Name: Suzhou Saibao Calibration Technology Co., Ltd.

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Registration No. CNAS L2336

Accreditation Criteria: ISO/IEC 17025:2017 and relevant requirements of CNAS

Effective Date: 2026-05-21 Expiry Date: 2028-12-23

SCHEDULE 5 ACCREDITED CALIBRATION AND MEASUREMENT CAPABILITY SCOPE

Note: The instruments with * represents onsite calibration can be performed.

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
Geometry measuring instruments							
1	*Linear Displacement Sensors	Length	C.S. for Linear Displacement Sensors JJF 1305	(0.1～10)mm	U=2 μm		
				(10～1000)mm	U=0.02%FS		
				(1000～2000)mm	U=0.04%FS		
2	Tape	Length	V.R. of Steel Measuring Tapes JJG 4	(0～100)m	U=0.2mm+2×10^{-5}L	except for Steel sounding tape measure.	
3	Fiber Tapes And Measuring Ropes	Length	V.R.of Fiber Tapes And Measuring Ropes JJG 5	(0～100)m	U=0.2mm+1×10^{-4}L		
4	π ruler	Length	π - ruler calibration specification JJF 1423	(9～5000)mm	U=0.02mm+4×10^{-6}L		
5	Steel Rule	Length	Verification Regulation of Steel Rule JJG 1	（0～600)mm	U=0.06mm		

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				（600～1500)mm	U=0.10mm		
				（1500～2000)mm	U=0.15mm		
6	*Capacitive grating digital display scale	length	Calibration specification for capacitive grating digital display scale JJF 1280	(0～500)mm	U=0.01mm		
				(500～1000)mm	U=0.02mm		
7	*Cable Length Meter	Length	V.R.of Cable Length Meter JJG 987	（10～1000）m	U_{rel}=0.18%		
8	*Tool Microscope	Length	V.R. of Universal Measuring Micro-scopes and Makers Microscopes JJG 56	(0～200)mm	U=0.5 μ m+2×10^{-6}L		
9	*Reading and measuring microscope	Length	V.R. of Measuring Microscope JJG 571	measuring microscope：(0～50)mm	U=2 μ m		
		Length		Reading microscope：(0～6)mm	U=2 μ m		
10	*Metallurgical Microscope	Length	C.S. for Biological Microscopes JJF 1402	（0～10）mm	U=1.2 μ m		
				（4×～125×）	U_{rel}=1.2%		
11	*Imaging Probe Measuring Machines	Length	C.S. for Imaging Probe Measuring Machines JJF 1318	(0～1000)mm	U=0.5 μ m+2×10^{-6}L		
12	*Projector	Length	C.S. for Projectors JJF 1093	(0～200)mm	U=1.1 μ m+5×10^{-6}L		
13	*Level Rule	Length	Calibration Specification for projectors Detecting The Notch of Tehe Sample JJF(Zhe) 1133	(0～100)mm	U=6 μ m		
				50×	U_{rel}=0.3%		
		Angle		(43～47)°	U=2′		
14	*Metallurgical Microscope	Length	Calibration Specification for Metallurgical Microscopes	（0～10）mm	U=1.2 μ m		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
			JJF 1914	4×～125×	U_{rel}=1.2%		
15	*Stereomicroscope	Length	C.S. for Stereomicroscope JJF(Jin) 87	（0～10）mm	U=3 μ m		
		Magnification		Total Magnification（5～100）×	U_{rel}=1.2%		
16	Gauge Block	Length	V.R. of Gauge Blocks JJG 146	(0.5～1000)mm	U=0.14μm+1.4×10^{-6}Ln		
17	Internal Micrometers	Length	V.R. of Internal Micrometers JJG 22	(0～2000)mm	U=1.5 μ m+6×10^{-6}L		
18	*Micrometer for measuring internal dimension	Length	C.S. for Micrometers for Measuring Inside Dimension JJF 1411	Internal：(5～200)mm	U=3 μ m		
				three grasp：(6～200) mm	U=2 μ m		
19	*Micrometers	Length	V.R. of Micrometer JJG 21	(0～100)mm	U=1.3 μ m+3×10^{-6}L		
				digital：(0～100)mm	U=0.7 μ m+4×10^{-6}L		
				(100～500)mm	U=1.5 μ m+5×10^{-6}L		
				digital：(100～500)mm	U=0.8 μ m+4×10^{-6}L		
				Measuring rod：(25～500)mm	U=0.5 μ m+6×10^{-6}L		
20	*Outside micrometer of large size	Length	C.S. for Large Dimension Outside Micrometers JJF 1088	(500～1000)mm	U=1.5 μ m+6×10^{-6}L		
				Measuring rod：(500～1000)mm	U=0.5 μ m+6×10^{-6}L		
21	*Pointed outside micrometer	length	Calibration specification for pointed outside micrometers JJF（Zhe）1045	(0～150)mm	U=2 μ m		
22	*Wafer micrometer	length	Calibration specification for micrometers JJF（Zhe）1090	(0～200)mm	U=2 μ m		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
23	*Micrometer with small probe	length	Calibration specification for micrometer with small probe JJF(Zhe)1131	(0～100)mm	U=2 μm		
24	*Micrometer with round probe	Length	Calibration specification for micrometers with circular probe JJF(Zhe)1132	(0～200)mm	U=2 μm		
25	*Depth Micrometer	Length	V.R. of Depth Micrometers JJG 24	(0～300)mm	U=1.2 μm+5×10^{-6}L		
26	Micrometers with Dial Comparater and Indicating Snap Gauge	Length	V.R. of Micrometers with Dial Comparater and Indicating Snap Gauge JJG 26	(0～200)mm	U=1.0 μm		
27	*Micrometers with Gauge	Length	V.R. of Micrometers with Gauge JJG 427	(0～100)mm	U=0.7 μm+4×10^{-6}L		
28	*Indicator table	Length	V. R. of Dial Gauges JJG 34	dial reading in 0.001mm：(0～5)mm	U=1.8 μm+3×10^{-4}L		
				digital reading in 0.001mm：(0～1)mm	U=1.4 μm		
				digital reading in 0.001mm：(1～10)mm	U=2.4 μm		
				dial reading in 0.01mm：(0～10)mm	U=5μm		
				digital reading in 0.01mm：(0～10)mm	U=7μm		
				dial Large range dial indicator:(10～50)mm	U=8μm		
				digital Large range dial indicator:(10～50)mm	U=0.01mm		
29	*Dial Test Indicator	Length	V.R. of Dial Test Indicator JJG 35	reading in 0.01mm：(0～1)mm	U=2.7μm		

