

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: P958932

Luminaire Tested: MFO-06W-930-20-X-4F-UNV-STD

Issue Date: 2/11/2025

Test Information

Test Method: LM-79-2019
Report Number: P958932
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-4F-UNV-STD
Description: iO LED MiniO-FLEX LINEAR LIGHTING WITH 20 DEGREE OPTICS
6 WATTS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

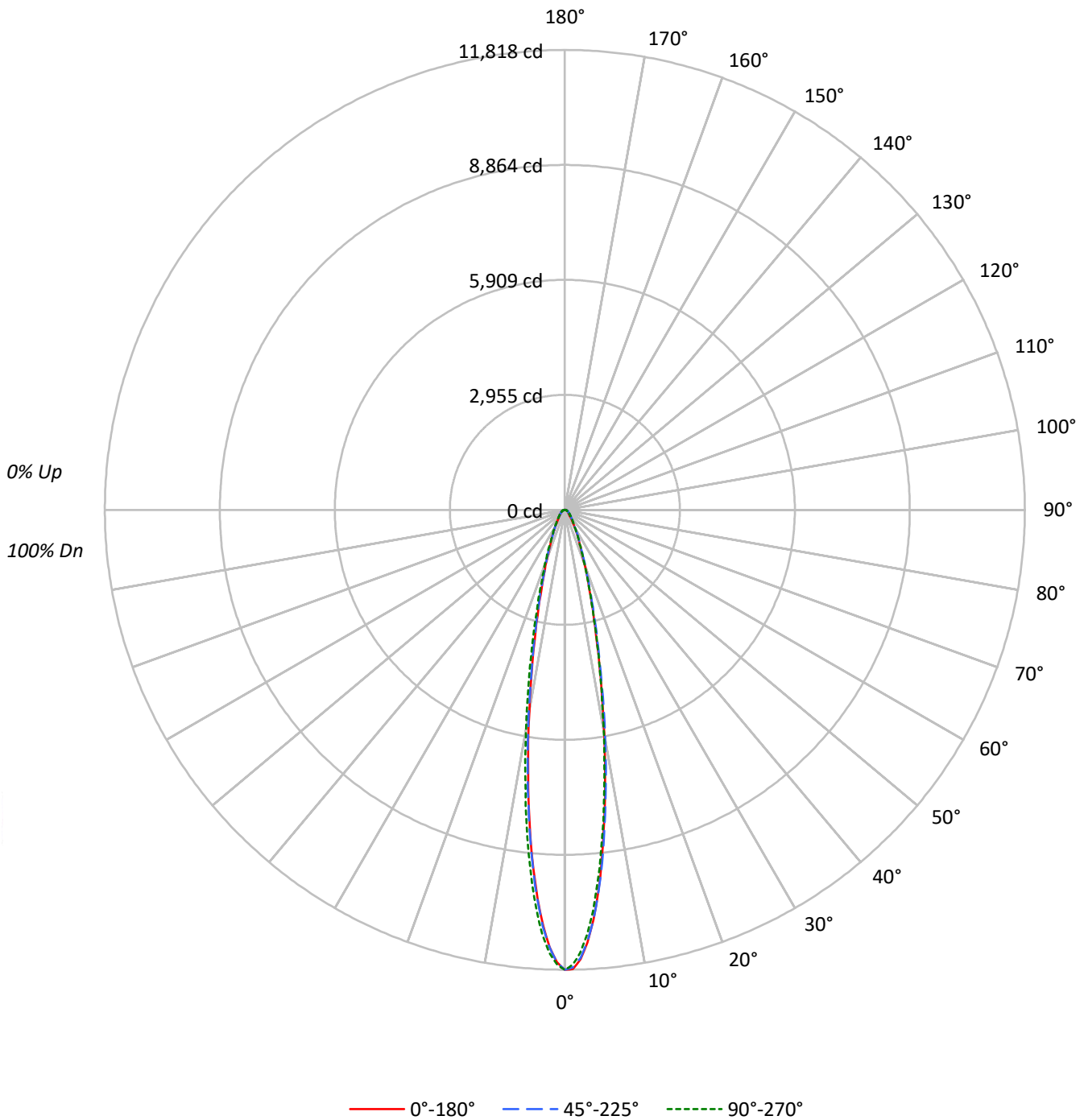
Lumens per Lamp: N/A
Luminaire Lumens: 2596.5 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.33 / 0.36
Luminous Opening: Rectangular w/ Sides (W: 0.08' x L: 4' x H: 0.03')
CIE Type: Direct

