

Manufacturer	HEWLETT-PACKARD	Calibration date	May 31 2020
Model Number	3458A	Ambient Temperature	23.35 °C
Serial	QVR meter	Relative Humidity	44.21 %
ID Number	STD Calibration test, GPIB11 unit	Pressure	1008.35
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
DC STD	xDevs.com	792X[2]	9.9999751 VDC	±0.5 ppm	XD01	03/03/2020	03/03/2021
DC STD	Fluke	732Bx	10.0000328	±0.7 ppm	6480002	03/26/2020	06/26/2020
STDR	ESI	SR104	10000.0026 KΩ	±0.15 ppm	G202088930104	03/17/2020	03/17/2021
STDR	xDevs.com/Fluke	SL935	1.00006085 Ω	±0.17 ppm	XR03	09/13/2019	09/13/2020
STDR	xDevs.com/Fluke	SL935	9999.9737 kΩ	±0.17 ppm	XR02	09/13/2019	09/13/2020
MFC	Fluke	5720A	03/HLK	E2E6	XC01	03/28/2020	03/28/2021
Amplifier	Fluke	5725A		5930005	XB01	03/28/2020	03/28/2021
DMM	HP	3458A	001,X02	MY45040325	XD2	06/16/2019	12/16/2019
DMM	HP	3458A	001,X02	X	XD3	03/28/2020	03/28/2021
AVMS	Wavetek	4920M	80	29336	XA02	07/11/2017	07/11/2018
DC STD	Wavetek	7000	54222	±2.2 ppm	XD01	02/16/2018	02/16/2019
Divider	Fluke	752A	4295200		XR01	02/16/2018	02/16/2019

MFC last calibrated	48.0 days ago	MFC since DCV ZERO	0.0 days ago
MFC since WBFLAT	63.0 days ago	MFC since WBGAIN	39.0 days ago
MFC Confidence level	24h 95% REL	MFC Calibrate date	2020-04-13 00:00:00
MFC Calibrate date Zero	2020-05-31 00:00:00	Calibrate date WB Flatness	2020-03-29 00:00:00
Calibrate date WB Gain	2020-04-22 00:00:00	CAL CONST 6.5V reference voltage	6.95748103013
CAL CONST 13V reference voltage	13.855305491	CAL CONST 22V range positive zero	398.17937
CAL CONST 22V range negative zero	398.17896	CAL CONST DAC Linearity	0.0
CAL CONST 10KOHM true output resistance	9999.80482503	CAL CONST 10KOHM standard resistance	9998.75116377
CAL CONST, Zero calibration temperature	23.5	CAL CONST, All calibration temp	23.5
Booster type	VB5725,IB5725	Current output posts	AUX
Calibrate date 5725A AMP	2020-04-13 00:00:00	Calibrated days ago	Debug
CAL CONST, Amp ACAL temperature	23.5	CAL CONST, Amp CalCheck temperature	23.5

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

Meter Info	HP3458A	Last calibration date	7/24/2018
CALSTR?	"xDevs_QVR,24.MAY,2020,23.1C"	Test date	31 May 2020 03:36
DUT Internal TEMP?	37.8	DUT Calibrations number?	42
Self-test result?	0,"NO ERROR"	ACAL ALL result?	0,"NO ERROR"
Firmware	9,2	Options	1,0
CAL? 72	0.989049663	CAL? 1,1	40000.2767
CAL? 2,1	7.11870924	CAL? Res 73	0.989177671
CAL 0 TEMP	38.37	CAL 10V TEMP	38.39
CAL 10KOhm TEMP	38.52	CAL? DCI	0.986970652

