



Certificate of Conformance

Issued to: Upstate Medical Physics
1290 Blossom Drive
Victor, Ny 14564


<u>Equipment Description</u>	<u>Model</u>	<u>S/N</u>
Accu-Gold Digitizer Module	AGDM	40-0200
Accu-Gold Wifi Module	AGNUGGET	51-0174
Accu-Gold Light Sensor	AGLS	01-0113
Accu-Gold Multi-Sensor	AGMS-D	41-0166
Accu-Gold Multi-Sensor	AGMS-M	42-0121

The equipment identified above has been calibrated and tested using Radcal calibration and acceptance procedure PP1102, Radcal Quality Manual PP1007, Radcal Policy and Procedure PP1038, PI1045, PI1055 and other related documents. The equipment has been found to conform in all respects. These test procedures are designed to ensure that the tested equipment meets or exceeds all aspects of Radcal's published product specifications and requirements. Radcal is an ACLASS accredited calibration lab that meets the requirements of ISO 17025 and ANSI/NCLS Z540-1, cert number AC-1553.

All measurements performed during the testing employ equipment traceable to NIST or another recognized National Laboratory such as Physikalisch-Technische Bundesanstalt (PTB).

For additional information please refer to Radcal's Product note: "The Importance of Conformance Testing". Radcal recommends revalidation in 12 months.

Certificate Issue Date 15-Aug-18

By: 
Authorized Representative

Report No: 124265MAL

MQSA⁽¹⁾ Certificate of Calibration

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1290 Blossom Drive
Victor, Ny 14564

Equipment Description	Model	S/N	Asset No.
Accu-Gold Digitizer Module	AGDM	40-0200	N/A
Accu-Gold Multi-Sensor	AGMS-M	42-0121	N/A

Condition of Equipment As-Left:

In Tolerance

Remarks: Prior to calibration, the equipment was examined and found to be in good condition and performed in accordance with the manufacturer's specifications with the exceptions listed below:

1. None

The equipment identified above has been calibrated and tested using standard Radcal calibration and acceptance procedures in accordance with Radcal Quality Manual PP1007, 4600131 - CertCal - Mammo Sensor.XLT Rev:G and technical requirements contained in the customer's order. These procedures are designed to ensure that the tested equipment meets or exceeds the stated specifications and the requirements of ANSI/NCLZ Z540-1-1994.

⁽¹⁾See MQSA Advisory Note attached.

All measurements performed during the testing employ equipment traceable to NIST or another recognized National Laboratory such as Physikalisch-Technische Bundesanstalt (PTB). All calibration results included with this certificate were recorded at the time of measurement and shall not imply anything about the instrument's future stability. This must be determined from previous historical data.


Calibration Date: 15 August 2018

Date of Report 15 August 2018

Interval, as defined by MQSA: 24 months after date of calibration

Calibration Due: 15 August 2020

Calibration Tech.:


AV

By:


Authorized Reviewers
E. Macintosh / M. Bryant

MQSA⁽¹⁾ Certificate of Calibration

Measurement Test Conditions

A Lorad M-II Mammographic X-ray generator equipped with Molybdenum target and a beryllium window x-ray tube was used as the source of the required mammographic x-ray beam. The generator ripple is less than 1 kV. Filters were added to produce the required beam (see data). The output of the generator was measured with a Radcal Dynalyzer invasive voltage divider. The HV-1 output was measured with an analog-to-digital converter with an uncertainty of $\pm 0.1\%$. All reported kVp, mA and time measurement results have an uncertainty of better than $\pm 1\%$ at the 95% confidence level. Dose measurements were made using the substitution method and normalized with a reference mammographic dose diode. Reported dose and dose rate measurement results have an uncertainty of better than $\pm 5\%$ at the 95% confidence level.

Conditions of Measurement

Temperature: 25.6 °C
 Pressure: 99.57 kPa
 Humidity: 29%

NOTE: All dose measurements were normalized to 22°C, 101.3 kPa.
 "CF" = correction factor and True Reading = CF x Reading
 All exposures were made with the DUT oriented perpendicular to the beam.
 The beam is collimated to not expose the chamber stem (if applicable).

All Multi-Sensor readings were captured with: Accu-Gold 2.40.2

Exposure Properties

ISO Beam	Added Filtration (µm Mo)	First HVL (mm Al)	Set kV	Avg. Current mA	Avg. Time ms	Distance (Perp.)
RQR-M-3	32.6	0.361	30.4	27.9	406	48 cm

Calibration Results

Exposure #	Standard	DUT	DUT CF
	Dose mGy	Dose mGy	
1	3.076	3.190	0.964
2	3.074	3.192	0.963
3	3.076	3.191	0.964
Avg.	3.075	3.191	0.964