

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: iO LED

Report Number: P972458

Luminaire Tested: MFO-06W-940-ASYM-X-1F-UNV-STD

Issue Date: 2/27/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P972458  
SCALED TEST REPORT  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 2/27/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: iO LED  
Catalog Number: MFO-06W-940-ASYM-X-1F-UNV-STD  
Description: iO LED MiniO-FLEX LINEAR LIGHTING WITH ASYMMETRIC OPTICS  
6 WATTS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

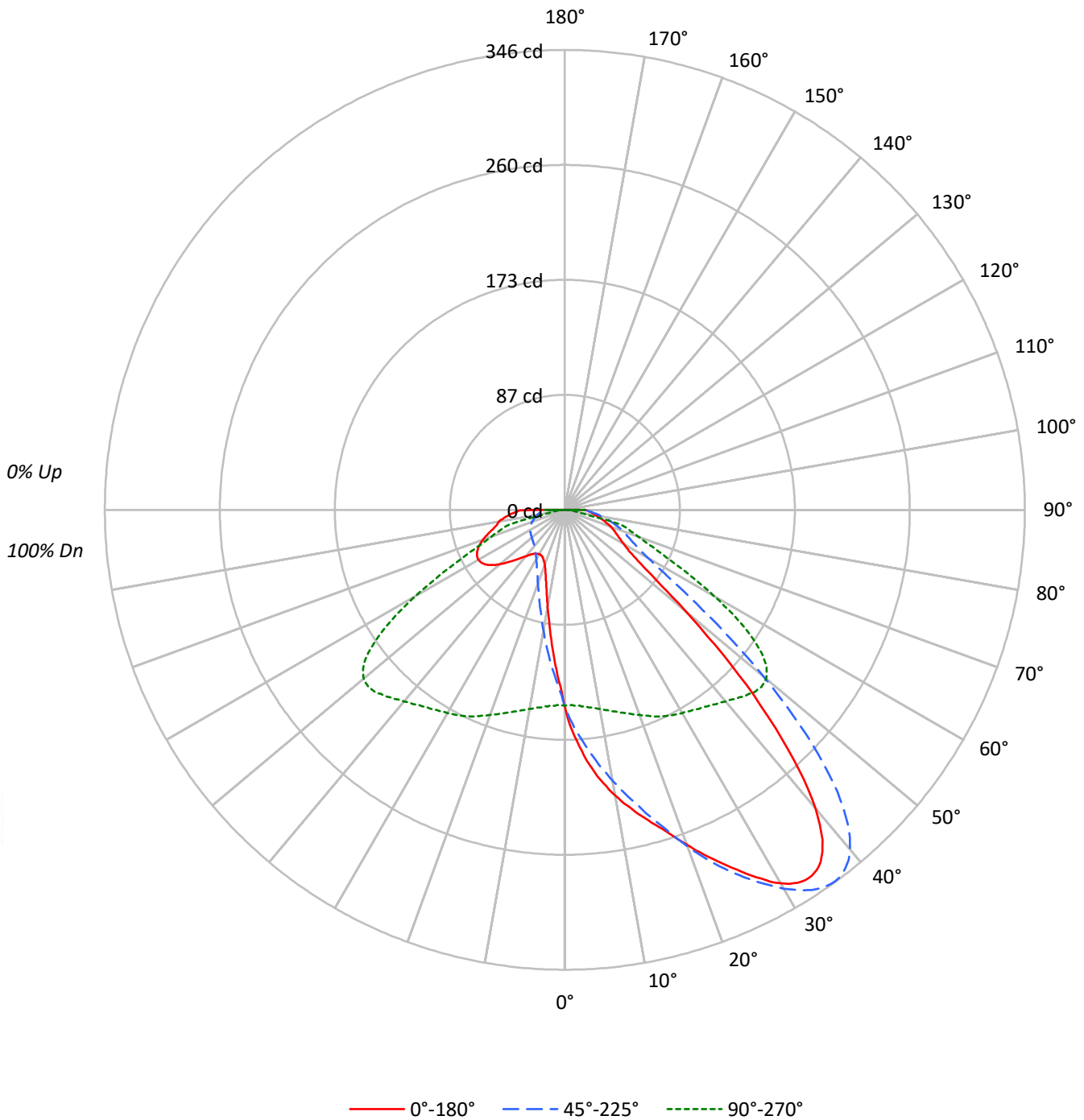
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 578.4 lumens  
Efficiency: N/A  
Efficacy: 101.5 lumens/watt  
Spacing Criteria (0/90/45): 1.7 / 1.9 / 1.61  
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 0.08' x H: 0.03')  
CIE Type: Direct  
  
