

No. 202401151498003-1
Issue Date 2024-01-30
< YYYY-MM-DD >

CALIBRATION CERTIFICATE

Model Name : RESISTANCE METER
Model Number : RM3545-02
Serial No. : 240121567
Calibration Date : 2024-01-22

The above listed product(s) is/are calibrated in accordance with the HIOKI standards. This also certifies that all reference instruments used in the calibration process can be traced back to all or some of the official standards laboratories of the nations affiliated with the International Committee for Weights and Measures (CIPM), such as the National Institute of Advanced Industrial Science and Technology, the National Institute of Information and Communications Technology, and NIST (National Institute of Standards and Technology).

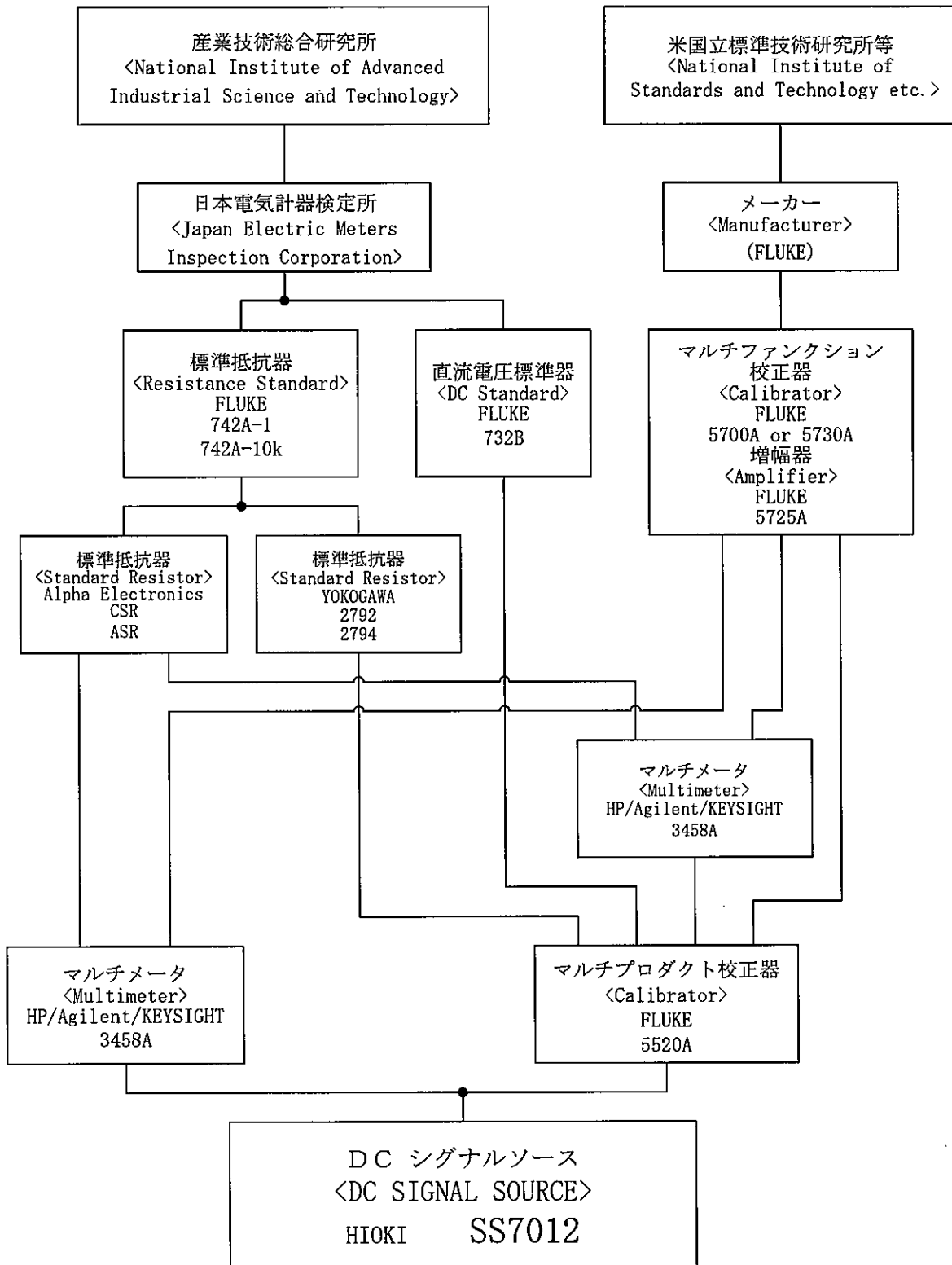
Calibration Equipment Used

<u>Model Name</u>	<u>Model Number</u>	<u>Serial No.</u>	<u>Control No.</u>	<u>Cal. Period</u>
DC SIGNAL SOURCE	SS7012	230523909	000-12-121	2024-07-31
DIGITAL MULTIMETER	34461A	MY60041733	215736	2024-07-31
RESISTOR FOR RM3545	----	----	215692	2024-03-31

T. Yamaguchi

Tsutomu Yamaguchi
Inspector Quality Assurance Department

使用標準器トレーサビリティ体系図 <Traceability Chart for Calibration Equipment>

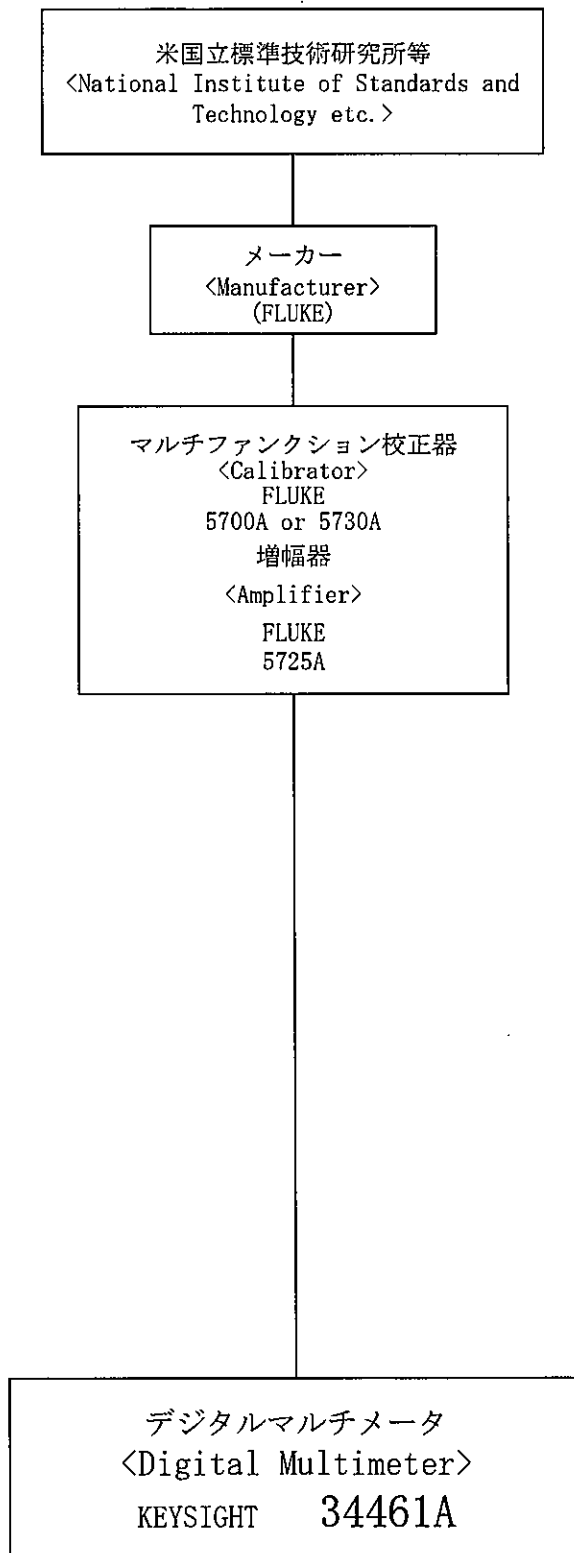


品名<Model Name>:抵抗計<RESISTANCE METER>

形名<Model Number>:RM3545-02

備考<Note>:

使用標準器トレーサビリティ体系図
<Traceability Chart for Calibration Equipment>

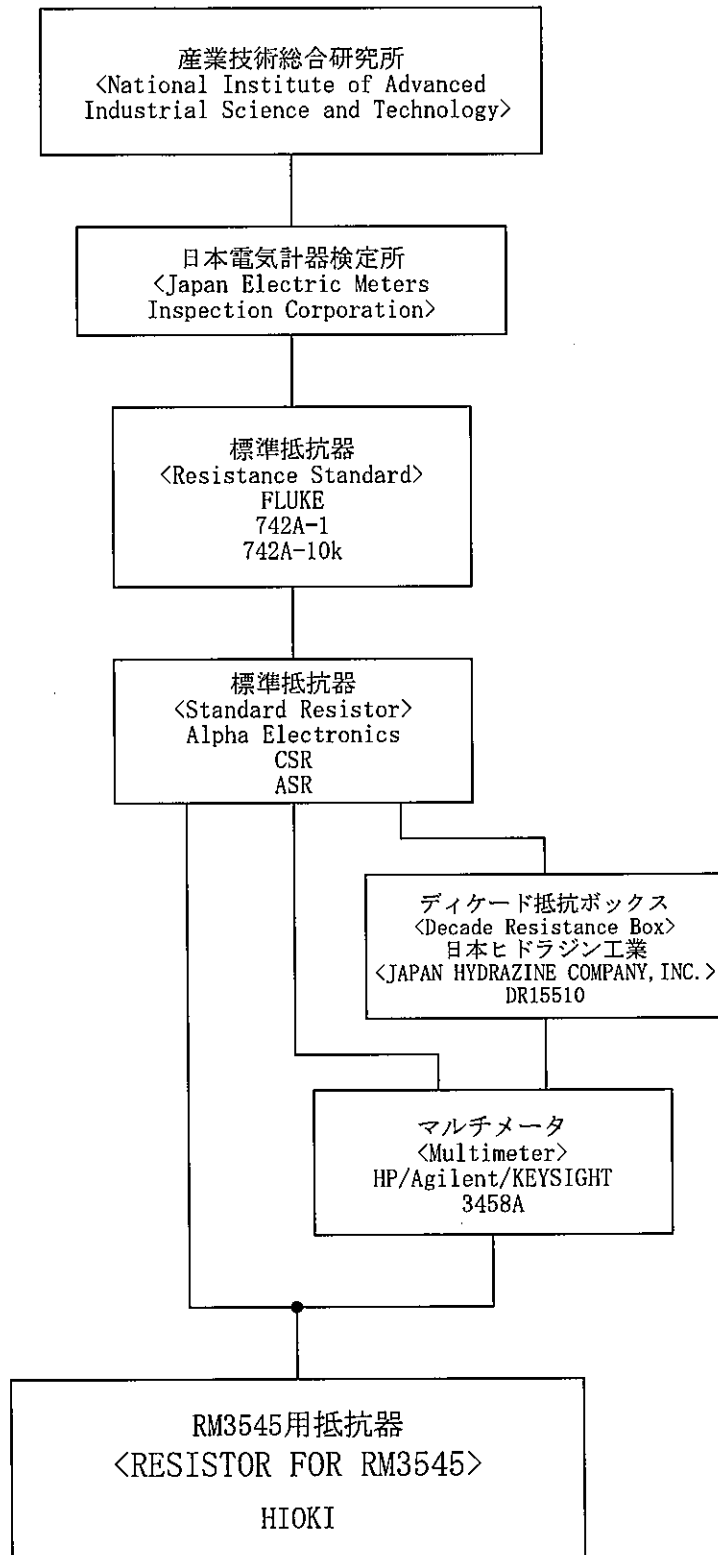


品名<Model Name>:抵抗計<RESISTANCE METER>

形名<Model Number>:RM3545-02

備考<Note>:

使用標準器トレーサビリティ体系図
<Traceability Chart for Calibration Equipment>



品名<Model Name>:抵抗計<RESISTANCE METER>

形名<Model Number>:RM3545-02

備考<Note>:

検査成績表

<TEST REPORT>

品名<Model Name> (抵抗計 <RESISTANCE METER>)
 形名<Model Number> (RM3545-02)
 製造番号<Serial No.> (No. 240121567)
 検査年月日<Test Date> (2024-01-22)
 (<YYYY-MM-DD>)
 検査条件<Test Conditions> (23.0 °C, 46 %rh)

