equipment

ESI SR104 (REF -> M1)

Reference	ESI	Calibration date	June 25 2021
Ref P/N	SR104	Ambient Temperature	24.60 °C
Serial	834026	Relative Humidity	42.22 %
ID Number	xDevs Transfer, traceable	Pressure	1021.76 hPa
Notes	Both SR104 isothermal at +23.0 °C	Test type	Datron 1281 nulled DMM ports, TrueOHM, RESL8

Reference standard	Mfg	Model	Options	Serial / Unc	CEID	Calibration date	Due date
10KR STD	ESI	SR104	10000.0028 Ω	G202088930104	C1210608	06/08/2021	06/08/2022
DMM	Datron	1281			XTR2	06/25/2021	06/25/2022

xDevs.com certifies that this calibration used standards whose accuracies are traceable to the SI, through ISO 17025 Accredited Measurement Laboratory. Actual measurement uncertainty available upon request was calculated using the expanded method and is expressed in values at approximately the 95% confidence level using a coverage factor of K= 2.

Certificate statements are based on test results within specified limits without reduction of the uncertainty of the test and/or measurement. The test and measurement data here relate only to the item tested and/or measured. Unit acceptance of failure includes uncertainty data compilation. Calibration due date that appears on the Certificate of Calibration and labels are determined by the customer and does not imply conformance to a standard.

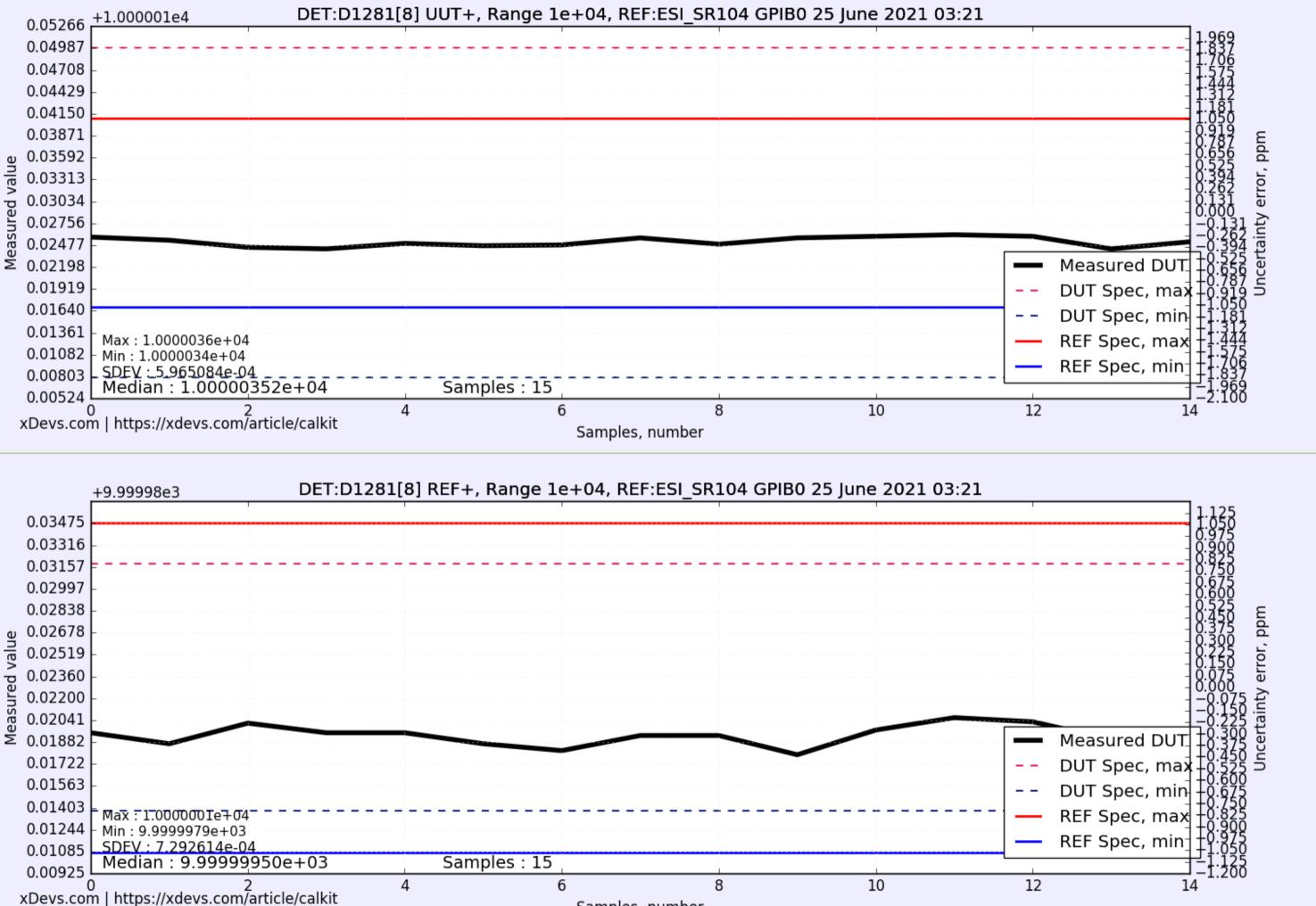
UUT output transferred by manual ratiometric measurement with reference standard.