Input Watts (W): 5.7  
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: 24 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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	108	103	99	94	105	101	97	93	96	93	90	93	90	87	89	87	85	82				
2	98	90	83	77	96	88	81	76	84	79	74	81	77	73	78	74	71	69				
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58				
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49				
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42				
6	69	56	47	40	67	55	46	40	53	45	40	51	45	39	50	44	39	37				
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32				
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29				
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25				
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°	135°	180°
0°	20917	20917	20917	20917	20917
5°	26004	24686	21110	16240	14480
10°	29303	28236	21810	12589	9964
15°	31953	31984	22989	9930	7245
20°	35136	36486	24530	8018	5784
25°	38941	41151	26449	6754	5166
30°	42860	45590	28437	5943	5085
35°	44343	48912	30730	5444	5417
40°	40260	48840	33965	5194	6244
45°	29567	42812	38133	5150	7604
50°	17457	31333	42086	5190	9377
55°	10416	19560	41615	5328	11145
60°	8383	13184	34865	5475	12353
65°	7599	11146	26460	5673	12843
70°	7071	10191	22381	5760	12655
75°	6363	9356	21293	5845	12020
80°	5748	8165	6793	6007	12175
85°	5525	7204	6099	6326	11698

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 90°  
 Luminance: 68538 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	14.1	2.4
10°-20°	44.0	7.6
20°-30°	80.4	13.9
30°-40°	117.1	20.3
40°-50°	121.9	21.1
50°-60°	84.7	14.7
60°-70°	54.7	9.5
70°-80°	38.1	6.6
80°-90°	23.2	4.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
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°	138.5	23.9
0°-40°	255.7	44.2
0°-60°	462.3	79.9
0°-90°	578.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	578.4	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	147	147	147	147	147	
5°	189	178	148	117	105	19
15°	242	236	158	73	55	69
25°	297	302	171	50	39	138
35°	331	345	181	38	40	203
45°	209	281	196	34	54	159
55°	67	115	176	31	72	65
65°	43	56	84	28	72	43
75°	30	37	43	23	56	32
85°	20	20	5	18	42	21
90°	15	15	15	15	15	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3	147.3
1°	158.8	157.7	155.0	151.3	147.2	143.1	139.8	137.5	136.8
2°	166.7	165.1	160.9	154.5	146.9	139.5	133.5	129.4	128.4
