

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: P273359

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273359
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-830-91-ID-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 90 DEGREE ASYMMETRIC OPTIC.
HIGH OUTPUT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 305.9 lumens
Efficiency: N/A
Efficacy: 24.5 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

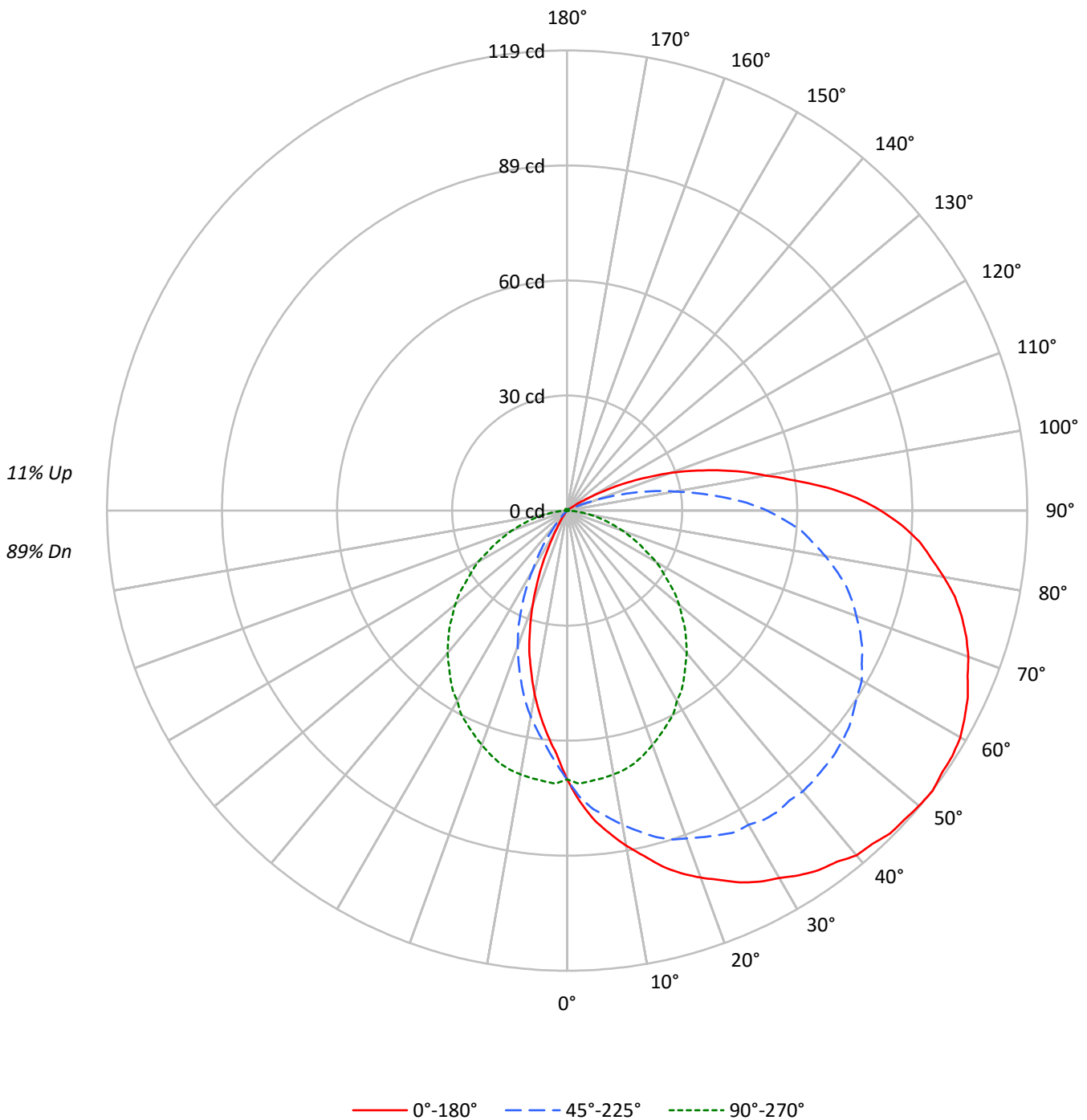
Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P273359

