Keysight 3458A RoHS

Manufacturer	HEWLETT-PACKARD	Calibration date	February 24 2021
Model Number	3458A	Ambient Temperature	23.55 °C
Serial	ROHS14 meter	Relative Humidity	24.33 %
ID Number	STD Calibration test, GPIB14 unit	Pressure	999.01
Notes	Test front spade cables	Test type	Front terminals

This note is test dummy text block for further use. It allow to include user information for further reference

Reference standard	Mfg	Model	Options	Serial / Unc	CEID	Calibration date	Due date
MFC	Fluke	5720A		9250208	VDM1	11.DEC.2020	11.DEC.2021

MFC last calibrated	78.0 days ago	MFC since DCV ZERO	0.0 days ago
MFC since WBFLAT	12111.0 days ago	MFC since WBGAIN	5268.0 days ago
MFC Confidence level	**24h 95% REL**	MFC Calibrate date	2020-11-12 00:00:00
MFC Calibrate date Zero	Debug	Calibrate date WB Flatness	1988-10-01 00:00:00
Calibrate date WB Gain	Debug	CAL CONST 6.5V reference voltage	6.91958652035
CAL CONST 13V reference voltage	13.8237896968	CAL CONST 22V range positive zero	398.17439
CAL CONST 22V range negative zero	398.1739	CAL CONST DAC Linearity	0.316817603263
CAL CONST 10KOHM true output resistance	9999.90365044	CAL CONST 10KOHM standard resistance	9998.84909801
CAL CONST, Zero calibration temperature	23.0	CAL CONST, All calibration temp	23.0
Booster type	VB5725,IB5725	Current output posts	AUX
Calibrate date 5725A AMP	1988-10-01 00:00:00	Calibrated days ago	2011-12-01 00:00:00
CAL CONST, Amp ACAL temperature	23.0	CAL CONST, Amp CalCheck temperature	23.0

Total uncertainty of each calibration point calculated with RSS

$$U_{95\%} = \sqrt{U_{SRC}{}^2 + U_{DUT}{}^2} * 2$$

Meter Info	HP3458A	Last calibration date	7/24/2018
CALSTR?	"PASS 55 MY59350899"	Test date	24 February 2021 11:28
DUT Internal TEMP?	33.3	DUT Calibrations number?	1
Self-test result?	0,"NO ERROR"	ACAL ALL result?	0,"NO ERROR"
Firmware	9,2	Options	1,0
CAL? 72	0.98993216	CAL? 1,1	40006.2739

CAL? 2,1	7.12452714	CAL? Res 73	0.989997081
CAL 0 TEMP	35.28	CAL 10V TEMP	33.91
CAL 10KOhm TEMP	33.87	CAL? DCI	0.990298106

Service information

CAL DUMP
[(1, 40006.2739), (1, 7.12452714), (1, -8.74329047e-06), (1, -8.41241097e-06), (1, -8.73104866e-06), (1, -8.40673853e-06), (1, -8.9127082e-06), (1, -8.49978624e-06), (1, -0.000100281323), (1, -0.000100281323), (1, -0.000117740954), (1, -0.000117740954), (1, 0.612177496), (1, 0.604194882), (1, 0.604089946), (1, 0.523774547), (1, 0.43138568), (1, -1.26453479), (1, -18.8079693), (1, -17.3681248), (1, -17.3681248), (1, 0.620050228), (1, 0.612347557), (1, 0.612262256), (1, 0.534492776), (1, 0.443434223), (1, -1.18962159), (1, -16.5282155), (1, -16.2882414), (1, -16.2882414), (1, -1.59644317e-06), (1, 8.61961958e-05), (1, 3.80058684e-05), (1, -0.000773826366), (1, -0.00200310767), (1, 0.0599305589), (1, -1.19987045), (1, -0.899902838), (1, -0.899902838), (1, 9.81750404e-06), (1, 0.000150503124), (1, 0.000154944697), (1, 0.000421964551), (1, 0.00352786127), (1, -0.0179791677), (1, -0.749919032), (1, -0.269970851), (1, -0.269970851), (1, 613.0), (1, 60.0), (1, 6.0), (1, 0.0), (1, 0.0), (1, 0.0), (1, 0.0), (1, 0.0), (1, 0.0), (1, 35.276808), (1, 33.9066906), (1, 33.8725092), (1, 122.0), (1, -1.21163968e-11), (1, -2.55432641e-11), (1, -1.87421453e-10), (1, -1.32389222e-09), (1, -9.78426031e-09), (1, -9.53328956e-08), (1, -8.91162334e-07), (1, -9.78651184e-06), (1, 0.989398018), (1, 0.990027087), (1, 0.98993216), (1, 0.989997081), (1, 0.989902157), (1, 1.0001507), (1, 0.999917284), (1, 1.00055304), (1, 1.00045842), (1, 0.998411141), (1, 1.000687), (1, 1.00173834), (1, 1.00173834), (1, 1.00173834), (1, 1.0001507), (1, 0.999917291), (1, 1.00055305), (1, 1.00045844), (1, 0.998411287), (1, 1.000687), (1, 1.00173834), (1, 1.00173834), (1, 1.00173834), (1, 0.990298106), (1, 0.989302599), (1, 0.989234216), (1, 0.98932736), (1, 0.988886099), (1, 0.986810182), (1, 0.981925627), (1, 0.989803904), (1, 47.0), (1, 53.0), (1, 4.93678952), (1, 7.16121236e-12), (1, -5.42676577e-12), (1, 9995600.13), (1, 0.00550952591), (1, -0.0187960292), (1, 0.999999556), (1, 0.999999893), (1, 1667.00384), (1, 16666.9972), (1, 5102.0), (1, 5099.0), (1, 5100.0), (1, 5099.0), (1, 5100.0), (1, 61224.0), (1, 61188.0), (1, 61200.0), (1, 61188.0), (1, 61200.0), (1, 5008.0), (1, 5009.0), (1, 5006.0), (1, 5006.0), (1, 2508.0), (1, 2502.0), (1, 2500.0), (1, 12501.0), (1, 22729.0), (1, 60096.0), (1, 60108.0), (1, 60072.0), (1, 60072.0), (1, 30096.0), (1, 30024.0), (1, 30000.0), (1, 150012.0), (1, 272748.0), (1, 5008.0), (1, 5009.0), (1, 5006.0), (1, 5006.0), (1, 2508.0), (1, 2502.0), (1, 2500.0), (1, 12501.0), (1, 22729.0), (1, 60096.0), (1, 60108.0), (1, 60072.0), (1, 60072.0), (1, 30096.0), (1, 30024.0), (1, 30000.0), (1, 150012.0), (1, 272748.0), (1, 278.0), (1, 278.0), (1, 278.0), (1, 278.0), (1, 278.0), (1, 278.0), (1, 278.0), (1, 278.0), (1, 3336.0), (1, 3336.0), (1, 3336.0), (1, 3336.0), (1, 3336.0), (1, 3336.0), (1, 3336.0), (1, 3336.0), (1, 33.2619663), (1, 33.4360382), (1, 33.489344), (1, 126.0), (1, 126.0), (1, 124.0), (1, 123.0), (1, 126.0), (1, 126.0), (1, 121.0), (1, 121.0), (1, 124.0), (1, 123.0), (1, 126.0), (1, 126.0), (1, 125.0), (1, 125.0), (1, 125.0), (1, 125.0), (1, 125.0), (1, 2409.0), (1, 2439.0), (1, 1352.0), (1, 1368.0), (1, 1536.0), (1, 1541.0), (1, 127.0), (1, 127.0), (1, 127.0), (1, 127.0), (1, 125.0), (1, 127.0), (1, 127.0), (1, 127.0), (1, 127.0), (1, -0.00117169819), (1, -0.0102629866), (1, -0.105799814), (1, -1.06258691), (1, -10.6386553), (1, -105.936535), (1, -0.0011141713), (1, -0.0103037823), (1, -0.107304216), (1, -1.06752688), (1, -10.6524002), (1, -105.887152), (1, 1.00792497), (1, 1.01525999), (1, 1.05232677), (1, 1.0792222), (1, 1.06888698), (1, 1.06962093), (1, 2056.2603), (1, 10.3794562), (1, 0.994137538), (1, 1.00145492), (1, 1.03801768), (1, 1.06454739), (1, 1.05435272), (1, 1.05507668), (1, 6.07952092e-08), (1, 6.26177419e-07), (1, 6.26177419e-06), (1, 6.26177419e-05), (1, 0.000626177419), (1, 0.00626177419), (1, 1.02515788), (1, 0.999794658), (1, 0.999975166), (1, 1.00005016), (1, 48.0), (1, 54.0), (1, 54.0), (1, 54.0), (1, 48.0), (1, 52.0), (1, 52.0), (1, 9.0)]
Verification
DUT Condition
xfer-calkit

