cal equipment

D1281 GPIB4

Manufacturer	Datron Instruments	Calibration date	May 12 2019
Model Number	1281	Ambient Temperature	0.00 °C
Serial	MM-GPIB4	Relative Humidity	0.00 %
ID Number	19608-4	Pressure	0.00
Notes	Test front V/R ports	Test type	First

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	10/09/2018	10/09/2019
DUT MFC	Fluke	5700B	/03 WB	XXX	MC02	03/07/2019	04/07/2019
DC STD	Fluke	732B-3	9.9999323 VDC	±0.55 ppm	SV03	08/20/2016	08/20/2017
DC STD	Fluke	732B-3	9.9999288 VDC	±0.56 ppm	SV03	11/03/2017	11/03/2018
STDR	IET	1 Ohm	0.99997483	±0.17 ppm	SM02	11/03/2017	11/30/2018
STDR	ESI	SR104	10000.0530 KΩ	±0.15 ppm	SM01	10/30/2017	10/30/2018

MFC last calibrated	215.0 days ago	MFC since DCV ZERO	6.0 days ago
MFC since WBFLAT	11453.0 days ago	MFC since WBGAIN	215.0 days ago
MFC Confidence level	**24h 95% REL**	MFC Calibrate date	2018-10-09 00:00:00
MFC Calibrate date Zero	2019-05-06 00:00:00	Calibrate date WB Flatness	1988-10-01 00:00:00
Calibrate date WB Gain	2018-10-09 00:00:00	CAL CONST 6.5V reference voltage	6.89136168037
CAL CONST 13V reference voltage	13.7948160154	CAL CONST 22V range positive zero	398.17885
CAL CONST 22V range negative zero	398.17831	CAL CONST DAC Linearity	0.0
CAL CONST 10KOHM true output resistance	10000.08459	CAL CONST 10KOHM standard resistance	10000.4488527
CAL CONST, Zero calibration temperature	23.0	CAL CONST, All calibration temp	23.0

This note is test MFC dummy text block for further use.
Calibrator was warmed up >8 hours.

Meter Info	Datron Instruments,1281,19608-4 ,890144-03.12	Last calibration date	N/A
Next calibration date	N/A	Test date	12 May 2019 22:23

Service information

Confidence test result?
0.0
Options
1,1,1,1,0,1,0
Reference
Direct MFC test, verification 5720MMA
DUT Condition
Test after reassembly