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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	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°	6156	6156	6156
5°	6565	6234	4758
10°	6728	6217	3693
15°	6892	6175	2734
20°	6979	6048	1811
25°	7071	5932	993
30°	7113	5762	344
35°	7218	5642	76
40°	7318	5496	13
45°	7396	5323	0
50°	7469	5121	0
55°	7523	4812	0
60°	7612	4615	0
65°	7618	4209	0
70°	7629	3837	0
75°	7637	3346	0
80°	7561	2737	0
85°	7473	1922	16



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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.6	2.2
10°-20°	18.8	6.1
20°-30°	27.8	9.1
30°-40°	33.7	11.0
40°-50°	38.1	12.5
50°-60°	40.4	13.2
60°-70°	39.9	13.0
70°-80°	36.5	11.9
80°-90°	30.2	9.9
90°-100°	20.2	6.6
100°-110°	9.9	3.2
110°-120°	3.0	1.0
120°-130°	0.4	0.1
130°-140°	0.1	0.0
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°	53.2	17.4
0°-40°	86.9	28.4
0°-60°	165.4	54.1
0°-90°	272.0	88.9
90°-120°	33.2	10.9
90°-150°	33.8	11.0
90°-180°	34.0	11.1
0°-180°	305.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	70	70	70	70	70	
5°	80	78	70	61	58	8
15°	95	87	68	46	38	27
25°	106	93	61	28	15	49
35°	114	95	53	10	1	71
45°	118	94	43	1	0	91
55°	118	90	32	0	0	106
65°	114	84	21	0	0	113
75°	106	75	10	0	0	111
85°	91	61	2	0	0	76
90°	81	52	0	0	0	44
95°	68	40	0	0	0	52
105°	40	18	0	0	0	43
115°	17	2	0	0	0	17
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



