

Manufacturer	HEWLETT-PACKARD	Calibration date	May 26 2020
Model Number	3458A	Ambient Temperature	23.14 °C
Serial	QVR meter	Relative Humidity	44.49 %
ID Number	STD Calibration test, GPIB11 unit	Pressure	1017.20
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	44.0 days ago	MFC since DCV ZERO	2.0 days ago
MFC since WBFLAT	59.0 days ago	MFC since WBGAIN	35.0 days ago
MFC Confidence level	24h 95% REL	MFC Calibrate date	2020-04-13 00:00:00
MFC Calibrate date Zero	2020-05-25 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	26 May 2020 16:45
DUT Internal TEMP?	37.8	DUT Calibrations number?	37
Self-test result?	0,"NO ERROR"	ACAL ALL result?	0,"NO ERROR"
Firmware	9,2	Options	1,0
CAL? 72	0.989049579	CAL? 1,1	40000.2984
CAL? 2,1	7.11871116	CAL? Res 73	0.989179157
CAL 0 TEMP	37.54	CAL 10V TEMP	37.51
CAL 10KOhm TEMP	37.61	CAL? DCI	0.986973418

Service information

CAL DUMP

[(1, 40000.2984), (1, 7.11871116), (1, 3.63518045e-06), (1, 6.03180499e-07), (1, 3.46931588e-06), (1, 5.47873951e-07), (1, 1.88974577e-06), (1, 1.66896355e-07), (1, -5.51676782e-05), (1, -5.51676782e-05), (1, -0.000233732168), (1, -0.000233732168), (1, 0.387817723), (1, 0.391211733), (1, 0.390728933), (1, 0.42271961), (1, 0.420723958), (1, 1.47652385), (1, 6.25334246), (1, 2.62352873), (1, 2.62352873), (1, 0.290496085), (1, 0.291184341), (1, 0.290877961), (1, 0.295859397), (1, 0.293288479), (1, 0.495767132), (1, 1.11410124), (1, 1.11410124), (1, 1.11410124), (1, 0.000456785189), (1, -4.69117284e-05), (1, -0.000244194285), (1, -0.0070063835), (1, -0.0565661151), (1, -0.71850309), (1, -1.00628499), (1, -3.73762997), (1, -3.73762997), (1, 3.74874793e-05), (1, 0.000410413389), (1, 0.000381456989), (1, 0.00376052692), (1, 0.00111407215), (1, 0.00359251545), (1, -0.251571248), (1, 0.0), (1, 0.0), (1, 388.0), (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, 0.0), (1, 0.0), (1, 0.0), (1, 37.5441847), (1, 37.5053991), (1, 37.6101847), (1, 149.0), (1, -9.30789387e-12), (1, 1.74933334e-11), (1, 1.81804193e-10), (1, 1.34394888e-09), (1, 9.68801367e-09), (1, 9.74157761e-08), (1, 6.43615657e-07), (1, 4.76441817e-06), (1, 0.989101301), (1, 0.989157884), (1, 0.989049579), (1, 0.989179157), (1, 0.989070851), (1, 1.00016657), (1, 1.00004776), (1, 1.00010497), (1, 1.00054662), (1, 1.00011784), (1, 0.999765612), (1, 1.00014396), (1, 1.00014396), (1, 1.00014396), (1, 1.00016657), (1, 1.00004778), (1, 1.00010499), (1, 1.00054663), (1, 1.00011821), (1, 0.999765612), (1, 1.00014396), (1, 1.00014396), (1, 0.986973418), (1, 0.989092333), (1, 0.98855819), (1, 0.988857067), (1, 0.987938154), (1, 0.987463216), (1, 0.991224712), (1, 1.02957824), (1, 124.0), (1, 120.0), (1, 4.93805075), (1, 1.80868047e-11), (1, -1.65338227e-11), (1, 10001714.2), (1, -0.00961648156), (1, -0.0584840034), (1, 0.999984534), (1, 1.00000118), (1, 1666.99645), (1, 16666.7645), (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, 5006.0), (1, 2504.0), (1, 2505.0), (1, 2504.0), (1, 2504.0), (1, 12521.0), (1, 22765.0), (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, 273180.0), (1, 5008.0), (1, 5008.0), (1, 5008.0), (1, 5008.0), (1, 2504.0), (1, 2505.0), (1, 2504.0), (1, 2504.0), (1, 12521.0), (1, 22765.0), (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, 273180.0), (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, 37.8717748), (1, 38.0609766), (1, 38.139239), (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, 112.0), (1, 112.0), (1, 112.0), (1, 112.0), (1, 