項目 <Item>	結果* <Result>
測定値のばらつき<Variation in Measurement Value>	(PASS)
測定異常検出機能<Faulty Measurement Detection>	(PASS)
入力端子結線<Input Connection Terminal>	(PASS)
電源周波数認識機能<Power Line Frequency Function>	(PASS)
接触改善機能<Contact Improvement Function>	(PASS)
コンタクトチェック<Contact Check Function>	(PASS)
COMP.OUT	(PASS)
Z3003(RM3545-02 Only)	(PASS)
LCD/LED	(PASS)
キー<Key>	(PASS)
EXT I/O	(PASS)
GP-IB(RM3545-01 Only)	(-)
RS-232C	(PASS)
USB	(PASS)
ブザー<Buzzer>	(PASS)

備考<Note>

* FAIL判定箇所は、グレー表示としています。<FAIL decision points are highlighted in gray.>

総合判定<Overall Result> (PASS)	検査者<Inspected by> (M. Tanaka)	承認者<Approved by> (M. Kuda)
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検査成績表

<TEST REPORT>

品名<Model Name> (抵抗計 <RESISTANCE METER>)
 形名<Model Number> (RM3545-02)
 製造番号<Serial No.> (No. 240121567)
 検査年月日<Test Date> (2024-01-22)
 (<YYYY-MM-DD>)

項目 <Item>	レンジ <Range>	入力 <Input>	許容範囲 <Tolerance>	校正値* <Calibration Value>
精度<Accuracy>				
Ω 0ADJ OFF,OVC OFF,SLOW2				
10mΩ	0mΩ	0mΩ	-0.00400 mΩ ~ 0.00400 mΩ	(-0.00012 mΩ)
	10mΩ	10mΩ	9.99000 mΩ ~ 10.01000 mΩ	(9.99983 mΩ)
100mΩ(1A)	0mΩ	0mΩ	-0.0120 mΩ ~ 0.0120 mΩ	(0.0000 mΩ)
	100mΩ	100mΩ	99.9280 mΩ ~ 100.0720 mΩ	(99.9996 mΩ)
100mΩ(100mA)	0mΩ	0mΩ	-0.0400 mΩ ~ 0.0400 mΩ	(-0.0020 mΩ)
	100mΩ	100mΩ	99.9460 mΩ ~ 100.0540 mΩ	(99.9991 mΩ)
1000mΩ(100mA)	0mΩ	0mΩ	-0.100 mΩ ~ 0.100 mΩ	(-0.003 mΩ)
	100mΩ	100mΩ	99.888 mΩ ~ 100.112 mΩ	(99.996 mΩ)
	1000mΩ	1000mΩ	999.780 mΩ ~ 1000.220 mΩ	(999.986 mΩ)
1000mΩ(10mA)	0mΩ	0mΩ	-0.400 mΩ ~ 0.400 mΩ	(-0.038 mΩ)
	1000mΩ	1000mΩ	999.520 mΩ ~ 1000.480 mΩ	(999.961 mΩ)
10Ω(10mA)	0Ω	0Ω	-0.00100 Ω ~ 0.00100 Ω	(-0.00004 Ω)
	10Ω	10Ω	9.99820 Ω ~ 10.00180 Ω	(9.99995 Ω)
10Ω(1mA)	0Ω	0Ω	-0.00400 Ω ~ 0.00400 Ω	(-0.00040 Ω)
	10Ω	10Ω	9.99520 Ω ~ 10.00480 Ω	(9.99966 Ω)
100Ω(10mA)	0Ω	0Ω	-0.0010 Ω ~ 0.0010 Ω	(0.0000 Ω)
	100Ω	100Ω	99.9920 Ω ~ 100.0080 Ω	(99.9998 Ω)
100Ω(1mA)	0Ω	0Ω	-0.0120 Ω ~ 0.0120 Ω	(-0.0003 Ω)
	100Ω	100Ω	99.9800 Ω ~ 100.0200 Ω	(99.9994 Ω)
1000Ω(1mA)	0Ω	0Ω	-0.010 Ω ~ 0.010 Ω	(0.000 Ω)
	1000Ω	1000Ω	999.930 Ω ~ 1000.070 Ω	(999.997 Ω)
10kΩ	0kΩ	0kΩ	-0.00010 kΩ ~ 0.00010 kΩ	(0.00001 kΩ)
	10kΩ	10kΩ	9.99920 kΩ ~ 10.00080 kΩ	(9.99995 kΩ)
100kΩ	0kΩ	0kΩ	-0.0010 kΩ ~ 0.0010 kΩ	(0.0001 kΩ)
	100kΩ	100kΩ	99.9920 kΩ ~ 100.0080 kΩ	(99.9995 kΩ)
1000kΩ	0kΩ	0kΩ	-0.010 kΩ ~ 0.010 kΩ	(0.001 kΩ)
	1000kΩ	1000kΩ	999.910 kΩ ~ 1000.090 kΩ	(999.998 kΩ)
10MΩ	0MΩ	0MΩ	-0.00010 MΩ ~ 0.00010 MΩ	(0.00001 MΩ)
	10MΩ	10MΩ	9.99690 MΩ ~ 10.00310 MΩ	(10.00002 MΩ)
100MΩ	0MΩ	0MΩ	-0.02 MΩ ~ 0.02 MΩ	(0.00 MΩ)
	100MΩ	100MΩ	98.98 MΩ ~ 101.02 MΩ	(100.00 MΩ)
1000MΩ	0MΩ	0MΩ	-0.2 MΩ ~ 0.2 MΩ	(0.0 MΩ)
	1000MΩ	1000MΩ	899.8 MΩ ~ 1100.2 MΩ	(998.9 MΩ)
高精度<High-Precision>				
100MΩ	0MΩ	0MΩ	-0.0010 MΩ ~ 0.0010 MΩ	(0.0001 MΩ)
	100MΩ	100MΩ	99.7990 MΩ ~ 100.2010 MΩ	(100.0106 MΩ)

