

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: P958860

Luminaire Tested: MMG-08W-927-30x60-ID-X-X-4F-4-UNV-STD-X

Issue Date: 1/31/2025

Test Information

Test Method: LM-79-2019
Report Number: P958860
SCALED TEST REPORT
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/31/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: iO LED
Catalog Number: MMG-08W-927-30x60-ID-X-X-4F-4-UNV-STD-X
Description: iO LED MiniO-Graze LINEAR LIGHTING WITH 30x60 DEGREE OPTICS
8 WATTS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1486.3 lumens
Efficiency: N/A
Efficacy: 50.9 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 1.09 / 0.76
Luminous Opening: Rectangular w/ Sides (W: 0.07' x L: 4' x H: 0.09')
CIE Type: Direct

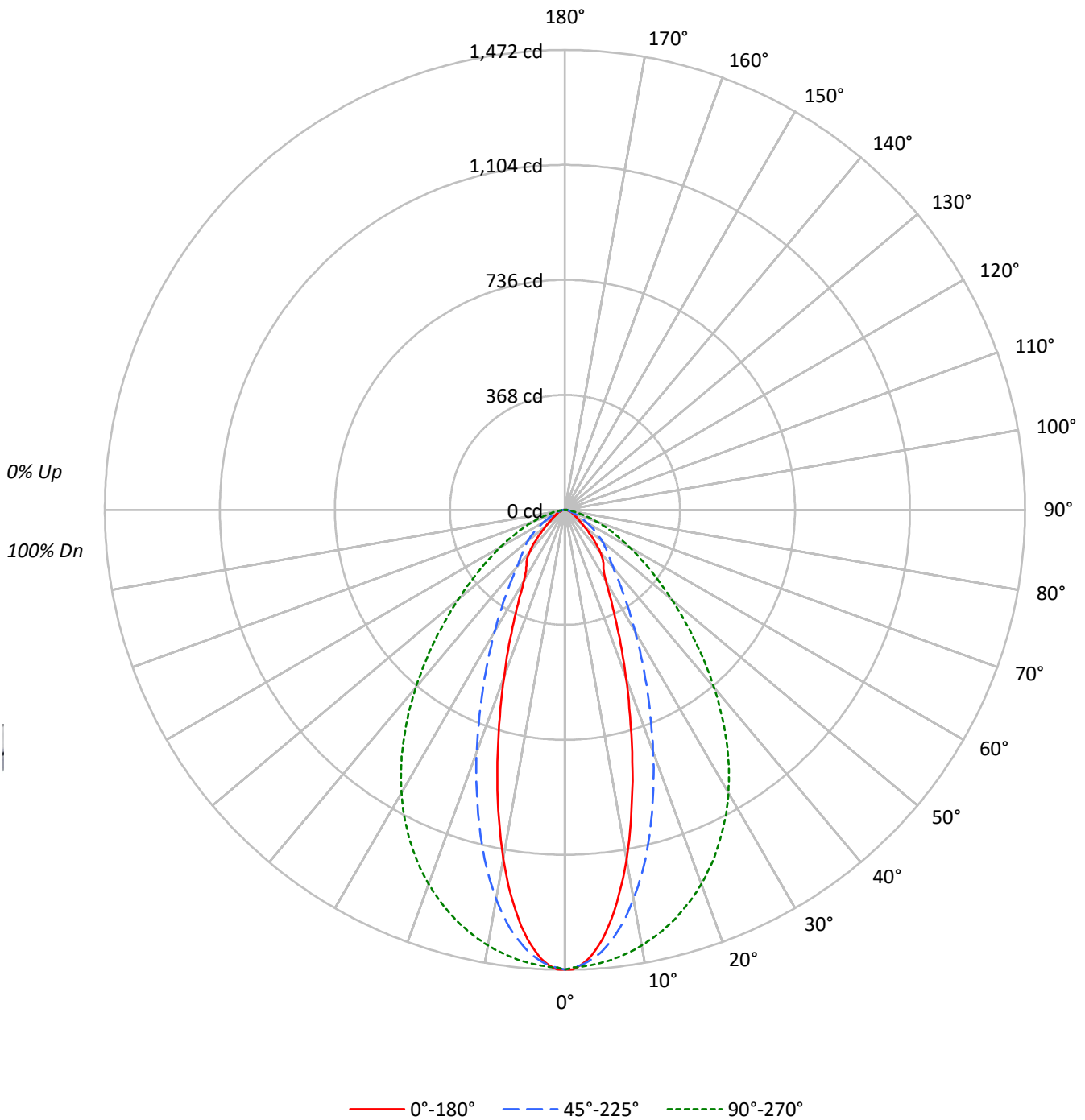
Input Watts (W): 29.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P958860

