

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: P977146

Luminaire Tested: GRZ-05L-927-17x75-X-UNV-STD-1F

Issue Date: 3/21/2025

Test Information

Test Method: LM-79-2019
Report Number: P977146
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-927-17x75-X-UNV-STD-1F
Description: iO COVIO LED GRAZER WITH 17X75 DEGREE OPTIC.
500 LUMENS PER FOOT, 1 FOOT FIXTURE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

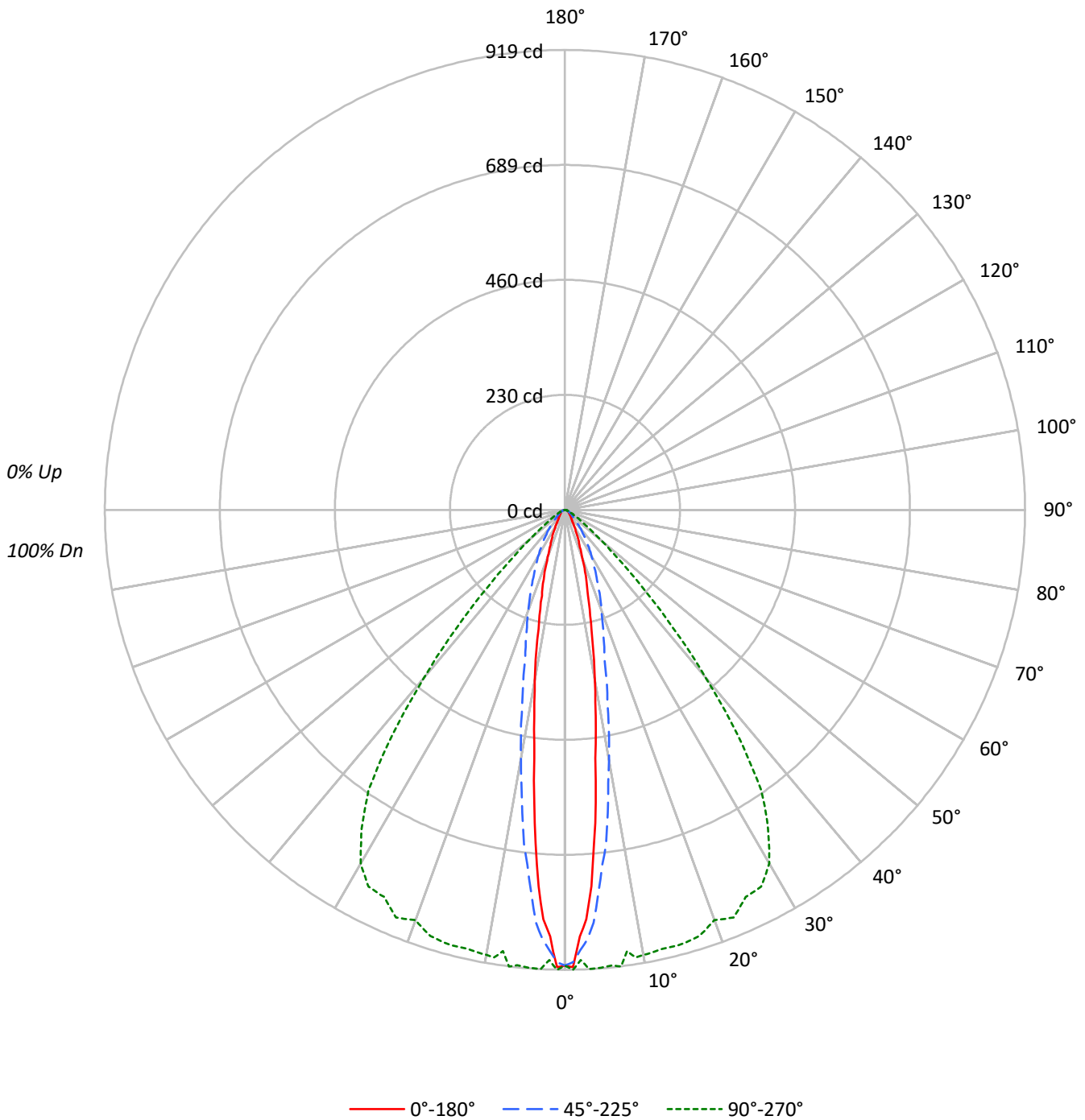
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 492.7 lumens
Efficiency: N/A
Efficacy: 93.0 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

