

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: P958940

Luminaire Tested: MFO-06W-935-20-X-4F-UNV-STD

Issue Date: 2/11/2025

Test Information

Test Method: LM-79-2019
Report Number: P958940
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-4F-UNV-STD
Description: iO LED MiniO-FLEX LINEAR LIGHTING WITH 20 DEGREE OPTICS
6 WATTS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

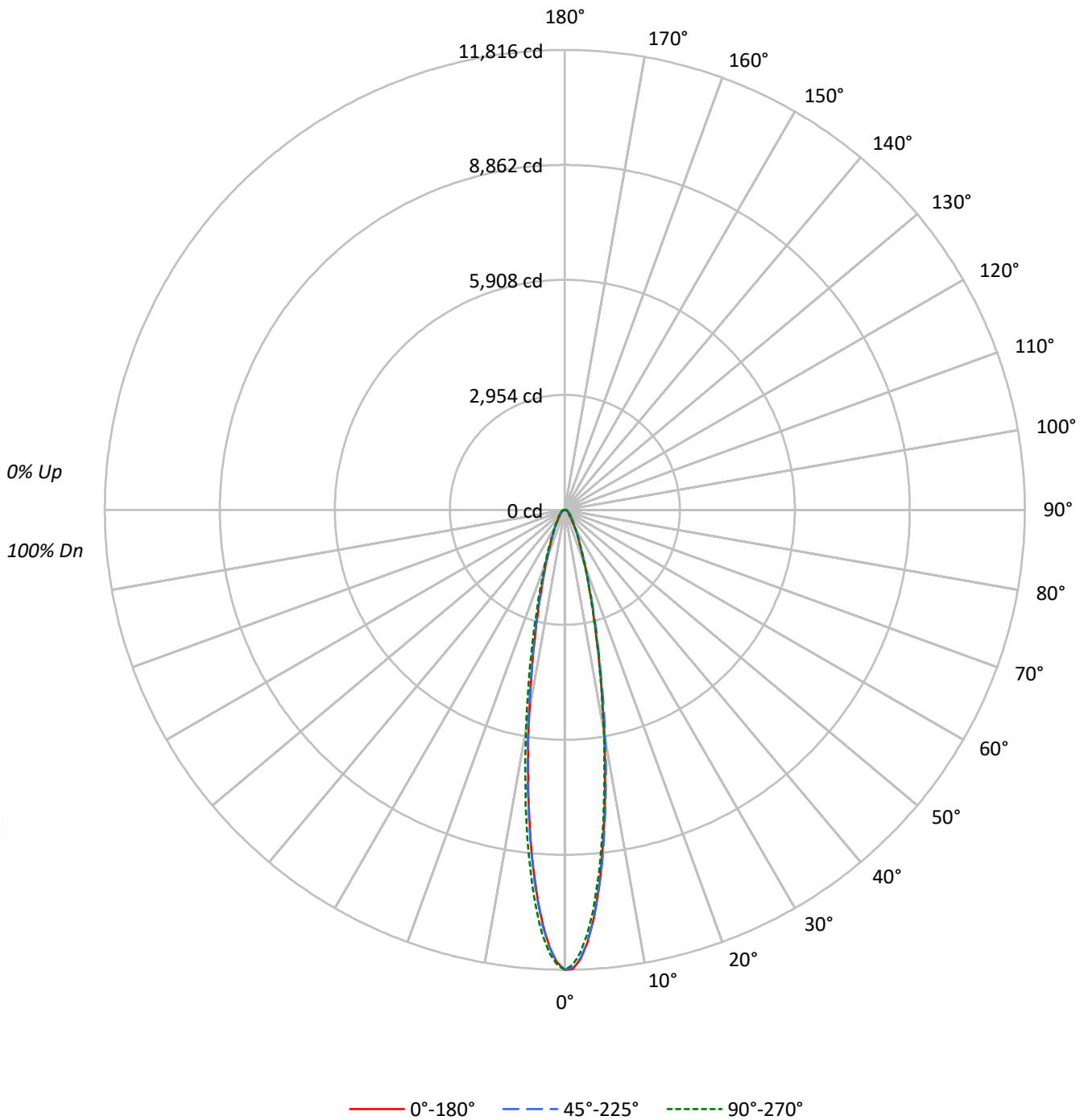
Lumens per Lamp: N/A
Luminaire Lumens: 2596.0 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.33 / 0.36
Luminous Opening: Rectangular w/ Sides (W: 0.08' x L: 4' x H: 0.03')
CIE Type: Direct