112.0), (1, 112.0), (1, 2533.0), (1, 2531.0), (1, 1504.0), (1, 2181.0), (1, 2420.0), (1, 2425.0), (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, -0.00158350249), (1, -0.0166078918), (1, -0.171763319), (1, -1.71722167), (1, -16.0768686), (1, -169.291463), (1, -0.00145868341), (1, -0.0164220184), (1, -0.172319891), (1, -1.71772199), (1, -16.7755499), (1, -162.739971), (1, 1.00647807), (1, 1.01467547), (1, 1.04150976), (1, 1.03300215), (1, 1.01914815), (1, 1.01825929), (1, 431134.746), (1, 10.3842696), (1, 0.993547275), (1, 1.00172208), (1, 1.0282138), (1, 1.0198148), (1, 1.00613766), (1, 1.00526015), (1, 1.52962393e-05), (1, 0.000157547935), (1, 0.00157547935), (1, 0.0157547935), (1, 0.157547935), (1, 1.57547935), (1, 1.02640162), (1, 1.0001645), (1, 0.999920115), (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 1500 | 2019/07/24 08:56:31 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	0.16 µV	0.75 µV	-0.910 µV	0.910 µV	N/A	0.16 µV	PASS
Short 0.0 VDC	0.000000E+00	0.18 µV	0.75 µV	-0.900 µV	0.900 µV	N/A	0.15 µV	PASS
Short 00.0 VDC	0.000000E+00	0.05 µV	0.75 µV	-1.070 µV	1.070 µV	N/A	0.32 µV	PASS
Short 000.0 VDC	0.000000E+00	19.04 µV	0.75 µV	-14.750 µV	14.750 µV	N/A	14.00 µV	FAIL
Short 0000.0 VDC	0.000000E+00	176.31 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	0.019000063	7.27 ppm	0.018999514	0.019000486	3.333 ppm	18.29 ppm	PASS 8.47 %
0.1 VDC (0.10 Range)	0.1000000	0.10000045	7.27 ppm	0.099998723	0.10000128	4.456 ppm	5.50 ppm	PASS 24.44 %
0.11 VDC (0.10 Range)	0.1100000	0.11000044	7.27 ppm	0.10999863	0.11000137	3.995 ppm	5.23 ppm	PASS 22.31 %
-0.019 VDC (0.10 Range)	-0.0190000	-0.01900005	7.27 ppm	-0.019000486	-0.018999514	2.609 ppm	18.29 ppm	PASS 6.63 %
-0.1 VDC (0.10 Range)	-0.1000000	-0.10000053	7.27 ppm	-0.10000128	-0.099998723	5.294 ppm	5.50 ppm	PASS 29.04 %
-0.11 VDC (0.10 Range)	-0.1100000	-0.11000063	7.27 ppm	-0.11000137	-0.10999863	5.712 ppm	5.23 ppm	PASS 31.89 %
0.19 VDC (1.00 Range)	0.1900000	0.19000051	7.27 ppm	0.18999803	0.19000197	2.664 ppm	3.08 ppm	PASS 16.87 %
1.0 VDC (1.00 Range)	1.0000000	1.0000055	3.86 ppm	0.99999434	1.0000057	5.483 ppm	1.80 ppm	PASS 64.37 %
1.1 VDC (1.00 Range)	1.1000000	1.1000062	3.86 ppm	1.0999938	1.1000062	5.629 ppm	1.77 ppm	PASS 66.26 %
-0.19 VDC (1.00 Range)	-0.1900000	-0.1899991	7.27 ppm	-0.19000197	-0.18999803	-4.718 ppm	3.08 ppm	PASS 29.88 %
-1.0 VDC (1.00 Range)	-1.0000000	-1.0000039	3.86 ppm	-1.0000057	-0.99999434	3.855 ppm	1.80 ppm	PASS 45.26 %
-1.1 VDC (1.00 Range)	-1.1000000	-1.1000044	3.86 ppm	-1.1000062	-1.0999938	4.009 ppm	1.77 ppm	PASS 47.19 %
1.9 VDC (10.00 Range)	1.9000000	1.8999974	3.86 ppm	1.8999912	1.9000088	-1.369 ppm	0.76 ppm	PASS 17.40 %
10.0 VDC (10.00 Range)	10.0000000	9.9999997	2.77 ppm	9.9999668	10.000033	-0.029 ppm	0.55 ppm	PASS 0.51 %
11.0 VDC (10.00 Range)	11.0000000	11.000002	2.73 ppm	10.999964	11.000036	0.152 ppm	0.55 ppm	PASS 2.73 %
-1.9 VDC (10.00 Range)	-1.9000000	-1.8999758	3.86 ppm	-1.9000088	-1.8999912	-12.711 ppm	0.76 ppm	FAIL 161.52 %
-10.0 VDC (10.00 Range)	-10.0000000	-9.9999729	2.77 ppm	-10.000033	-9.9999668	-2.709 ppm	0.55 ppm	PASS 47.96 %
-11.0 VDC (10.00 Range)	-11.0000000	-10.999975	2.73 ppm	-11.000036	-10.999964	-2.267 ppm	0.55 ppm	PASS 40.72 %
19 VDC (100.00 Range)	19.0000000	18.999784	2.77 ppm	18.99987	19.00013	-11.388 ppm	4.08 ppm	FAIL 115.49 %
100 VDC (100.00 Range)	100.0000000	99.998716	3.73 ppm	99.999347	100.00065	-12.837 ppm	2.80 ppm	FAIL 137.61 %
