Korea Laboratory Accreditation Scheme

CERTIFICATE OF ACCREDITATION

Korea Testing Instrument Calibration Center

Accreditation No. : KC00-005

Corporation Registration No. : 110111-2326216

Address of Laboratory : (Guro-dong, Samsung IT-valy), 708, 27, Digital-ro 33-gil, Guro-gu, Seoul, Republic of Korea

Date of Initial Accreditation : October 05, 2000.

Validity of Accreditation : October 28, 2021. ~ October 27, 2025.

Scope of Accreditation : Attached Annex

Date of issue : November 02, 2023.

This calibration laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to Joint ISO-ILAC-IAF Communiqué).

CHIN CHONGWOOK

Head
Korea Laboratory Accreditation Scheme

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017 & KS Q ISO/IEC 17025:2017

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CALIBRATION

Valid No : Oct. 27, 2025. Accreditation No. : KC00-005

In recognition of the successful completion of the KOLAS evaluation process,
accreditation is granted to this laboratory to perform the following calibrations

Field Code	Item of Calibration	on-site
102. Linear dimension		
10201	Balls	N
10206	Dial/ cylinder gauge testers	N
10207	Doctor blades	Y
10209	End bars	N
10210	Extensometers, linear displacement transducers	Y
10211	Filler gauges	Y
10212	Film applicators	Y
10213	Gap gauges	Y
10214	Gauge blocks, by comparison	N
10216	Height gauges /measuring machines	Y
10220	Standard measuring machines	Y
10223	Electronic micrometers	N
10224	Height micrometers, riser blocks	N
10225	Laser scan micrometers	Y
10227	Standard tape rules, peripheral gauges	N
10228	Cylindrical plug/ pin gauges, thread measuring wire gauges	N
10229	Radius gauges	N
10230	Cylindrical ring gauges	N
10232	Step gauges	N
10233	Taper thickness gauges	N
10234	Ultrasonic thickness gauges	Y
10235	Ultrasonic/ coating thickness specimens	Y
10236	Coating thickness testers	Y
104. Form		
10404	Optical flats	N
10406	Parallel blocks	Y
10407	Precision surface plates	Y
10412	Straight edges	Y
10413	Straight rules	N
105. Complex geometry		
10503	Contact coordinate measuring machines	Y
10504	Non-contact coordinate measuring machines	Y
10511	Measuring microscopes, Profile projectors	Y
10512	Micro measuring microscopes	Y
10525	Thread plug gauges	N
10527	Thread ring gauges	N
106. Various dimensional		
10601	Inside/ outside/ gear tooth calipers, caliper gauges	Y
10603	Cylinder/bore gauges	Y
10604	Depth gauges, depth micrometers	Y
10605	Dial/digital gauges	Y
10608	Grind gauges	Y
10609	Micro indicators, test indicators	Y
10610	Micrometer heads	Y
10611	3-points micrometers	Y
10612	Inside micrometers	Y
10613	Outside micrometers	Y
10617	Standard sieves	N
10620	Welding gauges	N
201. Mass		
20106	Dial platform scale balances	Y
20109	Electric balances	Y
20112	Platform scale balances	Y
20113	Spring scale balances	Y
20116	Weights	N
202. Force		
20203	Tension/compression testing machines	Y
20204	Push-pull gauges	N
203. Torque		
20302	Torque measuring devices	N
20303	Torque wrenches/drivers	Y
204. Pressure		
20402	Manometers	Y
20406	Absolute pressure gauges	Y
20407	Blood pressure gauges	Y
20408	Compound pressure gauges	Y
20409	Differential pressure gauges	Y
20411	Gauge pressure gauges	Y
20412	Pressure transducers /transmitters	Y
20413	Dial type vacuum gauges	Y
20414	Water depth meters	Y
206. Volume		
20601	Volumetric glasswares	N
20602	Pycnometers	N
20605	Concrete air content meters	N
20606	Piston type volume meters	N
301. Time/frequency		
30102	Frequency standards	N
30103	General frequency sources	Y
30104	Frequency meters/ counters	Y
30105	Time interval sources	Y
30106	Time interval meters/ stop watches/timers	Y
302. Velocity & revolution		
30201	Standard RPM generators	Y
30202	Contact type tachometers	Y
30203	Photo tachometers/ stroboscopes	Y
401. DC voltage & current		
40101	DC ammeters	Y
40102	Transconductance amplifiers	Y
40103	DC voltage/current calibrators	Y
40104	Electrical temperature calibrators	Y
40105	DC current shunts	Y
40106	Galvanometers null detectors	Y
40107	Potentiometers	Y
40108	DC power supplies	Y
40111	DC voltage standards	N
40112	DC voltmeters	Y
40113	Static/ionic voltmeters	N
402. Resistance, capacitance and inductance		
40201	Capacitance bridges/ indicators	Y
40202	Decade capacitors	Y
40204	Standard capacitors	Y
40205	Earth testers	Y
40206	Inductance bridges/ indicators	Y
40208	Inductors	Y
40210	Insulation testers	Y
40213	Resistance bridges & similar instruments	Y

Field Code	Item of Calibration	on-site
40214	Resistance meters	Y
40215	Resistors	Y
40217	Impedance bridges/ LCR meters	Y
403. AC voltage, current & power		
40301	AC ammeters	Y
40302	Clamp ammeters/ voltmeters	Y
40303	AC voltage/ current calibrators	Y
40305	AC current shunts	Y
40307	Voltage/current phase angle meters /synchro resolve meters	Y
40310	Power factor meters	Y
40311	AC power meters	Y
40312	AC power supplies	Y
40313	Puncture/ safety testers	Y
40314	Power recorders	Y
40318	AC voltmeters	Y
404. Other DC & LF measurements		
40401	LF amplifiers	Y
40402	DC/LF attenuators	Y
40403	Multimeter calibrators	Y
40404	Oscilloscope calibrators	Y
40406	Video signal generators	Y
40407	Audio distortion analyzers/meters	Y
40408	LF filters	Y
40409	LF/audio signal analyzers	Y
40410	Line frequency meters	Y
40411	Function generators	Y
40413	AC/DC high voltage voltmeters	Y
40414	LF impulse generators	Y
40416	Leakage current testers	Y
40417	Electronic AC/DC loads	Y
40418	Modulation meters	Y
40419	Analogue/ digital multimeters	Y
40420	Noise meters	Y
40421	Oscilloscopes	Y
40422	LF phase meters	Y
40423	Random wave generators	Y
40424	Voltage/current recorders	Y
40425	Relay test sets	Y
40426	LF signal generators	Y
40427	LF spectrum analyzers	Y
40429	Sweep generators	Y
40430	Signal transducers	Y
40432	Transistor curve tracers	Y
40433	Waveform analyzers	Y
40434	AC/DC high voltage generators	Y
40435	AC/DC high voltage probes	Y
40436	Logic analyzers	Y
40437	Telephone testers	Y
40438	Video signal analyzers	Y
406. Radio frequency measurement		
40601	RF amplifiers	Y
40602	Coaxial attenuators	Y
40604	BER(Bit Error Rate) testers	Y
40605	Burst pulse generators	Y
40607	RF power meter calibrators	Y
40608	EMC transduces; current probes, absorbing clamps, etc.	Y
40610	Coaxial directional couplers/splitters	Y
40612	DS1/DS3 communications systems	Y
40613	Electrostatic discharge generators	N
40614	EMC receivers	Y
40615	RF filters	Y
40616	RF impedance meters	Y
40617	RF impulse generators	Y
40618	Line impedance stabilization networks; LISN, CDN, ISN, etc.	Y
40619	Coaxial standard mismatches	Y
40621	Mobile communication test sets	Y
40622	Modulation meters	Y
40623	Network analyzers	Y
40624	Noise figure meters	Y
40625	Noise generators	Y
40626	Noise impulse simulators	Y
40628	Coaxial noise sources	Y
40631	RF phase meters	Y
40635	RF power meters	Y
40636	Diode power sensors	Y
40637	Thermocouple power sensors	Y
40638	Pulse generators	Y
40639	Radar test sets	Y
40640	RF signal generators	Y
40641	RF spectrum analyzers	Y
40643	Surge generators	Y
40644	SWR meters	Y
40645	RF terminations	Y
40646	Coaxial thermistor mounts	Y
40648	Transmission trouble testers	Y
40650	RF voltmeters	Y
40651	Vector voltmeters	Y
40652	Field strength meters	Y
40653	AM/FM test sources	Y
40654	Dip simulators	Y
407. Field strength & antenna		
40704	Loop antennas	N
40705	Monopole antennas	N
501. Contact thermometry		
50101	Temperature generators; ovens, furnaces, isothermal liquid baths, ice-point baths, dry-block calibrators	Y
50102	Temperature indicators/ recorders/ controllers, temperature calibrators	Y
50103	Glass thermometers; liquid-in-glass, Beckmann	N
50104	Resistance thermometers; SPRT, IPRT, thermistors, etc.	Y
50105	Thermal expansion thermometers; bimetal, gas or liquid type	Y
50106	Thermomecouples; noble metal, base metal pure metal, special type, etc.	N
50107	Temperature transducers	Y
50109	Others; quartz, semiconductivity, optical fiber, etc.	Y
502. Non contact thermometry		
50204	Standard radiation thermometers	N
50205	Thermal image apparatus	N
50206	Blackbody furnaces	Y
50207	Others; ear thermometers, etc.	N
503. Humidity		
50302	Relative humidity hygrometers; polimer thin film, hair, etc.	Y
50304	Temperature humidity recorders; Hygrothermograph, etc.	N
50305	Transducers; dew-point/ relative humidity	N
50306	Humidity generators; two-pressure, two-temperature, flow mixing humidity gererator, constant temperature and humidity chamber, etc.	Y
601. Sound in air		
60106	Sound level meters	Y
603. Vibration		
60301	Vibration calibrators	N
60302	Vibration transducers	N
60303	Vibration measuring instruments	N
701. Photometry		
70101	Illuminance meters	N
704. Fiber optics		
70402	Broadband light sources	Y
70410	Optical attenuators	Y

Field Code	Item of Calibration	on-site	Field Code	Item of Calibration	on-site	Field Code	Item of Calibration	on-site
70411	Optical couplers	Y						
70412	Fiber-optic power meters	Y						
70413	Optical loss testers	Y						
70415	Optical multimeters	Y						
70416	Optical network analyzers	Y						
70417	Optical spectrum analyzers	Y						
70418	Optical time domain reflectometers; OTDR	Y						
70419	PDH/SDH analyzers	Y						
70423	Return loss meters	Y						
70424	SDH/SONET analyzers	Y						
70426	Multi-laser wavelength meters	Y						
70427	Wavelength sweep multichannel measuring systems	Y						
70429	Frequency stabilized lasers and LDs	Y						
70430	ASE light sources	Y						
70431	CW-laser wavelength meters	Y						
70433	Optical power stabilized lasers and LDs	Y						
901. Chemical analysis								
90103	Gas analyzers	N						

Note

1. This laboratory provides calibration services in permanent standard laboratory and at on-site.
2. Laboratory conducts on-site calibration should meet requirements of KOLAS-SR-007.
3. On-site calibration is allowed to items with marking 'Y', not allowed to items with marking 'N'.
4. Measurement uncertainty normally is quoted as an expanded uncertainty at a coverage probability of 95 %, which usually requires the use of a coverage factor of k=2. It expresses the lowest uncertainty of measurement that can be provided by accredited calbration laboratories in normal conditions.
5. Due to the calibration environment such as reference standards or customers' facilities, it is note that uncertainty of measurement on a calibration certificate may be expressed larger than measurement uncertainty on scope of accreditation in general.

102. Linear dimension

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Balls	10201	(0 ~ 100) mm	$\sqrt{(0.60\ \mu m)^2 + (4.2 \times 10^{-6} \times l)^2}$	Standard measuring machine /KTICC-CI-10201
Dial/cylinder gauge testers	10206	(0 ~ 100) mm	$\sqrt{(0.65\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$	Gauge block /KTICC-CI-10206
Doctor blades	10207	(0 ~ 10) mm	2.6 μm	Electronic micrometer /KTICC-CI-10207
End bars	10209	(0 ~ 100) mm	$\sqrt{(1.2\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$	Gauge block/KTICC-CI-10209
Extensometers, linear displacement transducers	10210	(0 ~ 500) mm	$\sqrt{(1.3\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$	Gauge block/KTICC-CI-10210
Filler gauges	10211	(0 ~ 5) mm	1.4 μm	Outside micrometer /KTICC-CI-10211
Film applicators	10212	(0 ~ 1) mm	2.7 μm	Electronic micrometer /KTICC-CI-10212
Gap gauges	10213	(1 ~ 150) mm	$\sqrt{(2.6\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$	Height micrometer /KTICC-CI-10213
Gauge blocks, by comparison	10214	(0.5 ~ 100) mm	$\sqrt{(74\ nm)^2 + (1.3 \times 10^{-6} \times l)^2}$	Gauge block /KTICC-CI-10214
Height gauges/ measuring machines	10216	(0 ~ 1 000) mm	$\sqrt{(1.5\ \mu m)^2 + (3 \times 10^{-6} \times l)^2}$	Gauge block /KTICC-CI-10216
Standard measuring machines	10220	(0 ~ 300) mm	$\sqrt{(0.4\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$	Gauge block/KTICC-CI-10220
Electronic micrometers	10223	(0 ~ 10) mm	0.15 μm	Gauge block/KTICC-CI-10223
Height micrometers, riser blocks	10224			Gauge block /KTICC-CI-10224
Height micrometers				
Block		(0 ~ 610) mm	$\sqrt{(1.2\ \mu m)^2 + (3 \times 10^{-6} \times l)^2}$	
Head		(0 ~ 25) mm	$\sqrt{(0.68\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$	
Riser blocks		(0 ~ 600) mm	$\sqrt{(1.2\ \mu m)^2 + (3 \times 10^{-6} \times l)^2}$	
Laser scan micrometers	10225	(1 ~ 25) mm	0.41 μm	Cylindrical plug gauges /KTICC-CI-10225
Standard tape rules, peripheral gauges	10227			Standard rules /KTICC-CI-10227
		(0 ~ 5) m	$\sqrt{(0.07\ mm)^2 + (10 \times 10^{-6} \times l)^2}$	
		(5 ~ 20) m	$\sqrt{(0.22\ mm)^2 + (10 \times 10^{-6} \times l)^2}$	
		(20 ~ 50) m	$\sqrt{(0.62\ mm)^2 + (10 \times 10^{-6} \times l)^2}$	
Cylindrical plug/pin gauges, thread measuring wire gauges	10228	(0 ~ 25) mm (0 ~ 10) mm	0.9 μm 0.62 μm	Laserscan micrometer Standard measuring machine /KTICC-CI-10228
Radius gauges	10229	(0.4 ~ 100) mm	1.3 μm	Non-contact coordinate measuring machine /KTICC-CI-10229
Cylindrical ring gauges	10230	(5 ~ 200) mm	$\sqrt{(0.74\ \mu m)^2 + (3 \times 10^{-6} \times D)^2}$	Standard measuring machines /KTICC-CI-10230
Step gauges	10232	(0 ~ 670) mm	$\sqrt{(1.2\ \mu m)^2 + (3 \times 10^{-6} \times l)^2}$	Gauge block/KTICC-CI-10232
Taper thickness gauges	10233	(0 ~ 90) mm	1.6 μm	Non-contact coordinate measuring machine /KTICC-CI-10233
Ultrasonic thickness gauges	10234	(0 ~ 300) mm	3.4 μm	Ultrasonic test block /KTICC-CI-10234

102. Linear dimension

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Ultrasonic/ coating thickness specimens Ultrasonic test blocks	10235	 (0 ~ 25) mm (0 ~ 500) mm	 0.6 μm $\sqrt{(1.3\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$	Outside micrometer, Gauge block KTICC-CI-10235
Coating thickness testers	10236	(0 ~ 1.5) mm (1.5 ~ 7.8) mm (7.8 ~ 25) mm	1.6 μm 7.6 μm 71 μm	Coating standard specimens /KTICC-CI-10236

104. Form

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Optical flats	10404	(0 ~ 60) mm	0.035 μm	Optical flats /KTICC-CI-10404
Parallel blocks Parallelism Flates Height and width difference	10406	 (0 ~ 300) mm (0 ~ 300) mm (0 ~ 300) mm	 1.2 μm 1.2 μm 1.7 μm	Electronic micrometer /KTICC-CI-10406
Precision surface plates Diagonal length	10407	(0 ~ 5 000) mm	3.3 μm	Electronic levels /KTICC-CI-10407
Straight edges Straightness Parallelism	10412	 (0 ~ 2 500) mm (0 ~ 2 500) mm	 3.6 μm 3.5 μm	Electronic levels /KTICC-CI-10412
Straight rules	10413	(0 ~ 2 000) mm	$\sqrt{(0.06\ mm)^2 + (10 \times 10^{-6} \times l)^2}$	Standard rules /KTICC-CI-10413

105. Complex geometry

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Contact coordinate measuring machines Axis accuracy	10503	 (0 ~ 1 000) mm	 $\sqrt{(0.8\ \mu m)^2 + (3 \times 10^{-6} \times l)^2}$	Step gauge /KTICC-CI-10503
Non-contact coordinate measuring machines Axis accuracy Squreness	10504	 (0 ~ 500) mm (0 ~ 490) mm	 $\sqrt{(0.5\ \mu m)^2 + (4 \times 10^{-6} \times l)^2}$ 2.2 μm	Standard scales /KTICC-CI-10504
Measuring microscopes, Profile projectors Axis accuracy Squreness	10511	 (0 ~ 500) mm (0 ~ 490) mm	 $\sqrt{(0.86\ \mu m)^2 + (3 \times 10^{-6} \times l)^2}$ 2.2 μm	Standard scales /KTICC-CI-10511

105. Complex geometry

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Micro measuring microscopes	10512	(0 ~ 30) mm	$\sqrt{(5\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$	Standard scales /KTICC-CI-10512
Thread plug gauges	10525			Standard measuring machine
Outside diameter		(0 ~ 200) mm	1.8 μm	/KTICC-CI-10525
Effective diameter		(0 ~ 200) mm	2.1 μm	
Pitch		(0.2 ~ 5) mm	1.4 μm	
Half angle		(0 ~ 45)°	2′	
Thread ring gauges	10527			Standard measuring machine
Bore diameter		(5 ~ 100) mm	2.1 μm	/KTICC-CI-10527
Effective diameter		(5 ~ 100) mm	1.6 μm	
Pitch		(0.5 ~ 5) mm	0.7 μm	

106. Various dimensional

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Inside/outside/gear tooth calipers, Caliper gauges	10601	(0 ~ 1 000) mm (0 ~ 120) mm	$\sqrt{(9.2\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$ $\sqrt{(6.0\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$	Caliper checker, Gauge block /KTICC-CI-10601
Cylinder/bore gauges	10603	(0 ~ 500) mm	0.8 μm	Dial gage tester /KTICC-CI-10603
Depth gauges, depth micrometers	10604	(0 ~ 600) mm (0 ~ 300) mm	$\sqrt{(7.4\ \mu m)^2 + (3 \times 10^{-6} \times l)^2}$ $\sqrt{(1.8\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$	Gauge block/KTICC-CI-10604
Dial/digital gauges	10605	(0 ~ 100) mm	0.80 μm	Dial gage tester /KTICC-CI-10605
Grind gauges	10608			Electronic micrometer
Slope depth		(0 ~ 1) mm	2.8 μm	/KTICC-CI-10608
Scraper straightness		(0 ~ 1) mm	1.4 μm	
Micro indicators, Test indicators	10609	(0 ~ 2) mm (0 ~ 2) mm	0.74 μm 0.74 μm	Dial gage tester /KTICC-CI-10609
Micrometer heads	10610	(0 ~ 50) mm	$\sqrt{(1.0\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$	Gauge block /KTICC-CI-10610
3-points micrometers	10611	Ø(2 ~ 100) mm	1.8 μm	Ring gauge /KTICC-CI-10611
Inside micrometers	10612	(0 ~ 300) mm	$\sqrt{(1.2\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$	Gauge block
Bar type micrometers		(0 ~ 300) mm	$\sqrt{(1.2\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$	/KTICC-CI-10612
Outside micrometers	10613	(0 ~ 300) mm (300 ~ 1 000) mm	$\sqrt{(0.9\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$ $\sqrt{(1.9\ \mu m)^2 + (2 \times 10^{-6} \times l)^2}$	Gauge block, Pluge gauge /KTICC-CI-10613
V-anvil micrometers		(1 ~ 25) mm	1.2 μm	
Standard sieves	10617			Non-contact coordinate
Wire rod diameter		(0 ~ 10) mm	5.4 μm	measuring machine
Sieve opening		(0 ~ 150) mm	7.8 μm	/KTICC-CI-10617
Welding gauges	10620			Non-contact coordinate
Length		(0 ~ 90) mm	6.1 μm	measuring machine
Angle		(0 ~ 180)°	7.8′	/KTICC-CI-10620

201. MASS

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Dial platform scale balances	20106	(0 ~ 1) kg (1 ~ 10) kg (10 ~ 50) kg (50 ~ 100) kg (100 ~ 200) kg	2.9 g 15 g 62 g 0.15 kg 0.29 kg	Weight/KTICC-CI-20106
Electric balances	20109	(0 ~ 6) g (6 ~ 30) g (30 ~ 50) g (50 ~ 100) g (100 ~ 200) g (200 ~ 500) g (500 ~ 1 200) g (1 200 ~ 2 000) g (2 ~ 5) kg (5 ~ 10) kg (10 ~ 30) kg (30 ~ 60) kg (60 ~ 150) kg (150 ~ 300) kg (300 ~ 600) kg	0.048 mg 0.090 mg 0.096 mg 0.15 mg 0.24 mg 0.48 mg 1.4 mg 2.1 mg 4.8 mg 9.6 mg 21 mg 43 mg 6.5 g 13 g 0.13 kg	Weight/KTICC-CI-20109
Platform scale balances	20112	 (0 ~ 50) kg (50 ~ 100) kg (100 ~ 200) kg	 8 g 18 g 35 g	Weight/KTICC-CI-20112
Spring scale balances	20113	(0 ~ 1) kg (1 ~ 10) kg (10 ~ 50) kg (50 ~ 100) kg	2.9 g 15 g 62 g 0.15 kg	Weight/KTICC-CI-20113
Weights	20116	1 mg ~ 20 kg 1 mg 2 mg 5 mg 10 mg 20 mg 50 mg 100 mg 200 mg 500 mg 1 g 2 g 5 g 10 g 20 g 50 g 100 g 200 g 500 g 1 kg 2 kg 5 kg 10 kg 20 kg	Class F1 4.6 µg 4.6 µg 4.6 µg 4.6 µg 5.1 µg 6.5 µg 6.5 µg 7.3 µg 9.0 µg 16 µg 18 µg 23 µg 26 µg 31 µg 37 µg 0.10 mg 0.13 mg 0.28 mg 0.54 mg 1.0 mg 2.8 mg 5.4 mg 10 mg	Weight/KTICC-CI-20116

202. Force

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Tension/compression testing machines	20203			Load Cell /KTICC-CI-20203
Tension		(30 ~ 5 000) N	1.5×10^{-3}	
		(5 ~ 20) kN	1.6×10^{-3}	
Compression		(30 ~ 300) N	1.6×10^{-3}	
		(300 ~ 500) N	1.5×10^{-3}	
		(0.5 ~ 1) kN	1.6×10^{-3}	
		(1 ~ 10) kN	1.5×10^{-3}	
		(10 ~ 30) kN	2.0×10^{-3}	
		(30 ~ 50) kN	2.1×10^{-3}	
		(50 ~ 100) kN	1.7×10^{-3}	
		(100 ~ 300) kN	2.0×10^{-3}	
		(300 ~ 500) kN	1.6×10^{-3}	
		(500 ~ 1 000) kN	1.5×10^{-3}	
		(1 000 ~ 2 000) kN	3.5×10^{-3}	
Push-pull gauges	20204			Weight/KTICC-CI-20204
Push, Pull		(1 ~ 500) N	1.3×10^{-3}	

203. Torque

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Torque measuring devices	20302			Torque calibration system /KTICC-CI-20302
		(0.1 ~ 1) N·m	2.4×10^{-3}	
		(1 ~ 5) N·m	2.6×10^{-3}	
		(5 ~ 10) N·m	1.3×10^{-3}	
		(10 ~ 20) N·m	1.7×10^{-3}	
		(20 ~ 200) N·m	1.1×10^{-3}	
Torque wrenches/drivers	20303			Torque calibration system Standard weights, Torque cell /KTICC-CI-20303
		(0.05 ~ 0.5) N·m	3.0×10^{-2}	
		(0.5 ~ 1) N·m	3.0×10^{-2}	
		(1 ~ 5) N·m	1.0×10^{-2}	
		(5 ~ 10) N·m	1.1×10^{-2}	
		(10 ~ 25) N·m	4.8×10^{-3}	
		(25 ~ 50) N·m	4.7×10^{-3}	
		(50 ~ 100) N·m	5.2×10^{-3}	
		(100 ~ 250) N·m	2.5×10^{-3}	
		(250 ~ 500) N·m	3.7×10^{-3}	
		(500 ~ 1 000) N·m	3.9×10^{-3}	

204. Pressure

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Manometers	20402			Pressure generator & controller
Well, U type		(0 ~ 100) kPa	2.0×10^{-3}	/KTICC-CI-20402
Inclined tube		(0 ~ 10) kPa	2.4×10^{-3}	
Absolute pressure gauges	20406			Pressure generator & controller
		(75 ~ 135) kPa abs.	9.4×10^{-5}	/KTICC-CI-20406
		(0.135 ~ 7) MPa abs.	6.5×10^{-4}	
Blood pressure gauges	20407	(0 ~ 40) kPa	9.7×10^{-4}	Pressure generator & controller /KTICC-CI-20407
Compound pressure gauges	20408	(-0.095 ~ 7) MPa	6.1×10^{-4}	Deadweight tester Pressure generator & controller /KTICC-CI-20408
Differential pressure gauges	20409			Pressure generator & controller
		(0 ~ 3) MPa	5.9×10^{-4}	/KTICC-CI-20409
Gauge pressure gauges	20411			Deadweight tester
Gauge pressure gauges				/KTICC-CI-20411
		(0 ~ 40) kPa	2.7×10^{-4}	
		(0.04 ~ 10) MPa	1.1×10^{-4}	
		(10 ~ 110) MPa	1.3×10^{-4}	
Pressure transducers/transmitters	20412			Deadweight tester
		(-95 ~ 0) kPa	9.7×10^{-4}	/KTICC-CI-20412
		(0 ~ 40) kPa	6.8×10^{-4}	
		(0.04 ~ 110) MPa	3.8×10^{-4}	
Dial type vacuum gauges	20413	(-95 ~ 0) kPa	3.0×10^{-3}	Pressure generator & controller /KTICC-CI-20413
Water depth meters	20414	(0 ~ 100) m	2.5×10^{-3}	Pressure generator & controller /KTICC-CI-20414

206. Volume

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Volumetric glasswares	20601			Electric balances
		(0 ~ 1) ml	1.8 µl	/KTICC-CI-20601
		(1 ~ 2) ml	2.4 µl	
		(2 ~ 5) ml	3.5 µl	
		(5 ~ 10) ml	4.7 µl	
		(10 ~ 25) ml	7.8 µl	
		(25 ~ 50) ml	13 µl	
		(50 ~ 100) ml	23 µl	
		(100 ~ 200) ml	32 µl	
		(200 ~ 250) ml	50 µl	
		(250 ~ 500) ml	74 µl	
		(500 ~ 1 000) ml	0.13 ml	
		(1 000 ~ 2 000) ml	0.24 ml	
Pycnometers	20602			Electric balances
		(0 ~ 50) ml	4.5 µl	/KTICC-CI-20602
		(50 ~ 100) ml	9.3 µl	
		(100 ~ 500) ml	45 µl	

206. Volume

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Concrete air content meters	20605	(0 ~ 10) %	0.06 %	Electric balances /KTICC-CI-20605
Piston type volume meters	20606	(0 ~ 10) µl (10 ~ 20) µl (20 ~ 50) µl (50 ~ 100) µl (100 ~ 200) µl (200 ~ 500) µl (500 ~ 1 000) µl (1 ~ 2) ml (2 ~ 5) ml (5 ~ 10) ml (10 ~ 20) ml	0.012 µl 0.029 µl 0.070 µl 0.090 µl 0.14 µl 0.31 µl 0.60 µl 1.2 µl 3.0 µl 5.9 µl 12 µl	Electric balances /KTICC-CI-20606

301. Time/frequency

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Frequency standards	30102	(1 ~ 10) MHz	5.9×10^{-13}	Frequency standard /KTICC-CI-30102
General frequency sources	30103	(1 ~ 10) MHz	5.9×10^{-13}	Frequency standard /KTICC-CI-30103
Frequency meters/counters Compared to the frequency standard Input Frequency Reference Output	30104	 10 MHz 1 Hz ~ 5 GHz (5 ~ 40) GHz (1 ~ 10) MHz	 7.6×10^{-12} 1.2×10^{-10} 1.3 Hz 5.9×10^{-13}	Frequency Standard /KTICC-CI-30104
Time interval sources	30105	 1 ns ~ 1 s (1 ~ 5) s	 6.1×10^{-6} 1.2×10^{-6}	Frequency Counter /KTICC-CI-30105
Time interval meters/stop watches/timers Stop watches Time interval meters/timers	30106	 (0.1 ~ 86 400) s (1 ~ 10 000) s	 1.4×10^{-7} 6.1×10^{-5}	Watch test equipmnent, Oscilloscope /KTICC-CI-30106

302. Velocity & revolution

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Standard RPM generators	30201	(1 ~ 30) min^{-1} (30 ~ 90) min^{-1} (90 ~ 300) min^{-1} (300 ~ 900) min^{-1} (900 ~ 3 000) min^{-1} (3 000 ~ 9 000) min^{-1} (9 000 ~ 30 000) min^{-1} (30 000 ~ 60 000) min^{-1} (60 000 ~ 99 999) min^{-1}	0.02 min^{-1} 0.03 min^{-1} 0.2 min^{-1} 0.3 min^{-1} 2 min^{-1} 3 min^{-1} 8 min^{-1} 15 min^{-1} 24 min^{-1}	RPM Calibration system /KTICC-CI-30201
Contact type tachometers	30202	(1 ~ 600) min^{-1} (600 ~ 4 000) min^{-1}	0.10 min^{-1} 0.12 min^{-1}	RPM Calibration system /KTICC-CI-30202
Photo tachometers/storoboscopes Photo tachometers Stroboscope	30203	3 min^{-1} (3 ~ 600) min^{-1} (600 ~ 6 000) min^{-1} (6 000 ~ 600 000) min^{-1} (30 ~ 300 000) min^{-1}	0.006 min^{-1} 0.06 min^{-1} 0.09 min^{-1} 0.6 min^{-1} 0.01 min^{-1}	RPM Calibration system /KTICC-CI-30203

401. DC voltage & current

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
DC ammeters	40101	(±)		Meter calibrator
DC Current		0 nA	0.46 pA	/KTICC-CI-40101
		(0 ~ 19) nA	2.3×10^{-4}	
		(19 ~ 190) nA	1.2×10^{-4}	
		(0.19 ~ 1.9) μA	5.2×10^{-5}	
		(1.9 ~ 19) μA	3.2×10^{-5}	
		(19 ~ 190) μA	1.8×10^{-5}	
		(0.19 ~ 1) mA	4.3×10^{-5}	
		(1 ~ 10) mA	4.0×10^{-5}	
		(10 ~ 19) mA	3.8×10^{-5}	
		(19 ~ 100) mA	5.3×10^{-5}	
		(100 ~ 190) mA	5.0×10^{-5}	
		(0.19 ~ 1) A	9.4×10^{-5}	
		(1 ~ 1.9) A	8.9×10^{-5}	
		(1.9 ~ 2) A	9.0×10^{-5}	
		(2 ~ 10) A	4.2×10^{-4}	
		(10 ~ 100) A	1.5×10^{-4}	
Transconductance amplifiers	40102	(±)		DMM, Current shunt
DC Current		0 mA	1.2 nA	Meter calibrator
		(0 ~ 1) mA	1.4×10^{-5}	/KTICC-CI-40102
		(1 ~ 10) mA	1.5×10^{-5}	
		(10 ~ 100) mA	1.8×10^{-5}	
		(0.1 ~ 1) A	6.0×10^{-5}	
		(1 ~ 10) A	8.9×10^{-5}	
		(10 ~ 100) A	5.8×10^{-4}	
AC Current		(0.04 ~ 1) kHz		
		(0.009 ~ 100) mA	4.5×10^{-4}	
		(0.1 ~ 1) A	8.8×10^{-4}	
		(1 ~ 10) A	1.1×10^{-3}	
		(10 ~ 100) A	1.2×10^{-3}	
DC voltage/current calibrators	40103	(±)		DMM, Current shunt
DC Voltage		0 mV	0.38 μV	/KTICC-CI-40103
		(0 ~ 100) mV	8.9×10^{-6}	
		(0.1 ~ 1) V	3.8×10^{-6}	
		(1 ~ 10) V	3.8×10^{-6}	
		(10 ~ 100) V	6.0×10^{-6}	
		(100 ~ 1 000) V	6.1×10^{-6}	
DC Current		(±)		
		0 nA	0.01 pA	
		(0 ~ 1) nA	2.3×10^{-4}	
		(1 ~ 10) nA	1.2×10^{-4}	
		(10 ~ 100) nA	1.0×10^{-5}	
		(0.1 ~ 1) μA	7.0×10^{-6}	
		(1 ~ 10) μA	6.0×10^{-6}	
		(10 ~ 100) μA	6.5×10^{-6}	
		(0.1 ~ 1) mA	7.8×10^{-6}	
		(1 ~ 10) mA	8.3×10^{-6}	
		(10 ~ 100) mA	1.3×10^{-5}	
		(0.1 ~ 1) A	5.9×10^{-5}	
		(1 ~ 10) A	8.8×10^{-5}	
		(10 ~ 20) A	1.2×10^{-4}	
		(20 ~ 100) A	5.8×10^{-4}	

401. DC voltage & current

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Electrical temperature calibrators (Sensor not included)	40104			Meter calibrator, DMM /KTICC-CI-40104
Output DC Voltage		(±)		
		0 mV	0.10 μV	
		(0 ~ 1) mV	1.1×10^{-4}	
		(1 ~ 10) mV	1.6×10^{-5}	
		(10 ~ 100) mV	8.9×10^{-6}	
		(0.1 ~ 1) V	3.8×10^{-6}	
		(1 ~ 10) V	3.5×10^{-6}	
		(10 ~ 100) V	4.6×10^{-6}	
Output DC Current				
Output DC Current		(±)		
		0 mA	0.012 nA	
		(0 ~ 1) mA	6.5×10^{-6}	
		(1 ~ 10) mA	8.3×10^{-6}	
		(10 ~ 110) mA	1.3×10^{-5}	
Output Resistance		0 Ω	4.1 μΩ	
		(0 ~ 1) Ω	1.6×10^{-5}	
		(1 ~ 10) Ω	1.1×10^{-5}	
		(10 ~ 100) Ω	8.7×10^{-6}	
		(0.1 ~ 10) kΩ	7.4×10^{-6}	
Input DC Voltage		(±)		
		0 mV	0.41 μV	
		(0 ~ 10) mV	4.8×10^{-5}	
		(10 ~ 100) mV	1.1×10^{-5}	
		(0.1 ~ 1) V	5.9×10^{-6}	
		(1 ~ 10) V	4.0×10^{-6}	
		(10 ~ 100) V	5.9×10^{-6}	
		(100 ~ 300) V	8.3×10^{-6}	
Input DC Current		(±)		
		0 mA	6.2 nA	
		(0 ~ 1) mA	4.3×10^{-5}	
		(1 ~ 10) mA	4.0×10^{-5}	
		(10 ~ 110) mA	5.3×10^{-5}	
Input Resistance		0 Ω	0.61 μΩ	
		(0 ~ 1) Ω	1.1×10^{-5}	
		(1 ~ 10) Ω	2.4×10^{-5}	
		(10 ~100) Ω	8.0×10^{-6}	
		(0.1 ~ 1) kΩ	1.0×10^{-5}	
		(1 ~ 10) kΩ	6.9×10^{-6}	

401. DC voltage & current

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
DC current shunts Resistance	40105	(0.1 ~ 10) kΩ (10 ~ 100) Ω (1 ~ 10) Ω (0.1 ~ 1) Ω (0.01 ~ 0.1) Ω (0.001 ~ 0.01) Ω (0.5 ~ 1) mΩ (0 ~ 0.5) mΩ	7.4×10^{-6} 8.7×10^{-6} 1.1×10^{-5} 1.6×10^{-5} 9.5×10^{-5} 4.2×10^{-4} 1.3×10^{-4} 1.4×10^{-4}	Meter calibrator, DMM /KTICC-CI-40105
Galvanometers/null detectors DC Voltage	40106	(±) 0 μV (0 ~ 1) μV (1 ~ 3) μV (3 ~ 10) μV (10 ~ 30) μV (30 ~ 100) μV (100 ~ 300) μV (0.3 ~ 1) mV (1 ~ 3) mV (3 ~ 10) mV (10 ~ 30) mV (30 ~ 100) mV (100 ~ 300) mV (0.3 ~ 1) V (1 ~ 3) V (3 ~ 10) V (10 ~ 30) V (30 ~ 100) V (100 ~ 300) V (300 ~ 1 000) V	5.8 nV 5.8×10^{-3} 9.7×10^{-3} 5.8×10^{-3} 9.7×10^{-3} 5.8×10^{-3} 9.7×10^{-3} 5.8×10^{-3} 9.7×10^{-3} 5.8×10^{-3} 9.7×10^{-3} 5.8×10^{-3} 9.7×10^{-3} 5.8×10^{-3} 9.7×10^{-3} 5.8×10^{-3} 9.7×10^{-3} 5.8×10^{-3}	Meter calibrator /KTICC-CI-40106
Potentiometers DC Voltage	40107	(±) 0 mV (0 ~ 1) mV (1 ~ 10) mV (10 ~ 100) mV (0.1 ~ 1) V (1 ~ 10) V (10 ~ 100) V (100 ~ 1000) V	0.41 μV 4.7×10^{-4} 5.3×10^{-5} 1.3×10^{-5} 8.5×10^{-6} 7.3×10^{-6} 8.5×10^{-6} 9.5×10^{-6}	Meter calibrator /KTICC-CI-40107
DC power supplies DC Voltage	40108	(±) 0 V (0 ~ 0.1) V (0.1 ~ 1) V (1 ~ 10) V (10 ~ 20) V (20 ~ 30) V (30 ~ 40) V (40 ~ 100) V (100 ~ 1 000) V	0.62 μV 1.1×10^{-5} 7.2×10^{-6} 7.2×10^{-6} 8.0×10^{-6} 7.0×10^{-6} 6.8×10^{-6} 8.6×10^{-6} 8.6×10^{-6}	DMM, Current shunt, C.T /KTICC-CI-40108

401. DC voltage & current

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
DC power supplies DC Current	40108	(±) 0 A (0 ~ 0.1) A (0.1 ~ 1) A (1 ~ 1.5) A (1.5 ~ 1.9) A (1.9 ~ 15) A (15 ~ 20) A (20 ~ 100) A (100 ~ 1 000) A	 0.62 μA 7.7×10^{-5} 2.0×10^{-4} 1.9×10^{-4} 1.8×10^{-4} 2.4×10^{-4} 2.5×10^{-4} 5.9×10^{-4} 3.6×10^{-4}	DMM, Current shunt, C.T /KTICC-CI-40108
DC voltage standards DC Voltage	40111	1.018 V 10 V	1.6×10^{-6} 1.6×10^{-6}	Null detector, DC standard /KTICC-CI-40111
DC voltmeters DC Voltage	40112	(±) 0 mV (0 ~ 1) mV (1 ~ 1.9) mV (1.9 ~ 10) mV (10 ~ 19) mV (19 ~ 100) mV (100 ~ 190) mV (0.19 ~ 1) V (1 ~ 1.9) V (1.9 ~ 10) V (10 ~ 19) V (19 ~ 100) V (100 ~ 190) V (190 ~ 1 000) V	 0.41 μV 4.2×10^{-4} 2.2×10^{-4} 4.9×10^{-5} 2.9×10^{-5} 1.2×10^{-5} 1.0×10^{-5} 5.9×10^{-6} 5.8×10^{-6} 4.0×10^{-6} 3.8×10^{-6} 5.9×10^{-6} 5.8×10^{-6} 7.3×10^{-6}	Meter calibrator /KTICC-CI-40112

401. DC voltage & current

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Static/ionicvoltmeters	40113	(±)		High voltage power supply,
DC Voltage		0 kV	0.61 V	High voltage test equipment,
		(0 ~ 1) kV	1.3×10^{-3}	DMM
		(1 ~ 2) kV	1.2×10^{-3}	/KTICC-CI-40113
		(2 ~ 3) kV	2.4×10^{-3}	
		(3 ~ 4) kV	1.9×10^{-3}	
		(4 ~ 5) kV	1.7×10^{-3}	
		(5 ~ 6) kV	1.6×10^{-3}	
		(6 ~ 8) kV	1.4×10^{-3}	
		(8 ~ 15) kV	1.3×10^{-3}	
		(15 ~ 50) kV	1.2×10^{-3}	
Ion Voltage		(±)		
		0 V	0.61 mV	
		(0 ~ 10) V	6.1×10^{-4}	
		(10 ~ 20) V	3.1×10^{-4}	
		(20 ~ 40) V	1.5×10^{-4}	
		(40 ~ 60) V	1.0×10^{-4}	
		(60 ~ 80) V	7.6×10^{-5}	
		(80 ~ 100) V	6.1×10^{-4}	
		(100 ~ 150) V	4.1×10^{-4}	
		(150 ~ 200) V	3.1×10^{-4}	
		(200 ~ 400) V	1.5×10^{-4}	
		(400 ~ 600) V	1.0×10^{-4}	
		(600 ~ 800) V	7.6×10^{-5}	
		(800 ~ 1 000) V	6.1×10^{-4}	

