Issue date: 01 April 2026
Valid Until: -

NO: SAMM 246

LABORATORY LOCATION/ CENTRAL OFFICE:	Toyotech Engineering Sdn. Bhd. 2G, Block E, Jalan Perubatan 3 Pandan Indah 55100 WP Kuala Lumpur , 55100, WILAYAH PERSEKUTUAN KUALA LUMPUR MALAYSIA
ACCREDITED SINCE :	18 MARCH 2026
FIELD(S) OF CALIBRATION:	ELECTRICAL

This laboratory has demonstrated its technical competence to operate in accordance with MS ISO/IEC 17025:2017 (ISO/IEC 17025:2017).

This laboratory's fulfillment of the requirements of ISO/IEC 17025 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025 are written in language relevant to laboratory operations and operate generally in accordance with the principles of ISO 9001 (see Joint ISO-ILAC-IAF Communiqué dated April 2017).

*** The uncertainty covered by the CMC is expressed as the expanded uncertainty corresponding to a coverage probability of approximately 95 % and have a coverage factor of k=2 unless stated otherwise.**

CENTRAL LOCATION	Toyotech Engineering Sdn. Bhd. 2G, Block E, Jalan Perubatan 3 Pandan Indah 55100 WP Kuala Lumpur , 55100, Wilayah Persekutuan Kuala Lumpur
FIELD(S) OF CALIBRATION :	ELECTRICAL,

SCOPE OF CALIBRATION : ELECTRICAL

Instrument Calibrated/Measurement Parameter	**Range**	**Calibration and Measurement Capability Expressed as an Uncertainty (±)***	**Remarks**
indicating Instruments Dc Voltage	0 mV to 220 mV 221 mV to 1100 V	0.4 µV 2 µV/V	Generating using Calibrator model Fluke 5700A
indicating Instruments Dc Current	0 µA to 220 µA 221 µA to 220 mA 221 mA to 2.2 A	2 nA 13 nA 73 µA	Generating using Calibrator model Fluke 5700A
	2.3 A to 11 A	2 mA	Generating using Calibrator model Fluke 5500A

Instrument Calibrated/Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty (±)*	Remarks
indicating Instruments Ac Voltage	1 mV to 22 mV 45 Hz to 1 kHz 23 mV to 220 mV 45 Hz to 1 MHz 221 mV to 2.2 V 45 Hz to 1 MHz 2.3 V to 22 V 45 Hz to 1 MHz 23 V to 220 V 45 Hz to 100 kHz 221 V to 1100 V 45 Hz to 10 kHz	3 µV 7 µV 39 µV 440 µV 5 mV 33 mV	Generating using Calibrator model Fluke 5700A
indicating Instruments Ac Current	10 µA to 220 µA 45 Hz to 10 kHz 0.23 mA to 2.2 mA 45 Hz to 10 kHz 2.3 mA to 22 mA 45 Hz to 10 kHz 23 mA to 220 mA 45 Hz to 10 kHz 0.23 A to 2.2 A 45 Hz to 10 kHz 2.2 A to 11 A 45 Hz to 10 kHz	5 nA 150 nA 2 µA 18 µA 210 µA 5 mA	Generating using Calibrator model Fluke 5500A
indicating Instruments Ac Current At 60 Hz	11 A to 50 A	85 mA	Generating using AC Voltage Current Standard model Yokogawa 2558
indicating Instruments Dc Resistance	0 -„¦ to 10 -„¦ 11 -„¦ to 100 k-„¦ 101 k-„¦ to 1 M-„¦ 1.1 M-„¦ to 10 M-„¦ 11 M-„¦ to 100 M-„¦	0.1 m-„¦ 3 m-„¦ 7 -„¦ 89 -„¦ 4 k-„¦	Generating using Calibrator model Fluke 5700A
indicating Instruments Insulation Resistance	0.1 -„¦ to 1 -„¦ 1.1 -„¦ to 10 -„¦ 10.1 -„¦ to 100 -„¦ 100.1 -„¦ to 1000 -„¦ 1000.1 -„¦ to 10 k-„¦ 10.1 k-„¦ to 100 k-„¦ 100.1 k-„¦ to 1 M-„¦ 1.1 M-„¦ to 10 M-„¦ 10.1 M-„¦ to 110 M-„¦ 111 M-„¦ to 1 G-„¦ 1 G-„¦ to 10 G-„¦	0.5 m-„¦ 0.6 m-„¦ 1 m-„¦ 27 m-„¦ 0.1 -„¦ 1 -„¦ 14 -„¦ 0.6 k-„¦ 36 k-„¦ 53 k-„¦ 30 M-„¦	Generating using Decade Resistance Box Yokogawa 2793-01 and 2793-03

