cal equipment

Keysight 3458A

Manufacturer	HEWLETT-PACKARD	Calibration date	August 19, 2019
Model Number	3458A	Ambient Temperature	23.88 °C
Serial	niner	Relative Humidity	21.30 %
ID Number	XPR3	Pressure	1002.17
Notes	Test PTFE, 3458-10, curr 5440-7003 cable	Test type	Automated verification

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
DC STD	xDevs.com	792X[2]	9.9999838 VDC	±0.22 ppm	XD01	08/07/2019	08/07/2020
DC STD	Fluke	732B	10.0000152	±0.3 ppm	6480002	05/30/2019	05/30/2020
STDR	ESI	SR104	9999.9995 KΩ	±0.16 ppm	G202088930104	06/06/2019	06/06/2020
STDR	xDevs.com/Fluke	SL935	1.00006085 Ω	±0.17 ppm	XR03	08/14/2019	08/14/2020
STDR	xDevs.com/Fluke	SL935	9999.9737 kΩ	±0.17 ppm	XR02	08/14/2019	08/14/2020
MFC	Fluke	5720A	03/HLK	E2E6	XC01	08/18/2019	08/18/2020
Amplifier	Fluke	5725A		5930005	XB01	08/18/2019	08/18/2020
DMM	HP	3458A	001,X02	MY45040325	XD2	08/19/2019	08/19/2020
Divider	Fluke	752A	4295200		XR01	08/17/2019	08/18/2019

MFC last calibrated	3.0 days ago	MFC since DCV ZERO	1.0 days ago
MFC since WBFLAT	192.0 days ago	MFC since WBGAIN	2.0 days ago
MFC Confidence level	**24h 95% REL**	MFC Calibrate date	2019-08-17 00:00:00
MFC Calibrate date Zero	2019-08-19 00:00:00	Calibrate date WB Flatness	2019-02-09 00:00:00
Calibrate date WB Gain	2019-08-18 00:00:00	CAL CONST 6.5V reference voltage	6.95748455712
CAL CONST 13V reference voltage	13.85531006	CAL CONST 22V range positive zero	398.17951
CAL CONST 22V range negative zero	398.17922	CAL CONST DAC Linearity	0.0
CAL CONST 10KOHM true output resistance	9999.78412139	CAL CONST 10KOHM standard resistance	9998.72316298
CAL CONST, Zero calibration temperature	24.0	CAL CONST, All calibration temp	24.0
Booster type	VB5725,IB5725	Current output posts	AUX
Calibrate date 5725A AMP	2019-08-17 00:00:00	Calibrated days ago	Debug
CAL CONST, Amp ACAL temperature	24.0	CAL CONST, Amp CalCheck temperature	24.0

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?	"8/16/2019, TEMP=40.1, xDevs CAL"	Test date	19 August 2019 01:44
DUT Internal TEMP?	36.7	DUT Calibrations number?	38
Self-test result?	0,"NO ERROR"	ACAL ALL result?	0,"NO ERROR"
Firmware	9,2	Options	1,0
CAL? 72	1.0001363	CAL? 1,1	39998.4308
CAL? 2,1	7.1846239	CAL? Res 73	1.00034897
CAL 0 TEMP	40.03	CAL 10V TEMP	40.29
CAL 10KOhm TEMP	39.64	CAL? DCI	1.00041285

Service information

CAL DUMP
[(1, 39998.4308), (1, 7.1846239), (1, -1.04635063e-06), (1, -2.95595969e-06), (1, -1.0803341e-06), (1, -2.90574712e-06), (1, -1.59157783e-06), (1, -2.25407117e-06), (1, -0.000168851942), (1, -0.000168851942), (1, -0.000216891742), (1, -0.000216891742), (1, 0.394187968), (1, 0.393263338), (1, 0.392946015), (1, 0.383088369), (1, 0.362787244), (1, 0.0756087395), (1, -2.92055955), (1, -2.30760261), (1, -2.30760261), (1, 0.394184157), (1, 0.391185682), (1, 0.390535601), (1, 0.363840239), (1, 0.348961291), (1, -0.0792091557), (1, -3.78591053), (1, -4.25464231), (1, -4.25464231), (1, 0.00031805298), (1, 0.00308361149), (1, 0.00293024637), (1, 0.029340214), (1, 0.0476347284), (1, 0.435650356), (1, 4.65126151), (1, 4.39886747), (1, 4.39886747), (1, 0.000450291548), (1, 0.00367008924), (1, 0.00357685487), (1, 0.0362778796), (1, 0.0838198396), (1, 0.856899048), (1, 6.6343575), (1, 8.184778), (1, 8.184778), (1, 394.0), (1, 39.0), (1, 3.0), (1, 0.0), (1, 0.0), (1, 0.0), (1, 0.0), (1, 0.0), (1, 0.0), (1, 40.0258523), (1, 40.293574), (1, 39.639371), (1, 127.0), (1, -3.05262798e-12), (1, -4.2483928e-12), (1, -4.29376467e-11), (1, -2.93211268e-10), (1, -1.93897573e-09), (1, -1.80115732e-08), (1, -1.86652912e-07), (1, -8.15718653e-07), (1, 0.999558896), (1, 1.00028934), (1, 1.0001363), (1, 1.00034897), (1, 1.00019591), (1, 1.00155772), (1, 1.00141504), (1, 1.00214685), (1, 1.0028525), (1, 1.00199003), (1, 1.00196431), (1, 1.00341502), (1, 1.00341502), (1, 1.00341502), (1, 1.00155772), (1, 1.00141506), (1, 1.00214687), (1, 1.00285268), (1, 1.00199043), (1, 1.00196431), (1, 1.00341502), (1, 1.00341502), (1, 1.00341502), (1, 1.00041285), (1, 0.999539888), (1, 0.998570513), (1, 0.99941113), (1, 0.999413223), (1, 1.00028951), (1, 1.00516329), (1, 1.10002166), (1, 78.0), (1, 89.0), (1, 4.94507203), (1, 1.95945493e-11), (1, -2.00534085e-12), (1, 10001940.4), (1, -0.00886561879), (1, -0.0582086565), (1, 0.999999383), (1, 0.999999717), (1, 1666.99352), (1, 16666.9843), (1, 5051.0), (1, 5047.0), (1, 5048.0), (1, 5047.0), (1, 5047.0), (1, 60612.0), (1, 60564.0), (1, 60576.0), (1, 60564.0), (1, 60564.0), (1, 5001.0), (1, 5002.0), (1, 4998.0), (1, 4994.0), (1, 2499.0), (1, 2499.0), (1, 2496.0), (1, 12480.0), (1, 22691.0), (1, 60012.0), (1, 60024.0), (1, 59976.0), (1, 59928.0), (1, 29988.0), (1, 29988.0), (1, 29952.0), (1, 149760.0), (1, 272292.0), (1, 5001.0), (1, 5002.0), (1, 4998.0), (1, 4994.0), (1, 2499.0), (1, 2499.0), (1, 2496.0), (1, 12480.0), (1, 22691.0), (1, 60012.0), (1, 60024.0), (1, 59976.0), (1, 59928.0), (1, 29988.0), (1, 29988.0), (1, 29952.0), (1, 149760.0), (1, 272292.0), (1, 275.0), (1, 275.0), (1, 275.0), (1, 275.0), (1, 275.0), (1, 275.0), (1, 275.0), (1, 275.0), (1, 3300.0), (1, 3300.0), (1, 3300.0), (1, 3300.0), (1, 3300.0), (1, 3300.0), (1, 3300.0), (1, 36.6146477), (1, 36.6304391), (1, 36.6350031), (1, 120.0), (1, 120.0), (1, 119.0), (1, 120.0), (1, 120.0), (1, 119.0), (1, 120.0), (1, 120.0), (1, 119.0), (1, 120.0), (1, 120.0), (1, 119.0), (1, 122.0), (1, 122.0), (1, 122.0), (1, 122.0), (1, 122.0), (1, 1915.0), (1, 1904.0), (1, 2260.0), (1, 1954.0), (1, 2181.0), (1, 2186.0), (1, 123.0), (1, 126.0), (1, 125.0), (1, 126.0), (1, 125.0), (1, 126.0), (1, 126.0), (1, 126.0), (1, 126.0), (1, 126.0), (1, -0.00136573371), (1, -0.0124666449), (1, -0.118688929), (1, -1.27521598), (1, -12.6264874), (1, -123.236462), (1, -0.00110830519), (1, -0.0122150294), (1, -0.118592723), (1, -1.27546611), (1, -12.6286651), (1, -123.304231), (1, 1.02292548), (1, 1.02943768), (1, 1.00671196), (1, 1.05692408), (1, 1.04451392), (1, 1.04369243), (1, -423803.227), (1, 10.3647926), (1, 1.00900358), (1, 1.01551102), (1, 0.993092742), (1, 1.04262557), (1, 1.0303833), (1, 1.02957293), (1, -1.50361241e-05), (1, -0.000154868805), (1, -0.00154868805), (1, -0.0154868805), (1, -0.154868805), (1, -1.54868805), (1, 1.02574848), (1, 1.00030052), (1, 0.999981086), (1, 1.00000858), (1, 53.0), (1, 19.0), (1, 19.0), (1, 19.0), (1, 29.0), (1, 35.0), (1, 35.0), (1, 15.0)]
Reference
Verification cal 5720A/03 PC;
DUT Condition
xfer-calkit

