

LM-79-08 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: P622385

Luminaire Tested: **SELDWA50PSSD\_ Always On**

Issue Date: 9/27/2022

Tested By:

Approved By:



Cooper Lighting Solutions laboratories have been accredited by National Voluntary Laboratory Accreditation Program (NVLAP) that it adheres to the requirements of ISO/IEC 17025:2005 and appropriate IESNA test methods. This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government. Results contained in this report are valid for luminaire sample tested, as supplied by requestor. Information related to the luminaire tested has been supplied by requestor and can affect the validity of the test results. Report shall not be reproduced except in full without approval of Cooper Lighting Solutions Lighting Laboratory. Test performed at address noted above.

**Test Information**

Test Method: LM-79-08  
 Report Number: P622385  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Issue Date: 9/27/2022  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: iO LED  
 Catalog Number: SELDWA50PSSD\_ Always On  
 Description: ARCHITECTURAL OUTDOOR CAPABLE EMERGENCY LIGHT WITH PHOTOSENSOR,  
 5000K, ALWAYS ON MODE, SINGLE LAMP HEAD  
 Light Source: HIGH LUMEN LED 5000K CCT  
 Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
 Luminaire Lumens: 440.9 lumens  
 Efficiency: N/A  
 Efficacy: 133.6 lumens/watt  
 Spacing Criteria (0/90/45): 1.35 / 2.61 / 1.46  
 Luminous Opening: Circular (Dia: 0.17' x H: 0')  
 CIE Type: Direct

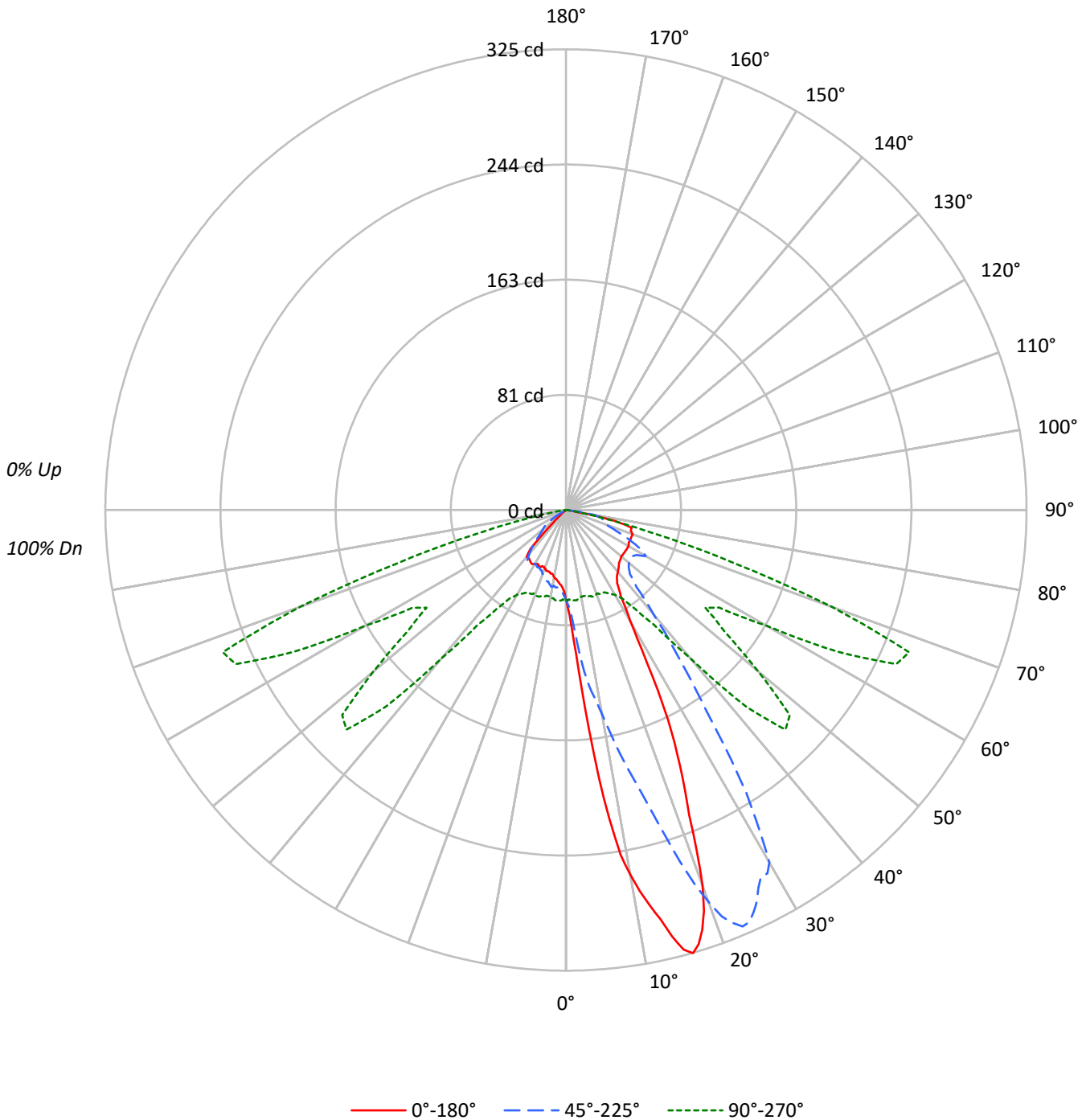
Input Watts (W): 3.3  
 Input Voltage (V): NR  
 Input Current (Ain): NR  
 Voltage Rise (V): NR  
 Power Factor: NR  
 Total Harmonic Distortion (THDi): NR  
 Frequency (hertz): 60  
 Stabilization Time: NR  
 Operation Time: NR  
 Ambient Temperature (°C): NR  
 Test Distance: 25 FT



