

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: P592124

Luminaire Tested: **GRZ-15L-940-50x60-X-UNV-STD-2F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P592124
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-940-50x60-X-UNV-STD-2F
Description: iO LED GRAZER WITH 50x60 OPTIC
1500 LUMENS PER FOOT, 2 FOOT FIXTURE
SUMULATED RESULTS
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

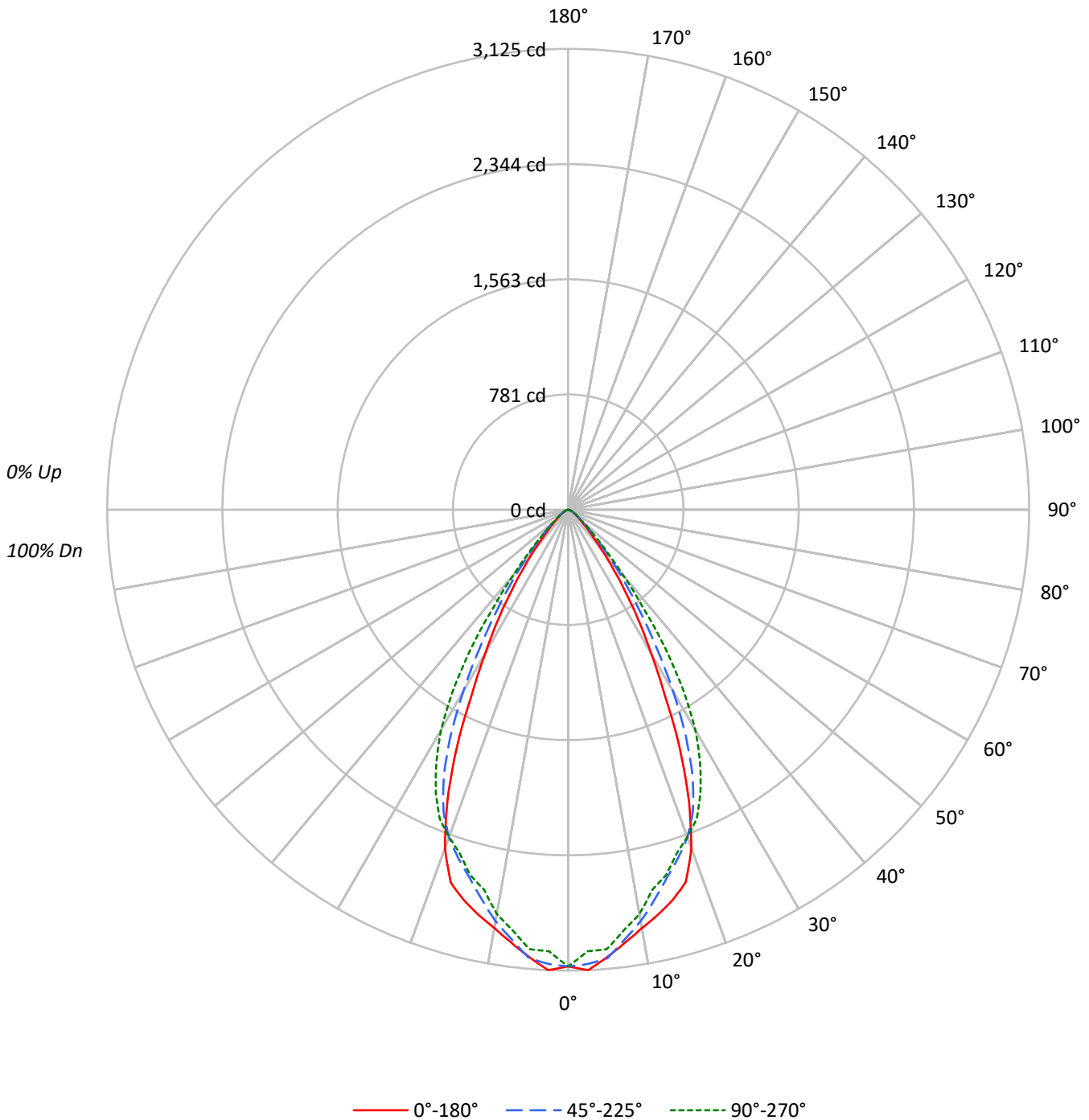
Lumens per Lamp: N/A
Luminaire Lumens: 2857.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.95 / 0.87
Luminous Opening: Rectangular (W 2' x L: 0.17' x H: 0')
CIE Type: Direct

