

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: P592075

Luminaire Tested: **GRZ-15L-927-30x60-X-UNV-STD-4F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P592075
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2111-457-21)
Test Lab: INNOVATION CENTER
Issue Date: 2/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: iO LED
Catalog Number: GRZ-15L-927-30x60-X-UNV-STD-4F
Description: iO LED GRAZER WITH 30x60 OPTIC
1500 LUMENS PER FOOT, 4 FOOT FIXTURE
SUMULATED RESULTS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

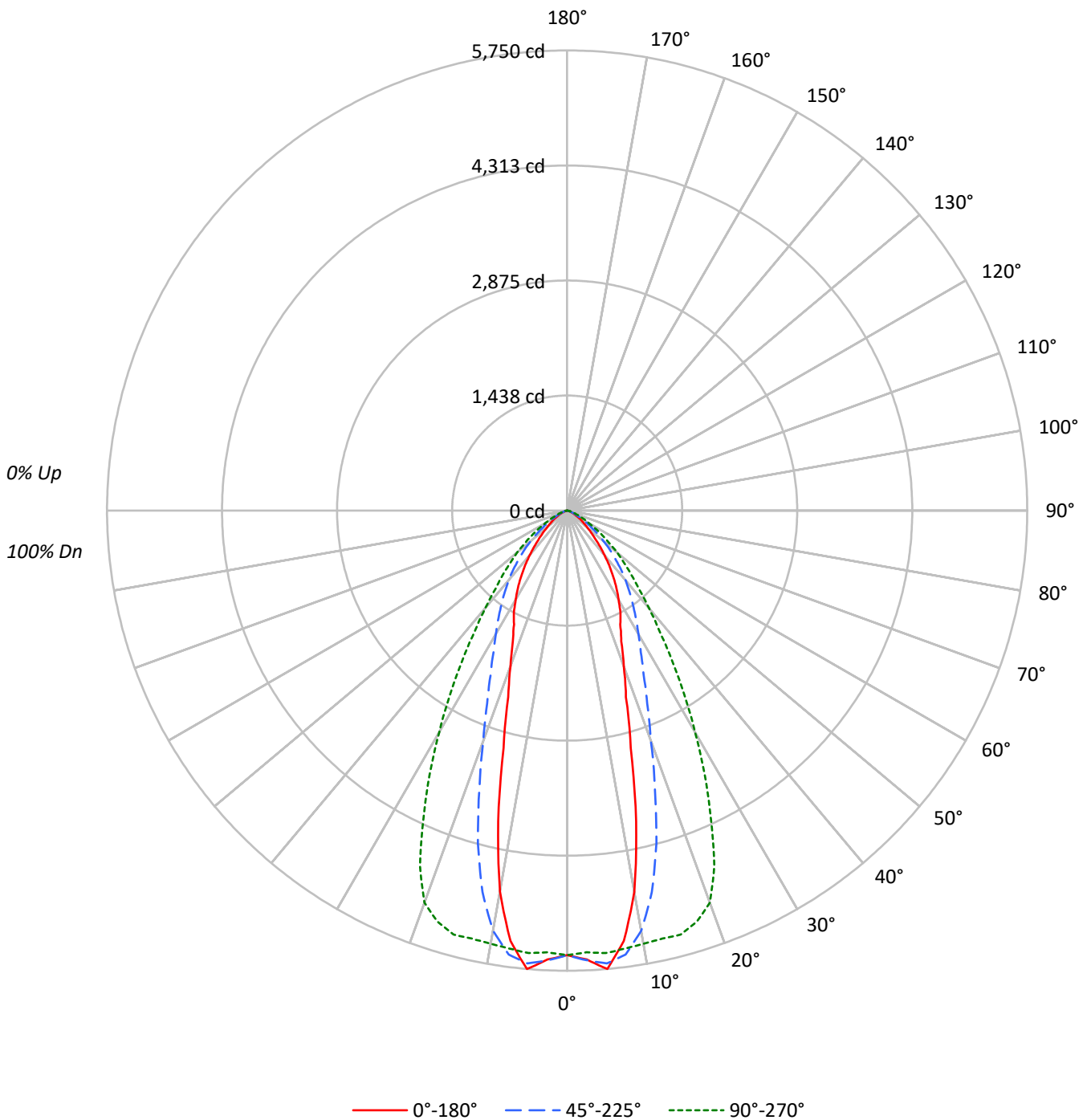
Lumens per Lamp: N/A
Luminaire Lumens: 5098.0 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Spacing Criteria (0/90/45): 0.53 / 1.01 / 0.76
Luminous Opening: Rectangular (W 4' x L: 0.17' x H: 0')
CIE Type: Direct