Test procedure : $Id: d1281.py | Rev 1307 | 2019/05/13 02:19:55 MM $

Source procedure : $Id: f5720a.py | Rev 1196 | 2019/03/11 16:10:33 clu $

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	**-0.21 µV**	0.75 µV	-0.910 µV	0.910 µV	N/A	0.16 µV	PASS
Short 0.0 VDC	0.0000000E+00	**0.56 µV**	0.75 µV	-0.900 µV	0.900 µV	N/A	0.15 µV	PASS
Short 00.0 VDC	0.0000000E+00	**4.70 µV**	0.75 µV	-1.070 µV	1.070 µV	N/A	0.32 µV	FAIL
Short 000.0 VDC	0.0000000E+00	**47.00 µV**	0.75 µV	-14.750 µV	14.750 µV	N/A	14.00 µV	FAIL
Short 0000.0 VDC	0.0000000E+00	**300.00 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**
0.1 VDC (0.10 Range)	0.1000000	**0.10000001**	7.27 ppm	0.099998723	0.10000128	0.060 ppm	5.50 ppm	PASS 0.47 %
-0.1 VDC (0.10 Range)	-0.1000000	**-0.10000008**	7.27 ppm	-0.10000128	-0.099998723	0.800 ppm	5.50 ppm	PASS 6.26 %
0.1 VDC (1.00 Range)	0.1000000	**0.10000066**	7.27 ppm	0.099999093	0.10000091	6.600 ppm	1.80 ppm	PASS 72.77 %
0.2 VDC (1.00 Range)	0.2000000	**0.20000097**	3.86 ppm	0.19999887	0.20000113	4.850 ppm	1.80 ppm	PASS 85.69 %
1.0 VDC (1.00 Range)	1.0000000	**1.0000012**	3.86 ppm	0.99999434	1.0000057	1.200 ppm	1.80 ppm	PASS 21.20 %
-0.1 VDC (1.00 Range)	-0.1000000	**-0.09999957**	7.27 ppm	-0.10000091	-0.099999093	-4.300 ppm	1.80 ppm	PASS 47.41 %
-0.2 VDC (1.00 Range)	-0.2000000	**-0.19999978**	3.86 ppm	-0.20000113	-0.19999887	-1.100 ppm	1.80 ppm	PASS 19.43 %
-1.0 VDC (1.00 Range)	-1.0000000	**-1.0000003**	3.86 ppm	-1.0000057	-0.99999434	0.320 ppm	1.80 ppm	PASS 5.65 %
1.0 VDC (10.00 Range)	1.0000000	**1.0000055**	3.86 ppm	0.99999559	1.0000044	5.500 ppm	0.55 ppm	FAIL 124.72 %
2.0 VDC (10.00 Range)	2.0000000	**2.0000057**	2.77 ppm	1.9999934	2.0000066	2.850 ppm	0.55 ppm	PASS 85.84 %
10.0 VDC (10.00 Range)	10.0000000	**10.000005**	2.73 ppm	9.9999672	10.000033	0.480 ppm	0.55 ppm	PASS 14.63 %
-1.0 VDC (10.00 Range)	-1.0000000	**-0.9999958**	3.86 ppm	-1.0000044	-0.99999559	-4.200 ppm	0.55 ppm	PASS 95.24 %
-2.0 VDC (10.00 Range)	-2.0000000	**-1.9999969**	2.77 ppm	-2.0000066	-1.9999934	-1.550 ppm	0.55 ppm	PASS 46.69 %
-10.0 VDC (10.00 Range)	-10.0000000	**-10.000004**	2.73 ppm	-10.000033	-9.9999672	0.380 ppm	0.55 ppm	PASS 11.59 %
10 VDC (100.00 Range)	10.0000000	**10.000049**	2.77 ppm	9.9999443	10.000056	4.900 ppm	2.80 ppm	PASS 87.97 %
20 VDC (100.00 Range)	20.0000000	**20.000058**	3.73 ppm	19.999869	20.000131	2.900 ppm	2.80 ppm	PASS 44.41 %
100 VDC (100.00 Range)	100.0000000	**100.00001**	3.73 ppm	99.999347	100.00065	0.060 ppm	2.80 ppm	PASS 0.92 %
-10 VDC (100.00 Range)	-10.0000000	**-9.999964**	2.77 ppm	-10.000056	-9.9999443	-3.600 ppm	2.80 ppm	PASS 64.63 %
-20 VDC (100.00 Range)	-20.0000000	**-19.999974**	3.73 ppm	-20.000131	-19.999869	-1.300 ppm	2.80 ppm	PASS 19.91 %
-100 VDC (100.00 Range)	-100.0000000	**-99.99998**	3.73 ppm	-100.00065	-99.999347	-0.200 ppm	2.80 ppm	PASS 3.06 %
100 VDC (1000.00 Range)	100.0000000	**100.00014**	3.73 ppm	99.999367	100.00063	1.400 ppm	2.60 ppm	PASS 22.12 %
200 VDC (1000.00 Range)	200.0000000	**199.9999**	3.73 ppm	199.99873	200.00127	-0.500 ppm	2.60 ppm	PASS 7.90 %
1000 VDC (1000.00 Range)	1000.0000000	**999.99775**	5.45 ppm	999.97995	1000.02	-2.250 ppm	2.60 ppm	PASS 11.22 %
-100 VDC (1000.00 Range)	-100.0000000	**-99.9996**	3.73 ppm	-100.00063	-99.999367	-4.000 ppm	2.60 ppm	PASS 63.19 %
-200 VDC (1000.00 Range)	-200.0000000	**-199.9995**	3.73 ppm	-200.00127	-199.99873	-2.500 ppm	2.60 ppm	PASS 39.49 %
-1000 VDC (1000.00 Range)	-1000.0000000	**-999.99896**	5.45 ppm	-1000.02	-999.97995	-1.040 ppm	2.60 ppm	PASS 26.33 %

