**Certificate of Calibration**

**Customer**

{{CUSTOMER\_ADDRESS}}  **Location of Calibration**

{{LOCATION\_OF\_CALIBRATION}}

Model / Part Number : {{MODEL}} Date of Calibration {{DATE\_OF\_CALIBRATION}}

Description : {{DESCRIPTION}} Due Date : {{DUE\_DATE}}

Serial Number {{SERIAL\_NUMBER}} Range {{RANGE}}

Manufacturer {{MANUFACTURER}} Certificate No. : {{CERTIFICATE\_NUMBER}}

This document certifies that the above instrument has been calibrated and test in accordance by Metrology Division. Calibration procedures conducted under conditions noted with standard. This report shall not be reproduced except in full, with out the written approval of the written approval of the laboratory.

**Uncertainty of Measurement.**

The Uncertainty evaluation has been performed in accordance with (M3003). The reported expanded measurement uncertainty, which corresponds to a coverage probability of approximately 95%, is the standard uncertainty multiplied by the coverage factor k=2. Where this is not the case, coverage factor (k), coverage factor (k),effective degrees of freedom (veff) and coverage probability (p) are stated.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

{{APPROVER}}

ดึงชื่อคนสอบ {{CALIBRATOR}}

ดึงชื่อคน

Calibrated Approved

Certificate No. : {{CERTIFICATE\_NUMBER}}

**Calibration Report**

**Environment of Calibration.**

The calibration was carried out in an ambient of temperature (23+/-3) °C , relative humidity (50+/-15) % and accomplished in an ambient environment controlled in the laboratory.

**Traceability.**

The measurements are traceable to the International System of Units

**Calibration Method.**

Initial testing found the instrument to be in-specification for the parameters tested. No adjustment was necessary to ensure the performance to published operating specifications.

**Standard Used.**

Asset No: Description Name: Maker / Model: Serial Number:

1 Weight Class E2 1 mg to 2 kg 22229943

ลำดับ ดึงชื่อเครื่องมือที่ใช้สอบเทียบ ดึง model ดึง serial

**Certificate No.:** {{CERTIFICATE\_NUMBER}}

**Calibration Report**

**Calibration Results :**

Initial testing found the instrument to be in-specification for the parameters tested. No adjustment was necessary to ensure the performance to published operating specifications.

**1. DC VOLTAGE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UUC Range** | **UUC. Setting** | **Measured Value** | **Uncertainty (±)** | **Tolerance Limit** |
| {{DC\_UUC\_RANGE\_1}} | {{DC\_UUC\_SETTING\_1}} | {{DC\_MEASURED\_VALUE\_1}} | {{DC\_UNCERTAINTY\_1}} | {{DC\_TOLERANCE\_LIMIT\_1}} |
| {{DC\_UUC\_RANGE\_2}} | {{DC\_UUC\_SETTING\_2}} | {{DC\_MEASURED\_VALUE\_2}} | {{DC\_UNCERTAINTY\_2}} | {{DC\_TOLERANCE\_LIMIT\_2}} |
| {{DC\_UUC\_RANGE\_3}} | {{DC\_UUC\_SETTING\_3}} | {{DC\_MEASURED\_VALUE\_3}} | {{DC\_UNCERTAINTY\_3}} | {{DC\_TOLERANCE\_LIMIT\_3}} |
| {{DC\_UUC\_RANGE\_4}} | {{DC\_UUC\_SETTING\_4}} | {{DC\_MEASURED\_VALUE\_4}} | {{DC\_UNCERTAINTY\_4}} | {{DC\_TOLERANCE\_LIMIT\_4}} |
| {{DC\_UUC\_RANGE\_5}} | {{DC\_UUC\_SETTING\_5}} | {{DC\_MEASURED\_VALUE\_5}} | {{DC\_UNCERTAINTY\_5}} | {{DC\_TOLERANCE\_LIMIT\_5}} |
| {{DC\_UUC\_RANGE\_6}} | {{DC\_UUC\_SETTING\_6}} | {{DC\_MEASURED\_VALUE\_6}} | {{DC\_UNCERTAINTY\_6}} | {{DC\_TOLERANCE\_LIMIT\_6}} |

