

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: P273338

Luminaire Tested: **0.03-1W-830-90-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273338
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-246-19)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 0.03-1W-830-90-ID-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 90 DEGREE SYMMETRIC OPTIC.
STANDARD OUTPUT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 269.3 lumens
Efficiency: N/A
Efficacy: 35.9 lumens/watt
Spacing Criteria (0/90/45): 1.39 / 1.2 / 1.52
Luminous Opening: Rectangular (W 2.92' x L: 0.06' x H: 0')
CIE Type: Direct

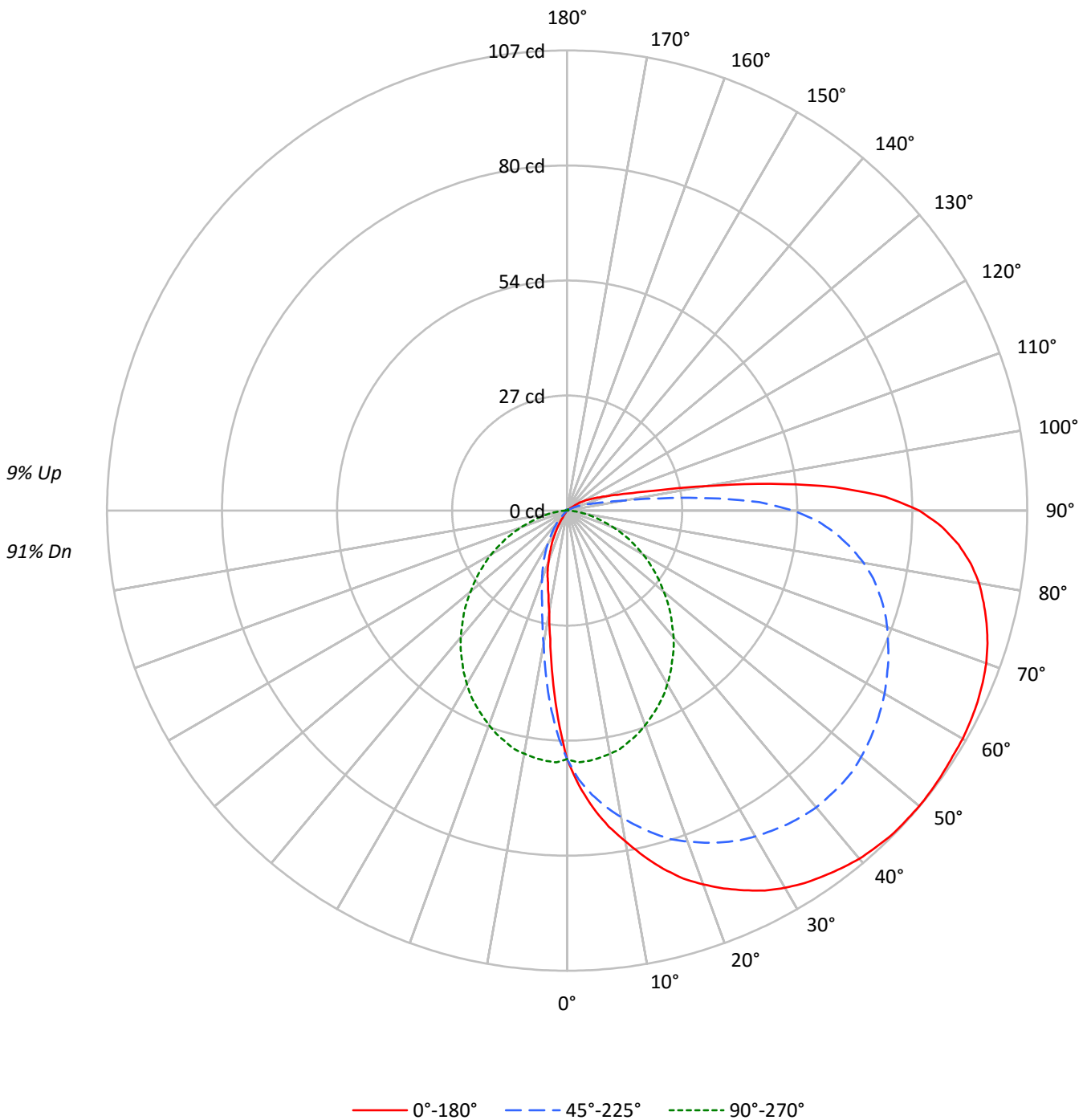
Input Watts (W): 7.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	50	30	10	50	30	10	0		
RCR																										
0	117	117	117	117	113	113	113	113	106	106	106	100	100	100	94	94	94	94	94	94	94	94	94	91		
1	102	95	88	83	98	91	86	81	85	81	76	80	76	72	75	71	69	66	66	66	66	66	66	66		
2	90	80	71	64	87	77	69	62	72	65	59	67	61	56	63	58	54	51	51	51	51	51	51	51		
3	81	68	59	51	78	66	57	50	62	54	47	58	51	45	54	48	44	41	41	41	41	41	41	41		
4	74	60	49	42	71	58	48	41	54	46	39	50	43	38	47	41	36	33	33	33	33	33	33	33		
5	67	53	43	35	65	51	42	34	48	40	33	45	38	32	42	36	31	28	28	28	28	28	28	28		
6	62	47	37	30	59	46	36	30	43	35	29	40	33	28	38	31	27	24	24	24	24	24	24	24		
7	57	42	33	26	55	41	32	26	39	31	25	36	29	24	34	28	23	21	21	21	21	21	21	21		
8	53	39	29	23	51	37	29	23	35	28	22	33	26	21	31	25	21	18	18	18	18	18	18	18		
9	50	35	26	20	48	34	26	20	32	25	20	31	24	19	29	23	18	16	16	16	16	16	16	16		
10	46	32	24	18	45	32	24	18	30	23	18	28	22	17	27	21	17	15	15	15	15	15	15	15		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	3413	3413	3413
5°	4114	3462	2306
10°	4683	3442	1439
15°	5269	3399	1058
20°	5812	3337	798
25°	6346	3264	547
30°	6907	3177	280
35°	7482	3071	58
40°	8148	2968	8
45°	8910	2839	0
50°	9820	2692	0
55°	10974	2553	0
60°	12542	2409	0
65°	14712	2222	14
70°	17903	1968	0
75°	23042	1688	0
80°	33086	1394	34
85°	61923	1016	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.2	1.9
10°-20°	14.6	5.4
20°-30°	22.8	8.5
30°-40°	29.3	10.9
40°-50°	34.2	12.7
50°-60°	36.8	13.7
60°-70°	37.2	13.8
70°-80°	35.1	13.0
80°-90°	30.2	11.2
90°-100°	17.5	6.5
100°-110°	4.3	1.6
110°-120°	1.4	0.5