3°	174.6	172.3	166.5	157.9	147.6	137.0	128.1	122.4	120.5
4°	181.9	179.3	172.4	161.4	147.6	133.6	122.1	114.9	112.7
5°	189.1	186.2	178.0	165.0	148.5	131.2	117.1	108.2	105.3
6°	195.6	192.7	184.0	168.8	148.7	128.0	111.6	101.2	98.1
7°	201.8	198.8	189.7	172.8	149.8	125.7	106.7	95.1	91.6
8°	207.6	204.7	195.4	176.7	150.1	122.7	101.5	89.0	85.3
9°	213.0	210.3	201.0	180.9	151.4	120.5	97.0	83.6	79.6
10°	218.2	215.9	206.8	185.3	152.1	117.6	92.2	78.4	74.2
11°	223.2	221.1	212.4	189.7	153.3	115.4	88.1	73.8	69.5
12°	227.8	226.4	218.3	194.6	154.1	112.5	83.8	69.4	65.2
13°	232.6	231.6	224.0	199.2	155.4	110.3	80.1	65.5	61.4
14°	237.3	236.9	230.0	204.2	156.4	107.6	76.5	61.9	57.9
15°	241.7	242.1	236.1	209.2	157.7	105.6	73.3	58.8	54.8
16°	246.4	247.4	242.3	214.6	158.8	103.0	69.9	55.7	52.1
17°	251.3	253.0	248.6	220.1	160.2	101.0	67.0	53.2	49.7
18°	256.5	258.7	255.3	225.8	161.4	98.5	64.2	50.7	47.5
19°	262.1	265.1	262.1	231.4	162.9	96.6	61.6	48.7	45.7
20°	267.9	271.6	269.4	237.4	164.2	94.4	59.2	46.8	44.1
21°	274.2	278.3	276.4	243.3	165.8	92.4	57.0	45.2	42.8
22°	279.8	284.7	283.2	249.7	167.2	90.4	54.8	43.7	41.7
23°	285.6	290.6	289.5	255.3	168.7	88.6	52.9	42.5	40.8
24°	291.3	296.4	295.6	260.8	170.2	86.7	51.1	41.4	40.0
25°	297.0	302.5	301.6	265.7	171.3	85.2	49.5	40.5	39.4
26°	302.8	308.4	307.3	270.9	172.7	83.5	48.0	39.8	39.0
27°	308.8	314.4	313.0	275.0	173.7	81.9	46.5	39.1	38.7
28°	314.2	320.8	318.6	279.4	174.8	80.3	45.2	38.6	38.5
29°	319.9	327.0	323.9	283.3	175.5	78.8	44.0	38.2	38.4
30°	324.5	332.7	329.1	287.3	176.6	77.4	42.9	37.9	38.5
31°	328.3	337.7	333.5	290.5	177.2	75.9	41.8	37.7	38.7
32°	330.8	341.9	337.6	293.7	178.3	74.6	40.9	37.6	38.9
33°	332.3	345.0	341.1	296.2	179.1	73.4	40.0	37.6	39.3
34°	332.2	347.1	343.4	298.9	180.4	72.2	39.2	37.7	39.8
35°	330.7	347.9	345.0	300.2	181.2	71.0	38.4	37.9	40.4
36°	327.3	347.0	345.6	301.5	182.8	70.0	37.8	38.1	41.2
37°	322.0	345.0	345.0	301.4	183.6	68.9	37.1	38.5	42.0
38°	314.9	341.1	342.5	301.3	185.3	68.0	36.6	39.0	43.0
39°	304.9	335.4	339.1	299.8	186.3	66.9	36.1	39.5	44.2
40°	293.4	327.8	333.8	297.8	188.1	66.2	35.5	40.1	45.5
41°	278.9	318.4	326.9	294.4	189.3	65.3	35.1	40.9	46.8
42°	263.5	306.7	318.0	290.5	191.4	64.7	34.7	41.6	48.4
43°	245.9	293.6	307.3	285.1	192.8	63.7	34.4	42.5	50.0
44°	228.2	278.3	295.0	279.0	194.7	63.2	34.0	43.5	51.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
