

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: P273363

Luminaire Tested: **0.03-3W-835-90-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273363
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-835-90-ID-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 90 DEGREE SYMMETRIC OPTIC.
HIGH OUTPUT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 673.4 lumens
Efficiency: N/A
Efficacy: 53.9 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

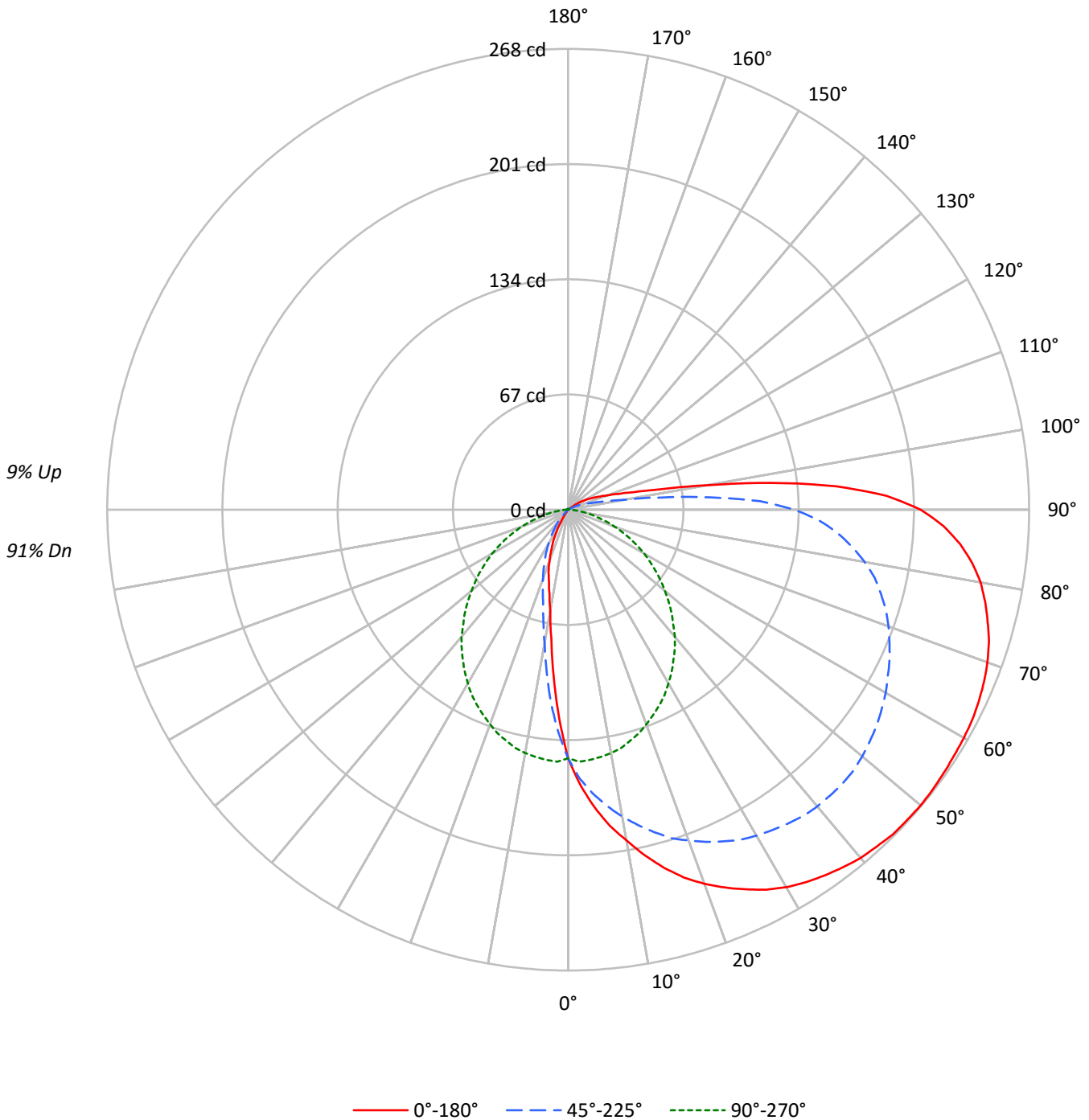
Input Watts (W): 12.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P273363

