

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: P273368

Luminaire Tested: **0.03-3W-840-90-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273368
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: 0.03-3W-840-90-ID-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 90 DEGREE SYMMETRIC OPTIC.
HIGH OUTPUT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 686.5 lumens
Efficiency: N/A
Efficacy: 54.9 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

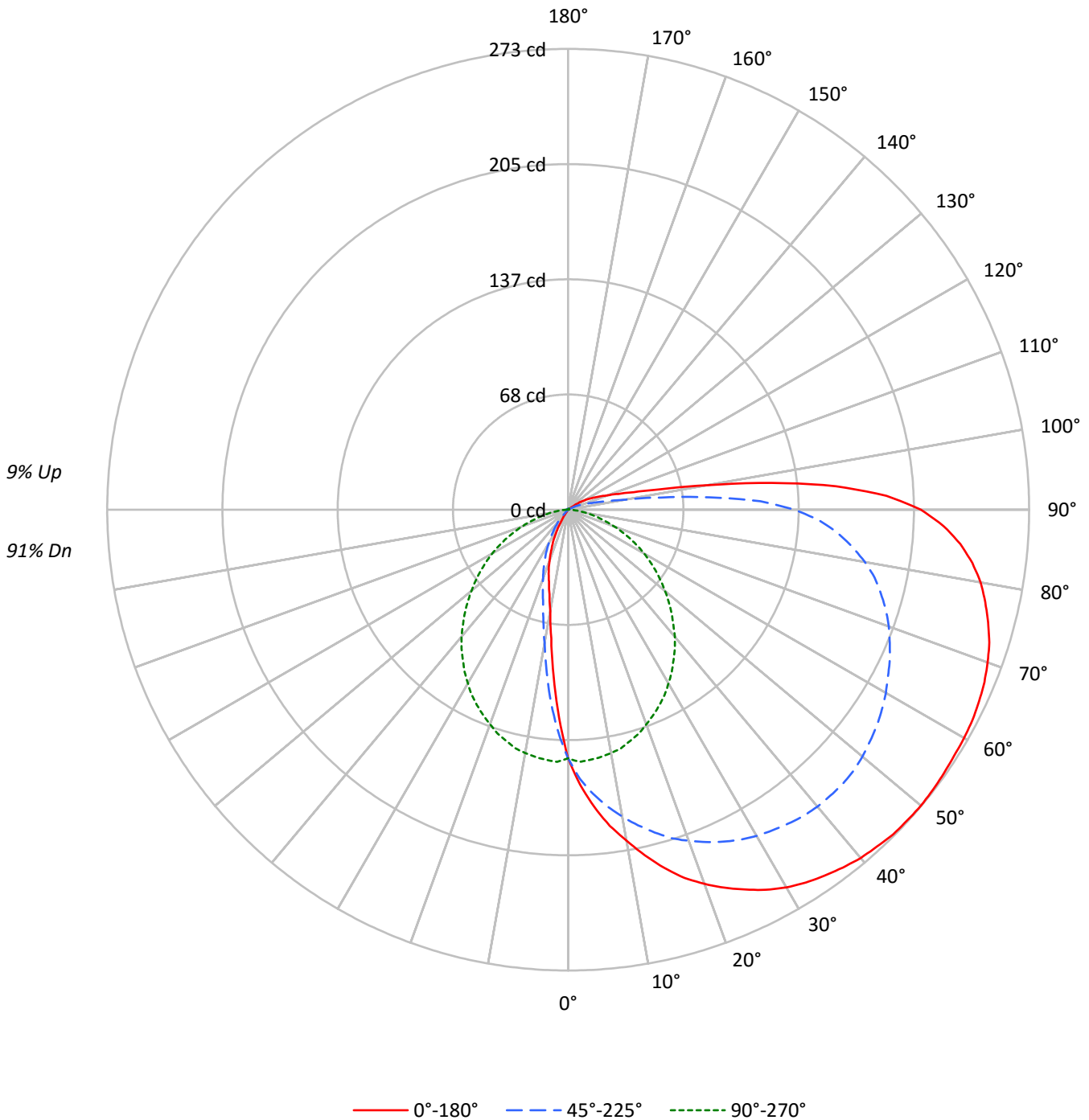
Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	8698	8698	8698
5°	10480	8820	5874
10°	11938	8778	3669
15°	13430	8668	2696
20°	14823	8502	2036
25°	16177	8326	1394
30°	17618	8100	716
35°	19081	7836	151
40°	20766	7569	8
45°	22722	7232	0
50°	25051	6871	0
55°	27981	6517	0
60°	31968	6141	0
65°	37515	5659	14
70°	45647	5007	0
75°	58724	4312	0
80°	84365	3536	34
85°	157925	2642	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.4	1.9
10°-20°	37.3	5.4
20°-30°	58.2	8.5
30°-40°	74.8	10.9
40°-50°	87.1	12.7
50°-60°	93.9	13.7
60°-70°	94.8	13.8
70°-80°	89.5	13.0
80°-90°	76.9	11.2
90°-100°	44.7	6.5
100°-110°	11.0	1.6
110°-120°	3.6	0.5
120°-130°	0.9	0.1
130°-140°	0.4	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°	108.9	15.9
0°-40°	183.6	26.7
0°-60°	364.6	53.1
0°-90°	625.8	91.2
90°-120°	59.3	8.6
90°-150°	60.7	8.8
90°-180°	61.0	8.9
0°-180°	686.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	147	147	147	147	147	
5°	177	169	149	115	99	18
15°	220	198	142	57	44	63
25°	248	217	128	33	21	115
35°	265	227	109	15	2	166
45°	272	230	87	2	0	210
55°	272	223	63	0	0	244
65°	268	210	40	0	0	266
75°	257	192	19	0	0	272
85°	233	160	4	0	0	193
90°	209	134	1	0	0	114
95°	159	84	1	0	0	114
105°	40	16	1	0	0	48
115°	17	5	1	0	0	17
125°	5	1	1	0	0	5
135°	0	0	1	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°	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3
2.5°	163.1	162.1	162.3	162.3	161.3	161.1	160.7	159.7	159.6	159.6	157.8
5°	176.8	176.0	175.8	175.4	173.9	173.2	172.3	170.9	170.0	169.0	166.6
7.5°	188.9	187.9	187.5	186.8	185.1	184.0	182.4	180.6	178.9	177.2	174.0
10°	199.1	198.3	197.6	196.7	194.9	193.4	191.5	189.3	187.5	184.7	180.9
12.5°	209.7	208.8	208.1	206.7	205.1	203.0	200.6	197.6	195.2	191.5	187.1
15°	219.7	218.7	217.7	216.1	214.2	211.6	208.6	205.3	202.5	198.0	192.5
17.5°	228.7	227.7	226.7	225.0	222.8	219.7	216.3	212.3	208.6	204.1	198.0