120°-130°	0.4	0.1
130°-140°	0.2	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°	42.7	15.9
0°-40°	72.0	26.7
0°-60°	143.0	53.1
0°-90°	245.5	91.2
90°-120°	23.3	8.6
90°-150°	23.8	8.8
90°-180°	24.0	8.9
0°-180°	269.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	58	58	58	58	58	
5°	69	66	58	45	39	7
15°	86	78	56	22	17	25
25°	97	85	50	13	8	45
35°	104	89	43	6	1	65
45°	107	90	34	1	0	82
55°	107	88	25	0	0	96
65°	105	82	16	0	0	104
75°	101	75	7	0	0	107
85°	91	63	2	0	0	76
90°	82	53	0	0	0	45
95°	62	33	0	0	0	45
105°	16	6	0	0	0	19
115°	7	2	0	0	0	7
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°	25°	30°	35°	40°	45°	50°
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°	64.0	63.6	63.6	63.6	63.3	63.2	63.0	62.6	62.6	62.6	61.9
5°	69.4	69.0	69.0	68.8	68.2	67.9	67.6	67.0	66.7	66.3	65.3
7.5°	74.1	73.7	73.5	73.3	72.6	72.2	71.6	70.8	70.2	69.5	68.3
10°	78.1	77.8	77.5	77.2	76.4	75.8	75.1	74.2	73.5	72.4	70.9
12.5°	82.3	81.9	81.6	81.1	80.5	79.6	78.7	77.5	76.6	75.1	73.4
15°	86.2	85.8	85.4	84.7	84.0	83.0	81.8	80.5	79.4	77.7	75.5
17.5°	89.7	89.3	88.9	88.3	87.4	86.2	84.8	83.3	81.8	80.1	77.7
20°	92.5	92.1	91.7	91.2	90.1	88.8	87.4	85.6	84.0	81.9	79.4
22.5°	95.1	94.6	94.2	93.6	92.4	91.2	89.5	87.7	85.9	83.6	80.8
25°	97.4	96.9	96.5	95.9	94.7	93.2	91.6	89.6	87.7	85.1	82.1
27.5°	99.6	99.1	98.8	97.9	96.8	95.2	93.5	91.4	89.1	86.5	83.2
30°	101.3	101.0	100.5	99.7	98.5	96.9	95.1	92.8	90.3	87.5	84.1
32.5°	102.7	102.4	102.0	101.1	99.9	98.3	96.2	93.9	91.3	88.3	84.8
35°	103.8	103.8	103.3	102.3	101.2	99.4	97.3	95.0	92.2	89.1	85.3
37.5°	104.8	104.7	104.3	103.3	102.1	100.5	98.2	95.9	92.9	89.7	85.7
40°	105.7	105.6	105.1	104.1	103.0	101.2	99.0	96.6	93.5	90.1	85.9
42.5°	106.2	106.1	105.7	104.6	103.4	101.7	99.4	96.8	93.8	90.1	85.9
45°	106.7	106.6	106.1	105.0	103.8	102.0	99.8	97.0	93.9	90.1	85.8
47.5°	106.8	106.8	106.2	105.1	103.9	102.1	99.9	96.9	93.6	89.9	85.3
50°	106.9	106.8	106.2	105.2	103.8	102.1	99.6	96.7	93.4	89.2	84.6
52.5°	106.8	106.6	106.0	104.9	103.5	101.7	99.2	96.3	92.7	88.4	83.6
55°	106.6	106.4	105.7	104.6	103.3	101.3	98.8	95.7	91.9	87.5	82.4
57.5°	106.3	106.1	105.3	104.3	102.8	100.8	98.3	95.0	91.1	86.4	81.1
60°	106.2	105.9	105.1	104.0	102.4	100.3	97.7	94.2	90.1	85.2	79.6
62.5°	105.8	105.5	104.7	103.6	101.9	99.8	96.9	93.3	89.0	83.8	77.9