402. Resistance, capacitance and inductance

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Capacitance bridges/indicators	40201			Standard Capacitor, DMM,
Frequency		10 Hz ~ 100 MHz	6.1×10^{-7}	Frequency Counter /KTICC-CI-40201
Voltage		1 mV		
		(0.04 ~ 10) kHz	1.1×10^{-3}	
		(10 ~ 50) kHz	1.6×10^{-3}	
		(50 ~ 100) kHz	2.0×10^{-3}	
		(0.1 ~ 1) MHz	9.7×10^{-3}	
		(1 ~ 10) mV		
		40 Hz	1.6×10^{-4}	
		(0.04 ~ 10) kHz	1.5×10^{-4}	
		(10 ~ 50) kHz	2.2×10^{-4}	
		(50 ~ 100) kHz	2.7×10^{-4}	
		(0.10 ~ 1) MHz	2.6×10^{-3}	
		(10 ~ 100) mV		
		40 Hz	7.4×10^{-5}	
		(0.04 ~ 10) kHz	7.2×10^{-5}	
		(10 ~ 50) kHz	7.7×10^{-5}	
		(50 ~ 100) kHz	1.0×10^{-4}	
		(0.10 ~ 1) MHz	1.0×10^{-3}	
		(0.1 ~ 1) V		
		40 Hz	6.7×10^{-5}	
		(0.04 ~ 10) kHz	6.5×10^{-5}	
		(10 ~ 50) kHz	6.7×10^{-5}	
		(50 ~ 100) kHz	7.7×10^{-5}	
		(0.1 ~ 1) MHz	9.6×10^{-4}	
		(1 ~ 2) V		
		40 Hz	4.1×10^{-5}	
		(0.04 ~ 10) kHz	3.8×10^{-5}	
		(10 ~ 50) kHz	4.1×10^{-5}	
		(50 ~ 100) kHz	5.5×10^{-5}	
		(0.10 ~ 1) MHz	9.5×10^{-4}	
		(2 ~ 5) V		
		40 Hz	3.2×10^{-5}	
		(0.04 ~ 1) kHz	2.4×10^{-5}	
		(1 ~ 10) kHz	2.6×10^{-5}	
		(10 ~ 50) kHz	3.0×10^{-5}	
		(50 ~ 100) kHz	5.8×10^{-5}	
		(0.10 ~ 1) MHz	1.2×10^{-3}	
Capacitance		1 pF		
		1 kHz	4.6×10^{-4}	
		(0.001 ~ 1) MHz	4.3×10^{-4}	
		(1 ~ 2) MHz	4.8×10^{-4}	
		(2 ~ 3) MHz	5.8×10^{-4}	
		(3 ~ 4) MHz	7.5×10^{-4}	
		(4 ~ 5) MHz	9.7×10^{-4}	
		(5 ~ 10) MHz	3.4×10^{-3}	
		(10 ~ 13) MHz	4.3×10^{-3}	

402. Resistance, capacitance and inductance

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Capacitance bridges/indicators Capacitance	40201	(1 ~ 10) pF		Standard Capacitor, DMM, Frequency Counter
		1 kHz	3.4×10^{-5}	/KTICC-CI-40201
		(0.001 ~ 5) MHz	4.2×10^{-4}	
		(5 ~ 13) MHz	2.4×10^{-3}	
		(10 ~ 100) pF		
		1 kHz	3.4×10^{-5}	
		(0.001 ~ 2) MHz	4.2×10^{-4}	
		(2 ~ 4) MHz	4.3×10^{-4}	
		(4 ~ 5) MHz	4.4×10^{-4}	
		(5 ~13) MHz	2.4×10^{-3}	
		(0.1 ~ 1) nF		
		1 kHz	3.4×10^{-5}	
		(0.001 ~ 1) MHz	4.3×10^{-4}	
		(1 ~ 2) MHz	4.5×10^{-4}	
		(2 ~ 3) MHz	5.1×10^{-4}	
		(3 ~ 4) MHz	6.1×10^{-4}	
		(4 ~ 5) MHz	7.5×10^{-4}	
		(5 ~ 10) MHz	3.1×10^{-3}	
		(10 ~ 13) MHz	3.8×10^{-3}	
		(1 ~ 10) nF		
		120 Hz	2.5×10^{-4}	
		(0.12 ~ 1) kHz	1.3×10^{-4}	
		(1 ~ 100) kHz	2.5×10^{-4}	
		(10 ~ 100) nF		
		120 Hz	2.5×10^{-4}	
		(0.12 ~ 1) kHz	1.5×10^{-4}	
		(1 ~ 100) kHz	2.5×10^{-4}	
		(0.1 ~ 1) µF		
		120 Hz	2.5×10^{-4}	
		(0.12 ~ 1) kHz	1.5×10^{-4}	
		(1 ~ 10) kHz	2.5×10^{-4}	
		(10 ~ 100) kHz	2.6×10^{-4}	
		(1 ~ 10) µF		
		(0.12 ~ 1) kHz	5.9×10^{-4}	
		(10 ~ 100) µF		
		120 Hz	6.1×10^{-4}	
		(0.12 ~ 1) kHz	6.0×10^{-4}	
		(0.1 ~ 10) mF		
		(0.12 ~ 1) kHz	2.9×10^{-3}	
Decade capacitors Capacitance	40202	1 kHz		LCR Meter /KTICC-CI-40202
		(1 ~ 100) pF	3.5×10^{-4}	
		(0.1 ~ 1) nF	2.7×10^{-4}	
		(1 ~ 10) nF	3.0×10^{-4}	
		(0.01 ~ 1) µF	3.1×10^{-4}	
		(1 ~ 10) µF	6.6×10^{-4}	
		(10 ~ 100) µF	7.0×10^{-4}	

402. Resistance, capacitance and inductance

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Standard capacitors	40204			LCR Meter
Capacitance		1 pF		/KTICC-CI-40204
		1 kHz	5.8×10^{-4}	
		(0.001 ~ 1) MHz	5.5×10^{-4}	
		(1 ~ 3) MHz	1.1×10^{-3}	
		(3 ~ 4) MHz	1.2×10^{-3}	
		(4 ~ 5) MHz	1.4×10^{-3}	
		(5 ~10) MHz	3.4×10^{-3}	
		(10 ~ 13) MHz	4.5×10^{-3}	
		(1 ~ 10) pF		
		1 kHz	3.5×10^{-4}	
		(0.001 ~ 5) MHz	5.0×10^{-4}	
		(5 ~ 13) MHz	2.4×10^{-3}	
		(10 ~ 100) pF		
		1 kHz	3.5×10^{-4}	
		(0.001 ~ 2) MHz	5.0×10^{-4}	
		(2 ~ 5) MHz	5.1×10^{-4}	
		(5 ~ 13) MHz	2.4×10^{-3}	
		(0.1 ~ 1) nF		
		1 kHz	2.7×10^{-4}	
		(0.001 ~ 1) MHz	5.1×10^{-4}	
		(1 ~ 2) MHz	5.2×10^{-4}	
		(2 ~ 3) MHz	5.8×10^{-4}	
		(3 ~ 4) MHz	6.7×10^{-4}	
		(4 ~ 5) MHz	8.0×10^{-4}	
		(5 ~ 10) MHz	3.1×10^{-3}	
		(10 ~ 13) MHz	3.8×10^{-3}	
		(1 ~ 10) nF		
		120 Hz	3.6×10^{-4}	
		(0.12 ~ 1) kHz	3.0×10^{-4}	
		(1 ~ 100) kHz	3.6×10^{-4}	
		(10 ~ 100) nF		
		120 Hz	3.6×10^{-4}	
		(0.12 ~ 1) kHz	3.1×10^{-4}	
		(1 ~ 100) kHz	3.6×10^{-4}	
		(0.1 ~ 1) µF		
		120 Hz	3.6×10^{-4}	
		(0.12 ~ 1) kHz	3.1×10^{-4}	
		(1 ~ 10) kHz	3.6×10^{-4}	
		(10 ~ 100) kHz	6.3×10^{-4}	
		(1 ~ 10) µF		
		(0.12 ~ 1) kHz	6.6×10^{-4}	
		(10 ~ 100) µF		
		1 kHz	6.9×10^{-4}	

402. Resistance, capacitance and inductance

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Earth testers	40205			Meter calibrator, DMM Current shunt /KTICC-CI-40205
Input AC Voltage		(50 ~ 60) Hz		
		0.22 mV ~ 1 V	9.1×10^{-5}	
		(1 ~ 10) V	8.9×10^{-5}	
		(10 ~ 100) V	9.4×10^{-5}	
		(100 ~ 1 000) V	1.0×10^{-4}	
Input DC Voltage		(±)		
		0 V	61 μV	
		(0 ~ 100) V	6.1×10^{-5}	
		(100 ~ 1 000) V	6.2×10^{-5}	
Input DC Resistance		(0.1 ~ 1) mΩ	1.3×10^{-4}	
		(1 ~ 10) mΩ	1.1×10^{-4}	
		(10 ~ 100) mΩ	8.5×10^{-5}	
		(0.1 ~ 1) Ω	6.2×10^{-5}	
		(1 ~ 10) Ω	6.1×10^{-5}	
		(10 ~ 100) Ω	6.2×10^{-5}	
		100 Ω ~ 1 MΩ	6.1×10^{-5}	
		(1 ~ 10) MΩ	6.2×10^{-5}	
Output AC Voltage		(50 ~ 60) Hz		
		(0.22 ~ 100) mV	6.5×10^{-4}	
		(0.1 ~ 10) V	6.2×10^{-4}	
Output AC Current				
		(50 ~ 60) Hz		
		9 μA ~ 100 A	1.4×10^{-3}	
Output DC Current		(±)		
		0 A	2.2 μA	
		(0 ~ 0.1) A	6.2×10^{-4}	
		(0.1 ~ 1) A	6.5×10^{-4}	
		(1 ~ 2) A	3.9×10^{-4}	
		(2 ~ 5) A	2.8×10^{-4}	
		(5 ~ 10) A	6.6×10^{-4}	
		(10 ~ 20) A	3.9×10^{-4}	
		(20 ~ 40) A	6.0×10^{-4}	
		(40 ~ 60) A	5.8×10^{-4}	
		(60 ~ 80) A	5.9×10^{-4}	
		(80 ~ 100) A	8.4×10^{-4}	
Input AC Current		(50 ~ 60) Hz		
		(0.009 ~ 100) mA	6.4×10^{-4}	
		(0.1 ~ 1) A	6.9×10^{-4}	
		(1 ~ 10) A	8.1×10^{-4}	
		(10 ~ 20) A	2.3×10^{-3}	
		(20 ~ 50) A	2.4×10^{-3}	
Input AC Resistance		(50 ~ 60) Hz		
		0.5 mΩ ~ 100 Ω	1.3×10^{-3}	
Timer		(1 ~ 1 000) s	6.1×10^{-5}	

402. Resistance, capacitance and inductance

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Inductance bridges/indicators	40206			Inductors,
Frequency		10 Hz ~ 1 MHz	6.1×10^{-7}	DMM, Frequency counter /KTICC-CI-40206
AC Voltage		1 mV		
		(40 ~ 100) Hz	4.2×10^{-3}	
		(0.1 ~ 1) kHz	2.1×10^{-3}	
		(1 ~ 10) kHz	4.2×10^{-3}	
		(10 ~ 100) kHz	2.1×10^{-2}	
		(1 ~ 10) mV		
		40 Hz	5.6×10^{-4}	
		(40 ~ 100) Hz	5.4×10^{-4}	
		(0.1 ~ 1) kHz	3.5×10^{-4}	
		(1 ~ 10) kHz	5.4×10^{-4}	
		(10 ~ 100) kHz	2.8×10^{-3}	
		(10 ~ 100) mV		
		40 Hz	2.4×10^{-4}	
		(40 ~ 100) Hz	2.2×10^{-4}	
		(0.1 ~ 1) kHz	2.1×10^{-4}	
		(1 ~ 10) kHz	2.2×10^{-4}	
		(10 ~ 50) kHz	9.6×10^{-4}	
		(50 ~ 100) kHz	1.1×10^{-3}	
		(0.1 ~ 1) V		
		40 Hz	1.5×10^{-4}	
		(40 ~ 100) Hz	1.4×10^{-4}	
		(0.1 ~ 1) kHz	1.2×10^{-4}	
		(1 ~ 10) kHz	1.4×10^{-4}	
		(10 ~ 50) kHz	7.2×10^{-4}	
		(50 ~ 100) kHz	7.3×10^{-4}	
		(1 ~ 2) V		
		40 Hz	2.2×10^{-4}	
		(40 ~ 100) Hz	2.0×10^{-4}	
		(0.1 ~ 1) kHz	1.8×10^{-4}	
		(1 ~ 10) kHz	2.0×10^{-4}	
		(10 ~ 100) kHz	1.5×10^{-3}	
		(2 ~ 5) V		
		40 Hz	1.6×10^{-4}	
		(40 ~ 100) Hz	1.4×10^{-4}	
		(0.1 ~ 1) kHz	1.2×10^{-4}	
		(1 ~ 10) kHz	1.4×10^{-4}	
		(10 ~ 100) kHz	9.2×10^{-4}	
Inductance		1 kHz		
		100 μH	4.5×10^{-4}	
		(0.1 ~ 10) mH	3.2×10^{-4}	
		(0.01 ~ 1) H	2.7×10^{-4}	
		(1 ~ 10) H	3.2×10^{-4}	
Inductors	40208			LCR Meter /KTICC-CI-40208
		1 kHz		
		100 μH	6.1×10^{-4}	
		(0.1 ~ 10) mH	5.3×10^{-4}	
		(0.01 ~ 1) H	4.6×10^{-4}	
		(1 ~ 10) H	5.3×10^{-4}	

402. Resistance, capacitance and inductance

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Insulation testers	40210			Decade resistance, DMM,
Resistance		(0 ~ 1) Ω	6.2×10^{-5}	Meter calibrator
		(1 ~ 10) Ω	6.1×10^{-5}	/KTICC-CI-40210
		(10 ~ 100) Ω	6.2×10^{-5}	
		(0.1 ~ 100) kΩ	6.1×10^{-5}	
		(0.1 ~ 1) MΩ	1.3×10^{-4}	
		(1 ~ 10) MΩ	3.6×10^{-4}	
		(10 ~ 100) MΩ	3.8×10^{-4}	
		(0.1 ~ 10) GΩ	8.4×10^{-4}	
		(10 ~ 100) GΩ	1.3×10^{-3}	
		(0.1 ~ 1) TΩ	2.4×10^{-3}	
Output DC Voltage		(±)		
		(0.1 ~ 100) V	6.1×10^{-4}	
		(100 ~ 500) V	1.2×10^{-4}	
		(0.5 ~ 1) kV	6.1×10^{-4}	
		(1 ~ 2) kV	7.5×10^{-3}	
		(2 ~ 3) kV	7.0×10^{-3}	
		(3 ~ 4) kV	6.8×10^{-3}	
		(4 ~ 5) kV	6.6×10^{-3}	
		(5 ~ 10) kV	6.2×10^{-3}	
Input AC Voltage		(50 ~ 60) Hz		
		0.22 mV ~ 100 V	6.1×10^{-4}	
		(100 ~ 1 000) V	6.2×10^{-4}	
Input DC Voltage		(±)		
		0 V	0.61 mV	
		(0 ~ 1 000) V	6.1×10^{-4}	
Timer		(1 ~ 1 000) s	6.1×10^{-5}	
Resistance bridges & similar instruments	40213			DMM, Decade resistance,
Resistance ARM		0 mΩ	7.3 μΩ	Standard resistance
		(1 ~ 10) mΩ	7.4×10^{-4}	/KTICC-CI-40213
		(10 ~ 100) mΩ	8.0×10^{-5}	
		(0.1 ~ 1) Ω	1.8×10^{-5}	
		(1 ~ 10) Ω	1.0×10^{-5}	
		(10 ~ 100) Ω	8.7×10^{-6}	
		(0.1 ~ 100) kΩ	8.2×10^{-6}	
		(0.1 ~ 1) MΩ	9.6×10^{-6}	
		(1 ~ 10) MΩ	2.1×10^{-5}	
Ratio ARM		0.001	1.1×10^{-5}	
		(0.001 ~ 0.01)	1.3×10^{-5}	
		(0.01 ~ 0.1)	1.1×10^{-5}	
		(0.1 ~ 1)	1.2×10^{-5}	
		(1 ~ 10)	1.1×10^{-5}	
		(10 ~ 100)	1.2×10^{-5}	
		(100 ~ 1 000)	1.4×10^{-5}	

402. Resistance, capacitance and inductance

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Resistance bridges & similar instruments	40213			DMM, Decade resistance,
Resistance Measured		0.5 mΩ ~ 1 Ω	1.1×10^{-5}	Standard resistance
		(1 ~ 10) Ω	6.7×10^{-6}	/KTICC-CI-40213
		(10 ~ 100) Ω	9.6×10^{-6}	
		(0.1 ~ 1) kΩ	6.7×10^{-6}	
		(1 ~ 10) kΩ	8.1×10^{-6}	
		(10 ~ 100) kΩ	7.5×10^{-6}	
		(0.1 ~ 1) MΩ	7.0×10^{-6}	
		(1 ~ 10) MΩ	9.9×10^{-6}	
		(10 ~ 100) MΩ	1.0×10^{-4}	
Resistance meters	40214	(±)		DMM, Decade resistance,
DC Voltage		0.1 V	6.2×10^{-5}	High resistance,
		(0.1 ~ 10) V	6.1×10^{-5}	Standsra resistance,
		(10 ~ 25) V	2.6×10^{-5}	Frequency counter
		(25 ~ 50) V	1.4×10^{-5}	/KTICC-CI-40214
		(50 ~ 100) V	6.1×10^{-5}	
		(100 ~ 250) V	2.6×10^{-5}	
		(250 ~ 500) V	1.4×10^{-5}	
		(500 ~ 1 000) V	6.1×10^{-5}	
DC Resistance		0.5 mΩ	2.6×10^{-3}	
		(0.5 ~ 1) mΩ	1.2×10^{-4}	
		(1 ~ 10) mΩ	8.8×10^{-5}	
		(10 ~ 100) mΩ	5.8×10^{-5}	
		(0.1 ~ 1) Ω	9.6×10^{-6}	
		(1 ~ 10) Ω	2.8×10^{-6}	
		(10 ~ 100) Ω	7.4×10^{-6}	
		(0.1 ~ 1) kΩ	2.9×10^{-6}	
		(1 ~ 10) kΩ	5.4×10^{-6}	
		(10 ~ 100) kΩ	3.1×10^{-6}	
		(0.1 ~ 1) MΩ	4.2×10^{-6}	
		(1 ~ 10) MΩ	8.3×10^{-6}	
		(10 ~ 100) MΩ	1.1×10^{-4}	
		(0.1 ~ 1) GΩ	6.2×10^{-4}	
		(1 ~ 10) GΩ	6.3×10^{-4}	
		(10 ~ 100) GΩ	1.2×10^{-3}	
		(0.1 ~ 1) TΩ	2.3×10^{-3}	
Output Frequency		50 Hz	1.2×10^{-6}	
		(50 ~ 60) Hz	1.0×10^{-6}	
		(0.06 ~ 1) kHz	6.1×10^{-7}	
Output AC Voltage		(0.04 ~ 1) kHz		
		10 mV	3.5×10^{-4}	
		(10 ~ 100) mV	2.1×10^{-4}	
		(0.1 ~ 1) V	1.2×10^{-4}	
		(1 ~ 100) V	1.1×10^{-4}	
AC Resistance		(0.04 ~ 1) kHz		
		0.5 mΩ	1.1×10^{-2}	
		(0.5 ~ 100) mΩ	1.2×10^{-3}	
		100 mΩ ~ 1 kΩ	3.7×10^{-4}	
		(1 ~ 100) kΩ	2.6×10^{-4}	
		(0.1 ~ 1) MΩ	3.3×10^{-4}	

402. Resistance, capacitance and inductance

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Resistors	40215			DMM, Megohmmeter,
Decade Resistance		0 mΩ	7.3 μΩ	Meter calibrator,
		(0 ~ 10) mΩ	7.4×10^{-4}	Standard resistance
		(10 ~ 100) mΩ	8.0×10^{-5}	/KTICC-CI-40215
		(0.1 ~ 1) Ω	1.9×10^{-5}	
		(1 ~ 10) Ω	1.1×10^{-5}	
		(10 ~ 100) Ω	8.7×10^{-6}	
		(0.1 ~ 100) kΩ	8.3×10^{-6}	
		(0.1 ~ 1) MΩ	9.6×10^{-6}	
		(1 ~ 10) MΩ	2.1×10^{-5}	
		(10 ~ 100) MΩ	3.6×10^{-5}	
		(0.1 ~ 1) GΩ	1.5×10^{-4}	
		(1 ~ 10) GΩ	6.6×10^{-4}	
		(10 ~ 100) GΩ	5.3×10^{-3}	
		(0.1 ~ 1) TΩ	6.0×10^{-3}	
DC Resistance		0.5 mΩ	2.2×10^{-4}	
		(0.5 ~ 1) mΩ	1.2×10^{-4}	
		(1 ~ 10) mΩ	8.9×10^{-5}	
		(10 ~ 100) mΩ	6.0×10^{-5}	
		(0.1 ~ 1) Ω	1.8×10^{-5}	
		(1 ~ 1.9) Ω	1.6×10^{-5}	
		(1.9 ~ 10) Ω	1.1×10^{-5}	
		(10 ~ 19) Ω	1.0×10^{-5}	
		(19 ~ 100) Ω	8.7×10^{-6}	
		(100 ~ 190) Ω	8.5×10^{-6}	
		(0.19 ~ 1) kΩ	8.3×10^{-6}	
		(1 ~ 1.9) kΩ	8.0×10^{-6}	
		(1.9 ~ 10) kΩ	8.3×10^{-6}	
		(10 ~ 19) kΩ	8.0×10^{-6}	
		(19 ~ 100) kΩ	8.3×10^{-6}	
		(100 ~ 190) kΩ	8.0×10^{-6}	
		(0.19 ~ 1) MΩ	9.6×10^{-6}	
		(1 ~ 1.9) MΩ	9.2×10^{-6}	
		(1.9 ~ 19) MΩ	1.1×10^{-5}	
		(19 ~ 100) MΩ	3.6×10^{-5}	
		(0.1 ~ 1) GΩ	1.5×10^{-4}	
		(1 ~ 10) GΩ	1.6×10^{-3}	
		(10 ~ 100) GΩ	5.3×10^{-3}	
		(0.1 ~ 1) TΩ	6.0×10^{-3}	
AC Resistance		(0.04 ~ 1) kHz		
		0.5 mΩ	6.8×10^{-4}	
		(0.5 ~ 1) mΩ	5.1×10^{-4}	
		(1 ~ 10) mΩ	5.6×10^{-4}	
		(10 ~ 100) mΩ	3.9×10^{-4}	
		(0.1 ~ 1) Ω	2.8×10^{-4}	

402. Resistance, capacitance and inductance

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Resistors	40215			DMM, Megohmmeter,
AC Resistance		(1 ~ 10) Ω		Meter calibrator,
		(0.04 ~ 1) kHz	2.8×10^{-4}	Standard resistance
		(0.001 ~ 1) MHz	5.7×10^{-4}	/KTICC-CI-40215
		(1 ~ 2) MHz	7.5×10^{-4}	
		(2 ~ 4) MHz	8.4×10^{-4}	
		(4 ~ 5) MHz	1.0×10^{-3}	
		(5 ~ 10) MHz	4.0×10^{-3}	
		(10 ~ 13) MHz	6.0×10^{-3}	
		(10 ~ 100) Ω		
		(0.04 ~ 1) kHz	2.8×10^{-4}	
		(0.001 ~ 1) MHz	5.7×10^{-4}	
		(1 ~ 2) MHz	6.6×10^{-4}	
		(2 ~ 5) MHz	7.5×10^{-4}	
		(5 ~ 10) MHz	2.0×10^{-3}	
		(10 ~ 13) MHz	3.0×10^{-3}	
		(0.1 ~ 1) kΩ		
		(0.04 ~ 1) kHz	4.6×10^{-4}	
		(0.001 ~ 3) MHz	5.7×10^{-4}	
		(3 ~ 4) MHz	6.6×10^{-4}	
		(4 ~ 5) MHz	7.5×10^{-4}	
		(5 ~ 10) MHz	2.0×10^{-3}	
		(10 ~ 13) MHz	3.0×10^{-3}	
		(1 ~ 10) kΩ		
		1 kHz	3.7×10^{-4}	
		1 kHz ~ 1 MHz	5.7×10^{-4}	
		(10 ~ 100) kΩ		
		1 kHz	3.7×10^{-4}	
		1 kHz ~ 1 MHz	5.7×10^{-4}	
		(0.1 ~ 1) MΩ		
		1 kHz	4.8×10^{-4}	
Impedance bridges/LCR meters	40217			Standard Capacitors,
Frequency		10 Hz ~ 100 MHz	6.1×10^{-7}	Standrd Inductors,
				Standard Resistors,
Voltage		(0 ~ 1) mV		Frequency Counter, DMM
		(0.04 ~ 10) kHz	1.1×10^{-3}	/KTICC-CI-40217
		(10 ~ 50) kHz	1.6×10^{-3}	
		(50 ~ 100) kHz	2.0×10^{-3}	
		(0.1 ~ 1) MHz	9.7×10^{-3}	
		(1 ~ 10) mV		
		40 Hz	1.6×10^{-4}	
		(0.04 ~ 10) kHz	1.5×10^{-4}	
		(10 ~ 50) kHz	2.2×10^{-4}	
		(50 ~ 100) kHz	2.7×10^{-4}	
		(0.1 ~ 1) MHz	2.6×10^{-3}	
		(10 ~ 100) mV		
		40 Hz	7.4×10^{-5}	
		(0.04 ~ 10) kHz	7.2×10^{-5}	
		(10 ~ 50) kHz	7.7×10^{-5}	
		(50 ~ 100) kHz	1.0×10^{-4}	
		(0.1 ~ 1) MHz	1.0×10^{-3}	

402. Resistance, capacitance and inductance

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Impedance bridges/LCR meters	40217			Standard Capacitors,
Voltage		(0.1 ~ 1) V		Standrd Inductors,
		40 Hz	6.7×10^{-5}	Standard Resistors,
		(0.04 ~ 10) kHz	6.5×10^{-5}	Frequency Counter, DMM
		(10 ~ 50) kHz	6.7×10^{-5}	/KTICC-CI-40217
		(50 ~ 100) kHz	7.7×10^{-5}	
		(0.1 ~ 1) MHz	9.6×10^{-4}	
		(1 ~ 2) V		
		40 Hz	4.1×10^{-5}	
		(0.04 ~ 10) kHz	3.7×10^{-5}	
		(10 ~ 50) kHz	4.0×10^{-5}	
		(50 ~ 100) kHz	5.5×10^{-5}	
		(0.1 ~ 1) MHz	9.5×10^{-4}	
		(2 ~ 5) V		
		40 Hz	3.2×10^{-5}	
		(0.04 ~ 1) kHz	2.4×10^{-5}	
		(1 ~ 10) kHz	2.6×10^{-5}	
		(10 ~ 50) kHz	3.0×10^{-5}	
		(50 ~ 100) kHz	5.8×10^{-5}	
		(0.1 ~ 1) MHz	1.2×10^{-3}	
		(5 ~ 10) V		
		40 Hz	3.0×10^{-5}	
		(0.04 ~ 10) kHz	2.3×10^{-5}	
		(10 ~ 50) kHz	2.9×10^{-5}	
		(50 ~ 100) kHz	5.5×10^{-5}	
		(0.1 ~ 1) MHz	1.2×10^{-3}	
		(10 ~ 20) V		
		40 Hz	3.2×10^{-5}	
		(0.04 ~ 10) kHz	2.4×10^{-5}	
		(10 ~ 50) kHz	3.0×10^{-5}	
		(50 ~ 100) kHz	5.5×10^{-5}	
		(0.1 ~ 1) MHz	1.2×10^{-3}	
DC Bias Voltage		(±)		
		0 V	1.0 μV	
		(0 ~ 0.1) V	1.1×10^{-5}	
		(0.1 ~ 0.5) V	1.3×10^{-5}	
		(0.5 ~ 1) V	7.2×10^{-6}	
		(1 ~ 5) V	1.3×10^{-5}	
		(5 ~ 10) V	7.2×10^{-6}	
		(10 ~ 20) V	7.0×10^{-6}	
		(20 ~ 40) V	5.7×10^{-6}	
DC Bias Current		(±)		
		0 A	6.1 μA	
		(0 ~ 0.1) A	1.3×10^{-4}	
		(0.1 ~ 18) A	2.5×10^{-4}	
		(18 ~ 40) A	5.8×10^{-4}	

402. Resistance, capacitance and inductance

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Impedance bridges/LCR meters	40217			Standard Capacitors,
Capacitance		1 pF		Standrd Inductors,
		1 kHz	4.6×10^{-4}	Standard Resistors,
		(0.001 ~ 1) MHz	4.3×10^{-4}	Frequency Counter, DMM
		(1 ~ 2) MHz	4.8×10^{-4}	/KTICC-CI-40217
		(2 ~ 3) MHz	5.8×10^{-4}	
		(3 ~ 4) MHz	7.5×10^{-4}	
		(4 ~ 5) MHz	9.7×10^{-4}	
		(5 ~ 10) MHz	3.4×10^{-3}	
		(10 ~ 13) MHz	4.3×10^{-3}	
		(1 ~ 10) pF		
		1 kHz	3.4×10^{-5}	
		(0.001 ~ 5) MHz	4.2×10^{-4}	
		(5 ~ 13) MHz	2.4×10^{-3}	
		(10 ~ 100) pF		
		1 kHz	3.4×10^{-5}	
		(0.001 ~ 2) MHz	4.2×10^{-4}	
		(2 ~ 4) MHz	4.3×10^{-4}	
		(4 ~ 5) MHz	4.4×10^{-4}	
		(5 ~ 13) MHz	2.4×10^{-3}	
		(0.1 ~ 1) nF		
		1 kHz	3.4×10^{-5}	
		(0.001 ~ 1) MHz	4.3×10^{-4}	
		(1 ~ 2) MHz	4.5×10^{-4}	
		(2 ~ 3) MHz	5.1×10^{-4}	
		(3 ~ 4) MHz	6.1×10^{-4}	
		(4 ~ 5) MHz	7.5×10^{-4}	
		(5 ~ 10) MHz	3.1×10^{-3}	
		(10 ~ 13) MHz	3.8×10^{-3}	
		(1 ~ 10) nF		
		120 Hz	2.5×10^{-4}	
		(0.12 ~ 1) kHz	1.3×10^{-4}	
		(1 ~ 100) kHz	2.5×10^{-4}	
		(10 ~ 100) nF		
		120 Hz	2.5×10^{-4}	
		(0.12 ~ 1) kHz	1.5×10^{-4}	
		(1 ~ 100) kHz	2.5×10^{-4}	
		(0.1 ~ 1) μF		
		120 Hz	2.5×10^{-4}	
		(0.12 ~ 1) kHz	1.5×10^{-4}	
		(1 ~ 10) kHz	2.5×10^{-4}	
		(10 ~ 100) kHz	2.6×10^{-4}	
		(1 ~ 10) μF		
		(0.12 ~ 1) kHz	5.9×10^{-4}	
		(10 ~ 100) μF		
		120 Hz	6.1×10^{-4}	
		(0.12 ~ 1) kHz	6.0×10^{-4}	
		(0.1 ~ 10) mF		
		(0.12 ~ 1) kHz	2.9×10^{-3}	
Inductance		(1 kHz)		
		100 μH	4.5×10^{-4}	
		(0.1 ~ 10) mH	3.2×10^{-4}	

402. Resistance, capacitance and inductance

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Impedance bridges/LCR meters	40217			Standard Capacitors,
Inductance		(0.01 ~ 1) H	2.7×10^{-4}	Standrd Inductors,
		(1 ~ 10) H	3.2×10^{-4}	Standard Resistors,
				Frequency Counter, DMM
AC Resistance		1 mΩ		/KTICC-CI-40217
		1 kHz	3.6×10^{-3}	
		(1 ~ 10) mΩ		
		1 kHz	8.1×10^{-4}	
		(10 ~ 100) mΩ		
		1 kHz	1.0×10^{-3}	
		(0.1 ~ 1) Ω		
		1 kHz	3.3×10^{-4}	
		(1 ~ 10) Ω		
		1 kHz	3.3×10^{-4}	
		(0.001 ~ 1) MHz	4.2×10^{-4}	
		(1 ~ 4) MHz	7.1×10^{-4}	
		(4 ~ 5) MHz	1.0×10^{-3}	
		(5 ~ 10) MHz	4.0×10^{-3}	
		(10 ~ 13) MHz	6.0×10^{-3}	
		(10 ~ 100) Ω		
		1 kHz	3.7×10^{-4}	
		(0.001 ~ 1) MHz	4.2×10^{-4}	
		(1 ~ 2) MHz	5.2×10^{-4}	
		(2 ~ 5) MHz	6.1×10^{-4}	
		(5 ~ 10) MHz	2.0×10^{-3}	
		(10 ~ 13) MHz	3.0×10^{-3}	
		(0.1 ~ 1) kΩ		
		1 kHz	3.7×10^{-4}	
		(0.001 ~ 3) MHz	4.2×10^{-4}	
		(3 ~ 4) MHz	5.2×10^{-4}	
		(4 ~ 5) MHz	6.1×10^{-4}	
		(5 ~ 10) MHz	2.0×10^{-3}	
		(10 ~ 13) MHz	3.0×10^{-3}	
		(1 ~ 10) kΩ		
		1 kHz	2.6×10^{-4}	
		1 kHz ~ 1 MHz	4.2×10^{-4}	
		(10 ~ 100) kΩ		
		1 kHz	2.6×10^{-4}	
		1 kHz ~ 1 MHz	4.2×10^{-4}	
		(0.1 ~ 1) MΩ		
		1 kHz	3.3×10^{-4}	
DC Resistance		(0 ~ 1) Ω	1.1×10^{-5}	
		(1 ~ 10) Ω	6.7×10^{-6}	
		(10 ~ 100) Ω	9.3×10^{-6}	
		(0.1 ~ 1) kΩ	6.7×10^{-6}	
		(1 ~ 10) kΩ	7.8×10^{-6}	
		(10 ~ 100) kΩ	7.5×10^{-6}	
		(0.1 ~ 1) MΩ	8.1×10^{-6}	
		(1 ~ 10) MΩ	1.1×10^{-5}	

403. AC voltage, current & power

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
AC ammeters	40301			Meter calibrator,
AC Current		9 μA ~ 190 mA		Current calibrator
		10 Hz	3.1×10^{-4}	/KTICC-CI-40301
		(10 ~ 40) Hz	2.1×10^{-4}	
		(0.04 ~ 1) kHz	1.7×10^{-4}	
		(1 ~ 10) kHz	1.9×10^{-3}	
		(0.19 ~ 1) A		
		(0.01 ~ 1) kHz	3.3×10^{-4}	
		(1 ~ 10) kHz	7.3×10^{-3}	
		(1 ~ 1.9) A		
		(0.01 ~ 1) kHz	3.1×10^{-4}	
		(1 ~ 10) kHz	7.4×10^{-3}	
		(1.9 ~ 10) A		
		(45 ~ 100) Hz	1.4×10^{-3}	
		(0.1 ~ 1) kHz	1.8×10^{-3}	
		(10 ~ 20) A		
		(45 ~ 100) Hz	2.2×10^{-3}	
		(0.1 ~ 1) kHz	2.5×10^{-3}	
		(20 ~ 100) A		
		(40 ~ 60) Hz	3.6×10^{-4}	
		(0.06 ~ 1) kHz	1.8×10^{-3}	
Clamp ammeters/voltmeters	40302	(±)		Meter calibrator, Turn coil,
DC Voltage		0 mV	0.76 μV	Current calibrator
		(0 ~ 10) mV	7.8×10^{-5}	/KTICC-CI-40302
		(0.01 ~ 1 000) V	6.2×10^{-5}	
AC Voltage		(0.22 ~ 10) mV		
		10 Hz	6.6×10^{-4}	
		(10 ~ 40) Hz	5.1×10^{-4}	
		(0.04 ~ 1) kHz	5.0×10^{-4}	
		(10 ~ 100) mV		
		10 Hz	3.8×10^{-4}	
		(10 ~ 40) Hz	1.8×10^{-4}	
		(0.04 ~ 1) kHz	1.7×10^{-4}	
		(0.1 ~ 1) V		
		10 Hz	3.0×10^{-4}	
		(10 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 1) kHz	9.1×10^{-5}	
		(1 ~ 10) V		
		10 Hz	3.0×10^{-4}	
		(10 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 1) kHz	8.9×10^{-5}	
		(10 ~ 100) V		
		10 Hz	3.0×10^{-4}	
		(10 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 1) kHz	9.4×10^{-5}	
		(100 ~ 1 000) V		
		50 Hz	3.3×10^{-4}	
		(0.05 ~ 1) kHz	1.0×10^{-4}	

403. AC voltage, current & power

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Clamp ammeters/voltmeters	40302	(±)		Meter calibrator, Turn coil,
DC Current		0 μA	61 nA	Current calibrator
		(0 ~ 1) A	6.2×10^{-4}	/KTICC-CI-40302
		(1 ~ 10) A	9.9×10^{-4}	
		(10 ~ 20) A	1.1×10^{-3}	
		(20 ~ 100) A	1.6×10^{-3}	
		(100 ~ 200) A	1.7×10^{-3}	
		(200 ~ 500) A	1.5×10^{-3}	
		(500 ~ 1 000) A	1.7×10^{-3}	
		(1 000 ~ 2 500) A	1.2×10^{-3}	
AC Current		9 μA ~ 100 mA		
		(0.01 ~ 1) kHz	6.8×10^{-4}	
		(1 ~ 10) kHz	1.9×10^{-3}	
		(0.1 ~ 1) A		
		(0.01 ~ 1) kHz	6.9×10^{-4}	
		(1 ~ 10) kHz	7.3×10^{-3}	
		(1 ~ 10) A		
		(0.01 ~ 1) kHz	3.0×10^{-3}	
		(10 ~ 20) A		
		(0.01 ~ 1) kHz	3.1×10^{-3}	
		(20 ~ 100) A		
		(40 ~ 60) Hz	4.0×10^{-3}	
		(100 ~ 200) A		
		(40 ~ 60) Hz	3.7×10^{-3}	
		(200 ~ 300) A		
		(40 ~ 60) Hz	4.7×10^{-3}	
		(300 ~ 400) A		
		(40 ~ 60) Hz	4.3×10^{-3}	
		(400 ~ 500) A		
		(40 ~ 60) Hz	4.0×10^{-3}	
		(500 ~ 1 000) A		
		(40 ~ 60) Hz	3.7×10^{-3}	
		(1 000 ~ 2 000) A		
		(40 ~ 60) Hz	1.6×10^{-3}	
		(2 000 ~ 5 000) A		
		(40 ~ 60) Hz	3.0×10^{-3}	
Resistance		0 Ω	0.61 mΩ	
		(0 ~ 10) MΩ	6.1×10^{-4}	
Turn Current Coil				
DC Ratio		2	9.5×10^{-4}	
		(2 ~ 10)	1.4×10^{-3}	
		(10 ~ 25)	1.5×10^{-3}	
		(25 ~ 50)	1.4×10^{-3}	
AC Ratio		(60 Hz)		
		2	1.2×10^{-3}	
		(2 ~ 10)	2.2×10^{-3}	
		(10 ~ 25)	2.4×10^{-3}	
		(25 ~ 50)	2.2×10^{-3}	

403. AC voltage, current & power

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
AC voltage/current calibrators	40303			DMM, Current shunt
AC Voltage		(0.5 ~ 2) mV		/KTICC-CI-40303
		10 Hz	6.0×10^{-4}	
		(0.01 ~ 20) kHz	6.0×10^{-4}	
		(20 ~ 50) kHz	9.0×10^{-4}	
		(50 ~ 100) kHz	1.1×10^{-3}	
		(100 ~ 300) kHz	1.9×10^{-3}	
		(300 ~ 500) kHz	4.1×10^{-3}	
		(0.5 ~ 1) MHz	6.5×10^{-3}	
		(2 ~ 20) mV		
		10 Hz	1.3×10^{-4}	
		(0.01 ~ 0.02) kHz	1.3×10^{-4}	
		(0.02 ~ 0.04) kHz	1.0×10^{-4}	
		(0.04 ~ 20) kHz	9.5×10^{-5}	
		(20 ~ 50) kHz	1.4×10^{-4}	
		(50 ~ 100) kHz	1.8×10^{-4}	
		(100 ~ 300) kHz	3.5×10^{-4}	
		(300 ~ 500) kHz	8.5×10^{-4}	
		(0.5 ~ 1) MHz	2.3×10^{-3}	
		(20 ~ 200) mV		
		10 Hz	6.5×10^{-5}	
		(0.01 ~ 0.02) kHz	6.0×10^{-5}	
		(0.02 ~ 0.04) kHz	3.6×10^{-5}	
		(0.04 ~ 1) kHz	3.3×10^{-5}	
		(1 ~ 20) kHz	3.4×10^{-5}	
		(20 ~ 50) kHz	4.1×10^{-5}	
		(50 ~ 100) kHz	7.5×10^{-5}	
		(100 ~ 300) kHz	1.7×10^{-4}	
		(300 ~ 500) kHz	3.0×10^{-4}	
		(0.5 ~ 1) MHz	1.0×10^{-3}	
		(0.2 ~ 2) V		
		10 Hz	5.5×10^{-5}	
		(0.01 ~ 0.02) kHz	5.0×10^{-5}	
		(0.02 ~ 0.04) kHz	2.8×10^{-5}	
		(0.04 ~ 20) kHz	2.2×10^{-5}	
		(20 ~ 50) kHz	2.7×10^{-5}	
		(50 ~ 100) kHz	4.7×10^{-5}	
		(100 ~ 300) kHz	1.3×10^{-4}	
		(300 ~ 500) kHz	2.2×10^{-4}	
		(0.5 ~ 1) MHz	9.5×10^{-4}	
		(2 ~ 20) V		
		10 Hz	5.5×10^{-5}	
		(0.01 ~ 0.02) kHz	5.0×10^{-5}	
		(0.02 ~ 0.04) kHz	3.0×10^{-5}	
		(0.04 ~ 20) kHz	2.3×10^{-5}	
		(20 ~ 50) kHz	2.9×10^{-5}	
		(50 ~ 100) kHz	5.5×10^{-5}	
		(100 ~ 300) kHz	1.4×10^{-4}	
		(300 ~ 500) kHz	3.5×10^{-4}	
		(0.5 ~ 1) MHz	1.2×10^{-3}	