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	109	107	104	110	107	105	102	103	101	99	99	98	96	96	95	93	92					92			
2	106	100	96	92	104	99	94	91	95	92	89	92	89	87	89	87	85	83					83			
3	100	92	87	82	98	91	86	81	88	84	80	86	82	79	83	80	78	76					76			
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69					69			
5	88	79	72	67	87	78	72	67	76	71	66	74	70	66	73	69	65	64					64			
6	83	73	67	62	82	73	66	62	71	65	61	69	65	61	68	64	60	59					59			
7	79	68	62	57	77	68	61	57	66	61	57	65	60	56	64	59	56	54					54			
8	75	64	57	53	73	63	57	53	62	57	53	61	56	52	60	56	52	51					51			
9	71	60	54	49	70	60	53	49	59	53	49	58	53	49	57	52	49	47					47			
10	67	57	50	46	66	56	50	46	55	50	46	55	49	46	54	49	46	44					44			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	89690	89690	89690
5°	93193	92059	89952
10°	79269	87385	90090
15°	51316	71960	91684
20°	35567	52577	89604
25°	27969	40262	75714
30°	23957	33186	59566
35°	19710	28186	44940
40°	15281	23922	33512
45°	11303	19294	25916
50°	8289	14820	20597
55°	6193	10556	15060
60°	4359	7104	10172
65°	3056	4585	6877
70°	2124	3068	4485
75°	1560	1871	3119
80°	930	1395	2325
85°	926	926	926



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	525.2	10.3
10°-20°	1197.0	23.5
20°-30°	1223.3	24.0
30°-40°	978.8	19.2
40°-50°	654.3	12.8
50°-60°	345.0	6.8
60°-70°	130.3	2.6
70°-80°	38.3	0.8
80°-90°	5.8	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°	2945.5	57.8
0°-40°	3924.3	77.0
0°-60°	4923.6	96.6
0°-90°	5098.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5098.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5555	5555	5555	5555	5555	
5°	5750	5666	5680	5594	5550	516
15°	3070	3388	4305	5225	5485	876
25°	1570	1695	2260	3715	4250	737
35°	1000	1088	1430	2070	2280	623
45°	495	574	845	1118	1135	389
55°	220	249	375	514	535	200
65°	80	89	120	162	180	83
75°	25	25	30	41	50	28
85°	5	5	5	5	5	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5555	5555	5555	5555	5555	5555	5555	5555	5555	5555	5555
2.5°	5615	5610	5665	5625	5640	5625	5580	5555	5550	5500	5525
5°	5750	5670	5685	5660	5685	5680	5630	5600	5575	5545	5550
7.5°	5425	5435	5480	5500	5570	5595	5570	5550	5530	5515	5520
10°	4835	4870	4935	5065	5210	5330	5380	5435	5480	5485	5495
12.5°	3980	4030	4135	4275	4595	4885	5130	5320	5430	5490	5480
15°	3070	3085	3215	3445	3795	4305	4790	5175	5375	5515	5485
17.5°	2445	2465	2570	2745	3080	3645	4370	4945	5310	5410	5385
20°	2070	2055	2135	2280	2560	3060	3815	4585	5045	5185	5215
22.5°	1770	1785	1835	1950	2195	2610	3300	4115	4625	4780	4805
25°	1570	1585	1635	1715	1915	2260	2855	3590	4090	4240	4250
27.5°	1440	1430	1465	1525	1700	1995	2485	3095	3560	3710	3720
30°	1285	1280	1315	1380	1520	1780	2195	2690	3020	3165	3195
32.5°	1145	1140	1180	1235	1375	1600	1960	2345	2570	2690	2720
35°	1000	1005	1035	1105	1230	1430	1760	2030	2190	2250	2280
37.5°	860	865	905	975	1100	1280	1545	1755	1850	1895	1890
40°	725	735	760	840	965	1135	1350	1505	1570	1575	1590
42.5°	605	605	645	710	830	990	1180	1290	1340	1335	1325
45°	495	500	525	590	700	845	1010	1110	1140	1120	1135
47.5°	405	410	430	490	585	725	855	950	975	960	960
50°	330	335	350	395	475	590	710	790	815	810	820
52.5°	270	270	285	320	385	480	575	645	665	660	655
55°	220	220	230	255	305	375	455	510	525	530	535
57.5°	175	175	180	200	235	290	350	390	405	410	415
60°	135	135	145	155	185	220	260	290	310	310	315
62.5°	105	105	110	120	140	165	190	215	225	235	240
65°	80	80	85	90	105	120	140	160	170	175	180
67.5°	60	60	60	70	80	90	100	115	120	130	135
70°	45	45	45	50	55	65	70	80	90	95	95
72.5°	35	35	35	35	40	45	50	55	65	70	70
75°	25	25	25	25	30	30	35	40	45	50	50
77.5°	20	20	15	20	20	20	25	25	30	35	35
80°	10	10	10	10	15	15	15	20	20	20	25
82.5°	5	5	5	5	10	10	10	10	10	15	15
85°	5	5	5	5	5	5	5	5	5	5	5
87.5°	0	0	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0	0	0

(END OF REPORT)