

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: P972455

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

Issue Date: 2/27/2025

Test Information

Test Method: LM-79-2019
Report Number: P972455
SCALED TEST REPORT
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 2/27/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: iO LED
Catalog Number: MFO-06W-930-ASYM-X-4F-UNV-STD
Description: iO LED MiniO-FLEX LINEAR LIGHTING WITH ASYMMETRIC OPTICS
6 WATTS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

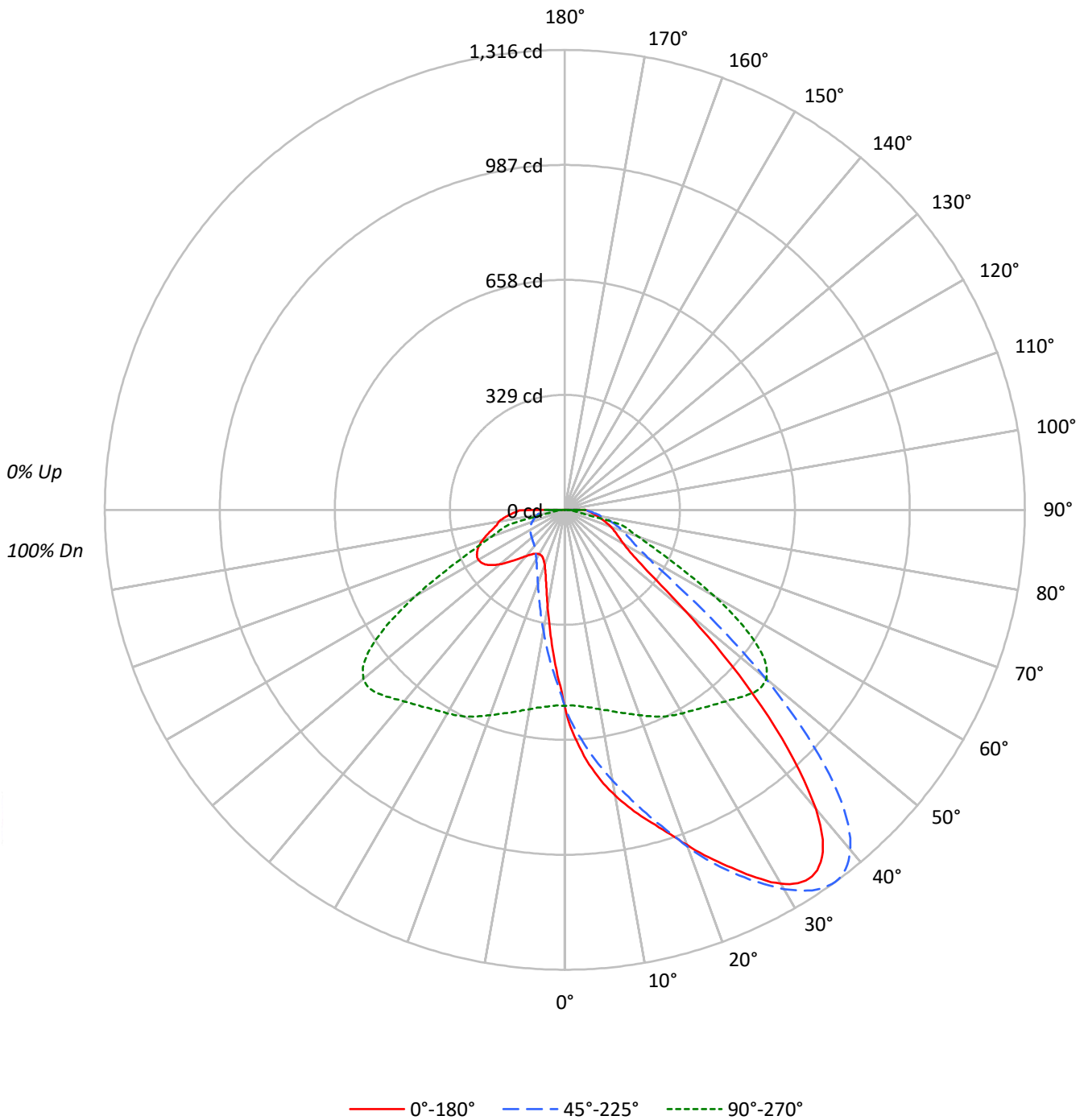
Lumens per Lamp: N/A
Luminaire Lumens: 2202.0 lumens
Efficiency: N/A
Efficacy: 96.6 lumens/watt
Spacing Criteria (0/90/45): 1.7 / 1.9 / 1.61
Luminous Opening: Rectangular w/ Sides (W: 4' x L: 0.08' x H: 0.03')
CIE Type: Direct

