

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: P592013

Luminaire Tested: **GRZ-10L-927-50x60-X-UNV-STD-4F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P592013
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-927-50x60-X-UNV-STD-4F
Description: iO LED GRAZER WITH 50x60 OPTIC
1000 LUMENS PER FOOT, 4 FOOT FIXTURE
SUMULATED RESULTS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

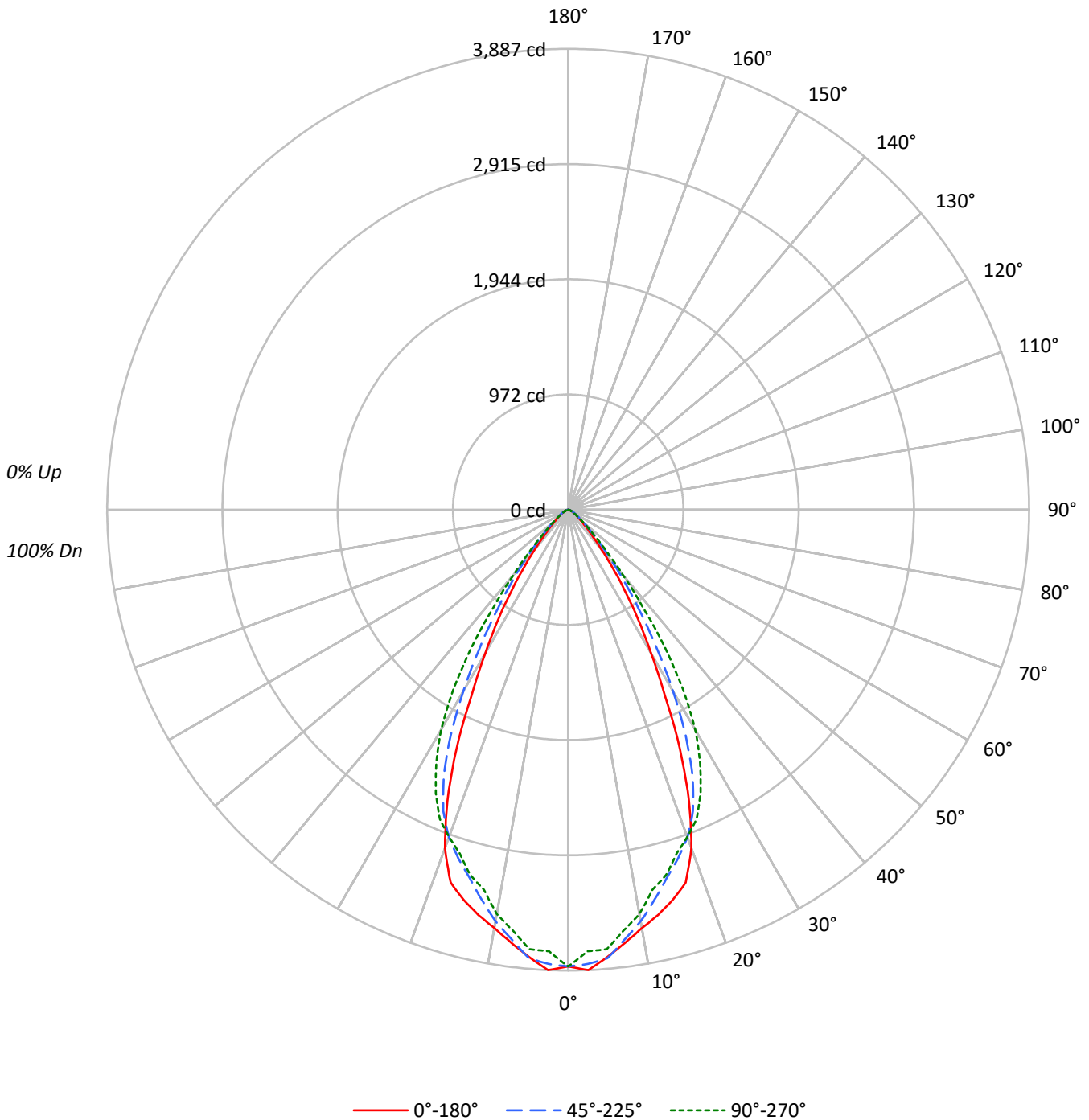
Lumens per Lamp: N/A
Luminaire Lumens: 3554.0 lumens
Efficiency: N/A
Efficacy: 93.5 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.95 / 0.87
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 38
Input Voltage (V): 120
Input Current (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				
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°	62203	62203	62203
5°	61378	61545	60313
10°	58745	57782	56762
15°	56948	53713	53309
20°	52185	50522	50464
25°	39765	44258	47028
30°	26025	32982	39940
35°	16277	21112	28127
40°	9249	12526	15148
45°	5128	7179	7494
50°	3298	4167	4079
55°	2432	2821	2528
60°	1786	2009	1786
65°	1452	1585	1322
70°	977	1142	1142
75°	649	861	861
80°	642	642	642
85°	648	648	648



