

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: P977152

Luminaire Tested: GRZ-05L-935-17x75-X-UNV-STD-1F

Issue Date: 3/21/2025

Test Information

Test Method: LM-79-2019
Report Number: P977152
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-05L-935-17x75-X-UNV-STD-1F
Description: iO COVIO LED GRAZER WITH 17X75 DEGREE OPTIC.
500 LUMENS PER FOOT, 1 FOOT FIXTURE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

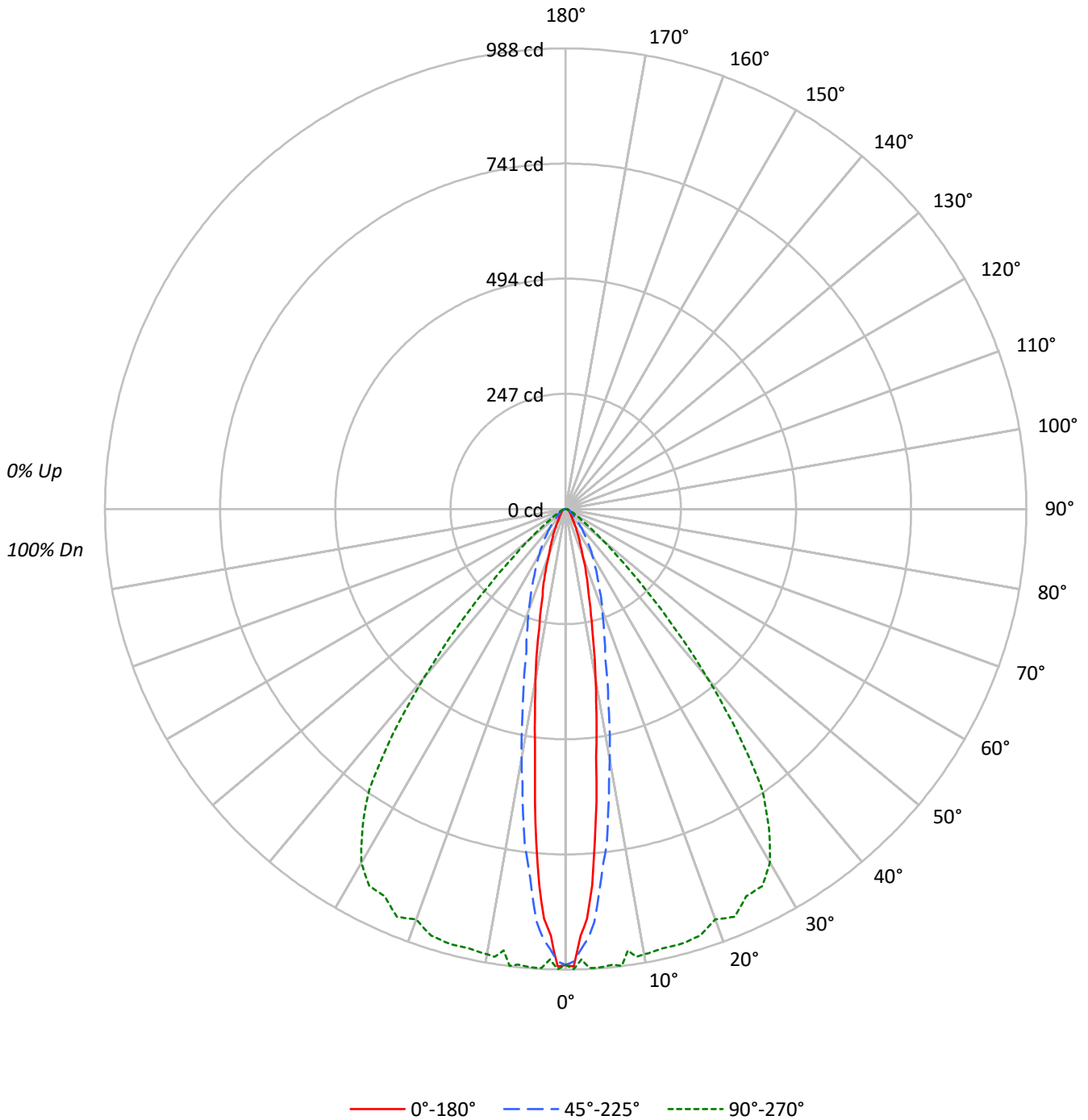
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 529.2 lumens
Efficiency: N/A
Efficacy: 99.8 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): 5.3
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

