

Manufacturer	KEITHLEY INSTRUMENTS	Calibration date	November 16 2020
Model Number	Model 2182	Ambient Temperature	23.26 °C
Serial	MM GPIB8	Relative Humidity	52.80 %
ID Number	Calibration test unit	Pressure	1022.64
Notes	Test after fresh cal	Test type	Front cable

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	11/14/2017	11/14/2018
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	29.0 days ago	MFC since DCV ZERO	21.0 days ago
MFC since WBFLAT	12009.0 days ago	MFC since WBGAIN	28.0 days ago
MFC Confidence level	24h 95% REL	MFC Calibrate date	2020-10-19 00:00:00
MFC Calibrate date Zero	2020-10-27 00:00:00	Calibrate date WB Flatness	1988-10-01 00:00:00
Calibrate date WB Gain	2020-10-20 00:00:00	CAL CONST 6.5V reference voltage	6.89135895011
CAL CONST 13V reference voltage	13.7948059532	CAL CONST 22V range positive zero	398.17871
CAL CONST 22V range negative zero	398.17824	CAL CONST DAC Linearity	0.260327694734
CAL CONST 10KOHM true output resistance	10000.0820586	CAL CONST 10KOHM standard resistance	10000.451077
CAL CONST, Zero calibration temperature	23.5799999237	CAL CONST, All calibration temp	23.5799999237
Booster type	VB5725,IB5725	Current output posts	AUX
Calibrate date 5725A AMP	1988-10-01 00:00:00	Calibrated days ago	2009-01-20 00:00:00
CAL CONST, Amp ACAL temperature	23.0	CAL CONST, Amp CalCheck temperature	23.0

Total uncertainty of each calibration point calculated with RSS

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

Meter Info	KEITHLEY INSTRUMENTS INC.,MODEL 2182A,1246880,C02 /A02	Test date start	16 November 2020 23:53
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Test specification interval	24 hour DUT spec	Line frequency	1	60.0
Next calibration date	2021,11,16	Last calibration date	2020,11,16	
DUT temperature to cal	-2.1	Last calibration temperature	+24.2	

Service information

Last calibration temperature

+24.2

All CAL values

0

Reference

Verification

DUT Condition

xfer-calkit

Test procedure : \$Id: k2182.py | Rev 1965 | 2020/11/17 04:21:45 MM \$

Source procedure : \$Id: f5720b.py | Rev 1724 | 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
CH1 Short 00 mVDC	0.0000000E+00	0.09 µV	7.27 µV	-8.470 µV	8.470 µV	N/A	1.20 µV	PASS
CH1 Short 000 mVDC	0.0000000E+00	0.10 µV	7.27 µV	-11.270 µV	11.270 µV	N/A	4.00 µV	PASS
CH1 Short 0.0 VDC	0.0000000E+00	0.20 µV	7.27 µV	-87.270 µV	87.270 µV	N/A	80.00 µV	PASS
CH1 Short 00.0 VDC	0.0000000E+00	-0.02 µV	3.86 µV	-603.860 µV	603.860 µV	N/A	0.60 mV	PASS
CH1 Short 000.0 VDC	0.0000000E+00	6.12 µV	3.86 µV	-6003.860 µV	6003.860 µV	N/A	6.00 mV	PASS
CH2 Short 000 mVDC	0.0000000E+00	0.16 µV	7.27 µV	-11.270 µV	11.270 µV	N/A	4.00 µV	PASS
CH2 Short 0.0 VDC	0.0000000E+00	0.06 µV	3.86 µV	-83.860 µV	83.860 µV	N/A	80.00 µV	PASS
CH2 Short 00.0 VDC	0.0000000E+00	0.05 µV	3.86 µV	-603.860 µV	603.860 µV	N/A	0.60 mV	PASS

DCV Test	0.01V-100V	DUT	Source unc.	Low Limit	Hi limit	Measured	24h spec	Result
0.001 VDC (0.010 Range)	0.0010000	0.0010001273	401.60 ppm	0.0009995744	0.0010004256	127.305 ppm	24.00 ppm	PASS 29.91 %
0.005 VDC (0.010 Range)	0.0050000	0.0050003756	81.60 ppm	0.004999472	0.005000528	75.115 ppm	24.00 ppm	PASS 71.13 %
0.01 VDC (0.010 Range)	0.0100000	0.010000446	41.60 ppm	0.009999344	0.010000656	44.565 ppm	24.00 ppm	PASS 67.93 %
-0.01 VDC (0.010 Range)	-0.0100000	-0.010000368	41.60 ppm	-0.010000656	-0.009999344	36.805 ppm	24.00 ppm	PASS 56.11 %
-0.005 VDC (0.010 Range)	-0.0050000	-0.0050000957	81.60 ppm	-0.005000528	-0.004999472	19.135 ppm	24.00 ppm	PASS 18.12 %
-0.001 VDC (0.010 Range)	-0.0010000	-0.0009999091	401.60 ppm	-0.0010004256	-0.0009995744	-90.994 ppm	24.00 ppm	PASS 21.38 %
0.01 VDC (0.100 Range)	0.0100000	0.010000169	41.60 ppm	0.009999454	0.010000546	16.895 ppm	13.00 ppm	PASS 30.94 %
0.05 VDC (0.100 Range)	0.0500000	0.050000369	9.60 ppm	0.04999887	0.05000113	7.377 ppm	13.00 ppm	PASS 32.64 %
0.1 VDC (0.100 Range)	0.1000000	0.10000083	5.60 ppm	0.09999814	0.10000186	8.335 ppm	13.00 ppm	PASS 44.81 %
-0.1 VDC (0.100 Range)	-0.1000000	-0.1000003	5.60 ppm	-0.10000186	-0.09999814	3.000 ppm	13.00 ppm	PASS 16.13 %
-0.05 VDC (0.100 Range)	-0.0500000	-0.050000045	9.60 ppm	-0.05000113	-0.04999887	0.906 ppm	13.00 ppm	PASS 4.01 %
-0.01 VDC (0.100 Range)	-0.0100000	-0.009999892	41.60 ppm	-0.010000546	-0.009999454	-10.801 ppm	13.00 ppm	PASS 19.78 %
0.1 VDC (1.000 Range)	0.1000000	0.10000062	8.60 ppm	0.09999824	0.10000176	6.190 ppm	9.00 ppm	PASS 35.17 %
0.5 VDC (1.000 Range)	0.5000000	0.50000263	3.00 ppm	0.499994	0.500006	5.269 ppm	9.00 ppm	PASS 43.91 %
1 VDC (1.000 Range)	1.0000000	1.0000054	2.30 ppm	0.9999887	1.0000113	5.370 ppm	9.00 ppm	PASS 47.52 %
-1 VDC (1.000 Range)	-1.0000000	-1.0000034	2.30 ppm	-1.0000113	-0.9999887	3.375 ppm	9.00 ppm	PASS 29.87 %
-0.5 VDC (1.000 Range)	-0.5000000	-0.50000109	3.00 ppm	-0.500006	-0.499994	2.172 ppm	9.00 ppm	PASS 18.10 %
-0.1 VDC (1.000 Range)	-0.1000000	-0.10000002	8.60 ppm	-0.10000176	-0.09999824	0.170 ppm	9.00 ppm	PASS 0.97 %
1.0 VDC (10.000 Range)	1.0000000	1.0000048	3.30 ppm	0.9999937	1.0000063	4.790 ppm	3.00 ppm	PASS 76.03 %
5 VDC (10.000 Range)	5.0000000	5.0000202	1.30 ppm	4.9999785	5.0000215	4.038 ppm	3.00 ppm	PASS 93.91 %
10.0 VDC (10.000 Range)	10.0000000	10.000038	1.10 ppm	9.999959	10.000041	3.755 ppm	3.00 ppm	PASS 91.59 %
-10.0 VDC (10.000 Range)	-10.0000000	-10.000039	1.10 ppm	-10.000041	-9.999959	3.910 ppm	3.00 ppm	PASS 95.37 %
-5.0 VDC (10.000 Range)	-5.0000000	-5.0000189	1.30 ppm	-5.0000215	-4.9999785	3.773 ppm	3.00 ppm	PASS 87.74 %
-1.0 VDC (10.000 Range)	-1.0000000	-0.99999921	3.30 ppm	-1.0000063	-0.9999937	-0.793 ppm	3.00 ppm	PASS 12.59 %

