

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: P977164

Luminaire Tested: GRZ-10L-935-17x75-X-UNV-STD-1F

Issue Date: 3/21/2025

**Test Information**

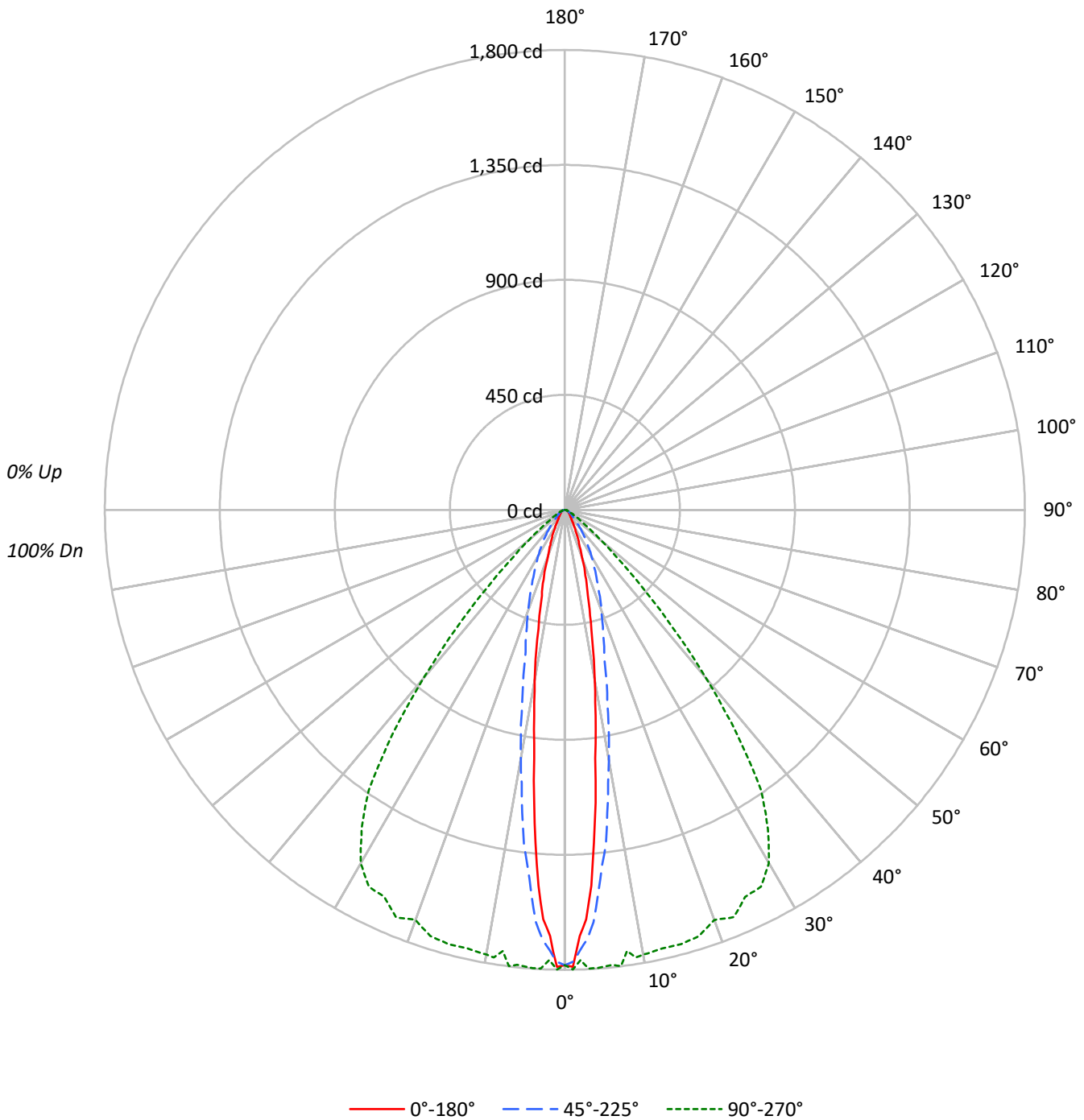
Test Method: LM-79-2019  
Report Number: P977164  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2309-147-6)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 3/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: iO LED  
Catalog Number: GRZ-10L-935-17x75-X-UNV-STD-1F  
Description: iO COVIO LED GRAZER WITH 17X75 DEGREE OPTIC.  
1000 LUMENS PER FOOT, 1 FOOT FIXTURE  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 964.4 lumens  
Efficiency: N/A  
Efficacy: 96.4 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	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°	115088	115088	115088
5°	84817	97602	116325
10°	44456	65016	115938
15°	23315	39910	117616
20°	13436	28680	117388
25°	8409	20829	119082
30°	5250	15497	119103
35°	3611	11385	105514
40°	2968	8018	72294
45°	2576	5626	38762
50°	2301	4069	18397
55°	2184	3367	8918
60°	2273	2958	5231
65°	2155	2415	3500
70°	2002	2002	2662
75°	1747	1747	2196
80°	1302	1302	1302
85°	1334	1334	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 38762 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.7	13.7
10°-20°	229.1	23.8
20°-30°	238.3	24.7
30°-40°	198.9	20.6
40°-50°	98.2	10.2
50°-60°	39.8	4.1
60°-70°	18.7	1.9
70°-80°	8.2	0.9
80°-90°	1.4	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°	599.1	62.1
0°-40°	798.1	82.8
0°-60°	936.0	97.1
0°-90°	964.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	964.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1782	1782	1782	1782	1782	
5°	1308	1384	1506	1713	1794	102
15°	349	402	597	1173	1759	102
25°	118	146	292	724	1671	55
35°	46	63	144	402	1338	30
45°	28	34	62	164	424	22
55°	19	23	30	67	79	18
65°	14	14	16	25	23	14
75°	7	7	7	9	9	7
85°	2	2	2	2	0	1
90°	0	0	0	0	0	