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	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°	419477	419477	419477	419477	419477
5°	350977	343387	331525	323315	329642
10°	208647	203504	192565	182398	188948
15°	105948	102176	95987	90566	95793
20°	55335	51851	48452	46486	50430
25°	32076	29029	26964	26326	29368
30°	19881	18273	16854	16743	19244
35°	13046	12673	11622	11738	13887
40°	9060	9422	8583	8819	10759
45°	7208	7408	6655	7002	8832
50°	6801	6091	5378	5819	7682
55°	6579	5201	4495	5015	7020
60°	6346	4567	3829	4437	6633
65°	6195	4072	3264	3975	6418
70°	6115	3600	2681	3526	6309
75°	6421	3151	2041	3099	6461
80°	7298	2755	1425	2747	7337
85°	11280	2291	853	2612	11354

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 90°
 Luminance: 93624 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	783.1	30.2
10°-20°	808.9	31.2
20°-30°	385.7	14.9
30°-40°	216.4	8.3
40°-50°	143.8	5.5
50°-60°	105.1	4.0
60°-70°	76.2	2.9
70°-80°	48.6	1.9
80°-90°	28.2	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°	1977.6	76.2
0°-40°	2194.0	84.5
0°-60°	2442.9	94.1
0°-90°	2596.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2596.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11816	11816	11816	11816	11816	
5°	9856	9890	9643	9312	9256	804
15°	2889	3004	2904	2663	2612	827
25°	822	845	823	766	752	391
35°	303	354	347	328	322	194
45°	145	192	188	182	177	115
55°	108	120	116	116	115	96
65°	75	80	74	78	78	74
75°	48	49	38	48	48	51
85°	30	25	12	28	30	33
90°	21	21	21	21	21	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	11815.9	11815.9	11815.9	11815.9	11815.9	11815.9	11815.9	11815.9	11815.9
1°	11797.4	11785.7	11761.3	11724.9	11683.1	11645.4	11621.0	11612.7	11621.5
2°	11553.9	11550.3	11520.1	11461.7	11385.3	11309.8	11252.2	11227.6	11237.5
3°	11132.0	11141.1	11111.5	11036.7	10929.1	10814.2	10723.6	10681.6	10695.0
4°	10554.4	10580.7	10558.3	10472.5	10337.6	10187.1	10064.4	10005.2	10020.8
5°	9855.6	9899.4	9889.8	9799.3	9643.3	9463.1	9311.7	9236.9	9256.5
6°	9072.5	9134.6	9137.9	9048.7	8878.7	8673.6	8500.6	8413.9	8435.5
7°	8242.7	8320.9	8339.0	8254.8	8079.4	7861.3	7670.8	7575.2	7597.0
8°	7400.2	7491.6	7521.8	7445.5	7271.5	7048.2	6849.5	6748.7	6770.4
9°	6578.0	6676.2	6716.8	6650.2	6484.6	6263.9	6062.4	5960.6	5982.4
10°	5796.0	5897.8	5945.2	5888.4	5735.7	5524.0	5328.6	5228.8	5248.8
