

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: P592008

Luminaire Tested: **GRZ-10L-927-17x30-X-UNV-STD-2F**

Issue Date: 2/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P592008  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2111-457-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 2/2/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: iO LED  
Catalog Number: GRZ-10L-927-17x30-X-UNV-STD-2F  
Description: iO LED GRAZER WITH 17x30 OPTIC  
1000 LUMENS PER FOOT, 2 FOOT FIXTURE  
SUMULATED RESULTS  
Light Source: 2700K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

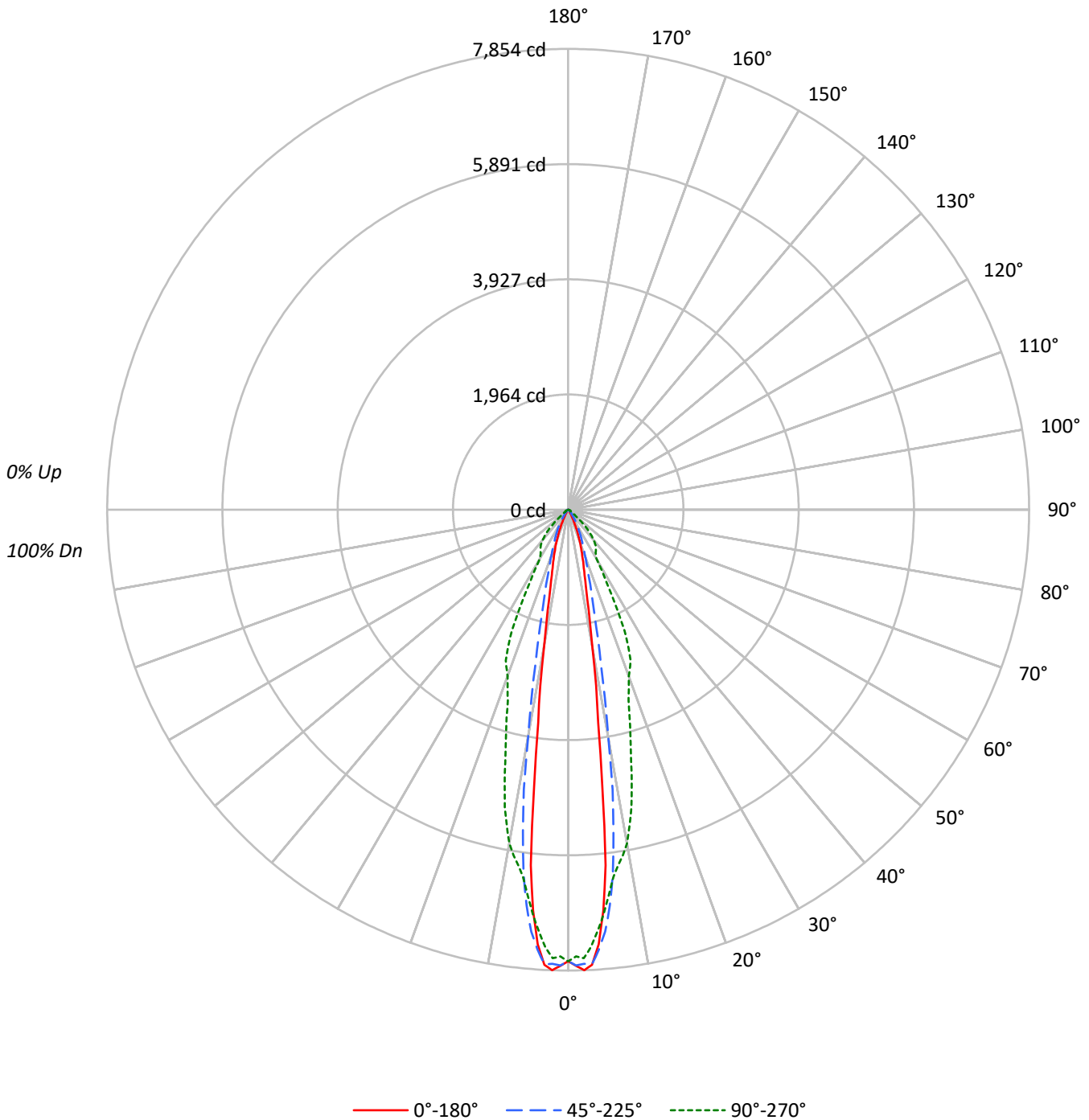
Lumens per Lamp: N/A  
Luminaire Lumens: 1867.0 lumens  
Efficiency: N/A  
Efficacy: 97.7 lumens/watt  
Spacing Criteria (0/90/45): 0.27 / 0.52 / 0.34  
Luminous Opening: Rectangular (W 2' x L: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 19.1  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97					95				
2	110	105	102	99	107	104	100	98	100	98	96	98	95	94	95	93	92					90				
3	105	100	95	92	103	98	94	91	96	93	90	93	91	88	91	89	87					86				
4	101	95	90	86	99	94	89	86	92	88	85	90	86	84	88	85	83					82				
5	97	90	85	82	96	89	85	81	88	84	81	86	83	80	85	82	79					78				
6	94	86	81	78	92	86	81	77	84	80	77	83	79	76	82	78	76					75				
7	90	83	78	74	89	82	77	74	81	77	74	80	76	73	79	75	73					72				
8	87	79	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70					69				
9	84	77	72	68	83	76	72	68	75	71	68	74	71	68	74	70	68					67				
10	82	74	69	66	81	73	69	66	73	69	66	72	68	66	71	68	65					64				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	248530	248530	248530
5°	222263	233965	224335
10°	77436	128703	189427
15°	34420	53479	137223
20°	20065	28673	103773
25°	8619	18282	80819
30°	2897	11339	35688
35°	1770	5858	32487
40°	1530	3351	28547
45°	1658	2603	19961
50°	1301	1216	8766
55°	1165	1165	3502
60°	1117	1227	3236
65°	1184	1184	3033
70°	1142	982	2285
75°	861	861	1073
80°	651	651	651
85°	630	630	630