20°	235.9	234.8	233.8	232.4	229.6	226.4	222.8	218.3	214.2	208.8	202.3
22.5°	242.4	241.1	240.2	238.6	235.7	232.4	228.2	223.6	219.1	213.1	206.0
25°	248.3	247.2	246.0	244.5	241.4	237.6	233.6	228.5	223.5	217.0	209.3
27.5°	253.9	252.8	251.8	249.7	246.7	242.8	238.5	233.0	227.3	220.5	212.1
30°	258.4	257.4	256.3	254.3	251.1	247.2	242.4	236.5	230.3	223.1	214.4
32.5°	261.9	261.0	260.0	257.8	254.7	250.5	245.3	239.5	232.9	225.2	216.2
35°	264.7	264.5	263.3	260.7	257.9	253.5	248.1	242.3	235.1	227.1	217.5
37.5°	267.2	267.1	265.9	263.4	260.3	256.1	250.4	244.5	236.9	228.8	218.6
40°	269.4	269.2	268.0	265.4	262.6	258.1	252.3	246.2	238.3	229.6	219.1
42.5°	270.7	270.6	269.4	266.6	263.7	259.2	253.5	246.7	239.2	229.8	219.1
45°	272.1	271.8	270.4	267.6	264.7	260.0	254.4	247.3	239.5	229.8	218.9
47.5°	272.4	272.2	270.7	268.0	264.8	260.2	254.6	247.0	238.8	229.1	217.6
50°	272.7	272.4	270.7	268.2	264.5	260.2	253.9	246.6	238.1	227.5	215.6
52.5°	272.4	271.8	270.3	267.5	264.0	259.3	252.9	245.6	236.2	225.3	213.1
55°	271.8	271.3	269.6	266.8	263.4	258.2	251.9	244.1	234.4	223.1	210.0
57.5°	271.1	270.4	268.6	265.9	262.2	257.1	250.7	242.1	232.2	220.3	206.7
60°	270.7	270.0	267.9	265.1	261.2	255.7	249.0	240.2	229.8	217.2	203.0
62.5°	269.9	269.0	267.1	264.1	259.8	254.4	247.0	237.9	227.0	213.5	198.5
65°	268.5	267.6	265.7	262.9	258.2	252.8	245.1	235.9	224.2	210.2	193.8
67.5°	266.8	265.9	263.6	260.6	255.7	250.2	242.4	232.7	221.2	206.1	188.6
70°	264.4	263.7	261.3	258.2	253.5	247.3	239.7	229.8	217.5	202.0	183.4
72.5°	261.5	260.7	258.4	255.0	250.5	243.9	236.4	226.4	213.3	197.3	177.8
75°	257.4	257.0	254.6	251.2	246.5	240.2	232.0	221.9	208.8	191.7	171.2
77.5°	253.0	252.5	250.2	246.6	241.6	235.4	227.1	216.5	203.2	185.9	164.8
80°	248.1	247.4	245.2	241.4	236.1	229.5	221.2	210.0	196.2	178.4	157.6
82.5°	241.4	240.9	238.9	235.0	229.6	222.8	214.4	202.9	188.6	169.8	149.6
85°	233.1	232.7	230.8	227.0	221.5	214.7	205.8	194.8	179.1	160.4	141.5
87.5°	222.6	222.5	220.3	216.3	211.0	204.0	194.9	183.0	167.3	149.1	130.3
90°	208.9	208.5	205.5	201.9	196.4	188.9	180.0	168.1	151.6	134.2	116.7
92.5°	188.7	188.9	185.5	181.9	176.0	167.9	159.3	147.8	129.9	113.9	97.0
95°	159.4	160.0	157.2	152.2	146.1	138.6	128.6	117.3	99.9	84.3	70.3
97.5°	121.6	121.3	118.7	112.2	107.9	98.6	90.8	79.9	67.1	55.3	45.0
100°	83.2	83.5	81.3	77.2	72.2	64.9	59.0	50.7	42.3	34.5	27.6
102.5°	55.3	55.9	53.5	51.4	47.8	43.6	38.7	34.0	27.9	22.8	18.4