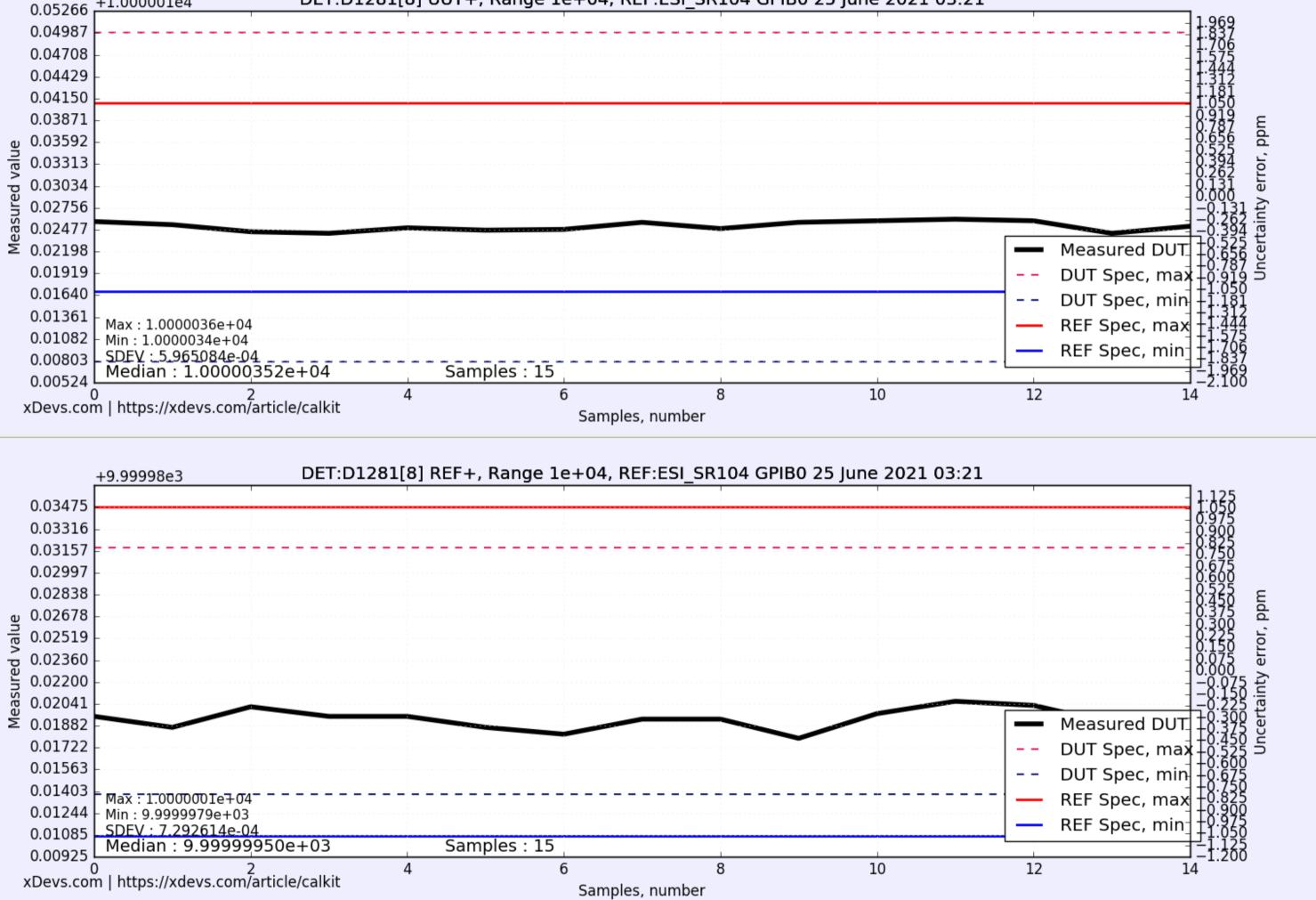
Fixed 10000 Ω TrueOhm range is used on the Datron 1281 detector. The following test use 10 minute transfer specification with ESI SR104 output source as reference. Gain verified for stability ±0.10 ppm over the test period. Detector zero offset is DUT is nulled prior to the measurement.

Configuration : RESL8, FILT OFF, XFER, LOI OFF, Guarded, PTFE wiring on FRONT, CH A, CH B ports.