CATALOG NUMBER: 0.03-3W-835-90-ID-STD-UNV-AN-3F0

Luminous Intensity Polar Plot





TEST NUMBER: P273363

CATALOG NUMBER: 0.03-3W-835-90-ID-STD-UNV-AN-3F0

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	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	94	94	94	94	94	91																	
1	102	95	88	83	98	91	86	81	85	81	76	80	76	72	75	72	69	66	66	66	66	66	66	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	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	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	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	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	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	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	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	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	15	15	15	15	15	15																

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	8532	8532	8532
5°	10284	8654	5761
10°	11710	8616	3604
15°	13180	8503	2647
20°	14547	8345	1998
25°	15871	8170	1368
30°	17284	7950	702
35°	18720	7691	151
40°	20380	7431	8
45°	22296	7098	0
50°	24573	6743	0
55°	27456	6393	0
60°	31366	6023	0
65°	36802	5547	14
70°	44784	4920	0
75°	57606	4243	0
80°	82800	3468	34
85°	154944	2574	0



TEST NUMBER: P273363

CATALOG NUMBER: 0.03-3W-835-90-ID-STD-UNV-AN-3F0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.1	1.9
10°-20°	36.6	5.4
20°-30°	57.1	8.5
30°-40°	73.3	10.9
40°-50°	85.4	12.7
50°-60°	92.1	13.7
60°-70°	93.0	13.8
70°-80°	87.8	13.0
80°-90°	75.5	11.2
90°-100°	43.8	6.5
100°-110°	10.8	1.6
110°-120°	3.5	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°	106.8	15.9
0°-40°	180.1	26.8
0°-60°	357.7	53.1
0°-90°	613.9	91.2
90°-120°	58.1	8.6
90°-150°	59.4	8.8
90°-180°	59.0	8.8
0°-180°	673.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	144	144	144	144	144	
5°	174	166	146	113	97	17
15°	216	194	139	56	43	61
25°	244	213	125	32	21	113
35°	260	223	107	15	2	163
45°	267	225	85	2	0	206
55°	267	219	62	0	0	239
65°	263	206	40	0	0	261
75°	252	188	19	0	0	267
85°	229	157	4	0	0	190
90°	205	132	1	0	0	111
95°	156	83	1	0	0	112
105°	39	16	0	0	0	47
115°	16	4	0	0	0	17
125°	5	0	0	0	0	4
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: P273363