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



TEST NUMBER: P958932
CATALOG NUMBER: MFO-06W-930-20-X-4F-UNV-STD

Luminous Intensity Polar Plot





TEST NUMBER: P958932

CATALOG NUMBER: MFO-06W-930-20-X-4F-UNV-STD

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°	419555	419555	419555	419555	419555
5°	351041	343449	331587	323374	329703
10°	208686	203542	192602	182432	188984
15°	105970	102193	96003	90583	95811
20°	55346	51862	48461	46496	50437
25°	32080	29032	26970	26329	29372
30°	19885	18276	16857	16747	19248
35°	13051	12676	11622	11742	13887
40°	9060	9425	8587	8822	10759
45°	7208	7411	6655	7006	8832
50°	6801	6091	5378	5819	7682
55°	6579	5201	4499	5015	7020
60°	6346	4567	3829	4437	6633
65°	6195	4072	3264	3975	6418
70°	6115	3606	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



TEST NUMBER: P958932

CATALOG NUMBER: MFO-06W-930-20-X-4F-UNV-STD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	783.2	30.2
10°-20°	809.0	31.2
20°-30°	385.7	14.9
30°-40°	216.5	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°	1978.0	76.2
0°-40°	2194.4	84.5
0°-60°	2443.3	94.1
0°-90°	2596.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2596.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	11818	11818	11818	11818	11818	
5°	9857	9892	9645	9313	9258	804
15°	2889	3005	2905	2664	2612	827
25°	822	845	823	767	753	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	



TEST NUMBER: P958932

CATALOG NUMBER: MFO-06W-930-20-X-4F-UNV-STD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	11818.1	11818.1	11818.1	11818.1	11818.1	11818.1	11818.1	11818.1	11818.1
1°	11799.6	11787.9	11763.5	11727.1	11685.3	11647.5	11623.2	11614.9	11623.7
2°	11556.1	11552.4	11522.2	11463.9	11387.4	11311.9	11254.3	11229.7	11239.5
3°	11134.1	11143.2	11113.6	11038.7	10931.2	10816.2	10725.6	10683.6	10697.0
4°	10556.3	10582.6	10560.2	10474.5	10339.6	10189.0	10066.3	10007.1	10022.7
5°	9857.4	9901.3	9891.6	9801.1	9645.1	9464.9	9313.4	9238.6	9258.2
6°	9074.2	9136.3	9139.6	9050.3	8880.3	8675.2	8502.2	8415.5	8437.0
7°	8244.2	8322.4	8340.6	8256.3	8080.9	7862.8	7672.2	7576.6	7598.4
8°	7401.6	7493.0	7523.2	7446.9	7272.9	7049.5	6850.8	6749.9	6771.6
9°	6579.2	6677.5	6718.0	6651.4	6485.8	6265.1	6063.6	5961.7	5983.5
10°	5797.1	5898.9	5946.3	5889.5	5736.8	5525.0	5329.6	5229.8	5249.8
11°	5075.0	5175.4	5227.7	5181.1	5041.3	4844.2	4659.1	4564.5	4583.1
12°	4421.0	4515.5	4568.5	4530.9	4406.4	4227.8	4058.0	3970.6	3987.0
13°	3840.6	3929.8	3981.3	3949.6	3841.2	3681.2	3528.6	3449.3	3463.4
14°	3331.8	3412.4	3460.5	3434.5	3341.3	3200.5	3065.1	2994.8	3007.2
15°	2889.4	2961.3	3005.0	2983.7	2904.8	2782.4	2663.6	2601.6	2612.4
16°	2509.4	2573.1	2611.6	2593.3	2526.7	2421.1	2317.8	2262.8	2272.8
17°	2184.8	2240.1	2273.2	2257.4	2201.1	2110.7	2021.9	1973.5	1982.5
18°	1906.9	1954.5	1982.5	1968.8	1921.0	1843.8	1768.3	1725.5	1733.2
19°	1670.9	1712.8	1735.2	1722.5	1682.3	1616.5	1551.9	1514.4	1521.1
20°	1469.2	1505.3	1523.3	1511.8	1478.0	1421.6	1365.7	1333.4	1338.9
21°	1296.9	1328.6	1342.4	1332.5	1303.8	1255.0	1206.8	1178.9	1183.3
22°	1149.9	1177.9	1187.8	1178.9	1154.5	1111.8	1070.0	1046.5	1049.9
23°	1023.6	1048.0	1055.4	1048.0	1026.6	989.4	953.0	933.5	935.3
24°	915.2	937.0	942.1	935.6	916.7	884.0	852.3	836.2	836.8
25°	822.0	842.0	845.3	839.2	822.8	794.2	766.6	753.1	752.6
26°	740.5	760.1	761.3	755.8	741.4	716.5	692.3	680.7	679.6
27°	669.6	689.1	689.1	683.7	671.4	649.4	628.0	617.8	616.6
28°	605.6	627.3	626.0	621.0	610.4	590.9	572.1	562.9	561.8
29°	543.6	573.5	571.4	566.3	557.3	540.0	522.9	514.7	513.7
30°	487.3	525.9	523.4	518.6	510.5	495.1	479.6	472.2	471.7
31°	439.3	483.9	481.3	476.7	469.4	455.6	441.6	434.8	434.3
32°	396.2	446.6	444.0	439.8	433.1	420.6	408.1	401.6	401.4
33°	362.7	413.6	410.7	407.2	401.0	389.7	378.5	372.4	372.1
34°	331.9	383.9	380.8	378.0	372.3	361.9	352.0	346.4	345.9
35°	302.8	357.1	354.2	351.7	346.7	337.1	328.1	322.9	322.2
36°	274.9	333.1	330.3	328.1	323.5	314.8	306.7	301.7	301.1
37°	252.8	311.2	308.6	306.5	302.8	294.6	287.3	282.4	281.8
38°	231.1	291.3	288.9	286.9	283.8	276.3	269.5	264.8	264.2
39°	212.6	273.3	271.1	269.3	266.2	259.6	253.3	248.8	248.2
40°	196.8	256.8	254.8	253.1	250.3	244.3	238.5	234.2	233.7
41°	183.8	241.9	239.9	238.6	235.5	230.3	224.9	220.8	220.4
42°	172.4	228.1	226.4	225.3	222.0	217.3	212.6	208.5	208.1
43°	161.0	215.3	214.1	213.1	209.7	205.6	201.4	197.3	196.9
44°	151.7	203.7	202.7	201.9	198.4	194.6	191.1	186.9	186.7