403. AC voltage, current & power

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
AC voltage/current calibrators	40303			DMM, Current shunt
AC Voltage		(20 ~ 200) V		/KTICC-CI-40303
		10 Hz	6.5×10^{-5}	
		(0.01 ~ 0.02) kHz	5.5×10^{-5}	
		(0.02 ~ 0.04) kHz	3.3×10^{-5}	
		(0.04 ~ 20) kHz	2.8×10^{-5}	
		(20 ~ 50) kHz	4.0×10^{-5}	
		(50 ~ 100) kHz	6.5×10^{-5}	
		(200 ~ 700) V		
		20 Hz	5.3×10^{-5}	
		(0.02 ~ 0.04) kHz	3.4×10^{-5}	
		(0.04 ~ 20) kHz	2.9×10^{-5}	
		(20 ~ 50) kHz	1.1×10^{-4}	
		(50 ~ 100) kHz	6.6×10^{-4}	
		(700 ~ 1 000) V		
		40 Hz	3.6×10^{-5}	
		(0.04 ~ 1) kHz	2.9×10^{-5}	
		(1 ~ 20) kHz	3.0×10^{-5}	
		(20 ~ 30) kHz	1.1×10^{-4}	
AC Current		(0.009 ~ 1) mA		
		20 Hz	4.4×10^{-4}	
		(0.02 ~ 1) kHz	4.4×10^{-4}	
		(1 ~ 10) kHz	1.7×10^{-3}	
		(1 ~ 1.9) mA		
		20 Hz	3.6×10^{-4}	
		(0.02 ~ 1) kHz	3.6×10^{-4}	
		(1 ~ 10) kHz	1.6×10^{-3}	
		(1.9 ~ 10) mA		
		20 Hz	4.4×10^{-4}	
		(0.02 ~ 1) kHz	4.4×10^{-4}	
		(1 ~ 10) kHz	1.5×10^{-3}	
		(10 ~ 19) mA		
		20 Hz	3.6×10^{-4}	
		(0.02 ~ 1) kHz	3.6×10^{-4}	
		(1 ~ 10) kHz	1.4×10^{-3}	
		(19 ~ 100) mA		
		20 Hz	4.4×10^{-4}	
		(0.02 ~ 1) kHz	4.4×10^{-4}	
		(1 ~ 10) kHz	1.2×10^{-3}	
		(100 ~ 190) mA		
		20 Hz	3.6×10^{-4}	
		(0.02 ~ 1) kHz	3.6×10^{-4}	
		(1 ~ 10) kHz	1.2×10^{-3}	
		(0.19 ~ 1) A		
		20 Hz	8.7×10^{-4}	
		(0.02 ~ 1) kHz	8.7×10^{-4}	
		(1 ~ 10) kHz	6.3×10^{-3}	
		(1 ~ 1.9) A		
		20 Hz	7.9×10^{-4}	
		(0.02 ~ 1) kHz	7.9×10^{-4}	
		(1 ~ 10) kHz	6.3×10^{-3}	

403. AC voltage, current & power

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
AC voltage/current calibrators	40303			DMM, Current shunt
AC Current		(1.9 ~ 10) A		/KTICC-CI-40303
		40 Hz	1.0×10^{-3}	
		(0.04 ~ 1) kHz	1.0×10^{-3}	
		(10 ~ 30) A		
		40 Hz	1.3×10^{-3}	
		(0.04 ~ 1) kHz	1.3×10^{-3}	
		(30 ~ 100) A		
		40 Hz	1.2×10^{-3}	
		(0.04 ~ 1) kHz	1.2×10^{-3}	
Frequency		10 Hz ~ 1 MHz	6.1×10^{-7}	
AC current shunts	40305			DMM, Meter calibrator
AC Resistance		(100 ~ 1 000) Ω		Current calibrator
		10 Hz	4.3×10^{-4}	/KTICC-CI-40305
		(10 ~ 40) Hz	2.4×10^{-4}	
		(0.04 ~ 1) kHz	2.2×10^{-4}	
		(1 ~ 10) kHz	1.8×10^{-3}	
		(10 ~ 100) Ω		
		10 Hz	3.2×10^{-4}	
		(10 ~ 40) Hz	2.2×10^{-4}	
		(0.04 ~ 1) kHz	1.8×10^{-4}	
		(1 ~ 10) kHz	1.8×10^{-3}	
		(1 ~ 10) Ω		
		10 Hz	3.2×10^{-4}	
		(10 ~ 40) Hz	2.2×10^{-4}	
		(0.04 ~ 1) kHz	1.8×10^{-4}	
		(1 ~ 10) kHz	1.6×10^{-3}	
		(0.1 ~ 1) Ω		
		10 Hz	3.2×10^{-4}	
		(10 ~ 40) Hz	2.3×10^{-4}	
		(0.04 ~ 1) kHz	1.8×10^{-4}	
		(1 ~ 10) kHz	1.2×10^{-3}	
		(0.01 ~ 0.1) Ω		
		10 Hz	3.4×10^{-4}	
		(0.01 ~ 1) kHz	3.3×10^{-4}	
		(1 ~ 10) kHz	7.3×10^{-3}	
		(0.001 ~ 0.01) Ω		
		45 Hz	1.4×10^{-3}	
		(45 ~ 100) Hz	1.4×10^{-3}	
		(0.1 ~ 1) kHz	1.8×10^{-3}	
		(0.000 5 ~ 0.001) Ω		
		60 Hz	3.4×10^{-4}	
		0.000 5 Ω		
		60 Hz	3.4×10^{-4}	
Voltage/current phase angle meters /synchro resolve meters	40307			Power calibrator
Phase		(50 ~ 60) Hz		/KTICC-CI-40307
		-180° ~ 180°	0.043°	

403. AC voltage, current & power

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Power factor meters	40310			Power calibrator
Power Factor		(50 ~ 60) Hz -1 ~ 1	(Absolute) 0.000 52	/KTICC-CI-40310
AC power meters	40311	(±)		Meter calibrator,
DC Voltage		0 mV	0.76 μV	Power calibrator
		(0.1 ~ 100) mV	1.3×10^{-5}	/KTICC-CI-40311
		(0.1 ~ 1) V	8.5×10^{-6}	
		(1 ~ 10) V	7.3×10^{-6}	
		(10 ~ 100) V	8.5×10^{-6}	
		(100 ~ 1 000) V	9.5×10^{-6}	
AC Voltage		(0.04 ~ 1) kHz		
		(0.22 ~ 100) mV	1.6×10^{-4}	
		(0.1 ~ 1) V	6.8×10^{-5}	
		(1 ~ 10) V	6.5×10^{-5}	
		(10 ~ 100) V	7.2×10^{-5}	
		(100 ~ 1 000) V	8.5×10^{-5}	
DC Current		(±)		
		0 μA	9.7 nA	
		1 μA ~ 1 mA	4.4×10^{-5}	
		(1 ~ 10) mA	4.1×10^{-5}	
		(10 ~ 100) mA	5.4×10^{-5}	
		(0.1 ~ 1) A	9.4×10^{-5}	
		(1 ~ 2) A	8.8×10^{-5}	
		(2 ~ 10) A	7.8×10^{-4}	
		(10 ~ 100) A	1.4×10^{-4}	
		(100 ~ 200) A	1.4×10^{-3}	
		(200 ~ 400) A	1.5×10^{-3}	
		(400 ~ 500) A	1.4×10^{-3}	
		(500 ~ 1 000) A	1.7×10^{-3}	
		(1 000 ~ 2 500) A	1.2×10^{-3}	

403. AC voltage, current & power

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
AC power meters	40311			Meter calibrator,
AC Current		(0.04 ~ 1) kHz		Power calibrator
		9 μA ~ 100 mA	1.8×10^{-4}	/KTICC-CI-40311
		(0.1 ~ 1) A	3.3×10^{-4}	
		(1 ~ 2) A	3.1×10^{-4}	
		(2 ~ 10) A	2.9×10^{-3}	
		(10 ~ 20) A	3.1×10^{-3}	
		60 Hz		
		(20 ~ 100) A	1.3×10^{-3}	
		(100 ~ 200) A	3.6×10^{-3}	
		(200 ~ 300) A	4.7×10^{-3}	
		(300 ~ 400) A	4.3×10^{-3}	
		(400 ~ 500) A	4.0×10^{-3}	
		(500 ~ 800) A	3.8×10^{-3}	
		(800 ~ 2 000) A	1.6×10^{-3}	
		(2 000 ~ 5 000) A	3.0×10^{-3}	
AC Power		(50 ~ 60) Hz		
		0.24 mW	2.6×10^{-2}	
		(0.24 ~ 0.48) mW	1.4×10^{-2}	
		(0.000 48 ~ 1.2) W	1.6×10^{-3}	
		(1.2 ~ 2.4) W	1.0×10^{-3}	
		(2.4 ~ 12) W	5.8×10^{-4}	
		(12 ~ 24) W	4.7×10^{-4}	
		(24 ~ 60) W	1.7×10^{-4}	
		(60 ~ 120) W	1.8×10^{-4}	
		(120 ~ 240) W	1.7×10^{-4}	
		(240 ~ 600) W	1.8×10^{-4}	
		(0.6 ~ 1.2) kW	3.3×10^{-4}	
		(1.2 ~ 2.4) kW	6.3×10^{-4}	
		(2.4 ~ 3.6) kW	5.8×10^{-4}	
		(3.6 ~ 4.8) kW	6.3×10^{-4}	
		(4.8 ~ 6.0) kW	5.3×10^{-4}	
		(6.0 ~ 7.2) kW	5.7×10^{-4}	
		(7.2 ~ 9.6) kW	5.4×10^{-4}	
		(9.6 ~ 12) kW	5.3×10^{-4}	
Power Factor		(50 ~ 60) Hz	(absolute)	
		-1 ~ 1	0.000 52	

403. AC voltage, current & power

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
AC power meters	40311			Meter calibrator,
Frequency		10 Hz ~ 1 MHz	6.1×10^{-5}	Power calibrator /KTICC-CI-40311
Harmonic Voltage		(50 ~ 3000) Hz		
		0.5 %	8.2×10^{-2}	
		(0.5 ~ 1) %	4.1×10^{-2}	
		(1 ~ 3) %	1.4×10^{-2}	
		(3 ~ 5) %	8.2×10^{-3}	
		(5 ~ 10) %	4.2×10^{-3}	
		(10 ~ 20) %	2.2×10^{-3}	
Harmonic Current		(50 ~ 3000) Hz		
		0.5 %	8.4×10^{-2}	
		(0.5 ~ 1) %	4.2×10^{-2}	
		(1 ~ 3) %	1.4×10^{-2}	
		(3 ~ 5) %	8.4×10^{-3}	
		(5 ~ 10) %	4.2×10^{-3}	
		(10 ~ 20) %	2.1×10^{-3}	
DC Power		1 mW	2.7×10^{-4}	
		(0.001 ~ 1) W	2.7×10^{-4}	
		(1 ~ 10) W	8.6×10^{-4}	
		(10 ~ 20) W	1.0×10^{-3}	
		(20 ~ 100) W	8.6×10^{-4}	
		(100 ~ 200) W	1.0×10^{-3}	
		(0.2 ~ 1) kW	8.6×10^{-4}	
		(1 ~ 2) kW	1.0×10^{-3}	
		(2 ~ 10) kW	8.6×10^{-4}	
		(10 ~ 20) kW	1.0×10^{-3}	
AC power supplies	40312			DMM, Current shunt
AC Voltage		(45 ~ 100) Hz		/KTICC-CI-40312
		(0 ~ 10) V	1.4×10^{-4}	
		(10 ~ 20) V	2.0×10^{-4}	
		(20 ~ 40) V	1.5×10^{-4}	
		(40 ~ 150) V	1.4×10^{-4}	
		(0.1 ~ 5) kHz		
		(0 ~ 10) V	1.2×10^{-4}	
		(10 ~ 20) V	1.8×10^{-4}	
		(20 ~ 40) V	1.3×10^{-4}	
		(40 ~ 150) V	1.2×10^{-4}	
		(0.045 ~ 5) kHz		
		(150 ~ 200) V	2.1×10^{-4}	
		(200 ~ 250) V	1.8×10^{-4}	
		(250 ~ 300) V	1.7×10^{-4}	
		(300 ~ 350) V	2.4×10^{-4}	
		(350 ~ 400) V	2.2×10^{-4}	
		(400 ~ 500) V	2.0×10^{-4}	
AC Current		(0.045 ~ 1) kHz		
		9 μA ~ 100 mA	4.6×10^{-4}	
		(0.1 ~ 1) A	9.7×10^{-4}	
		(1 ~ 100) A	1.2×10^{-3}	
Frequency		(10 ~ 5 000) Hz	6.1×10^{-5}	

403. AC voltage, current & power

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Puncture/safety testers	40313			High voltage meter, DMM
DC Voltage		(±)		High voltage test equipment
		1 V ~ 100 kV	1.2×10^{-3}	/ KTICC-CI-40313
AC Voltage		(50 ~ 60) Hz		
		1 V ~ 100 kV	1.3×10^{-2}	
DC Cutoff Current		(±)		
		(0.01 ~ 0.5) mA	9.6×10^{-3}	
		(0.5 ~ 1) mA	7.3×10^{-3}	
		(1 ~ 2) mA	6.5×10^{-3}	
		(2 ~ 5) mA	6.0×10^{-3}	
		(5 ~ 10) mA	6.1×10^{-3}	
		(10 ~ 20) mA	6.0×10^{-3}	
AC Cutoff Current		(50 ~ 60) Hz		
		(0.01 ~ 0.5) mA	3.0×10^{-2}	
		(0.5 ~ 1) mA	1.8×10^{-2}	
		(1 ~ 2) mA	1.3×10^{-2}	
		(2 ~ 5) mA	1.0×10^{-2}	
		(5 ~ 10) mA	9.3×10^{-3}	
		(10 ~ 20) mA	9.0×10^{-3}	
		(20 ~ 50) mA	1.2×10^{-2}	
		(50 ~ 100) mA	1.1×10^{-2}	
Timer		(1 ~ 1 000) s	6.1×10^{-5}	
Power recorders	40314			Meter calibrator,
AC Voltage		(0.04 ~ 1) kHz		Power calibrator
		(0.22 ~ 100) mV	1.6×10^{-4}	/KTICC-CI-40314
		(0.1 ~ 1) V	6.8×10^{-5}	
		(1 ~ 10) V	6.5×10^{-5}	
		(10 ~ 100) V	7.2×10^{-5}	
		(100 ~ 1 000) V	8.5×10^{-5}	
AC Current		(0.04 ~ 1) kHz		
		9 μA ~ 100 mA	1.8×10^{-4}	
		(0.1 ~ 1) A	3.3×10^{-4}	
		(1 ~ 2) A	3.1×10^{-4}	
		(2 ~ 10) A	1.8×10^{-3}	
		(10 ~ 20) A	2.5×10^{-3}	
		60 Hz		
		(20 ~ 100) A	3.1×10^{-4}	
AC Power				
		(50 ~ 60) Hz, 120 V		
		(0.06 ~ 600) W	1.8×10^{-4}	
		(0.6 ~ 1.2) kW	3.3×10^{-4}	
		(1.2 ~ 2.4) kW	6.3×10^{-4}	
		(2.4 ~ 3.6) kW	5.8×10^{-4}	
		(3.6 ~ 4.8) kW	5.4×10^{-4}	
		(4.8 ~ 6.0) kW	5.3×10^{-4}	

403. AC voltage, current & power

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Power recorders AC Power	40314	(50 ~ 60) Hz, 240 V		Meter calibrator, Power calibrator /KTICC-CI-40314
		0.06 W ~ 1.2 kW	1.8×10^{-4}	
		(1.2 ~ 2.4) kW	3.2×10^{-4}	
		(2.4 ~ 4.8) kW	6.3×10^{-4}	
		(4.8 ~ 7.2) kW	5.7×10^{-4}	
		(7.2 ~ 9.6) kW	5.4×10^{-4}	
		(9.6 ~ 12) kW	5.3×10^{-4}	
AC voltmeters AC Voltage	40318	(0.1 ~ 1) mV		Meter calibrator /KTICC-CI-40318
		(10 ~ 20) Hz	4.3×10^{-3}	
		(0.02 ~ 20) kHz	4.2×10^{-3}	
		(20 ~ 50) kHz	4.3×10^{-3}	
		(50 ~ 100) kHz	5.6×10^{-3}	
		(100 ~ 200) kHz	1.1×10^{-2}	
		(200 ~ 500) kHz	2.2×10^{-2}	
		(0.5 ~ 1) MHz	2.3×10^{-2}	
		(1 ~ 10) mV		
		(10 ~ 20) Hz	6.6×10^{-4}	
		(20 ~ 40) Hz	5.1×10^{-4}	
		(0.04 ~ 20) kHz	5.0×10^{-4}	
		(20 ~ 50) kHz	6.2×10^{-4}	
		(50 ~ 100) kHz	1.0×10^{-3}	
		(100 ~ 200) kHz	2.1×10^{-3}	
		(200 ~ 500) kHz	3.5×10^{-3}	
		(0.5 ~ 1) MHz	4.8×10^{-3}	
		(10 ~ 100) mV		
		(10 ~ 20) Hz	3.8×10^{-4}	
		(20 ~ 40) Hz	1.8×10^{-4}	
		(0.04 ~ 20) kHz	1.7×10^{-4}	
		(20 ~ 50) kHz	2.9×10^{-4}	
		(50 ~ 100) kHz	6.5×10^{-4}	
		(100 ~ 200) kHz	1.1×10^{-3}	
		(200 ~ 500) kHz	1.7×10^{-3}	
		(0.5 ~ 1) MHz	3.2×10^{-3}	
		(0.1 ~ 1) V		
		(10 ~ 20) Hz	3.0×10^{-4}	
		(20 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 20) kHz	9.1×10^{-5}	
		(20 ~ 50) kHz	1.1×10^{-4}	
		(50 ~ 100) kHz	1.6×10^{-4}	
		(100 ~ 200) kHz	5.2×10^{-4}	
		(200 ~ 500) kHz	1.2×10^{-3}	
		(0.5 ~ 1) MHz	2.0×10^{-3}	

