

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: P958947

Luminaire Tested: MFO-06W-940-20-X-1F-UNV-STD

Issue Date: 2/11/2025

Test Information

Test Method: LM-79-2019
Report Number: P958947
SCALED TEST REPORT
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/11/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: iO LED
Catalog Number: MFO-06W-940-20-X-1F-UNV-STD
Description: iO LED MiniO-FLEX LINEAR LIGHTING WITH 20 DEGREE OPTICS. INPUT WATTAGE IN IES FILE REPRESENTS CONSUMPTION IN A RUN, INDIVIDUAL FIXTURE MAY VARY.
6 WATTS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

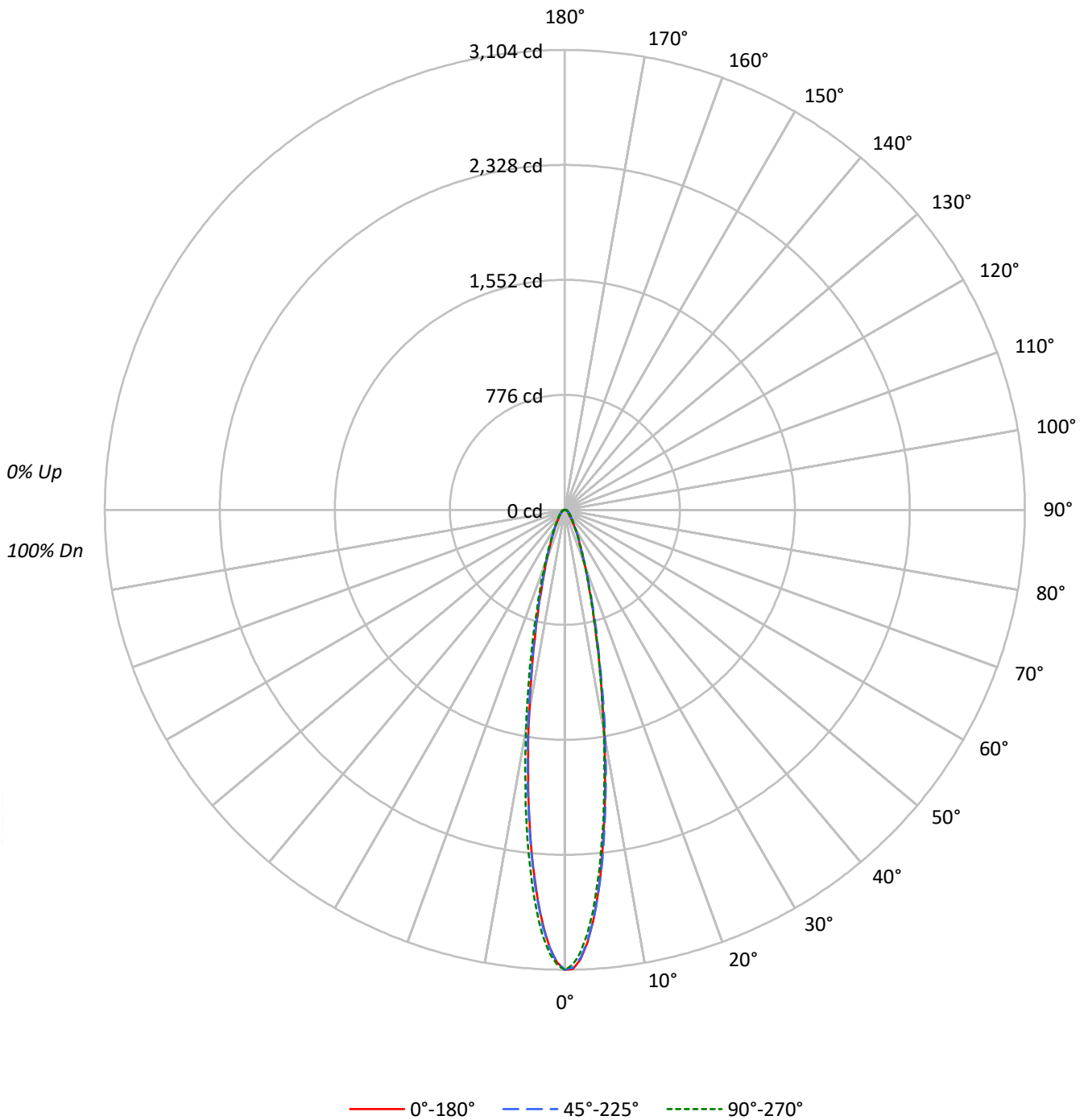
Lumens per Lamp: N/A
Luminaire Lumens: 682.0 lumens
Efficiency: N/A
Efficacy: 119.6 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.33 / 0.36
Luminous Opening: Rectangular w/ Sides (W: 0.08' x L: 1' x H: 0.03')
CIE Type: Direct