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	1 Ohm to 1 GOhm	DUT	Source unc.	Low Limit	Hi limit	Measured	24h spec	Result
TrueOhm 1 Ω	0.9998017	**0.99979605**	32.0 ppm	9.9976171E-01	9.9984169E-01	-5.651 ppm	8.0 ppm	PASS 14.13 %
TrueOhm 1.9 Ω	1.8995064	**1.8994878**	25.0 ppm	1.8994437E+00	1.8995691E+00	-9.792 ppm	8.0 ppm	PASS 29.67 %
TrueOhm 10 Ω	9.999933	**9.9999473**	5.0 ppm	9.9998030E+00	1.0000063E+01	1.430 ppm	8.0 ppm	PASS 11.00 %
TrueOhm 19 Ω	18.999097	**18.999148**	4.0 ppm	1.8998907E+01	1.8999287E+01	2.695 ppm	6.0 ppm	PASS 26.95 %
TrueOhm 100 Ω	100.00183	**100.00194**	1.7 ppm	1.0000106E+02	1.0000260E+02	1.100 ppm	6.0 ppm	PASS 14.29 %
TrueOhm 190 Ω	189.99505	**189.99525**	1.7 ppm	1.8999431E+02	1.8999579E+02	1.063 ppm	2.2 ppm	PASS 27.26 %
TrueOhm 1.0 kΩ	999.9918	**999.99211**	1.7 ppm	9.9998790E+02	9.9999570E+02	0.310 ppm	2.2 ppm	PASS 7.95 %
TrueOhm 1.9 kΩ	1899.9976	**1899.998**	1.7 ppm	1.8999902E+03	1.9000050E+03	0.200 ppm	2.2 ppm	PASS 5.13 %
TrueOhm 10 kΩ	10000.084	**10000.077**	1.6 ppm	1.0000046E+04	1.0000122E+04	-0.700 ppm	2.2 ppm	PASS 18.42 %
TrueOhm 19 kΩ	18999.701	**18999.684**	1.7 ppm	1.8999627E+04	1.8999775E+04	-0.895 ppm	2.2 ppm	PASS 22.94 %
TrueOhm 100 kΩ	100001.4	**100001.37**	2.0 ppm	1.0000098E+05	1.0000182E+05	-0.280 ppm	2.2 ppm	PASS 6.67 %
TrueOhm 190 kΩ	189992.98	**189992.92**	2.0 ppm	1.8999051E+05	1.8999545E+05	-0.289 ppm	11.0 ppm	PASS 2.23 %
1.0 MΩ	1000003.1	**1000004.2**	2.5 ppm	9.9998960E+05	1.0000166E+06	1.080 ppm	11.0 ppm	PASS 8.00 %
1.9 MΩ	1899959.2	**1899964**	3.0 ppm	1.8998490E+06	1.9000694E+06	2.532 ppm	55.0 ppm	PASS 4.36 %
10 MΩ	9999407	**9999567.2**	10.0 ppm	9.9987570E+06	1.0000057E+07	16.016 ppm	55.0 ppm	PASS 24.64 %
19 MΩ	18999096	**18999402**	20.0 ppm	1.8989026E+07	1.9009166E+07	16.093 ppm	510.0 ppm	PASS 3.04 %
100 MΩ	1.000094E+08	**1.0003625E+08**	50.0 ppm	9.9953395E+07	1.0006541E+08	268.475 ppm	510.0 ppm	PASS 47.94 %