105°	40.1	40.2	39.0	36.4	33.9	31.4	27.7	24.1	20.0	16.3	12.9
107.5°	31.1	31.1	30.1	28.2	26.5	24.0	21.3	18.4	15.0	12.0	9.1
110°	24.9	24.9	24.1	22.8	21.0	19.1	16.8	14.3	11.5	9.1	6.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	20.5	20.3	19.8	18.4	17.0	15.4	13.3	11.2	8.8	6.7	4.9
115°	16.8	16.7	16.1	15.0	13.7	12.3	10.5	8.7	6.7	4.6	2.1
117.5°	13.7	13.7	13.0	12.3	11.1	9.8	8.1	6.6	4.3	1.5	0.7
120°	11.1	11.1	10.6	9.7	8.7	7.4	5.7	3.6	1.0	0.7	0.6
122.5°	8.5	8.5	8.1	7.1	5.7	4.1	2.1	0.7	0.6	0.7	0.6
125°	4.8	4.6	3.9	2.9	1.5	0.7	0.6	0.6	0.4	0.6	0.6
127.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6
130°	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.6	0.7	0.6
132.5°	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
135°	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.6	0.6	0.4	0.6
137.5°	0.4	0.4	0.6	0.4	0.4	0.6	0.6	0.6	0.7	0.6	0.6
140°	0.4	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.6	0.6
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°	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3
2.5°	157.3	156.1	155.5	154.3	153.1	152.0	150.9	149.5	147.5	145.2	143.5
5°	165.2	163.1	161.3	159.0	156.8	154.5	151.7	148.8	145.0	141.2	137.6
7.5°	171.8	169.1	166.5	163.0	159.9	156.4	152.4	147.8	142.6	136.9	131.1
10°	177.8	174.3	170.5	166.2	162.1	157.6	152.4	146.4	139.7	132.0	124.1
12.5°	183.3	178.9	174.2	169.0	163.7	158.3	151.9	144.7	136.0	126.4	116.4
15°	187.6	182.4	177.0	170.7	164.2	157.9	150.5	141.8	131.7	120.1	107.6
17.5°	192.1	185.9	179.5	172.2	164.8	157.5	148.9	139.0	127.2	113.5	99.2
20°	195.3	188.6	181.3	173.2	164.6	156.5	147.0	135.3	122.0	106.8	90.5
22.5°	198.3	190.7	182.4	173.7	164.2	154.8	144.5	131.6	116.9	99.6	82.2
25°	201.1	192.2	183.4	173.6	163.0	152.9	141.7	127.8	111.2	92.5	74.3
27.5°	203.6	193.5	183.7	173.0	161.7	150.8	138.6	123.7	105.6	85.6	66.7
30°	205.1	194.3	183.7	171.9	159.7	147.8	134.9	118.8	99.6	78.3	59.7
32.5°	206.0	194.9	183.3	170.7	157.3	144.6	130.7	114.1	93.6	71.5	53.1
35°	206.8	195.0	182.7	169.0	155.0	141.1	126.1	108.7	87.4	64.9	47.5
37.5°	207.1	194.5	181.7	167.4	152.2	137.5	121.8	103.7	81.4	58.6	42.5
40°	207.2	193.8	180.0	165.2	149.1	133.5	117.0	98.2	75.4	52.8	37.8
42.5°	206.7	192.5	178.4	162.4	145.2	128.8	111.5	92.1	68.8	47.1	33.3
45°	205.7	191.1	175.8	159.2	141.2	123.6	105.9	86.6	63.5	42.0	29.7
47.5°	204.0	188.7	172.6	155.2	136.2	118.0	100.0	80.7	57.6	37.6	25.9
