

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: P972453

Luminaire Tested: MFO-06W-927-ASYM-X-4F-UNV-STD

Issue Date: 2/27/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P972453  
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-927-ASYM-X-4F-UNV-STD  
Description: iO LED MiniO-FLEX LINEAR LIGHTING WITH ASYMMETRIC OPTICS  
6 WATTS PER FOOT  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

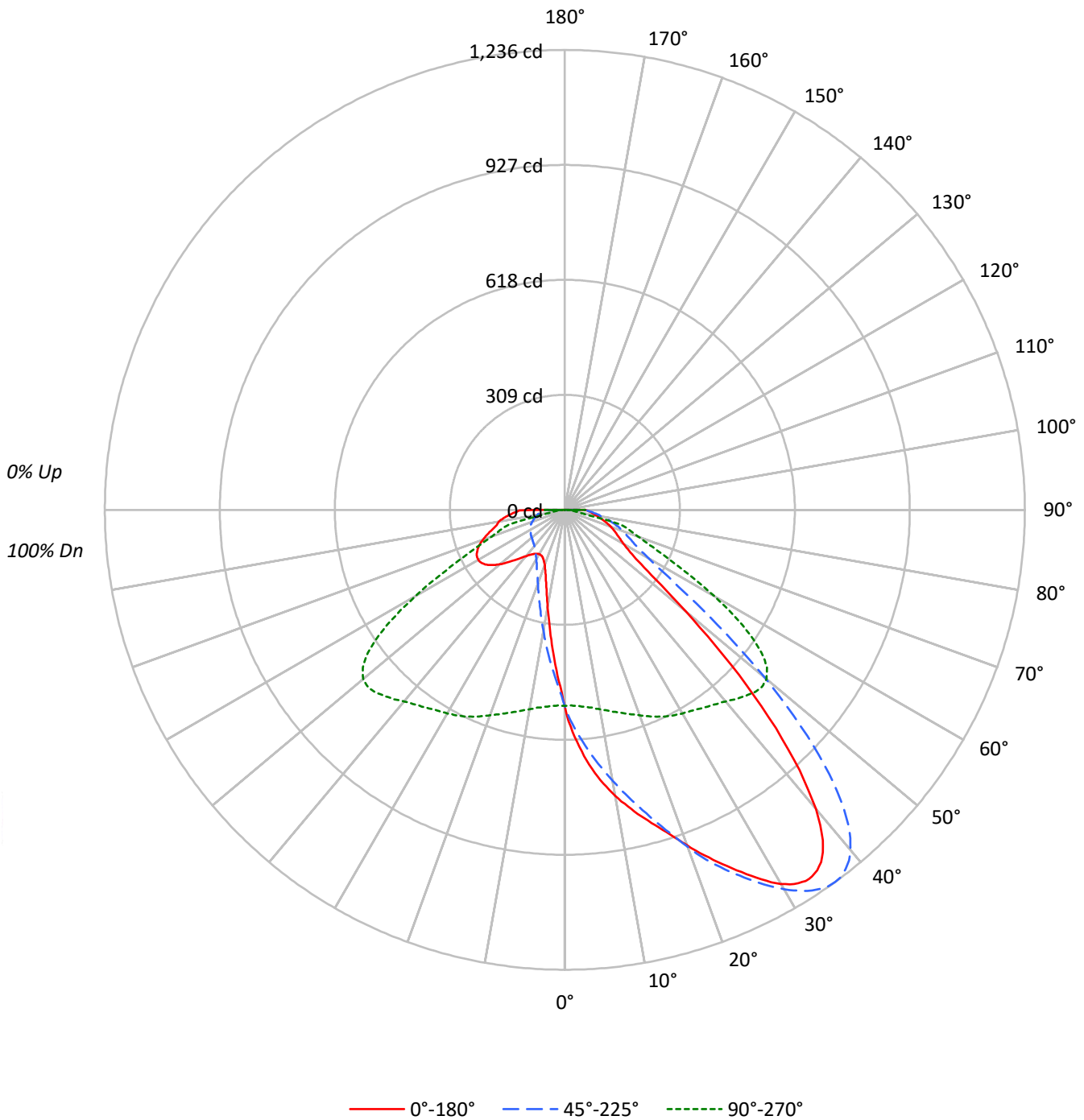
Lumens per Lamp: N/A  
Luminaire Lumens: 2069.0 lumens  
Efficiency: N/A  
Efficacy: 90.7 lumens/watt  
Spacing Criteria (0/90/45): 1.7 / 1.91 / 1.61  
Luminous Opening: Rectangular w/ Sides (W: 4' x L: 0.08' x H: 0.03')  
CIE Type: Direct  
  