CATALOG NUMBER: 0.03-3W-835-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5
2.5°	160.0	159.1	159.2	159.2	158.2	158.1	157.7	156.7	156.6	156.6	154.8
5°	173.5	172.7	172.5	172.1	170.6	169.9	169.1	167.7	166.8	165.8	163.5
7.5°	185.3	184.3	183.9	183.2	181.6	180.5	179.0	177.2	175.5	173.9	170.7
10°	195.3	194.5	193.8	193.0	191.2	189.7	187.9	185.7	183.9	181.2	177.5
12.5°	205.8	204.8	204.1	202.8	201.3	199.2	196.9	193.8	191.5	187.9	183.5
15°	215.6	214.6	213.6	212.0	210.2	207.6	204.7	201.4	198.6	194.2	188.9
17.5°	224.3	223.4	222.4	220.8	218.6	215.6	212.3	208.3	204.7	200.3	194.2
20°	231.5	230.4	229.4	228.1	225.3	222.2	218.6	214.2	210.2	204.8	198.5
22.5°	237.8	236.6	235.6	234.1	231.2	228.1	223.9	219.4	215.0	209.1	202.1
25°	243.6	242.5	241.4	239.9	236.9	233.1	229.2	224.2	219.3	212.9	205.4
27.5°	249.1	248.0	247.0	245.0	242.1	238.2	234.0	228.6	223.0	216.4	208.1
30°	253.5	252.5	251.4	249.5	246.3	242.5	237.8	232.0	226.0	218.9	210.3
32.5°	256.9	256.1	255.1	252.9	249.9	245.8	240.7	234.9	228.5	220.9	212.1
35°	259.7	259.5	258.3	255.8	253.1	248.7	243.5	237.7	230.7	222.8	213.4
37.5°	262.2	262.0	260.9	258.4	255.4	251.3	245.7	239.9	232.5	224.5	214.5
40°	264.4	264.1	263.0	260.4	257.6	253.2	247.6	241.5	233.8	225.3	215.0
42.5°	265.6	265.5	264.4	261.6	258.7	254.3	248.7	242.1	234.7	225.4	215.0
45°	267.0	266.7	265.3	262.6	259.7	255.1	249.6	242.6	234.9	225.4	214.7
47.5°	267.2	267.1	265.6	263.0	259.8	255.3	249.8	242.4	234.2	224.8	213.5
50°	267.5	267.2	265.6	263.1	259.5	255.3	249.1	241.9	233.6	223.2	211.6
52.5°	267.2	266.7	265.2	262.4	259.0	254.5	248.1	241.0	231.8	221.1	209.1
55°	266.7	266.1	264.5	261.7	258.4	253.4	247.2	239.5	230.0	218.9	206.1
57.5°	266.0	265.3	263.5	260.9	257.2	252.3	245.9	237.5	227.8	216.1	202.8
60°	265.6	264.9	262.8	260.1	256.2	250.9	244.3	235.6	225.4	213.1	199.2
62.5°	264.8	263.9	262.0	259.1	254.9	249.6	242.4	233.4	222.7	209.5	194.8
65°	263.4	262.6	260.6	257.9	253.4	248.0	240.4	231.5	220.0	206.2	190.1
67.5°	261.7	260.9	258.6	255.7	250.9	245.5	237.8	228.3	217.1	202.2	185.0
70°	259.4	258.7	256.4	253.4	248.7	242.6	235.2	225.4	213.4	198.2	179.9
72.5°	256.5	255.8	253.5	250.2	245.8	239.3	231.9	222.2	209.2	193.6	174.4
75°	252.5	252.1	249.8	246.5	241.8	235.6	227.6	217.8	204.8	188.1	168.0
77.5°	248.3	247.7	245.5	241.9	237.0	230.9	222.8	212.4	199.3	182.4	161.7
80°	243.5	242.8	240.6	236.9	231.6	225.2	217.1	206.1	192.5	175.0	154.7
82.5°	236.9	236.3	234.4	230.5	225.3	218.6	210.3	199.1	185.0	166.6	146.8
85°	228.7	228.3	226.4	222.7	217.3	210.6	201.9	191.1	175.7	157.4	138.8
87.5°	218.4	218.3	216.1	212.3	207.0	200.2	191.2	179.5	164.1	146.3	127.8
90°	205.0	204.6	201.7	198.1	192.7	185.3	176.6	165.0	148.7	131.7	114.5
92.5°	185.2	185.3	182.0	178.4	172.7	164.7	156.3	145.0	127.4	111.8	95.1
95°	156.4	157.0	154.2	149.3	143.4	136.0	126.2	115.1	98.0	82.8	69.0
97.5°	119.3	119.0	116.4	110.1	105.9	96.8	89.1	78.4	65.8	54.3	44.1
100°	81.7	81.9	79.7	75.7	70.8	63.6	57.9	49.8	41.5	33.8	27.1
102.5°	54.3	54.9	52.5	50.5	46.9	42.8	37.9	33.4	27.4	22.4	18.0
105°	39.3	39.5	38.2	35.7	33.3	30.8	27.2	23.6	19.7	15.9	12.6
107.5°	30.5	30.5	29.6	27.6	26.0	23.5	20.9	18.0	14.7	11.8	8.9
110°	24.5	24.5	23.6	22.4	20.6	18.7	16.5	14.0	11.3	8.9	6.6