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				reading in 0.001mm：(0～0.4)mm	U=1.2μm		
30	*Bore Dial Indicators	Length	C.S. for Bore Dial Indicators JJF 1102	Inner diameter dial gauge:(6～450)mm	U=3μm		
				Inside dial indicator:(6～450)mm	U=1.9μm		
31	*Depth Dial Gauge	Length	V.R.of Depth Dial Gauge JJG 830	（0～10）mm	U=1μm		
				（10～100)mm	U=2μm		
32	*Current Calipers	Length	V.R. of Current Calipers JJG 30	(0～500)mm	U=0.01mm		
				(500～1000)mm	U=0.02mm		
				(1000～1500)mm	U=0.03mm		
				(1500～2000)mm	U=0.04mm		
33	*Height Gauge	Length	V. R. of Feeler Gauge JJG 31	(0～500)mm	U=0.01mm		
				(500～1000)mm	U=0.02mm		
34	*Dial Snap Gauges	Length	C.S.for Dial Snap Gauges JJF 1253	(5～100)mm	U=9μm		
35	*Thickness Gauges	Length	C.S.for Thickness Gauges JJF 1255	(0～50)mm	U=2μm		
36	*Tester for Dial Indicator Gauges	Length	V.R. of Tester for Dial Indicator Gauges JJG 201	(0～50)mm	$U=0.2\ \mu m+2\times10^{-5}L$		
37	*Micrometers with Prismatically Arranged Measuring Faces	Length	V.R.of Micrometers with Prismatically Arranged Measuring Faces JJG 182	(1～50)mm	U=1.4μm		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
38	*Rubber, plastic film thickness gauge	Length	C.S. for rubber, plastic film thickness gauge JJF 1488	（0～30）mm	U=3 μ m		
39	Ultrasonic flaw detection test block	Length	C.S. for ultrasonic flaw detection block JJF 1487	（0～300）mm	U=4 μ m		
40	*Inside Calipers	Length	C.S. for Inside Calipers JJF(Zhe) 1091	（0～500）mm	U=0.01mm		
41	*Brick Calipers	Length	C.S. for Brick Calipers JJF(Zhe) 1130	（-50～+50）mm	U=0.01mm		
42	*Recess Measuring Micrometer	Length	V.R. of Measuring Micromete JJG(JG) 56	（0～50）mm	U=3 μ m		
43	*Wide Randc Electromic Digital Display Dial Indicator	Length	C.S. for Wide Randc Electromic Digital Display Dial Indicator JJF(Zhe) 1135	（0～50）mm	U=2 μ m		
44	Box Plates	Verticality	V.R. of Box Plates JJG 194	(100～400)mm	U=2.8 μ m		
45	Square	Perpendicularity	V.R. of Squares JJG 7	wide-stand square：H(0～630)mm	U=2 μ m+3×$10^{-6}H$		
				Knife edge square：H(0～200)mm	U=2 μ m		
				Parallel square：H(0～500)mm	U=3 μ m		
				Triangle square：H(0～630)mm	U=0.5 μ m+1×$10^{-6}H$		
				Linear steel square：（0～500）mm	U=0.06mm		
46	Straight Edge	Linearity	V.R. of Straight Edge JJG 63	（75～175）mm	U=0.4 μ m		

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				（175～300)mm	U=0.8 μ m		
				（300～500)mm	U=1.4 μ m		
47	Square Gauge	Perpendicularity	V.R. of Square Gauge JJG 1046	H:(100～630)mm	U=0.2 μ m+2×$10^{-6}H$		
48	*General Bevel Protractor	Angle	C.S. for General Bevel Protractors JJF 1959	(0～360)°	U= 1′		
49	*Composite angle gauge	Angle	C.S. for Composite Type Angle Rules JJF 1132	(0～180)°	U=4′		
		Length		(0～300)mm	U=0.05mm		
50	Frame Levels and Shaft Levels	Angle	C.S. for Frame Levels and Shaft Levels JJF 1084	（0.02～0.10） mm/m	U_{rel}=6%		
51	*Calibrators for the Level	Angle	V.R. of Calibrators for the Level JJG 191	(0.005～1.5)mm/m	U_{rel}=2%		
52	clinometers	Angle	Calibration Specification for Clinometers JJF 1915	(0～360)°	U=0.01°		
53	Level Rule	Angle	C.S.for Level Rules JJF 1085	(0.5～10) mm/m	U_{rel}=4%		
		Length		(0～1000)mm	U=0.1mm		
54	*Image contact angle tester	angle	Calibration specification for image contact angle tester JJF (Su) 219	（10～170）°	U=0.20°		
55	*Digital Display Height Measuring Instrument	Length	C.S.for Height Measuring Instrument with Digital JJF 1254	(0～1000)mm	U=0.5 μ m+1.5×$10^{-6}L$		
56	*Concentricity Testers	Length	C.S.for Concentricity Testers JJF 1109	（20～30） μ m	U=2 μ m		
57	*Tooth thickness caliper	length	Calibration specification for tooth thickness caliper JJF 1072	Modulus：（1～50）mm	U=0.01mm		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
58	*Common Normal Micrometer	Length	V.R. of Common Normal Micrometer JJG 82	(0～200)mm	U=1.2 μm+5.5×10^{-6}L		
59	*Thread micrometer	length	Verification regulation of thread micrometer JJG25	(0～200)mm	U=1 μm+7×10^{-6}L		
60	Screw Templates	Length	V.R.of Screw Templates JJG 60	(0.4～6.35)mm	U=2 μm		
61	Working gauge for petroleum thread	Length	C.S.for OCTG Thread Working Gauges JJF 1108	Pitch:(0.941～3.175)mm	U=4.0 μm		
				Medium diameter：(5～200)mm	U=3.4 μm+6×10^{-6}L		
62	*Coordinate Measuring Machine	Length	C.S. for Coordinate Measuring Machines JJF 1064	(0～1000)mm	U=0.5 μm+1×10^{-6}L	except for thecoordinate measuring machine with rotary table as the fourth axis.	
				(1000～7000)mm	U=2 μm+1×10^{-6}L		
63	*Roundness instrument	Roundness	Measurement Standard Instrument of Roundness and Cylindricity JJG 429	(1～11) μm	U_{rel}=6%		
				(19～20) μm	U_{rel}=4%		
64	*Flat Plate	Flatnecs	V.R. of Surface Plates JJG 117	160mm×100mm～630mm×400mm	U=0.9μm		
				630mm×400mm～1600mm×1000mm:	U=2.2μm		
				1600mm×1000mm～3000mm×2000mm:	U=3.5μm		
65	Feeler gauge	Length	V. R. of Feeler Gauge JJG 62	(0.02～0.10)mm	U=2 μm		
				(0.10～3.00)mm	U=3 μm		
66	Standard Ring Gauge	Length	V.R. of Standard Ring Gauge JJG 894	（2～200）mm	U=0.7 μm+6×10^{-6}L		

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67	*Snap Gauge Reading in 0.01mm	Length	V.R. of Snap Gauge Reading in 0.01mm JJG 109	(0～200)mm	U=4 μ m		
68	Cylindrical Thread Gauges	Length	C.S. for Cylindrical Thread Gauges JJF 1345	Gauge:(1～500)mm	U=3.4 μ m+6×10^{-6}L		
				Ring:(2～500)mm	U=3.4 μ m+6×10^{-6}L		
69	Sealing pipe thread gauge	Length	Calibration specification for thread gauge of 55 ° sealing pipe JJF (Su) 223	Medium diameter：(7～165)mm	U=3.4 μ m+6×10^{-6}L		
70	Smooth limit gauge	Length	V.R. of Plain Limit Gauges JJG 343	External dimension:(1～500)mm	U=0.5 μ m+4×10^{-6}L		
				inside dimension:(1～500)mm	U=1.0 μ m+3×10^{-6}L		
71	Pin Gauge,Thread Measuring Wires	Length	C.S. for Cylindrical Measuring Pin JJF 1207	Thread Measuring Wires：(0.118～6.585)mm	U=0.3μm		
				Pin Gauge：(0.1～25)mm	U=0.5μm		
72	*Optimeter	Length	V.R. of Optimeter JJG 45	（-100～+100） μ m	U=0.12 μ m		
73	*Length Measuring Instruments	Length	C.S. for Length Measuring Instruments JJF 1066	(0～3000)mm	U=0.2 μ m+2×10^{-6}L		
74	*Length Measuring Instrument	Length	C.S. for Length Measuring Instrument JJF 1189	(0～50)mm	U=0.2 μ m		
				（50～500)mm	U=0.2 μ m+2×10^{-6}L		
75	*Laser Diameter Measuring Gauges	Length	C.S. for Laser Diameter Measuring Gauges JJF 1250	(0.1～30)mm	U=0.5 μ m		
				Standard gauge：(0.1～30)mm	U=0.3μm		