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				
1	108	103	99	94	105	101	97	93	96	93	90	93	90	87	89	87	85	82				
2	98	90	83	77	96	88	81	76	84	79	74	81	77	73	78	74	71	69				
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58				
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49				
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42				
6	69	56	47	40	67	55	46	40	53	45	40	51	45	39	50	44	39	37				
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32				
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29				
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25				
10	52	38	30	25	51	38	30	25	37	30	25	36	29	25	35	29	25	23				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	19905	19905	19905	19905	19905
5°	24749	23534	20131	15486	13786
10°	27886	26956	20839	12022	9484
15°	30412	30566	22024	9485	6898
20°	33438	34917	23548	7670	5512
25°	37060	39435	25453	6471	4923
30°	40793	43753	27438	5702	4837
35°	42201	47011	29739	5239	5156
40°	38322	47008	32967	5005	5938
45°	28144	41270	37144	4958	7232
50°	16620	30262	41188	5015	8931
55°	9920	18927	40944	5162	10610
60°	7980	12788	34530	5314	11764
65°	7236	10844	26456	5521	12227
70°	6738	9943	22644	5616	12036
75°	6058	9155	22022	5733	11441
80°	5463	8053	7278	5925	11581
85°	5264	7149	7283	6269	11141

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 90°
 Luminance: 260714 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.8	2.4
10°-20°	167.5	7.6
20°-30°	306.0	13.9
30°-40°	446.0	20.3
40°-50°	464.2	21.1
50°-60°	322.7	14.7
60°-70°	208.4	9.5
70°-80°	144.9	6.6
80°-90°	88.5	4.0
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°	527.3	23.9
0°-40°	973.4	44.2
0°-60°	1760.2	79.9
0°-90°	2202.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2202.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	561	561	561	561	561	
5°	720	678	565	446	401	72
15°	920	899	600	279	209	264
25°	1131	1148	652	188	150	526
35°	1259	1314	690	146	154	772
45°	795	1070	746	128	204	605
55°	256	437	669	119	274	248
65°	163	212	320	108	276	163
75°	113	142	165	89	214	120
85°	75	78	20	68	158	81
90°	58	58	58	58	58	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	560.7	560.7	560.7	560.7	560.7	560.7	560.7	560.7	560.7
1°	604.7	600.2	590.0	576.0	560.5	545.0	532.1	523.7	520.9
2°	634.8	628.5	612.4	588.2	559.4	531.1	508.1	492.8	489.0
3°	664.8	656.1	633.9	601.0	561.8	521.6	487.6	465.9	458.7
4°	692.7	682.8	656.2	614.6	561.8	508.6	465.0	437.4	428.9
5°	719.9	708.8	677.8	628.2	565.3	499.5	446.0	412.1	401.0
6°	744.7	733.6	700.5	642.5	566.1	487.5	424.8	385.3	373.6