TEST NUMBER: P273363

CATALOG NUMBER: 0.03-3W-835-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	20.1	19.9	19.4	18.0	16.6	15.1	13.1	11.0	8.7	6.6	4.8
115°	16.5	16.4	15.8	14.7	13.5	12.1	10.3	8.5	6.6	4.5	2.1
117.5°	13.5	13.5	12.8	12.1	10.9	9.6	8.0	6.5	4.3	1.5	0.7
120°	10.9	10.9	10.4	9.5	8.5	7.3	5.6	3.6	1.0	0.7	0.5
122.5°	8.4	8.4	8.0	7.0	5.6	4.0	2.1	0.7	0.5	0.7	0.5
125°	4.7	4.5	3.8	2.9	1.5	0.7	0.5	0.5	0.4	0.5	0.5
127.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5
130°	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.7	0.5
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	0.5	0.5	0.4	0.5
137.5°	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.7	0.5	0.5
140°	0.4	0.3	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.5	0.5
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: P273363

CATALOG NUMBER: 0.03-3W-835-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5
2.5°	154.4	153.1	152.6	151.4	150.3	149.2	148.1	146.7	144.8	142.4	140.8
5°	162.1	160.0	158.2	156.0	153.8	151.6	148.9	146.0	142.3	138.6	135.0
7.5°	168.5	165.9	163.3	159.9	156.9	153.4	149.6	145.0	139.9	134.3	128.7
10°	174.4	171.0	167.3	163.0	159.1	154.7	149.6	143.7	137.1	129.5	121.8
12.5°	179.8	175.5	170.9	165.8	160.6	155.3	149.0	142.0	133.5	124.0	114.2
15°	184.1	179.0	173.6	167.4	161.1	154.9	147.6	139.1	129.2	117.8	105.6
17.5°	188.5	182.4	176.1	168.9	161.7	154.5	146.1	136.4	124.8	111.4	97.3
20°	191.6	185.0	177.9	169.9	161.5	153.6	144.2	132.8	119.7	104.8	88.8
22.5°	194.5	187.1	179.0	170.5	161.1	151.9	141.7	129.1	114.6	97.7	80.7
25°	197.3	188.6	179.9	170.3	159.9	150.0	139.0	125.4	109.2	90.7	72.9
27.5°	199.7	189.8	180.2	169.8	158.6	147.9	136.0	121.4	103.7	84.0	65.4
30°	201.3	190.7	180.2	168.7	156.7	145.0	132.4	116.6	97.7	76.8	58.6
32.5°	202.1	191.2	179.8	167.4	154.4	141.9	128.3	111.9	91.8	70.1	52.1
35°	202.9	191.4	179.3	165.8	152.0	138.4	123.7	106.7	85.8	63.6	46.6
37.5°	203.2	190.8	178.3	164.3	149.3	134.9	119.5	101.7	79.9	57.5	41.7
40°	203.3	190.1	176.6	162.1	146.3	131.0	114.8	96.4	74.0	51.8	37.1
42.5°	202.8	188.9	175.0	159.3	142.4	126.3	109.4	90.3	67.5	46.2	32.7
45°	201.8	187.5	172.5	156.2	138.6	121.2	103.9	85.0	62.3	41.2	29.1
47.5°	200.2	185.2	169.4	152.3	133.6	115.7	98.2	79.2	56.5	36.8	25.4
50°	198.2	182.6	165.9	147.5	128.1	110.3	92.8	73.4	51.3	32.9	22.1
52.5°	195.2	179.0	161.4	142.4	122.8	104.6	86.9	67.8	46.2	28.7	19.0
55°	191.9	174.9	156.6	136.8	117.3	98.6	80.7	62.1	41.4	24.9	15.9
57.5°	187.6	169.9	150.8	131.1	111.4	92.7	74.9	56.5	36.4	21.6	12.9
60°	183.0	164.6	144.9	125.5	105.3	86.5	68.7	51.0	32.0	18.3	10.3
62.5°	177.5	158.4	139.0	119.3	99.0	79.9	62.4	45.1	27.6	15.3	8.0
65°	171.8	152.0	132.8	113.0	92.2	73.3	55.9	39.7	23.5	12.1	5.6
67.5°	165.2	145.4	125.8	105.7	85.2	66.3	49.2	34.0	19.4	9.1	3.4
70°	159.3	138.8	118.9	98.6	77.9	59.0	42.8	28.5	15.3	6.3	1.6
72.5°	153.4	132.5	111.9	91.0	70.5	51.7	36.6	23.4	11.7	4.1	1.0
75°	147.4	126.2	105.0	83.4	62.5	45.0	30.4	18.6	8.2	2.2	0.7
77.5°	141.0	119.9	98.0	76.0	55.1	38.1	24.6	14.0	5.5	1.1	0.7
80°	134.4	113.1	91.0	68.9	48.4	31.9	19.1	10.2	3.3	0.8	0.5
82.5°	127.4	106.0	83.7	61.9	41.8	26.0	14.4	6.7	1.4	0.5	0.5
85°	119.3	98.4	76.6	55.3	35.9	20.8	10.6	3.8	0.8	0.5	0.5
87.5°	109.6	89.2	68.2	48.0	30.0	16.6	7.1	2.1	0.8	0.8	0.7
90°	96.4	77.3	57.5	39.0	23.2	11.8	4.4	0.7	0.7	0.7	0.5
92.5°	78.6	60.9	43.6	28.5	15.8	6.9	1.9	0.7	0.8	0.7	0.5
95°	55.4	41.0	28.2	17.5	8.7	2.7	0.8	0.7	0.8	0.5	0.5
97.5°	34.0	24.6	16.4	9.2	4.0	0.8	0.5	0.7	0.7	0.5	0.5
100°	20.8	14.7	9.3	4.8	1.9	0.7	0.5	0.7	0.8	0.5	0.7
102.5°	13.5	9.2	5.5	2.6	0.5	0.5	0.5	0.7	0.7	0.5	0.7
105°	9.1	5.9	3.3	0.8	0.5	0.4	0.5	0.5	0.5	0.5	0.7
107.5°	6.3	3.8	1.1	0.7	0.4	0.4	0.5	0.5	0.5	0.5	0.5
110°	4.3	1.6	0.7	0.7	0.5	0.5	0.4	0.5	0.5	0.5	0.5