検査成績表

<TEST REPORT>

品名<Model Name> (抵抗計 <RESISTANCE METER>)
 形名<Model Number> (RM3545-02)
 製造番号<Serial No.> (No. 240121567)
 検査年月日<Test Date> (2024-01-22)
 <YYYY-MM-DD>

項目 <Item>	レンジ <Range>	入力 <Input>	許容範囲 <Tolerance>	校正値* <Calibration Value>
確度<Accuracy>				
Ω 0ADJ OFF,OVC ON,SLOW2				
10mΩ	0mΩ	0mΩ	-0.00010 mΩ ~ 0.00010 mΩ	(0.00001 mΩ)
		10mΩ	9.99390 mΩ ~ 10.00610 mΩ	(9.99996 mΩ)
100mΩ(1A)	0mΩ	0mΩ	-0.0010 mΩ ~ 0.0010 mΩ	(0.0000 mΩ)
		100mΩ	99.9390 mΩ ~ 100.0610 mΩ	(100.0006 mΩ)
100mΩ(100mA)	0mΩ	0mΩ	-0.0010 mΩ ~ 0.0010 mΩ	(-0.0001 mΩ)
		100mΩ	99.9850 mΩ ~ 100.0150 mΩ	(100.0005 mΩ)
1000mΩ(100mA)	0mΩ	0mΩ	-0.010 mΩ ~ 0.010 mΩ	(0.000 mΩ)
		1000mΩ	999.870 mΩ ~ 1000.130 mΩ	(999.990 mΩ)
1000mΩ(10mA)	0mΩ	0mΩ	-0.020 mΩ ~ 0.020 mΩ	(0.001 mΩ)
		1000mΩ	999.900 mΩ ~ 1000.100 mΩ	(999.992 mΩ)
10Ω(10mA)	0Ω	0Ω	-0.00010 Ω ~ 0.00010 Ω	(0.00000 Ω)
		10Ω	9.99910 Ω ~ 10.00090 Ω	(9.99996 Ω)
10Ω(1mA)	0Ω	0Ω	-0.00020 Ω ~ 0.00020 Ω	(-0.00001 Ω)
		10Ω	9.99900 Ω ~ 10.00100 Ω	(9.99999 Ω)
100Ω(10mA)	0Ω	0Ω	-0.0010 Ω ~ 0.0010 Ω	(0.0000 Ω)
		100Ω	99.9920 Ω ~ 100.0080 Ω	(99.9997 Ω)
100Ω(1mA)	0Ω	0Ω	-0.0010 Ω ~ 0.0010 Ω	(0.0000 Ω)
		100Ω	99.9910 Ω ~ 100.0090 Ω	(99.9996 Ω)
1000Ω(1mA)	0Ω	0Ω	-0.010 Ω ~ 0.010 Ω	(0.000 Ω)
		1000Ω	999.930 Ω ~ 1000.070 Ω	(999.997 Ω)
LPΩ				
1000mΩ	0mΩ	0mΩ	-0.03 mΩ ~ 0.03 mΩ	(0.00 mΩ)
		1000mΩ	997.97 mΩ ~ 1002.03 mΩ	(999.99 mΩ)
10Ω	0Ω	0Ω	-0.0002 Ω ~ 0.0002 Ω	(0.0000 Ω)
		10Ω	9.9798 Ω ~ 10.0202 Ω	(9.9999 Ω)
100Ω	0Ω	0Ω	-0.002 Ω ~ 0.002 Ω	(0.000 Ω)
