

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: P958916

Luminaire Tested: MMG-08W-935-30x60-ID-X-X-1F-1-UNV-STD-X

Issue Date: 1/31/2025

Test Information

Test Method: LM-79-2019
Report Number: P958916
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-935-30x60-ID-X-X-1F-1-UNV-STD-X
Description: iO LED MiniO-Graze LINEAR LIGHTING WITH 30x60 DEGREE OPTICS. INPUT WATTAGE IN IES FILE REPRESENTS CONSUMPTION IN A RUN, INDIVIDUAL FIXTURE MAY VARY.
8 WATTS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 376.3 lumens
Efficiency: N/A
Efficacy: 51.6 lumens/watt
Spacing Criteria (0/90/45): 0.55 / 1.09 / 0.76
Luminous Opening: Rectangular w/ Sides (W: 0.07' x L: 1' x H: 0.09')
CIE Type: Direct

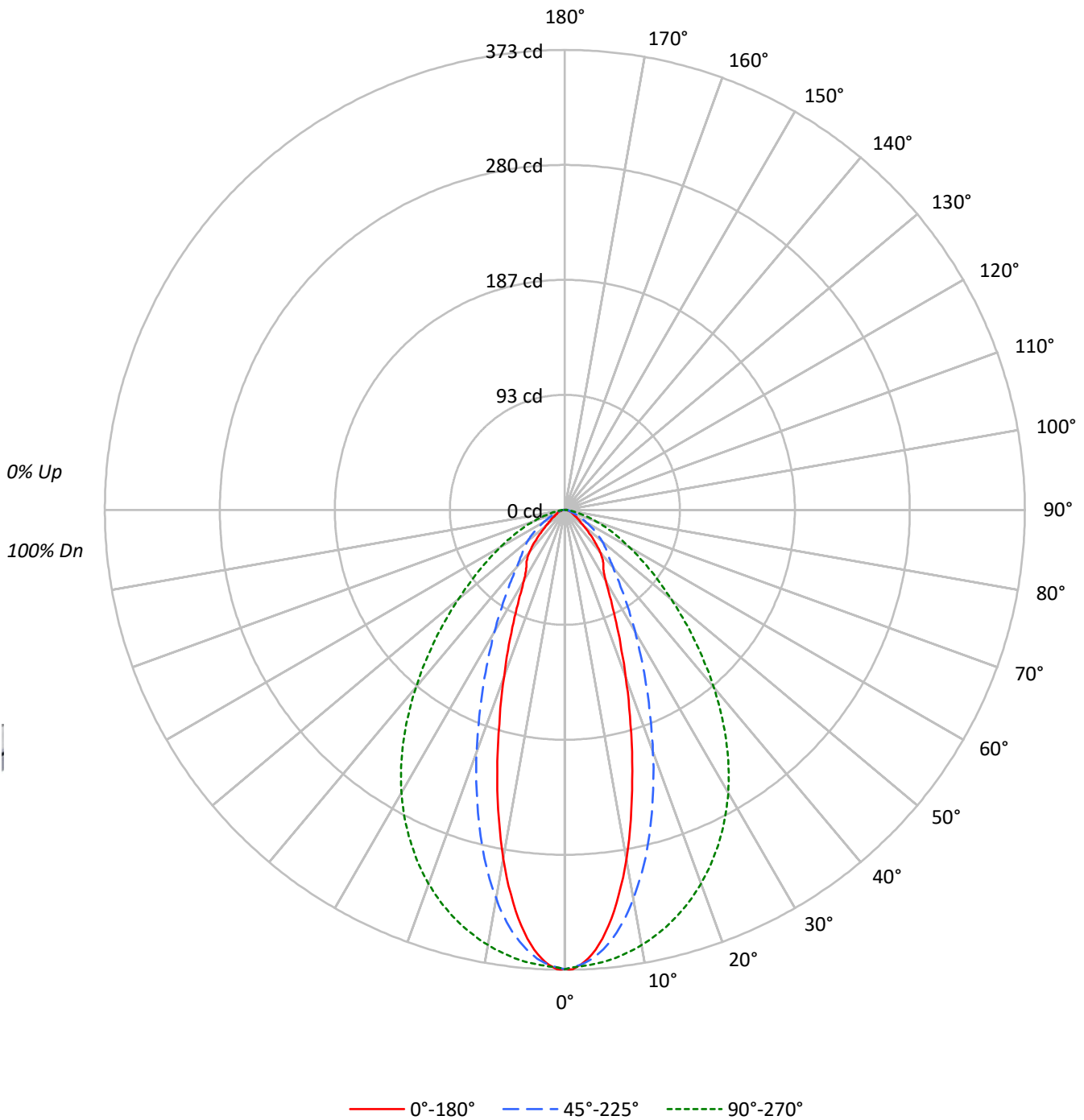
Input Watts (W): 7.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P958916