Test procedure : $Id: hp3458a.py | Rev 2037 | 2021/02/23 03:29:08 Vadim $

Source procedure : $Id: f5720b.py | Rev 2035 | 2020/12/28 08:14:46 Vadim $

Main DC Voltage ranges performance test.
Checks zero offset and +/-FS calibration on all ranges
The following test for the offset voltage specification using MFC 0V source in 4-wire ext sense mode as reference.
DCV gain range points verify gain of the DC voltage function, using uncorrected 24-hour MFC output. DC voltage offset of DUT is nulled before FS tests.

Test Description	Expected Value	Measured Value	Measurement Uncertainty	Lower Limit	Upper Limit	Deviation	DUT Spec	Test Status
Short 0 mVDC	0.0000000E+00	**-2.48 µV**	0.75 µV	-0.910 µV	0.910 µV	N/A	0.16 µV	FAIL
Short 0.0 VDC	0.0000000E+00	**-2.49 µV**	0.75 µV	-0.900 µV	0.900 µV	N/A	0.15 µV	FAIL
Short 00.0 VDC	0.0000000E+00	**-2.59 µV**	0.75 µV	-1.070 µV	1.070 µV	N/A	0.32 µV	FAIL
Short 000.0 VDC	0.0000000E+00	**10.00 µV**	0.75 µV	-14.750 µV	14.750 µV	N/A	14.00 µV	PASS
Short 0000.0 VDC	0.0000000E+00	**5.88 µV**	0.75 µV	-41.750 µV	41.750 µV	N/A	41.00 µV	PASS
DCV Test	**0.1V-1000V**	**DUT**	**Source unc.**	**Low Limit**	**Hi limit**	**Measured**	**24h spec**	**Result**
0.019 VDC (0.10 Range)	0.0190000	**0.019000008**	7.27 ppm	0.018999514	0.019000486	0.411 ppm	18.29 ppm	PASS 2.09 %
0.1 VDC (0.10 Range)	0.1000000	**0.1**	7.27 ppm	0.099998723	0.10000128	0.023 ppm	5.50 ppm	PASS 0.25 %
0.11 VDC (0.10 Range)	0.1100000	**0.11000003**	7.27 ppm	0.10999863	0.11000137	0.312 ppm	5.23 ppm	PASS 3.48 %
-0.019 VDC (0.10 Range)	-0.0190000	**-0.018999906**	7.27 ppm	-0.019000486	-0.018999514	-4.950 ppm	18.29 ppm	PASS 25.15 %
-0.1 VDC (0.10 Range)	-0.1000000	**-0.099999802**	7.27 ppm	-0.10000128	-0.099998723	-1.985 ppm	5.50 ppm	PASS 21.77 %
-0.11 VDC (0.10 Range)	-0.1100000	**-0.10999977**	7.27 ppm	-0.11000137	-0.10999863	-2.053 ppm	5.23 ppm	PASS 22.92 %
0.19 VDC (1.00 Range)	0.1900000	**0.19000017**	7.27 ppm	0.18999803	0.19000197	0.917 ppm	3.08 ppm	PASS 11.62 %
1.0 VDC (1.00 Range)	1.0000000	**0.99999968**	3.86 ppm	0.99999434	1.0000057	-0.319 ppm	1.80 ppm	PASS 7.49 %
1.1 VDC (1.00 Range)	1.1000000	**1.0999995**	3.86 ppm	1.0999938	1.1000062	-0.422 ppm	1.77 ppm	PASS 9.93 %
-0.19 VDC (1.00 Range)	-0.1900000	**-0.18999975**	7.27 ppm	-0.19000197	-0.18999803	-1.332 ppm	3.08 ppm	PASS 16.87 %
-1.0 VDC (1.00 Range)	-1.0000000	**-0.99999796**	3.86 ppm	-1.0000057	-0.99999434	-2.043 ppm	1.80 ppm	PASS 47.96 %
-1.1 VDC (1.00 Range)	-1.1000000	**-1.0999977**	3.86 ppm	-1.1000062	-1.0999938	-2.090 ppm	1.77 ppm	PASS 49.21 %
1.9 VDC (10.00 Range)	1.9000000	**1.8999988**	3.86 ppm	1.8999912	1.9000088	-0.646 ppm	0.76 ppm	PASS 16.42 %
10.0 VDC (10.00 Range)	10.0000000	**9.9999952**	2.77 ppm	9.9999668	10.000033	-0.481 ppm	0.55 ppm	PASS 17.04 %
11.0 VDC (10.00 Range)	11.0000000	**10.999997**	2.73 ppm	10.999964	11.000036	-0.232 ppm	0.55 ppm	PASS 8.33 %
-1.9 VDC (10.00 Range)	-1.9000000	**-1.8999974**	3.86 ppm	-1.9000088	-1.8999912	-1.374 ppm	0.76 ppm	PASS 34.91 %
-10.0 VDC (10.00 Range)	-10.0000000	**-9.999989**	2.77 ppm	-10.000033	-9.9999668	-1.097 ppm	0.55 ppm	PASS 38.86 %
-11.0 VDC (10.00 Range)	-11.0000000	**-10.999988**	2.73 ppm	-11.000036	-10.999964	-1.063 ppm	0.55 ppm	PASS 38.17 %
19 VDC (100.00 Range)	19.0000000	**19.000043**	2.77 ppm	18.99987	19.00013	2.273 ppm	4.08 ppm	PASS 46.10 %
100 VDC (100.00 Range)	100.0000000	**100.00004**	3.73 ppm	99.999347	100.00065	0.382 ppm	2.80 ppm	PASS 8.18 %
110 VDC (100.00 Range)	110.0000000	**109.99995**	3.73 ppm	109.99928	110.00072	-0.472 ppm	2.77 ppm	PASS 10.15 %
-19 VDC (100.00 Range)	-19.0000000	**-19.000007**	2.77 ppm	-19.00013	-18.99987	0.392 ppm	4.08 ppm	PASS 7.96 %
-100 VDC (100.00 Range)	-100.0000000	**-100.00003**	3.73 ppm	-100.00065	-99.999347	0.332 ppm	2.80 ppm	PASS 7.12 %
-110 VDC (100.00 Range)	-110.0000000	**-110.00001**	3.73 ppm	-110.00072	-109.99928	0.053 ppm	2.77 ppm	PASS 1.13 %
190 VDC (1000.00 Range)	190.0000000	**189.99973**	3.73 ppm	189.99872	190.00128	-1.441 ppm	3.03 ppm	PASS 29.99 %
500 VDC (1000.00 Range)	500.0000000	**499.99981**	3.73 ppm	499.99678	500.00322	-0.381 ppm	2.70 ppm	PASS 10.22 %
1000 VDC (1000.00 Range)	1000.0000000	**999.99231**	5.45 ppm	999.97995	1000.02	-7.694 ppm	2.60 ppm	PASS 58.38 %
-190 VDC (1000.00 Range)	-190.0000000	**-189.99976**	3.73 ppm	-190.00128	-189.99872	-1.259 ppm	3.03 ppm	PASS 26.20 %
-500 VDC (1000.00 Range)	-500.0000000	**-500.00004**	3.73 ppm	-500.00322	-499.99678	0.082 ppm	2.70 ppm	PASS 0.65 %
-1000 VDC (1000.00 Range)	-1000.0000000	**-999.99163**	5.45 ppm	-1000.02	-999.97995	-8.370 ppm	2.60 ppm	PASS 63.51 %

