

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: P622384

Luminaire Tested: **SELDWA50PSBZSD\_ EM Mode**

Issue Date: 9/27/2022

Tested By:

Approved By:



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**Test Information**

Test Method: LM-79-08  
 Report Number: P622384  
 Test Lab: COOPER LIGHTING SOLUTIONS  
 Issue Date: 9/27/2022  
 Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
 Product Line: iO LED  
 Catalog Number: SELDWA50PSBZSD\_ EM Mode  
 Description: ARCHITECTURAL OUTDOOR CAPABLE EMERGENCY LIGHT WITH PHOTOSENSOR,  
 5000K, EMERGENCY MODE, SINGLE LAMP HEAD  
 Light Source: HIGH LUMEN LED 5000K CCT  
 Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
 Luminaire Lumens: 373.1 lumens  
 Efficiency: N/A  
 Efficacy: 82.9 lumens/watt  
 Spacing Criteria (0/90/45): 1.34 / 2.64 / 1.46  
 Luminous Opening: Circular (Dia: 0.17' x H: 0')  
 CIE Type: Direct

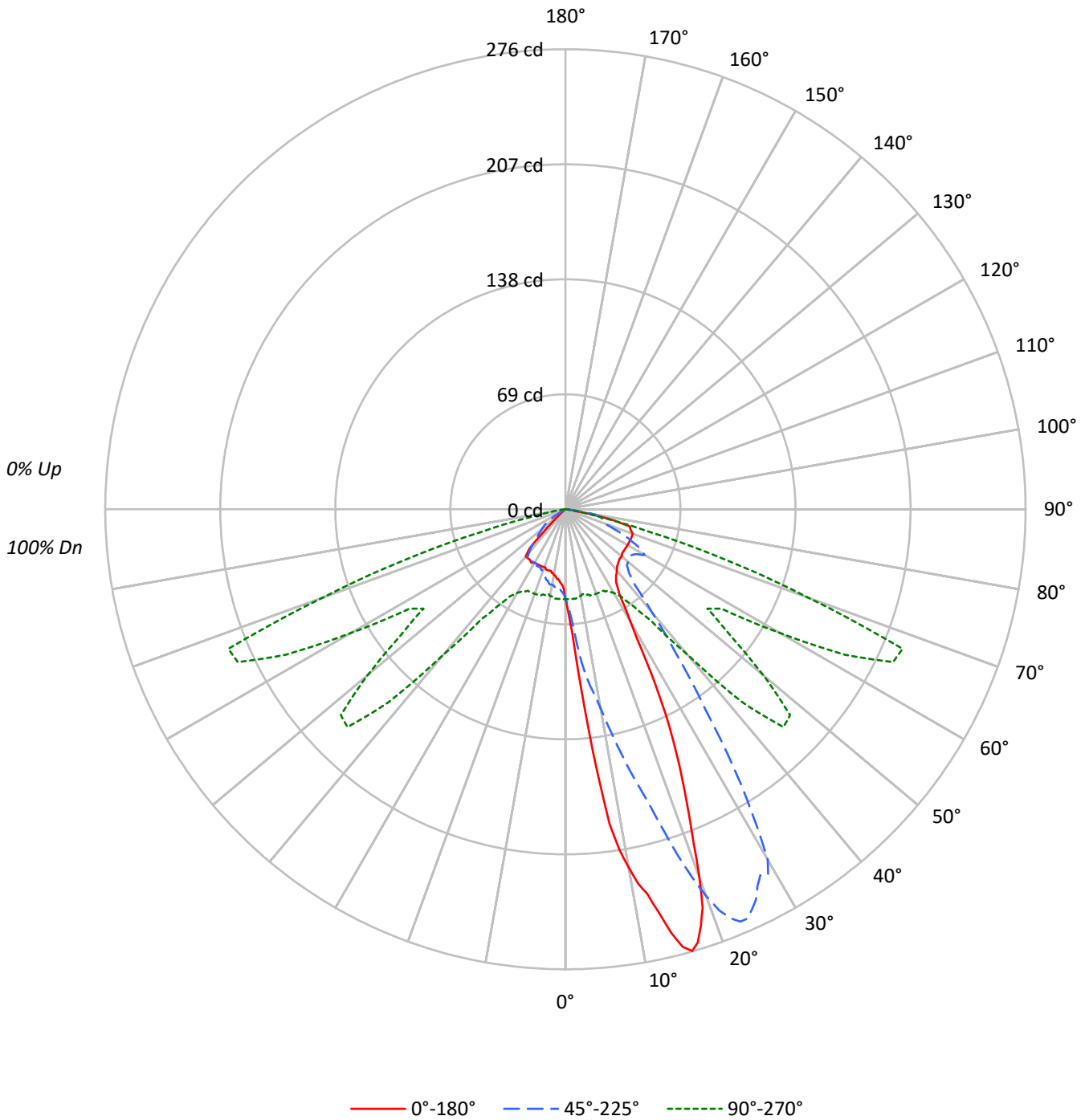
Input Watts (W): 4.5  
 Input Voltage (V): NR  
 Input Current (Ain): NR  
 Voltage Rise (V): NR  
 Power Factor: NR  
 Total Harmonic Distortion (THDi): NR  
 Frequency (hertz): 60  
 Stabilization Time: NR  
 Operation Time: NR  
 Ambient Temperature (°C): NR  
 Test Distance: 25 FT