CATALOG NUMBER: MMG-08W-935-30x60-ID-X-X-1F-1-UNV-STD-X

Luminous Intensity Polar Plot





TEST NUMBER: P958916

CATALOG NUMBER: MMG-08W-935-30x60-ID-X-X-1F-1-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°	58210	58210	58210
5°	54325	51865	52042
10°	44916	43615	46680
15°	33380	34553	41705
20°	23268	25894	36996
25°	15981	18698	32403
30°	11416	13317	27867
35°	9790	9494	23292
40°	8469	6946	18785
45°	6250	5536	14630
50°	4258	4527	11055
55°	3181	3404	8206
60°	2477	2349	5992
65°	2219	1549	4228
70°	2035	998	2760
75°	1557	658	1579
80°	1334	428	763
85°	1543	322	284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 14630 cd/sqm



TEST NUMBER: P958916

CATALOG NUMBER: MMG-08W-935-30x60-ID-X-X-1F-1-UNV-STD-X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.0	8.8
10°-20°	75.5	20.1
20°-30°	80.7	21.4
30°-40°	69.2	18.4
40°-50°	53.4	14.2
50°-60°	34.8	9.2
60°-70°	19.1	5.1
70°-80°	8.0	2.1
80°-90°	2.6	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°	189.2	50.3
0°-40°	258.4	68.7
0°-60°	346.5	92.1
0°-90°	376.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	376.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	373	373	373	373	373	
5°	349	351	358	365	368	31
15°	211	226	267	318	343	58
25°	96	110	156	240	296	45
35°	54	57	82	160	228	34
45°	31	37	48	101	148	24
55°	13	16	29	61	83	12
65°	7	8	13	32	42	7
75°	3	4	5	11	15	4
85°	2	2	2	3	2	2
90°	2	2	2	2	2	



TEST NUMBER: P958916

CATALOG NUMBER: MMG-08W-935-30x60-ID-X-X-1F-1-UNV-STD-X

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	372.6	372.6	372.6	372.6	372.6
1°	372.7	371.9	371.2	371.0	371.0
2°	369.3	369.0	369.3	369.9	370.5
3°	364.4	364.7	366.5	368.6	369.8
4°	357.5	358.7	362.7	366.8	368.9
5°	349.0	351.2	357.8	364.6	367.8
6°	339.0	342.5	352.0	361.9	366.4
7°	327.7	332.5	345.3	358.8	364.8
8°	314.8	321.3	337.7	355.2	362.9
9°	301.9	309.2	329.4	351.0	360.8
10°	287.4	296.7	320.3	346.6	358.5
11°	272.4	282.9	310.5	341.7	355.9
12°	257.0	269.0	300.3	336.4	353.1
13°	241.6	254.4	290.1	330.7	350.1
14°	226.3	240.4	278.7	324.8	346.9
15°	211.1	226.0	267.2	318.4	343.4
16°	196.4	211.6	255.6	311.6	339.7
17°	182.0	197.8	243.6	304.5	335.8
18°	169.1	184.2	232.2	297.1	331.7
19°	156.5	171.9	220.7	289.4	327.3
20°	144.3	159.6	208.8	281.7	322.8
21°	133.4	148.3	197.4	273.8	318.0
22°	122.9	137.5	186.4	265.8	312.9
23°	113.4	127.7	175.7	257.5	307.7
24°	104.4	118.1	165.5	249.1	302.1
25°	96.4	109.5	155.8	240.5	296.5
26°	88.9	101.1	146.6	231.8	290.6
27°	82.3	93.8	137.6	223.1	284.5
28°	76.2	87.0	129.2	214.6	278.3
29°	70.9	80.8	121.3	206.5	271.7
30°	66.4	75.1	113.7	198.5	264.9
31°	62.7	69.9	106.8	190.5	257.8
32°	59.7	65.7	99.9	182.5	250.6
33°	57.6	62.0	93.8	174.7	243.3
34°	55.9	59.2	87.8	167.2	235.7
35°	54.4	56.9	82.4	159.8	228.0
36°	52.9	55.1	77.1	152.9	220.1
37°	51.2	53.5	72.6	146.0	212.1
38°	49.2	52.0	68.1	139.6	204.0
39°	47.0	50.5	64.2	133.5	195.9
40°	44.5	48.7	60.8	127.7	187.8
41°	41.8	46.7	57.6	121.9	179.7
42°	39.1	44.5	54.9	116.4	171.7
43°	36.2	42.0	52.5	111.0	163.6
44°	33.4	39.4	50.4	106.0	155.8