TEST NUMBER: P273363

CATALOG NUMBER: 0.03-3W-835-90-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	0.5	0.5	0.5	0.5	0.7	0.5	0.5
115°	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5
117.5°	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.4
120°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
122.5°	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
125°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
127.5°	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
130°	0.5	0.7	0.7	0.5	0.7	0.5	0.7	0.7	0.7	0.7	0.7
132.5°	0.4	0.4	0.5	0.5	0.4	0.5	0.5	0.4	0.5	0.5	0.5
135°	0.5	0.5	0.5	0.5	0.7	0.7	0.5	0.5	0.7	0.7	0.7
137.5°	0.5	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.8	0.8	0.8
140°	0.5	0.7	0.5	0.5	0.7	0.5	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: P273363

CATALOG NUMBER: 0.03-3W-835-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5	144.5
2.5°	139.0	137.1	135.4	133.3	131.1	129.8	128.3	126.3	125.6	124.0	122.9
5°	131.6	127.7	124.1	120.3	116.2	113.1	110.4	107.2	104.9	102.4	101.6
7.5°	123.0	117.4	111.6	105.6	99.9	95.4	91.6	87.4	84.3	82.3	80.0
10°	113.8	106.1	97.9	90.9	84.3	78.9	74.9	70.8	67.6	64.9	63.6
12.5°	104.1	94.7	85.4	77.5	71.3	66.4	62.1	59.1	56.8	54.9	53.2
15°	93.8	82.8	73.5	65.8	60.1	56.1	52.7	50.3	48.7	46.9	45.6
17.5°	84.1	73.1	63.4	57.2	52.7	49.1	46.2	43.9	42.2	40.7	39.6
20°	74.9	63.9	55.8	50.2	46.2	42.8	40.1	37.9	36.3	34.9	33.7
22.5°	66.4	56.2	49.1	44.0	40.3	37.3	34.5	32.2	30.8	29.3	27.9
25°	59.0	49.9	43.0	38.5	35.3	32.2	29.6	27.1	25.4	23.8	22.5
27.5°	52.4	44.0	38.1	33.8	30.5	27.4	24.6	22.5	20.5	18.8	17.6
30°	46.6	39.0	33.7	29.3	26.0	22.5	20.1	17.6	15.9	14.2	12.8
32.5°	41.4	34.4	29.4	25.2	21.7	18.4	15.8	13.6	11.5	9.8	8.1
35°	36.8	30.2	25.2	21.2	17.9	14.7	12.2	9.8	7.4	5.6	4.3
37.5°	32.4	26.4	21.7	17.6	14.3	11.3	8.5	5.9	4.0	2.6	1.9
40°	28.6	23.1	18.1	14.6	11.1	8.0	5.4	3.2	1.6	0.8	0.4
42.5°	25.0	19.4	15.0	11.3	8.0	4.8	2.7	1.1	0.4	0.3	0.1
45°	21.7	16.5	12.2	8.5	5.2	2.5	1.0	0.7	0.4	0.3	0.1
47.5°	18.4	13.6	9.5	5.6	2.7	1.0	0.5	0.4	0.3	0.3	0.1
50°	15.5	10.9	6.9	3.3	1.2	0.5	0.4	0.4	0.3	0.3	0.1
52.5°	12.6	8.2	4.0	1.4	0.5	0.4	0.3	0.3	0.1	0.3	0.1
55°	10.2	5.6	2.2	0.7	0.4	0.3	0.3	0.3	0.3	0.1	0.1
57.5°	8.0	3.4	1.0	0.5	0.4	0.4	0.3	0.3	0.3	0.1	0.1
60°	5.6	1.9	0.8	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.1
62.5°	3.4	1.0	0.5	0.4	0.3	0.3	0.3	0.3	0.1	0.1	0.1