**2. AC VOLTAGE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UUC Range** | **UUC. Setting** | **Measured Value** | **Uncertainty (±)** | **Tolerance Limit** |
| {{AC\_UUC\_RANGE\_1}} | {{AC\_UUC\_SETTING\_1}} | {{AC\_MEASURED\_VALUE\_1}} | {{AC\_UNCERTAINTY\_1}} | {{AC\_TOLERANCE\_LIMIT\_1}} |
| {{AC\_UUC\_RANGE\_2}} | {{AC\_UUC\_SETTING\_2}} | {{AC\_MEASURED\_VALUE\_2}} | {{AC\_UNCERTAINTY\_2}} | {{AC\_TOLERANCE\_LIMIT\_2}} |
| {{AC\_UUC\_RANGE\_3}} | {{AC\_UUC\_SETTING\_3}} | {{AC\_MEASURED\_VALUE\_3}} | {{AC\_UNCERTAINTY\_3}} | {{AC\_TOLERANCE\_LIMIT\_3}} |
| {{AC\_UUC\_RANGE\_4}} | {{AC\_UUC\_SETTING\_4}} | {{AC\_MEASURED\_VALUE\_4}} | {{AC\_UNCERTAINTY\_4}} | {{AC\_TOLERANCE\_LIMIT\_4}} |
| {{AC\_UUC\_RANGE\_5}} | {{AC\_UUC\_SETTING\_5}} | {{AC\_MEASURED\_VALUE\_5}} | {{AC\_UNCERTAINTY\_5}} | {{AC\_TOLERANCE\_LIMIT\_5}} |
| {{AC\_UUC\_RANGE\_6}} | {{AC\_UUC\_SETTING\_6}} | {{AC\_MEASURED\_VALUE\_6}} | {{AC\_UNCERTAINTY\_6}} | {{AC\_TOLERANCE\_LIMIT\_6}} |

**Certificate No.:** {{CERTIFICATE\_NUMBER}}

**Calibration Report**

**3. RESISTANCE**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UUC Range** | **UUC. Setting** | **Measured Value** | **Uncertainty (±)** | **Tolerance Limit** |
| {{RES\_UUC\_RANGE\_1}} | {{RES\_UUC\_SETTING\_1}} | {{RES\_MEASURED\_VALUE\_1}} | {{RES\_UNCERTAINTY\_1}} | {{RES\_TOLERANCE\_LIMIT\_1}} |
| {{RES\_UUC\_RANGE\_2}} | {{RES\_UUC\_SETTING\_2}} | {{RES\_MEASURED\_VALUE\_2}} | {{RES\_UNCERTAINTY\_2}} | {{RES\_TOLERANCE\_LIMIT\_2}} |
| {{RES\_UUC\_RANGE\_3}} | {{RES\_UUC\_SETTING\_3}} | {{RES\_MEASURED\_VALUE\_3}} | {{RES\_UNCERTAINTY\_3}} | {{RES\_TOLERANCE\_LIMIT\_3}} |
| {{RES\_UUC\_RANGE\_4}} | {{RES\_UUC\_SETTING\_4}} | {{RES\_MEASURED\_VALUE\_4}} | {{RES\_UNCERTAINTY\_4}} | {{RES\_TOLERANCE\_LIMIT\_4}} |
| {{RES\_UUC\_RANGE\_5}} | {{RES\_UUC\_SETTING\_5}} | {{RES\_MEASURED\_VALUE\_5}} | {{RES\_UNCERTAINTY\_5}} | {{RES\_TOLERANCE\_LIMIT\_5}} |
| {{RES\_UUC\_RANGE\_6}} | {{RES\_UUC\_SETTING\_6}} | {{RES\_MEASURED\_VALUE\_6}} | {{RES\_UNCERTAINTY\_6}} | {{RES\_TOLERANCE\_LIMIT\_6}} |

{{MODEL}} {{MANUFACTURER}} {{DESCRIPTION}} {{SERIAL\_NUMBER}} {{RANGE}} {{GRADUATION}} {{OPTION}} {{CUSTOMER\_ASSET\_ID}}

{{RECEIVED\_DATE}} {{DATE\_OF\_CALIBRATION}} {{DUE\_DATE}} {{ISSUE\_DATE}} {{CERTIFICATE\_NUMBER}} {{PROCEDURE}}

{{STANDARD\_ASSET\_NO}} {{STANDARD\_DESCRIPTION}} {{STANDARD\_MAKER\_MODEL}} {{STANDARD\_SERIAL}} {{STANDARD\_CERTIFICATE}} {{STANDARD\_DUE\_DATE}}

{{CALIBRATOR}} {{APPROVER}}

{{CUSTOMER}} {{CUSTOMER\_ADDRESS}} {{LOCATION\_OF\_CALIBRATION}} {{LOCATION\_ADDRESS}}

{{AC\_UUC\_RANGE\_1}} {{AC\_UUC\_SETTING\_1}} {{AC\_MEASURED\_VALUE\_1}} {{AC\_UNCERTAINTY\_1}} {{AC\_TOLERANCE\_LIMIT\_1}}

{{RES\_UUC\_RANGE\_1}} {{RES\_UUC\_SETTING\_1}} {{RES\_MEASURED\_VALUE\_1}} {{RES\_UNCERTAINTY\_1}}

{{RES\_TOLERANCE\_LIMIT\_1}}

{{DC\_UUC\_RANGE\_1}} {{DC\_UUC\_SETTING\_1}} {{DC\_MEASURED\_VALUE\_1}} {{DC\_UNCERTAINTY\_1}} {{DC\_TOLERANCE\_LIMIT\_1}}