Service information

CAL DUMP

[(1, 40000.2767), (1, 7.11870924), (1, 2.95342937e-06), (1, 6.03180177e-07), (1, 2.70230419e-06), (1, 5.47873493e-07), (1, 1.1748357e-08), (1, 1.66896369e-07), (1, -6.29947745e-05), (1, -6.29947745e-05), (1, -0.000299971094), (1, -0.000299971094), (1, 0.379540075), (1, 0.382235766), (1, 0.381641161), (1, 0.405560582), (1, 0.38866598), (1, 0.402360272), (1, -0.754711896), (1, 1.36566915), (1, 1.36566915), (1, 0.290496611), (1, 0.291184575), (1, 0.290878107), (1, 0.295857958), (1, 0.293287385), (1, 0.495765335), (1, 1.11409851), (1, 1.11409851), (1, 1.11409851), (1, 0.000415674857), (1, -0.00018629949), (1, -0.000480087283), (1, -0.00911643358), (1, -0.0744628674), (1, -0.574800389), (1, -6.39708179), (1, -6.25332714), (1, -6.25332714), (1, 3.74875473e-05), (1, 0.000410413719), (1, 0.00038145718), (1, 0.00376050863), (1, 0.001114068), (1, 0.00359250243), (1, -0.251570632), (1, 0.0), (1, 0.0), (1, 380.0), (1, 38.0), (1, 3.0), (1, 0.0), (1, 0.0), (1, 0.0), (1, 0.0), (1, 0.0), (1, 0.0), (1, 0.0), (1, 0.0), (1, 38.3722039), (1, 38.3938191), (1, 38.5231264), (1, 179.0), (1, -5.80747086e-12), (1, 2.10081801e-11), (1, 1.84888397e-10), (1, 1.34057224e-09), (1, 9.8434649e-09), (1, 9.56338197e-08), (1, 6.45345505e-07), (1, 2.58763574e-06), (1, 0.989100774), (1, 0.989157056), (1, 0.989049663), (1, 0.989177671), (1, 0.989070276), (1, 1.00016838), (1, 1.00004856), (1, 1.00010547), (1, 1.00054175), (1, 1.00011411), (1, 0.999761989), (1, 1.00014151), (1, 1.00014151), (1, 1.00014151), (1, 1.00016839), (1, 1.00004858), (1, 1.00010549), (1, 1.00054177), (1, 1.00011448), (1, 0.999761989), (1, 1.00014151), (1, 1.00014151), (1, 1.00014151), (1, 0.986970652), (1, 0.989092702), (1, 0.988561292), (1, 0.98886186), (1, 0.98794252), (1, 0.987467267), (1, 0.991216888), (1, 1.02952809), (1, 122.0), (1, 120.0), (1, 120.0), (1, 4.93835309), (1, 1.80061232e-11), (1, -1.62338684e-11), (1, 10001771.1), (1, -0.0084374426), (1, -0.107064125), (1, 1.00000469), (1, 0.999998859), (1, 1666.99376), (1, 16667.0641), (1, 5104.0), (1, 5104.0), (1, 5104.0), (1, 5104.0), (1, 5104.0), (1, 61248.0), (1, 61248.0), (1, 61248.0), (1, 61248.0), (1, 61248.0), (1, 5008.0), (1, 5008.0), (1, 5008.0), (1, 5008.0), (1, 5006.0), (1, 2504.0), (1, 2505.0), (1, 2504.0), (1, 12521.0), (1, 22766.0), (1, 60096.0), (1, 60096.0), (1, 60096.0), (1, 60072.0), (1, 30048.0), (1, 30060.0), (1, 30048.0), (1, 150252.0), (1, 273192.0), (1, 5008.0), (1, 5008.0), (1, 5008.0), (1, 5008.0), (1, 5006.0), (1, 2504.0), (1, 2505.0), (1, 2504.0), (1, 12521.0), (1, 22766.0), (1, 60096.0), (1, 60096.0), (1, 60096.0), (1, 60072.0), (1, 30048.0), (1, 30060.0), (1, 30048.0), (1, 150252.0), (1, 273192.0), (1, 279.0), (1, 279.0), (1, 279.0), (1, 279.0), (1, 279.0), (1, 279.0), (1, 279.0), (1, 279.0), (1, 279.0), (1, 3348.0), (1, 3348.0), (1, 3348.0), (1, 3348.0), (1, 3348.0), (1, 3348.0), (1, 3348.0), (1, 3348.0), (1, 3348.0), (1, 3348.0), (1, 3348.0), (1, 37.6964885), (1, 37.6017973), (1, 37.6127197), (1, 127.0), (1, 127.0), (1, 126.0), (1, 126.0), (1, 128.0), (1, 128.0), (1, 125.0), (1, 126.0), (1, 126.0), (1, 126.0), (1, 128.0), (1, 128.0), (1, 146.0), (1, 146.0), (1, 146.0), (1, 146.0), (1, 146.0), (1, 2534.0), (1, 2532.0), (1, 1505.0), (1, 2182.0), (1, 2415.0), (1, 2420.0), (1, 125.0), (1, 126.0), (1, 125.0), (1, 126.0), (1, 129.0), (1, 126.0), (1, 126.0), (1, 126.0), (1, 126.0), (1, -0.00159283021), (1, -0.01662219), (1, -0.165305769), (1, -1.7189805), (1, -16.8057083), (1, -164.268657), (1, -0.00147136853), (1, -0.0168768228), (1, -0.172573382), (1, -1.71910986), (1, -16.8017956), (1, -166.188184), (1, 1.00646884), (1, 1.01465881), (1, 1.04145925), (1, 1.0329337), (1, 1.0194072), (1, 1.01854286), (1, 433245.579), (1, 10.3841961), (1, 0.993530046), (1, 1.00169745), (1, 1.02815554), (1, 1.01973889), (1, 1.00638519), (1, 1.00553188), (1, 1.53711296e-05), (1, 0.000158319288), (1, 0.00158319288), (1, 0.0158319288), (1, 0.158319288), (1, 1.58319288), (1, 1.02638354), (1, 1.00015505), (1, 0.999933271), (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)]

Destructive overloads?

