



MICRO PRECISION CALIBRATION PTE LTD
BLOCK 5008 ANG MO KIO AVENUE 5 #07-04
TECHPLACE II SINGAPORE 569874
65 67484384



Certificate of Calibration

Date: February 21, 2019

Cert No. 551220082829049

Customer:

GES SINGAPORE PTE LTD
28 MARSILING LANE
SINGAPORE 739152

Work Order #: SG-11010042

MPC Control #: 1CD658C
Asset ID: 97023
Gage Type: SOURCE MEASURE UNIT
Manufacturer: NATIONAL INSTRUMENTS
Model Number: PXI-4130
Size: ± 20 V, 40 W
Temp/RH: 24.2°C / 42 %
Location: Calibration performed at Customer's facility

Serial Number: 1CD658C
Department: N/A
Performed By: DIVIEERNRAJ CHANDRAN
Received Condition: IN TOLERANCE
Returned Condition: IN TOLERANCE
Cal. Date: February 21, 2019
Cal. Interval: 12 MONTHS
Cal. Due Date: February 21, 2020

Calibration Notes:

- Performance test passed.
- Refer attachment (5 Pages).

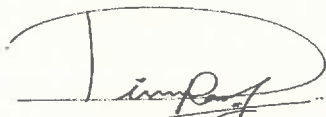
Standards Used to Calibrate Equipment

I.D.	Description.	Model	Serial	Manufacturer	Cal. Due Date	Traceability #
DH3876	MULTI-FUNCTION CALIBRATOR	5700A/NAF	6020913	FLUKE	Apr 3, 2019	512200813349236
CJ6455	MULTIMETER	34401A	US36052770	HEWLETT PACKARD	Oct 17, 2019	551220081632867
CA8156	REGULATED DC POWER SUPPLY	HPD30-10	E00114193	XANTREX	Jul 3, 2019	551220081453785

Procedures Used in this Event

Procedure Name	Description
NI PXI-4130	Programmable and High-Power Source Measure Unit Calibration Procedure, 374753B-01

Calibrating Technician:


DIVIEERNRAJ CHANDRAN

QC Approval:


JULES PHILIPPE AGPANGAN

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k=2$, which for normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty of measurement has been determined in accordance with EA's Publication and NIST Technical Note 1297, 1994 Edition. Services rendered comply with ISO/IEC 17025:2017, ANSI/NCSL Z540-1-1994, ANSI/NCSL Z540.3-2006, MPC Quality Manual, MPC CSD and with customer purchase order instructions.

Calibration cycles and resulting due dates were submitted/approved by the customer. Any number of factors may cause an instrument to drift out of tolerance before the next scheduled calibration. Recalibration cycles should be based on frequency of use, environmental conditions and customer's established systematic accuracy. The information on this report, pertains only to the instrument identified.

All standards are traceable to SI through the National Institute of Standards and Technology (NIST) and/or recognized national or international standards laboratories. Services rendered include proper manufacturer's service instruction and are warranted for no less than thirty (30) days. This report may not be reproduced in part or in a whole without the prior written approval of the issuing MPC lab.



National Instruments PXI-4130 Source Measure Unit

Procedure: NI PXI-4130
 ID Number: 1CD658C
 Asset Number: 97023

Order Number: SG-11010042
 Serial Number: 1CD658C
 Calibration Date: February 21, 2019

Current Line Regulation

Channel 1

Test Value	Reference Measured Value	Lower Limit	UUT Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.2 mA	0.00000 mA	-0.00027 mA	-0.00002 mA	-0.00002 mA	0.00 %	0.00027 mA	PASS	0.00051 mA
2 mA	0.00000 mA	-0.00270 mA	0.00000 mA	0.00000 mA	0.00 %	0.00270 mA	PASS	0.00539 mA
20 mA	0.00000 mA	-0.02700 mA	-0.00010 mA	-0.00010 mA	0.00 %	0.02700 mA	PASS	0.00005 mA
200 mA	0.00000 mA	-0.27000 mA	0.00020 mA	0.00020 mA	0.00 %	0.27000 mA	PASS	0.00045 mA
2000 mA	0.00000 mA	-2.70000 mA	0.08264 mA	0.08264 mA	0.08 %	2.70000 mA	PASS	0.00689 mA

