

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: P273389

Luminaire Tested: **0.03-5W-840-91-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P273389  
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: 0.03-5W-840-91-ID-STD-UNV-AN-3F0  
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 90 DEGREE ASYMMETRIC OPTIC.  
VERY HIGH OUTPUT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 490.9 lumens  
Efficiency: N/A  
Efficacy: 26.8 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

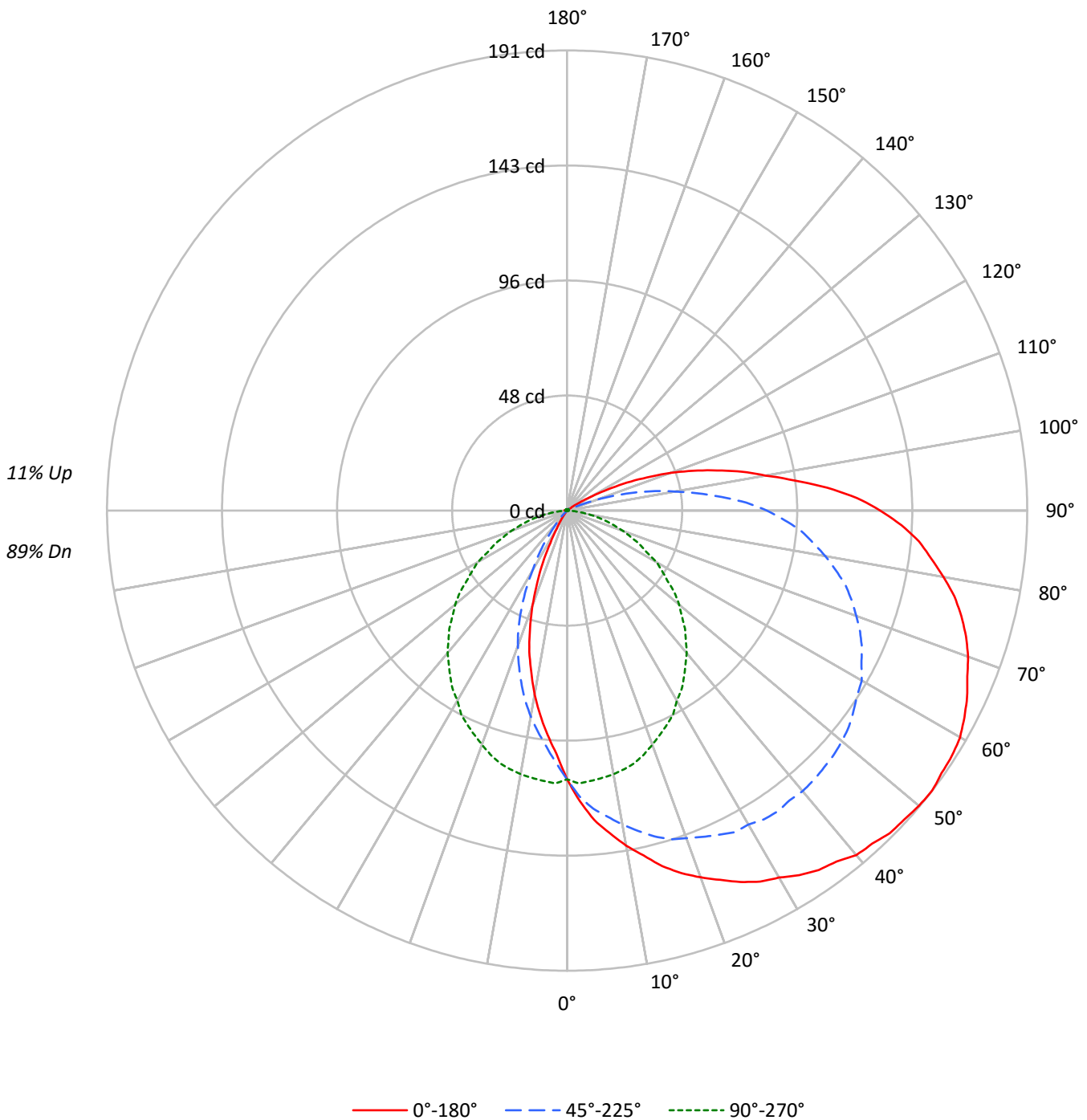
Input Watts (W): 18.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	9876	9876	9876
5°	10538	9999	7636
10°	10796	9967	5925
15°	11050	9902	4382
20°	11195	9696	2909
25°	11337	9514	1593
30°	11405	9231	551
35°	11581	9046	121
40°	11738	8820	25
45°	11862	8533	0
50°	11983	8210	0
55°	12070	7703	0
60°	12209	7399	0
65°	12210	6751	0
70°	12238	6155	0
75°	12251	5393	0
80°	12126	4388	0
85°	11986	3058	33



