

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: P977161

Luminaire Tested: GRZ-10L-930-17x75-X-UNV-STD-1F

Issue Date: 3/21/2025

Test Information

Test Method: LM-79-2019
Report Number: P977161
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-147-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 3/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: iO LED
Catalog Number: GRZ-10L-930-17x75-X-UNV-STD-1F
Description: iO COVIO LED GRAZER WITH 17X75 DEGREE OPTIC.
1000 LUMENS PER FOOT, 1 FOOT FIXTURE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

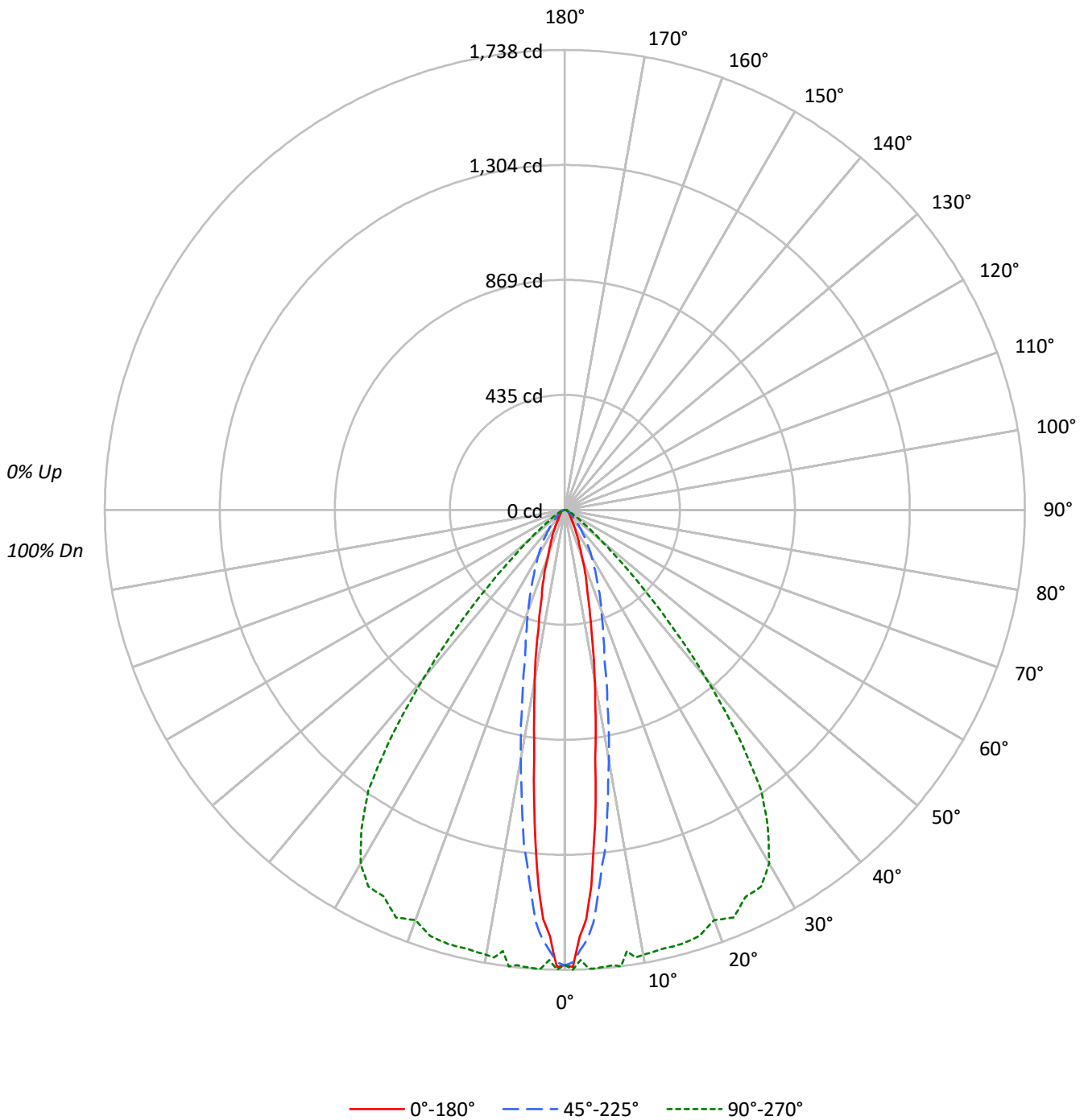
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 931.5 lumens
Efficiency: N/A
Efficacy: 93.1 lumens/watt
Spacing Criteria (0/90/45): 0.27 / 1.27 / 0.47
Luminous Opening: Rectangular (W 1' x L: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 10
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	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92				
2	107	101	97	93	105	100	96	92	96	93	90	93	91	88	91	88	87	85				
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78				
4	95	87	81	77	93	86	81	76	84	79	75	82	78	74	80	76	74	72				
5	90	81	75	70	89	80	75	70	79	73	70	77	72	69	75	71	68	67				
6	86	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62				
7	81	71	65	61	80	71	65	60	69	64	60	68	63	60	67	63	59	58				
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54				
9	73	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	52	51				
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49	48				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	111167	111167	111167
5°	81926	94276	112363
10°	42942	62799	111990
15°	22519	38552	113611
20°	12976	27704	113388
25°	8124	20117	115021
30°	5071	14967	115046
35°	3485	10998	101919
40°	2866	7739	69832
45°	2484	5434	37438
50°	2220	3929	17774
55°	2106	3254	8614
60°	2196	2855	5050
65°	2078	2338	3377
70°	1926	1926	2568
75°	1697	1697	2121
80°	1265	1265	1265
85°	1260	1260	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 37438 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	13.7
