

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: P592060

Luminaire Tested: **GRZ-10L-940-50x60-X-UNV-STD-2F**

Issue Date: 2/2/2022

**Test Information**

Test Method: LM-79-2019  
Report Number: P592060  
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-2F  
Description: iO LED GRAZER WITH 50x60 OPTIC  
1000 LUMENS PER FOOT, 2 FOOT FIXTURE  
SUMULATED RESULTS  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: -

**Summary**

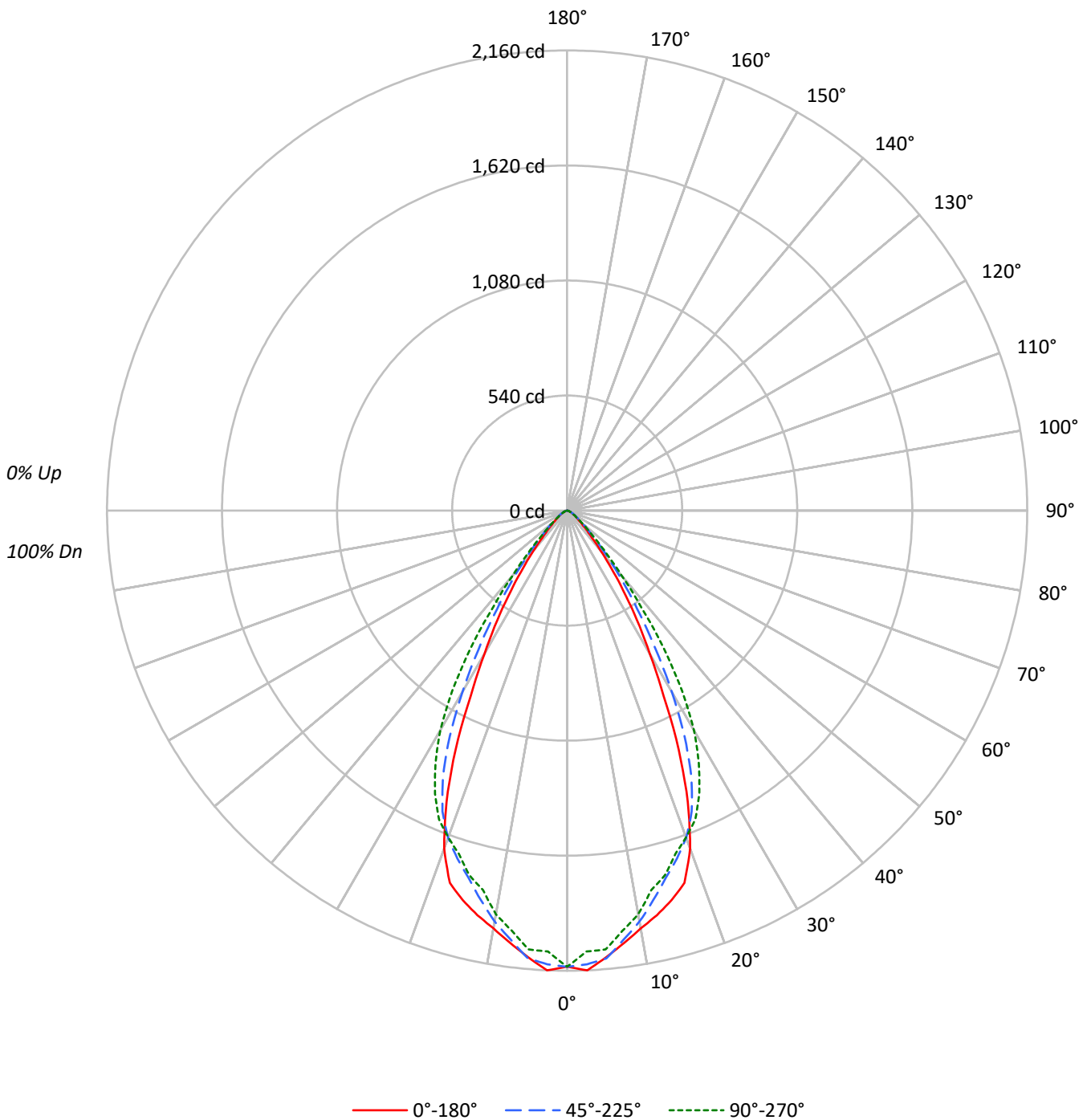
Lumens per Lamp: N/A  
Luminaire Lumens: 1975.0 lumens  
Efficiency: N/A  
Efficacy: 103.4 lumens/watt  
Spacing Criteria (0/90/45): 0.87 / 0.95 / 0.87  
Luminous Opening: Rectangular (W 2' x L: 0.17' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	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°	69133	69133	69133
5°	68217	68402	67034
10°	65291	64219	63088
15°	63291	59697	59249
20°	58000	56151	56086
25°	44195	49191	52269
30°	28924	36657	44390
35°	18090	23463	31261
40°	10281	13923	16836
45°	5699	7978	8330
50°	3667	4632	4531
55°	2702	3136	2809
60°	1983	2235	1983
65°	1612	1757	1467
70°	1086	1265	1265
75°	724	961	961
80°	707	707	707
85°	704	704	704