TEST NUMBER: P273359

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
2.5°	75.3	74.8	75.0	74.8	74.8	74.6	74.3	74.3	74.1	73.8	74.1
5°	80.3	79.9	80.1	79.6	79.1	78.9	78.7	78.4	77.9	77.7	77.5
7.5°	84.2	83.9	83.7	83.5	83.0	82.7	82.3	81.8	81.3	80.8	79.9
10°	88.0	87.3	87.3	87.1	86.6	86.1	85.6	85.4	84.2	83.7	82.5
12.5°	91.4	91.2	91.2	90.2	89.7	89.5	88.8	88.3	87.1	86.1	84.9
15°	95.3	95.0	94.8	94.3	93.6	92.8	92.1	90.9	90.0	88.5	87.3
17.5°	98.4	98.1	97.9	96.9	96.5	95.7	95.0	93.6	92.1	90.7	89.2
20°	101.0	100.8	100.3	99.6	98.4	97.9	96.9	95.7	94.0	92.4	90.2
22.5°	103.4	103.2	102.7	101.7	100.8	100.1	99.1	97.4	95.7	93.8	91.4
25°	106.1	105.8	105.1	104.2	102.7	102.0	101.3	99.6	97.4	95.3	92.6
27.5°	108.2	108.0	107.3	106.3	104.9	104.2	103.2	101.0	98.9	96.5	93.8
30°	109.7	109.7	109.0	107.8	106.3	105.4	104.4	102.2	99.6	96.9	93.8
32.5°	111.8	111.8	111.1	109.9	108.2	107.3	106.1	103.7	100.8	97.9	94.8
35°	113.5	113.1	112.3	111.1	109.4	108.5	107.3	104.4	101.5	98.1	95.0
37.5°	114.5	114.3	113.5	112.3	110.4	109.2	107.8	104.9	102.0	98.1	94.5
40°	116.4	115.7	115.0	113.8	111.8	110.4	109.0	106.1	102.5	98.9	94.8
42.5°	116.9	116.9	115.7	114.3	112.3	110.9	109.7	106.1	102.7	98.4	94.5
45°	118.1	117.6	116.7	115.0	112.8	111.4	110.2	106.6	102.7	98.6	94.0
47.5°	118.3	118.1	116.9	115.2	113.1	111.8	110.2	106.6	102.7	98.1	93.6
50°	118.8	118.6	117.4	115.5	113.1	112.1	110.4	106.6	102.2	97.9	92.8
52.5°	119.1	118.6	117.6	115.7	113.3	111.8	110.2	106.3	101.7	96.9	91.9
55°	118.3	118.1	116.9	115.0	112.3	110.9	109.2	105.4	100.8	95.7	90.4
57.5°	118.1	117.6	116.2	114.3	111.6	110.2	108.5	104.6	99.8	94.5	89.0
60°	117.4	116.9	115.7	113.5	110.9	109.4	107.5	103.4	98.9	93.6	88.0
62.5°	115.9	115.2	114.0	111.8	109.2	107.5	105.8	101.7	96.9	91.9	85.9
65°	114.3	114.0	112.8	110.6	107.8	106.1	104.4	100.1	95.3	90.0	84.2
67.5°	112.1	111.8	110.6	108.5	105.6	103.9	102.0	97.9	93.3	87.8	82.0
70°	110.4	110.2	108.7	106.6	103.7	101.7	100.1	96.0	91.2	85.6	79.6
72.5°	108.2	107.5	106.6	104.4	101.5	99.6	97.7	93.3	88.8	83.2	77.2
75°	105.6	104.9	103.7	101.7	98.9	96.9	95.0	90.7	85.9	80.6	74.6
77.5°	102.7	102.0	100.8	98.6	95.7	93.8	91.9	87.8	82.7	77.2	71.2
80°	98.9	98.4	97.2	95.3	92.4	90.7	88.8	84.4	79.4	73.8	67.8
82.5°	95.0	95.0	93.6	91.6	88.8	86.8	84.9	80.6	76.0	70.7	64.2
85°	91.4	90.7	89.7	87.6	84.9	83.0	80.8	77.0	72.2	66.6	60.9
87.5°	86.6	85.9	84.9	83.0	80.3	78.7	76.2	72.4	67.3	62.3	56.3
90°	81.1	80.8	79.6	77.5	74.8	73.1	71.4	67.6	62.8	57.5	51.7
92.5°	75.0	74.6	73.8	71.7	69.3	67.6	65.7	61.8	57.0	52.0	46.4
95°	67.6	67.1	66.1	64.2	61.8	60.4	58.2	54.6	50.0	45.5	40.2
97.5°	59.4	59.2	58.0	56.5	54.1	52.7	51.0	47.6	43.5	39.2	34.2
100°	52.2	52.0	51.2	49.8	47.6	46.2	44.5	41.6	37.8	33.4	28.4
102.5°	46.4	46.2	45.2	43.8	41.9	40.4	39.0	35.8	32.2	27.7	23.3
105°	40.2	39.9	39.0	37.8	35.8	34.4	33.2	30.1	26.2	22.1	18.0
107.5°	34.2	33.7	33.0	31.8	29.8	28.9	27.2	24.3	20.9	17.1	12.7
110°	28.6	27.9	27.2	26.0	24.1	23.1	21.6	18.8	15.6	12.0	8.2



TEST NUMBER: P273359

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

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	22.4	22.4	21.4	20.2	18.5	17.3	16.1	13.2	10.3	7.2	4.1
115°	17.1	16.6	15.9	14.7	13.2	12.3	10.8	8.7	5.8	3.6	1.9
117.5°	11.8	11.3	10.8	9.9	8.4	7.5	6.5	4.6	3.1	1.7	0.2
120°	7.5	6.7	6.5	5.5	4.6	4.1	3.6	2.4	1.4	0.2	0.2
122.5°	4.3	4.1	3.8	3.4	2.6	2.2	1.4	0.7	0.2	0.2	0.2
125°	1.9	1.7	1.4	0.7	0.5	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°	0.5	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	0.5	0.2	0.2	0.5
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	0.5	0.2	0.2	0.2	0.5
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	0.5	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



