

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: P592072

Luminaire Tested: **GRZ-15L-927-17x30-X-UNV-STD-2F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P592072
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-15L-927-17x30-X-UNV-STD-2F
Description: iO LED GRAZER WITH 17x30 OPTIC
1500 LUMENS PER FOOT, 2 FOOT FIXTURE
SUMULATED RESULTS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

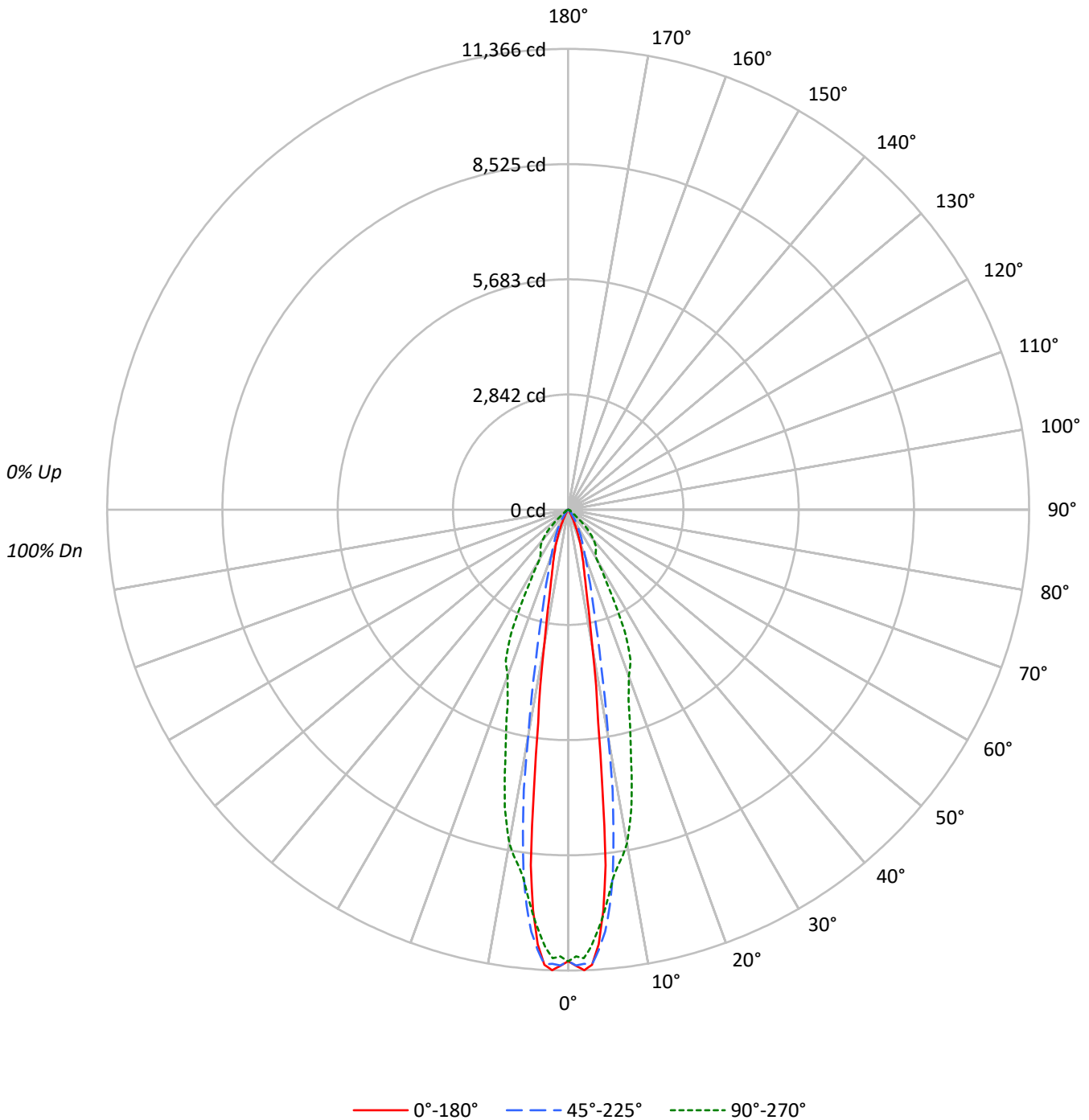
Lumens per Lamp: N/A
Luminaire Lumens: 2702.0 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Spacing Criteria (0/90/45): 0.27 / 0.52 / 0.34
Luminous Opening: Rectangular (W 2' x L: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 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							
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10				
RCR																								
0	119	119	119	119	116	116	116	116	111	111	111	111	106	106	106	106	102	102	102	102	100	100	100	100
1	114	112	110	108	112	110	108	106	106	104	103	103	102	101	100	100	99	98	97	97	95	95	95	95
2	110	105	102	99	107	104	100	98	100	98	96	96	98	95	94	94	95	93	92	92	90	90	90	90
3	105	100	95	92	103	98	94	91	96	93	90	90	93	91	88	88	91	89	87	87	86	86	86	86
4	101	95	90	86	99	94	89	86	92	88	85	85	90	86	84	84	88	85	83	83	82	82	82	82
5	97	90	85	82	96	89	85	81	88	84	81	81	86	83	80	80	85	82	79	79	78	78	78	78
6	94	86	81	78	92	86	81	77	84	80	77	77	83	79	76	76	82	78	76	76	75	75	75	75
7	90	83	78	74	89	82	77	74	81	77	74	74	80	76	73	73	79	75	73	73	72	72	72	72
8	87	79	75	71	86	79	74	71	78	74	71	71	77	73	71	71	76	73	70	70	69	69	69	69
9	84	77	72	68	83	76	72	68	75	71	68	68	74	71	68	68	74	70	68	68	67	67	67	67
10	82	74	69	66	81	73	69	66	73	69	66	66	72	68	66	66	71	68	65	65	64	64	64	64