110 VDC (100.00 Range)	110.0000000	109.99859	3.73 ppm	109.99928	110.00072	-12.844 ppm	2.77 ppm	FAIL 138.18 %
-19 VDC (100.00 Range)	-19.0000000	-18.999474	2.77 ppm	-19.00013	-18.99987	-27.676 ppm	4.08 ppm	FAIL 280.65 %
-100 VDC (100.00 Range)	-100.0000000	-99.998395	3.73 ppm	-100.00065	-99.999347	-16.055 ppm	2.80 ppm	FAIL 172.11 %
-110 VDC (100.00 Range)	-110.0000000	-109.99826	3.73 ppm	-110.00072	-109.99928	-15.781 ppm	2.77 ppm	FAIL 169.78 %
190 VDC (1000.00 Range)	190.0000000	189.99632	3.73 ppm	189.99872	190.00128	-19.354 ppm	3.03 ppm	FAIL 201.47 %
500 VDC (1000.00 Range)	500.0000000	499.99194	3.73 ppm	499.99678	500.00322	-16.112 ppm	2.70 ppm	FAIL 215.98 %
1000 VDC (1000.00 Range)	1000.0000000	999.98681	5.45 ppm	999.97995	1000.02	-13.189 ppm	2.60 ppm	PASS 50.03 %
-190 VDC (1000.00 Range)	-190.0000000	-189.99399	3.73 ppm	-190.00128	-189.99872	-31.612 ppm	3.03 ppm	FAIL 329.07 %
-500 VDC (1000.00 Range)	-500.0000000	-499.9895	3.73 ppm	-500.00322	-499.99678	-20.998 ppm	2.70 ppm	PASS 83.55 %
-1000 VDC (1000.00 Range)	-1000.0000000	-999.98445	5.45 ppm	-1000.02	-999.97995	-15.552 ppm	2.60 ppm	PASS 59.00 %

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	0.99980037 Ω	32.0 ppm	9.9972401E-01	9.9985799E-01	9.370 ppm	35.01 ppm	PASS, 9.88 % of 94.86 ppm
1.9 Ω	1.8998378 Ω	1.8998432 Ω	25.0 ppm	1.8997508E+00	1.8999248E+00	2.852 ppm	20.79 ppm	PASS, 4.39 % of 65.03 ppm
10 Ω	10.000581 Ω	10.000772 Ω	5.0 ppm	1.0000451E+01	1.0000711E+01	19.049 ppm	8.00 ppm	FAIL, 100.96 % of 18.87 ppm
19 Ω	19.00024 Ω	19.000603 Ω	4.0 ppm	1.8999807E+01	1.9000673E+01	19.099 ppm	18.79 ppm	PASS, 49.71 % of 38.42 ppm
100 Ω	99.9966 Ω	99.998511 Ω	1.7 ppm	9.9995830E+01	9.9997370E+01	19.106 ppm	6.00 ppm	FAIL, 153.19 % of 12.47 ppm
190 Ω	189.99379 Ω	189.99745 Ω	1.7 ppm	1.8999289E+02	1.8999469E+02	19.254 ppm	3.05 ppm	FAIL, 275.53 % of 6.99 ppm
1.0 kΩ	1000.0256 kΩ	1000.0434 kΩ	1.7 ppm	1.0000217E+03	1.0000295E+03	17.750 ppm	2.20 ppm	FAIL, 319.20 % of 5.56 ppm
1.9 kΩ	1899.9011 kΩ	1899.9236 kΩ	1.7 ppm	1.8998921E+03	1.8999101E+03	11.865 ppm	3.05 ppm	FAIL, 169.79 % of 6.99 ppm
10 kΩ	9999.8 kΩ	9999.9177 kΩ	1.6 ppm	9.9997620E+03	9.9998380E+03	11.769 ppm	2.20 ppm	FAIL, 216.31 % of 5.44 ppm
19 kΩ	18999.283 kΩ	18999.358 kΩ	1.7 ppm	1.8999193E+04	1.8999373E+04	3.941 ppm	3.05 ppm	PASS, 56.40 % of 6.99 ppm
100 kΩ	99994.81 kΩ	99994.83 kΩ	2.0 ppm	9.9994390E+04	9.9995230E+04	0.199 ppm	2.20 ppm	PASS, 3.35 % of 5.95 ppm
190 kΩ	189989.23 kΩ	189988.73 kΩ	2.0 ppm	1.8998595E+05	1.8999251E+05	-2.653 ppm	15.26 ppm	PASS, 8.62 % of 30.79 ppm
1.0 MΩ	999983.3 MΩ	999975.01 MΩ	2.5 ppm	9.9996980E+05	9.9999680E+05	-8.294 ppm	11.00 ppm	PASS, 36.76 % of 22.56 ppm
1.9 MΩ	1899980.9 MΩ	1899938 MΩ	3.0 ppm	1.8998302E+06	1.9001316E+06	-22.573 ppm	76.32 ppm	PASS, 14.78 % of 152.75 ppm
10 MΩ	9999100 MΩ	9998711.3 MΩ	10.0 ppm	9.9984501E+06	9.9997499E+06	-38.878 ppm	55.00 ppm	PASS, 34.77 % of 111.80 ppm
19 MΩ	18998751 MΩ	18998415 MΩ	20.0 ppm	1.8987872E+07	1.9009630E+07	-17.661 ppm	552.64 ppm	PASS, 1.60 % of 1105.99 ppm
100 MΩ	1.0000484E+08 MΩ	99999058 MΩ	50.0 ppm	9.9948837E+07	1.0006084E+08	-57.817 ppm	510.00 ppm	PASS, 5.64 % 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. 1G Ω 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 0.0000103 Ω	5.000e-05 Ω	-5e-05	5e-05	N/A	8.0000e-06 Ω	PASS
100 Ω	Range 0.0000144 Ω	5.500e-04 Ω	-0.00055	0.00055	N/A	2.2000e-06 Ω	PASS
1.0 k Ω	Range -0.0001563 Ω	5.500e-03 Ω	-0.0055	0.0055	N/A	2.2000e-06 Ω	PASS
10 k Ω	Range -0.0012763 Ω	5.500e-02 Ω	-0.055	0.055	N/A	2.2000e-06 Ω	PASS