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
TrueOhm 10 Ω	**Range 0.0000108 Ω**	5.000e-05 Ω	-5e-05	5e-05	N/A	4.0000e-06 Ω	PASS
TrueOhm 100 Ω	**Range -0.0000160 Ω**	5.500e-04 Ω	-0.00055	0.00055	N/A	1.3000e-06 Ω	PASS
TrueOhm 1.0 kΩ	**Range -0.0000100 Ω**	5.500e-03 Ω	-0.0055	0.0055	N/A	1.3000e-06 Ω	PASS
TrueOhm 10 kΩ	**Range 0.0000000 Ω**	5.500e-02 Ω	-0.055	0.055	N/A	1.3000e-06 Ω	PASS
TrueOhm 100 kΩ	**Range 0.0020000 Ω**	5.500e-01 Ω	-0.55	0.55	N/A	1.3000e-06 Ω	PASS
1.0 MΩ	**Range -0.0020000 Ω**	5.500e+00 Ω	-5.5	5.5	N/A	1.3000e-06 Ω	PASS
10 MΩ	**Range 0.0000000 Ω**	5.500e+01 Ω	-55	55	N/A	1.3000e-06 Ω	PASS
100 MΩ	**Range 0.0010000 Ω**	5.500e+02 Ω	-550	550	N/A	1.3000e-06 Ω	PASS
1 GΩ	**Range -0.0030000 Ω**	5.500e+03 Ω	-5500	5500	N/A	1.3000e-06 Ω	PASS
OHM ZERO 2W	**DUT**	**Source unc.**	**Low Limit**	**Hi limit**	**Measured**	**24h spec**	**Result**
TrueOhm 100 Ω	**Range 0.0000000 Ω**	3.500e-01 Ω	-0.35	0.35	N/A	1.3000e-06 Ω	PASS
TrueOhm 1.0 kΩ	**Range 0.0000000 Ω**	4.000e-01 Ω	-0.4	0.4	N/A	1.3000e-06 Ω	PASS
TrueOhm 10 kΩ	**Range 0.0000000 Ω**	4.000e-01 Ω	-0.4	0.4	N/A	1.3000e-06 Ω	PASS
TrueOhm 100 kΩ	**Range 0.0000000 Ω**	5.500e-01 Ω	-0.55	0.55	N/A	1.3000e-06 Ω	PASS
1.0 MΩ	**Range 0.0000000 Ω**	5.500e+00 Ω	-5.5	5.5	N/A	1.3000e-06 Ω	PASS
10 MΩ	**Range 0.0000000 Ω**	5.500e+01 Ω	-55	55	N/A	1.3000e-06 Ω	PASS
100 MΩ	**Range 0.0000000 Ω**	5.500e+02 Ω	-550	550	N/A	1.3000e-06 Ω	PASS

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

ACV ANA Test	1V-10V	DUT	w/Guardband	Low Limit	Hi limit	Units	Measured	24h spec	Result
1.0 VAC @ 50.0 kHz	1.0	**1.000091**	129.09	0.99937091	1.00062909	VAC	91.000 ppm	500.0 ppm	PASS 14.47 %
1.0 VAC @ 1.0 MHz	1.0	**1.002942**	0.2500 %	0.9845	1.0155	VAC	0.2942 %	1.3000 %	PASS 18.98 %
1.9 VAC @ 10 Hz	1.9	**1.906495**	73.18	1.899613958	1.900386042	VAC	3418.421 ppm	130.0 ppm	FAIL 1682.46 %
1.9 VAC @ 200 Hz	1.9	**1.900484**	73.18	1.899784958	1.900215042	VAC	254.737 ppm	40.0 ppm	FAIL 225.07 %
1.9 VAC @ 500 Hz	1.9	**1.900512**	73.18	1.899784958	1.900215042	VAC	269.474 ppm	40.0 ppm	FAIL 238.09 %
1.9 VAC @ 50.0 kHz	1.9	**1.90032**	129.09	1.899089729	1.900910271	VAC	168.421 ppm	350.0 ppm	PASS 35.15 %
1.9 VAC @ 1.0 MHz	1.9	**1.901105**	0.3000 %	1.8658	1.9342	VAC	0.0582 %	1.5000 %	PASS 3.23 %
10.0 VAC @ 10 Hz	10.0	**10.03705**	73.18	9.9979682	10.0020318	VAC	3705.000 ppm	130.0 ppm	FAIL 1823.51 %
10.0 VAC @ 200 Hz	10.0	**10.00131**	73.18	9.9988682	10.0011318	VAC	131.000 ppm	40.0 ppm	FAIL 115.74 %
10.0 VAC @ 500 Hz	10.0	**10.00146**	73.18	9.9988682	10.0011318	VAC	146.000 ppm	40.0 ppm	FAIL 129.00 %
10.0 VAC @ 50.0 kHz	10.0	**10.00018**	129.09	9.9952091	10.0047909	VAC	18.000 ppm	350.0 ppm	PASS 3.76 %
10.0 VAC @ 1.0 MHz	10.0	**10.08094**	0.3000 %	9.82	10.18	VAC	0.8094 %	1.5000 %	PASS 44.97 %
19 VAC @ 10 Hz	19	**18.98271**	73.18	18.99613958	19.00386042	VAC	-910.000 ppm	130.0 ppm	FAIL 447.88 %
19 VAC @ 200 Hz	19	**19.00394**	73.18	18.99784958	19.00215042	VAC	207.368 ppm	40.0 ppm	FAIL 183.22 %
19 VAC @ 500 Hz	19	**19.00424**	73.18	18.99784958	19.00215042	VAC	223.158 ppm	40.0 ppm	FAIL 197.17 %
19 VAC @ 50.0 kHz	19	**19.00151**	129.09	18.99089729	19.00910271	VAC	79.474 ppm	350.0 ppm	PASS 16.59 %
19 VAC @ 1.0 MHz	19	**19.10399**	0.3000 %	18.658	19.342	VAC	0.5473 %	1.5000 %	PASS 30.41 %