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	359681	359681	359681
5°	321667	338604	324666
10°	112069	186263	274149
15°	49815	77399	198596
20°	29041	41498	150185
25°	12470	26459	116966
30°	4195	16406	51647
35°	2562	8475	47013
40°	2213	4848	41315
45°	2398	3768	28889
50°	1884	1758	12685
55°	1689	1689	5067
60°	1615	1776	4682
65°	1719	1719	4393
70°	1652	1416	3305
75°	1248	1248	1560
80°	930	930	930
85°	926	926	926



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	818.0	30.3
10°-20°	865.0	32.0
20°-30°	535.6	19.8
30°-40°	271.0	10.0
40°-50°	134.1	5.0
50°-60°	39.9	1.5
60°-70°	24.6	0.9
70°-80°	11.6	0.4
80°-90°	2.0	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°	2218.7	82.1
0°-40°	2489.7	92.1
0°-60°	2663.7	98.6
0°-90°	2702.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2702.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11138	11138	11138	11138	11138	
5°	9923	10138	10446	10156	10016	692
15°	1490	1653	2315	4052	5940	443
25°	350	436	743	1780	3283	177
35°	65	71	215	796	1193	43
45°	52	47	82	218	633	38
55°	30	29	30	44	90	27
65°	22	27	22	14	58	21
75°	10	14	10	6	12	12
85°	2	2	2	0	2	2
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°	11138.5	11138.5	11138.5	11138.5	11138.5	11138.5	11138.5	11138.5	11138.5	11138.5	11138.5
1°	11251.0	11216.0	11223.5	11268.5	11296.0	11243.5	11168.5	11111.0	11136.0	11058.5	11021.0
2°	11366.0	11338.5	11321.0	11336.0	11276.0	11208.5	11131.0	11088.5	11073.5	11033.5	11071.0
3°	11241.0	11206.0	11216.0	11251.0	11221.0	11226.0	11033.5	10903.5	10891.0	10838.5	10796.0
4°	10746.0	10771.0	10821.0	10826.0	10861.0	10871.0	10803.5	10556.0	10561.0	10463.4	10415.9
5°	9923.4	9940.9	10090.9	10153.4	10378.4	10445.9	10463.4	10163.4	10133.4	9985.9	10015.9
6°	8820.8	8498.3	8900.8	9060.8	9513.4	9820.9	9928.4	9880.9	9730.9	9560.9	9563.4
7°	6883.1	6910.6	7140.6	7583.2	8425.8	9020.8	9463.4	9560.9	9360.8	9240.8	9128.3
8°	5308.0	5423.0	5750.5	6218.1	7055.6	8018.2	8820.8	9040.8	8990.8	8870.8	8853.3
9°	4395.4	4307.9	4570.4	4942.9	5745.5	6983.1	7973.2	8440.8	8585.8	8623.3	8630.8
10°	3417.8	3520.3	3645.3	4032.9	4712.9	5680.5	6980.6	7705.7	8085.7	8298.3	8360.8
11°	2767.8	2805.3	2965.3	3330.3	3842.8	4732.9	6048.0	6865.6	7450.7	7880.7	7935.7