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

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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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84	84	84
2	99	90	83	78	96	88	82	77	85	80	75	82	77	73	79	75	72	69	69	69
3	90	79	70	64	87	77	69	63	74	68	62	71	66	61	69	64	60	58	58	58
4	82	69	60	53	79	68	60	53	65	58	52	63	57	52	61	55	51	49	49	49
5	75	62	52	45	73	60	52	45	58	51	45	56	49	44	54	48	44	42	42	42
6	69	55	46	39	67	54	45	39	52	44	39	51	44	38	49	43	38	36	36	36
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31	31	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28	28	28
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24	24	24
10	51	38	30	24	50	37	29	24	36	29	24	35	28	24	34	28	24	22	22	22

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

	0°	90°	180°
0°	26593	26593	26593
5°	52944	26695	21296
10°	109116	26502	20040
15°	138780	27020	19410
20°	123280	28300	19427
25°	83236	29342	20142
30°	44380	32986	21079
35°	31862	42703	22285
40°	30915	73359	23830
45°	31398	128943	8373
50°	33773	118895	1535
55°	36988	89373	860
60°	42431	145942	987
65°	50200	253100	1167
70°	62029	223450	1443
75°	76251	99126	1906
80°	17048	22730	0
85°	5661	5661	0

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	7.0	1.9
10°-20°	30.9	8.3
20°-30°	52.3	14.0
30°-40°	61.8	16.6
40°-50°	79.3	21.3
50°-60°	62.6	16.8
60°-70°	51.5	13.8
70°-80°	25.0	6.7
80°-90°	2.7	0.7
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>90.1</b>	<b>24.2</b>
<b>0°-40°</b>	<b>152.0</b>	<b>40.7</b>
<b>0°-60°</b>	<b>293.9</b>	<b>78.8</b>
<b>0°-90°</b>	<b>373.1</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>373.1</b>	<b>100.0</b>