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
0.1 V AC+DC @ 10 Hz	**0.1061949**	0.0121 %	0.099973	0.100027	6.1949 %	0.0150 %	FAIL 22829.08 %
0.1 V AC+DC @ 20 Hz	**0.0993971**	0.0121 %	0.099973	0.100027	-0.6029 %	0.0150 %	FAIL 2221.77 %
0.1 V AC+DC @ 50 Hz	**0.1000216**	0.0121 %	0.099983	0.100017	0.0216 %	0.0050 %	FAIL 126.05 %
0.1 V AC+DC @ 100 Hz	**0.1000283**	0.0121 %	0.099983	0.100017	0.0283 %	0.0050 %	FAIL 165.15 %
0.1 V AC+DC @ 1.0 kHz	**0.1000188**	0.0121 %	0.099983	0.100017	0.0188 %	0.0050 %	FAIL 109.71 %
0.1 V AC+DC @ 10.0 kHz	**0.100022**	0.0121 %	0.099960	0.100040	0.0220 %	0.0280 %	PASS 54.81 %
0.1 V AC+DC @ 20.0 kHz	**0.1000213**	0.0121 %	0.099960	0.100040	0.0213 %	0.0280 %	PASS 53.07 %
0.1 V AC+DC @ 50.0 kHz	**0.1000175**	0.0256 %	0.099924	0.100076	0.0175 %	0.0500 %	PASS 23.14 %
0.1 V AC+DC @ 100.0 kHz	**0.0999955**	0.0591 %	0.099891	0.100109	-0.0045 %	0.0500 %	PASS 4.12 %
0.1 V AC+DC @ 300.0 kHz	**0.0991067**	0.0964 %	0.099554	0.100446	-0.8933 %	0.3500 %	FAIL 200.13 %
0.1 V AC+DC @ 500.0 kHz	**0.096301**	0.1500 %	0.098550	0.101450	-3.6990 %	1.3000 %	FAIL 255.10 %
0.1 V AC+DC @ 1.0 MHz	**0.0802875**	0.3000 %	0.098400	0.101600	-19.7125 %	1.3000 %	FAIL 1232.03 %
0.19 V AC+DC @ 10 Hz	**0.1989668**	0.0121 %	0.189948	0.190052	4.7194 %	0.0150 %	FAIL 17391.54 %
0.19 V AC+DC @ 20 Hz	**0.1887094**	0.0121 %	0.189948	0.190052	-0.6793 %	0.0150 %	FAIL 2503.18 %
0.19 V AC+DC @ 50 Hz	**0.1900534**	0.0121 %	0.189967	0.190033	0.0281 %	0.0050 %	FAIL 164.01 %
0.19 V AC+DC @ 100 Hz	**0.1900674**	0.0121 %	0.189967	0.190033	0.0355 %	0.0050 %	FAIL 207.01 %
0.19 V AC+DC @ 1.0 kHz	**0.1900472**	0.0121 %	0.189967	0.190033	0.0248 %	0.0050 %	FAIL 144.97 %
0.19 V AC+DC @ 10.0 kHz	**0.1900556**	0.0121 %	0.189924	0.190076	0.0293 %	0.0280 %	PASS 72.91 %
0.19 V AC+DC @ 20.0 kHz	**0.1900585**	0.0121 %	0.189924	0.190076	0.0308 %	0.0280 %	PASS 76.71 %
0.19 V AC+DC @ 50.0 kHz	**0.1900666**	0.0256 %	0.189856	0.190144	0.0351 %	0.0500 %	PASS 46.34 %