DCV Test CH2	0.1V-10V	DUT	Source unc.	Low Limit	Hi limit	Measured	24h spec	Result
0.01 VDC (0.10 Range)	0.0100000	0.0099984475	41.60 ppm	0.009999344	0.010000656	-155.248 ppm	24.00 ppm	FAIL 236.66 %
0.05 VDC (0.10 Range)	0.0500000	0.049998808	9.60 ppm	0.04999832	0.05000168	-23.835 ppm	24.00 ppm	PASS 70.94 %
0.1 VDC (0.10 Range)	0.1000000	0.099999561	5.60 ppm	0.09999704	0.10000296	-4.392 ppm	24.00 ppm	PASS 14.84 %
-0.1 VDC (0.10 Range)	-0.1000000	-0.10000196	5.60 ppm	-0.10000296	-0.09999704	19.585 ppm	24.00 ppm	PASS 66.17 %
-0.05 VDC (0.10 Range)	-0.0500000	-0.050001281	9.60 ppm	-0.05000168	-0.04999832	25.612 ppm	24.00 ppm	PASS 76.23 %

-0.01 VDC (0.10 Range)	-0.0100000	-0.010000904	41.60 ppm	-0.010000656	-0.009999344	90.365 ppm	24.00 ppm	FAIL 137.75 %
0.1 VDC (1.00 Range)	0.1000000	0.099999656	8.60 ppm	0.09999784	0.10000216	-3.438 ppm	13.00 ppm	PASS 15.92 %
0.5 VDC (1.00 Range)	0.5000000	0.50000174	3.00 ppm	0.499992	0.500008	3.482 ppm	13.00 ppm	PASS 21.76 %
1 VDC (1.00 Range)	1.0000000	1.000004	2.30 ppm	0.9999847	1.0000153	4.020 ppm	13.00 ppm	PASS 26.27 %
-1 VDC (1.00 Range)	-1.0000000	-1.0000043	2.30 ppm	-1.0000153	-0.9999847	4.345 ppm	13.00 ppm	PASS 28.40 %
-0.5 VDC (1.00 Range)	-0.5000000	-0.50000233	3.00 ppm	-0.500008	-0.499992	4.668 ppm	13.00 ppm	PASS 29.17 %
-0.1 VDC (1.00 Range)	-0.1000000	-0.10000057	8.60 ppm	-0.10000216	-0.09999784	5.680 ppm	13.00 ppm	PASS 26.30 %
1.0 VDC (10.00 Range)	1.0000000	1.0000041	3.30 ppm	0.9999877	1.0000123	4.070 ppm	9.00 ppm	PASS 33.09 %
5 VDC (10.00 Range)	5.0000000	5.0000198	1.30 ppm	4.9999485	5.0000515	3.960 ppm	9.00 ppm	PASS 38.45 %
10.0 VDC (10.00 Range)	10.0000000	10.00004	1.10 ppm	9.999899	10.000101	4.045 ppm	9.00 ppm	PASS 40.05 %
-10.0 VDC (10.00 Range)	-10.0000000	-10.000037	1.10 ppm	-10.000101	-9.999899	3.675 ppm	9.00 ppm	PASS 36.39 %
-5.0 VDC (10.00 Range)	-5.0000000	-5.0000215	1.30 ppm	-5.0000515	-4.9999485	4.299 ppm	9.00 ppm	PASS 41.74 %
-1.0 VDC (10.00 Range)	-1.0000000	-1.0000022	3.30 ppm	-1.0000123	-0.9999877	2.175 ppm	9.00 ppm	PASS 17.68 %

Additional test for **combined DUT+MFC** DC Voltage Integral Linearity (INL) using fixed 10V range. Integral linearity is a measure of the device's deviation from ideal linear behaviour.

DCV Linearity	10 mV Range	DUT	Source unc.	Low Limit	Hi limit	Measured	24h spec	Result
10.25000 mV	0.010250	0.0102506	40.62 ppm	0.01024949	0.01025051	54.17 ppm	9.00 ppm	FAIL 109.16 %
10.00000 mV	0.010000	0.0100005	41.60 ppm	0.009999494	0.01000051	53.09 ppm	9.00 ppm	FAIL 104.92 %
9.75000 mV	0.009750	0.0097505	42.63 ppm	0.009749497	0.009750503	53.78 ppm	9.00 ppm	FAIL 104.16 %
9.50000 mV	0.009500	0.0095005	43.71 ppm	0.009499499	0.009500501	54.13 ppm	9.00 ppm	FAIL 102.70 %
9.25000 mV	0.009250	0.0092505	44.84 ppm	0.009249502	0.009250498	55.14 ppm	9.00 ppm	FAIL 102.42 %
9.00000 mV	0.009000	0.00900049	46.04 ppm	0.008999505	0.009000495	54.67 ppm	9.00 ppm	PASS 99.34 %
8.75000 mV	0.008750	0.00875048	47.31 ppm	0.008749507	0.008750493	55.13 ppm	9.00 ppm	PASS 97.90 %
8.50000 mV	0.008500	0.00850047	48.66 ppm	0.00849951	0.00850049	55.26 ppm	9.00 ppm	PASS 95.84 %
8.25000 mV	0.008250	0.00825046	50.08 ppm	0.008249513	0.008250487	55.69 ppm	9.00 ppm	PASS 94.27 %
8.00000 mV	0.008000	0.00800046	51.60 ppm	0.007999515	0.008000485	56.97 ppm	9.00 ppm	PASS 94.01 %
7.75000 mV	0.007750	0.00775045	53.21 ppm	0.007749518	0.007750482	57.94 ppm	9.00 ppm	PASS 93.14 %
7.50000 mV	0.007500	0.00750043	54.93 ppm	0.007499521	0.007500479	57.31 ppm	9.00 ppm	PASS 89.65 %
7.25000 mV	0.007250	0.00725042	56.77 ppm	0.007249523	0.007250477	58.42 ppm	9.00 ppm	PASS 88.83 %
7.00000 mV	0.007000	0.00700041	58.74 ppm	0.006999526	0.007000474	58.46 ppm	9.00 ppm	PASS 86.30 %
6.75000 mV	0.006750	0.00675040	60.86 ppm	0.006749528	0.006750472	59.02 ppm	9.00 ppm	PASS 84.48 %
6.50000 mV	0.006500	0.00650039	63.14 ppm	0.006499531	0.006500469	59.33 ppm	9.00 ppm	PASS 82.24 %
6.25000 mV	0.006250	0.00625037	65.60 ppm	0.006249534	0.006250466	59.75 ppm	9.00 ppm	PASS 80.10 %
6.00000 mV	0.006000	0.0060004	68.27 ppm	0.005999536	0.006000464	59.40 ppm	9.00 ppm	PASS 76.87 %
5.75000 mV	0.005750	0.0057503	71.17 ppm	0.005749539	0.005750461	60.34 ppm	9.00 ppm	PASS 75.27 %
5.50000 mV	0.005500	0.0055003	74.33 ppm	0.005499542	0.005500458	58.76 ppm	9.00 ppm	PASS 70.51 %
5.25000 mV	0.005250	0.0052503	77.79 ppm	0.005249544	0.005250456	58.84 ppm	9.00 ppm	PASS 67.79 %
5.00000 mV	0.005000	0.0050003	81.60 ppm	0.004999547	0.005000453	61.20 ppm	9.00 ppm	PASS 67.55 %
4.75000 mV	0.004750	0.0047503	85.81 ppm	0.00474955	0.00475045	59.64 ppm	9.00 ppm	PASS 62.90 %
4.50000 mV	0.004500	0.0045003	90.49 ppm	0.004499552	0.004500448	61.10 ppm	9.00 ppm	PASS 61.42 %
4.25000 mV	0.004250	0.0042503	95.72 ppm	0.004249555	0.004250445	62.90 ppm	9.00 ppm	PASS 60.07 %
4.00000 mV	0.004000	0.0040002	101.60 ppm	0.003999558	0.004000442	62.25 ppm	9.00 ppm	PASS 56.29 %
3.75000 mV	0.003750	0.0037502	108.27 ppm	0.00374956	0.00375044	63.75 ppm	9.00 ppm	PASS 54.36 %
3.50000 mV	0.003500	0.0035002	115.89 ppm	0.003499563	0.003500437	64.87 ppm	9.00 ppm	PASS 51.95 %
3.25000 mV	0.003250	0.0032502	124.68 ppm	0.003249566	0.003250434	68.27 ppm	9.00 ppm	PASS 51.07 %
3.00000 mV	0.003000	0.0030002	134.93 ppm	0.002999568	0.003000432	67.81 ppm	9.00 ppm	PASS 47.11 %
2.75000 mV	0.002750	0.0027502	147.05 ppm	0.002749571	0.002750429	72.61 ppm	9.00 ppm	PASS 46.53 %
2.50000 mV	0.002500	0.0025002	161.60 ppm	0.002499573	0.002500427	73.19 ppm	9.00 ppm	PASS 42.90 %
2.25000 mV	0.002250	0.0022502	179.38 ppm	0.002249576	0.002250424	76.89 ppm	9.00 ppm	PASS 40.82 %
2.00000 mV	0.002000	0.0020002	201.60 ppm	0.001999579	0.002000421	82.32 ppm	9.00 ppm	PASS 39.09 %
1.75000 mV	0.001750	0.0017502	230.17 ppm	0.001749581	0.001750419	88.95 ppm	9.00 ppm	PASS 37.19 %
1.50000 mV	0.001500	0.0015001	268.27 ppm	0.001499584	0.001500416	94.34 ppm	9.00 ppm	PASS 34.02 %
1.25000 mV	0.001250	0.0012501	321.60 ppm	0.001249587	0.001250413	105.92 ppm	9.00 ppm	PASS 32.04 %
1.00000 mV	0.001000	0.0010001	401.60 ppm	0.0009995894	0.001000411	119.88 ppm	9.00 ppm	PASS 29.20 %
0.75000 mV	0.000750	0.0007501	534.93 ppm	0.0007495921	0.0007504079	134.61 ppm	9.00 ppm	PASS 24.75 %
0.50000 mV	0.000500	0.0005001	801.60 ppm	0.0004995947	0.0005004053	186.79 ppm	9.00 ppm	PASS 23.04 %
0.25000 mV	0.000250	0.0002501	1601.60 ppm	0.0002495974	0.0002504026	330.70 ppm	9.00 ppm	PASS 20.53 %
0.10000 mV	0.000100	0.0001001	4001.60 ppm	9.959894E-05	0.0001004011	756.54 ppm	9.00 ppm	PASS 18.86 %