Test procedure : $Id: hp3458a.py | Rev 1531 | 2019/08/19 07:34:12 clu $

Source procedure : $Id: f5720b.py | Rev 1529 | 2019/08/19 00:42:32 tin_fpga $

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 MFC	0.0000000E+00	**-0.51 µV**	0.75 µV	-0.910 µV	0.910 µV	N/A	0.16 µV	PASS
Short 0.0 VDC MFC	0.0000000E+00	**-0.47 µV**	0.75 µV	-0.900 µV	0.900 µV	N/A	0.15 µV	PASS
Short 00.0 VDC MFC	0.0000000E+00	**-0.14 µV**	0.75 µV	-1.070 µV	1.070 µV	N/A	0.32 µV	PASS
Short 000.0 VDC MFC	0.0000000E+00	**26.03 µV**	0.75 µV	-14.750 µV	14.750 µV	N/A	14.00 µV	INFO
Short 0000.0 VDC MFC	0.0000000E+00	**42.79 µV**	0.75 µV	-41.750 µV	41.750 µV	N/A	41.00 µV	INFO
DCV Test	**0.1V-1000V**	**DUT**	**Source unc.**	**Low Limit**	**Hi limit**	**Measured**	**24h spec**	**Result**
0.019 VDC (0.10 Range)	0.0190000	**0.019000012**	7.27 ppm	0.018999514	0.019000486	0.638 ppm	18.29 ppm	PASS 1.62 %
0.1 VDC (0.10 Range)	0.1000000	**0.099999959**	7.27 ppm	0.099998723	0.10000128	-0.412 ppm	5.50 ppm	PASS 2.26 %
0.11 VDC (0.10 Range)	0.1100000	**0.11000001**	7.27 ppm	0.10999863	0.11000137	0.050 ppm	5.23 ppm	PASS 0.28 %
-0.019 VDC (0.10 Range)	-0.0190000	**-0.018999875**	7.27 ppm	-0.019000486	-0.018999514	-6.592 ppm	18.29 ppm	PASS 16.75 %
-0.1 VDC (0.10 Range)	-0.1000000	**-0.0999998**	7.27 ppm	-0.10000128	-0.099998723	-1.998 ppm	5.50 ppm	PASS 10.96 %
-0.11 VDC (0.10 Range)	-0.1100000	**-0.10999983**	7.27 ppm	-0.11000137	-0.10999863	-1.567 ppm	5.23 ppm	PASS 8.75 %
0.19 VDC (1.00 Range)	0.1900000	**0.19000007**	7.27 ppm	0.18999803	0.19000197	0.375 ppm	3.08 ppm	PASS 2.37 %
1.0 VDC (1.00 Range)	1.0000000	**0.9999992**	3.86 ppm	0.99999434	1.0000057	-0.803 ppm	1.80 ppm	PASS 9.43 %
1.1 VDC (1.00 Range)	1.1000000	**1.0999993**	3.86 ppm	1.0999938	1.1000062	-0.598 ppm	1.77 ppm	PASS 7.04 %
-0.19 VDC (1.00 Range)	-0.1900000	**-0.18999981**	7.27 ppm	-0.19000197	-0.18999803	-1.001 ppm	3.08 ppm	PASS 6.34 %
-1.0 VDC (1.00 Range)	-1.0000000	**-0.99999962**	3.86 ppm	-1.0000057	-0.99999434	-0.375 ppm	1.80 ppm	PASS 4.40 %
-1.1 VDC (1.00 Range)	-1.1000000	**-1.0999995**	3.86 ppm	-1.1000062	-1.0999938	-0.467 ppm	1.77 ppm	PASS 5.50 %
1.9 VDC (10.00 Range)	1.9000000	**1.8999992**	3.86 ppm	1.8999912	1.9000088	-0.419 ppm	0.76 ppm	PASS 5.33 %
10.0 VDC (10.00 Range)	10.0000000	**9.9999959**	2.77 ppm	9.9999668	10.000033	-0.410 ppm	0.55 ppm	PASS 7.26 %
11.0 VDC (10.00 Range)	11.0000000	**10.999997**	2.73 ppm	10.999964	11.000036	-0.314 ppm	0.55 ppm	PASS 5.63 %
-1.9 VDC (10.00 Range)	-1.9000000	**-1.8999988**	3.86 ppm	-1.9000088	-1.8999912	-0.634 ppm	0.76 ppm	PASS 8.05 %
-10.0 VDC (10.00 Range)	-10.0000000	**-9.9999951**	2.77 ppm	-10.000033	-9.9999668	-0.486 ppm	0.55 ppm	PASS 8.61 %
-11.0 VDC (10.00 Range)	-11.0000000	**-10.999997**	2.73 ppm	-11.000036	-10.999964	-0.295 ppm	0.55 ppm	PASS 5.31 %
19 VDC (100.00 Range)	19.0000000	**19.000046**	2.77 ppm	18.99987	19.00013	2.433 ppm	4.08 ppm	PASS 24.67 %
100 VDC (100.00 Range)	100.0000000	**99.999981**	3.73 ppm	99.999347	100.00065	-0.186 ppm	2.80 ppm	PASS 2.00 %
110 VDC (100.00 Range)	110.0000000	**109.99995**	3.73 ppm	109.99928	110.00072	-0.413 ppm	2.77 ppm	PASS 4.44 %
-19 VDC (100.00 Range)	-19.0000000	**-18.999954**	2.77 ppm	-19.00013	-18.99987	-2.429 ppm	4.08 ppm	PASS 24.63 %
-100 VDC (100.00 Range)	-100.0000000	**-99.999898**	3.73 ppm	-100.00065	-99.999347	-1.020 ppm	2.80 ppm	PASS 10.93 %
-110 VDC (100.00 Range)	-110.0000000	**-109.99988**	3.73 ppm	-110.00072	-109.99928	-1.060 ppm	2.77 ppm	PASS 11.40 %
190 VDC (1000.00 Range)	190.0000000	**189.99984**	3.73 ppm	189.99872	190.00128	-0.824 ppm	3.03 ppm	PASS 8.58 %
500 VDC (1000.00 Range)	500.0000000	**500.00074**	3.73 ppm	499.99678	500.00322	1.473 ppm	2.70 ppm	PASS 19.75 %
1000 VDC (1000.00 Range)	1000.0000000	**1000.0001**	5.45 ppm	999.97995	1000.02	0.095 ppm	2.60 ppm	PASS 0.36 %
-190 VDC (1000.00 Range)	-190.0000000	**-189.9998**	3.73 ppm	-190.00128	-189.99872	-1.058 ppm	3.03 ppm	PASS 11.02 %
-500 VDC (1000.00 Range)	-500.0000000	**-500.00065**	3.73 ppm	-500.00322	-499.99678	1.291 ppm	2.70 ppm	PASS 5.14 %
-1000 VDC (1000.00 Range)	-1000.0000000	**-1000.0002**	5.45 ppm	-1000.02	-999.97995	0.232 ppm	2.60 ppm	PASS 0.88 %