100 k Ω	Range -0.0323440 Ω	5.500e-01 Ω	-0.55	0.55	N/A	2.2000e-06 Ω	PASS
1.0 M Ω	Range 0.5748025 Ω	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	PASS
10 M Ω	Range -0.7187750 Ω	5.500e+01 Ω	-55	55	N/A	2.2000e-06 Ω	PASS
100 M Ω	Range 2.1922643 Ω	5.500e+02 Ω	-550	550	N/A	2.2000e-06 Ω	PASS
1 G Ω	Range 1.3656727 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 0.2516368 Ω	3.000e-01 Ω	-0.3	0.3	N/A	8.0000e-06 Ω	PASS
100 Ω	Range 0.2462271 Ω	3.500e-01 Ω	-0.35	0.35	N/A	2.2000e-06 Ω	PASS
1.0 k Ω	Range 0.2454616 Ω	4.000e-01 Ω	-0.4	0.4	N/A	2.2000e-06 Ω	PASS
10 k Ω	Range 0.1735831 Ω	4.000e-01 Ω	-0.4	0.4	N/A	2.2000e-06 Ω	PASS
100 k Ω	Range -0.6332280 Ω	5.500e-01 Ω	-0.55	0.55	N/A	2.2000e-06 Ω	FAIL
1.0 M Ω	Range -0.1616646 Ω	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	PASS
10 M Ω	Range 1.9766546 Ω	5.500e+01 Ω	-55	55	N/A	2.2000e-06 Ω	PASS
100 M Ω	Range 6.0737243 Ω	5.500e+02 Ω	-550	550	N/A	2.2000e-06 Ω	PASS
1 G Ω	Range 5.2111831 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	0.01001084	0.0312 %	-0.290006	0.310006	0.1084 %	3000.0300 %	PASS 0.00 %
0.01 V AC+DC @ 20 Hz	0.010010596	0.0312 %	-0.290006	0.310006	0.1060 %	3000.0300 %	PASS 0.00 %
0.01 V AC+DC @ 40 Hz	0.010010661	0.0312 %	-0.290006	0.310006	0.1066 %	3000.0300 %	PASS 0.00 %
0.01 V AC+DC @ 100 Hz	0.010010084	0.0312 %	-0.100005	0.120005	0.1008 %	1100.0200 %	PASS 0.00 %
0.01 V AC+DC @ 1.0 kHz	0.010010621	0.0312 %	-0.100005	0.120005	0.1062 %	1100.0200 %	PASS 0.00 %
0.01 V AC+DC @ 10.0 kHz	0.010012278	0.0312 %	-0.100006	0.120006	0.1228 %	1100.0300 %	PASS 0.01 %
0.01 V AC+DC @ 20.0 kHz	0.010011498	0.0312 %	-0.100006	0.120006	0.1150 %	1100.0300 %	PASS 0.01 %
0.01 V AC+DC @ 50.0 kHz	0.010007714	0.0447 %	-0.100014	0.120014	0.0771 %	1100.1000 %	PASS 0.00 %
0.01 V AC+DC @ 100.0 kHz	0.0099890172	0.0773 %	-0.100058	0.120058	-0.1098 %	1100.5000 %	PASS 0.00 %
0.01 V AC+DC @ 300.0 kHz	0.0098324175	0.1500 %	-0.190055	0.210055	-1.6758 %	2000.4000 %	PASS 0.04 %
0.01 V AC+DC @ 500.0 kHz	0.0095721441	0.2500 %	-0.490070	0.510070	-4.2786 %	5000.4500 %	PASS 0.04 %
0.01 V AC+DC @ 1.0 MHz	0.0084861992	0.4000 %	-0.490085	0.510085	-15.1380 %	5000.4500 %	PASS 0.15 %
0.03 V AC+DC @ 10 Hz	0.030011843	0.0121 %	0.029994	0.030006	0.0395 %	0.0083 %	FAIL 134.08 %
0.03 V AC+DC @ 20 Hz	0.030010762	0.0121 %	0.029994	0.030006	0.0359 %	0.0083 %	FAIL 121.84 %
0.03 V AC+DC @ 40 Hz	0.030008159	0.0121 %	0.029994	0.030006	0.0272 %	0.0083 %	PASS 92.37 %
0.03 V AC+DC @ 100 Hz	0.030010408	0.0121 %	0.029994	0.030006	0.0347 %	0.0077 %	FAIL 120.84 %
0.03 V AC+DC @ 1.0 kHz	0.0300106	0.0121 %	0.029994	0.030006	0.0353 %	0.0077 %	FAIL 123.07 %
0.03 V AC+DC @ 10.0 kHz	0.030013869	0.0121 %	0.029992	0.030008	0.0462 %	0.0147 %	FAIL 121.43 %
0.03 V AC+DC @ 20.0 kHz	0.0300142	0.0121 %	0.029992	0.030008	0.0473 %	0.0147 %	FAIL 124.32 %
0.03 V AC+DC @ 50.0 kHz	0.030013693	0.0256 %	0.029983	0.030017	0.0456 %	0.0307 %	PASS 57.10 %
0.03 V AC+DC @ 100.0 kHz	0.030009408	0.0591 %	0.029958	0.030042	0.0314 %	0.0807 %	PASS 15.68 %
0.03 V AC+DC @ 300.0 kHz	0.029988864	0.0964 %	0.029880	0.030120	-0.0371 %	0.3033 %	PASS 5.83 %
0.03 V AC+DC @ 500.0 kHz	0.029989698	0.1500 %	0.029654	0.030346	-0.0343 %	1.0033 %	PASS 1.69 %
0.03 V AC+DC @ 1.0 MHz	0.029855542	0.3000 %	0.029609	0.030391	-0.4815 %	1.0033 %	PASS 22.99 %
0.1 V AC+DC @ 10 Hz	0.099999176	0.0121 %	0.099980	0.100020	-0.0008 %	0.0074 %	PASS 2.90 %
0.1 V AC+DC @ 20 Hz	0.0999963	0.0121 %	0.099980	0.100020	-0.0037 %	0.0074 %	PASS 13.01 %
