

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: P592092

Luminaire Tested: **GRZ-15L-930-50x60-X-UNV-STD-2F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P592092
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-2F
Description: iO LED GRAZER WITH 50x60 OPTIC
1500 LUMENS PER FOOT, 2 FOOT FIXTURE
SUMULATED RESULTS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

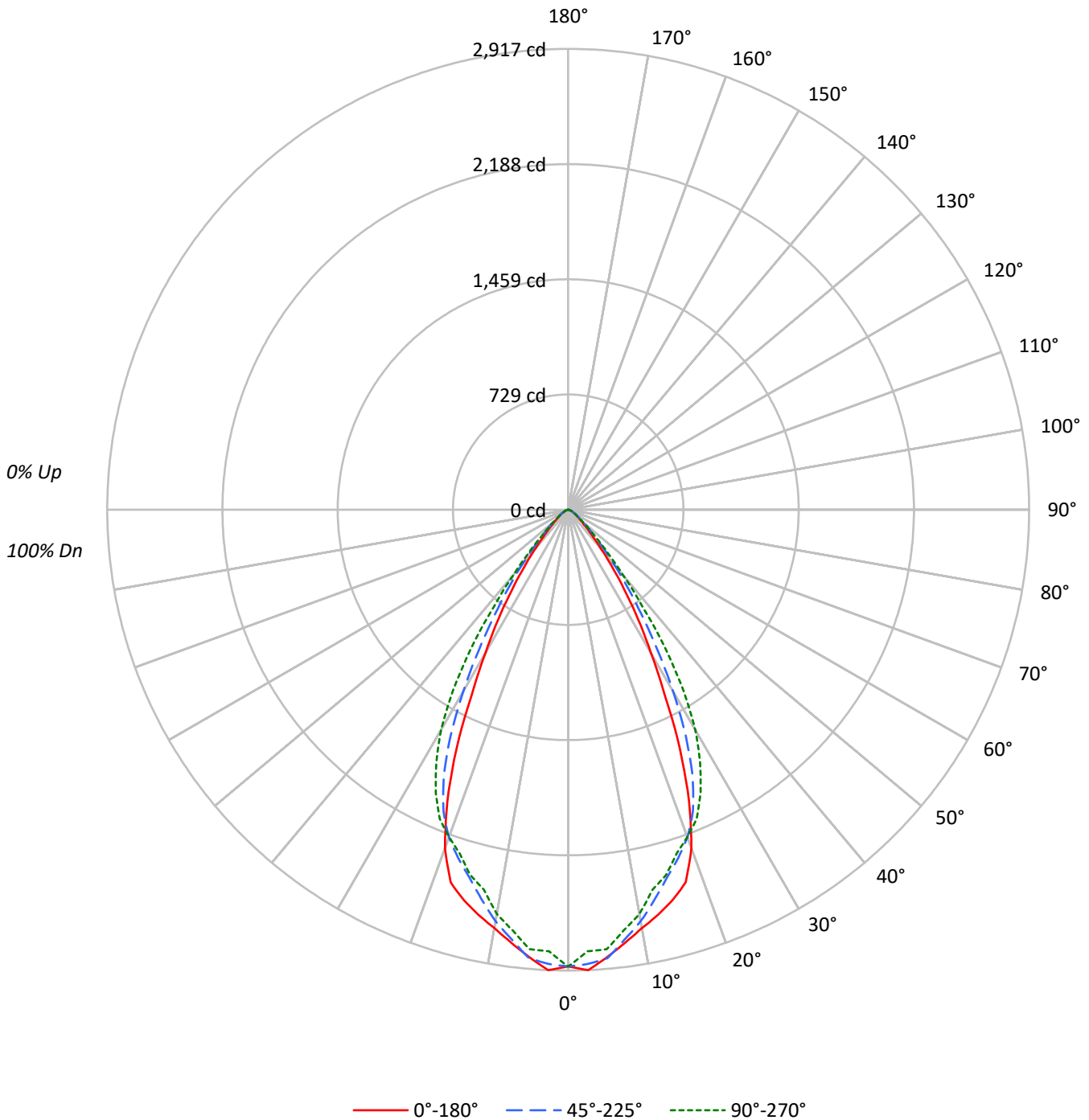
Lumens per Lamp: N/A
Luminaire Lumens: 2667.0 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.95 / 0.87
Luminous Opening: Rectangular (W 2' x L: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 29
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°	93358	93358	93358
5°	92117	92370	90519
10°	88165	86723	85191
15°	85469	80615	80007
20°	78323	75828	75738
25°	59680	66425	70583
30°	39058	49503	59943
35°	24429	31686	42216
40°	13881	18801	22734
45°	7695	10777	11248
50°	4948	6254	6124
55°	3648	4234	3795
60°	2680	3016	2680
65°	2178	2376	1979
70°	1473	1718	1718
75°	973	1298	1298
80°	967	967	967
85°	963	963	963