-0.25000 mV	-0.000250	-0.0002499	1601.60 ppm	-0.0002504026	-0.0002495974	-233.35 ppm	9.00 ppm	PASS 14.49 %
-0.50000 mV	-0.000500	-0.0004999	801.60 ppm	-0.0005004053	-0.0004995947	-105.75 ppm	9.00 ppm	PASS 13.05 %
-0.75000 mV	-0.000750	-0.0007500	534.93 ppm	-0.0007504079	-0.0007495921	-56.90 ppm	9.00 ppm	PASS 10.46 %
-1.00000 mV	-0.001000	-0.0010000	401.60 ppm	-0.001000411	-0.0009995894	-35.38 ppm	9.00 ppm	PASS 8.62 %
-1.25000 mV	-0.001250	-0.0012500	321.60 ppm	-0.001250413	-0.001249587	-16.62 ppm	9.00 ppm	PASS 5.03 %
-1.50000 mV	-0.001500	-0.0015000	268.27 ppm	-0.001500416	-0.001499584	-4.28 ppm	9.00 ppm	PASS 1.54 %
-1.75000 mV	-0.001750	-0.0017500	230.17 ppm	-0.001750419	-0.001749581	0.35 ppm	9.00 ppm	PASS 0.15 %
-2.00000 mV	-0.002000	-0.0020000	201.60 ppm	-0.002000421	-0.001999579	7.15 ppm	9.00 ppm	PASS 3.39 %
-2.25000 mV	-0.002250	-0.0022500	179.38 ppm	-0.002250424	-0.002249576	10.04 ppm	9.00 ppm	PASS 5.33 %
-2.50000 mV	-0.002500	-0.0025000	161.60 ppm	-0.002500427	-0.002499573	11.43 ppm	9.00 ppm	PASS 6.70 %
-2.75000 mV	-0.002750	-0.0027500	147.05 ppm	-0.002750429	-0.002749571	17.11 ppm	9.00 ppm	PASS 10.96 %
-3.00000 mV	-0.003000	-0.0030001	134.93 ppm	-0.003000432	-0.002999568	20.05 ppm	9.00 ppm	PASS 13.93 %
-3.25000 mV	-0.003250	-0.0032501	124.68 ppm	-0.003250434	-0.003249566	22.87 ppm	9.00 ppm	PASS 17.11 %
-3.50000 mV	-0.003500	-0.0035001	115.89 ppm	-0.003500437	-0.003499563	23.73 ppm	9.00 ppm	PASS 19.00 %
-3.75000 mV	-0.003750	-0.0037501	108.27 ppm	-0.00375044	-0.00374956	24.99 ppm	9.00 ppm	PASS 21.31 %
-4.00000 mV	-0.004000	-0.0040001	101.60 ppm	-0.004000442	-0.003999558	25.69 ppm	9.00 ppm	PASS 23.23 %
-4.25000 mV	-0.004250	-0.0042501	95.72 ppm	-0.004250445	-0.004249555	27.18 ppm	9.00 ppm	PASS 25.95 %
-4.50000 mV	-0.004500	-0.0045001	90.49 ppm	-0.004500448	-0.004499552	27.35 ppm	9.00 ppm	PASS 27.49 %
-4.75000 mV	-0.004750	-0.0047501	85.81 ppm	-0.00475045	-0.00474955	28.82 ppm	9.00 ppm	PASS 30.39 %
-5.00000 mV	-0.005000	-0.0050001	81.60 ppm	-0.005000453	-0.004999547	27.92 ppm	9.00 ppm	PASS 30.82 %
-5.25000 mV	-0.005250	-0.0052502	77.79 ppm	-0.005250456	-0.005249544	29.99 ppm	9.00 ppm	PASS 34.56 %
-5.50000 mV	-0.005500	-0.0055002	74.33 ppm	-0.005500458	-0.005499542	30.35 ppm	9.00 ppm	PASS 36.43 %
-5.75000 mV	-0.005750	-0.0057502	71.17 ppm	-0.005750461	-0.005749539	32.14 ppm	9.00 ppm	PASS 40.09 %
-6.00000 mV	-0.006000	-0.0060002	68.27 ppm	-0.006000464	-0.005999536	33.81 ppm	9.00 ppm	PASS 43.76 %
-6.25000 mV	-0.006250	-0.0062502	65.60 ppm	-0.006250466	-0.006249534	31.80 ppm	9.00 ppm	PASS 42.63 %
-6.50000 mV	-0.006500	-0.0065002	63.14 ppm	-0.006500469	-0.006499531	32.66 ppm	9.00 ppm	PASS 45.28 %
-6.75000 mV	-0.006750	-0.0067502	60.86 ppm	-0.006750472	-0.006749528	33.35 ppm	9.00 ppm	PASS 47.73 %
-7.00000 mV	-0.007000	-0.0070002	58.74 ppm	-0.007000474	-0.006999526	33.11 ppm	9.00 ppm	PASS 48.87 %
-7.25000 mV	-0.007250	-0.0072502	56.77 ppm	-0.007250477	-0.007249523	33.44 ppm	9.00 ppm	PASS 50.85 %
-7.50000 mV	-0.007500	-0.0075003	54.93 ppm	-0.007500479	-0.007499521	34.64 ppm	9.00 ppm	PASS 54.18 %
-7.75000 mV	-0.007750	-0.0077503	53.21 ppm	-0.007750482	-0.007749518	34.07 ppm	9.00 ppm	PASS 54.76 %
-8.00000 mV	-0.008000	-0.0080003	51.60 ppm	-0.008000485	-0.007999515	34.06 ppm	9.00 ppm	PASS 56.20 %
-8.25000 mV	-0.008250	-0.0082503	50.08 ppm	-0.008250487	-0.008249513	35.06 ppm	9.00 ppm	PASS 59.35 %
-8.50000 mV	-0.008500	-0.0085003	48.66 ppm	-0.00850049	-0.00849951	36.10 ppm	9.00 ppm	PASS 62.61 %
-8.75000 mV	-0.008750	-0.0087503	47.31 ppm	-0.008750493	-0.008749507	38.16 ppm	9.00 ppm	PASS 67.77 %
-9.00000 mV	-0.009000	-0.0090003	46.04 ppm	-0.009000495	-0.008999505	36.70 ppm	9.00 ppm	PASS 66.68 %
-9.25000 mV	-0.009250	-0.0092503	44.84 ppm	-0.009250498	-0.009249502	35.90 ppm	9.00 ppm	PASS 66.69 %
-9.50000 mV	-0.009500	-0.0095003	43.71 ppm	-0.009500501	-0.009499499	36.80 ppm	9.00 ppm	PASS 69.82 %
-9.75000 mV	-0.009750	-0.0097504	42.63 ppm	-0.009750503	-0.009749497	36.22 ppm	9.00 ppm	PASS 70.14 %
-10.00000 mV	-0.010000	-0.0100004	41.60 ppm	-0.01000051	-0.009999494	36.94 ppm	9.00 ppm	PASS 73.00 %
-10.25000 mV	-0.010250	-0.0102504	40.62 ppm	-0.01025051	-0.01024949	37.21 ppm	9.00 ppm	PASS 74.99 %

Additional test for **combined DUT+MFC** DC Voltage Integral Linearity (INL) using fixed 10V range. Integral linearity is a measure of the device's deviation from ideal linear behaviour.