4W test procedure for all test points that verify Gain of the OHMF function. 4-wire kelvin connection is used between DMM and MFC.
1GΩ resistance range is tested using the external standard, as MFC unable to provide this range value.

OHM Test	Reference	DUT	Source unc.	Low Limit	Hi limit	Measured	24h spec	Result
1 Ω	0.9999951 Ω	**1.0000214 Ω**	32.0 ppm	9.9992810E-01	1.0000621E+00	26.330 ppm	35.00 ppm	PASS, 55.52 % of 47.42 ppm
1.9 Ω	1.8995806 Ω	**1.8995527 Ω**	25.0 ppm	1.8994936E+00	1.8996676E+00	-14.677 ppm	20.79 ppm	PASS, 46.22 % of 31.75 ppm
10 Ω	9.999534	**9.9994598**	5.00 ppm	9.9994040E+00	9.9996640E+00	-7.417 ppm	8.0 ppm	PASS, 82.92 % of 8.94 ppm
19 Ω	19.000082 Ω	**18.999918 Ω**	4.0 ppm	1.8999649E+01	1.9000515E+01	-8.647 ppm	18.79 ppm	PASS, 45.01 % of 19.21 ppm
100 Ω	99.99773 Ω	**99.997253 Ω**	1.7 ppm	9.9996960E+01	9.9998500E+01	-4.769 ppm	6.00 ppm	PASS, 76.47 % of 6.24 ppm
190 Ω	190.00159 Ω	**190.00068 Ω**	1.7 ppm	1.9000069E+02	1.9000249E+02	-4.806 ppm	3.05 ppm	FAIL, 137.56 % of 3.49 ppm
1.0 kΩ	1000.0208 kΩ	**1000.018 kΩ**	1.7 ppm	1.0000169E+03	1.0000247E+03	-2.797 ppm	2.20 ppm	FAIL, 100.62 % of 2.78 ppm
1.9 kΩ	1900.036 kΩ	**1900.0315 kΩ**	1.7 ppm	1.9000270E+03	1.9000450E+03	-2.392 ppm	3.05 ppm	PASS, 68.45 % of 3.49 ppm
10 kΩ	9999.916 kΩ	**9999.8871 kΩ**	1.6 ppm	9.9998780E+03	9.9999540E+03	-2.888 ppm	2.20 ppm	FAIL, 106.16 % of 2.72 ppm
19 kΩ	19000.292 kΩ	**19000.257 kΩ**	1.7 ppm	1.9000202E+04	1.9000382E+04	-1.859 ppm	3.05 ppm	PASS, 53.22 % of 3.49 ppm
100 kΩ	99998.81 kΩ	**99998.461 kΩ**	2.0 ppm	9.9998390E+04	9.9999230E+04	-3.493 ppm	2.20 ppm	FAIL, 117.47 % of 2.97 ppm
190 kΩ	189999.8 kΩ	**189999.26 kΩ**	2.0 ppm	1.8999652E+05	1.9000308E+05	-2.845 ppm	15.26 ppm	PASS, 18.48 % of 15.39 ppm
1.0 MΩ	999970 MΩ	**999968.01 MΩ**	2.5 ppm	9.9995650E+05	9.9998350E+05	-1.990 ppm	11.00 ppm	PASS, 17.64 % of 11.28 ppm
1.9 MΩ	1900005.6 MΩ	**1900010.2 MΩ**	3.0 ppm	1.8998549E+06	1.9001563E+06	2.439 ppm	76.32 ppm	PASS, 3.20 % of 76.34 ppm
10 MΩ	9998760 MΩ	**9998671.7 MΩ**	10.0 ppm	9.9981101E+06	9.9994099E+06	-8.833 ppm	55.00 ppm	PASS, 15.80 % of 55.90 ppm
19 MΩ	18999470 MΩ	**18999519 MΩ**	20.0 ppm	1.8988590E+07	1.9010350E+07	2.603 ppm	552.63 ppm	PASS, 0.47 % of 552.99 ppm
100 MΩ	99998610 MΩ	**99989617 MΩ**	50.0 ppm	9.9942611E+07	1.0005461E+08	-89.936 ppm	510.00 ppm	PASS, 17.55 % of 512.45 ppm

4W and 2W Zero test procedure for all test points that verify Zero offset of the OHMF function. 4-wire kelvin connection is used between DMM and MFC. 1GΩ resistance range is tested using the external standard, as MFC unable to provide this range value.

