

# CALIBRATION REPORT ORDER NO. MAY 2, 2019 PAGE 1 OF 2

MANUFACTURER:

OHM-LABS

DESCRIPTION:

**CURRENT SHUNT** 

MODEL: SERIAL: CS-10

PROCEDURE:

CS CAL

LAB ENVIRONMENT:

23.2 °C / 43 %RH

CALIBRATION DATE:

02/MAY/2019

	MEASUREMENT DA	ATA - AS FOUND	AS LEFT	
APPLIED CURRENT	MEASURED VALUE	UNCERTAINTY	TEMPERATURE	TEMPERATURE UNCERTAINTY 0.5 °C
2 A	99.996 23 $\mathrm{m}\Omega$	$3.7 \mu\Omega/\Omega$	24.1 °C	
4	99.996 60	2.0	27.6	0.1
6	99.997 54	3.5	33.9	0.1
8	99.997 99	2.5	41.4	0.5
10	99.998 06	2.9	51.9	1.1

#### NOTES:

SHUNT WAS ALLOWED TO FULLY STABILIZE AT EACH APPLIED CURRENT.

REPORTED TEMPERATURE UNCERTAINTY INCLUDES STANDARD DEVIATION OF TEMPERATURE AT EACH CURRENT SETTING.

#### STANDARDS USED

ID	DESCRIPTION	MAKE & MODEL	CAL DUE	
AS3012	RESISTANCE STANDARD	OHM-LABS 201	31/MAR/2020	
AS3326	PRECISION THERMOMETER	ISOTECH MILLIK	18/OcT/2019	
AS3403	RESISTANCE BRIDGE	GUILDLINE 9975	28/FEB/2020	
AS3407	RANGE EXTENDER	GUILDLINE 9923	28/FEB/2020	

### COMMENTS:

OHM-LABS, INC. CERTIFIES THAT THIS CALIBRATION IS TRACEABLE TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY (NIST), OR ANOTHER RECOGNIZED NATIONAL MEASUREMENT INSTITUTE, OR DERIVED BY A RATIO TYPE SELF-CALIBRATION TECHNIQUE, AND IS ACCREDITED TO ISO/IEC 17025. OHM-LABS' QUALITY CONTROL SYSTEM MEETS THE REQUIREMENTS OF ANSI/NCSL Z540-1-1994. THE REPORTED UNCERTAINTIES REPRESENT EXPANDED UNCERTAINTIES EXPRESSED AT A CONFIDENCE LEVEL OF APPROXIMATELY 95 %, USING A COVERAGE FACTOR OF K=2. THIS UNCERTAINTY IS AT THE TIME OF TEST ONLY AND DOES NOT TAKE INTO ACCOUNT TRANSIT, USAGE, DRIFT OVER TIME, OR OTHER FACTORS AFFECTING STABILITY. THIS DOCUMENT CERTIFIES THAT THE ITEMS IDENTIFIED HEREIN COMPLY WITH ALL REQUIREMENTS OF THE ABOVE PURCHASE ORDER, AND THAT THE CALIBRATION PERFORMED WAS IN ACCORDANCE WITH THE CURRENT REVISION LEVEL OF OHM-LABS' QUALITY CONTROL SYSTEM. TRAINED AND QUALIFIED PERSONNEL PERFORMED THE CALIBRATIONS IN ACCORDANCE WITH THE REQUIREMENTS OF ISO/IEC, 17025. THIS CERTIFICATE SHALL NOT BE REPRODUCED, EXCEPT IN FULL, WITHOUT WRITTEN PERMISSION BY OHM-LABS, INC.

PERFORMED BY:

REVIEWED BY:





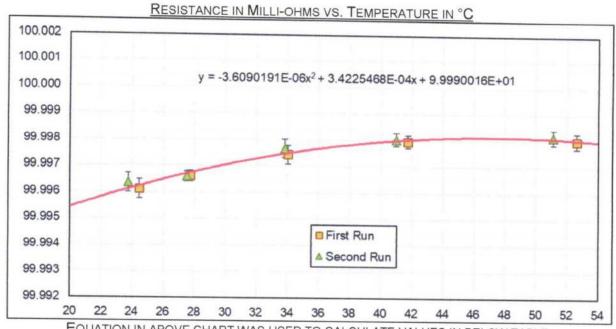
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MODEL: CS-10

SERIAL:



EQUATION IN ABOVE CHART WAS USED TO CALCULATE VALUES IN BELOW TABLE.

°C	mΩ	°C	mΩ	°C	mΩ	°C	mΩ
20	99.995 42	30	99.997 04	40	99.997 93	50	99.998 11
21	99.995 61	31	99.997 16	41	99.997 98	51	99.998 08
22	99.995 80	32	99.997 27	42	99.998 02	52	99.998 05
23	99.995 98	33	99.997 38	43	99.998 06	53	99.998 02
24	99.996 15	34	99.997 48	44	99.998 09	54	99.997 97
25	99.996 32	35	99.997 57	45	99.998 11	55	99.997 92
26	99.996 47	36	99.997 66	46	99.998 12	56	99.997 86
27	99.996 63	37	99.997 74	47	99.998 13	57	99.997 80
28	99.996 77	38	99.997 81	48	99.998 13	58	99.997 73
29	99.996 91	39	99.997 87	49	99.998 12	59	99 997 65

END OF REPORT