TEST NUMBER: P958932

CATALOG NUMBER: MFO-06W-930-20-X-4F-UNV-STD

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
45°	144.7	192.9	192.1	191.4	188.0	184.7	181.6	177.4	177.3
46°	138.8	182.9	182.3	181.7	178.4	175.5	172.8	168.6	168.8
47°	133.0	173.5	173.3	172.7	169.4	167.0	164.5	160.5	160.8
48°	127.9	164.9	164.9	164.3	161.0	159.1	157.0	153.0	153.4
49°	126.3	157.0	157.1	156.5	153.2	151.6	149.8	146.0	146.6
50°	124.3	149.6	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	134.6
52°	117.6	136.3	136.9	136.2	132.9	132.3	131.2	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	125.0	121.3	121.7	120.7	118.1	119.2
55°	107.5	119.5	120.2	119.7	116.1	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	107.7	107.0	105.2	106.2
58°	97.2	105.7	106.2	105.6	101.6	103.4	102.9	101.3	102.3
59°	93.7	101.4	102.1	101.3	97.3	99.1	98.9	97.7	98.4
60°	90.6	97.3	97.9	97.1	93.0	95.2	95.1	94.1	94.7
61°	87.4	93.4	94.3	93.2	89.1	91.3	91.6	90.9	91.2
62°	84.2	89.3	90.5	89.3	85.1	87.6	88.1	87.4	87.7
63°	80.9	85.1	86.8	85.4	81.4	83.9	84.5	84.2	84.3
64°	77.9	80.1	83.3	81.6	77.5	80.3	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	76.4	74.3	70.0	73.1	74.7	74.8	74.5
67°	68.8	63.5	73.1	70.8	66.3	69.7	71.4	71.6	71.4
68°	65.9	59.7	69.8	67.2	62.7	66.3	68.2	68.6	68.2
69°	63.0	56.0	66.6	63.7	59.1	62.8	65.2	65.5	65.2
70°	60.2	53.3	63.5	60.3	55.5	59.6	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	50.1	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	46.2	41.9	34.8	41.5	45.3	46.2	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	40.6	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	28.3	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



TEST NUMBER: P958932

CATALOG NUMBER: MFO-06W-930-20-X-4F-UNV-STD

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)