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	10.6	2.2
10°-20°	30.1	6.1
20°-30°	44.6	9.1
30°-40°	54.1	11.0
40°-50°	61.1	12.4
50°-60°	64.9	13.2
60°-70°	63.9	13.0
70°-80°	58.6	11.9
80°-90°	48.5	9.9
90°-100°	32.5	6.6
100°-110°	15.9	3.2
110°-120°	4.9	1.0
120°-130°	0.6	0.1
130°-140°	0.3	0.1
140°-150°	0.2	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	85.3	17.4
0°-40°	139.4	28.4
0°-60°	265.3	54.0
0°-90°	436.3	88.9
90°-120°	53.3	10.9
90°-150°	54.4	11.1
90°-180°	55.0	11.2
0°-180°	490.9	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	112	112	112	112	112	
5°	129	124	113	98	93	13
15°	153	140	108	74	61	43
25°	170	148	98	45	24	79
35°	182	152	84	16	2	114
45°	189	151	69	2	0	146
55°	190	145	51	0	0	170
65°	183	135	33	0	0	181
75°	169	120	17	0	0	179
85°	147	98	4	1	0	122
90°	130	83	0	0	0	71
95°	108	64	0	0	1	83
105°	64	29	0	0	0	69
115°	27	3	0	0	0	28
125°	3	0	1	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