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	0.9997928 Ω	**0.99977363 Ω**	32.0 ppm	9.9972581E-01	9.9985979E-01	-19.175 ppm	35.0 ppm	PASS, 20.22 % of 94.86 ppm
1.9 Ω	1.8998366 Ω	**1.8998065 Ω**	25.0 ppm	1.8997496E+00	1.8999236E+00	-15.837 ppm	20.8 ppm	PASS, 24.35 % of 65.03 ppm
10 Ω	10.000584 Ω	**10.000595 Ω**	5.0 ppm	1.0000454E+01	1.0000714E+01	1.143 ppm	8.0 ppm	PASS, 6.06 % of 18.87 ppm
19 Ω	19.000245 Ω	**19.000318 Ω**	4.0 ppm	1.8999812E+01	1.9000678E+01	3.824 ppm	18.8 ppm	PASS, 9.95 % of 38.42 ppm
100 Ω	99.99666 Ω	**99.996909 Ω**	1.7 ppm	9.9995890E+01	9.9997430E+01	2.489 ppm	6.0 ppm	PASS, 19.96 % of 12.47 ppm
190 Ω	189.99422 Ω	**189.99495 Ω**	1.7 ppm	1.8999332E+02	1.8999512E+02	3.853 ppm	3.1 ppm	PASS, 55.13 % of 6.99 ppm
1.0 kΩ	1000.025 Ω	**1000.0269 Ω**	1.7 ppm	1.0000211E+03	1.0000289E+03	1.864 ppm	2.2 ppm	PASS, 33.52 % of 5.56 ppm
1.9 kΩ	1899.903 Ω	**1899.9089 Ω**	1.7 ppm	1.8998940E+03	1.8999120E+03	3.092 ppm	3.1 ppm	PASS, 44.24 % of 6.99 ppm
10 kΩ	9999.784 Ω	**9999.8017 Ω**	1.6 ppm	9.9997460E+03	9.9998220E+03	1.766 ppm	2.2 ppm	PASS, 32.45 % of 5.44 ppm
19 kΩ	18999.247 Ω	**18999.284 Ω**	1.7 ppm	1.8999157E+04	1.8999337E+04	1.956 ppm	3.1 ppm	PASS, 27.99 % of 6.99 ppm
100 kΩ	99994.5 Ω	**99994.134 Ω**	2.0 ppm	9.9994080E+04	9.9994920E+04	-3.661 ppm	2.2 ppm	PASS, 61.57 % of 5.95 ppm
190 kΩ	189988.68 Ω	**189989.22 Ω**	2.0 ppm	1.8998540E+05	1.8999196E+05	2.818 ppm	15.3 ppm	PASS, 9.15 % of 30.79 ppm
1.0 MΩ	999979.8 Ω	**999979.25 Ω**	2.5 ppm	9.9996630E+05	9.9999330E+05	-0.555 ppm	11.0 ppm	PASS, 2.46 % of 22.56 ppm
1.9 MΩ	1899973.9 Ω	**1899986.5 Ω**	3.0 ppm	1.8998232E+06	1.9001246E+06	6.654 ppm	76.3 ppm	PASS, 4.36 % of 152.75 ppm
10 MΩ	9999063 Ω	**9999039.8 Ω**	10.0 ppm	9.9984131E+06	9.9997129E+06	-2.322 ppm	55.0 ppm	PASS, 2.08 % of 111.80 ppm
19 MΩ	18998631 Ω	**18999099 Ω**	20.0 ppm	1.8987752E+07	1.9009510E+07	24.631 ppm	552.6 ppm	PASS, 2.23 % of 1105.99 ppm
100 MΩ	1.0000492E+08 Ω	**1.0000466E+08 Ω**	50.0 ppm	9.9948917E+07	1.0006092E+08	-2.590 ppm	510.0 ppm	PASS, 0.25 % of 1024.89 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 -0.0000482 Ω**	5.500e-04 Ω	-0.00055	0.00055	N/A	2.2000e-06 Ω	PASS
1.0 kΩ	**Range 0.0000000 Ω**	5.500e-03 Ω	-0.0055	0.0055	N/A	2.2000e-06 Ω	PASS
10 kΩ	**Range 0.0003784 Ω**	5.500e-02 Ω	-0.055	0.055	N/A	2.2000e-06 Ω	PASS
100 kΩ	**Range 0.0018003 Ω**	5.500e-01 Ω	-0.55	0.55	N/A	2.2000e-06 Ω	PASS
1.0 MΩ	**Range 0.2052237 Ω**	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	PASS
10 MΩ	**Range 1.5864768 Ω**	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	PASS
100 MΩ	**Range 1.9470401 Ω**	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	PASS
1 GΩ	**Range 1.9830965 Ω**	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	PASS
OHM ZERO 2W	**DUT**	**Source unc.**	**Low Limit**	**Hi limit**	**Measured**	**24h spec**	**Result**
10 Ω	**Range 0.2529217 Ω**	3.000e-01 Ω	-0.3	0.3	N/A	8.0000e-06 Ω	PASS
100 Ω	**Range 0.2408156 Ω**	3.500e-01 Ω	-0.35	0.35	N/A	2.2000e-06 Ω	PASS
1.0 kΩ	**Range 0.2348471 Ω**	4.000e-01 Ω	-0.4	0.4	N/A	2.2000e-06 Ω	PASS
10 kΩ	**Range 0.2386310 Ω**	4.000e-01 Ω	-0.4	0.4	N/A	2.2000e-06 Ω	PASS
100 kΩ	**Range 0.2405133 Ω**	5.500e-01 Ω	-0.55	0.55	N/A	2.2000e-06 Ω	PASS
1.0 MΩ	**Range 0.2700300 Ω**	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	PASS
10 MΩ	**Range 0.6490114 Ω**	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	PASS
100 MΩ	**Range -0.1442247 Ω**	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	PASS
1 GΩ	**Range 0.0000000 Ω**	5.500e+01 Ω	-55	55	N/A	2.2000e-06 Ω	PASS

