

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: P592093

Luminaire Tested: **GRZ-15L-930-50x60-X-UNV-STD-4F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P592093
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-930-50x60-X-UNV-STD-4F
Description: iO LED GRAZER WITH 50x60 OPTIC
1500 LUMENS PER FOOT, 4 FOOT FIXTURE
SUMULATED RESULTS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

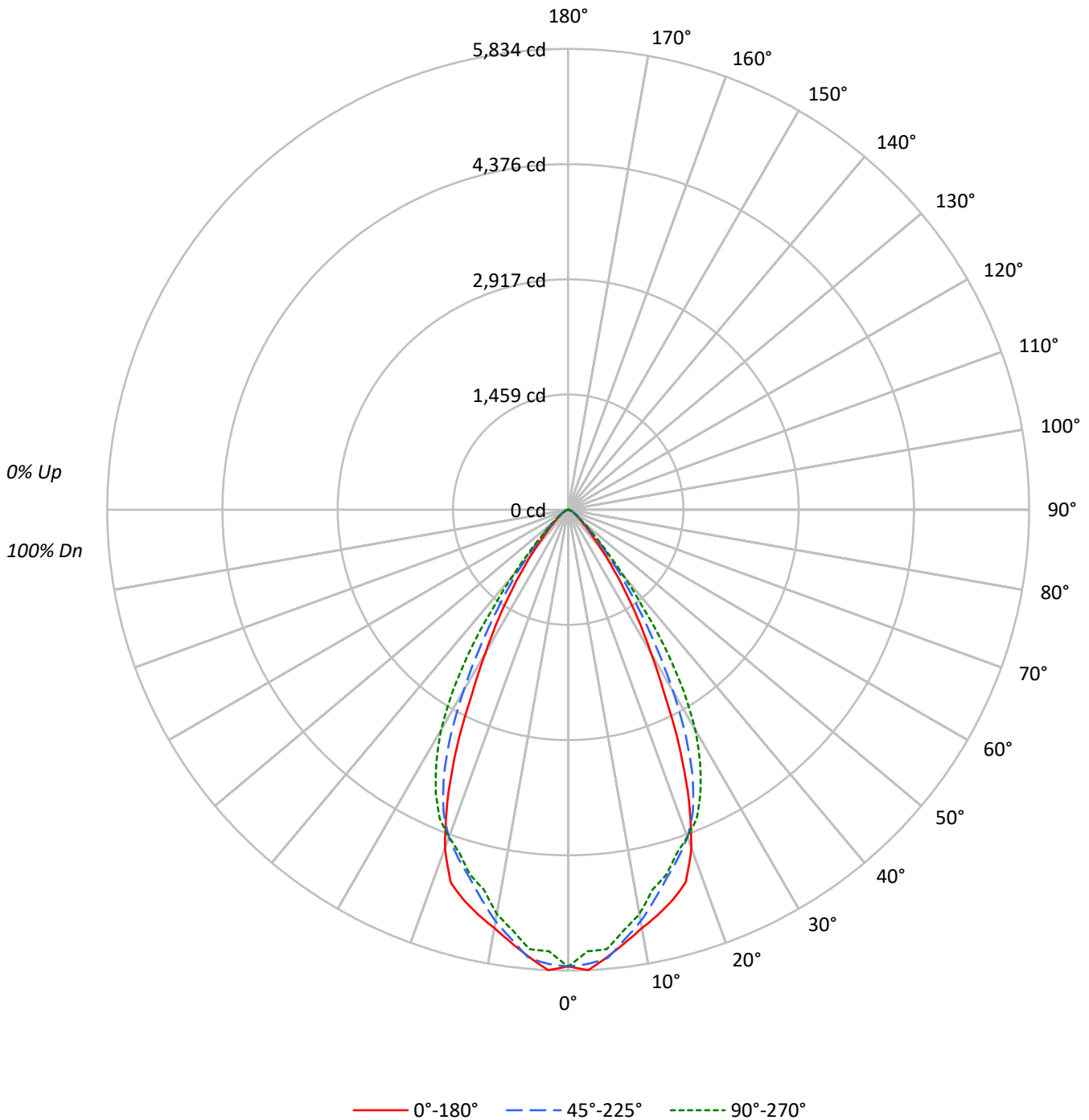
Lumens per Lamp: N/A
Luminaire Lumens: 5334.0 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.95 / 0.87
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Direct

