



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Suga Test Instruments Co., Ltd.

6-10-2 Shinjuku, Shinjuku-ku

Tokyo 160-0022 Japan

Fulfills the requirements of

ISO/IEC 17025:2017

In the field of

CALIBRATION

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

A handwritten signature in black ink, appearing to read 'R. Douglas Leonard Jr.', is positioned above a horizontal line.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 19 January 2025

Certificate Number: AC-2116



This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory
quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Suga Test Instruments Co., Ltd.

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CALIBRATION

Valid to: **January 19, 2025**

Certificate Number: **AC-2116**

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Pneumatic Gage Pressure	(0 to 0.2) MPa	0.001 4 MPa	Digital Pressure Gage DG-923N-G Tokyo Aircraft Instrument Co., Ltd. with Nitrogen
	(0 to 0.3) MPa	0.002 2 MPa	
	(0 to 0.4) MPa	0.002 4 MPa	
	(0 to 1) MPa	0.011 MPa	

Photometry and Radiometry

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Radiometer for Water Cooled 7.5 kW Xenon Lamps	Quartz / #275 (40 to 180) W/m ² (300 to 400) nm	12 % of reading	Spectral Irradiance Standard Source, Reference Radiometer
	Quartz / #295 (40 to 180) W/m ² (300 to 400) nm	13 % of reading	
Radiometer for Water Cooled 7.5 kW Xenon Lamps	Quartz / #320 (40 to 162) W/m ² (300 to 400) nm	14 % of reading	Spectral Irradiance Standard Source, Reference Radiometer

Photometry and Radiometry

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Spectral Irradiance - Tungsten Lamp	(>0 to 30) $\mu\text{W}\cdot\text{cm}^2 / \lambda$ (250 to 350) nm (350 to 450) nm (450 to 600) nm (600 to 830) nm (830 to 850) nm	5.6 % of reading 3.9 % of reading 3.4 % of reading 3.7 % of reading 4.1 % of reading	Spectral Irradiance Tungsten Lamp
Spectral Irradiance - Water Cooled 7.5 kW Xenon Lamps	Quartz / #275, #295, #320 (>0 to 300) $\mu\text{W}\cdot\text{cm}^2 / \lambda$ (300 to 350) nm (350 to 450) nm (450 to 600) nm (600 to 830) nm (830 to 850) nm	11 % of reading 8.2 % of reading 7.9 % of reading 13 % of reading 6.5 % of reading	Spectral Irradiance Tungsten Lamp


Thermodynamic

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Resistance Thermometry 100 Ω , 3-wire type	(0 to 70) $^{\circ}\text{C}$	0.1 $^{\circ}\text{C}$	Digital Thermometer 1502A Fluke Corporation

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ($k=2$), corresponding to a confidence level of approximately 95%.

Notes:

1. This scope is formatted as part of a single document including Certificate of Accreditation No. AC-2116.



R. Douglas Leonard Jr., VP, PILR SBU