OHM ZERO 4W	DUT	Source unc.	Low Limit	Hi limit	Measured	24h spec	Result
10 Ω	**Range -0.0000033 Ω**	5.000e-05 Ω	-5e-05	5e-05	N/A	8.0000e-06 Ω	PASS
100 Ω	**Range -0.0000177 Ω**	5.500e-04 Ω	-0.00055	0.00055	N/A	2.2000e-06 Ω	PASS
1.0 kΩ	**Range 0.0000150 Ω**	5.500e-03 Ω	-0.0055	0.0055	N/A	2.2000e-06 Ω	PASS
10 kΩ	**Range -0.0000599 Ω**	5.500e-02 Ω	-0.055	0.055	N/A	2.2000e-06 Ω	PASS
100 kΩ	**Range -0.0041856 Ω**	5.500e-01 Ω	-0.55	0.55	N/A	2.2000e-06 Ω	PASS
1.0 MΩ	**Range -0.1438333 Ω**	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	PASS
10 MΩ	**Range -0.4199547 Ω**	5.500e+01 Ω	-55	55	N/A	2.2000e-06 Ω	PASS
100 MΩ	**Range -0.0599935 Ω**	5.500e+02 Ω	-550	550	N/A	2.2000e-06 Ω	PASS
1 GΩ	**Range -0.0299968 Ω**	5.500e+03 Ω	-5500	5500	N/A	2.2000e-06 Ω	PASS
OHM ZERO 2W	**DUT**	**Source unc.**	**Low Limit**	**Hi limit**	**Measured**	**24h spec**	**Result**
10 Ω	**Range 0.2415724 Ω**	3.000e-01 Ω	-0.3	0.3	N/A	8.0000e-06 Ω	PASS
100 Ω	**Range 0.2493472 Ω**	3.500e-01 Ω	-0.35	0.35	N/A	2.2000e-06 Ω	PASS
1.0 kΩ	**Range 0.2492778 Ω**	4.000e-01 Ω	-0.4	0.4	N/A	2.2000e-06 Ω	PASS
10 kΩ	**Range 0.3293183 Ω**	4.000e-01 Ω	-0.4	0.4	N/A	2.2000e-06 Ω	PASS
100 kΩ	**Range 0.4176631 Ω**	5.500e-01 Ω	-0.55	0.55	N/A	2.2000e-06 Ω	PASS
1.0 MΩ	**Range 0.0809063 Ω**	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	PASS
10 MΩ	**Range -0.5099436 Ω**	5.500e+01 Ω	-55	55	N/A	2.2000e-06 Ω	PASS
100 MΩ	**Range -1.9197874 Ω**	5.500e+02 Ω	-550	550	N/A	2.2000e-06 Ω	PASS
1 GΩ	**Range -1.7998007 Ω**	5.500e+03 Ω	-5500	5500	N/A	2.2000e-06 Ω	PASS

Procedure for all test points in the AC performance verification for ANAlog mode. AC-measurements does not suffer from TEMF offsets, test connection can be made using shielded leads terminated with dual banana plugs. MFC main AC output is used as reference source

ACV ANA Test	1V-10V	DUT	w/Guardband	Low Limit	Hi limit	Units	Measured	24h spec	Result
1.0 VAC @ 50.0 kHz	1.0	**1.000125**	129.09	0.99956891	1.00043109	VAC	124.966 ppm	302.0 ppm	PASS 28.99 %
1.0 VAC @ 1.0 MHz	1.0	**1.0126488**	0.2500 %	0.98749	1.01251	VAC	1.2649 %	1.0010 %	FAIL 101.11 %
10 VAC @ 40 Hz	10	**9.9997377**	0.0073 %	9.8892682	10.1107318	VAC	-0.0026 %	1.1000 %	PASS 0.24 %
10 VAC @ 200 Hz	10	**10.001472**	73.18	9.9965682	10.0034318	VAC	147.221 ppm	270.0 ppm	PASS 42.90 %
10 VAC @ 500 Hz	10	**10.001516**	73.18	9.9965682	10.0034318	VAC	151.641 ppm	270.0 ppm	PASS 44.19 %
10 VAC @ 50.0 kHz	10	**10.001228**	129.09	9.9937091	10.0062909	VAC	122.751 ppm	500.0 ppm	PASS 19.51 %
10 VAC @ 1.0 MHz	10	**10.129088**	0.3000 %	9.86	10.14	VAC	1.2909 %	1.1000 %	PASS 92.21 %

Procedure for all test points in the AC performance verification for SYNCronous mode. This is highest AC accuracy test. AC-measurements does not suffer from TEMF offsets, test connection can be made using shielded leads terminated with dual banana plugs. MFC main AC output is used as reference source