Current Load Regulation

Test Value	UUT Set Value	Lower Limit	Reference Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
500.0 mA / Channel 0	0.00000 mA	-0.60000 mA	0.32500 mA	0.32500 mA	0.33 %	0.60000 mA	PASS	0.00051 mA
0.1 mA / Channel 1	0.00000 mA	-0.00032 mA	0.00000 mA	0.00000 mA	0.00 %	0.00032 mA	PASS	0.00051 mA
1 mA / Channel 1	0.00000 mA	-0.00320 mA	0.00010 mA	0.00010 mA	0.00 %	0.00320 mA	PASS	0.00539 mA
10 mA / Channel 1	0.00000 mA	-0.03215 mA	0.00000 mA	0.00000 mA	0.00 %	0.03215 mA	PASS	0.00539 mA
100 mA / Channel 1	0.00000 mA	-0.32300 mA	0.00000 mA	0.00000 mA	0.00 %	0.32300 mA	PASS	0.04491 mA
1000 mA / Channel 1	0.00000 mA	-3.18300 mA	0.01000 mA	0.01000 mA	0.01 %	3.18300 mA	PASS	0.04491 mA

Current Measurement Accuracy-Part 1 (1A Range)

Channel 0

Test Value	Reference Measured Value	Lower Limit	UUT Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.00000 A	0.000000 A	-0.004000 A	0.000041 A	0.000041 A	0.00 %	0.004000 A	PASS	0.000509 A
0.35000 A	0.350000 A	0.345475 A	0.350113 A	0.350113 A	0.03 %	0.354525 A	PASS	0.000102 A
0.70000 A	0.700000 A	0.694249 A	0.699587 A	0.699587 A	0.06 %	0.705751 A	PASS	0.000102 A

Current Measurement Accuracy-Part 2 (200 µA Range)

Channel 1

Test Value	Reference Measured Value	Lower Limit	UUT Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.00000 µA	0.000000 µA	-0.020000 µA	-0.005280 µA	-0.005280 µA	0.01 %	0.020000 µA	PASS	0.00051 µA
50.00000 µA	50.000000 µA	49.964990 µA	50.000973 µA	50.000973 µA	0.00 %	50.035010 µA	PASS	0.0054 µA
100.00000 µA	100.000000 µA	99.950034 µA	100.001264 µA	100.001264 µA	0.00 %	100.049966 µA	PASS	0.00051 µA
150.00000 µA	150.000000 µA	149.934945 µA	150.002237 µA	150.002237 µA	0.00 %	150.065055 µA	PASS	0.00051 µA
200.00000 µA	200.000000 µA	199.920034 µA	200.001725 µA	200.001725 µA	0.00 %	200.079966 µA	PASS	0.0054 µA
-50.00000 µA	-50.000000 µA	-50.035004 µA	-50.003152 µA	-50.003152 µA	0.01 %	-49.964996 µA	PASS	0.00057 µA
-100.00000 µA	-100.000000 µA	-100.050000 µA	-100.011000 µA	-100.011000 µA	0.01 %	-99.950000 µA	PASS	0.00057 µA
-150.00000 µA	-150.000000 µA	-150.065000 µA	-150.019000 µA	-150.019000 µA	0.01 %	-149.935000 µA	PASS	0.00057 µA
-200.00000 µA	-200.000000 µA	-200.080000 µA	-200.027000 µA	-200.027000 µA	0.01 %	-199.920000 µA	PASS	0.00057 µA

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Current Measurement Accuracy-Part 3 (2 mA Range)

Channel 1

Test Value	Reference Measured Value	Lower Limit	UUT Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.00000 mA	0.00000 mA	-0.00020 mA	0.00008 mA	0.00008 mA	0.00 %	0.00020 mA	PASS	0.00057 mA
0.50000 mA	0.50000 mA	0.49965 mA	0.50023 mA	0.50023 mA	0.05 %	0.50035 mA	PASS	0.00057 mA
1.00000 mA	1.00000 mA	0.99950 mA	1.00034 mA	1.00034 mA	0.03 %	1.00050 mA	PASS	0.00057 mA
1.50000 mA	1.50000 mA	1.49935 mA	1.50053 mA	1.50053 mA	0.04 %	1.50065 mA	PASS	0.00057 mA
2.00000 mA	2.00000 mA	1.99920 mA	2.00013 mA	2.00013 mA	0.01 %	2.00080 mA	PASS	0.00057 mA
-0.50000 mA	-0.50000 mA	-0.50035 mA	-0.49999 mA	-0.49999 mA	0.00 %	-0.49965 mA	PASS	0.00057 mA
1.00000 mA	1.00000 mA	0.99950 mA	0.99957 mA	0.99957 mA	0.04 %	1.00050 mA	PASS	0.00045 mA
1.50000 mA	1.50000 mA	1.49935 mA	1.49983 mA	1.49983 mA	0.01 %	1.50065 mA	PASS	0.00005 mA
2.00000 mA	2.00000 mA	1.99920 mA	1.99978 mA	1.99978 mA	0.01 %	2.00080 mA	PASS	0.00005 mA

