

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: P972457

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

Issue Date: 2/27/2025

Test Information

Test Method: LM-79-2019
Report Number: P972457
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-935-ASYM-X-4F-UNV-STD
Description: iO LED MiniO-FLEX LINEAR LIGHTING WITH ASYMMETRIC OPTICS
6 WATTS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2201.5 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

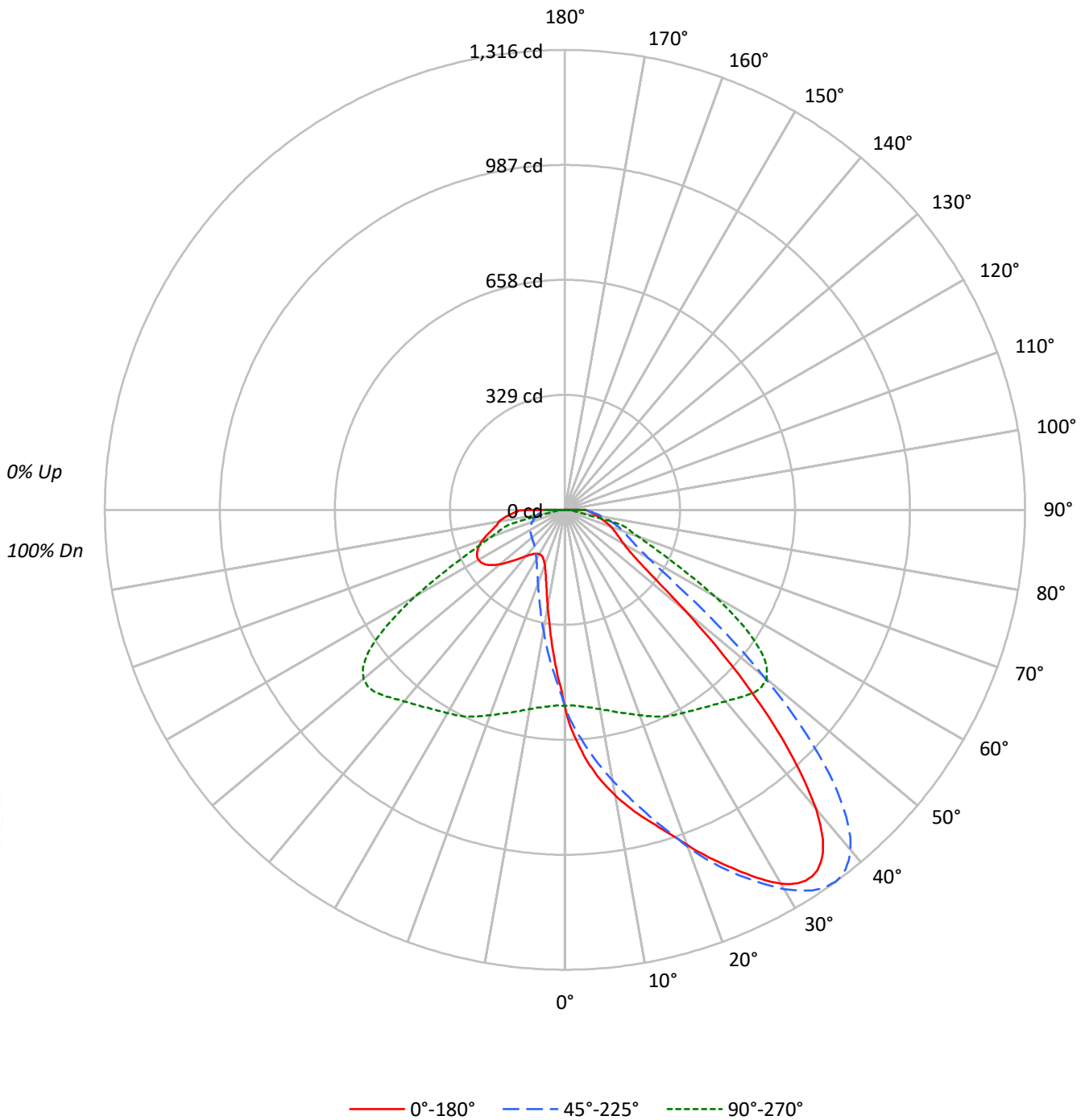
Input Watts (W): 22.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	19902	19902	19902	19902	19902
5°	24742	23531	20124	15482	13782
10°	27879	26953	20836	12018	9481
15°	30406	30559	22020	9485	6894
20°	33431	34910	23544	7667	5508
25°	37053	39428	25449	6471	4920
30°	40787	43746	27430	5699	4837
35°	42195	47004	29730	5239	5152
40°	38315	46997	32963	5005	5935
45°	28137	41266	37134	4958	7232
50°	16616	30254	41183	5015	8927
55°	9920	18923	40932	5158	10606
60°	7980	12788	34523	5309	11760
65°	7236	10839	26456	5521	12223
70°	6733	9943	22644	5610	12036
75°	6053	9155	22022	5733	11436
80°	5463	8053	7278	5917	11575
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°	305.9	13.9
30°-40°	445.9	20.3
40°-50°	464.1	21.1
50°-60°	322.6	14.7
60°-70°	208.3	9.5
70°-80°	144.9	6.6
80°-90°	88.4	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°	527.2	23.9
0°-40°	973.2	44.2
0°-60°	1759.9	79.9
0°-90°	2201.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2201.5	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°	1130	1148	652	188	150	526
35°	1259	1313	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°	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6	560.6
1°	604.6	600.1	589.9	575.9	560.4	544.9	532.0	523.6	520.8
2°	634.6	628.4	612.3	588.1	559.3	531.0	508.0	492.7	488.9
3°	664.7	656.0	633.8	600.9	561.7	521.5	487.5	465.8	458.6
4°	692.6	682.7	656.1	614.5	561.6	508.5	465.0	437.3	428.9
5°	719.7	708.7	677.7	628.1	565.1	499.4	445.9	412.0	400.9
6°	744.6	733.5	700.4	642.4	566.0	487.4	424.7	385.3	373.5
7°	768.3	756.7	721.9	657.6	570.0	478.6	406.3	362.2	348.6
8°	790.2	779.1	743.7	672.7	571.5	467.0	386.4	338.7	324.6
9°	810.9	800.6	765.1	688.7	576.1	458.7	369.2	318.2	303.0
10°	830.4	821.8	787.4	705.4	578.8	447.6	351.1	298.3	282.4
11°	849.4	841.5	808.4	722.2	583.4	439.2	335.4	281.0	264.7
