

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: P972454

Luminaire Tested: MFO-06W-930-ASYM-X-1F-UNV-STD

Issue Date: 2/27/2025

Test Information

Test Method: LM-79-2019
Report Number: P972454
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-930-ASYM-X-1F-UNV-STD
Description: iO LED MiniO-FLEX LINEAR LIGHTING WITH ASYMMETRIC OPTICS
6 WATTS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 550.5 lumens
Efficiency: N/A
Efficacy: 96.6 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

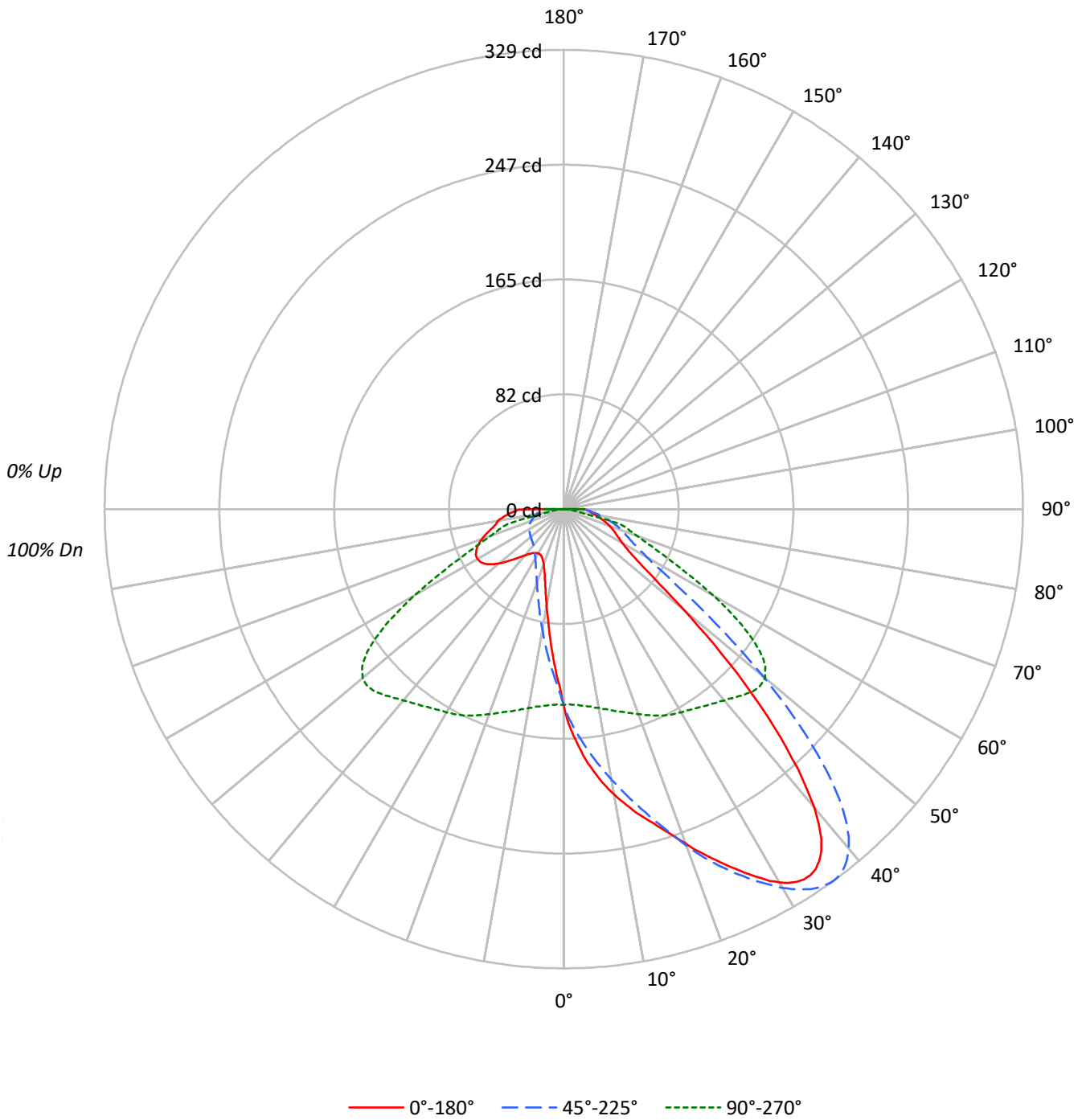
Input Watts (W): 5.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	19909	19909	19909	19909	19909
5°	24753	23507	20086	15464	13779
10°	27892	26884	20749	11988	9481
15°	30406	30439	21881	9442	6901
20°	33431	34726	23350	7625	5508
25°	37066	39173	25183	6426	4917
30°	40787	43401	27068	5652	4834
35°	42198	46559	29254	5189	5149
40°	38326	46484	32322	4945	5942
45°	28137	40740	36283	4891	7236
50°	16616	29827	40063	4950	8935
55°	9920	18606	39602	5073	10602
60°	7988	12543	33196	5219	11760
65°	7245	10606	25201	5413	12223
70°	6743	9704	21273	5472	12036
75°	6063	8905	20263	5569	11441
80°	5457	7786	6446	5716	11569
85°	5271	6853	5860	6009	11134