CATALOG NUMBER: MMG-08W-927-30x60-ID-X-X-4F-4-UNV-STD-X

Luminous Intensity Polar Plot





TEST NUMBER: P958860

CATALOG NUMBER: MMG-08W-927-30x60-ID-X-X-4F-4-UNV-STD-X

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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																												
1	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	92	90																												
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80																												
3	97	89	83	78	95	88	82	77	85	80	76	82	78	75	80	76	73	72																												
4	91	81	75	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64																												
5	85	75	68	62	83	74	67	62	72	66	61	70	65	61	68	64	60	59																												
6	80	69	62	57	78	68	61	56	67	61	56	65	60	56	64	59	55	53																												
7	75	64	57	52	74	63	57	52	62	56	51	61	55	51	60	55	51	49																												
8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45																												
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42																												
10	64	53	46	41	63	52	46	41	51	45	41	50	45	41	50	44	41	39																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	57479	57479	57479
5°	53944	51393	51381
10°	44844	43363	46085
15°	33522	34447	41183
20°	23500	25880	36526
25°	16244	18739	31990
30°	11672	13370	27512
35°	10091	9556	22993
40°	8795	7003	18545
45°	6560	5595	14443
50°	4515	4581	10918
55°	3410	3450	8105
60°	2719	2393	5912
65°	2466	1575	4169
70°	2362	1020	2727
75°	1901	670	1560
80°	1746	446	749
85°	2378	325	275

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14443 cd/sqm



TEST NUMBER: P958860

CATALOG NUMBER: MMG-08W-927-30x60-ID-X-X-4F-4-UNV-STD-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.3	8.8
10°-20°	298.2	20.1
20°-30°	318.7	21.4
30°-40°	273.3	18.4
40°-50°	210.7	14.2
50°-60°	137.4	9.2
60°-70°	75.6	5.1
70°-80°	31.7	2.1
80°-90°	10.3	0.7
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°	747.2	50.3
0°-40°	1020.5	68.7
0°-60°	1368.6	92.1
0°-90°	1486.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1486.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1472	1472	1472	1472	1472	
5°	1378	1387	1413	1440	1452	124
15°	834	893	1055	1258	1356	230
25°	381	432	615	950	1171	177
35°	215	225	325	631	900	134
45°	121	145	192	399	585	94
55°	52	62	115	242	330	47
65°	28	30	50	126	165	28
75°	14	15	19	45	58	15
85°	7	7	8	12	9	8
90°	6	6	6	6	6	



TEST NUMBER: P958860

CATALOG NUMBER: MMG-08W-927-30x60-ID-X-X-4F-4-UNV-STD-X

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1471.7	1471.7	1471.7	1471.7	1471.7
1°	1471.9	1468.8	1466.1	1465.3	1465.1
2°	1458.7	1457.4	1458.7	1461.0	1463.4
3°	1439.1	1440.5	1447.5	1455.6	1460.7
4°	1412.0	1416.9	1432.6	1448.8	1457.0
5°	1378.5	1387.2	1413.0	1439.9	1452.5
6°	1338.9	1352.5	1390.1	1429.3	1447.1
7°	1294.4	1313.4	1363.7	1417.2	1440.7
8°	1243.4	1269.2	1333.9	1402.9	1433.3
9°	1192.4	1221.1	1300.9	1386.2	1425.0
10°	1135.0	1171.9	1265.1	1368.8	1415.7
11°	1075.9	1117.2	1226.3	1349.4	1405.6
12°	1014.9	1062.5	1186.2	1328.5	1394.8
13°	954.4	1004.8	1145.7	1306.0	1382.7
14°	893.9	949.3	1100.5	1282.7	1369.9
15°	833.8	892.8	1055.2	1257.5	1356.4
16°	775.7	835.8	1009.4	1230.8	1341.6
17°	718.7	781.1	962.1	1202.5	1326.3
18°	667.7	727.6	917.0	1173.2	1309.9
19°	617.9	678.8	871.6	1143.2	1292.8
20°	569.8	630.5	824.5	1112.7	1274.8
21°	527.0	585.7	779.6	1081.5	1255.8
22°	485.3	542.9	736.1	1049.7	1235.8
23°	447.7	504.3	693.9	1017.0	1215.3
24°	412.3	466.5	653.6	983.7	1193.2
25°	380.7	432.4	615.4	949.7	1170.9
26°	351.0	399.5	579.1	915.6	1147.8
27°	324.8	370.4	543.5	881.1	1123.8
28°	300.8	343.5	510.1	847.6	1099.0
29°	279.9	319.0	478.9	815.6	1073.0
30°	262.0	296.6	448.9	784.0	1046.1
31°	247.5	276.2	421.8	752.2	1018.4
32°	235.7	259.3	394.6	720.6	989.9
33°	227.4	245.0	370.4	690.0	960.8
34°	220.8	233.8	346.9	660.2	930.9
35°	214.8	224.6	325.4	631.1	900.3
36°	208.9	217.7	304.7	603.8	869.1
37°	202.4	211.5	286.7	576.6	837.5
38°	194.4	205.5	269.0	551.4	805.7
39°	185.7	199.4	253.5	527.2	773.7
40°	175.6	192.3	240.0	504.3	741.6
41°	165.1	184.5	227.5	481.5	709.6
42°	154.3	175.6	216.7	459.6	678.0
43°	142.8	165.9	207.4	438.4	646.2
44°	131.8	155.4	199.3	418.7	615.2