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.8	9.9
10°-20°	908.3	25.6
20°-30°	1095.4	30.8
30°-40°	747.7	21.0
40°-50°	298.1	8.4
50°-60°	96.7	2.7
60°-70°	39.0	1.1
70°-80°	15.0	0.4
80°-90°	3.1	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°	2354.5	66.2
0°-40°	3102.2	87.3
0°-60°	3496.9	98.4
0°-90°	3554.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3554.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3853	3853	3853	3853	3853	
5°	3787	3784	3797	3732	3721	355
15°	3407	3289	3213	3165	3189	951
25°	2232	2218	2484	2564	2640	1004
35°	826	1040	1071	1527	1427	529
45°	225	432	314	425	328	189
55°	86	118	100	97	90	79
65°	38	38	42	38	35	37
75°	10	14	14	14	14	13
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°	3852.6	3852.6	3852.6	3852.6	3852.6
2.5°	3887.2	3849.1	3835.3	3818.0	3728.2
5°	3787.0	3783.5	3797.3	3731.7	3721.3
7.5°	3683.3	3666.0	3655.7	3610.7	3579.6
10°	3583.1	3545.1	3524.4	3462.2	3462.2
12.5°	3500.2	3438.0	3368.9	3306.7	3282.5
15°	3406.9	3289.4	3213.4	3165.0	3189.2
17.5°	3296.3	3113.2	3082.1	3016.4	3040.6
20°	3037.2	2912.8	2940.4	2878.2	2937.0
22.5°	2664.0	2594.9	2750.4	2736.6	2826.4
25°	2232.1	2218.3	2484.3	2563.8	2639.8
27.5°	1765.6	1838.2	2145.7	2363.4	2408.3
30°	1395.9	1509.9	1769.1	2121.5	2142.3
32.5°	1095.3	1257.7	1395.9	1838.2	1807.1
35°	825.8	1040.0	1071.1	1527.2	1427.0
37.5°	608.1	874.2	815.4	1202.4	1026.2
40°	438.8	715.2	594.3	888.0	718.7
42.5°	311.0	570.1	431.9	642.7	487.2
45°	224.6	431.9	314.4	425.0	328.2
47.5°	169.3	317.9	228.0	279.9	231.5
50°	131.3	224.6	165.9	190.0	162.4
52.5°	107.1	162.4	127.8	134.8	120.9
55°	86.4	117.5	100.2	96.7	89.8
57.5°	69.1	89.8	79.5	76.0	72.6
60°	55.3	65.6	62.2	58.7	55.3
62.5°	44.9	51.8	51.8	44.9	44.9
65°	38.0	38.0	41.5	38.0	34.6
67.5°	27.6	31.1	31.1	27.6	27.6
70°	20.7	24.2	24.2	24.2	24.2
72.5°	17.3	17.3	20.7	17.3	17.3
75°	10.4	13.8	13.8	13.8	13.8
77.5°	6.9	10.4	10.4	10.4	10.4
80°	6.9	6.9	6.9	6.9	6.9
82.5°	3.5	3.5	6.9	3.5	3.5
85°	3.5	3.5	3.5	3.5	3.5
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)