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76	*Microcator	Length	V.R. of Microcator JJG 118	（-300～300） μm	U=0.14 μm		
77	*Comparator of Machinery Type	Length	V.R. of Comparator of Machinery Type JJG 39	（-1000～1000） μm	U=0.12 μm		
78	*Inductive Micro meters	Length	C.S.for Inductive Micrometers JJF 1331	Resolution 0.01 μm：（-10～+10） μm	U=0.03 μm		
				Resolution 0.1 μm：（-100～+100） μm	U=0.2 μm		
				Resolution 1 μm：（-1000～+1000） μm	U=1 μm		
79	*Grating Micrometer	Length	C.S. for Grating Micrometers JJF 1682	0.2 μmgrade;（0～25） mm	U=0.09 μm		
				0.5 μmgrade;（0～50） mm	U=0.16 μm		
				1 μmgrade;（0～100） mm	U=0.3 μm		
				2 μmgrade;（0～100） mm	U=0.9 μm		
				5 μmgrade;（0～100） mm	U=2 μm		
				10 μmgrade;（0～100） mm	U=2 μm		
80	Roughness CoMParison Specimens	Roughness	Calibration specification for surface roughness comparison blocks JJF 1099	Ra(0.012～6.3) μm	U_{rel}=7.6%		
81	*Contact Instruments of Surface RoughnessMeters by the profile	Roughness	C.S. for Contact (Stylus) Instruments of Surface Roughness Measurement by the profile Method JJF 1105	Ra:(0.04～0.1) μm	U_{rel}=6.0%		

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	Method			Ra:(1.4～6.9) μm	U_{rel}=4.0%		
82	Fineness of Grind Gauge	Length	V.R.of Fineness of Grind Gage JJG 905	（0～25） μm	U=0.6 μm		
				（25～50) μm	U=1.0 μm		
				（50～150) μm	U=1.3 μm		
83	*Contact（Stylus) Surface Contour Tester	Length	C.S. for Contact（Stylus) Surface Contour Tester JJF(Min) 1043	Z axis：(0～50)mm	U=0.5 μm+3×$10^{-5}L$		
				X axis：(0～100)mm	U=0.8 μm		
				radius：10mm	U=0.9 μm		
		Angle		0～90°	U=40″		
84	*Tool Presetting and Measuring Instruments	Length	V.R. of Tool Presetting and Measuring Instruments JJG 938	(0～1000)mm	U=1.7 μm+2.2×$10^{-6}L$		
85	*Magnetic and Eddy Current Measuring Instrument for Coating Thickness	Length	V.R. of Magnetic and Eddy Current Measuring Instrument for Coating Thickness JJG 818	Magnetic ：（0～2000） μm	U=0.4 μm+6×$10^{-3}L$		
				（0～2000） μm	U=0.4 μm+6×$10^{-3}L$		
				(10～2000) μm	U_{rel}=0.6%		
86	*X-Ray Thickness Guage	Length	C. S. for X-Ray Flourescence Coating Thickness Instruments JJF 1306	（0.053～0.2） μm	U_{rel}=10%		
				（0.2～15） μm	U_{rel}=6%		
87	*Ultrasonic Thickness Instrument	Length	C.S. for Ultrasonic Thickness Instrument JJF 1126	（0.5～15）mm	U=0.02mm		
				（15～75）mm	U=0.03mm		
				（75～200)mm	U=0.07mm		

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88	*Pneumatic measuring instrument for micrometers	Length	V.R.of Pneumatic Measuring Instrument for Micrometers JJG 356	Buoy-type read in 0.5 μm：(0～8) μm	U=0.2 μm		
				Buoy-type read in 1 μm：(0～15) μm	U=0.4 μm		
				Buoy-type read in 2 μm：(0～40) μm	U=0.6 μm		
				Buoy-type read in 5 μm：(0～80) μm	U=1.3 μm		
				Electronic column type read in 0.2 μm：（0～10) μm	U=0.2 μm		
				Electronic column type read in 0.5 μm：(0～25) μm	U=0.4 μm		
				Electronic column type read in 1 μm：(0～50) μm	U=0.9 μm		
89	Radius Gauges	Length	C.S..for Radius Gauge JJF 2187	(R1～R25)mm	U=10 μm		
90	Wedge-feet Calibrator for Micrometers	Length	V.R.of Wedge-feet Calibrator for Micrometers JJG 525	(0～2000) μm	U=0.3 μm		
91	*Welding Inspection Callipers	Angle	C.S. for Callipers for Welding Inspection Callipers JJF 2161	(0～320)°	U=8′		
		Length		(0～60)mm	U=0.03mm		
92	*Staight Edges	Linearity	C.S.for Staight Edges JJF 1097	（300～1000）mm	U=0.7 μm		
				（1000～2000)mm	U=1.0 μm		
				（2000～3000)mm	U=1.4 μm		

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93	*Surface profile table	Length	Calibration specification for Surface profile gauges JJF 1476	（0～6.5）mm	U=1.7 μ m		
94	*Tensile stretch tester	elongation	Verificafion procedure for test equipment of enamdelled winding wire-Part3:Elongation tester JB/T4279.3	1%～60%	U=0.3%		
95	*Articulated arm type coordinate measuring machine	length	Calibration specification for articulated arm CMM JJF 1408	(0～1000)mm	U=6 μ m+4×$10^{-6}L$		
96	*Laser micrometer	length	Calibration specification for laser micrometer JJF 1663	(0.1～6)mm	U=0.024%FS		
				(6～100)mm	U=0.015%FS		
97	*Solder Paste Inspection Instruments	length	Calibration Specification for Solder Paste Inspection Instruments JJF1965	（75～400） μ m	U=1.5 μ m		
98	*Drop Test Machine for Packages	Length	Drop Test Machine for Packages JJG（Yue）045	(10～2000)mm	U=0.7mm		
		Angle		0～5°	U=0.6°		
99	*Extensometer	Length	Verification Regulation for Extensometer JJG 762	(0～1/3) mm	U=0.5 μ m		
				(1/3～25) mm	U_{rel}=0.18%		
100	Microscale	Length	C.S.for Micropattern Standards JJF 1917	line spacing：(0～10)mm	U=0.5 μ m		
				diameter：(0～10)mm	U=0.8 μ m		
		Angle		（0～360）°	U=16″		
101	Optical instrument	Length	C.S. for Material Measures of Length Measuring Instrument	Eccentric shafte：e(20～30) μ m	U=0.8 μ m		