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CATALOG NUMBER: GRZ-10L-935-17x75-X-UNV-STD-1F

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1782.0	1782.0	1782.0	1782.0	1782.0
1°	1789.0	1785.5	1769.7	1794.3	1799.6
2°	1669.3	1715.1	1723.9	1753.8	1762.6
3°	1604.1	1635.8	1681.6	1755.6	1797.8
4°	1475.6	1510.8	1618.2	1738.0	1797.8
5°	1308.3	1384.0	1505.5	1713.3	1794.3
6°	1153.4	1241.4	1398.1	1679.9	1790.8
7°	979.0	1093.5	1317.1	1618.2	1799.6
8°	868.1	952.6	1197.4	1570.7	1743.3
9°	762.5	843.5	1082.9	1500.3	1773.2
10°	677.9	736.0	991.4	1461.5	1767.9
12.5°	477.2	535.3	769.5	1324.2	1759.1
15°	348.7	401.5	596.9	1172.7	1759.1
17.5°	269.4	309.9	498.3	1044.2	1748.5
20°	195.5	241.2	417.3	926.2	1708.0
22.5°	147.9	188.4	352.2	820.6	1725.6
25°	118.0	146.2	292.3	723.7	1671.1
27.5°	91.6	116.2	246.5	632.2	1662.3
30°	70.4	91.6	207.8	549.4	1597.1
32.5°	56.3	74.0	172.6	471.9	1479.1
35°	45.8	63.4	144.4	401.5	1338.3
37.5°	40.5	52.8	116.2	336.3	1107.6
40°	35.2	44.0	95.1	260.6	857.5
42.5°	31.7	38.7	74.0	207.8	626.9
45°	28.2	33.5	61.6	163.8	424.4
47.5°	26.4	31.7	49.3	132.1	274.7
50°	22.9	28.2	40.5	103.9	183.1
52.5°	21.1	24.7	35.2	86.3	118.0
55°	19.4	22.9	29.9	66.9	79.2
57.5°	19.4	21.1	26.4	52.8	56.3
60°	17.6	17.6	22.9	40.5	40.5
62.5°	15.8	15.8	19.4	31.7	31.7
65°	14.1	14.1	15.8	24.7	22.9
67.5°	12.3	12.3	12.3	19.4	19.4
70°	10.6	10.6	10.6	15.8	14.1
72.5°	8.8	8.8	8.8	12.3	10.6
75°	7.0	7.0	7.0	8.8	8.8
77.5°	5.3	5.3	5.3	7.0	5.3
80°	3.5	3.5	3.5	3.5	3.5
82.5°	1.8	1.8	1.8	1.8	1.8
85°	1.8	1.8	1.8	1.8	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)