cal equipment

Keysight 3458A/MM3

Manufacturer	HEWLETT-PACKARD	Calibration date	April 17 2020
Model Number	3458A	Ambient Temperature	23.34 °C
Serial	STD3	Relative Humidity	55.50 %
ID Number	Calibration test, GPIB3 unit	Pressure	1020.21
Notes	Test front spade cables	Test type	Front Fluke DIY cables, 5-wire

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
CAL MFC	Fluke	5700A	/03 WB	XXX	MC01	3/25/2020	3/25/2021
Booster	Fluke	5725A		XXX	MB02	3/25/2020	3/25/2021
DC STD	Fluke	732B-3	9.999928 VDC	±0.55 ppm	SV03	03/20/2020	03/20/2020
STDR	Ohm Labs 200	1 Ohm	1.0000005	±0.17 ppm	SM02	02/20/2020	03/20/2021
STDR	ESI	SR104	10000.054 KΩ	±0.15 ppm	SM01	03/01/2020	03/01/2021

MFC last calibrated	23.0 days ago	MFC since DCV ZERO	13.0 days ago
MFC since WBFLAT	11795.0 days ago	MFC since WBGAIN	23.0 days ago
MFC Confidence level	**24h 95% REL**	MFC Calibrate date	2020-03-25 00:00:00
MFC Calibrate date Zero	2020-04-04 00:00:00	Calibrate date WB Flatness	1988-10-01 00:00:00
Calibrate date WB Gain	2020-03-25 00:00:00	CAL CONST 6.5V reference voltage	6.89136090013
CAL CONST 13V reference voltage	13.7948138313	CAL CONST 22V range positive zero	398.17871
CAL CONST 22V range negative zero	398.17807	CAL CONST DAC Linearity	-0.316920424792
CAL CONST 10KOHM true output resistance	10000.0825862	CAL CONST 10KOHM standard resistance	10000.4504017
CAL CONST, Zero calibration temperature	23.1700000763	CAL CONST, All calibration temp	23.1700000763
Booster type	VB5725,IB5725	Current output posts	IB5725
Calibrate date 5725A AMP	2020-03-25 00:00:00	Calibrated days ago	Debug
CAL CONST, Amp ACAL temperature	23.5400009155	CAL CONST, Amp CalCheck temperature	23.1700000763

Total uncertainty of each calibration point calculated with RSS

Meter Info	HP3458A	Last calibration date	7/24/2018
CALSTR?	""	Test date	17 April 2020 23:09
DUT Internal TEMP?	36.6	DUT Calibrations number?	62
Self-test result?	0,"NO ERROR"	ACAL ALL result?	0,"NO ERROR"
Firmware	9,1	Options	1,0
CAL? 72	0.988093819	CAL? 1,1	40000.5451
CAL? 2,1	7.09585414	CAL? Res 73	0.987479563
CAL 0 TEMP	39.39	CAL 10V TEMP	39.58
CAL 10KOhm TEMP	39.07	CAL? DCI	0.986625245

Service information

CAL DUMP
[(1, 40000.5451), (1, 7.09585414), (1, -1.61334579e-07), (1, 1.7771501e-07), (1, -1.8757506e-07), (1, 2.09719337e-07), (1, 3.30187761e-07), (1, 7.83557525e-07), (1, -6.88503536e-05), (1, -6.88503536e-05), (1, -5.64149245e-05), (1, -5.64149245e-05), (1, 0.398470712), (1, 0.3983101), (1, 0.398130505), (1, 0.39654196), (1, 0.403712781), (1, 0.529676045), (1, 0.792829448), (1, 0.864904852), (1, 0.864904852), (1, 0.576996525), (1, 0.577135589), (1, 0.57704274), (1, 0.579182749), (1, 0.590872989), (1, 0.637773197), (1, 1.11716877), (1, 1.83792281), (1, 1.83792281), (1, 0.000338712272), (1, 0.00319996574), (1, 0.00343806732), (1, 0.0347657867), (1, 0.0733008128), (1, 0.655789389), (1, 7.31565354), (1, 7.27961584), (1, 7.27961584), (1, 0.000184742083), (1, 0.00183053187), (1, 0.00198795975), (1, 0.0204555465), (1, 0.0465379116), (1, 0.446801562), (1, 3.45961941), (1, 4.9371652), (1, 4.9371652), (1, 398.0), (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, 39.3942711), (1, 39.5756928), (1, 39.0665399), (1, 177.0), (1, -4.69839697e-12), (1, -1.22594299e-11), (1, -9.28249879e-11), (1, -5.90300908e-10), (1, -3.94011743e-09), (1, -3.82955066e-08), (1, -3.48491288e-07), (1, -3.6605575e-06), (1, 0.986816781), (1, 0.987495337), (1, 0.988093819), (1, 0.987479563), (1, 0.988078035), (1, 1.00203586), (1, 1.00198757), (1, 1.00267656), (1, 1.00213002), (1, 1.00240662), (1, 1.00274972), (1, 1.00289772), (1, 1.00289772), (1, 1.00289772), (1, 1.00203586), (1, 1.00198761), (1, 1.0026766), (1, 1.00213032), (1, 1.00240742), (1, 1.00274972), (1, 1.00289772), (1, 1.00289772), (1, 1.00289772), (1, 0.986625245), (1, 0.986876209), (1, 0.986908938), (1, 0.988360167), (1, 0.98643781), (1, 0.986325878), (1, 0.983676816), (1, 0.972316132), (1, 75.0), (1, 111.0), (1, 5.00966969), (1, 3.90961536e-11), (1, -9.83716676e-12), (1, 10001317.2), (1, -0.00669974939), (1, -0.0464606424), (1, 0.999999246), (1, 0.999999875), (1, 1666.98362), (1, 16666.9723), (1, 5116.0), (1, 5112.0), (1, 5109.0), (1, 5112.0), (1, 5109.0), (1, 61392.0), (1, 61344.0), (1, 61308.0), (1, 61344.0), (1, 61308.0), (1, 4999.0), (1, 4999.0), (1, 4995.0), (1, 4998.0), (1, 2498.0), (1, 2497.0), (1, 2497.0), (1, 12486.0), (1, 22703.0), (1, 59988.0), (1, 59988.0), (1, 59940.0), (1, 59976.0), (1, 29976.0), (1, 29964.0), (1, 29964.0), (1, 149832.0), (1, 272436.0), (1, 4999.0), (1, 4999.0), (1, 4995.0), (1, 4998.0), (1, 2498.0), (1, 2497.0), (1, 2497.0), (1, 12486.0), (1, 22703.0), (1, 59988.0), (1, 59988.0), (1, 59940.0), (1, 59976.0), (1, 29976.0), (1, 29964.0), (1, 29964.0), (1, 149832.0), (1, 272436.0), (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, 36.640099), (1, 36.6885261), (1, 36.7113419), (1, 137.0), (1, 137.0), (1, 134.0), (1, 131.0), (1, 137.0), (1, 138.0), (1, 130.0), (1, 130.0), (1, 133.0), (1, 131.0), (1, 137.0), (1, 138.0), (1, 138.0), (1, 138.0), (1, 138.0), (1, 138.0), (1, 138.0), (1, 2276.0), (1, 2273.0), (1, 2266.0), (1, 2808.0), (1, 2981.0), (1, 2986.0), (1, 132.0), (1, 127.0), (1, 126.0), (1, 126.0), (1, 129.0), (1, 126.0), (1, 126.0), (1, 126.0), (1, 126.0), (1, -0.00200402674), (1, -0.0188716749), (1, -0.187319392), (1, -1.87203704), (1, -18.2863103), (1, -183.80024), (1, -0.00183692147), (1, -0.0188262288), (1, -0.186114611), (1, -1.87342135), (1, -18.2983958), (1, -183.803363), (1, 0.994205707), (1, 1.0011364), (1, 0.984593483), (1, 0.982071882), (1, 0.973397779), (1, 0.972327217), (1, 107447.151), (1, 10.3721042), (1, 0.982278787), (1, 0.989208027), (1, 0.972862215), (1, 0.970370658), (1, 0.961799905), (1, 0.960742099), (1, 3.81211986e-06), (1, 3.92640046e-05), (1, 0.000392640046), (1, 0.00392640046), (1, 0.0392640046), (1, 0.392640046), (1, 1.02732744), (1, 1.00020426), (1, 0.999832254), (1, 0.999979783), (1, 78.0), (1, 55.0), (1, 55.0), (1, 55.0), (1, 73.0), (1, 119.0), (1, 119.0), (1, 9.0)]
Destructive overloads?
81, DESTRUCTIVE OVERLOADS valid 2941
Reference
Verification
DUT Condition
xfer-calkit