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	**0.010000875**	0.0312 %	0.009991	0.010009	0.0088 %	0.0600 %	PASS 6.47 %
0.01 V AC+DC @ 20 Hz	**0.010000687**	0.0312 %	0.009991	0.010009	0.0069 %	0.0600 %	PASS 5.08 %
0.01 V AC+DC @ 40 Hz	**0.010000627**	0.0312 %	0.009991	0.010009	0.0063 %	0.0600 %	PASS 4.63 %
0.01 V AC+DC @ 100 Hz	**0.010000636**	0.0312 %	0.009994	0.010006	0.0064 %	0.0310 %	PASS 7.22 %
0.01 V AC+DC @ 1.0 kHz	**0.0099997664**	0.0312 %	0.009994	0.010006	-0.0023 %	0.0310 %	PASS 2.65 %
0.01 V AC+DC @ 10.0 kHz	**0.0099988551**	0.0312 %	0.009993	0.010007	-0.0114 %	0.0410 %	PASS 11.11 %
0.01 V AC+DC @ 20.0 kHz	**0.0099990082**	0.0312 %	0.009993	0.010007	-0.0099 %	0.0410 %	PASS 9.62 %
0.01 V AC+DC @ 50.0 kHz	**0.0099957649**	0.0447 %	0.009984	0.010016	-0.0424 %	0.1110 %	PASS 17.69 %
0.01 V AC+DC @ 100.0 kHz	**0.0099740102**	0.0773 %	0.009941	0.010059	-0.2599 %	0.5110 %	PASS 25.14 %
0.01 V AC+DC @ 300.0 kHz	**0.0097998627**	0.1500 %	0.009583	0.010417	-2.0014 %	4.0200 %	PASS 24.88 %
0.01 V AC+DC @ 500.0 kHz	**0.0095352973**	0.2500 %	0.007470	0.012530	-4.6470 %	25.0500 %	PASS 9.28 %
0.01 V AC+DC @ 1.0 MHz	**0.0084634174**	0.4000 %	0.007455	0.012545	-15.3658 %	25.0500 %	PASS 30.67 %
0.03 V AC+DC @ 10 Hz	**0.029998695**	0.0121 %	0.029989	0.030011	-0.0044 %	0.0233 %	PASS 8.27 %
0.03 V AC+DC @ 20 Hz	**0.029997737**	0.0121 %	0.029989	0.030011	-0.0075 %	0.0233 %	PASS 14.34 %
0.03 V AC+DC @ 40 Hz	**0.029997828**	0.0121 %	0.029989	0.030011	-0.0072 %	0.0233 %	PASS 13.76 %
0.03 V AC+DC @ 100 Hz	**0.029997818**	0.0121 %	0.029992	0.030008	-0.0073 %	0.0137 %	PASS 19.90 %
0.03 V AC+DC @ 1.0 kHz	**0.029998645**	0.0121 %	0.029992	0.030008	-0.0045 %	0.0137 %	PASS 12.35 %
0.03 V AC+DC @ 10.0 kHz	**0.029998445**	0.0121 %	0.029990	0.030010	-0.0052 %	0.0207 %	PASS 10.81 %
0.03 V AC+DC @ 20.0 kHz	**0.029997232**	0.0121 %	0.029990	0.030010	-0.0092 %	0.0207 %	PASS 19.25 %
0.03 V AC+DC @ 50.0 kHz	**0.029996788**	0.0256 %	0.029981	0.030019	-0.0107 %	0.0367 %	PASS 11.97 %
0.03 V AC+DC @ 100.0 kHz	**0.029986453**	0.0591 %	0.029956	0.030044	-0.0452 %	0.0867 %	PASS 21.53 %
0.03 V AC+DC @ 300.0 kHz	**0.029932275**	0.0964 %	0.029871	0.030129	-0.2257 %	0.3333 %	PASS 32.53 %
0.03 V AC+DC @ 500.0 kHz	**0.02989526**	0.1500 %	0.029645	0.030355	-0.3491 %	1.0333 %	PASS 16.72 %
0.03 V AC+DC @ 1.0 MHz	**0.029862914**	0.3000 %	0.029600	0.030400	-0.4570 %	1.0333 %	PASS 21.23 %
0.1 V AC+DC @ 10 Hz	**0.099990916**	0.0121 %	0.099974	0.100026	-0.0091 %	0.0140 %	PASS 24.51 %
0.1 V AC+DC @ 20 Hz	**0.09998939**	0.0121 %	0.099974	0.100026	-0.0106 %	0.0140 %	PASS 28.63 %
0.1 V AC+DC @ 40 Hz	**0.099989005**	0.0121 %	0.099974	0.100026	-0.0110 %	0.0140 %	PASS 29.67 %
0.1 V AC+DC @ 100 Hz	**0.099988415**	0.0121 %	0.099979	0.100021	-0.0116 %	0.0090 %	PASS 38.34 %
0.1 V AC+DC @ 1.0 kHz	**0.099989623**	0.0121 %	0.099979	0.100021	-0.0104 %	0.0090 %	PASS 34.34 %
0.1 V AC+DC @ 10.0 kHz	**0.099988437**	0.0121 %	0.099972	0.100028	-0.0116 %	0.0160 %	PASS 28.79 %
0.1 V AC+DC @ 20.0 kHz	**0.099985099**	0.0121 %	0.099972	0.100028	-0.0149 %	0.0160 %	PASS 37.10 %
0.1 V AC+DC @ 50.0 kHz	**0.099979865**	0.0256 %	0.099942	0.100058	-0.0201 %	0.0320 %	PASS 24.55 %
0.1 V AC+DC @ 100.0 kHz	**0.099943516**	0.0591 %	0.099859	0.100141	-0.0565 %	0.0820 %	PASS 27.94 %
0.1 V AC+DC @ 300.0 kHz	**0.099759804**	0.0964 %	0.099594	0.100406	-0.2402 %	0.3100 %	PASS 37.00 %
0.1 V AC+DC @ 500.0 kHz	**0.099637973**	0.1500 %	0.098840	0.101160	-0.3620 %	1.0100 %	PASS 17.73 %
0.1 V AC+DC @ 1.0 MHz	**0.099630094**	0.3000 %	0.098690	0.101310	-0.3699 %	1.0100 %	PASS 17.55 %
0.3 V AC+DC @ 10 Hz	**0.29997322**	0.0050 %	0.299918	0.300082	-0.0089 %	0.0223 %	PASS 19.51 %
0.3 V AC+DC @ 20 Hz	**0.29996479**	0.0050 %	0.299918	0.300082	-0.0117 %	0.0223 %	PASS 25.66 %
0.3 V AC+DC @ 40 Hz	**0.29996305**	0.0050 %	0.299918	0.300082	-0.0123 %	0.0223 %	PASS 26.92 %
0.3 V AC+DC @ 100 Hz	**0.29996362**	0.0050 %	0.299944	0.300056	-0.0121 %	0.0137 %	PASS 41.71 %

