

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: P958864

Luminaire Tested: MMG-08W-930-30x60-ID-X-X-4F-4-UNV-STD-X

Issue Date: 1/31/2025

Test Information

Test Method: LM-79-2019
Report Number: P958864
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-930-30x60-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: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1489.6 lumens
Efficiency: N/A
Efficacy: 51.0 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

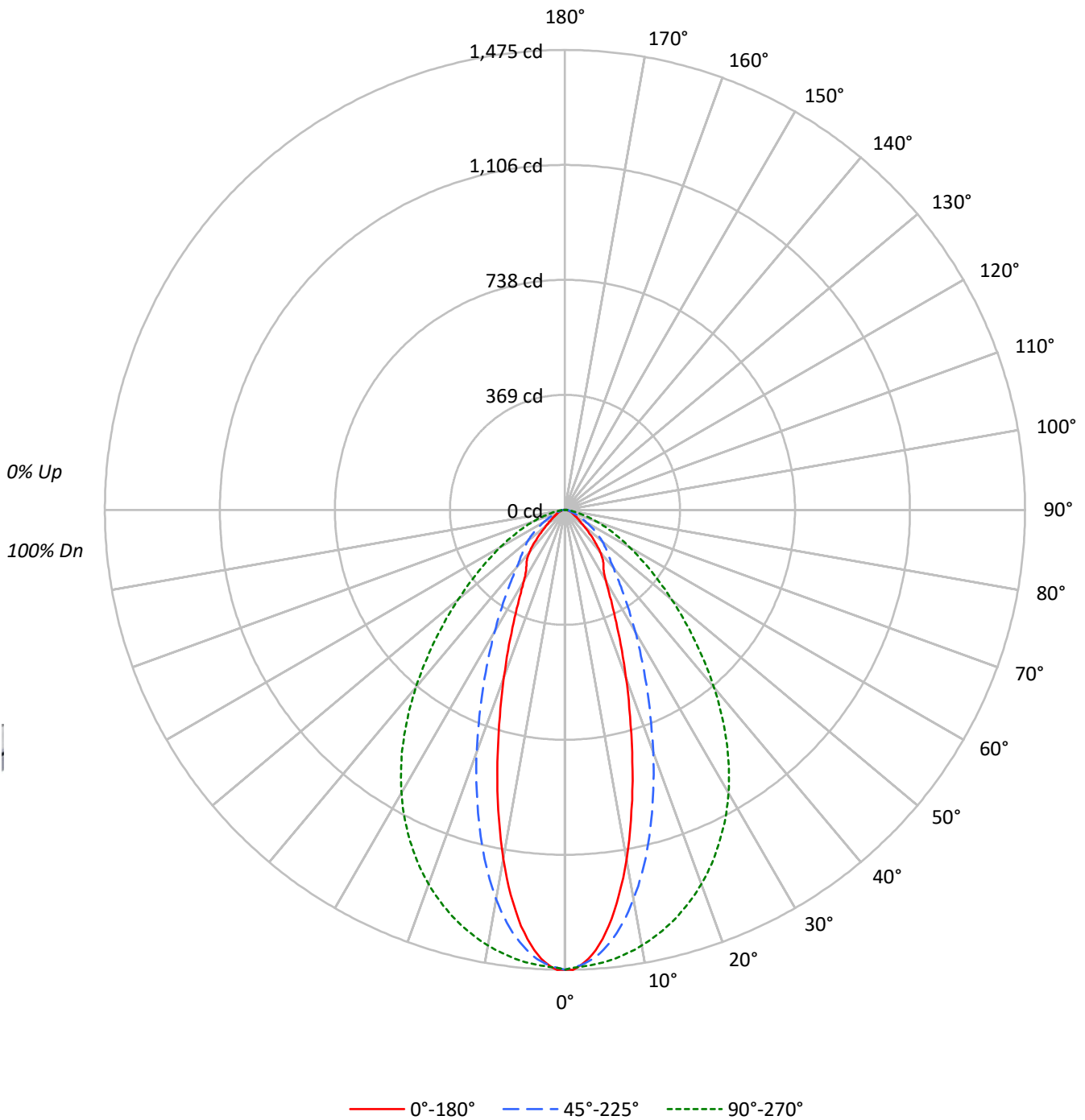
Input Watts (W): 29.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P958864