162, DESTRUCTIVE OVERLOADS valid 2941

Reference

Verification

DUT Condition

xfer-calkit

Test procedure : \$Id: hp3458a.py | Rev 1725 | 2020/05/27 08:09:02 tin_fpga \$

Source procedure : \$Id: f5720b.py | Rev 1697 | 2020/04/04 04:09:52 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	0.000000E+00	15.25 µV	0.75 µV	-0.910 µV	0.910 µV	N/A	0.16 µV	FAIL
Short 0.0 VDC	0.000000E+00	14.90 µV	0.75 µV	-0.900 µV	0.900 µV	N/A	0.15 µV	FAIL
Short 00.0 VDC	0.000000E+00	16.06 µV	0.75 µV	-1.070 µV	1.070 µV	N/A	0.32 µV	FAIL
Short 000.0 VDC	0.000000E+00	35.27 µV	0.75 µV	-14.750 µV	14.750 µV	N/A	14.00 µV	FAIL
Short 0000.0 VDC	0.000000E+00	181.60 µV	0.75 µV	-41.750 µV	41.750 µV	N/A	41.00 µV	FAIL
DCV Test	0.1V-1000V	DUT	Source unc.	Low Limit	Hi limit	Measured	24h spec	Result
0.019 VDC (0.10 Range)	0.0190000	0.018999541	7.27 ppm	0.018999514	0.019000486	-24.143 ppm	18.29 ppm	PASS 61.33 %
0.1 VDC (0.10 Range)	0.1000000	0.099997424	7.27 ppm	0.099998723	0.10000128	-25.764 ppm	5.50 ppm	FAIL 141.31 %
0.11 VDC (0.10 Range)	0.1100000	0.10999701	7.27 ppm	0.10999863	0.11000137	-27.199 ppm	5.23 ppm	FAIL 151.88 %
-0.019 VDC (0.10 Range)	-0.0190000	-0.019003517	7.27 ppm	-0.019000486	-0.018999514	185.123 ppm	18.29 ppm	FAIL 470.30 %
-0.1 VDC (0.10 Range)	-0.1000000	-0.10000201	7.27 ppm	-0.10000128	-0.099998723	20.120 ppm	5.50 ppm	FAIL 110.35 %
-0.11 VDC (0.10 Range)	-0.1100000	-0.1100019	7.27 ppm	-0.11000137	-0.10999863	17.259 ppm	5.23 ppm	PASS 96.37 %
0.19 VDC (1.00 Range)	0.1900000	0.18999909	7.27 ppm	0.18999803	0.19000197	-4.806 ppm	3.08 ppm	PASS 30.44 %
1.0 VDC (1.00 Range)	1.0000000	1.000001	3.86 ppm	0.99999434	1.0000057	0.997 ppm	1.80 ppm	PASS 11.70 %
1.1 VDC (1.00 Range)	1.1000000	1.1000013	3.86 ppm	1.0999938	1.1000062	1.154 ppm	1.77 ppm	PASS 13.58 %
-0.19 VDC (1.00 Range)	-0.1900000	-0.19000301	7.27 ppm	-0.19000197	-0.18999803	15.850 ppm	3.08 ppm	FAIL 100.38 %
-1.0 VDC (1.00 Range)	-1.0000000	-1.0000055	3.86 ppm	-1.0000057	-0.99999434	5.526 ppm	1.80 ppm	PASS 64.87 %
-1.1 VDC (1.00 Range)	-1.1000000	-1.1000059	3.86 ppm	-1.1000062	-1.0999938	5.323 ppm	1.77 ppm	PASS 62.66 %
1.9 VDC (10.00 Range)	1.9000000	1.8999954	3.86 ppm	1.8999912	1.9000088	-2.421 ppm	0.76 ppm	PASS 30.76 %
10.0 VDC (10.00 Range)	10.0000000	9.9999882	2.77 ppm	9.9999668	10.000033	-1.182 ppm	0.55 ppm	PASS 20.93 %
11.0 VDC (10.00 Range)	11.0000000	10.999987	2.73 ppm	10.999964	11.000036	-1.172 ppm	0.55 ppm	PASS 21.05 %
-1.9 VDC (10.00 Range)	-1.9000000	-1.8999813	3.86 ppm	-1.9000088	-1.8999912	-9.843 ppm	0.76 ppm	FAIL 125.08 %
-10.0 VDC (10.00 Range)	-10.0000000	-9.9999707	2.77 ppm	-10.000033	-9.9999668	-2.934 ppm	0.55 ppm	PASS 51.95 %
-11.0 VDC (10.00 Range)	-11.0000000	-10.999971	2.73 ppm	-11.000036	-10.999964	-2.680 ppm	0.55 ppm	PASS 48.13 %
19 VDC (100.00 Range)	19.0000000	18.999786	2.77 ppm	18.99987	19.00013	-11.251 ppm	4.08 ppm	FAIL 114.09 %
100 VDC (100.00 Range)	100.0000000	99.998712	3.73 ppm	99.999347	100.00065	-12.878 ppm	2.80 ppm	FAIL 138.06 %
110 VDC (100.00 Range)	110.0000000	109.99858	3.73 ppm	109.99928	110.00072	-12.940 ppm	2.77 ppm	FAIL 139.21 %
-19 VDC (100.00 Range)	-19.0000000	-18.999483	2.77 ppm	-19.00013	-18.99987	-27.223 ppm	4.08 ppm	FAIL 276.06 %
-100 VDC (100.00 Range)	-100.0000000	-99.998402	3.73 ppm	-100.00065	-99.999347	-15.983 ppm	2.80 ppm	FAIL 171.35 %
-110 VDC (100.00 Range)	-110.0000000	-109.99827	3.73 ppm	-110.00072	-109.99928	-15.731 ppm	2.77 ppm	FAIL 169.23 %
190 VDC (1000.00 Range)	190.0000000	189.99631	3.73 ppm	189.99872	190.00128	-19.447 ppm	3.03 ppm	FAIL 202.43 %
500 VDC (1000.00 Range)	500.0000000	499.99186	3.73 ppm	499.99678	500.00322	-16.281 ppm	2.70 ppm	FAIL 218.24 %
1000 VDC (1000.00 Range)	1000.0000000	999.98634	5.45 ppm	999.97995	1000.02	-13.656 ppm	2.60 ppm	PASS 51.81 %
-190 VDC (1000.00 Range)	-190.0000000	-189.99425	3.73 ppm	-190.00128	-189.99872	-30.262 ppm	3.03 ppm	FAIL 315.01 %
-500 VDC (1000.00 Range)	-500.0000000	-499.98973	3.73 ppm	-500.00322	-499.99678	-20.533 ppm	2.70 ppm	PASS 81.70 %
-1000 VDC (1000.00 Range)	-1000.0000000	-999.98444	5.45 ppm	-1000.02	-999.97995	-15.562 ppm	2.60 ppm	PASS 59.04 %