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	inspection tool	Length	with Optical Principle JJF1941	Standard mandrel：(0～500)mm	U=0.5 μ m		
102	*Center distance caliper	Length	C.S. for CenterDistance Calipers JJF (Su) 199	(0～500)mm	U=0.01mm		
				(500～1000)mm	U=0.02mm		
103	*Chamfer caliper	Length	C.S. for Calipers and gauges of Chamfer JJF (Su) 211	(1.2～10)mm	U=0.02mm		
104	Gauges for plugs and sockets for household and similar purposes	Length	C.S. for plugs and Socket-outlets guages forHousehold and Similar Purposes JJF（Zhe）1119	(0～60)mm	U=0.004mm		
		Angle		(119～121)°	U=2′		
105	One dimensional and two-dimensional geometric dimensions	Length	C.S. for one-dimensional and two-dimensional geometric dimension measurement JJF(Xin)68	(0～500)mm	U=0.5 μ m+5×10^{-6}L		
				(500～1000)mm	U=0.7 μ m+5×10^{-6}L		
		Angle		(0～360)°	U=8″		
106	Hand-held Laser Distance Meters	Length	V.R.of Hand-held Laser Distance Meters JJG 966	（0～30）m	U=1.0mm+2×10^{-5}D		
107	*Quick Video Measuring Machines	Length	C.S.for Quick Video Measuring Machines JJF（Zhe）1194	(0～500)mm	U=0.5 μ m+2×10^{-6}L		
108	Levels	Angle	V.R.of Levels JJG 425	(-25～+25)″	U=3″		
109	Optical Theodolites	Angle	V.R.of Optical Theodolites JJG 414	(0～360)°	U=0.4″		
110	Protection of person and equipment by enclosures-Probe for verification	Length	C.S. for Protection of person and equipment by enclosures-Probe for verification JJF(Liao) 288	(0～100)mm	U=0.004mm		
				(100～200)mm	U=0.007mm		
				(200～300)mm	U=0.04mm		
				(300～500)mm	U=0.05mm		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Angle		(0～360)°	U=4′		
111	Laser Alignment Instrument	Length	C.S.for Laser Alignment Instrument JJF(Zhe) 1196	(-20～+20)mm	U=3 μ m		
		Angle		(0～360)°	U=0.1°		
112	*Step Gauges	Length	C.S.for Step Gauges JJF(Ji) 154	（-50～+50）mm	U=0.01mm		
113	*Vertical Axis Deviation Measuring Instrument	Length	C.S.for Vertical Axis Deviation Measuring Instrument JJF（Ji）153	（0～300）mm	U=0.007mm		
114	*Bottom Wall Thickness Measuring Instrument	Length	C.S.for Bottom Wall Thickness Measuring Instrument JJF(Ji) 152	（0～20）mm	U=0.003mm		
115	*Optical 3D Measuring Systems Based on Structured Light Scanning	Length	C.S.for Optical 3D Measuring Systems Based on Structured Light Scanning JJF 1951	(0～1200)mm	U=7 μ m+3×10^{-6}L	No single perspective system type equipment	
116	*Conical Ruler	Length	C.S. of Conical Ruler JJF（Wan）89	（0～60）mm	U=0.01mm		
117	Taper Thread Gauges	Length	C.S.for Taper Thread Gauges JJF（Xiang）47	(6～165)mm	U=3.6 μ m+6×$10^{-6}L$		
118	*Wide Face Caliper	Length	C.S.for Wide Face Caliper JJF(Zhe) 1172	（0～300）mm	U=0.01mm		
119	*Hall Effect Thickness Gauge	Length	V.R.of Hall Effect Thickness Gauge JJG(Yue) 034	(0～20)mm	U=2 μ m+4×10^{-3} H		
120	Pointer Angle Gauge	Angle	C.S.for Pointer Angle Gauge JJF(Su) 280	（-180～+180）°	U=0.2°		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
121	Coordinate Measuring Spheres	Length	C.S.for Coordinate Measuring Spheres JJF 1422	Φ(10～50)mm	U=0.4 μm		
		Roundness		(0～10) μm	U=0.07 μm		
122	*Creepage Distance （Clearance）Test Card	Length	C.S.for Creepage Distance （Clearance）Test Card JJF(Shan) 105	（1～10）mm	U=0.005mm		
123	*Micrometer With μm Reading	Length	C.S.for Micrometer With μm Reading JJF(Zhe) 1134	（0～100）mm	U=1 μm		
124	*Micrometers for Measuring Gear	Length	V.R.of Micrometers for Measuring Gear JJG(Yue) 074	（0～300）mm	U=0.7 μm +9×$10^{-6}L$		
125	Phelin Rule	Length	C.S.for Phelin Rule JJF(Meng) 107	Line Spacing：（0～300）mm	U=7 μm		
				Line Width：（0.01～10）mm	U=4 μm		
				Diameter ：（0.01～10）mm	U=4 μm		
126	*Linear Displacement Sensors	Length	Calibration Specification for Large Deformation Extensometer JJF(E) 141	(100～1000)mm	U_{rel}=0.16%		
Thermology measuring instruments							
1	Working Noble Metal Thermocouples	Temperature	V.R.of Working Noble Metal Thermocouples JJG 141	（300～1100）℃	U=0.8℃		
				(1100～1500)℃	U=2.6℃		
2	Base Metal Thermocouples	Temperature	C. S. for Base Metal Thermocouples JJF 1637	(-40～300)℃	U=0.3℃		
				(300～1200)℃	U=1.1℃		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
3	Sheathed Thermocouples	Temperature	C. S. for Sheathed Thermocouples JJF1262	(-40～300)℃	U=0.3℃		
				(300～1100)℃	U=1.1℃		
4	Industrial Platinum and Copper Resistance Thermistor	Temperature	V. R. of Industrial Platinum and Copper Resistance Thermistor JJG 229	Platinum Resistance:(-80～300)℃	U=0.09℃		
				Copper Resistance:(0～150)℃	U=0.12℃		
5	Standard Mercury-in-Glass Thermometers	Temperature	V.R.of Standard Mercury-in-Glass Thermometers JJG 161	(-60～300)℃	U=0.04℃		
6	Liquid-in-Glass Thermometers for Working	Temperature	V.R. of Liquid-in-Glass Thermometers for Working JJG 130	(-80～300)℃	U=0.06℃		
7	Electric contact mercury-in-glass thermometers	Temperature	V.R. of Electric Contact Mercury-in-Glass Thermometers JJG 131	(-30～100)℃	U=0.05℃		
				(100～300)℃	U=0.08℃		
8	Clinical Electronic Thermometer	Temperature	V.R. for the Clinical Electronic Thermometer JJG 1162	(35～41)℃	U=0.03℃		
9	Clinical Thermometers	Temperature	V.R. of the Clinical Thermometers JJG 111	(30～43)℃	U=0.03℃		
10	*Bimetallic Thermometers	Temperature	Calibration Specification for Bimetallic Thermometers JJF 1908	(-80～300)℃	U=0.5℃		
11	*Filled System Thermometers	Temperature	Calibration Specification for Filled System Thermometers JJF 1909	(-80～300)℃	U=0.5℃		
12	Surface Thermometers	Temperature	C.S.for the Surface Thermometers JJF 1409	(50～400)℃	U=1.8℃		
13	Surface Platinum	Temperature	C.S. for Surface Platinum Resistance Thermometers JJF	（-30～50）℃	U=0.8℃		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
	Resistance Thermometers		2137	（50～300）℃	U=1.6℃		
14	*Digital Thermometer	Temperature	C.S.for digital thermometer JJF(Su) 95	（-196～0）℃	U=0.3℃		
				(-80～300)℃	U=0.04℃		
				(300～1000)℃	U=0.90℃		
15	Thermistor Thermometer	Temperature	C. S. for Thermistor Thermometers JJF1379	（15～35）℃，Resolution 0.001℃	U=0.013℃		
				（-50～200）℃，Resolution 0.1℃	U=0.1℃		