CATALOG NUMBER: MMG-08W-930-30x60-ID-X-X-4F-4-UNV-STD-X

Luminous Intensity Polar Plot





TEST NUMBER: P958864

CATALOG NUMBER: MMG-08W-930-30x60-ID-X-X-4F-4-UNV-STD-X

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	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°	57608	57608	57608
5°	54062	51506	51494
10°	44947	43459	46186
15°	33599	34522	41274
20°	23554	25940	36606
25°	16278	18781	32061
30°	11699	13400	27573
35°	10110	9580	23044
40°	8816	7018	18585
45°	6576	5607	14475
50°	4521	4593	10942
55°	3416	3459	8123
60°	2719	2400	5925
65°	2474	1579	4180
70°	2373	1024	2732
75°	1901	670	1565
80°	1746	446	751
85°	2378	329	275

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14475 cd/sqm

TEST NUMBER: P958864

CATALOG NUMBER: MMG-08W-930-30x60-ID-X-X-4F-4-UNV-STD-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.6	8.8
10°-20°	298.9	20.1
20°-30°	319.4	21.4
30°-40°	273.9	18.4
40°-50°	211.2	14.2
50°-60°	137.7	9.2
60°-70°	75.8	5.1
70°-80°	31.8	2.1
80°-90°	10.4	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°	748.9	50.3
0°-40°	1022.8	68.7
0°-60°	1371.7	92.1
0°-90°	1489.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1489.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1475	1475	1475	1475	1475	
5°	1382	1390	1416	1443	1456	124
15°	836	895	1058	1260	1359	230
25°	382	433	617	952	1174	178
35°	215	225	326	632	902	135
45°	122	146	192	400	586	94
55°	52	63	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: P958864

CATALOG NUMBER: MMG-08W-930-30x60-ID-X-X-4F-4-UNV-STD-X

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1475.0	1475.0	1475.0	1475.0	1475.0
1°	1475.2	1472.1	1469.3	1468.6	1468.4
2°	1462.0	1460.6	1462.0	1464.3	1466.6
3°	1442.3	1443.7	1450.7	1458.9	1463.9
4°	1415.1	1420.0	1435.7	1452.1	1460.2
5°	1381.5	1390.3	1416.1	1443.1	1455.7
6°	1341.9	1355.5	1393.2	1432.4	1450.3
7°	1297.2	1316.3	1366.8	1420.4	1443.9
8°	1246.1	1272.0	1336.9	1406.0	1436.5
9°	1195.1	1223.8	1303.8	1389.3	1428.2
10°	1137.6	1174.5	1267.9	1371.8	1418.8
11°	1078.3	1119.7	1229.1	1352.4	1408.7
12°	1017.1	1064.9	1188.8	1331.4	1397.9
13°	956.5	1007.0	1148.2	1308.9	1385.8
14°	895.9	951.5	1103.0	1285.6	1373.0
15°	835.7	894.7	1057.5	1260.3	1359.4
16°	777.4	837.6	1011.7	1233.5	1344.6
17°	720.3	782.8	964.3	1205.2	1329.3
18°	669.2	729.2	919.0	1175.8	1312.8
19°	619.3	680.3	873.6	1145.7	1295.7
20°	571.1	631.9	826.4	1115.2	1277.6
21°	528.2	587.0	781.3	1083.9	1258.6
22°	486.4	544.1	737.8	1052.1	1238.6
23°	448.7	505.5	695.4	1019.3	1218.0
24°	413.2	467.6	655.0	985.8	1195.8
25°	381.5	433.4	616.8	951.9	1173.5
26°	351.8	400.4	580.4	917.7	1150.4
27°	325.6	371.2	544.7	883.1	1126.3
28°	301.5	344.2	511.3	849.5	1101.4
29°	280.5	319.7	480.0	817.4	1075.4
30°	262.6	297.2	449.9	785.8	1048.4
31°	248.1	276.8	422.7	753.9	1020.6
32°	236.2	259.9	395.5	722.2	992.1
33°	227.9	245.5	371.2	691.5	962.9
34°	221.3	234.3	347.7	661.6	933.0
35°	215.2	225.1	326.2	632.5	902.3
36°	209.4	218.1	305.4	605.1	871.0
37°	202.8	211.9	287.3	577.9	839.4
38°	194.8	205.9	269.6	552.7	807.5
39°	186.1	199.9	254.1	528.4	775.5
40°	176.0	192.7	240.5	505.5	743.2
41°	165.5	184.9	228.1	482.5	711.2
42°	154.6	176.0	217.2	460.6	679.5
43°	143.2	166.3	207.9	439.4	647.6
44°	132.1	155.8	199.7	419.6	616.6