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5
2.5°	120.7	120.0	120.4	120.0	120.0	119.6	119.2	119.2	118.8	118.4	118.8
5°	128.9	128.1	128.5	127.7	126.9	126.5	126.2	125.8	125.0	124.6	124.2
7.5°	135.0	134.6	134.3	133.9	133.1	132.7	131.9	131.2	130.4	129.6	128.1
10°	141.2	140.0	140.0	139.7	138.9	138.1	137.3	137.0	135.0	134.3	132.3
12.5°	146.6	146.2	146.2	144.7	143.9	143.5	142.4	141.6	139.7	138.1	136.2
15°	152.8	152.4	152.0	151.2	150.1	148.9	147.8	145.8	144.3	142.0	140.0
17.5°	157.8	157.4	157.0	155.5	154.7	153.5	152.4	150.1	147.8	145.4	143.1
20°	162.0	161.6	160.9	159.7	157.8	157.0	155.5	153.5	150.8	148.1	144.7
22.5°	165.9	165.5	164.7	163.2	161.6	160.5	158.9	156.2	153.5	150.5	146.6
25°	170.1	169.7	168.6	167.0	164.7	163.6	162.4	159.7	156.2	152.8	148.5
27.5°	173.6	173.2	172.1	170.5	168.2	167.0	165.5	162.0	158.6	154.7	150.5
30°	175.9	175.9	174.8	172.8	170.5	169.0	167.4	164.0	159.7	155.5	150.5
32.5°	179.4	179.4	178.2	176.3	173.6	172.1	170.1	166.3	161.6	157.0	152.0
35°	182.1	181.3	180.2	178.2	175.5	174.0	172.1	167.4	162.8	157.4	152.4
37.5°	183.6	183.2	182.1	180.2	177.1	175.1	172.8	168.2	163.6	157.4	151.6
40°	186.7	185.6	184.4	182.5	179.4	177.1	174.8	170.1	164.3	158.6	152.0
42.5°	187.5	187.5	185.6	183.2	180.2	177.8	175.9	170.1	164.7	157.8	151.6
45°	189.4	188.6	187.1	184.4	180.9	178.6	176.7	170.9	164.7	158.2	150.8
47.5°	189.8	189.4	187.5	184.8	181.3	179.4	176.7	170.9	164.7	157.4	150.1
50°	190.6	190.2	188.3	185.2	181.3	179.8	177.1	170.9	164.0	157.0	148.9
52.5°	191.0	190.2	188.6	185.6	181.7	179.4	176.7	170.5	163.2	155.5	147.4
55°	189.8	189.4	187.5	184.4	180.2	177.8	175.1	169.0	161.6	153.5	145.1
57.5°	189.4	188.6	186.3	183.2	179.0	176.7	174.0	167.8	160.1	151.6	142.7
60°	188.3	187.5	185.6	182.1	177.8	175.5	172.4	165.9	158.6	150.1	141.2
62.5°	185.9	184.8	182.9	179.4	175.1	172.4	169.7	163.2	155.5	147.4	137.7
65°	183.2	182.9	180.9	177.5	172.8	170.1	167.4	160.5	152.8	144.3	135.0
67.5°	179.8	179.4	177.5	174.0	169.4	166.7	163.6	157.0	149.7	140.8	131.6
70°	177.1	176.7	174.4	170.9	166.3	163.2	160.5	153.9	146.2	137.3	127.7
72.5°	173.6	172.4	170.9	167.4	162.8	159.7	156.6	149.7	142.4	133.5	123.8
75°	169.4	168.2	166.3	163.2	158.6	155.5	152.4	145.4	137.7	129.2	119.6
77.5°	164.7	163.6	161.6	158.2	153.5	150.5	147.4	140.8	132.7	123.8	114.2
80°	158.6	157.8	155.9	152.8	148.1	145.4	142.4	135.4	127.3	118.4	108.8
82.5°	152.4	152.4	150.1	147.0	142.4	139.3	136.2	129.2	121.9	113.4	103.0
85°	146.6	145.4	143.9	140.4	136.2	133.1	129.6	123.4	115.7	106.9	97.6
87.5°	138.9	137.7	136.2	133.1	128.9	126.2	122.3	116.1	108.0	99.9	90.3
90°	130.0	129.6	127.7	124.2	120.0	117.3	114.6	108.4	100.7	92.2	82.9
92.5°	120.4	119.6	118.4	115.0	111.1	108.4	105.3	99.1	91.4	83.3	74.5
95°	108.4	107.6	106.1	103.0	99.1	96.8	93.4	87.6	80.2	72.9	64.4
97.5°	95.3	94.9	93.0	90.7	86.8	84.5	81.8	76.4	69.8	62.9	54.8
100°	83.7	83.3	82.2	79.9	76.4	74.1	71.4	66.7	60.6	53.6	45.5
102.5°	74.5	74.1	72.5	70.2	67.1	64.8	62.5	57.5	51.7	44.4	37.4
105°	64.4	64.0	62.5	60.6	57.5	55.2	53.2	48.2	42.1	35.5	28.9
107.5°	54.8	54.0	52.9	50.9	47.8	46.3	43.6	39.0	33.6	27.4	20.4
110°	45.9	44.8	43.6	41.7	38.6	37.0	34.7	30.1	25.1	19.3	13.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
112.5°	35.9	35.9	34.3	32.4	29.7	27.8	25.8	21.2	16.6	11.6	6.6
115°	27.4	26.6	25.5	23.5	21.2	19.7	17.4	13.9	9.3	5.8	3.1
117.5°	18.9	18.1	17.4	15.8	13.5	12.0	10.4	7.3	5.0	2.7	0.4
120°	12.0	10.8	10.4	8.9	7.3	6.6	5.8	3.9	2.3	0.4	0.4
122.5°	6.9	6.6	6.2	5.4	4.2	3.5	2.3	1.2	0.4	0.4	0.4
125°	3.1	2.7	2.3	1.2	0.8	0.4	0.4	0.4	0.4	0.4	0.0
127.5°	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.4	0.0	0.0	0.0
130°	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.8	0.0	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4
135°	0.0	0.0	0.0	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4
137.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.4	0.4	0.8
140°	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0	0.4	0.0	0.4
142.5°	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
145°	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4
147.5°	0.0	0.4	0.4	0.4	0.4	0.4	0.8	0.4	0.4	0.4	0.8
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
152.5°	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.4
155°	0.4	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.4	0.4
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	0.4	0.0
160°	0.0	0.0	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
162.5°	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.4	0.4	0.4
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
167.5°	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
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	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
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	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.0
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