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	0.999791 Ω	0.99980647 Ω	32.0 ppm	9.9972401E-01	9.9985799E-01	15.473 ppm	35.01 ppm	PASS, 16.31 % of 94.86 ppm
1.9 Ω	1.8998378 Ω	1.899858 Ω	25.0 ppm	1.8997508E+00	1.8999248E+00	10.654 ppm	20.79 ppm	PASS, 16.38 % of 65.03 ppm
10 Ω	10.000581 Ω	10.000856 Ω	5.0 ppm	1.0000451E+01	1.0000711E+01	27.493 ppm	8.00 ppm	FAIL, 145.71 % of 18.87 ppm
19 Ω	19.00024 Ω	19.000605 Ω	4.0 ppm	1.8999807E+01	1.9000673E+01	19.205 ppm	18.79 ppm	PASS, 49.99 % of 38.42 ppm
100 Ω	99.9966 Ω	99.998544 Ω	1.7 ppm	9.9995830E+01	9.9997370E+01	19.436 ppm	6.00 ppm	FAIL, 155.83 % of 12.47 ppm
190 Ω	189.99379 Ω	189.99772 Ω	1.7 ppm	1.8999289E+02	1.8999469E+02	20.706 ppm	3.05 ppm	FAIL, 296.31 % of 6.99 ppm
1.0 kΩ	1000.0256 kΩ	1000.0448 kΩ	1.7 ppm	1.0000217E+03	1.0000295E+03	19.228 ppm	2.20 ppm	FAIL, 345.78 % of 5.56 ppm
1.9 kΩ	1899.9011 kΩ	1899.9246 kΩ	1.7 ppm	1.8998921E+03	1.8999101E+03	12.376 ppm	3.05 ppm	FAIL, 177.10 % of 6.99 ppm
10 kΩ	9999.8 kΩ	9999.9164 kΩ	1.6 ppm	9.9997620E+03	9.9998380E+03	11.643 ppm	2.20 ppm	FAIL, 214.01 % of 5.44 ppm
19 kΩ	18999.283 kΩ	18999.351 kΩ	1.7 ppm	1.8999193E+04	1.8999373E+04	3.576 ppm	3.05 ppm	PASS, 51.17 % of 6.99 ppm
100 kΩ	99994.81 kΩ	99994.73 kΩ	2.0 ppm	9.9994390E+04	9.9995230E+04	-0.801 ppm	2.20 ppm	PASS, 13.48 % of 5.95 ppm
190 kΩ	189989.23 kΩ	189988.71 kΩ	2.0 ppm	1.8998595E+05	1.8999251E+05	-2.722 ppm	15.26 ppm	PASS, 8.84 % of 30.79 ppm
1.0 MΩ	999983.3 MΩ	999975.57 MΩ	2.5 ppm	9.9996980E+05	9.9999680E+05	-7.732 ppm	11.00 ppm	PASS, 34.27 % of 22.56 ppm
1.9 MΩ	1899980.9 MΩ	1899951.5 MΩ	3.0 ppm	1.8998302E+06	1.9001316E+06	-15.470 ppm	76.32 ppm	PASS, 10.13 % of 152.75 ppm
10 MΩ	9999100 MΩ	9998781.4 MΩ	10.0 ppm	9.9984501E+06	9.9997499E+06	-31.862 ppm	55.00 ppm	PASS, 28.50 % of 111.80 ppm
19 MΩ	18998751 MΩ	19000353 MΩ	20.0 ppm	1.8987872E+07	1.9009630E+07	84.303 ppm	552.64 ppm	PASS, 7.62 % of 1105.99 ppm
100 MΩ	1.0000484E+08 MΩ	1.0000184E+08 MΩ	50.0 ppm	9.9948837E+07	1.0006084E+08	-30.017 ppm	510.00 ppm	PASS, 2.93 % 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 0.0000138 Ω	5.000e-05 Ω	-5e-05	5e-05	N/A	8.0000e-06 Ω	PASS
100 Ω	Range 0.0000133 Ω	5.500e-04 Ω	-0.00055	0.00055	N/A	2.2000e-06 Ω	PASS
1.0 kΩ	Range -0.0001024 Ω	5.500e-03 Ω	-0.0055	0.0055	N/A	2.2000e-06 Ω	PASS
10 kΩ	Range 0.0027504 Ω	5.500e-02 Ω	-0.055	0.055	N/A	2.2000e-06 Ω	PASS
100 kΩ	Range 0.0086250 Ω	5.500e-01 Ω	-0.55	0.55	N/A	2.2000e-06 Ω	PASS
1.0 MΩ	Range 0.4849879 Ω	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	PASS
10 MΩ	Range 4.6001490 Ω	5.500e+01 Ω	-55	55	N/A	2.2000e-06 Ω	PASS
100 MΩ	Range 5.3908025 Ω	5.500e+02 Ω	-550	550	N/A	2.2000e-06 Ω	PASS
1 GΩ	Range 4.8517220 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 0.2084343 Ω	3.000e-01 Ω	-0.3	0.3	N/A	8.0000e-06 Ω	PASS
100 Ω	Range 0.2115322 Ω	3.500e-01 Ω	-0.35	0.35	N/A	2.2000e-06 Ω	PASS
1.0 kΩ	Range 0.2093843 Ω	4.000e-01 Ω	-0.4	0.4	N/A	2.2000e-06 Ω	PASS
10 kΩ	Range 0.2175149 Ω	4.000e-01 Ω	-0.4	0.4	N/A	2.2000e-06 Ω	PASS
100 kΩ	Range -0.4815635 Ω	5.500e-01 Ω	-0.55	0.55	N/A	2.2000e-06 Ω	PASS
1.0 MΩ	Range -9.5847939 Ω	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	FAIL
10 MΩ	Range -95.9201509 Ω	5.500e+01 Ω	-55	55	N/A	2.2000e-06 Ω	FAIL
100 MΩ	Range -197.9100108 Ω	5.500e+02 Ω	-550	550	N/A	2.2000e-06 Ω	PASS
1 GΩ	Range -198.4131314 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 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	0.010007941	0.0312 %	-0.290006	0.310006	0.0794 %	3000.0300 %	PASS 0.00 %
0.01 V AC+DC @ 20 Hz	0.01000767	0.0312 %	-0.290006	0.310006	0.0767 %	3000.0300 %	PASS 0.00 %
0.01 V AC+DC @ 40 Hz	0.010005473	0.0312 %	-0.290006	0.310006	0.0547 %	3000.0300 %	PASS 0.00 %
0.01 V AC+DC @ 100 Hz	0.010007986	0.0312 %	-0.100005	0.120005	0.0799 %	1100.0200 %	PASS 0.00 %
0.01 V AC+DC @ 1.0 kHz	0.010006657	0.0312 %	-0.100005	0.120005	0.0666 %	1100.0200 %	PASS 0.00 %
0.01 V AC+DC @ 10.0 kHz	0.010007497	0.0312 %	-0.100006	0.120006	0.0750 %	1100.0300 %	PASS 0.00 %
0.01 V AC+DC @ 20.0 kHz	0.010006291	0.0312 %	-0.100006	0.120006	0.0629 %	1100.0300 %	PASS 0.00 %
0.01 V AC+DC @ 50.0 kHz	0.010002882	0.0447 %	-0.100014	0.120014	0.0288 %	1100.1000 %	PASS 0.00 %
0.01 V AC+DC @ 100.0 kHz	0.0099844762	0.0773 %	-0.100058	0.120058	-0.1552 %	1100.5000 %	PASS 0.01 %
0.01 V AC+DC @ 300.0 kHz	0.0098237749	0.1500 %	-0.190055	0.210055	-1.7623 %	2000.4000 %	PASS 0.04 %
0.01 V AC+DC @ 500.0 kHz	0.0095586641	0.2500 %	-0.490070	0.510070	-4.4134 %	5000.4500 %	PASS 0.04 %
0.01 V AC+DC @ 1.0 MHz	0.0085275453	0.4000 %	-0.490085	0.510085	-14.7245 %	5000.4500 %	PASS 0.15 %
0.03 V AC+DC @ 10 Hz	0.030036091	0.0121 %	0.029994	0.030006	0.1203 %	0.0083 %	FAIL 408.60 %
0.03 V AC+DC @ 20 Hz	0.030033027	0.0121 %	0.029994	0.030006	0.1101 %	0.0083 %	FAIL 373.91 %
0.03 V AC+DC @ 40 Hz	0.03003487	0.0121 %	0.029994	0.030006	0.1162 %	0.0083 %	FAIL 394.77 %
0.03 V AC+DC @ 100 Hz	0.030032633	0.0121 %	0.029994	0.030006	0.1088 %	0.0077 %	FAIL 378.88 %
0.03 V AC+DC @ 1.0 kHz	0.030034106	0.0121 %	0.029994	0.030006	0.1137 %	0.0077 %	FAIL 395.98 %
0.03 V AC+DC @ 10.0 kHz	0.030036507	0.0121 %	0.029992	0.030008	0.1217 %	0.0147 %	FAIL 319.62 %
0.03 V AC+DC @ 20.0 kHz	0.030034783	0.0121 %	0.029992	0.030008	0.1159 %	0.0147 %	FAIL 304.53 %
0.03 V AC+DC @ 50.0 kHz	0.03003557	0.0256 %	0.029983	0.030017	0.1186 %	0.0307 %	FAIL 148.32 %
0.03 V AC+DC @ 100.0 kHz	0.030028542	0.0591 %	0.029958	0.030042	0.0951 %	0.0807 %	PASS 47.57 %
0.03 V AC+DC @ 300.0 kHz	0.030000293	0.0964 %	0.029880	0.030120	0.0010 %	0.3033 %	PASS 0.15 %
0.03 V AC+DC @ 500.0 kHz	0.029982105	0.1500 %	0.029654	0.030346	-0.0597 %	1.0033 %	PASS 2.94 %
0.03 V AC+DC @ 1.0 MHz	0.030041626	0.3000 %	0.029609	0.030391	0.1388 %	1.0033 %	PASS 6.62 %
0.1 V AC+DC @ 10 Hz	0.10000734	0.0121 %	0.099980	0.100020	0.0073 %	0.0074 %	PASS 25.81 %
0.1 V AC+DC @ 20 Hz	0.10000709	0.0121 %	0.099980	0.100020	0.0071 %	0.0074 %	PASS 24.93 %
0.1 V AC+DC @ 40 Hz	0.10000712	0.0121 %	0.099980	0.100020	0.0071 %	0.0074 %	PASS 25.04 %
0.1 V AC+DC @ 100 Hz	0.10000754	0.0121 %	0.099981	0.100019	0.0075 %	0.0072 %	PASS 26.73 %
0.1 V AC+DC @ 1.0 kHz	0.10000421	0.0121 %	0.099981	0.100019	0.0042 %	0.0072 %	PASS 14.93 %
0.1 V AC+DC @ 10.0 kHz	0.10001117	0.0121 %	0.099974	0.100026	0.0112 %	0.0142 %	PASS 29.90 %
0.1 V AC+DC @ 20.0 kHz	0.100009	0.0121 %	0.099974	0.100026	0.0090 %	0.0142 %	PASS 24.10 %
0.1 V AC+DC @ 50.0 kHz	0.10000791	0.0256 %	0.099944	0.100056	0.0079 %	0.0302 %	PASS 9.99 %
0.1 V AC+DC @ 100.0 kHz	0.099986695	0.0591 %	0.099861	0.100139	-0.0133 %	0.0802 %	PASS 6.68 %
0.1 V AC+DC @ 300.0 kHz	0.099887661	0.0964 %	0.099603	0.100397	-0.1123 %	0.3010 %	PASS 17.77 %
0.1 V AC+DC @ 500.0 kHz	0.099832456	0.1500 %	0.098849	0.101151	-0.1675 %	1.0010 %	PASS 8.28 %
0.1 V AC+DC @ 1.0 MHz	0.10009488	0.3000 %	0.098699	0.101301	0.0949 %	1.0010 %	PASS 4.54 %
0.3 V AC+DC @ 10 Hz	0.30000717	0.0050 %	0.299960	0.300040	0.0024 %	0.0083 %	PASS 12.33 %
0.3 V AC+DC @ 20 Hz	0.29999875	0.0050 %	0.299960	0.300040	-0.0004 %	0.0083 %	PASS 2.15 %
0.3 V AC+DC @ 40 Hz	0.30000969	0.0050 %	0.299960	0.300040	0.0032 %	0.0083 %	PASS 16.65 %
0.3 V AC+DC @ 100 Hz	0.30000208	0.0050 %	0.299962	0.300038	0.0007 %	0.0077 %	PASS 3.80 %
0.3 V AC+DC @ 1.0 kHz	0.30001152	0.0050 %	0.299962	0.300038	0.0038 %	0.0077 %	PASS 21.03 %