Instrument Calibrated/Measurement Parameter	**Range**	**Calibration and Measurement Capability Expressed as an Uncertainty (±)***	**Remarks**
indicating Instruments Temperature Indicator Electrical R-type K-type E-type J-type T-type (without Cold Junction Compensation)	0 to 1600 -•°C -200 to 1200 -•°C 0 to 700 -•°C -200 to 600 -•°C -200 to 200 -•°	0.3 -•°C 0.4 -•°C 0.2 -•°C 0.2 -•°C 0.1 -•°C	Electrical Simulation using DC Voltage Standard (refer to ITS-90)
indicating Instruments Frequency	1 Hz to 10 kHz 11 kHz to 100 kHz 101 kHz to 1 MHz	8 mHz 36 mHz 2 mHz	Generating using Function Generator Yokogawa FG-120
	1.1 MHz to 10 MHz 11 MHz to 100 MHz 101 MHz to 1 GHz 1.1 GHz to 2 GHz 2.1 GHz to 3 GHz	18 mHz 0.2 Hz 2 Hz 9 Hz 7 Hz	Generating using Signal Generator Agilent E4436B
indicating Instruments Rf Power	100 kHz to 3 GHz 10 dBm to – 120 dBm	0.3 dB	Generating using Signal Generator Agilent E4436B
indicating Instruments Frequency Modulation Deviation	Carrier Frequency: 100 kHz to 3 GHz @ Internal Rate : 1 Hz to 500 kHz 0.5 kHz to 1 kHz 1.1 kHz to 10 kHz 10.1 kHz to 100 kHz	 20 Hz 200 Hz 2 kHz	Generating using Signal Generator Agilent E4436B
indicating Instruments Amplitude Modulation Depth	Carrier Frequency: 100 kHz to 3 GHz @ Internal Rate : 1Hz to 500 kHz 0 % to 30 % 31 % to 60 % 61 % to 100 %	 1 % 2 % 4 %	Generating using Signal Generator Agilent E4436B
indicating Instruments Distortion	20 Hz to 20 kHz -10 dB -20 dB -30 dB to -60 dB	 0.5 dB 0.6 dB 0.8 dB	Generating using Distortion Calibrator Meguro MKS-682
sources Dc Voltage	0 mV to 100 mV 101 mV to 1 V 1.1 V to 10 V 10.1 V to 100V 100.1 V to 1000 V	0.6 µV 8 µV 45 µV 0.7 mV 7 mV	Measurement using Multimeter Agilent 3458A

Instrument Calibrated/Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty (±)*	Remarks
sources Dc Current	0 mA to 10 mA 10.1 mA to 100 mA 100.1 mA to 1 A	17 µA 2 µA 54 mA	Measurement using Multimeter Agilent 3458A
	1.1 A to 3 A	0.6 mA	Measurement using Multimeter Agilent 34401A
sources Ac Voltage	1 mV to 10 mV 45 Hz to 1 kHz 1 mV to 100 mV 45 Hz to 1 MHz 101 mV to 1 V 45 Hz to 1 MHz 1.1 V to 10 V 45 Hz to 1 MHz 11 V to 100 V 45 Hz to 100 kHz 101 V to 1000 V 45 Hz to 1 kHz	4 µV 4 µV 22 µV 0.3 mV 4 mV 32 mV	Measurement using Multimeter Agilent 3458A
sources Ac Current	1 mA to 1 A 45 Hz to 1 kHz 1.1 A to 3 A 45 Hz to 1 kHz	0.4 mA 0.5 mA	Measurement using Multimeter Agilent 34401A
sources Dc Resistance	0 -„¦ 10 µ-„¦ 10.1 µ-„¦ to 100 -„¦ 100.1 -„¦ to 1000 -„¦ 1.1 k-„¦ to 10 k-„¦ 10.1 k-„¦ to 100 k-„¦ 100.1 k-„¦ to 1 M-„¦ 1.1 M-„¦ to 10 M-„¦ 10.1 M-„¦ to 100 M-„¦ 100.1 M-„¦ to 1 G-„¦	0.3 m-„¦ 2 m-„¦ 17 m-„¦ 180 m-„¦ 2 -„¦ 25 -„¦ 0.7 k-„¦ 13 k-„¦ 0.7 M-„¦	Measurement using Multimeter Agilent 3458A
sources Dc High Voltage	1 kV to 2 kV 2.1 kV to 4 kV 4.1 kV to 6 kV 6.1 kV to 8 kV 8.1 kV to 10 kV	6 V 7 V 8 V 8 V 10 V	Measurement using High Voltage Meter Kikusui 149-10A
sources Ac High Voltage At 50 Hz	1 kV to 2 kV 2.1 kV to 4 kV 4.1 kV to 6 kV 6.1 kV to 8 kV 8.1 kV to 10 kV	12 V 13 V 23 V 26 V 29 V	Measurement using High Voltage Meter Kikusui 149-10A