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	565.2	30.3
10°-20°	597.7	32.0
20°-30°	370.1	19.8
30°-40°	187.2	10.0
40°-50°	92.7	5.0
50°-60°	27.6	1.5
60°-70°	17.0	0.9
70°-80°	8.0	0.4
80°-90°	1.4	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°	1533.1	82.1
0°-40°	1720.3	92.1
0°-60°	1840.5	98.6
0°-90°	1867.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1867.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7696	7696	7696	7696	7696	
5°	6857	7005	7218	7017	6921	478
15°	1030	1142	1600	2800	4105	306
25°	242	301	513	1230	2268	122
35°	45	49	149	550	824	30
45°	36	32	57	151	437	26
55°	21	20	21	30	62	19
65°	16	19	16	10	40	15
75°	7	10	7	4	9	8
85°	2	2	2	0	2	1
90°	0	0	0	0	0	



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CATALOG NUMBER: GRZ-10L-927-17x30-X-UNV-STD-2F

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	7696.4	7696.4	7696.4	7696.4	7696.4	7696.4	7696.4	7696.4	7696.4	7696.4	7696.4
1°	7774.1	7749.9	7755.1	7786.2	7805.2	7768.9	7717.1	7677.4	7694.6	7641.1	7615.2
2°	7853.6	7834.6	7822.5	7832.9	7791.4	7744.7	7691.2	7661.8	7651.5	7623.8	7649.7
3°	7767.2	7743.0	7749.9	7774.1	7753.4	7756.8	7623.8	7534.0	7525.3	7489.1	7459.7
4°	7425.1	7442.4	7477.0	7480.4	7504.6	7511.5	7464.9	7293.8	7297.3	7229.9	7197.1
5°	6856.8	6868.9	6972.5	7015.7	7171.2	7217.8	7229.9	7022.6	7001.9	6900.0	6920.7
6°	6094.9	5872.0	6150.2	6260.8	6573.4	6785.9	6860.2	6827.4	6723.7	6606.3	6608.0
7°	4756.0	4775.0	4934.0	5239.8	5821.9	6233.1	6538.9	6606.3	6468.1	6385.1	6307.4
8°	3667.7	3747.1	3973.4	4296.5	4875.2	5540.4	6094.9	6246.9	6212.4	6129.5	6117.4
9°	3037.1	2976.6	3158.0	3415.4	3970.0	4825.1	5509.3	5832.3	5932.5	5958.4	5963.6
10°	2361.6	2432.4	2518.8	2786.6	3256.5	3925.1	4823.4	5324.4	5587.0	5733.8	5777.0
11°	1912.4	1938.3	2048.9	2301.1	2655.3	3270.3	4179.0	4743.9	5148.2	5445.3	5483.3
12°	1573.8	1596.3	1670.6	1857.1	2178.5	2667.4	3448.3	4154.8	4762.9	5110.2	5187.9
13°	1337.1	1363.1	1423.5	1568.6	1817.4	2244.1	2784.9	3550.2	4249.8	4742.2	4811.3