Current Measurement Accuracy-Part 4 (20 mA Range)

Channel 1

Test Value	Reference Measured Value	Lower Limit	UUT Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.00000 mA	0.00000 mA	-0.00200 mA	-0.00122 mA	-0.00122 mA	0.00 %	0.00200 mA	PASS	0.00014 mA
5.00000 mA	5.00000 mA	4.99650 mA	5.00262 mA	5.00262 mA	0.05 %	5.00350 mA	PASS	0.00014 mA
10.00000 mA	10.00000 mA	9.99500 mA	10.00347 mA	10.00347 mA	0.03 %	10.00500 mA	PASS	0.00014 mA
15.00000 mA	15.00000 mA	14.99350 mA	15.00358 mA	15.00358 mA	0.02 %	15.00650 mA	PASS	0.00180 mA
20.00000 mA	20.00000 mA	19.99200 mA	20.00278 mA	20.00278 mA	0.01 %	20.00800 mA	PASS	0.00180 mA
-5.00000 mA	-5.00000 mA	-5.00350 mA	-4.99891 mA	-4.99891 mA	0.02 %	-4.99650 mA	PASS	0.00180 mA
-10.00000 mA	-10.00000 mA	-10.00500 mA	-9.99880 mA	-9.99880 mA	0.01 %	-9.99500 mA	PASS	0.00180 mA
-15.00000 mA	-15.00000 mA	-15.00650 mA	-14.99885 mA	-14.99885 mA	0.01 %	-14.99350 mA	PASS	0.00180 mA
-20.00000 mA	-20.00000 mA	-20.00800 mA	-19.99837 mA	-19.99837 mA	0.01 %	-19.99200 mA	PASS	0.00180 mA

Current Measurement Accuracy-Part 5 (200 mA Range)

Channel 1

Test Value	Reference Measured Value	Lower Limit	UUT Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.00000 mA	0.00000 mA	-0.04000 mA	-0.01673 mA	-0.01673 mA	0.02 %	0.04000 mA	PASS	0.00014 mA
50.00000 mA	50.00000 mA	49.94503 mA	50.04210 mA	50.04210 mA	0.08 %	50.05497 mA	PASS	0.00014 mA
100.00000 mA	100.00000 mA	99.92999 mA	100.02990 mA	100.02990 mA	0.03 %	100.07001 mA	PASS	0.00014 mA
150.00000 mA	150.00000 mA	149.91499 mA	150.06640 mA	150.06640 mA	0.04 %	150.08502 mA	PASS	0.00180 mA
200.00000 mA	200.00000 mA	199.89998 mA	200.09010 mA	200.09010 mA	0.05 %	200.10002 mA	PASS	0.00180 mA
-50.00000 mA	-50.00000 mA	-50.05495 mA	-49.94670 mA	-49.94670 mA	0.11 %	-49.94505 mA	PASS	0.00180 mA
-100.00000 mA	-100.00000 mA	-100.07003 mA	-99.99520 mA	-99.99520 mA	0.00 %	-99.92997 mA	PASS	0.00180 mA
-150.00000 mA	-150.00000 mA	-150.08497 mA	-149.94020 mA	-149.94020 mA	0.04 %	-149.91504 mA	PASS	0.00180 mA
-200.00000 mA	-200.00000 mA	-200.10005 mA	-199.90050 mA	-199.90050 mA	0.05 %	-199.89995 mA	PASS	0.00180 mA

Current Measurement Accuracy-Part 6 (2 A Range)