65°	105.3	105.0	104.2	103.1	101.3	99.1	96.1	92.5	87.9	82.4	76.0
67.5°	104.6	104.3	103.4	102.2	100.3	98.1	95.1	91.3	86.8	80.8	74.0
70°	103.7	103.4	102.5	101.3	99.4	97.0	94.0	90.1	85.3	79.2	71.9
72.5°	102.5	102.3	101.3	100.0	98.3	95.7	92.7	88.8	83.6	77.4	69.7
75°	101.0	100.8	99.9	98.5	96.7	94.2	91.0	87.0	81.9	75.2	67.2
77.5°	99.2	99.0	98.1	96.7	94.7	92.3	89.1	84.9	79.7	72.9	64.6
80°	97.3	97.0	96.2	94.7	92.6	90.0	86.8	82.4	76.9	70.0	61.8
82.5°	94.7	94.5	93.7	92.2	90.1	87.4	84.1	79.6	74.0	66.6	58.7
85°	91.4	91.3	90.5	89.0	86.9	84.2	80.7	76.4	70.2	62.9	55.5
87.5°	87.3	87.3	86.4	84.8	82.8	80.0	76.4	71.8	65.6	58.5	51.1
90°	81.9	81.8	80.6	79.2	77.0	74.1	70.6	65.9	59.5	52.6	45.8
92.5°	74.0	74.1	72.8	71.3	69.0	65.8	62.5	58.0	50.9	44.7	38.0
95°	62.5	62.8	61.7	59.7	57.3	54.3	50.4	46.0	39.2	33.1	27.6
97.5°	47.7	47.6	46.5	44.0	42.3	38.7	35.6	31.3	26.3	21.7	17.6
100°	32.6	32.8	31.9	30.3	28.3	25.4	23.1	19.9	16.6	13.5	10.8
102.5°	21.7	21.9	21.0	20.2	18.7	17.1	15.2	13.4	10.9	9.0	7.2
105°	15.7	15.8	15.3	14.3	13.3	12.3	10.9	9.5	7.9	6.4	5.1
107.5°	12.2	12.2	11.8	11.0	10.4	9.4	8.4	7.2	5.9	4.7	3.6
110°	9.8	9.8	9.5	9.0	8.2	7.5	6.6	5.6	4.5	3.6	2.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	8.0	8.0	7.7	7.2	6.6	6.0	5.2	4.4	3.5	2.6	1.9
115°	6.6	6.5	6.3	5.9	5.4	4.8	4.1	3.4	2.6	1.8	0.8
117.5°	5.4	5.4	5.1	4.8	4.3	3.8	3.2	2.6	1.7	0.6	0.3
120°	4.3	4.3	4.2	3.8	3.4	2.9	2.3	1.4	0.4	0.3	0.2
122.5°	3.4	3.4	3.2	2.8	2.3	1.6	0.8	0.3	0.2	0.3	0.2
125°	1.9	1.8	1.5	1.2	0.6	0.3	0.2	0.2	0.2	0.2	0.2
127.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
130°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2
132.5°	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135°	0.1	0.1	0.2	0.2	0.2	0.2	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	0.2	0.3	0.2	0.2
140°	0.2	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	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	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
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°	61.7	61.2	61.0	60.5	60.1	59.6	59.2	58.6	57.9	56.9	56.3
5°	64.8	64.0	63.3	62.4	61.5	60.6	59.5	58.4	56.9	55.4	54.0
7.5°	67.4	66.3	65.3	63.9	62.7	61.3	59.8	58.0	55.9	53.7	51.4
10°	69.7	68.4	66.9	65.2	63.6	61.8	59.8	57.4	54.8	51.8	48.7
12.5°	71.9	70.2	68.3	66.3	64.2	62.1	59.6	56.8	53.4	49.6	45.7
