

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: P592061

Luminaire Tested: **GRZ-10L-940-50x60-X-UNV-STD-4F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P592061
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-10L-940-50x60-X-UNV-STD-4F
Description: iO LED GRAZER WITH 50x60 OPTIC
1000 LUMENS PER FOOT, 4 FOOT FIXTURE
SUMULATED RESULTS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

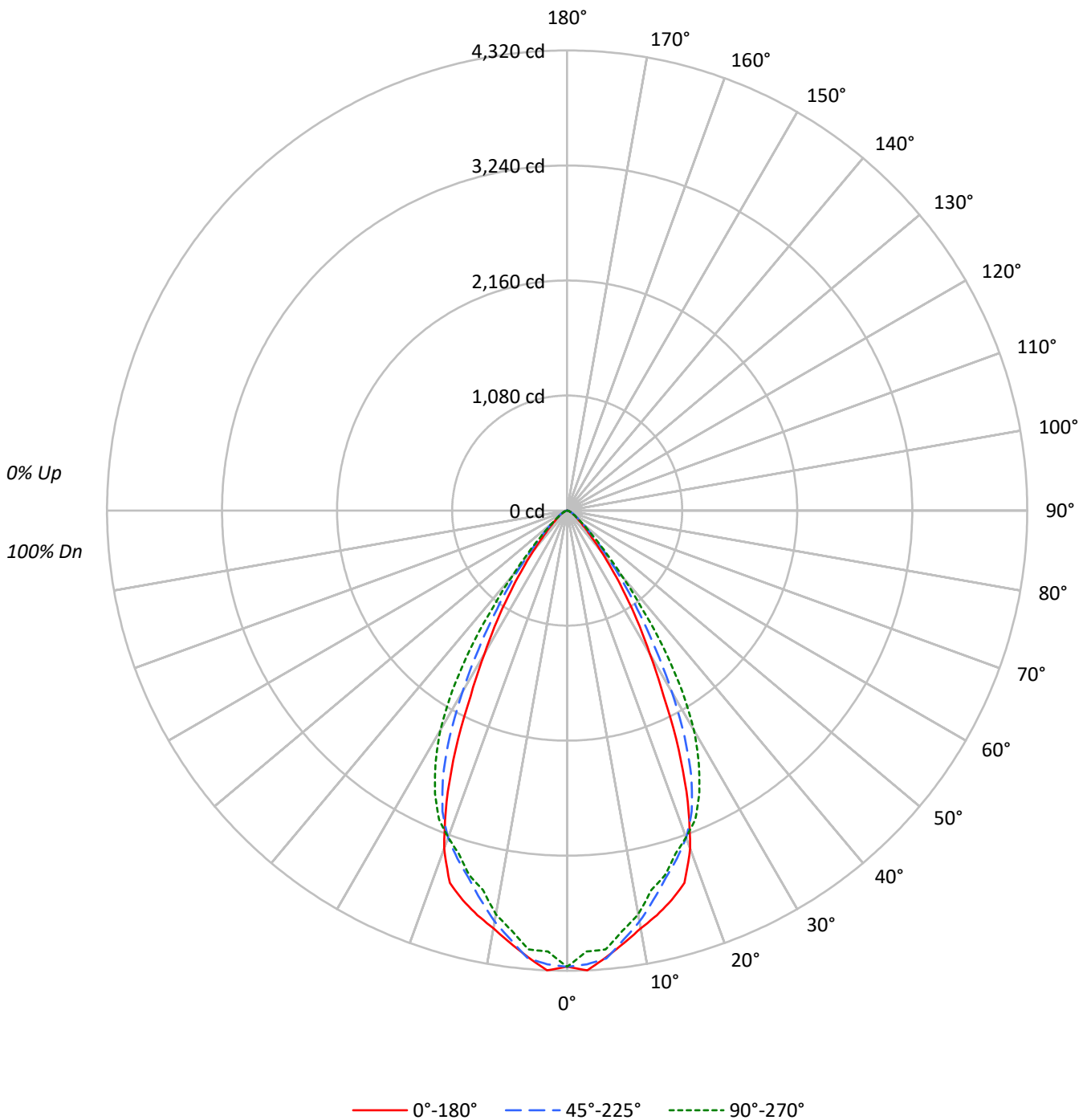
Lumens per Lamp: N/A
Luminaire Lumens: 3950.0 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.95 / 0.87
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 38
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	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	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86
3	101	95	89	85	99	93	88	85	91	87	83	88	85	82	86	83	81	79
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75	73
5	91	82	76	71	89	81	75	71	79	74	70	78	73	70	76	72	69	68
6	86	77	70	66	84	76	70	66	74	69	65	73	68	65	72	68	64	63
7	82	72	66	61	80	71	65	61	70	65	61	69	64	60	67	63	60	59
8	77	67	61	57	76	67	61	57	66	60	57	65	60	56	64	59	56	55
9	74	64	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53	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°	69135	69135	69135
5°	68216	68402	67033
10°	65289	64219	63086
15°	63293	59697	59248
20°	58000	56151	56086
25°	44195	49189	52267
30°	28926	36657	44390
35°	18090	23465	31261
40°	10279	13921	16836
45°	5699	7980	8330
50°	3665	4629	4534
55°	2702	3136	2809
60°	1983	2231	1983
65°	1612	1761	1467
70°	1086	1270	1270
75°	717	961	961
80°	716	716	716
85°	704	704	704