DCV Linearity	100 mV Range	DUT	Source unc.	Low Limit	Hi limit	Measured	24h spec	Result
102.50000 mV	0.102500	0.0102501	5.50 ppm	0.1024985	0.1025015	-899999.42 ppm	9.00 ppm	FAIL 6206892.58 %
100.00000 mV	0.100000	0.0100001	5.60 ppm	0.09999854	0.1000015	-899999.29 ppm	9.00 ppm	FAIL 6164378.69 %
97.50000 mV	0.097500	0.0097500	5.70 ppm	0.09749857	0.09750143	-899999.67 ppm	9.00 ppm	FAIL 6122446.75 %
95.00000 mV	0.095000	0.0095001	5.81 ppm	0.09499859	0.09500141	-899999.12 ppm	9.00 ppm	FAIL 6076969.05 %
92.50000 mV	0.092500	0.0092501	5.92 ppm	0.09249862	0.09250138	-899998.96 ppm	9.00 ppm	FAIL 6032164.59 %
90.00000 mV	0.090000	0.0090001	6.04 ppm	0.08999865	0.09000135	-899999.24 ppm	9.00 ppm	FAIL 5984037.53 %
87.50000 mV	0.087500	0.0087500	6.17 ppm	0.08749867	0.08750133	-899999.45 ppm	9.00 ppm	FAIL 5932758.40 %
85.00000 mV	0.085000	0.0085001	6.31 ppm	0.0849987	0.0850013	-899999.35 ppm	9.00 ppm	FAIL 5878506.52 %
82.50000 mV	0.082500	0.0082501	6.45 ppm	0.08249873	0.08250127	-899999.23 ppm	9.00 ppm	FAIL 5825237.73 %
80.00000 mV	0.080000	0.0080000	6.60 ppm	0.07999875	0.08000125	-899999.41 ppm	9.00 ppm	FAIL 5769226.97 %
77.50000 mV	0.077500	0.0077501	6.76 ppm	0.07749878	0.07750122	-899999.31 ppm	9.00 ppm	FAIL 5710655.55 %
75.00000 mV	0.075000	0.0075001	6.93 ppm	0.07499881	0.07500119	-899999.13 ppm	9.00 ppm	FAIL 5649712.05 %
72.50000 mV	0.072500	0.0072500	7.12 ppm	0.07249883	0.07250117	-899999.68 ppm	9.00 ppm	FAIL 5583124.58 %
70.00000 mV	0.070000	0.0070001	7.31 ppm	0.06999886	0.07000114	-899999.02 ppm	9.00 ppm	FAIL 5518081.07 %
67.50000 mV	0.067500	0.0067501	7.53 ppm	0.06749888	0.06750112	-899998.90 ppm	9.00 ppm	FAIL 5444639.46 %
65.00000 mV	0.065000	0.0065000	7.75 ppm	0.06499891	0.06500109	-899999.38 ppm	9.00 ppm	FAIL 5373130.64 %
62.50000 mV	0.062500	0.0062500	8.00 ppm	0.06249894	0.06250106	-899999.35 ppm	9.00 ppm	FAIL 5294113.82 %
60.00000 mV	0.060000	0.0060000	8.27 ppm	0.05999896	0.06000104	-899999.27 ppm	9.00 ppm	FAIL 5211344.94 %
57.50000 mV	0.057500	0.0057500	8.56 ppm	0.05749899	0.05750101	-899999.38 ppm	9.00 ppm	FAIL 5125281.23 %
55.00000 mV	0.055000	0.0055000	8.87 ppm	0.05499902	0.05500098	-899999.16 ppm	9.00 ppm	FAIL 5036369.10 %
52.50000 mV	0.052500	0.0052501	9.22 ppm	0.05249904	0.05250096	-899998.91 ppm	9.00 ppm	FAIL 4939620.81 %
50.00000 mV	0.050000	0.0050001	9.60 ppm	0.04999907	0.05000093	-899998.84 ppm	9.00 ppm	FAIL 4838703.46 %
47.50000 mV	0.047500	0.0047500	10.02 ppm	0.0474991	0.0475009	-899999.02 ppm	9.00 ppm	FAIL 4731856.03 %
45.00000 mV	0.045000	0.0045000	10.49 ppm	0.04499912	0.04500088	-899998.91 ppm	9.00 ppm	FAIL 4617747.10 %
42.50000 mV	0.042500	0.0042500	11.01 ppm	0.04249915	0.04250085	-899999.14 ppm	9.00 ppm	FAIL 4497746.81 %
40.00000 mV	0.040000	0.0040000	11.60 ppm	0.03999918	0.04000082	-899999.07 ppm	9.00 ppm	FAIL 4368927.50 %
37.50000 mV	0.037500	0.0037500	12.27 ppm	0.0374992	0.0375008	-899998.72 ppm	9.00 ppm	FAIL 4231305.68 %
35.00000 mV	0.035000	0.0035000	13.03 ppm	0.03499923	0.03500077	-899999.00 ppm	9.00 ppm	FAIL 4085333.64 %
32.50000 mV	0.032500	0.0032501	13.91 ppm	0.03249926	0.03250074	-899998.39 ppm	9.00 ppm	FAIL 3928408.51 %
30.00000 mV	0.030000	0.0030000	14.93 ppm	0.02999928	0.03000072	-899999.31 ppm	9.00 ppm	FAIL 3760966.60 %
27.50000 mV	0.027500	0.0027500	16.15 ppm	0.02749931	0.02750069	-899998.83 ppm	9.00 ppm	FAIL 3578524.16 %
25.00000 mV	0.025000	0.0025000	17.60 ppm	0.02499934	0.02500067	-899998.87 ppm	9.00 ppm	FAIL 3383454.42 %
22.50000 mV	0.022500	0.0022500	19.38 ppm	0.02249936	0.02250064	-899998.45 ppm	9.00 ppm	FAIL 3171241.89 %
20.00000 mV	0.020000	0.0020000	21.60 ppm	0.01999939	0.02000061	-899997.87 ppm	9.00 ppm	FAIL 2941169.52 %
17.50000 mV	0.017500	0.0017500	24.46 ppm	0.01749941	0.01750059	-899997.72 ppm	9.00 ppm	FAIL 2689772.02 %
15.00000 mV	0.015000	0.0015000	28.27 ppm	0.01499944	0.01500056	-899997.78 ppm	9.00 ppm	FAIL 2414804.89 %
12.50000 mV	0.012500	0.0012500	33.60 ppm	0.01249947	0.01250053	-899996.68 ppm	9.00 ppm	FAIL 2112668.27 %
10.00000 mV	0.010000	0.0010000	41.60 ppm	0.009999494	0.01000051	-899998.53 ppm	9.00 ppm	FAIL 1778653.22 %
7.50000 mV	0.007500	0.0007500	54.93 ppm	0.007499521	0.007500479	-899996.44 ppm	9.00 ppm	FAIL 1407784.20 %
5.00000 mV	0.005000	0.0005000	81.60 ppm	0.004999547	0.005000453	-899995.15 ppm	9.00 ppm	FAIL 993372.13 %
2.50000 mV	0.002500	0.0002500	161.60 ppm	0.002499573	0.002500427	-899992.32 ppm	9.00 ppm	FAIL 527545.32 %
1.00000 mV	0.001000	0.0001000	401.60 ppm	0.0009995894	0.001000411	-899972.58 ppm	9.00 ppm	FAIL 219184.75 %