403. AC voltage, current & power

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
AC voltmeters	40318			Meter calibrator
AC Voltage		(1 ~ 10) V		/KTICC-CI-40318
		(10 ~ 20) Hz	3.0×10^{-4}	
		(20 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 20) kHz	8.9×10^{-5}	
		(20 ~ 50) kHz	1.1×10^{-4}	
		(50 ~ 100) kHz	1.4×10^{-4}	
		(100 ~ 200) kHz	3.6×10^{-4}	
		(200 ~ 500) kHz	1.2×10^{-3}	
		(0.5 ~ 1) MHz	1.9×10^{-3}	
		(10 ~ 100) V		
		(20 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 20) kHz	9.4×10^{-5}	
		(20 ~ 50) kHz	1.2×10^{-4}	
		(50 ~ 100) kHz	2.0×10^{-4}	
		(100 ~ 1 000) V		
		(15 ~ 50) Hz	3.3×10^{-4}	
		(0.05 ~ 1) kHz	1.0×10^{-4}	
		(0.000 1 ~ 0.33) V		
		(1 ~ 30) MHz	1.3×10^{-2}	
		(0.33 ~ 3.5) V		
		(1 ~ 30) MHz	1.4×10^{-2}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
LF amplifiers	40401			Meter calibrator, DMM
DC Gain		1	1.4×10^{-5}	/KTICC-CI-40401
		(1 ~ 3.162 3)	5.7×10^{-5}	
		(3.162 3 ~ 10)	1.4×10^{-5}	
		(10 ~ 50)	6.3×10^{-5}	
		(50 ~ 1 000)	6.3×10^{-5}	
LF Gain		10 Hz		
		1	2.6×10^{-4}	
		(1 ~ 31.623)	3.8×10^{-4}	
		(31.623 ~ 40)	4.3×10^{-4}	
		(40 ~ 50)	2.8×10^{-4}	
		(50 ~ 100)	3.0×10^{-4}	
		(100 ~ 1 000)	3.8×10^{-4}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
LF amplifiers	40401			Meter calibrator, DMM
LF Gain		(0.01 ~ 20) kHz		/KTICC-CI-40401
		1	7.0×10^{-5}	
		(1 ~ 3.162 3)	9.8×10^{-5}	
		(3.162 3 ~ 10)	7.5×10^{-5}	
		(10 ~ 20)	9.5×10^{-5}	
		(20 ~ 40)	1.0×10^{-4}	
		(40 ~ 50)	9.2×10^{-5}	
		(50 ~ 100)	9.5×10^{-5}	
		(100 ~ 316.23)	1.1×10^{-4}	
		(316.23 ~ 1 000)	1.7×10^{-4}	
		(20 ~ 50) kHz		
		1	1.1×10^{-4}	
		(1 ~ 316.23)	1.5×10^{-4}	
		(316.23 ~ 1 000)	2.9×10^{-4}	
		(50 ~ 100) kHz		
		(1 ~ 3.162 3)	1.9×10^{-4}	
		(3.162 3 ~ 20)	1.8×10^{-4}	
		(20 ~ 316.23)	2.3×10^{-4}	
		(316.23 ~ 1 000)	6.5×10^{-4}	
		(0.1 ~ 1) MHz		
		(1 ~ 10)	3.7×10^{-3}	
		(10 ~ 20)	4.7×10^{-3}	
		(20 ~ 31.623)	5.7×10^{-3}	
		(31.623 ~ 40)	6.8×10^{-3}	
		(40 ~ 316.23)	7.6×10^{-3}	
		(316.23 ~ 600)	9.8×10^{-3}	
		(600 ~ 800)	1.2×10^{-2}	
		(800 ~ 1 000)	1.4×10^{-2}	
DC Bias Voltage		(±)		
		0 V	61 μV	
		(0 ~ 10) V	6.1×10^{-5}	
		(10 ~ 20) V	3.2×10^{-5}	
		(20 ~ 40) V	1.7×10^{-5}	
		(40 ~ 60) V	1.2×10^{-5}	
		(60 ~ 80) V	9.8×10^{-6}	
		(80 ~ 100) V	6.1×10^{-5}	
		(100 ~ 150) V	4.1×10^{-5}	
		(150 ~ 200) V	3.1×10^{-5}	
DC/LF attenuators	40402			Audio analyzer, DMM
LF Attenuator		(0.01 ~ 100) kHz		Meter calibrator
		(0 ~ 70) dB	0.008 dB	/KTICC-CI-40402
		(70 ~ 80) dB	0.014 dB	
		(100 ~ 300) kHz		
		(0 ~ 60) dB	0.008 dB	
		(60 ~ 70) dB	0.014 dB	
		(70 ~ 80) dB	0.038 dB	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
DC/LF attenuators	40402			Audio analyzer, DMM
LF Attenuator		(300 ~ 500) kHz		Meter calibrator
		(0 ~ 50) dB	0.008 dB	/KTICC-CI-40402
		(50 ~ 60) dB	0.013 dB	
		(60 ~ 70) dB	0.028 dB	
		(70 ~ 80) dB	0.078 dB	
		(0.5 ~ 1) MHz		
		(0 ~ 50) dB	0.013 dB	
		(50 ~ 60) dB	0.025 dB	
		(60 ~ 70) dB	0.045 dB	
		(70 ~ 80) dB	0.099 dB	
Multimeter calibrators	40403	(±)		DC standard, DMM
DC Voltage		0 mV	0.12 μV	AC/DC transfer standard,
		(0 ~ 100) mV	8.9×10^{-6}	Current shunt
		(100 ~ 190) mV	8.4×10^{-6}	Standard resiatance
		(0.19 ~ 1) V	3.8×10^{-6}	Meter calibrator
		(1 ~ 10) V	3.8×10^{-6}	/KTICC-CI-40403
		(10 ~ 19) V	3.6×10^{-6}	
		(19 ~ 100) V	6.0×10^{-6}	
		(100 ~ 190) V	5.8×10^{-6}	
		(190 ~ 1 000) V	6.1×10^{-6}	
Resistance		(0 ~ 1) Ω	1.6×10^{-5}	
		(1 ~ 1.9) Ω	1.4×10^{-5}	
		(1.9 ~ 10) Ω	1.1×10^{-5}	
		(10 ~ 19) Ω	1.0×10^{-5}	
		(19 ~ 100) Ω	8.7×10^{-6}	
		(100 ~ 190) Ω	8.4×10^{-6}	
		(0.19 ~ 19) kΩ	7.4×10^{-6}	
		(19 ~ 100) kΩ	7.5×10^{-6}	
		(100 ~ 190) kΩ	7.4×10^{-6}	
		(0.19 ~ 1) MΩ	9.6×10^{-6}	
		(1 ~ 1.9) MΩ	8.9×10^{-6}	
		(1.9 ~ 10) MΩ	2.1×10^{-5}	
		(10 ~ 19) MΩ	1.7×10^{-5}	
		(19 ~ 100) MΩ	1.4×10^{-4}	
DC Current		(±)		
		0 μA	12 pA	
		(0 ~ 19) μA	1.0×10^{-5}	
		(19 ~ 100) μA	6.5×10^{-6}	
		(100 ~ 190) μA	6.3×10^{-6}	
		(0.19 ~ 1) mA	4.9×10^{-6}	
		(1 ~ 1.9) mA	4.8×10^{-6}	
		(1.9 ~ 10) mA	5.3×10^{-6}	
		(10 ~ 19) mA	5.0×10^{-6}	
		(19 ~ 190) mA	1.3×10^{-5}	
		(0.19 ~ 1) A	5.9×10^{-5}	
		(1 ~ 1.9) A	5.8×10^{-5}	
		(1.9 ~ 10) A	8.9×10^{-5}	
		(10 ~ 30) A	1.2×10^{-4}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Multimeter calibrators	40403			DC standard, DMM
AC Voltage		(0.5 ~ 2) mV		AC/DC transfer standard,
		10 Hz	6.0×10^{-4}	Current shunt
		(0.01 ~ 20) kHz	6.0×10^{-4}	Standard resiatance
		(20 ~ 50) kHz	9.0×10^{-4}	Meter calibrator
		(50 ~ 100) kHz	1.1×10^{-3}	/KTICC-CI-40403
		(100 ~ 300) kHz	1.9×10^{-3}	
		(300 ~ 500) kHz	4.1×10^{-3}	
		(0.5 ~ 1) MHz	6.5×10^{-3}	
		(2 ~ 20) mV		
		10 Hz	1.3×10^{-4}	
		(0.01 ~ 0.02) kHz	1.3×10^{-4}	
		(0.02 ~ 0.04) kHz	1.0×10^{-4}	
		(0.04 ~ 20) kHz	9.5×10^{-5}	
		(20 ~ 50) kHz	1.4×10^{-4}	
		(50 ~ 100) kHz	1.8×10^{-4}	
		(100 ~ 300) kHz	3.5×10^{-4}	
		(100 ~ 500) kHz	8.5×10^{-4}	
		(0.5 ~ 1) MHz	2.3×10^{-3}	
		(20 ~ 200) mV		
		10 Hz	6.5×10^{-5}	
		(0.01 ~ 0.02) kHz	6.0×10^{-5}	
		(0.02 ~ 0.04) kHz	3.6×10^{-5}	
		(0.04 ~ 1) kHz	3.3×10^{-5}	
		(1 ~ 20) kHz	3.4×10^{-5}	
		(20 ~ 50) kHz	4.1×10^{-5}	
		(50 ~ 100) kHz	7.5×10^{-5}	
		(100 ~ 300) kHz	1.7×10^{-4}	
		(300 ~ 500) kHz	3.0×10^{-4}	
		(0.5 ~ 1) MHz	1.0×10^{-3}	
		(0.2 ~ 2) V		
		10 Hz	5.5×10^{-5}	
		(0.01 ~ 0.02)	5.0×10^{-5}	
		(0.02 ~ 0.04)	2.8×10^{-5}	
		(0.04 ~ 20) kHz	2.2×10^{-5}	
		(20 ~ 50) kHz	2.7×10^{-5}	
		(50 ~ 100) kHz	4.7×10^{-5}	
		(100 ~ 300) kHz	1.3×10^{-4}	
		(300 ~ 500) kHz	2.2×10^{-4}	
		(0.5 ~ 1) MHz	9.5×10^{-4}	
		(2 ~ 20) V		
		10 Hz	5.5×10^{-5}	
		(0.01 ~ 0.02) kHz	5.0×10^{-5}	
		(0.02 ~ 0.04) kHz	3.0×10^{-5}	
		(0.04 ~ 20) kHz	2.3×10^{-5}	
		(20 ~ 50) kHz	2.9×10^{-5}	
		(50 ~ 100) kHz	5.5×10^{-5}	
		(100 ~ 300) kHz	1.4×10^{-4}	
		(300 ~ 500) kHz	3.5×10^{-4}	
		(0.5 ~ 1) MHz	1.2×10^{-3}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Multimeter calibrators	40403			DC standard, DMM
AC Voltage		(20 ~ 200) V		AC/DC transfer standard,
		10 Hz	6.5×10^{-5}	Current shunt
		(0.01 ~ 0.02) kHz	5.5×10^{-5}	Standard resiatance
		(0.02 ~ 0.04) kHz	3.3×10^{-5}	Meter calibrator
		(0.04 ~ 20) kHz	2.8×10^{-5}	/KTICC-CI-40403
		(20 ~ 50) kHz	4.0×10^{-5}	
		(50 ~ 100) kHz	6.5×10^{-5}	
		(200 ~ 700) V		
		20 Hz	5.3×10^{-5}	
		(0.02 ~ 0.04) kHz	3.4×10^{-5}	
		(0.04 ~ 20) kHz	2.9×10^{-5}	
		(20 ~ 50) kHz	1.1×10^{-4}	
		(50 ~ 100) kHz	6.6×10^{-4}	
		(700 ~ 1 000) V		
		40 Hz	3.6×10^{-5}	
		(0.04 ~ 1) kHz	2.9×10^{-5}	
		(1 ~ 20) kHz	3.0×10^{-5}	
		(20 ~ 30) kHz	1.1×10^{-4}	
AC Current		(0.009 ~ 1) mA		
		20 Hz	4.4×10^{-4}	
		(0.02 ~ 1) kHz	4.4×10^{-4}	
		(1 ~ 10) kHz	1.7×10^{-3}	
		(1 ~ 1.9) mA		
		20 Hz	3.6×10^{-4}	
		(0.02 ~ 1) kHz	3.6×10^{-4}	
		(1 ~ 10) kHz	1.6×10^{-3}	
		(1.9 ~ 10) mA		
		20 Hz	4.4×10^{-4}	
		(0.02 ~ 1) kHz	4.4×10^{-4}	
		(1 ~ 10) kHz	1.5×10^{-3}	
		(10 ~ 19) mA		
		20 Hz	3.6×10^{-4}	
		(0.02 ~ 1) kHz	3.6×10^{-4}	
		(1 ~ 10) kHz	1.4×10^{-3}	
		(19 ~ 100) mA		
		20 Hz	4.4×10^{-4}	
		(0.02 ~ 1) kHz	4.4×10^{-4}	
		(1 ~ 10) kHz	1.2×10^{-3}	
		(100 ~ 190) mA		
		20 Hz	3.6×10^{-4}	
		(0.02 ~ 1) kHz	3.6×10^{-4}	
		(1 ~ 10) kHz	1.2×10^{-3}	
		(0.19 ~ 1) A		
		20 Hz	8.7×10^{-4}	
		(0.02 ~ 1) kHz	8.7×10^{-4}	
		(1 ~ 10) kHz	6.6×10^{-3}	
		(1 ~ 1.9) A		
		20 Hz	7.9×10^{-4}	
		(0.02 ~ 1) kHz	7.9×10^{-4}	
		(1 ~ 10) kHz	6.3×10^{-3}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Multimeter calibrators	40403			DC standard, DMM
AC Current		(1.9 ~ 10) A		AC/DC transfer standard,
		40 Hz	1.1×10^{-3}	Current shunt
		(0.04 ~ 1) kHz	1.1×10^{-3}	Standard resiatance
		(10 ~ 30) A		Meter calibrator
		40 Hz	1.3×10^{-3}	/KTICC-CI-40403
		(0.04 ~ 1) kHz	1.3×10^{-3}	
Frequency		10 Hz ~ 1 MHz	6.1×10^{-7}	
Widband Voltage		(0.5 ~ 1) mV		
		10 Hz	8.7×10^{-4}	
		(10 ~ 30) Hz	8.1×10^{-4}	
		(0.03 ~ 100) kHz	4.5×10^{-4}	
		(0.1 ~ 2) MHz	1.3×10^{-3}	
		(2 ~ 10) MHz	2.1×10^{-3}	
		(10 ~ 20) MHz	3.2×10^{-3}	
		(20 ~ 30) MHz	7.1×10^{-3}	
		(30 ~ 50) MHz	1.0×10^{-2}	
		(1 ~ 3.2) mV		
		10 Hz	8.1×10^{-4}	
		(10 ~ 30) Hz	7.8×10^{-4}	
		(0.03 ~ 100) kHz	4.1×10^{-4}	
		(0.1 ~ 2) MHz	8.1×10^{-4}	
		(2 ~ 10) MHz	1.1×10^{-3}	
		(10 ~ 20) MHz	1.7×10^{-3}	
		(20 ~ 30) MHz	3.4×10^{-3}	
		(30 ~ 50) MHz	4.7×10^{-3}	
		(3.2 ~ 32) mV		
		10 Hz	8.1×10^{-4}	
		(10 ~ 30) Hz	8.0×10^{-4}	
		(0.03 ~ 100) kHz	4.1×10^{-4}	
		(0.1 ~ 2) MHz	5.6×10^{-4}	
		(2 ~ 10) MHz	8.4×10^{-4}	
		(10 ~ 20) MHz	1.5×10^{-3}	
		(20 ~ 30) MHz	3.2×10^{-3}	
		(30 ~ 50) MHz	5.1×10^{-3}	
		(0.032 ~ 3.5) V		
		10 Hz	8.0×10^{-4}	
		(10 ~ 30) Hz	8.0×10^{-4}	
		(0.03 ~ 100) kHz	3.2×10^{-4}	
		(0.1 ~ 2) MHz	4.1×10^{-4}	
		(2 ~ 10) MHz	8.5×10^{-4}	
		(10 ~ 20) MHz	1.3×10^{-3}	
		(20 ~ 30) MHz	3.1×10^{-3}	
		(30 ~ 50) MHz	5.1×10^{-3}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Oscilloscope calibrators	40404	(±)		DMM, Frequency counter,
Output DC Voltage		0 V	0.12 μV	RF power meter
		(0 ~ 1) mV	1.2×10^{-4}	/ KTICC-CI-40404
		(1 ~ 10) mV	1.6×10^{-5}	
		(10 ~ 100) mV	1.1×10^{-5}	
		(100 ~ 300) mV	5.0×10^{-6}	
		(300 ~ 500) mV	4.2×10^{-6}	
		(0.5 ~ 1) V	7.2×10^{-6}	
		(1 ~ 3) V	5.3×10^{-6}	
		(3 ~ 5) V	5.0×10^{-6}	
		(5 ~ 10) V	7.2×10^{-6}	
		(10 ~ 30) V	7.0×10^{-6}	
		(30 ~ 50) V	6.4×10^{-6}	
		(50 ~ 100) V	8.6×10^{-6}	
		(100 ~ 130) V	7.6×10^{-6}	
		(130 ~ 200) V	8.5×10^{-6}	
Output AC Voltage		(0.05 ~ 10) kHz		
		(0.5 ~ 1) mV	1.1×10^{-3}	
		(1 ~ 3) mV	3.7×10^{-4}	
		(3 ~ 5) mV	2.4×10^{-4}	
		(5 ~ 10) mV	1.4×10^{-4}	
		(10 ~ 30) mV	7.3×10^{-5}	
		(30 ~ 50) mV	6.2×10^{-5}	
		(50 ~ 100) mV	3.8×10^{-5}	
		(100 ~ 300) mV	2.9×10^{-5}	
		(300 ~ 500) mV	2.8×10^{-5}	
		(0.5 ~ 1) V	2.3×10^{-5}	
		(1 ~ 5) V	2.2×10^{-5}	
		(5 ~ 10) V	2.3×10^{-5}	
		(10 ~ 30) V	2.7×10^{-5}	
		(30 ~ 50) V	2.8×10^{-5}	
		(50 ~ 100) V	2.9×10^{-5}	
		(100 ~ 200) V	2.8×10^{-5}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Oscilloscope calibrators	40404			DMM, Frequency counter,
Time Marker		1 ns	6.1×10^{-8}	RF power meter
		(1 ~ 2) ns	3.1×10^{-8}	/ KTICC-CI-40404
		(2 ~ 5) ns	1.2×10^{-8}	
		(5 ~ 10) ns	6.1×10^{-8}	
		(10 ~ 20) ns	3.1×10^{-8}	
		(20 ~ 50) ns	1.2×10^{-8}	
		(50 ~ 100) ns	6.1×10^{-8}	
		(100 ~ 200) ns	3.1×10^{-8}	
		(200 ~ 500) ns	1.2×10^{-8}	
		(0.5 ~ 1) μs	6.1×10^{-8}	
		(1 ~ 2) μs	3.1×10^{-8}	
		(2 ~ 5) μs	1.2×10^{-8}	
		(5 ~ 10) μs	6.1×10^{-8}	
		(10 ~ 20) μs	3.1×10^{-8}	
		(20 ~ 50) μs	1.2×10^{-8}	
		(50 ~ 100) μs	6.1×10^{-8}	
		(100 ~ 200) μs	3.1×10^{-8}	
		(200 ~ 500) μs	1.2×10^{-8}	
		(0.5 ~ 1) ms	6.1×10^{-8}	
		(1 ~ 2) ms	3.1×10^{-8}	
		(2 ~ 5) ms	1.2×10^{-8}	
		(5 ~ 10) ms	6.1×10^{-8}	
		(10 ~ 20) ms	3.1×10^{-8}	
		(20 ~ 50) ms	1.2×10^{-7}	
		(50 ~ 100) ms	6.1×10^{-7}	
		(100 ~ 200) ms	3.1×10^{-7}	
		(200 ~ 500) ms	1.2×10^{-7}	
		(0.5 ~ 1) s	6.1×10^{-7}	
		(1 ~ 2) s	3.1×10^{-7}	
		(2 ~ 5) s	1.2×10^{-7}	
Level Sine Wave Amplitude		(1 ~ 50) kHz		
		5 mV	1.8×10^{-3}	
		(5 ~ 10) mV	7.6×10^{-4}	
		(10 ~ 30) mV	5.0×10^{-4}	
		(30 ~ 100) mV	5.1×10^{-4}	
		(100 ~ 600) mV	4.5×10^{-4}	
		(0.6 ~ 5.5) V	3.9×10^{-4}	
Level Sine Wave Flatness		50 kHz ~ 6 GHz		
		30 mV	2.0×10^{-2}	
		(0.03 ~ 3) V	1.8×10^{-2}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Video signal generators	40406			Video signal analyzers /KTICC-CI-40406
Frequency		10 Hz ~ 5 GHz	3.7×10^{-10}	
Luminance Level		NTSC, PAL		
		(1 ~ 100) mV	0.70 mV	
		(100 ~ 200) mV	0.92 mV	
		(200 ~ 300) mV	1.2 mV	
		(300 ~ 400) mV	1.5 mV	
		(400 ~ 500) mV	1.8 mV	
		(500 ~ 600) mV	2.5 mV	
		(600 ~ 714.3) mV	2.5 mV	
Chrominance Level		NTSC, PAL		
		(100 ~ 714.3) mV	8.4×10^{-3}	
Phase		NTSC, PAL		
		(0 ~ 360)°	1.4°	
H Timing		H Blanking, Sync to Setup		
		(8.8 ~ 13) μs	0.024 μs	
		Sync to Burst Start / End		
		(4 ~ 10) μs	0.036 μs	
		Sync Width		
		(1 ~ 8) μs	0.024 μs	
		Burst Width		
		(1.4 ~ 3) μs	0.036 μs	
		Front Proch		
		(0.1 ~ 3.5) μs	0.024 μs	
		Rise Time, Fall Time		
		80 ns ~ 1 μs	12 ns	
Audio distortion analyzers/meters	40407			Meter calibrator,
Frequency		(0.01 ~ 100) kHz	6.1×10^{-6}	Frequency counter,
		(100 ~ 200) kHz	3.1×10^{-6}	Audio analyzer /KTICC-CI-40407
AC Voltage		(0.22 ~ 1) mV		
		10 Hz	4.4×10^{-3}	
		(10 ~ 40) Hz	5.0×10^{-3}	
		(0.04 ~ 10) kHz	4.2×10^{-3}	
		(10 ~ 100) kHz	5.6×10^{-3}	
		(100 ~ 200) kHz	1.1×10^{-2}	
		(1 ~ 10) mV		
		10 Hz	6.6×10^{-4}	
		(0.01 ~ 10) kHz	5.1×10^{-4}	
		(10 ~ 100) kHz	1.0×10^{-3}	
		(100 ~ 200) kHz	2.1×10^{-3}	
		(10 ~ 100) mV		
		10 Hz	3.8×10^{-4}	
		(0.01 ~ 10) kHz	1.8×10^{-4}	
		(10 ~ 100) kHz	6.5×10^{-4}	
		(100 ~ 200) kHz	1.1×10^{-3}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Audio distortion analyzers/meters	40407			Meter calibrator,
AC Voltage		(0.1 ~ 1) V		Frequency counter,
		10 Hz	3.0×10^{-4}	Audio analyzer
		(10 ~ 40) Hz	1.3×10^{-4}	/KTICC-CI-40407
		(0.04 ~ 10) kHz	9.1×10^{-5}	
		(10 ~ 100) kHz	1.6×10^{-4}	
		(100 ~ 200) kHz	5.2×10^{-4}	
		(1 ~ 10) V		
		10 Hz	3.0×10^{-4}	
		(10 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 10) kHz	8.9×10^{-5}	
		(10 ~ 100) kHz	1.5×10^{-4}	
		(100 ~ 200) kHz	3.6×10^{-4}	
		(10 ~ 100) V		
		10 Hz	3.0×10^{-4}	
		(10 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 10) kHz	9.4×10^{-5}	
		(10 ~ 100) kHz	2.0×10^{-4}	
		(100 ~ 200) V		
		10 Hz	2.7×10^{-4}	
		(10 ~ 40) Hz	1.1×10^{-4}	
		(0.04 ~ 10) kHz	7.5×10^{-5}	
		(10 ~ 100) kHz	1.9×10^{-4}	
		(200 ~ 300) V		
		50 Hz	3.7×10^{-4}	
		(0.05 ~ 1) kHz	9.3×10^{-5}	
DC Voltage		(±)		
		0 V	6.1 μV	
		(0 ~ 100) mV	6.2×10^{-5}	
		(0.1 ~ 100) V	6.1×10^{-5}	
		(100 ~ 300) V	2.2×10^{-5}	
Level		10 Hz		
		(40 ~ -40) dBm	0.009 dB	
		(-40 ~ -50) dBm	0.018 dB	
		(-50 ~ -60) dBm	0.048 dB	
		(-60 ~ -70) dBm	0.15 dB	
		(0.01 ~ 1) kHz		
		(50 ~ -40) dBm	0.009 dB	
		(-40 ~ -50) dBm	0.016 dB	
		(-50 ~ -60) dBm	0.047 dB	
		(-60 ~ -70) dBm	0.14 dB	
		(1 ~ 10) kHz		
		(40 ~ -40) dBm	0.008 dB	
		(-40 ~ -50) dBm	0.016 dB	
		(-50 ~ -60) dBm	0.047 dB	
		(-60 ~ -70) dBm	0.14 dB	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Audio distortion analyzers/meters	40407			Meter calibrator,
Level		(10 ~ 100) kHz		Frequency counter,
		(40 ~ -20) dBm	0.009 dB	Audio analyzer
		(-20 ~ -40) dBm	0.012 dB	/KTICC-CI-40407
		(-40 ~ -50) dBm	0.023 dB	
		(-50 ~ -60) dBm	0.062 dB	
		(-60 ~ -70) dBm	0.18 dB	
		(100 ~ 200) kHz		
		(20 ~ -10) dBm	0.009 dB	
		(-10 ~ -20) dBm	0.012 dB	
		(-20 ~ -30) dBm	0.017 dB	
		(-30 ~ -40) dBm	0.022 dB	
		(-40 ~ -50) dBm	0.046 dB	
		(-50 ~ -60) dBm	0.12 dB	
		(-60 ~ -70) dBm	0.36 dB	
Frequency Respones		100 mV		
(Voltage)		(10 ~ 20) Hz	3.8×10^{-4}	
		(20 ~ 40) Hz	1.8×10^{-4}	
		(0.04 ~ 10) kHz	1.7×10^{-4}	
		(10 ~ 100) kHz	6.5×10^{-4}	
		(100 ~ 200) kHz	1.1×10^{-3}	
		(0.1 ~ 1) V		
		(10 ~ 20) Hz	3.0×10^{-4}	
		(20 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 10) kHz	9.1×10^{-5}	
		(10 ~ 100) kHz	1.6×10^{-4}	
		(100 ~ 200) kHz	5.2×10^{-4}	
		(1 ~ 10) V		
		(10 ~ 20) Hz	3.0×10^{-4}	
		(20 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 10) kHz	8.9×10^{-5}	
		(10 ~ 100) kHz	1.5×10^{-4}	
		(100 ~ 200) kHz	3.6×10^{-4}	
Frequency Respones		(10 ~ -10) dBm		
(Level)		(10 ~ 40) Hz	0.008 dB	
		(0.04 ~ 100) kHz	0.007 dB	
		(100 ~ 200) kHz	0.010 dB	
Distortion		(0.02 ~ 100) kHz		
		(0 ~ -60) dB	0.19 dB	
		(-60 ~ -80) dB	0.50 dB	
Filter(Frequency)		(0.01 ~ 100) kHz	6.1×10^{-6}	
(Weight, Low, High Pass)				
Filter(Level)		(0.01 ~ 100) kHz		
(Weight, Low, High Pass)		(20 ~ -63) dB	0.007 dB	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
LF filters	40408			Meter calibrator,
Filter(Frequency)		10 Hz ~ 1 MHz	6.1×10^{-6}	LF signal generator,
(Weight, Low, High Pass etc.)				Frequency counter,
Filter(Level)		20 Hz		Audio analyzer
(Weight, Low, High Pass etc.)		(0 ~ -30) dB	0.10 dB	/KTICC-CI-40408
		(-30 ~ -50) dB	0.20 dB	
		(-50 ~ -60) dB	0.30 dB	
		(0.02 ~ 100) kHz		
		(0 ~ -30) dB	0.054 dB	
		(-30 ~ -50) dB	0.10 dB	
		(-50 ~ -60) dB	0.21 dB	
		(0.1 ~ 1) MHz		
		(0 ~ -20) dB	0.076 dB	
		(-20 ~ -30) dB	0.086 dB	
		(-30 ~ -40) dB	0.20 dB	
		(-40 ~ -50) dB	0.22 dB	
		(-50 ~ -60) dB	0.38 dB	
LF/audio signal analyzers	40409			Meter calibrator, DMM
Input Frequency		(0.01 ~ 100) kHz	6.1×10^{-6}	Frequency counter,
		(100 ~ 200) kHz	3.1×10^{-6}	Audio analyzer
				/KTICC-CI-40409
Input AC Voltge		(0.22 ~ 1) mV		
		10 Hz	4.4×10^{-3}	
		(10 ~ 40) Hz	5.0×10^{-3}	
		(0.04 ~ 10) kHz	4.2×10^{-3}	
		(10 ~ 100) kHz	5.6×10^{-3}	
		(100 ~ 200) kHz	1.1×10^{-2}	
		(1 ~ 10) mV		
		10 Hz	6.6×10^{-4}	
		(0.01 ~ 10) kHz	5.1×10^{-4}	
		(10 ~ 100) kHz	1.0×10^{-3}	
		(100 ~ 200) kHz	2.1×10^{-3}	
		(10 ~ 100) mV		
		10 Hz	3.8×10^{-4}	
		(0.01 ~ 10) kHz	1.8×10^{-4}	
		(10 ~ 100) kHz	6.5×10^{-4}	
		(100 ~ 200) kHz	1.1×10^{-3}	
		(0.01 ~ 1) V		
		10 Hz	3.0×10^{-4}	
		(10 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 10) kHz	9.1×10^{-5}	
		(10 ~ 100) kHz	1.6×10^{-4}	
		(100 ~ 200) kHz	5.2×10^{-4}	
		(1 ~ 10) V		
		10 Hz	3.0×10^{-4}	
		(10 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 10) kHz	8.9×10^{-5}	
		(10 ~ 100) kHz	1.5×10^{-4}	
		(100 ~ 200) kHz	3.6×10^{-4}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
LF/audio signal analyzers	40409			Meter calibrator, DMM Frequency counter, Audio analyzer /KTICC-CI-40409
Input AC Voltge		(10 ~ 100) V		
		10 Hz	3.0×10^{-4}	
		(10 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 10) kHz	9.4×10^{-5}	
		(10 ~ 100) kHz	2.0×10^{-4}	
		(100 ~ 200) V		
		10 Hz	2.7×10^{-4}	
		(10 ~ 40) Hz	1.1×10^{-4}	
		(0.04 ~ 10) kHz	7.5×10^{-5}	
		(10 ~ 100) kHz	1.9×10^{-4}	
		(200 ~ 300) V		
		50 Hz	3.7×10^{-4}	
		(0.05 ~ 1) kHz	9.3×10^{-5}	
Input DC Voltage		(±)		
		0 V	6.1 μV	
		(0 ~ 100) mV	6.2×10^{-5}	
		(0.1 ~ 100) V	6.1×10^{-5}	
		(100 ~ 300) V	2.2×10^{-5}	
Input Level		10 Hz		
		(40 ~ -40) dBm	0.009 dB	
		(-40 ~ -50) dBm	0.018 dB	
		(-50 ~ -60) dBm	0.048 dB	
		(-60 ~ -70) dBm	0.15 dB	
		(0.01 ~ 1) kHz		
		(50 ~ -40) dBm	0.009 dB	
		(-40 ~ -50) dBm	0.016 dB	
		(-50 ~ -60) dBm	0.047 dB	
		(-60 ~ -70) dBm	0.14 dB	
		(1 ~ 10) kHz		
		(40 ~ -40) dBm	0.008 dB	
		(-40 ~ -50) dBm	0.016 dB	
		(-50 ~ -60) dBm	0.047 dB	
		(-60 ~ -70) dBm	0.14 dB	
		(10 ~ 100) kHz		
		(40 ~ -20) dBm	0.009 dB	
		(-20 ~ -40) dBm	0.012 dB	
		(-40 ~ -50) dBm	0.023 dB	
		(-50 ~ -60) dBm	0.062 dB	
		(-60 ~ -70) dBm	0.18 dB	
		(100 ~ 200) kHz		
		(20 ~ -10) dBm	0.009 dB	
		(-10 ~ -20) dBm	0.012 dB	
		(-20 ~ -30) dBm	0.017 dB	
		(-30 ~ -40) dBm	0.022 dB	
		(-40 ~ -50) dBm	0.046 dB	
		(-50 ~ -60) dBm	0.12 dB	
		(-60 ~ -70) dBm	0.36 dB	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
LF/audio signal analyzers	40409			Meter calibrator, DMM
Frequency Respones		100 mV		Frequency counter,
(Voltage)		(10 ~ 20) Hz	3.8×10^{-4}	Audio analyzer
		(20 ~ 40) Hz	1.8×10^{-4}	/KTICC-CI-40409
		(0.04 ~ 10) kHz	1.7×10^{-4}	
		(10 ~ 100) kHz	6.5×10^{-4}	
		(100 ~ 200) kHz	1.1×10^{-3}	
		(0.1 ~ 1) V		
		(10 ~ 20) Hz	3.0×10^{-4}	
		(20 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 10) kHz	9.1×10^{-5}	
		(10 ~ 100) kHz	1.6×10^{-4}	
		(100 ~ 200) kHz	5.2×10^{-4}	
		(1 ~ 10) V		
		(10 ~ 20) Hz	3.0×10^{-4}	
		(20 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 10) kHz	8.9×10^{-5}	
		(10 ~ 100) kHz	1.5×10^{-4}	
		(100 ~ 200) kHz	3.6×10^{-4}	
Frequency Respones		(10 ~ -10) dBm		
(Level)		(10 ~ 40) Hz	0.008 dB	
		(0.04 ~ 100) kHz	0.007 dB	
		(100 ~ 200) kHz	0.010 dB	
Distortion		(0.02 ~ 100) kHz		
		(0 ~ -60) dB	0.19 dB	
		(-60 ~ -80) dB	0.50 dB	
Filter(Frequency)		(0.01 ~ 100) kHz	6.1×10^{-6}	
(Weight, Low, High Pass)				
Filter(Level)		(0.01 ~ 100) kHz		
(Weight, Low, High Pass)		(20 ~ -63) dB	0.007 dB	
Output Frequency		(0.001 ~ 100) kHz	6.1×10^{-7}	
		(100 ~ 200) kHz	1.0×10^{-7}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
LF/audio signal analyzers	40409			Meter calibrator, DMM Frequency counter, Audio analyzer /KTICC-CI-40409
Output AC Voltage		(0.5 ~ 1) mV		
		10 Hz	1.3×10^{-3}	
		(0.01 ~ 10) kHz	1.2×10^{-3}	
		(10 ~ 50) kHz	1.8×10^{-3}	
		(50 ~ 100) kHz	2.1×10^{-3}	
		(100 ~ 200) kHz	3.5×10^{-3}	
		(1 ~ 10) mV		
		10 Hz	1.8×10^{-4}	
		(0.01 ~ 10) kHz	1.6×10^{-4}	
		(10 ~ 50) kHz	2.2×10^{-4}	
		(50 ~ 100) kHz	2.7×10^{-4}	
		(100 ~ 200) kHz	7.5×10^{-4}	
		(10 ~ 100) mV		
		10 Hz	9.3×10^{-5}	
		(0.01 ~ 10) kHz	7.4×10^{-5}	
		(10 ~ 50) kHz	7.7×10^{-5}	
		(50 ~ 100) kHz	1.0×10^{-4}	
		(100 ~ 200) kHz	1.9×10^{-4}	
		(0.1 ~ 1) V		
		10 Hz	8.3×10^{-5}	
		(0.01 ~ 50) kHz	6.7×10^{-5}	
		(50 ~ 100) kHz	7.7×10^{-5}	
		(100 ~ 200) kHz	1.4×10^{-4}	
		(1 ~ 10) V		
		10 Hz	8.2×10^{-5}	
		(0.01 ~ 50) kHz	6.8×10^{-5}	
		(50 ~ 100) kHz	8.2×10^{-5}	
		(100 ~ 200) kHz	1.5×10^{-4}	
		(10 ~ 100) V		
		10 Hz	8.8×10^{-5}	
		(0.01 ~ 10) kHz	6.9×10^{-5}	
		(10 ~ 50) kHz	7.3×10^{-5}	
		(50 ~ 100) kHz	9.1×10^{-5}	
Output Level		10 Hz		
		(20 ~ -50) dBm	0.008 dB	
		(-50 ~ -60) dBm	0.014 dB	
		(0.01 ~ 10) kHz		
		(20 ~ -50) dBm	0.008 dB	
		(-50 ~ -60) dBm	0.013 dB	
		(10 ~ 100) kHz		
		(20 ~ -40) dBm	0.007 dB	
		(-40 ~ -50) dBm	0.010 dB	
		(-50 ~ -60) dBm	0.023 dB	
		(100 ~ 200) kHz		
		(20 ~ -40) dBm	0.008 dB	
		(-40 ~ -50) dBm	0.014 dB	
		(-50 ~ -60) dBm	0.038 dB	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
LF/audio signal analyzers	40409			Meter calibrator, DMM Frequency counter, Audio analyzer /KTICC-CI-40409
Flatness (Voltage)		100 mV		
		10 Hz	9.3×10^{-5}	
		(0.01 ~ 10) kHz	7.4×10^{-5}	
		(10 ~ 50) kHz	7.7×10^{-5}	
		(50 ~ 100) kHz	1.0×10^{-4}	
		(100 ~ 200) kHz	1.9×10^{-4}	
		(0.1 ~ 10) V		
		10 Hz	8.2×10^{-5}	
		(0.01 ~ 50) kHz	6.8×10^{-5}	
		(50 ~ 100) kHz	8.2×10^{-5}	
		(100 ~ 200) kHz	1.5×10^{-4}	
Flatness (Level)		(-10 ~ 10) dBm		
		10 Hz	0.007 dB	
		(0.01 ~ 200) kHz	0.007 dB	
Line frequency meters	40410			Power calibrator /KTICC-CI-40410
Frequency		25 Hz	4.4×10^{-4}	
		(25 ~ 60) Hz	2.0×10^{-4}	
		(60 ~ 100) Hz	2.4×10^{-4}	
		(100 ~ 500) Hz	1.7×10^{-4}	
		(500 ~ 1 000) Hz	2.4×10^{-4}	
Function generators	40411			DMM, Frequency counter, Measuring receiver, Oscilloscope, Audio Analyzer /KTICC-CI-40411
Frequency		1 Hz ~ 100 MHz	6.1×10^{-9}	
		(100 ~ 400) MHz	1.6×10^{-9}	
AC Voltage		(0.22 ~ 1) mV		
		10 Hz	1.3×10^{-3}	
		(0.01 ~ 10) kHz	1.2×10^{-3}	
		(10 ~ 100) kHz	2.1×10^{-3}	
		(0.1 ~ 1) MHz	1.0×10^{-2}	
		(1 ~ 10) mV		
		10 Hz	1.8×10^{-4}	
		(0.01 ~ 10) kHz	1.6×10^{-4}	
		(10 ~ 50) kHz	2.2×10^{-4}	
		(50 ~ 100) kHz	2.7×10^{-4}	
		(0.1 ~ 1) MHz	2.7×10^{-3}	
		(10 ~ 100) mV		
		10 Hz	9.3×10^{-5}	
		(0.01 ~ 10) kHz	7.4×10^{-5}	
		(10 ~ 50) kHz	7.7×10^{-5}	
		(50 ~ 100) kHz	1.0×10^{-4}	
		(0.1 ~ 1) MHz	1.0×10^{-3}	
		(0.1 ~ 1) V		
		10 Hz	8.3×10^{-5}	
		(0.01 ~ 50) kHz	6.7×10^{-5}	
		(50 ~ 100) kHz	7.7×10^{-5}	
		(0.1 ~ 1) MHz	9.6×10^{-4}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Function generators	40411			DMM, Frequency counter,
AC Voltage		(1 ~ 10) V		Measuring receiver,
		10 Hz	8.2×10^{-5}	Oscilloscope,
		(0.01 ~ 10) kHz	6.8×10^{-5}	Audio Analyzer
		(50 ~ 100) kHz	8.2×10^{-5}	/KTICC-CI-40411
		(0.1 ~ 1) MHz	1.2×10^{-3}	
		(10 ~ 100) V		
		10 Hz	8.8×10^{-5}	
		(0.01 ~ 10) kHz	6.9×10^{-5}	
		(10 ~ 50) kHz	7.3×10^{-5}	
		(50 ~ 100) kHz	9.1×10^{-5}	
Level		10 Hz		
		(20 ~ -40) dBm	0.008 dB	
		(-40 ~ -50) dBm	0.010 dB	
		(-50 ~ -60) dBm	0.49 dB	
		(10 ~ 40) Hz		
		(20 ~ -40) dBm	0.007 dB	
		(-40 ~ -50) dBm	0.010 dB	
		(-50 ~ -60) dBm	0.30 dB	
		(0.04 ~ 10) kHz		
		(20 ~ -40) dBm	0.007 dB	
		(-40 ~ -50) dBm	0.010 dB	
		(-50 ~ -60) dBm	0.21 dB	
		(0.01 ~ 10) MHz		
		(20 ~ -40) dBm	0.008 dB	
		(-40 ~ -50) dBm	0.011 dB	
		(-50 ~ -60) dBm	0.14 dB	
		(10 ~ 50) MHz		
		(20 ~ -50) dBm	0.024 dB	
		(-50 ~ -60) dBm	0.14 dB	
		(50 ~ 400) MHz		
		(20 ~ -30) dBm	0.12 dB	
		(-30 ~ -60) dBm	0.14 dB	
Flatness		100 mV		
(Voltage)		10 Hz	8.7×10^{-4}	
		(0.01 ~ 100) kHz	4.5×10^{-4}	
		(0.1 ~ 1) MHz	5.1×10^{-4}	
		(1 ~ 10) MHz	8.9×10^{-4}	
		(10 ~ 30) MHz	3.0×10^{-3}	
		(30 ~ 50) MHz	5.1×10^{-3}	
		(50 ~ 400) MHz	2.6×10^{-2}	
		(0.1 ~ 1) V		
		10 Hz	8.9×10^{-4}	
		(0.01 ~ 100) kHz	4.0×10^{-4}	
		(0.1 ~ 1) MHz	5.1×10^{-4}	
		(1 ~ 10) MHz	8.9×10^{-4}	
		(10 ~ 30) MHz	3.0×10^{-3}	
		(30 ~ 50) MHz	5.0×10^{-3}	
		(50 ~ 400) MHz	2.7×10^{-2}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Function generators	40411			DMM, Frequency counter,
Flatness		(1 ~ 3) V		Measuring receiver,
(Voltage)		10 Hz	9.0×10^{-4}	Oscilloscope,
		(0.01 ~ 100) kHz	4.3×10^{-4}	Audio Analyzer
		(0.1 ~ 1) MHz	5.3×10^{-4}	/KTICC-CI-40411
		(1 ~ 10) MHz	9.0×10^{-4}	
		(10 ~ 30) MHz	3.0×10^{-3}	
		(30 ~ 50) MHz	5.0×10^{-3}	
		(50 ~ 400) MHz	2.8×10^{-2}	
Flatness		(10 ~ -10) dBm		
(Level)		10 Hz ~ 10 MHz	0.008 dB	
		(10 ~ 30) MHz	0.015 dB	
		(30 ~ 50) MHz	0.023 dB	
		(50 ~ 400) MHz	0.11 dB	
DC Offset Voltage		(±)		
		0 V	6.2 μV	
		(0 ~ 1) V	6.2×10^{-5}	
		(1 ~ 5) V	1.3×10^{-5}	
		(5 ~ 10) V	7.2×10^{-6}	
Attenuator		(0.04 ~ 100) kHz		
		(30 ~ -40) dB	0.054 dB	
		(-40 ~ -60) dB	0.10 dB	
		(-60 ~ -70) dB	0.20 dB	
		(-70 ~ -80) dB	0.30 dB	
		(0.1 ~ 400) MHz		
		(30 ~ -40) dB	0.061 dB	
		(-40 ~ -50) dB	0.068 dB	
		(-50 ~ -60) dB	0.072 dB	
		(-60 ~ -70) dB	0.076 dB	
		(-70 ~ -80) dB	0.081 dB	
Frequency Modulation		(0 ~ 400) kHz	2.8×10^{-2}	
Amplitude Modulation		(0 ~ 99) %	2.7×10^{-2}	
Phase		(0 ~ 360)°	0.061°	
Duty cycle		(1 ~ 99) %	0.006 1 %	
Rise/Fall Time		0.4 ns	4.8×10^{-1}	
		(0.4 ~ 1) ns	9.0×10^{-2}	
		1 ns ~ 1 ms	8.2×10^{-3}	
Distortion		(0.02 ~ 100) kHz		
		(-30 ~ -80) dB	2.3 dB	
AC/DC high voltage voltmeters	40413	(±)		High voltage supply
DC Voltage		0 kV	0.61 V	High volt meter, DMM
		(0 ~ 1) kV	1.3×10^{-3}	High voltage test equipment
		(1 ~ 100) kV	1.2×10^{-3}	/KTICC-CI-40413
AC Voltage		(50 ~ 60) Hz		
		(0.1 ~ 10) kV	1.3×10^{-2}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
LF impulse generators	40414	(±)		Oscilloscope,
Output Voltage		(0.001 ~ 20) kV	1.3×10^{-2}	High voltage probe /KTICC-CI-40414
Pulse Width		1 ns	9.0×10^{-2}	
		(1 ~ 10) ns	3.6×10^{-3}	
		10 ns ~ 100 ms	3.4×10^{-3}	
Frequency		100 Hz	3.4×10^{-3}	
		(100 ~ 200) Hz	3.9×10^{-3}	
		(200 ~ 500) Hz	5.6×10^{-3}	
		(0.5 ~ 1) kHz	3.4×10^{-3}	
		(1 ~ 2) kHz	3.9×10^{-3}	
		(2 ~ 5) kHz	5.6×10^{-3}	
		(5 ~ 10) kHz	3.4×10^{-3}	
		(10 ~ 20) kHz	3.9×10^{-3}	
Leakage current testers	40416	(±)		Meter calibrator, DMM /KTICC-CI-40416
DC Voltage		0 V	6.1 μV	
		(0 ~ 0.1) V	6.2×10^{-5}	
		(0.1 ~ 100) V	6.1×10^{-5}	
		(100 ~ 1 000) V	6.2×10^{-5}	
AC Voltage		(0.02 ~ 1) kHz		
		(0.22 ~ 100) mV	1.7×10^{-4}	
		(0.1 ~ 1) V	9.1×10^{-5}	
		(1 ~ 10) V	8.9×10^{-5}	
		(10 ~ 100) V	9.4×10^{-5}	
		(100 ~ 1 000) V	1.0×10^{-4}	
DC Current		(±)		
		0 A	8.7 nA	
		(0 ~ 10) μA	8.9×10^{-4}	
		(10 ~ 100) μA	6.2×10^{-4}	
		(10 ~ 500) μA	1.3×10^{-4}	
		(0.5 ~ 1) mA	6.1×10^{-4}	
		(1 ~ 5) mA	1.3×10^{-4}	
		(5 ~ 10) mA	6.2×10^{-4}	
		(10 ~ 50) mA	1.4×10^{-4}	
		(50 ~ 100) mA	6.2×10^{-4}	
AC Current		(0.04 ~ 1) kHz		
		(0.009 ~ 1) mA	6.4×10^{-4}	
		(1 ~ 5) mA	2.4×10^{-4}	
		(5 ~ 10) mA	7.6×10^{-4}	
		(10 ~ 50) mA	6.4×10^{-4}	
		(50 ~ 100) mA	7.6×10^{-4}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Leakage current testers Output voltage to input voltage ratios	40416	Unweighted touch current measuring network ratio (1 ~ 4)		Meter calibrator, DMM /KTICC-CI-40416
		0.02 kHz	3.0×10^{-4}	
		0.05 kHz	1.4×10^{-4}	
		0.06 kHz	1.4×10^{-4}	
		0.1 kHz	1.4×10^{-4}	
		0.2 kHz	1.3×10^{-4}	
		0.5 kHz	1.1×10^{-4}	
		1 kHz	9.2×10^{-5}	
		2 kHz	8.1×10^{-5}	
		5 kHz	7.4×10^{-5}	
		10 kHz	7.4×10^{-5}	
		20 kHz	7.3×10^{-5}	
		50 kHz	1.0×10^{-4}	
		100 kHz	1.4×10^{-4}	
		200 kHz	3.5×10^{-4}	
		500 kHz	1.2×10^{-3}	
		1 000 kHz	2.1×10^{-3}	
		Perception or reaction measuring network ratio (3.43 ~ 1 382)		
		0.02 kHz	3.0×10^{-4}	
		0.05 kHz	1.4×10^{-4}	
		0.06 kHz	1.4×10^{-4}	
		0.1 kHz	1.4×10^{-4}	
		0.2 kHz	1.3×10^{-4}	
		0.5 kHz	1.2×10^{-4}	
		1 kHz	1.1×10^{-4}	
		2 kHz	1.3×10^{-4}	
		5 kHz	7.9×10^{-5}	
		10 kHz	4.3×10^{-5}	
		20 kHz	8.6×10^{-5}	
		50 kHz	2.2×10^{-4}	
		100 kHz	4.2×10^{-4}	
		200 kHz	2.9×10^{-4}	
		500 kHz	7.2×10^{-4}	
		1 000 kHz	1.4×10^{-3}	
		Foil around lamp network ratio (1 000 ~ 5 503)		
		0.06 kHz	3.2×10^{-4}	
		0.1 kHz	3.3×10^{-4}	
		0.2 kHz	3.9×10^{-4}	
		0.5 kHz	4.3×10^{-4}	
		1 kHz	5.3×10^{-4}	
		2 kHz	8.4×10^{-4}	
		5 kHz	1.4×10^{-3}	
		10 kHz	1.6×10^{-3}	
		20 kHz	1.7×10^{-3}	
		50 kHz	1.7×10^{-3}	
		100 kHz	1.8×10^{-3}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Electronic AC/DC loads	40417	(±)		DC/AC power supply,
DC Voltage		0 V	61 μV	Meter calibrator,
		(0 ~ 1 000) V	6.2×10^{-5}	Current shunt, DMM
				/KTICC-CI-40417
DC Current		(±)		
		0 A	61 nA	
		(0 ~ 100) mA	1.3×10^{-4}	
		(0.1 ~ 1) A	2.4×10^{-4}	
		(1 ~ 10) A	2.5×10^{-4}	
		(10 ~ 100) A	5.9×10^{-4}	
AC Voltage		(40 ~ 100) Hz		
		0.22 mV ~ 10 V	9.5×10^{-5}	
		(10 ~ 100) V	1.0×10^{-4}	
		(100 ~ 1 000) V	2.0×10^{-4}	
AC Current		(40 ~ 100) Hz		
		0.009 mA ~ 30 A	1.3×10^{-3}	
Modulation meters	40418			RF signal generator,
Frequency Modulation		(0 ~ 400) kHz	2.8×10^{-2}	Measuring receiver,
				/KTICC-CI-40418
Amplitude Modulation		(0 ~ 99) %	2.7×10^{-2}	
Phase Modulation		(0 ~ 400) rad	4.2×10^{-2}	
Frequency		(0.1 ~ 1 000) MHz	6.1×10^{-9}	
Analogue/digital multimeters	40419	(±)		Meter calibrator,
DC Voltage		0 V	0.41 μV	Frequency generator,
		(0 ~ 10) mV	4.9×10^{-5}	Standard resistance,
		(10 ~ 19) mV	2.9×10^{-5}	DC reference standard
		(19 ~ 100) mV	1.2×10^{-5}	/KTICC-CI-40419
		(100 ~ 190) mV	1.0×10^{-5}	
		(0.19 ~ 1) V	5.9×10^{-6}	
		(1 ~ 1.9) V	5.8×10^{-6}	
		(1.9 ~ 10) V	4.0×10^{-6}	
		(10 ~ 19) V	3.9×10^{-6}	
		(19 ~ 100) V	5.9×10^{-6}	
		(100 ~ 190) V	5.8×10^{-6}	
		(190 ~ 1 000) V	7.3×10^{-6}	
AC Voltage		(0.22 ~ 100) mV		
		(10 ~ 20) Hz	3.7×10^{-4}	
		(20 ~ 40) Hz	1.7×10^{-4}	
		(0.04 ~ 20) kHz	1.6×10^{-4}	
		(20 ~ 50) kHz	2.8×10^{-4}	
		(50 ~ 100) kHZ	6.5×10^{-4}	
		(100 ~ 200) kHz	1.1×10^{-3}	
		(200 ~ 500) kHz	1.7×10^{-3}	
		(0.5 ~ 1) MHz	3.2×10^{-3}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Analogue/digital multimeters AC Voltage	40419	(100 ~ 190) mV		Meter calibrator, Frequency generator, Standard resistance, DC reference standard /KTICC-CI-40419
		(10 ~ 20) Hz	3.2×10^{-4}	
		(20 ~ 40) Hz	1.4×10^{-4}	
		(0.04 ~ 20) kHz	1.3×10^{-4}	
		(20 ~ 50) kHz	2.5×10^{-4}	
		(50 ~ 100) kHZ	5.8×10^{-4}	
		(100 ~ 200) kHz	1.1×10^{-3}	
		(200 ~ 500) kHz	1.6×10^{-3}	
		(0.5 ~ 1) MHz	3.0×10^{-3}	
		(0.19 ~ 1) V		
		(10 ~ 20) Hz	2.9×10^{-4}	
		(20 ~ 40) Hz	1.1×10^{-4}	
		(0.04 ~ 20) kHz	6.8×10^{-5}	
		(20 ~ 50) kHz	9.6×10^{-5}	
		(50 ~ 100) kHz	1.5×10^{-4}	
		(100 ~ 200) kHz	5.2×10^{-4}	
		(200 ~ 500) kHz	1.2×10^{-3}	
		(0.5 ~ 1) MHz	2.0×10^{-3}	
		(1 ~ 1.9) V		
		(10 ~ 20) Hz	2.7×10^{-4}	
		(20 ~ 40) Hz	1.1×10^{-4}	
		(0.04 ~ 20) kHz	6.3×10^{-5}	
		(20 ~ 50) kHz	8.9×10^{-5}	
		(50 ~ 100) kHz	1.4×10^{-4}	
		(100 ~ 200) kHz	4.8×10^{-4}	
		(200 ~ 500) kHz	1.2×10^{-3}	
		(0.5 ~ 1) MHz	1.9×10^{-3}	
		(1.9 ~ 10) V		
		(10 ~ 20) Hz	2.9×10^{-4}	
		(20 ~ 40) Hz	1.1×10^{-4}	
		(0.04 ~ 20) kHz	6.5×10^{-5}	
		(20 ~ 50) kHz	1.0×10^{-4}	
		(50 ~ 100) kHz	1.3×10^{-4}	
		(100 ~ 200) kHz	3.5×10^{-4}	
		(200 ~ 500) kHz	1.2×10^{-3}	
		(0.5 ~ 1) MHz	1.9×10^{-3}	
		(10 ~ 19) V		
		(10 ~ 20) Hz	2.7×10^{-4}	
		(20 ~ 40) Hz	1.1×10^{-4}	
		(0.04 ~ 20) kHz	6.3×10^{-5}	
		(20 ~ 50) kHz	8.9×10^{-5}	
		(50 ~ 100) kHz	1.2×10^{-4}	
		(100 ~ 200) kHz	3.3×10^{-4}	
		(200 ~ 500) kHz	1.2×10^{-3}	
		(0.5 ~ 1) MHz	1.7×10^{-3}	
		(19 ~ 100) V		
		(20 ~ 40) Hz	1.1×10^{-4}	
		(0.04 ~ 20) kHz	7.2×10^{-5}	
		(20 ~ 50) kHz	1.0×10^{-4}	
		(50 ~ 100) kHz	1.9×10^{-4}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Analogue/digital multimeters	40419			Meter calibrator,
AC Voltage		(100 ~ 190) V		Frequency generator,
		(20 ~ 40) Hz	1.1×10^{-4}	Standard resistance,
		(0.04 ~ 20) kHz	6.8×10^{-5}	DC reference standard
		(20 ~ 50) kHz	1.0×10^{-4}	/KTICC-CI-40419
		(50 ~ 100) kHz	1.8×10^{-4}	
		(190 ~ 1 000) V		
		(15 ~ 50) Hz	3.2×10^{-4}	
		(50 ~ 500) Hz	8.5×10^{-5}	
		(0.5 ~ 1) kHz	8.5×10^{-5}	
		(1 ~ 20) kHz	1.8×10^{-4}	
DC Current		(±)		
		0 A	6.1 nA	
		(0 ~ 100) μA	1.0×10^{-4}	
		(100 ~ 190) μA	7.4×10^{-5}	
		(0.19 ~ 1) mA	4.3×10^{-5}	
		(1 ~ 10) mA	4.0×10^{-5}	
		(10 ~ 19) mA	3.8×10^{-5}	
		(19 ~ 100) mA	5.4×10^{-5}	
		(100 ~ 190) mA	5.0×10^{-5}	
		(0.19 ~ 1) A	9.4×10^{-5}	
		(1 ~ 1.9) A	8.9×10^{-5}	
		(1.9 ~ 2) A	9.0×10^{-5}	
		(2 ~ 10) A	5.1×10^{-4}	
		(10 ~ 20) A	1.3×10^{-4}	
		(20 ~ 30) A	3.7×10^{-4}	
AC Current		(0.009 ~ 1) mA		
		(10 ~ 20) Hz	3.1×10^{-4}	
		(20 ~ 40) Hz	2.1×10^{-4}	
		(0.04 ~ 1) kHz	1.7×10^{-4}	
		(1 ~ 10) kHz	1.9×10^{-3}	
		(1 ~ 1.9) mA		
		(10 ~ 20) Hz	5.5×10^{-4}	
		(20 ~ 40) Hz	1.9×10^{-4}	
		(0.04 ~ 1) kHz	1.6×10^{-4}	
		(1 ~ 10) kHz	1.5×10^{-3}	
		(1.9 ~ 10) mA		
		(10 ~ 20) Hz	3.1×10^{-4}	
		(20 ~ 40) Hz	2.1×10^{-4}	
		(0.04 ~ 1) kHz	1.7×10^{-4}	
		(1 ~ 10) kHz	1.6×10^{-3}	
		(10 ~ 19) mA		
		(10 ~ 20) Hz	2.9×10^{-4}	
		(20 ~ 40) Hz	1.9×10^{-4}	
		(0.04 ~ 1) kHz	1.6×10^{-4}	
		(1 ~ 10) kHz	1.4×10^{-3}	
		(19 ~ 100) mA		
		(10 ~ 20) Hz	3.1×10^{-4}	
		(20 ~ 40) Hz	2.2×10^{-4}	
		(0.04 ~ 1) kHz	1.7×10^{-4}	
		(1 ~ 10) kHz	1.2×10^{-3}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Analogue/digital multimeters	40419			Meter calibrator,
AC Current		(100 ~ 190) mA		Frequency generator,
		(10 ~ 20) Hz	2.9×10^{-4}	Standard resistance,
		(20 ~ 40) Hz	2.1×10^{-4}	DC reference standard
		(0.04 ~ 1) kHz	1.6×10^{-4}	/KTICC-CI-40419
		(1 ~ 10) kHz	1.2×10^{-3}	
		(0.19 ~ 1) A		
		(0.01 ~ 1) kHz	3.3×10^{-4}	
		(1 ~ 10) kHz	7.3×10^{-3}	
		(1 ~ 1.9) A		
		(0.01 ~ 1) kHz	3.1×10^{-4}	
		(1 ~ 10) kHz	7.4×10^{-3}	
		(1.9 ~ 2) A		
		(0.01 ~ 1) kHz	3.2×10^{-4}	
		(1 ~ 10) kHz	7.0×10^{-3}	
		(2 ~ 10) A		
		(45 ~ 100) Hz	8.0×10^{-4}	
		(0.1 ~ 1) kHz	8.0×10^{-4}	
		(1 ~ 10) kHz	1.7×10^{-2}	
		(10 ~ 20) A		
		(45 ~ 100) Hz	8.5×10^{-4}	
		(0.1 ~ 1) kHz	1.4×10^{-3}	
		(20 ~ 30) A		
		(45 ~ 100) Hz	1.3×10^{-3}	
		(0.1 ~ 1) kHz	4.0×10^{-3}	
Resistance		(0 ~ 1) Ω	9.6×10^{-6}	
		(1 ~ 10) Ω	2.4×10^{-5}	
		(10 ~ 100) Ω	7.4×10^{-6}	
		(0.1 ~ 1) kΩ	1.0×10^{-5}	
		(1 ~ 10) kΩ	5.4×10^{-6}	
		(10 ~ 100) kΩ	1.5×10^{-5}	
		(0.1 ~ 1) MΩ	2.3×10^{-5}	
		(1 ~ 10) MΩ	4.6×10^{-5}	
		(10 ~ 100) MΩ	1.0×10^{-4}	
		(0.1 ~ 1) GΩ	6.2×10^{-4}	
Frequency		1 Hz ~ 10 MHz	6.1×10^{-7}	
Noise meters	40420			Meter calibrator
AC Voltage		(0.22 ~ 0.3) mV		/KTICC-CI-40420
		(0.01 ~ 20) kHz	1.5×10^{-2}	
		(20 ~ 100) kHz	1.8×10^{-2}	
		(100 ~ 500) kHz	7.0×10^{-2}	
		(0.3 ~ 1) mV		
		(10 ~ 20) Hz	5.2×10^{-3}	
		(0.02 ~ 20) kHz	5.1×10^{-3}	
		(20 ~ 100) kHz	6.3×10^{-3}	
		(100 ~ 500) kHz	2.2×10^{-2}	
		(1 ~ 3) mV		
		(0.01 ~ 20) kHz	5.0×10^{-3}	
		(20 ~ 100) kHz	5.3×10^{-3}	
		(100 ~ 500) kHz	9.7×10^{-3}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Noise meters	40420			Meter calibrator
AC Voltage		(3 ~ 10) mV		/KTICC-CI-40420
		(10 ~ 20) Hz	3.0×10^{-3}	
		(0.02 ~ 20) kHz	2.9×10^{-3}	
		(20 ~ 100) kHz	3.1×10^{-3}	
		(100 ~ 500) kHz	4.5×10^{-3}	
		(10 ~ 30) mV		
		(10 ~ 20) Hz	5.0×10^{-3}	
		(0.02 ~ 20) kHz	4.7×10^{-3}	
		(20 ~ 100) kHz	5.0×10^{-3}	
		(100 ~ 500) kHz	5.3×10^{-3}	
		(30 ~ 100) mV		
		(0.01 ~ 20) kHz	2.9×10^{-3}	
		(20 ~ 100) kHz	3.0×10^{-3}	
		(100 ~ 500) kHz	3.4×10^{-3}	
		(100 ~ 300) mV		
		(0.01 ~ 100) kHz	4.7×10^{-3}	
		(100 ~ 500) kHz	5.0×10^{-3}	
		(0.3 ~ 1) V		
		(0.01 ~ 100) kHz	2.9×10^{-3}	
		(100 ~ 500) kHz	3.1×10^{-3}	
		(1 ~ 3) V		
		(0.01 ~ 100) kHz	4.7×10^{-3}	
		(100 ~ 500) kHz	5.0×10^{-3}	
		(3 ~ 10) V		
		(0.01 ~ 100) kHz	2.9×10^{-3}	
		(100 ~ 500) kHz	3.1×10^{-3}	
		(10 ~ 30) V		
		(0.01 ~ 100) kHz	4.7×10^{-3}	
		(30 ~ 100) V		
		(0.01 ~ 100) kHz	2.9×10^{-3}	
		(100 ~ 300) V		
		(0.015 ~ 1) kHz	4.7×10^{-3}	
Level		(0.01 ~ 1) kHz		
		(40 ~ -40) dBm	0.036 dB	
		(-40 ~ -50) dBm	0.039 dB	
		(-50 ~ -60) dBm	0.059 dB	
		(-60 ~ -70) dBm	0.15 dB	
		(1 ~ 20) kHz		
		(40 ~ -40) dBm	0.035 dB	
		(-40 ~ -50) dBm	0.038 dB	
		(-50 ~ -60) dBm	0.058 dB	
		(-60 ~ -70) dBm	0.15 dB	
		(20 ~ 100) kHz		
		(40 ~ -10) dBm	0.035 dB	
		(-10 ~ -20) dBm	0.036 dB	
		(-20 ~ -40) dBm	0.037 dB	
		(-40 ~ -50) dBm	0.042 dB	
		(-50 ~ -60) dBm	0.071 dB	
		(-60 ~ -70) dBm	0.19 dB	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Noise meters	40420			Meter calibrator
Level		(100 ~ 500) kHz		/KTICC-CI-40420
		(20 ~ -20) dBm	0.039 dB	
		(-20 ~ -30) dBm	0.041 dB	
		(-30 ~ -40) dBm	0.050 dB	
		(-40 ~ -50) dBm	0.091 dB	
		(-50 ~ -60) dBm	0.24 dB	
		(-60 ~ -70) dBm	0.71 dB	
Filter		(0.01 ~ 31.5) kHz		
(Weight, Low, High Pass etc.)		(20 ~ -63) dB	0.035 dB	
Oscilloscopes	40421	(±)		Scope calibrator,
Vertical(DC Voltage)		0 V	29 μV	DMM, Frequency counter,
		(0 ~ 1) mV	2.9×10^{-2}	RF signal generator
		(1 ~ 2) mV	1.5×10^{-2}	/KTICC-CI-40421
		(2 ~ 5) mV	6.0×10^{-3}	
		(5 ~ 10) mV	3.2×10^{-3}	
		(10 ~ 20) mV	1.8×10^{-3}	
		(20 ~ 50) mV	8.6×10^{-4}	
		(50 ~ 100) mV	5.8×10^{-4}	
		(100 ~ 200) mV	4.4×10^{-4}	
		(200 ~ 500) mV	3.4×10^{-4}	
		(0.5 ~ 1) V	3.2×10^{-4}	
		(1 ~ 2) V	3.1×10^{-4}	
		(2 ~ 10) V	3.0×10^{-4}	
		(10 ~ 20) V	2.9×10^{-4}	
		(20 ~ 50) V	2.8×10^{-4}	
		(50 ~ 100) V	3.0×10^{-4}	
		(100 ~ 130) V	2.9×10^{-4}	
Vertical(Spuare Wave)		1 kHz		
		1 mV	6.4×10^{-3}	
		(1 ~ 2) mV	3.5×10^{-3}	
		(2 ~ 5) mV	1.7×10^{-3}	
		(5 ~ 10) mV	1.2×10^{-3}	
		(10 ~ 20) mV	8.5×10^{-4}	
		(20 ~ 50) mV	7.0×10^{-4}	
		(50 ~ 100) mV	6.4×10^{-4}	
		(100 ~ 200) mV	6.0×10^{-4}	
		(200 ~ 500) mV	5.8×10^{-4}	
		(0.5 ~ 1) V	5.9×10^{-4}	
		(1 ~ 2) V	6.0×10^{-4}	
		(2 ~ 10) V	5.8×10^{-4}	
		(10 ~ 20) V	6.0×10^{-4}	
		(20 ~ 130) V	5.8×10^{-4}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Oscilloscopes	40421			Scope calibrator,
Time(Period)		1 ns	6.1×10^{-5}	DMM, Frequency counter,
		(1 ~ 2) ns	3.1×10^{-5}	RF signal generator
		(2 ~ 5) ns	1.2×10^{-5}	/KTICC-CI-40421
		(5 ~ 10) ns	6.1×10^{-5}	
		(10 ~ 20) ns	3.1×10^{-5}	
		(20 ~ 50) ns	1.2×10^{-5}	
		(50 ~ 100) ns	6.1×10^{-5}	
		(100 ~ 200) ns	3.1×10^{-5}	
		(200 ~ 500) ns	1.2×10^{-5}	
		(0.5 ~ 1) µs	6.1×10^{-5}	
		(1 ~ 2) µs	3.1×10^{-5}	
		(2 ~ 5) µs	1.2×10^{-5}	
		(5 ~ 10) µs	6.1×10^{-5}	
		(10 ~ 20) µs	3.1×10^{-5}	
		(20 ~ 50) µs	1.2×10^{-5}	
		(50 ~ 100) µs	6.1×10^{-5}	
		(100 ~ 200) µs	3.1×10^{-5}	
		(200 ~ 500) µs	1.2×10^{-5}	
		(0.5 ~ 1) ms	6.1×10^{-5}	
		(1 ~ 2) ms	3.1×10^{-5}	
		(2 ~ 5) ms	1.2×10^{-5}	
		(5 ~ 10) ms	6.1×10^{-5}	
		(10 ~ 20) ms	3.1×10^{-5}	
		(20 ~ 50) ms	1.4×10^{-5}	
		(50 ~ 100) ms	6.1×10^{-5}	
		(100 ~ 200) ms	3.1×10^{-5}	
		(200 ~ 500) ms	1.3×10^{-5}	
		(0.5 ~ 1) s	6.1×10^{-5}	
		(1 ~ 2) s	3.1×10^{-5}	
		(2 ~ 5) s	1.3×10^{-5}	
Bandwidth		30 mV (≤2 GHz)		
		50 kHz	2.5×10^{-2}	
		(0.05 ~ 100) MHz	2.9×10^{-2}	
		(100 ~ 300) MHz	3.3×10^{-2}	
		(300 ~ 500) MHz	5.0×10^{-2}	
		(500 ~ 600) MHz	5.3×10^{-2}	
		(0.6 ~ 1) GHz	6.3×10^{-2}	
		(1 ~ 2) GHz	7.7×10^{-2}	
		30 mV (≥2 GHz)		
		(0.01 ~ 5) GHz	5.0×10^{-2}	
		(5 ~ 10) GHz	5.3×10^{-2}	
		(10 ~ 18) GHz	5.7×10^{-2}	
		600 mV (≤2 GHz)		
		50 kHz	1.5×10^{-2}	
		(0.05 ~ 100) MHz	2.0×10^{-2}	
		(100 ~ 300) MHz	2.5×10^{-2}	
		(300 ~ 500) MHz	4.2×10^{-2}	
		(500 ~ 600) MHz	4.7×10^{-2}	
		(0.6 ~ 1) GHz	5.8×10^{-2}	
		(1 ~ 2) GHz	7.0×10^{-2}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Oscilloscopes	40421			Scope calibrator,
Bandwidth		600 mV (≥2 GHz)		DMM, Frequency counter,
		(0.01 ~ 2) GHz	4.7×10^{-2}	RF signal generator
		(2 ~ 10) GHz	5.0×10^{-2}	/KTICC-CI-40421
		(10 ~ 18) GHz	5.5×10^{-2}	
		3 V (≤2 GHz)		
		50 kHz	1.5×10^{-2}	
		(0.05 ~ 100) MHz	2.0×10^{-2}	
		(100 ~ 300) MHz	2.5×10^{-2}	
		(300 ~ 500) MHz	4.0×10^{-2}	
		(500 ~ 600) MHz	4.7×10^{-2}	
		(0.6 ~ 1) GHz	6.0×10^{-2}	
		(1 ~ 2) GHz	7.0×10^{-2}	
		3 V (≥2 GHz)		
		(0.01 ~ 2) GHz	4.7×10^{-2}	
		(2 ~ 10) GHz	5.0×10^{-2}	
		(10 ~ 18) GHz	5.3×10^{-2}	
CAL Output		0 V	0.12 μV	
(DC Voltage)		(0 ~ 1) mV	1.2×10^{-4}	
		(1 ~ 10) mV	6.3×10^{-5}	
		(10 ~ 100) mV	6.2×10^{-5}	
		(0.1 ~ 1) V	6.1×10^{-5}	
		(1 ~ 2) V	3.2×10^{-5}	
CAL Output		0.22 mV ~ 0.1 V		
(AC Voltage)		100 Hz	2.2×10^{-4}	
		(0.1 ~ 1) kHz	2.1×10^{-4}	
		(1 ~ 10) kHz	2.2×10^{-4}	
		(10 ~ 100) kHz	1.1×10^{-3}	
		(0.1 ~ 0.5) V		
		100 Hz	1.9×10^{-4}	
		(0.1 ~ 1) kHz	1.7×10^{-4}	
		(1 ~ 10) kHz	1.9×10^{-4}	
		(10 ~ 100) kHz	9.4×10^{-4}	
		(0.5 ~ 1) V		
		100 Hz	1.4×10^{-4}	
		(0.1 ~ 1) kHz	1.2×10^{-4}	
		(1 ~ 10) kHz	1.4×10^{-4}	
		(10 ~ 100) kHz	7.3×10^{-4}	
		(1 ~ 5) V		
		100 Hz	1.4×10^{-4}	
		(0.1 ~ 1) kHz	1.2×10^{-4}	
		(1 ~ 10) kHz	1.4×10^{-4}	
		(10 ~ 100) kHz	9.3×10^{-4}	
CAL Output		(0.1 ~ 100) kHz	6.1×10^{-6}	
(Frequency)				