TEST NUMBER: P977146
CATALOG NUMBER: GRZ-05L-927-17x75-X-UNV-STD-1F

Luminous Intensity Polar Plot





TEST NUMBER: P977146

CATALOG NUMBER: GRZ-05L-927-17x75-X-UNV-STD-1F

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°	58797	58797	58797
5°	43332	49861	59430
10°	22710	33216	59232
15°	11908	20393	60089
20°	6866	14653	59972
25°	4297	10639	60835
30°	2685	7912	60845
35°	1845	5819	53904
40°	1518	4097	36935
45°	1315	2877	19801
50°	1176	2080	9404
55°	1115	1723	4560
60°	1163	1511	2674
65°	1100	1238	1788
70°	1020	1020	1360
75°	898	898	1123
80°	669	669	669
85°	667	667	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 19801 cd/sqm



TEST NUMBER: P977146

CATALOG NUMBER: GRZ-05L-927-17x75-X-UNV-STD-1F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.3	13.7
10°-20°	117.1	23.8
20°-30°	121.7	24.7
30°-40°	101.6	20.6
40°-50°	50.2	10.2
50°-60°	20.3	4.1
60°-70°	9.6	1.9
70°-80°	4.2	0.9
80°-90°	0.7	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°	306.1	62.1
0°-40°	407.7	82.8
0°-60°	478.2	97.1
0°-90°	492.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	492.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	910	910	910	910	910	
5°	668	707	769	875	917	52
15°	178	205	305	599	899	52
25°	60	75	149	370	854	28
35°	23	32	74	205	684	15
45°	14	17	32	84	217	11
55°	10	12	15	34	40	9
65°	7	7	8	13	12	7
75°	4	4	4	4	4	4
85°	1	1	1	1	0	1
90°	0	0	0	0	0	



TEST NUMBER: P977146

CATALOG NUMBER: GRZ-05L-927-17x75-X-UNV-STD-1F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	910.4	910.4	910.4	910.4	910.4
1°	914.0	912.2	904.1	916.7	919.4
2°	852.8	876.2	880.7	896.0	900.5
3°	819.5	835.7	859.1	896.9	918.5
4°	753.8	771.8	826.7	887.9	918.5
5°	668.4	707.1	769.1	875.3	916.7
6°	589.2	634.2	714.3	858.2	914.9
7°	500.2	558.6	672.9	826.7	919.4
8°	443.5	486.7	611.7	802.4	890.6
9°	389.5	430.9	553.2	766.4	905.9
10°	346.3	376.0	506.5	746.6	903.2
12.5°	243.8	273.5	393.1	676.5	898.7
15°	178.1	205.1	305.0	599.1	898.7
17.5°	137.6	158.3	254.6	533.4	893.3
20°	99.9	123.2	213.2	473.2	872.6
22.5°	75.6	96.3	179.9	419.2	881.6
25°	60.3	74.7	149.3	369.7	853.7
27.5°	46.8	59.4	125.9	322.9	849.2
30°	36.0	46.8	106.1	280.7	815.9
32.5°	28.8	37.8	88.2	241.1	755.6
35°	23.4	32.4	73.8	205.1	683.7
37.5°	20.7	27.0	59.4	171.8	565.8
40°	18.0	22.5	48.6	133.1	438.1
42.5°	16.2	19.8	37.8	106.1	320.2
45°	14.4	17.1	31.5	83.7	216.8
47.5°	13.5	16.2	25.2	67.5	140.3
50°	11.7	14.4	20.7	53.1	93.6
52.5°	10.8	12.6	18.0	44.1	60.3
55°	9.9	11.7	15.3	34.2	40.5
57.5°	9.9	10.8	13.5	27.0	28.8
60°	9.0	9.0	11.7	20.7	20.7
62.5°	8.1	8.1	9.9	16.2	16.2
65°	7.2	7.2	8.1	12.6	11.7
67.5°	6.3	6.3	6.3	9.9	9.9
70°	5.4	5.4	5.4	8.1	7.2
72.5°	4.5	4.5	4.5	6.3	5.4
75°	3.6	3.6	3.6	4.5	4.5
77.5°	2.7	2.7	2.7	3.6	2.7
80°	1.8	1.8	1.8	1.8	1.8
82.5°	0.9	0.9	0.9	0.9	0.9
85°	0.9	0.9	0.9	0.9	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)