12°	2277.7	2310.2	2417.7	2687.7	3152.8	3860.3	4990.5	6013.0	6893.1	7395.7	7508.2
13°	1935.2	1972.7	2060.2	2270.2	2630.2	3247.8	4030.4	5138.0	6150.6	6863.1	6963.1
14°	1662.7	1705.2	1762.7	1947.7	2240.2	2677.7	3345.3	4402.9	5488.0	6288.1	6420.6
15°	1490.1	1495.1	1557.6	1685.2	1942.7	2315.2	2890.3	3775.3	4880.4	5780.5	5940.5
17.5°	1120.1	1112.6	1120.1	1220.1	1370.1	1642.6	2037.7	2805.3	3982.9	4765.4	4940.4
20°	845.1	847.6	830.1	887.6	1012.6	1207.6	1535.1	2282.7	3487.8	4270.4	4370.4
22.5°	587.6	582.6	590.1	645.1	765.1	945.1	1202.6	1862.7	3177.8	3940.4	4022.9
25°	350.0	357.5	387.5	452.5	570.1	742.6	982.6	1505.1	2602.7	3110.3	3282.8
27.5°	202.5	205.0	230.0	300.0	412.5	577.6	807.6	1172.6	1802.7	2072.7	2117.7
30°	112.5	112.5	130.0	175.0	280.0	440.0	660.1	972.6	1307.6	1382.6	1385.1
32.5°	75.0	75.0	80.0	102.5	172.5	320.0	537.5	837.6	1135.1	1242.6	1260.1
35°	65.0	62.5	65.0	72.5	107.5	215.0	412.5	712.6	1045.1	1172.6	1192.6
37.5°	57.5	57.5	60.0	67.5	82.5	140.0	292.5	565.1	925.1	1085.1	1107.6
40°	52.5	52.5	55.0	67.5	82.5	115.0	185.0	410.0	762.6	955.1	980.1
42.5°	50.0	50.0	50.0	60.0	77.5	105.0	107.5	262.5	587.6	785.1	822.6
45°	52.5	50.0	45.0	47.5	60.0	82.5	62.5	155.0	407.5	605.1	632.6
47.5°	50.0	50.0	47.5	45.0	45.0	55.0	40.0	85.0	255.0	420.0	435.0
50°	37.5	37.5	32.5	40.0	42.5	35.0	30.0	55.0	157.5	237.5	252.5
52.5°	32.5	32.5	30.0	30.0	35.0	32.5	22.5	45.0	100.0	132.5	137.5
55°	30.0	27.5	27.5	30.0	32.5	30.0	20.0	35.0	70.0	87.5	90.0
57.5°	27.5	27.5	27.5	27.5	32.5	30.0	20.0	25.0	55.0	70.0	77.5
60°	25.0	25.0	27.5	27.5	30.0	27.5	17.5	17.5	45.0	62.5	72.5
62.5°	22.5	25.0	25.0	27.5	30.0	25.0	15.0	12.5	35.0	57.5	67.5
65°	22.5	22.5	25.0	27.5	27.5	22.5	12.5	10.0	27.5	47.5	57.5
67.5°	20.0	20.0	22.5	25.0	27.5	20.0	7.5	7.5	22.5	40.0	47.5
70°	17.5	17.5	20.0	22.5	22.5	15.0	7.5	7.5	15.0	32.5	35.0
72.5°	15.0	15.0	17.5	20.0	20.0	12.5	5.0	5.0	10.0	25.0	22.5
75°	10.0	12.5	12.5	15.0	15.0	10.0	5.0	5.0	7.5	15.0	12.5
77.5°	7.5	7.5	10.0	12.5	12.5	7.5	2.5	2.5	5.0	10.0	7.5
80°	5.0	5.0	7.5	7.5	7.5	5.0	2.5	2.5	2.5	5.0	5.0
82.5°	2.5	2.5	5.0	5.0	5.0	2.5	2.5	2.5	2.5	2.5	2.5
85°	2.5	2.5	2.5	2.5	2.5	2.5	0.0	0.0	0.0	2.5	2.5
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)