-2.50000 mV	-0.002500	-0.0002500	161.60 ppm	-0.002500427	-0.002499573	-900011.27 ppm	9.00 ppm	FAIL 527556.43 %
-5.00000 mV	-0.005000	-0.0005000	81.60 ppm	-0.005000453	-0.004999547	-900002.36 ppm	9.00 ppm	FAIL 993380.09 %
-7.50000 mV	-0.007500	-0.0007500	54.93 ppm	-0.007500479	-0.007499521	-900001.31 ppm	9.00 ppm	FAIL 1407791.82 %
-10.00000 mV	-0.010000	-0.0010000	41.60 ppm	-0.01000051	-0.009999494	-900001.76 ppm	9.00 ppm	FAIL 1778659.60 %
-12.50000 mV	-0.012500	-0.0012500	33.60 ppm	-0.01250053	-0.01249947	-900001.86 ppm	9.00 ppm	FAIL 2112680.43 %
-15.00000 mV	-0.015000	-0.0015000	28.27 ppm	-0.01500056	-0.01499944	-899999.99 ppm	9.00 ppm	FAIL 2414810.82 %
-17.50000 mV	-0.017500	-0.0017500	24.46 ppm	-0.01750059	-0.01749941	-900000.42 ppm	9.00 ppm	FAIL 2689780.10 %
-20.00000 mV	-0.020000	-0.0020000	21.60 ppm	-0.02000061	-0.01999939	-899999.28 ppm	9.00 ppm	FAIL 2941174.13 %
-22.50000 mV	-0.022500	-0.0022500	19.38 ppm	-0.02250064	-0.02249936	-899998.50 ppm	9.00 ppm	FAIL 3171242.07 %
-25.00000 mV	-0.025000	-0.0025000	17.60 ppm	-0.02500067	-0.02499934	-899999.11 ppm	9.00 ppm	FAIL 3383455.29 %
-27.50000 mV	-0.027500	-0.0027500	16.15 ppm	-0.02750069	-0.02749931	-900000.98 ppm	9.00 ppm	FAIL 3578532.73 %
-30.00000 mV	-0.030000	-0.0030000	14.93 ppm	-0.03000072	-0.02999928	-899999.48 ppm	9.00 ppm	FAIL 3760967.31 %
-32.50000 mV	-0.032500	-0.0032500	13.91 ppm	-0.03250074	-0.03249926	-899999.46 ppm	9.00 ppm	FAIL 3928413.20 %
-35.00000 mV	-0.035000	-0.0035000	13.03 ppm	-0.03500077	-0.03499923	-899999.53 ppm	9.00 ppm	FAIL 4085336.04 %
-37.50000 mV	-0.037500	-0.0037500	12.27 ppm	-0.0375008	-0.0374992	-899999.55 ppm	9.00 ppm	FAIL 4231309.58 %
-40.00000 mV	-0.040000	-0.0040000	11.60 ppm	-0.04000082	-0.03999918	-899999.85 ppm	9.00 ppm	FAIL 4368931.29 %
-42.50000 mV	-0.042500	-0.0042500	11.01 ppm	-0.04250085	-0.04249915	-900000.03 ppm	9.00 ppm	FAIL 4497751.25 %
-45.00000 mV	-0.045000	-0.0045000	10.49 ppm	-0.04500088	-0.04499912	-900000.06 ppm	9.00 ppm	FAIL 4617752.99 %
-47.50000 mV	-0.047500	-0.0047500	10.02 ppm	-0.0475009	-0.0474991	-900000.16 ppm	9.00 ppm	FAIL 4731862.04 %
-50.00000 mV	-0.050000	-0.0050000	9.60 ppm	-0.05000093	-0.04999907	-900000.64 ppm	9.00 ppm	FAIL 4838713.11 %
-52.50000 mV	-0.052500	-0.0052500	9.22 ppm	-0.05250096	-0.05249904	-900000.13 ppm	9.00 ppm	FAIL 4939627.51 %
-55.00000 mV	-0.055000	-0.0055000	8.87 ppm	-0.05500098	-0.05499902	-900000.05 ppm	9.00 ppm	FAIL 5036374.06 %
-57.50000 mV	-0.057500	-0.0057500	8.56 ppm	-0.05750101	-0.05749899	-899999.69 ppm	9.00 ppm	FAIL 5125282.95 %
-60.00000 mV	-0.060000	-0.0060000	8.27 ppm	-0.06000104	-0.05999896	-900000.16 ppm	9.00 ppm	FAIL 5211350.06 %
-62.50000 mV	-0.062500	-0.0062500	8.00 ppm	-0.06250106	-0.06249894	-899999.95 ppm	9.00 ppm	FAIL 5294117.37 %
-65.00000 mV	-0.065000	-0.0065000	7.75 ppm	-0.06500109	-0.06499891	-899999.75 ppm	9.00 ppm	FAIL 5373132.81 %
-67.50000 mV	-0.067500	-0.0067500	7.53 ppm	-0.06750112	-0.06749888	-899999.81 ppm	9.00 ppm	FAIL 5444644.93 %
-70.00000 mV	-0.070000	-0.0070000	7.31 ppm	-0.07000114	-0.06999886	-900000.08 ppm	9.00 ppm	FAIL 5518087.57 %
-72.50000 mV	-0.072500	-0.0072500	7.12 ppm	-0.07250117	-0.07249883	-899999.90 ppm	9.00 ppm	FAIL 5583125.95 %
-75.00000 mV	-0.075000	-0.0075000	6.93 ppm	-0.07500119	-0.07499881	-900000.08 ppm	9.00 ppm	FAIL 5649718.04 %
-77.50000 mV	-0.077500	-0.0077500	6.76 ppm	-0.07750122	-0.07749878	-899999.97 ppm	9.00 ppm	FAIL 5710659.70 %
-80.00000 mV	-0.080000	-0.0080000	6.60 ppm	-0.08000125	-0.07999875	-900000.27 ppm	9.00 ppm	FAIL 5769232.51 %
-82.50000 mV	-0.082500	-0.0082500	6.45 ppm	-0.08250127	-0.08249873	-899999.86 ppm	9.00 ppm	FAIL 5825241.80 %
-85.00000 mV	-0.085000	-0.0085000	6.31 ppm	-0.0850013	-0.0849987	-899999.70 ppm	9.00 ppm	FAIL 5878508.80 %
-87.50000 mV	-0.087500	-0.0087500	6.17 ppm	-0.08750133	-0.08749867	-899999.52 ppm	9.00 ppm	FAIL 5932758.85 %
-90.00000 mV	-0.090000	-0.0090000	6.04 ppm	-0.09000135	-0.08999865	-899999.71 ppm	9.00 ppm	FAIL 5984040.66 %
-92.50000 mV	-0.092500	-0.0092500	5.92 ppm	-0.09250138	-0.09249862	-899999.56 ppm	9.00 ppm	FAIL 6032168.64 %
-95.00000 mV	-0.095000	-0.0095000	5.81 ppm	-0.09500141	-0.09499859	-899999.89 ppm	9.00 ppm	FAIL 6076974.26 %
-97.50000 mV	-0.097500	-0.0097500	5.70 ppm	-0.09750143	-0.09749857	-899999.70 ppm	9.00 ppm	FAIL 6122446.92 %
-100.00000 mV	-0.100000	-0.0100000	5.60 ppm	-0.1000015	-0.09999854	-899999.90 ppm	9.00 ppm	FAIL 6164382.87 %
-102.50000 mV	-0.102500	-0.0102500	5.50 ppm	-0.1025015	-0.1024985	-899999.89 ppm	9.00 ppm	FAIL 6206895.78 %

DCV Linearity	1V Range	DUT	Source unc.	Low Limit	Hi limit	Measured	24h spec	Result
1.025000 V	1.0250000	1.0250056	2.28 ppm	1.024988	1.025012	5.51 ppm	9.00 ppm	PASS 48.87 %
1.000000 V	1.0000000	1.0000047	2.30 ppm	0.9999887	1.000011	4.73 ppm	9.00 ppm	PASS 41.86 %
0.975000 V	0.9750000	0.9750043	2.32 ppm	0.974989	0.975011	4.44 ppm	9.00 ppm	PASS 39.21 %
0.950000 V	0.9500000	0.9500041	2.34 ppm	0.9499892	0.9500108	4.34 ppm	9.00 ppm	PASS 38.23 %

