

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: P592064

Luminaire Tested: **GRZ-15L-927-10x10-X-UNV-STD-2F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P592064
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2111-457-14)
Test Lab: INNOVATION CENTER
Issue Date: 2/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: iO LED
Catalog Number: GRZ-15L-927-10x10-X-UNV-STD-2F
Description: iO LED GRAZER WITH 10x10 OPTIC
1500 LUMENS PER FOOT, 2 FOOT FIXTURE
SCALED BASED ON PHOTOMETRIC TESTING
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

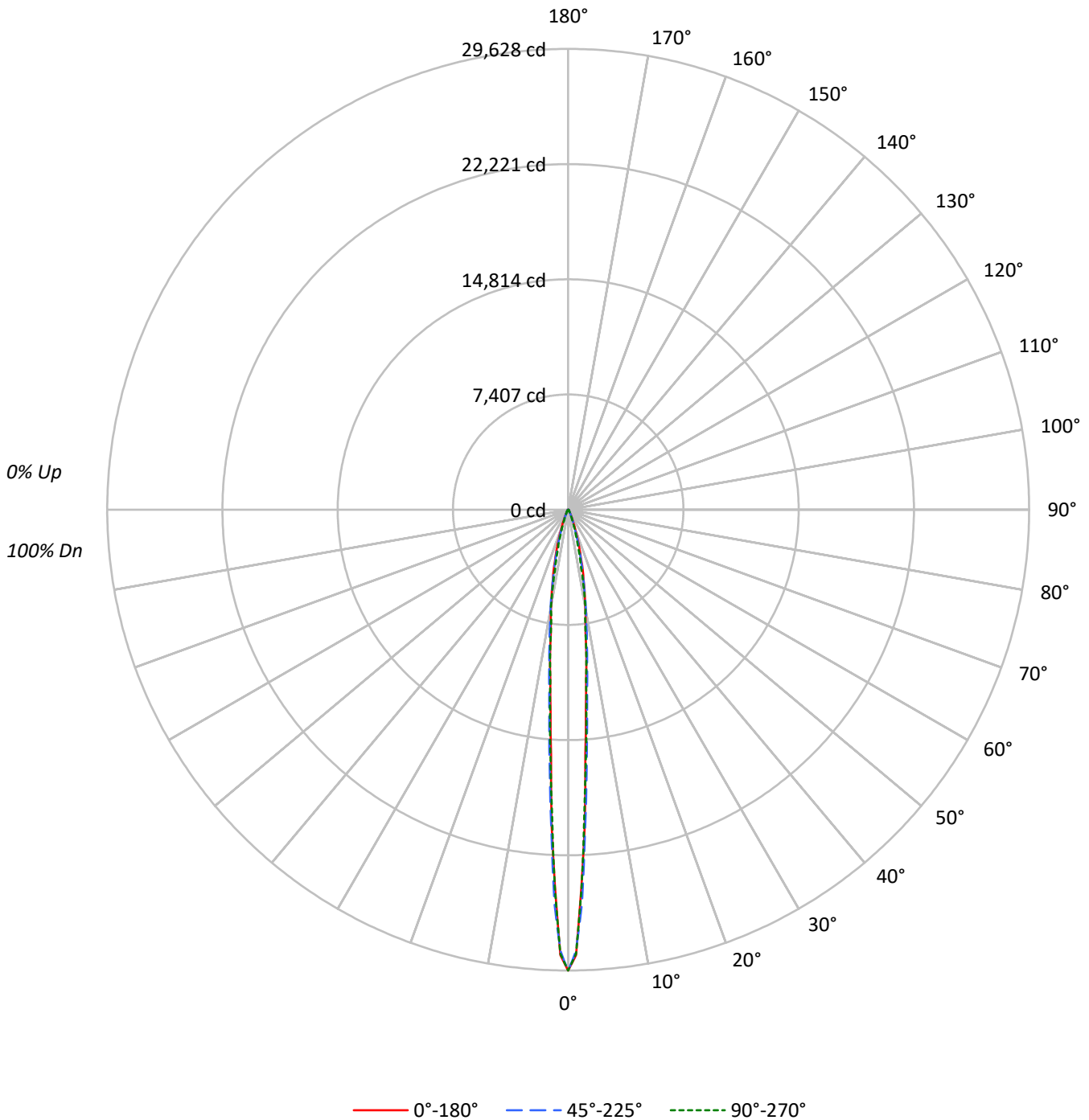
Lumens per Lamp: N/A
Luminaire Lumens: 2371.0 lumens
Efficiency: N/A
Efficacy: 81.8 lumens/watt
Spacing Criteria (0/90/45): 0.15 / 0.16 / 0.22
Luminous Opening: Rectangular (W 2' x L: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 29
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96
2	111	107	104	102	109	106	103	101	103	100	99	100	98	96	97	96	95	93
3	108	103	99	96	106	102	98	96	99	96	94	97	95	93	95	93	91	90
4	104	99	95	92	103	98	94	92	96	93	91	94	92	90	93	90	89	87
5	102	96	92	89	100	95	91	88	93	90	88	92	89	87	90	88	86	85
6	99	93	89	86	98	92	88	86	91	88	85	90	87	85	88	86	84	83
7	96	90	86	83	95	90	86	83	89	85	83	88	85	82	87	84	82	81
8	94	88	84	81	93	87	84	81	86	83	81	86	83	80	85	82	80	79
9	92	86	82	79	91	85	82	79	85	81	79	84	81	79	83	80	78	78
10	90	84	80	77	89	83	80	77	83	79	77	82	79	77	82	79	77	76

