

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: P592044

Luminaire Tested: **GRZ-10L-935-50x60-X-UNV-STD-2F**

Issue Date: 2/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P592044
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-935-50x60-X-UNV-STD-2F
Description: iO LED GRAZER WITH 50x60 OPTIC
1000 LUMENS PER FOOT, 2 FOOT FIXTURE
SUMULATED RESULTS
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

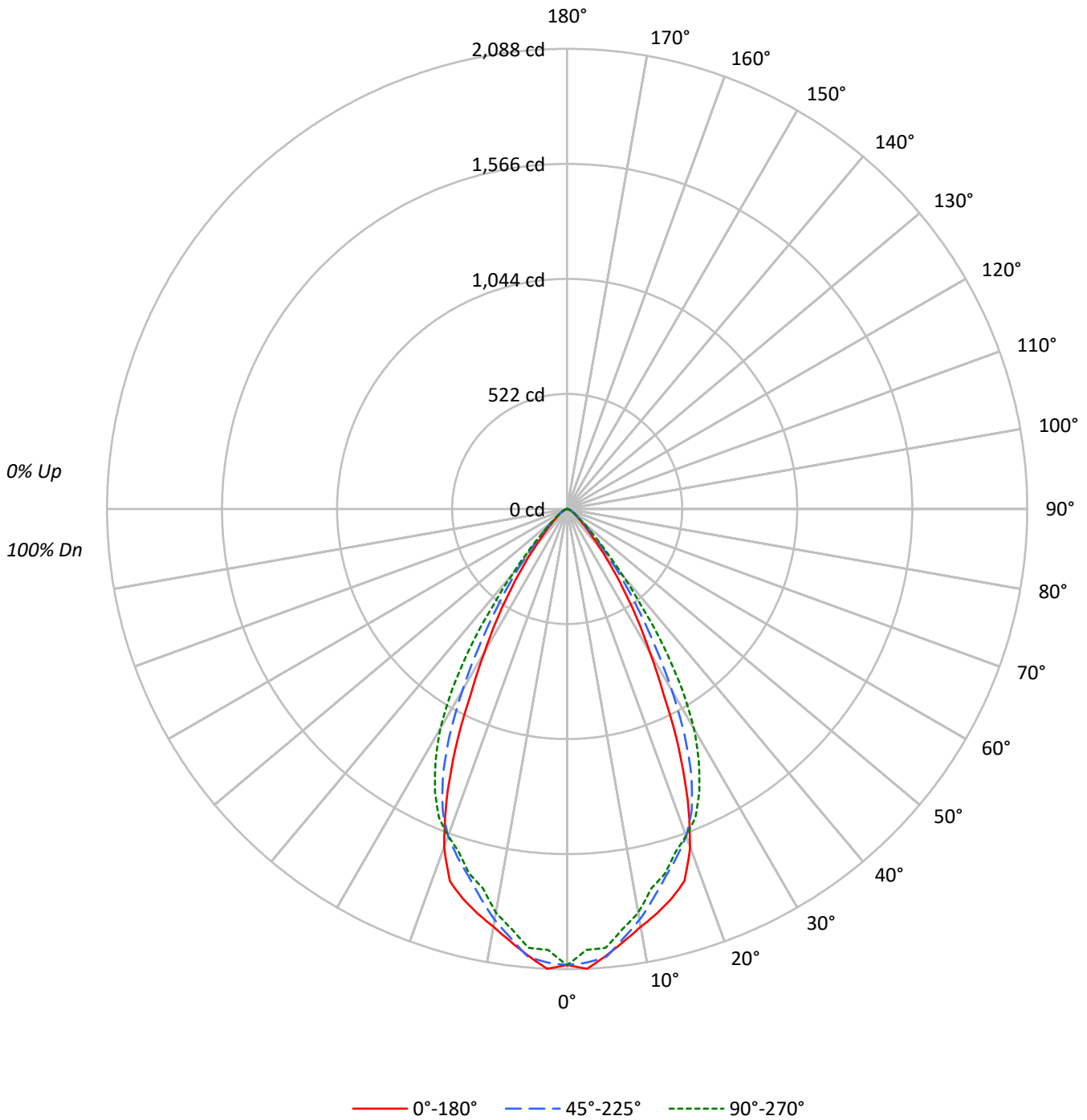
Lumens per Lamp: N/A
Luminaire Lumens: 1909.0 lumens
Efficiency: N/A
Efficacy: 99.9 lumens/watt
Spacing Criteria (0/90/45): 0.87 / 0.95 / 0.87
Luminous Opening: Rectangular (W 2' x L: 0.17' x H: 0')
CIE Type: Direct