50°	202.0	186.1	169.1	150.3	130.6	112.4	94.6	74.8	52.3	33.5	22.6
52.5°	199.0	182.4	164.5	145.2	125.1	106.6	88.6	69.1	47.1	29.3	19.3
55°	195.6	178.2	159.6	139.4	119.5	100.5	82.2	63.3	42.2	25.4	16.3
57.5°	191.3	173.2	153.7	133.7	113.5	94.4	76.4	57.6	37.1	22.0	13.2
60°	186.5	167.7	147.7	127.9	107.3	88.1	70.1	52.0	32.6	18.6	10.5
62.5°	180.9	161.4	141.7	121.6	100.9	81.4	63.6	46.0	28.2	15.6	8.1
65°	175.1	155.0	135.3	115.2	94.0	74.7	57.0	40.5	24.0	12.3	5.7
67.5°	168.4	148.2	128.2	107.7	86.9	67.5	50.2	34.6	19.8	9.2	3.5
70°	162.4	141.5	121.2	100.5	79.4	60.1	43.6	29.0	15.6	6.4	1.7
72.5°	156.4	135.1	114.1	92.8	71.9	52.7	37.3	23.8	11.9	4.2	1.0
75°	150.2	128.6	107.0	85.0	63.8	45.8	31.0	18.9	8.4	2.2	0.7
77.5°	143.8	122.2	99.9	77.5	56.2	38.8	25.1	14.3	5.6	1.1	0.7
80°	137.0	115.3	92.8	70.2	49.3	32.5	19.5	10.4	3.4	0.8	0.6
82.5°	129.9	108.0	85.3	63.1	42.6	26.5	14.7	6.9	1.4	0.6	0.6
85°	121.6	100.3	78.0	56.3	36.6	21.2	10.8	3.9	0.8	0.6	0.6
87.5°	111.7	90.9	69.5	48.9	30.5	17.0	7.3	2.1	0.8	0.8	0.7
90°	98.2	78.7	58.6	39.8	23.7	12.0	4.5	0.7	0.7	0.7	0.6
92.5°	80.1	62.1	44.4	29.0	16.1	7.0	2.0	0.7	0.8	0.7	0.6
95°	56.5	41.8	28.7	17.8	8.8	2.8	0.8	0.7	0.8	0.6	0.6
97.5°	34.6	25.1	16.7	9.4	4.1	0.8	0.6	0.7	0.7	0.6	0.6
100°	21.2	15.0	9.5	4.9	2.0	0.7	0.6	0.7	0.8	0.6	0.7
102.5°	13.7	9.4	5.6	2.7	0.6	0.6	0.6	0.7	0.7	0.6	0.7
105°	9.2	6.0	3.4	0.8	0.6	0.4	0.6	0.6	0.6	0.6	0.7
107.5°	6.4	3.9	1.1	0.7	0.4	0.4	0.6	0.6	0.6	0.6	0.6
110°	4.3	1.7	0.7	0.7	0.6	0.6	0.4	0.6	0.6	0.6	0.6



TEST NUMBER: P273368

CATALOG NUMBER: 0.03-3W-840-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
112.5°	2.1	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.7	0.6	0.6
115°	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.6	0.6	0.6
117.5°	0.6	0.6	0.6	0.6	0.6	0.4	0.6	0.6	0.6	0.4	0.4
120°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
122.5°	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
125°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.4
127.5°	0.4	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
130°	0.6	0.7	0.7	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.7
132.5°	0.4	0.4	0.6	0.6	0.4	0.6	0.6	0.4	0.6	0.6	0.6
135°	0.6	0.6	0.6	0.6	0.7	0.7	0.6	0.6	0.7	0.7	0.7
137.5°	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.8	0.8	0.8
140°	0.6	0.7	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	0.7
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: P273368