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**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5
2.5°	117.3	117.3	116.5	116.5	116.1	115.7	115.3	115.0	114.2	113.4	111.9
5°	122.3	121.1	120.4	119.6	119.2	118.8	116.9	115.3	114.6	112.6	110.3
7.5°	126.5	125.0	123.4	121.9	121.1	120.0	118.0	116.5	114.2	111.9	108.8
10°	130.4	128.5	126.5	124.2	123.1	122.3	119.6	116.9	114.2	111.1	107.6
12.5°	133.9	131.6	128.9	126.2	125.0	123.4	120.4	116.9	113.4	109.9	105.3
15°	137.0	133.9	130.8	127.7	125.8	124.2	120.4	116.9	112.6	108.4	103.0
17.5°	139.3	135.4	132.3	128.9	126.5	124.6	120.4	116.1	111.5	106.1	100.3
20°	141.2	136.6	132.7	128.9	126.5	124.2	119.6	115.0	109.6	103.4	97.6
22.5°	142.7	138.1	133.1	128.9	126.2	123.8	118.4	113.4	107.2	100.7	93.7
25°	144.3	138.9	133.1	128.9	125.8	123.1	117.3	111.5	105.3	98.0	90.3
27.5°	145.4	139.7	133.9	128.1	125.0	121.9	115.7	109.9	103.0	95.3	86.8
30°	145.4	139.3	133.1	126.9	123.4	120.4	113.4	106.9	99.1	91.0	82.6
32.5°	146.2	139.7	133.5	126.5	123.1	119.6	112.3	104.9	97.2	88.3	79.5
35°	145.8	139.3	132.7	125.0	121.1	117.3	109.9	102.2	94.1	84.5	75.2
37.5°	145.1	138.1	130.8	123.4	119.2	115.0	106.9	98.4	89.9	80.6	70.6
40°	145.4	137.7	130.0	122.3	118.0	113.4	105.3	96.4	87.2	77.2	67.1
42.5°	144.3	136.2	127.7	119.6	115.3	110.7	101.8	93.0	83.3	72.9	62.1
45°	143.5	135.0	126.5	118.0	113.4	108.8	99.5	89.9	79.9	69.1	58.3
47.5°	142.0	133.5	124.6	115.3	110.3	105.3	95.7	86.0	75.6	64.4	53.2
50°	140.4	131.6	122.3	112.3	107.6	102.6	92.2	82.2	71.8	60.6	48.6
52.5°	138.9	129.6	120.0	109.9	104.9	99.9	89.1	78.3	67.9	56.3	44.8
55°	136.2	126.5	116.5	106.5	101.5	95.7	84.5	74.1	62.9	50.9	39.3
57.5°	133.9	124.2	113.4	103.0	97.6	91.8	80.6	69.8	58.3	46.7	34.7
60°	131.6	121.5	110.7	100.3	94.1	88.7	77.2	66.0	54.4	42.8	31.2
62.5°	128.1	117.3	107.2	95.7	89.5	84.1	72.1	60.6	49.4	37.0	25.8
65°	125.0	114.6	103.4	91.8	85.6	80.2	68.3	56.7	44.8	33.2	22.0
67.5°	121.1	110.3	99.5	88.0	81.4	75.6	63.3	51.7	40.1	28.5	17.4
70°	117.7	106.5	95.3	83.3	77.2	71.0	59.0	47.1	35.5	24.7	13.9
72.5°	113.4	102.6	91.0	79.5	72.5	66.7	54.4	42.4	31.2	20.4	10.4
75°	109.2	98.0	86.4	74.8	68.3	62.1	49.8	37.8	27.0	16.6	7.7
77.5°	104.2	93.4	81.8	69.8	63.3	57.1	45.1	33.6	22.4	12.7	4.2
80°	98.4	87.6	76.0	64.8	58.6	52.1	40.5	28.5	18.1	9.3	2.3
82.5°	92.6	82.2	71.0	59.4	53.2	47.5	35.9	24.3	13.9	5.8	0.8
85°	87.2	76.4	65.2	54.0	47.8	42.4	31.2	20.4	10.4	3.5	0.8
87.5°	80.2	69.4	58.6	47.5	42.1	36.3	25.8	15.4	6.6	1.2	0.4
90°	72.1	62.1	51.7	40.9	35.1	30.5	20.1	11.2	3.9	0.4	0.4
92.5°	64.0	54.4	44.0	33.9	28.9	23.9	14.7	6.6	1.2	0.8	1.2
95°	54.8	45.5	35.5	26.2	22.0	17.4	8.9	2.7	1.2	0.4	0.8
97.5°	45.9	37.0	27.8	18.9	14.7	10.4	3.5	0.8	0.4	0.4	0.4
100°	36.6	28.9	20.4	12.0	8.1	5.0	0.4	0.0	0.0	0.0	0.4
102.5°	28.9	21.2	13.5	6.2	3.5	1.5	0.4	0.4	0.4	0.4	0.8
105°	20.8	13.9	6.6	2.3	0.8	0.0	0.0	0.0	0.4	0.4	0.4
107.5°	13.9	6.9	2.7	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
110°	6.9	3.1	0.8	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4





