



ISO/IEC 17025:2017

מעבדות כיוול

## תעודת הסמכה מס' 376 אופיר אופטרוניקס סולושנס בע"מ

כתובת אתר ייחוס: רח' הרטום 10, ירושלים, 9145001, ישראל

עד יום: 29.04.2022

בתוקף מיום: 05.01.2020

הארגון נבדק ונבחן על ידי הרשות הלאומית להסמכת מעבדות (להלן הרשות) ונמצא ראוי להסמכה בהתאם לנספח פירוט היקף ההסמכה המצורף לתעודה זו, המהווה חלק בלתי נפרד ממנה ומספרו זהה למספר התעודה. הסמכה מצביעה על כשירות מקצועית ותפעול מערכת ניהול איכות בעלת הכרה בינלאומית. הארגון המוסמך על ידי הרשות, עומד בתקנים/ בדרישות המפורטים למעלה. דרישות התקנים הם לכשירות מקצועית ולמערכות ניהול, שהינן הכרחיות למתן תוצאות אמינות. הסמכה זו ניתנה בהתאם לכללי ISO/IEC 17011:2017 לפיהם פועלת הרשות ובמסגרתם מקיימת פיקוח שוטף על הארגון לצורך בחינת תפקודו המתמשך בהתאם לדרישות ההסמכה. ההסמכה תקפה כל עוד הארגון עונה לאמות המידה שנקבעו על ידי הרשות.

תעודה זו אינה מהווה אישור לפי סעיף 12 לחוק התקנים.

אתי פלר  
מנכ"ל

הרשות הלאומית להסמכת מעבדות

תאריך הסמכה ראשון: 30.04.2018



הרשות הלאומית להסמכת מעבדות  
Israel Laboratory Accreditation Authority

**Calibration Laboratories**

**ISO/IEC 17025:2017**

**Accreditation Certificate No. 376**

**Ophir Optronics Solutions Ltd.**

**Main site address:** 10 Hartum St., Jerusalem ,9145001, Israel

**Valid from: 05.01.2020**

**Until: 29.04.2022**

The organization was assessed by the Israel Laboratory Accreditation Authority (ISRAC) and found to be worthy of accreditation to the detailed schedule attached.

The schedule is an integral part of this certificate and is numbered with the above certificate number.

Accreditation demonstrates technical competence and operation of an internationally recognized quality management system.

The organization accredited by ISRAC complies with the standards/requirements mentioned above, meets the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically competent results. This accreditation is granted in accordance with the requirements of ISO/IEC 17011:2017, and entails periodic surveillance and reassessment by ISRAC to ensure that the organization continues to comply with the accreditation requirements.

The accreditation is valid provided that the organization continues to meet the criteria as laid down by ISRAC.

This certificate does not constitute an approval in accordance with article 12 of the standard law.

**Date of first accreditation: 30.04.2018**

**Etty Feller**  
**General Manager**  
**Israel Laboratory Accreditation Authority**

Date of signature 05/01/2020

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Name and Address:

<b>Laboratory name</b>	<b>Ophir Optronics Solutions Ltd.</b>
<b>Address</b>	10 Hartum St., Jerusalem ; 9145001, Israel
<b>Phone</b>	+ 972-02-5485400
<b>Fax</b>	+972-02-5487481
<b>E-Mail</b>	<a href="mailto:Gadi.Seeberger@ophiropt.com">Gadi.Seeberger@ophiropt.com</a>

Site: P or T or M , P-Permanent, T-Temporary, M-Mobile

A permanent (P) or temporary (T) place, or a stationary or mobile (M) facility, at or from which the organization performs activities forming part of its scope of accreditation, starting from sampling to final issuance of a report or certificate and / or quality system activities. A temporary (T) site is a site established under the responsibility of an accredited permanent site. All activities performed at a temporary site are the responsibility of the permanent site. An outdoors work is also considered to be a temporary site. Temporary site will be a site that involves work for special project and the activity will be defined in time (up to 2 years).

Type of Scopes: A- Fixed, C- Flexible scope in analytical tests : Type of matrix, analytes, experimental systems and/or analytical characteristics may be subject to changes, in accordance with the laboratory's approved and documented procedures. For details, please refer to the list of Accredited Tests, available from the laboratory upon request.



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
<b>Calibration – Electrical Quantities - DC &amp; LF</b>					<b>כיוול – גדלים חשמליים - זרם ישר ותדר נמוך</b>		
1	A	P	DC Current, Displays	זרם ישר, צגים [30 nA to 700 μA]	0.2%	Work Instruction QA-102	

Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
<b>Calibration – Physical Quantities - Optics</b>					<b>כיוול – גדלים פיזיקליים - אופטיקה</b>		
2	A	P	Thermal sensors	הספק [10 μW to 15 kW] at 193, 248 nm	1.4 %	Work Instruction QA-101	Uncertainty values for Silver master reference sensor. UUT typically has higher uncertainty
3	A	P		הספק [10 μW to 15 kW] at 355, 532, 808, 1064, 1070, - 10600 nm	1.3%		
4	A	P		הספק [10 μW to 15 kW] at (248 nm to 355 nm)	1.7 %		
5	A	P		הספק [10 μW to 15 kW] at (355 nm to 2200 nm)	1.6 %		
6	A	P	Thermal sensors	אנרגיה [15 μJ to 10 kJ] at 193 nm	2.6%	Work Instruction QA-101	Uncertainty values for Silver master reference sensor. UUT typically has higher uncertainty
7	A	P		אנרגיה [15 μJ to 10 kJ] at [248 nm to 2200 nm]	2.7 %		
8	A	P		אנרגיה [15 μJ to 10 kJ] at 10600 nm	2.7 %		
9	A	P	Photodiode IR sensors	הספק [5 nW to 30 mW] at [700 nm to 1430 nm]	2.2 %	Work Instruction QA-100	Uncertainty values for Silver master reference sensor. UUT typically has higher uncertainty
10	A	P		הספק [5 nW to 30 mW] at (1430 nm to 1600 nm)	2.4 %		
11	A	P	Photodiode UV-VIS sensors	הספק [20 pW to 3 mW] at (210 nm to 220 nm)	4.0 %	Work Instruction QA-100	Uncertainty values for Silver master reference sensor.
12	A	P		הספק [20 pW to 3 mW] at (220 nm to 255 nm)	3.2 %		



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<b>Calibration – Physical Quantities - Optics</b>						<b>כיוול – גדלים פיזיקליים - אופטיקה</b>	
13	A	P		Power הספק [20 pW to 3 mW] at (255 nm to 285 nm)	2.4 %		UUT typically has higher uncertainty
14	A	P		Power הספק [20 pW to 3 mW] at (285 nm to 430 nm)	1.6 %		
15	A	P		Power הספק [20 pW to 3 mW] at (430 nm to 1000 nm)	0.8 %		
16	A	P		Power הספק [20 pW to 3 mW] at (1000 nm to 1030 nm)	1.6%		
17	A	P		Power הספק [20 pW to 3 mW] at (1030 nm to 1070 nm)	2.6%		
18	A	P		Power הספק [20 pW to 3 mW] at (1070 nm to 1100 nm)	3.2%		
19	A	P	Photodiode UV-VIS Irradiance sensors	פוטודיודות למדידת הספק ליחידת שטח ל-VIS-UV	Power הספק ליחידת שטח [100 nW/cm <sup>2</sup> to 20 W/cm <sup>2</sup> ] at (210 nm to 220 nm)	5.5%	
20	A	P		Power הספק ליחידת שטח [100 nW/cm <sup>2</sup> to 20 W/cm <sup>2</sup> ] at (220 nm to 255 nm)	4.1%		
21	A	P		Power הספק ליחידת שטח [100 nW/cm <sup>2</sup> to 20 W/cm <sup>2</sup> ] at (255 nm to 285 nm)	3.5%		
22	A	P		Power הספק ליחידת שטח [100 nW/cm <sup>2</sup> to 20 W/cm <sup>2</sup> ] at (285 nm to 430 nm)	3.2%		
23	A	P		Power הספק ליחידת שטח [100 nW/cm <sup>2</sup> to 20 W/cm <sup>2</sup> ] at (430 nm to 1000 nm)	3%		
24	A	P	Pyroelectric sensors	גלאים פירואלקטרים	Energy אנרגיה 1 mJ at 193 nm	2.7 %	Work Instruction QA-101
25	A	P			Energy אנרגיה 1 mJ at [248 nm to 2200 nm]	2.8 %	
26	A	P			Energy אנרגיה 5 mJ at 193 nm	2.7 %	
27	A	P			Energy אנרגיה 5 mJ at [248 nm to 2200 nm]	2.8 %	



Item	Scope Type	Site	Measurand Instrument, Gauge	Range [Including margins] (Does not include margins)	CMC Expressed as an Expanded Uncertainty (95%)	Reference Documents	Remarks
<b>Calibration – Physical Quantities - Optics</b>						<b>כיוול – גדלים פיזיקליים - אופטיקה</b>	
28	A	P		Energy אנרגיה 10 mJ at 193 nm	2.7%		
29	A	P		Energy אנרגיה 10 mJ at [248 nm to 2200 nm]	2.8 %		
30	A	P		Energy אנרגיה 20 mJ at 193 nm	2.7 %		
31	A	P		Energy אנרגיה 20 mJ at [248 nm to 2200 nm]	2.8 %		
32	A	P		Energy אנרגיה 50 mJ at 193 nm	2.7 %		
33	A	P		Energy אנרגיה 50 mJ at [248 nm to 2200 nm]	2.8 %		
34	A	P		Energy אנרגיה 100 mJ at 193 nm	2.7 %		
35	A	P		Energy אנרגיה 100 mJ at [248 nm to 2200 nm]	2.8 %		
36	A	P	Relative spectral reflectance factor	מקדם החזרה ספקטרלית יחסי >0.80 to 0.99 at [250 nm to 400 nm)	0.013 of reading	QA-105	Spectral reflectance factor is a dimensionless property
37	A	P		>0.80 to 0.99 at [400 nm to 1500 nm)	0.006 of reading		
38	A	P		>0.80 to 0.99 at [1500 nm to 2200 nm]	0.009 of reading		
39	A	P	Spectrophotometer - wavelegnth	ספקטרופוטומטר - אורך גל 250 nm to 2200 nm	4 nm	QA-105	Standard transmission reference glass and lamp emission peak calibration procedure.