65°	1.9	0.8	0.5	0.5	0.5	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°	0.5	0.5	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°	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
77.5°	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.1
80°	0.5	0.7	0.7	0.5	0.4	0.4	0.3	0.3	0.4	0.3	0.3
82.5°	0.5	0.5	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	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3
87.5°	0.7	0.8	0.8	0.7	0.5	0.5	0.4	0.4	0.3	0.4	0.3
90°	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.4	0.3	0.3	0.1
92.5°	0.7	0.5	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3
95°	0.7	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3
97.5°	0.7	0.7	0.5	0.5	0.5	0.4	0.4	0.3	0.3	0.3	0.3
100°	0.5	0.7	0.7	0.7	0.5	0.5	0.5	0.4	0.4	0.4	0.4
102.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3
105°	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3
107.5°	0.4	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3
110°	0.4	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3



TEST NUMBER: P273363

CATALOG NUMBER: 0.03-3W-835-90-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	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
115°	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.1
117.5°	0.5	0.5	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.1
120°	0.5	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.1
122.5°	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.1
125°	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.1
127.5°	0.5	0.5	0.4	0.5	0.4	0.4	0.3	0.4	0.3	0.3	0.3
130°	0.5	0.5	0.5	0.7	0.5	0.4	0.4	0.4	0.3	0.4	0.3
132.5°	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
135°	0.7	0.7	0.7	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3
137.5°	0.7	0.7	0.7	0.7	0.5	0.7	0.5	0.5	0.5	0.4	0.4
140°	0.7	0.7	0.5	0.7	0.5	0.5	0.5	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: P273363

CATALOG NUMBER: 0.03-3W-835-90-ID-STD-UNV-AN-3F0

CANDELA DISTRIBUTION (continued):

	165°	170°	175°	180°
0°	144.5	144.5	144.5	144.5
2.5°	122.2	122.8	122.1	121.0
5°	99.5	99.7	98.6	97.2
7.5°	77.9	77.7	76.6	75.3
10°	62.3	61.7	60.9	60.1
12.5°	51.8	51.3	51.1	50.3
15°	44.4	43.9	43.7	43.3
17.5°	38.8	38.2	37.9	37.8
20°	32.9	32.4	32.0	31.8
22.5°	27.2	26.7	26.3	25.8
25°	21.7	21.2	20.6	21.0
27.5°	16.8	16.1	15.3	15.5
30°	11.5	11.0	10.3	10.3
32.5°	6.9	6.0	5.5	5.4
35°	3.2	2.6	2.2	2.1
37.5°	1.1	0.7	0.4	0.5
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: P273363

CATALOG NUMBER: 0.03-3W-835-90-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)