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	100	100	100	
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93	93	93	93	
2	108	103	99	96	106	101	98	95	98	95	92	95	93	90	92	90	89	87	87	87	87	
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	86	83	82	82	82	82	
4	99	92	86	82	97	90	86	82	88	84	81	86	83	80	85	82	79	78	78	78	78	
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74	74	74	74	
6	91	83	78	74	90	82	77	74	81	76	73	80	76	73	78	75	72	71	71	71	71	
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	76	72	69	68	68	68	68	
8	85	76	71	68	84	76	71	67	75	70	67	74	70	67	73	69	67	65	65	65	65	
9	82	74	69	65	81	73	68	65	72	68	65	71	67	65	71	67	64	63	63	63	63	
10	79	71	66	63	79	71	66	63	70	66	63	69	65	62	69	65	62	61	61	61	61	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	440809	440809	440809	440809	440809
5°	368061	360322	348381	339269	345686
10°	218345	213255	202351	191136	197725
15°	110629	106923	100868	94772	100031
20°	57651	54188	50914	48581	52542
25°	33335	30290	28334	27480	30525
30°	20611	19048	17712	17455	19951
35°	13482	13185	12216	12221	14347
40°	9335	9788	9015	9159	11087
45°	7397	7679	6995	7267	9071
50°	6961	6311	5647	6023	7855
55°	6679	5379	4728	5192	7129
60°	6408	4706	4019	4578	6704
65°	6198	4195	3437	4095	6418
70°	6034	3700	2821	3611	6225
75°	6231	3211	2143	3161	6231
80°	6793	2800	1504	2800	6862
85°	9448	2319	902	2636	9568