15°	73.6	71.6	69.4	66.9	64.4	61.9	59.0	55.6	51.7	47.1	42.2
17.5°	75.3	72.9	70.4	67.5	64.6	61.8	58.4	54.5	49.9	44.5	38.9
20°	76.6	74.0	71.1	67.9	64.6	61.4	57.6	53.1	47.9	41.9	35.5
22.5°	77.8	74.8	71.6	68.1	64.4	60.7	56.7	51.6	45.8	39.1	32.3
25°	78.9	75.4	71.9	68.1	63.9	60.0	55.6	50.1	43.6	36.3	29.1
27.5°	79.8	75.9	72.0	67.9	63.4	59.1	54.3	48.5	41.4	33.6	26.2
30°	80.5	76.2	72.0	67.4	62.6	58.0	52.9	46.6	39.1	30.7	23.4
32.5°	80.8	76.4	71.9	66.9	61.7	56.7	51.3	44.7	36.7	28.0	20.8
35°	81.1	76.5	71.7	66.3	60.8	55.3	49.5	42.6	34.3	25.4	18.6
37.5°	81.2	76.3	71.3	65.7	59.7	53.9	47.8	40.7	31.9	23.0	16.7
40°	81.3	76.0	70.6	64.8	58.5	52.4	45.9	38.5	29.6	20.7	14.8
42.5°	81.1	75.5	70.0	63.7	56.9	50.5	43.7	36.1	27.0	18.5	13.1
45°	80.7	75.0	69.0	62.4	55.4	48.5	41.5	34.0	24.9	16.5	11.7
47.5°	80.0	74.0	67.7	60.9	53.4	46.3	39.2	31.7	22.6	14.7	10.2
50°	79.2	73.0	66.3	59.0	51.2	44.1	37.1	29.3	20.5	13.1	8.8
52.5°	78.0	71.6	64.5	56.9	49.1	41.8	34.7	27.1	18.5	11.5	7.6
55°	76.7	69.9	62.6	54.7	46.9	39.4	32.3	24.8	16.5	9.9	6.4
57.5°	75.0	67.9	60.3	52.4	44.5	37.0	30.0	22.6	14.6	8.6	5.2
60°	73.1	65.8	57.9	50.2	42.1	34.6	27.5	20.4	12.8	7.3	4.1
62.5°	70.9	63.3	55.6	47.7	39.6	31.9	24.9	18.0	11.0	6.1	3.2
65°	68.7	60.8	53.1	45.2	36.9	29.3	22.4	15.9	9.4	4.8	2.3
67.5°	66.1	58.1	50.3	42.3	34.1	26.5	19.7	13.6	7.7	3.6	1.4
70°	63.7	55.5	47.5	39.4	31.2	23.6	17.1	11.4	6.1	2.5	0.7
72.5°	61.3	53.0	44.7	36.4	28.2	20.7	14.6	9.3	4.7	1.6	0.4
75°	58.9	50.4	42.0	33.4	25.0	18.0	12.1	7.4	3.3	0.9	0.3
77.5°	56.4	47.9	39.2	30.4	22.0	15.2	9.8	5.6	2.2	0.4	0.3
80°	53.7	45.2	36.4	27.5	19.3	12.7	7.6	4.1	1.3	0.3	0.2
82.5°	50.9	42.4	33.5	24.7	16.7	10.4	5.8	2.7	0.5	0.2	0.2
85°	47.7	39.3	30.6	22.1	14.3	8.3	4.2	1.5	0.3	0.2	0.2
87.5°	43.8	35.7	27.3	19.2	12.0	6.6	2.9	0.8	0.3	0.3	0.3
90°	38.5	30.9	23.0	15.6	9.3	4.7	1.8	0.3	0.3	0.3	0.2
92.5°	31.4	24.3	17.4	11.4	6.3	2.7	0.8	0.3	0.3	0.3	0.2
95°	22.1	16.4	11.3	7.0	3.5	1.1	0.3	0.3	0.3	0.2	0.2
97.5°	13.6	9.8	6.5	3.7	1.6	0.3	0.2	0.3	0.3	0.2	0.2
100°	8.3	5.9	3.7	1.9	0.8	0.3	0.2	0.3	0.3	0.2	0.3
102.5°	5.4	3.7	2.2	1.0	0.2	0.2	0.2	0.3	0.3	0.2	0.3
105°	3.6	2.4	1.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3
107.5°	2.5	1.5	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
110°	1.7	0.7	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2