16	*Thermometers of Clinic Autoclave	Temperature	C.S. for Thermometers of Clinic Autoclave JJF 1308	(20～150)℃	U=0.1℃		
17	WBGT-index Meters	Temperature	C.S. for Thermometers of WBGT-index Meters JJF 1407	(5～120)℃	U=0.3℃		
18	Fiber-optic Distributed Thermometers	Temperature	C.S. for Fiber-optic Distributed Thermometers JJF 1630	(-20～100)℃	U=0.4℃		
19	Working Copper/Copper-Nick Thermocouple	Temperature	V.R.of the Working Copper/Copper-Nickel Thermocouple JJG368	(-80～300)℃	U=0.2℃		
20	*Temperature Indicators and Simulators by Electrical Simulation and Measurement	Temperature	C.S.for Temperature Indicators and Simulators by Electrical Simulation and Measurement JJF 1309	(-200～1600)℃	U=0.02℃		
21	Recorders for Industrial Process	Temperature	V.R. of the Recorders for Industrial Process	With Platinum thermal resistance:(-200～800)℃	U=0.2℃		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
	Measurement		Measurement JJG 74	With Thermocouple: (-200～1600) ℃	U=0.8℃		
22	Temperature Data Acquisition Instruments	Temperature	C. S. for Temperature Data Acquisition Instruments JJF 1366	(-80～300)℃	U=0.08℃		
23	Temperature and Humidity Itinerant Detecting Instruments	Temperature	Calibration Specification for Temperature and Humidity Itinerant Detecting Instruments JJF 1171	(-80～300)℃	U=0.04℃		
				(300～1200)℃	U=0.67℃		
		Humidity		10%RH～95%RH	U=1.6%RH		
24	*Analogue Temperatue Indicators and Controllers	Temperature	V.R.of Analogue Temperature Indicators and Controllers JJG 951	With Platinum Thermal Resistance:(0～850)℃	U=1.0℃		
				With Thermocouple:(0～1300)℃	U=1.0℃		
25	*Digital Temperature Indicators and Controllers	Temperature	V.R.of Digital Temperature Indicators and Controllers JJG 617	With Platinum Thermal Resistance:(-100～600)℃	U=0.4℃		
				With Thermocouple: (-100～1300) ℃	U=0.6℃		
26	*Iron Thermometer	Temperature	C.S. for Soldering Iron Thermometers JJF 1629	(50～600)℃	U=1.5℃		
27	Temperature transmitters	Temperature	C.S.for Temperature Transmitter JJF 1183	With Platinum Thermal Resistance: (-80～300)℃	U=0.2℃		
				Without Platinum Thermal Resistance: (-200～800)℃	U=0.6℃		
				With Thermocouple: (-80～1100)℃	U=1.0℃		
				Without Thermocouple: (-200～1300)℃	U=1.2℃		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
28	*Temperature Indicators	Temperature	C.S. for Temperature Indicators JJF 1664	With Platinum Thermal resistance:（-100～850）℃	U=0.4℃		
				With Thermocouple:（-200～1300）℃	U=0.6℃		
29	*Thermostatic Baths for Temperature Calibration	Temperature	Measurement and Test Norm of Thermostatic Bath's Technological Characteristics JJF 1030	Uniformity: (-80～300)℃	U=0.007℃		
				Volatility: (-80～300)℃	U=0.009℃		
30	*Temperature Block Calibrators	Temperature	Calibration Guideline of the Temperature Block Calibrators JJF 1257	(-60～400)℃	U=0.32℃		
31	*Equipment of the Environmental Testing	Temperature	C. S. for the Equipment of the Environmental Testing for Temperature and Humidity Parameters JJF 1101	(-80～300)℃	U=0.5℃		
		Humidity		20%RH～95%RH	U=1.5%RH		
32	*Equipment of the Chamber Electric Furnace	Temperature	C.S. for the Equipment of the Chamber Electric Furnace JJF 1376	(100～1100)℃	U=1.5℃		
33	*Steam Sterilizer	Temperature	C.S. for Steam Sterilizer's Temperature and Pressure JJF(Su) 96	(40～140)℃	U=0.5℃		
		Pressure		(1～200)kPa	U=0.5kPa		
34	*Salt Mist Testing Chambers	Temperature	Calibration Specification for Salt Mist Testing Chambers JJF 2168	(0～60)℃	U=0.6℃		
		Mist Rate		(1～2)mL/(h•80cm^2)	U=0.4mL/(h•80cm^2)		
35	*Natural Ventilation Thermal Aging Test Oven	Temperature	Verification Procedure for Test Equipment of Rubber Plastic Wire and Cable -Part 6:Natural Ventilation Thermal Aging Test Oven JB/T4278.6	(20～300)℃	U=0.8℃		
		Ventilation		(8～20)Times/Hour	U=1Times/Hour		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
36	*Electro-thermal Incubator	Temperature	Calibration Method of Electro-thermal Incubator SL144.4	(0～50)℃	U=0.6℃		
37	*Unsaturated Pressurized Vapour Damp Heat/steady State Testing Equipments	Temperature	V.R.of Unsaturated Pressurized Vapour Damp Heat/steady State Testing Equipments JJG(DZ) 31504	（100～170）℃	U=0.5℃		
		Humidity		50%RH～90%RH	U=1.8%RH		
38	*Electrically-heated Thermostatic Water bath	Temperature	C.S. of Electrically-heated Thermostatic Water bath JJF(Liao) 118	(0～100)℃	U=0.2℃		
39	*Vacuum Drying Chamber	Temperature	C.S. for Temperature and Pressure of Vacuum Drying Chamber JJF(Su) 177	(40～150)℃	U=0.6℃		
		Pressure		(0～101)kPa	U=2.4kPa		
40	*Equipment of Biological Artificial Climate	Temperature	C.S. for Equipment of Biological Artificial Climate JJF(Zhe)1103	(5～40)℃	U=0.6℃		
		Humidity		50%RH～95%RH	U=1.7%RH		
		Illumination		(100～10000)lx	U_{rel}=3.0%		
41	*Dry Bath Incubator for Biological Experiments	Temperature	C.S. for Dry Bath Incubator for Biological Experiments JJF(Zhe)1149	（-10～150）℃（Temperature Deciation）	U=0.13℃		
				（-10～150）℃（Temperature Uniformity）	U=0.07℃		
				（-10～150）℃（Temperature Volatility）	U=0.10℃		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
42	*Temperature and Humidity Standard Chambers	Temperature	C.S. for Temperature and Humidity Standard Chambers JJF1564	(5～50)℃（uniformity）	U=0.05℃		
				(5～50)℃（fluctuation）	U=0.02℃		
		Temperature change rate		(0～5)℃/min	U=0.03℃/min		
		Humidity		20%RH～90%RH（Uniformity）	U=0.6%RH		
				20%RH～90%RH（Fluctuation）	U=0.3%RH		
		Humidity change rate		0RH/min～1%RH/min	U=0.6%RH/min		
43	Working Radiation Thermometers	Temperature	V.R. of the Working Radiation Thermometers JJG 856	(50～400)℃	U=1.3℃		
				(400～800)℃	U=1.7℃		
				(800～1000)℃	U=2.0℃		
				(1000～1200)℃	U=3.0℃		
44	Infrared Thermometers for Measurement of Human Temperature	Temperature	C.S.for Infrared Thermometers for Measurement of Human Temperature JJF 1107	（22.0～40.0）℃	U=0.14℃		
45	Thermal Imagers	Temperature	C. S. for Thermal Imagers JJF 1187	(50～300)℃	U=1.5℃		
				(300～500)℃	U=1.8℃		
				(500～900)℃	U=2.4℃		
				(900～1200)℃	U=3.0℃		