Channel 1

Test Value	Reference Measured Value	Lower Limit	UUT Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.00000 A	0.00000 A	-0.00020 A	0.00006 A	0.00006 A	0.00 %	0.00020 A	PASS	0.00014 A
0.50000 A	0.50000 A	0.49920 A	0.50077 A	0.50077 A	0.15 %	0.50081 A	PASS	0.00014 A
1.00000 A	1.00000 A	0.99810 A	1.00126 A	1.00126 A	0.13 %	1.00190 A	PASS	0.00014 A
1.50000 A	1.50000 A	1.49612 A	1.50174 A	1.50174 A	0.12 %	1.50388 A	PASS	0.00180 A
2.00000 A	2.00000 A	1.99240 A	2.00224 A	2.00224 A	0.11 %	2.00760 A	PASS	0.00180 A
-0.50000 A	-0.50000 A	-0.50080 A	-0.49941 A	-0.49941 A	0.12 %	-0.49920 A	PASS	0.00180 A
-1.00000 A	-1.00000 A	-1.00190 A	-0.99913 A	-0.99913 A	0.09 %	-0.99810 A	PASS	0.00180 A
-1.50000 A	-1.50000 A	-1.50388 A	-1.49895 A	-1.49895 A	0.07 %	-1.49612 A	PASS	0.00180 A
-2.00000 A	-2.00000 A	-2.00760 A	-1.99886 A	-1.99886 A	0.06 %	-1.99240 A	PASS	0.00180 A

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Current Programming Accuracy-Part 1 (1 A Range)

Channel 0

Test Value	UUT Set Value	Lower Limit	Reference Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.05000 A	0.050000 A	0.045920 A	0.049973 A	0.049973 A	0.05 %	0.054080 A	PASS	0.000139 A
0.35000 A	0.350000 A	0.345470 A	0.350031 A	0.350031 A	0.01 %	0.354530 A	PASS	0.000139 A
0.70000 A	0.700000 A	0.694250 A	0.699585 A	0.699585 A	0.06 %	0.705750 A	PASS	0.000139 A

Current Programming Accuracy-Part 2 (200 µA Range)

Channel 1

Test Value	UUT Set Value	Lower Limit	Reference Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
4.00 µA	4.000 µA	3.899 µA	4.035 µA	4.035 µA	0.88 %	4.101 µA	PASS	0.000 µA
50.00 µA	50.000 µA	49.885 µA	50.031 µA	50.031 µA	0.06 %	50.115 µA	PASS	0.000 µA
100.00 µA	100.000 µA	99.870 µA	100.021 µA	100.021 µA	0.02 %	100.130 µA	PASS	0.000 µA
150.00 µA	150.000 µA	149.855 µA	150.009 µA	150.009 µA	0.01 %	150.145 µA	PASS	0.002 µA
200.00 µA	200.000 µA	199.840 µA	199.994 µA	199.994 µA	0.00 %	200.160 µA	PASS	0.002 µA
-4.00 µA	-4.000 µA	-4.101 µA	-3.980 µA	-3.980 µA	0.50 %	-3.899 µA	PASS	0.002 µA
-50.00 µA	-50.000 µA	-50.115 µA	-49.909 µA	-49.909 µA	0.18 %	-49.885 µA	PASS	0.002 µA
-100.00 µA	-100.000 µA	-100.130 µA	-99.874 µA	-99.874 µA	0.13 %	-99.870 µA	PASS	0.002 µA
-150.00 µA	-150.000 µA	-150.145 µA	-149.864 µA	-149.864 µA	0.09 %	-149.855 µA	PASS	0.002 µA
-200.00 µA	-200.000 µA	-200.160 µA	-199.986 µA	-199.986 µA	0.01 %	-199.840 µA	PASS	0.002 µA

Current Programming Accuracy-Part 3 (2 mA Range)

