

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: P592012

Luminaire Tested: **GRZ-10L-927-50x60-X-UNV-STD-2F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P592012
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-10L-927-50x60-X-UNV-STD-2F
Description: iO LED GRAZER WITH 50x60 OPTIC
1000 LUMENS PER FOOT, 2 FOOT FIXTURE
SUMULATED RESULTS
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

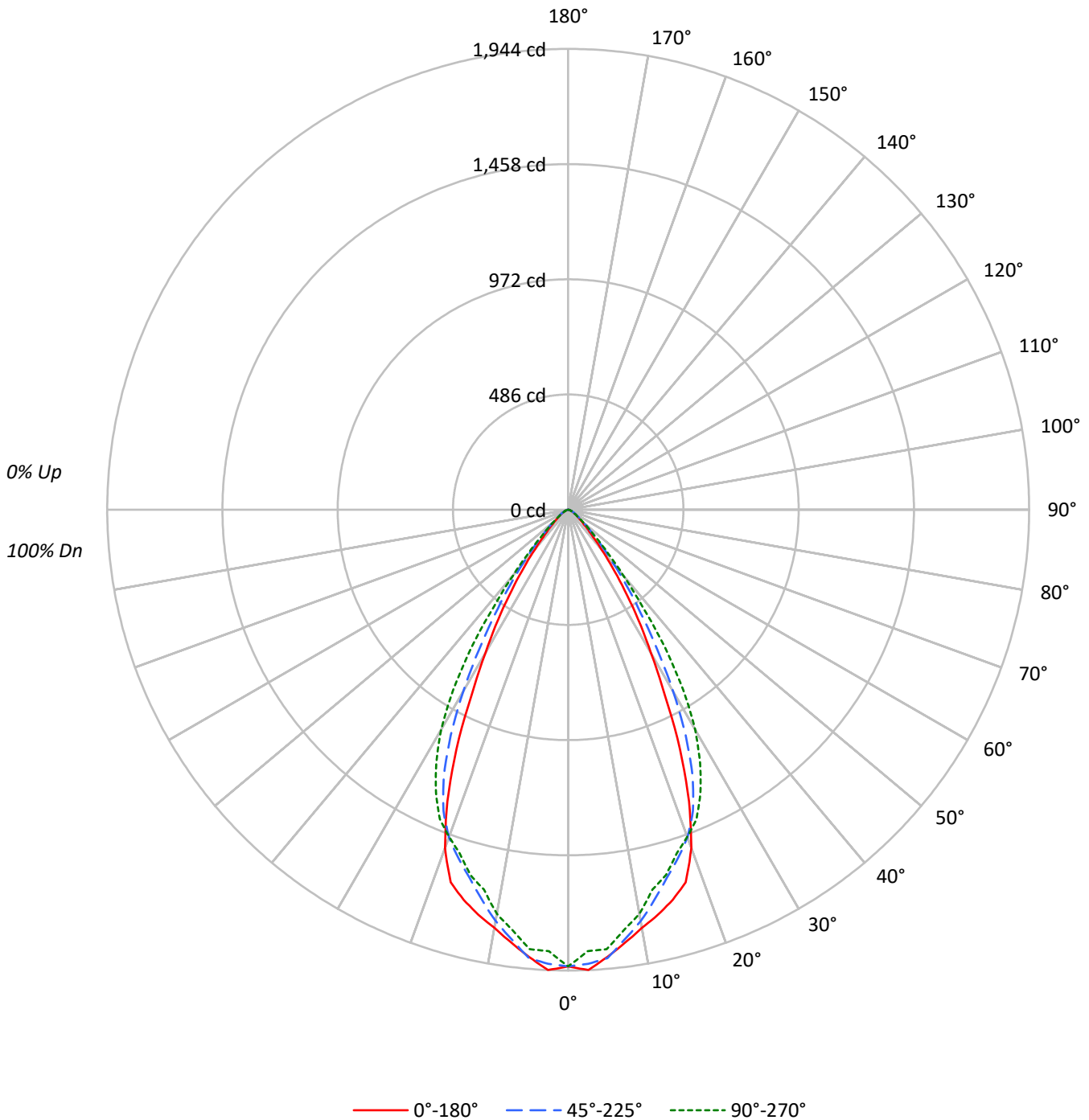
Lumens per Lamp: N/A
Luminaire Lumens: 1777.0 lumens
Efficiency: N/A
Efficacy: 93.0 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.95 / 0.87
Luminous Opening: Rectangular (W 2' x L: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 19.1
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°	62203	62203	62203
5°	61378	61546	60315
10°	58743	57782	56762
15°	56946	53713	53309
20°	52185	50522	50464
25°	39763	44259	47028
30°	26026	32981	39938
35°	16277	21114	28127
40°	9249	12528	15146
45°	5128	7179	7494
50°	3296	4165	4079
55°	2432	2821	2528
60°	1783	2009	1783
65°	1452	1582	1322
70°	982	1142	1142
75°	649	861	861
80°	651	651	651
85°	630	630	630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.4	9.9
10°-20°	454.2	25.6
20°-30°	547.7	30.8
30°-40°	373.9	21.0
40°-50°	149.0	8.4
50°-60°	48.3	2.7
60°-70°	19.5	1.1
70°-80°	7.5	0.4
80°-90°	1.5	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°	1177.2	66.2
0°-40°	1551.1	87.3
0°-60°	1748.5	98.4
0°-90°	1777.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1777.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1926	1926	1926	1926	1926	