Test procedure : Id

Source procedure : Id

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

Test Description	Expected Value	Measured Value	Measurement Uncertainty	Lower Limit	Upper Limit	Deviation	DUT Spec	Test Status
Short 0 mVDC	0.0000000E+00	**-0.06 µV**	0.75 µV	-0.910 µV	0.910 µV	N/A	0.16 µV	PASS
Short 0.0 VDC	0.0000000E+00	**-0.04 µV**	0.75 µV	-0.900 µV	0.900 µV	N/A	0.15 µV	PASS
Short 00.0 VDC	0.0000000E+00	**0.12 µV**	0.75 µV	-1.070 µV	1.070 µV	N/A	0.32 µV	PASS
Short 000.0 VDC	0.0000000E+00	**7.22 µV**	0.75 µV	-14.750 µV	14.750 µV	N/A	14.00 µV	PASS
Short 0000.0 VDC	0.0000000E+00	**0.00 µV**	0.75 µV	-41.750 µV	41.750 µV	N/A	41.00 µV	PASS
DCV Test	**0.1V-1000V**	**DUT**	**Source unc.**	**Low Limit**	**Hi limit**	**Measured**	**24h spec**	**Result**
0.019 VDC (0.10 Range)	0.0190000	**0.018999996**	7.27 ppm	0.018999514	0.019000486	-0.188 ppm	18.29 ppm	PASS 0.48 %
0.1 VDC (0.10 Range)	0.1000000	**0.099999933**	7.27 ppm	0.099998723	0.10000128	-0.666 ppm	5.50 ppm	PASS 3.65 %
0.11 VDC (0.10 Range)	0.1100000	**0.10999994**	7.27 ppm	0.10999863	0.11000137	-0.525 ppm	5.23 ppm	PASS 2.93 %
-0.019 VDC (0.10 Range)	-0.0190000	**-0.018999941**	7.27 ppm	-0.019000486	-0.018999514	-3.109 ppm	18.29 ppm	PASS 7.90 %
-0.1 VDC (0.10 Range)	-0.1000000	**-0.099999777**	7.27 ppm	-0.10000128	-0.099998723	-2.230 ppm	5.50 ppm	PASS 12.23 %
-0.11 VDC (0.10 Range)	-0.1100000	**-0.10999974**	7.27 ppm	-0.11000137	-0.10999863	-2.342 ppm	5.23 ppm	PASS 13.08 %
0.19 VDC (1.00 Range)	0.1900000	**0.19000014**	7.27 ppm	0.18999803	0.19000197	0.760 ppm	3.08 ppm	PASS 4.81 %
1.0 VDC (1.00 Range)	1.0000000	**0.99999873**	3.86 ppm	0.99999434	1.0000057	-1.274 ppm	1.80 ppm	PASS 14.96 %
1.1 VDC (1.00 Range)	1.1000000	**1.0999986**	3.86 ppm	1.0999938	1.1000062	-1.304 ppm	1.77 ppm	PASS 15.35 %
-0.19 VDC (1.00 Range)	-0.1900000	**-0.18999977**	7.27 ppm	-0.19000197	-0.18999803	-1.208 ppm	3.08 ppm	PASS 7.65 %
-1.0 VDC (1.00 Range)	-1.0000000	**-0.99999836**	3.86 ppm	-1.0000057	-0.99999434	-1.642 ppm	1.80 ppm	PASS 19.28 %
-1.1 VDC (1.00 Range)	-1.1000000	**-1.0999981**	3.86 ppm	-1.1000062	-1.0999938	-1.723 ppm	1.77 ppm	PASS 20.28 %
1.9 VDC (10.00 Range)	1.9000000	**1.8999971**	3.86 ppm	1.8999912	1.9000088	-1.523 ppm	0.76 ppm	PASS 19.35 %
10.0 VDC (10.00 Range)	10.0000000	**9.9999886**	2.77 ppm	9.9999668	10.000033	-1.143 ppm	0.55 ppm	PASS 20.23 %
11.0 VDC (10.00 Range)	11.0000000	**10.999987**	2.73 ppm	10.999964	11.000036	-1.157 ppm	0.55 ppm	PASS 20.78 %
-1.9 VDC (10.00 Range)	-1.9000000	**-1.8999969**	3.86 ppm	-1.9000088	-1.8999912	-1.621 ppm	0.76 ppm	PASS 20.59 %
-10.0 VDC (10.00 Range)	-10.0000000	**-9.9999884**	2.77 ppm	-10.000033	-9.9999668	-1.158 ppm	0.55 ppm	PASS 20.50 %
-11.0 VDC (10.00 Range)	-11.0000000	**-10.999988**	2.73 ppm	-11.000036	-10.999964	-1.102 ppm	0.55 ppm	PASS 19.79 %
19 VDC (100.00 Range)	19.0000000	**19.000023**	2.77 ppm	18.99987	19.00013	1.235 ppm	4.08 ppm	PASS 12.52 %
100 VDC (100.00 Range)	100.0000000	**99.999895**	3.73 ppm	99.999347	100.00065	-1.052 ppm	2.80 ppm	PASS 11.28 %
110 VDC (100.00 Range)	110.0000000	**109.99987**	3.73 ppm	109.99928	110.00072	-1.218 ppm	2.77 ppm	PASS 13.11 %
-19 VDC (100.00 Range)	-19.0000000	**-18.999954**	2.77 ppm	-19.00013	-18.99987	-2.406 ppm	4.08 ppm	PASS 24.40 %
-100 VDC (100.00 Range)	-100.0000000	**-99.999844**	3.73 ppm	-100.00065	-99.999347	-1.562 ppm	2.80 ppm	PASS 16.75 %
-110 VDC (100.00 Range)	-110.0000000	**-109.99981**	3.73 ppm	-110.00072	-109.99928	-1.703 ppm	2.77 ppm	PASS 18.32 %
190 VDC (1000.00 Range)	190.0000000	**189.99964**	3.73 ppm	189.99872	190.00128	-1.875 ppm	3.03 ppm	PASS 19.52 %
500 VDC (1000.00 Range)	500.0000000	**500.0005**	3.73 ppm	499.99678	500.00322	1.010 ppm	2.70 ppm	PASS 13.54 %
1000 VDC (1000.00 Range)	1000.0000000	**1000**	5.45 ppm	999.97995	1000.02	0.018 ppm	2.60 ppm	PASS 0.07 %
-190 VDC (1000.00 Range)	-190.0000000	**-189.99975**	3.73 ppm	-190.00128	-189.99872	-1.342 ppm	3.03 ppm	PASS 13.97 %
-500 VDC (1000.00 Range)	-500.0000000	**-500.00058**	3.73 ppm	-500.00322	-499.99678	1.158 ppm	2.70 ppm	PASS 4.61 %
-1000 VDC (1000.00 Range)	-1000.0000000	**-1000.0003**	5.45 ppm	-1000.02	-999.97995	0.316 ppm	2.60 ppm	PASS 1.20 %