12°	867.2	861.7	830.8	740.6	586.4	428.3	319.1	264.1	248.4
13°	885.5	881.6	852.5	758.4	591.6	420.0	305.1	249.5	233.6
14°	903.3	901.8	875.4	777.4	595.3	409.6	291.1	235.6	220.4
15°	920.0	921.5	898.6	796.3	600.4	401.9	278.9	223.7	208.6
16°	937.8	941.8	922.4	816.9	604.5	392.2	266.2	212.1	198.2
17°	956.8	963.2	946.4	837.8	609.8	384.3	255.2	202.4	189.1
18°	976.3	984.9	971.9	859.3	614.5	375.1	244.4	193.2	181.0
19°	997.7	1008.9	997.5	880.8	620.0	367.8	234.6	185.4	174.1
20°	1019.6	1033.9	1025.4	903.6	625.0	359.2	225.2	178.2	168.0
21°	1043.8	1059.5	1052.3	926.2	631.1	351.8	217.1	172.0	163.1
22°	1065.2	1083.6	1078.0	950.6	636.5	344.0	208.7	166.4	158.8
23°	1087.2	1106.1	1101.9	971.9	642.1	337.3	201.6	161.9	155.2
24°	1108.9	1128.3	1125.2	992.8	647.7	330.2	194.6	157.7	152.4
25°	1130.4	1151.6	1148.0	1011.4	652.1	324.2	188.4	154.3	150.1
26°	1152.6	1174.0	1169.6	1031.3	657.5	317.9	182.5	151.3	148.5
27°	1175.4	1196.9	1191.3	1046.9	661.1	311.8	177.0	148.9	147.3
28°	1196.1	1221.2	1212.8	1063.4	665.4	305.8	172.0	147.0	146.6
29°	1217.8	1244.9	1232.7	1078.4	667.9	300.1	167.3	145.5	146.3
30°	1235.2	1266.3	1252.8	1093.7	672.2	294.7	163.2	144.3	146.5
31°	1249.5	1285.6	1269.6	1105.9	674.7	289.0	159.2	143.6	147.1
32°	1259.3	1301.4	1285.1	1118.1	678.8	284.1	155.6	143.1	148.1
33°	1265.0	1313.1	1298.2	1127.5	681.8	279.3	152.1	143.1	149.6
34°	1264.6	1321.3	1307.3	1137.8	686.8	274.8	149.2	143.4	151.4
35°	1258.7	1324.4	1313.4	1142.6	689.8	270.1	146.4	144.2	153.7
36°	1246.0	1320.7	1315.5	1147.6	695.8	266.4	143.8	145.2	156.6
37°	1225.7	1313.3	1313.2	1147.4	698.9	262.1	141.3	146.6	159.9
38°	1198.5	1298.5	1303.9	1146.9	705.4	258.9	139.2	148.3	163.9
39°	1160.8	1276.7	1290.6	1141.1	709.2	254.8	137.2	150.5	168.2
40°	1116.9	1247.8	1270.5	1133.6	716.0	252.1	135.3	152.7	173.0
41°	1061.6	1212.0	1244.2	1120.6	720.8	248.4	133.7	155.6	178.3
42°	1002.8	1167.3	1210.5	1105.8	728.5	246.2	132.2	158.4	184.2
43°	936.1	1117.6	1169.7	1085.2	733.8	242.5	130.8	161.9	190.4
44°	868.6	1059.4	1122.9	1062.1	741.3	240.6	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°	794.8	997.6	1069.6	1033.5	745.5	237.1	128.5	169.7	204.3
46°	723.6	928.5	1010.3	1002.0	752.6	235.2	127.2	173.7	211.8
47°	649.6	857.1	948.1	966.5	755.1	231.5	126.3	178.5	219.3
48°	579.8	780.3	880.6	927.9	757.5	229.4	125.3	183.0	227.1