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	956725	956725	956725
5°	421305	449739	434368
10°	207628	213747	209455
15°	104739	96508	83169
20°	43948	37223	31615
25°	17819	14911	12556
30°	8501	7584	6715
35°	5361	4699	3729
40°	3823	3495	2622
45°	3434	3019	2187
50°	3255	2864	1693
55°	2916	2550	1458
60°	2344	2009	1421
65°	2277	1979	1482
70°	2323	1954	1350
75°	2096	1934	1298
80°	1934	1692	1209
85°	1445	1445	963



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1113.5	47.0
10°-20°	823.3	34.7
20°-30°	224.7	9.5
30°-40°	79.4	3.3
40°-50°	50.1	2.1
50°-60°	37.1	1.6
60°-70°	24.4	1.0
70°-80°	14.7	0.6
80°-90°	3.9	0.2
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°	2161.5	91.2
0°-40°	2240.9	94.5
0°-60°	2328.0	98.2
0°-90°	2371.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2371.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	29628	29628	29628	29628	29628	
5°	12997	13571	13874	13360	13400	1080
15°	3133	3093	2887	2555	2488	888
25°	500	491	418	371	352	264
35°	136	134	119	109	95	88
45°	75	73	66	56	48	58
55°	52	49	45	34	26	47
65°	30	26	26	22	19	30
75°	17	14	16	13	10	18
85°	4	3	4	3	3	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	29627.6	29627.6	29627.6	29627.6	29627.6
1°	28636.4	28063.7	28396.7	28383.7	28549.6
2°	24227.1	26020.4	25322.0	25245.5	24450.0
3°	20268.7	21061.7	20618.6	20879.0	19632.5
4°	15781.7	16771.6	16923.2	16582.5	16143.2
5°	12997.2	13571.2	13874.4	13360.0	13400.2
6°	10947.4	11674.3	11629.0	11643.2	11066.6
7°	9590.8	9969.2	10023.6	9694.5	9537.7
8°	8038.6	8690.3	8639.8	8392.3	8041.2
9°	7165.3	7565.6	7502.1	7060.3	6932.0
10°	6332.1	6552.4	6518.7	6032.8	6387.8
12.5°	4559.6	4580.3	4357.5	4093.1	3881.9
15°	3133.0	3092.9	2886.8	2555.1	2487.8
17.5°	2057.6	2062.8	1784.2	1534.1	1495.2
20°	1278.9	1286.6	1083.2	944.6	920.0
22.5°	804.6	769.6	644.0	585.7	570.1
25°	500.1	491.1	418.5	370.6	352.4
27.5°	338.2	331.7	272.1	250.1	248.8
30°	228.0	237.1	203.4	185.3	180.1
32.5°	172.3	172.3	158.1	145.1	130.9
35°	136.0	133.5	119.2	108.8	94.6
37.5°	103.7	108.8	95.9	88.1	73.9
40°	90.7	90.7	82.9	72.6	62.2
42.5°	80.3	82.9	72.6	62.2	51.8
45°	75.2	72.6	66.1	55.7	47.9
47.5°	68.7	67.4	60.9	49.2	41.5
50°	64.8	62.2	57.0	44.1	33.7
52.5°	60.9	57.0	51.8	38.9	28.5
55°	51.8	49.2	45.3	33.7	25.9
57.5°	45.3	40.2	37.6	28.5	23.3
60°	36.3	32.4	31.1	25.9	22.0
62.5°	32.4	29.8	28.5	24.6	20.7
65°	29.8	25.9	25.9	22.0	19.4
67.5°	27.2	23.3	23.3	19.4	16.8
70°	24.6	20.7	20.7	16.8	14.3
72.5°	20.7	16.8	18.1	14.3	13.0
75°	16.8	14.3	15.5	13.0	10.4
77.5°	14.3	11.7	11.7	10.4	7.8
80°	10.4	9.1	9.1	7.8	6.5
82.5°	6.5	5.2	6.5	5.2	3.9
85°	3.9	2.6	3.9	2.6	2.6
87.5°	1.3	1.3	1.3	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)