Instrument Calibrated/Measurement Parameter	Range	Calibration and Measurement Capability Expressed as an Uncertainty (±)*	Remarks
sources Leakage Dc Current	0.4 mA 0.5 mA 0.8 mA 1.0 mA 1.6 mA 2.0 mA 4.0 mA 5.0 mA	24 µA 24 µA 11 µA 11 µA 11 µA 11 µA 23 µA 23 µA	Measurement using Current Calibrator for W. Tester Kikusui TOS1200
sources Leakage Ac Current At 50 Hz	0.4 mA 0.5 mA 0.8 mA 1.0 mA 1.6 mA 2.0 mA 4.0 mA 5.0 mA 8.0 mA 10.0 mA 16.0 mA 20.0 mA 40.0 mA 50.0 mA	27 µA 27 µA 10 µA 10 µA 20 µA 20 µA 50 µA 50 µA 100 µA 100 µA 200 µA 200 µA 400 µA 400 µA	Measurement using Current Calibrator for W. Tester Kikusui TOS1200
sources Time Interval	1 s to 2 s 250 ms/div) 2 s to 4 s (500 ms/div) 4 s to 8 s (1 s/div) 8 s to 20 s (2.5 s/div) 20 s to 60 s (5 s/div)	0.6 s 0.6 s 0.6 s 0.6 s 0.6 s	Measurement using Oscilloscope Tektronix TDS350
sources Time Base	10 MHz	0.3 Hz	Measurement using Frequency Counter Agilent 5335A
sources Frequency	10 Hz to 100 Hz 100 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 100 kHz 100 kHz to 1 MHz 1 MHz to 10 MHz 10 MHz to 100 MHz 100 Mhz to 1 GHz	50 µHz 110 µHz 0.4 mHz 4 mHz 66 mHz 360 mHz 3 Hz 27 Hz	Measurement using Frequency Counter Agilent 5385A

Instrument Calibrated/Measurement Parameter	**Range**	**Calibration and Measurement Capability Expressed as an Uncertainty (±)***	**Remarks**
	1 GHz to 2 GHz 2 GHz to 3 GHz	2 Hz 20 Hz	Measurement using Frequency Counter Anritsu MF76A
sources Distortion	10 Hz to 20 kHz -10 dB to -60 dB	0.1 dB	Measurement using Audio Analyzer Agilent 8903B
sources Attenuation	10 Hz to 20 kHz -10 dB to -60 dB	0.2 dB	Measurement using Audio Analyzer Agilent 8903B
sources Rf Power	100 kHz to 1.3 GHz 10 dBm to -120 dBm -20 dBm to -120 dBm	0.9 dB 1 dB	Measurement using Measuring Receiver Agilent 8902A
sources Frequency Modulation Deviation	Carrier Frequency: 100 kHz to 1.3 GHz @ internal rate 20 Hz to 200 Hz 0.5 kHz to 1 kHz 1 kHz to 10 khz 10 kHz to 100 kHz	 11 Hz 110 Hz 1kHz	Measurement using Measuring Receiver Agilent 8902A
sources Amplitude Modulation Deviation	Carrier Frequency: 100 kHz to 1.3 GHz @ internal rate 20 Hz to 200 kHz 0% to 30% 30% to 60% 60% to 90%	 1% 2% 3%	Measurement using Measuring Receiver Agilent 8902A
oscilloscope Vertical Deflection	Amplitude (Peak-to-peak) 1 M-„¦ Load 200 µV to 100 V	 2.5 mV/V + 1 µ	Generating using Calibration Generator Tektronix PG506
oscilloscope Time Mark	1 ns to 5 s	1 ms/s	Generating using Time Mark Generator Tektronix TG501
oscilloscope Frequency Range	50 kHz to 250 MHz	0.7 of the least significant displayed digit	Measurement using Levelled Sine Wave Generator Tektronix SG503
oscilloscope Amplitude Range	X0.01 Range 5 mV to 50 mV X0.1 Range 50 mV to 500 mV X1 Range 500 mV to 5 V	5 % of reading 4 % of reading 3 % of reading	Measurement using Levelled Sine Wave Generator Tektronix SG503

