

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: P977176

Luminaire Tested: GRZ-15L-935-17x75-X-UNV-STD-1F

Issue Date: 3/21/2025

Test Information

Test Method: LM-79-2019
Report Number: P977176
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-15L-935-17x75-X-UNV-STD-1F
Description: iO COVIO LED GRAZER WITH 17X75 DEGREE OPTIC.
1500 LUMENS PER FOOT, 1 FOOT FIXTURE
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

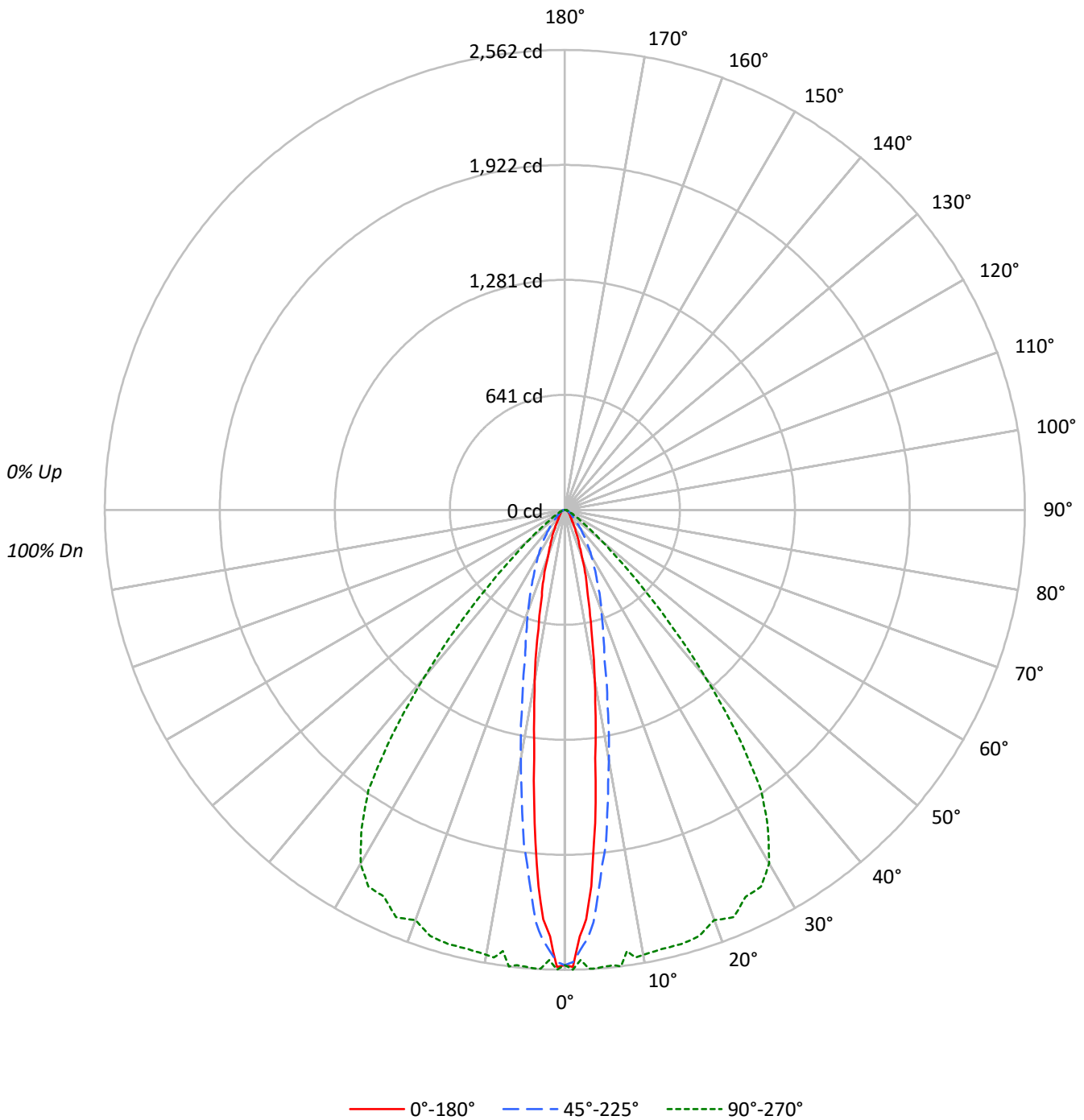
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1373.0 lumens
Efficiency: N/A
Efficacy: 92.1 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): 14.9
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: P977176
CATALOG NUMBER: GRZ-15L-935-17x75-X-UNV-STD-1F