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 90°
 Luminance: 24638 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.7	30.2
10°-20°	212.5	31.2
20°-30°	101.3	14.9
30°-40°	56.9	8.3
40°-50°	37.8	5.5
50°-60°	27.6	4.0
60°-70°	20.0	2.9
70°-80°	12.8	1.9
80°-90°	7.4	1.1
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°	519.5	76.2
0°-40°	576.4	84.5
0°-60°	641.8	94.1
0°-90°	682.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	682.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	3104	3104	3104	3104	3104	
5°	2589	2598	2533	2446	2432	211
15°	759	789	763	700	686	217
25°	216	222	216	201	198	103
35°	80	93	91	86	85	51
45°	38	50	49	48	47	30
55°	28	32	30	30	30	25
65°	20	21	19	20	20	20
75°	13	13	10	13	13	13
85°	8	7	3	8	8	9
90°	6	6	6	6	6	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	3104.2	3104.2	3104.2	3104.2	3104.2	3104.2	3104.2	3104.2	3104.2
1°	3099.3	3096.2	3089.8	3080.2	3069.3	3059.4	3053.0	3050.8	3053.1
2°	3035.3	3034.4	3026.4	3011.1	2991.0	2971.2	2956.1	2949.6	2952.2
3°	2924.5	2926.9	2919.1	2899.4	2871.2	2841.0	2817.2	2806.2	2809.7
4°	2772.7	2779.6	2773.8	2751.2	2715.8	2676.3	2644.0	2628.5	2632.6
5°	2589.2	2600.7	2598.1	2574.4	2533.4	2486.1	2446.3	2426.6	2431.8
6°	2383.4	2399.8	2400.6	2377.2	2332.5	2278.6	2233.2	2210.4	2216.1
7°	2165.4	2186.0	2190.7	2168.6	2122.5	2065.3	2015.2	1990.1	1995.8
8°	1944.1	1968.1	1976.0	1956.0	1910.3	1851.6	1799.4	1772.9	1778.6
9°	1728.1	1753.9	1764.6	1747.1	1703.6	1645.6	1592.7	1565.9	1571.6
10°	1522.7	1549.4	1561.9	1547.0	1506.8	1451.2	1399.9	1373.7	1378.9
11°	1333.0	1359.4	1373.1	1360.9	1324.2	1272.4	1223.8	1198.9	1203.8
12°	1161.2	1186.1	1200.0	1190.1	1157.4	1110.5	1065.9	1042.9	1047.2
13°	1008.8	1032.2	1045.7	1037.4	1008.9	966.9	926.8	906.0	909.7
14°	875.1	896.3	908.9	902.1	877.6	840.7	805.1	786.6	789.9
15°	758.9	777.8	789.3	783.7	763.0	730.8	699.6	683.3	686.2
16°	659.1	675.8	686.0	681.2	663.7	635.9	608.8	594.3	597.0
17°	573.9	588.4	597.1	592.9	578.2	554.4	531.1	518.4	520.7
18°	500.9	513.4	520.7	517.1	504.6	484.3	464.5	453.2	455.3
19°	438.9	449.9	455.8	452.4	441.9	424.6	407.6	397.8	399.5
20°	385.9	395.4	400.1	397.1	388.2	373.4	358.7	350.2	351.7
21°	340.6	349.0	352.6	350.0	342.5	329.6	317.0	309.6	310.8
22°	302.0	309.4	312.0	309.6	303.2	292.0	281.0	274.9	275.8
23°	268.9	275.3	277.2	275.3	269.7	259.9	250.3	245.2	245.7
24°	240.4	246.1	247.5	245.7	240.8	232.2	223.9	219.6	219.8
25°	215.9	221.2	222.0	220.4	216.1	208.6	201.4	197.8	197.7
26°	194.5	199.6	200.0	198.5	194.7	188.2	181.9	178.8	178.5
27°	175.9	181.0	181.0	179.6	176.4	170.6	165.0	162.3	162.0
28°	159.1	164.8	164.4	163.1	160.3	155.2	150.3	147.8	147.6
29°	142.8	150.6	150.1	148.7	146.4	141.8	137.4	135.2	134.9
30°	128.0	138.1	137.5	136.2	134.1	130.0	126.0	124.0	123.9
31°	115.4	127.1	126.4	125.2	123.3	119.7	116.0	114.2	114.1
32°	104.1	117.3	116.6	115.5	113.8	110.5	107.2	105.5	105.4