CATALOG NUMBER: 0.03-3W-840-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3
2.5°	141.7	139.7	138.0	135.9	133.7	132.3	130.7	128.8	128.1	126.4	125.3
5°	134.1	130.2	126.5	122.6	118.4	115.3	112.5	109.3	106.9	104.4	103.5
7.5°	125.4	119.7	113.8	107.6	101.9	97.2	93.3	89.1	85.9	83.9	81.5
10°	116.0	108.2	99.8	92.6	85.9	80.4	76.4	72.2	68.9	66.1	64.9
12.5°	106.1	96.5	87.0	79.0	72.7	67.7	63.3	60.2	57.9	55.9	54.2
15°	95.6	84.3	75.0	67.1	61.2	57.2	53.7	51.3	49.6	47.8	46.5
17.5°	85.7	74.5	64.6	58.3	53.7	50.0	47.1	44.7	43.0	41.5	40.4
20°	76.4	65.2	56.9	51.1	47.1	43.6	40.9	38.7	37.0	35.6	34.3
22.5°	67.7	57.3	50.0	44.8	41.1	38.0	35.2	32.8	31.4	29.8	28.4
25°	60.1	50.9	43.9	39.2	36.0	32.8	30.1	27.6	25.9	24.2	23.0
27.5°	53.4	44.8	38.8	34.5	31.1	27.9	25.1	23.0	20.9	19.2	17.9
30°	47.5	39.8	34.3	29.8	26.5	23.0	20.5	17.9	16.3	14.4	13.0
32.5°	42.2	35.0	30.0	25.6	22.1	18.8	16.1	13.9	11.8	9.9	8.3
35°	37.6	30.8	25.6	21.6	18.2	15.0	12.5	9.9	7.6	5.7	4.3
37.5°	33.1	26.9	22.1	17.9	14.6	11.5	8.7	6.0	4.1	2.7	2.0
40°	29.1	23.5	18.5	14.9	11.3	8.1	5.5	3.2	1.7	0.8	0.4
42.5°	25.5	19.8	15.3	11.5	8.1	4.9	2.8	1.1	0.4	0.3	0.1
45°	22.1	16.8	12.5	8.7	5.3	2.5	1.0	0.7	0.4	0.3	0.1
47.5°	18.8	13.9	9.7	5.7	2.8	1.0	0.6	0.4	0.3	0.3	0.1
50°	15.8	11.1	7.0	3.4	1.3	0.6	0.4	0.4	0.3	0.3	0.1
52.5°	12.9	8.4	4.1	1.4	0.6	0.4	0.3	0.3	0.1	0.3	0.1
55°	10.4	5.7	2.2	0.7	0.4	0.3	0.3	0.3	0.3	0.1	0.1
57.5°	8.1	3.5	1.0	0.6	0.4	0.4	0.3	0.3	0.3	0.1	0.1
60°	5.7	2.0	0.8	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.1
62.5°	3.5	1.0	0.6	0.4	0.3	0.3	0.3	0.3	0.1	0.1	0.1
65°	2.0	0.8	0.6	0.6	0.6	0.4	0.4	0.4	0.3	0.3	0.3
67.5°	0.8	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.1	0.1	0.1
70°	0.6	0.6	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.1	0.3
72.5°	0.7	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
75°	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
77.5°	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.1
80°	0.6	0.7	0.7	0.6	0.4	0.4	0.3	0.3	0.4	0.3	0.3
82.5°	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
85°	0.7	0.7	0.7	0.6	0.6	0.4	0.4	0.4	0.3	0.3	0.3
87.5°	0.7	0.8	0.8	0.7	0.6	0.6	0.4	0.4	0.3	0.4	0.3
90°	0.6	0.6	0.6	0.6	0.4	0.4	0.3	0.4	0.3	0.3	0.1
92.5°	0.7	0.6	0.6	0.6	0.6	0.4	0.4	0.3	0.3	0.3	0.3
95°	0.7	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.3	0.3
97.5°	0.7	0.7	0.6	0.6	0.6	0.4	0.4	0.3	0.3	0.3	0.3