Luminous Intensity Polar Plot





TEST NUMBER: P977176

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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°	163854	163854	163854
5°	120759	138963	165621
10°	63297	92566	165071
15°	33190	56826	167455
20°	19127	40838	167133
25°	11972	29658	169541
30°	7480	22059	169575
35°	5140	16210	150225
40°	4224	11415	102931
45°	3663	8010	55184
50°	3275	5797	26194
55°	3108	4797	12701
60°	3242	4211	7453
65°	3072	3454	4982
70°	2832	2832	3795
75°	2495	2495	3119
80°	1860	1860	1860
85°	1853	1853	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 55184 cd/sqm

TEST NUMBER: P977176

CATALOG NUMBER: GRZ-15L-935-17x75-X-UNV-STD-1F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.6	13.7
10°-20°	326.3	23.8
20°-30°	339.2	24.7
30°-40°	283.2	20.6
40°-50°	139.8	10.2
50°-60°	56.7	4.1
60°-70°	26.7	1.9
70°-80°	11.7	0.9
80°-90°	2.0	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°	853.0	62.1
0°-40°	1136.3	82.8
0°-60°	1332.7	97.1
0°-90°	1373.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1373.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2537	2537	2537	2537	2537	
5°	1863	1970	2144	2439	2555	146
15°	496	572	850	1670	2504	145
25°	168	208	416	1030	2379	78
35°	65	90	206	572	1905	43
45°	40	48	88	233	604	32
55°	28	33	43	95	113	26
65°	20	20	23	35	33	20
75°	10	10	10	12	12	11
85°	2	2	2	2	0	2
90°	0	0	0	0	0	



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CATALOG NUMBER: GRZ-15L-935-17x75-X-UNV-STD-1F

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2537.1	2537.1	2537.1	2537.1	2537.1
1°	2547.2	2542.2	2519.6	2554.7	2562.2
2°	2376.7	2441.9	2454.4	2497.0	2509.6
3°	2283.9	2329.1	2394.2	2499.5	2559.7
4°	2100.9	2151.1	2304.0	2474.5	2559.7
5°	1862.7	1970.5	2143.5	2439.4	2554.7
6°	1642.1	1767.5	1990.6	2391.7	2549.7
7°	1393.9	1556.9	1875.3	2304.0	2562.2
8°	1236.0	1356.3	1704.8	2236.3	2482.0
9°	1085.6	1200.9	1541.8	2136.0	2524.6
10°	965.2	1047.9	1411.5	2080.9	2517.1
12.5°	679.4	762.1	1095.6	1885.3	2504.5
15°	496.4	571.6	849.9	1669.7	2504.5
17.5°	383.6	441.2	709.5	1486.7	2489.5
20°	278.3	343.5	594.2	1318.7	2431.8
22.5°	210.6	268.3	501.4	1168.3	2456.9
25°	168.0	208.1	416.2	1030.4	2379.2
27.5°	130.4	165.5	351.0	900.0	2366.7
30°	100.3	130.4	295.8	782.2	2273.9
32.5°	80.2	105.3	245.7	671.9	2105.9
35°	65.2	90.3	205.6	571.6	1905.4
37.5°	57.7	75.2	165.5	478.8	1576.9
40°	50.1	62.7	135.4	371.0	1220.9
42.5°	45.1	55.2	105.3	295.8	892.5
45°	40.1	47.6	87.7	233.2	604.2
47.5°	37.6	45.1	70.2	188.0	391.1
50°	32.6	40.1	57.7	147.9	260.7
52.5°	30.1	35.1	50.1	122.8	168.0
55°	27.6	32.6	42.6	95.3	112.8
57.5°	27.6	30.1	37.6	75.2	80.2
60°	25.1	25.1	32.6	57.7	57.7
62.5°	22.6	22.6	27.6	45.1	45.1
65°	20.1	20.1	22.6	35.1	32.6
67.5°	17.5	17.5	17.5	27.6	27.6
70°	15.0	15.0	15.0	22.6	20.1
72.5°	12.5	12.5	12.5	17.5	15.0
75°	10.0	10.0	10.0	12.5	12.5
77.5°	7.5	7.5	7.5	10.0	7.5
80°	5.0	5.0	5.0	5.0	5.0
82.5°	2.5	2.5	2.5	2.5	2.5
85°	2.5	2.5	2.5	2.5	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)