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	0.9998149 Ω	**0.99977381 Ω**	32.0 ppm	9.9974791E-01	9.9988189E-01	-41.102 ppm	35.01 ppm	PASS, 43.33 % of 94.86 ppm
1.9 Ω	1.8995691	**1.8994549**	25.00 ppm	1.8994821E+00	1.8996561E+00	-60.107 ppm	20.8 ppm	PASS, 92.42 % of 65.03 ppm
10 Ω	9.999919 Ω	**9.9998608 Ω**	5.0 ppm	9.9997890E+00	1.0000049E+01	-5.823 ppm	8.00 ppm	PASS, 30.86 % of 18.87 ppm
19 Ω	18.999097 Ω	**18.999075 Ω**	4.0 ppm	1.8998664E+01	1.8999530E+01	-1.145 ppm	18.79 ppm	PASS, 2.98 % of 38.42 ppm
100 Ω	100.00167 Ω	**100.00176 Ω**	1.7 ppm	1.0000090E+02	1.0000244E+02	0.870 ppm	6.00 ppm	PASS, 6.98 % of 12.47 ppm
190 Ω	189.99489 Ω	**189.9951 Ω**	1.7 ppm	1.8999399E+02	1.8999579E+02	1.128 ppm	3.05 ppm	PASS, 16.15 % of 6.99 ppm
1.0 kΩ	999.9911 kΩ	**999.99145 kΩ**	1.7 ppm	9.9998720E+02	9.9999500E+02	0.349 ppm	2.20 ppm	PASS, 6.27 % of 5.56 ppm
1.9 kΩ	1899.9963 kΩ	**1899.9962 kΩ**	1.7 ppm	1.8999873E+03	1.9000053E+03	-0.047 ppm	3.05 ppm	PASS, 0.67 % of 6.99 ppm
10 kΩ	10000.084 kΩ	**10000.076 kΩ**	1.6 ppm	1.0000046E+04	1.0000122E+04	-0.839 ppm	2.20 ppm	PASS, 15.43 % of 5.44 ppm
19 kΩ	18999.698 kΩ	**18999.693 kΩ**	1.7 ppm	1.8999608E+04	1.8999788E+04	-0.253 ppm	3.05 ppm	PASS, 3.62 % of 6.99 ppm
100 kΩ	100001.49	**100000.97**	2.00 ppm	1.0000107E+05	1.0000191E+05	-5.185 ppm	2.2 ppm	PASS, 87.20 % of 5.95 ppm
190 kΩ	189993.04 kΩ	**189992.81 kΩ**	2.0 ppm	1.8998976E+05	1.8999632E+05	-1.229 ppm	15.26 ppm	PASS, 3.99 % of 30.79 ppm
1.0 MΩ	1000004.5 MΩ	**999998.37 MΩ**	2.5 ppm	9.9999100E+05	1.0000180E+06	-6.132 ppm	11.00 ppm	PASS, 27.18 % of 22.56 ppm
1.9 MΩ	1899959.3 MΩ	**1899914.3 MΩ**	3.0 ppm	1.8998086E+06	1.9001100E+06	-23.691 ppm	76.32 ppm	PASS, 15.51 % of 152.75 ppm
10 MΩ	9999426 MΩ	**9998964.6 MΩ**	10.0 ppm	9.9987760E+06	1.0000076E+07	-46.145 ppm	55.00 ppm	PASS, 41.27 % of 111.80 ppm
19 MΩ	18999119 MΩ	**18999892 MΩ**	20.0 ppm	1.8988239E+07	1.9009999E+07	40.688 ppm	552.63 ppm	PASS, 3.68 % of 1105.99 ppm
100 MΩ	1.0000973E+08 MΩ	**1.0002657E+08 MΩ**	50.0 ppm	9.9953725E+07	1.0006574E+08	168.365 ppm	510.00 ppm	PASS, 16.43 % 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 -0.0000095 Ω**	5.000e-05 Ω	-5e-05	5e-05	N/A	8.0000e-06 Ω	PASS
100 Ω	**Range 0.0000416 Ω**	5.500e-04 Ω	-0.00055	0.00055	N/A	2.2000e-06 Ω	PASS
1.0 kΩ	**Range -0.0000216 Ω**	5.500e-03 Ω	-0.0055	0.0055	N/A	2.2000e-06 Ω	PASS
10 kΩ	**Range -0.0003421 Ω**	5.500e-02 Ω	-0.055	0.055	N/A	2.2000e-06 Ω	PASS
100 kΩ	**Range -0.0021612 Ω**	5.500e-01 Ω	-0.55	0.55	N/A	2.2000e-06 Ω	PASS
1.0 MΩ	**Range 0.0504453 Ω**	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	PASS
10 MΩ	**Range 0.2883016 Ω**	5.500e+01 Ω	-55	55	N/A	2.2000e-06 Ω	PASS
100 MΩ	**Range 0.5766033 Ω**	5.500e+02 Ω	-550	550	N/A	2.2000e-06 Ω	PASS
1 GΩ	**Range 0.3603770 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 0.2094647 Ω**	3.000e-01 Ω	-0.3	0.3	N/A	8.0000e-06 Ω	PASS
100 Ω	**Range 0.2085272 Ω**	3.500e-01 Ω	-0.35	0.35	N/A	2.2000e-06 Ω	PASS
1.0 kΩ	**Range 0.2077586 Ω**	4.000e-01 Ω	-0.4	0.4	N/A	2.2000e-06 Ω	PASS
10 kΩ	**Range 0.2089311 Ω**	4.000e-01 Ω	-0.4	0.4	N/A	2.2000e-06 Ω	PASS
100 kΩ	**Range 0.1923474 Ω**	5.500e-01 Ω	-0.55	0.55	N/A	2.2000e-06 Ω	PASS
1.0 MΩ	**Range 0.3675302 Ω**	5.500e+00 Ω	-5.5	5.5	N/A	2.2000e-06 Ω	PASS
10 MΩ	**Range 2.9190515 Ω**	5.500e+01 Ω	-55	55	N/A	2.2000e-06 Ω	PASS
100 MΩ	**Range 2.8109393 Ω**	5.500e+02 Ω	-550	550	N/A	2.2000e-06 Ω	PASS
1 GΩ	**Range 2.9550901 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	**0.0099989907**	0.0312 %	-0.290006	0.310006	-0.0101 %	3000.0300 %	PASS 0.00 %
0.01 V AC+DC @ 20 Hz	**0.0099984545**	0.0312 %	-0.290006	0.310006	-0.0155 %	3000.0300 %	PASS 0.00 %