0.3 V AC+DC @ 10.0 kHz	0.30001627	0.0050 %	0.299941	0.300059	0.0054 %	0.0147 %	PASS 17.51 %
0.3 V AC+DC @ 20.0 kHz	0.29999997	0.0050 %	0.299941	0.300059	-0.0000 %	0.0147 %	PASS 0.03 %
0.3 V AC+DC @ 50.0 kHz	0.30001861	0.0085 %	0.299882	0.300118	0.0062 %	0.0307 %	PASS 9.74 %
0.3 V AC+DC @ 100.0 kHz	0.30006777	0.0138 %	0.299717	0.300283	0.0226 %	0.0807 %	PASS 13.80 %
0.3 V AC+DC @ 300.0 kHz	0.30043962	0.0425 %	0.298962	0.301038	0.1465 %	0.3033 %	PASS 23.92 %
0.3 V AC+DC @ 500.0 kHz	0.30107139	0.1100 %	0.296660	0.303340	0.3571 %	1.0033 %	PASS 17.69 %
0.3 V AC+DC @ 1.0 MHz	0.30307236	0.1800 %	0.296450	0.303550	1.0241 %	1.0033 %	PASS 50.23 %
1.0 V AC+DC @ 10 Hz	1.000013	0.0050 %	0.999876	1.000124	0.0013 %	0.0074 %	PASS 7.31 %
1.0 V AC+DC @ 20 Hz	0.99998692	0.0050 %	0.999876	1.000124	-0.0013 %	0.0074 %	PASS 7.34 %
1.0 V AC+DC @ 40 Hz	0.99997735	0.0050 %	0.999876	1.000124	-0.0023 %	0.0074 %	PASS 12.72 %
1.0 V AC+DC @ 100 Hz	0.99998699	0.0050 %	0.999878	1.000122	-0.0013 %	0.0072 %	PASS 7.44 %
1.0 V AC+DC @ 1.0 kHz	1.0000226	0.0050 %	0.999878	1.000122	0.0023 %	0.0072 %	PASS 12.95 %
1.0 V AC+DC @ 10.0 kHz	1.0000171	0.0050 %	0.999808	1.000192	0.0017 %	0.0142 %	PASS 5.69 %
1.0 V AC+DC @ 20.0 kHz	0.99997499	0.0050 %	0.999808	1.000192	-0.0025 %	0.0142 %	PASS 8.31 %
1.0 V AC+DC @ 50.0 kHz	1.0000198	0.0085 %	0.999613	1.000387	0.0020 %	0.0302 %	PASS 3.16 %
1.0 V AC+DC @ 100.0 kHz	1.0001302	0.0138 %	0.999060	1.000940	0.0130 %	0.0802 %	PASS 8.00 %
1.0 V AC+DC @ 300.0 kHz	1.0014439	0.0425 %	0.996565	1.003435	0.1444 %	0.3010 %	PASS 23.75 %
1.0 V AC+DC @ 500.0 kHz	1.0035618	0.1100 %	0.988890	1.011110	0.3562 %	1.0010 %	PASS 17.68 %
1.0 V AC+DC @ 1.0 MHz	1.0111507	0.1800 %	0.988190	1.011810	1.1151 %	1.0010 %	PASS 54.82 %
3.0 V AC+DC @ 10 Hz	3.0000248	0.0048 %	2.999605	3.000395	0.0008 %	0.0083 %	PASS 4.29 %
3.0 V AC+DC @ 20 Hz	2.999967	0.0048 %	2.999605	3.000395	-0.0011 %	0.0083 %	PASS 5.71 %
3.0 V AC+DC @ 40 Hz	2.9999539	0.0048 %	2.999605	3.000395	-0.0015 %	0.0083 %	PASS 7.98 %
3.0 V AC+DC @ 100 Hz	2.9999455	0.0048 %	2.999625	3.000375	-0.0018 %	0.0077 %	PASS 10.02 %
3.0 V AC+DC @ 1.0 kHz	3.0000376	0.0048 %	2.999625	3.000375	0.0013 %	0.0077 %	PASS 6.93 %
3.0 V AC+DC @ 10.0 kHz	3.0001432	0.0048 %	2.999415	3.000585	0.0048 %	0.0147 %	PASS 15.45 %
3.0 V AC+DC @ 20.0 kHz	3.0000797	0.0048 %	2.999415	3.000585	0.0027 %	0.0147 %	PASS 8.60 %
3.0 V AC+DC @ 50.0 kHz	3.0000342	0.0085 %	2.998824	3.001176	0.0011 %	0.0307 %	PASS 1.79 %
3.0 V AC+DC @ 100.0 kHz	2.9995839	0.0121 %	2.997216	3.002784	-0.0139 %	0.0807 %	PASS 8.50 %
3.0 V AC+DC @ 300.0 kHz	2.9969434	0.0336 %	2.989891	3.010109	-0.1019 %	0.3033 %	PASS 16.69 %
3.0 V AC+DC @ 500.0 kHz	3.0007034	0.1100 %	2.966600	3.033400	0.0234 %	1.0033 %	PASS 1.16 %
3.0 V AC+DC @ 1.0 MHz	3.0235631	0.1700 %	2.964800	3.035200	0.7854 %	1.0033 %	PASS 38.59 %
10.0 V AC+DC @ 10 Hz	10.000057	0.0048 %	9.998778	10.001222	0.0006 %	0.0074 %	PASS 3.24 %
10.0 V AC+DC @ 20 Hz	9.9998574	0.0048 %	9.998778	10.001222	-0.0014 %	0.0074 %	PASS 8.07 %
10.0 V AC+DC @ 40 Hz	9.9996617	0.0048 %	9.998778	10.001222	-0.0034 %	0.0074 %	PASS 19.15 %
10.0 V AC+DC @ 100 Hz	9.9997965	0.0048 %	9.998798	10.001202	-0.0020 %	0.0072 %	PASS 11.74 %
10.0 V AC+DC @ 1.0 kHz	10.000131	0.0048 %	9.998798	10.001202	0.0013 %	0.0072 %	PASS 7.55 %
10.0 V AC+DC @ 10.0 kHz	10.000275	0.0048 %	9.998098	10.001902	0.0027 %	0.0142 %	PASS 9.16 %
10.0 V AC+DC @ 20.0 kHz	10.000033	0.0048 %	9.998098	10.001902	0.0003 %	0.0142 %	PASS 1.09 %
10.0 V AC+DC @ 50.0 kHz	9.9998063	0.0085 %	9.996125	10.003875	-0.0019 %	0.0302 %	PASS 3.09 %
10.0 V AC+DC @ 100.0 kHz	9.9977311	0.0121 %	9.990766	10.009234	-0.0227 %	0.0802 %	PASS 13.99 %
10.0 V AC+DC @ 300.0 kHz	9.9897018	0.0336 %	9.966536	10.033464	-0.1030 %	0.3010 %	PASS 17.00 %
10.0 V AC+DC @ 500.0 kHz	10.002043	0.1100 %	9.888900	10.111100	0.0204 %	1.0010 %	PASS 1.01 %
10.0 V AC+DC @ 1.0 MHz	10.085417	0.1700 %	9.882900	10.117100	0.8542 %	1.0010 %	PASS 42.06 %
30 V AC+DC @ 10 Hz	29.998947	0.0060 %	29.991795	30.008205	-0.0035 %	0.0213 %	PASS 7.92 %
30 V AC+DC @ 20 Hz	29.998236	0.0060 %	29.991795	30.008205	-0.0059 %	0.0213 %	PASS 13.26 %
30 V AC+DC @ 40 Hz	29.99659	0.0060 %	29.991795	30.008205	-0.0114 %	0.0213 %	PASS 25.64 %