TEST NUMBER: P273338

CATALOG NUMBER: 0.03-1W-830-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	0.8	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2
115°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
117.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
120°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
122.5°	0.3	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	0.2	0.2	0.2
127.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
130°	0.2	0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3
132.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
135°	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.3	0.3
137.5°	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
140°	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	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	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P273338

CATALOG NUMBER: 0.03-1W-830-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
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°	55.6	54.8	54.1	53.3	52.4	51.9	51.3	50.5	50.2	49.6	49.1
5°	52.6	51.1	49.6	48.1	46.4	45.2	44.1	42.9	41.9	40.9	40.6
7.5°	49.2	46.9	44.6	42.2	40.0	38.1	36.6	35.0	33.7	32.9	32.0
10°	45.5	42.4	39.1	36.3	33.7	31.5	30.0	28.3	27.0	25.9	25.4
12.5°	41.6	37.9	34.1	31.0	28.5	26.5	24.8	23.6	22.7	21.9	21.3
15°	37.5	33.1	29.4	26.3	24.0	22.4	21.0	20.1	19.5	18.7	18.2
17.5°	33.6	29.2	25.3	22.9	21.0	19.6	18.5	17.5	16.9	16.3	15.8
20°	30.0	25.6	22.3	20.1	18.5	17.1	16.0	15.2	14.5	14.0	13.5
22.5°	26.5	22.5	19.6	17.6	16.1	14.9	13.8	12.9	12.3	11.7	11.2
25°	23.6	19.9	17.2	15.4	14.1	12.9	11.8	10.8	10.2	9.5	9.0
27.5°	20.9	17.6	15.2	13.5	12.2	10.9	9.8	9.0	8.2	7.5	7.0
30°	18.6	15.6	13.5	11.7	10.4	9.0	8.0	7.0	6.4	5.7	5.1
32.5°	16.5	13.7	11.8	10.1	8.7	7.4	6.3	5.4	4.6	3.9	3.2
35°	14.7	12.1	10.1	8.5	7.1	5.9	4.9	3.9	3.0	2.3	1.7
37.5°	13.0	10.6	8.7	7.0	5.7	4.5	3.4	2.4	1.6	1.0	0.8
40°	11.4	9.2	7.3	5.8	4.5	3.2	2.1	1.3	0.7	0.3	0.2
42.5°	10.0	7.7	6.0	4.5	3.2	1.9	1.1	0.4	0.2	0.1	0.1
45°	8.7	6.6	4.9	3.4	2.1	1.0	0.4	0.3	0.2	0.1	0.1
47.5°	7.4	5.4	3.8	2.3	1.1	0.4	0.2	0.2	0.1	0.1	0.1
50°	6.2	4.3	2.7	1.3	0.5	0.2	0.2	0.2	0.1	0.1	0.1
52.5°	5.1	3.3	1.6	0.5	0.2	0.2	0.1	0.1	0.1	0.1	0.1
55°	4.1	2.3	0.9	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1
57.5°	3.2	1.4	0.4	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
60°	2.3	0.8	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
62.5°	1.4	0.4	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
65°	0.8	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
67.5°	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
70°	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
72.5°	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
75°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
77.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
80°	0.2	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1
82.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
85°	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
87.5°	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.1
90°	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1
92.5°	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
95°	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
97.5°	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
100°	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
102.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
105°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
107.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1
110°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1