11°	5074.1	5174.4	5226.8	5180.1	5040.4	4843.3	4658.3	4563.7	4582.3
12°	4420.2	4514.7	4567.7	4530.0	4405.6	4227.0	4057.2	3969.8	3986.3
13°	3839.9	3929.0	3980.5	3948.9	3840.5	3680.5	3527.9	3448.7	3462.8
14°	3331.2	3411.8	3459.9	3433.8	3340.7	3199.9	3064.5	2994.3	3006.7
15°	2888.8	2960.8	3004.5	2983.2	2904.3	2781.9	2663.1	2601.1	2611.9
16°	2508.9	2572.6	2611.1	2592.8	2526.2	2420.6	2317.4	2262.3	2272.3
17°	2184.4	2239.7	2272.8	2257.0	2200.7	2110.3	2021.5	1973.2	1982.2
18°	1906.6	1954.2	1982.2	1968.4	1920.7	1843.5	1768.0	1725.1	1732.9
19°	1670.6	1712.5	1734.9	1722.2	1682.0	1616.2	1551.6	1514.1	1520.8
20°	1468.9	1505.0	1523.0	1511.6	1477.7	1421.3	1365.4	1333.2	1338.7
21°	1296.6	1328.3	1342.2	1332.2	1303.6	1254.8	1206.5	1178.7	1183.0
22°	1149.7	1177.7	1187.5	1178.7	1154.3	1111.6	1069.8	1046.3	1049.7
23°	1023.4	1047.8	1055.2	1047.8	1026.5	989.2	952.8	933.3	935.1
24°	915.0	936.8	942.0	935.4	916.5	883.9	852.1	836.0	836.6
25°	821.9	841.9	845.2	839.1	822.6	794.0	766.5	753.0	752.5
26°	740.3	759.9	761.1	755.7	741.3	716.3	692.2	680.5	679.4
27°	669.4	688.9	688.9	683.6	671.3	649.2	627.9	617.7	616.5
28°	605.5	627.2	625.9	620.9	610.3	590.8	572.0	562.8	561.7
29°	543.5	573.4	571.3	566.2	557.2	539.9	522.8	514.6	513.6
30°	487.2	525.8	523.3	518.5	510.4	495.0	479.5	472.1	471.6
31°	439.2	483.8	481.2	476.6	469.3	455.5	441.5	434.7	434.2
32°	396.1	446.5	443.9	439.7	433.0	420.6	408.0	401.6	401.3
33°	362.6	413.5	410.6	407.2	401.0	389.6	378.4	372.3	372.0
34°	331.8	383.8	380.8	378.0	372.2	361.9	351.9	346.3	345.8
35°	302.7	357.0	354.1	351.6	346.7	337.0	328.0	322.8	322.2
36°	274.8	333.0	330.2	328.0	323.4	314.8	306.6	301.6	301.0
37°	252.8	311.1	308.5	306.5	302.7	294.5	287.2	282.4	281.8
38°	231.1	291.3	288.8	286.9	283.7	276.3	269.5	264.7	264.1
39°	212.6	273.2	271.0	269.2	266.2	259.6	253.3	248.8	248.2
40°	196.8	256.8	254.7	253.0	250.2	244.3	238.4	234.1	233.7
41°	183.7	241.8	239.9	238.5	235.5	230.3	224.9	220.8	220.4
42°	172.4	228.1	226.4	225.3	222.0	217.2	212.6	208.5	208.1
43°	161.0	215.3	214.1	213.1	209.7	205.5	201.4	197.3	196.9
44°	151.7	203.7	202.6	201.9	198.4	194.6	191.0	186.9	186.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
45°	144.7	192.9	192.0	191.4	188.0	184.7	181.5	177.4	177.3
46°	138.8	182.9	182.3	181.7	178.4	175.5	172.8	168.5	168.8
47°	133.0	173.5	173.3	172.7	169.4	166.9	164.5	160.5	160.7