ACV SYNC Test	DUT	w/Guardband	Low Limit	Hi limit	Measured	24h spec	Result, % spec
0.01 V AC+DC @ 10 Hz	**0.010005036**	0.0312 %	-0.290006	0.310006	0.0504 %	3000.0300 %	PASS 0.00 %
0.01 V AC+DC @ 20 Hz	**0.010004639**	0.0312 %	-0.290006	0.310006	0.0464 %	3000.0300 %	PASS 0.00 %
0.01 V AC+DC @ 40 Hz	**0.010004016**	0.0312 %	-0.290006	0.310006	0.0402 %	3000.0300 %	PASS 0.00 %
0.01 V AC+DC @ 100 Hz	**0.010002913**	0.0312 %	-0.100005	0.120005	0.0291 %	1100.0200 %	PASS 0.00 %
0.01 V AC+DC @ 1.0 kHz	**0.010004713**	0.0312 %	-0.100005	0.120005	0.0471 %	1100.0200 %	PASS 0.00 %
0.01 V AC+DC @ 10.0 kHz	**0.010002192**	0.0312 %	-0.100006	0.120006	0.0219 %	1100.0300 %	PASS 0.00 %
0.01 V AC+DC @ 20.0 kHz	**0.010004371**	0.0312 %	-0.100006	0.120006	0.0437 %	1100.0300 %	PASS 0.00 %
0.01 V AC+DC @ 50.0 kHz	**0.010003549**	0.0447 %	-0.100014	0.120014	0.0355 %	1100.1000 %	PASS 0.00 %
0.01 V AC+DC @ 100.0 kHz	**0.0099946345**	0.0773 %	-0.100058	0.120058	-0.0537 %	1100.5000 %	PASS 0.00 %
0.01 V AC+DC @ 300.0 kHz	**0.009890752**	0.1500 %	-0.190055	0.210055	-1.0925 %	2000.4000 %	PASS 0.03 %
0.01 V AC+DC @ 500.0 kHz	**0.0097240999**	0.2500 %	-0.490070	0.510070	-2.7590 %	5000.4500 %	PASS 0.03 %
0.01 V AC+DC @ 1.0 MHz	**0.0087761572**	0.4000 %	-0.490085	0.510085	-12.2384 %	5000.4500 %	PASS 0.12 %
0.03 V AC+DC @ 10 Hz	**0.030004163**	0.0121 %	0.029994	0.030006	0.0139 %	0.0083 %	PASS 47.13 %
0.03 V AC+DC @ 20 Hz	**0.030004009**	0.0121 %	0.029994	0.030006	0.0134 %	0.0083 %	PASS 45.38 %
0.03 V AC+DC @ 40 Hz	**0.03000397**	0.0121 %	0.029994	0.030006	0.0132 %	0.0083 %	PASS 44.95 %
0.03 V AC+DC @ 100 Hz	**0.030003574**	0.0121 %	0.029994	0.030006	0.0119 %	0.0077 %	PASS 41.49 %
0.03 V AC+DC @ 1.0 kHz	**0.030004405**	0.0121 %	0.029994	0.030006	0.0147 %	0.0077 %	PASS 51.14 %
0.03 V AC+DC @ 10.0 kHz	**0.030003684**	0.0121 %	0.029992	0.030008	0.0123 %	0.0147 %	PASS 32.26 %
0.03 V AC+DC @ 20.0 kHz	**0.030004559**	0.0121 %	0.029992	0.030008	0.0152 %	0.0147 %	PASS 39.91 %
0.03 V AC+DC @ 50.0 kHz	**0.03000553**	0.0256 %	0.029983	0.030017	0.0184 %	0.0307 %	PASS 23.06 %
0.03 V AC+DC @ 100.0 kHz	**0.030007263**	0.0591 %	0.029958	0.030042	0.0242 %	0.0807 %	PASS 12.11 %
0.03 V AC+DC @ 300.0 kHz	**0.030017319**	0.0964 %	0.029880	0.030120	0.0577 %	0.3033 %	PASS 9.07 %
0.03 V AC+DC @ 500.0 kHz	**0.030041364**	0.1500 %	0.029654	0.030346	0.1379 %	1.0033 %	PASS 6.80 %
0.03 V AC+DC @ 1.0 MHz	**0.030000925**	0.3000 %	0.029609	0.030391	0.0031 %	1.0033 %	PASS 0.15 %
0.1 V AC+DC @ 10 Hz	**0.099993173**	0.0121 %	0.099980	0.100020	-0.0068 %	0.0074 %	PASS 24.01 %
0.1 V AC+DC @ 20 Hz	**0.099990497**	0.0121 %	0.099980	0.100020	-0.0095 %	0.0074 %	PASS 33.43 %
0.1 V AC+DC @ 40 Hz	**0.099990763**	0.0121 %	0.099980	0.100020	-0.0092 %	0.0074 %	PASS 32.49 %
0.1 V AC+DC @ 100 Hz	**0.099989933**	0.0121 %	0.099981	0.100019	-0.0101 %	0.0072 %	PASS 35.67 %
0.1 V AC+DC @ 1.0 kHz	**0.099993643**	0.0121 %	0.099981	0.100019	-0.0064 %	0.0072 %	PASS 22.53 %
0.1 V AC+DC @ 10.0 kHz	**0.099990538**	0.0121 %	0.099974	0.100026	-0.0095 %	0.0142 %	PASS 25.33 %
0.1 V AC+DC @ 20.0 kHz	**0.099990505**	0.0121 %	0.099974	0.100026	-0.0095 %	0.0142 %	PASS 25.42 %
0.1 V AC+DC @ 50.0 kHz	**0.099993949**	0.0256 %	0.099944	0.100056	-0.0061 %	0.0302 %	PASS 7.64 %
0.1 V AC+DC @ 100.0 kHz	**0.099996855**	0.0591 %	0.099861	0.100139	-0.0031 %	0.0802 %	PASS 1.58 %
0.1 V AC+DC @ 300.0 kHz	**0.10004324**	0.0964 %	0.099603	0.100397	0.0432 %	0.3010 %	PASS 6.84 %
0.1 V AC+DC @ 500.0 kHz	**0.10011793**	0.1500 %	0.098849	0.101151	0.1179 %	1.0010 %	PASS 5.83 %
0.1 V AC+DC @ 1.0 MHz	**0.1000433**	0.3000 %	0.098699	0.101301	0.0433 %	1.0010 %	PASS 2.07 %
0.3 V AC+DC @ 10 Hz	**0.29997702**	0.0050 %	0.299960	0.300040	-0.0077 %	0.0083 %	PASS 39.50 %
0.3 V AC+DC @ 20 Hz	**0.29997175**	0.0050 %	0.299960	0.300040	-0.0094 %	0.0083 %	PASS 48.56 %
0.3 V AC+DC @ 40 Hz	**0.29996799**	0.0050 %	0.299960	0.300040	-0.0107 %	0.0083 %	PASS 55.03 %
0.3 V AC+DC @ 100 Hz	**0.29997177**	0.0050 %	0.299962	0.300038	-0.0094 %	0.0077 %	PASS 51.54 %
0.3 V AC+DC @ 1.0 kHz	**0.29997864**	0.0050 %	0.299962	0.300038	-0.0071 %	0.0077 %	PASS 39.00 %