TEST NUMBER: P273359

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
2.5°	73.1	73.1	72.6	72.6	72.4	72.2	71.9	71.7	71.2	70.7	69.8
5°	76.2	75.5	75.0	74.6	74.3	74.1	72.9	71.9	71.4	70.2	68.8
7.5°	78.9	77.9	77.0	76.0	75.5	74.8	73.6	72.6	71.2	69.8	67.8
10°	81.3	80.1	78.9	77.5	76.7	76.2	74.6	72.9	71.2	69.3	67.1
12.5°	83.5	82.0	80.3	78.7	77.9	77.0	75.0	72.9	70.7	68.6	65.7
15°	85.4	83.5	81.5	79.6	78.4	77.5	75.0	72.9	70.2	67.6	64.2
17.5°	86.8	84.4	82.5	80.3	78.9	77.7	75.0	72.4	69.5	66.1	62.5
20°	88.0	85.1	82.7	80.3	78.9	77.5	74.6	71.7	68.3	64.5	60.9
22.5°	89.0	86.1	83.0	80.3	78.7	77.2	73.8	70.7	66.9	62.8	58.4
25°	90.0	86.6	83.0	80.3	78.4	76.7	73.1	69.5	65.7	61.1	56.3
27.5°	90.7	87.1	83.5	79.9	77.9	76.0	72.2	68.6	64.2	59.4	54.1
30°	90.7	86.8	83.0	79.1	77.0	75.0	70.7	66.6	61.8	56.8	51.5
32.5°	91.2	87.1	83.2	78.9	76.7	74.6	70.0	65.4	60.6	55.1	49.5
35°	90.9	86.8	82.7	77.9	75.5	73.1	68.6	63.7	58.7	52.7	46.9
37.5°	90.4	86.1	81.5	77.0	74.3	71.7	66.6	61.3	56.0	50.3	44.0
40°	90.7	85.9	81.1	76.2	73.6	70.7	65.7	60.1	54.4	48.1	41.9
42.5°	90.0	84.9	79.6	74.6	71.9	69.0	63.5	58.0	52.0	45.5	38.7
45°	89.5	84.2	78.9	73.6	70.7	67.8	62.1	56.0	49.8	43.1	36.3
47.5°	88.5	83.2	77.7	71.9	68.8	65.7	59.7	53.6	47.1	40.2	33.2
50°	87.6	82.0	76.2	70.0	67.1	64.0	57.5	51.2	44.7	37.8	30.3
52.5°	86.6	80.8	74.8	68.6	65.4	62.3	55.6	48.8	42.3	35.1	27.9
55°	84.9	78.9	72.6	66.4	63.3	59.7	52.7	46.2	39.2	31.8	24.5
57.5°	83.5	77.5	70.7	64.2	60.9	57.2	50.3	43.5	36.3	29.1	21.6
60°	82.0	75.8	69.0	62.5	58.7	55.3	48.1	41.1	33.9	26.7	19.5
62.5°	79.9	73.1	66.9	59.7	55.8	52.4	45.0	37.8	30.8	23.1	16.1
65°	77.9	71.4	64.5	57.2	53.4	50.0	42.6	35.4	27.9	20.7	13.7
67.5°	75.5	68.8	62.1	54.8	50.8	47.1	39.4	32.2	25.0	17.8	10.8
70°	73.4	66.4	59.4	52.0	48.1	44.3	36.8	29.3	22.1	15.4	8.7
72.5°	70.7	64.0	56.8	49.5	45.2	41.6	33.9	26.5	19.5	12.7	6.5
75°	68.1	61.1	53.9	46.7	42.6	38.7	31.0	23.6	16.8	10.3	4.8
77.5°	64.9	58.2	51.0	43.5	39.4	35.6	28.1	20.9	14.0	7.9	2.6
80°	61.3	54.6	47.4	40.4	36.6	32.5	25.3	17.8	11.3	5.8	1.4
82.5°	57.7	51.2	44.3	37.0	33.2	29.6	22.4	15.2	8.7	3.6	0.5
85°	54.4	47.6	40.7	33.7	29.8	26.5	19.5	12.7	6.5	2.2	0.5
87.5°	50.0	43.3	36.6	29.6	26.2	22.6	16.1	9.6	4.1	0.7	0.2
90°	45.0	38.7	32.2	25.5	21.9	19.0	12.5	7.0	2.4	0.2	0.2
92.5°	39.9	33.9	27.4	21.2	18.0	14.9	9.1	4.1	0.7	0.5	0.7
95°	34.2	28.4	22.1	16.4	13.7	10.8	5.5	1.7	0.7	0.2	0.5
97.5°	28.6	23.1	17.3	11.8	9.1	6.5	2.2	0.5	0.2	0.2	0.2
100°	22.9	18.0	12.7	7.5	5.1	3.1	0.2	0.0	0.0	0.0	0.2
102.5°	18.0	13.2	8.4	3.8	2.2	1.0	0.2	0.2	0.2	0.2	0.5
105°	13.0	8.7	4.1	1.4	0.5	0.0	0.0	0.0	0.2	0.2	0.2
107.5°	8.7	4.3	1.7	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
110°	4.3	1.9	0.5	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.2