Input Watts (W): 22.8  
Input Voltage (V): 120  
Input Current (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°	18702	18702	18702	18702	18702
5°	23254	22114	18914	14548	12954
10°	26200	25330	19583	11296	8910
15°	28575	28719	20696	8913	6481
20°	31418	32806	22124	7207	5177
25°	34824	37055	23916	6083	4625
30°	38330	41113	25781	5356	4547
35°	39654	44173	27941	4921	4844
40°	36010	44167	30978	4705	5578
45°	26445	38781	34903	4657	6797
50°	15617	28434	38699	4714	8389
55°	9323	17785	38471	4847	9967
60°	7498	12018	32450	4992	11052
65°	6798	10190	24862	5190	11488
70°	6327	9341	21282	5275	11312
75°	5689	8606	20703	5385	10750
80°	5136	7570	6848	5562	10878
85°	4947	6718	6835	5884	10472

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 90°  
 Luminance: 245036 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	50.6	2.4
10°-20°	157.4	7.6
20°-30°	287.5	13.9
30°-40°	419.1	20.3
40°-50°	436.2	21.1
50°-60°	303.2	14.7
60°-70°	195.8	9.5
70°-80°	136.1	6.6
80°-90°	83.1	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°	495.5	23.9
0°-40°	914.6	44.2
0°-60°	1653.9	79.9
0°-90°	2069.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2069.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	527	527	527	527	527	
5°	676	637	531	419	377	68
15°	865	844	564	262	196	248
25°	1062	1079	613	177	141	495
35°	1183	1234	648	138	144	725
45°	747	1005	701	121	192	569
55°	241	411	629	112	257	233
65°	154	200	301	102	259	153
75°	106	133	155	83	201	113
85°	70	73	18	64	149	76
90°	55	55	55	55	55	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8	526.8
1°	568.2	564.0	554.4	541.2	526.6	512.1	499.9	492.0	489.4
2°	596.4	590.6	575.4	552.7	525.7	499.0	477.4	463.0	459.5
3°	624.7	616.5	595.6	564.7	527.9	490.1	458.1	437.8	431.0
4°	650.9	641.6	616.6	577.5	527.8	477.8	437.0	411.0	403.0
5°	676.4	666.0	636.9	590.3	531.1	469.3	419.0	387.2	376.8
6°	699.8	689.3	658.2	603.7	531.9	458.0	399.2	362.1	351.0
7°	722.0	711.2	678.5	618.0	535.7	449.8	381.8	340.4	327.6
8°	742.6	732.2	698.9	632.2	537.1	438.9	363.1	318.3	305.1
9°	762.1	752.4	719.1	647.3	541.4	431.1	347.0	299.1	284.7
10°	780.4	772.3	740.0	662.9	544.0	420.7	330.0	280.3	265.4
11°	798.3	790.9	759.7	678.7	548.3	412.7	315.2	264.0	248.8
12°	814.9	809.8	780.8	696.0	551.1	402.5	299.9	248.2	233.4
13°	832.1	828.5	801.2	712.8	556.0	394.7	286.7	234.5	219.5