Channel 1

Test Value	UUT Set Value	Lower Limit	Reference Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.04 mA	0.04000 mA	0.03899 mA	0.04042 mA	0.04042 mA	1.05 %	0.04101 mA	PASS	0.00014 mA
0.50 mA	0.50000 mA	0.49885 mA	0.50081 mA	0.50081 mA	0.16 %	0.50115 mA	PASS	0.00014 mA
1.00 mA	1.00000 mA	0.99870 mA	1.00116 mA	1.00116 mA	0.12 %	1.00130 mA	PASS	0.00014 mA
1.50 mA	1.50000 mA	1.49855 mA	1.50143 mA	1.50143 mA	0.10 %	1.50145 mA	PASS	0.00180 mA
2.00 mA	2.00000 mA	1.99840 mA	2.00158 mA	2.00158 mA	0.08 %	2.00160 mA	PASS	0.00180 mA
-0.04 mA	-0.04000 mA	-0.04101 mA	-0.03976 mA	-0.03976 mA	0.60 %	-0.03899 mA	PASS	0.00180 mA
-0.50 mA	-0.50000 mA	-0.50115 mA	-0.49946 mA	-0.49946 mA	0.11 %	-0.49885 mA	PASS	0.00180 mA
-1.00 mA	-1.00000 mA	-1.00130 mA	-0.99918 mA	-0.99918 mA	0.08 %	-0.99870 mA	PASS	0.00180 mA
-1.50 mA	-1.50000 mA	-1.50145 mA	-1.49889 mA	-1.49889 mA	0.07 %	-1.49855 mA	PASS	0.00180 mA
-2.00 mA	-2.00000 mA	-2.00160 mA	-1.99860 mA	-1.99860 mA	0.07 %	-1.99840 mA	PASS	0.00180 mA

Current Programming Accuracy-Part 4 (20 mA Range)

Channel 1

Test Value	UUT Set Value	Lower Limit	Reference Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.40 mA	0.4000 mA	0.3899 mA	0.4045 mA	0.4045 mA	1.13 %	0.4101 mA	PASS	0.0001 mA
5.00 mA	5.0000 mA	4.9885 mA	5.0089 mA	5.0089 mA	0.18 %	5.0115 mA	PASS	0.0001 mA
10.00 mA	10.0000 mA	9.9870 mA	10.0128 mA	10.0128 mA	0.13 %	10.0130 mA	PASS	0.0001 mA
15.00 mA	15.0000 mA	14.9855 mA	15.0144 mA	15.0144 mA	0.10 %	15.0145 mA	PASS	0.0018 mA
20.00 mA	20.0000 mA	19.9840 mA	20.0155 mA	20.0155 mA	0.08 %	20.0160 mA	PASS	0.0018 mA
-0.40 mA	-0.4000 mA	-0.4101 mA	-0.3978 mA	-0.3978 mA	0.55 %	-0.3899 mA	PASS	0.0018 mA
-5.00 mA	-5.0000 mA	-5.0115 mA	-4.9954 mA	-4.9954 mA	0.09 %	-4.9885 mA	PASS	0.0018 mA
-10.00 mA	-10.0000 mA	-10.0130 mA	-9.9931 mA	-9.9931 mA	0.07 %	-9.9870 mA	PASS	0.0018 mA
-15.00 mA	-15.0000 mA	-15.0145 mA	-14.9910 mA	-14.9910 mA	0.06 %	-14.9855 mA	PASS	0.0018 mA
-20.00 mA	-20.0000 mA	-20.0160 mA	-19.9886 mA	-19.9886 mA	0.06 %	-19.9840 mA	PASS	0.0018 mA

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Current Programming Accuracy-Part 5 (200 mA Range)

Channel 1

Test Value	UUT Set Value	Lower Limit	Reference Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
4.00 mA	4.000 mA	3.899 mA	4.043 mA	4.043 mA	1.08 %	4.101 mA	PASS	0.000 mA
50.00 mA	50.000 mA	49.885 mA	50.086 mA	50.086 mA	0.17 %	50.115 mA	PASS	0.000 mA
100.00 mA	100.000 mA	99.870 mA	100.125 mA	100.125 mA	0.13 %	100.130 mA	PASS	0.000 mA
150.00 mA	150.000 mA	149.855 mA	150.144 mA	150.144 mA	0.10 %	150.145 mA	PASS	0.002 mA
200.00 mA	200.000 mA	199.840 mA	200.021 mA	200.021 mA	0.01 %	200.160 mA	PASS	0.002 mA
-4.00 mA	-4.000 mA	-4.101 mA	-3.978 mA	-3.978 mA	0.55 %	-3.899 mA	PASS	0.002 mA
-50.00 mA	-50.000 mA	-50.115 mA	-49.952 mA	-49.952 mA	0.10 %	-49.885 mA	PASS	0.002 mA
-100.00 mA	-100.000 mA	-100.130 mA	-99.932 mA	-99.932 mA	0.07 %	-99.870 mA	PASS	0.002 mA
-150.00 mA	-150.000 mA	-150.145 mA	-149.910 mA	-149.910 mA	0.06 %	-149.855 mA	PASS	0.002 mA
-200.00 mA	-200.000 mA	-200.160 mA	-199.884 mA	-199.884 mA	0.06 %	-199.840 mA	PASS	0.002 mA