0.3 V AC+DC @ 1.0 kHz	**0.29996749**	0.0050 %	0.299944	0.300056	-0.0108 %	0.0137 %	PASS 37.27 %
0.3 V AC+DC @ 10.0 kHz	**0.29995044**	0.0050 %	0.299923	0.300077	-0.0165 %	0.0207 %	PASS 38.86 %
0.3 V AC+DC @ 20.0 kHz	**0.29993318**	0.0050 %	0.299923	0.300077	-0.0223 %	0.0207 %	PASS 52.40 %
0.3 V AC+DC @ 50.0 kHz	**0.29995865**	0.0085 %	0.299864	0.300136	-0.0138 %	0.0367 %	PASS 18.31 %
0.3 V AC+DC @ 100.0 kHz	**0.29999104**	0.0138 %	0.299699	0.300301	-0.0030 %	0.0867 %	PASS 1.70 %
0.3 V AC+DC @ 300.0 kHz	**0.30032972**	0.0425 %	0.298872	0.301128	0.1099 %	0.3333 %	PASS 16.35 %
0.3 V AC+DC @ 500.0 kHz	**0.3009836**	0.1100 %	0.296570	0.303430	0.3279 %	1.0333 %	PASS 15.78 %
0.3 V AC+DC @ 1.0 MHz	**0.30284675**	0.1800 %	0.296360	0.303640	0.9489 %	1.0333 %	PASS 45.23 %
1.0 V AC+DC @ 10 Hz	**0.99986703**	0.0050 %	0.999820	1.000180	-0.0133 %	0.0130 %	PASS 47.79 %
1.0 V AC+DC @ 20 Hz	**0.99984826**	0.0050 %	0.999820	1.000180	-0.0152 %	0.0130 %	PASS 54.53 %
1.0 V AC+DC @ 40 Hz	**0.99984011**	0.0050 %	0.999820	1.000180	-0.0160 %	0.0130 %	PASS 57.47 %
1.0 V AC+DC @ 100 Hz	**0.99983772**	0.0050 %	0.999860	1.000140	-0.0162 %	0.0090 %	PASS 78.98 %
1.0 V AC+DC @ 1.0 kHz	**0.99985582**	0.0050 %	0.999860	1.000140	-0.0144 %	0.0090 %	PASS 70.17 %
1.0 V AC+DC @ 10.0 kHz	**0.99978161**	0.0050 %	0.999790	1.000210	-0.0218 %	0.0160 %	PASS 65.19 %
1.0 V AC+DC @ 20.0 kHz	**0.99975544**	0.0050 %	0.999790	1.000210	-0.0245 %	0.0160 %	PASS 73.00 %
1.0 V AC+DC @ 50.0 kHz	**0.99982438**	0.0085 %	0.999595	1.000405	-0.0176 %	0.0320 %	PASS 26.51 %
1.0 V AC+DC @ 100.0 kHz	**0.99989008**	0.0138 %	0.999042	1.000958	-0.0110 %	0.0820 %	PASS 6.61 %
1.0 V AC+DC @ 300.0 kHz	**1.0011038**	0.0425 %	0.996475	1.003525	0.1104 %	0.3100 %	PASS 17.64 %
1.0 V AC+DC @ 500.0 kHz	**1.0032986**	0.1100 %	0.988800	1.011200	0.3299 %	1.0100 %	PASS 16.23 %
1.0 V AC+DC @ 1.0 MHz	**1.0097572**	0.1800 %	0.988100	1.011900	0.9757 %	1.0100 %	PASS 47.55 %
3.0 V AC+DC @ 10 Hz	**2.9998159**	0.0048 %	2.999245	3.000755	-0.0061 %	0.0203 %	PASS 14.69 %
3.0 V AC+DC @ 20 Hz	**2.9997725**	0.0048 %	2.999245	3.000755	-0.0076 %	0.0203 %	PASS 18.15 %
3.0 V AC+DC @ 40 Hz	**2.9997742**	0.0048 %	2.999245	3.000755	-0.0075 %	0.0203 %	PASS 18.01 %
3.0 V AC+DC @ 100 Hz	**2.999791**	0.0048 %	2.999445	3.000555	-0.0070 %	0.0137 %	PASS 24.03 %
3.0 V AC+DC @ 1.0 kHz	**2.9998695**	0.0048 %	2.999445	3.000555	-0.0044 %	0.0137 %	PASS 15.01 %
3.0 V AC+DC @ 10.0 kHz	**2.9997335**	0.0048 %	2.999235	3.000765	-0.0089 %	0.0207 %	PASS 20.93 %
3.0 V AC+DC @ 20.0 kHz	**2.999676**	0.0048 %	2.999235	3.000765	-0.0108 %	0.0207 %	PASS 25.45 %
3.0 V AC+DC @ 50.0 kHz	**2.9996277**	0.0085 %	2.998644	3.001356	-0.0124 %	0.0367 %	PASS 16.48 %
3.0 V AC+DC @ 100.0 kHz	**2.9988382**	0.0121 %	2.997036	3.002964	-0.0387 %	0.0867 %	PASS 22.13 %
3.0 V AC+DC @ 300.0 kHz	**2.9955341**	0.0336 %	2.988991	3.011009	-0.1489 %	0.3333 %	PASS 22.22 %
3.0 V AC+DC @ 500.0 kHz	**2.9994172**	0.1100 %	2.965700	3.034300	-0.0194 %	1.0333 %	PASS 0.93 %
3.0 V AC+DC @ 1.0 MHz	**3.022594**	0.1700 %	2.963900	3.036100	0.7531 %	1.0333 %	PASS 35.96 %
10.0 V AC+DC @ 10 Hz	**9.9995793**	0.0048 %	9.998418	10.001582	-0.0042 %	0.0110 %	PASS 17.52 %
10.0 V AC+DC @ 20 Hz	**9.9994257**	0.0048 %	9.998418	10.001582	-0.0057 %	0.0110 %	PASS 23.91 %
10.0 V AC+DC @ 40 Hz	**9.9993981**	0.0048 %	9.998418	10.001582	-0.0060 %	0.0110 %	PASS 25.06 %
10.0 V AC+DC @ 100 Hz	**9.9993792**	0.0048 %	9.998618	10.001382	-0.0062 %	0.0090 %	PASS 30.41 %
10.0 V AC+DC @ 1.0 kHz	**9.9996543**	0.0048 %	9.998618	10.001382	-0.0035 %	0.0090 %	PASS 16.93 %
10.0 V AC+DC @ 10.0 kHz	**9.999107**	0.0048 %	9.997918	10.002082	-0.0089 %	0.0160 %	PASS 26.72 %
10.0 V AC+DC @ 20.0 kHz	**9.9989423**	0.0048 %	9.997918	10.002082	-0.0106 %	0.0160 %	PASS 31.65 %
10.0 V AC+DC @ 50.0 kHz	**9.9987092**	0.0085 %	9.995946	10.004054	-0.0129 %	0.0320 %	PASS 19.49 %
10.0 V AC+DC @ 100.0 kHz	**9.9954659**	0.0121 %	9.990586	10.009414	-0.0453 %	0.0820 %	PASS 27.35 %
10.0 V AC+DC @ 300.0 kHz	**9.9851043**	0.0336 %	9.965636	10.034364	-0.1490 %	0.3100 %	PASS 23.89 %
10.0 V AC+DC @ 500.0 kHz	**9.9977631**	0.1100 %	9.888000	10.112000	-0.0224 %	1.0100 %	PASS 1.10 %
10.0 V AC+DC @ 1.0 MHz	**10.075481**	0.1700 %	9.882000	10.118000	0.7548 %	1.0100 %	PASS 36.85 %
30 V AC+DC @ 10 Hz	**29.997265**	0.0060 %	29.988195	30.011805	-0.0091 %	0.0333 %	PASS 13.46 %