0.1 V AC+DC @ 40 Hz	0.099997093	0.0121 %	0.099980	0.100020	-0.0029 %	0.0074 %	PASS 10.23 %
0.1 V AC+DC @ 100 Hz	0.099997189	0.0121 %	0.099981	0.100019	-0.0028 %	0.0072 %	PASS 9.96 %
0.1 V AC+DC @ 1.0 kHz	0.099997211	0.0121 %	0.099981	0.100019	-0.0028 %	0.0072 %	PASS 9.88 %
0.1 V AC+DC @ 10.0 kHz	0.10000539	0.0121 %	0.099974	0.100026	0.0054 %	0.0142 %	PASS 14.43 %
0.1 V AC+DC @ 20.0 kHz	0.10000316	0.0121 %	0.099974	0.100026	0.0032 %	0.0142 %	PASS 8.46 %
0.1 V AC+DC @ 50.0 kHz	0.1000026	0.0256 %	0.099944	0.100056	0.0026 %	0.0302 %	PASS 3.28 %
0.1 V AC+DC @ 100.0 kHz	0.099987408	0.0591 %	0.099861	0.100139	-0.0126 %	0.0802 %	PASS 6.32 %
0.1 V AC+DC @ 300.0 kHz	0.099920296	0.0964 %	0.099603	0.100397	-0.0797 %	0.3010 %	PASS 12.61 %
0.1 V AC+DC @ 500.0 kHz	0.099920084	0.1500 %	0.098849	0.101151	-0.0799 %	1.0010 %	PASS 3.95 %
0.1 V AC+DC @ 1.0 MHz	0.099525818	0.3000 %	0.098699	0.101301	-0.4742 %	1.0010 %	PASS 22.69 %
0.3 V AC+DC @ 10 Hz	0.29998624	0.0050 %	0.299960	0.300040	-0.0046 %	0.0083 %	PASS 23.65 %
0.3 V AC+DC @ 20 Hz	0.2999834	0.0050 %	0.299960	0.300040	-0.0055 %	0.0083 %	PASS 28.54 %
0.3 V AC+DC @ 40 Hz	0.29996671	0.0050 %	0.299960	0.300040	-0.0111 %	0.0083 %	PASS 57.22 %
0.3 V AC+DC @ 100 Hz	0.29998467	0.0050 %	0.299962	0.300038	-0.0051 %	0.0077 %	PASS 27.99 %
0.3 V AC+DC @ 1.0 kHz	0.29999723	0.0050 %	0.299962	0.300038	-0.0009 %	0.0077 %	PASS 5.05 %

0.3 V AC+DC @ 10.0 kHz	0.30001175	0.0050 %	0.299941	0.300059	0.0039 %	0.0147 %	PASS 12.65 %
0.3 V AC+DC @ 20.0 kHz	0.29999965	0.0050 %	0.299941	0.300059	-0.0001 %	0.0147 %	PASS 0.38 %
0.3 V AC+DC @ 50.0 kHz	0.30001954	0.0085 %	0.299882	0.300118	0.0065 %	0.0307 %	PASS 10.23 %
0.3 V AC+DC @ 100.0 kHz	0.30008024	0.0138 %	0.299717	0.300283	0.0267 %	0.0807 %	PASS 16.34 %
0.3 V AC+DC @ 300.0 kHz	0.30057092	0.0425 %	0.298962	0.301038	0.1903 %	0.3033 %	PASS 31.07 %
0.3 V AC+DC @ 500.0 kHz	0.30143438	0.1100 %	0.296660	0.303340	0.4781 %	1.0033 %	PASS 23.69 %
0.3 V AC+DC @ 1.0 MHz	0.30512708	0.1800 %	0.296450	0.303550	1.7090 %	1.0033 %	PASS 83.83 %
1.0 V AC+DC @ 10 Hz	0.9999583	0.0050 %	0.999876	1.000124	-0.0042 %	0.0074 %	PASS 23.41 %
1.0 V AC+DC @ 20 Hz	0.99993937	0.0050 %	0.999876	1.000124	-0.0061 %	0.0074 %	PASS 34.04 %
1.0 V AC+DC @ 40 Hz	0.99992719	0.0050 %	0.999876	1.000124	-0.0073 %	0.0074 %	PASS 40.88 %
1.0 V AC+DC @ 100 Hz	0.99993487	0.0050 %	0.999878	1.000122	-0.0065 %	0.0072 %	PASS 37.26 %
1.0 V AC+DC @ 1.0 kHz	0.99997989	0.0050 %	0.999878	1.000122	-0.0020 %	0.0072 %	PASS 11.51 %
1.0 V AC+DC @ 10.0 kHz	1.0000001	0.0050 %	0.999808	1.000192	0.0000 %	0.0142 %	PASS 0.04 %
1.0 V AC+DC @ 20.0 kHz	0.99996348	0.0050 %	0.999808	1.000192	-0.0037 %	0.0142 %	PASS 12.14 %
1.0 V AC+DC @ 50.0 kHz	1.0000224	0.0085 %	0.999613	1.000387	0.0022 %	0.0302 %	PASS 3.57 %
1.0 V AC+DC @ 100.0 kHz	1.0001735	0.0138 %	0.999060	1.000940	0.0173 %	0.0802 %	PASS 10.66 %
1.0 V AC+DC @ 300.0 kHz	1.0018721	0.0425 %	0.996565	1.003435	0.1872 %	0.3010 %	PASS 30.79 %
1.0 V AC+DC @ 500.0 kHz	1.0047699	0.1100 %	0.988890	1.011110	0.4770 %	1.0010 %	PASS 23.68 %
1.0 V AC+DC @ 1.0 MHz	1.018104	0.1800 %	0.988190	1.011810	1.8104 %	1.0010 %	PASS 89.00 %
3.0 V AC+DC @ 10 Hz	3.0000161	0.0048 %	2.999605	3.000395	0.0005 %	0.0083 %	PASS 2.79 %
3.0 V AC+DC @ 20 Hz	2.9999608	0.0048 %	2.999605	3.000395	-0.0013 %	0.0083 %	PASS 6.79 %
3.0 V AC+DC @ 40 Hz	2.9998752	0.0048 %	2.999605	3.000395	-0.0042 %	0.0083 %	PASS 21.61 %
3.0 V AC+DC @ 100 Hz	2.9999456	0.0048 %	2.999625	3.000375	-0.0018 %	0.0077 %	PASS 10.02 %
