

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
(formerly Eaton)

Brand: iO LED

Report Number: P592077

Luminaire Tested: **GRZ-15L-927-50x60-X-UNV-STD-4F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P592077
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2111-457-22)
Test Lab: INNOVATION CENTER
Issue Date: 2/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: iO LED
Catalog Number: GRZ-15L-927-50x60-X-UNV-STD-4F
Description: iO LED GRAZER WITH 50x60 OPTIC
1500 LUMENS PER FOOT, 4 FOOT FIXTURE
SUMULATED RESULTS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

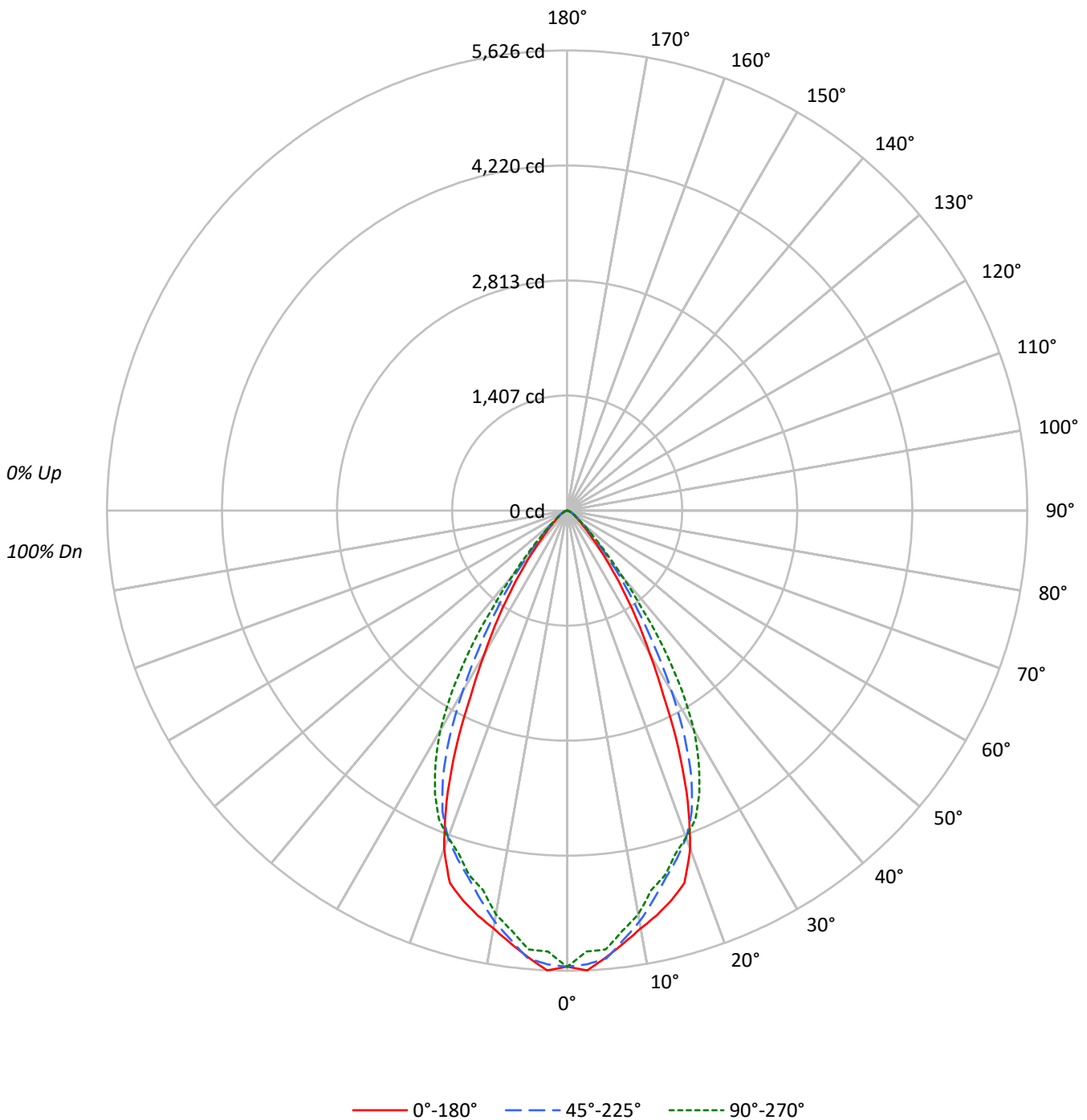
Lumens per Lamp: N/A
Luminaire Lumens: 5144.0 lumens
Efficiency: N/A
Efficacy: 91.9 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.95 / 0.87
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 56
Input Voltage (V): 120
Input Current (A_{in}): 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	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	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93					93			
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86					86			
3	101	95	89	85	99	93	88	85	91	87	83	88	85	82	86	83	81	79					79			
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73					73			
5	91	82	76	71	89	81	75	71	79	74	70	78	73	70	76	72	69	68					68			
6	86	77	70	66	84	76	70	66	74	69	65	73	68	65	72	68	64	63					63			
7	82	72	66	61	80	71	65	61	70	65	61	69	64	60	67	63	60	59					59			
8	77	67	61	57	76	67	61	57	66	60	57	65	60	56	64	59	56	55					55			
9	74	64	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	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°	90032	90032	90032
5°	88837	89080	87295
10°	85026	83632	82157
15°	82425	77743	77158
20°	75531	73125	73039
25°	57555	64059	68067
30°	37668	47737	57808
35°	23560	30557	40710
40°	13386	18130	21924
45°	7423	10392	10848
50°	4773	6031	5905
55°	3519	4082	3659
60°	2583	2906	2583
65°	2101	2292	1910
70°	1416	1652	1652
75°	936	1248	1248
80°	930	930	930
85°	926	926	926