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	389.8	9.9
10°-20°	1009.5	25.6
20°-30°	1217.4	30.8
30°-40°	831.1	21.0
40°-50°	331.3	8.4
50°-60°	107.5	2.7
60°-70°	43.4	1.1
70°-80°	16.6	0.4
80°-90°	3.4	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°	2616.8	66.2
0°-40°	3447.9	87.3
0°-60°	3886.6	98.4
0°-90°	3950.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3950.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4282	4282	4282	4282	4282	
5°	4209	4205	4220	4148	4136	394
15°	3786	3656	3571	3518	3544	1057
25°	2481	2465	2761	2850	2934	1116
35°	918	1156	1190	1697	1586	588
45°	250	480	350	472	365	210
55°	96	131	111	108	100	88
65°	42	42	46	42	38	41
75°	12	15	15	15	15	14
85°	4	4	4	4	4	3
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4281.9	4281.9	4281.9	4281.9	4281.9
2.5°	4320.3	4278.0	4262.7	4243.5	4143.6
5°	4208.9	4205.1	4220.4	4147.5	4135.9
7.5°	4093.7	4074.5	4063.0	4013.1	3978.5
10°	3982.3	3940.1	3917.0	3847.9	3847.9
12.5°	3890.2	3821.0	3744.2	3675.1	3648.2
15°	3786.5	3655.9	3571.4	3517.7	3544.5
17.5°	3663.6	3460.1	3425.5	3352.5	3379.4
20°	3375.6	3237.3	3268.0	3198.9	3264.2
22.5°	2960.8	2884.0	3056.8	3041.5	3141.3
25°	2480.8	2465.4	2761.1	2849.5	2933.9
27.5°	1962.4	2043.0	2384.8	2626.7	2676.7
30°	1551.5	1678.2	1966.2	2357.9	2381.0
32.5°	1217.4	1397.8	1551.5	2043.0	2008.4
35°	917.8	1155.9	1190.5	1697.4	1586.0
37.5°	675.9	971.6	906.3	1336.4	1140.6
40°	487.7	794.9	660.5	986.9	798.8
42.5°	345.6	633.6	480.0	714.3	541.5
45°	249.6	480.0	349.5	472.4	364.8
47.5°	188.2	353.3	253.5	311.1	257.3
50°	145.9	249.6	184.3	211.2	180.5
52.5°	119.0	180.5	142.1	149.8	134.4
55°	96.0	130.6	111.4	107.5	99.8
57.5°	76.8	99.8	88.3	84.5	80.6
60°	61.4	73.0	69.1	65.3	61.4
62.5°	49.9	57.6	57.6	49.9	49.9
65°	42.2	42.2	46.1	42.2	38.4
67.5°	30.7	34.6	34.6	30.7	30.7
70°	23.0	26.9	26.9	26.9	26.9
72.5°	19.2	19.2	23.0	19.2	19.2
75°	11.5	15.4	15.4	15.4	15.4
77.5°	7.7	11.5	11.5	11.5	11.5
80°	7.7	7.7	7.7	7.7	7.7
82.5°	3.8	3.8	7.7	3.8	3.8
85°	3.8	3.8	3.8	3.8	3.8
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)