Instrument Calibrated/Measurement Parameter	**Range**	**Calibration and Measurement Capability Expressed as an Uncertainty (±)***	**Remarks**
Dc Current Via Shunt (1 MÏ‰)	0 A to 30 A	1 mA/A	Measurement using Agilent 3458A through Current Shunt Yokogawa 2215

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FIELD(S) OF CALIBRATION :	ELECTRICAL

SCOPE OF CALIBRATION : ELECTRICAL

Material / Product Tested	**Type Of Test / Properties Measured / Range Of Measurement**	**Standard Test Methods / Equipment / Techniques**	**Remarks**
indicating Instruments Dc Voltage	0 mV to 220 mV 221 mV to 1100 V	0.4 µV 2 µV/V	Generating using Calibrator model Fluke 5700A
indicating Instruments Dc Current	0 µA to 220 µA 221 µA to 220 mA 221 mA to 2.2 A	2 nA 13 nA 73 µA	Generating using Calibrator model Fluke 5700A
	2.3 A to 11 A	2 mA	Generating using Calibrator model Fluke 5500A
indicating Instruments Ac Voltage	1 mV to 22 mV 45 Hz to 1 kHz 23 mV to 220 mV 45 Hz to 1 MHz 221 mV to 2.2 V 45 Hz to 1 MHz 2.3 V to 22 V 45 Hz to 1 MHz 23 V to 220 V 45 Hz to 100 kHz 221 V to 1100 V 45 Hz to 10 kHz	3 µV 7 µV 39 µV 440 µV 5 mV 33 mV	Generating using Calibrator model Fluke 5700A

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques	Remarks
indicating Instruments Ac Current	10 µA to 220 µA 45 Hz to 10 kHz 0.23 mA to 2.2 mA 45 Hz to 10 kHz 2.3 mA to 22 mA 45 Hz to 10 kHz 23 mA to 220 mA 45 Hz to 10 kHz 0.23 A to 2.2 A 45 Hz to 10 kHz 2.2 A to 11 A 45 Hz to 10 kHz	5 nA 150 nA 2 µA 18 µA 210 µA 5 mA	Generating using Calibrator model Fluke 5500A
indicating Instruments Ac Current At 60 Hz	11 A to 50 A	85 mA	Generating using AC Voltage Current Standard model Yokogawa 2558
indicating Instruments Dc Resistance	0 -„¦ to 10 -„¦ 11 -„¦ to 100 k-„¦ 101 k-„¦ to 1 M-„¦ 1.1 M-„¦ to 10 M-„¦ 11 M-„¦ to 100 M-„¦	0.1 m-„¦ 3 m-„¦ 7 -„¦ 89 -„¦ 4 k-„¦	Generating using Calibrator model Fluke 5700A
indicating Instruments Insulation Resistance	0.1 -„¦ to 1 -„¦ 1.1 -„¦ to 10 -„¦ 10.1 -„¦ to 100 -„¦ 100.1 -„¦ to 1000 -„¦ 1000.1 -„¦ to 10 k-„¦ 10.1 k-„¦ to 100 k-„¦ 100.1 k-„¦ to 1 M-„¦ 1.1 M-„¦ to 10 M-„¦ 10.1 M-„¦ to 110 M-„¦ 111 M-„¦ to 1 G-„¦ 1 G-„¦ to 10 G-„¦	0.5 m-„¦ 0.6 m-„¦ 1 m-„¦ 27 m-„¦ 0.1 -„¦ 1 -„¦ 14 -„¦ 0.6 k-„¦ 36 k-„¦ 53 k-„¦ 30 M-„¦	Generating using Decade Resistance Box Yokogawa 2793-01 and 2793-03
indicating Instruments Temperature Indicator Electrical R-type K-type E-type J-type T-type (without Cold Junction Compensation)	0 to 1600 -•°C -200 to 1200 -•°C 0 to 700 -•°C -200 to 600 -•°C -200 to 200 -•°	0.3 -•°C 0.4 -•°C 0.2 -•°C 0.2 -•°C 0.1 -•°C	Electrical Simulation using DC Voltage Standard (refer to ITS-90)
indicating Instruments Frequency	1 Hz to 10 kHz 11 kHz to 100 kHz 101 kHz to 1 MHz	8 mHz 36 mHz 2 mHz	Generating using Function Generator Yokogawa FG-120