0.3 V AC+DC @ 10.0 kHz	**0.299973**	0.0050 %	0.299941	0.300059	-0.0090 %	0.0147 %	PASS 29.07 %
0.3 V AC+DC @ 20.0 kHz	**0.29997287**	0.0050 %	0.299941	0.300059	-0.0090 %	0.0147 %	PASS 29.21 %
0.3 V AC+DC @ 50.0 kHz	**0.29998964**	0.0085 %	0.299882	0.300118	-0.0035 %	0.0307 %	PASS 5.42 %
0.3 V AC+DC @ 100.0 kHz	**0.30005689**	0.0138 %	0.299717	0.300283	0.0190 %	0.0807 %	PASS 11.59 %
0.3 V AC+DC @ 300.0 kHz	**0.30048586**	0.0425 %	0.298962	0.301038	0.1620 %	0.3033 %	PASS 26.44 %
0.3 V AC+DC @ 500.0 kHz	**0.30109636**	0.1100 %	0.296660	0.303340	0.3655 %	1.0033 %	PASS 18.10 %
0.3 V AC+DC @ 1.0 MHz	**0.30270885**	0.1800 %	0.296450	0.303550	0.9030 %	1.0033 %	PASS 44.29 %
1.0 V AC+DC @ 10 Hz	**0.99995128**	0.0050 %	0.999876	1.000124	-0.0049 %	0.0074 %	PASS 27.35 %
1.0 V AC+DC @ 20 Hz	**0.99992366**	0.0050 %	0.999876	1.000124	-0.0076 %	0.0074 %	PASS 42.86 %
1.0 V AC+DC @ 40 Hz	**0.99991856**	0.0050 %	0.999876	1.000124	-0.0081 %	0.0074 %	PASS 45.72 %
1.0 V AC+DC @ 100 Hz	**0.99992176**	0.0050 %	0.999878	1.000122	-0.0078 %	0.0072 %	PASS 44.76 %
1.0 V AC+DC @ 1.0 kHz	**0.99994578**	0.0050 %	0.999878	1.000122	-0.0054 %	0.0072 %	PASS 31.02 %
1.0 V AC+DC @ 10.0 kHz	**0.99993113**	0.0050 %	0.999808	1.000192	-0.0069 %	0.0142 %	PASS 22.90 %
1.0 V AC+DC @ 20.0 kHz	**0.99993075**	0.0050 %	0.999808	1.000192	-0.0069 %	0.0142 %	PASS 23.02 %
1.0 V AC+DC @ 50.0 kHz	**0.99996984**	0.0085 %	0.999613	1.000387	-0.0030 %	0.0302 %	PASS 4.81 %
1.0 V AC+DC @ 100.0 kHz	**1.0001436**	0.0138 %	0.999060	1.000940	0.0144 %	0.0802 %	PASS 8.82 %
1.0 V AC+DC @ 300.0 kHz	**1.0016339**	0.0425 %	0.996565	1.003435	0.1634 %	0.3010 %	PASS 26.87 %
1.0 V AC+DC @ 500.0 kHz	**1.0036379**	0.1100 %	0.988890	1.011110	0.3638 %	1.0010 %	PASS 18.06 %
1.0 V AC+DC @ 1.0 MHz	**1.0091706**	0.1800 %	0.988190	1.011810	0.9171 %	1.0010 %	PASS 45.08 %
3.0 V AC+DC @ 10 Hz	**2.9999197**	0.0048 %	2.999605	3.000395	-0.0027 %	0.0083 %	PASS 13.91 %
3.0 V AC+DC @ 20 Hz	**2.9998474**	0.0048 %	2.999605	3.000395	-0.0051 %	0.0083 %	PASS 26.42 %
3.0 V AC+DC @ 40 Hz	**2.9998299**	0.0048 %	2.999605	3.000395	-0.0057 %	0.0083 %	PASS 29.45 %
3.0 V AC+DC @ 100 Hz	**2.999866**	0.0048 %	2.999625	3.000375	-0.0045 %	0.0077 %	PASS 24.66 %
3.0 V AC+DC @ 1.0 kHz	**2.999886**	0.0048 %	2.999625	3.000375	-0.0038 %	0.0077 %	PASS 20.99 %
3.0 V AC+DC @ 10.0 kHz	**2.999777**	0.0048 %	2.999415	3.000585	-0.0074 %	0.0147 %	PASS 24.07 %
3.0 V AC+DC @ 20.0 kHz	**2.9996488**	0.0048 %	2.999415	3.000585	-0.0117 %	0.0147 %	PASS 37.91 %
3.0 V AC+DC @ 50.0 kHz	**2.9992546**	0.0085 %	2.998824	3.001176	-0.0248 %	0.0307 %	PASS 39.02 %
3.0 V AC+DC @ 100.0 kHz	**3.0001588**	0.0121 %	2.997216	3.002784	0.0053 %	0.0807 %	PASS 3.24 %
3.0 V AC+DC @ 300.0 kHz	**3.0023673**	0.0336 %	2.989891	3.010109	0.0789 %	0.3033 %	PASS 12.93 %
3.0 V AC+DC @ 500.0 kHz	**3.0083875**	0.1100 %	2.966600	3.033400	0.2796 %	1.0033 %	PASS 13.85 %
3.0 V AC+DC @ 1.0 MHz	**3.0291408**	0.1700 %	2.964800	3.035200	0.9714 %	1.0033 %	PASS 47.73 %
10.0 V AC+DC @ 10 Hz	**9.9996223**	0.0048 %	9.998778	10.001222	-0.0038 %	0.0074 %	PASS 21.38 %
10.0 V AC+DC @ 20 Hz	**9.9994161**	0.0048 %	9.998778	10.001222	-0.0058 %	0.0074 %	PASS 33.07 %
10.0 V AC+DC @ 40 Hz	**9.9994038**	0.0048 %	9.998778	10.001222	-0.0060 %	0.0074 %	PASS 33.76 %
10.0 V AC+DC @ 100 Hz	**9.9994394**	0.0048 %	9.998798	10.001202	-0.0056 %	0.0072 %	PASS 32.35 %
10.0 V AC+DC @ 1.0 kHz	**9.9995516**	0.0048 %	9.998798	10.001202	-0.0045 %	0.0072 %	PASS 25.88 %
10.0 V AC+DC @ 10.0 kHz	**9.9990891**	0.0048 %	9.998098	10.001902	-0.0091 %	0.0142 %	PASS 30.37 %
10.0 V AC+DC @ 20.0 kHz	**9.9987015**	0.0048 %	9.998098	10.001902	-0.0130 %	0.0142 %	PASS 43.30 %
10.0 V AC+DC @ 50.0 kHz	**9.9976689**	0.0085 %	9.996125	10.003875	-0.0233 %	0.0302 %	PASS 37.14 %
10.0 V AC+DC @ 100.0 kHz	**10.000186**	0.0121 %	9.990766	10.009234	0.0019 %	0.0802 %	PASS 1.15 %
10.0 V AC+DC @ 300.0 kHz	**10.008039**	0.0336 %	9.966536	10.033464	0.0804 %	0.3010 %	PASS 13.27 %
10.0 V AC+DC @ 500.0 kHz	**10.027533**	0.1100 %	9.888900	10.111100	0.2753 %	1.0010 %	PASS 13.67 %
10.0 V AC+DC @ 1.0 MHz	**10.097175**	0.1700 %	9.882900	10.117100	0.9717 %	1.0010 %	PASS 47.85 %
30 V AC+DC @ 10 Hz	**29.997464**	0.0060 %	29.991795	30.008205	-0.0085 %	0.0213 %	PASS 19.07 %
30 V AC+DC @ 20 Hz	**29.996613**	0.0060 %	29.991795	30.008205	-0.0113 %	0.0213 %	PASS 25.47 %
30 V AC+DC @ 40 Hz	**29.996457**	0.0060 %	29.991795	30.008205	-0.0118 %	0.0213 %	PASS 26.64 %