5°	1894	1892	1899	1866	1861	177
15°	1703	1645	1607	1582	1595	475
25°	1116	1109	1242	1282	1320	502
35°	413	520	536	764	714	265
45°	112	216	157	212	164	94
55°	43	59	50	48	45	40
65°	19	19	21	19	17	18
75°	5	7	7	7	7	6
85°	2	2	2	2	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1926.3	1926.3	1926.3	1926.3	1926.3
2.5°	1943.6	1924.6	1917.7	1909.0	1864.1
5°	1893.5	1891.7	1898.7	1865.8	1860.7
7.5°	1841.6	1833.0	1827.8	1805.4	1789.8
10°	1791.5	1772.5	1762.2	1731.1	1731.1
12.5°	1750.1	1719.0	1684.4	1653.3	1641.2
15°	1703.4	1644.7	1606.7	1582.5	1594.6
17.5°	1648.2	1556.6	1541.0	1508.2	1520.3
20°	1518.6	1456.4	1470.2	1439.1	1468.5
22.5°	1332.0	1297.4	1375.2	1368.3	1413.2
25°	1116.0	1109.1	1242.2	1281.9	1319.9
27.5°	882.8	919.1	1072.9	1181.7	1204.2
30°	698.0	755.0	884.5	1060.8	1071.1
32.5°	547.7	628.9	698.0	919.1	903.5
35°	412.9	520.0	535.6	763.6	713.5
37.5°	304.1	437.1	407.7	601.2	513.1
40°	219.4	357.6	297.2	444.0	359.3
42.5°	155.5	285.1	216.0	321.3	243.6
45°	112.3	216.0	157.2	212.5	164.1
47.5°	84.7	158.9	114.0	139.9	115.8
50°	65.6	112.3	82.9	95.0	81.2
52.5°	53.6	81.2	63.9	67.4	60.5
55°	43.2	58.7	50.1	48.4	44.9
57.5°	34.6	44.9	39.7	38.0	36.3
60°	27.6	32.8	31.1	29.4	27.6
62.5°	22.5	25.9	25.9	22.5	22.5
65°	19.0	19.0	20.7	19.0	17.3
67.5°	13.8	15.5	15.5	13.8	13.8
70°	10.4	12.1	12.1	12.1	12.1
72.5°	8.6	8.6	10.4	8.6	8.6
75°	5.2	6.9	6.9	6.9	6.9
77.5°	3.5	5.2	5.2	5.2	5.2
80°	3.5	3.5	3.5	3.5	3.5
82.5°	1.7	1.7	3.5	1.7	1.7
85°	1.7	1.7	1.7	1.7	1.7
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)