TEST NUMBER: P273359

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

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	1.9	0.5	0.0	0.0	0.2	0.2	0.0	0.0	0.2	0.2	0.2
115°	0.5	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	0.5	0.5	0.5
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	0.5	0.2	0.2	0.0	0.2	0.5	0.2	0.2	0.2
135°	0.0	0.2	0.0	0.2	0.2	0.2	0.2	0.2	0.5	0.2	0.2
137.5°	0.2	0.5	0.5	0.5	0.2	0.2	0.2	0.5	0.5	0.7	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	0.5	0.2	0.2	0.5	0.5	0.5	0.5	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	0.5	0.5	0.2	0.5
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	0.5	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: P273359

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

CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
2.5°	69.3	68.6	68.3	68.1	67.6	66.9	66.6	65.9	65.4	65.2	64.5
5°	67.8	66.9	66.1	65.4	64.9	64.0	63.0	62.5	61.3	61.1	60.4
7.5°	66.4	64.9	63.7	63.0	62.3	60.9	59.7	58.7	57.7	56.8	56.0
10°	64.9	63.0	61.6	60.6	59.7	58.0	56.5	55.1	54.1	52.7	51.5
12.5°	63.3	60.9	59.2	58.0	57.0	54.8	53.2	51.7	50.3	48.6	47.1
15°	61.3	58.9	56.5	55.3	53.9	51.7	50.0	47.9	45.9	44.0	42.6
17.5°	59.2	56.3	53.9	52.2	51.2	48.3	45.9	43.5	41.6	39.9	37.8
20°	57.0	53.9	50.8	49.3	47.9	45.0	42.1	39.2	37.3	34.9	33.0
22.5°	54.6	51.2	47.6	45.9	44.5	40.9	38.2	35.1	33.0	30.1	27.7
25°	52.0	48.3	44.7	42.8	40.9	37.3	33.9	30.5	27.9	25.0	22.6
27.5°	49.8	45.5	41.4	39.4	37.5	33.4	30.1	26.7	23.1	20.4	17.6
30°	46.7	42.3	38.0	35.6	33.7	29.1	25.5	21.6	18.0	15.2	12.5
32.5°	44.5	39.7	35.1	32.7	30.5	25.7	21.9	17.8	14.2	10.8	8.4
35°	41.4	36.6	31.3	28.9	26.5	21.6	17.3	13.7	10.1	7.0	5.3
37.5°	38.2	33.0	27.7	25.3	22.6	17.8	13.2	9.4	6.3	4.1	3.1
40°	35.8	30.1	24.5	22.1	19.5	14.2	9.9	6.0	3.8	2.6	1.7
42.5°	32.7	26.7	21.2	18.3	15.6	10.6	6.3	3.8	2.4	1.2	0.5
45°	29.6	23.8	18.0	15.2	12.3	7.2	4.1	2.4	1.2	0.5	0.2
47.5°	26.7	20.4	14.7	11.8	9.1	4.6	2.6	1.2	0.2	0.2	0.0
50°	23.6	17.6	11.8	8.9	6.3	3.1	1.7	0.7	0.2	0.0	0.2
52.5°	21.2	15.2	8.9	6.3	4.3	2.2	1.0	0.7	0.5	0.2	0.5
55°	18.0	11.8	5.8	3.6	2.6	1.0	0.2	0.0	0.2	0.2	0.0
57.5°	15.4	9.1	3.8	2.6	1.7	0.5	0.2	0.0	0.0	0.2	0.0
60°	12.7	6.7	2.6	1.7	1.2	0.7	0.5	0.5	0.2	0.5	0.5
62.5°	9.6	4.3	1.2	0.7	0.2	0.2	0.0	0.2	0.2	0.0	0.0
65°	7.5	2.6	0.7	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2
67.5°	5.1	1.4	0.2	0.2	0.2	0.0	0.2	0.2	0.2	0.0	0.0
70°	3.4	0.7	0.2	0.2	0.2	0.2	0.2	0.0	0.2	0.0	0.0
72.5°	1.9	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.0
75°	1.0	0.5	0.2	0.2	0.5	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	0.5	0.2	0.2	0.0	0.2	0.0
85°	0.5	0.5	0.5	0.5	0.2	0.5	0.2	0.5	0.5	0.2	0.5
87.5°	0.2	0.5	0.5	0.2	0.2	0.5	0.2	0.2	0.2	0.2	0.2
90°	0.2	0.5	0.5	0.2	0.2	0.2	0.2	0.5	0.2	0.2	0.2
92.5°	0.5	0.7	0.7	0.5	0.5	0.5	0.5	0.5	0.7	0.5	0.2
95°	0.7	0.5	0.7	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2
97.5°	0.5	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	0.5	0.2	0.2	0.5	0.5	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: P273359