7°	768.4	756.9	722.1	657.7	570.1	478.7	406.3	362.3	348.6
8°	790.3	779.3	743.9	672.9	571.6	467.1	386.5	338.8	324.7
9°	811.1	800.8	765.3	688.9	576.2	458.8	369.3	318.3	303.0
10°	830.6	821.9	787.5	705.5	578.9	447.7	351.2	298.3	282.5
11°	849.6	841.7	808.6	722.3	583.5	439.2	335.4	281.0	264.8
12°	867.3	861.9	831.0	740.7	586.5	428.4	319.2	264.2	248.4
13°	885.6	881.8	852.7	758.6	591.7	420.1	305.1	249.5	233.6
14°	903.5	901.9	875.5	777.6	595.4	409.7	291.2	235.6	220.4
15°	920.2	921.7	898.8	796.4	600.5	402.0	278.9	223.7	208.7
16°	938.0	942.0	922.6	817.1	604.6	392.3	266.2	212.1	198.2
17°	956.9	963.4	946.6	837.9	609.9	384.4	255.2	202.5	189.2
18°	976.4	985.1	972.1	859.5	614.6	375.2	244.4	193.2	181.0
19°	997.9	1009.1	997.7	881.0	620.1	367.8	234.6	185.4	174.2
20°	1019.8	1034.1	1025.6	903.8	625.1	359.2	225.3	178.2	168.1
21°	1044.0	1059.7	1052.5	926.4	631.2	351.8	217.1	172.1	163.1
22°	1065.4	1083.8	1078.2	950.8	636.6	344.1	208.7	166.5	158.8
23°	1087.4	1106.3	1102.1	972.1	642.2	337.3	201.6	161.9	155.3
24°	1109.2	1128.5	1125.4	993.0	647.8	330.2	194.7	157.7	152.4
25°	1130.6	1151.8	1148.2	1011.6	652.2	324.3	188.4	154.3	150.2
26°	1152.8	1174.2	1169.9	1031.5	657.6	318.0	182.6	151.3	148.5
27°	1175.7	1197.1	1191.5	1047.1	661.2	311.9	177.1	149.0	147.3
28°	1196.4	1221.4	1213.0	1063.6	665.5	305.9	172.0	147.0	146.6
29°	1218.0	1245.1	1233.0	1078.6	668.1	300.2	167.4	145.5	146.3
30°	1235.4	1266.6	1253.0	1093.9	672.4	294.8	163.3	144.3	146.5
31°	1249.7	1285.8	1269.8	1106.1	674.8	289.1	159.2	143.6	147.2
32°	1259.6	1301.7	1285.3	1118.3	679.0	284.2	155.6	143.1	148.1
33°	1265.3	1313.3	1298.5	1127.7	681.9	279.3	152.2	143.2	149.6
34°	1264.8	1321.5	1307.5	1138.0	687.0	274.8	149.2	143.4	151.5
35°	1258.9	1324.6	1313.6	1142.8	690.0	270.2	146.4	144.3	153.8
36°	1246.2	1320.9	1315.7	1147.8	695.9	266.5	143.8	145.2	156.7
37°	1225.9	1313.5	1313.4	1147.7	699.0	262.1	141.3	146.7	160.0
38°	1198.7	1298.8	1304.1	1147.1	705.5	258.9	139.3	148.4	163.9
39°	1161.0	1277.0	1290.9	1141.3	709.3	254.9	137.3	150.5	168.2
40°	1117.1	1248.0	1270.8	1133.8	716.1	252.1	135.3	152.8	173.1
41°	1061.8	1212.3	1244.5	1120.8	720.9	248.5	133.7	155.6	178.3
42°	1003.0	1167.6	1210.7	1106.0	728.7	246.2	132.2	158.4	184.2
43°	936.2	1117.8	1169.9	1085.4	733.9	242.5	130.8	162.0	190.5
44°	868.8	1059.6	1123.2	1062.3	741.4	240.7	129.6	165.5	197.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
45°	795.0	997.7	1069.7	1033.7	745.7	237.2	128.5	169.7	204.3
46°	723.7	928.6	1010.5	1002.2	752.7	235.3	127.3	173.7	211.8
