

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: P958939

Luminaire Tested: MFO-06W-935-20-X-1F-UNV-STD

Issue Date: 2/11/2025

Test Information

Test Method: LM-79-2019
Report Number: P958939
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-935-20-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

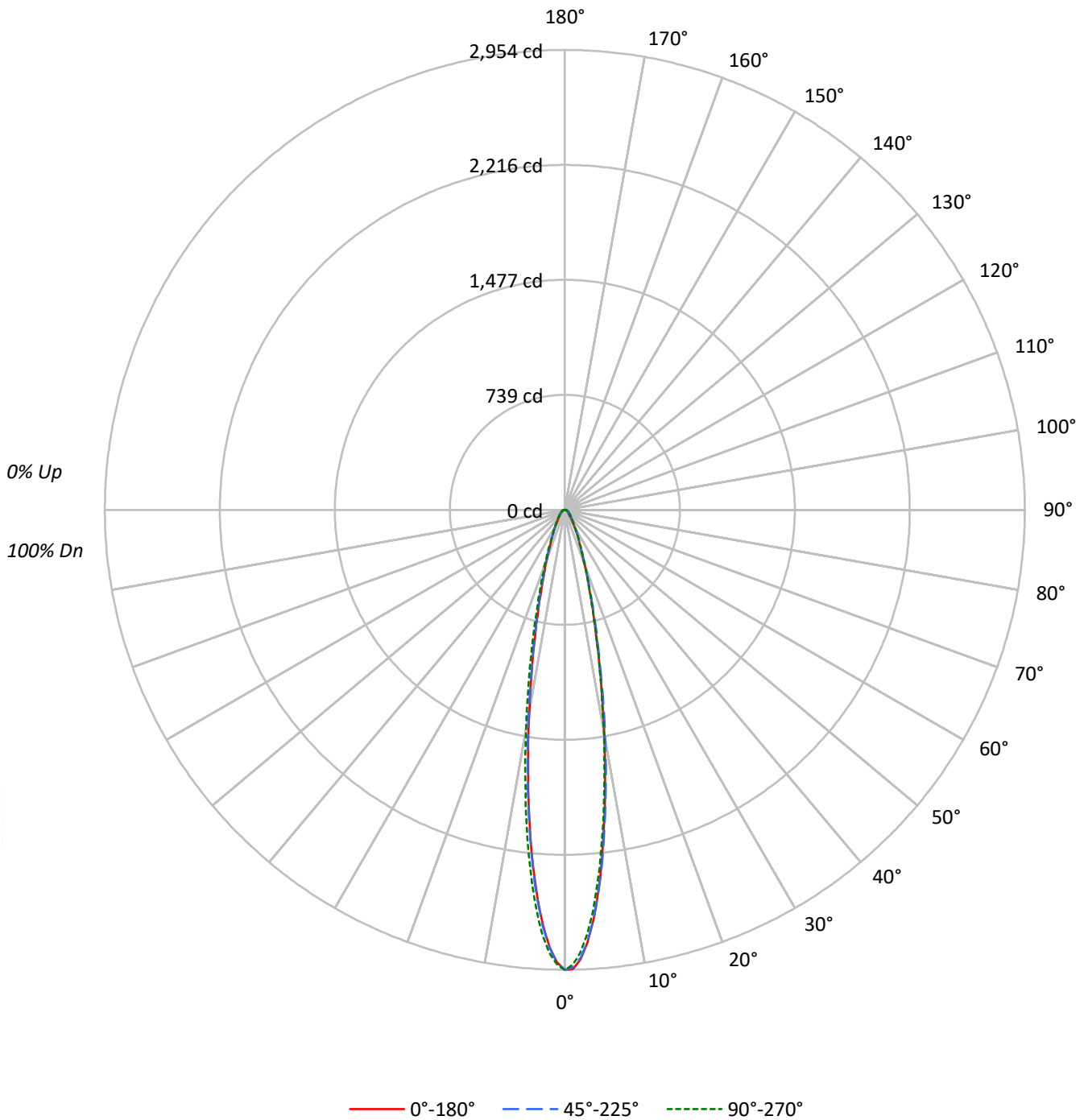
Lumens per Lamp: N/A
Luminaire Lumens: 649.0 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.33 / 0.36
Luminous Opening: Rectangular w/ Sides (W: 0.08' x L: 1' x H: 0.03')
CIE Type: Direct

