

Reference	Fluke   xDevs.com	Calibration date	August 09 2020
Ref P/N	792X	Ambient Temperature	22.29 °C
Serial	X102	Relative Humidity	47.83 %
ID Number	Niko's unit	Pressure	1015.38 hPa
Notes	Sub xfer, battery powered SSVR	Test type	Front spade lug terminals

Reference standard	Mfg	Model	Options	Serial / Unc	CEID	Calibration date	Due date
SSVR STD	Fluke/xDevs.com	792X	9.9999728 VDC	X102	A3525075	03/03/2020	03/03/2021
DMM	HP	3458A	001,X02	MY45040325	XD2 LN	03/18/2020	09/18/2020

xDevs.com certifies that this calibration used standards whose accuracies are traceable to the SI, through National 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.

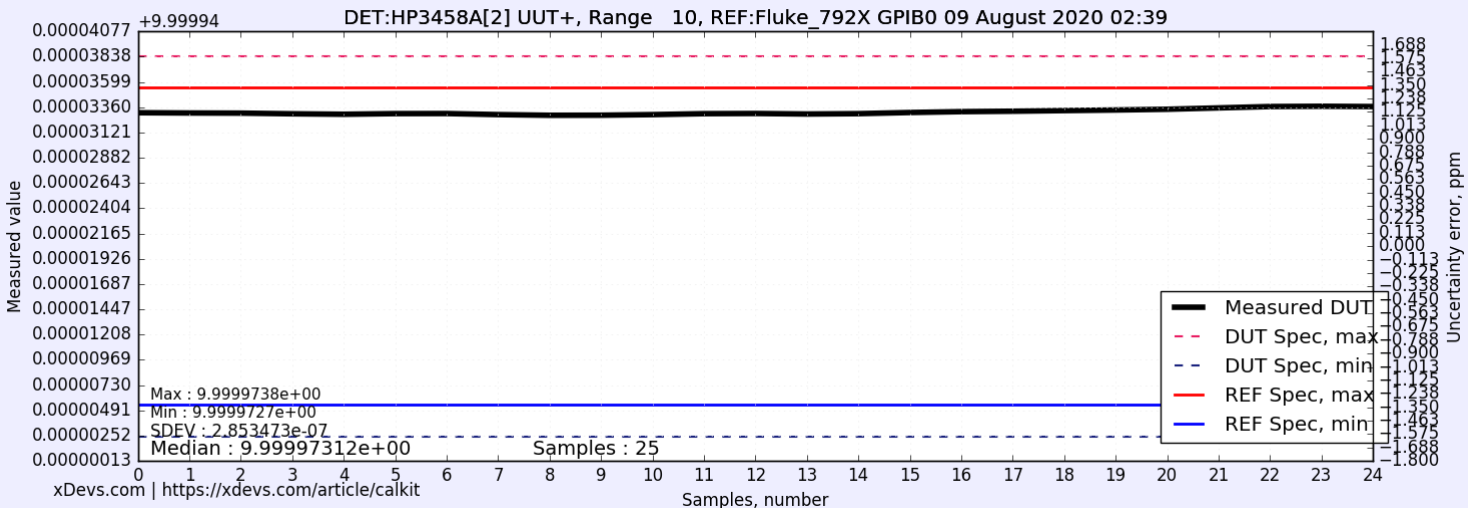
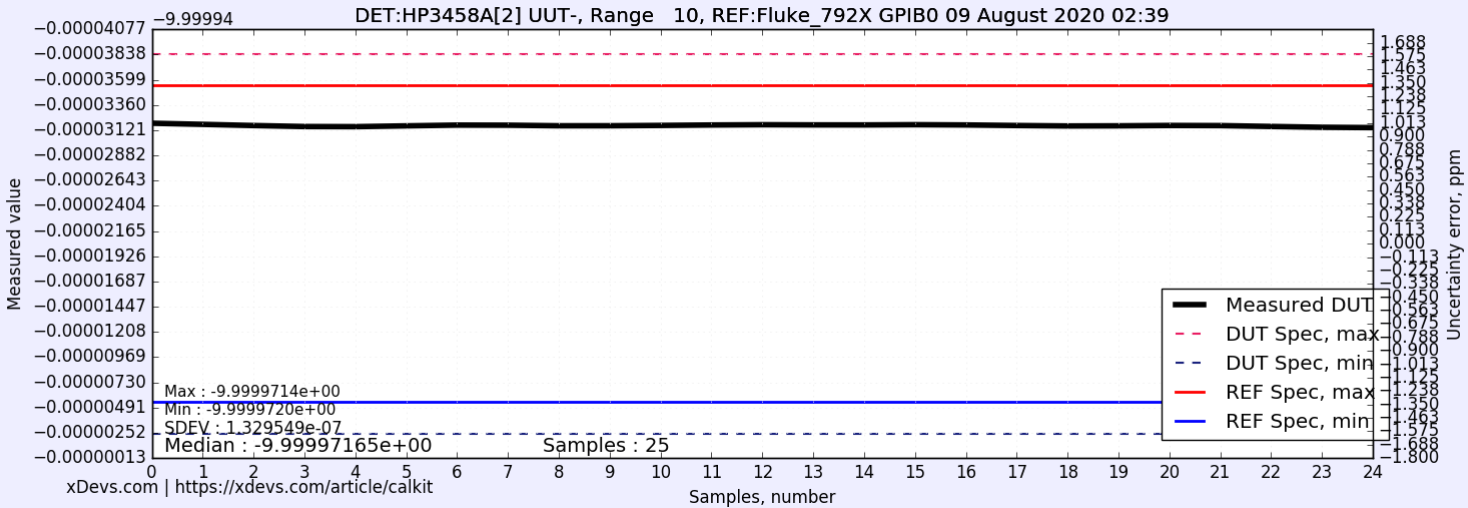
Certificate statements are based on test results within specified limits without reduction of the uncertainty of the test and/or measurement. The test and measurement data here relate only to the item tested and/or measured. Unit acceptance of failure includes uncertainty data compilation. Calibration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