	Measurement	Unit	Uncertainty	Standard Deviation	DUT Spec / Δ	Degree of freedom / Notes
Transfer reference output	10000.0028	Ω	±0.100 ppm			
Reference measured output (+)	9999.9993	Ω	±0.300 ppm	σ = 8.195120e-04 Ω	Δ = -0.350 ppm	15
Reference calculated +/-	9999.9993	Ω	±0.300 ppm		Δ = -0.350 ppm	
Detector zero offset	0.0000	Ω		σ = 1.050057e-07 Ω		
UUT measured output (+)	10000.0354	Ω	±0.300 ppm	σ = 5.878775e-04 Ω		15
Ratio positive polarity	1.00000362		±0.600 ppm			Inf
UUT calculated output (+)	10000.0390	Ω	±0.700 ppm		Δ = 0.000 ppm	
Temperature Δ	-0.270	°C	±0.60 °C		±1.0 °C	
UUT previous data	10000.0388	Ω	±0.110 ppm			Report
Deviation from previous measurement	+0.020 ppm	Ω				
UUT Expanded measurement (Linear) k=2	10000.0390	Ω	±0.700 ppm		0.1%	In spec
UUT Expanded measurement (RSS) k=2	10000.0390	Ω	±0.608 ppm		0.1%	In spec

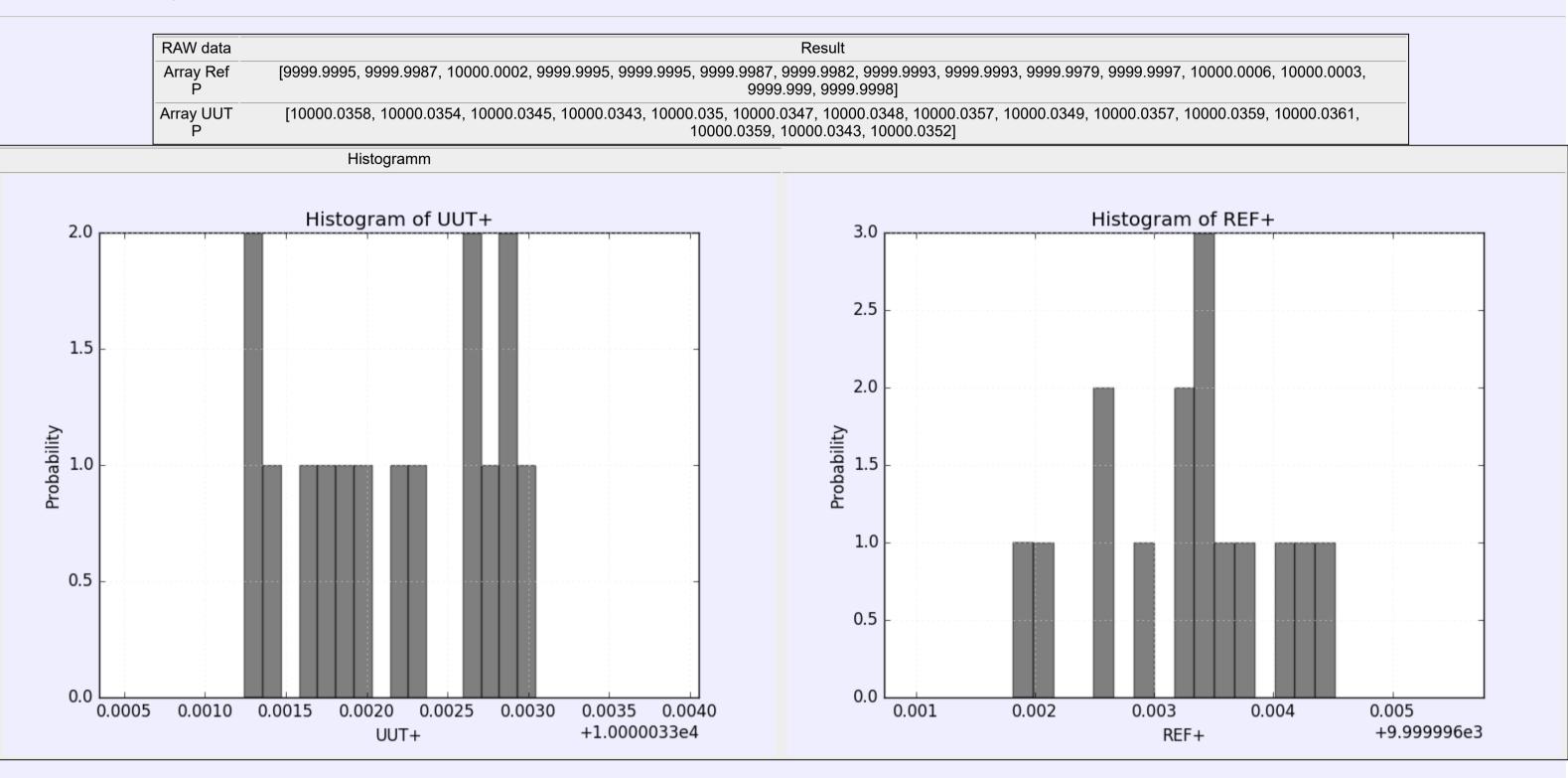
Statistics image data





Test procedure : \$Id: xfer_dcv.py | Rev 2008 | 2021/06/25 00:49:03 tin_fpga \$

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