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	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	97	96	95	93	92	91	90	89	87					
1	113	110	108	105	111	108	106	104	104	102	101	100	99	98	97	96	95	93	92	91	90	89	88	87	86	85	84	83	82					
2	108	103	99	96	106	101	98	95	98	95	92	95	93	90	92	90	89	87	86	85	84	83	82	81	80	79	78	77	76					
3	103	97	92	88	101	95	91	88	93	89	86	90	87	85	88	86	83	82	81	80	79	78	77	76	75	74	73	72	71					
4	99	92	86	82	97	90	86	82	88	84	81	86	83	80	85	82	79	78	77	76	75	74	73	72	71	70	69	68	67					
5	95	87	82	78	93	86	81	77	84	80	77	83	79	76	81	78	75	74	73	72	71	70	69	68	67	66	65	64	63					
6	91	83	78	74	90	82	77	74	81	76	73	80	76	73	78	75	72	71	70	69	68	67	66	65	64	63	62	61						
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	76	72	69	68	67	66	65	64	63	62	61									
8	85	76	71	68	84	76	71	67	75	70	67	74	70	67	73	69	67	66	65	64	63	62	61											
9	82	74	69	65	81	73	68	65	72	68	65	71	67	65	71	67	64	63	62	61														
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°	419480	419480	419480	419480	419480
5°	350249	342889	331522	322848	328955
10°	207777	202933	192561	181879	188161
15°	105279	101749	95990	90193	95191
20°	54857	51574	48448	46238	50002
25°	31730	28830	26970	26143	29043
30°	19613	18120	16854	16610	18985
35°	12838	12547	11626	11625	13652
40°	8884	9320	8590	8720	10545
45°	7046	7313	6655	6917	8623
50°	6620	6007	5381	5735	7472
55°	6371	5107	4495	4937	6798
60°	6085	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°	8970	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°	202.2	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°	494.4	76.2
0°-40°	548.5	84.5
0°-60°	610.7	94.1
0°-90°	649.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	649.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	2954	2954	2954	2954	2954	
5°	2464	2472	2411	2328	2314	201
15°	722	751	726	666	653	207
25°	206	211	206	192	188	98
35°	76	88	87	82	80	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°	2954.0	2954.0	2954.0	2954.0	2954.0	2954.0	2954.0	2954.0	2954.0
1°	2949.4	2946.4	2940.3	2931.2	2920.8	2911.3	2905.3	2903.2	2905.4
2°	2888.5	2887.6	2880.0	2865.4	2846.3	2827.4	2813.0	2806.9	2809.4
3°	2783.0	2785.3	2777.9	2759.2	2732.3	2703.6	2680.9	2670.4	2673.7
4°	2638.6	2645.2	2639.6	2618.1	2584.4	2546.8	2516.1	2501.3	2505.2
5°	2463.9	2474.9	2472.4	2449.8	2410.8	2365.8	2327.9	2309.2	2314.1
6°	2268.1	2283.7	2284.5	2262.2	2219.7	2168.4	2125.1	2103.5	2108.9
7°	2060.7	2080.2	2084.8	2063.7	2019.9	1965.3	1917.7	1893.8	1899.2
8°	1850.1	1872.9	1880.4	1861.4	1817.9	1762.1	1712.4	1687.2	1692.6
9°	1644.5	1669.1	1679.2	1662.5	1621.1	1566.0	1515.6	1490.2	1495.6
10°	1449.0	1474.5	1486.3	1472.1	1433.9	1381.0	1332.1	1307.2	1312.2
11°	1268.5	1293.6	1306.7	1295.0	1260.1	1210.8	1164.6	1140.9	1145.6
12°	1105.1	1128.7	1141.9	1132.5	1101.4	1056.7	1014.3	992.5	996.6
13°	960.0	982.3	995.1	987.2	960.1	920.1	882.0	862.2	865.7
14°	832.8	852.9	865.0	858.5	835.2	800.0	766.1	748.6	751.7
15°	722.2	740.2	751.1	745.8	726.1	695.5	665.8	650.3	653.0
16°	627.2	643.1	652.8	648.2	631.6	605.2	579.3	565.6	568.1
17°	546.1	559.9	568.2	564.2	550.2	527.6	505.4	493.3	495.5
18°	476.6	488.5	495.5	492.1	480.2	460.9	442.0	431.3	433.2
19°	417.6	428.1	433.7	430.6	420.5	404.0	387.9	378.5	380.2
20°	367.2	376.2	380.8	377.9	369.4	355.3	341.4	333.3	334.7
21°	324.2	332.1	335.5	333.1	325.9	313.7	301.6	294.7	295.8
22°	287.4	294.4	296.9	294.7	288.6	277.9	267.5	261.6	262.4
23°	255.9	261.9	263.8	261.9	256.6	247.3	238.2	233.3	233.8
24°	228.8	234.2	235.5	233.8	229.1	221.0	213.0	209.0	209.2
25°	205.5	210.5	211.3	209.8	205.7	198.5	191.6	188.2	188.1
26°	185.1	190.0	190.3	188.9	185.3	179.1	173.1	170.1	169.9
27°	167.4	172.2	172.2	170.9	167.8	162.3	157.0	154.4	154.1
28°	151.4	156.8	156.5	155.2	152.6	147.7	143.0	140.7	140.4
29°	135.9	143.3	142.8	141.5	139.3	135.0	130.7	128.6	128.4
30°	121.8	131.4	130.8	129.6	127.6	123.7	119.9	118.0	117.9
31°	109.8	120.9	120.3	119.1	117.3	113.9	110.4	108.7	108.6
32°	99.0	111.6	111.0	109.9	108.2	105.1	102.0	100.4	100.3
33°	90.7	103.4	102.6	101.8	100.2	97.4	94.6	93.1	93.0
34°	83.0	95.9	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	80.5
36°	68.7	83.3	82.6	82.0	80.9	78.7	76.6	75.4	75.2
37°	63.2	77.8	77.1	76.6	75.7	73.6	71.8	70.6	70.4
38°	57.8	72.8	72.2	71.7	70.9	69.1	67.4	66.2	66.0
39°	53.1	68.3	67.8	67.3	66.5	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	53.1	52.1	52.0
43°	40.2	53.8	53.5	53.3	52.4	51.4	50.3	49.3	49.2
44°	37.9	50.9	50.7	50.5	49.6	48.6	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	42.3	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	30.7	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	30.0	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°	22.6	24.3	24.5	24.3	23.3	23.8	23.8	23.5	23.7
61°	21.9	23.3	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	19.1	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	11.0	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°	10.3	10.0	10.3	9.2	7.2	9.1	10.1	10.4	10.3
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	8.9
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	6.1	7.4	7.8	7.9
85°	7.5	7.4	6.2	5.8	3.0	5.7	7.1	7.5	7.6
86°	7.3	7.2	6.1	5.4	2.6	5.4	6.8	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)