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
LF phase meters	40422	(0.01 ~ 10) kHz (0 ~ 360)°	0.061°	Function generator, Frequency counter /KTICC-CI-40422
		(10 ~ 100) kHz (0 ~ 360)°	0.064°	
		(0.1 ~ 1) MHz (0 ~ 360)°	0.19°	
		(1 ~ 10) MHz (0 ~ 360)°	1.8°	
Random wave generators	40423			DMM, Frequency counter,
Frequency		1 Hz ~ 100 MHz	6.1×10^{-9}	Measuring receiver,
		(100 ~ 400) MHz	2.6×10^{-9}	Oscilloscope /KTICC-CI-40423
AC Voltage		(0.22 ~ 1) mV		
		10 Hz	1.3×10^{-3}	
		(0.01 ~ 10) kHz	1.2×10^{-3}	
		(10 ~ 100) kHz	2.1×10^{-3}	
		(0.1 ~ 1) MHz	1.0×10^{-2}	
		(1 ~ 10) mV		
		10 Hz	1.8×10^{-4}	
		(0.01 ~ 10) kHz	1.6×10^{-4}	
		(10 ~ 50) kHz	2.2×10^{-4}	
		(50 ~ 100) kHz	2.7×10^{-4}	
		(0.1 ~ 1) MHz	2.7×10^{-3}	
		(10 ~ 100) mV		
		10 Hz	9.3×10^{-5}	
		(0.01 ~ 10) kHz	7.4×10^{-5}	
		(10 ~ 50) kHz	7.7×10^{-5}	
		(50 ~ 100) kHz	1.0×10^{-4}	
		(0.1 ~ 1) MHz	1.0×10^{-3}	
		(0.1 ~ 1) V		
		10 Hz	8.3×10^{-5}	
		(0.01 ~ 50) kHz	6.7×10^{-5}	
		(50 ~ 100) kHz	7.7×10^{-5}	
		(0.1 ~ 1) MHz	9.6×10^{-4}	
		(1 ~ 10) V		
		10 Hz	8.2×10^{-5}	
		(0.01 ~ 50) kHz	6.8×10^{-5}	
		(50 ~ 100) kHz	8.2×10^{-5}	
		(0.1 ~ 1) MHz	1.2×10^{-3}	
		(10 ~ 100) V		
		10 Hz	8.8×10^{-5}	
		(0.01 ~ 10) kHz	6.9×10^{-5}	
		(10 ~ 50) kHz	7.3×10^{-5}	
		(50 ~ 100) kHz	9.1×10^{-5}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Random wave generators	40423			DMM, Frequency counter,
Level		10 Hz		Measuring receiver,
		(20 ~ -40) dBm	0.008 dB	Oscilloscope
		(-40 ~ -50) dBm	0.010 dB	/KTICC-CI-40423
		(-50 ~ -60) dBm	0.49 dB	
		(10 ~ 40) Hz		
		(20 ~ -40) dBm	0.007 dB	
		(-40 ~ -50) dBm	0.010 dB	
		(-50 ~ -60) dBm	0.30 dB	
		(0.04 ~ 10) kHz		
		(20 ~ -40) dBm	0.007 dB	
		(-40 ~ -50) dBm	0.010 dB	
		(-50 ~ -60) dBm	0.21 dB	
		(0.01 ~ 10) MHz		
		(20 ~ -40) dBm	0.008 dB	
		(-40 ~ -50) dBm	0.011 dB	
		(-50 ~ -60) dBm	0.14 dB	
		(10 ~ 50) MHz		
		(20 ~ -50) dBm	0.024 dB	
		(-50 ~ -60) dBm	0.14 dB	
		(50 ~ 400) MHz		
		(20 ~ -30) dBm	0.12 dB	
		(-30 ~ -60) dBm	0.14 dB	
Flatness		100 mV		
(Voltage)		10 Hz	8.7×10^{-4}	
		(0.01 ~ 100) kHz	4.5×10^{-4}	
		(0.1 ~ 1) MHz	5.1×10^{-4}	
		(1 ~ 10) MHz	8.9×10^{-4}	
		(10 ~ 30) MHz	3.0×10^{-3}	
		(30 ~ 50) MHz	5.1×10^{-3}	
		(50 ~ 400) MHz	2.6×10^{-2}	
		(0.1 ~ 1) V		
		10 Hz	8.9×10^{-4}	
		(0.01 ~ 100) kHz	4.0×10^{-4}	
		(0.1 ~ 1) MHz	5.1×10^{-4}	
		(1 ~ 10) MHz	8.9×10^{-4}	
		(10 ~ 30) MHz	3.0×10^{-3}	
		(30 ~ 50) MHz	5.0×10^{-3}	
		(50 ~ 400) MHz	2.7×10^{-2}	
		(1 ~ 3) V		
		10 Hz	9.0×10^{-4}	
		(0.01 ~ 100) kHz	4.3×10^{-4}	
		(0.1 ~ 1) MHz	5.3×10^{-4}	
		(1 ~ 10) MHz	9.0×10^{-4}	
		(10 ~ 30) MHz	3.0×10^{-3}	
		(30 ~ 50) MHz	5.0×10^{-3}	
		(50 ~ 400) MHz	2.8×10^{-2}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Random wave generators	40423			DMM, Frequency counter,
Flatness		(10 ~ -10) dBm		Measuring receiver,
(Level)		10 Hz ~ 10 MHz	0.008 dB	Oscilloscope
		(10 ~ 30) MHz	0.015 dB	/KTICC-CI-40423
		(30 ~ 50) MHz	0.023 dB	
		(50 ~ 400) MHz	0.11 dB	
DC Offset Voltage		(±)		
		0 V	6.1 μV	
		(0 ~ 1) V	6.2×10^{-5}	
		(1 ~ 5) V	1.3×10^{-5}	
		(5 ~ 10) V	7.2×10^{-6}	
Attenuator		(0.04 ~ 100) kHz		
		(30 ~ -40) dB	0.054 dB	
		(-40 ~ -60) dB	0.10 dB	
		(-60 ~ -70) dB	0.20 dB	
		(-70 ~ -80) dB	0.30 dB	
		(0.1 ~ 400) MHz		
		(30 ~ -40) dB	0.061 dB	
		(-40 ~ -50) dB	0.068 dB	
		(-50 ~ -60) dB	0.072 dB	
		(-60 ~ -70) dB	0.076 dB	
		(-70 ~ -80) dB	0.081 dB	
Frequency Modulation		(0 ~ 400) kHz	2.8×10^{-2}	
Amplitude Modulation		(0 ~ 99) %	2.7×10^{-2}	
Phase		(0 ~ 360)°	0.061°	
Duty cycle		(1 ~ 99) %	0.006 1 %	
Rise/Fall Time		0.4 ns	4.8×10^{-1}	
		(0.4 ~ 1) ns	9.0×10^{-2}	
		1 ns ~ 1 ms	8.2×10^{-3}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Voltage/current recorders	40424	(±)		Meter calibrator
DC Voltage		0 V	0.41 μV	/KTICC-CI-40424
		(0 ~ 10) mV	4.9×10^{-5}	
		(10 ~ 100) mV	1.2×10^{-5}	
		(0.1 ~ 1) V	5.9×10^{-6}	
		(1 ~ 10) V	4.0×10^{-6}	
		(10 ~ 100) V	5.9×10^{-6}	
		(100 ~ 1 000) V	7.3×10^{-6}	
AC Voltage		(0.22 ~ 100) mV		
		(20 ~ 40) Hz	1.7×10^{-4}	
		(0.04 ~ 20) kHz	1.6×10^{-4}	
		(20 ~ 50) kHz	2.8×10^{-4}	
		(50 ~ 100) kHZ	6.5×10^{-4}	
		(100 ~ 300) kHz	1.1×10^{-3}	
		(0.1 ~ 1) V		
		(20 ~ 40) Hz	1.1×10^{-4}	
		(0.04 ~ 20) kHz	6.8×10^{-5}	
		(20 ~ 50) kHz	9.6×10^{-5}	
		(50 ~ 100) kHz	1.5×10^{-4}	
		(100 ~ 300) kHz	5.2×10^{-4}	
		(1 ~ 10) V		
		(20 ~ 40) Hz	1.1×10^{-4}	
		(0.04 ~ 20) kHz	6.5×10^{-5}	
		(20 ~ 50) kHz	1.0×10^{-4}	
		(50 ~ 100) kHz	1.3×10^{-4}	
		(100 ~ 200) kHz	3.5×10^{-4}	
		(200 ~ 300) kHz	3.6×10^{-4}	
		(10 ~ 100) V		
		(20 ~ 40) Hz	1.1×10^{-4}	
		(0.04 ~ 20) kHz	7.2×10^{-5}	
		(20 ~ 50) kHz	1.0×10^{-4}	
		(50 ~ 100) kHz	1.9×10^{-4}	
		(100 ~ 1 000) V		
		(15 ~ 50) Hz	3.2×10^{-4}	
		(0.05 ~ 1) kHz	8.5×10^{-5}	
DC Current		(±)		
		0 A	6.1 nA	
		(0 ~ 100) μA	1.0×10^{-4}	
		(0.1 ~ 1) mA	4.3×10^{-5}	
		(1 ~ 10) mA	4.0×10^{-5}	
		(10 ~ 100) mA	5.4×10^{-5}	
		(0.1 ~ 1) A	9.4×10^{-5}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Voltage/current recorders	40424			Meter calibrator
AC Current		(0.009 ~ 1) mA		/KTICC-CI-40424
		(20 ~ 40) Hz	2.1×10^{-4}	
		(0.04 ~ 1) kHz	1.7×10^{-4}	
		(1 ~ 10) kHz	1.9×10^{-3}	
		(1 ~ 10) mA		
		(20 ~ 40) Hz	2.1×10^{-4}	
		(0.04 ~ 1) kHz	1.7×10^{-4}	
		(1 ~ 10) kHz	1.6×10^{-3}	
		(10 ~ 100) mA		
		(20 ~ 40) Hz	2.2×10^{-4}	
		(0.04 ~ 1) kHz	1.7×10^{-4}	
		(1 ~ 10) kHz	1.2×10^{-3}	
		(0.1 ~ 1) A		
		(0.02 ~ 1) kHz	3.3×10^{-4}	
		(1 ~ 10) kHz	7.3×10^{-3}	
Resistance		(0 ~ 1) Ω	9.6×10^{-6}	
		(1 ~ 10) Ω	2.4×10^{-5}	
		(10 ~ 100) Ω	7.4×10^{-6}	
		(0.1 ~ 1) kΩ	1.0×10^{-5}	
		(1 ~ 10) kΩ	5.4×10^{-6}	
		(10 ~ 100) kΩ	1.5×10^{-5}	
		(0.1 ~ 1) MΩ	2.3×10^{-5}	
		(1 ~ 10) MΩ	4.6×10^{-5}	
		(10 ~ 100) MΩ	1.0×10^{-4}	
Frequency		(0.001 ~ 100) kHz	6.1×10^{-7}	
Relay test sets	40425	(±)		DMM, Current shunt,
DC Voltage		0 V	0.62 μV	Function generator,
		(0 ~ 100) mV	1.1×10^{-5}	Oscilloscope
		(100 ~ 190) mV	9.5×10^{-6}	/KTICC-CI-40425
		(0.19 ~ 1) V	7.2×10^{-6}	
		(1 ~ 1.9) V	4.8×10^{-6}	
		(1.9 ~ 10) V	7.2×10^{-6}	
		(10 ~ 19) V	4.8×10^{-6}	
		(19 ~ 100) V	8.6×10^{-6}	
		(100 ~ 190) V	6.8×10^{-6}	
		(190 ~ 1 000) V	8.6×10^{-6}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Relay test sets	40425	(±)		DMM, Current shunt,
DC Current		0 A	6.1 nA	Function generator,
		(0 ~ 1) mA	8.9×10^{-6}	Oscilloscope
		(1 ~ 1.9) mA	7.4×10^{-6}	/KTICC-CI-40425
		(1.9 ~ 10) mA	1.0×10^{-5}	
		(10 ~ 19) mA	8.9×10^{-6}	
		(19 ~ 100) mA	1.4×10^{-5}	
		(100 ~ 190) mA	1.3×10^{-5}	
		(0.19 ~ 1) A	5.9×10^{-5}	
		(1 ~ 1.9) A	5.8×10^{-5}	
		(1.9 ~ 10) A	8.9×10^{-5}	
		(10 ~ 30) A	1.2×10^{-4}	
		(30 ~ 50) A	2.4×10^{-4}	
		(50 ~ 100) A	5.8×10^{-4}	
AC Voltage		(0.04 ~ 1) kHz		
		(0.22 ~ 190) mV	4.0×10^{-5}	
		(0.19 ~ 1) V	2.3×10^{-5}	
		(1 ~ 1.9) V	2.2×10^{-5}	
		(1.9 ~ 19) V	2.2×10^{-5}	
		(19 ~ 190) V	2.6×10^{-5}	
		(190 ~ 1 000) V	2.9×10^{-5}	
AC Current		(0.04 ~ 1) kHz		
		(0.009 ~ 1) mA	4.4×10^{-4}	
		(1 ~ 1.9) mA	3.6×10^{-4}	
		(1.9 ~ 10) mA	4.4×10^{-4}	
		(10 ~ 19) mA	3.6×10^{-4}	
		(19 ~ 100) mA	4.4×10^{-4}	
		(100 ~ 190) mA	3.6×10^{-4}	
		(0.19 ~ 1) A	8.7×10^{-4}	
		(1 ~ 1.9) A	8.9×10^{-4}	
		(1.9 ~ 10) A	1.1×10^{-3}	
		(10 ~ 100) A	1.2×10^{-3}	
Output Time Interval		(0 ~ 100) s	6.1×10^{-4}	
Input Time Interval		(0 ~ 100) s	6.1×10^{-4}	
LF signal generators	40426			DMM, Frequency counter,
Frequency		1 Hz ~ 10 MHz	6.1×10^{-7}	Audio analyzer
				/KTICC-CI-40426
AC Voltage		(0.22 ~ 1) mV		
		(0.04 ~ 10) kHz	1.2×10^{-3}	
		(10 ~ 100) kHz	2.1×10^{-3}	
		(0.1 ~ 1) MHz	9.7×10^{-3}	
		(1 ~ 10) mV		
		40 Hz	1.6×10^{-4}	
		(0.04 ~ 10) kHz	1.5×10^{-4}	
		(10 ~ 50) kHz	2.2×10^{-4}	
		(0.05 ~ 1) MHz	2.7×10^{-3}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
LF signal generators	40426			DMM, Frequency counter,
AC Voltage		(10 ~ 100) mV		Audio analyzer
		40 Hz	7.4×10^{-5}	/KTICC-CI-40426
		(0.04 ~ 10) kHz	7.2×10^{-5}	
		(10 ~ 50) kHz	7.7×10^{-5}	
		(50 ~ 100) kHz	1.0×10^{-4}	
		(0.1 ~ 1) MHz	1.0×10^{-3}	
		(0.1 ~ 1) V		
		40 Hz	6.7×10^{-5}	
		(0.04 ~ 50) kHz	6.7×10^{-5}	
		(50 ~ 100) kHz	7.7×10^{-5}	
		(0.1 ~ 1) MHz	9.6×10^{-4}	
		(1 ~ 10) V		
		40 Hz	6.8×10^{-5}	
		(0.04 ~ 50) kHz	6.7×10^{-5}	
		(50 ~ 100) kHz	8.2×10^{-5}	
		(0.1 ~ 1) MHz	1.2×10^{-3}	
		(10 ~ 100) V		
		40 Hz	6.9×10^{-5}	
		(0.04 ~ 10) kHz	6.7×10^{-5}	
		(10 ~ 50) kHz	7.3×10^{-5}	
		(50 ~ 100) kHz	9.1×10^{-5}	
Level		40 Hz		
		(20 ~ -20) dBm	0.10 dB	
		(-20 ~ -40) dBm	0.20 dB	
		(-40 ~ -60) dBm	0.30 dB	
		(0.04 ~ 10) kHz		
		(20 ~ -20) dBm	0.051 dB	
		(-20 ~ -40) dBm	0.10 dB	
		(-40 ~ -60) dBm	0.20 dB	
		(10 ~ 100) kHz		
		(20 ~ 0) dBm	0.051 dB	
		(0 ~ -20) dBm	0.054 dB	
		(-20 ~ -40) dBm	0.10 dB	
		(-40 ~ -60) dBm	0.21 dB	
		(0.1 ~ 1) MHz		
		(20 ~ -20) dBm	0.076 dB	
		(-20 ~ -40) dBm	0.20 dB	
		(-40 ~ -50) dBm	0.31 dB	
		(-50 ~ -60) dBm	0.38 dB	
Flatness		(0 ~ 100) mV		
(Voltage)		(0.04 ~ 100) kHz	7.7×10^{-5}	
		(0.1 ~ 1) MHz	1.0×10^{-3}	
		(0.1 ~ 10) V		
		(0.04 ~ 100) kHz	8.2×10^{-5}	
		(0.1 ~ 1) MHz	1.2×10^{-3}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
LF signal generators	40426			DMM, Frequency counter,
Flatness		0 dB		Audio analyzer
(Level)		40 Hz	0.10 dB	/KTICC-CI-40426
		(0.04 ~ 100) kHz	0.051 dB	
		(0.1 ~ 1) MHz	0.073 dB	
Attenuator		(0.04 ~ 100) kHz		
		(30 ~ -40) dB	0.054 dB	
		(-40 ~ -60) dB	0.10 dB	
		(-60 ~ -70) dB	0.20 dB	
		(-70 ~ -80) dB	0.30 dB	
		(0.1 ~ 1) MHz		
		(30 ~ -40) dB	0.076 dB	
		(-40 ~ -60) dB	0.20 dB	
		(-60 ~ -70) dB	0.31 dB	
		(-70 ~ -80) dB	0.46 dB	
DC Offset		(±)		
		0 V	6.1 μV	
		(0 ~ 1) V	6.2×10^{-5}	
		(1 ~ 5) V	1.3×10^{-5}	
		(5 ~ 10) V	7.2×10^{-6}	
Distortion		(0.02 ~ 100) kHz		
		(-30 ~ -80) dB	2.3 dB	
LF spectrum analyzers	40427			Function generator
Frequency		10 Hz ~ 100 MHz	6.1×10^{-8}	RF signal generator,
Referance Frequency		10 MHz	6.1×10^{-9}	Measuring receiver,
				Frequency counter
Amplitude		40 Hz ~ 100 MHz		/KTICC-CI-40427
		(0 ~ -50) dB	0.18 dB	
		(-50 ~ -60) dB	0.20 dB	
		(-60 ~ -70) dB	0.22 dB	
		(-70 ~ -80) dB	0.24 dB	
Display Scale		40 Hz ~ 100 MHz		
		(0 ~ -50) dB	0.18 dB	
		(-50 ~ -60) dB	0.20 dB	
		(-60 ~ -70) dB	0.22 dB	
		(-70 ~ -80) dB	0.24 dB	
Frequency Response		(10 ~ -10) dBm		
		40 Hz ~ 1 MHz	0.18 dB	
		(1 ~ 100) MHz	0.20 dB	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
LF spectrum analyzers	40427			Function generator
Frequency Span		8 Hz	1.1×10^{-4}	RF signal generator,
		(8 ~ 16) Hz	5.3×10^{-4}	Measuring receiver,
		(16 ~ 40) Hz	2.1×10^{-4}	Frequency counter
		(40 ~ 80) Hz	1.1×10^{-4}	/KTICC-CI-40427
		(80 ~ 160) Hz	5.3×10^{-4}	
		(160 ~ 400) Hz	2.1×10^{-4}	
		(0.4 ~ 0.8) kHz	1.1×10^{-4}	
		(0.8 ~ 1.6) kHz	5.3×10^{-4}	
		(1.6 ~ 4) kHz	2.1×10^{-4}	
		(4 ~ 8) kHz	1.1×10^{-4}	
		(8 ~ 16) kHz	5.3×10^{-4}	
		(16 ~ 40) kHz	2.1×10^{-4}	
		(40 ~ 80) kHz	1.1×10^{-4}	
		(80 ~ 160) kHz	5.3×10^{-4}	
		(160 ~ 400) kHz	2.1×10^{-4}	
		(0.4 ~ 0.8) MHz	1.1×10^{-4}	
		(0.8 ~ 1.6) MHz	5.3×10^{-4}	
		(1.6 ~ 4) MHz	2.1×10^{-4}	
		(4 ~ 8) MHz	1.1×10^{-4}	
		(8 ~ 16) MHz	5.3×10^{-4}	
Resolution Bandwidth		3 Hz	2.8×10^{-4}	
		(3 ~ 10) Hz	8.4×10^{-4}	
		(10 ~ 30) Hz	2.8×10^{-4}	
		(30 ~ 100) Hz	8.4×10^{-4}	
		(100 ~ 300) Hz	2.8×10^{-4}	
		(0.3 ~ 1) kHz	8.4×10^{-4}	
		(1 ~ 3) kHz	2.8×10^{-4}	
		(3 ~ 10) kHz	8.4×10^{-4}	
		(10 ~ 30) kHz	2.8×10^{-4}	
Output Level		(0.04 ~ 100) kHz		
		(10 ~ -20) dBm	0.059 dB	
		(-20 ~ -30) dBm	0.10 dB	
		(0.1 ~ 100) MHz		
		(10 ~ -30) dBm	0.11 dB	
Output Frequency		10 Hz ~ 100 MHz	6.1×10^{-9}	
Sweep generators	40429			DMM, Frequency counter,
Frequency		1 Hz ~ 100 MHz	6.1×10^{-9}	Measuring receiver,
		(100 ~ 400) MHz	2.6×10^{-9}	Oscilloscope
				/KTICC-CI-40429
AC Voltage		(0.22 ~ 1) mV		
		10 Hz	1.3×10^{-3}	
		(0.01 ~ 10) kHz	1.2×10^{-3}	
		(10 ~ 100) kHz	2.1×10^{-3}	
		(0.1 ~ 1) MHz	1.0×10^{-2}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Sweep generators	40429			DMM, Frequency counter,
AC Voltage		(1 ~ 10) mV		Measuring receiver,
		10 Hz	1.8×10^{-4}	Oscilloscope
		(0.01 ~ 10) kHz	1.6×10^{-4}	/KTICC-CI-40429
		(10 ~ 50) kHz	2.2×10^{-4}	
		(50 ~ 100) kHz	2.7×10^{-4}	
		(0.1 ~ 1) MHz	2.7×10^{-3}	
		(10 ~ 100) mV		
		10 Hz	9.3×10^{-5}	
		(0.01 ~ 10) kHz	7.4×10^{-5}	
		(10 ~ 50) kHz	7.7×10^{-5}	
		(50 ~ 100) kHz	1.0×10^{-4}	
		(0.1 ~ 1) MHz	1.0×10^{-3}	
		(0.1 ~ 1) V		
		10 Hz	8.3×10^{-5}	
		(0.01 ~ 50) kHz	6.7×10^{-5}	
		(50 ~ 100) kHz	7.7×10^{-5}	
		(0.1 ~ 1) MHz	9.6×10^{-4}	
		(1~ 10) V		
		10 Hz	8.2×10^{-5}	
		(0.01 ~ 50) kHz	6.8×10^{-5}	
		(50 ~ 100) kHz	8.2×10^{-5}	
		(0.1 ~ 1) MHz	1.2×10^{-3}	
		(10 ~ 100) V		
		10 Hz	8.8×10^{-5}	
		(0.01 ~ 10) kHz	6.9×10^{-5}	
		(10 ~ 50) kHz	7.3×10^{-5}	
		(50 ~ 100) kHz	9.1×10^{-5}	
Level		10 Hz		
		(20 ~ -40) dBm	0.008 dB	
		(-40 ~ -50) dBm	0.010 dB	
		(-50 ~ -60) dBm	0.49 dB	
		(10 ~ 40) Hz		
		(20 ~ -40) dBm	0.007 dB	
		(-40 ~ -50) dBm	0.010 dB	
		(-50 ~ -60) dBm	0.30 dB	
		(0.04 ~ 10) kHz		
		(20 ~ -40) dBm	0.007 dB	
		(-40 ~ -50) dBm	0.010 dB	
		(-50 ~ -60) dBm	0.21 dB	
		(0.01 ~ 10) MHz		
		(20 ~ -40) dBm	0.008 dB	
		(-40 ~ -50) dBm	0.011 dB	
		(-50 ~ -60) dBm	0.14 dB	
		(10 ~ 50) MHz		
		(20 ~ -50) dBm	0.024 dB	
		(-50 ~ -60) dBm	0.14 dB	
		(50 ~ 400) MHz		
		(20 ~ -30) dBm	0.12 dB	
		(-30 ~ -60) dBm	0.14 dB	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Sweep generators	40429			DMM, Frequency counter,
Flatness		100 mV		Measuring receiver,
(Voltage)		10 Hz	8.7×10^{-4}	Oscilloscope
		(0.01 ~ 100) kHz	4.5×10^{-4}	/KTICC-CI-40429
		(0.1 ~ 1) MHz	5.1×10^{-4}	
		(1 ~ 10) MHz	8.9×10^{-4}	
		(10 ~ 30) MHz	3.0×10^{-3}	
		(30 ~ 50) MHz	5.1×10^{-3}	
		(50 ~ 400) MHz	2.6×10^{-2}	
		(0.1 ~ 1) V		
		10 Hz	8.9×10^{-4}	
		(0.01 ~ 100) kHz	4.0×10^{-4}	
		(0.1 ~ 1) MHz	5.1×10^{-4}	
		(1 ~ 10) MHz	8.9×10^{-4}	
		(10 ~ 30) MHz	3.0×10^{-3}	
		(30 ~ 50) MHz	5.0×10^{-3}	
		(50 ~ 400) MHz	2.7×10^{-2}	
		(1 ~ 3) V		
		10 Hz	9.0×10^{-4}	
		(0.01 ~ 100) kHz	4.3×10^{-4}	
		(0.1 ~ 1) MHz	5.3×10^{-4}	
		(1 ~ 10) MHz	9.0×10^{-4}	
		(10 ~ 30) MHz	3.0×10^{-3}	
		(30 ~ 50) MHz	5.0×10^{-3}	
		(50 ~ 400) MHz	2.8×10^{-2}	
Flatness		(10 ~ -10) dBm		
(Level)		10 Hz ~ 10 MHz	0.008 dB	
		(10 ~ 30) MHz	0.015 dB	
		(30 ~ 50) MHz	0.023 dB	
		(50 ~ 400) MHz	0.11 dB	
DC Offset Voltage		(±)		
		0 V	6.1 μV	
		(0 ~ 1) V	6.2×10^{-5}	
		(1 ~ 5) V	1.3×10^{-5}	
		(5 ~ 10) V	7.2×10^{-6}	
Attenuator		(0.04 ~ 100) kHz		
		(30 ~ -40) dB	0.054 dB	
		(-40 ~ -60) dB	0.10 dB	
		(-60 ~ -70) dB	0.20 dB	
		(-70 ~ -80) dB	0.30 dB	
		(0.1 ~ 400) MHz		
		(30 ~ -40) dB	0.061 dB	
		(-40 ~ -50) dB	0.068 dB	
		(-50 ~ -60) dB	0.072 dB	
		(-60 ~ -70) dB	0.076 dB	
		(-70 ~ -80) dB	0.081 dB	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Sweep generators	40429			DMM, Frequency counter,
Frequency Modulation		(0 ~ 400) kHz	2.8×10^{-2}	Measuring receiver,
Amplitude Modulation		(0 ~ 99) %	2.7×10^{-2}	Oscilloscope
Phase		(0 ~ 360)°	0.061°	/KTICC-CI-40429
Duty cycle		(1 ~ 99) %	0.006 1 %	
Rise/Fall Time		0.4 ns	4.8×10^{-1}	
		(0.4 ~ 1) ns	9.0×10^{-2}	
		1 ns ~ 1 ms	8.2×10^{-3}	
Signal transducers	40430			DMM, Frequency counter
DC Voltage		(±)		/KTICC-CI-40430
		0 V	0.12 μV	
		(0 ~ 1) mV	1.2×10^{-4}	
		(1 ~ 10) mV	6.3×10^{-5}	
		(10 ~ 100) mV	6.2×10^{-5}	
		(0.1 ~ 100) V	6.1×10^{-5}	
		(±)		
DC Current		0 A	6.1 nA	
		(0 ~ 10) mA	6.5×10^{-5}	
		(10 ~ 100) mA	7.7×10^{-5}	
		(0.1 ~ 1) A	2.0×10^{-4}	
Frequency		10 Hz ~ 100 kHz	6.1×10^{-7}	
Transistor curve tracers	40432			Meter calibrator, DMM
Input DC Voltage		(±)		/KTICC-CI-40432
		0 V	6.1 μV	
		(0 ~ 500) V	1.2×10^{-4}	
		(500 ~ 1 000) V	6.1×10^{-4}	
Input DC Current		(±)		
		0 A	62 nA	
		(0 ~ 5) mA	1.3×10^{-4}	
		(5 ~ 50) mA	1.4×10^{-4}	
		(50 ~ 500) mA	1.6×10^{-4}	
		(0.5 ~ 1) A	6.2×10^{-4}	
		(1 ~ 2) A	3.2×10^{-4}	
Output DC Voltage		(±)		
		0 V	0.62 μV	
		(0 ~ 10) mV	6.3×10^{-5}	
		(10 ~ 100) mV	6.2×10^{-5}	
		(0.1 ~ 1 000) V	6.1×10^{-5}	
Output DC Current		(±)		
		0 A	6.1 nA	
		(0 ~ 10) mA	6.5×10^{-5}	
		(10 ~ 100) mA	7.8×10^{-5}	
		(0.1 ~ 1) A	2.0×10^{-4}	
		(1 ~ 2) A	6.0×10^{-4}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Waveform analyzers	40433			Meter calibrator,
Frequency		(0.01 ~ 100) kHz	6.1×10^{-6}	Frequency counter,
		(100 ~ 200) kHz	3.1×10^{-6}	Audio analyzer
				/KTICC-CI-40433
AC Voltge		(0.22 ~ 1) mV		
		10 Hz	4.4×10^{-3}	
		(10 ~ 40) Hz	5.0×10^{-3}	
		(0.04 ~ 10) kHz	4.2×10^{-3}	
		(10 ~ 100) kHz	5.6×10^{-3}	
		(100 ~ 200) kHz	1.1×10^{-2}	
		(1 ~ 10) mV		
		10 Hz	6.6×10^{-4}	
		(0.01 ~ 10) kHz	5.1×10^{-4}	
		(10 ~ 100) kHz	1.0×10^{-3}	
		(100 ~ 200) kHz	2.1×10^{-3}	
		(10 ~ 100) mV		
		10 Hz	3.8×10^{-4}	
		(0.01 ~ 10) kHz	1.8×10^{-4}	
		(10 ~ 100) kHz	6.5×10^{-4}	
		(100 ~ 200) kHz	1.1×10^{-3}	
		(0.01 ~ 1) V		
		10 Hz	3.0×10^{-4}	
		(10 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 10) kHz	9.1×10^{-5}	
		(10 ~ 100) kHz	1.6×10^{-4}	
		(100 ~ 200) kHz	5.2×10^{-4}	
		(1 ~ 10) V		
		10 Hz	3.0×10^{-4}	
		(10 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 10) kHz	8.9×10^{-5}	
		(10 ~ 100) kHz	1.5×10^{-4}	
		(100 ~ 200) kHz	3.6×10^{-4}	
		(10 ~ 100) V		
		10 Hz	3.0×10^{-4}	
		(10 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 10) kHz	9.4×10^{-5}	
		(10 ~ 100) kHz	2.0×10^{-4}	
		(100 ~ 200) V		
		10 Hz	2.7×10^{-4}	
		(10 ~ 40) Hz	1.1×10^{-4}	
		(0.04 ~ 10) kHz	7.5×10^{-5}	
		(10 ~ 100) kHz	1.9×10^{-4}	
		(200 ~ 300) V		
		50 Hz	3.7×10^{-4}	
		(50 ~ 1) kHz	9.3×10^{-5}	
DC Voltage		(±)		
		0 V	6.1 μV	
		(0 ~ 100) mV	6.2×10^{-5}	
		(0.1 ~ 100) V	6.1×10^{-5}	
		(100 ~ 300) V	2.2×10^{-5}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Waveform analyzers	40433			Meter calibrator,
Level		10 Hz		Frequency counter,
		(40 ~ -40) dBm	0.009 dB	Audio analyzer
		(-40 ~ -50) dBm	0.018 dB	/KTICC-CI-40433
		(-50 ~ -60) dBm	0.048 dB	
		(-60 ~ -70) dBm	0.15 dB	
		(0.01 ~ 1) kHz		
		(50 ~ -40) dBm	0.009 dB	
		(-40 ~ -50) dBm	0.016 dB	
		(-50 ~ -60) dBm	0.047 dB	
		(-60 ~ -70) dBm	0.14 dB	
		(1 ~ 10) kHz		
		(40 ~ -40) dBm	0.008 dB	
		(-40 ~ -50) dBm	0.016 dB	
		(-50 ~ -60) dBm	0.047 dB	
		(-60 ~ -70) dBm	0.14 dB	
		(10 ~ 100) kHz		
		(40 ~ -20) dBm	0.009 dB	
		(-20 ~ -40) dBm	0.012 dB	
		(-40 ~ -50) dBm	0.023 dB	
		(-50 ~ -60) dBm	0.062 dB	
		(-60 ~ -70) dBm	0.18 dB	
		(100 ~ 200) kHz		
		(20 ~ -10) dBm	0.009 dB	
		(-10 ~ -20) dBm	0.012 dB	
		(-20 ~ -30) dBm	0.017 dB	
		(-30 ~ -40) dBm	0.022 dB	
		(-40 ~ -50) dBm	0.046 dB	
		(-50 ~ -60) dBm	0.12 dB	
		(-60 ~ -70) dBm	0.36 dB	
Frequency Respones		100 mV		
(Voltage)		(10 ~ 20) Hz	3.8×10^{-4}	
		(20 ~ 40) Hz	1.8×10^{-4}	
		(0.04 ~ 10) kHz	1.7×10^{-4}	
		(10 ~ 100) kHz	6.5×10^{-4}	
		(100 ~ 200) kHz	1.1×10^{-3}	
		(0.1 ~ 1) V		
		(10 ~ 20) Hz	3.0×10^{-4}	
		(20 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 10) kHz	9.1×10^{-5}	
		(10 ~ 100) kHz	1.6×10^{-4}	
		(100 ~ 200) kHz	5.2×10^{-4}	
		(1 ~ 10) V		
		(10 ~ 20) Hz	3.0×10^{-4}	
		(20 ~ 40) Hz	1.3×10^{-4}	
		(0.04 ~ 10) kHz	8.9×10^{-5}	
		(10 ~ 100) kHz	1.5×10^{-4}	
		(100 ~ 200) kHz	3.6×10^{-4}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Waveform analyzers	40433			Meter calibrator,
Frequency Respones		(10 ~ -10) dBm		Frequency counter,
(Level)		(10 ~ 40) Hz	0.008 dB	Audio analyzer
		(0.04 ~ 100) kHz	0.007 dB	/KTICC-CI-40433
		(100 ~ 200) kHz	0.010 dB	
Distortion		(0.02 ~ 100) kHz		
		(0 ~ -60) dB	0.19 dB	
		(-60 ~ -80) dB	0.50 dB	
Filter(Frequency)		(0.01 ~ 100) kHz	6.1×10^{-6}	
(Weight, Low, High Pass etc.)				
Filter(Level)		(0.01 ~ 100) kHz		
(Weight, Low, High Pass etc.)		(20 ~ -63) dB	0.007 dB	
AC/DC high voltage generators	40434			High voltage test equipment,
DC Voltage		(±)		High voltage meter, DMM
		0 V	62 mV	/KTICC-CI-40434
		(0 ~ 100) kV	1.2×10^{-3}	
AC Voltage		(50 ~ 60) Hz		
		(0.001 ~ 100) kV	2.3×10^{-2}	
AC/DC high voltage probes	40435	(±)		Meter calibrator, DMM,
DC Voltage		(1 ~ 10 000) : 1		High voltage test equipment,
		(0 ~ 1) kV	6.2×10^{-5}	Oscilloscope,
		(1 ~ 100) kV	1.2×10^{-3}	High voltage power supply
				/ KTICC-CI-4035
AC Voltage		(1 ~ 10 000) : 1		
		(0.04 ~ 1) kHz		
		(0.22 ~ 100) mV	3.8×10^{-4}	
		(0.1 ~ 100) V	2.3×10^{-4}	
		(0.1 ~ 1) kV	7.4×10^{-4}	
		(50 ~ 60) Hz		
		(1 ~ 10) kV	1.3×10^{-2}	
Bandwidth		(5 ~ 600) mV		
		50 kHz	3.1×10^{-2}	
		(0.05 ~ 100) MHz	3.4×10^{-2}	
		(100 ~ 300) MHz	5.2×10^{-2}	
		(300 ~ 500) MHz	6.2×10^{-2}	
		(0.5 ~ 1) GHz	8.5×10^{-2}	
		(0.6 ~ 3) V		
		50 kHz	5.8×10^{-2}	
		(0.05 ~ 100) MHz	6.3×10^{-2}	
		(100 ~ 300) MHz	7.8×10^{-2}	
		(300 ~ 500) MHz	9.5×10^{-2}	
		(0.5 ~ 1) GHz	1.2×10^{-1}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Logic analyzers	40436			Scope calibrator
Vertical(Spuare Wave)		1 kHz		Meter calibrator
		1 mV	6.4×10^{-3}	/KTICC-CI-40436
		(1 ~ 2) mV	3.5×10^{-3}	
		(2 ~ 5) mV	1.7×10^{-3}	
		(5 ~ 10) mV	1.2×10^{-3}	
		(10 ~ 20) mV	8.5×10^{-4}	
		(20 ~ 50) mV	7.0×10^{-4}	
		(50 ~ 100) mV	6.4×10^{-4}	
		(100 ~ 200) mV	6.0×10^{-4}	
		(200 ~ 500) mV	5.8×10^{-4}	
		(0.5 ~ 1) V	5.9×10^{-4}	
		(1 ~ 2) V	6.0×10^{-4}	
		(2 ~ 10) V	5.8×10^{-4}	
		(10 ~ 20) V	6.0×10^{-4}	
		(20 ~ 130) V	5.8×10^{-4}	
Bandwidth		600 mV		
		50 kHz	1.5×10^{-2}	
		(0.05 ~ 100) MHz	2.0×10^{-2}	
		(100 ~ 300) MHz	2.5×10^{-2}	
		(300 ~ 500) MHz	4.2×10^{-2}	
		(0.5 ~ 1) GHz	5.8×10^{-2}	
		(1 ~ 2) GHz	7.0×10^{-2}	
Time(Period)		1 ns	6.1×10^{-5}	
		(1 ~ 2) ns	3.1×10^{-5}	
		(2 ~ 5) ns	1.2×10^{-5}	
		(5 ~ 10) ns	6.1×10^{-5}	
		(10 ~ 20) ns	3.1×10^{-5}	
		(20 ~ 50) ns	1.2×10^{-5}	
		(50 ~ 100) ns	6.1×10^{-5}	
		(100 ~ 200) ns	3.1×10^{-5}	
		(200 ~ 500) ns	1.2×10^{-5}	
		(0.5 ~ 1) µs	6.1×10^{-5}	
		(1 ~ 2) µs	3.1×10^{-5}	
		(2 ~ 5) µs	1.2×10^{-5}	
		(5 ~ 10) µs	6.1×10^{-5}	
		(10 ~ 20) µs	3.1×10^{-5}	
		(20 ~ 50) µs	1.2×10^{-5}	
		(50 ~ 100) µs	6.1×10^{-5}	
		(100 ~ 200) µs	3.1×10^{-5}	
		(200 ~ 500) µs	1.2×10^{-5}	
		(0.5 ~ 1) ms	6.1×10^{-5}	
		(1 ~ 2) ms	3.1×10^{-5}	
		(2 ~ 5) ms	1.2×10^{-5}	
		(5 ~ 10) ms	6.1×10^{-5}	
		(10 ~ 20) ms	3.1×10^{-5}	
		(20 ~ 50) ms	1.4×10^{-5}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Logic analyzers	40436			Scope calibrator
Time(Period)		(50 ~ 100) ms	6.1×10^{-5}	Meter calibrator
		(100 ~ 200) ms	3.1×10^{-5}	/KTICC-CI-40436
		(200 ~ 500) ms	1.3×10^{-5}	
		(0.5 ~ 1) s	6.1×10^{-5}	
		(1 ~ 2) s	3.1×10^{-5}	
		(2 ~ 5) s	1.3×10^{-5}	
Threshold Voltage		(-10 ~ 10) V	6.1×10^{-4}	
Telephone testers	40437	(±)		DMM, DTMF generator,
Line Output Voltage		0 V	61 mV	Frequency counter
		(0 ~ 10) V	6.1×10^{-5}	/KTICC-CI-40437
		(10 ~ 16) V	3.9×10^{-5}	
		(16 ~ 35) V	1.9×10^{-5}	
		(35 ~ 48) V	1.4×10^{-5}	
		(45 ~ 75) V	1.0×10^{-5}	
		(75 ~ 100) V	6.1×10^{-5}	
Loop Current & Artificial Line		(0 ~ 10) mA	6.5×10^{-5}	
		(10 ~ 20) mA	8.5×10^{-5}	
		(20 ~ 40) mA	6.0×10^{-5}	
		(40 ~ 60) mA	5.2×10^{-5}	
		(60 ~ 80) mA	4.9×10^{-5}	
		(80 ~ 100) mA	7.7×10^{-5}	
		(100 ~ 120) mA	6.8×10^{-5}	
		(120 ~ 150) mA	6.0×10^{-5}	
Bell Output Voltage		(40 ~ 100) Hz		
		(1 ~ 10) V	1.4×10^{-4}	
		(10 ~ 20) V	2.0×10^{-4}	
		(20 ~ 40) V	1.5×10^{-4}	
		(40 ~ 60) V	1.4×10^{-4}	
		(60 ~ 80) V	1.3×10^{-4}	
		(80 ~ 100) V	1.4×10^{-4}	
		(100 ~ 150) V	1.3×10^{-4}	
Bell Output Frequency		10 Hz	6.1×10^{-5}	
		(10 ~ 20) Hz	3.1×10^{-5}	
		(20 ~ 40) Hz	1.6×10^{-5}	
		(40 ~ 60) Hz	1.2×10^{-5}	
		(60 ~ 80) Hz	9.6×10^{-6}	
		(80 ~ 100) Hz	6.1×10^{-5}	
Receiving Frequency		400 Hz	1.6×10^{-5}	
DTMF Level		(697 ~ 1 663) Hz		
		(0 ~ -20) dBm	0.12 dB	
		(-20 ~ -30) dBm	0.15 dB	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Telephone testers	40437			DMM, DTMF generator,
DTMF Frequency		697 Hz	2.9×10^{-4}	Frequency counter
		(697 ~ 941) Hz	2.7×10^{-4}	/KTICC-CI-40437
		(941 ~ 1 336) Hz	2.5×10^{-4}	
		(1 336 ~ 1 663) Hz	2.4×10^{-4}	
Output Frequency		(10 ~ 1 000) Hz	6.1×10^{-7}	
		(1 000 ~ 2 000) Hz	3.1×10^{-7}	
		(2 000 ~ 3 000) Hz	2.0×10^{-7}	
Output Level		(0.04 ~ 3) kHz		
		(0 ~ -30) dBm	0.051 dB	
		(-30 ~ -40) dBm	0.10 dB	
Video signal analyzers	40438			Video signal analyzer
Frequency		10 Hz ~ 1 GHz	3.7×10^{-10}	Video signal generator
				/KTICC-CI-40438
Squarewave Amplitude		NTSC, PAL		
		(1 ~ 10) mV	1.4×10^{-2}	
		(10 ~ 100) mV	1.9×10^{-3}	
		(100 ~ 200) mV	1.2×10^{-3}	
		(200 ~ 300) mV	1.0×10^{-3}	
		(300 ~ 400) mV	8.9×10^{-4}	
		(400 ~ 500) mV	8.8×10^{-4}	
		(500 ~ 600) mV	8.2×10^{-4}	
		(600 ~ 700) mV	7.8×10^{-4}	
		(700 ~ 800) mV	7.6×10^{-4}	
		(800 ~ 900) mV	7.3×10^{-4}	
		(900 ~ 999.9) mV	7.2×10^{-4}	
Sinewave Amplitude		(5 ~ 600) mV		
		50 kHz	4.2×10^{-3}	
		50 kHz ~ 10 MHz	8.8×10^{-3}	
Burst Frequency		(3 ~ 5) MHz	1.0 Hz	
Luminance Amplitude		NTSC, PAL		
		(1 ~ 10) mV	1.4×10^{-2}	
		(10 ~ 100) mV	1.9×10^{-3}	
		(100 ~ 200) mV	1.2×10^{-3}	
		(200 ~ 300) mV	1.0×10^{-3}	
		(300 ~ 400) mV	8.9×10^{-4}	
		(400 ~ 500) mV	8.8×10^{-4}	
		(500 ~ 600) mV	8.2×10^{-4}	
		(600 ~ 700) mV	7.8×10^{-4}	
		(700 ~ 800) mV	7.6×10^{-4}	
		(800 ~ 900) mV	7.3×10^{-4}	
		(900 ~ 999.9) mV	7.2×10^{-4}	
Chrominance Amplitude		NTSC, PAL		
		(1 ~ 714.3) mV	1.9×10^{-2}	

