

Certificate number: o60240421i204980-1



Calibration Certificate

Customer
SET Y GAD SAS
CRA 48 NO 101A-69
110111 BOGOTA
CO

Laboratory
Unfors RaySafe Inc.
2 Science Road
Glenwood, IL 60425-1586
USA
+1-833-296-9240
customerservice.us@raysafe.com

CUSTOMER INSTRUMENT

Product X2 Light
Serial number 204980
Manufacturer RaySafe

CALIBRATION INFORMATION

As found 6/3/2024
As left 6/3/2024
Adjustment done Yes
Tested by Nate Barnes

Approved by

Josefina Diaz
Finalization technician

Certificate date 6/13/2024

CALIBRATION RESULT

AS FOUND: One or more measured and tested values of this certificate are within the specifications by a margin less than the expanded measurement uncertainty. Therefore, it is not possible to state conformance with specifications for those measurements.

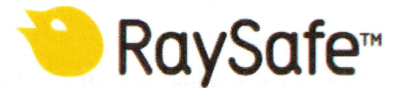
AS LEFT: All measured and tested values of this certificate were found to be in conformance with the specification.

Relevant instrument specifications

Illuminance: 3 %
Luminance: 3 %



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GENERAL INFORMATION

LABORATORY CALIBRATION

All reference standards used for this calibration are valid for one year. Voltage, Time, Electrical current, Electrical charge, Illuminance and Luminance standards are traceable to RISE Research Institute of Sweden. All Air kerma and Air kerma rate standards are traceable to Physikalisch-Technische Bundesanstalt (PTB). HVL standards are traceable to RISE and PTB.

CALIBRATION ENVIRONMENTAL CONDITIONS

Ambient temperature: 15 – 30 °C
Relative humidity: < 80 %

CALIBRATION UNCERTAINTY

All measurements are associated with some level of uncertainty. The measurement uncertainties in this certificate are stated in accordance with EA-4/02 (Expression of the Uncertainty of Measurement in Calibration) and JCGM 100:2008, Guide to the Expression of Uncertainty in Measurement (GUM).

The term *Expanded uncertainty* in this certificate, is defined as the standard uncertainty multiplied by a coverage factor $k = 2$. For a normal distribution, this gives approximately 95 % probability that the measurement result is within the stated uncertainty.

SCOPE OF CERTIFICATE

The results in this calibration certificate only relate to the customer instrument specified on the first page of the certificate. Whether the device under test conforms to the requirements for its intended use or not, has to be decided by its user.

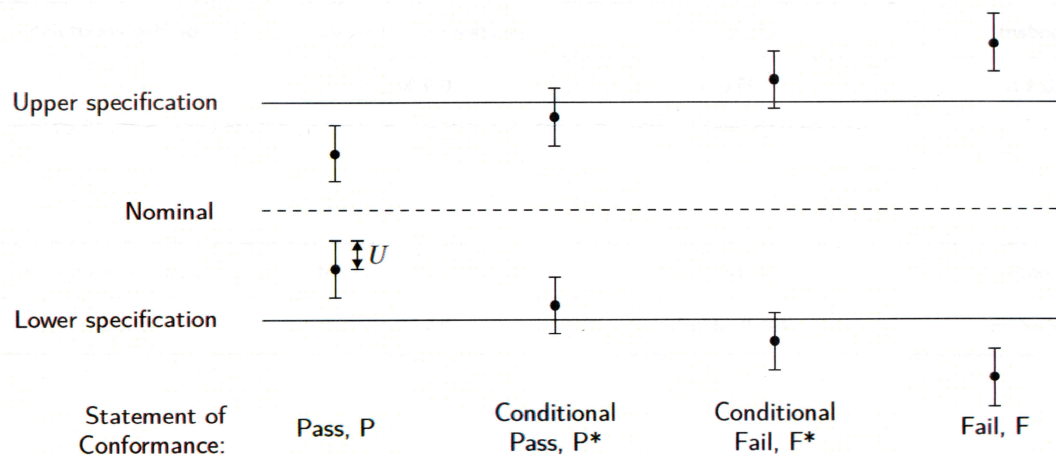
CONFORMANCE WITH SPECIFICATION

The conformance with specification (Result) has been determined in accordance with ILAC publication ILAC-G8:09/2019. The statement of conformance is based on a 95 % coverage probability for the expanded uncertainty and is only valid for the tested measurements.

All statements of conformance with specification in this certificate are reported as:

- P PASS** – The measured value is within the specification by a margin greater than the expanded uncertainty.
- P* CONDITIONAL PASS** – The measured value is within the specification by a margin less than the expanded measurement uncertainty. Therefore, it is not possible to state conformance with specification using a 95 % coverage probability for the expanded uncertainty.
- F* CONDITIONAL FAIL** – The measured value is outside of the specification by a margin less than the expanded measurement uncertainty. Therefore, it is not possible to state non-conformance with specification using a 95 % coverage probability for the expanded uncertainty.
- F FAIL** – The measured value is outside of the specification by a margin greater than the expanded measurement uncertainty.

A summary of all performed tests is reported on the first page of this certificate.

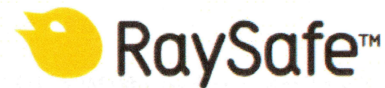


$U = 95 \% \text{ expanded measurement uncertainty}$

Other terms that may be used:

- NS NO SPECIFICATION** – The measured value has no specification.
- NM NOT MEASURED** – The measurement has not been performed and no value is tested against the specification.

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CALIBRATION AS FOUND

REFERENCE EQUIPMENT

INSTRUMENT	VALID UNTIL DATE
OL 400-CS Controller, S/N: 23000110	12/15/2024
OL 455-8SA-U Integrating Sphere Calibration Standard, S/N: 23000011	
Opal Diffuser, S/N: 23000011-O	

MEASUREMENTS

ILLUMINANCE

Standard	Measured	Deviation from standard	Expanded uncertainty	Result
500.3 lx	496.0 lx	-0.9 %	2.0 %	P

LUMINANCE

Standard	Measured	Deviation from standard	Expanded uncertainty	Result
501.4 cd/m ²	491.0 cd/m ²	-2.1 %	1.8 %	P*

CALIBRATION AS LEFT

REFERENCE EQUIPMENT

INSTRUMENT	VALID UNTIL DATE
OL 400-CS Controller, S/N: 23000110	12/15/2024
OL 455-8SA-U Integrating Sphere Calibration Standard, S/N: 23000011	
Opal Diffuser, S/N: 23000011-O	

MEASUREMENTS

ILLUMINANCE

Standard	Measured	Deviation from standard	Expanded uncertainty	Result
499.5 lx	501.0 lx	0.3 %	2.0 %	P

LUMINANCE

Standard	Measured	Deviation from standard	Expanded uncertainty	Result
503.1 cd/m ²	503.0 cd/m ²	0.0 %	1.8 %	P