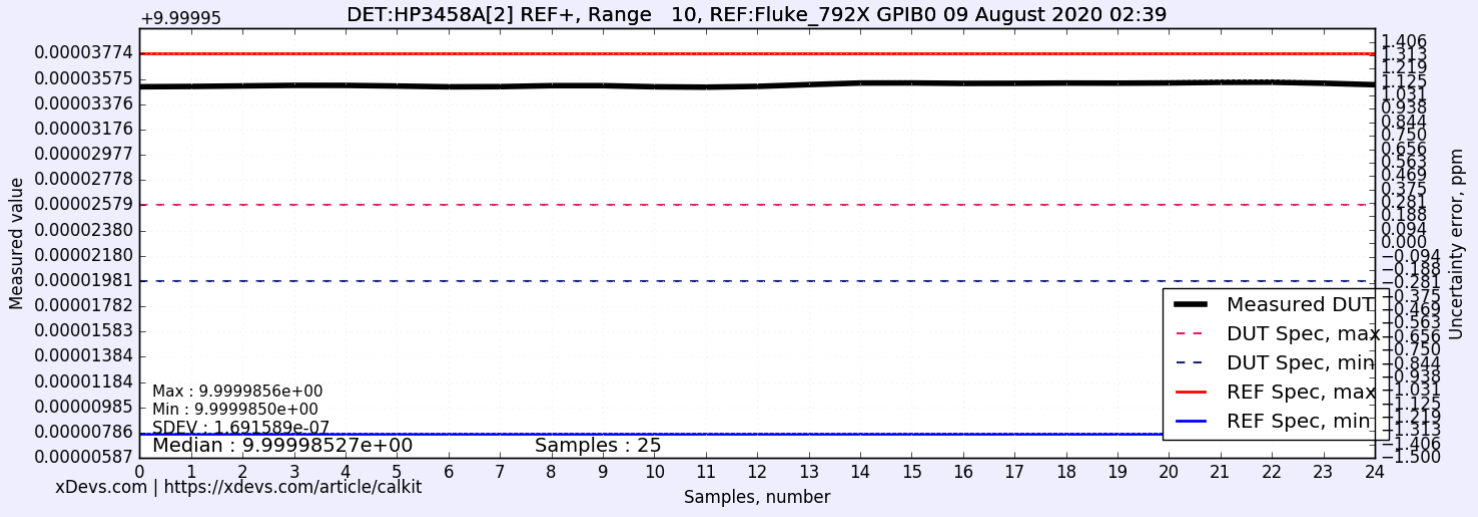
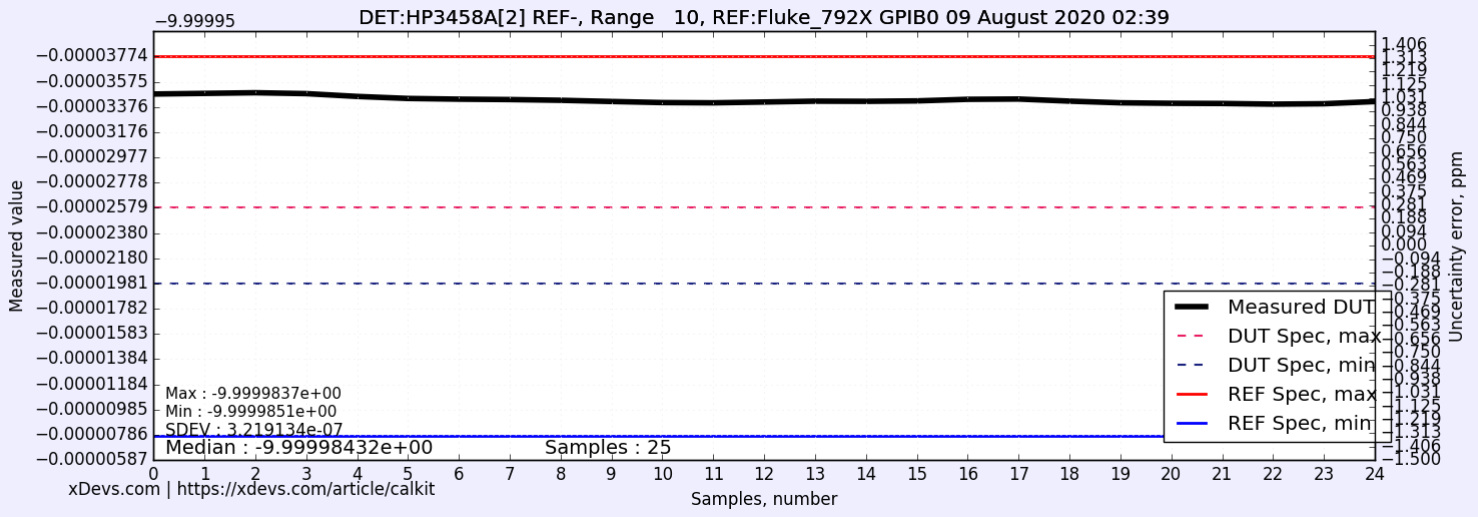
UUT output transferred by manual ratiometric measurement with reference standard. Fixed 1.000e+01 range is used on the Keysight 3458A/X02 detector. The following test use 10 minute transfer specification with Fluke 792X output source as reference. Gain verified for stability ±0.10 ppm over the test period. Detector zero offset is DUT is nulled prior to the measurement.