33°	95.3	108.6	107.9	107.0	105.3	102.4	99.4	97.8	97.7
34°	87.2	100.8	100.0	99.3	97.8	95.1	92.4	91.0	90.8
35°	79.5	93.8	93.0	92.4	91.1	88.5	86.2	84.8	84.6
36°	72.2	87.5	86.8	86.2	85.0	82.7	80.5	79.2	79.1
37°	66.4	81.7	81.1	80.5	79.5	77.4	75.5	74.2	74.0
38°	60.7	76.5	75.9	75.4	74.5	72.6	70.8	69.5	69.4
39°	55.9	71.8	71.2	70.7	69.9	68.2	66.5	65.4	65.2
40°	51.7	67.5	66.9	66.5	65.7	64.2	62.6	61.5	61.4
41°	48.3	63.5	63.0	62.7	61.9	60.5	59.1	58.0	57.9
42°	45.3	59.9	59.5	59.2	58.3	57.1	55.9	54.8	54.7
43°	42.3	56.6	56.2	56.0	55.1	54.0	52.9	51.8	51.7
44°	39.9	53.5	53.2	53.0	52.1	51.1	50.2	49.1	49.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
45°	38.0	50.7	50.4	50.3	49.4	48.5	47.7	46.6	46.6
46°	36.5	48.0	47.9	47.7	46.9	46.1	45.4	44.3	44.3
47°	34.9	45.6	45.5	45.4	44.5	43.9	43.2	42.2	42.2
48°	33.6	43.3	43.3	43.2	42.3	41.8	41.2	40.2	40.3
49°	33.2	41.2	41.3	41.1	40.2	39.8	39.3	38.4	38.5
50°	32.7	39.3	39.4	39.2	38.3	38.0	37.6	36.7	36.9
51°	31.8	37.5	37.6	37.4	36.6	36.3	36.0	35.1	35.3
52°	30.9	35.8	36.0	35.8	34.9	34.7	34.5	33.7	33.9
53°	30.0	34.2	34.4	34.3	33.3	33.3	33.0	32.3	32.6
54°	29.1	32.8	32.9	32.8	31.9	32.0	31.7	31.0	31.3
55°	28.2	31.4	31.6	31.4	30.5	30.7	30.5	29.8	30.1
56°	27.3	30.1	30.3	30.2	29.1	29.4	29.2	28.7	29.0
57°	26.5	28.9	29.0	28.9	27.9	28.3	28.1	27.6	27.9
58°	25.5	27.8	27.9	27.7	26.7	27.2	27.0	26.6	26.9
59°	24.6	26.6	26.8	26.6	25.6	26.0	26.0	25.7	25.8
60°	23.8	25.6	25.7	25.5	24.4	25.0	25.0	24.7	24.9
61°	23.0	24.5	24.8	24.5	23.4	24.0	24.1	23.9	24.0
62°	22.1	23.4	23.8	23.4	22.4	23.0	23.1	23.0	23.0
63°	21.2	22.4	22.8	22.4	21.4	22.0	22.2	22.1	22.1
64°	20.5	21.0	21.9	21.4	20.3	21.1	21.3	21.3	21.3
65°	19.7	19.6	21.0	20.5	19.4	20.1	20.5	20.4	20.4
66°	18.9	18.0	20.1	19.5	18.4	19.2	19.6	19.6	19.6
67°	18.1	16.7	19.2	18.6	17.4	18.3	18.7	18.8	18.7
68°	17.3	15.7	18.3	17.7	16.5	17.4	17.9	18.0	17.9
69°	16.5	14.7	17.5	16.7	15.5	16.5	17.1	17.2	17.1
70°	15.8	14.0	16.7	15.8	14.6	15.6	16.3	16.4	16.3
71°	15.1	13.3	15.9	15.0	13.7	14.8	15.5	15.7	15.5
72°	14.4	12.9	15.1	14.1	12.7	13.9	14.8	14.9	14.8
73°	13.9	12.7	14.3	13.3	11.8	13.1	14.0	14.2	14.1
74°	13.3	12.3	13.5	12.5	10.9	12.4	13.3	13.5	13.4
75°	12.7	11.7	12.8	11.7	10.0	11.6	12.6	12.8	12.7
76°	12.0	11.3	12.1	11.0	9.1	10.9	11.9	12.1	12.1
77°	11.5	10.9	11.5	10.3	8.3	10.2	11.3	11.5	11.5
78°	10.9	10.5	10.8	9.7	7.6	9.6	10.7	10.9	10.9
79°	10.3	10.0	10.2	9.1	6.8	9.0	10.1	10.4	10.3
80°	9.8	9.5	9.6	8.5	6.2	8.5	9.6	9.8	9.9
81°	9.3	9.1	8.8	8.0	5.5	8.0	9.1	9.4	9.4
82°	8.9	8.7	7.7	7.5	4.9	7.4	8.6	8.9	9.0
83°	8.5	8.3	6.9	7.0	4.3	6.9	8.2	8.5	8.6
84°	8.2	8.0	6.7	6.5	3.7	6.5	7.8	8.2	8.3
85°	7.9	7.8	6.6	6.0	3.2	6.0	7.5	7.9	8.0
86°	7.7	7.5	6.5	5.7	2.7	5.6	7.2	7.6	7.7
87°	7.5	7.3	6.4	5.3	2.2	5.2	6.9	7.4	7.5
88°	7.3	7.1	6.3	5.0	1.8	4.9	6.7	7.2	7.3
89°	7.1	7.0	6.2	4.2	1.3	4.6	6.5	7.1	7.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
90°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5

(END OF REPORT)