

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: P592065

Luminaire Tested: **GRZ-15L-927-10x10-X-UNV-STD-4F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P592065
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-4F
Description: iO LED GRAZER WITH 10x10 OPTIC
1500 LUMENS PER FOOT, 4 FOOT FIXTURE
SCALED BASED ON PHOTOMETRIC TESTING
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

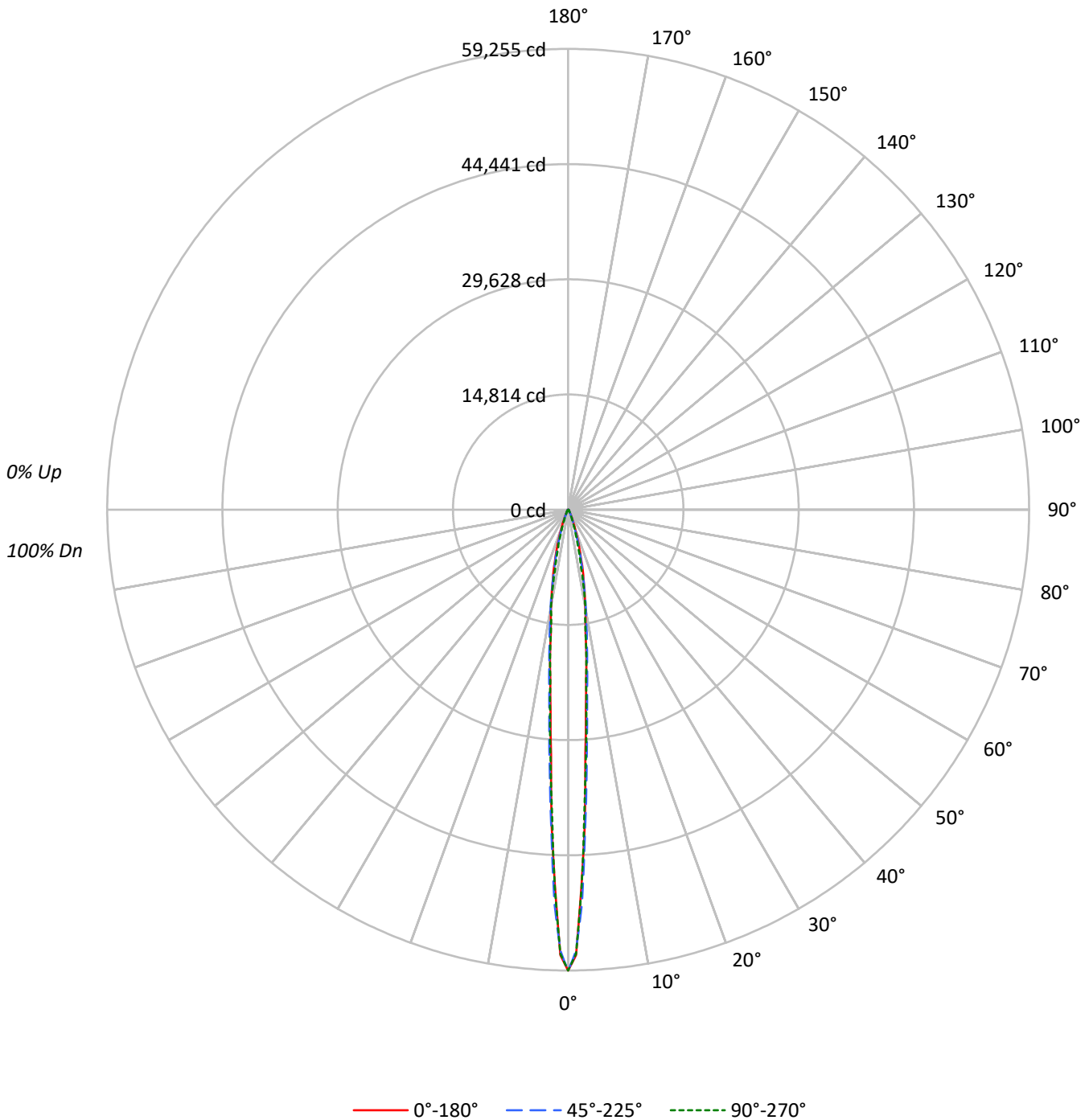
Lumens per Lamp: N/A
Luminaire Lumens: 4742.0 lumens
Efficiency: N/A
Efficacy: 84.7 lumens/watt
Spacing Criteria (0/90/45): 0.15 / 0.16 / 0.22
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 56
Input Voltage (V): 120
Input Current (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							
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10				
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	111	106	106	106	106	102	102	102	102	100	100	100	100
1	115	113	111	109	113	111	109	107	107	105	104	104	103	102	101	101	100	99	98	98	96	96	96	96
2	111	107	104	102	109	106	103	101	103	100	99	99	100	98	96	96	97	96	95	95	93	93	93	93
3	108	103	99	96	106	102	98	96	99	96	94	94	97	95	93	93	95	93	91	91	90	90	90	90
4	104	99	95	92	103	98	94	92	96	93	91	91	94	92	90	90	93	90	89	89	87	87	87	87
5	102	96	92	89	100	95	91	88	93	90	88	88	92	89	87	87	90	88	86	86	85	85	85	85
6	99	93	89	86	98	92	88	86	91	88	85	85	90	87	85	85	88	86	84	84	83	83	83	83
7	96	90	86	83	95	90	86	83	89	85	83	83	88	85	82	82	87	84	82	82	81	81	81	81
8	94	88	84	81	93	87	84	81	86	83	81	81	86	83	80	80	85	82	80	80	79	79	79	79
9	92	86	82	79	91	85	82	79	85	81	79	79	84	81	79	79	83	80	78	78	78	78	78	78
10	90	84	80	77	89	83	80	77	83	79	77	77	82	79	77	77	82	79	77	77	76	76	76	76