0.01 V AC+DC @ 40 Hz	**0.009998233**	0.0312 %	-0.290006	0.310006	-0.0177 %	3000.0300 %	PASS 0.00 %
0.01 V AC+DC @ 100 Hz	**0.0099982395**	0.0312 %	-0.100005	0.120005	-0.0176 %	1100.0200 %	PASS 0.00 %
0.01 V AC+DC @ 1.0 kHz	**0.0099981163**	0.0312 %	-0.100005	0.120005	-0.0188 %	1100.0200 %	PASS 0.00 %
0.01 V AC+DC @ 10.0 kHz	**0.0099984578**	0.0312 %	-0.100006	0.120006	-0.0154 %	1100.0300 %	PASS 0.00 %
0.01 V AC+DC @ 20.0 kHz	**0.009996637**	0.0312 %	-0.100006	0.120006	-0.0336 %	1100.0300 %	PASS 0.00 %
0.01 V AC+DC @ 50.0 kHz	**0.0099893591**	0.0447 %	-0.100014	0.120014	-0.1064 %	1100.1000 %	PASS 0.00 %
0.01 V AC+DC @ 100.0 kHz	**0.0099564712**	0.0773 %	-0.100058	0.120058	-0.4353 %	1100.5000 %	PASS 0.02 %
0.01 V AC+DC @ 300.0 kHz	**0.0096754025**	0.1500 %	-0.190055	0.210055	-3.2460 %	2000.4000 %	PASS 0.08 %
0.01 V AC+DC @ 500.0 kHz	**0.0092296214**	0.2500 %	-0.490070	0.510070	-7.7038 %	5000.4500 %	PASS 0.08 %
0.01 V AC+DC @ 1.0 MHz	**0.0076630895**	0.4000 %	-0.490085	0.510085	-23.3691 %	5000.4500 %	PASS 0.23 %
0.03 V AC+DC @ 10 Hz	**0.030003869**	0.0121 %	0.029994	0.030006	0.0129 %	0.0083 %	PASS 43.80 %
0.03 V AC+DC @ 20 Hz	**0.030001701**	0.0121 %	0.029994	0.030006	0.0057 %	0.0083 %	PASS 19.26 %
0.03 V AC+DC @ 40 Hz	**0.030001958**	0.0121 %	0.029994	0.030006	0.0065 %	0.0083 %	PASS 22.17 %
0.03 V AC+DC @ 100 Hz	**0.030001478**	0.0121 %	0.029994	0.030006	0.0049 %	0.0077 %	PASS 17.16 %
0.03 V AC+DC @ 1.0 kHz	**0.030000877**	0.0121 %	0.029994	0.030006	0.0029 %	0.0077 %	PASS 10.18 %
0.03 V AC+DC @ 10.0 kHz	**0.03000144**	0.0121 %	0.029992	0.030008	0.0048 %	0.0147 %	PASS 12.61 %
0.03 V AC+DC @ 20.0 kHz	**0.030001958**	0.0121 %	0.029992	0.030008	0.0065 %	0.0147 %	PASS 17.14 %
0.03 V AC+DC @ 50.0 kHz	**0.030002493**	0.0256 %	0.029983	0.030017	0.0083 %	0.0307 %	PASS 10.39 %
0.03 V AC+DC @ 100.0 kHz	**0.029994468**	0.0591 %	0.029958	0.030042	-0.0184 %	0.0807 %	PASS 9.22 %
0.03 V AC+DC @ 300.0 kHz	**0.029951198**	0.0964 %	0.029880	0.030120	-0.1627 %	0.3033 %	PASS 25.56 %
0.03 V AC+DC @ 500.0 kHz	**0.029915378**	0.1500 %	0.029654	0.030346	-0.2821 %	1.0033 %	PASS 13.90 %
0.03 V AC+DC @ 1.0 MHz	**0.029829216**	0.3000 %	0.029609	0.030391	-0.5693 %	1.0033 %	PASS 27.18 %
0.1 V AC+DC @ 10 Hz	**0.099999553**	0.0121 %	0.099980	0.100020	-0.0004 %	0.0074 %	PASS 1.57 %
0.1 V AC+DC @ 20 Hz	**0.099996636**	0.0121 %	0.099980	0.100020	-0.0034 %	0.0074 %	PASS 11.83 %
0.1 V AC+DC @ 40 Hz	**0.099995393**	0.0121 %	0.099980	0.100020	-0.0046 %	0.0074 %	PASS 16.21 %
0.1 V AC+DC @ 100 Hz	**0.09999549**	0.0121 %	0.099981	0.100019	-0.0045 %	0.0072 %	PASS 15.98 %
0.1 V AC+DC @ 1.0 kHz	**0.099992192**	0.0121 %	0.099981	0.100019	-0.0078 %	0.0072 %	PASS 27.66 %
0.1 V AC+DC @ 10.0 kHz	**0.099991763**	0.0121 %	0.099974	0.100026	-0.0082 %	0.0142 %	PASS 22.05 %
0.1 V AC+DC @ 20.0 kHz	**0.099992467**	0.0121 %	0.099974	0.100026	-0.0075 %	0.0142 %	PASS 20.16 %
0.1 V AC+DC @ 50.0 kHz	**0.099993283**	0.0256 %	0.099944	0.100056	-0.0067 %	0.0302 %	PASS 8.48 %
0.1 V AC+DC @ 100.0 kHz	**0.09996635**	0.0591 %	0.099861	0.100139	-0.0336 %	0.0802 %	PASS 16.89 %
0.1 V AC+DC @ 300.0 kHz	**0.099819393**	0.0964 %	0.099603	0.100397	-0.1806 %	0.3010 %	PASS 28.57 %
0.1 V AC+DC @ 500.0 kHz	**0.09969305**	0.1500 %	0.098849	0.101151	-0.3069 %	1.0010 %	PASS 15.16 %
0.1 V AC+DC @ 1.0 MHz	**0.099486159**	0.3000 %	0.098699	0.101301	-0.5138 %	1.0010 %	PASS 24.59 %
0.3 V AC+DC @ 10 Hz	**0.30000466**	0.0050 %	0.299960	0.300040	0.0016 %	0.0083 %	PASS 8.01 %
0.3 V AC+DC @ 20 Hz	**0.29999789**	0.0050 %	0.299960	0.300040	-0.0007 %	0.0083 %	PASS 3.63 %