TEST NUMBER: P958916

CATALOG NUMBER: MMG-08W-935-30x60-ID-X-X-1F-1-UNV-STD-X

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
45°	30.7	36.8	48.5	101.1	148.2
46°	28.1	34.2	46.6	96.4	140.7
47°	25.4	31.6	44.9	92.0	133.3
48°	23.2	29.2	43.1	87.6	126.1
49°	21.1	26.6	41.2	83.5	119.3
50°	19.3	24.3	39.4	79.5	112.6
51°	17.7	22.2	37.4	75.5	106.3
52°	16.3	20.3	35.3	71.7	100.2
53°	15.1	18.6	33.3	68.1	94.4
54°	14.0	17.2	31.2	64.5	88.8
55°	13.1	15.8	29.2	61.1	83.4
56°	12.1	14.6	27.1	57.7	78.3
57°	11.3	13.5	25.1	54.5	73.5
58°	10.5	12.5	23.2	51.4	68.9
59°	9.7	11.6	21.4	48.4	64.5
60°	9.1	10.7	19.7	45.3	60.3
61°	8.5	9.9	18.1	42.5	56.2
62°	8.0	9.2	16.6	39.7	52.4
63°	7.7	8.5	15.1	37.0	48.7
64°	7.4	8.0	13.8	34.3	45.1
65°	7.1	7.5	12.6	31.8	41.8
66°	6.8	7.0	11.4	29.3	38.5
67°	6.6	6.6	10.4	26.9	35.3
68°	6.3	6.3	9.4	24.6	32.3
69°	5.9	5.9	8.5	22.4	29.3
70°	5.5	5.6	7.8	20.3	26.6
71°	5.1	5.3	7.1	18.3	23.9
72°	4.7	4.9	6.4	16.4	21.4
73°	4.2	4.6	5.8	14.6	19.1
74°	3.8	4.2	5.3	13.0	16.8
75°	3.4	3.8	4.9	11.4	14.7
76°	3.1	3.5	4.4	10.1	12.9
77°	2.8	3.2	4.0	8.8	11.1
78°	2.6	2.9	3.7	7.7	9.5
79°	2.4	2.7	3.3	6.7	8.1
80°	2.2	2.5	3.0	5.8	6.8
81°	2.1	2.3	2.8	5.1	5.6
82°	2.0	2.1	2.6	4.5	4.7
83°	1.9	2.0	2.4	3.9	3.8
84°	1.8	1.9	2.3	3.4	3.0
85°	1.7	1.8	2.1	3.1	2.4
86°	1.7	1.7	1.9	2.7	1.8
87°	1.6	1.6	1.8	2.5	1.4
88°	1.6	1.5	1.7	2.3	1.1
89°	1.6	1.5	1.6	2.1	0.9



TEST NUMBER: P958916

CATALOG NUMBER: MMG-08W-935-30x60-ID-X-X-1F-1-UNV-STD-X

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
90°	1.5	1.5	1.5	1.5	1.5

(END OF REPORT)