0.925000 V	0.9250000	0.9250043	2.36 ppm	0.9249895	0.9250105	4.66 ppm	9.00 ppm	PASS 41.02 %
0.900000 V	0.9000000	0.9000044	2.38 ppm	0.8999898	0.9000102	4.93 ppm	9.00 ppm	PASS 43.33 %
0.875000 V	0.8750000	0.8750040	2.40 ppm	0.87499	0.87501	4.63 ppm	9.00 ppm	PASS 40.57 %
0.850000 V	0.8500000	0.8500038	2.42 ppm	0.8499903	0.8500097	4.52 ppm	9.00 ppm	PASS 39.55 %
0.825000 V	0.8250000	0.8250037	2.45 ppm	0.8249906	0.8250094	4.48 ppm	9.00 ppm	PASS 39.12 %
0.800000 V	0.8000000	0.8000032	2.48 ppm	0.7999908	0.8000092	4.02 ppm	9.00 ppm	PASS 35.02 %
0.775000 V	0.7750000	0.7750033	2.50 ppm	0.7749911	0.7750089	4.20 ppm	9.00 ppm	PASS 36.49 %
0.750000 V	0.7500000	0.7500032	2.53 ppm	0.7499914	0.7500086	4.23 ppm	9.00 ppm	PASS 36.69 %
0.725000 V	0.7250000	0.7250032	2.57 ppm	0.7249916	0.7250084	4.46 ppm	9.00 ppm	PASS 38.59 %
0.700000 V	0.7000000	0.7000031	2.60 ppm	0.6999919	0.7000081	4.46 ppm	9.00 ppm	PASS 38.46 %
0.675000 V	0.6750000	0.6750032	2.64 ppm	0.6749921	0.6750079	4.72 ppm	9.00 ppm	PASS 40.51 %
0.650000 V	0.6500000	0.6500028	2.68 ppm	0.6499924	0.6500076	4.37 ppm	9.00 ppm	PASS 37.41 %
0.625000 V	0.6250000	0.6250027	2.72 ppm	0.6249927	0.6250073	4.25 ppm	9.00 ppm	PASS 36.29 %
0.600000 V	0.6000000	0.6000027	2.77 ppm	0.5999929	0.6000071	4.48 ppm	9.00 ppm	PASS 38.02 %
0.575000 V	0.5750000	0.5750027	2.82 ppm	0.5749932	0.5750068	4.67 ppm	9.00 ppm	PASS 39.49 %
0.550000 V	0.5500000	0.5500025	2.87 ppm	0.5499935	0.5500065	4.49 ppm	9.00 ppm	PASS 37.80 %
0.525000 V	0.5250000	0.5250023	2.93 ppm	0.5249937	0.5250063	4.32 ppm	9.00 ppm	PASS 36.18 %
0.500000 V	0.5000000	0.5000022	3.00 ppm	0.499994	0.500006	4.32 ppm	9.00 ppm	PASS 35.97 %
0.475000 V	0.4750000	0.4750020	3.07 ppm	0.4749943	0.4750057	4.29 ppm	9.00 ppm	PASS 35.51 %
0.450000 V	0.4500000	0.4500019	3.16 ppm	0.4499945	0.4500055	4.28 ppm	9.00 ppm	PASS 35.16 %
0.425000 V	0.4250000	0.4250015	3.25 ppm	0.4249948	0.4250052	3.48 ppm	9.00 ppm	PASS 28.41 %
0.400000 V	0.4000000	0.4000016	3.35 ppm	0.3999951	0.4000049	3.95 ppm	9.00 ppm	PASS 32.00 %
0.375000 V	0.3750000	0.3750016	3.47 ppm	0.3749953	0.3750047	4.37 ppm	9.00 ppm	PASS 35.07 %
0.350000 V	0.3500000	0.3500014	3.60 ppm	0.3499956	0.3500044	3.93 ppm	9.00 ppm	PASS 31.16 %
0.325000 V	0.3250000	0.3250012	3.75 ppm	0.3249959	0.3250041	3.59 ppm	9.00 ppm	PASS 28.16 %
0.300000 V	0.3000000	0.3000012	3.93 ppm	0.2999961	0.3000039	3.94 ppm	9.00 ppm	PASS 30.45 %
0.275000 V	0.2750000	0.2750009	4.15 ppm	0.2749964	0.2750036	3.35 ppm	9.00 ppm	PASS 25.47 %
0.250000 V	0.2500000	0.2500009	4.40 ppm	0.2499966	0.2500034	3.48 ppm	9.00 ppm	PASS 25.94 %
0.225000 V	0.2250000	0.2250008	4.71 ppm	0.2249969	0.2250031	3.41 ppm	9.00 ppm	PASS 24.86 %
0.200000 V	0.2000000	0.2000008	5.10 ppm	0.1999972	0.2000028	3.78 ppm	9.00 ppm	PASS 26.84 %
0.175000 V	0.1750000	0.1750007	5.60 ppm	0.1749974	0.1750026	3.89 ppm	9.00 ppm	PASS 26.61 %
0.150000 V	0.1500000	0.1500004	6.27 ppm	0.1499977	0.1500023	2.85 ppm	9.00 ppm	PASS 18.64 %
0.125000 V	0.1250000	0.1250004	7.20 ppm	0.124998	0.125002	3.39 ppm	9.00 ppm	PASS 20.94 %
0.100000 V	0.1000000	0.1000002	8.60 ppm	0.09999824	0.1000018	2.10 ppm	9.00 ppm	PASS 11.93 %
0.075000 V	0.0750000	0.0750002	10.93 ppm	0.07499851	0.07500149	3.33 ppm	9.00 ppm	PASS 16.72 %
0.050000 V	0.0500000	0.0500001	15.60 ppm	0.04999877	0.05000123	1.95 ppm	9.00 ppm	PASS 7.94 %
0.025000 V	0.0250000	0.0250001	29.60 ppm	0.02499904	0.02500096	5.24 ppm	9.00 ppm	PASS 13.59 %
0.010000 V	0.0100000	0.0100000	71.60 ppm	0.009999194	0.01000081	3.48 ppm	9.00 ppm	PASS 4.32 %
-0.025000 V	-0.0250000	-0.0250001	29.60 ppm	-0.02500096	-0.02499904	4.62 ppm	9.00 ppm	PASS 11.96 %
-0.050000 V	-0.0500000	-0.0500001	15.60 ppm	-0.05000123	-0.04999877	2.77 ppm	9.00 ppm	PASS 11.25 %
-0.075000 V	-0.0750000	-0.0750002	10.93 ppm	-0.07500149	-0.07499851	2.87 ppm	9.00 ppm	PASS 14.40 %
-0.100000 V	-0.1000000	-0.1000004	8.60 ppm	-0.1000018	-0.09999824	3.56 ppm	9.00 ppm	PASS 20.23 %
-0.125000 V	-0.1250000	-0.1250005	7.20 ppm	-0.125002	-0.124998	3.87 ppm	9.00 ppm	PASS 23.90 %
-0.150000 V	-0.1500000	-0.1500005	6.27 ppm	-0.1500023	-0.1499977	3.23 ppm	9.00 ppm	PASS 21.13 %
-0.175000 V	-0.1750000	-0.1750007	5.60 ppm	-0.1750026	-0.1749974	4.06 ppm	9.00 ppm	PASS 27.83 %
-0.200000 V	-0.2000000	-0.2000009	5.10 ppm	-0.2000028	-0.1999972	4.57 ppm	9.00 ppm	PASS 32.41 %

