

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: P592108

Luminaire Tested: **GRZ-15L-935-50x60-X-UNV-STD-2F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P592108
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-935-50x60-X-UNV-STD-2F
Description: iO LED GRAZER WITH 50x60 OPTIC
1500 LUMENS PER FOOT, 2 FOOT FIXTURE
SUMULATED RESULTS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

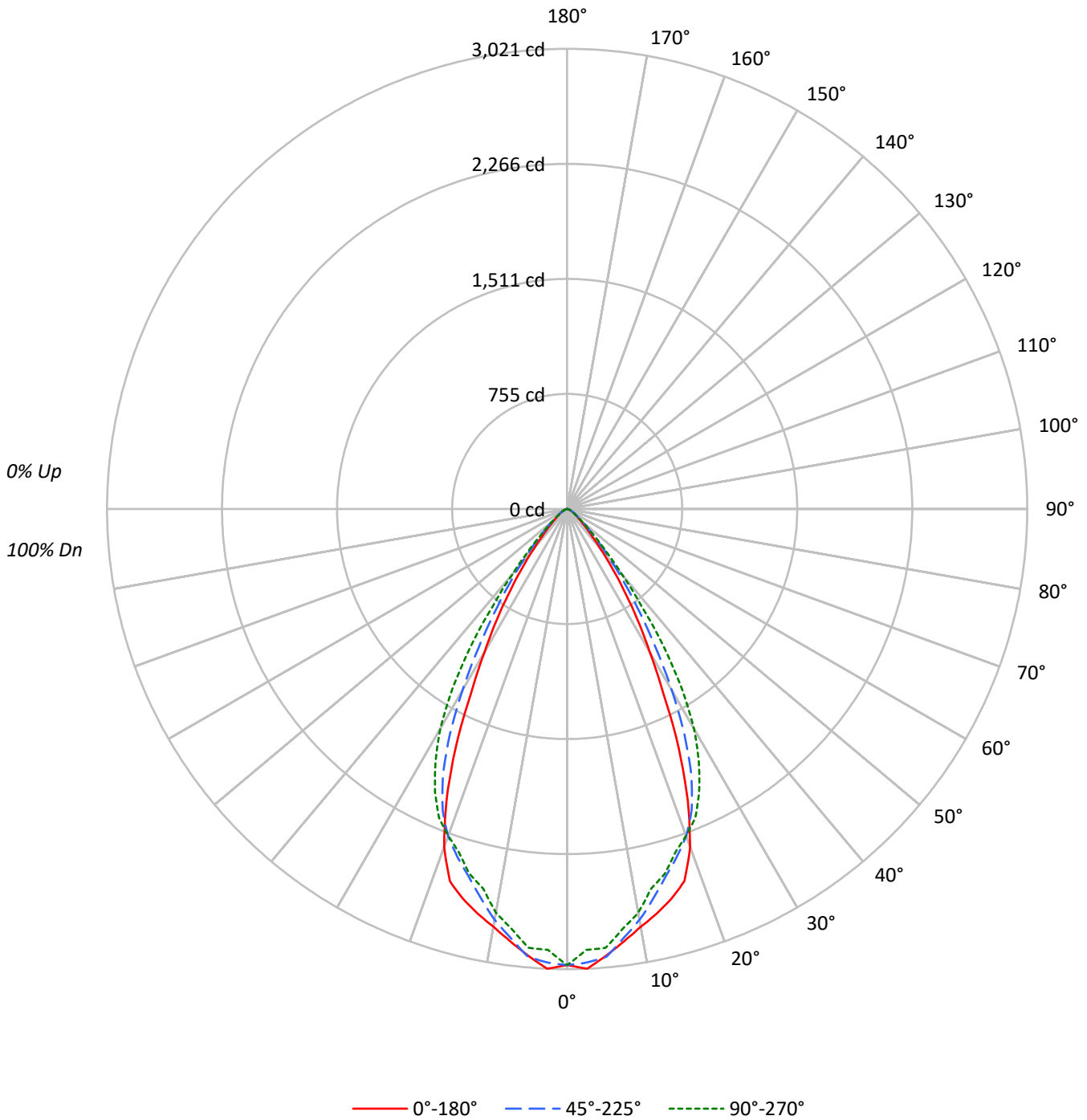
Lumens per Lamp: N/A
Luminaire Lumens: 2762.0 lumens
Efficiency: N/A
Efficacy: 95.2 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.95 / 0.87
Luminous Opening: Rectangular (W 2' x L: 0.17' x H: 0')
CIE Type: Direct