10°-20°	221.3	23.8
20°-30°	230.1	24.7
30°-40°	192.1	20.6
40°-50°	94.8	10.2
50°-60°	38.4	4.1
60°-70°	18.1	1.9
70°-80°	7.9	0.9
80°-90°	1.3	0.1
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°	578.7	62.1
0°-40°	770.9	82.8
0°-60°	904.1	97.1
0°-90°	931.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	931.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1721	1721	1721	1721	1721	
5°	1264	1337	1454	1655	1733	99
15°	337	388	577	1133	1699	99
25°	114	141	282	699	1614	53
35°	44	61	140	388	1293	29
45°	27	32	60	158	410	21
55°	19	22	29	65	76	17
65°	14	14	15	24	22	13
75°	7	7	7	8	8	7
85°	2	2	2	2	0	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1721.3	1721.3	1721.3	1721.3	1721.3
1°	1728.1	1724.7	1709.4	1733.2	1738.3
2°	1612.4	1656.7	1665.2	1694.1	1702.6
3°	1549.5	1580.1	1624.3	1695.8	1736.6
4°	1425.3	1459.3	1563.1	1678.8	1736.6
5°	1263.7	1336.9	1454.2	1655.0	1733.2
6°	1114.1	1199.1	1350.5	1622.6	1729.8
7°	945.7	1056.2	1272.3	1563.1	1738.3
8°	838.5	920.2	1156.6	1517.2	1683.9
9°	736.5	814.7	1046.0	1449.1	1712.8
10°	654.8	711.0	957.6	1411.7	1707.7
12.5°	460.9	517.1	743.3	1279.1	1699.2
15°	336.8	387.8	576.6	1132.8	1699.2
17.5°	260.2	299.4	481.3	1008.6	1689.0
20°	188.8	233.0	403.1	894.7	1649.8
22.5°	142.9	182.0	340.2	792.6	1666.9
25°	114.0	141.2	282.3	699.1	1614.1
27.5°	88.4	112.3	238.1	610.6	1605.6
30°	68.0	88.4	200.7	530.7	1542.7
32.5°	54.4	71.4	166.7	455.8	1428.7
35°	44.2	61.2	139.5	387.8	1292.7
37.5°	39.1	51.0	112.3	324.9	1069.8
40°	34.0	42.5	91.8	251.7	828.3
42.5°	30.6	37.4	71.4	200.7	605.5
45°	27.2	32.3	59.5	158.2	409.9
47.5°	25.5	30.6	47.6	127.6	265.3
50°	22.1	27.2	39.1	100.4	176.9
52.5°	20.4	23.8	34.0	83.3	114.0
55°	18.7	22.1	28.9	64.6	76.5
57.5°	18.7	20.4	25.5	51.0	54.4
60°	17.0	17.0	22.1	39.1	39.1
62.5°	15.3	15.3	18.7	30.6	30.6
65°	13.6	13.6	15.3	23.8	22.1
67.5°	11.9	11.9	11.9	18.7	18.7
70°	10.2	10.2	10.2	15.3	13.6
72.5°	8.5	8.5	8.5	11.9	10.2
75°	6.8	6.8	6.8	8.5	8.5
77.5°	5.1	5.1	5.1	6.8	5.1
80°	3.4	3.4	3.4	3.4	3.4
82.5°	1.7	1.7	1.7	1.7	1.7
85°	1.7	1.7	1.7	1.7	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)