The scope of the accreditation in Chinese remains the definitive version.

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
46	Mechanical Thermo-hygrometers	Temperature	V.R. of Mechanical Thermo-hygrometers JJG 205	(5～50)℃	U=0.6℃		
		Humidity		30%RH～90%RH	U=1.8%RH		
47	Digital Temperature-hygrometers	Humidity	C.S. for Digital Temperature-hygrometers JJF 1076	10%RH～90％RH	U=0.6%RH~1.5%RH		
		Temperature		(-10～50)℃	U=0.4℃		
48	Temperature and Humidity Transmitter	Temperature	C.S.for Temperature and Humidity Transmitter JJF(Zhe)1035	（5～50)℃	U=0.4℃		
		Humidity		20%RH～90%RH	U=1.9%RH		
49	*Dust and Sand Testing Equipments	Temperature	C. S. for Dust and Sand Testing Equipments JJF(JG) 18	（21～75）℃	U=0.4℃		
		Humidity		20%RH～30%RH	U=1.5%RH		
		Wind Velocity		（0.5～2.5）m/s	U_{rel}=12%		
				（7.7～10.1）m/s	U_{rel}=3.2%		
				（18～29）m/s	U_{rel}=2.8%		
		Dust Concentration		(0～20)g/m^3	U=0.76g/m^3		
50	*Rain Testing Equipments	Rainfall Intensity	C. S. for Rain Testing Equipments JJF(JG) 17	（90～110）mm/h	U_{rel}=2.6%		
		Wind Velocity		（16～20）m/s	U_{rel}=4.6%		
51	*Carbon Dioxide Incubator	Temperature	C.S. for Carbon Dioxide Incubator JJF（Liao）463	（20～55）℃	U=0.2℃		
		Carbon dioxide concentration		0.1%～10%	U_{rel}=2.4%		
52	*Oxygen Transmission Rate Testers	Oxygen transmittance	C.S. for Oxygen Gas Transmission Rate Testers JJF（Xiang）66	(0.02～20)cm^3/(m^2 • 24h)	U_{rel}=9%		