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				
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87					86				
3	101	95	89	85	99	93	88	85	91	87	83	88	85	82	86	83	81					79				
4	96	88	82	78	94	87	81	77	85	80	76	83	79	75	81	77	75					73				
5	91	82	76	71	89	81	75	71	79	74	70	78	73	70	76	72	69					68				
6	86	77	70	66	84	76	70	66	74	69	65	73	68	65	72	68	64					63				
7	82	72	66	61	80	71	65	61	70	65	61	69	64	60	67	63	60					59				
8	77	67	61	57	76	67	61	57	66	60	57	65	60	56	64	59	56					55				
9	74	64	57	53	72	63	57	53	62	57	53	61	56	53	60	56	53					51				
10	70	60	54	50	69	60	54	50	59	53	50	58	53	50	57	53	49					48				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	66824	66824	66824
5°	65935	66117	64794
10°	63107	62074	60979
15°	61178	57702	57267
20°	56062	54275	54213
25°	42717	47545	50523
30°	27958	35430	42906
35°	17487	22679	30216
40°	9936	13455	16271
45°	5507	7713	8051
50°	3542	4476	4381
55°	2612	3029	2719
60°	1918	2157	1918
65°	1559	1704	1421
70°	1048	1227	1227
75°	699	923	923
80°	688	688	688
85°	704	704	704



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.4	9.9
10°-20°	487.9	25.6
20°-30°	588.4	30.8
30°-40°	401.6	21.0
40°-50°	160.1	8.4
50°-60°	51.9	2.7
60°-70°	21.0	1.1
70°-80°	8.0	0.4
80°-90°	1.7	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°	1264.7	66.2
0°-40°	1666.3	87.3
0°-60°	1878.3	98.4
0°-90°	1909.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1909.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2069	2069	2069	2069	2069	
5°	2034	2032	2040	2004	1999	191
15°	1830	1767	1726	1700	1713	511
25°	1199	1192	1334	1377	1418	539
35°	444	559	575	820	766	284
45°	121	232	169	228	176	101
55°	46	63	54	52	48	43
65°	20	20	22	20	19	20
75°	6	7	7	7	7	7
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2069.4	2069.4	2069.4	2069.4	2069.4
2.5°	2088.0	2067.5	2060.1	2050.8	2002.6
5°	2034.1	2032.3	2039.7	2004.4	1998.9
7.5°	1978.4	1969.2	1963.6	1939.5	1922.8
10°	1924.6	1904.2	1893.1	1859.7	1859.7
12.5°	1880.1	1846.7	1809.6	1776.1	1763.2
15°	1830.0	1766.9	1726.0	1700.1	1713.0
17.5°	1770.6	1672.2	1655.5	1620.2	1633.2
20°	1631.4	1564.6	1579.4	1546.0	1577.6
22.5°	1430.9	1393.8	1477.3	1469.9	1518.2
25°	1198.9	1191.5	1334.4	1377.1	1418.0
27.5°	948.4	987.4	1152.5	1269.5	1293.6
30°	749.8	811.1	950.2	1139.6	1150.7
32.5°	588.3	675.6	749.8	987.4	970.7
35°	443.6	558.6	575.3	820.3	766.5
37.5°	326.6	469.6	438.0	645.9	551.2
40°	235.7	384.2	319.2	477.0	386.0
42.5°	167.0	306.2	232.0	345.2	261.7
45°	120.6	232.0	168.9	228.3	176.3
47.5°	90.9	170.7	122.5	150.3	124.3
50°	70.5	120.6	89.1	102.1	87.2
52.5°	57.5	87.2	68.7	72.4	65.0
55°	46.4	63.1	53.8	52.0	48.3
57.5°	37.1	48.3	42.7	40.8	39.0
60°	29.7	35.3	33.4	31.6	29.7
62.5°	24.1	27.8	27.8	24.1	24.1
65°	20.4	20.4	22.3	20.4	18.6
67.5°	14.8	16.7	16.7	14.8	14.8
70°	11.1	13.0	13.0	13.0	13.0
72.5°	9.3	9.3	11.1	9.3	9.3
75°	5.6	7.4	7.4	7.4	7.4
77.5°	3.7	5.6	5.6	5.6	5.6
80°	3.7	3.7	3.7	3.7	3.7
82.5°	1.9	1.9	3.7	1.9	1.9
85°	1.9	1.9	1.9	1.9	1.9
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)