

Calibration Certificate

Client Name: * * * *
Client Address: * * * *
Calibration Site: Meteorological Instrument Center,
Japan Meteorological Agency (JMA)
Calibration Item: * * * *
Type and Serial Number: * * * *
Manufacturer: * * * *
Calibration Variable: Relative humidity
Calibration Method: As shown in page 2
Calibration Conditions: Temperature * * °C - * * °C
Relative humidity * * % - * * %
Calibration Results: As shown in page 2
Date of Application: * * * *
Date of Performing Calibration: * * * *
Date of issue: * * * *

The issuing authority

Head, Meteorological Instrument Center
Observation Division, Observation Department
Japan Meteorological Agency
1-2 Nagamine Tsukuba-City Ibaraki, 305-0052, Japan

This certificate is based on article 144 of the Measurement Law and indicates the result of calibration in accordance with measurement standards traceable to Primary Measurement Standards (National Standards) which realizes the physical units of measurement according to the International System of Units (SI). The accreditation symbol is attestation of which the result of calibration is traceable to Primary Measurement Standards (National Standards).

The certificate shall not be reproduced except in full, without the written approval of the issuing laboratory. The calibration laboratory who issued this calibration certificate conforms to ISO/IEC 17025:2005.

This calibration certificate was issued by the calibration laboratory accredited by IAJapan who is a signatory to the Mutual Recognition Arrangement (MRA) of International Laboratory Accreditation Cooperation (ILAC) and Asia Pacific Laboratory Accreditation Cooperation (APLAC). This (These) calibration result(s) may be accepted internationally through ILAC/APLAC MRA.

Calibration method

The calibration item was calibrated with the following reference standards and instruments;

- Chilled Mirror Hygrometer (Sensor): * * * *
- Chilled Mirror Hygrometer (Indicator): * * * *
- Thermometer (Sensor): * * * *
- Thermometer (Indicator): * * * *

The calibration item was compared with the above reference standards. Reference humidity values were derived from dew points and temperature using the equation of Sonntag. The procedure used in this calibration was the standard operating procedure manual No.13 of Meteorological Instrument Center, JMA.

Calibration results

Nominal humidity (%)	Reference humidity (A) (%)	Indication of the Calibrated item (humidity) (B) (%)	Deviation (E - (A) (%)	Expanded uncertainty (%)
20	20.00	* * * *	* * *	* * * *
40	40.00	* * * *	* * *	* * * *
60	60.00	* * * *	* * *	* * * *
80	80.00	* * * *	* * *	* * * *
95	95.00	* * * *	* * *	* * * *

* Temperature in the calibration chamber during calibration: * * °C - * * °C

Notes

- 1) The reported expanded uncertainty is stated as the combined standard uncertainty multiplied by the coverage factor $k = 2$, which for a normal distribution corresponds to a coverage probability of approximately 95 %.
- 2) The values of humidity of the calibrated item were the digital output data collected by computer from the calibrated item.
- 3) The calibration was performed three times at the calibration points from the lowest to the highest of humidity and in reverse order. The deviation at each calibration point is an average of the six data.
- 4) Each humidity value of the reference standards was set within ± 3 % from the nominal value and an average of the six data of the reference was set within ± 1 % from the nominal value.

-End of the Certificate-