0.3 V AC+DC @ 40 Hz	**0.29999554**	0.0050 %	0.299960	0.300040	-0.0015 %	0.0083 %	PASS 7.67 %
0.3 V AC+DC @ 100 Hz	**0.29999457**	0.0050 %	0.299962	0.300038	-0.0018 %	0.0077 %	PASS 9.91 %
0.3 V AC+DC @ 1.0 kHz	**0.2999936**	0.0050 %	0.299962	0.300038	-0.0021 %	0.0077 %	PASS 11.68 %
0.3 V AC+DC @ 10.0 kHz	**0.30001418**	0.0050 %	0.299941	0.300059	0.0047 %	0.0147 %	PASS 15.26 %
0.3 V AC+DC @ 20.0 kHz	**0.30001293**	0.0050 %	0.299941	0.300059	0.0043 %	0.0147 %	PASS 13.92 %
0.3 V AC+DC @ 50.0 kHz	**0.30005408**	0.0085 %	0.299882	0.300118	0.0180 %	0.0307 %	PASS 28.31 %
0.3 V AC+DC @ 100.0 kHz	**0.30011501**	0.0138 %	0.299717	0.300283	0.0383 %	0.0807 %	PASS 23.42 %
0.3 V AC+DC @ 300.0 kHz	**0.30041691**	0.0425 %	0.298962	0.301038	0.1390 %	0.3033 %	PASS 22.69 %
0.3 V AC+DC @ 500.0 kHz	**0.30079179**	0.1100 %	0.296660	0.303340	0.2639 %	1.0033 %	PASS 13.07 %
0.3 V AC+DC @ 1.0 MHz	**0.30126204**	0.1800 %	0.296450	0.303550	0.4207 %	1.0033 %	PASS 20.63 %
1.0 V AC+DC @ 10 Hz	**1.0000112**	0.0050 %	0.999876	1.000124	0.0011 %	0.0074 %	PASS 6.30 %
1.0 V AC+DC @ 20 Hz	**0.99998327**	0.0050 %	0.999876	1.000124	-0.0017 %	0.0074 %	PASS 9.40 %
1.0 V AC+DC @ 40 Hz	**0.9999788**	0.0050 %	0.999876	1.000124	-0.0021 %	0.0074 %	PASS 11.90 %
1.0 V AC+DC @ 100 Hz	**0.99997714**	0.0050 %	0.999878	1.000122	-0.0023 %	0.0072 %	PASS 13.07 %
1.0 V AC+DC @ 1.0 kHz	**0.99997307**	0.0050 %	0.999878	1.000122	-0.0027 %	0.0072 %	PASS 15.40 %
1.0 V AC+DC @ 10.0 kHz	**1.0000144**	0.0050 %	0.999808	1.000192	0.0014 %	0.0142 %	PASS 4.78 %
1.0 V AC+DC @ 20.0 kHz	**1.0000386**	0.0050 %	0.999808	1.000192	0.0039 %	0.0142 %	PASS 12.82 %
1.0 V AC+DC @ 50.0 kHz	**1.0001418**	0.0085 %	0.999613	1.000387	0.0142 %	0.0302 %	PASS 22.58 %
1.0 V AC+DC @ 100.0 kHz	**1.0003106**	0.0138 %	0.999060	1.000940	0.0311 %	0.0802 %	PASS 19.09 %
1.0 V AC+DC @ 300.0 kHz	**1.0013925**	0.0425 %	0.996565	1.003435	0.1393 %	0.3010 %	PASS 22.90 %
1.0 V AC+DC @ 500.0 kHz	**1.0026452**	0.1100 %	0.988890	1.011110	0.2645 %	1.0010 %	PASS 13.13 %
1.0 V AC+DC @ 1.0 MHz	**1.005617**	0.1800 %	0.988190	1.011810	0.5617 %	1.0010 %	PASS 27.61 %
3.0 V AC+DC @ 10 Hz	**3.0001221**	0.0048 %	2.999605	3.000395	0.0041 %	0.0083 %	PASS 21.14 %
3.0 V AC+DC @ 20 Hz	**3.0000303**	0.0048 %	2.999605	3.000395	0.0010 %	0.0083 %	PASS 5.24 %
3.0 V AC+DC @ 40 Hz	**3.0000053**	0.0048 %	2.999605	3.000395	0.0002 %	0.0083 %	PASS 0.91 %
3.0 V AC+DC @ 100 Hz	**3.0000203**	0.0048 %	2.999625	3.000375	0.0007 %	0.0077 %	PASS 3.75 %
3.0 V AC+DC @ 1.0 kHz	**2.9999575**	0.0048 %	2.999625	3.000375	-0.0014 %	0.0077 %	PASS 7.82 %
3.0 V AC+DC @ 10.0 kHz	**2.9999233**	0.0048 %	2.999415	3.000585	-0.0026 %	0.0147 %	PASS 8.28 %
3.0 V AC+DC @ 20.0 kHz	**3.0000137**	0.0048 %	2.999415	3.000585	0.0005 %	0.0147 %	PASS 1.47 %
3.0 V AC+DC @ 50.0 kHz	**2.9998785**	0.0085 %	2.998824	3.001176	-0.0040 %	0.0307 %	PASS 6.36 %
3.0 V AC+DC @ 100.0 kHz	**2.9989729**	0.0121 %	2.997216	3.002784	-0.0342 %	0.0807 %	PASS 20.98 %
3.0 V AC+DC @ 300.0 kHz	**2.9930026**	0.0336 %	2.989891	3.010109	-0.2332 %	0.3033 %	PASS 38.21 %
3.0 V AC+DC @ 500.0 kHz	**2.9930332**	0.1100 %	2.966600	3.033400	-0.2322 %	1.0033 %	PASS 11.50 %
3.0 V AC+DC @ 1.0 MHz	**3.0053372**	0.1700 %	2.964800	3.035200	0.1779 %	1.0033 %	PASS 8.74 %
10.0 V AC+DC @ 10 Hz	**10.000385**	0.0048 %	9.998778	10.001222	0.0038 %	0.0074 %	PASS 21.79 %
10.0 V AC+DC @ 20 Hz	**10.000107**	0.0048 %	9.998778	10.001222	0.0011 %	0.0074 %	PASS 6.05 %
10.0 V AC+DC @ 40 Hz	**10.00006**	0.0048 %	9.998778	10.001222	0.0006 %	0.0074 %	PASS 3.39 %
10.0 V AC+DC @ 100 Hz	**10.000039**	0.0048 %	9.998798	10.001202	0.0004 %	0.0072 %	PASS 2.23 %
10.0 V AC+DC @ 1.0 kHz	**9.9998302**	0.0048 %	9.998798	10.001202	-0.0017 %	0.0072 %	PASS 9.80 %
10.0 V AC+DC @ 10.0 kHz	**9.9996832**	0.0048 %	9.998098	10.001902	-0.0032 %	0.0142 %	PASS 10.56 %
10.0 V AC+DC @ 20.0 kHz	**9.9999514**	0.0048 %	9.998098	10.001902	-0.0005 %	0.0142 %	PASS 1.62 %
10.0 V AC+DC @ 50.0 kHz	**9.9995235**	0.0085 %	9.996125	10.003875	-0.0048 %	0.0302 %	PASS 7.59 %
10.0 V AC+DC @ 100.0 kHz	**9.995981**	0.0121 %	9.990766	10.009234	-0.0402 %	0.0802 %	PASS 24.77 %