404. Other DC & LF measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Video signal analyzers	40438			Video signal analyzer
Frequency Response		(5 ~ 600) mV		Video signal generator
		0.05 MHz	2.4×10^{-3}	/KTICC-CI-40438
		(0.05 ~ 20) MHz	8.1×10^{-3}	
Horizontal Frequency		10 ns	7.0×10^{-4}	
		(10 ~ 20) ns	3.5×10^{-4}	
		(20 ~ 50) ns	1.4×10^{-4}	
		(50 ~ 100) ns	7.0×10^{-4}	
		(100 ~ 200) ns	3.5×10^{-4}	
		(200 ~ 500) ns	1.4×10^{-4}	
		(0.5 ~ 1) μs	7.0×10^{-4}	
		(1 ~ 2) μs	3.5×10^{-4}	
		(2 ~ 5) μs	1.4×10^{-4}	
		(5 ~ 10) μs	7.0×10^{-4}	
		(10 ~ 20) μs	3.5×10^{-4}	
		(20 ~ 50) μs	1.4×10^{-4}	
		(50 ~ 100) μs	7.0×10^{-4}	
		(100 ~ 200) μs	3.5×10^{-4}	
		(200 ~ 500) μs	1.4×10^{-4}	
		(0.5 ~ 1) ms	7.0×10^{-4}	
Phase		NTSC, PAL		
		(0 ~ 360)°	1.3°	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
RF amplifiers	40601			Network Analyzer,
Gain		(0 ~ 10) dB		Calibration Kit
		(5 ~ 100) Hz	0.09 dB	/KTICC-CI-40601
		100 Hz ~ 0.3 MHz	0.06 dB	
		0.3 MHz ~ 1 GHz	0.05 dB	
		(1 ~ 2) GHz	0.06 dB	
		(2 ~ 8) GHz	0.09 dB	
		(8 ~ 18) GHz	0.12 dB	
		(18 ~ 40) GHz	0.17 dB	
		(10 ~ 20) dB		
		(5 ~ 100) Hz	0.11 dB	
		100 Hz ~ 0.3 MHz	0.08 dB	
		0.3 MHz ~ 1 GHz	0.07 dB	
		(1 ~ 2) GHz	0.08 dB	
		(2 ~ 8) GHz	0.11 dB	
		(8 ~ 18) GHz	0.14 dB	
		(18 ~ 40) GHz	0.19 dB	
		(20 ~ 30) dB		
		(5 ~ 100) Hz	0.13 dB	
		100 Hz ~ 0.3 MHz	0.09 dB	
		0.3 MHz ~ 1 GHz	0.08 dB	
		(1 ~ 2) GHz	0.10 dB	
		(2 ~ 8) GHz	0.12 dB	
		(8 ~ 18) GHz	0.16 dB	
		(18 ~ 40) GHz	0.20 dB	
		(30 ~ 40) dB		
		(5 ~ 100) Hz	0.15 dB	
		100 Hz ~ 0.3 MHz	0.11 dB	
		0.3 MHz ~ 1 GHz	0.10 dB	
		(1 ~ 2) GHz	0.11 dB	
		(2 ~ 8) GHz	0.14 dB	
		(8 ~ 18) GHz	0.18 dB	
		(18 ~ 40) GHz	0.22 dB	
		(40 ~ 50) dB		
		(5 ~ 100) Hz	0.16 dB	
		100 Hz ~ 0.3 MHz	0.14 dB	
		0.3 MHz ~ 1 GHz	0.13 dB	
		(1 ~ 2) GHz	0.12 dB	
		(2 ~ 8) GHz	0.16 dB	
		(8 ~ 18) GHz	0.19 dB	
		(18 ~ 40) GHz	0.24 dB	
		(50 ~ 60) dB		
		(5 ~ 100) Hz	0.19 dB	
		100 Hz ~ 0.3 MHz	0.18 dB	
		0.3 MHz ~ 1 GHz	0.17 dB	
		(1 ~ 2) GHz	0.25 dB	
		(2 ~ 8) GHz	0.28 dB	
		(8 ~ 18) GHz	0.31 dB	
		(18 ~ 40) GHz	0.36 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
RF amplifiers Gain	40601	(60 ~ 70) dB (5 ~ 100) Hz 100 Hz ~ 0.3 MHz 0.3 MHz ~ 1 GHz (1 ~ 2) GHz (2 ~ 8) GHz (8 ~ 18) GHz (18 ~ 40) GHz	 0.27 dB 0.25 dB 0.24 dB 0.28 dB 0.31 dB 0.35 dB 0.39 dB	Network Analyzer, Calibration Kit /KTICC-CI-40601
Coaxial attenuators Attenuation	40602	(0 ~ 10) dB (5 ~ 100) Hz 100 Hz ~ 26.5 GHz (26.5 ~ 40) GHz (40 ~ 50) GHz (10 ~ 20) dB (5 ~ 100) Hz 100 Hz ~ 0.1 MHz 0.1 MHz ~ 26.5 GHz (26.5 ~ 40) GHz (40 ~ 50) GHz (20 ~ 30) dB (5 ~ 100) Hz 100 Hz ~ 0.1 MHz 0.1 MHz ~ 26.5 GHz (26.5 ~ 40) GHz (40 ~ 50) GHz (30 ~ 40) dB (5 ~ 100) Hz 100 Hz ~ 0.1 MHz 0.1 MHz ~ 26.5 GHz (26.5 ~ 40) GHz (40 ~ 50) GHz (40 ~ 50) dB (5 ~ 100) Hz 100 Hz ~ 0.1 MHz 0.1 MHz ~ 18 GHz (18 ~ 26.5) GHz (26.5 ~ 40) GHz (40 ~ 45) GHz (45 ~ 50) GHz (50 ~ 60) dB (5 ~ 100) Hz 100 Hz ~ 0.1 MHz 0.1 MHz ~ 18 GHz (18 ~ 26.5) GHz (26.5 ~ 40) GHz (40 ~ 45) GHz (45 ~ 50) GHz	 0.09 dB 0.06 dB 0.17 dB 0.25 dB 0.12 dB 0.08 dB 0.06 dB 0.18 dB 0.27 dB 0.14 dB 0.09 dB 0.06 dB 0.20 dB 0.28 dB 0.20 dB 0.12 dB 0.07 dB 0.22 dB 0.32 dB 0.33 dB 0.17 dB 0.07 dB 0.08 dB 0.27 dB 0.37 dB 0.39 dB 0.73 dB 0.27 dB 0.08 dB 0.09 dB 0.36 dB 0.48 dB 0.55 dB	Network Analyzer Sensor Module, Measuring Receiver, Signal Generator, Calibration Kit /KTICC-CI-40602