30 V AC+DC @ 20 Hz	**29.996862**	0.0060 %	29.988195	30.011805	-0.0105 %	0.0333 %	PASS 15.44 %
30 V AC+DC @ 40 Hz	**29.996694**	0.0060 %	29.988195	30.011805	-0.0110 %	0.0333 %	PASS 16.26 %
30 V AC+DC @ 100 Hz	**29.99678**	0.0060 %	29.990195	30.009805	-0.0107 %	0.0267 %	PASS 19.63 %
30 V AC+DC @ 1.0 kHz	**29.997322**	0.0060 %	29.990195	30.009805	-0.0089 %	0.0267 %	PASS 16.33 %
30 V AC+DC @ 10.0 kHz	**29.995966**	0.0060 %	29.990195	30.009805	-0.0134 %	0.0267 %	PASS 24.59 %
30 V AC+DC @ 20.0 kHz	**29.993762**	0.0060 %	29.990195	30.009805	-0.0208 %	0.0267 %	PASS 38.03 %
30 V AC+DC @ 50.0 kHz	**29.988138**	0.0060 %	29.985695	30.014305	-0.0395 %	0.0417 %	PASS 46.96 %
30 V AC+DC @ 100.0 kHz	**29.960088**	0.0174 %	29.956791	30.043209	-0.1330 %	0.1267 %	PASS 52.03 %
30 V AC+DC @ 300.0 kHz	**29.747009**	0.0991 %	29.840273	30.159727	-0.8433 %	0.4333 %	PASS 94.86 %
30 V AC+DC @ 500.0 kHz	**29.502128**	0.5200 %	29.384000	30.616000	-1.6596 %	1.5333 %	PASS 51.25 %
100.0 V AC+DC @ 10 Hz	**99.989149**	0.0060 %	99.969982	100.030018	-0.0109 %	0.0240 %	PASS 21.93 %
100.0 V AC+DC @ 20 Hz	**99.987763**	0.0060 %	99.969982	100.030018	-0.0122 %	0.0240 %	PASS 24.73 %
100.0 V AC+DC @ 40 Hz	**99.987176**	0.0060 %	99.969982	100.030018	-0.0128 %	0.0240 %	PASS 25.91 %
100.0 V AC+DC @ 100 Hz	**99.986827**	0.0060 %	99.971982	100.028018	-0.0132 %	0.0220 %	PASS 28.88 %
100.0 V AC+DC @ 1.0 kHz	**99.988858**	0.0060 %	99.971982	100.028018	-0.0111 %	0.0220 %	PASS 24.42 %
100.0 V AC+DC @ 10.0 kHz	**99.985078**	0.0060 %	99.971982	100.028018	-0.0149 %	0.0220 %	PASS 32.71 %
100.0 V AC+DC @ 20.0 kHz	**99.978336**	0.0060 %	99.971982	100.028018	-0.0217 %	0.0220 %	PASS 47.49 %
100.0 V AC+DC @ 50.0 kHz	**99.956852**	0.0095 %	99.953455	100.046545	-0.0431 %	0.0370 %	PASS 56.46 %
100.0 V AC+DC @ 100.0 kHz	**99.858331**	0.0174 %	99.860636	100.139364	-0.1417 %	0.1220 %	PASS 57.48 %
300.0 V AC+DC @ 40 Hz	**299.91756**	0.0079 %	299.056408	300.943592	-0.0275 %	0.3067 %	PASS 4.48 %
300.0 V AC+DC @ 100 Hz	**299.91883**	0.0079 %	299.836408	300.163592	-0.0271 %	0.0467 %	PASS 28.59 %
300.0 V AC+DC @ 1.0 kHz	**299.92101**	0.0079 %	299.836408	300.163592	-0.0263 %	0.0467 %	PASS 27.82 %
300.0 V AC+DC @ 10.0 kHz	**299.90511**	0.0110 %	299.766865	300.233135	-0.0316 %	0.0667 %	PASS 23.40 %
300.0 V AC+DC @ 20.0 kHz	**299.88231**	0.0110 %	299.766865	300.233135	-0.0392 %	0.0667 %	PASS 29.03 %
300.0 V AC+DC @ 50.0 kHz	**299.97015**	0.0245 %	299.546599	300.453401	-0.0099 %	0.1267 %	PASS 3.86 %
300.0 V AC+DC @ 100.0 kHz	**300.1072**	0.0660 %	298.882000	301.118000	0.0357 %	0.3067 %	PASS 5.70 %
750.0 V AC+DC @ 40 Hz	**749.85996**	0.0079 %	747.671020	752.328980	-0.0187 %	0.3027 %	PASS 3.08 %
750.0 V AC+DC @ 100 Hz	**749.85717**	0.0079 %	749.621020	750.378980	-0.0190 %	0.0427 %	PASS 21.95 %
750.0 V AC+DC @ 1.0 kHz	**749.86463**	0.0079 %	749.621020	750.378980	-0.0180 %	0.0427 %	PASS 20.80 %
750.0 V AC+DC @ 10.0 kHz	**749.77865**	0.0110 %	749.447162	750.552838	-0.0295 %	0.0627 %	PASS 23.19 %
750.0 V AC+DC @ 20.0 kHz	**749.68822**	0.0110 %	749.447162	750.552838	-0.0416 %	0.0627 %	PASS 32.66 %
750.0 V AC+DC @ 50.0 kHz	**749.85036**	0.0245 %	748.896498	751.103503	-0.0200 %	0.1227 %	PASS 7.98 %
750.0 V AC+DC @ 45.0 kHz	**749.78074**	0.0660 %	748.585000	751.415000	-0.0292 %	0.1227 %	PASS 10.49 %