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 90°
 Luminance: 65403 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.5	2.4
10°-20°	41.9	7.6
20°-30°	76.5	13.9
30°-40°	111.5	20.3
40°-50°	116.1	21.1
50°-60°	80.7	14.7
60°-70°	52.1	9.5
70°-80°	36.2	6.6
80°-90°	22.1	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°	131.8	23.9
0°-40°	243.3	44.2
0°-60°	440.1	79.9
0°-90°	550.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	550.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	140	140	140	140	140	
5°	180	170	141	112	100	18
15°	230	225	150	70	52	66
25°	283	287	163	47	38	132
35°	315	328	172	37	38	193
45°	199	267	186	32	51	151
55°	64	109	167	30	68	62
65°	41	53	80	27	69	41
75°	28	36	41	22	53	30
85°	19	20	5	17	40	20
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°	140.2	140.2	140.2	140.2	140.2	140.2	140.2	140.2	140.2
1°	151.2	150.1	147.5	144.0	140.1	136.2	133.0	130.9	130.2
2°	158.7	157.1	153.1	147.1	139.9	132.8	127.0	123.2	122.2
3°	166.2	164.0	158.5	150.3	140.5	130.4	121.9	116.5	114.7
4°	173.2	170.7	164.1	153.6	140.4	127.1	116.3	109.3	107.2
5°	180.0	177.2	169.5	157.1	141.3	124.9	111.5	103.0	100.2
6°	186.2	183.4	175.1	160.6	141.5	121.9	106.2	96.3	93.4
7°	192.1	189.2	180.5	164.4	142.5	119.7	101.6	90.6	87.2
8°	197.6	194.8	186.0	168.2	142.9	116.8	96.6	84.7	81.2
9°	202.8	200.2	191.3	172.2	144.1	114.7	92.3	79.6	75.8
10°	207.7	205.5	196.9	176.4	144.7	111.9	87.8	74.6	70.6
11°	212.4	210.4	202.1	180.6	145.9	109.8	83.9	70.3	66.2
12°	216.8	215.5	207.8	185.2	146.6	107.1	79.8	66.0	62.1
13°	221.4	220.4	213.2	189.6	147.9	105.0	76.3	62.4	58.4
14°	225.9	225.5	218.9	194.4	148.8	102.4	72.8	58.9	55.1
15°	230.0	230.4	224.7	199.1	150.1	100.5	69.7	55.9	52.2
16°	234.5	235.5	230.7	204.3	151.1	98.1	66.6	53.0	49.6
17°	239.2	240.8	236.6	209.5	152.5	96.1	63.8	50.6	47.3
18°	244.1	246.3	243.0	214.9	153.6	93.8	61.1	48.3	45.3
19°	249.5	252.3	249.4	220.2	155.0	92.0	58.7	46.4	43.5
20°	254.9	258.5	256.4	226.0	156.3	89.8	56.3	44.5	42.0
21°	261.0	264.9	263.1	231.6	157.8	88.0	54.3	43.0	40.8
22°	266.3	270.9	269.6	237.7	159.2	86.0	52.2	41.6	39.7
23°	271.9	276.6	275.5	243.0	160.5	84.3	50.4	40.5	38.8
24°	277.3	282.1	281.3	248.2	161.9	82.6	48.7	39.4	38.1
25°	282.7	288.0	287.1	252.9	163.1	81.1	47.1	38.6	37.5
26°	288.2	293.6	292.5	257.9	164.4	79.5	45.6	37.8	37.1
27°	293.9	299.3	297.9	261.8	165.3	78.0	44.3	37.2	36.8
28°	299.1	305.4	303.3	265.9	166.4	76.5	43.0	36.8	36.6
29°	304.5	311.3	308.2	269.6	167.0	75.0	41.8	36.4	36.6
30°	308.8	316.6	313.3	273.5	168.1	73.7	40.8	36.1	36.6
31°	312.4	321.5	317.5	276.5	168.7	72.3	39.8	35.9	36.8
32°	314.9	325.4	321.3	279.6	169.7	71.0	38.9	35.8	37.0
33°	316.3	328.3	324.6	281.9	170.5	69.8	38.0	35.8	37.4
34°	316.2	330.4	326.9	284.5	171.7	68.7	37.3	35.9	37.9
35°	314.7	331.2	328.4	285.7	172.5	67.5	36.6	36.1	38.4
36°	311.5	330.2	328.9	286.9	174.0	66.6	36.0	36.3	39.2