Meas		Calibration Due Date	
Instrument	Identificatio		
Photometer	GONIO 1 11111111	4/22/2021	10/22/2021
Power Meter	XITRON 2801 IN0197	12/1/2020	12/1/2021
AC Power Source	CHROMA 61505 IN0196	12/1/2020	12/1/2021
DC Power Supply	AGILENT E3634A IN0198	11/30/2020	11/30/2021
Room Thermometer	ONSET IN0143	12/1/2020	12/1/2021

TEST NUMBER: P622385  
CATALOG NUMBER: SELDWA50PSSD\_ Always On

### Luminous Intensity Polar Plot





TEST NUMBER: P622385  
 CATALOG NUMBER: SELDWA50PSSD\_ Always On

**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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	90	83	78	96	88	82	77	85	79	75	82	77	73	78	75	71	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58
4	82	69	60	53	79	68	60	53	65	58	52	63	57	52	61	55	51	49
5	75	62	52	45	73	60	52	45	58	51	45	56	49	44	54	48	44	42
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28
9	55	41	33	27	53	40	32	27	39	32	27	38	31	27	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°
0°	31083	31083	31083
5°	61958	31697	25754
10°	130809	31061	24048
15°	164064	32179	22985
20°	148115	33078	23102
25°	98588	34841	23953
30°	51843	39310	25067
35°	37945	51196	26501
40°	36711	87657	27695
45°	36980	152876	9071
50°	39146	135935	1535
55°	43869	103308	860
60°	50325	160940	987
65°	58372	300148	1167
70°	72127	287211	1443
75°	91501	125814	1906
80°	19889	28413	0
85°	5661	5661	0

TEST NUMBER: P622385  
 CATALOG NUMBER: SELDWA50PSSD\_ Always On

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	8.3	1.9
10°-20°	36.6	8.3
20°-30°	61.8	14.0
30°-40°	73.4	16.6
40°-50°	93.6	21.2
50°-60°	72.8	16.5
60°-70°	60.7	13.8
70°-80°	30.4	6.9
80°-90°	3.3	0.8
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
<b>0°-30°</b>	<b>106.7</b>	<b>24.2</b>
<b>0°-40°</b>	<b>180.1</b>	<b>40.8</b>
<b>0°-60°</b>	<b>346.5</b>	<b>78.6</b>
<b>0°-90°</b>	<b>440.9</b>	<b>100.0</b>
90°-120°	0.0	0.0
90°-150°	0.0	0.0
<b>90°-180°</b>	<b>0.0</b>	<b>0.0</b>
<b>0°-180°</b>	<b>440.9</b>	<b>100.0</b>

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	63	63	63	63	63	
5°	125	96	64	55	52	17
15°	321	207	63	52	45	86
25°	181	313	64	45	44	81
35°	63	172	85	45	44	42
45°	53	64	219	29	13	41
55°	51	57	120	16	1	46
65°	50	49	257	1	1	50
75°	48	27	66	0	1	42
85°	1	3	1	0	0	3
90°	0	0	0	0	0	