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 nADC	0	**-3.7633731E-11**						INFO
Zero µADC	0	**-1.4738325E-11**						INFO
0.5 µADC	5.00000E-07 A	**4.9998371E-07 A**	71.82 ppm	4.999191E-07	5.000809E-07	-32.588 ppm	90 ppm	PASS 14.15 %
1.0 µADC	1.00000E-06 A	**9.9995135E-07 A**	71.82 ppm	9.998782E-07	1.000122E-06	-48.652 ppm	50 ppm	PASS 27.80 %
-1.0 µADC	-1.00000E-06 A	**-1.0000120E-06 A**	71.82 ppm	-1.000122E-06	-9.998782E-07	11.971 ppm	50 ppm	PASS 6.84 %
-0.5 µADC	-5.00000E-07 A	**-5.0002328E-07 A**	71.82 ppm	-5.000809E-07	-4.999191E-07	46.568 ppm	90 ppm	PASS 20.22 %
Zero 00 µADC	0	**-4.2850012E-11**						INFO
5 µADC	5.00000E-06 A	**4.9999656E-06 A**	71.82 ppm	4.999521E-06	5.000479E-06	-6.876 ppm	24 ppm	PASS 4.54 %
10 µADC	1.00000E-05 A	**9.9999985E-06 A**	71.82 ppm	9.999112E-06	1.000089E-05	-0.153 ppm	17 ppm	PASS 0.10 %
-10 µADC	-1.00000E-05 A	**-9.9999137E-06 A**	71.82 ppm	-1.000089E-05	-9.999112E-06	-8.632 ppm	17 ppm	PASS 5.85 %
-5 µADC	-5.00000E-06 A	**-4.9999298E-06 A**	71.82 ppm	-5.000479E-06	-4.999521E-06	-14.033 ppm	24 ppm	PASS 9.27 %
Zero 000 µADC	0	**-8.1390993E-12**						INFO
50 µADC	5.00000E-05 A	**5.0000125E-05 A**	71.82 ppm	4.999531E-05	5.000469E-05	2.500 ppm	22 ppm	PASS 1.66 %
100 µADC	1.00000E-04 A	**1.0000008E-04 A**	71.82 ppm	9.999122E-05	0.0001000088	0.774 ppm	16 ppm	PASS 0.53 %
-100 µADC	-1.00000E-04 A	**-9.9999621E-05 A**	71.82 ppm	-0.0001000088	-9.999122E-05	-3.790 ppm	16 ppm	PASS 2.58 %
-50 µADC	-5.00000E-05 A	**-4.9999700E-05 A**	71.82 ppm	-5.000469E-05	-4.999531E-05	-5.998 ppm	22 ppm	PASS 3.99 %
Zero mADC	0	**-4.0017102E-12**						INFO
0.5 mADC	5.00000E-04 A	**5.0000216E-04 A**	33.64 ppm	0.0004999742	0.0005000258	4.326 ppm	18 ppm	PASS 5.67 %
1.0 mADC	1.00000E-03 A	**1.0000012E-03 A**	33.64 ppm	0.0009999524	0.001000048	1.181 ppm	14 ppm	PASS 1.62 %
-1.0 mADC	-1.00000E-03 A	**-9.9999540E-04 A**	33.64 ppm	-0.001000048	-0.0009999524	-4.597 ppm	14 ppm	PASS 6.31 %
-0.5 mADC	-5.00000E-04 A	**-4.9999584E-04 A**	33.64 ppm	-0.0005000258	-0.0004999742	-8.313 ppm	18 ppm	PASS 10.89 %
Zero 00 mADC	0	**2.5720142E-11**						INFO
5 mADC	5.00000E-03 A	**5.0000054E-03 A**	32.27 ppm	0.004999749	0.005000251	1.084 ppm	18 ppm	PASS 1.47 %
10 mADC	1.00000E-02 A	**9.9999854E-03 A**	32.27 ppm	0.009999537	0.01000046	-1.464 ppm	14 ppm	PASS 2.08 %
-10 mADC	-1.00000E-02 A	**-9.9999575E-03 A**	32.27 ppm	-0.01000046	-0.009999537	-4.250 ppm	14 ppm	PASS 6.04 %
-5 mADC	-5.00000E-03 A	**-4.9999761E-03 A**	32.27 ppm	-0.005000251	-0.004999749	-4.783 ppm	18 ppm	PASS 6.47 %
Zero 000 mADC	0	**6.1078391E-11**						INFO
50 mADC	5.00000E-02 A	**5.0000373E-02 A**	53.32 ppm	0.04999568	0.05000432	7.469 ppm	33 ppm	PASS 5.96 %
100 mADC	1.00000E-01 A	**1.0000055E-01 A**	53.32 ppm	0.09999177	0.1000082	5.532 ppm	29 ppm	PASS 4.56 %
-100 mADC	-1.00000E-01 A	**-1.0000119E-01 A**	53.32 ppm	-0.1000082	-0.09999177	11.905 ppm	29 ppm	PASS 9.81 %
-50 mADC	-5.00000E-02 A	**-5.0000550E-02 A**	53.32 ppm	-0.05000432	-0.04999568	10.994 ppm	33 ppm	PASS 8.77 %
Zero ADC	0	**-4.3090311E-11**						INFO
0.5 ADC	5.00000E-01 A	**4.9998194E-01 A**	115.22 ppm	0.4998824	0.5001176	-36.113 ppm	120 ppm	PASS 10.85 %
1.0 ADC	1.00000E+00 A	**9.9991359E-01 A**	115.22 ppm	0.9997748	1.000225	-86.409 ppm	110 ppm	PASS 27.12 %
-1.0 ADC	-1.00000E+00 A	**-9.9993421E-01 A**	115.22 ppm	-1.000225	-0.9997748	-65.790 ppm	110 ppm	PASS 20.65 %
-0.5 ADC	-5.00000E-01 A	**-4.9997809E-01 A**	115.22 ppm	-0.5001176	-0.4998824	-43.818 ppm	120 ppm	PASS 13.17 %