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°	100007	100007	100007
5°	98681	98950	96970
10°	94448	92900	91261
15°	91557	86358	85707
20°	83900	81226	81134
25°	63931	71157	75610
30°	41844	53026	64212
35°	26168	33945	45224
40°	14872	20137	24352
45°	8243	11545	12052
50°	5300	6697	6556
55°	3907	4538	4065
60°	2868	3229	2868
65°	2338	2544	2124
70°	1577	1832	1832
75°	1036	1385	1385
80°	1041	1041	1041
85°	1037	1037	1037



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.0	9.9
10°-20°	730.2	25.6
20°-30°	880.6	30.8
30°-40°	601.1	21.0
40°-50°	239.6	8.4
50°-60°	77.7	2.7
60°-70°	31.4	1.1
70°-80°	12.0	0.4
80°-90°	2.5	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°	1892.7	66.2
0°-40°	2493.8	87.3
0°-60°	2811.1	98.4
0°-90°	2857.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2857.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3097	3097	3097	3097	3097	
5°	3044	3042	3053	3000	2992	285
15°	2739	2644	2583	2544	2564	764
25°	1794	1783	1997	2061	2122	807
35°	664	836	861	1228	1147	426
45°	180	347	253	342	264	152
55°	69	94	81	78	72	64
65°	31	31	33	31	28	29
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°	3097.0	3097.0	3097.0	3097.0	3097.0
2.5°	3124.8	3094.3	3083.2	3069.3	2997.0
5°	3044.3	3041.5	3052.6	2999.8	2991.5
7.5°	2960.9	2947.0	2938.7	2902.6	2877.6
10°	2880.4	2849.8	2833.2	2783.2	2783.2
12.5°	2813.7	2763.7	2708.2	2658.2	2638.7
15°	2738.7	2644.3	2583.2	2544.3	2563.7
17.5°	2649.8	2502.6	2477.6	2424.9	2444.3
20°	2441.5	2341.5	2363.7	2313.8	2361.0
22.5°	2141.5	2086.0	2211.0	2199.9	2272.1
25°	1794.3	1783.2	1997.1	2061.0	2122.1
27.5°	1419.4	1477.7	1724.9	1899.9	1936.0
30°	1122.2	1213.8	1422.1	1705.5	1722.1
32.5°	880.5	1011.1	1122.2	1477.7	1452.7
35°	663.8	836.1	861.1	1227.7	1147.2
37.5°	488.9	702.7	655.5	966.6	825.0
40°	352.8	575.0	477.7	713.8	577.7
42.5°	250.0	458.3	347.2	516.6	391.6
45°	180.5	347.2	252.8	341.6	263.9
47.5°	136.1	255.5	183.3	225.0	186.1
50°	105.5	180.5	133.3	152.8	130.5
52.5°	86.1	130.5	102.8	108.3	97.2
55°	69.4	94.4	80.6	77.8	72.2
57.5°	55.6	72.2	63.9	61.1	58.3
60°	44.4	52.8	50.0	47.2	44.4
62.5°	36.1	41.7	41.7	36.1	36.1
65°	30.6	30.6	33.3	30.6	27.8
67.5°	22.2	25.0	25.0	22.2	22.2
70°	16.7	19.4	19.4	19.4	19.4
72.5°	13.9	13.9	16.7	13.9	13.9
75°	8.3	11.1	11.1	11.1	11.1
77.5°	5.6	8.3	8.3	8.3	8.3
80°	5.6	5.6	5.6	5.6	5.6
82.5°	2.8	2.8	5.6	2.8	2.8
85°	2.8	2.8	2.8	2.8	2.8
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)