Current Programming Accuracy-Part 6 (2 A Range)

Channel 1

Test Value	UUT Set Value	Lower Limit	Reference Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.04 A	0.04000 A	0.03895 A	0.04043 A	0.04043 A	1.08 %	0.04105 A	PASS	0.00014 A
0.50 A	0.50000 A	0.49840 A	0.50088 A	0.50088 A	0.18 %	0.50160 A	PASS	0.00014 A
1.00 A	1.00000 A	0.99730 A	1.00121 A	1.00121 A	0.12 %	1.00270 A	PASS	0.00014 A
1.50 A	1.50000 A	1.49532 A	1.50152 A	1.50152 A	0.10 %	1.50468 A	PASS	0.00180 A
2.00 A	2.00000 A	1.99160 A	2.00173 A	2.00173 A	0.09 %	2.00840 A	PASS	0.00180 A
-0.04 A	-0.04000 A	-0.04105 A	-0.03978 A	-0.03978 A	0.55 %	-0.03895 A	PASS	0.00180 A
-0.50 A	-0.50000 A	-0.50160 A	-0.49958 A	-0.49958 A	0.08 %	-0.49840 A	PASS	0.00180 A
-1.00 A	-1.00000 A	-1.00270 A	-0.99933 A	-0.99933 A	0.07 %	-0.99730 A	PASS	0.00180 A
-1.50 A	-1.50000 A	-1.50468 A	-1.49902 A	-1.49902 A	0.07 %	-1.49532 A	PASS	0.00180 A
-2.00 A	-2.00000 A	-2.00840 A	-1.99872 A	-1.99872 A	0.06 %	-1.99160 A	PASS	0.00180 A

Remote Sense Output

Test Value	UUT Set Value	Lower Limit	Reference Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
10.00 V	10.00 V	9.99468 V	10.00000 V	10.00000 V	0.00 %	10.00532 V	PASS	0.00014 V

Voltage Line Regulation

Test Value	UUT Set Value	Lower Limit	Reference Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
10.00 V	0.00 V	-0.00900 V	-0.00001 V	-0.00001 V	0.00 %	0.00900 V	PASS	0.00014 V

Voltage Load Regulation

Test Value	UUT Set Value	Lower Limit	Reference Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
Channel 0								
6.00 V	0.0000 V	-0.0209 V	0.0068 V	0.0068 V	0.01 %	0.0209 V	PASS	0.00014 V
Channel 1								
10.00 V	0.0000 V	-0.0320 V	0.0129 V	0.0129 V	0.01 %	0.0320 V	PASS	0.00014 V

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Voltage Measurement Accuracy

Channel 0

Test Value	Reference Measured Value	Lower Limit	UUT Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.00 V	0.00000 V	-0.00410 V	0.00013 V	0.00013 V	0.00 %	0.00410 V	PASS	0.00014 V
1.50 V	1.50000 V	1.49525 V	1.50097 V	1.50097 V	0.06 %	1.50475 V	PASS	0.00014 V
3.00 V	3.00000 V	2.99450 V	3.00047 V	3.00047 V	0.02 %	3.00550 V	PASS	0.00014 V
4.50 V	4.50000 V	4.49375 V	4.50011 V	4.50011 V	0.00 %	4.50625 V	PASS	0.0018 V
6.00 V	6.00000 V	5.99300 V	6.00054 V	6.00054 V	0.01 %	6.00700 V	PASS	0.0018 V

Voltage Measurement Accuracy

Channel 1

Test Value	Reference Measured Value	Lower Limit	UUT Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.00 V	0.00000 V	-0.00150 V	-0.00095 V	-0.00095 V	0.00 %	0.00150 V	PASS	0.00014 V
5.00 V	5.00000 V	4.99700 V	4.99898 V	4.99898 V	0.02 %	5.00300 V	PASS	0.00014 V
10.00 V	10.00000 V	9.99551 V	9.99898 V	9.99898 V	0.01 %	10.00450 V	PASS	0.00014 V
15.00 V	15.00000 V	14.99400 V	14.99903 V	14.99903 V	0.01 %	15.00600 V	PASS	0.0018 V
20.00 V	20.00000 V	19.99250 V	19.99890 V	19.99890 V	0.01 %	20.00750 V	PASS	0.0018 V
-5.00 V	-5.00000 V	-5.00300 V	-5.00081 V	-5.00081 V	0.02 %	-4.99700 V	PASS	0.00180 V
-10.00 V	-10.00000 V	-10.00450 V	-10.00072 V	-10.00072 V	0.01 %	-9.99551 V	PASS	0.00180 V
-15.00 V	-15.00000 V	-15.00600 V	-15.00065 V	-15.00065 V	0.00 %	-14.99400 V	PASS	0.0018 V
-20.00 V	-20.00000 V	-20.00750 V	-20.00066 V	-20.00066 V	0.00 %	-19.99250 V	PASS	0.0018 V