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№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				（20～70）$cm^3/(m^2 \cdot 24h)$	U_{rel}=7%		
		Temperature		（20～40）℃	U=0.26℃		
53	*Gas Transmittance Meter	Gas transmittance	C. S. for Gas Transmittance Meter JJF(Qian) 42	(0.01～10)[$cm^3/(m^2 \cdot 24h \cdot 0.1MPa)$]	U_{rel}=26%		
				（10～12）[$cm^3/(m^2 \cdot 24h \cdot 0.1MPa)$]	U_{rel}=20%		
		Temperature		（20～40）℃	U=0.4℃		
54	*Water Vapor Transmission Rate Tester	Water vapor transmittance	C.S. of Water Vapor Transmission Rate Tester JJF(Ji) 191	(0.01～2)$g/(m^2 \cdot 24h)$	U_{rel}=17%		
				（2～5）$g/(m^2 \cdot 24h)$	U_{rel}=19%		
		Temperature		（0～50）℃	U=0.14℃		
		Humidity		10%RH～95%RH	U=1.3%RH		
55	*Industrial Temperature Measurement System	Temperature	Calibration Specification for Industrial Temperature Measurement System JJF（Gan）018	（-90～400）℃	U=0.1℃		
56	*Liquid constan temperature testing equipment	Temperature	Measurement specification for temperature performance of liquid constant temperature testing equipment JJF 2019	Temperature deviation：(-80～300)℃	U=0.2℃		
		Temperature		Temperature uniformity：(-80～300)℃	U=0.02℃		
		Temperature		Temperature fluctuation：(-80～300)℃	U=0.04℃		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
57	*Large steam sterilizers	Temperature	Calibration Specification for Temperature, Pressure and Time Parameters of Large Steam Sterilizers JJF 2088	（0～150）℃	U=0.12℃		
		Pressure		(0～400)kPa	U=1.2kPa		
		Time		(1～3600)s	U=1s		
58	*Medical Cold Storage and Transportation Equipment	Temperature	Calibration Specification of Medical Cold Storage and Transportation Equipment JJF(Liao)310	（2～10）℃	U=0.2℃		
		Humidity		10%RH～90%RH	U=1.6%RH		
		Time		(1～3600)s	U=0.2s		
59	*Temperature Alternating and Temperature Shock Testing Equipments	Temperature	Calibration Specification for Temperature Alternating and Temperature Shock Testing Equipments JJF(Min)1121	（-80～300）℃	U=0.4℃		
		Temperature Rate of Change		（0～30）℃/min	U=0.08℃/min		
		Time		（0～3600）s	U=0.4s		
60	*Ozone Aging Test Chambers	Temperature	Calibration Specification for Ozone Aging Test Chambers JJF 2051	（0～100）℃	U=0.4℃		
		Humidity		10%RH～90%RH	U=1.3%RH		
		Ozone concentration		（0～400） μ mol/mol	（0.019~17） μ mol/mol		
61	*The ConstantTemperature Culture Oscillator	Temperature	Calibration Specification for the Constant Temperature Culture Oscillator JJF(Liao）359	（0～300）℃	U=0.4℃		
		Oscillation frequency		（0～1000）r/min	U=1.0r/min		
		Amplitude		（0～150）mm	U=0.4mm		
62	Mechanical Thermometers of Refrigerator	Temperature	Calibration Specification for Mechanical Thermometers of Refrigerator JJF(Xin)47	（-40～50）℃	U=0.4℃		
63	Digital Thermometers of	Temperature	Calibration Specification for Digital Thermometers of	Built-in：（-40～50）℃	U=0.3℃		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
	Refrigerator		Refrigerator JJF(Xin)63	External：（-40～50）℃	U=0.2℃		
64	Thermocouple compensation wire	Temperature	Calibration Specification for Base Metal Thermocouples（Appendix C Calibration Method for Thermocouple Compensation Wires）JJF1637	（-40～100）℃	U=0.2℃		
65	*Temperature/Humidity/Vibration Combined Environmental Testing System	Temperature	C. S. for Temperature/Humidity/Vibration Combined Environmental Testing System JJF 1270	(-75～200)℃	U=0.5℃		
		Humidity		20%RH～95%RH	U=1.7%RH		
		Acceleration		(1～980)m/s^2	U_{rel}=3.0%		
		Wind velocity		(0.1～20)m/s	U_{rel}=3.0%		
		Rate of temperature change		(0.5～60)℃/min	U_{rel}=5.0%		
		The test system operates at maximum noise		(30～130)dB	U=0.7dB		
		Indication of acceleration amplitude in temperature cycle		(1～980)m/s^2	U_{rel}=2.6%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Vibration table additional table acceleration uniformity		0.1%～100%	U_{rel}=4.0%		
66	*Irradiance of Artificial Accelerated Weathering Apparatus of Xenon Arc Lamp	UV Irradiance	C.S. for Irradiance of Artificial Accelerated Weathering Apparatus of Xenon Arc Lamp JJF1525	(0.01～1000)W/m^2	U_{rel}=14%		
67	*Asphalt Aging Oven	Temperature	V.R. of Asphalt Aging Oven JJG(JT)056	(0～300)℃	U=0.16℃		
		Length		(0～300)mm	U=0.04mm		
		Rotate speed		(4～20)r/min	U=0.08r/min		
		Time		(0～200)min	U=5.2s		
		Flow		(3.5～4.5)L/min	U=56mL/min		
68	*Constant Temperature Heating Platform	Temperature	Calibration Specification for Constant Temperature Heating Platform JJF (JG) 256	(50～100)℃	U=1.2℃		
				(100～300)℃	U=1.3℃		
				(300～400)℃	U=1.5℃		
69	*Atmospheric Pressure Test Chambers	Temperature	Calibration Specification for Atmospheric Pressure Test Chambers JJF 2119	（-80～200）℃	U=0.2℃		
		Time		（0.1～6000）s	U=0.8s		
		Pressure		(0.1～2)kPa	U=0.06kPa		
				(2～25)kPa	U=0.19kPa		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				(25～120)kPa	U=0.70kPa		
		Air pressure rate of change		（1～20）kPa/min	U=0.05kPa/min		
70	*Magnetic Heating Stirrer	Temperature	Calibration Specification for Magnetic Heating Stirrer JJF(Hei) 12	（0～100）℃	U=0.2℃		
		Speed		（50～2000）r/min	U_{rel}=0.2%		
71	*Surface Temperature Source	Temperature	Calibration Specification for the Surface (Appendix D Measurement Methods for Temperature Control Stability and Unif ormity of Surface Temperature Sources) JJF1409	Uniformity：（50～400）℃	U=0.3℃		
				Stability：（50～400）℃	U=0.2℃		
72	*Low Temperature Freezers	Temperature	Calibration Specification of Low Temperature Freezers JJF(E) 135	（-80～-25）℃	U=0.6℃		
73	*Ethylene Oxide Sterilization	Temperature	Calibration Specification of Ethylene Oxide Sterilization JJF(E) 68	（37～63）℃	U=0.3℃		
		Humidity		30%RH～80%RH	U=2.4%RH		
		Pressure		(-20～100)kPa	U=1.3kPa		
74	*Washer-disinfection	Temperature	Calibration Specification of Washer-disinfection for Temperature Parameters JJF(Jin) 06	（20～100）℃	U=0.3℃		
Mechanics measuring instruments							
1	Weights	Mass	V. R.of Weights JJG 99	(1～100)mg	U=(0.002～0.005)mg		
				(0.1～10)g	U=(0.005～0.020)mg		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				(10～500)g	U=(0.020～0.25)mg		
				(0.5～1)kg	U=(0.25～1.6)mg		
				(1～25)kg	U=1.6mg～0.12g		
2	*Mechanical Balance	Mass	V. R.of Mechanical Balance JJG 98	1mg～200g	U=0.03mg		
3	*Eletronic Balance	Mass	V. R. of Eletronic Balance JJG 1036,C. S. for Eletronic Balances JJF 1847	(1～100)mg	U=(0.0020～0.0050)mg		
				(0.1～10)g	U=(0.0050～0.03)mg		
				(10～1000)g	U=(0.03～2)mg		
				(1～150)kg	U=2mg～0.7g		
4	*Torsion Balance	Mass	V. R. of Torsion Balance JJG 46	(5～2500)mg	U=(0.04～1.3)mg		
5	*Table Balance	Mass	V. R. of Table Balances JJG 156	(0.1～10)kg	U=(0.03～1.6)g		
6	*Non-self indication Weighing instruments	Mass	V. R. of Non-self-indication Weighing Instruments JJG 14	(0.02～2)kg	U=(0.5～1) g		
				(2～1000)kg	U=(0.001～0.1) kg		
				(100～2000)kg	U=(0.1～0.2) kg		
7	*Digital Indicating Weighing Instument	Mass	V. R. of Digital Indicating Weighing Instrument JJG 539	(2～200)g	U=(0.02～0.2)g		
				(0.2～20)kg	U=(0.2～1.2)g		
				(20～2000)kg	U=1.2g～0.2kg		
				(2～10)t	U=(0.2～0.7)kg		
8	Working Glass Container	Volume	V. R. of Working Glass Container JJG 196	(0～0.1)mL	U=0.0008mL	Only weighing method	

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				(0.1～0.25)mL	U=0.001mL		
				(0.25～1)mL	U=0.002mL		
				(1～2)mL	U=0.003mL		
				(2～5)mL	U=0.005mL		
				(5～10)mL	U=0.006mL		
				(10～15)mL	U=0.008mL		
				(15～25)mL	U=0.010mL		
				(25～50)mL	U=0.016mL		
				(50～100)mL	U=0.024mL		
				(100～250)mL	U=0.05mL		
				(250～500)mL	U=0.08mL		
				(500～1000)mL	U=0.14mL		
				(1000～2000)mL	U=0.22mL		
9	locomotive pipette	Volume	V. R.of Locomotive Pipette JJG 646	(0.2～1) μL	U=0.06 μL		
				(1～10) μL	U=(0.06～0.20) μL		
				(10～100) μL	U=(0.2～0.6) μL		
				(100～1000) μL	U=(0.6～3.0) μL		
				(1000～10000) μL	U=(3.0～15) μL		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
10	Float Meter	Flow	V. R. of Float Meter JJG257	(3.3～100)L/min,(gas）	U_{rel}=0.8%	Volumetric method only(grade 1.5 and below)	
11	*Electromagnetic Flowmeters	Flow	C. S. for Electromagnetic Flowmeters JJF(Su) 228	(0.5～8444))m^3/h,DN:(15～1000)mm	U_{rel}=1.8%		
12	*liquid flowmeter	Flow	One Calibraion Specification for liquid flowmeter JJF(Xin）99	(0.5～8444)m^3/h,DN:(15～1000)mm	U_{rel}=1.8%		
13	*Elastic Element Precise Pressure Gaugee and Vacuum Gauges	Pressure	V. R. of Elastic Element Precise Pressure Gaugee and Vacuum Gauges JJG 49	(-0.1～100)MPa	U=0.09%FS	(100 ～500) MPa cannot be calibrated on site	
				(100～500)MPa	U_{rel}=0.03%		
14	*Elastic Element Precise Pressure Gauges,Pressure-Vacuum Gauges and Vacuum Gauges for General Use	Pressure	V. R. of Elastic Element Precise Pressure Gauges,Pressure-Vacuum Gauges and Vacuum Gauges for General Use JJG 52	(-0.1～100)MPa	U=0.6%FS	(100 ～500) MPa cannot be calibrated on site	
				(100～500)MPa	U_{rel}=0.4%		
15	*Digital Pressure Gauges	Pressure	V. R. of Digital Pressure Gauges JJG 875	(-0.1～100)MPa	U=0.09%FS	Under 100MPa: only grade 0.2 and below; 100MPa and above:only grade 0.02	