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques	Remarks
	1.1 MHz to 10 MHz 11 MHz to 100 MHz 101 MHz to 1 GHz 1.1 GHz to 2 GHz 2.1 GHz to 3 GHz	18 mHz 0.2 Hz 2 Hz 9 Hz 7 Hz	Generating using Signal Generator Agilent E4436B
indicating Instruments Rf Power	100 kHz to 3 GHz 10 dBm to – 120 dBm	0.3 dB	Generating using Signal Generator Agilent E4436B
indicating Instruments Frequency Modulation Deviation	Carrier Frequency: 100 kHz to 3 GHz @ Internal Rate : 1 Hz to 500 kHz 0.5 kHz to 1 kHz 1.1 kHz to 10 kHz 10.1 kHz to 100 kHz	 20 Hz 200 Hz 2 kHz	Generating using Signal Generator Agilent E4436B
indicating Instruments Amplitude Modulation Depth	Carrier Frequency: 100 kHz to 3 GHz @ Internal Rate : 1Hz to 500 kHz 0 % to 30 % 31 % to 60 % 61 % to 100 %	 1 % 2 % 4 %	Generating using Signal Generator Agilent E4436B
indicating Instruments Distortion	20 Hz to 20 kHz -10 dB -20 dB -30 dB to -60 dB	 0.5 dB 0.6 dB 0.8 dB	Generating using Distortion Calibrator Meguro MKS-682
sources Dc Voltage	0 mV to 100 mV 101 mV to 1 V 1.1 V to 10 V 10.1 V to 100V 100.1 V to 1000 V	0.6 µV 8 µV 45 µV 0.7 mV 7 mV	Measurement using Multimeter Agilent 3458A
sources Dc Current	0 mA to 10 mA 10.1 mA to 100 mA 100.1 mA to 1 A	17 µA 2 µA 54 mA	Measurement using Multimeter Agilent 3458A
	1.1 A to 3 A	0.6 mA	Measurement using Multimeter Agilent 34401A

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques	Remarks
sources Ac Voltage	1 mV to 10 mV 45 Hz to 1 kHz 1 mV to 100 mV 45 Hz to 1 MHz 101 mV to 1 V 45 Hz to 1 MHz 1.1 V to 10 V 45 Hz to 1 MHz 11 V to 100 V 45 Hz to 100 kHz 101 V to 1000 V 45 Hz to 1 kHz	4 µV 4 µV 22 µV 0.3 mV 4 mV 32 mV	Measurement using Multimeter Agilent 3458A
sources Ac Current	1 mA to 1 A 45 Hz to 1 kHz 1.1 A to 3 A 45 Hz to 1 kHz	0.4 mA 0.5 mA	Measurement using Multimeter Agilent 34401A
sources Dc Resistance	0 -„¦ 10 µ-„¦ 10.1 µ-„¦ to 100 -„¦ 100.1 -„¦ to 1000 -„¦ 1.1 k-„¦ to 10 k-„¦ 10.1 k-„¦ to 100 k-„¦ 100.1 k-„¦ to 1 M-„¦ 1.1 M-„¦ to 10 M-„¦ 10.1 M-„¦ to 100 M-„¦ 100.1 M-„¦ to 1 G-„¦	0.3 m-„¦ 2 m-„¦ 17 m-„¦ 180 m-„¦ 2 -„¦ 25 -„¦ 0.7 k-„¦ 13 k-„¦ 0.7 M-„¦	Measurement using Multimeter Agilent 3458A
sources Dc High Voltage	1 kV to 2 kV 2.1 kV to 4 kV 4.1 kV to 6 kV 6.1 kV to 8 kV 8.1 kV to 10 kV	6 V 7 V 8 V 8 V 10 V	Measurement using High Voltage Meter Kikusui 149-10A
sources Ac High Voltage At 50 Hz	1 kV to 2 kV 2.1 kV to 4 kV 4.1 kV to 6 kV 6.1 kV to 8 kV 8.1 kV to 10 kV	12 V 13 V 23 V 26 V 29 V	Measurement using High Voltage Meter Kikusui 149-10A
sources Leakage Dc Current	0.4 mA 0.5 mA 0.8 mA 1.0 mA 1.6 mA 2.0 mA 4.0 mA 5.0 mA	24 µA 24 µA 11 µA 11 µA 11 µA 11 µA 23 µA 23 µA	Measurement using Current Calibrator for W. Tester Kikusui TOS1200

Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques	Remarks
sources Leakage Ac Current At 50 Hz	0.4 mA	27 µA	Measurement using Current Calibrator for W. Tester Kikusui TOS1200
	0.5 mA	27 µA	
	0.8 mA	10 µA	
	1.0 mA	10 µA	
	1.6 mA	20 µA	
	2.0 mA	20 µA	
	4.0 mA	50 µA	
	5.0 mA	50 µA	
	8.0 mA	100 µA	
	10.0 mA	100 µA	
	16.0 mA	200 µA	
	20.0 mA	200 µA	
	40.0 mA	400 µA	
	50.0 mA	400 µA	
sources Time Interval	1 s to 2 s 250 ms/div)	0.6 s	Measurement using Oscilloscope Tektronix TDS350
	2 s to 4 s (500 ms/div)	0.6 s	
	4 s to 8 s (1 s/div)	0.6 s	
	8 s to 20 s (2.5 s/div)	0.6 s	
	20 s to 60 s (5 s/div)	0.6 s	
sources Time Base	10 MHz	0.3 Hz	Measurement using Frequency Counter Agilent 5335A
sources Frequency	10 Hz to 100 Hz	50 µHz	Measurement using Frequency Counter Agilent 5385A
	100 Hz to 1 kHz	110 µHz	
	1 kHz to 10 kHz	0.4 mHz	
	10 kHz to 100 kHz	4 mHz	
	100 kHz to 1 MHz	66 mHz	
	1 MHz to 10 MHz	360 mHz	
	10 MHz to 100 MHz	3 Hz	
	100 Mhz to 1 GHz	27 Hz	
	1 GHz to 2 GHz	2 Hz	Measurement using Frequency Counter Anritsu MF76A
	2 GHz to 3 GHz	20 Hz	
sources Distortion	10 Hz to 20 kHz -10 dB to -60 dB	0.1 dB	Measurement using Audio Analyzer Agilent 8903B
sources Attenuation	10 Hz to 20 kHz -10 dB to -60 dB	0.2 dB	Measurement using Audio Analyzer Agilent 8903B

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Material / Product Tested	Type Of Test / Properties Measured / Range Of Measurement	Standard Test Methods / Equipment / Techniques	Remarks
sources Rf Power	100 kHz to 1.3 GHz 10 dBm to -120 dBm -20 dBm to -120 dBm	0.9 dB 1 dB	Measurement using Measuring Receiver Agilent 8902A
sources Frequency Modulation Deviation	Carrier Frequency: 100 kHz to 1.3 GHz @ internal rate 20 Hz to 200 Hz 0.5 kHz to 1 kHz 1 kHz to 10 khz 10 kHz to 100 kHz	 11 Hz 110 Hz 1kHz	Measurement using Measuring Receiver Agilent 8902A
sources Amplitude Modulation Deviation	Carrier Frequency: 100 kHz to 1.3 GHz @ internal rate 20 Hz to 200 kHz 0% to 30% 30% to 60% 60% to 90%	 1% 2% 3%	Measurement using Measuring Receiver Agilent 8902A
oscilloscope Vertical Deflection	Amplitude (Peak-to-peak) 1 M-„¦ Load 200 µV to 100 V	 2.5 mV/V + 1 µ	Generating using Calibration Generator Tektronix PG506
oscilloscope Time Mark	1 ns to 5 s	1 ms/s	Generating using Time Mark Generator Tektronix TG501
oscilloscope Frequency Range	50 kHz to 250 MHz	0.7 of the least significant displayed digit	Measurement using Levelled Sine Wave Generator Tektronix SG503
oscilloscope Amplitude Range	X0.01 Range mV to 50 mV X0.1 Range 50 mV to 500 mV X1 Range 500 mV to 5 V	5 % of reading 4 % of reading 3 % of reading	Measurement using Levelled Sine Wave Generator Tektronix SG503
Dc Current Via Shunt (1 MÏ‰)	0 A to 30 A	1 mA/A	Measurement using Agilent 3458A through Current Shunt Yokogawa 2215