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°	96685	96685	96685
5°	95397	95660	93744
10°	91307	89811	88224
15°	88515	83487	82858
20°	81110	78529	78436
25°	61807	68791	73095
30°	40449	51266	62079
35°	25300	32814	43718
40°	14374	19471	23543
45°	7969	11161	11650
50°	5124	6476	6340
55°	3778	4386	3930
60°	2777	3119	2777
65°	2254	2460	2055
70°	1520	1775	1775
75°	1011	1335	1335
80°	1004	1004	1004
85°	1000	1000	1000



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.6	9.9
10°-20°	705.9	25.6
20°-30°	851.3	30.8
30°-40°	581.1	21.0
40°-50°	231.6	8.4
50°-60°	75.1	2.7
60°-70°	30.3	1.1
70°-80°	11.6	0.4
80°-90°	2.4	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°	1829.8	66.2
0°-40°	2410.9	87.3
0°-60°	2717.7	98.4
0°-90°	2762.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2762.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2994	2994	2994	2994	2994	
5°	2943	2940	2951	2900	2892	276
15°	2648	2556	2497	2460	2478	739
25°	1735	1724	1931	1992	2052	780
35°	642	808	832	1187	1109	411
45°	174	336	244	330	255	146
55°	67	91	78	75	70	62
65°	30	30	32	30	27	28
75°	8	11	11	11	11	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°	2994.1	2994.1	2994.1	2994.1	2994.1
2.5°	3020.9	2991.4	2980.6	2967.2	2897.4
5°	2943.0	2940.4	2951.1	2900.1	2892.0
7.5°	2862.5	2849.1	2841.0	2806.1	2781.9
10°	2784.6	2755.1	2739.0	2690.6	2690.6
12.5°	2720.2	2671.8	2618.1	2569.8	2551.0
15°	2647.7	2556.4	2497.3	2459.7	2478.5
17.5°	2561.7	2419.4	2395.2	2344.2	2363.0
20°	2360.3	2263.7	2285.2	2236.8	2282.5
22.5°	2070.3	2016.6	2137.5	2126.7	2196.5
25°	1734.7	1723.9	1930.7	1992.5	2051.5
27.5°	1372.2	1428.6	1667.5	1836.7	1871.6
30°	1084.8	1173.5	1374.9	1648.7	1664.9
32.5°	851.2	977.4	1084.8	1428.6	1404.4
35°	641.8	808.3	832.4	1186.9	1109.0
37.5°	472.6	679.4	633.7	934.5	797.5
40°	341.0	555.8	461.9	690.1	558.5
42.5°	241.7	443.1	335.7	499.5	378.6
45°	174.5	335.7	244.4	330.3	255.1
47.5°	131.6	247.0	177.2	217.5	179.9
50°	102.0	174.5	128.9	147.7	126.2
52.5°	83.2	126.2	99.4	104.7	94.0
55°	67.1	91.3	77.9	75.2	69.8
57.5°	53.7	69.8	61.8	59.1	56.4
60°	43.0	51.0	48.3	45.6	43.0
62.5°	34.9	40.3	40.3	34.9	34.9
65°	29.5	29.5	32.2	29.5	26.9
67.5°	21.5	24.2	24.2	21.5	21.5
70°	16.1	18.8	18.8	18.8	18.8
72.5°	13.4	13.4	16.1	13.4	13.4
75°	8.1	10.7	10.7	10.7	10.7
77.5°	5.4	8.1	8.1	8.1	8.1
80°	5.4	5.4	5.4	5.4	5.4
82.5°	2.7	2.7	5.4	2.7	2.7
85°	2.7	2.7	2.7	2.7	2.7
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)