Voltage Programming Accuracy

Channel 0

Test Value	UUT Set Value	Lower Limit	Reference Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.00 V	0.00000 V	-0.00400 V	0.00002 V	0.00002 V	0.00 %	0.00400 V	PASS	0.00014 V
1.50 V	1.50000 V	1.49525 V	1.50089 V	1.50089 V	0.06 %	1.50475 V	PASS	0.00014 V
3.00 V	3.00000 V	2.99450 V	3.00035 V	3.00035 V	0.01 %	3.00550 V	PASS	0.00014 V
4.50 V	4.50000 V	4.49375 V	4.49997 V	4.49997 V	0.00 %	4.50625 V	PASS	0.0018 V
6.00 V	6.00000 V	5.99300 V	6.00036 V	6.00036 V	0.01 %	6.00700 V	PASS	0.0018 V

Voltage Programming Accuracy

Channel 1

Test Value	UUT Set Value	Lower Limit	Reference Measured Value	As Left	Error	Upper Limit	Result	Uncertainty (±)
0.00 V	0.00000 V	-0.00400 V	-0.00013 V	-0.00013 V	0.00 %	0.00400 V	PASS	0.00014 V
1.50 V	1.50000 V	1.49525 V	1.49986 V	1.49986 V	0.01 %	1.50475 V	PASS	0.00014 V
3.00 V	3.00000 V	2.99450 V	2.99996 V	2.99996 V	0.00 %	3.00550 V	PASS	0.00014 V
4.50 V	4.50000 V	4.49375 V	4.49992 V	4.49992 V	0.00 %	4.50625 V	PASS	0.0018 V
6.00 V	6.00000 V	5.99300 V	5.99994 V	5.99994 V	0.00 %	6.00700 V	PASS	0.0018 V
-1.50 V	-1.50000 V	-1.50201 V	-1.50000 V	-1.50000 V	0.00 %	-1.49799 V	PASS	0.00180 V
-3.00 V	-3.00000 V	-3.00252 V	-3.00001 V	-3.00001 V	0.00 %	-2.99748 V	PASS	0.00180 V
-4.50 V	-4.50000 V	-4.50303 V	-4.50011 V	-4.50011 V	0.00 %	-4.49697 V	PASS	0.0018 V
-6.00 V	-6.00000 V	-6.00354 V	-6.00012 V	-6.00012 V	0.00 %	-5.99646 V	PASS	0.0018 V
0.00 V	0.00000 V	-0.00180 V	-0.00020 V	-0.00020 V	0.00 %	0.00180 V	PASS	0.00014 V
5.00 V	5.00000 V	4.99650 V	4.99980 V	4.99980 V	0.00 %	5.00350 V	PASS	0.00014 V
10.00 V	10.00000 V	9.99480 V	9.99990 V	9.99990 V	0.00 %	10.00520 V	PASS	0.0001 V
15.00 V	15.00000 V	14.99310 V	15.00000 V	15.00000 V	0.00 %	15.00690 V	PASS	0.0018 V
20.00 V	20.00000 V	19.99140 V	20.00000 V	20.00000 V	0.00 %	20.00860 V	PASS	0.00180 V
-5.00 V	-5.00000 V	-5.00350 V	-5.00000 V	-5.00000 V	0.00 %	-4.99650 V	PASS	0.00180 V
-10.00 V	-10.00000 V	-10.00520 V	-10.00010 V	-10.00010 V	0.00 %	-9.99480 V	PASS	0.0018 V
-15.00 V	-15.00000 V	-15.00690 V	-15.00020 V	-15.00020 V	0.00 %	-14.99310 V	PASS	0.0018 V
-20.00 V	-20.00000 V	-20.00860 V	-20.00040 V	-20.00040 V	0.00 %	-19.99140 V	PASS	0.0018 V

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