3.0 V AC+DC @ 1.0 kHz	3.0000442	0.0048 %	2.999625	3.000375	0.0015 %	0.0077 %	PASS 8.14 %
3.0 V AC+DC @ 10.0 kHz	3.0001864	0.0048 %	2.999415	3.000585	0.0062 %	0.0147 %	PASS 20.13 %
3.0 V AC+DC @ 20.0 kHz	3.0001369	0.0048 %	2.999415	3.000585	0.0046 %	0.0147 %	PASS 14.78 %
3.0 V AC+DC @ 50.0 kHz	3.0001435	0.0085 %	2.998824	3.001176	0.0048 %	0.0307 %	PASS 7.51 %
3.0 V AC+DC @ 100.0 kHz	2.9997272	0.0121 %	2.997216	3.002784	-0.0091 %	0.0807 %	PASS 5.57 %
3.0 V AC+DC @ 300.0 kHz	2.9983221	0.0336 %	2.989891	3.010109	-0.0559 %	0.3033 %	PASS 9.16 %
3.0 V AC+DC @ 500.0 kHz	3.0045875	0.1100 %	2.966600	3.033400	0.1529 %	1.0033 %	PASS 7.58 %
3.0 V AC+DC @ 1.0 MHz	3.0441806	0.1700 %	2.964800	3.035200	1.4727 %	1.0033 %	PASS 72.36 %
10.0 V AC+DC @ 10 Hz	10.000009	0.0048 %	9.998778	10.001222	0.0001 %	0.0074 %	PASS 0.54 %
10.0 V AC+DC @ 20 Hz	9.9998207	0.0048 %	9.998778	10.001222	-0.0018 %	0.0074 %	PASS 10.15 %
10.0 V AC+DC @ 40 Hz	9.9998783	0.0048 %	9.998778	10.001222	-0.0012 %	0.0074 %	PASS 6.89 %
10.0 V AC+DC @ 100 Hz	9.9997345	0.0048 %	9.998798	10.001202	-0.0027 %	0.0072 %	PASS 15.33 %
10.0 V AC+DC @ 1.0 kHz	10.000095	0.0048 %	9.998798	10.001202	0.0010 %	0.0072 %	PASS 5.49 %
10.0 V AC+DC @ 10.0 kHz	10.000311	0.0048 %	9.998098	10.001902	0.0031 %	0.0142 %	PASS 10.37 %
10.0 V AC+DC @ 20.0 kHz	10.000094	0.0048 %	9.998098	10.001902	0.0009 %	0.0142 %	PASS 3.13 %
10.0 V AC+DC @ 50.0 kHz	10.000015	0.0085 %	9.996125	10.003875	0.0001 %	0.0302 %	PASS 0.24 %
10.0 V AC+DC @ 100.0 kHz	9.9981798	0.0121 %	9.990766	10.009234	-0.0182 %	0.0802 %	PASS 11.22 %
10.0 V AC+DC @ 300.0 kHz	9.994212	0.0336 %	9.966536	10.033464	-0.0579 %	0.3010 %	PASS 9.56 %
10.0 V AC+DC @ 500.0 kHz	10.014939	0.1100 %	9.888900	10.111100	0.1494 %	1.0010 %	PASS 7.42 %
10.0 V AC+DC @ 1.0 MHz	10.145571	0.1700 %	9.882900	10.117100	1.4557 %	1.0010 %	PASS 71.69 %
30 V AC+DC @ 10 Hz	29.99906	0.0060 %	29.991795	30.008205	-0.0031 %	0.0213 %	PASS 7.07 %
30 V AC+DC @ 20 Hz	29.998367	0.0060 %	29.991795	30.008205	-0.0054 %	0.0213 %	PASS 12.28 %
30 V AC+DC @ 40 Hz	29.99858	0.0060 %	29.991795	30.008205	-0.0047 %	0.0213 %	PASS 10.68 %

30 V AC+DC @ 100 Hz	29.998569	0.0060 %	29.991995	30.008005	-0.0048 %	0.0207 %	PASS 11.08 %
30 V AC+DC @ 1.0 kHz	29.999156	0.0060 %	29.991995	30.008005	-0.0028 %	0.0207 %	PASS 6.53 %
30 V AC+DC @ 10.0 kHz	29.9974	0.0060 %	29.991995	30.008005	-0.0087 %	0.0207 %	PASS 20.13 %
30 V AC+DC @ 20.0 kHz	29.995118	0.0060 %	29.991995	30.008005	-0.0163 %	0.0207 %	PASS 37.80 %
30 V AC+DC @ 50.0 kHz	29.988842	0.0060 %	29.987495	30.012505	-0.0372 %	0.0357 %	PASS 51.41 %
30 V AC+DC @ 100.0 kHz	29.960537	0.0174 %	29.958591	30.041409	-0.1315 %	0.1207 %	PASS 53.95 %
30 V AC+DC @ 300.0 kHz	29.817436	0.0991 %	29.849273	30.150727	-0.6085 %	0.4033 %	PASS 73.26 %
30 V AC+DC @ 500.0 kHz	29.732397	0.5200 %	29.393000	30.607000	-0.8920 %	1.5033 %	PASS 28.04 %
100.0 V AC+DC @ 10 Hz	99.996292	0.0060 %	99.973582	100.026418	-0.0037 %	0.0204 %	PASS 8.72 %
100.0 V AC+DC @ 20 Hz	99.993802	0.0060 %	99.973582	100.026418	-0.0062 %	0.0204 %	PASS 14.57 %
100.0 V AC+DC @ 40 Hz	99.992136	0.0060 %	99.973582	100.026418	-0.0079 %	0.0204 %	PASS 18.49 %
100.0 V AC+DC @ 100 Hz	99.993995	0.0060 %	99.973782	100.026218	-0.0060 %	0.0202 %	PASS 14.24 %
100.0 V AC+DC @ 1.0 kHz	99.997129	0.0060 %	99.973782	100.026218	-0.0029 %	0.0202 %	PASS 6.81 %
100.0 V AC+DC @ 10.0 kHz	99.991057	0.0060 %	99.973782	100.026218	-0.0089 %	0.0202 %	PASS 21.22 %
100.0 V AC+DC @ 20.0 kHz	99.982234	0.0060 %	99.973782	100.026218	-0.0178 %	0.0202 %	PASS 42.14 %