TEST NUMBER: P273389

CATALOG NUMBER: 0.03-5W-840-91-ID-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
112.5°	3.1	0.8	0.0	0.0	0.4	0.4	0.0	0.0	0.4	0.4	0.4
115°	0.8	0.0	0.4	0.0	0.0	0.4	0.4	0.0	0.0	0.4	0.4
117.5°	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.4
120°	0.4	0.4	0.0	0.4	0.0	0.4	0.4	0.4	0.4	0.0	0.4
122.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
125°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8	0.8
127.5°	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.4	0.4	0.4	0.0
130°	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.4
132.5°	0.4	0.4	0.8	0.4	0.4	0.0	0.4	0.8	0.4	0.4	0.4
135°	0.0	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.8	0.4	0.4
137.5°	0.4	0.8	0.8	0.8	0.4	0.4	0.4	0.8	0.8	1.2	0.4
140°	0.0	0.0	0.0	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4
142.5°	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
145°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
147.5°	0.4	0.4	0.4	0.8	0.4	0.4	0.8	0.8	0.8	0.8	0.4
150°	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.4	0.4	0.0
152.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
155°	0.4	0.0	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4
157.5°	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
160°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8	0.4	0.8
162.5°	0.0	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4
165°	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.4
167.5°	0.4	0.0	0.0	0.4	0.0	0.4	0.0	0.0	0.4	0.0	0.4
170°	0.4	0.0	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4
172.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
175°	0.4	0.0	0.0	0.0	0.4	0.0	0.4	0.0	0.4	0.4	0.0
177.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.4	0.4
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