CATALOG NUMBER: 0.03-3W-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	0.5	0.2	0.0	0.2	0.2	0.5	0.2
125°	0.2	0.5	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	0.5	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	0.5	0.5	0.5	0.5	0.5	0.2	0.5	0.2	0.5	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	0.5	0.5	0.2	0.2	0.5	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	0.5	0.2	0.5	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	0.5	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: P273359

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

CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	69.5	69.5	69.5	69.5	69.5	69.5	69.5	69.5
2.5°	64.2	63.7	63.5	63.3	63.0	63.0	63.3	63.0
5°	59.9	59.2	58.9	58.7	58.4	58.2	58.4	58.2
7.5°	55.1	54.6	54.4	53.9	53.4	53.4	53.4	53.4
10°	50.8	50.0	49.5	49.1	48.6	48.3	48.3	48.3
12.5°	46.2	45.0	44.5	44.3	43.3	43.3	43.1	42.8
15°	41.4	40.2	39.7	39.0	38.5	37.8	38.0	37.8
17.5°	36.6	35.1	34.4	33.7	33.2	32.5	32.5	32.0
20°	31.3	29.8	29.1	28.4	27.4	26.7	26.7	26.2
22.5°	26.0	24.1	23.6	22.6	21.9	20.9	20.7	20.2
25°	20.4	18.8	17.8	17.1	16.1	15.2	14.7	14.9
27.5°	15.4	13.5	12.7	12.0	10.8	9.9	9.4	9.4
30°	10.1	8.2	7.5	7.0	6.0	5.5	5.1	5.3
32.5°	6.5	5.5	5.1	4.3	3.8	3.4	3.4	3.1
35°	3.8	3.1	2.6	2.4	1.7	1.4	1.2	1.2
37.5°	1.9	1.2	0.7	0.5	0.2	0.2	0.2	0.0
40°	1.0	0.5	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	0.5	0.2	0.5	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	0.5	0.0	0.2	0.5	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°	0.5	0.2	0.2	0.5	0.2	0.2	0.2	0.7
95°	0.2	0.2	0.2	0.5	0.5	0.2	0.2	0.5
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	0.5	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: P273359

CATALOG NUMBER: 0.03-3W-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)