100.0 V AC+DC @ 50.0 kHz	99.961453	0.0095 %	99.955255	100.044745	-0.0385 %	0.0352 %	PASS 52.85 %
100.0 V AC+DC @ 100.0 kHz	99.862019	0.0174 %	99.862436	100.137564	-0.1380 %	0.1202 %	PASS 56.81 %
300.0 V AC+DC @ 40 Hz	299.88963	0.0079 %	299.074408	300.925592	-0.0368 %	0.3007 %	PASS 6.12 %
300.0 V AC+DC @ 100 Hz	299.89712	0.0079 %	299.854408	300.145592	-0.0343 %	0.0407 %	PASS 41.40 %
300.0 V AC+DC @ 1.0 kHz	299.90704	0.0079 %	299.854408	300.145592	-0.0310 %	0.0407 %	PASS 37.40 %
300.0 V AC+DC @ 10.0 kHz	299.92455	0.0110 %	299.784865	300.215135	-0.0252 %	0.0607 %	PASS 20.39 %
300.0 V AC+DC @ 20.0 kHz	299.97033	0.0110 %	299.784865	300.215135	-0.0099 %	0.0607 %	PASS 8.02 %
300.0 V AC+DC @ 50.0 kHz	300.09369	0.0245 %	299.564599	300.435401	0.0312 %	0.1207 %	PASS 12.68 %
300.0 V AC+DC @ 100.0 kHz	299.63911	0.0660 %	298.900000	301.100000	-0.1203 %	0.3007 %	PASS 19.54 %
750.0 V AC+DC @ 40 Hz	749.68792	0.0079 %	747.689020	752.310980	-0.0416 %	0.3003 %	PASS 6.93 %
750.0 V AC+DC @ 100 Hz	749.67223	0.0079 %	749.639020	750.360980	-0.0437 %	0.0403 %	PASS 53.26 %
750.0 V AC+DC @ 1.0 kHz	749.71034	0.0079 %	749.639020	750.360980	-0.0386 %	0.0403 %	PASS 47.07 %
750.0 V AC+DC @ 10.0 kHz	749.76312	0.0110 %	749.465162	750.534838	-0.0316 %	0.0603 %	PASS 25.77 %
750.0 V AC+DC @ 20.0 kHz	749.85396	0.0110 %	749.465162	750.534838	-0.0195 %	0.0603 %	PASS 15.89 %
750.0 V AC+DC @ 50.0 kHz	750.12613	0.0245 %	748.914498	751.085502	0.0168 %	0.1203 %	PASS 6.85 %
750.0 V AC+DC @ 50.0 kHz	750.1243	0.0660 %	748.603000	751.397000	0.0166 %	0.1203 %	PASS 6.04 %

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	-2.8958251E-11						INFO
50 nADC	5E-08	4.9996543E-08						INFO
100 nADC	1E-07	9.9954521E-08	71.82 ppm	9.995282E-08	1.000472E-07	-454.787 ppm	400 ppm	PASS 55.95 %
-100 nADC	-1E-07	-1.000595E-07	71.82 ppm	-1.000492E-07	-9.995082E-08	595.009 ppm	420 ppm	PASS 69.82 %
-50 nADC	-5E-08	-5.0011197E-08						INFO
Zero µADC	0	-3.2469173E-11						INFO
0.5 µADC	5E-07	4.9992477E-07	71.82 ppm	4.999201E-07	5.000799E-07	-150.459 ppm	88 ppm	PASS 66.23 %
1.0 µADC	1E-06	9.9991639E-07	71.82 ppm	9.998792E-07	1.000121E-06	-83.609 ppm	49 ppm	PASS 48.08 %
-1.0 µADC	-1E-06	-1.0000618E-06	71.82 ppm	-1.000123E-06	-9.998772E-07	61.818 ppm	51 ppm	PASS 35.09 %
-0.5 µADC	-5E-07	-5.0005476E-07	71.82 ppm	-5.000819E-07	-4.999181E-07	109.515 ppm	92 ppm	PASS 46.92 %
Zero 00 µADC	0	-2.7476148E-11						INFO
5 µADC	5E-06	4.9998452E-06	71.82 ppm	4.999522E-06	5.000478E-06	-30.965 ppm	24 ppm	PASS 20.46 %
10 µADC	1E-05	9.9997442E-06	71.82 ppm	9.999113E-06	1.000089E-05	-25.580 ppm	17 ppm	PASS 17.33 %
-10 µADC	-1E-05	-9.9998548E-06	71.82 ppm	-1.000089E-05	-9.999111E-06	-14.521 ppm	17 ppm	PASS 9.83 %
-5 µADC	-5E-06	-4.9999776E-06	71.82 ppm	-5.00048E-06	-4.99952E-06	-4.475 ppm	24 ppm	PASS 2.95 %
Zero 000 µADC	0	-2.5948889E-11						INFO
50 µADC	5E-05	4.9998511E-05	71.82 ppm	4.999531E-05	5.000469E-05	-29.772 ppm	22 ppm	PASS 19.82 %
100 µADC	0.0001	9.9997348E-05	71.82 ppm	9.999122E-05	0.0001000088	-26.525 ppm	16 ppm	PASS 18.02 %
-100 µADC	-0.0001	-9.9997769E-05	71.82 ppm	-0.0001000088	-9.999122E-05	-22.309 ppm	16 ppm	PASS 15.16 %
-50 µADC	-5E-05	-4.9998963E-05	71.82 ppm	-5.000469E-05	-4.999531E-05	-20.738 ppm	22 ppm	PASS 13.80 %
Zero mADC	0	-5.3626629E-11						INFO
0.5 mADC	0.0005	0.00049999044	33.64 ppm	0.0004999742	0.0005000258	-19.118 ppm	18 ppm	PASS 25.05 %
1.0 mADC	0.001	0.00099997941	33.64 ppm	0.0009999524	0.001000048	-20.588 ppm	14 ppm	PASS 28.25 %