TEST NUMBER: P273338

CATALOG NUMBER: 0.03-1W-830-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
115°	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
117.5°	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1
120°	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
122.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1
125°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
127.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1
130°	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.1	0.2	0.1
132.5°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1
135°	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
137.5°	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2
140°	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	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	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P273338

CATALOG NUMBER: 0.03-1W-830-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	57.8	57.8	57.8	57.8
2.5°	48.9	49.1	48.8	48.4
5°	39.8	39.8	39.4	38.9
7.5°	31.2	31.0	30.6	30.1
10°	24.9	24.7	24.3	24.0
12.5°	20.7	20.5	20.4	20.1
15°	17.8	17.5	17.5	17.3
17.5°	15.5	15.3	15.2	15.1
20°	13.1	13.0	12.8	12.7
22.5°	10.9	10.7	10.5	10.3
25°	8.7	8.5	8.2	8.4
27.5°	6.7	6.4	6.1	6.2
30°	4.6	4.4	4.1	4.1
32.5°	2.7	2.4	2.2	2.1
35°	1.3	1.0	0.9	0.8
37.5°	0.4	0.3	0.2	0.2
40°	0.2	0.1	0.1	0.1
42.5°	0.1	0.1	0.0	0.0
45°	0.1	0.1	0.1	0.0
47.5°	0.1	0.1	0.0	0.0
50°	0.1	0.1	0.0	0.0
52.5°	0.0	0.0	0.0	0.0
55°	0.1	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0
60°	0.1	0.0	0.0	0.0
62.5°	0.1	0.0	0.0	0.0
65°	0.1	0.1	0.0	0.1
67.5°	0.1	0.1	0.0	0.0
70°	0.1	0.0	0.0	0.0
72.5°	0.1	0.1	0.0	0.0
75°	0.1	0.1	0.0	0.0
77.5°	0.1	0.1	0.1	0.0
80°	0.1	0.1	0.1	0.1
82.5°	0.1	0.1	0.1	0.0
85°	0.1	0.1	0.1	0.0
87.5°	0.2	0.1	0.1	0.1
90°	0.1	0.1	0.1	0.0
92.5°	0.1	0.1	0.1	0.1
95°	0.1	0.1	0.1	0.1
97.5°	0.1	0.1	0.1	0.1
100°	0.1	0.1	0.1	0.1
102.5°	0.1	0.1	0.1	0.1
105°	0.1	0.1	0.1	0.1
107.5°	0.1	0.1	0.1	0.1
110°	0.1	0.1	0.1	0.1



TEST NUMBER: P273338

CATALOG NUMBER: 0.03-1W-830-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
112.5°	0.1	0.1	0.1	0.0
115°	0.1	0.1	0.0	0.1
117.5°	0.1	0.1	0.0	0.0
120°	0.1	0.1	0.1	0.0
122.5°	0.1	0.1	0.1	0.0
125°	0.1	0.1	0.0	0.1
127.5°	0.1	0.1	0.1	0.1
130°	0.1	0.1	0.1	0.1
132.5°	0.1	0.1	0.1	0.0
135°	0.1	0.1	0.1	0.1
137.5°	0.2	0.2	0.1	0.1
140°	0.1	0.1	0.1	0.1
142.5°	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0

(END OF REPORT)