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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				100
1	113	110	107	105	110	108	105	103	104	102	100	100	98	97	97	95	94	92				92
2	107	101	97	93	105	100	96	92	96	93	90	93	91	88	91	88	87	85				85
3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78				78
4	95	87	81	77	93	86	81	76	84	79	75	82	78	74	80	76	74	72				72
5	90	81	75	70	89	80	75	70	79	73	70	77	72	69	75	71	68	67				67
6	86	76	70	65	84	75	69	65	74	68	64	72	68	64	71	67	64	62				62
7	81	71	65	61	80	71	65	60	69	64	60	68	63	60	67	63	59	58				58
8	77	67	61	57	76	67	61	56	65	60	56	64	59	56	63	59	56	54				54
9	73	63	57	53	72	63	57	53	62	57	53	61	56	53	60	56	52	51				51
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49	48				48

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	63150	63150	63150
5°	46541	53556	63832
10°	24396	35675	63619
15°	12791	21904	64542
20°	7375	15739	64412
25°	4611	11430	65338
30°	2879	8501	65357
35°	1979	6244	57893
40°	1627	4401	39675
45°	1416	3087	21272
50°	1266	2231	10098
55°	1194	1847	4898
60°	1253	1628	2868
65°	1177	1330	1925
70°	1095	1095	1454
75°	973	973	1198
80°	707	707	707
85°	741	741	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 21272 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.3	13.7
10°-20°	125.7	23.8
20°-30°	130.7	24.7
30°-40°	109.2	20.6
40°-50°	53.9	10.2
50°-60°	21.8	4.1
60°-70°	10.3	1.9
70°-80°	4.5	0.9
80°-90°	0.8	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°	328.8	62.1
0°-40°	437.9	82.8
0°-60°	513.6	97.1
0°-90°	529.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	529.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	978	978	978	978	978	
5°	718	760	826	940	985	56
15°	191	220	328	644	965	56
25°	65	80	160	397	917	30
35°	25	35	79	220	734	17
45°	16	18	34	90	233	12
55°	11	13	16	37	44	10
65°	8	8	9	14	13	8
75°	4	4	4	5	5	4
85°	1	1	1	1	0	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	977.8	977.8	977.8	977.8	977.8
1°	981.7	979.8	971.1	984.6	987.5
2°	916.0	941.1	945.9	962.4	967.2
3°	880.2	897.6	922.7	963.3	986.5
4°	809.7	829.0	888.0	953.7	986.5
5°	717.9	759.5	826.1	940.1	984.6
6°	632.9	681.2	767.2	921.8	982.7
7°	537.2	600.0	722.7	888.0	987.5
8°	476.3	522.7	657.0	861.9	956.6
9°	418.4	462.8	594.2	823.2	973.0
10°	372.0	403.9	544.0	802.0	970.1
12.5°	261.8	293.7	422.2	726.6	965.3
15°	191.3	220.3	327.6	643.5	965.3
17.5°	147.8	170.1	273.4	573.0	959.5
20°	107.3	132.4	229.0	508.2	937.2
22.5°	81.2	103.4	193.2	450.3	946.9
25°	64.7	80.2	160.4	397.1	916.9
27.5°	50.2	63.8	135.3	346.9	912.1
30°	38.6	50.2	114.0	301.5	876.4
32.5°	30.9	40.6	94.7	258.9	811.6
35°	25.1	34.8	79.2	220.3	734.3
37.5°	22.2	29.0	63.8	184.5	607.8
40°	19.3	24.2	52.2	143.0	470.6
42.5°	17.4	21.3	40.6	114.0	344.0
45°	15.5	18.4	33.8	89.9	232.9
47.5°	14.5	17.4	27.1	72.5	150.7
50°	12.6	15.5	22.2	57.0	100.5
52.5°	11.6	13.5	19.3	47.3	64.7
55°	10.6	12.6	16.4	36.7	43.5
57.5°	10.6	11.6	14.5	29.0	30.9
60°	9.7	9.7	12.6	22.2	22.2
62.5°	8.7	8.7	10.6	17.4	17.4
65°	7.7	7.7	8.7	13.5	12.6
67.5°	6.8	6.8	6.8	10.6	10.6
70°	5.8	5.8	5.8	8.7	7.7
72.5°	4.8	4.8	4.8	6.8	5.8
75°	3.9	3.9	3.9	4.8	4.8
77.5°	2.9	2.9	2.9	3.9	2.9
80°	1.9	1.9	1.9	1.9	1.9
82.5°	1.0	1.0	1.0	1.0	1.0
85°	1.0	1.0	1.0	1.0	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)