30 V AC+DC @ 100 Hz	29.998273	0.0060 %	29.991995	30.008005	-0.0058 %	0.0207 %	PASS 13.37 %
30 V AC+DC @ 1.0 kHz	29.999097	0.0060 %	29.991995	30.008005	-0.0030 %	0.0207 %	PASS 6.99 %
30 V AC+DC @ 10.0 kHz	30.002628	0.0060 %	29.991995	30.008005	0.0088 %	0.0207 %	PASS 20.35 %
30 V AC+DC @ 20.0 kHz	30.002097	0.0060 %	29.991995	30.008005	0.0070 %	0.0207 %	PASS 16.24 %
30 V AC+DC @ 50.0 kHz	29.996459	0.0060 %	29.987495	30.012505	-0.0118 %	0.0357 %	PASS 16.32 %
30 V AC+DC @ 100.0 kHz	29.973007	0.0174 %	29.958591	30.041409	-0.0900 %	0.1207 %	PASS 36.90 %
30 V AC+DC @ 300.0 kHz	29.813877	0.0991 %	29.849273	30.150727	-0.6204 %	0.4033 %	PASS 74.69 %
30 V AC+DC @ 500.0 kHz	29.684059	0.5200 %	29.393000	30.607000	-1.0531 %	1.5033 %	PASS 33.10 %
100.0 V AC+DC @ 10 Hz	99.99633	0.0060 %	99.973582	100.026418	-0.0037 %	0.0204 %	PASS 8.63 %
100.0 V AC+DC @ 20 Hz	99.993842	0.0060 %	99.973582	100.026418	-0.0062 %	0.0204 %	PASS 14.48 %
100.0 V AC+DC @ 40 Hz	99.993275	0.0060 %	99.973582	100.026418	-0.0067 %	0.0204 %	PASS 15.81 %
100.0 V AC+DC @ 100 Hz	99.993762	0.0060 %	99.973782	100.026218	-0.0062 %	0.0202 %	PASS 14.80 %
100.0 V AC+DC @ 1.0 kHz	99.997155	0.0060 %	99.973782	100.026218	-0.0028 %	0.0202 %	PASS 6.75 %
100.0 V AC+DC @ 10.0 kHz	100.00899	0.0060 %	99.973782	100.026218	0.0090 %	0.0202 %	PASS 21.33 %
100.0 V AC+DC @ 20.0 kHz	100.00608	0.0060 %	99.973782	100.026218	0.0061 %	0.0202 %	PASS 14.43 %
100.0 V AC+DC @ 50.0 kHz	99.988213	0.0095 %	99.955255	100.044745	-0.0118 %	0.0352 %	PASS 16.16 %
100.0 V AC+DC @ 100.0 kHz	99.90422	0.0174 %	99.862436	100.137564	-0.0958 %	0.1202 %	PASS 39.43 %
300.0 V AC+DC @ 40 Hz	299.90261	0.0079 %	299.074408	300.925592	-0.0325 %	0.3007 %	PASS 5.40 %
300.0 V AC+DC @ 100 Hz	299.90137	0.0079 %	299.854408	300.145592	-0.0329 %	0.0407 %	PASS 39.69 %
300.0 V AC+DC @ 1.0 kHz	299.91102	0.0079 %	299.854408	300.145592	-0.0297 %	0.0407 %	PASS 35.80 %
300.0 V AC+DC @ 10.0 kHz	299.94673	0.0110 %	299.784865	300.215135	-0.0178 %	0.0607 %	PASS 14.40 %
300.0 V AC+DC @ 20.0 kHz	299.94755	0.0110 %	299.784865	300.215135	-0.0175 %	0.0607 %	PASS 14.18 %
300.0 V AC+DC @ 50.0 kHz	300.04131	0.0245 %	299.564599	300.435401	0.0138 %	0.1207 %	PASS 5.59 %
300.0 V AC+DC @ 100.0 kHz	300.10331	0.0660 %	298.900000	301.100000	0.0344 %	0.3007 %	PASS 5.59 %
750.0 V AC+DC @ 40 Hz	749.68947	0.0079 %	747.689020	752.310980	-0.0414 %	0.3003 %	PASS 6.89 %
750.0 V AC+DC @ 100 Hz	749.69064	0.0079 %	749.639020	750.360980	-0.0412 %	0.0403 %	PASS 50.27 %
750.0 V AC+DC @ 1.0 kHz	749.72672	0.0079 %	749.639020	750.360980	-0.0364 %	0.0403 %	PASS 44.41 %
750.0 V AC+DC @ 10.0 kHz	749.8234	0.0110 %	749.465162	750.534838	-0.0235 %	0.0603 %	PASS 19.22 %
750.0 V AC+DC @ 20.0 kHz	749.80509	0.0110 %	749.465162	750.534838	-0.0260 %	0.0603 %	PASS 21.21 %
750.0 V AC+DC @ 50.0 kHz	749.9905	0.0245 %	748.914498	751.085502	-0.0013 %	0.1203 %	PASS 0.52 %
750.0 V AC+DC @ 50.0 kHz	749.98786	0.0660 %	748.603000	751.397000	-0.0016 %	0.1203 %	PASS 0.59 %