45°	208.8	262.1	281.0	271.5	195.9	62.3	33.8	44.6	53.7
46°	190.1	243.9	265.4	263.2	197.7	61.8	33.4	45.6	55.6
47°	170.7	225.2	249.1	253.9	198.4	60.8	33.2	46.9	57.6
48°	152.3	205.0	231.3	243.8	199.0	60.3	32.9	48.1	59.7
49°	134.3	184.9	213.7	233.0	198.4	59.1	32.7	49.5	61.6
50°	118.4	164.6	195.6	221.7	197.7	58.4	32.4	50.7	63.6
51°	103.8	145.7	177.7	209.9	195.3	57.0	32.2	52.2	65.5
52°	91.8	127.8	160.1	197.4	192.6	55.9	31.9	53.4	67.4
53°	81.5	112.7	143.8	184.7	188.1	54.2	31.8	54.8	69.0
54°	73.6	99.5	128.2	171.6	182.7	52.9	31.5	55.9	70.6
55°	67.2	88.9	114.9	158.8	175.7	50.8	31.3	57.2	71.9
56°	62.5	80.3	102.7	145.8	168.1	49.0	31.0	58.2	73.0
57°	58.6	73.7	92.9	133.5	159.3	46.8	30.8	59.2	73.8
58°	55.7	68.2	84.3	121.5	149.8	44.8	30.5	59.8	74.5
59°	53.0	64.0	77.6	110.7	139.9	42.5	30.3	60.6	74.8
60°	50.9	60.4	72.0	100.5	129.5	40.5	29.9	60.8	75.0
61°	49.0	57.5	67.6	91.9	119.5	38.3	29.7	61.3	75.0
62°	47.3	54.9	63.9	84.4	109.5	36.5	29.3	61.1	74.8
63°	45.7	52.8	60.9	78.2	100.2	34.5	29.1	61.3	74.2
64°	44.3	50.6	58.1	72.8	91.6	33.0	28.7	60.8	73.4
65°	42.9	48.8	55.8	68.4	84.1	31.3	28.4	60.5	72.5
66°	41.7	47.0	53.6	64.6	77.4	30.0	27.9	59.7	71.4
67°	40.4	45.3	51.5	61.3	71.7	28.7	27.6	59.2	70.2
68°	39.2	43.6	49.6	58.3	66.6	27.6	27.0	58.1	68.7
69°	37.9	42.0	47.8	55.7	62.4	26.4	26.6	57.2	67.2
70°	36.6	40.4	46.0	53.3	58.6	25.5	26.0	55.8	65.5
71°	35.3	38.9	44.3	51.2	55.3	24.4	25.6	54.7	63.7
72°	33.9	37.2	42.5	49.1	52.3	23.6	25.0	53.1	61.7
73°	32.5	35.6	40.8	47.4	49.8	22.7	24.6	51.9	59.8
74°	31.1	33.9	39.0	45.7	47.4	22.1	23.8	50.2	57.9
75°	29.7	32.2	37.3	44.2	43.4	21.4	23.3	48.9	56.1
76°	28.4	30.5	35.4	42.8	33.1	20.9	22.6	47.4	54.4
77°	27.1	28.8	33.6	41.5	22.9	20.4	22.1	46.3	53.0
78°	25.8	27.3	31.7	40.3	15.6	20.2	21.4	45.2	51.9
79°	24.7	25.8	29.9	39.9	12.1	19.7	21.1	44.6	51.0
80°	23.7	24.5	28.0	37.8	9.8	18.9	20.6	43.8	50.2
81°	22.8	23.3	26.4	34.6	8.5	18.1	20.3	43.0	48.7
82°	21.9	22.2	24.8	31.6	7.3	17.1	19.7	41.3	46.9
83°	21.1	21.1	23.3	29.1	6.5	16.2	19.3	39.9	45.2
84°	20.4	20.2	21.8	26.8	5.6	15.6	18.5	38.2	43.4
85°	19.6	19.3	20.5	24.9	5.1	14.8	18.0	36.7	41.5
86°	18.9	18.6	19.2	23.2	4.4	14.2	17.2	34.9	39.6
87°	17.8	17.6	17.9	21.3	3.9	13.5	16.6	33.5	37.9
88°	16.8	16.6	16.7	19.5	3.0	12.8	15.9	31.8	36.0
89°	15.7	15.4	15.2	17.2	2.4	12.0	15.3	30.2	33.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
90°	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3

(END OF REPORT)