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Coaxial attenuators	40602			Network Analyzer Sensor Module, Measuring Receiver, Signal Generator, Calibration Kit /KTICC-CI-40602
Attenuation		(60 ~ 70) dB		
		(5 ~ 100) Hz	1.8 dB	
		100 Hz ~ 0.1 MHz	0.55 dB	
		0.1 MHz ~ 18 GHz	0.08 dB	
		(18 ~ 26.5) GHz	0.09 dB	
		(26.5 ~ 40) GHz	0.55 dB	
		(40 ~ 45) GHz	0.74 dB	
		(45 ~ 50) GHz	0.97 dB	
		(70 ~ 90) dB		
		0.1 MHz ~ 18 GHz	0.09 dB	
		(18 ~ 26.5) GHz	0.10 dB	
		(90 ~ 120) dB		
		0.1 MHz ~ 18 GHz	0.10 dB	
		(18 ~ 26.5) GHz	0.11 dB	
BER(Bit Error Rate) testers	40604			Frequency counter, Frequency standard Signal generator /KTICC-CI-40604
Output Bit rate		(0.05 ~ 5) GHz	1.2×10^{-10}	
		(5 ~ 30) GHz	1.3 Hz	
Input Bit rate		(0.05 ~ 5) GHz	0.9 Hz	
		(5 ~ 30) GHz	1.3 Hz	
Burst pulse generators	40605			Oscilloscope. Attenuator High voltage probe /KTICC-CI-40605
Burst Voltage		(±)		
		0 kV	0.1 V	
		(0 ~ 4) kV	1.3×10^{-2}	
Burst Duration		10 μs ~ 10 ms	3.4×10^{-3}	
		(10 ~ 15) ms	5.5×10^{-3}	
		(15 ~ 20) ms	4.1×10^{-3}	
		(20 ~ 50) ms	3.8×10^{-3}	
Burst Cycle		100 μs	3.4×10^{-3}	
		100 μs ~ 10 ms	4.8×10^{-3}	
		(10 ~ 50) ms	3.9×10^{-3}	
		(50 ~ 100) ms	3.4×10^{-3}	
		(100 ~ 300) ms	5.0×10^{-3}	
		(300 ~ 400) ms	4.6×10^{-3}	
		(400 ~ 1 000) ms	3.4×10^{-3}	
Repetition Frequency		1 kHz	3.4×10^{-3}	
		(1 ~ 5) kHz	4.8×10^{-3}	
		(5 ~ 10) kHz	3.4×10^{-3}	
		(10 ~ 50) kHz	4.8×10^{-3}	
		(50 ~ 100) kHz	3.4×10^{-3}	
Rise Time		1 ns	9.0×10^{-2}	
		(1 ~ 5) ns	7.6×10^{-3}	
		(5 ~ 10) ns	9.1×10^{-3}	
		(10 ~ 100) ns	4.2×10^{-3}	
		100 ns ~ 1 μs	3.3×10^{-3}	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Burst pulse generators	40605			Oscilloscope. Attenuator
Pulse Width		10 ns	3.6×10^{-3}	High voltage probe
		(10 ~ 50) ns	4.4×10^{-3}	/KTICC-CI-40605
		(50 ~ 100) ns	4.2×10^{-3}	
		(100 ~ 150) ns	2.8×10^{-3}	
Vibration Frequency		90 kHz	1.0×10^{-3}	
		90 kHz ~ 1 MHz	1.1×10^{-3}	
		(1 ~ 10) MHz	8.8×10^{-4}	
		(10 ~ 100) MHz	1.4×10^{-3}	
RF power meter calibrators	40607			Digital multimeter
Power		3 µW	2.5×10^{-5}	/KTICC-CI-40607
		10 µW	1.2×10^{-5}	
		30 µW	2.4×10^{-5}	
		100 µW	1.0×10^{-5}	
		300 µW	1.9×10^{-5}	
		1 mW	5.0×10^{-5}	
		3 mW	1.6×10^{-5}	
		10 mW	4.8×10^{-5}	
		30 mW	1.5×10^{-5}	
		100 mW	4.5×10^{-5}	
EMC transduces; current probes, absorbing clamps, etc.	40608			Network analyzer, Calibration kit /KTICC-CI-40608
Current probes				
Transfer Impedance		(5 ~ 100) Hz	2.0 dB	
		100 Hz ~ 1 GHz	1.8 dB	
Absorbing clamps				
Insertion Loss		30 MHz ~ 1 GHz	1.8 dB	
Coaxial directional couplers /splitters	40610			Network Analyzer, Calibration Kit /KTICC-CI-40610
Coupling Factor,		(0 ~ 10) dB		
Insertion Loss		(5 ~ 100) Hz	0.09 dB	
		100 Hz ~ 0.3 MHz	0.06 dB	
		0.3 MHz ~ 2 GHz	0.05 dB	
		(2 ~ 20) GHz	0.10 dB	
		(20 ~ 40) GHz	0.17 dB	
		(40 ~ 50) GHz	0.25 dB	
		(10 ~ 20) dB		
		(5 ~ 100) Hz	0.12 dB	
		100 Hz ~ 0.3 MHz	0.08 dB	
		0.3 MHz ~ 2 GHz	0.07 dB	
		(2 ~ 20) GHz	0.12 dB	
		(20 ~ 40) GHz	0.18 dB	
		(40 ~ 50) GHz	0.27 dB	
		(20 ~ 30) dB		
		(5 ~ 100) Hz	0.14 dB	
		100 Hz ~ 0.3 MHz	0.09 dB	
		0.3 MHz ~ 2 GHz	0.08 dB	
		(2 ~ 20) GHz	0.13 dB	
		(20 ~ 40) GHz	0.20 dB	
		(40 ~ 50) GHz	0.28 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Coaxial directional couplers /splitters	40610			Network Analyzer, Calibration Kit /KTICC-CI-40610
Coupling Factor, Insertion Loss		(30 ~ 40) dB		
		(5 ~ 100) Hz	0.20 dB	
		100 Hz ~ 0.3 MHz	0.12 dB	
		0.3 MHz ~ 2 GHz	0.10 dB	
		(2 ~ 20) GHz	0.16 dB	
		(20 ~ 40) GHz	0.22 dB	
		(40 ~ 50) GHz	0.32 dB	
		(40 ~ 50) dB		
		(5 ~ 100) Hz	0.33 dB	
		100 Hz ~ 0.3 MHz	0.17 dB	
		0.3 MHz ~ 2 GHz	0.13 dB	
		(2 ~ 20) GHz	0.20 dB	
		(20 ~ 40) GHz	0.27 dB	
		(40 ~ 45) GHz	0.37 dB	
		(45 ~ 50) GHz	0.39 dB	
		(50 ~ 60) dB		
		(5 ~ 100) Hz	0.73 dB	
		100 Hz ~ 0.3 MHz	0.27 dB	
		0.3 MHz ~ 2 GHz	0.17 dB	
		(2 ~ 20) GHz	0.27 dB	
		(20 ~ 40) GHz	0.36 dB	
		(40 ~ 45) GHz	0.48 dB	
		(45 ~ 50) GHz	0.55 dB	
		(60 ~ 70) dB		
		(5 ~ 100) Hz	1.8 dB	
		100 Hz ~ 0.3 MHz	0.55 dB	
		0.3 MHz ~ 2 GHz	0.27 dB	
		(2 ~ 10) GHz	0.42 dB	
		(10 ~ 20) GHz	0.44 dB	
		(20 ~ 40) GHz	0.55 dB	
		(40 ~ 45) GHz	0.74 dB	
		(45 ~ 50) GHz	0.97 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
DS1/DS3 communications systems	40612			Frequency counter Transmission analyzer
Bit rate		50 Hz ~ 5 GHz	1.2×10^{-10}	Audeo analyzer Frequency standard,
Level & Amplitude		50 Hz ~ 200 kHz		Oscilloscope
		(10 ~ -30) dBm	0.051 dB	/KTICC-CI-40612
		(-30 ~ -50) dBm	0.10 dB	
		(-50 ~ -60) dBm	0.21 dB	
Frequency		(20 ~ 100) Hz	0.10 dB	
Response & Flatness		(0.1 ~ 100) kHz	0.051 dB	
		(0.1 ~ 1) MHz	0.081 dB	
Output Jitter		DS1 (10 Hz to 40 kHz)	0.023 UI	
		DS1 (8 kHz to 40 kHz)	0.023 UI	
		E1 (20 Hz to 100 kHz)	0.023 UI	
		E1 (18 kHz to 100 kHz)	0.023 UI	
		DS3 (10 Hz to 400 kHz)	0.035 UI	
		DS3 (30 kHz to 400 kHz)	0.035 UI	
Jitter Generator & Analyzer		DS1(1.544 MHz), 1 kHz		
		0.77 UI	0.09 UI	
		1.80 UI	0.26 UI	
		4.80 UI	0.50 UI	
		8.80 UI	0.83 UI	
		E1(2.048 MHz), 2.4 kHz		
		0.77 UI	0.09 UI	
		1.80 UI	0.26 UI	
		4.80 UI	0.50 UI	
		8.80 UI	0.83 UI	
		DS3(44.736 MHz), 4 kHz		
		0.77 UI	0.11 UI	
		1.80 UI	0.30 UI	
		4.80 UI	0.61 UI	
		8.80 UI	1.0 UI	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Electrostatic discharge generators	40613			Oscilloscope, Attenuator, ESD System
Output Voltage		(±)		/KTICC-CI-40613
		0 kV	0.01 kV	
		(0 ~ 1) kV	8.7×10^{-3}	
		(1 ~ 2) kV	5.4×10^{-3}	
		(2 ~ 20) kV	3.8×10^{-3}	
		(20 ~ 30) kV	3.7×10^{-3}	
Peak Current		(±)		
		0 A	0.01 A	
		(0 ~ 7.5) A	1.3×10^{-2}	
		(7.5 ~15) A	1.3×10^{-2}	
		(15 ~ 22.5) A	1.3×10^{-2}	
		(22.5 ~ 30) A	1.3×10^{-2}	
		(30 ~ 56) A	1.3×10^{-2}	
		(56 ~ 112.5) A	1.4×10^{-2}	
T1 Current(30 ns ~ 65 ns)		(±)		
		0 A	0.01 A	
		(0 ~ 4) A	1.3×10^{-2}	
		(4 ~ 8) A	1.3×10^{-2}	
		(8 ~ 12) A	1.3×10^{-2}	
		(12 ~ 16) A	1.3×10^{-2}	
		(16 ~ 30) A	1.3×10^{-2}	
		30 A ~ 60 A	1.3×10^{-2}	
T2 Current(60 ns ~ 130 ns)		(±)		
		0 A	0.01 A	
		(0 ~ 2) A	1.3×10^{-2}	
		(2 ~ 4) A	1.3×10^{-2}	
		(4 ~ 6) A	1.3×10^{-2}	
		(6 ~ 8) A	1.3×10^{-2}	
		(8 ~ 15) A	1.4×10^{-2}	
		(15 ~ 30) A	1.3×10^{-2}	
T1 Current(180 ns ~ 400 ns)		(±)		
		0 A	0.01 A	
		(0 ~ 0.55) A	2.1×10^{-2}	
		(0.55 ~ 1.1) A	1.5×10^{-2}	
		(1.1 ~ 1.65) A	1.4×10^{-2}	
		(1.65 ~ 2.2) A	1.3×10^{-2}	
		(2.2 ~ 4.125) A	1.3×10^{-2}	
		(4.125 ~ 8.25) A	1.6×10^{-2}	
T2 Current(360 ns ~ 800 ns)		(±)		
		0 A	0.01 A	
		(0 ~ 0.3) A	3.2×10^{-2}	
		(0.3 ~ 0.6) A	2.0×10^{-2}	
		(0.6 ~ 0.9) A	1.6×10^{-2}	
		(0.9 ~ 1.2) A	1.5×10^{-2}	
		(1.2 ~ 2.3) A	1.3×10^{-2}	
		(2.3 ~ 4.5) A	1.3×10^{-2}	
Rjse/Fall Time		(0.5 ~ 1) ns	0.02 ns	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
EMC receivers	40614			Power sensor, Modulation meter,
Frequency		9 kHz ~ 5 GHz	1.2×10^{-10}	Power meter, Frequency counter,
		(5 ~ 40) GHz	1.3 Hz	Measuring receiver,
				Signal generator
Input Level		(0.1 ~ 1 000) MHz		/KTICC-CI-40614
		(20 ~ 10) dBm	0.21 dB	
		(10 ~ 0) dBm	0.20 dB	
		(0 ~ -40) dBm	0.21 dB	
		(-40 ~ -60) dBm	0.22 dB	
		(-60 ~ -90) dBm	0.23 dB	
		(-90 ~ -110) dBm	0.24 dB	
		(-110 ~ -120) dBm	0.25 dB	
		(1 ~ 4) GHz		
		(20 ~ -20) dBm	0.21 dB	
		(-20 ~ -40) dBm	0.22 dB	
		(-40 ~ -70) dBm	0.23 dB	
		(-70 ~ -100) dBm	0.24 dB	
		(-100 ~ -120) dBm	0.25 dB	
		(4 ~ 8) GHz		
		(20 ~ -20) dBm	0.22 dB	
		(-20 ~ -40) dBm	0.23 dB	
		(-40 ~ -70) dBm	0.24 dB	
		(-70 ~ -100) dBm	0.25 dB	
		(-100 ~ -120) dBm	0.26 dB	
		(8 ~ 10) GHz		
		(20 ~ -20) dBm	0.27 dB	
		(-20 ~ -50) dBm	0.28 dB	
		(-50 ~ -80) dBm	0.29 dB	
		(-80 ~ -110) dBm	0.30 dB	
		(-110 ~ -120) dBm	0.31 dB	
		(10 ~ 12) GHz		
		(20 ~ 10) dBm	0.28 dB	
		(-20 ~ 0) dBm	0.27 dB	
		(0 ~ -40) dBm	0.28 dB	
		(-40 ~ -60) dBm	0.29 dB	
		(-60 ~ -90) dBm	0.30 dB	
		(-90 ~ -120) dBm	0.31 dB	
		(12 ~ 18) GHz		
		(20 ~ -30) dBm	0.29 dB	
		(-30 ~ -50) dBm	0.30 dB	
		(-50 ~ -80) dBm	0.31 dB	
		(-80 ~ -100) dBm	0.32 dB	
		(-100 ~ -120) dBm	0.33 dB	
		(18 ~ 26.5) GHz		
		(20 ~ -20) dBm	0.37 dB	
		(-20 ~ -40) dBm	0.38 dB	
		(-40 ~ -50) dBm	0.39 dB	
		(-50 ~ -80) dBm	0.40 dB	
		(-80 ~ -110) dBm	0.41 dB	
		(-110 ~ -120) dBm	0.42 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
EMC receivers	40614			Power sensor, Modulation meter,
Input Level		(26.5 ~ 40) GHz		Power meter, Frequency counter,
		(20 ~ -20) dBm	0.50 dB	Measuring receiver,
				Signal generator
Output Level		(0.1 ~ 1 000) MHz		/KTICC-CI-40614
		(20 ~ 10) dBm	0.12 dB	
		(10 ~ -10) dBm	0.11 dB	
		(-10 ~ -30) dBm	0.12 dB	
		(-30 ~ -40) dBm	0.13 dB	
		(-40 ~ -60) dBm	0.14 dB	
		(-60 ~ -70) dBm	0.15 dB	
		(-70 ~ -90) dBm	0.16 dB	
		(-90 ~ -110) dBm	0.17 dB	
		(-110 ~ -120) dBm	0.18 dB	
		(1 ~ 4) GHz		
		(20 ~ 10) dBm	0.13 dB	
		(10 ~ -10) dBm	0.12 dB	
		(-10 ~ -30) dBm	0.13 dB	
		(-30 ~ -40) dBm	0.14 dB	
		(-40 ~ -60) dBm	0.15 dB	
		(-60 ~ -80) dBm	0.16 dB	
		(-80 ~ -100) dBm	0.17 dB	
		(-100 ~ -120) dBm	0.18 dB	
		(4 ~ 8) GHz		
		(20 ~ 10) dBm	0.14 dB	
		(10 ~ 0) dBm	0.13 dB	
		(0 ~ -20) dBm	0.14 dB	
		(-20 ~ -40) dBm	0.15 dB	
		(-40 ~ -50) dBm	0.16 dB	
		(-50 ~ -70) dBm	0.17 dB	
		(-70 ~ -90) dBm	0.18 dB	
		(-90 ~ -100) dBm	0.19 dB	
		(-100 ~ -120) dBm	0.20 dB	
		(8 ~ 10) GHz		
		(20 ~ 10) dBm	0.15 dB	
		(10 ~ 0) dBm	0.14 dB	
		(0 ~ -20) dBm	0.15 dB	
		(-20 ~ -40) dBm	0.16 dB	
		(-40 ~ -50) dBm	0.17 dB	
		(-50 ~ -70) dBm	0.18 dB	
		(-70 ~ -90) dBm	0.19 dB	
		(-90 ~ -110) dBm	0.20 dB	
		(-110 ~ -120) dBm	0.21 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
EMC receivers	40614			Power sensor, Modulation meter,
Output Level		(10 ~ 12) GHz		Power meter, Frequency counter,
		(20 ~ 10) dBm	0.16 dB	Measuring receiver,
		(10 ~ 0) dBm	0.15 dB	Signal generator
		(0 ~ -20) dBm	0.16 dB	/KTICC-CI-40614
		(-20 ~ -40) dBm	0.17 dB	
		(-40 ~ -50) dBm	0.18 dB	
		(-50 ~ -70) dBm	0.19 dB	
		(-70 ~ -90) dBm	0.20 dB	
		(-90 ~ -110) dBm	0.21 dB	
		(-110 ~ -120) dBm	0.22 dB	
		(12 ~ 18) GHz		
		(20 ~ 10) dBm	0.18 dB	
		(10 ~ 0) dBm	0.17 dB	
		(0 ~ -20) dBm	0.18 dB	
		(-20 ~ -40) dBm	0.19 dB	
		(-40 ~ -50) dBm	0.20 dB	
		(-50 ~ -70) dBm	0.21 dB	
		(-70 ~ -90) dBm	0.22 dB	
		(-90 ~ -100) dBm	0.23 dB	
		(-100 ~ -120) dBm	0.24 dB	
		(18 ~ 26.5) GHz		
		(20 ~ 10) dBm	0.25 dB	
		(10 ~ -10) dBm	0.24 dB	
		(-10 ~ -30) dBm	0.25 dB	
		(-30 ~ -40) dBm	0.26 dB	
		(-40 ~ -60) dBm	0.28 dB	
		(-60 ~ -80) dBm	0.29 dB	
		(-80 ~ -100) dBm	0.30 dB	
		(-100 ~ -120) dBm	0.31 dB	
		(26.5 ~ 40) GHz		
		(20 ~ -20) dBm	0.21 dB	
Frequency Modulation		Rate (0.01 ~ 100) kHz		
		(0 ~ 400) kHz	2.7×10^{-2}	
Amplitude Modulation		Rate (0.01 ~ 50) kHz		
		(0 ~ 99) %	2.7×10^{-2}	
Phase Modulation		Rate (0.05 ~ 100) kHz		
		(0 ~ 400) rad	4.2×10^{-2}	
VSWR		(1 ~ 3)		
		(9 ~ 100) kHz	0.008	
		100 kHz ~ 2 GHz	0.009	
		(2 ~ 26.5) GHz	0.015	
		(26.5 ~ 40) GHz	0.029	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
EMC receivers	40614			Power sensor, Modulation meter,
Frequency Response(CW)		10 Hz ~ 100 kHz	0.18 dB	Power meter, Frequency counter,
		100 kHz ~ 1 GHz	0.20 dB	Measuring receiver,
		(1 ~ 4) GHz	0.21 dB	Signal generator
		(4 ~ 8) GHz	0.22 dB	/KTICC-CI-40614
		(8 ~ 12) GHz	0.27 dB	
		(12 ~ 18) GHz	0.29 dB	
		(18 ~ 26.5) GHz	0.37 dB	
		(26.5 ~ 40) GHz	0.50 dB	
Frequency Response(Pulse)		9 kHz ~ 1 GHz	0.75 dB	
Frequency Response, Repetition(CISPR Band)		9 kHz ~ 1 GHz	0.75 dB	
Overall Selectivity		9 kHz ~ 1 GHz	0.07 dB	
IF Rejection		9 kHz ~ 100 kHz	0.06 dB	
		100 kHz ~ 1 GHz	0.11 dB	
		(1 ~ 4) GHz	0.12 dB	
		(4 ~ 8) GHz	0.13 dB	
		(8 ~ 10) GHz	0.14 dB	
		(10 ~ 12) GHz	0.15 dB	
		(12 ~ 18) GHz	0.18 dB	
		(18 ~ 26.5) GHz	0.24 dB	
		(26.5 ~ 40) GHz	0.20 dB	
IF Image Frequency Rejection		9 kHz ~ 100 kHz	0.06 dB	
		100 kHz ~ 1 GHz	0.11 dB	
		(1 ~ 4) GHz	0.12 dB	
		(4 ~ 8) GHz	0.13 dB	
		(8 ~ 10) GHz	0.14 dB	
		(10 ~ 12) GHz	0.15 dB	
		(12 ~ 18) GHz	0.18 dB	
		(18 ~ 26.5) GHz	0.24 dB	
		(26.5 ~ 40) GHz	0.20 dB	
Other Spurious Response		9 kHz ~ 100 kHz	0.06 dB	
		100 kHz ~ 1 GHz	0.11 dB	
		(1 ~ 4) GHz	0.12 dB	
		(4 ~ 8) GHz	0.13 dB	
		(8 ~ 10) GHz	0.14 dB	
		(10 ~ 12) GHz	0.15 dB	
		(12 ~ 18) GHz	0.18 dB	
		(18 ~ 26.5) GHz	0.24 dB	
		(26.5 ~ 40) GHz	0.20 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
EMC receivers	40614			Power sensor, Modulation meter,
Random Noise		9 kHz ~ 100 kHz	0.06 dB	Power meter, Frequency counter,
		100 kHz ~ 1 GHz	0.11 dB	Measuring receiver,
		(1 ~ 4) GHz	0.12 dB	Signal generator
		(4 ~ 8) GHz	0.13 dB	/KTICC-CI-40614
		(8 ~ 10) GHz	0.14 dB	
		(10 ~ 12) GHz	0.15 dB	
		(12 ~ 18) GHz	0.18 dB	
		(18 ~ 26.5) GHz	0.24 dB	
		(26.5 ~ 40) GHz	0.20 dB	
Resolution Bandwidth		10 Hz ~ 10 MHz	1.1×10^{-3}	
RF filters	40615			Network analyzer
Cutoff Frequency		(5 ~ 100) Hz	0.60 Hz	Frequency standard,
		100 Hz ~ 300 kHz	72 Hz	Calibration kit
		0.3 MHz ~ 1 GHz	72 kHz	/KTICC-CI-40615
		(1 ~ 2) GHz	0.12 MHz	
		(2 ~ 8) GHz	0.16 MHz	
		(8 ~ 18) GHz	0.31 MHz	
		(18 ~ 40) GHz	0.42 MHz	
Insertion Loss		5 Hz ~ 9 kHz	0.047 dB	
		9 kHz ~ 0.3 MHz	0.041 dB	
		0.3 MHz ~ 1 GHz	0.040 dB	
		(1 ~ 2) GHz	0.041 dB	
		(2 ~ 8) GHz	0.075 dB	
		(8 ~ 18) GHz	0.11 dB	
		(18 ~ 26.5) GHz	0.15 dB	
		(26.5 ~ 40) GHz	0.16 dB	
RF impedance meters	40616			Standard mismatch,
VSWR		(1.00 ~ 1.05)		Power sensor, Power meter,
		(0.05 ~ 2) GHz	0.059	Spectrum analyzer,
		(2 ~ 7) GHz	0.062	Frequency standard,
		(7 ~ 9) GHz	0.063	Frequency counter,
		(9 ~ 11) GHz	0.062	Calibration kit
		(11 ~ 12) GHz	0.063	/KTICC-CI-40616
		(12 ~ 18) GHz	0.095	
		(1.05 ~ 1.20)		
		(0.05 ~ 1) GHz	0.071	
		(1 ~ 8) GHz	0.074	
		(8 ~ 12) GHz	0.085	
		(12 ~ 18) GHz	0.12	
		(1.20 ~ 1.50)		
		(0.05 ~ 1) GHz	0.095	
		(1 ~ 8) GHz	0.10	
		(8 ~ 12) GHz	0.11	
		(12 ~ 18) GHz	0.20	
		(1.50 ~ 2.00)		
		(0.05 ~ 1) GHz	0.14	
		(1 ~ 4) GHz	0.15	
		(4 ~ 12) GHz	0.16	
		(12 ~ 17) GHz	0.26	
		(17 ~ 18) GHz	0.27	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
RF impedance meters	40616			Standard mismatch,
Output Power		9 kHz ~ 0.1 MHz		Power sensor, Power meter,
		(10 ~ -30) dBm	0.07 dB	Spectrum analyzer,
		(0.1 ~ 1 000) MHz		Frequency standard,
		(10 ~ -10) dBm	0.11 dB	Frequency counter,
		(-10 ~ -30) dBm	0.12 dB	Calibration kit
		(1 ~ 4) GHz		/KTICC-CI-40616
		(10 ~ -10) dBm	0.12 dB	
		(-10 ~ -30) dBm	0.13 dB	
		(4 ~ 8) GHz		
		(10 ~ 0) dBm	0.14 dB	
		0 dBm	0.13 dB	
		(0 ~ -20) dBm	0.14 dB	
		(-20 ~ -30) dBm	0.15 dB	
		(8 ~ 10) GHz		
		(10 ~ 0) dBm	0.15 dB	
		0 dBm	0.14 dB	
		(0 ~ -20) dBm	0.15 dB	
		(-20 ~ -30) dBm	0.16 dB	
		(10 ~ 12) GHz		
		(10 ~ 0) dBm	0.16 dB	
		0 dBm	0.15 dB	
		(0 ~ -20) dBm	0.16 dB	
		(-20 ~ -30) dBm	0.17 dB	
		(12 ~ 18) GHz		
		(10 ~ 0) dBm	0.18 dB	
		0 dBm	0.17 dB	
		(0 ~ -20) dBm	0.18 dB	
		(-20 ~ -30) dBm	0.19 dB	
Frequency		10 Hz ~ 5 GHz	1.2×10^{-10}	
		(5 ~ 40) GHz	1.3 Hz	
Loss		(1 ~ 3) dB		
		(0.05 ~ 1) GHz	0.040 dB	
		(1 ~ 3) GHz	0.042 dB	
		(3 ~ 8) GHz	0.040 dB	
		(8 ~ 10) GHz	0.043 dB	
		(10 ~ 15) GHz	0.048 dB	
		(15 ~ 18) GHz	0.056 dB	
		(3 ~ 6) dB		
		(0.05 ~ 1) GHz	0.041 dB	
		(1 ~ 3) GHz	0.043 dB	
		(3 ~ 8) GHz	0.041 dB	
		(8 ~ 10) GHz	0.044 dB	
		(10 ~ 15) GHz	0.048 dB	
		(15 ~ 18) GHz	0.052 dB	
		(6 ~ 10) dB		
		(0.05 ~ 1) GHz	0.041 dB	
		(1 ~ 3) GHz	0.043 dB	
		(3 ~ 8) GHz	0.042 dB	
		(8 ~ 10) GHz	0.044 dB	
		(10 ~ 15) GHz	0.042 dB	
		(15 ~ 18) GHz	0.048 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
RF impedance meters	40616			Standard mismatch,
Impedance		(0.05 ~ 2) GHz	0.6 Ω	Power sensor, Power meter,
		(2 ~ 18) GHz	1.1 Ω	Calibration kit
				/KTICC-CI-40616
RF impulse generators	40617			Oscilloscope,
Output Voltage		(±)		High voltage probe
		0 kV	0.1 V	/KTICC-CI-40617
		(0 ~ 20) kV	1.3×10^{-2}	
Pulse Width		10 ns	3.6×10^{-3}	
		(10 ~ 100) ns	4.2×10^{-3}	
		100 ns ~ 100 ms	3.4×10^{-3}	
Line impedance stabilization networks ; LISN, CDN, ISN, etc.	40618			Network analyzer Calibration kit
Impedance		(9 ~ 30) kHz	0.45 Ω	/KTICC-CI-40618
		30 kHz ~ 1 GHz	0.40 Ω	
Insertion Loss		(9 ~ 30) kHz	0.060 dB	
(Voltage Division Factor,		(30 ~ 50) kHz	0.051 dB	
Longitudinal conversion loss,		50 kHz ~ 1 GHz	0.041 dB	
Attenuation,Isolation)				
Phase Angle		(9 ~ 30) kHz	0.52°	
		30 kHz ~ 1 GHz	0.46°	
CDN				
Impedance		9 kHz ~ 10 MHz	0.61 Ω	
		10 MHz ~ 1 GHz	0.83 Ω	
Insertion Loss		(9 ~ 300) kHz	0.060 dB	
(Voltage Division Factor,		300 kHz ~ 10 MHz	0.046 dB	
Longitudinal conversion loss)		10 MHz ~ 1 GHz	0.050 dB	
Phase Angle		9 kHz ~ 10 MHz	0.23°	
		10 MHz ~ 1 GHz	0.33°	
Coaxial standard mismatches	40619			Network analyzer
VSWR		1.00		Calibration kit
		5 Hz ~ 0.1 MHz	0.008	/KTICC-CI-40619
		0.1 MHz ~ 2 GHz	0.009	
		(2 ~ 26.5) GHz	0.015	
		(26.5 ~ 40) GHz	0.029	
		(1 ~ 1.05)		
		5 Hz ~ 0.1 MHz	0.009	
		0.1 MHz ~ 2 GHz	0.010	
		(2 ~ 26.5) GHz	0.016	
		(26.5 ~ 40) GHz	0.031	
		(1.05 ~ 1.10)		
		5 Hz ~ 0.1 MHz	0.010	
		0.1 MHz ~ 2 GHz	0.011	
		(2 ~ 26.5) GHz	0.017	
		(26.5 ~ 40) GHz	0.033	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Coaxial standard mismatches VSWR	40619	(1.10 ~ 1.20)		Network analyzer Calibration kit /KTICC-CI-40619
		5 Hz ~ 0.1 MHz	0.011	
		0.1 MHz ~ 2 GHz	0.013	
		(2 ~ 26.5) GHz	0.020	
		(26.5 ~ 40) GHz	0.038	
		(1.20 ~ 1.30)		
		5 Hz ~ 0.1 MHz	0.014	
		0.1 MHz ~ 2 GHz	0.015	
		(2 ~ 26.5) GHz	0.023	
		(26.5 ~ 40) GHz	0.043	
		(1.30 ~ 1.50)		
		5 Hz ~ 0.1 MHz	0.018	
		0.1 MHz ~ 2 GHz	0.019	
		(2 ~ 8) GHz	0.030	
		(8 ~ 26.5) GHz	0.031	
		(26.5 ~ 40) GHz	0.054	
		(1.50 ~ 1.75)		
		5 Hz ~ 2 GHz	0.025	
		(2 ~ 8) GHz	0.041	
		(8 ~ 26.5) GHz	0.043	
		(26.5 ~ 40) GHz	0.070	
		(1.75 ~ 2.00)		
		5 Hz ~ 0.1 MHz	0.033	
		0.1 MHz ~ 2 GHz	0.032	
		(2 ~ 8) GHz	0.054	
		(8 ~ 26.5) GHz	0.058	
		(26.5 ~ 40) GHz	0.090	
		(2.00 ~ 2.50)		
		5 Hz ~ 0.1 MHz	0.052	
		0.1 MHz ~ 2 GHz	0.048	
		(2 ~ 8) GHz	0.087	
		(8 ~ 26.5) GHz	0.10	
		(26.5 ~ 40) GHz	0.14	
		(2.50 ~ 3.00)		
		5 Hz ~ 0.1 MHz	0.075	
		0.1 MHz ~ 2 GHz	0.067	
		(2 ~ 8) GHz	0.13	
		(8 ~ 26.5) GHz	0.14	
		(26.5 ~ 40) GHz	0.20	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Mobile commuication test sets	40621			Frequency counter, Measuring receiver,
Frequency		10 Hz ~ 5 GHz	1.2×10^{-10}	Power meter,
		(5 ~ 40) GHz	1.3 ㎐	Frequency counter, DMM,
				Meter calibrater,
Output level		(0.1 ~ 1 000) MHz		Function generator,
		(20 ~ 10) dBm	0.12 dB	Audio analyzer,
		(10 ~ -10) dBm	0.11 dB	RF spectrum analyzer
		(-10 ~ -30) dBm	0.12 dB	/KTICC-CI-40621
		(-30 ~ -40) dBm	0.13 dB	
		(-40 ~ -60) dBm	0.14 dB	
		(-60 ~ -70) dBm	0.15 dB	
		(-70 ~ -90) dBm	0.16 dB	
		(-90 ~ -110) dBm	0.17 dB	
		(-110 ~ -120) dBm	0.18 dB	
		(1 ~ 4) GHz		
		(20 ~ 10) dBm	0.13 dB	
		(10 ~ -10) dBm	0.12 dB	
		(-10 ~ -30) dBm	0.13 dB	
		(-30 ~ -40) dBm	0.14 dB	
		(-40 ~ -60) dBm	0.15 dB	
		(-60 ~ -80) dBm	0.16 dB	
		(-80 ~ -100) dBm	0.17 dB	
		(-100 ~ -120) dBm	0.18 dB	
		(4 ~ 8) GHz		
		(20 ~ 10) dBm	0.14 dB	
		(10 ~ 0) dBm	0.13 dB	
		(0 ~ -20) dBm	0.14 dB	
		(-20 ~ -40) dBm	0.15 dB	
		(-40 ~ -50) dBm	0.16 dB	
		(-50 ~ -70) dBm	0.17 dB	
		(-70 ~ -90) dBm	0.18 dB	
		(-90 ~ -100) dBm	0.19 dB	
		(-100 ~ -120) dBm	0.20 dB	
		(8 ~ 10) GHz		
		(20 ~ 10) dBm	0.15 dB	
		(10 ~ 0) dBm	0.14 dB	
		(0 ~ -20) dBm	0.15 dB	
		(-20 ~ -40) dBm	0.16 dB	
		(-40 ~ -50) dBm	0.17 dB	
		(-50 ~ -70) dBm	0.18 dB	
		(-70 ~ -90) dBm	0.19 dB	
		(-90 ~ -110) dBm	0.20 dB	
		(-110 ~ -120) dBm	0.21 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Mobile commuication test sets	40621			Frequency counter, Measuring receiver,
Output level		(10 ~ 12) GHz		Power meter,
		(20 ~ 10) dBm	0.16 dB	Frequency counter, DMM,
		(10 ~ 0) dBm	0.15 dB	Meter calibrater,
		(0 ~ -20) dBm	0.16 dB	Function generator,
		(-20 ~ -40) dBm	0.17 dB	Audio analyzer,
		(-40 ~ -50) dBm	0.18 dB	RF spectrum analyzer
		(-50 ~ -70) dBm	0.19 dB	/KTICC-CI-40621
		(-70 ~ -90) dBm	0.20 dB	
		(-90 ~ -110) dBm	0.21 dB	
		(-110 ~ -120) dBm	0.22 dB	
		(12 ~ 18) GHz		
		(20 ~ 10) dBm	0.18 dB	
		(10 ~ 0) dBm	0.17 dB	
		(0 ~ -20) dBm	0.18 dB	
		(-20 ~ -40) dBm	0.19 dB	
		(-40 ~ -50) dBm	0.20 dB	
		(-50 ~ -70) dBm	0.21 dB	
		(-70 ~ -90) dBm	0.22 dB	
		(-90 ~ -100) dBm	0.23 dB	
		(-100 ~ -120) dBm	0.24 dB	
		(18 ~ 26.5) GHz		
		(20 ~ 10) dBm	0.25 dB	
		(10 ~ -10) dBm	0.24 dB	
		(-10 ~ -30) dBm	0.25 dB	
		(-30 ~ -40) dBm	0.26 dB	
		(-40 ~ -60) dBm	0.28 dB	
		(-60 ~ -80) dBm	0.29 dB	
		(-80 ~ -100) dBm	0.30 dB	
		(-100 ~ -120) dBm	0.31 dB	
		(26.5 ~ 40) GHz		
		(20 ~ -20) dBm	0.21 dB	
Frequency Modulation		Rate (0.01 ~ 100) kHz		
		(0 ~ 400) kHz	2.7×10^{-2}	
Amplitude Modulation		Rate (0.01 ~ 50) kHz		
		(0 ~ 99) %	2.7×10^{-2}	
Phase Modulation		Rate (0.05 ~ 100) kHz		
		(0 ~ 400) rad	4.2×10^{-2}	
Harmonics		10 MHz ~ 3 GHz	0.4 dB	
		(3 ~ 8) GHz	0.5 dB	
		(8 ~ 12) GHz	0.6 dB	
		(12 ~ 16) GHz	0.7 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Mobile commuication test sets	40621			Frequency counter, Measuring receiver,
Input Level		(0.1 ~ 1 000) MHz		Power meter,
		(20 ~ 10) dBm	0.21 dB	Frequency counter, DMM,
		(10 ~ 0) dBm	0.20 dB	Meter calibrater,
		(0 ~ -40) dBm	0.21 dB	Function generator,
		(-40 ~ -60) dBm	0.22 dB	Audio analyzer,
		(-60 ~ -90) dBm	0.23 dB	RF spectrum analyzer
		(-90 ~ -110) dBm	0.24 dB	/KTICC-CI-40621
		(-110 ~ -120) dBm	0.25 dB	
		(1 ~ 4) GHz		
		(20 ~ -20) dBm	0.21 dB	
		(-20 ~ -40) dBm	0.22 dB	
		(-40 ~ -70) dBm	0.23 dB	
		(-70 ~ -100) dBm	0.24 dB	
		(-100 ~ -120) dBm	0.25 dB	
		(4 ~ 8) GHz		
		(20 ~ -20) dBm	0.22 dB	
		(-20 ~ -40) dBm	0.23 dB	
		(-40 ~ -70) dBm	0.24 dB	
		(-70 ~ -100) dBm	0.25 dB	
		(-100 ~ -120) dBm	0.26 dB	
		(8 ~ 10) GHz		
		(20 ~ -20) dBm	0.27 dB	
		(-20 ~ -50) dBm	0.28 dB	
		(-50 ~ -80) dBm	0.29 dB	
		(-80 ~ -110) dBm	0.30 dB	
		(-110 ~ -120) dBm	0.31 dB	
		(10 ~ 12) GHz		
		(20 ~ 10) dBm	0.28 dB	
		(-20 ~ 0) dBm	0.27 dB	
		(0 ~ -40) dBm	0.28 dB	
		(-40 ~ -60) dBm	0.29 dB	
		(-60 ~ -90) dBm	0.30 dB	
		(-90 ~ -120) dBm	0.31 dB	
		(12 ~ 18) GHz		
		(20 ~ -30) dBm	0.29 dB	
		(-30 ~ -50) dBm	0.30 dB	
		(-50 ~ -80) dBm	0.31 dB	
		(-80 ~ -100) dBm	0.32 dB	
		(-100 ~ -120) dBm	0.33 dB	
		(18 ~ 26.5) GHz		
		(20 ~ -20) dBm	0.37 dB	
		(-20 ~ -40) dBm	0.38 dB	
		(-40 ~ -50) dBm	0.39 dB	
		(-50 ~ -80) dBm	0.40 dB	
		(-80 ~ -110) dBm	0.41 dB	
		(-110 ~ -120) dBm	0.42 dB	
		(26.5 ~ 40) GHz		
		(20 ~ -20) dBm	0.50 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Mobile commuication test sets	40621			Frequency counter, Measuring receiver,
Audio Output Level		1 mV		Power meter,
		40 ㎐ ~ 10 kHz	4.2×10^{-3}	Frequency counter, DMM,
		(10 ~ 100) kHz	2.1×10^{-2}	Meter calibrater,
		(1 ~ 10) mV		Function generator,
		40 ㎐ ~ 10 kHz	5.4×10^{-4}	Audio analyzer,
		(10 ~ 100) kHz	2.8×10^{-3}	RF spectrum analyzer
		(10 ~ 100) mV		/KTICC-CI-40621
		40 ㎐ ~ 10 kHz	2.2×10^{-4}	
		(10 ~ 100) kHz	1.1×10^{-3}	
		(0.1 ~ 10) V		
		(40 ~ 100) Hz	1.4×10^{-4}	
		(0.1 ~ 1) kHz	1.2×10^{-4}	
		(1 ~ 10) kHz	1.4×10^{-4}	
		(10 ~ 100) kHz	7.3×10^{-4}	
		(10 ~ 20) V		
		(40 ~ 100) Hz	2.0×10^{-4}	
		(0.1 ~ 1) kHz	1.8×10^{-4}	
		(1 ~ 10) kHz	2.0×10^{-4}	
		(10 ~ 100) kHz	1.5×10^{-3}	
AC Input Voltage		10 mV		
		(0.04 ~ 1) kHz	5.1×10^{-4}	
		(1 ~ 10) kHz	5.0×10^{-4}	
		(10 ~ 100) kHz	1.0×10^{-3}	
		(100 ~ 500) kHz	3.5×10^{-3}	
		(0.5 ~ 1) MHz	4.8×10^{-3}	
		(10 ~ 100) mV		
		(0.04 ~ 1) kHz	1.8×10^{-4}	
		(1 ~ 10) kHz	1.7×10^{-4}	
		(10 ~ 100) kHz	6.5×10^{-4}	
		(100 ~ 500) kHz	1.7×10^{-3}	
		(0.5 ~ 1) MHz	3.2×10^{-3}	
		(0.1 ~ 1) V		
		(0.04 ~ 1) kHz	1.3×10^{-4}	
		(1 ~ 10) kHz	9.1×10^{-5}	
		(10 ~ 100) kHz	1.6×10^{-4}	
		(100 ~ 500) kHz	1.2×10^{-3}	
		(0.5 ~ 1) MHz	2.0×10^{-3}	
		(1 ~ 10) V		
		(0.04 ~ 1) kHz	1.3×10^{-4}	
		(1 ~ 10) kHz	8.9×10^{-5}	
		(10 ~ 100) kHz	1.4×10^{-4}	
		(100 ~ 500) kHz	1.2×10^{-3}	
		(0.5 ~ 1) MHz	1.9×10^{-3}	
DC Input Voltage		0 mV	0.01 μV	
		(0 ~ 10) mV	4.9×10^{-5}	
		(10 ~ 100) mV	1.3×10^{-5}	
		(0.1 ~ 1) V	5.9×10^{-6}	
		(1 ~ 10) V	4.0×10^{-6}	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Mobile commuication test sets	40621			Frequency counter, Measuring receiver,
DC Output Voltage		0 V	0.01 mV	Power meter,
		(0 ~ 0.1) V	6.3×10^{-5}	Frequency counter, DMM,
		(0.1 ~ 0.2) V	3.3×10^{-5}	Meter calibrater,
		(0.2 ~ 0.5) V	1.6×10^{-5}	Function generator,
		(0.5 ~ 1) V	1.1×10^{-5}	Audio analyzer,
		(1 ~ 2) V	3.2×10^{-5}	RF spectrum analyzer
		(2 ~ 5) V	1.5×10^{-5}	/KTICC-CI-40621
		(5 ~ 10) V	1.0×10^{-5}	
Modulation meters	40622			Measuring receiver
Frequency Modulation		Rate (0.01 ~ 100) kHz		Frequency counter
		(0 ~ 400) kHz	2.7×10^{-2}	RF Signal Generator
				/KTICC-CI-40622
Amplitude Modulation		Rate (0.01 ~ 50) kHz		
		(0 ~ 99) %	2.7×10^{-2}	
Phase Modulation		Rate (0.05 ~ 100) kHz		
		(0 ~ 400) rad	4.2×10^{-2}	
Frequency		10 Hz ~ 5 GHz	1.2×10^{-10}	
		(5 ~ 26.5) GHz	1.3 Hz	
Tuned RF Level		(0 ~ -10) dB	0.04 dB	
		(-10 ~ -120) dB	0.05 dB	
ILS/VOR Analyzer				
Frequency(VOR/ILS)		(70 ~ 350) MHz	6.7 Hz	
Amplitude Modulation(VOR/ILS)		Localizer(108 ~ 112) MHz :		
		(0 ~ 20) %	0.93 %	
		Glideslope(320 ~ 340) MHz :		
		(20 ~ 40) %	1.9 %	
		Marker Beacon(74.7 ~ 75.3) MHz :		
		(40 ~ 95) %	4.6 %	
		VOR(108 ~ 118) MHz :		
		(0 ~ 30) %	1.4 %	
Input level(VOR/ILS)		Localizer(108 ~ 112) MHz :		
		(10 ~ -10) dBm	0.14 dB	
		(-10 ~ -40) dBm	0.15 dB	
		(-40 ~ -50) dBm	0.16 dB	
		(-50 ~ -70) dBm	0.17 dB	
		(-70 ~ -90) dBm	0.18 dB	
		(-90 ~ -110) dBm	0.19 dB	
		(-110 ~ -120) dBm	0.20 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Modulation meters	40622			Measuring receiver Frequency counter RF Signal Generator /KTICC-CI-40622
Input level(VOR/ILS)		Glideslope(320 ~ 340) MHz :		
		(10 ~ -10) dBm	0.14 dB	
		(-10 ~ -40) dBm	0.15 dB	
		(-40 ~ -50) dBm	0.16 dB	
		(-50 ~ -70) dBm	0.17 dB	
		(-70 ~ -90) dBm	0.18 dB	
		(-90 ~ -110) dBm	0.19 dB	
		(-110 ~ -120) dBm	0.20 dB	
DDM(VOR/ILS)		Localizer(108 ~ 112) MHz :		
		0	0.000 7	
		±(0 ~ 0.155)	0.003 2	
		Glideslope(320 ~ 340) MHz :		
		0	0.001 1	
		±(0 ~ 0.175)	0.003 2	
SDM(VOR/ILS)		Localizer(108 ~ 112) MHz :		
		40 %	0.34 %	
		Glideslope(320 ~ 340) MHz :		
		80 %	1.5 %	
Azimuth(VOR/ILS)		VOR(108 ~ 118) MHz :		
		(0 ~ 360)°	0.07°	
Network analyzers	40623			Frequency Standard, Frequency Counter, Power Sensor, Power Meter, Sensor Module, Measuring Receiver, Calibration Kit, Attenuator /KTICC-CI-40623
Output Frequency		10 Hz ~ 5 GHz	1.2×10^{-10}	
		(5 ~ 46) GHz	1.3 Hz	
Output Level		9 kHz ~ 0.1 MHz		
		(20 ~ -40) dBm	0.07 dB	
		(0.1 ~ 1 000) MHz		
		(20 ~ 10) dBm	0.12 dB	
		(10 ~ -10) dBm	0.11 dB	
		(-10 ~ -30) dBm	0.12 dB	
		(-30 ~ -40) dBm	0.13 dB	
		(-40 ~ -60) dBm	0.14 dB	
		(-60 ~ -70) dBm	0.15 dB	
		(-70 ~ -90) dBm	0.16 dB	
		(-90 ~ -110) dBm	0.17 dB	
		(1 ~ 4) GHz		
		(20 ~ 10) dBm	0.13 dB	
		(10 ~ -10) dBm	0.12 dB	
		(-10 ~ -30) dBm	0.13 dB	
		(-30 ~ -40) dBm	0.14 dB	
		(-40 ~ -60) dBm	0.15 dB	
		(-60 ~ -80) dBm	0.16 dB	
		(-80 ~ -100) dBm	0.17 dB	
		(-100 ~ -110) dBm	0.18 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Network analyzers	40623			Frequency Standard,
Output Level		(4 ~ 8) GHz		Frequency Counter,
		(20 ~ 10) dBm	0.14 dB	Power Sensor, Power Meter,
		(10 ~ 0) dBm	0.13 dB	Sensor Module,
		(0 ~ -20) dBm	0.14 dB	Measuring Receiver,
		(-20 ~ -40) dBm	0.15 dB	Calibration Kit, Attenuator
		(-40 ~ -50) dBm	0.16 dB	/KTICC-CI-40623
		(-50 ~ -70) dBm	0.17 dB	
		(-70 ~ -90) dBm	0.18 dB	
		(-90 ~ -100) dBm	0.19 dB	
		(-100 ~ -110) dBm	0.20 dB	
		(8 ~ 10) GHz		
		(20 ~ 10) dBm	0.15 dB	
		(10 ~ 0) dBm	0.14 dB	
		(0 ~ -20) dBm	0.15 dB	
		(-20 ~ -40) dBm	0.16 dB	
		(-40 ~ -50) dBm	0.17 dB	
		(-50 ~ -70) dBm	0.18 dB	
		(-70 ~ -90) dBm	0.19 dB	
		(-90 ~ -110) dBm	0.20 dB	
		(12 ~ 18) GHz		
		(20 ~ 10) dBm	0.18 dB	
		(10 ~ 0) dBm	0.17 dB	
		(0 ~ -20) dBm	0.18 dB	
		(-20 ~ -40) dBm	0.19 dB	
		(-40 ~ -50) dBm	0.20 dB	
		(-50 ~ -70) dBm	0.21 dB	
		(-70 ~ -90) dBm	0.22 dB	
		(-90 ~ -100) dBm	0.23 dB	
		(-100 ~ -110) dBm	0.24 dB	
		(18 ~ 26.5) GHz		
		(20 ~ 10) dBm	0.25 dB	
		(10 ~ -10) dBm	0.24 dB	
		(-10 ~ -30) dBm	0.25 dB	
		(-30 ~ -40) dBm	0.26 dB	
		(-40 ~ -60) dBm	0.28 dB	
		(-60 ~ -80) dBm	0.29 dB	
		(-80 ~ -100) dBm	0.30 dB	
		(-100 ~ -110) dBm	0.31 dB	
		(26.5 ~ 40) GHz		
		(20 ~ -30) dBm	0.21 dB	
		(40 ~ 50) GHz		
		(20 ~ -30) dBm	0.25 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Network analyzers	40623			Frequency Standard,
Output Level Linearity		9 kHz ~ 0.1 MHz		Frequency Counter,
		(20 ~ -40) dBm	0.07 dB	Power Sensor, Power Meter,
				Sensor Module,
		(0.1 ~ 1 000) MHz		Measuring Receiver,
		(20 ~ -30) dBm	0.06 dB	Calibration Kit, Attenuator
		(-30 ~ -50) dBm	0.07 dB	/KTICC-CI-40623
		(-50 ~ -70) dBm	0.08 dB	
		(-70 ~ -100) dBm	0.09 dB	
		(-100 ~ -110) dBm	0.10 dB	
		(1 ~ 10) GHz		
		(20 ~ -40) dBm	0.08 dB	
		(-40 ~ -60) dBm	0.09 dB	
		(-60 ~ -90) dBm	0.10 dB	
		(-90 ~ -110) dBm	0.11 dB	
		(10 ~ 18) GHz		
		(20 ~ -60) dBm	0.10 dB	
		(-60 ~ -90) dBm	0.11 dB	
		(-90 ~ -110) dBm	0.12 dB	
		(18 ~ 22) GHz		
		(20 ~ 10) dBm	0.15 dB	
		(10 ~ -10) dBm	0.14 dB	
		(-10 ~ -70) dBm	0.15 dB	
		(-70 ~ -110) dBm	0.16 dB	
		(22 ~ 26.5) GHz		
		(20 ~ 10) dBm	0.15 dB	
		(10 ~ -10) dBm	0.14 dB	
		(-10 ~ -50) dBm	0.15 dB	
		(-50 ~ -90) dBm	0.16 dB	
		(-90 ~ -110) dBm	0.17 dB	
		(26.5 ~ 40) GHz		
		(20 ~ -30) dBm	0.21 dB	
		(40 ~ 50) GHz		
		(20 ~ -30) dBm	0.25 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Network analyzers	40623			Frequency Standard,
Frequency Response		(10 ~ -10) dBm		Frequency Counter,
		9 kHz ~ 0.1 MHz	0.18 dB	Power Sensor, Power Meter,
		(0.1 ~ 1 000) MHz	0.20 dB	Sensor Module,
		(1 ~ 4) GHz	0.21 dB	Measuring Receiver,
		(4 ~ 8) GHz	0.22 dB	Calibration Kit, Attenuator
		(8 ~ 12) GHz	0.27 dB	/KTICC-CI-40623
		(12 ~ 18) GHz	0.29 dB	
		(18 ~ 26.5) GHz	0.37 dB	
		(26.5 ~ 40) GHz	0.50 dB	
		(40 ~ 50) GHz	0.52 dB	
Attenuation		(0.05 ~ 3) GHz		
		(0 ~ -80) dB	0.06 dB	
		(-80 ~ -90) dB	0.07 dB	
		(-90 ~ -100) dB	0.08 dB	
		(3 ~ 8) GHz		
		(0 ~ -40) dB	0.05 dB	
		(-40 ~ -70) dB	0.06 dB	
		(-70 ~ -80) dB	0.07 dB	
		(-80 ~ -90) dB	0.08 dB	
		(-90 ~ -100) dB	0.09 dB	
		(8 ~ 10) GHz		
		(0 ~ -40) dB	0.05 dB	
		(-40 ~ -70) dB	0.06 dB	
		(-70 ~ -80) dB	0.07 dB	
		(-80 ~ -90) dB	0.09 dB	
		(-90 ~ -100) dB	0.10 dB	
		(10 ~ 15) GHz		
		(0 ~ -20) dB	0.06 dB	
		(-20 ~ -60) dB	0.07 dB	
		(-60 ~ -80) dB	0.08 dB	
		(-80 ~ -90) dB	0.10 dB	
		(-90 ~ -100) dB	0.11 dB	
		(15 ~ 18) GHz		
		(0 ~ -70) dB	0.09 dB	
		(-70 ~ -80) dB	0.10 dB	
		(-80 ~ -90) dB	0.11 dB	
		(-90 ~ -100) dB	0.12 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Noise figure meters	40624			DMM, Frequency counter
Reference Frequency		10 MHz	1.2 mHz	Attenuator, Noise source
				Network analyzer
Frequency		10 MHz ~ 26.5 GHz	0.58 kHz	/KTICC-CI-40624
Noise Figure Range		(0 ~ -5) dB	0.040 dB	
		(-5 ~ -11) dB	0.041 dB	
		(-11 ~ -30) dB	0.042 dB	
		(-30 ~ -40) dB	0.044 dB	
		(-40 ~ -60) dB	0.045 dB	
Noise Figure		Noise source (6 dB)		
		(0.01 ~ 1) GHz	0.52 dB	
		(1 ~ 7) GHz	0.51 dB	
		(7 ~ 18) GHz	0.53 dB	
		Noise source (15 dB)		
		(0.01 ~ 1) GHz	0.52 dB	
		(1 ~ 3) GHz	0.50 dB	
		(3 ~ 7) GHz	0.51 dB	
		(7 ~ 9) GHz	0.55 dB	
		(9 ~ 17) GHz	0.56 dB	
		(17 ~ 18) GHz	0.57 dB	
		(18 ~ 26.5) GHz	0.74 dB	
VSWR		(1 ~ 3)		
		0.1 MHz	0.008	
		(0.1 ~ 2 000) MHz	0.009	
		(2 ~ 26.5) GHz	0.015	
Noise Source Voltage		(0 ~ 28) V	0.25 mV	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Noise generators	40625			Frequency counter,
Frequency		(0.1 ~ 5 000) MHz	1.2×10^{-10}	Power sensor, Power meter
		(5 ~ 18) GHz	1.3 Hz	RF spectrum analyzer
				Sensor module,
Output Level		(0.1 ~ 1 000) MHz		Measuring receiver
		(20 ~ 10) dBm	0.12 dB	/KTICC-CI-40625
		(10 ~ -10) dBm	0.11 dB	
		(-10 ~ -30) dBm	0.12 dB	
		(-30 ~ -40) dBm	0.13 dB	
		(-40 ~ -60) dBm	0.14 dB	
		(-60 ~ -70) dBm	0.15 dB	
		(-70 ~ -90) dBm	0.16 dB	
		(-90 ~ -110) dBm	0.17 dB	
		(-110 ~ -120) dBm	0.18 dB	
		(1 ~ 4) GHz		
		(20 ~ 10) dBm	0.13 dB	
		(10 ~ -10) dBm	0.12 dB	
		(-10 ~ -30) dBm	0.13 dB	
		(-30 ~ -40) dBm	0.14 dB	
		(-40 ~ -60) dBm	0.15 dB	
		(-60 ~ -80) dBm	0.16 dB	
		(-80 ~ -100) dBm	0.17 dB	
		(-100 ~ -120) dBm	0.18 dB	
		(4 ~ 8) GHz		
		(20 ~ 10) dBm	0.14 dB	
		(10 ~ 0) dBm	0.13 dB	
		(0 ~ -20) dBm	0.14 dB	
		(-20 ~ -40) dBm	0.15 dB	
		(-40 ~ -50) dBm	0.16 dB	
		(-50 ~ -70) dBm	0.17 dB	
		(-70 ~ -90) dBm	0.18 dB	
		(-90 ~ -100) dBm	0.19 dB	
		(-100 ~ -120) dBm	0.20 dB	
		(8 ~ 10) GHz		
		(20 ~ 10) dBm	0.15 dB	
		(10 ~ 0) dBm	0.14 dB	
		(0 ~ -20) dBm	0.15 dB	
		(-20 ~ -40) dBm	0.16 dB	
		(-40 ~ -50) dBm	0.17 dB	
		(-50 ~ -70) dBm	0.18 dB	
		(-70 ~ -90) dBm	0.19 dB	
		(-90 ~ -110) dBm	0.20 dB	
		(-110 ~ -120) dBm	0.21 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Noise generators	40625			Frequency counter,
Output Level		(10 ~ 12) GHz		Power sensor, Power meter
		(20 ~ 10) dBm	0.16 dB	RF spectrum analyzer
		(10 ~ 0) dBm	0.15 dB	Sensor module,
		(0 ~ -20) dBm	0.16 dB	Measuring receiver
		(-20 ~ -40) dBm	0.17 dB	/KTICC-CI-40625
		(-40 ~ -50) dBm	0.18 dB	
		(-50 ~ -70) dBm	0.19 dB	
		(-70 ~ -90) dBm	0.20 dB	
		(-90 ~ -110) dBm	0.21 dB	
		(-110 ~ -120) dBm	0.22 dB	
		(12 ~ 18) GHz		
		(20 ~ 10) dBm	0.18 dB	
		(10 ~ 0) dBm	0.17 dB	
		(0 ~ -20) dBm	0.18 dB	
		(-20 ~ -40) dBm	0.19 dB	
		(-40 ~ -50) dBm	0.20 dB	
		(-50 ~ -70) dBm	0.21 dB	
		(-70 ~ -90) dBm	0.22 dB	
		(-90 ~ -100) dBm	0.23 dB	
		(-100 ~ -120) dBm	0.24 dB	
Noise impulse simulators	40626			Oscilloscope. Attenuator
Output Voltage		(±)		High voltage probe
		0 kV	0.1 V	/KTICC-CI-40626
		(0 ~ 4) kV	1.3×10^{-2}	
Pulse Width		10 ns	3.6×10^{-3}	
		(10 ~ 50) ns	4.4×10^{-3}	
		(50 ~ 100) ns	4.2×10^{-3}	
		(100 ~ 200) ns	6.0×10^{-3}	
		(200 ~ 250) ns	5.3×10^{-3}	
		(250 ~ 400) ns	4.6×10^{-3}	
		(400 ~ 500) ns	3.9×10^{-3}	
		(500 ~ 800) ns	4.2×10^{-3}	
		(800 ~ 1 000) ns	3.4×10^{-3}	
Rise Time		0.5 ns	3.2×10^{-1}	
		(0.5 ~ 1) ns	9.1×10^{-2}	
		(1 ~ 5) ns	7.6×10^{-3}	
Repetition period		(10 ~ 1 000) ms	3.4×10^{-3}	
Coaxial noise sources	40628			Coaxial noise sources,
ENR		(0.01 ~ 5) GHz	0.47 dB	Noise figure analyzer
		(5 ~ 6) GHz	0.48 dB	/KTICC-CI-40628
		(6 ~ 18) GHz	0.62 dB	
		(18 ~ 26.5) GHz	0.92 dB	
Reflection coefficient		(0 ~ 0.5)		
		0.01 GHz	0.004 1	
		(0.01 ~ 2) GHz	0.004 6	
		(2 ~ 26.5) GHz	0.007 3	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
RF phase meters	40631			RF signal generator Calibration kit Network analyzer /KTICC-CI-40631
Phase		(0 ~ 360)°		
		(0.05 ~ 1) GHz	1.5°	
		(1 ~ 7) GHz	3.8°	
		(7 ~ 18) GHz	6.7°	
RF power meters	40635			Range calibrator, Thermistor mount, Power meter, Frequency counter Fixed attenuator, Power sensor, RF amplifier, Signal generator /KTICC-CI-40635
Instrument Accuracy		0 µW	0.001 µW	
		3 µW ~ 100 mW	2.9×10^{-3}	
Power Reference Accuracy		1 mW	5.8 µW	
Reference Frequency		(0.01 ~ 1) GHz	1.2×10^{-10}	
Calibration Factor		(88 ~ 100) %	3.0×10^{-3}	
Power linearity		(0.01 ~ 1) GHz		
		(0 ~ -60) dBm	0.07 dB	
		(-60 ~ -80) dBm	0.08 dB	
		(-80 ~ -100) dBm	0.09 dB	
		(1 ~ 10) GHz		
		(0 ~ -40) dBm	0.08 dB	
		(-40 ~ -70) dBm	0.09 dB	
		(-70 ~ -80) dBm	0.10 dB	
		(-80 ~ -90) dBm	0.11 dB	
		(-90 ~ -100) dBm	0.12 dB	
		(10 ~ 18) GHz		
		(0 ~ -10) dBm	0.12 dB	
		(-10 ~ -40) dBm	0.11 dB	
		(-40 ~ -80) dBm	0.12 dB	
		(-80 ~ -100) dBm	0.14 dB	
RF High Power		(0.08 ~ 1) GHz		
		0 W	1 mW	
		(0 ~ 100) W	2.2×10^{-2}	
Diode power sensors	40636			Thermistor mount, Power meter, Network analyzer /KTICC-CI-40636
Calibration Factor		0.1 µW ~ 1 mW		
		9 kHz ~ 10 MHz	1.2×10^{-2}	
		(0.01 ~ 1) GHz	1.1×10^{-2}	
		(1 ~ 10) GHz	1.3×10^{-2}	
		(10 ~ 18) GHz	1.5×10^{-2}	
		(18 ~ 26.5) GHz	2.6×10^{-2}	
		(26.5 ~ 40) GHz	3.6×10^{-2}	
Thermocouple power sensors	40637			Thermistor mount, Power meter, Network analyzer /KTICC-CI-40637
Calibration Factor		10 µW ~ 10 mW		
		9 kHz ~ 10 MHz	1.2×10^{-2}	
		(0.01 ~ 1) GHz	1.1×10^{-2}	
		(1 ~ 10) GHz	1.3×10^{-2}	
		(10 ~ 18) GHz	1.5×10^{-2}	
		(18 ~ 26.5) GHz	2.6×10^{-2}	
		(26.5 ~ 40) GHz	3.6×10^{-2}	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Pulse generators	40638			Frequency counter, DMM,
Frequency		10 MHz	1.4×10^{-10}	Audio analyzer, Oscilloscope
				Measuring receiver
Period		0.2 ns ~ 1 s	1.4×10^{-10}	Sensor module
				/KTICC-CI-40638
Output Voltage		1 mV		
		20 Hz ~ 10 kHz	4.2×10^{-3}	
		(10 ~ 100) kHz	2.1×10^{-2}	
		100 kHz ~ 1 MHz	4.5×10^{-2}	
		(1 ~ 10) mV		
		20 Hz ~ 10 kHz	5.4×10^{-4}	
		(10 ~ 100) kHz	2.8×10^{-3}	
		100 kHz ~ 1 MHz	2.3×10^{-2}	
		(10 ~ 100) mV		
		20 Hz ~ 10 kHz	2.2×10^{-4}	
		(10 ~ 100) kHz	1.1×10^{-3}	
		100 kHz ~ 1 MHz	8.1×10^{-3}	
		(0.1 ~ 10) V		
		(40 ~ 100) Hz	1.4×10^{-4}	
		(0.1 ~ 1) kHz	1.2×10^{-4}	
		(1 ~ 10) kHz	1.4×10^{-4}	
		(10 ~ 100) kHz	7.3×10^{-4}	
		100 kHz ~ 1 MHz	8.1×10^{-3}	
		(10 ~ 20) V		
		(40 ~ 100) Hz	2.0×10^{-4}	
		(0.1 ~ 1) kHz	1.8×10^{-4}	
		(1 ~ 10) kHz	2.0×10^{-4}	
		(10 ~ 100) kHz	1.5×10^{-3}	
		100 kHz ~ 1 MHz	8.6×10^{-3}	
		(20 ~ 100) V		
		(40 ~ 100) Hz	1.4×10^{-4}	
		(0.1 ~ 1) kHz	1.2×10^{-4}	
		(1 ~ 10) kHz	1.4×10^{-4}	
		(10 ~ 100) kHz	7.4×10^{-4}	
Output Level		(0.1 ~ 1 000) MHz		
		(20 ~ 10) dBm	0.12 dB	
		(10 ~ -10) dBm	0.11 dB	
		(-10 ~ -30) dBm	0.12 dB	
		(-30 ~ -40) dBm	0.13 dB	
		(-40 ~ -60) dBm	0.14 dB	
		(-60 ~ -70) dBm	0.15 dB	
		(-70 ~ -90) dBm	0.16 dB	
		(-90 ~ -110) dBm	0.17 dB	
		(-110 ~ -120) dBm	0.18 dB	
Level Flatness		(0.1 ~ 1 000) MHz	0.11 dB	
		(1 ~ 4) GHz	0.12 dB	
		(4 ~ 8) GHz	0.13 dB	
		(8 ~ 10) GHz	0.14 dB	
		(10 ~ 12) GHz	0.15 dB	
		(12 ~ 18) GHz	0.17 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Pulse generators	40638			Frequency counter, DMM,
Pulse width		0.4 ns	4.8×10^{-1}	Audio analyzer, Oscilloscope
		(0.4 ~ 1) ns	9.0×10^{-2}	Measuring receiver
		(1 ~ 10) ns	3.6×10^{-3}	Sensor module
		10 ns ~ 1 ms	3.4×10^{-3}	/KTICC-CI-40638
		1 ms ~ 1 s	1.3×10^{-3}	
Pulse Time		0.4 ns	4.8×10^{-1}	
		(0.4 ~ 1) ns	9.0×10^{-2}	
		(1 ~ 10) ns	3.6×10^{-3}	
		10 ns ~ 1 ms	3.4×10^{-3}	
		1 ms ~ 1 s	1.3×10^{-3}	
Double Pulse		0.4 ns	4.8×10^{-1}	
		(0.4 ~ 1) ns	9.0×10^{-2}	
		(1 ~ 10) ns	3.6×10^{-3}	
		10 ns ~ 1 ms	3.4×10^{-3}	
		1 ms ~ 1 s	1.3×10^{-3}	
Pulse Delay		0.4 ns	4.8×10^{-1}	
		(0.4 ~ 1) ns	9.0×10^{-2}	
		(1 ~ 10) ns	3.6×10^{-3}	
		10 ns ~ 1 ms	3.4×10^{-3}	
		1 ms ~ 1 s	1.3×10^{-3}	
Transition		0.4 ns	4.8×10^{-1}	
		(0.4 ~ 1) ns	9.0×10^{-2}	
		(1 ~ 10) ns	3.6×10^{-3}	
		10 ns ~ 1 ms	3.4×10^{-3}	
		1 ms ~ 1 s	1.3×10^{-3}	
Duty cycle		(1 ~ 99) %	0.006 3 %	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Radar test sets	40639			Frequency Standard,
Frequency		10 Hz ~ 5 GHz	1.2×10^{-10}	Frequency Counter,
		(5 ~ 10) GHz	1.3 Hz	Power Sensor, Power Meter,
				Signal Generator
Output Level		(0.1 ~ 1 000) MHz		RF amplifiers
		(20 ~ 10) dBm	0.12 dB	attenuators
		(10 ~ -10) dBm	0.11 dB	/KTICC-CI-40639
		(-10 ~ -30) dBm	0.12 dB	
		(-30 ~ -40) dBm	0.13 dB	
		(-40 ~ -60) dBm	0.14 dB	
		(-60 ~ -70) dBm	0.15 dB	
		(-70 ~ -90) dBm	0.16 dB	
		(-90 ~ -110) dBm	0.17 dB	
		(-110 ~ -120) dBm	0.18 dB	
Frequency Modulation		Rate (0.01 ~ 100) kHz		
		(0 ~ 400) kHz	2.7×10^{-2}	
Input level		(0.1 ~ 1 000) MHz		
		(20 ~ 10) dBm	0.21 dB	
		(10 ~ 0) dBm	0.20 dB	
		(0 ~ -40) dBm	0.21 dB	
		(-40 ~ -60) dBm	0.22 dB	
		(-60 ~ -90) dBm	0.23 dB	
		(-90 ~ -110) dBm	0.24 dB	
		(-110 ~ -120) dBm	0.25 dB	
RF High Power		(0.08 ~ 1) GHz		
		0 W	1 mW	
		(0 ~ 100) W	2.8×10^{-2}	
Pulse Time		0.4 ns	4.8×10^{-1}	
		(0.4 ~ 1) ns	9.0×10^{-2}	
		(1 ~ 10) ns	3.6×10^{-3}	
		10 ns ~ 1 ms	3.4×10^{-3}	
		1 ms ~ 1 s	1.3×10^{-3}	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
RF signal generators	40640			Frequency Counter,
Output Frequency		9 kHz ~ 5 GHz	1.2×10^{-10}	Power Meter, Power Sensor
		(5 ~ 46) GHz	1.3 Hz	RF Spectrum Analyzer
				Sensor Module,
Output Level		9 kHz ~ 2.5 GHz		Measuring Receiver
		(30 ~ 57) dBm	0.25 dB	Audio Analyzer
		2.5 GHz ~ 18 GHz		/KTICC-CI-40640
		(30 ~ 44) dBm	0.30 dB	
		9 kHz ~ 0.1 MHz		
		(20 ~ -40) dBm	0.07 dB	
		(0.1 ~ 1 000) MHz		
		(20 ~ 10) dBm	0.12 dB	
		(10 ~ -10) dBm	0.11 dB	
		(-10 ~ -30) dBm	0.12 dB	
		(-30 ~ -40) dBm	0.13 dB	
		(-40 ~ -60) dBm	0.14 dB	
		(-60 ~ -70) dBm	0.15 dB	
		(-70 ~ -90) dBm	0.16 dB	
		(-90 ~ -110) dBm	0.17 dB	
		(-110 ~ -120) dBm	0.18 dB	
		(1 ~ 4) GHz		
		(20 ~ 10) dBm	0.13 dB	
		(10 ~ -10) dBm	0.12 dB	
		(-10 ~ -30) dBm	0.13 dB	
		(-30 ~ -40) dBm	0.14 dB	
		(-40 ~ -60) dBm	0.15 dB	
		(-60 ~ -80) dBm	0.16 dB	
		(-80 ~ -100) dBm	0.17 dB	
		(-100 ~ -120) dBm	0.18 dB	
		(4 ~ 8) GHz		
		(20 ~ 10) dBm	0.14 dB	
		(10 ~ 0) dBm	0.13 dB	
		(0 ~ -20) dBm	0.14 dB	
		(-20 ~ -40) dBm	0.15 dB	
		(-40 ~ -50) dBm	0.16 dB	
		(-50 ~ -70) dBm	0.17 dB	
		(-70 ~ -90) dBm	0.18 dB	
		(-90 ~ -100) dBm	0.19 dB	
		(-100 ~ -120) dBm	0.20 dB	
		(8 ~ 10) GHz		
		(20 ~ 10) dBm	0.15 dB	
		(10 ~ 0) dBm	0.14 dB	
		(0 ~ -20) dBm	0.15 dB	
		(-20 ~ -40) dBm	0.16 dB	
		(-40 ~ -50) dBm	0.17 dB	
		(-50 ~ -70) dBm	0.18 dB	
		(-70 ~ -90) dBm	0.19 dB	
		(-90 ~ -110) dBm	0.20 dB	
		(-110 ~ -120) dBm	0.21 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
RF signal generators	40640			Frequency Counter,
Output Level		(10 ~ 12) GHz		Power Meter, Power Sensor
		(20 ~ 10) dBm	0.16 dB	RF Spectrum Analyzer
		(10 ~ 0) dBm	0.15 dB	Sensor Module,
		(0 ~ -20) dBm	0.16 dB	Measuring Receiver
		(-20 ~ -40) dBm	0.17 dB	Audio Analyzer
		(-40 ~ -50) dBm	0.18 dB	/KTICC-CI-40640
		(-50 ~ -70) dBm	0.19 dB	
		(-70 ~ -90) dBm	0.20 dB	
		(-90 ~ -110) dBm	0.21 dB	
		(-110 ~ -120) dBm	0.22 dB	
		(12 ~ 18) GHz		
		(20 ~ 10) dBm	0.18 dB	
		(10 ~ 0) dBm	0.17 dB	
		(0 ~ -20) dBm	0.18 dB	
		(-20 ~ -40) dBm	0.19 dB	
		(-40 ~ -50) dBm	0.20 dB	
		(-50 ~ -70) dBm	0.21 dB	
		(-70 ~ -90) dBm	0.22 dB	
		(-90 ~ -100) dBm	0.23 dB	
		(-100 ~ -120) dBm	0.24 dB	
		(18 ~ 26.5) GHz		
		(20 ~ 10) dBm	0.25 dB	
		(10 ~ -10) dBm	0.24 dB	
		(-10 ~ -30) dBm	0.25 dB	
		(-30 ~ -40) dBm	0.26 dB	
		(-40 ~ -60) dBm	0.28 dB	
		(-60 ~ -80) dBm	0.29 dB	
		(-80 ~ -100) dBm	0.30 dB	
		(-100 ~ -120) dBm	0.31 dB	
		(26.5 ~ 40) GHz		
		(20 ~ -20) dBm	0.21 dB	
		(40 ~ 50) GHz		
		(20 ~ -30) dBm	0.25 dB	
Frequency Modulation		Rate (0.01 ~ 100) kHz		
		(0 ~ 400) kHz	2.7×10^{-2}	
Amplitude Modulation		Rate (0.01 ~ 50) kHz		
		(0 ~ 99) %	2.7×10^{-2}	
Phase Modulation		Rate (0.05 ~ 100) kHz		
		(0 ~ 400) rad	4.2×10^{-2}	
Modulation distortion		FM, PM		
		20 Hz ~ 100 kHz	0.12 %	
		AM		
		20 Hz ~ 100 kHz		
		Depth (5 ~ 50) %	0.35 %	
		Depth (50 ~ 95) %	0.69 %	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
RF signal generators	40640			Frequency Counter,
Modulation Rate		10 Hz ~ 100 kHz	6.8×10^{-10}	Power Meter, Power Sensor
				RF Spectrum Analyzer
Harmonics		10 MHz ~ 3 GHz	0.4 dB	Sensor Module,
		(3 ~ 8) GHz	0.5 dB	Measuring Receiver
		(8 ~ 12) GHz	0.6 dB	Audio Analyzer
		(12 ~ 20) GHz	0.8 dB	/KTICC-CI-40640
		(20 ~ 26) GHz	1.0 dB	
RF spectrum analyzers	40641			Frequency standard,
Reference Frequency		(0.1 ~ 5 000) MHz	1.2×10^{-10}	Frequency counter,
		(5 ~ 26.5) GHz	1.3 Hz	Power sensor, Power meter,
				Sensor module, Attenuator,
Input Frequency		3 Hz ~ 5 GHz	1.2×10^{-10}	Measuring receiver,
		(5 ~ 40) GHz	1.3 Hz	Signal generator
				/KTICC-CI-40641
Calibrator Output		(0.1 MHz ~ 1 GHz)		
		(10 ~ -10) dBm	0.11 dB	
		(-10 ~ -30) dBm	0.12 dB	
Input Amplitude		(0 ~ -30) dB	0.06 dB	
		(-30 ~ -50) dB	0.07 dB	
		(-50 ~ -70) dB	0.08 dB	
		(-70 ~ -100) dB	0.09 dB	
		(-100 ~ -120) dB	0.10 dB	
Scale fidelity		(0 ~ -30) dB	0.06 dB	
		(-30 ~ -50) dB	0.07 dB	
		(-50 ~ -70) dB	0.08 dB	
		(-70 ~ -100) dB	0.09 dB	
Scale fidelity Switching		(0.1 ~ 10) dB	0.051 dB	
Frequency Response		10 Hz ~ 9 kHz	0.18 dB	
		9 kHz ~ 1 GHz	0.20 dB	
		(1 ~ 4) GHz	0.21 dB	
		(4 ~ 8) GHz	0.22 dB	
		(8 ~ 12) GHz	0.27 dB	
		(12 ~ 18) GHz	0.29 dB	
		(18 ~ 26.5) GHz	0.37 dB	
		(26.5 ~ 40) GHz	0.53 dB	
Absolute Amplitude		(0.1 ~ 1 000) MHz		
		(0 ~ -10) dBm	0.20 dB	
		(-10 ~ -40) dBm	0.21 dB	
		(-40 ~ -50) dBm	0.22 dB	
Frequency Span		1 kHz ~ 26.5 GHz	1.3×10^{-4}	
Resolution Bandwidth		10 Hz ~ 10 MHz	1.1×10^{-3}	
Accuracy				
RBW Selectivity		10 Hz ~ 10 MHz	0.2×10^{-2}	
RBW Switching Accuracy		10 Hz ~ 10 MHz	0.06 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
RF spectrum analyzers	40641			Frequency standard,
Input Attenuator and Switching		(0 ~ -30) dB	0.06 dB	Frequency counter,
		(-30 ~ -50) dB	0.07 dB	Power sensor, Power meter,
		(-50 ~ -70) dB	0.08 dB	Sensor module, Attenuator,
		(-70 ~ -100) dB	0.09 dB	Measuring receiver,
				Signal generator
Noise Sidebands		0.1 kHz ~ 10 MHz	0.15 dB	/KTICC-CI-40641
Display average noise level		30 Hz ~ 40 GHz	0.27 dB	
Surge generators	40643			Oscilloscope,
Output Voltage		(±)		High voltage probe,
		0 kV	0.1 V	Current sensor
		(0 ~ 20) kV	1.3×10^{-2}	/KTICC-CI-40643
Front Time		0.1 μs	1.4×10^{-2}	
(Rise Time)		(0.1 ~ 0.5) μs	1.1×10^{-2}	
		(0.5 ~ 1.2) μs	1.2×10^{-2}	
		(1.2 ~ 5) μs	1.1×10^{-2}	
		(5 ~ 10) μs	1.4×10^{-2}	
		(10 ~ 30) μs	9.3×10^{-3}	
Duration		10 μs	3.4×10^{-3}	
		(10 ~ 50) μs	3.8×10^{-3}	
		(50 ~ 700) μs	3.1×10^{-3}	
		(700 ~ 1 000) μs	3.4×10^{-3}	
		(1 000 ~ 3 000) μs	4.8×10^{-3}	
		(3 ~ 10) ms	3.4×10^{-3}	
		(10 ~ 50) ms	3.8×10^{-3}	
		(50 ~ 1 000) ms	3.4×10^{-3}	
		(1 000 ~ 3 000) ms	4.8×10^{-3}	
Frequency		(1 ~ 100) kHz	1.1×10^{-3}	
(Ring Wave)		(100 ~ 200) kHz	1.0×10^{-3}	
		200 kHz ~ 100 MHz	1.4×10^{-3}	
Output Current		(±)		
		(5.0 ~ 2 500) A	1.7×10^{-2}	
		(2 500 ~ 3 000) A	1.8×10^{-2}	
Front Time		1 μs	1.1×10^{-2}	
(Rise Time)		(1 ~ 5) μs	8.2×10^{-3}	
		(5 ~ 10) μs	1.1×10^{-2}	
Duration		10 μs	3.4×10^{-3}	
		(10 ~ 20) μs	6.0×10^{-3}	
		(20 ~ 100) μs	3.4×10^{-3}	
		(100 ~ 320) μs	5.6×10^{-3}	
		(320 ~ 400) μs	4.6×10^{-3}	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
SWR meters	40644			Standard mismatch,
VSWR		(1.00 ~ 1.05)		Power sensor, Power meter,
		(0.05 ~ 2) GHz	0.059	Spectrum analyzer,
		(2 ~ 7) GHz	0.062	Frequency standard,
		(7 ~ 9) GHz	0.063	Frequency counter
		(9 ~ 11) GHz	0.062	/KTICC-CI-40644
		(11 ~ 12) GHz	0.063	
		(12 ~ 18) GHz	0.095	
		(1.05 ~ 1.20)		
		(0.05 ~ 1) GHz	0.071	
		(1 ~ 8) GHz	0.074	
		(8 ~ 12) GHz	0.085	
		(12 ~ 18) GHz	0.12	
		(1.20 ~ 1.50)		
		(0.05 ~ 1) GHz	0.095	
		(1 ~ 8) GHz	0.10	
		(8 ~ 12) GHz	0.11	
		(12 ~ 18) GHz	0.20	
		(1.50 ~ 2.00)		
		(0.05 ~ 1) GHz	0.14	
		(1 ~ 4) GHz	0.15	
		(4 ~ 12) GHz	0.16	
		(12 ~ 17) GHz	0.26	
		(17 ~ 18) GHz	0.27	
Output Power		(0.1 ~ 1 000) MHz		
		(10 ~ -10) dBm	0.11 dB	
		(-10 ~ -30) dBm	0.12 dB	
		(1 ~ 4) GHz		
		(10 ~ -10) dBm	0.12 dB	
		(-10 ~ -30) dBm	0.13 dB	
		(4 ~ 8) GHz		
		(10 ~ 0) dBm	0.14 dB	
		0 dBm	0.13 dB	
		(0 ~ -20) dBm	0.14 dB	
		(-20 ~ -30) dBm	0.15 dB	
		(8 ~ 10) GHz		
		(10 ~ 0) dBm	0.15 dB	
		0 dBm	0.14 dB	
		(0 ~ -20) dBm	0.15 dB	
		(-20 ~ -30) dBm	0.16 dB	
		(10 ~ 12) GHz		
		(10 ~ 0) dBm	0.16 dB	
		0 dBm	0.15 dB	
		(0 ~ -20) dBm	0.16 dB	
		(-20 ~ -30) dBm	0.17 dB	
		(12 ~ 18) GHz		
		(10 ~ 0) dBm	0.18 dB	
		0 dBm	0.17 dB	
		(0 ~ -20) dBm	0.18 dB	
		(-20 ~ -30) dBm	0.19 dB	
Frequency		(0.1 ~ 5 000) MHz	1.2×10^{-10}	
		(5 ~ 18) GHz	1.3 Hz	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
SWR meters	40644			Standard mismatch,
Loss		(1 ~ 3) dB		Power sensor, Power meter,
		(0.05 ~ 1) GHz	0.040 dB	Spectrum analyzer,
		(1 ~ 3) GHz	0.042 dB	Frequency standard,
		(3 ~ 8) GHz	0.040 dB	Frequency counter
		(8 ~ 10) GHz	0.043 dB	/KTICC-CI-40644
		(10 ~ 15) GHz	0.048 dB	
		(15 ~ 18) GHz	0.056 dB	
		(3 ~ 6) dB		
		(0.05 ~ 1) GHz	0.041 dB	
		(1 ~ 3) GHz	0.043 dB	
		(3 ~ 8) GHz	0.041 dB	
		(8 ~ 10) GHz	0.044 dB	
		(10 ~ 15) GHz	0.048 dB	
		(15 ~ 18) GHz	0.052 dB	
		(6 ~ 10) dB		
		(0.05 ~ 1) GHz	0.041 dB	
		(1 ~ 3) GHz	0.043 dB	
		(3 ~ 8) GHz	0.042 dB	
		(8 ~ 10) GHz	0.044 dB	
		(10 ~ 15) GHz	0.042 dB	
		(15 ~ 18) GHz	0.048 dB	
RF terminations	40645			Network analyzer,
VSWR		(1 ~ 3)		Calibration kit
		5 Hz ~ 0.1 MHz	0.008	/KTICC-CI-40645
		0.1 MHz ~ 2 GHz	0.009	
		(2 ~ 26.5) GHz	0.015	
		(26.5 ~ 40) GHz	0.029	
		(40 ~ 50) GHz	0.037	
Reflection coefficient		(0 ~ 0.5)		
		5 Hz ~ 0.1 MHz	0.004 1	
		0.1 MHz ~ 2 GHz	0.004 6	
		(2 ~ 26.5) GHz	0.007 3	
		(26.5 ~ 40) GHz	0.015	
		(40 ~ 50) GHz	0.018	
Coaxial thermistor mounts	40646			Thermistor mount, Power meter,
Calibration Facor		10 μW ~ 10 mW		Network analyzer
		(0.01 ~ 1) GHz	0.9×10^{-2}	/KTICC-CI-40646
		(1 ~ 10) GHz	1.1×10^{-2}	
		(10 ~ 18) GHz	1.3×10^{-2}	
Transmission trouble testers	40648			Frequncy counter, Transmission analyazer
Output Bit rate		(0.05 ~ 5) GHz	1.2×10^{-10}	Frequency standard,
		(5 ~ 30) GHz	1.3 Hz	Signal generator
				/KTICC-CI-40648
Input Bit rate		(0.05 ~ 5) GHz	0.9 Hz	
		(5 ~ 30) GHz	1.3 Hz	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
RF voltmeters	40650			Signal generator,
Ratio of voltage		(0.1 ~ 100) MHz	2.6×10^{-2}	TVC, Calibrator
and RF output voltage (F)		(100 ~ 1 000) MHz	1.2×10^{-2}	/KTICC-CI-40650
DC Input Voltage		0 mV	0.61 μV	
		(0 ~ 10) mV	7.8×10^{-5}	
		(10 ~ 100) mV	6.2×10^{-5}	
		(0.1 ~ 100) V	6.1×10^{-5}	
		(100 ~ 400) V	1.7×10^{-5}	
Vector voltmeters	40651			Signal generator,
Ratio of voltage		(0.1 ~ 100) MHz	2.6×10^{-2}	TVC
and RF output voltage (F)		(100 ~ 1 000) MHz	1.2×10^{-2}	/KTICC-CI-40651
Phase		(0 ~ 360)°	0.1°	
Field strength meters	40652			Power sensor
Frequency		(0.1 ~ 5 000) MHz	1.2×10^{-10}	Power meter, Frequency counter
		(5 ~ 18) GHz	1.3 Hz	Measuring receiver,
				Signal generator
Input Level		9 kHz ~ 0.1 MHz		/KTICC-CI-40652
		(20 ~ -40) dBm	0.08 dB	
		(0.1 ~ 1 000) MHz		
		(20 ~ 10) dBm	0.21 dB	
		(10 ~ 0) dBm	0.20 dB	
		(0 ~ -40) dBm	0.21 dB	
		(-40 ~ -60) dBm	0.22 dB	
		(-60 ~ -90) dBm	0.23 dB	
		(-90 ~ -110) dBm	0.24 dB	
		(-110 ~ -120) dBm	0.25 dB	
		(1 ~ 4) GHz		
		(20 ~ -20) dBm	0.21 dB	
		(-20 ~ -40) dBm	0.22 dB	
		(-40 ~ -70) dBm	0.23 dB	
		(-70 ~ -100) dBm	0.24 dB	
		(-100 ~ -120) dBm	0.25 dB	
		(4 ~ 8) GHz		
		(20 ~ -20) dBm	0.22 dB	
		(-20 ~ -40) dBm	0.23 dB	
		(-40 ~ -70) dBm	0.24 dB	
		(-70 ~ -100) dBm	0.25 dB	
		(-100 ~ -120) dBm	0.26 dB	
		(8 ~ 10) GHz		
		(20 ~ -20) dBm	0.27 dB	
		(-20 ~ -50) dBm	0.28 dB	
		(-50 ~ -80) dBm	0.29 dB	
		(-80 ~ -110) dBm	0.30 dB	
		(-110 ~ -120) dBm	0.31 dB	
		(10 ~ 12) GHz		
		(20 ~ 10) dBm	0.28 dB	
		(10 ~ 0) dBm	0.27 dB	
		(0 ~ -40) dBm	0.28 dB	
		(-40 ~ -60) dBm	0.29 dB	
		(-60 ~ -90) dBm	0.30 dB	
		(-90 ~ -120) dBm	0.31 dB	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Field strength meters Input Level	40652	(12 ~ 18) GHz (20 ~ -30) dBm (-30 ~ -50) dBm (-50 ~ -80) dBm (-80 ~ -100) dBm (-100 ~ -120) dBm	 0.29 dB 0.30 dB 0.31 dB 0.32 dB 0.33 dB	Power sensor Power meter, Frequency counter Measuring receiver, Signal generator /KTICC-CI-40652
AM/FM test sources Output Frequency Residual FM Residual AM FM Distortion	40653	 1 MHz ~ 1 GHz 50 Hz ~ 3 kHz 50 Hz ~ 3 kHz (12.5 ~ 400) kHz	 1.2×10^{-10} 5.6×10^{-2} 4.1×10^{-2} 2.1×10^{-2}	Frequency Counter, Measuring Receiver /KTICC-CI-40653
Dip simulators Output Frequency Dip Voltage	40654	 (50 ~ 60) Hz (50 ~ 60) Hz (0 ~ 120) V 0 (0 ~ 40) % (40 ~ 80) % (80 ~ 100) % (100 ~ 120) % (120 ~ 240) V 0 (0 ~ 40) % (40 ~ 80) % (80 ~ 100) % (100 ~ 120) % (240 ~ 380) V 0 (0 ~ 40) % (40 ~ 70) % (70 ~ 80) % (80 ~ 120) %	 6.3 0.01 2.1×10^{-2} 1.5×10^{-2} 1.8×10^{-2} 1.7×10^{-2} 0.01 2.1×10^{-2} 1.5×10^{-2} 1.8×10^{-2} 1.6×10^{-2} 0.01 2.2×10^{-2} 1.7×10^{-2} 1.6×10^{-2} 1.4×10^{-2}	Oscilloscope, DMM, High voltage probe /KTICC-CI-40654
Dip Cycle		60 Hz 0.833 ms (0.833 ~ 1.67) ms (1.67 ~ 5.00) ms (5.00 ~ 8.33) ms (8.33 ~ 16.7) ms (16.7 ~ 83.3) ms (83.3 ~ 166.7) ms (166.7 ~ 417) ms (417 ~ 833) ms (0.833 ~ 1.67) s (1.67 ~ 5.00) s (5.00 ~ 8.33) s	 4.1×10^{-3} 6.7×10^{-3} 3.8×10^{-3} 4.1×10^{-3} 6.7×10^{-3} 4.1×10^{-3} 6.7×10^{-3} 4.6×10^{-3} 4.1×10^{-3} 6.7×10^{-3} 3.8×10^{-3} 4.1×10^{-3}	