0.19 V AC+DC @ 100.0 kHz	**0.1900147**	0.0591 %	0.189793	0.190207	0.0077 %	0.0500 %	PASS 7.09 %
0.19 V AC+DC @ 300.0 kHz	**0.1881222**	0.0964 %	0.189152	0.190848	-0.9883 %	0.3500 %	FAIL 221.41 %
0.19 V AC+DC @ 500.0 kHz	**0.1812452**	0.1500 %	0.187245	0.192755	-4.6078 %	1.3000 %	FAIL 317.78 %
0.19 V AC+DC @ 1.0 MHz	**0.1488029**	0.3000 %	0.186960	0.193040	-21.6827 %	1.3000 %	FAIL 1355.17 %
1.0 V AC+DC @ 10 Hz	**1.017534**	0.0050 %	0.999820	1.000180	1.7534 %	0.0130 %	FAIL 9765.52 %
1.0 V AC+DC @ 20 Hz	**0.996015**	0.0050 %	0.999820	1.000180	-0.3985 %	0.0130 %	FAIL 2219.44 %
1.0 V AC+DC @ 50 Hz	**1.000264**	0.0050 %	0.999910	1.000090	0.0264 %	0.0040 %	FAIL 294.81 %
1.0 V AC+DC @ 100 Hz	**1.00032**	0.0050 %	0.999910	1.000090	0.0320 %	0.0040 %	FAIL 357.34 %
1.0 V AC+DC @ 1.0 kHz	**1.000219**	0.0050 %	0.999910	1.000090	0.0219 %	0.0040 %	FAIL 244.56 %
1.0 V AC+DC @ 10.0 kHz	**1.000223**	0.0050 %	0.999830	1.000170	0.0223 %	0.0120 %	FAIL 131.52 %
1.0 V AC+DC @ 20.0 kHz	**1.000148**	0.0050 %	0.999830	1.000170	0.0148 %	0.0120 %	PASS 87.29 %
1.0 V AC+DC @ 50.0 kHz	**1.000102**	0.0085 %	0.999565	1.000435	0.0102 %	0.0350 %	PASS 23.42 %
1.0 V AC+DC @ 100.0 kHz	**1.000377**	0.0138 %	0.997362	1.002638	0.0377 %	0.2500 %	PASS 14.29 %
1.0 V AC+DC @ 300.0 kHz	**1.002657**	0.0425 %	0.984575	1.015425	0.2657 %	1.5000 %	PASS 17.22 %
1.0 V AC+DC @ 500.0 kHz	**1.005159**	0.1100 %	0.983900	1.016100	0.5159 %	1.5000 %	PASS 32.04 %
1.0 V AC+DC @ 1.0 MHz	**1.002712**	0.1800 %	0.983200	1.016800	0.2712 %	1.5000 %	PASS 16.14 %
1.9 V AC+DC @ 10 Hz	**1.957955**	0.0048 %	1.899661	1.900339	3.0503 %	0.0130 %	FAIL 17119.00 %
1.9 V AC+DC @ 20 Hz	**1.889769**	0.0048 %	1.899661	1.900339	-0.5385 %	0.0130 %	FAIL 3022.08 %
1.9 V AC+DC @ 50 Hz	**1.900596**	0.0048 %	1.899832	1.900168	0.0314 %	0.0040 %	FAIL 355.73 %
1.9 V AC+DC @ 100 Hz	**1.900759**	0.0048 %	1.899832	1.900168	0.0399 %	0.0040 %	FAIL 453.02 %