-0.225000 V	-0.2250000	-0.2250010	4.71 ppm	-0.2250031	-0.2249969	4.44 ppm	9.00 ppm	PASS 32.42 %
-0.250000 V	-0.2500000	-0.2500012	4.40 ppm	-0.2500034	-0.2499966	4.75 ppm	9.00 ppm	PASS 35.43 %
-0.275000 V	-0.2750000	-0.2750013	4.15 ppm	-0.2750036	-0.2749964	4.67 ppm	9.00 ppm	PASS 35.48 %
-0.300000 V	-0.3000000	-0.3000012	3.93 ppm	-0.3000039	-0.2999961	3.97 ppm	9.00 ppm	PASS 30.68 %
-0.325000 V	-0.3250000	-0.3250013	3.75 ppm	-0.3250041	-0.3249959	4.06 ppm	9.00 ppm	PASS 31.88 %
-0.350000 V	-0.3500000	-0.3500016	3.60 ppm	-0.3500044	-0.3499956	4.66 ppm	9.00 ppm	PASS 37.01 %
-0.375000 V	-0.3750000	-0.3750017	3.47 ppm	-0.3750047	-0.3749953	4.63 ppm	9.00 ppm	PASS 37.15 %
-0.400000 V	-0.4000000	-0.4000019	3.35 ppm	-0.4000049	-0.3999951	4.79 ppm	9.00 ppm	PASS 38.79 %
-0.425000 V	-0.4250000	-0.4250022	3.25 ppm	-0.4250052	-0.4249948	5.27 ppm	9.00 ppm	PASS 43.03 %
-0.450000 V	-0.4500000	-0.4500021	3.16 ppm	-0.4500055	-0.4499945	4.68 ppm	9.00 ppm	PASS 38.51 %
-0.475000 V	-0.4750000	-0.4750022	3.07 ppm	-0.4750057	-0.4749943	4.55 ppm	9.00 ppm	PASS 37.69 %
-0.500000 V	-0.5000000	-0.5000021	3.00 ppm	-0.500006	-0.499994	4.22 ppm	9.00 ppm	PASS 35.18 %
-0.525000 V	-0.5250000	-0.5250021	2.93 ppm	-0.5250063	-0.5249937	3.93 ppm	9.00 ppm	PASS 32.92 %
-0.550000 V	-0.5500000	-0.5500020	2.87 ppm	-0.5500065	-0.5499935	3.56 ppm	9.00 ppm	PASS 30.02 %
-0.575000 V	-0.5750000	-0.5750024	2.82 ppm	-0.5750068	-0.5749932	4.16 ppm	9.00 ppm	PASS 35.21 %
-0.600000 V	-0.6000000	-0.6000027	2.77 ppm	-0.6000071	-0.5999929	4.44 ppm	9.00 ppm	PASS 37.74 %
-0.625000 V	-0.6250000	-0.6250027	2.72 ppm	-0.6250073	-0.6249927	4.26 ppm	9.00 ppm	PASS 36.37 %
-0.650000 V	-0.6500000	-0.6500028	2.68 ppm	-0.6500076	-0.6499924	4.24 ppm	9.00 ppm	PASS 36.26 %
-0.675000 V	-0.6750000	-0.6750023	2.64 ppm	-0.6750079	-0.6749921	3.47 ppm	9.00 ppm	PASS 29.78 %
-0.700000 V	-0.7000000	-0.7000029	2.60 ppm	-0.7000081	-0.6999919	4.18 ppm	9.00 ppm	PASS 36.06 %
-0.725000 V	-0.7250000	-0.7250031	2.57 ppm	-0.7250084	-0.7249916	4.29 ppm	9.00 ppm	PASS 37.09 %
-0.750000 V	-0.7500000	-0.7500031	2.53 ppm	-0.7500086	-0.7499914	4.08 ppm	9.00 ppm	PASS 35.41 %
-0.775000 V	-0.7750000	-0.7750031	2.50 ppm	-0.7750089	-0.7749911	3.95 ppm	9.00 ppm	PASS 34.36 %
-0.800000 V	-0.8000000	-0.8000031	2.48 ppm	-0.8000092	-0.7999908	3.94 ppm	9.00 ppm	PASS 34.29 %
-0.825000 V	-0.8250000	-0.8250034	2.45 ppm	-0.8250094	-0.8249906	4.15 ppm	9.00 ppm	PASS 36.26 %
-0.850000 V	-0.8500000	-0.8500032	2.42 ppm	-0.8500097	-0.8499903	3.76 ppm	9.00 ppm	PASS 32.96 %
-0.875000 V	-0.8750000	-0.8750037	2.40 ppm	-0.87501	-0.87499	4.21 ppm	9.00 ppm	PASS 36.94 %
-0.900000 V	-0.9000000	-0.9000038	2.38 ppm	-0.9000102	-0.8999898	4.20 ppm	9.00 ppm	PASS 36.94 %
-0.925000 V	-0.9250000	-0.9250034	2.36 ppm	-0.9250105	-0.9249895	3.70 ppm	9.00 ppm	PASS 32.54 %
-0.950000 V	-0.9500000	-0.9500040	2.34 ppm	-0.9500108	-0.9499892	4.16 ppm	9.00 ppm	PASS 36.71 %
-0.975000 V	-0.9750000	-0.9750039	2.32 ppm	-0.975011	-0.974989	4.03 ppm	9.00 ppm	PASS 35.57 %
-1.000000 V	-1.0000000	-1.0000041	2.30 ppm	-1.000011	-0.9999887	4.05 ppm	9.00 ppm	PASS 35.84 %
-1.025000 V	-1.0250000	-1.0250043	2.28 ppm	-1.025012	-1.024988	4.22 ppm	9.00 ppm	PASS 37.45 %

DCV Linearity	10V Range	DUT	Source unc.	Low Limit	Hi limit	Measured	24h spec	Result
10.250000 V	10.250000	10.2500406	1.04 ppm	10.2499	10.2501	3.96 ppm	9.00 ppm	PASS 39.45 %
10.000000 V	10.000000	10.0000397	1.05 ppm	9.999899	10.0001	3.97 ppm	9.00 ppm	PASS 39.50 %
9.750000 V	9.750000	9.7500411	1.06 ppm	9.749902	9.750098	4.21 ppm	9.00 ppm	PASS 41.87 %
9.500000 V	9.500000	9.5000424	1.06 ppm	9.499904	9.500096	4.46 ppm	9.00 ppm	PASS 44.37 %
9.250000 V	9.250000	9.2500432	1.07 ppm	9.249907	9.250093	4.67 ppm	9.00 ppm	PASS 46.38 %
9.000000 V	9.000000	9.0000397	1.08 ppm	8.999909	9.000091	4.41 ppm	9.00 ppm	PASS 43.77 %
8.750000 V	8.750000	8.7500404	1.09 ppm	8.749912	8.750088	4.62 ppm	9.00 ppm	PASS 45.76 %
8.500000 V	8.500000	8.5000368	1.09 ppm	8.499914	8.500086	4.33 ppm	9.00 ppm	PASS 42.93 %
8.250000 V	8.250000	8.2500348	1.10 ppm	8.249917	8.250083	4.22 ppm	9.00 ppm	PASS 41.79 %
8.000000 V	8.000000	8.0000369	1.11 ppm	7.999919	8.000081	4.61 ppm	9.00 ppm	PASS 45.57 %
7.750000 V	7.750000	7.7500343	1.12 ppm	7.749922	7.750078	4.43 ppm	9.00 ppm	PASS 43.73 %
7.500000 V	7.500000	7.5000316	1.13 ppm	7.499924	7.500076	4.21 ppm	9.00 ppm	PASS 41.58 %