14°	1148.8	1178.2	1217.9	1345.8	1547.9	1850.2	2311.5	3042.3	3792.0	4344.9	4436.4
15°	1029.6	1033.1	1076.3	1164.4	1342.3	1599.7	1997.1	2608.6	3372.2	3994.2	4104.7
17.5°	774.0	768.8	774.0	843.1	946.7	1135.0	1408.0	1938.3	2752.0	3292.8	3413.7
20°	583.9	585.6	573.6	613.3	699.7	834.4	1060.7	1577.3	2410.0	2950.7	3019.8
22.5°	406.0	402.5	407.7	445.7	528.6	653.0	831.0	1287.0	2195.8	2722.7	2779.7
25°	241.9	247.0	267.8	312.7	393.9	513.1	678.9	1040.0	1798.4	2149.1	2268.3
27.5°	139.9	141.7	158.9	207.3	285.1	399.1	558.0	810.2	1245.6	1432.2	1463.3
30°	77.7	77.7	89.8	120.9	193.5	304.1	456.1	672.0	903.5	955.4	957.1
32.5°	51.8	51.8	55.3	70.8	119.2	221.1	371.4	578.7	784.3	858.6	870.7
35°	44.9	43.2	44.9	50.1	74.3	148.6	285.1	492.4	722.1	810.2	824.1
37.5°	39.7	39.7	41.5	46.6	57.0	96.7	202.1	390.4	639.2	749.8	765.3
40°	36.3	36.3	38.0	46.6	57.0	79.5	127.8	283.3	526.9	659.9	677.2
42.5°	34.6	34.6	34.6	41.5	53.6	72.6	74.3	181.4	406.0	542.5	568.4
45°	36.3	34.6	31.1	32.8	41.5	57.0	43.2	107.1	281.6	418.1	437.1
47.5°	34.6	34.6	32.8	31.1	31.1	38.0	27.6	58.7	176.2	290.2	300.6
50°	25.9	25.9	22.5	27.6	29.4	24.2	20.7	38.0	108.8	164.1	174.5
52.5°	22.5	22.5	20.7	20.7	24.2	22.5	15.5	31.1	69.1	91.6	95.0
55°	20.7	19.0	19.0	20.7	22.5	20.7	13.8	24.2	48.4	60.5	62.2
57.5°	19.0	19.0	19.0	19.0	22.5	20.7	13.8	17.3	38.0	48.4	53.6
60°	17.3	17.3	19.0	19.0	20.7	19.0	12.1	12.1	31.1	43.2	50.1
62.5°	15.5	17.3	17.3	19.0	20.7	17.3	10.4	8.6	24.2	39.7	46.6
65°	15.5	15.5	17.3	19.0	19.0	15.5	8.6	6.9	19.0	32.8	39.7
67.5°	13.8	13.8	15.5	17.3	19.0	13.8	5.2	5.2	15.5	27.6	32.8
70°	12.1	12.1	13.8	15.5	15.5	10.4	5.2	5.2	10.4	22.5	24.2
72.5°	10.4	10.4	12.1	13.8	13.8	8.6	3.5	3.5	6.9	17.3	15.5
75°	6.9	8.6	8.6	10.4	10.4	6.9	3.5	3.5	5.2	10.4	8.6
77.5°	5.2	5.2	6.9	8.6	8.6	5.2	1.7	1.7	3.5	6.9	5.2
80°	3.5	3.5	5.2	5.2	5.2	3.5	1.7	1.7	1.7	3.5	3.5
82.5°	1.7	1.7	3.5	3.5	3.5	1.7	1.7	1.7	1.7	1.7	1.7
85°	1.7	1.7	1.7	1.7	1.7	1.7	0.0	0.0	0.0	1.7	1.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)