

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: P592125

Luminaire Tested: **GRZ-15L-940-50x60-X-UNV-STD-4F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P592125
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-940-50x60-X-UNV-STD-4F
Description: iO LED GRAZER WITH 50x60 OPTIC
1500 LUMENS PER FOOT, 4 FOOT FIXTURE
SUMULATED RESULTS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

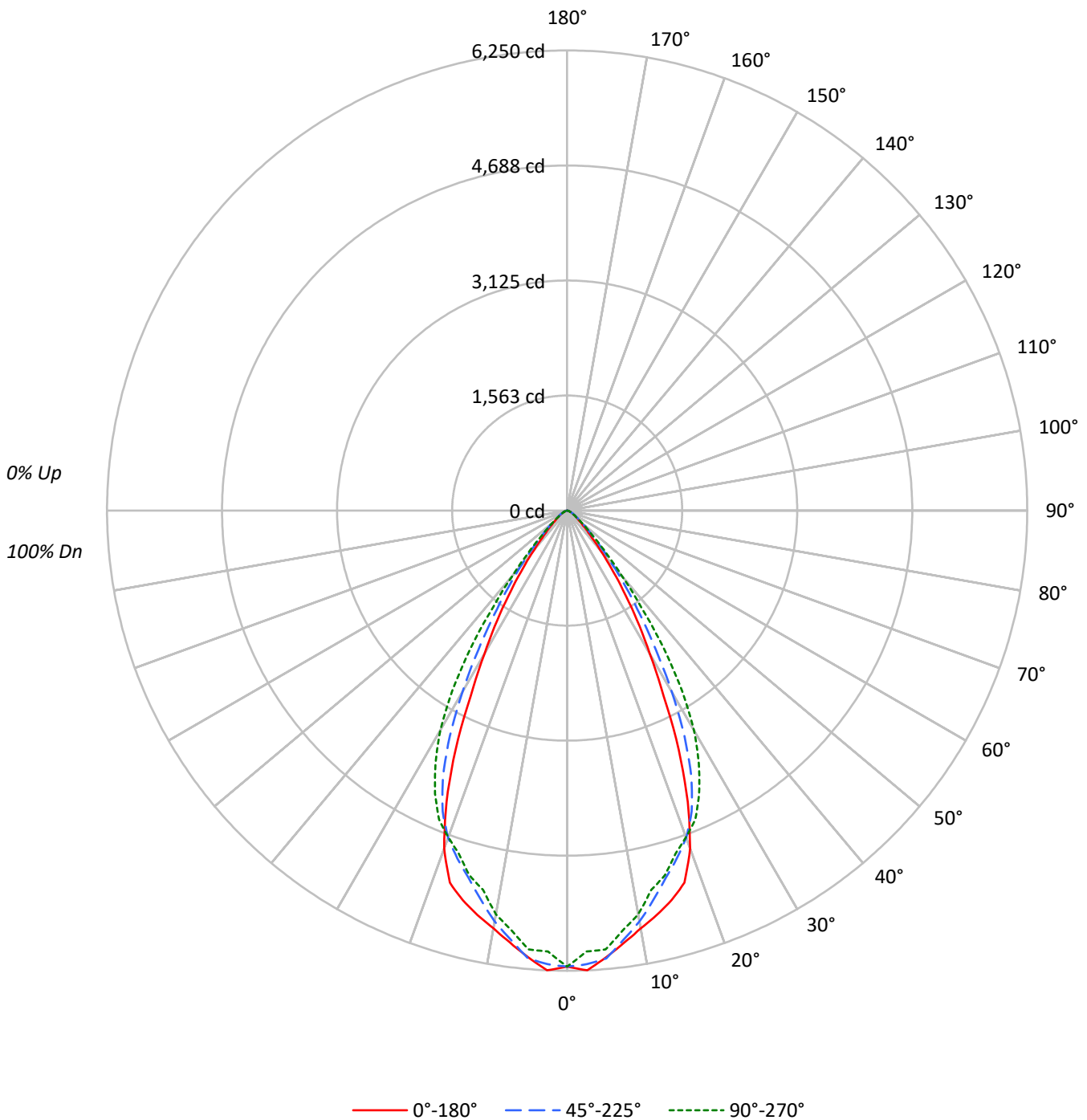
Lumens per Lamp: N/A
Luminaire Lumens: 5714.0 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.95 / 0.87
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Direct

