

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: P958931

Luminaire Tested: MFO-06W-930-20-X-1F-UNV-STD

Issue Date: 2/11/2025

Test Information

Test Method: LM-79-2019
Report Number: P958931
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-930-20-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

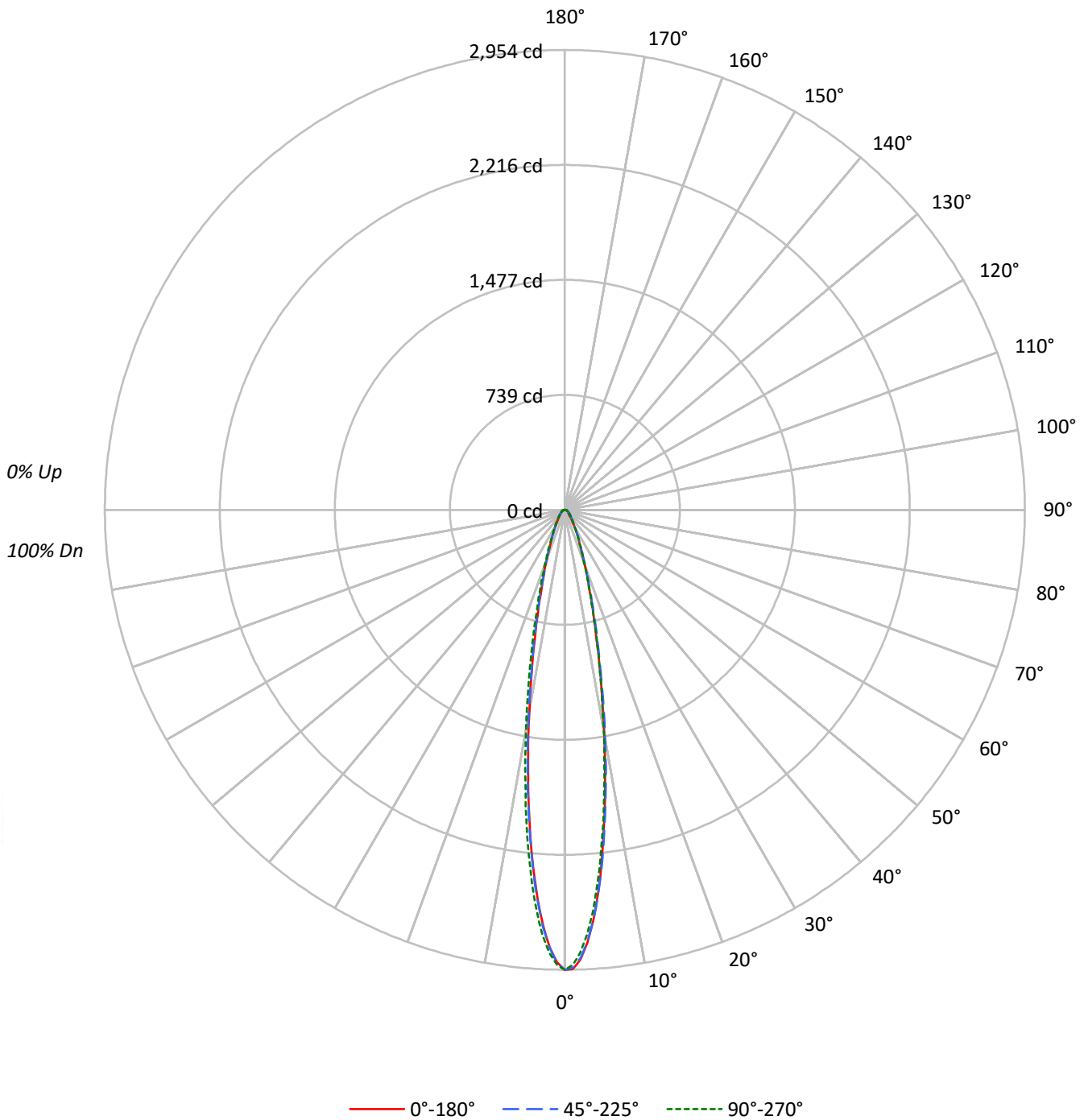
Lumens per Lamp: N/A
Luminaire Lumens: 649.1 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.33 / 0.36
Luminous Opening: Rectangular w/ Sides (W: 0.08' x L: 1' x H: 0.03')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	419551	419551	419551	419551	419551
5°	350320	342958	331590	322904	329026
10°	207820	202974	192602	181920	188189
15°	105294	101776	96003	90207	95206
20°	54872	51574	48461	46238	50002
25°	31730	28830	26970	26156	29058
30°	19613	18133	16854	16610	18985
35°	12838	12547	11626	11625	13669
40°	8884	9320	8590	8720	10545
45°	7046	7313	6655	6917	8623
50°	6620	6007	5381	5735	7472
55°	6371	5124	4495	4937	6798
60°	6111	4486	3838	4358	6381
65°	5915	3975	3259	3895	6104
70°	5729	3523	2686	3434	5920
75°	5936	3060	2035	3010	5936
80°	6446	2654	1431	2654	6516
85°	9089	2179	846	2495	9089