{{DC\_UUC\_RANGE\_1}} {{DC\_UUC\_SETTING\_1}} {{DC\_MEASURED\_VALUE\_1}} {{DC\_UNCERTAINTY\_1}} {{DC\_TOLERANCE\_LIMIT\_1}}

{{DC\_UUC\_RANGE\_2}} {{DC\_UUC\_SETTING\_2}} {{DC\_MEASURED\_VALUE\_2}} {{DC\_UNCERTAINTY\_2}} {{DC\_TOLERANCE\_LIMIT\_2}}

{{DC\_UUC\_RANGE\_3}} {{DC\_UUC\_SETTING\_3}} {{DC\_MEASURED\_VALUE\_3}} {{DC\_UNCERTAINTY\_3}} {{DC\_TOLERANCE\_LIMIT\_3}}

{{DC\_UUC\_RANGE\_4}} {{DC\_UUC\_SETTING\_4}} {{DC\_MEASURED\_VALUE\_4}} {{DC\_UNCERTAINTY\_4}} {{DC\_TOLERANCE\_LIMIT\_4}}

{{DC\_UUC\_RANGE\_5}} {{DC\_UUC\_SETTING\_5}} {{DC\_MEASURED\_VALUE\_5}} {{DC\_UNCERTAINTY\_5}} {{DC\_TOLERANCE\_LIMIT\_5}}

{{DC\_UUC\_RANGE\_6}} {{DC\_UUC\_SETTING\_6}} {{DC\_MEASURED\_VALUE\_6}} {{DC\_UNCERTAINTY\_6}} {{DC\_TOLERANCE\_LIMIT\_6}}

{{AC\_UUC\_RANGE\_2}} {{AC\_UUC\_SETTING\_2}} {{AC\_MEASURED\_VALUE\_2}} {{AC\_UNCERTAINTY\_2}} {{AC\_TOLERANCE\_LIMIT\_2}}

{{AC\_UUC\_RANGE\_3}} {{AC\_UUC\_SETTING\_3}} {{AC\_MEASURED\_VALUE\_3}} {{AC\_UNCERTAINTY\_3}} {{AC\_TOLERANCE\_LIMIT\_3}}

{{AC\_UUC\_RANGE\_4}} {{AC\_UUC\_SETTING\_4}} {{AC\_MEASURED\_VALUE\_4}} {{AC\_UNCERTAINTY\_4}} {{AC\_TOLERANCE\_LIMIT\_4}}

{{AC\_UUC\_RANGE\_5}} {{AC\_UUC\_SETTING\_5}} {{AC\_MEASURED\_VALUE\_5}} {{AC\_UNCERTAINTY\_5}} {{AC\_TOLERANCE\_LIMIT\_5}}

{{AC\_UUC\_RANGE\_6}} {{AC\_UUC\_SETTING\_6}} {{AC\_MEASURED\_VALUE\_6}} {{AC\_UNCERTAINTY\_6}} {{AC\_TOLERANCE\_LIMIT\_6}}

{{RES\_UUC\_RANGE\_1}} {{RES\_UUC\_SETTING\_1}} {{RES\_MEASURED\_VALUE\_1}} {{RES\_UNCERTAINTY\_1}} {{RES\_TOLERANCE\_LIMIT\_1}}

{{RES\_UUC\_RANGE\_2}} {{RES\_UUC\_SETTING\_2}} {{RES\_MEASURED\_VALUE\_2}} {{RES\_UNCERTAINTY\_2}} {{RES\_TOLERANCE\_LIMIT\_2}}

{{RES\_UUC\_RANGE\_3}} {{RES\_UUC\_SETTING\_3}} {{RES\_MEASURED\_VALUE\_3}} {{RES\_UNCERTAINTY\_3}} {{RES\_TOLERANCE\_LIMIT\_3}}

{{RES\_UUC\_RANGE\_4}} {{RES\_UUC\_SETTING\_4}} {{RES\_MEASURED\_VALUE\_4}} {{RES\_UNCERTAINTY\_4}} {{RES\_TOLERANCE\_LIMIT\_4}}

{{RES\_UUC\_RANGE\_5}} {{RES\_UUC\_SETTING\_5}} {{RES\_MEASURED\_VALUE\_5}} {{RES\_UNCERTAINTY\_5}} {{RES\_TOLERANCE\_LIMIT\_5}}

{{RES\_UUC\_RANGE\_6}} {{RES\_UUC\_SETTING\_6}} {{RES\_MEASURED\_VALUE\_6}} {{RES\_UNCERTAINTY\_6}} {{RES\_TOLERANCE\_LIMIT\_6}}