30 V AC+DC @ 100 Hz	**29.996604**	0.0060 %	29.991995	30.008005	-0.0113 %	0.0207 %	PASS 26.30 %
30 V AC+DC @ 1.0 kHz	**29.996121**	0.0060 %	29.991995	30.008005	-0.0129 %	0.0207 %	PASS 30.03 %
30 V AC+DC @ 10.0 kHz	**29.986581**	0.0060 %	29.991995	30.008005	-0.0447 %	0.0207 %	FAIL 103.90 %
30 V AC+DC @ 20.0 kHz	**29.974062**	0.0060 %	29.991995	30.008005	-0.0865 %	0.0207 %	FAIL 200.83 %
30 V AC+DC @ 50.0 kHz	**29.948841**	0.0060 %	29.987495	30.012505	-0.1705 %	0.0357 %	FAIL 235.73 %
30 V AC+DC @ 100.0 kHz	**29.972146**	0.0174 %	29.958591	30.041409	-0.0928 %	0.1207 %	PASS 38.08 %
30 V AC+DC @ 300.0 kHz	**29.89896**	0.0991 %	29.849273	30.150727	-0.3368 %	0.4033 %	PASS 40.55 %
30 V AC+DC @ 500.0 kHz	**29.92398**	0.5200 %	29.393000	30.607000	-0.2534 %	1.5033 %	PASS 7.96 %
100.0 V AC+DC @ 10 Hz	**99.991962**	0.0060 %	99.973582	100.026418	-0.0080 %	0.0204 %	PASS 18.90 %
100.0 V AC+DC @ 20 Hz	**99.989234**	0.0060 %	99.973582	100.026418	-0.0108 %	0.0204 %	PASS 25.31 %
100.0 V AC+DC @ 40 Hz	**99.98876**	0.0060 %	99.973582	100.026418	-0.0112 %	0.0204 %	PASS 26.42 %
100.0 V AC+DC @ 100 Hz	**99.989128**	0.0060 %	99.973782	100.026218	-0.0109 %	0.0202 %	PASS 25.79 %
100.0 V AC+DC @ 1.0 kHz	**99.989404**	0.0060 %	99.973782	100.026218	-0.0106 %	0.0202 %	PASS 25.14 %
100.0 V AC+DC @ 10.0 kHz	**99.975775**	0.0060 %	99.973782	100.026218	-0.0242 %	0.0202 %	PASS 57.47 %
100.0 V AC+DC @ 20.0 kHz	**99.960352**	0.0060 %	99.973782	100.026218	-0.0396 %	0.0202 %	PASS 94.05 %
100.0 V AC+DC @ 50.0 kHz	**99.938555**	0.0095 %	99.955255	100.044745	-0.0614 %	0.0352 %	PASS 84.24 %
100.0 V AC+DC @ 100.0 kHz	**99.944682**	0.0174 %	99.862436	100.137564	-0.0553 %	0.1202 %	PASS 22.77 %
300.0 V AC+DC @ 100 Hz	**299.91521**	0.0079 %	299.854408	300.145592	-0.0283 %	0.0407 %	PASS 34.12 %
300.0 V AC+DC @ 1.0 kHz	**299.91375**	0.0079 %	299.854408	300.145592	-0.0288 %	0.0407 %	PASS 34.71 %
750.0 V AC+DC @ 100 Hz	**749.85413**	0.0245 %	749.514498	750.485502	-0.0194 %	0.0403 %	PASS 20.64 %
750.0 V AC+DC @ 1.0 kHz	**749.87064**	0.0660 %	749.203000	750.797000	-0.0172 %	0.0403 %	PASS 11.15 %

Procedure for all test points that verify Gain of the DC current DCI function. Both +/-FS points are tested.
2-wire connection at LO and DCI is used between DMM and MFC.
DCI gain range points verify gain of the DC current function, using corrected 24-hour MFC output.

DCI Test	100nA-1A	DUT	Source unc.	Low Limit	Hi limit	Measured	24h spec	Result
Zero µADC	0	**3.9519778E-11**						INFO
50 nADC	5E-08	**5.0067862E-08**						INFO
100 nADC	1E-07	**1.0004799E-07**	71.82 ppm	9.995282E-08	1.000472E-07	479.856 ppm	400 ppm	PASS 59.04 %
-100 nADC	-1E-07	**-1.0000955E-07**	71.82 ppm	-1.000492E-07	-9.995082E-08	95.461 ppm	420 ppm	PASS 11.20 %
-50 nADC	-5E-08	**-4.9962476E-08**						INFO
Zero µADC	0	**4.7068545E-11**						INFO
0.5 µADC	5E-07	**5.000311E-07**	71.82 ppm	4.999201E-07	5.000799E-07	62.196 ppm	88 ppm	PASS 27.38 %
1.0 µADC	1E-06	**1.0000723E-06**	71.82 ppm	9.998792E-07	1.000121E-06	72.312 ppm	49 ppm	PASS 41.59 %
-1.0 µADC	-1E-06	**-9.9999542E-07**	71.82 ppm	-1.000123E-06	-9.998772E-07	-4.582 ppm	51 ppm	PASS 2.60 %
-0.5 µADC	-5E-07	**-4.9998489E-07**	71.82 ppm	-5.000819E-07	-4.999181E-07	-30.222 ppm	92 ppm	PASS 12.95 %
Zero 00 µADC	0	**3.725299E-11**						INFO
5 µADC	5E-06	**5.0000246E-06**	71.82 ppm	4.999522E-06	5.000478E-06	4.926 ppm	24 ppm	PASS 3.26 %
10 µADC	1E-05	**1.0000053E-05**	71.82 ppm	9.999113E-06	1.000089E-05	5.336 ppm	17 ppm	PASS 3.62 %
-10 µADC	-1E-05	**-1.0000025E-05**	71.82 ppm	-1.000089E-05	-9.999111E-06	2.494 ppm	17 ppm	PASS 1.69 %
-5 µADC	-5E-06	**-4.9999934E-06**	71.82 ppm	-5.00048E-06	-4.99952E-06	-1.326 ppm	24 ppm	PASS 0.87 %
Zero 000 µADC	0	**1.6722447E-11**						INFO
50 µADC	5E-05	**5.0000068E-05**	71.82 ppm	4.999531E-05	5.000469E-05	1.355 ppm	22 ppm	PASS 0.90 %
100 µADC	0.0001	**0.00010000022**	71.82 ppm	9.999122E-05	0.0001000088	2.158 ppm	16 ppm	PASS 1.47 %
-100 µADC	-0.0001	**-0.00010000037**	71.82 ppm	-0.0001000088	-9.999122E-05	3.723 ppm	16 ppm	PASS 2.53 %
-50 µADC	-5E-05	**-5.000025E-05**	71.82 ppm	-5.000469E-05	-4.999531E-05	4.994 ppm	22 ppm	PASS 3.32 %
Zero mADC	0	**3.3842695E-11**						INFO
0.5 mADC	0.0005	**0.00049999908**	33.64 ppm	0.0004999742	0.0005000258	-1.843 ppm	18 ppm	PASS 2.42 %
1.0 mADC	0.001	**0.00099999732**	33.64 ppm	0.0009999524	0.001000048	-2.676 ppm	14 ppm	PASS 3.67 %
-1.0 mADC	-0.001	**-0.00099999173**	33.64 ppm	-0.001000048	-0.0009999524	-8.268 ppm	14 ppm	PASS 11.35 %
-0.5 mADC	-0.0005	**-0.00049999417**	33.64 ppm	-0.0005000258	-0.0004999742	-11.659 ppm	18 ppm	PASS 15.28 %
Zero 00 mADC	0	**2.1699671E-11**						INFO
5 mADC	0.005	**0.0050000271**	32.27 ppm	0.004999749	0.005000251	5.419 ppm	18 ppm	PASS 7.33 %
10 mADC	0.01	**0.010000001**	32.27 ppm	0.009999537	0.01000046	0.145 ppm	14 ppm	PASS 0.21 %
-10 mADC	-0.01	**-0.0099999284**	32.27 ppm	-0.01000046	-0.009999537	-7.156 ppm	14 ppm	PASS 10.17 %
-5 mADC	-0.005	**-0.0049999426**	32.27 ppm	-0.005000251	-0.004999749	-11.474 ppm	18 ppm	PASS 15.53 %
Zero 000 mADC	0	**4.0064562E-11**						INFO
50 mADC	0.05	**0.050000284**	53.32 ppm	0.04999568	0.05000432	5.674 ppm	33 ppm	PASS 4.52 %
100 mADC	0.1	**0.10000073**	53.32 ppm	0.09999177	0.1000082	7.340 ppm	29 ppm	PASS 6.05 %
-100 mADC	-0.1	**-0.10000107**	53.32 ppm	-0.1000082	-0.09999177	10.699 ppm	29 ppm	PASS 8.81 %
-50 mADC	-0.05	**-0.050000483**	53.32 ppm	-0.05000432	-0.04999568	9.660 ppm	33 ppm	PASS 7.70 %
Zero ADC	0	**1.3128625E-10**						INFO
0.5 ADC	0.5	**0.49999494**	115.22 ppm	0.4998824	0.5001176	-10.124 ppm	120 ppm	PASS 3.04 %
1.0 ADC	1	**0.99998936**	115.22 ppm	0.9997748	1.000225	-10.638 ppm	110 ppm	PASS 3.34 %
-1.0 ADC	-1	**-0.99995723**	115.22 ppm	-1.000225	-0.9997748	-42.771 ppm	110 ppm	PASS 13.43 %
-0.5 ADC	-0.5	**-0.4999661**	115.22 ppm	-0.5001176	-0.4998824	-67.803 ppm	120 ppm	PASS 20.38 %