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	3.20964E-11						INFO
50 nADC	5E-08	5.0019019E-08						INFO
100 nADC	1E-07	1.0001143E-07	71.82 ppm	9.995282E-08	1.000472E-07	114.299 ppm	400 ppm	PASS 14.06 %
-100 nADC	-1E-07	-9.9895021E-08	71.82 ppm	-1.000492E-07	-9.995082E-08	-1049.794 ppm	420 ppm	FAIL 123.19 %
-50 nADC	-5E-08	-4.9954405E-08						INFO
Zero µADC	0	5.7661275E-11						INFO
0.5 µADC	5E-07	5.0004735E-07	71.82 ppm	4.999201E-07	5.000799E-07	94.698 ppm	88 ppm	PASS 41.69 %
1.0 µADC	1E-06	1.000043E-06	71.82 ppm	9.998792E-07	1.000121E-06	42.983 ppm	49 ppm	PASS 24.72 %
-1.0 µADC	-1E-06	-9.999161E-07	71.82 ppm	-1.000123E-06	-9.998772E-07	-83.898 ppm	51 ppm	PASS 47.62 %
-0.5 µADC	-5E-07	-4.9991781E-07	71.82 ppm	-5.000819E-07	-4.999181E-07	-164.382 ppm	92 ppm	PASS 70.42 %
Zero 00 µADC	0	7.093398E-11						INFO
5 µADC	5E-06	4.9999632E-06	71.82 ppm	4.999522E-06	5.000478E-06	-7.365 ppm	24 ppm	PASS 4.87 %
10 µADC	1E-05	9.9999009E-06	71.82 ppm	9.999113E-06	1.000089E-05	-9.907 ppm	17 ppm	PASS 6.71 %
-10 µADC	-1E-05	-9.999759E-06	71.82 ppm	-1.000089E-05	-9.999111E-06	-24.097 ppm	17 ppm	PASS 16.32 %
-5 µADC	-5E-06	-4.9998471E-06	71.82 ppm	-5.00048E-06	-4.99952E-06	-30.582 ppm	24 ppm	PASS 20.18 %
Zero 000 µADC	0	8.8662637E-11						INFO
50 µADC	5E-05	4.9998686E-05	71.82 ppm	4.999531E-05	5.000469E-05	-26.271 ppm	22 ppm	PASS 17.49 %
100 µADC	0.0001	9.9997481E-05	71.82 ppm	9.999122E-05	0.0001000088	-25.189 ppm	16 ppm	PASS 17.12 %
-100 µADC	-0.0001	-9.9997703E-05	71.82 ppm	-0.0001000088	-9.999122E-05	-22.971 ppm	16 ppm	PASS 15.61 %
-50 µADC	-5E-05	-4.9998897E-05	71.82 ppm	-5.000469E-05	-4.999531E-05	-22.056 ppm	22 ppm	PASS 14.68 %
Zero mADC	0	1.0986671E-10						INFO
0.5 mADC	0.0005	0.00049999028	33.64 ppm	0.0004999742	0.0005000258	-19.434 ppm	18 ppm	PASS 25.47 %
1.0 mADC	0.001	0.00099998028	33.64 ppm	0.0009999524	0.001000048	-19.721 ppm	14 ppm	PASS 27.06 %
-1.0 mADC	-0.001	-0.00099997814	33.64 ppm	-0.001000048	-0.0009999524	-21.862 ppm	14 ppm	PASS 30.00 %
-0.5 mADC	-0.0005	-0.0004999889	33.64 ppm	-0.0005000258	-0.0004999742	-22.201 ppm	18 ppm	PASS 29.09 %
Zero 00 mADC	0	1.0628002E-10						INFO
5 mADC	0.005	0.0049998769	32.27 ppm	0.004999749	0.005000251	-24.627 ppm	18 ppm	PASS 33.32 %
10 mADC	0.01	0.0099997565	32.27 ppm	0.009999537	0.01000046	-24.353 ppm	14 ppm	PASS 34.62 %
-10 mADC	-0.01	-0.0099997611	32.27 ppm	-0.01000046	-0.009999537	-23.894 ppm	14 ppm	PASS 33.96 %
-5 mADC	-0.005	-0.0049998774	32.27 ppm	-0.005000251	-0.004999749	-24.518 ppm	18 ppm	PASS 33.18 %
Zero 000 mADC	0	8.3984129E-11						INFO
50 mADC	0.05	0.049999107	53.32 ppm	0.04999568	0.05000432	-17.869 ppm	33 ppm	PASS 14.25 %
100 mADC	0.1	0.099997966	53.32 ppm	0.09999177	0.1000082	-20.340 ppm	29 ppm	PASS 16.76 %
-100 mADC	-0.1	-0.099998175	53.32 ppm	-0.1000082	-0.09999177	-18.245 ppm	29 ppm	PASS 15.03 %
-50 mADC	-0.05	-0.049999051	53.32 ppm	-0.05000432	-0.04999568	-18.981 ppm	33 ppm	PASS 15.14 %
Zero ADC	0	2.1013288E-10						INFO
0.5 ADC	0.5	0.49999406	115.22 ppm	0.4998824	0.5001176	-11.871 ppm	120 ppm	PASS 3.57 %
1.0 ADC	1	0.9999356	115.22 ppm	0.9997748	1.000225	-64.404 ppm	110 ppm	PASS 20.21 %
-1.0 ADC	-1	-0.99990303	115.22 ppm	-1.000225	-0.9997748	-96.969 ppm	110 ppm	PASS 30.44 %
-0.5 ADC	-0.5	-0.49996114	115.22 ppm	-0.5001176	-0.4998824	-77.717 ppm	120 ppm	PASS 23.36 %