1.9 V AC+DC @ 1.0 kHz	**1.900557**	0.0048 %	1.899832	1.900168	0.0293 %	0.0040 %	FAIL 332.45 %
1.9 V AC+DC @ 10.0 kHz	**1.900568**	0.0048 %	1.899680	1.900320	0.0299 %	0.0120 %	FAIL 177.75 %
1.9 V AC+DC @ 20.0 kHz	**1.900422**	0.0048 %	1.899680	1.900320	0.0222 %	0.0120 %	FAIL 132.06 %
1.9 V AC+DC @ 50.0 kHz	**1.90033**	0.0085 %	1.899173	1.900827	0.0174 %	0.0350 %	PASS 39.89 %
1.9 V AC+DC @ 100.0 kHz	**1.900781**	0.0121 %	1.895019	1.904981	0.0411 %	0.2500 %	PASS 15.68 %
1.9 V AC+DC @ 300.0 kHz	**1.904452**	0.0336 %	1.870861	1.929139	0.2343 %	1.5000 %	PASS 15.28 %
1.9 V AC+DC @ 500.0 kHz	**1.908321**	0.1100 %	1.869410	1.930590	0.4379 %	1.5000 %	PASS 27.20 %
1.9 V AC+DC @ 1.0 MHz	**1.9006**	0.1700 %	1.868270	1.931730	0.0316 %	1.5000 %	PASS 1.89 %
10.0 V AC+DC @ 10 Hz	**10.36811**	0.0048 %	9.998218	10.001782	3.6811 %	0.0130 %	FAIL 20659.45 %
10.0 V AC+DC @ 20 Hz	**9.95288**	0.0048 %	9.998218	10.001782	-0.4712 %	0.0130 %	FAIL 2644.52 %
10.0 V AC+DC @ 50 Hz	**10.00217**	0.0048 %	9.999118	10.000882	0.0217 %	0.0040 %	FAIL 246.09 %
10.0 V AC+DC @ 100 Hz	**10.00282**	0.0048 %	9.999118	10.000882	0.0282 %	0.0040 %	FAIL 319.80 %
10.0 V AC+DC @ 1.0 kHz	**10.00169**	0.0048 %	9.999118	10.000882	0.0169 %	0.0040 %	FAIL 191.65 %
10.0 V AC+DC @ 10.0 kHz	**10.00173**	0.0048 %	9.998318	10.001682	0.0173 %	0.0120 %	FAIL 102.87 %
10.0 V AC+DC @ 20.0 kHz	**10.00091**	0.0048 %	9.998318	10.001682	0.0091 %	0.0120 %	PASS 54.11 %
10.0 V AC+DC @ 50.0 kHz	**10.0002**	0.0085 %	9.995646	10.004354	0.0020 %	0.0350 %	PASS 4.59 %
10.0 V AC+DC @ 100.0 kHz	**10.00086**	0.0121 %	9.973786	10.026214	0.0086 %	0.2500 %	PASS 3.28 %
10.0 V AC+DC @ 300.0 kHz	**10.00358**	0.0336 %	9.846636	10.153364	0.0358 %	1.5000 %	PASS 2.33 %
10.0 V AC+DC @ 500.0 kHz	**10.01235**	0.1100 %	9.839000	10.161000	0.1235 %	1.5000 %	PASS 7.67 %
10.0 V AC+DC @ 1.0 MHz	**10.08029**	0.1700 %	9.833000	10.167000	0.8029 %	1.5000 %	PASS 48.08 %