		100Ω	99.798 Ω ~ 100.202 Ω	(100.001 Ω)
1000Ω	0Ω	0Ω	-0.02 Ω ~ 0.02 Ω	(0.00 Ω)
		1000Ω	997.98 Ω ~ 1002.02 Ω	(1000.03 Ω)
Ω 0ADJ ON,OVC OFF,SLOW2				
10mΩ	0mΩ	0mΩ	-0.00200 mΩ ~ 0.00200 mΩ	(-0.00007 mΩ)
		10mΩ	9.99200 mΩ ~ 10.00800 mΩ	(9.99987 mΩ)
100mΩ(1A)	100mΩ	100mΩ	99.9300 mΩ ~ 100.0700 mΩ	(99.9992 mΩ)
100mΩ(100mA)	100mΩ	100mΩ	99.9660 mΩ ~ 100.0340 mΩ	(100.0004 mΩ)
1000mΩ(100mA)	1000mΩ	1000mΩ	999.800 mΩ ~ 1000.200 mΩ	(999.991 mΩ)
1000mΩ(10mA)	1000mΩ	1000mΩ	999.720 mΩ ~ 1000.280 mΩ	(999.996 mΩ)
10Ω(10mA)	10Ω	10Ω	9.99840 Ω ~ 10.00160 Ω	(9.99997 Ω)
10Ω(1mA)	10Ω	10Ω	9.99720 Ω ~ 10.00280 Ω	(9.99994 Ω)
100Ω(1mA)	100Ω	100Ω	99.9820 Ω ~ 100.0180 Ω	(99.9996 Ω)

検査成績表

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品名<Model Name> (抵抗計 <RESISTANCE METER>)
 形名<Model Number> (RM3545-02)
 製造番号<Serial No.> (No. 240121567)
 検査年月日<Test Date> (2024-01-22)
 <YYYY-MM-DD>

項目 <Item>	レンジ <Range>	入力 <Input>	許容範囲 <Tolerance>	校正値* <Calibration Value>
確度<Accuracy>				
TEMP	サーミスタセンサ<Thermistor Sensor>			
	-9.5 °C	-9.7 °C	~	-9.3 °C (-9.6 °C)
	25.0 °C	24.8 °C	~	25.2 °C (25.0 °C)
	99.5 °C	99.3 °C	~	99.7 °C (99.5 °C)
	アナログ入力<Analog Input>*1			
	0.1V (10°C)	9.6 °C	~	10.4 °C (10.0 °C)
	1V (100°C)	98.7 °C	~	101.3 °C (100.0 °C)
*1. 基準電圧/基準温度の設定を、0.1V/10°C, 1V/100°Cとしています。 <Reference voltages and reference temperatures set to 0.1V/10°C, 1V/100°C.>				
D/A出力<D/A Output>				
	0.0V	-0.0020 V	~	0.0020 V (0.0002 V)
	1.0V	0.9980 V	~	1.0020 V (0.9996 V)