5	0.3	0.0	0.3	0.3	0.5	0.3
125°	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
127.5°	0.0	0.3	0.3	0.3	0.3	0.0	0.3	0.0	0.0	0.0	0.0
130°	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.0
132.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.5	0.3	0.3	0.3	0.3
135°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3
137.5°	0.3	0.5	0.5	0.5	0.5	0.5	0.3	0.5	0.3	0.5	0.3
140°	0.3	0.0	0.0	0.3	0.3	0.3	0.3	0.0	0.3	0.0	0.0
142.5°	0.3	0.3	0.0	0.0	0.0	0.3	0.0	0.3	0.3	0.0	0.0
145°	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.0
147.5°	0.3	0.3	0.5	0.5	0.3	0.3	0.5	0.3	0.3	0.3	0.3
150°	0.0	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.3	0.3	0.5	0.3	0.5	0.3	0.3	0.3	0.3	0.3	0.3
155°	0.3	0.3	0.3	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0
157.5°	0.0	0.0	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.0	0.0
160°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0
162.5°	0.3	0.3	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0
165°	0.3	0.0	0.3	0.3	0.3	0.0	0.3	0.3	0.0	0.3	0.0
167.5°	0.3	0.3	0.3	0.0	0.0	0.3	0.3	0.3	0.0	0.3	0.0
170°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
172.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.3	0.3
175°	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
177.5°	0.3	0.3	0.3	0.5	0.0	0.3	0.3	0.3	0.0	0.3	0.0
180°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3



TEST NUMBER: P273369

CATALOG NUMBER: 0.03-3W-840-91-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
2.5°	68.1	67.6	67.3	67.1	66.8	66.8	67.1	66.8
5°	63.5	62.7	62.5	62.2	62.0	61.7	62.0	61.7
7.5°	58.4	57.9	57.6	57.1	56.6	56.6	56.6	56.6
10°	53.8	53.0	52.5	52.0	51.5	51.2	51.2	51.2
12.5°	49.0	47.7	47.2	46.9	45.9	45.9	45.6	45.4
15°	43.9	42.6	42.1	41.3	40.8	40.0	40.3	40.0
17.5°	38.8	37.2	36.5	35.7	35.2	34.4	34.4	33.9
20°	33.1	31.6	30.9	30.1	29.1	28.3	28.3	27.8
22.5°	27.5	25.5	25.0	24.0	23.2	22.2	21.9	21.4
25°	21.7	19.9	18.9	18.1	17.1	16.1	15.6	15.8
27.5°	16.3	14.3	13.5	12.7	11.5	10.5	9.9	9.9
30°	10.7	8.7	7.9	7.4	6.4	5.9	5.4	5.6
32.5°	6.9	5.9	5.4	4.6	4.1	3.6	3.6	3.3
35°	4.1	3.3	2.8	2.5	1.8	1.5	1.3	1.3
37.5°	2.0	1.3	0.8	0.5	0.3	0.3	0.3	0.0
40°	1.0	0.5	0.3	0.3	0.0	0.3	0.3	0.3
42.5°	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.3	0.3	0.0	0.0	0.3	0.0	0.0	0.0
52.5°	0.3	0.5	0.3	0.5	0.3	0.3	0.3	0.0
55°	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.3	0.3	0.5	0.0	0.3	0.5	0.3	0.0
62.5°	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.3	0.3	0.3	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°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.3	0.3	0.3	0.3	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0
80°	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.3	0.0	0.0	0.3	0.0	0.3	0.0
85°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
87.5°	0.3	0.3	0.3	0.0	0.3	0.3	0.0	0.3
90°	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3
92.5°	0.5	0.3	0.3	0.5	0.3	0.3	0.3	0.8
95°	0.3	0.3	0.3	0.5	0.5	0.3	0.3	0.5
97.5°	0.0	0.3	0.0	0.0	0.3	0.3	0.3	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.3	0.3	0.0	0.3	0.5	0.3	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0
107.5°	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3
110°	0.3	0.3	0.3	0.0	0.0	0.3	0.3	0.0



TEST NUMBER: P273369

CATALOG NUMBER: 0.03-3W-840-91-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	0.3	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.3
125°	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3
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°	0.3	0.0	0.0	0.0	0.3	0.3	0.0	0.0
135°	0.0	0.3	0.3	0.3	0.0	0.0	0.0	0.0
137.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	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	0.3	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.3	0.3	0.3	0.3	0.0	0.0	0.3	0.0
155°	0.0	0.3	0.0	0.3	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
160°	0.3	0.0	0.3	0.3	0.3	0.3	0.0	0.0
162.5°	0.0	0.0	0.3	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	0.3	0.0	0.0	0.0	0.0	0.3	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

(END OF REPORT)