ANSI-ASQ National Accreditation Board

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005)

RTI Electronics, Inc.

33 Jacksonville Road, Bldg.1
Towaco, NJ, 07082
Stephen Honeywell 973-439-0242

CALIBRATION

Valid to: **November 21, 2021** Certificate Number: **L2338**

Ionizing Radiation

Parameter/ Equipment	Range	Reference Beam Quality (IEC 61267 code) or [PTB code] or {University of Wisconsin code}, Target/Filtration - Reference Voltage	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Radiography, Dose Calibration Factor (Gy/C)	(35 to 150) kV	(RQR 5) W/2.83 mm Al – 70 kV (RQA 5) W/23.8 mm Al – 70 kV (RQR 9) W/3.75 mm Al – 120 kV	1.3 % of reading	Radcal RC6M Ion Chamber Radcal RC6 Ion Chamber
Mammography, Dose Calibration Factor (Gy/C)	(18 to 49) kV	[MMV 28] Mo/0.03 mm Mo – 28 kV [MRV 30] Mo/0.025 mm Rh – 30 kV [WRV 30] W/0.05 mm Rh – 30 kV [WSV 30] W/0.05 mm Ag – 30 kV [WAV 30] W/0.5 mm Al – 30 kV [WAH 30] W/2.5 mm Al – 30 kV	1.3 % of reading	Radcal RC6M Ion Chamber
CT Dose, Dose Calibration Factor (Gy/C)	(35 to 150) kV	{UW 150 M} W/2.7 mm Al + 0.25 mm Cu – 150 kV {UW 120 M} W/6.7 mm Al – 120 kV {UW 100 M} W/4.7 mm Al – 100 kV {UW 80 M} W/2.7 mm Al – 80 kV	2.1 % of reading	Standard Imaging A101 Ion Chamber
CT-Dose Profiler, Dose Calibration Factor (Gy/C)	(35 to 150) kV	(RQR 9) W/3.75 mm Al – 120 kV	1.4 % of reading	Radcal RC6 Ion Chamber

Electrical – DC/Low Frequency

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Electrometers, DC Current-Generate	2 pA (25 to 100) pA 100 pA to 10 µA	6.5 % of reading 0.7 % of reading 0.3 % of reading	Keithley 263
MAS meters, DC Current-Generate	0.5 mA to 10 A	0.5 % of reading	Fluke 287 & 189, Electrometer
Electrometers, Charge Generate	2 pC (2 to 100) pC 100 pC to 100 mC	6.5 % of charge 1.5 % of charge 0.19 % of charge	Keithley 263
Non-Invasive kVp Meters Measure	(18 to 150) kV	0.7 % of reading	HV Measurement System (Radiography, Fluoroscopy, Mammography, Dental & CT)

Photometry and Radiometry

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Luminance Responsivity Measure	(10 to 1 000) cd/m^2	3.3 % of reading	Reference Detector L100
Illuminance Responsivity Measure	(10 to 100) lux	3.2 % of reading	Reference Detector L100

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. L2338.

Vice President