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	**1.0016868E-05 A**	0.0160 %	9.9623955e-06	1.00376045e-05	0.1687 %	0.3600 %	INFO
100 µA AC @ 50 Hz	0.0001	**9.9993668E-05 A**	0.0160 %	9.9893955e-05	0.000100106045	-0.0063 %	0.0900 %	PASS 3.46 %
1.0 mA AC @ 50 Hz	0.001	**1.0000796E-03 A**	0.0160 %	0.00099903955	0.00100096045	0.0080 %	0.0800 %	PASS 4.88 %
10 mA AC @ 50 Hz	0.01	**1.0000753E-02 A**	0.0160 %	0.0099903955	0.0100096045	0.0075 %	0.0800 %	PASS 4.61 %
100 mA AC @ 50 Hz	0.1	**1.0001309E-01 A**	0.0133 %	0.099906682	0.100093318	0.0131 %	0.0800 %	PASS 8.07 %
1.0 A AC @ 50 Hz	1.0	**9.9996569E-01 A**	0.0133 %	0.99886682	1.00113318	-0.0034 %	0.1000 %	PASS 1.70 %
10 µA AC @ 60 Hz	1e-05	**1.0016872E-05 A**	0.0133 %	9.9626682e-06	1.00373318e-05	0.1687 %	0.3600 %	INFO
100 µA AC @ 60 Hz	0.0001	**9.9995769E-05 A**	0.0133 %	9.9896682e-05	0.000100103318	-0.0042 %	0.0900 %	PASS 2.33 %
1.0 mA AC @ 60 Hz	0.001	**1.0001096E-03 A**	0.0129 %	0.00099907136	0.00100092864	0.0110 %	0.0800 %	PASS 6.76 %
10 mA AC @ 60 Hz	0.01	**1.0001076E-02 A**	0.0129 %	0.0099907136	0.0100092864	0.0108 %	0.0800 %	PASS 6.64 %
100 mA AC @ 60 Hz	0.1	**1.0001641E-01 A**	0.0288 %	0.099891182	0.100108818	0.0164 %	0.0800 %	PASS 9.65 %
1.0 A AC @ 60 Hz	1.0	**9.9999337E-01 A**	0.0288 %	0.99871182	1.00128818	-0.0007 %	0.1000 %	PASS 0.32 %
10 µA AC @ 1.0 kHz	1e-05	**1.0017377E-05 A**	0.0160 %	9.9623955e-06	1.00376045e-05	0.1738 %	0.3600 %	INFO
100 µA AC @ 1.0 kHz	0.0001	**9.9998014E-05 A**	0.0160 %	9.9893955e-05	0.000100106045	-0.0020 %	0.0900 %	PASS 1.09 %
1.0 mA AC @ 1.0 kHz	0.001	**1.0001637E-03 A**	0.0160 %	0.00099933955	0.00100066045	0.0164 %	0.0500 %	PASS 15.58 %
10 mA AC @ 1.0 kHz	0.01	**1.0001675E-02 A**	0.0160 %	0.0099933955	0.0100066045	0.0168 %	0.0500 %	PASS 15.95 %
100 mA AC @ 1.0 kHz	0.1	**1.0002294E-01 A**	0.0133 %	0.099936682	0.100063318	0.0229 %	0.0500 %	PASS 22.17 %
1.0 A AC @ 1.0 kHz	1.0	**1.0002073E+00 A**	0.0133 %	0.99866682	1.00133318	0.0207 %	0.1200 %	PASS 8.58 %

Test completed

Test date	19 August 2019 15:27
UUT Internal TEMP?	39.7

Lab temperature maintained +23°C ±2°C

Internal use only

Not validated