10.0 V AC+DC @ 300.0 kHz	**9.9767366**	0.0336 %	9.966536	10.033464	-0.2326 %	0.3010 %	PASS 38.40 %
10.0 V AC+DC @ 500.0 kHz	**9.9767877**	0.1100 %	9.888900	10.111100	-0.2321 %	1.0010 %	PASS 11.53 %
10.0 V AC+DC @ 1.0 MHz	**10.032456**	0.1700 %	9.882900	10.117100	0.3246 %	1.0010 %	PASS 15.98 %
30 V AC+DC @ 10 Hz	**30.000628**	0.0060 %	29.991795	30.008205	0.0021 %	0.0213 %	PASS 4.72 %
30 V AC+DC @ 20 Hz	**29.999927**	0.0060 %	29.991795	30.008205	-0.0002 %	0.0213 %	PASS 0.55 %
30 V AC+DC @ 40 Hz	**29.999775**	0.0060 %	29.991795	30.008205	-0.0008 %	0.0213 %	PASS 1.69 %
30 V AC+DC @ 100 Hz	**29.999634**	0.0060 %	29.991995	30.008005	-0.0012 %	0.0207 %	PASS 2.83 %
30 V AC+DC @ 1.0 kHz	**29.999105**	0.0060 %	29.991995	30.008005	-0.0030 %	0.0207 %	PASS 6.93 %
30 V AC+DC @ 10.0 kHz	**29.998832**	0.0060 %	29.991995	30.008005	-0.0039 %	0.0207 %	PASS 9.05 %
30 V AC+DC @ 20.0 kHz	**29.999803**	0.0060 %	29.991995	30.008005	-0.0007 %	0.0207 %	PASS 1.53 %
30 V AC+DC @ 50.0 kHz	**29.999911**	0.0060 %	29.987495	30.012505	-0.0003 %	0.0357 %	PASS 0.41 %
30 V AC+DC @ 100.0 kHz	**29.996481**	0.0174 %	29.958591	30.041409	-0.0117 %	0.1207 %	PASS 4.81 %
30 V AC+DC @ 300.0 kHz	**30.030262**	0.0991 %	29.849273	30.150727	0.1009 %	0.4033 %	PASS 12.14 %
30 V AC+DC @ 500.0 kHz	**30.211124**	0.5200 %	29.393000	30.607000	0.7037 %	1.5033 %	PASS 22.12 %
100.0 V AC+DC @ 10 Hz	**100.00206**	0.0060 %	99.973582	100.026418	0.0021 %	0.0204 %	PASS 4.84 %
100.0 V AC+DC @ 20 Hz	**99.999184**	0.0060 %	99.973582	100.026418	-0.0008 %	0.0204 %	PASS 1.92 %
100.0 V AC+DC @ 40 Hz	**99.998359**	0.0060 %	99.973582	100.026418	-0.0016 %	0.0204 %	PASS 3.86 %
100.0 V AC+DC @ 100 Hz	**99.998224**	0.0060 %	99.973782	100.026218	-0.0018 %	0.0202 %	PASS 4.21 %
100.0 V AC+DC @ 1.0 kHz	**99.996397**	0.0060 %	99.973782	100.026218	-0.0036 %	0.0202 %	PASS 8.55 %
100.0 V AC+DC @ 10.0 kHz	**99.99598**	0.0060 %	99.973782	100.026218	-0.0040 %	0.0202 %	PASS 9.54 %
100.0 V AC+DC @ 20.0 kHz	**99.998693**	0.0060 %	99.973782	100.026218	-0.0013 %	0.0202 %	PASS 3.10 %
100.0 V AC+DC @ 50.0 kHz	**99.997839**	0.0095 %	99.955255	100.044745	-0.0022 %	0.0352 %	PASS 2.96 %
100.0 V AC+DC @ 100.0 kHz	**99.982774**	0.0174 %	99.862436	100.137564	-0.0172 %	0.1202 %	PASS 7.09 %
300.0 V AC+DC @ 40 Hz	**299.9747**	0.0079 %	299.074408	300.925592	-0.0084 %	0.3007 %	PASS 1.40 %
300.0 V AC+DC @ 100 Hz	**299.97398**	0.0079 %	299.854408	300.145592	-0.0087 %	0.0407 %	PASS 10.47 %
300.0 V AC+DC @ 1.0 kHz	**299.96692**	0.0079 %	299.854408	300.145592	-0.0110 %	0.0407 %	PASS 13.31 %
300.0 V AC+DC @ 10.0 kHz	**299.95494**	0.0110 %	299.784865	300.215135	-0.0150 %	0.0607 %	PASS 12.18 %
300.0 V AC+DC @ 20.0 kHz	**299.95221**	0.0110 %	299.784865	300.215135	-0.0159 %	0.0607 %	PASS 12.92 %
300.0 V AC+DC @ 50.0 kHz	**300.07851**	0.0245 %	299.564599	300.435401	0.0262 %	0.1207 %	PASS 10.63 %
300.0 V AC+DC @ 100.0 kHz	**300.49615**	0.0660 %	298.900000	301.100000	0.1654 %	0.3007 %	PASS 26.86 %
750.0 V AC+DC @ 40 Hz	**749.85306**	0.0079 %	747.689020	752.310980	-0.0196 %	0.3003 %	PASS 3.26 %
750.0 V AC+DC @ 100 Hz	**749.84725**	0.0079 %	749.639020	750.360980	-0.0204 %	0.0403 %	PASS 24.82 %
750.0 V AC+DC @ 1.0 kHz	**749.83157**	0.0079 %	749.639020	750.360980	-0.0225 %	0.0403 %	PASS 27.37 %
750.0 V AC+DC @ 10.0 kHz	**749.80522**	0.0110 %	749.465162	750.534838	-0.0260 %	0.0603 %	PASS 21.19 %
750.0 V AC+DC @ 20.0 kHz	**749.81356**	0.0110 %	749.465162	750.534838	-0.0249 %	0.0603 %	PASS 20.29 %
750.0 V AC+DC @ 50.0 kHz	**750.11699**	0.0245 %	748.914498	751.085502	0.0156 %	0.1203 %	PASS 6.35 %
750.0 V AC+DC @ 50.0 kHz	**750.18839**	0.0660 %	748.603000	751.397000	0.0251 %	0.1203 %	PASS 9.15 %