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°	100009	100009	100009
5°	98679	98950	96970
10°	94448	92899	91259
15°	91559	86358	85708
20°	83900	81228	81132
25°	63933	71157	75610
30°	41842	53028	64212
35°	26170	33943	45222
40°	14870	20139	24354
45°	8245	11542	12049
50°	5303	6699	6558
55°	3910	4535	4065
60°	2871	3229	2871
65°	2334	2548	2124
70°	1572	1836	1836
75°	1042	1385	1385
80°	1032	1032	1032
85°	1037	1037	1037



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	563.9	9.9
10°-20°	1460.4	25.6
20°-30°	1761.1	30.8
30°-40°	1202.2	21.0
40°-50°	479.2	8.4
50°-60°	155.4	2.7
60°-70°	62.8	1.1
70°-80°	24.1	0.4
80°-90°	4.9	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°	3785.4	66.2
0°-40°	4987.6	87.3
0°-60°	5622.3	98.4
0°-90°	5714.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5714.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6194	6194	6194	6194	6194	
5°	6088	6083	6105	6000	5983	571
15°	5478	5289	5166	5089	5128	1528
25°	3589	3566	3994	4122	4244	1615
35°	1328	1672	1722	2455	2294	851
45°	361	694	506	683	528	303
55°	139	189	161	156	144	127
65°	61	61	67	61	56	59
75°	17	22	22	22	22	20
85°	6	6	6	6	6	5
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6194.1	6194.1	6194.1	6194.1	6194.1
2.5°	6249.6	6188.5	6166.3	6138.5	5994.1
5°	6088.5	6083.0	6105.2	5999.6	5983.0
7.5°	5921.9	5894.1	5877.4	5805.2	5755.2
10°	5760.8	5699.7	5666.3	5566.3	5566.3
12.5°	5627.4	5527.5	5416.3	5316.4	5277.5
15°	5477.5	5288.6	5166.4	5088.6	5127.5
17.5°	5299.7	5005.3	4955.3	4849.7	4888.6
20°	4883.0	4683.1	4727.5	4627.5	4721.9
22.5°	4283.1	4172.0	4422.0	4399.7	4544.2
25°	3588.7	3566.5	3994.2	4122.0	4244.2
27.5°	2838.7	2955.4	3449.8	3799.8	3872.0
30°	2244.3	2427.6	2844.3	3410.9	3444.2
32.5°	1761.0	2022.1	2244.3	2955.4	2905.4
35°	1327.7	1672.1	1722.1	2455.4	2294.3
37.5°	977.7	1405.5	1311.0	1933.2	1649.9
40°	705.5	1149.9	955.5	1427.7	1155.5
42.5°	500.0	916.6	694.4	1033.3	783.3
45°	361.1	694.4	505.5	683.3	527.7
47.5°	272.2	511.1	366.6	450.0	372.2
50°	211.1	361.1	266.7	305.5	261.1
52.5°	172.2	261.1	205.5	216.7	194.4
55°	138.9	188.9	161.1	155.5	144.4
57.5°	111.1	144.4	127.8	122.2	116.7
60°	88.9	105.5	100.0	94.4	88.9
62.5°	72.2	83.3	83.3	72.2	72.2
65°	61.1	61.1	66.7	61.1	55.6
67.5°	44.4	50.0	50.0	44.4	44.4
70°	33.3	38.9	38.9	38.9	38.9
72.5°	27.8	27.8	33.3	27.8	27.8
75°	16.7	22.2	22.2	22.2	22.2
77.5°	11.1	16.7	16.7	16.7	16.7
80°	11.1	11.1	11.1	11.1	11.1
82.5°	5.6	5.6	11.1	5.6	5.6
85°	5.6	5.6	5.6	5.6	5.6
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)