TEST NUMBER: P958860

CATALOG NUMBER: MMG-08W-927-30x60-ID-X-X-4F-4-UNV-STD-X

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
45°	121.3	145.2	191.5	399.3	585.2
46°	110.9	134.9	183.9	380.9	555.5
47°	100.4	124.8	177.2	363.2	526.4
48°	91.5	115.1	170.2	346.0	498.1
49°	83.3	105.2	162.8	329.7	471.0
50°	76.2	96.1	155.4	313.8	444.8
51°	69.8	87.6	147.7	298.1	419.8
52°	64.3	80.2	139.6	283.4	395.8
53°	59.7	73.7	131.4	268.8	372.7
54°	55.4	67.8	123.3	254.9	350.6
55°	51.6	62.4	115.1	241.5	329.5
56°	47.7	57.8	107.2	227.9	309.3
57°	44.6	53.5	99.2	215.1	290.3
58°	41.5	49.4	91.7	203.1	271.9
59°	38.4	45.7	84.7	191.1	254.7
60°	36.1	42.3	77.9	179.1	238.0
61°	33.7	39.2	71.3	167.7	222.1
62°	31.8	36.4	65.5	156.6	207.0
63°	30.4	33.7	59.7	145.9	192.5
64°	29.1	31.4	54.5	135.5	178.3
65°	27.9	29.5	49.6	125.6	164.9
66°	26.7	27.7	45.0	115.7	152.0
67°	26.0	26.2	41.1	106.2	139.6
68°	24.8	24.8	37.2	97.1	127.5
69°	23.3	23.3	33.7	88.4	115.9
70°	21.9	22.1	30.8	80.2	105.1
71°	20.2	20.7	27.9	72.3	94.6
72°	18.4	19.4	25.4	64.7	84.7
73°	16.7	18.0	23.1	57.8	75.4
74°	15.1	16.7	20.9	51.2	66.5
75°	13.6	15.1	19.2	45.2	58.1
76°	12.4	14.0	17.4	39.7	50.8
77°	11.2	12.8	15.9	34.9	43.8
78°	10.1	11.6	14.5	30.2	37.6
79°	9.5	10.7	13.2	26.4	32.0
80°	8.7	9.7	12.0	23.1	26.7
81°	8.1	8.9	11.2	20.2	22.3
82°	7.8	8.3	10.3	17.6	18.4
83°	7.4	7.8	9.5	15.5	14.9
84°	7.0	7.4	8.9	13.6	11.8
85°	6.6	7.0	8.1	12.2	9.3
86°	6.6	6.6	7.6	10.9	7.2
87°	6.4	6.2	7.2	9.7	5.4
88°	6.2	6.0	6.6	8.9	4.3
89°	6.2	5.8	6.4	8.1	3.7



TEST NUMBER: P958860

CATALOG NUMBER: MMG-08W-927-30x60-ID-X-X-4F-4-UNV-STD-X

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
90°	6.0	6.0	6.0	6.0	6.0

(END OF REPORT)