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

DCI Test	100nA-1A	DUT	Source unc.	Low Limit	Hi limit	Measured	24h spec	Result
Zero µADC	0	**-2.2699463E-12**						INFO
50 nADC	5E-08	**4.9978941E-08**						INFO
100 nADC	1E-07	**9.9978856E-08**	71.82 ppm	9.995282E-08	1.000472E-07	-211.437 ppm	400 ppm	PASS 26.01 %
-100 nADC	-1E-07	**-9.9991043E-08**	71.82 ppm	-1.000492E-07	-9.995082E-08	-89.571 ppm	420 ppm	PASS 10.51 %
-50 nADC	-5E-08	**-5.0030171E-08**						INFO
Zero µADC	0	**7.4514857E-12**						INFO
0.5 µADC	5E-07	**5.0000657E-07**	71.82 ppm	4.999201E-07	5.000799E-07	13.136 ppm	88 ppm	PASS 5.78 %
1.0 µADC	1E-06	**9.9998482E-07**	71.82 ppm	9.998792E-07	1.000121E-06	-15.185 ppm	49 ppm	PASS 8.73 %
-1.0 µADC	-1E-06	**-9.9999047E-07**	71.82 ppm	-1.000123E-06	-9.998772E-07	-9.532 ppm	51 ppm	PASS 5.41 %
-0.5 µADC	-5E-07	**-4.9999409E-07**	71.82 ppm	-5.000819E-07	-4.999181E-07	-11.822 ppm	92 ppm	PASS 5.06 %
Zero 00 µADC	0	**-1.0138986E-11**						INFO
5 µADC	5E-06	**4.999968E-06**	71.82 ppm	4.999522E-06	5.000478E-06	-6.397 ppm	24 ppm	PASS 4.23 %
10 µADC	1E-05	**9.9999635E-06**	71.82 ppm	9.999113E-06	1.000089E-05	-3.654 ppm	17 ppm	PASS 2.48 %
-10 µADC	-1E-05	**-9.9999329E-06**	71.82 ppm	-1.000089E-05	-9.999111E-06	-6.706 ppm	17 ppm	PASS 4.54 %
-5 µADC	-5E-06	**-4.9999545E-06**	71.82 ppm	-5.00048E-06	-4.99952E-06	-9.091 ppm	24 ppm	PASS 6.00 %
Zero 000 µADC	0	**-2.1608019E-11**						INFO
50 µADC	5E-05	**4.9999777E-05**	71.82 ppm	4.999531E-05	5.000469E-05	-4.462 ppm	22 ppm	PASS 2.97 %
100 µADC	0.0001	**9.9999446E-05**	71.82 ppm	9.999122E-05	0.0001000088	-5.535 ppm	16 ppm	PASS 3.76 %
-100 µADC	-0.0001	**-9.9999439E-05**	71.82 ppm	-0.0001000088	-9.999122E-05	-5.606 ppm	16 ppm	PASS 3.81 %
-50 µADC	-5E-05	**-4.9999645E-05**	71.82 ppm	-5.000469E-05	-4.999531E-05	-7.105 ppm	22 ppm	PASS 4.73 %
Zero mADC	0	**2.7713336E-11**						INFO
0.5 mADC	0.0005	**0.00049999691**	33.64 ppm	0.0004999742	0.0005000258	-6.181 ppm	18 ppm	PASS 8.10 %
1.0 mADC	0.001	**0.00099999511**	33.64 ppm	0.0009999524	0.001000048	-4.889 ppm	14 ppm	PASS 6.71 %
-1.0 mADC	-0.001	**-0.00099999769**	33.64 ppm	-0.001000048	-0.0009999524	-2.309 ppm	14 ppm	PASS 3.17 %
-0.5 mADC	-0.0005	**-0.00049999916**	33.64 ppm	-0.0005000258	-0.0004999742	-1.689 ppm	18 ppm	PASS 2.21 %
Zero 00 mADC	0	**3.3533298E-12**						INFO
5 mADC	0.005	**0.0049999668**	32.27 ppm	0.004999749	0.005000251	-6.639 ppm	18 ppm	PASS 8.98 %
10 mADC	0.01	**0.0099999634**	32.27 ppm	0.009999537	0.01000046	-3.661 ppm	14 ppm	PASS 5.20 %
-10 mADC	-0.01	**-0.010000014**	32.27 ppm	-0.01000046	-0.009999537	1.388 ppm	14 ppm	PASS 1.97 %
-5 mADC	-0.005	**-0.0050000151**	32.27 ppm	-0.005000251	-0.004999749	3.029 ppm	18 ppm	PASS 4.10 %
Zero 000 mADC	0	**1.074194E-11**						INFO
50 mADC	0.05	**0.050000403**	53.32 ppm	0.04999568	0.05000432	8.068 ppm	33 ppm	PASS 6.43 %
100 mADC	0.1	**0.10000189**	53.32 ppm	0.09999177	0.1000082	18.877 ppm	29 ppm	PASS 15.55 %
-100 mADC	-0.1	**-0.10000286**	53.32 ppm	-0.1000082	-0.09999177	28.586 ppm	29 ppm	PASS 23.55 %
-50 mADC	-0.05	**-0.050001394**	53.32 ppm	-0.05000432	-0.04999568	27.884 ppm	33 ppm	PASS 22.23 %
Zero ADC	0	**3.3828326E-11**						INFO
0.5 ADC	0.5	**0.50003063**	115.22 ppm	0.4998824	0.5001176	61.255 ppm	120 ppm	PASS 18.41 %