7.250000 V	7.250000	7.2500308	1.14 ppm	7.249926	7.250074	4.25 ppm	9.00 ppm	PASS 41.88 %
7.000000 V	7.000000	7.0000323	1.16 ppm	6.999929	7.000071	4.61 ppm	9.00 ppm	PASS 45.36 %
6.750000 V	6.750000	6.7500302	1.17 ppm	6.749931	6.750069	4.47 ppm	9.00 ppm	PASS 43.98 %
6.500000 V	6.500000	6.5000290	1.18 ppm	6.499934	6.500066	4.46 ppm	9.00 ppm	PASS 43.78 %
6.250000 V	6.250000	6.2500270	1.20 ppm	6.249936	6.250064	4.32 ppm	9.00 ppm	PASS 42.38 %
6.000000 V	6.000000	6.0000259	1.22 ppm	5.999939	6.000061	4.31 ppm	9.00 ppm	PASS 42.16 %
5.750000 V	5.750000	5.7500251	1.23 ppm	5.749941	5.750059	4.37 ppm	9.00 ppm	PASS 42.72 %
5.500000 V	5.500000	5.5000235	1.25 ppm	5.499944	5.500056	4.27 ppm	9.00 ppm	PASS 41.69 %
5.250000 V	5.250000	5.2500219	1.28 ppm	5.249946	5.250054	4.18 ppm	9.00 ppm	PASS 40.67 %
5.000000 V	5.000000	5.0000199	1.30 ppm	4.999949	5.000051	3.98 ppm	9.00 ppm	PASS 38.60 %
4.750000 V	4.750000	4.7500192	1.33 ppm	4.749951	4.750049	4.04 ppm	9.00 ppm	PASS 39.13 %
4.500000 V	4.500000	4.5000176	1.36 ppm	4.499953	4.500047	3.91 ppm	9.00 ppm	PASS 37.71 %
4.250000 V	4.250000	4.2500167	1.39 ppm	4.249956	4.250044	3.92 ppm	9.00 ppm	PASS 37.73 %
4.000000 V	4.000000	4.0000165	1.42 ppm	3.999958	4.000042	4.13 ppm	9.00 ppm	PASS 39.64 %
3.750000 V	3.750000	3.7500149	1.47 ppm	3.749961	3.750039	3.97 ppm	9.00 ppm	PASS 37.90 %
3.500000 V	3.500000	3.5000132	1.51 ppm	3.499963	3.500037	3.78 ppm	9.00 ppm	PASS 35.94 %
3.250000 V	3.250000	3.2500118	1.57 ppm	3.249966	3.250034	3.63 ppm	9.00 ppm	PASS 34.35 %
3.000000 V	3.000000	3.0000108	1.63 ppm	2.999968	3.000032	3.61 ppm	9.00 ppm	PASS 33.93 %
2.750000 V	2.750000	2.7500099	1.71 ppm	2.749971	2.750029	3.60 ppm	9.00 ppm	PASS 33.61 %
2.500000 V	2.500000	2.5000089	1.80 ppm	2.499973	2.500027	3.58 ppm	9.00 ppm	PASS 33.15 %
2.250000 V	2.250000	2.2500085	1.91 ppm	2.249975	2.250025	3.76 ppm	9.00 ppm	PASS 34.42 %
2.000000 V	2.000000	2.0000070	2.05 ppm	1.999978	2.000022	3.52 ppm	9.00 ppm	PASS 31.90 %
1.750000 V	1.750000	1.7500060	2.23 ppm	1.74998	1.75002	3.41 ppm	9.00 ppm	PASS 30.33 %
1.500000 V	1.500000	1.5000053	2.47 ppm	1.499983	1.500017	3.57 ppm	9.00 ppm	PASS 31.10 %
1.250000 V	1.250000	1.2500039	2.80 ppm	1.249985	1.250015	3.11 ppm	9.00 ppm	PASS 26.37 %
1.000000 V	1.000000	1.0000037	3.30 ppm	0.9999877	1.000012	3.73 ppm	9.00 ppm	PASS 30.33 %
0.750000 V	0.750000	0.7500024	4.13 ppm	0.7499902	0.7500098	3.19 ppm	9.00 ppm	PASS 24.26 %
0.500000 V	0.500000	0.5000011	5.80 ppm	0.4999926	0.5000074	2.23 ppm	9.00 ppm	PASS 15.08 %
0.250000 V	0.250000	0.2500000	10.80 ppm	0.249995	0.250005	0.08 ppm	9.00 ppm	PASS 0.42 %
0.100000 V	0.100000	0.0999993	25.80 ppm	0.09999652	0.1000035	-6.77 ppm	9.00 ppm	PASS 19.45 %
-0.100000 V	-0.100000	-0.1000020	25.80 ppm	-0.1000035	-0.09999652	20.11 ppm	9.00 ppm	PASS 57.79 %
-0.250000 V	-0.250000	-0.2500019	10.80 ppm	-0.250005	-0.249995	7.65 ppm	9.00 ppm	PASS 38.63 %
-0.500000 V	-0.500000	-0.5000027	5.80 ppm	-0.5000074	-0.4999926	5.40 ppm	9.00 ppm	PASS 36.50 %
-0.750000 V	-0.750000	-0.7500036	4.13 ppm	-0.7500098	-0.7499902	4.80 ppm	9.00 ppm	PASS 36.59 %
-1.000000 V	-1.000000	-1.0000045	3.30 ppm	-1.000012	-0.9999877	4.45 ppm	9.00 ppm	PASS 36.18 %
-1.250000 V	-1.250000	-1.2500055	2.80 ppm	-1.250015	-1.249985	4.39 ppm	9.00 ppm	PASS 37.22 %
-1.500000 V	-1.500000	-1.5000067	2.47 ppm	-1.500017	-1.499983	4.48 ppm	9.00 ppm	PASS 39.06 %
-1.750000 V	-1.750000	-1.7500080	2.23 ppm	-1.75002	-1.74998	4.60 ppm	9.00 ppm	PASS 40.96 %
-2.000000 V	-2.000000	-2.0000094	2.05 ppm	-2.000022	-1.999978	4.70 ppm	9.00 ppm	PASS 42.49 %
-2.250000 V	-2.250000	-2.2500105	1.91 ppm	-2.250025	-2.249975	4.65 ppm	9.00 ppm	PASS 42.65 %
-2.500000 V	-2.500000	-2.5000120	1.80 ppm	-2.500027	-2.499973	4.80 ppm	9.00 ppm	PASS 44.48 %
-2.750000 V	-2.750000	-2.7500137	1.71 ppm	-2.750029	-2.749971	4.97 ppm	9.00 ppm	PASS 46.45 %
-3.000000 V	-3.000000	-3.0000143	1.63 ppm	-3.000032	-2.999968	4.75 ppm	9.00 ppm	PASS 44.72 %
-3.250000 V	-3.250000	-3.2500165	1.57 ppm	-3.250034	-3.249966	5.08 ppm	9.00 ppm	PASS 48.09 %
-3.500000 V	-3.500000	-3.5000166	1.51 ppm	-3.500037	-3.499963	4.75 ppm	9.00 ppm	PASS 45.18 %
-3.750000 V	-3.750000	-3.7500172	1.47 ppm	-3.750039	-3.749961	4.59 ppm	9.00 ppm	PASS 43.81 %

-4.000000 V	-4.000000	-4.0000196	1.42 ppm	-4.000042	-3.999958	4.90 ppm	9.00 ppm	PASS 47.07 %
-4.250000 V	-4.250000	-4.2500205	1.39 ppm	-4.250044	-4.249956	4.82 ppm	9.00 ppm	PASS 46.42 %
-4.500000 V	-4.500000	-4.5000205	1.36 ppm	-4.500047	-4.499953	4.56 ppm	9.00 ppm	PASS 44.06 %
-4.750000 V	-4.750000	-4.7500205	1.33 ppm	-4.750049	-4.749951	4.32 ppm	9.00 ppm	PASS 41.86 %
-5.000000 V	-5.000000	-5.0000208	1.30 ppm	-5.000051	-4.999949	4.16 ppm	9.00 ppm	PASS 40.35 %
-5.250000 V	-5.250000	-5.2500229	1.28 ppm	-5.250054	-5.249946	4.37 ppm	9.00 ppm	PASS 42.52 %
-5.500000 V	-5.500000	-5.5000226	1.25 ppm	-5.500056	-5.499944	4.11 ppm	9.00 ppm	PASS 40.11 %
-5.750000 V	-5.750000	-5.7500243	1.23 ppm	-5.750059	-5.749941	4.22 ppm	9.00 ppm	PASS 41.24 %
-6.000000 V	-6.000000	-6.0000260	1.22 ppm	-6.000061	-5.999939	4.33 ppm	9.00 ppm	PASS 42.37 %
-6.250000 V	-6.250000	-6.2500256	1.20 ppm	-6.250064	-6.249936	4.09 ppm	9.00 ppm	PASS 40.09 %
-6.500000 V	-6.500000	-6.5000276	1.18 ppm	-6.500066	-6.499934	4.24 ppm	9.00 ppm	PASS 41.64 %
-6.750000 V	-6.750000	-6.7500286	1.17 ppm	-6.750069	-6.749931	4.24 ppm	9.00 ppm	PASS 41.65 %
-7.000000 V	-7.000000	-7.0000303	1.16 ppm	-7.000071	-6.999929	4.32 ppm	9.00 ppm	PASS 42.56 %
-7.250000 V	-7.250000	-7.2500296	1.14 ppm	-7.250074	-7.249926	4.08 ppm	9.00 ppm	PASS 40.22 %
-7.500000 V	-7.500000	-7.5000331	1.13 ppm	-7.500076	-7.499924	4.41 ppm	9.00 ppm	PASS 43.57 %
-7.750000 V	-7.750000	-7.7500328	1.12 ppm	-7.750078	-7.749922	4.24 ppm	9.00 ppm	PASS 41.86 %
-8.000000 V	-8.000000	-8.0000348	1.11 ppm	-8.000081	-7.999919	4.35 ppm	9.00 ppm	PASS 43.03 %
-8.250000 V	-8.250000	-8.2500332	1.10 ppm	-8.250083	-8.249917	4.02 ppm	9.00 ppm	PASS 39.84 %
-8.500000 V	-8.500000	-8.5000371	1.09 ppm	-8.500086	-8.499914	4.37 ppm	9.00 ppm	PASS 43.28 %
-8.750000 V	-8.750000	-8.7500371	1.09 ppm	-8.750088	-8.749912	4.24 ppm	9.00 ppm	PASS 42.04 %
-9.000000 V	-9.000000	-9.0000396	1.08 ppm	-9.000091	-8.999909	4.40 ppm	9.00 ppm	PASS 43.62 %
-9.250000 V	-9.250000	-9.2500390	1.07 ppm	-9.250093	-9.249907	4.22 ppm	9.00 ppm	PASS 41.91 %
-9.500000 V	-9.500000	-9.5000401	1.06 ppm	-9.500096	-9.499904	4.22 ppm	9.00 ppm	PASS 41.96 %
-9.750000 V	-9.750000	-9.7500415	1.06 ppm	-9.750098	-9.749902	4.25 ppm	9.00 ppm	PASS 42.28 %
-10.000000 V	-10.000000	-10.0000406	1.05 ppm	-10.0001	-9.999899	4.06 ppm	9.00 ppm	PASS 40.40 %
-10.250000 V	-10.250000	-10.2500450	1.04 ppm	-10.2501	-10.2499	4.39 ppm	9.00 ppm	PASS 43.73 %

Test completed

Test date

17 November 2020 05:07

Lab temperature maintained +24°C ±2°C

Internal use only

Not validated

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