100°	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.4	0.4	0.4	0.4
102.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.3
105°	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.3	0.3	0.3	0.3
107.5°	0.4	0.6	0.6	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3
110°	0.4	0.4	0.6	0.6	0.6	0.4	0.4	0.4	0.3	0.3	0.3



TEST NUMBER: P273368

CATALOG NUMBER: 0.03-3W-840-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
112.5°	0.4	0.4	0.6	0.6	0.4	0.4	0.4	0.4	0.3	0.3	0.3
115°	0.6	0.6	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.1
117.5°	0.6	0.6	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.1
120°	0.6	0.6	0.6	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.1
122.5°	0.6	0.6	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.1
125°	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.1
127.5°	0.6	0.6	0.4	0.6	0.4	0.4	0.3	0.4	0.3	0.3	0.3
130°	0.6	0.6	0.6	0.7	0.6	0.4	0.4	0.4	0.3	0.4	0.3
132.5°	0.4	0.4	0.6	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
135°	0.7	0.7	0.7	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.3
137.5°	0.7	0.7	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.4	0.4
140°	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.4	0.4	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: P273368

CATALOG NUMBER: 0.03-3W-840-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	147.3	147.3	147.3	147.3
2.5°	124.6	125.1	124.4	123.3
5°	101.4	101.6	100.5	99.1
7.5°	79.4	79.2	78.0	76.8
10°	63.5	62.9	62.1	61.2
12.5°	52.8	52.3	52.1	51.3
15°	45.3	44.7	44.6	44.1
17.5°	39.5	39.0	38.7	38.5
20°	33.5	33.1	32.6	32.4
22.5°	27.7	27.2	26.8	26.3
25°	22.1	21.6	21.0	21.4
27.5°	17.1	16.4	15.6	15.8
30°	11.8	11.2	10.5	10.5
32.5°	7.0	6.2	5.6	5.5
35°	3.2	2.7	2.2	2.1
37.5°	1.1	0.7	0.4	0.6
40°	0.4	0.3	0.1	0.1
42.5°	0.1	0.1	0.0	0.0
45°	0.3	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°	0.3	0.1	0.1	0.1
82.5°	0.1	0.1	0.1	0.0
85°	0.3	0.1	0.1	0.0
87.5°	0.4	0.3	0.3	0.3
90°	0.1	0.1	0.1	0.0
92.5°	0.3	0.1	0.1	0.1
95°	0.3	0.1	0.3	0.3
97.5°	0.3	0.1	0.1	0.1
100°	0.3	0.1	0.3	0.3
102.5°	0.3	0.3	0.1	0.3
105°	0.3	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: P273368

CATALOG NUMBER: 0.03-3W-840-90-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	0.3	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°	0.4	0.4	0.3	0.3
140°	0.3	0.3	0.3	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)