406. Radio frequency measurement

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Dip simulators	40654			Oscilloscope, DMM,
Dip Cycle		50 Hz		High voltage probe
		1 ms	4.8×10^{-3}	/KTICC-CI-40654
		(1 ~ 2) ms	6.0×10^{-3}	
		(2 ~ 6) ms	3.5×10^{-3}	
		(6 ~ 10) ms	3.4×10^{-3}	
		(10 ~ 20) ms	6.0×10^{-3}	
		(20 ~ 100) ms	3.4×10^{-3}	
		(100 ~ 200) ms	6.0×10^{-3}	
		(200 ~ 500) ms	3.8×10^{-3}	
		(0.5 ~ 1) s	3.4×10^{-3}	
		(1 ~ 2) s	6.0×10^{-3}	
		(2 ~ 6) s	3.5×10^{-3}	
		(6 ~ 10) s	3.4×10^{-3}	
Interval Cycle		60 Hz		
		8.33 ms	4.1×10^{-3}	
		(8.33 ~ 16.7) ms	6.7×10^{-3}	
		(16.7 ~ 83.3) ms	4.1×10^{-3}	
		(83.3 ~ 167) ms	6.7×10^{-3}	
		(167 ~ 417) ms	4.6×10^{-3}	
		(417 ~ 833) ms	4.1×10^{-3}	
		(0.833 ~ 1.67) s	6.7×10^{-3}	
		(1.67 ~ 5) s	3.8×10^{-3}	
		(5 ~ 8.33) s	4.1×10^{-3}	
		50 Hz		
		10 ms	3.4×10^{-3}	
		(10 ~ 20) ms	6.0×10^{-3}	
		(20 ~ 100) ms	3.4×10^{-3}	
		(100 ~ 200) ms	6.0×10^{-3}	
		(200 ~ 500) ms	3.8×10^{-3}	
		(0.5 ~ 1) s	3.4×10^{-3}	
		(1 ~ 2) s	6.0×10^{-3}	
		(2 ~ 6) s	3.5×10^{-3}	
		(6 ~ 10) s	3.4×10^{-3}	
Phase Time		(50 ~ 60) Hz		
		1 ms	3.8 μs	
		(1 ~ 10) ms	3.8×10^{-3}	
		(10 ~ 20) ms	4.2×10^{-3}	
		(20 ~ 100) ms	3.8×10^{-3}	

407. Field strength &

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Loop antennas Antenna factor	40704	(160 ~ -10) dB(1/m) 20 Hz ~ 30 MHz	 1.5 dB	Standard antenna Signal generator Spectrum analyzer, DMM /KTICC-CI-40704
Monopole antennas Antenna factor	40705	(120 ~ -30) dB(1/m) 1 kHz ~ 30 MHz	 1.4 dB	Network Analyzer /KTICC-CI-40705

501. Contact thermometry

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Temperature generators; ovens, furnaces, isothermal liquid baths, ice-point baths, dry-block calibrators	50101	 (-196 ~ -80) ℃ (-80 ~ 0) ℃ 0 ℃ (0 ~ 500) ℃ (500 ~ 1 100) ℃	 0.08 ℃ 0.02 0.017 0.02 2.4	Digital thermometer, SPRT, Noble metal thermocouples /KTICC-CI-50101
Temperature indicators /recorders/controllers, temperature calibrators With sensor Without sensor Temperature calibrators	50102	 (-196 ~ 0) ℃ (0 ~ 200) ℃ (200 ~ 500) ℃ (500 ~ 1 100) ℃ (-196 ~ 500) ℃ (500 ~ 1 100) ℃ (-196 ~ 400) ℃ (400 ~ 1 100) ℃	 0.071 0.036 0.032 2.4 0.041 0.061 0.086 0.25	Temperature simulation, Calibrators, SPRT Noble metal thermocouples /KTICC-CI-50102
Glass thermometers; liquid-in-glass, Beckmann Glass thermometers	50103	 (-50 ~ 50) ℃ (50 ~ 400) ℃ (400 ~ 500) ℃	 0.07 0.04 0.16	SPRT/KTICC-CI-50103
Resistance thermometers; SPRT, IPRT, thermistors, etc. SPRT, IPRT	50104	 (-196 ~ 0) ℃ (0 ~ 500) ℃	 0.086 ℃ 0.069 ℃	SPRT/KTICC-CI-50104

501. Contact thermometry

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Thermal expansion thermometers; bimetal, gas or liquid type	50105	(-50 ~ 100) ℃ (100 ~ 200) ℃ (200 ~ 500) ℃	0.3 0.6 1.5	SPRT/KTICC-CI-50105
Thermomecouples; noble metal, base metal pure metal, special type, etc. Base metal	50106	(-196 ~ 0) ℃ (0 ~ 200) ℃ (200 ~ 500) ℃ (500 ~ 1 100) ℃	0.14 0.06 0.1 1.5	SPRT, Noble metal thermocouples /KTICC-CI-50106
Temperature transducers	50107	(-196 ~ -80) ℃ (-80 ~ 0) ℃ (0 ~ 200) ℃ (200 ~ 500) ℃ (500 ~ 1100) ℃	0.11 ℃ 0.09 0.113 0.185 1.243	SPRT, Noble metal thermocouples /KTICC-CI-50107
Others; quartz, semiconductivity, optical fiber, etc. Thermistor thermometer	50109	(-80 ~ 500) ℃	0.15	SPRT/KTICC-CI-50109

502. Non contact thermometry

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Standard radiation thermometers Infrared	50204	(0 ~ 300) ℃ (300 ~ 1000) ℃	2.4 3.5	Infrared thermometer /KTICC-CI-50204
Thermal image apparatus	50205	(0 ~ 300) ℃ (300 ~ 1 000) ℃	2.4 3.5	Infrared thermometer /KTICC-CI-50205
Blackbody furnaces	50206	(0 ~ 300) ℃ (300 ~ 1 000) ℃	1.2 1.7	Infrared thermometer /KTICC-CI-50206
Others; ear thermometers, etc. Ear thermometer	50207	(20 ~ 40) ℃	1.3	Black Body/KTICC-CI-50207

503. Humidity

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Relative humidity hygrometers; polimer thin film, hair, etc.	50302			Dew point hygrometer /KTICC-CI-50302
Humidity		(5 ~ 15) % R.H.	2.7	
		(15 ~ 30) % R.H.	1.1	
		(30 ~ 50) % R.H.	1.8	
		(50 ~ 70) % R.H.	1.9	
		(70 ~ 95) % R.H.	2	
Temperature		(-40 ~ 80) ℃	0.9	
Temperature humidity recorders; Hygrothermograph, etc.	50304			Dew point hygrometer /KTICC-CI-50304
Humidity		(5 ~ 15) % R.H.	2.9	
		(15 ~ 30) % R.H.	2.1	
		(30 ~ 50) % R.H.	2.2	
		(50 ~ 70) % R.H.	2.3	
		(70 ~ 95) % R.H.	2.4	
Temperature		(-40 ~ 80) ℃	1.1	
Transducers; dew-point/relative humidity	50305			Dew point hygrometer /KTICC-CI-50305
Humidity		(5 ~ 25) % R.H.	3	
		(25 ~ 50) % R.H.	2.4	
		(50 ~ 70) % R.H.	2.5	
		(70 ~ 90) % R.H.	2.6	
		(90 ~ 95) % R.H.	2.7	
Humidity generators; two-pressure, two-temperature, flow mixing humidity gererator, constant temperature and humidity chamber, etc.	50306			Dew point hygrometer /KTICC-CI-50306
Humidity		(5 ~ 20) % R.H.	1.5	
		(20 ~ 40) % R.H.	2.2	
		(40 ~ 60) % R.H.	2.8	
		(60 ~ 80) % R.H.	3.7	
		(80 ~ 95) % R.H.	4.4	
Temperature		(-75 ~ 100) ℃	0.8	
		(100 ~ 150) ℃	1.1	
		(150 ~ 180) ℃	1.4	

601. Sound in air

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Sound level meters	60106			Sound calibrator /KTICC-CI-60106
		31.5	0.4	
		63 Hz	0.3	
		125 Hz	0.3	
		250 Hz	0.2	
		500 Hz	0.2	
		1	0.2	
		2	0.2	
		4	0.2	
		8	0.4	
		12.5 kHz	0.6	

603. Vibration

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Vibration calibrators Acceleration	60301	(10 ~ 160) Hz (160 ~ 315) Hz (315 ~ 1 250) Hz	1.6×10^{-2} 1.8×10^{-2} 2.2×10^{-2}	Accelerometer /KTICC-CI-60301
Vibration transducers Sensitivity	60302	(10 ~ 20) Hz (20 ~ 160) Hz (160 ~ 315) Hz (315 ~ 5 000) Hz	1.7×10^{-2} 1.6×10^{-2} 1.8×10^{-2} 2.2×10^{-2}	Accelerometer /KTICC-CI-60302
Vibration measuring instruments Acceleration	60303	(10 ~ 20) Hz (20 ~ 160) Hz (160 ~ 315) Hz (315 ~ 5 000) Hz	1.7×10^{-2} 1.6×10^{-2} 1.8×10^{-2} 2.2×10^{-2}	Accelerometer /KTICC-CI-60303
Velocity		(10 ~ 20) Hz (20 ~ 160) Hz (160 ~ 315) Hz (315 ~ 630) Hz (630 ~ 2 500) Hz	1.7×10^{-2} 1.6×10^{-2} 1.9×10^{-2} 2.3×10^{-2} 2.2×10^{-2}	
Displacement		(10 ~ 20) Hz (20 ~ 80) Hz (80 ~ 100) Hz (100 ~ 160) Hz (160 ~ 315) Hz (315 ~ 630) Hz (630 ~ 1 000) Hz (1 000 ~ 1 250) Hz	1.6×10^{-2} 1.5×10^{-2} 1.6×10^{-2} 1.7×10^{-2} 1.8×10^{-2} 2.3×10^{-2} 3.2×10^{-2} 4.3×10^{-2}	

701. Photometry

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Iluminance meters	70101	(0.5 ~ 10) lx (10 ~ 1 500) lx (1 500 ~ 20 000) lx	2.6×10^{-2} 2.2×10^{-2} 2.9×10^{-2}	Iluminance meters /KTICC-CI-70101

704. Fiber optics

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Broadband light sources	70402			Optical spectrum analyzers
Wavelength		(600 ~ 1 700) nm	0.082 nm	Optical multimeters
				/KTICC-CI-70402
Optical power		1 310 nm, 1 550 nm (-50 ~ 0) dBm	0.05	
Optical attenuators	70410			Optical power stabilized
Optical attenuation		1 310 nm, 1 550 nm (0 ~ -60) dB	0.06	Optical multimeters /KTICC-CI-70410
Optical couplers	70411			Optical power stabilized
Division Ratio		1 310 nm	1.1×10^{-2}	Optical multimeters
		1 550 nm	1.1×10^{-2}	/KTICC-CI-70411
Fiber-optic power meters	70412			Optical power stabilized
Absolute Optical Power		1 310 nm, 1 550 nm (0 ~ -60) dBm	0.06	Optical multimeters Optical attenuators /KTICC-CI-70412
Linearity		1 310 nm, 1 550 nm (0 ~ -60) dB	0.06	
Optical loss Testers	70413			Optical power stabilized
Wavelength		(600 ~ 1 700) nm	2.2×10^{-7}	Optical multimeters Optical attenuators
Output Optical Power		1 310 nm, 1 550 nm (-50 ~ 0) dBm	0.05	Optical spectrum analyzers Multi-laser wavelength meters /KTICC-CI-70413
Input Optical Power		1 310 nm, 1 550 nm (0 ~ -60) dBm	0.06	
Linearity		1 310 nm, 1 550 nm (0 ~ -60) dB	0.06	
Optical multimeters	70415			Optical power stabilized
Absolute Optical Power		1 310 nm, 1 550 nm (0 ~ -60) dBm	0.06	Optical multimeters Optical attenuators /KTICC-CI-70415
Linearity		1 310 nm, 1 550 nm (0 ~ -60) dB	0.06	

704. Fiber optics

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Optical network analyzers	70416			Optical multimeters
Optical multimeters				Optical spectrum analyzers
Input Optical Power		1 310 nm, 1 550 nm		Optical attenuators
		(0 ~ -60) dBm	0.06	OTDR
				Wavelength meters, Multi laser
Optical spectrum analyzers				Return loss test sets
Wavelength		(1310 ~ 1575) nm	0.058 nm	/KTICC-CI-70416
Resolution		1310 nm, 1550 nm		
		(0.1 ~ 1) nm	0.058 nm	
Input Optical Power		1 310 nm, 1 550 nm		
		(0 ~ -60) dBm	0.06	
Optical attenuators				
Attenuation		1 310 nm, 1 550 nm		
		(0 ~ -60) dB	0.06	
OTDR				
Length		CRM(1 310 nm, 1550 nm)		
		(2.4, 2.7) km	0.085 m	
		13 km	0.38 m	
Loss		CRM(1 310 nm, 1550 nm)		
		(0 ~ 3) dB	0.11 dB	
		(3 ~ 10) dB	0.19 dB	
Wavelength Meters, Multi laser				
Wavelength		1 310 nm	2.4 pm	
		1 460 nm	1.7 pm	
		1 500 nm	1.7 pm	
		1 531.591 0 nm	0.35 pm	
		1 531.587 8 nm	0.35 pm	
		1 531.584 8 nm	0.35 pm	
		1 550 nm	2.4 pm	
		1 580 nm	1.7 pm	
Input Optical Power		1 310 nm, 1 550 nm		
		(0 ~ -60) dBm	0.06	
Return loss test				
Return Loss		1 310 nm, 1 550 nm		
		(20 ~ 30) dB	0.5 dB	
		(30 ~ 40) dB	0.6 dB	
Ethernet Tester				
Interface		(1 ~ 100) MHz	1.3×10^{-10}	
Wavelength		(600 ~ 1640) nm	0.082 nm	
Output Optical Power		1310 nm, 1550 nm		
		(0 ~ -60) dBm	0.05 dB	
Sensitivity		1310 nm, 1550 nm	0.06 dB	

704. Fiber optics

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Optical spectrum analyzers	70417			Optical power stabilized lasers and LDs
Wavelength		(600 ~ 1 640) nm	0.058 nm	Optical multimeters Optical attenuators
Resolution		1 310 nm, 1 550 nm (0.1 ~ 1) nm	0.058 nm	/KTICC-CI-70417
Input Optical Power		1 310 nm, 1 550 nm (0 ~ -60) dBm	0.06	
Linearity		1 310 nm, 1 550 nm (0 ~ -60) dB	0.06	
Optical time domain reflectometers; OTDR	70418			Optical length standard Optical fiber
Wavelength		1 310 nm, 1 550 nm	0.082 nm	Optical spectrum analyzers Loss standard optical fiber
Length		CRM(1 310 nm, 1550 nm) (2.4, 2.7) km 13 km	 0.085 m 0.38 m	/KTICC-CI-70418
Loss		CRM(1 310 nm, 1550 nm) (0 ~ 3) dB (3 ~ 10) dB	 0.11 dB 0.19 dB	
PDH/SDH analyzers	70419			Optical multimeters
Bit rate		DS1 (1.544 MHz) ~ STM-64 (9.953 28 GHz)	 1.3×10^{-10}	Optical spectrum analyzers Optical attenuators PDH/SDH analyzers
Output Jitter		DS1 (10 Hz to 40 kHz) DS1 (8 kHz to 40 kHz) E1 (20 Hz to 100 kHz) E1 (18 kHz to 100 kHz) DS3 (10 Hz to 400 kHz DS3 (30 kHz to 400 kHz) STM-1 (12 kHz to 1.3 MHz) STM-4 (12 kHz to 5 MHz) STM-16 (13 kHz to 20 MHz)	15 ns 15 ns 11 ns 11 ns 0.78 ns 0.78 ns 0.37 ns 0.13 ns 0.032 ns	General frequency sources Frequency meters/counters /KTICC-CI-70419
Smsr		STM-1 (155.52 MHz) ~ STM-64 (9.953 28 GHz)	 0.08 dB	
Optical Power		STM-1 (155.52 MHz) ~ STM-64 (9.953 28 GHz)	 0.05 dB	
Extinction Ratio		STM-1 (155.52 MHz) ~ STM-64 (9.953 28 GHz)	 0.2 dB	
Sensitivity		STM-1 (155.52 MHz) ~ STM-64 (9.953 28 GHz)	 0.05 dB	
Reflectance		STM-1 (155.52 MHz) ~ STM-16 (2.488 32 GHz)	 0.8	

704. Fiber optics

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
PDH/SDH analyzers Jitter Generator & Analyzers	70419	DS1 (1.544 MHz), 1 kHz 0.77 1.8 4.8 8.8 E1 (2.048 MHz), 2.4 kHz 0.77 1.8 4.8 8.8 DS3 (44.736 MHz), 4 kHz 0.77 1.8 4.8 8.8 STM-1 (155.52 MHz) 65 kHz / 0.20 UI 650 kHz / 0.20 UI 6.5 kHz / 0.91 UI 4 kHz / 3.52 UI 2.5 kHz / 7.52 UI STM-4 (622.08 MHz) 65 kHz / 0.20 UI 650 kHz / 0.20 UI 6.5 kHz / 0.91 UI 4 kHz / 3.52 UI 2.5 kHz / 7.52 UI STM-16 (2.488 32 GHz) 65 kHz / 0.20 UI 650 kHz / 0.20 UI 6.5 kHz / 0.91 UI 4 kHz / 3.52 UI 2.5 kHz / 7.52 UI	 56 ns 0.17 µs 0.33 µs 0.54 µs 42 ns 0.13 µs 0.25 µs 0.40 µs 2.6 ns 6.7 ns 14 ns 23 ns 0.48 ns 0.49 ns 0.85 ns 2.6 ns 4.7 ns 0.16 ns 0.17 ns 0.25 ns 0.64 ns 1.7 ns 0.042 ns 0.051 ns 0.062 ns 0.18 ns 0.38 ns	Optical multimeters Optical spectrum analyzers Optical attenuators PDH/SDH analyzers General frequency sources Frequency meters/counters /KTICC-CI-70419
Return loss meters Return Loss	70423	1 310 nm, 1 550 nm (20 ~ 30) dB (30 ~ 40) dB	 0.5 dB 0.6 dB	Return loss generator /KTICC-CI-70423

704. Fiber optics

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
SDH/SONET analyzers	70424			Optical multimeters
Bit Rate		STM-1 (155.52 MHz) ~ STM-64 (9.953 28 GHz)	1.3×10^{-10}	Optical spectrum analyzers Optical attenuators PDH/SDH analyzers
Output Jitter		STM-1 (12 kHz to 1.3 MHz)	0.37 ns	General frequency sources
		STM-4 (12 kHz to 5 MHz)	0.13 ns	Frequency meters/counters
		STM-16 (13 kHz to 20 MHz)	0.032 ns	/KTICC-CI-70424
Smsr		STM-1 (155.52 MHz) ~ STM-64 (9.953 28 GHz)	0.08 dB	
Optical Power		STM-1 (155.52 MHz) ~ STM-64 (9.953 28 GHz)	0.05 dB	
Extinction Ratio		STM-1 (155.52 MHz) ~ STM-64 (9.953 28 GHz)	0.2 dB	
Sensitivity		STM-1 (155.52 MHz) ~ STM-16 (2.488 32 GHz)	0.05 dB	
Reflectance		STM-1 (155.52 MHz) ~ STM-16 (2.488 32 GHz)	0.8	
Jitter Generator & Analyzers		STM-1 (155.52 MHz)		
		65 kHz / 0.20 UI	0.48 ns	
		650 kHz / 0.20 UI	0.49 ns	
		6.5 kHz / 0.91 UI	0.85 ns	
		4 kHz / 3.52 UI	2.6 ns	
		2.5 kHz / 7.52 UI	4.7 ns	
		STM-4 (622.08 MHz)		
		65 kHz / 0.20 UI	0.16 ns	
		650 kHz / 0.20 UI	0.17 ns	
		6.5 kHz / 0.91 UI	0.25 ns	
		4 kHz / 3.52 UI	0.64 ns	
		2.5 kHz / 7.52 UI	1.7 ns	
		STM-16 (2.488 32 GHz)		
		65 kHz / 0.20 UI	0.042 ns	
		650 kHz / 0.20 UI	0.051 ns	
		6.5 kHz / 0.91 UI	0.062 ns	
		4 kHz / 3.52 UI	0.18 ns	
		2.5 kHz / 7.52 UI	0.38 ns	

704. Fiber optics

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Multi-laser wavelength Wavelength	70426	 1 310 nm 1 460 nm 1 500 nm 1 531.591 0 nm 1 531.587 8 nm 1 531.584 8 nm 1 550 nm 1 580 nm	 2.4 pm 1.7 pm 1.7 pm 0.35 pm 0.35 pm 0.35 pm 2.4 pm 1.7 pm	Frequency stabilized lasers and LDs Optical multimeters /KTICC-CI-70426
Input Optical Power		1 310 nm, 1 550 nm (0 ~ -60) dBm	0.06	
Wavelength sweep multichannel measuring systems	70427			Optical power stabilized Optical multimeters Optical attenuators
Input Optical Power		1 310 nm, 1 550 nm (0 ~ -60) dBm	0.06	/KTICC-CI-70427
Frequency stabilized lasers and LDs Wavelength	70429	 (1 260 ~ 1 640) nm	 1.2 pm	Optical spectrum analyzers Optical multimeters /KTICC-CI-70429
Output Optical Power		1 310 nm, 1 550 nm (-50 ~ 0) dBm	0.05 dB	
Linearity		1 310 nm, 1 550 nm (-50 ~ 0) dB	0.05	
ASE light sources Wavelength	70430	 (600 ~ 1 700) nm	 0.082 nm	Optical spectrum analyzers Optical multimeters /KTICC-CI-70430
Output Optical Power		1 310 nm, 1 550 nm (-50 ~ 0) dBm	0.05	
CW-laser wavelength meters Wavelength	70431	 632.991 0 nm 1 310 nm 1 460 nm 1 500 nm 1 531.591 0 nm 1 531.587 8 nm 1 531.584 8 nm 1 550 nm 1 580 nm 1 640 nm	 0.06 pm 2.4 pm 1.7 pm 1.7 pm 0.35 pm 0.35 pm 0.35 pm 2.4 pm 1.7 pm 1.7 pm	Frequency stabilized lasers and LDs Optical attenuators Optical multimeters /KTICC-CI-70431
Input Optical Power		1 310 nm, 1 550 nm (0 ~ -60) dBm	0.06	

704. Fiber optics

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Optical power stabilized lasers and LDs	70433			Multi-laser wavelength meters Optical multimeters
Wavelength		(1 300 ~ 1 640) nm	2.2×10^{-7}	Optical spectrum analyzers /KTICC-CI-70433
Output Optical Power		1 310 nm, 1 550 nm (0 ~ -50) dBm	0.05	
Light sources, LED				
Wavelength		(600 ~ 1 640) nm	0.082 nm	
Output Optical Power		1 310 nm, 1 550 nm (-50 ~ 0) dBm	0.05	

901. Chemical analysis

Measured Quantity Instrument or Gauge	Field Code	Range	Measurement uncertainty (The Confidence Level is about 95 %)	Standard/Method of Measurement etc.
Gas analyzers	90103			Standard gas
O_2		(0 ~ 18) cmol/mol	0.37 cmol/mol	/KTICC-CI-90103
CO		(0 ~ 100) µmol/mol	2.1 µmol/mol	
CH_4		(0 ~ 2) cmol/mol	0.03 cmol/mol	
H_2S		(0 ~ 30) µmol/mol	0.89 µmol/mol	