TEST NUMBER: P622385  
 CATALOG NUMBER: SELDWA50PSSD\_ Always On

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0	63.0
1°	68.0	68.0	66.0	64.0	64.0	62.0	61.0	60.0	58.0
2°	74.0	74.0	69.0	66.0	63.0	61.0	59.0	58.0	56.0
3°	85.0	84.0	75.0	68.0	64.0	60.0	58.0	56.0	54.0
4°	101.1	99.1	84.0	70.0	64.0	59.0	56.0	55.0	53.0
5°	125.1	119.1	96.0	73.0	64.0	58.0	55.0	54.0	52.0
6°	155.1	140.1	109.1	77.0	64.0	58.0	55.0	53.0	51.0
7°	190.1	162.1	120.1	82.0	64.0	58.0	55.0	52.0	50.0
8°	220.1	178.1	129.1	86.0	63.0	58.0	55.0	51.0	49.0
9°	246.1	195.1	136.1	89.0	63.0	57.0	54.0	50.0	49.0
10°	261.1	212.1	146.1	93.0	62.0	56.0	55.0	50.0	48.0
11°	274.1	228.1	157.1	98.1	62.0	56.0	55.0	49.0	47.0
12°	285.1	241.1	170.1	105.1	62.0	56.0	54.0	49.0	46.0
13°	296.2	256.1	182.1	113.1	62.0	55.0	53.0	49.0	46.0
14°	310.2	273.1	194.1	121.1	63.0	55.0	52.0	49.0	46.0
15°	321.2	290.1	207.1	131.1	63.0	55.0	52.0	49.0	45.0
16°	325.2	302.2	223.1	142.1	63.0	54.0	51.0	48.0	45.0
17°	320.2	310.2	241.1	153.1	64.0	52.0	50.0	48.0	45.0
18°	311.2	310.2	261.1	166.1	64.0	52.0	49.0	47.0	45.0
19°	299.2	300.2	279.1	179.1	64.0	51.0	48.0	47.0	44.0
20°	282.1	286.1	294.2	195.1	63.0	51.0	48.0	46.0	44.0
21°	258.1	268.1	307.2	209.1	63.0	50.0	47.0	46.0	43.0
22°	232.1	245.1	314.2	221.1	64.0	50.0	46.0	45.0	43.0
23°	215.1	221.1	319.2	233.1	64.0	49.0	46.0	45.0	43.0
24°	198.1	201.1	318.2	246.1	64.0	49.0	45.0	45.0	44.0
25°	181.1	183.1	313.2	259.1	64.0	48.0	45.0	45.0	44.0
26°	164.1	169.1	307.2	273.1	65.0	48.0	45.0	44.0	44.0
27°	143.1	156.1	299.2	287.1	66.0	48.0	45.0	44.0	43.0
28°	121.1	144.1	293.1	299.2	67.0	48.0	44.0	44.0	43.0
29°	104.1	131.1	293.1	311.2	68.0	48.0	44.0	44.0	44.0
30°	91.0	117.1	287.1	324.2	69.0	48.0	44.0	44.0	44.0
32.5°	72.0	88.0	237.1	359.2	74.0	47.0	44.0	44.0	45.0
35°	63.0	71.0	172.1	392.2	85.0	49.0	45.0	44.0	44.0
37.5°	59.0	62.0	129.1	425.2	102.1	51.0	45.0	44.0	43.0
40°	57.0	58.0	97.0	456.2	136.1	60.0	40.0	40.0	43.0
42.5°	55.0	54.0	74.0	494.3	188.1	57.0	35.0	35.0	37.0
45°	53.0	52.0	64.0	541.3	219.1	52.0	29.0	28.0	13.0
47.5°	52.0	51.0	60.0	531.3	214.1	42.0	24.0	20.0	6.0
50°	51.0	50.0	58.0	483.2	177.1	33.0	21.0	7.0	2.0
52.5°	51.0	49.0	58.0	414.2	141.1	30.0	19.0	3.0	1.0
55°	51.0	49.0	57.0	329.2	120.1	29.0	16.0	1.0	1.0
57.5°	51.0	48.0	59.0	253.1	128.1	31.0	9.0	1.0	1.0
60°	51.0	48.0	65.0	185.1	163.1	30.0	3.0	1.0	1.0
62.5°	50.0	48.0	59.0	140.1	217.1	25.0	1.0	1.0	1.0
65°	50.0	48.0	49.0	108.1	257.1	18.0	1.0	0.0	1.0

TEST NUMBER: P622385  
 CATALOG NUMBER: SELDWA50PSSD\_ Always On

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	50.0	47.0	38.0	96.0	262.1	9.0	0.0	0.0	1.0
70°	50.0	43.0	30.0	94.0	199.1	5.0	0.0	1.0	1.0
72.5°	48.0	38.0	28.0	86.0	124.1	3.0	0.0	1.0	1.0
75°	48.0	30.0	27.0	73.0	66.0	1.0	0.0	1.0	1.0
77.5°	35.0	23.0	26.0	59.0	27.0	0.0	0.0	0.0	1.0
80°	7.0	19.0	20.0	39.0	10.0	0.0	0.0	0.0	0.0
82.5°	4.0	7.0	10.0	14.0	2.0	0.0	0.0	0.0	0.0
85°	1.0	2.0	3.0	4.0	1.0	0.0	0.0	0.0	0.0
87.5°	1.0	1.0	2.0	2.0	1.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)