14°	848.9	847.5	822.6	730.6	559.4	384.9	273.6	221.4	207.1
15°	864.6	866.0	844.5	748.3	564.3	377.7	262.1	210.2	196.1
16°	881.3	885.1	866.9	767.8	568.1	368.6	250.2	199.3	186.2
17°	899.1	905.2	889.4	787.3	573.0	361.2	239.8	190.2	177.7
18°	917.5	925.6	913.4	807.6	577.5	352.5	229.7	181.5	170.1
19°	937.6	948.2	937.4	827.8	582.7	345.6	220.4	174.2	163.7
20°	958.2	971.6	963.6	849.2	587.3	337.5	211.7	167.4	157.9
21°	980.9	995.7	988.9	870.4	593.1	330.6	204.0	161.7	153.3
22°	1001.0	1018.3	1013.1	893.3	598.2	323.3	196.1	156.4	149.2
23°	1021.8	1039.5	1035.5	913.4	603.4	317.0	189.4	152.1	145.9
24°	1042.2	1060.4	1057.4	933.0	608.7	310.3	182.9	148.2	143.2
25°	1062.4	1082.3	1078.9	950.5	612.8	304.7	177.1	145.0	141.1
26°	1083.2	1103.3	1099.2	969.2	617.9	298.8	171.6	142.2	139.6
27°	1104.7	1124.8	1119.5	983.9	621.3	293.0	166.4	140.0	138.4
28°	1124.1	1147.7	1139.8	999.4	625.4	287.4	161.6	138.1	137.7
29°	1144.5	1169.9	1158.5	1013.5	627.7	282.1	157.3	136.7	137.5
30°	1160.8	1190.1	1177.4	1027.8	631.8	277.0	153.4	135.6	137.7
31°	1174.3	1208.2	1193.2	1039.3	634.1	271.6	149.6	135.0	138.3
32°	1183.5	1223.1	1207.7	1050.8	638.0	267.0	146.2	134.5	139.2
33°	1188.9	1234.0	1220.1	1059.6	640.8	262.5	143.0	134.5	140.6
34°	1188.5	1241.7	1228.6	1069.3	645.5	258.2	140.2	134.8	142.3
35°	1182.9	1244.6	1234.3	1073.8	648.3	253.8	137.5	135.5	144.5
36°	1170.9	1241.1	1236.3	1078.5	653.9	250.4	135.1	136.4	147.2
37°	1151.9	1234.2	1234.1	1078.4	656.8	246.3	132.8	137.8	150.3
38°	1126.3	1220.4	1225.4	1077.8	662.9	243.3	130.8	139.4	154.0
39°	1090.9	1199.9	1212.9	1072.4	666.5	239.5	129.0	141.4	158.0
40°	1049.7	1172.6	1194.0	1065.4	672.9	236.9	127.2	143.6	162.6
41°	997.7	1139.1	1169.3	1053.1	677.4	233.4	125.7	146.2	167.6
42°	942.4	1097.0	1137.6	1039.2	684.7	231.4	124.2	148.9	173.1
43°	879.7	1050.3	1099.3	1019.8	689.6	227.9	122.9	152.2	179.0
44°	816.3	995.6	1055.3	998.1	696.6	226.1	121.8	155.5	185.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
45°	747.0	937.5	1005.2	971.3	700.7	222.9	120.7	159.4	192.0
46°	680.0	872.6	949.5	941.6	707.2	221.1	119.6	163.2	199.0
47°	610.5	805.5	891.0	908.3	709.7	217.6	118.7	167.7	206.1
48°	544.9	733.3	827.6	872.0	711.9	215.6	117.7	172.0	213.4
49°	480.4	661.5	764.6	833.6	709.6	211.3	117.0	177.0	220.5
50°	423.7	588.7	699.7	793.1	707.3	208.7	116.0	181.5	227.6