1.0 ADC	1	**1.000065**	115.22 ppm	0.9997748	1.000225	65.016 ppm	110 ppm	PASS 20.41 %
-1.0 ADC	-1	**-1.0000647**	115.22 ppm	-1.000225	-0.9997748	64.687 ppm	110 ppm	PASS 20.30 %
-0.5 ADC	-0.5	**-0.50003985**	115.22 ppm	-0.5001176	-0.4998824	79.697 ppm	120 ppm	PASS 23.95 %

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	**1.0018827E-05**	0.0160 %	-0.0002900076045	0.0003100076045	0.1883 %	3000.0600 %	INFO
100 µA AC @ 50 Hz	0.0001	**0.00010001225**	0.0160 %	-0.000200076045	0.000400076045	0.0123 %	300.0600 %	PASS 0.00 %
1.0 mA AC @ 50 Hz	0.001	**0.00099994242**	0.0160 %	0.00099921955	0.00100078045	-57.580 ppm	0.0620 %	PASS 4.50 %
10 mA AC @ 50 Hz	0.01	**0.0099994815**	0.0160 %	0.0099921955	0.0100078045	-51.850 ppm	0.0620 %	PASS 4.05 %
100 mA AC @ 50 Hz	0.1	**0.099998784**	0.0133 %	0.099924682	0.100075318	-12.160 ppm	0.0620 %	PASS 0.96 %
1.0 A AC @ 50 Hz	1.0	**1.0002488**	0.0133 %	0.99904682	1.00095318	248.781 ppm	0.0820 %	PASS 14.97 %
10 µA AC @ 60 Hz	1e-05	**1.0020249E-05**	0.0133 %	-0.0002900073318	0.0003100073318	0.2025 %	3000.0600 %	INFO
100 µA AC @ 60 Hz	0.0001	**0.00010001057**	0.0133 %	-0.000200073318	0.000400073318	0.0106 %	300.0600 %	PASS 0.00 %
1.0 mA AC @ 60 Hz	0.001	**0.00099996946**	0.0129 %	0.00099925136	0.00100074864	-30.541 ppm	0.0620 %	PASS 2.41 %
10 mA AC @ 60 Hz	0.01	**0.0099997306**	0.0129 %	0.0099925136	0.0100074864	-26.940 ppm	0.0620 %	PASS 2.13 %
100 mA AC @ 60 Hz	0.1	**0.10000033**	0.0288 %	0.099909182	0.100090818	3.334 ppm	0.0620 %	PASS 0.24 %
1.0 A AC @ 60 Hz	1.0	**1.0002611**	0.0288 %	0.99889182	1.00110818	261.111 ppm	0.0820 %	PASS 15.02 %
10 µA AC @ 1.0 kHz	1e-05	**1.0017786E-05**	0.0160 %	-0.0002900076045	0.0003100076045	0.1779 %	3000.0600 %	INFO
100 µA AC @ 1.0 kHz	0.0001	**9.9986178E-05**	0.0160 %	-0.000200076045	0.000400076045	-0.0138 %	300.0600 %	PASS 0.00 %
1.0 mA AC @ 1.0 kHz	0.001	**0.0010000002**	0.0160 %	0.00099951955	0.00100048045	0.208 ppm	0.0320 %	PASS 0.03 %
10 mA AC @ 1.0 kHz	0.01	**0.010000046**	0.0160 %	0.0099951955	0.0100048045	4.565 ppm	0.0320 %	PASS 0.64 %
100 mA AC @ 1.0 kHz	0.1	**0.10000447**	0.0133 %	0.099954682	0.100045318	44.698 ppm	0.0320 %	PASS 6.45 %
1.0 A AC @ 1.0 kHz	1.0	**1.000227**	0.0133 %	0.99884682	1.00115318	0.0227 %	0.1020 %	PASS 11.03 %

Test completed

Test date	18 April 2020 14:10
UUT Internal TEMP?	37.5
Destructive overloads?	87, DESTRUCTIVE OVERLOADS valid 2941

Lab temperature maintained +24°C ±2°C

Internal use only

Not validated