49°	511.2	703.9	813.6	887.0	755.1	224.8	124.5	188.4	234.6
50°	450.8	626.4	744.5	844.0	752.7	222.1	123.4	193.1	242.2
51°	394.9	554.4	676.5	798.9	743.2	217.0	122.7	198.6	249.4
52°	349.5	486.6	609.6	751.4	733.0	212.9	121.6	203.2	256.4
53°	310.1	429.0	547.3	703.2	715.8	206.5	121.0	208.6	262.7
54°	280.1	378.9	488.1	653.2	695.4	201.2	119.8	212.8	268.6
55°	256.0	338.5	437.3	604.4	668.8	193.3	119.2	217.8	273.7
56°	238.0	305.7	391.0	555.0	639.8	186.6	117.9	221.4	277.9
57°	223.2	280.5	353.5	508.3	606.2	178.0	117.3	225.4	281.1
58°	211.9	259.5	320.8	462.6	570.3	170.7	115.9	227.6	283.4
59°	201.9	243.7	295.5	421.2	532.4	161.8	115.3	230.5	284.8
60°	193.8	230.0	274.1	382.6	492.9	154.3	113.8	231.6	285.6
61°	186.5	218.8	257.4	350.0	454.9	145.8	113.2	233.2	285.7
62°	180.1	209.0	243.3	321.1	416.7	138.9	111.6	232.7	284.6
63°	174.1	200.8	231.8	297.5	381.5	131.5	110.9	233.2	282.6
64°	168.6	192.8	221.3	276.9	348.7	125.5	109.1	231.4	279.6
65°	163.4	185.7	212.4	260.4	320.3	119.1	108.2	230.5	276.0
66°	158.6	178.7	203.9	245.8	294.5	114.2	106.2	227.3	271.8
67°	153.7	172.3	196.2	233.2	272.8	109.1	105.0	225.2	267.0
68°	149.0	165.9	188.7	222.0	253.6	105.1	102.7	221.0	261.5
69°	144.2	160.0	181.9	212.1	237.4	100.5	101.4	217.7	255.7
70°	139.4	153.9	175.1	203.0	222.9	96.9	98.8	212.4	249.2
71°	134.3	148.0	168.7	194.9	210.6	92.8	97.6	208.3	242.4
72°	129.2	141.8	161.9	187.0	199.2	89.8	95.2	202.3	235.0
73°	123.8	135.5	155.4	180.3	189.5	86.5	93.6	197.4	227.7
74°	118.5	128.9	148.6	174.0	180.3	84.0	90.7	191.1	220.3
75°	113.0	122.4	141.8	168.4	165.3	81.3	88.8	186.2	213.5
76°	108.0	115.9	134.7	162.8	125.9	79.6	86.0	180.3	207.2
77°	103.0	109.8	127.8	157.9	87.2	77.7	84.2	176.4	201.8
78°	98.3	103.8	120.5	153.4	59.2	77.0	81.6	172.1	197.7
79°	94.2	98.4	113.7	152.0	46.0	75.0	80.3	169.9	194.2
80°	90.1	93.2	106.7	143.7	37.2	71.9	78.4	166.8	190.9
81°	86.7	88.7	100.5	131.6	32.4	68.7	77.2	163.7	185.5
82°	83.3	84.6	94.3	120.1	27.6	65.2	75.2	157.2	178.5
83°	80.4	80.3	88.6	110.7	24.8	61.7	73.4	152.0	172.2
84°	77.6	77.0	83.0	101.9	21.5	59.4	70.4	145.4	165.1
85°	74.7	73.5	78.0	94.6	19.5	56.3	68.4	139.9	158.1
86°	71.9	70.7	73.1	88.1	16.7	54.2	65.4	133.0	150.9
87°	67.9	66.9	68.3	81.1	14.8	51.3	63.3	127.5	144.2
88°	64.0	63.2	63.7	74.4	11.5	48.6	60.4	121.0	137.2
89°	59.8	58.6	57.7	65.6	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)