TEST NUMBER: P958864

CATALOG NUMBER: MMG-08W-930-30x60-ID-X-X-4F-4-UNV-STD-X

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
45°	121.6	145.5	191.9	400.2	586.5
46°	111.1	135.2	184.3	381.7	556.7
47°	100.6	125.1	177.5	364.0	527.6
48°	91.7	115.4	170.6	346.7	499.2
49°	83.5	105.5	163.2	330.4	472.0
50°	76.3	96.4	155.8	314.5	445.8
51°	69.9	87.8	148.0	298.8	420.8
52°	64.5	80.4	139.9	284.0	396.7
53°	59.8	73.8	131.7	269.4	373.6
54°	55.6	68.0	123.5	255.4	351.4
55°	51.7	62.6	115.4	242.0	330.2
56°	47.8	57.9	107.4	228.4	310.0
57°	44.7	53.6	99.5	215.6	291.0
58°	41.6	49.5	91.9	203.6	272.5
59°	38.5	45.8	84.9	191.5	255.3
60°	36.1	42.3	78.1	179.5	238.5
61°	33.8	39.2	71.5	168.0	222.6
62°	31.9	36.5	65.7	157.0	207.5
63°	30.5	33.8	59.8	146.3	192.9
64°	29.1	31.5	54.6	135.8	178.7
65°	28.0	29.5	49.7	125.9	165.3
66°	26.8	27.8	45.1	116.0	152.3
67°	26.0	26.2	41.2	106.5	139.9
68°	24.9	24.9	37.3	97.3	127.8
69°	23.3	23.3	33.8	88.6	116.2
70°	22.0	22.1	30.9	80.4	105.3
71°	20.2	20.8	28.0	72.5	94.8
72°	18.5	19.4	25.4	64.9	84.9
73°	16.7	18.1	23.1	57.9	75.6
74°	15.2	16.7	21.0	51.3	66.6
75°	13.6	15.2	19.2	45.3	58.3
76°	12.4	14.0	17.5	39.8	50.9
77°	11.3	12.8	15.9	35.0	43.9
78°	10.1	11.7	14.6	30.3	37.7
79°	9.5	10.7	13.2	26.4	32.1
80°	8.7	9.7	12.0	23.1	26.8
81°	8.2	8.9	11.3	20.2	22.3
82°	7.8	8.4	10.3	17.7	18.5
83°	7.4	7.8	9.5	15.5	15.0
84°	7.0	7.4	8.9	13.6	11.8
85°	6.6	7.0	8.2	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	8.2	3.7



TEST NUMBER: P958864

CATALOG NUMBER: MMG-08W-930-30x60-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)