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	956727	956727	956727
5°	421306	449741	434368
10°	207628	213747	209457
15°	104739	96510	83167
20°	43947	37223	31613
25°	17820	14911	12558
30°	8503	7586	6715
35°	5363	4699	3729
40°	3823	3497	2622
45°	3432	3019	2190
50°	3255	2864	1693
55°	2919	2553	1458
60°	2344	2009	1424
65°	2277	1979	1486
70°	2323	1959	1345
75°	2102	1940	1291
80°	1925	1683	1209
85°	1445	1445	963



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2226.9	47.0
10°-20°	1646.7	34.7
20°-30°	449.3	9.5
30°-40°	158.8	3.3
40°-50°	100.1	2.1
50°-60°	74.2	1.6
60°-70°	48.8	1.0
70°-80°	29.4	0.6
80°-90°	7.7	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°	4322.9	91.2
0°-40°	4481.8	94.5
0°-60°	4656.1	98.2
0°-90°	4742.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4742.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	59255	59255	59255	59255	59255	
5°	25994	27142	27749	26720	26800	2159
15°	6266	6186	5774	5110	4976	1776
25°	1000	982	837	741	705	527
35°	272	267	238	218	189	176
45°	150	145	132	111	96	116
55°	104	98	91	67	52	93
65°	60	52	52	44	39	59
75°	34	28	31	26	21	37
85°	8	5	8	5	5	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	59255.3	59255.3	59255.3	59255.3	59255.3
1°	57272.8	56127.4	56793.4	56767.5	57099.2
2°	48454.2	52040.8	50644.0	50491.1	48900.0
3°	40537.5	42123.4	41237.2	41758.0	39265.1
4°	31563.4	33543.3	33846.4	33164.9	32286.4
5°	25994.5	27142.5	27748.9	26720.1	26800.4
6°	21894.9	23348.6	23257.9	23286.4	22133.3
7°	19181.6	19938.3	20047.2	19389.0	19075.4
8°	16077.1	17380.6	17279.5	16784.6	16082.3
9°	14330.5	15131.3	15004.3	14120.6	13864.1
10°	12664.2	13104.8	13037.4	12065.6	12775.7
12.5°	9119.2	9160.6	8714.9	8186.3	7763.9
15°	6266.0	6185.7	5773.7	5110.3	4975.5
17.5°	4115.2	4125.5	3568.4	3068.2	2990.5
20°	2557.7	2573.3	2166.4	1889.1	1839.9
22.5°	1609.3	1539.3	1287.9	1171.3	1140.2
25°	1000.3	982.1	837.0	741.1	704.9
27.5°	676.4	663.4	544.2	500.1	497.6
30°	456.1	474.2	406.9	370.6	360.2
32.5°	344.7	344.7	316.2	290.2	261.7
35°	272.1	266.9	238.4	217.7	189.2
37.5°	207.3	217.7	191.8	176.2	147.7
40°	181.4	181.4	165.9	145.1	124.4
42.5°	160.7	165.9	145.1	124.4	103.7
45°	150.3	145.1	132.2	111.4	95.9
47.5°	137.3	134.8	121.8	98.5	82.9
50°	129.6	124.4	114.0	88.1	67.4
52.5°	121.8	114.0	103.7	77.7	57.0
55°	103.7	98.5	90.7	67.4	51.8
57.5°	90.7	80.3	75.2	57.0	46.6
60°	72.6	64.8	62.2	51.8	44.1
62.5°	64.8	59.6	57.0	49.2	41.5
65°	59.6	51.8	51.8	44.1	38.9
67.5°	54.4	46.6	46.6	38.9	33.7
70°	49.2	41.5	41.5	33.7	28.5
72.5°	41.5	33.7	36.3	28.5	25.9
75°	33.7	28.5	31.1	25.9	20.7
77.5°	28.5	23.3	23.3	20.7	15.5
80°	20.7	18.1	18.1	15.5	13.0
82.5°	13.0	10.4	13.0	10.4	7.8
85°	7.8	5.2	7.8	5.2	5.2
87.5°	2.6	2.6	2.6	2.6	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)