

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: P591964

Luminaire Tested: **GRZ-05L-930-50x60-X-UNV-STD-2F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P591964
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-05L-930-50x60-X-UNV-STD-2F
Description: iO LED GRAZER WITH 50x60 OPTIC
500 LUMENS PER FOOT, 2 FOOT FIXTURE
SUMULATED RESULTS
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

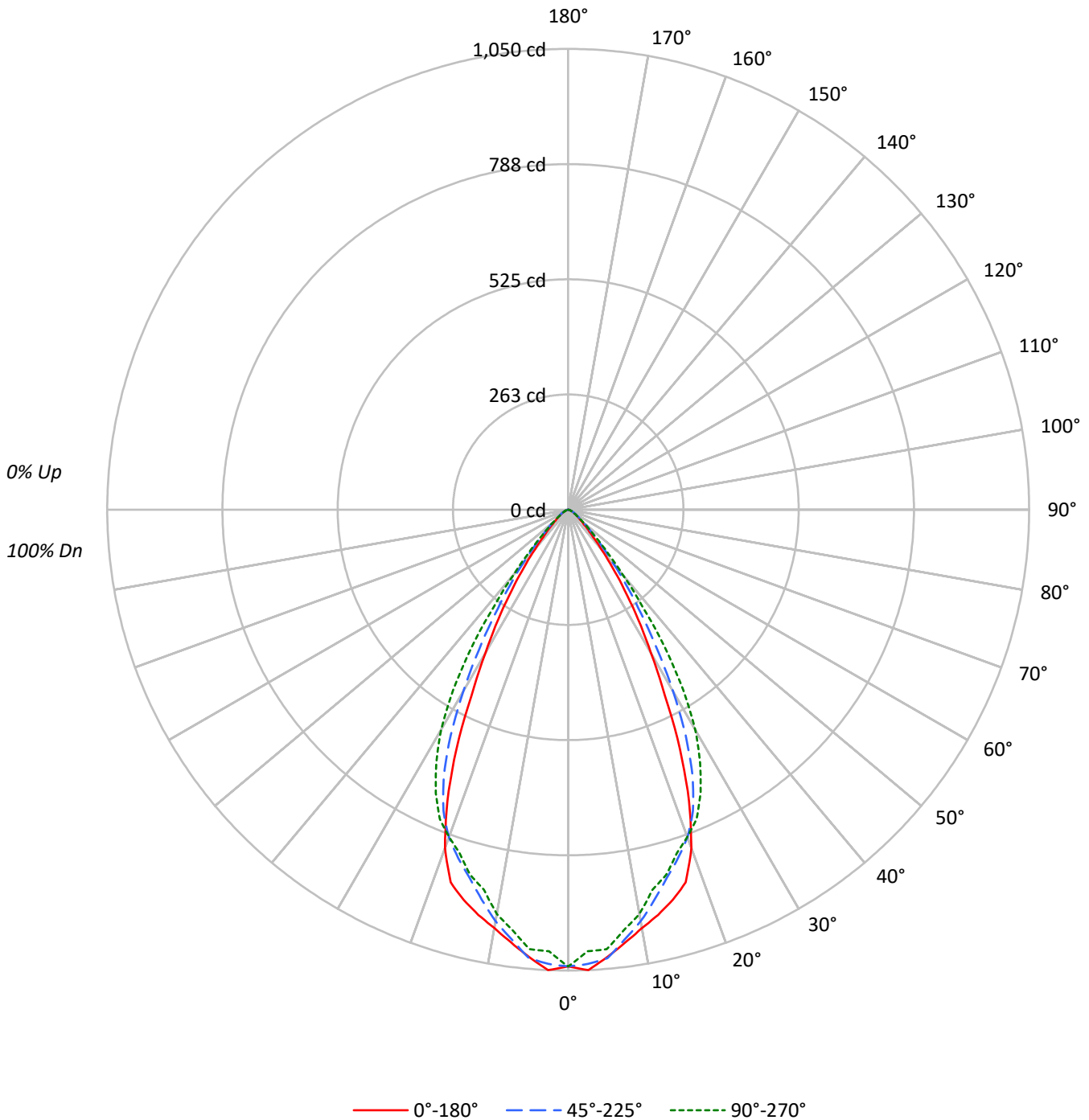
Lumens per Lamp: N/A
Luminaire Lumens: 960.0 lumens
Efficiency: N/A
Efficacy: 100.0 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.95 / 0.87
Luminous Opening: Rectangular (W 2' x L: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 9.6
Input Voltage (V): 120
Input Current (Ain): 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°	33606	33606	33606
5°	33157	33248	32584
10°	31737	31216	30665
15°	30766	29018	28801
20°	28192	27295	27261
25°	21481	23911	25408
30°	14061	17820	21578
35°	8795	11404	15197
40°	4995	6766	8182
45°	2772	3877	4051
50°	1783	2251	2205
55°	1312	1526	1368
60°	962	1085	962
65°	787	856	711
70°	529	614	614
75°	349	462	462
80°	353	353	353
85°	333	333	333