Configuration : Battery power STD, NPLC100, NDIG8, Guard is open.

	Measurement	Unit	Uncertainty	Standard Deviation	DUT Spec / Δ	Degree of freedom / Notes
<b>Transfer reference output</b>	<b>9.9999728</b>	<b>VDC</b>	<b>±0.400 ppm</b>			
Reference measured output (+)	9.9999853	VDC	±0.100 ppm	$\sigma = 1.790449e-07$ VDC	$\Delta = 1.254$ ppm	25
Reference measured output (-)	-9.9999841	VDC	±0.100 ppm	$\sigma = 2.164381e-07$ VDC	$\Delta = 1.133$ ppm	25
Reference calculated +/-	9.9999847	VDC	±0.100 ppm		$\Delta = 1.194$ ppm	
Detector zero offset	-0.0000000	VDC		$\sigma = 0.000000e+00$ VDC		
UUT measured output (+)	9.9999731	VDC	±0.100 ppm	$\sigma = 2.993094e-07$ VDC		25
UUT measured output (-)	-9.9999716	VDC	±0.100 ppm	$\sigma = 0.1144$ μVDC		25
Ratio positive polarity	0.99999878		±0.200 ppm			Inf
Ratio negative polarity	0.99999875		±0.200 ppm			Inf
UUT calculated output (+)	9.9999606	VDC	±0.600 ppm		$\Delta = 0.014$ ppm	
UUT calculated output (-)	-9.9999603	VDC	±0.600 ppm		$\Delta = -0.014$ ppm	
Temperature Δ	0.155	°C	±1.00 %		±1.0 °C	
UUT previous data	9.9999687	VDC	±2.000 ppm			Report
Deviation from previous	-0.825 ppm	VDC	±2.049 ppm			
<b>UUT transfer result (Linear)</b>	<b>9.9999605</b>	<b>VDC</b>	<b>±0.600 ppm</b>		0.1%	In spec
<b>UUT transfer result (RSS)</b>	<b>9.9999605</b>	<b>VDC</b>	<b>±0.447 ppm</b>		0.1%	In spec

Statistics image data





Test procedure : \$Id: xfer\_dcv.py | Rev 1683 | 2020/03/10 05:59:56 tin\_fpga \$

Lab temperature maintained +23°C ±1°C

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RAW data	Result
Array Ref P	[9.999985112, 9.999985165, 9.999985165, 9.999985305, 9.999985235, 9.999985252, 9.999985042, 9.999985077, 9.99998527, 9.999985375, 9.999984972, 9.99998513, 9.999985077, 9.99998527, 9.999985603, 9.999985393, 9.999985393, 9.99998534, 9.999985533, 9.99998534, 9.999985428, 9.999985498, 9.99998555, 9.99998548, 9.999985182]
Array Ref N	[-9.999984745, -9.999984832, -9.999984885, -9.999985077, -9.999984394, -9.999984412, -9.999984359, -9.999984359, -9.999984324, -9.999984184, -9.999984062, -9.999984044, -9.999984079, -9.999984394, -9.999984114, -9.999984149, -9.999984377, -9.999984692, -9.999984009, -9.999984114, -9.999983974, -9.999984114, -9.999984009, -9.999983694, -9.999984429]
Array UUT P	[9.999973135, 9.999972942, 9.999973153, 9.999972995, 9.99997275, 9.999973083, 9.999973135, 9.999972802, 9.999972802, 9.999972855, 9.99997282, 9.999973048, 9.999973135, 9.999972802, 9.999972977, 9.9999731, 9.999973275, 9.999973118, 9.999973345, 9.99997331, 9.99997338, 9.999973468, 9.999973818, 9.999973678, 9.999973643]
Array UUT N	[-9.999971979, -9.999971664, -9.999971734, -9.999971454, -9.999971489, -9.999971629, -9.999971734, -9.999971787, -9.999971472, -9.999971699, -9.999971612, -9.999971717, -9.999971769, -9.999971717, -9.999971612, -9.999971857, -9.999971647, -9.999971717, -9.999971507, -9.999971647, -9.999971647, -9.999971752, -9.999971507, -9.999971472, -9.999971437]

Histogram