Procedure for all test points that verify Gain of the AC Current ACI function. Three frequency band points are tested, 50 Hz, 60 Hz and 1 kHz. 2-wire connection at LO and DCI is used between DMM and MFC.

ACI Test	200µA-2A	DUT	Source unc.	Low Limit	Hi limit	Measured	24h spec	Result, % spec
10 µA AC @ 50 Hz	1e-05	**1.0436611E-05**	0.0160 %	-0.0002900076045	0.0003100076045	4.3661 %	3000.0600 %	INFO
100 µA AC @ 50 Hz	0.0001	**0.00010002754**	0.0160 %	-0.000200076045	0.000400076045	0.0275 %	300.0600 %	PASS 0.00 %
1.0 mA AC @ 50 Hz	0.001	**0.0010003919**	0.0160 %	0.00099921955	0.00100078045	391.933 ppm	0.0620 %	PASS 30.60 %
10 mA AC @ 50 Hz	0.01	**0.010001674**	0.0160 %	0.0099921955	0.0100078045	167.446 ppm	0.0620 %	PASS 13.07 %
100 mA AC @ 50 Hz	0.1	**0.10002218**	0.0133 %	0.099924682	0.100075318	221.806 ppm	0.0620 %	PASS 17.49 %
1.0 A AC @ 50 Hz	1.0	**1.0001647**	0.0133 %	0.99904682	1.00095318	164.699 ppm	0.0820 %	PASS 9.91 %
10 µA AC @ 60 Hz	1e-05	**1.0408281E-05**	0.0133 %	-0.0002900073318	0.0003100073318	4.0828 %	3000.0600 %	INFO
100 µA AC @ 60 Hz	0.0001	**0.00010006118**	0.0133 %	-0.000200073318	0.000400073318	0.0612 %	300.0600 %	PASS 0.01 %
1.0 mA AC @ 60 Hz	0.001	**0.0010003151**	0.0129 %	0.00099925136	0.00100074864	315.081 ppm	0.0620 %	PASS 24.88 %
10 mA AC @ 60 Hz	0.01	**0.010001934**	0.0129 %	0.0099925136	0.0100074864	193.396 ppm	0.0620 %	PASS 15.27 %
100 mA AC @ 60 Hz	0.1	**0.1000236**	0.0288 %	0.099909182	0.100090818	235.989 ppm	0.0620 %	PASS 17.26 %
1.0 A AC @ 60 Hz	1.0	**1.0001823**	0.0288 %	0.99889182	1.00110818	182.309 ppm	0.0820 %	PASS 10.49 %
10 µA AC @ 1.0 kHz	1e-05	**1.0407958E-05**	0.0160 %	-0.0002900076045	0.0003100076045	4.0796 %	3000.0600 %	INFO
100 µA AC @ 1.0 kHz	0.0001	**0.0001000558**	0.0160 %	-0.000200076045	0.000400076045	0.0558 %	300.0600 %	PASS 0.01 %
1.0 mA AC @ 1.0 kHz	0.001	**0.0010003707**	0.0160 %	0.00099951955	0.00100048045	370.686 ppm	0.0320 %	PASS 51.78 %
10 mA AC @ 1.0 kHz	0.01	**0.010002538**	0.0160 %	0.0099951955	0.0100048045	253.819 ppm	0.0320 %	PASS 35.45 %
100 mA AC @ 1.0 kHz	0.1	**0.10003073**	0.0133 %	0.099954682	0.100045318	307.256 ppm	0.0320 %	PASS 44.32 %
1.0 A AC @ 1.0 kHz	1.0	**1.000367**	0.0133 %	0.99884682	1.00115318	0.0367 %	0.1020 %	PASS 17.84 %

Test completed

Test date	25 February 2021 03:32
UUT Internal TEMP?	33.4

Lab temperature maintained +24°C ±2°C

Internal use only

Not validated