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.7	9.9
10°-20°	245.4	25.6
20°-30°	295.9	30.8
30°-40°	202.0	21.0
40°-50°	80.5	8.4
50°-60°	26.1	2.7
60°-70°	10.5	1.1
70°-80°	4.0	0.4
80°-90°	0.8	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°	636.0	66.2
0°-40°	838.0	87.3
0°-60°	944.6	98.4
0°-90°	960.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	960.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1041	1041	1041	1041	1041	
5°	1023	1022	1026	1008	1005	96
15°	920	888	868	855	862	257
25°	603	599	671	692	713	271
35°	223	281	289	412	386	143
45°	61	117	85	115	89	51
55°	23	32	27	26	24	21
65°	10	10	11	10	9	10
75°	3	4	4	4	4	3
85°	1	1	1	1	1	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1040.7	1040.7	1040.7	1040.7	1040.7
2.5°	1050.0	1039.7	1036.0	1031.3	1007.1
5°	1022.9	1022.0	1025.7	1008.0	1005.2
7.5°	994.9	990.3	987.5	975.3	966.9
10°	967.9	957.6	952.0	935.2	935.2
12.5°	945.5	928.7	910.0	893.2	886.7
15°	920.3	888.5	868.0	854.9	861.5
17.5°	890.4	840.9	832.5	814.8	821.3
20°	820.4	786.8	794.3	777.5	793.3
22.5°	719.6	700.9	742.9	739.2	763.5
25°	602.9	599.2	671.1	692.5	713.1
27.5°	476.9	496.5	579.6	638.4	650.5
30°	377.1	407.9	477.9	573.1	578.7
32.5°	295.9	339.7	377.1	496.5	488.1
35°	223.1	280.9	289.3	412.5	385.5
37.5°	164.3	236.1	220.3	324.8	277.2
40°	118.5	193.2	160.5	239.9	194.1
42.5°	84.0	154.0	116.7	173.6	131.6
45°	60.7	116.7	84.9	114.8	88.7
47.5°	45.7	85.9	61.6	75.6	62.5
50°	35.5	60.7	44.8	51.3	43.9
52.5°	28.9	43.9	34.5	36.4	32.7
55°	23.3	31.7	27.1	26.1	24.3
57.5°	18.7	24.3	21.5	20.5	19.6
60°	14.9	17.7	16.8	15.9	14.9
62.5°	12.1	14.0	14.0	12.1	12.1
65°	10.3	10.3	11.2	10.3	9.3
67.5°	7.5	8.4	8.4	7.5	7.5
70°	5.6	6.5	6.5	6.5	6.5
72.5°	4.7	4.7	5.6	4.7	4.7
75°	2.8	3.7	3.7	3.7	3.7
77.5°	1.9	2.8	2.8	2.8	2.8
80°	1.9	1.9	1.9	1.9	1.9
82.5°	0.9	0.9	1.9	0.9	0.9
85°	0.9	0.9	0.9	0.9	0.9
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)