-1.0 mADC	-0.001	-0.00099997479	33.64 ppm	-0.001000048	-0.0009999524	-25.207 ppm	14 ppm	PASS 34.59 %
-0.5 mADC	-0.0005	-0.00049998613	33.64 ppm	-0.0005000258	-0.0004999742	-27.740 ppm	18 ppm	PASS 36.35 %
Zero 00 mADC	0	-4.9317404E-12						INFO
5 mADC	0.005	0.0049998907	32.27 ppm	0.004999749	0.005000251	-21.852 ppm	18 ppm	PASS 29.57 %
10 mADC	0.01	0.0099997676	32.27 ppm	0.009999537	0.01000046	-23.239 ppm	14 ppm	PASS 33.03 %
-10 mADC	-0.01	-0.0099997405	32.27 ppm	-0.01000046	-0.009999537	-25.954 ppm	14 ppm	PASS 36.89 %
-5 mADC	-0.005	-0.0049998595	32.27 ppm	-0.005000251	-0.004999749	-28.107 ppm	18 ppm	PASS 38.03 %
Zero 000 mADC	0	-2.3481406E-11						INFO
50 mADC	0.05	0.049999094	53.32 ppm	0.04999568	0.05000432	-18.118 ppm	33 ppm	PASS 14.45 %
100 mADC	0.1	0.099997854	53.32 ppm	0.09999177	0.1000082	-21.462 ppm	29 ppm	PASS 17.68 %
-100 mADC	-0.1	-0.099998044	53.32 ppm	-0.1000082	-0.09999177	-19.564 ppm	29 ppm	PASS 16.12 %
-50 mADC	-0.05	-0.049998976	53.32 ppm	-0.05000432	-0.04999568	-20.474 ppm	33 ppm	PASS 16.33 %
Zero ADC	0	-1.3385692E-13						INFO
0.5 ADC	0.5	0.49999027	115.22 ppm	0.4998824	0.5001176	-19.452 ppm	120 ppm	PASS 5.85 %
1.0 ADC	1	0.999927	115.22 ppm	0.9997748	1.000225	-72.996 ppm	110 ppm	PASS 22.91 %
-1.0 ADC	-1	-0.99989558	115.22 ppm	-1.000225	-0.9997748	-104.416 ppm	110 ppm	PASS 32.77 %
-0.5 ADC	-0.5	-0.49995789	115.22 ppm	-0.5001176	-0.4998824	-84.218 ppm	120 ppm	PASS 25.31 %

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	1.0149886E-05	0.0160 %	-0.0002900076045	0.0003100076045	1.4989 %	3000.0600 %	INFO
100 µA AC @ 50 Hz	0.0001	0.00010003441	0.0160 %	-0.000200076045	0.000400076045	0.0344 %	300.0600 %	PASS 0.01 %
1.0 mA AC @ 50 Hz	0.001	0.0010000415	0.0160 %	0.00099921955	0.00100078045	41.469 ppm	0.0620 %	PASS 3.24 %
10 mA AC @ 50 Hz	0.01	0.010000103	0.0160 %	0.0099921955	0.0100078045	10.350 ppm	0.0620 %	PASS 0.81 %
100 mA AC @ 50 Hz	0.1	0.10000432	0.0133 %	0.099924682	0.100075318	43.188 ppm	0.0620 %	PASS 3.41 %
1.0 A AC @ 50 Hz	1.0	1.0002244	0.0133 %	0.99904682	1.00095318	224.394 ppm	0.0820 %	PASS 13.51 %
10 µA AC @ 60 Hz	1e-05	1.0145448E-05	0.0133 %	-0.0002900073318	0.0003100073318	1.4545 %	3000.0600 %	INFO
100 µA AC @ 60 Hz	0.0001	0.00010003502	0.0133 %	-0.000200073318	0.000400073318	0.0350 %	300.0600 %	PASS 0.01 %
1.0 mA AC @ 60 Hz	0.001	0.0010000627	0.0129 %	0.00099925136	0.00100074864	62.663 ppm	0.0620 %	PASS 4.95 %
10 mA AC @ 60 Hz	0.01	0.010000385	0.0129 %	0.0099925136	0.0100074864	38.451 ppm	0.0620 %	PASS 3.04 %
100 mA AC @ 60 Hz	0.1	0.10000771	0.0288 %	0.099909182	0.100090818	77.103 ppm	0.0620 %	PASS 5.64 %
1.0 A AC @ 60 Hz	1.0	1.0002341	0.0288 %	0.99889182	1.00110818	234.057 ppm	0.0820 %	PASS 13.46 %
10 µA AC @ 1.0 kHz	1e-05	1.0149163E-05	0.0160 %	-0.0002900076045	0.0003100076045	1.4916 %	3000.0600 %	INFO
100 µA AC @ 1.0 kHz	0.0001	0.00010000635	0.0160 %	-0.000200076045	0.000400076045	0.0063 %	300.0600 %	PASS 0.00 %
1.0 mA AC @ 1.0 kHz	0.001	0.0010001029	0.0160 %	0.00099951955	0.00100048045	102.934 ppm	0.0320 %	PASS 14.38 %
10 mA AC @ 1.0 kHz	0.01	0.010000846	0.0160 %	0.0099951955	0.0100048045	84.624 ppm	0.0320 %	PASS 11.82 %
100 mA AC @ 1.0 kHz	0.1	0.10001034	0.0133 %	0.099954682	0.100045318	103.367 ppm	0.0320 %	PASS 14.91 %
1.0 A AC @ 1.0 kHz	1.0	1.0001454	0.0133 %	0.99884682	1.00115318	0.0145 %	0.1020 %	PASS 7.07 %

Test date	27 May 2020 08:08
UUT Internal TEMP?	41.0
Destructive overloads?	162, DESTRUCTIVE OVERLOADS valid 2941

Lab temperature maintained +24°C ±2°C

Internal use only

Not validated