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				
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°	93358	93358	93358
5°	92117	92370	90521
10°	88167	86721	85191
15°	85469	80615	80008
20°	78321	75826	75737
25°	59680	66425	70581
30°	39060	49501	59943
35°	24429	31686	42214
40°	13881	18801	22734
45°	7697	10775	11248
50°	4951	6252	6121
55°	3648	4234	3795
60°	2680	3013	2680
65°	2178	2376	1983
70°	1468	1714	1714
75°	973	1291	1291
80°	967	967	967
85°	963	963	963



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	526.4	9.9
10°-20°	1363.2	25.6
20°-30°	1644.0	30.8
30°-40°	1122.3	21.0
40°-50°	447.3	8.4
50°-60°	145.1	2.7
60°-70°	58.6	1.1
70°-80°	22.4	0.4
80°-90°	4.6	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°	3533.7	66.2
0°-40°	4655.9	87.3
0°-60°	5248.4	98.4
0°-90°	5334.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5334.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5782	5782	5782	5782	5782	
5°	5684	5678	5699	5601	5585	533
15°	5113	4937	4823	4750	4786	1427
25°	3350	3329	3729	3848	3962	1507
35°	1239	1561	1608	2292	2142	795
45°	337	648	472	638	493	283
55°	130	176	150	145	135	119
65°	57	57	62	57	52	55
75°	16	21	21	21	21	19
85°	5	5	5	5	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5782.2	5782.2	5782.2	5782.2	5782.2
2.5°	5834.0	5777.0	5756.2	5730.3	5595.5
5°	5683.6	5678.4	5699.2	5600.7	5585.1
7.5°	5528.0	5502.1	5486.6	5419.1	5372.5
10°	5377.7	5320.6	5289.5	5196.2	5196.2
12.5°	5253.2	5159.9	5056.1	4962.8	4926.5
15°	5113.2	4936.9	4822.8	4750.2	4786.5
17.5°	4947.2	4672.4	4625.7	4527.2	4563.5
20°	4558.3	4371.6	4413.1	4319.8	4407.9
22.5°	3998.2	3894.5	4127.9	4107.1	4242.0
25°	3350.0	3329.3	3728.6	3847.9	3961.9
27.5°	2649.9	2758.8	3220.4	3547.1	3614.5
30°	2095.1	2266.2	2655.1	3184.1	3215.2
32.5°	1643.9	1887.6	2095.1	2758.8	2712.2
35°	1239.4	1560.9	1607.6	2292.1	2141.7
37.5°	912.7	1312.0	1223.8	1804.7	1540.2
40°	658.6	1073.5	892.0	1332.7	1078.6
42.5°	466.7	855.7	648.2	964.6	731.2
45°	337.1	648.2	471.9	637.9	492.6
47.5°	254.1	477.1	342.3	420.0	347.4
50°	197.1	337.1	248.9	285.2	243.7
52.5°	160.8	243.7	191.9	202.2	181.5
55°	129.6	176.3	150.4	145.2	134.8
57.5°	103.7	134.8	119.3	114.1	108.9
60°	83.0	98.5	93.3	88.2	83.0
62.5°	67.4	77.8	77.8	67.4	67.4
65°	57.0	57.0	62.2	57.0	51.9
67.5°	41.5	46.7	46.7	41.5	41.5
70°	31.1	36.3	36.3	36.3	36.3
72.5°	25.9	25.9	31.1	25.9	25.9
75°	15.6	20.7	20.7	20.7	20.7
77.5°	10.4	15.6	15.6	15.6	15.6
80°	10.4	10.4	10.4	10.4	10.4
82.5°	5.2	5.2	10.4	5.2	5.2
85°	5.2	5.2	5.2	5.2	5.2
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)