37°	306.5	328.4	328.4	286.9	174.8	65.5	35.3	36.7	40.0
38°	299.7	324.7	326.0	286.8	176.4	64.7	34.8	37.1	41.0
39°	290.2	319.2	322.7	285.3	177.3	63.7	34.3	37.6	42.1
40°	279.3	312.0	317.7	283.5	179.0	63.0	33.8	38.2	43.3
41°	265.5	303.1	311.1	280.2	180.2	62.1	33.4	38.9	44.6
42°	250.8	291.9	302.7	276.5	182.2	61.6	33.1	39.6	46.0
43°	234.1	279.5	292.5	271.3	183.5	60.6	32.7	40.5	47.6
44°	217.2	264.9	280.8	265.6	185.3	60.2	32.4	41.4	49.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
45°	198.7	249.4	267.4	258.4	186.4	59.3	32.1	42.4	51.1
46°	180.9	232.2	252.6	250.5	188.2	58.8	31.8	43.4	53.0
47°	162.4	214.3	237.1	241.7	188.8	57.9	31.6	44.6	54.8
48°	145.0	195.1	220.2	232.0	189.4	57.4	31.3	45.8	56.8
49°	127.8	176.0	203.4	221.8	188.8	56.2	31.1	47.1	58.7
50°	112.7	156.6	186.2	211.0	188.2	55.5	30.9	48.3	60.6
51°	98.8	138.6	169.2	199.8	185.8	54.3	30.7	49.7	62.4
52°	87.4	121.7	152.4	187.9	183.3	53.2	30.4	50.8	64.1
53°	77.5	107.3	136.8	175.8	179.0	51.6	30.2	52.1	65.7
54°	70.0	94.7	122.0	163.3	173.9	50.3	30.0	53.2	67.2
55°	64.0	84.7	109.3	151.1	167.2	48.3	29.8	54.5	68.4
56°	59.5	76.5	97.8	138.8	160.0	46.7	29.5	55.3	69.5
57°	55.8	70.1	88.4	127.1	151.6	44.5	29.3	56.4	70.3
58°	53.0	64.9	80.2	115.7	142.6	42.7	29.0	56.9	70.9
59°	50.5	60.9	73.9	105.3	133.1	40.5	28.8	57.6	71.2
60°	48.5	57.5	68.5	95.7	123.3	38.6	28.5	57.9	71.4
61°	46.6	54.7	64.4	87.5	113.7	36.5	28.3	58.3	71.4
62°	45.0	52.3	60.8	80.3	104.2	34.7	27.9	58.2	71.2
63°	43.5	50.2	58.0	74.4	95.4	32.9	27.7	58.3	70.7
64°	42.2	48.2	55.3	69.2	87.2	31.4	27.3	57.9	69.9
65°	40.9	46.4	53.1	65.1	80.1	29.8	27.1	57.6	69.0
66°	39.7	44.7	51.0	61.5	73.6	28.6	26.5	56.8	68.0
67°	38.4	43.1	49.1	58.3	68.2	27.3	26.3	56.3	66.8
68°	37.3	41.5	47.2	55.5	63.4	26.3	25.7	55.3	65.4
69°	36.0	40.0	45.5	53.0	59.4	25.1	25.3	54.4	63.9
70°	34.9	38.5	43.8	50.8	55.7	24.2	24.7	53.1	62.3
71°	33.6	37.0	42.2	48.7	52.7	23.2	24.4	52.1	60.6
72°	32.3	35.5	40.5	46.8	49.8	22.5	23.8	50.6	58.8
73°	31.0	33.9	38.9	45.1	47.4	21.6	23.4	49.4	56.9
74°	29.6	32.2	37.1	43.5	45.1	21.0	22.7	47.8	55.1
75°	28.3	30.6	35.5	42.1	41.3	20.3	22.2	46.6	53.4
76°	27.0	29.0	33.7	40.7	31.5	19.9	21.5	45.1	51.8
77°	25.8	27.4	31.9	39.5	21.8	19.4	21.1	44.1	50.5
78°	24.6	26.0	30.1	38.4	14.8	19.2	20.4	43.0	49.4
79°	23.5	24.6	28.4	38.0	11.5	18.7	20.1	42.5	48.6
80°	22.5	23.3	26.7	35.9	9.3	18.0	19.6	41.7	47.7
81°	21.7	22.2	25.1	32.9	8.1	17.2	19.3	40.9	46.4
82°	20.8	21.1	23.6	30.0	6.9	16.3	18.8	39.3	44.6
83°	20.1	20.1	22.2	27.7	6.2	15.4	18.3	38.0	43.1
84°	19.4	19.3	20.8	25.5	5.4	14.8	17.6	36.4	41.3
85°	18.7	18.4	19.5	23.7	4.9	14.1	17.1	35.0	39.5
86°	18.0	17.7	18.3	22.0	4.2	13.5	16.3	33.3	37.7
87°	17.0	16.7	17.1	20.3	3.7	12.8	15.8	31.9	36.1
88°	16.0	15.8	15.9	18.6	2.9	12.2	15.1	30.3	34.3
89°	14.9	14.7	14.4	16.4	2.3	11.4	14.6	28.8	32.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
90°	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14.6

(END OF REPORT)