19 V AC+DC @ 10 Hz	**19.73079**	0.0060 %	18.996387	19.003613	3.8463 %	0.0130 %	FAIL 20224.33 %
19 V AC+DC @ 20 Hz	**18.8889**	0.0060 %	18.996387	19.003613	-0.5847 %	0.0130 %	FAIL 3074.65 %
19 V AC+DC @ 50 Hz	**19.00512**	0.0060 %	18.998097	19.001903	0.0269 %	0.0040 %	FAIL 268.99 %
19 V AC+DC @ 100 Hz	**19.00679**	0.0060 %	18.998097	19.001903	0.0357 %	0.0040 %	FAIL 356.73 %
19 V AC+DC @ 1.0 kHz	**19.00463**	0.0060 %	18.998097	19.001903	0.0244 %	0.0040 %	FAIL 243.25 %
19 V AC+DC @ 10.0 kHz	**19.00466**	0.0060 %	18.996577	19.003423	0.0245 %	0.0120 %	FAIL 136.12 %
19 V AC+DC @ 20.0 kHz	**19.00307**	0.0060 %	18.996577	19.003423	0.0162 %	0.0120 %	PASS 89.68 %
19 V AC+DC @ 50.0 kHz	**19.00139**	0.0060 %	18.992207	19.007793	0.0073 %	0.0350 %	PASS 17.84 %
19 V AC+DC @ 100.0 kHz	**19.00187**	0.0174 %	18.949201	19.050799	0.0098 %	0.2500 %	PASS 3.68 %
19 V AC+DC @ 300.0 kHz	**19.00157**	0.0991 %	18.696173	19.303827	0.0083 %	1.5000 %	PASS 0.52 %
19 V AC+DC @ 500.0 kHz	**19.01063**	0.5200 %	18.616200	19.383800	0.0559 %	1.5000 %	PASS 2.77 %
19 V AC+DC @ 1.0 MHz	**19.10315**	0.1700 %	18.682700	19.317300	0.5429 %	1.5000 %	PASS 32.51 %
100.0 V AC+DC @ 10 Hz	**103.342**	0.0060 %	99.980982	100.019018	3.3420 %	0.0130 %	FAIL 17462.64 %
100.0 V AC+DC @ 20 Hz	**99.4489**	0.0060 %	99.980982	100.019018	-0.5511 %	0.0130 %	FAIL 2897.78 %
100.0 V AC+DC @ 50 Hz	**100.0226**	0.0060 %	99.989982	100.010018	0.0226 %	0.0040 %	FAIL 222.92 %
100.0 V AC+DC @ 100 Hz	**100.0298**	0.0060 %	99.989982	100.010018	0.0298 %	0.0040 %	FAIL 293.94 %
100.0 V AC+DC @ 1.0 kHz	**100.0195**	0.0060 %	99.989982	100.010018	0.0195 %	0.0040 %	FAIL 192.35 %
100.0 V AC+DC @ 10.0 kHz	**100.0211**	0.0060 %	99.981982	100.018018	0.0211 %	0.0120 %	FAIL 116.33 %
100.0 V AC+DC @ 20.0 kHz	**100.0139**	0.0060 %	99.981982	100.018018	0.0139 %	0.0120 %	PASS 76.63 %
100.0 V AC+DC @ 50.0 kHz	**100.0065**	0.0095 %	99.955455	100.044545	0.0065 %	0.0350 %	PASS 14.55 %
100.0 V AC+DC @ 100.0 kHz	**100.0119**	0.0174 %	99.732636	100.267364	0.0119 %	0.2500 %	PASS 4.45 %
190.0 V AC+DC @ 10 Hz	**192.0789**	0.0060 %	189.963866	190.036134	1.0942 %	0.0130 %	FAIL 5685.12 %
190.0 V AC+DC @ 20 Hz	**189.1948**	0.0060 %	189.963866	190.036134	-0.4238 %	0.0130 %	FAIL 2201.96 %
190.0 V AC+DC @ 50 Hz	**190.0561**	0.0060 %	189.980966	190.019034	0.0295 %	0.0040 %	FAIL 288.17 %
190.0 V AC+DC @ 100 Hz	**190.0719**	0.0060 %	189.980966	190.019034	0.0378 %	0.0040 %	FAIL 369.34 %
190.0 V AC+DC @ 1.0 kHz	**190.0519**	0.0060 %	189.980966	190.019034	0.0273 %	0.0040 %	FAIL 266.60 %
190.0 V AC+DC @ 10.0 kHz	**190.0543**	0.0060 %	189.965766	190.034234	0.0286 %	0.0120 %	FAIL 156.63 %
190.0 V AC+DC @ 20.0 kHz	**190.0403**	0.0060 %	189.965766	190.034234	0.0212 %	0.0120 %	FAIL 116.25 %
190.0 V AC+DC @ 50.0 kHz	**190.0234**	0.0095 %	189.915365	190.084635	0.0123 %	0.0350 %	PASS 27.51 %
190.0 V AC+DC @ 100.0 kHz	**190.0258**	0.0174 %	189.492008	190.507992	0.0136 %	0.2500 %	PASS 5.07 %
700.0 V AC+DC @ 50 Hz	**700.186**	0.0079 %	699.902952	700.097048	0.0266 %	0.0060 %	FAIL 180.71 %
700.0 V AC+DC @ 100 Hz	**700.217**	0.0079 %	699.902952	700.097048	0.0310 %	0.0060 %	FAIL 210.83 %
700.0 V AC+DC @ 1.0 kHz	**700.156**	0.0079 %	699.902952	700.097048	0.0223 %	0.0060 %	FAIL 151.56 %

Test completed

Test date	13 May 2019 04:25

Lab temperature maintained +24°C ±2°C

Internal use only

Not validated