47°	649.7	857.3	948.3	966.7	755.3	231.5	126.3	178.5	219.4
48°	580.0	780.4	880.8	928.1	757.6	229.4	125.3	183.1	227.1
49°	511.3	704.0	813.8	887.1	755.2	224.9	124.5	188.4	234.6
50°	450.9	626.5	744.7	844.1	752.8	222.2	123.4	193.1	242.3
51°	395.0	554.5	676.6	799.1	743.4	217.0	122.7	198.6	249.4
52°	349.6	486.6	609.7	751.5	733.2	213.0	121.6	203.2	256.5
53°	310.2	429.1	547.4	703.3	716.0	206.5	121.0	208.6	262.8
54°	280.2	379.0	488.2	653.3	695.5	201.2	119.9	212.8	268.6
55°	256.0	338.6	437.4	604.6	669.0	193.3	119.3	217.8	273.8
56°	238.0	305.8	391.1	555.1	639.9	186.6	118.0	221.4	278.0
57°	223.3	280.6	353.5	508.4	606.3	178.0	117.3	225.4	281.1
58°	211.9	259.6	320.9	462.7	570.4	170.7	116.0	227.7	283.4
59°	202.0	243.7	295.6	421.3	532.5	161.8	115.3	230.6	284.9
60°	193.8	230.1	274.1	382.7	493.0	154.3	113.9	231.6	285.7
61°	186.5	218.8	257.4	350.1	455.0	145.8	113.3	233.2	285.7
62°	180.1	209.0	243.3	321.1	416.8	138.9	111.6	232.8	284.7
63°	174.1	200.9	231.8	297.5	381.6	131.5	110.9	233.2	282.6
64°	168.6	192.8	221.3	277.0	348.7	125.5	109.1	231.4	279.6
65°	163.4	185.7	212.5	260.4	320.3	119.1	108.2	230.5	276.1
66°	158.6	178.8	204.0	245.8	294.6	114.3	106.2	227.4	271.8
67°	153.7	172.4	196.3	233.2	272.9	109.2	105.0	225.2	267.1
68°	149.1	165.9	188.8	222.1	253.6	105.1	102.7	221.0	261.6
69°	144.2	160.0	181.9	212.2	237.5	100.5	101.4	217.8	255.8
70°	139.5	154.0	175.1	203.0	222.9	96.9	98.9	212.4	249.2
71°	134.3	148.1	168.7	194.9	210.6	92.9	97.6	208.3	242.4
72°	129.2	141.8	161.9	187.0	199.2	89.8	95.2	202.3	235.1
73°	123.8	135.6	155.4	180.4	189.5	86.5	93.6	197.5	227.7
74°	118.6	129.0	148.6	174.1	180.3	84.0	90.7	191.2	220.4
75°	113.1	122.5	141.8	168.4	165.3	81.4	88.8	186.3	213.6
76°	108.0	115.9	134.7	162.8	126.0	79.7	86.0	180.3	207.3
77°	103.0	109.8	127.8	157.9	87.2	77.8	84.2	176.4	201.8
78°	98.3	103.8	120.5	153.5	59.2	77.0	81.6	172.2	197.7
79°	94.2	98.4	113.7	152.0	46.0	75.0	80.3	170.0	194.3
80°	90.1	93.2	106.7	143.7	37.2	72.0	78.5	166.8	191.0
81°	86.7	88.7	100.5	131.6	32.4	68.7	77.3	163.7	185.6
82°	83.3	84.6	94.3	120.1	27.6	65.2	75.2	157.3	178.5
83°	80.4	80.3	88.6	110.7	24.8	61.7	73.4	152.1	172.2
84°	77.7	77.0	83.0	101.9	21.5	59.4	70.4	145.5	165.2
85°	74.7	73.5	78.0	94.7	19.5	56.3	68.4	139.9	158.1
86°	72.0	70.7	73.1	88.1	16.7	54.2	65.4	133.1	150.9
87°	67.9	66.9	68.3	81.2	14.8	51.3	63.3	127.5	144.2
88°	64.1	63.2	63.7	74.4	11.5	48.6	60.4	121.1	137.2
89°	59.8	58.6	57.7	65.7	9.0	45.6	58.3	115.1	129.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
90°	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2	58.2

(END OF REPORT)