

Scope of accreditation

Scope of accreditation is described in tables 1 – 9.

CMC (Calibration and Measurement Capability) is the best uncertainty the calibration laboratory can deliver under ideal circumstances. The measurement uncertainty is an expanded uncertainty calculated by a coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%. The calculations are in accordance with “Expression of the Uncertainty of Measurement in Calibration” EA-4/02.

Table 1. Electrical DC Voltage

Method: MTB-010, " for Tube Potential Calibration at RTI Electronics", version 2010-01(B).

DC Voltage – Measurement range	Calibration and Measurement Capability (CMC) (\pm)
18 – 150 kV	0,6 %

Table 2. Electrical DC Current

Method: MTB-030, "Method for Current and Charge calibration at RTI Electronics", version 2010-02(B).

DC Current - Measurement range	Calibration and Measurement Capability (CMC) (\pm)
± 1 pA – ± 10 mA	0,8 %

Table 3. Electrical DC Current

Method: MTB-050, "Method for Current (mA) and Current Charge Product (mAs) calibration at RTI Electronics", version 2010-02(B).

DC Current - Measurement range	Calibration and Measurement Capability (CMC) (\pm)
0,5 – 1300 mA	0,9 %

Table 4. Electrical charge

Method: Metod: MTB-030, "Method for Current and Charge calibration at RTI Electronics", version 2010-02(B).

Charge - Measurement range	Calibration and Measurement Capability (CMC) (\pm)
1 pC – 20 μ C	0,8 %

Table 5. Photometry – Luminous

Method: MTB-040, "Method for Light calibration at RTI Electronics", version 2010-03(C).

Luminous - Measurement range	Calibration and Measurement Capability (CMC) (±)
10 – 1000 cd/m ²	3,2 %

Table 6. Photometry – Illuminous

Method: MTB-040, "Method for Light calibration at RTI Electronics", version 2010-03(C).

Illuminous - Measurement range	Calibration and Measurement Capability (CMC) (±)
10 – 100 lux	3,2 %

Table 7 - 9. Dose calibration

Methods:

- MTB-020, "Method for Dose calibration at RTI Electronics", version 2010-01(B).
- MTB-070, "Method for Kerma Area Product (KAP) calibration at RTI Electronics", version 2010-01(B).
- MTB-060, "Method for CT Dose calibration at RTI Electronics", version 2010-01(B).

Table 7: X-ray: KAP

Reference voltage (kV)	Calibration and Measurement Capability (CMC) (±)
18 – 150	3,5 %

Table 8: X-ray: Dos

Reference voltage (kV)	Calibration and Measurement Capability (CMC) (±)
18 – 150	2,1 %

Table 9: X-ray: CT Dos

Reference voltage (kV)	Calibration and Measurement Capability (CMC) (±)
18 – 150	2,4 %

Comments: Activities outside laboratory premises, field activities, are not included in the scope of accreditation.