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	1.0053824E-05	0.0160 %	-0.0002900076045	0.0003100076045	0.5382 %	3000.0600 %	INFO
100 µA AC @ 50 Hz	0.0001	0.00010003047	0.0160 %	-0.000200076045	0.000400076045	0.0305 %	300.0600 %	PASS 0.01 %
1.0 mA AC @ 50 Hz	0.001	0.0010000322	0.0160 %	0.00099921955	0.00100078045	32.226 ppm	0.0620 %	PASS 2.52 %
10 mA AC @ 50 Hz	0.01	0.010000426	0.0160 %	0.0099921955	0.0100078045	42.585 ppm	0.0620 %	PASS 3.32 %
100 mA AC @ 50 Hz	0.1	0.10003133	0.0133 %	0.099924682	0.100075318	313.319 ppm	0.0620 %	PASS 24.70 %
1.0 A AC @ 50 Hz	1.0	1.0034159	0.0133 %	0.99904682	1.00095318	3415.940 ppm	0.0820 %	FAIL 205.60 %
10 µA AC @ 60 Hz	1e-05	1.0054786E-05	0.0133 %	-0.0002900073318	0.0003100073318	0.5479 %	3000.0600 %	INFO
100 µA AC @ 60 Hz	0.0001	0.0001000336	0.0133 %	-0.000200073318	0.000400073318	0.0336 %	300.0600 %	PASS 0.01 %
1.0 mA AC @ 60 Hz	0.001	0.0010000602	0.0129 %	0.00099925136	0.00100074864	60.173 ppm	0.0620 %	PASS 4.75 %
10 mA AC @ 60 Hz	0.01	0.01000071	0.0129 %	0.0099925136	0.0100074864	70.982 ppm	0.0620 %	PASS 5.60 %
100 mA AC @ 60 Hz	0.1	0.10003351	0.0288 %	0.099909182	0.100090818	335.064 ppm	0.0620 %	PASS 24.50 %
1.0 A AC @ 60 Hz	1.0	1.0033988	0.0288 %	0.99889182	1.00110818	3398.840 ppm	0.0820 %	FAIL 195.52 %
10 µA AC @ 1.0 kHz	1e-05	1.0054656E-05	0.0160 %	-0.0002900076045	0.0003100076045	0.5466 %	3000.0600 %	INFO
100 µA AC @ 1.0 kHz	0.0001	0.00010000498	0.0160 %	-0.000200076045	0.000400076045	0.0050 %	300.0600 %	PASS 0.00 %
1.0 mA AC @ 1.0 kHz	0.001	0.0010000973	0.0160 %	0.00099951955	0.00100048045	97.282 ppm	0.0320 %	PASS 13.59 %
10 mA AC @ 1.0 kHz	0.01	0.010000947	0.0160 %	0.0099951955	0.0100048045	94.695 ppm	0.0320 %	PASS 13.23 %
100 mA AC @ 1.0 kHz	0.1	0.10002563	0.0133 %	0.099954682	0.100045318	256.278 ppm	0.0320 %	PASS 36.97 %
1.0 A AC @ 1.0 kHz	1.0	1.0010674	0.0133 %	0.99884682	1.00115318	0.1067 %	0.1020 %	PASS 51.88 %

Test date	31 May 2020 19:00
UUT Internal TEMP?	37.7
Destructive overloads?	162, DESTRUCTIVE OVERLOADS valid 2941

Lab temperature maintained +24°C ±2°C

Internal use only

Not validated