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 90°
 Luminance: 23294 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.8	30.2
10°-20°	202.3	31.2
20°-30°	96.4	14.9
30°-40°	54.1	8.3
40°-50°	35.9	5.5
50°-60°	26.3	4.0
60°-70°	19.1	2.9
70°-80°	12.2	1.9
80°-90°	7.1	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°	494.5	76.2
0°-40°	548.6	84.5
0°-60°	610.8	94.1
0°-90°	649.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	649.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2954	2954	2954	2954	2954	
5°	2464	2473	2411	2328	2315	201
15°	722	751	726	666	653	207
25°	206	211	206	192	188	98
35°	76	88	87	82	81	48
45°	36	48	47	45	44	29
55°	27	30	29	29	29	24
65°	19	20	18	20	19	19
75°	12	12	10	12	12	13
85°	8	6	3	7	8	8
90°	5	5	5	5	5	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	2954.5	2954.5	2954.5	2954.5	2954.5	2954.5	2954.5	2954.5	2954.5
1°	2949.9	2947.0	2940.9	2931.8	2921.3	2911.9	2905.8	2903.7	2905.9
2°	2889.0	2888.1	2880.6	2866.0	2846.8	2828.0	2813.6	2807.4	2809.9
3°	2783.5	2785.8	2778.4	2759.7	2732.8	2704.1	2681.4	2670.9	2674.2
4°	2639.1	2645.7	2640.1	2618.6	2584.9	2547.3	2516.6	2501.8	2505.7
5°	2464.4	2475.3	2472.9	2450.3	2411.3	2366.2	2328.3	2309.7	2314.6
6°	2268.6	2284.1	2284.9	2262.6	2220.1	2168.8	2125.5	2103.9	2109.3
7°	2061.1	2080.6	2085.1	2064.1	2020.2	1965.7	1918.1	1894.2	1899.6
8°	1850.4	1873.2	1880.8	1861.7	1818.2	1762.4	1712.7	1687.5	1692.9
9°	1644.8	1669.4	1679.5	1662.9	1621.4	1566.3	1515.9	1490.4	1495.9
10°	1449.3	1474.7	1486.6	1472.4	1434.2	1381.3	1332.4	1307.5	1312.4
11°	1268.8	1293.8	1306.9	1295.3	1260.3	1211.1	1164.8	1141.1	1145.8
12°	1105.3	1128.9	1142.1	1132.7	1101.6	1056.9	1014.5	992.6	996.8
13°	960.2	982.4	995.3	987.4	960.3	920.3	882.2	862.3	865.9
14°	832.9	853.1	865.1	858.6	835.3	800.1	766.3	748.7	751.8
15°	722.3	740.3	751.3	745.9	726.2	695.6	665.9	650.4	653.1
16°	627.3	643.3	652.9	648.3	631.7	605.3	579.5	565.7	568.2
17°	546.2	560.0	568.3	564.4	550.3	527.7	505.5	493.4	495.6
18°	476.7	488.6	495.6	492.2	480.3	461.0	442.1	431.4	433.3
19°	417.7	428.2	433.8	430.6	420.6	404.1	388.0	378.6	380.3
20°	367.3	376.3	380.8	378.0	369.5	355.4	341.4	333.4	334.7
21°	324.2	332.1	335.6	333.1	326.0	313.7	301.7	294.7	295.8
22°	287.5	294.5	296.9	294.7	288.6	277.9	267.5	261.6	262.5
23°	255.9	262.0	263.8	262.0	256.7	247.3	238.2	233.4	233.8
24°	228.8	234.3	235.5	233.9	229.2	221.0	213.1	209.0	209.2
25°	205.5	210.5	211.3	209.8	205.7	198.5	191.7	188.3	188.2
26°	185.1	190.0	190.3	188.9	185.4	179.1	173.1	170.2	169.9
27°	167.4	172.3	172.3	170.9	167.9	162.3	157.0	154.5	154.1
28°	151.4	156.8	156.5	155.2	152.6	147.7	143.0	140.7	140.4
29°	135.9	143.4	142.9	141.6	139.3	135.0	130.7	128.7	128.4
30°	121.8	131.5	130.9	129.6	127.6	123.8	119.9	118.0	117.9
31°	109.8	121.0	120.3	119.2	117.3	113.9	110.4	108.7	108.6
32°	99.0	111.6	111.0	109.9	108.3	105.2	102.0	100.4	100.4