TEST NUMBER: P273389

CATALOG NUMBER: 0.03-5W-840-91-ID-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5
2.5°	111.1	109.9	109.6	109.2	108.4	107.2	106.9	105.7	104.9	104.5	103.4
5°	108.8	107.2	106.1	104.9	104.2	102.6	101.1	100.3	98.4	98.0	96.8
7.5°	106.5	104.2	102.2	101.1	99.9	97.6	95.7	94.1	92.6	91.0	89.9
10°	104.2	101.1	98.8	97.2	95.7	93.0	90.7	88.3	86.8	84.5	82.6
12.5°	101.5	97.6	94.9	93.0	91.4	88.0	85.3	82.9	80.6	77.9	75.6
15°	98.4	94.5	90.7	88.7	86.4	82.9	80.2	76.8	73.7	70.6	68.3
17.5°	94.9	90.3	86.4	83.7	82.2	77.5	73.7	69.8	66.7	64.0	60.6
20°	91.4	86.4	81.4	79.1	76.8	72.1	67.5	62.9	59.8	55.9	52.9
22.5°	87.6	82.2	76.4	73.7	71.4	65.6	61.3	56.3	52.9	48.2	44.4
25°	83.3	77.5	71.8	68.7	65.6	59.8	54.4	49.0	44.8	40.1	36.3
27.5°	79.9	72.9	66.4	63.3	60.2	53.6	48.2	42.8	37.0	32.8	28.2
30°	74.8	67.9	61.0	57.1	54.0	46.7	40.9	34.7	28.9	24.3	20.1
32.5°	71.4	63.7	56.3	52.5	49.0	41.3	35.1	28.5	22.8	17.4	13.5
35°	66.4	58.6	50.2	46.3	42.4	34.7	27.8	22.0	16.2	11.2	8.5
37.5°	61.3	52.9	44.4	40.5	36.3	28.5	21.2	15.0	10.0	6.6	5.0
40°	57.5	48.2	39.3	35.5	31.2	22.8	15.8	9.6	6.2	4.2	2.7
42.5°	52.5	42.8	33.9	29.3	25.1	17.0	10.0	6.2	3.9	1.9	0.8
45°	47.5	38.2	28.9	24.3	19.7	11.6	6.6	3.9	1.9	0.8	0.4
47.5°	42.8	32.8	23.5	18.9	14.7	7.3	4.2	1.9	0.4	0.4	0.0
50°	37.8	28.2	18.9	14.3	10.0	5.0	2.7	1.2	0.4	0.0	0.4
52.5°	33.9	24.3	14.3	10.0	6.9	3.5	1.5	1.2	0.8	0.4	0.8
55°	28.9	18.9	9.3	5.8	4.2	1.5	0.4	0.0	0.4	0.4	0.0
57.5°	24.7	14.7	6.2	4.2	2.7	0.8	0.4	0.0	0.0	0.4	0.0
60°	20.4	10.8	4.2	2.7	1.9	1.2	0.8	0.8	0.4	0.8	0.8
62.5°	15.4	6.9	1.9	1.2	0.4	0.4	0.0	0.4	0.4	0.0	0.0
65°	12.0	4.2	1.2	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4
67.5°	8.1	2.3	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.0
70°	5.4	1.2	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.0	0.0
72.5°	3.1	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
75°	1.5	0.8	0.4	0.4	0.8	0.0	0.4	0.4	0.4	0.0	0.4
77.5°	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.4	0.0	0.4	0.0
80°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.0	0.0
82.5°	0.4	0.4	0.4	0.4	0.4	0.8	0.4	0.4	0.0	0.4	0.0
85°	0.8	0.8	0.8	0.8	0.4	0.8	0.4	0.8	0.8	0.4	0.8
87.5°	0.4	0.8	0.8	0.4	0.4	0.8	0.4	0.4	0.4	0.4	0.4
90°	0.4	0.8	0.8	0.4	0.4	0.4	0.4	0.8	0.4	0.4	0.4
92.5°	0.8	1.2	1.2	0.8	0.8	0.8	0.8	0.8	1.2	0.8	0.4
95°	1.2	0.8	1.2	0.8	0.8	0.8	0.8	0.8	0.4	0.4	0.4
97.5°	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4
100°	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.4	0.0
102.5°	0.4	0.4	0.8	0.4	0.4	0.8	0.8	0.4	0.4	0.4	0.4
105°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
107.5°	0.0	0.4	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.0	0.4
110°	0.4	0.4	0.4	0.0	0.0	0.4	0.0	0.4	0.4	0.4	0.0



TEST NUMBER: P273389

CATALOG NUMBER: 0.03-5W-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°	0.4	0.4	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.4
120°	0.0	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.0	0.4	0.0
122.5°	0.4	0.4	0.4	0.4	0.8	0.4	0.0	0.4	0.4	0.8	0.4
125°	0.4	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
127.5°	0.0	0.4	0.4	0.4	0.4	0.0	0.4	0.0	0.0	0.0	0.0
130°	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.0
132.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.4	0.4	0.4	0.4
135°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4
137.5°	0.4	0.8	0.8	0.8	0.8	0.8	0.4	0.8	0.4	0.8	0.4
140°	0.4	0.0	0.0	0.4	0.4	0.4	0.4	0.0	0.4	0.0	0.0
142.5°	0.4	0.4	0.0	0.0	0.0	0.4	0.0	0.4	0.4	0.0	0.0
145°	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.0
147.5°	0.4	0.4	0.8	0.8	0.4	0.4	0.8	0.4	0.4	0.4	0.4
150°	0.0	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.4	0.4	0.8	0.4	0.8	0.4	0.4	0.4	0.4	0.4	0.4
155°	0.4	0.4	0.4	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.0
157.5°	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.0	0.0
160°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0
162.5°	0.4	0.4	0.0	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0
165°	0.4	0.0	0.4	0.4	0.4	0.0	0.4	0.4	0.0	0.4	0.0
167.5°	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.4	0.0	0.4	0.0
170°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
172.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.4	0.4
175°	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
177.5°	0.4	0.4	0.4	0.8	0.0	0.4	0.4	0.4	0.0	0.4	0.0
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4