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	54	54	54	54	54	
5°	107	82	54	47	43	15
15°	272	174	53	44	38	72
25°	153	265	54	38	37	68
35°	53	146	71	38	37	35
45°	45	54	185	25	12	35
55°	43	48	104	13	1	39
65°	43	42	217	0	1	43
75°	40	23	52	0	1	35
85°	1	3	1	0	0	2
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9	53.9
1°	57.9	57.9	55.9	54.9	53.9	52.9	51.0	51.0	48.0
2°	63.9	61.9	58.9	55.9	53.9	52.0	50.0	49.0	46.0
3°	72.9	69.9	64.9	57.9	53.9	51.0	49.0	47.0	45.0
4°	86.9	81.9	71.9	59.9	53.9	50.0	48.0	46.0	44.0
5°	106.9	101.9	81.9	62.9	53.9	49.0	47.0	45.0	43.0
6°	131.9	118.9	91.9	65.9	53.9	49.0	46.0	45.0	42.0
7°	160.8	134.9	99.9	69.9	53.9	49.0	47.0	44.0	42.0
8°	190.8	150.9	106.9	72.9	52.9	49.0	47.0	43.0	41.0
9°	206.8	161.8	112.9	75.9	52.9	48.0	46.0	43.0	40.0
10°	217.8	176.8	120.9	78.9	52.9	48.0	46.0	42.0	40.0
11°	228.8	191.8	130.9	83.9	52.0	47.0	46.0	42.0	39.0
12°	235.8	203.8	140.9	88.9	52.0	47.0	46.0	42.0	39.0
13°	247.8	214.8	151.9	95.9	52.9	47.0	45.0	42.0	38.0
14°	261.7	229.8	162.8	103.9	52.9	46.0	44.0	42.0	38.0
15°	271.7	241.8	173.8	111.9	52.9	46.0	44.0	41.0	38.0
16°	275.7	254.8	185.8	121.9	53.9	45.0	43.0	41.0	38.0
17°	271.7	261.7	201.8	131.9	53.9	44.0	42.0	41.0	38.0
18°	262.7	262.7	218.8	140.9	53.9	44.0	41.0	40.0	38.0
19°	252.8	255.8	233.8	152.9	53.9	43.0	41.0	40.0	37.0
20°	234.8	243.8	246.8	166.8	53.9	43.0	40.0	39.0	37.0
21°	214.8	224.8	257.8	176.8	53.9	42.0	39.0	39.0	37.0
22°	197.8	205.8	264.7	186.8	53.9	42.0	39.0	39.0	37.0
23°	182.8	186.8	268.7	195.8	53.9	41.0	38.0	39.0	37.0
24°	167.8	168.8	268.7	207.8	53.9	41.0	38.0	38.0	37.0
25°	152.9	155.9	264.7	218.8	53.9	41.0	38.0	38.0	37.0
26°	137.9	143.9	260.7	230.8	54.9	40.0	38.0	38.0	37.0
27°	120.9	133.9	253.8	242.8	54.9	40.0	38.0	38.0	37.0
28°	103.9	122.9	248.8	252.8	55.9	40.0	37.0	38.0	37.0
29°	88.9	111.9	250.8	262.7	56.9	40.0	37.0	37.0	37.0
30°	77.9	99.9	242.8	273.7	57.9	40.0	37.0	37.0	37.0
32.5°	59.9	75.9	196.8	303.7	61.9	40.0	37.0	37.0	38.0
35°	52.9	60.9	145.9	330.7	70.9	41.0	38.0	37.0	37.0
37.5°	50.0	52.9	108.9	359.7	83.9	43.0	38.0	37.0	37.0
40°	48.0	49.0	80.9	385.6	113.9	50.0	34.0	34.0	37.0
42.5°	46.0	46.0	61.9	416.6	156.8	49.0	30.0	30.0	32.0
45°	45.0	44.0	53.9	455.6	184.8	44.0	25.0	24.0	12.0
47.5°	44.0	43.0	50.0	452.6	182.8	37.0	21.0	17.0	5.0
50°	44.0	42.0	49.0	410.6	154.9	29.0	18.0	6.0	2.0
52.5°	43.0	42.0	49.0	354.7	124.9	26.0	16.0	3.0	1.0
55°	43.0	41.0	48.0	286.7	103.9	25.0	13.0	1.0	1.0
57.5°	43.0	41.0	50.0	214.8	110.9	27.0	8.0	1.0	1.0
60°	43.0	41.0	54.9	159.8	147.9	25.0	3.0	0.0	1.0
62.5°	43.0	41.0	50.0	120.9	188.8	20.0	1.0	0.0	1.0
65°	43.0	41.0	42.0	90.9	216.8	14.0	0.0	0.0	1.0

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	43.0	40.0	33.0	82.9	218.8	7.0	0.0	0.0	1.0
70°	43.0	37.0	25.0	79.9	154.9	4.0	0.0	0.0	1.0
72.5°	41.0	32.0	24.0	72.9	100.9	2.0	0.0	0.0	1.0
75°	40.0	25.0	23.0	62.9	52.0	1.0	0.0	0.0	1.0
77.5°	27.0	19.0	22.0	48.0	21.0	0.0	0.0	0.0	1.0
80°	6.0	16.0	17.0	31.0	8.0	0.0	0.0	0.0	0.0
82.5°	3.0	5.0	8.0	12.0	1.0	0.0	0.0	0.0	0.0
85°	1.0	2.0	3.0	3.0	1.0	0.0	0.0	0.0	0.0
87.5°	1.0	1.0	1.0	1.0	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)