33°	90.7	103.4	102.7	101.8	100.3	97.4	94.6	93.1	93.0
34°	83.0	96.0	95.2	94.5	93.1	90.5	88.0	86.6	86.5
35°	75.7	89.3	88.5	87.9	86.7	84.3	82.0	80.7	80.6
36°	68.7	83.3	82.6	82.0	80.9	78.7	76.7	75.4	75.3
37°	63.2	77.8	77.2	76.6	75.7	73.6	71.8	70.6	70.5
38°	57.8	72.8	72.2	71.7	70.9	69.1	67.4	66.2	66.0
39°	53.2	68.3	67.8	67.3	66.6	64.9	63.3	62.2	62.0
40°	49.2	64.2	63.7	63.3	62.6	61.1	59.6	58.5	58.4
41°	45.9	60.5	60.0	59.6	58.9	57.6	56.2	55.2	55.1
42°	43.1	57.0	56.6	56.3	55.5	54.3	53.2	52.1	52.0
43°	40.2	53.8	53.5	53.3	52.4	51.4	50.4	49.3	49.2
44°	37.9	50.9	50.7	50.5	49.6	48.7	47.8	46.7	46.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
45°	36.2	48.2	48.0	47.9	47.0	46.2	45.4	44.4	44.3
46°	34.7	45.7	45.6	45.4	44.6	43.9	43.2	42.1	42.2
47°	33.2	43.4	43.3	43.2	42.4	41.7	41.1	40.1	40.2
48°	32.0	41.2	41.2	41.1	40.2	39.8	39.2	38.2	38.4
49°	31.6	39.2	39.3	39.1	38.3	37.9	37.4	36.5	36.7
50°	31.1	37.4	37.5	37.3	36.5	36.2	35.8	34.9	35.1
51°	30.3	35.7	35.8	35.6	34.8	34.6	34.2	33.4	33.6
52°	29.4	34.1	34.2	34.0	33.2	33.1	32.8	32.0	32.3
53°	28.6	32.6	32.7	32.6	31.7	31.7	31.4	30.8	31.0
54°	27.7	31.2	31.4	31.2	30.3	30.4	30.2	29.5	29.8
55°	26.9	29.9	30.1	29.9	29.0	29.2	29.0	28.4	28.7
56°	26.0	28.6	28.8	28.7	27.7	28.0	27.8	27.3	27.6
57°	25.2	27.5	27.6	27.5	26.5	26.9	26.8	26.3	26.5
58°	24.3	26.4	26.5	26.4	25.4	25.8	25.7	25.3	25.6
59°	23.4	25.4	25.5	25.3	24.3	24.8	24.7	24.4	24.6
60°	22.7	24.3	24.5	24.3	23.3	23.8	23.8	23.5	23.7
61°	21.9	23.4	23.6	23.3	22.3	22.8	22.9	22.7	22.8
62°	21.0	22.3	22.6	22.3	21.3	21.9	22.0	21.9	21.9
63°	20.2	21.3	21.7	21.3	20.3	21.0	21.1	21.0	21.1
64°	19.5	20.0	20.8	20.4	19.4	20.1	20.3	20.2	20.2
65°	18.8	18.6	19.9	19.5	18.4	19.2	19.5	19.5	19.4
66°	18.0	17.1	19.1	18.6	17.5	18.3	18.7	18.7	18.6
67°	17.2	15.9	18.3	17.7	16.6	17.4	17.8	17.9	17.8
68°	16.5	14.9	17.4	16.8	15.7	16.6	17.0	17.1	17.0
69°	15.7	14.0	16.7	15.9	14.8	15.7	16.3	16.4	16.3
70°	15.0	13.3	15.9	15.1	13.9	14.9	15.5	15.6	15.5
71°	14.4	12.6	15.1	14.2	13.0	14.1	14.8	14.9	14.8
72°	13.7	12.3	14.3	13.4	12.1	13.3	14.1	14.2	14.1
73°	13.2	12.1	13.6	12.6	11.3	12.5	13.3	13.5	13.4
74°	12.7	11.7	12.9	11.9	10.4	11.8	12.6	12.8	12.7
75°	12.1	11.1	12.2	11.1	9.5	11.1	12.0	12.2	12.1
76°	11.4	10.7	11.5	10.5	8.7	10.4	11.3	11.5	11.5
77°	10.9	10.4	10.9	9.8	7.9	9.7	10.7	11.0	10.9
78°	10.4	10.0	10.3	9.2	7.2	9.1	10.1	10.4	10.4
79°	9.8	9.5	9.7	8.6	6.5	8.6	9.6	9.9	9.8
80°	9.3	9.1	9.1	8.1	5.9	8.1	9.1	9.3	9.4
81°	8.9	8.6	8.4	7.6	5.2	7.6	8.6	8.9	9.0
82°	8.5	8.3	7.4	7.1	4.6	7.1	8.2	8.5	8.6
83°	8.1	7.9	6.6	6.6	4.0	6.6	7.8	8.1	8.2
84°	7.8	7.6	6.3	6.2	3.5	6.2	7.4	7.8	7.9
85°	7.6	7.4	6.2	5.8	3.0	5.7	7.1	7.6	7.6
86°	7.3	7.2	6.2	5.4	2.6	5.4	6.9	7.3	7.4
87°	7.1	7.0	6.1	5.1	2.1	5.0	6.6	7.0	7.1
88°	6.9	6.8	6.0	4.7	1.7	4.7	6.4	6.9	6.9
89°	6.8	6.7	5.9	4.0	1.2	4.4	6.2	6.7	6.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
90°	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2

(END OF REPORT)