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.9	9.9
10°-20°	504.8	25.6
20°-30°	608.7	30.8
30°-40°	415.5	21.0
40°-50°	165.6	8.4
50°-60°	53.7	2.7
60°-70°	21.7	1.1
70°-80°	8.3	0.4
80°-90°	1.7	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°	1308.4	66.2
0°-40°	1723.9	87.3
0°-60°	1943.3	98.4
0°-90°	1975.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1975.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2141	2141	2141	2141	2141	
5°	2104	2102	2110	2074	2068	197
15°	1893	1828	1786	1759	1772	528
25°	1240	1233	1381	1425	1467	558
35°	459	578	595	849	793	294
45°	125	240	175	236	182	105
55°	48	65	56	54	50	44
65°	21	21	23	21	19	20
75°	6	8	8	8	8	7
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2140.9	2140.9	2140.9	2140.9	2140.9
2.5°	2160.1	2139.0	2131.3	2121.7	2071.8
5°	2104.5	2102.5	2110.2	2073.7	2068.0
7.5°	2046.9	2037.2	2031.5	2006.5	1989.2
10°	1991.2	1970.0	1958.5	1924.0	1924.0
12.5°	1945.1	1910.5	1872.1	1837.6	1824.1
15°	1893.2	1828.0	1785.7	1758.8	1772.3
17.5°	1831.8	1730.0	1712.7	1676.3	1689.7
20°	1687.8	1618.7	1634.0	1599.5	1632.1
22.5°	1480.4	1442.0	1528.4	1520.7	1570.7
25°	1240.4	1232.7	1380.6	1424.7	1467.0
27.5°	981.2	1021.5	1192.4	1313.4	1338.3
30°	775.7	839.1	983.1	1179.0	1190.5
32.5°	608.7	698.9	775.7	1021.5	1004.2
35°	458.9	578.0	595.2	848.7	793.0
37.5°	337.9	485.8	453.1	668.2	570.3
40°	243.9	397.5	330.3	493.5	399.4
42.5°	172.8	316.8	240.0	357.1	270.7
45°	124.8	240.0	174.7	236.2	182.4
47.5°	94.1	176.7	126.7	155.5	128.6
50°	73.0	124.8	92.2	105.6	90.2
52.5°	59.5	90.2	71.0	74.9	67.2
55°	48.0	65.3	55.7	53.8	49.9
57.5°	38.4	49.9	44.2	42.2	40.3
60°	30.7	36.5	34.6	32.6	30.7
62.5°	25.0	28.8	28.8	25.0	25.0
65°	21.1	21.1	23.0	21.1	19.2
67.5°	15.4	17.3	17.3	15.4	15.4
70°	11.5	13.4	13.4	13.4	13.4
72.5°	9.6	9.6	11.5	9.6	9.6
75°	5.8	7.7	7.7	7.7	7.7
77.5°	3.8	5.8	5.8	5.8	5.8
80°	3.8	3.8	3.8	3.8	3.8
82.5°	1.9	1.9	3.8	1.9	1.9
85°	1.9	1.9	1.9	1.9	1.9
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)