51°	371.1	521.1	635.8	750.8	698.5	203.9	115.3	186.6	234.4
52°	328.4	457.3	572.9	706.1	688.9	200.1	114.3	190.9	241.0
53°	291.5	403.2	514.3	660.9	672.7	194.1	113.7	196.0	246.9
54°	263.3	356.1	458.7	613.8	653.5	189.1	112.6	200.0	252.4
55°	240.6	318.2	411.0	568.0	628.6	181.7	112.0	204.7	257.2
56°	223.6	287.3	367.5	521.6	601.3	175.4	110.8	208.0	261.2
57°	209.8	263.6	332.2	477.7	569.7	167.3	110.2	211.8	264.1
58°	199.1	243.9	301.5	434.7	535.9	160.4	109.0	213.9	266.3
59°	189.8	229.0	277.7	395.9	500.4	152.1	108.4	216.6	267.7
60°	182.1	216.2	257.6	359.6	463.3	145.0	107.0	217.6	268.4
61°	175.2	205.6	241.9	328.9	427.5	137.0	106.4	219.2	268.5
62°	169.2	196.4	228.6	301.7	391.6	130.5	104.9	218.7	267.5
63°	163.6	188.7	217.8	279.6	358.5	123.5	104.2	219.1	265.6
64°	158.4	181.2	208.0	260.3	327.7	118.0	102.5	217.5	262.7
65°	153.5	174.5	199.7	244.7	301.0	111.9	101.7	216.6	259.4
66°	149.0	168.0	191.7	231.0	276.8	107.4	99.8	213.7	255.4
67°	144.5	161.9	184.4	219.1	256.4	102.6	98.7	211.6	251.0
68°	140.1	155.9	177.4	208.7	238.3	98.8	96.5	207.7	245.8
69°	135.5	150.3	170.9	199.4	223.1	94.4	95.3	204.6	240.3
70°	131.0	144.7	164.5	190.8	209.5	91.1	92.9	199.6	234.2
71°	126.2	139.1	158.5	183.1	197.9	87.3	91.7	195.7	227.8
72°	121.4	133.2	152.1	175.7	187.2	84.4	89.5	190.1	220.9
73°	116.3	127.4	146.1	169.5	178.1	81.3	87.9	185.5	214.0
74°	111.4	121.2	139.6	163.5	169.4	78.9	85.3	179.6	207.1
75°	106.2	115.1	133.3	158.3	155.4	76.5	83.4	175.0	200.7
76°	101.5	108.9	126.6	153.0	118.4	74.8	80.8	169.4	194.8
77°	96.8	103.2	120.1	148.4	82.0	73.1	79.1	165.8	189.6
78°	92.4	97.6	113.2	144.2	55.6	72.3	76.7	161.8	185.8
79°	88.5	92.4	106.9	142.8	43.2	70.4	75.4	159.7	182.6
80°	84.7	87.6	100.3	135.1	35.0	67.6	73.7	156.8	179.4
81°	81.5	83.4	94.4	123.7	30.5	64.6	72.6	153.8	174.4
82°	78.2	79.5	88.6	112.9	25.9	61.3	70.6	147.8	167.8
83°	75.5	75.4	83.3	104.0	23.3	58.0	68.9	142.9	161.8
84°	73.0	72.4	78.0	95.8	20.2	55.8	66.1	136.7	155.2
85°	70.2	69.1	73.3	88.9	18.3	52.9	64.2	131.4	148.6
86°	67.6	66.4	68.7	82.8	15.7	50.9	61.4	125.0	141.8
87°	63.8	62.9	64.2	76.3	13.9	48.2	59.5	119.8	135.5
88°	60.2	59.4	59.9	69.9	10.8	45.7	56.7	113.7	128.9
89°	56.2	55.1	54.3	61.7	8.5	42.8	54.8	108.1	121.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
90°	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7	54.7

(END OF REPORT)