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CATALOG NUMBER: GRZ-15L-927-50x60-X-UNV-STD-4F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	507.7	9.9
10°-20°	1314.7	25.6
20°-30°	1585.4	30.8
30°-40°	1082.3	21.0
40°-50°	431.4	8.4
50°-60°	139.9	2.7
60°-70°	56.5	1.1
70°-80°	21.6	0.4
80°-90°	4.4	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°	3407.8	66.2
0°-40°	4490.1	87.3
0°-60°	5061.4	98.4
0°-90°	5144.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5144.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5576	5576	5576	5576	5576	
5°	5481	5476	5496	5401	5386	514
15°	4931	4761	4651	4581	4616	1376
25°	3231	3211	3596	3711	3821	1454
35°	1195	1505	1550	2210	2065	766
45°	325	625	455	615	475	273
55°	125	170	145	140	130	115
65°	55	55	60	55	50	53
75°	15	20	20	20	20	18
85°	5	5	5	5	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5576.2	5576.2	5576.2	5576.2	5576.2
2.5°	5626.2	5571.2	5551.2	5526.2	5396.2
5°	5481.2	5476.2	5496.2	5401.2	5386.1
7.5°	5331.1	5306.1	5291.1	5226.1	5181.1
10°	5186.1	5131.1	5101.1	5011.1	5011.1
12.5°	5066.1	4976.1	4876.0	4786.0	4751.0
15°	4931.1	4761.0	4651.0	4581.0	4616.0
17.5°	4771.0	4506.0	4461.0	4365.9	4400.9
20°	4395.9	4215.9	4255.9	4165.9	4250.9
22.5°	3855.8	3755.8	3980.8	3960.8	4090.9
25°	3230.7	3210.7	3595.8	3710.8	3820.8
27.5°	2555.5	2660.6	3105.7	3420.7	3485.7
30°	2020.4	2185.5	2560.5	3070.7	3100.7
32.5°	1585.3	1820.4	2020.4	2660.6	2615.6
35°	1195.3	1505.3	1550.3	2210.5	2065.4
37.5°	880.2	1265.3	1180.3	1740.4	1485.3
40°	635.1	1035.2	860.2	1285.3	1040.2
42.5°	450.1	825.2	625.1	930.2	705.2
45°	325.1	625.1	455.1	615.1	475.1
47.5°	245.1	460.1	330.1	405.1	335.1
50°	190.0	325.1	240.1	275.1	235.1
52.5°	155.0	235.1	185.0	195.0	175.0
55°	125.0	170.0	145.0	140.0	130.0
57.5°	100.0	130.0	115.0	110.0	105.0
60°	80.0	95.0	90.0	85.0	80.0
62.5°	65.0	75.0	75.0	65.0	65.0
65°	55.0	55.0	60.0	55.0	50.0
67.5°	40.0	45.0	45.0	40.0	40.0
70°	30.0	35.0	35.0	35.0	35.0
72.5°	25.0	25.0	30.0	25.0	25.0
75°	15.0	20.0	20.0	20.0	20.0
77.5°	10.0	15.0	15.0	15.0	15.0
80°	10.0	10.0	10.0	10.0	10.0
82.5°	5.0	5.0	10.0	5.0	5.0
85°	5.0	5.0	5.0	5.0	5.0
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)