48°	127.9	164.9	164.9	164.3	161.0	159.0	157.0	152.9	153.4
49°	126.3	157.0	157.1	156.5	153.2	151.6	149.8	146.0	146.6
50°	124.3	149.5	149.9	149.2	145.9	144.7	143.2	139.7	140.4
51°	121.2	142.7	143.2	142.5	139.2	138.2	136.9	133.7	134.5
52°	117.6	136.3	136.9	136.1	132.8	132.2	131.1	128.1	129.1
53°	114.2	130.3	130.9	130.4	126.9	126.8	125.7	123.0	124.0
54°	110.9	124.7	125.4	124.9	121.3	121.6	120.7	118.1	119.2
55°	107.5	119.4	120.2	119.7	116.0	116.8	115.9	113.5	114.7
56°	103.9	114.6	115.2	114.8	110.9	112.0	111.3	109.2	110.3
57°	100.7	110.0	110.6	110.1	106.2	107.6	107.0	105.2	106.2
58°	97.2	105.7	106.2	105.6	101.5	103.4	102.9	101.3	102.3
59°	93.6	101.4	102.0	101.3	97.3	99.1	98.9	97.7	98.4
60°	90.6	97.3	97.9	97.0	93.0	95.2	95.1	94.1	94.7
61°	87.4	93.4	94.2	93.1	89.1	91.3	91.6	90.8	91.2
62°	84.1	89.3	90.5	89.3	85.1	87.5	88.0	87.4	87.7
63°	80.9	85.1	86.8	85.4	81.3	83.9	84.5	84.1	84.3
64°	77.9	80.1	83.3	81.6	77.4	80.2	81.2	81.0	81.0
65°	75.0	74.5	79.8	77.9	73.7	76.6	77.9	77.8	77.7
66°	72.1	68.6	76.3	74.3	70.0	73.1	74.6	74.8	74.5
67°	68.8	63.4	73.1	70.7	66.2	69.6	71.4	71.6	71.4
68°	65.9	59.7	69.8	67.2	62.7	66.2	68.2	68.6	68.2
69°	63.0	56.0	66.6	63.7	59.1	62.8	65.1	65.5	65.1
70°	60.2	53.3	63.4	60.3	55.5	59.5	62.1	62.6	62.1
71°	57.5	50.5	60.4	57.0	52.0	56.3	59.2	59.7	59.2
72°	54.9	49.1	57.4	53.7	48.5	53.1	56.3	56.9	56.4
73°	52.7	48.2	54.4	50.5	45.1	50.0	53.3	54.1	53.6
74°	50.7	46.6	51.5	47.5	41.5	47.1	50.5	51.3	50.9
75°	48.2	44.6	48.8	44.6	38.1	44.2	48.0	48.7	48.5
76°	45.8	43.0	46.1	41.9	34.8	41.5	45.3	46.1	45.9
77°	43.6	41.5	43.6	39.2	31.8	39.0	42.9	43.8	43.6
78°	41.4	39.9	41.3	36.8	28.9	36.5	40.5	41.5	41.4
79°	39.3	38.1	39.0	34.6	26.1	34.3	38.5	39.5	39.3
80°	37.3	36.3	36.5	32.5	23.5	32.3	36.4	37.4	37.5
81°	35.6	34.5	33.5	30.4	20.9	30.3	34.5	35.7	35.8
82°	34.0	33.1	29.5	28.5	18.5	28.2	32.8	34.0	34.2
83°	32.5	31.7	26.4	26.5	16.2	26.3	31.2	32.5	32.9
84°	31.2	30.6	25.3	24.7	14.1	24.6	29.7	31.3	31.5
85°	30.2	29.6	25.0	23.0	12.1	22.9	28.5	30.2	30.4
86°	29.2	28.6	24.6	21.6	10.2	21.4	27.4	29.1	29.5
87°	28.4	27.9	24.2	20.2	8.5	20.0	26.4	28.1	28.5
88°	27.6	27.2	23.9	19.0	6.8	18.8	25.6	27.5	27.8
89°	27.2	26.7	23.5	16.0	5.0	17.7	24.8	26.9	27.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
90°	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9

(END OF REPORT)