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.2	9.9
10°-20°	681.6	25.6
20°-30°	822.0	30.8
30°-40°	561.1	21.0
40°-50°	223.7	8.4
50°-60°	72.6	2.7
60°-70°	29.3	1.1
70°-80°	11.3	0.4
80°-90°	2.3	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°	1766.8	66.2
0°-40°	2328.0	87.3
0°-60°	2624.2	98.4
0°-90°	2667.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2667.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2891	2891	2891	2891	2891	
5°	2842	2839	2850	2800	2792	266
15°	2557	2468	2411	2375	2393	713
25°	1675	1665	1864	1924	1981	754
35°	620	780	804	1146	1071	397
45°	168	324	236	319	246	141
55°	65	88	75	73	67	59
65°	28	28	31	28	26	27
75°	8	10	10	10	10	10
85°	3	3	3	3	3	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2891.1	2891.1	2891.1	2891.1	2891.1
2.5°	2917.0	2888.5	2878.1	2865.1	2797.7
5°	2841.8	2839.2	2849.6	2800.3	2792.5
7.5°	2764.0	2751.1	2743.3	2709.6	2686.2
10°	2688.8	2660.3	2644.8	2598.1	2598.1
12.5°	2626.6	2579.9	2528.1	2481.4	2463.2
15°	2556.6	2468.4	2411.4	2375.1	2393.2
17.5°	2473.6	2336.2	2312.9	2263.6	2281.7
20°	2279.2	2185.8	2206.6	2159.9	2204.0
22.5°	1999.1	1947.3	2063.9	2053.6	2121.0
25°	1675.0	1664.6	1864.3	1923.9	1981.0
27.5°	1325.0	1379.4	1610.2	1773.5	1807.2
30°	1047.5	1133.1	1327.6	1592.0	1607.6
32.5°	821.9	943.8	1047.5	1379.4	1356.1
35°	619.7	780.5	803.8	1146.1	1070.9
37.5°	456.3	656.0	611.9	902.3	770.1
40°	329.3	536.7	446.0	666.4	539.3
42.5°	233.4	427.8	324.1	482.3	365.6
45°	168.5	324.1	236.0	318.9	246.3
47.5°	127.1	238.5	171.1	210.0	173.7
50°	98.5	168.5	124.5	142.6	121.9
52.5°	80.4	121.9	95.9	101.1	90.8
55°	64.8	88.2	75.2	72.6	67.4
57.5°	51.9	67.4	59.6	57.0	54.5
60°	41.5	49.3	46.7	44.1	41.5
62.5°	33.7	38.9	38.9	33.7	33.7
65°	28.5	28.5	31.1	28.5	25.9
67.5°	20.7	23.3	23.3	20.7	20.7
70°	15.6	18.2	18.2	18.2	18.2
72.5°	13.0	13.0	15.6	13.0	13.0
75°	7.8	10.4	10.4	10.4	10.4
77.5°	5.2	7.8	7.8	7.8	7.8
80°	5.2	5.2	5.2	5.2	5.2
82.5°	2.6	2.6	5.2	2.6	2.6
85°	2.6	2.6	2.6	2.6	2.6
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)