TEST NUMBER: P273389

CATALOG NUMBER: 0.03-5W-840-91-ID-STD-UNV-AN-3F0

**CANDELA DISTRIBUTION (continued):**

	150°	155°	157.5°	160°	165°	170°	175°	180°
0°	111.5	111.5	111.5	111.5	111.5	111.5	111.5	111.5
2.5°	103.0	102.2	101.8	101.5	101.1	101.1	101.5	101.1
5°	96.1	94.9	94.5	94.1	93.7	93.4	93.7	93.4
7.5°	88.3	87.6	87.2	86.4	85.6	85.6	85.6	85.6
10°	81.4	80.2	79.5	78.7	77.9	77.5	77.5	77.5
12.5°	74.1	72.1	71.4	71.0	69.4	69.4	69.1	68.7
15°	66.4	64.4	63.7	62.5	61.7	60.6	61.0	60.6
17.5°	58.6	56.3	55.2	54.0	53.2	52.1	52.1	51.3
20°	50.2	47.8	46.7	45.5	44.0	42.8	42.8	42.1
22.5°	41.7	38.6	37.8	36.3	35.1	33.6	33.2	32.4
25°	32.8	30.1	28.5	27.4	25.8	24.3	23.5	23.9
27.5°	24.7	21.6	20.4	19.3	17.4	15.8	15.0	15.0
30°	16.2	13.1	12.0	11.2	9.6	8.9	8.1	8.5
32.5°	10.4	8.9	8.1	6.9	6.2	5.4	5.4	5.0
35°	6.2	5.0	4.2	3.9	2.7	2.3	1.9	1.9
37.5°	3.1	1.9	1.2	0.8	0.4	0.4	0.4	0.0
40°	1.5	0.8	0.4	0.4	0.0	0.4	0.4	0.4
42.5°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.4	0.0	0.0	0.0	0.0	0.4	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.4	0.4	0.0	0.0	0.4	0.0	0.0	0.0
52.5°	0.4	0.8	0.4	0.8	0.4	0.4	0.4	0.0
55°	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.4	0.4	0.8	0.0	0.4	0.8	0.4	0.0
62.5°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.4	0.4	0.4	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°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.4	0.4	0.4	0.4	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.4	0.4	0.0	0.0	0.0
80°	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.4	0.0	0.0	0.4	0.0	0.4	0.0
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
87.5°	0.4	0.4	0.4	0.0	0.4	0.4	0.0	0.4
90°	0.4	0.4	0.4	0.4	0.4	0.0	0.0	0.4
92.5°	0.8	0.4	0.4	0.8	0.4	0.4	0.4	1.2
95°	0.4	0.4	0.4	0.8	0.8	0.4	0.4	0.8
97.5°	0.0	0.4	0.0	0.0	0.4	0.4	0.4	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.4	0.4	0.0	0.4	0.8	0.4	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
107.5°	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.4
110°	0.4	0.4	0.4	0.0	0.0	0.4	0.4	0.0



TEST NUMBER: P273389

CATALOG NUMBER: 0.03-5W-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	0.4	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.4	0.4	0.4	0.0	0.0	0.0	0.4
125°	0.4	0.4	0.4	0.4	0.0	0.4	0.4	0.4
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°	0.4	0.0	0.0	0.0	0.4	0.4	0.0	0.0
135°	0.0	0.4	0.4	0.4	0.0	0.0	0.0	0.0
137.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	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	0.4	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.4	0.4	0.4	0.4	0.0	0.0	0.4	0.0
155°	0.0	0.4	0.0	0.4	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0
160°	0.4	0.0	0.4	0.4	0.4	0.4	0.0	0.0
162.5°	0.0	0.0	0.4	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	0.4	0.0	0.0	0.0	0.0	0.4	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4

(END OF REPORT)