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				(100～500)MPa	U_{rel}=0.02%	and below; (100 ~ 500) MPa cannot be calibrated on site	
16	*Pressure Transducer(Static)	Pressure	V. R. of the Pressure Transducer(Static) JJG 860	(-0.1～100)MPa	U=0.09%FS	Under 100MPa: only grade 0.2 and below; 100MPa and above:only grade 0.05 and below; (100 ~ 500) MPa cannot be calibrated on site	
				(100～500)MPa	U_{rel}=0.02%		
17	*Pressure Controller	Pressure	V. R. of Pressure Controller JJG 544	(-0.1～100)MPa	U=0.09%FS	(100～500) MPa cannot be calibrated on site	
				(100～500)MPa	U_{rel}=0.2%		
18	*Pressure Transmitter	Pressure	V. R. of Pressure Transmitter JJG 882	(-0.1～100)MPa	U=0.07%FS	Under 100MPa:only grade 0.2 and below;(100 ～ 500) MPa cannot be calibrated on site	
				(100～500)MPa	U_{rel}=0.02%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
19	Pressure Regulators with Bourdon Tube Pressure Gauge	Pressure	C. S. for Pressure Regulators with Bourdon Tube Pressure Gauge JJF 1328	(0.001～25)MPa	U=0.9%FS		
20	*Point Type Micro-differential Pressure Gauge	Pressure	V. R. of Point Type Micro-differential Pressure Gauge JJG(Yue) 020	(-30～30)kPa	U=0.7%FS		
21	Compensated Micro-manometer	Pressure	V. R. of Compensated Micro-manomete JJG 158	(-2500～2500) Pa	U=0.7%FS		
22	Tilting Tube Micromanometers	Pressure	V. R. of Tilting Tube Micromanometers JJG 172	(-2～2)kPa	U=1.0%FS		
23	*leak tester of digitai difference pressure	Pressure	V. R. of leak tester of digitai difference pressure GJB/J 5461	Span:（-1～1）kPa	U=7.0Pa		
				（-0.1～2）MPa	U=0.3%FS		
24	Standard Dynamometers	Force	V. R. of Standard Dynamometers JJG 144	（10～1100）N	U_{rel}=0.03%		
25	*Working Dynamometers	Force	V. R. of Working Dynamometers JJG 455	1cN～500N	U_{rel}=0.1%		
				500N～600kN	U_{rel}=0.15%		
				(600～5000)kN	U_{rel}=0.36%		
26	*Working Force Measuring Machines for Special Purposes	Force	C. S. for Working Force Measuring Machines for Special Purposes JJF 1134	1cN～5MN	U_{rel}=0.4%		
27	*Tension,Compression and Universal Testing Machines	Force	V. R. of Universal Testing and Compression Testing Machine JJG 139	0.01N～5MN	U_{rel}=0.36%		
		Displacement		(1～1000)mm	U_{rel}=0.36%		
28	*Electronic Universal Testing Machine	Force	V. R. of Electronic Universal Testing Machine JJG 475	0.01N～5MN	U_{rel}=0.36%		
		Displacement		(1～1000)mm	U_{rel}=0.36%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Rate		（0.1～1000）mm/min	U_{rel}=0.36%		
29	*Electro-hydraulic Servo Universal Testing Machine	Force	V. R. of Electro-hydraulic Servo Universal Testing Machines JJG 1063	0.01N～1MN	U_{rel}=0.3%		
				(1～3)MN	U_{rel}=0.5%		
30	*Wire Bending Testing Machine	Angle	V. R. of Wire Bending Testing Machine JJG（Yue）022	0°～360°	U=0.2°		
		Speed		(10～100)times/min	U_{rel}=0.3%		
		Mass		(0.01～2)kg	U=0.2g		
31	*Flexure Testing Machine	Force	V. R. of Flexure Testing Machines JJG 476	(0.01～10)kN	U_{rel}=0.4%		
		Torque Speed		(40～60)N/s	U=2N/s		
32	*High-Temperature Creep and Stress-Rupture Testing Machines	Length	V. R. of High-Temperature Creep and Stress-Rupture Testing Machines JJG 276	（0.01～15）mm	U_{rel}=0.08%		
		Force		0.01N～1000kN	U_{rel}=0.4%		
		Temperature		(50～900)℃	U=1.4℃		
				(900～1000)℃	U=1.8℃		
		Alignment		（0.01～25）%	U=3%		
		Time		（0.01～3600）s	U_{rel}=0.1%		
33	*Cupping Testing Machine	Force	V. R. of Cupping Testing Machine JJG 583	(9.5～10.5)kN	U_{rel}=0.28%		
		Length		（15～60）mm	U=0.02mm		
34	*Hydraulic Jacks	Force	V. R. of Hydraulic Jacks JJG 621	(1～1000)kN	U_{rel}=0.6%		
				(1～10)MN	U_{rel}=0.7%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
35	Force Transducers	Force	V. R. of Force Transducers JJG 391	(100～1100)N	U_{rel}=0.3%	Grade 0.3 and below only	
36	Screen Tension Meters	Force	C. S. for Screen Tension Meters JJF 1465	(5～50) N/cm	U=1.5%FS		
37	*Pendulum Impact Testing Machines	Energy	V. R. of Pendulum Impact Testing Machines JJG 145	(1～30)J	U_{rel}=2.0%		
				(30～110)J	U_{rel}=1.9%		
				(110～300)J	U_{rel}=1.8%		
		Length		（0.1～1000）mm	U=0.02mm		
38	*Cantilever-Beam(Izod-Type)Impact Testing Machine	Energy	V. R. of Cantilever-Beam(Izod-Type) Impact Testing Machine JJG 608	(1～150)J	U_{rel}=0.5%		
		Length		（0.01～25）mm	U=0.01mm		
				（50～1000）mm	U=0.06mm		
39	*Calibration Instrument for Torque Wrenches	Torque	V. R. of Calibration Instrument for Torque Wrenches JJG 797	(0.2～100)Nm	U_{rel}=0.18%		
40	*Working Torque-meters	Torque	V. R. of Working Torque-meters JJG1146	(0.1～2000)Nm	U_{rel}=0.4%		
41	Torque Wrenches	Torque	V. R.of Torque Wrenches JJG 707	(0.2～500)Nm	U_{rel}=0.5%		
				(500～2000)Nm	U_{rel}=0.4%		
42	*Electric and pneumatic torque wrenchs	Torque	C. S. for Electric and Pneumatic Torque Wrenches JJF 1610	(0.5～180)Nm	U_{rel}=1.2%		
43	*Equipment of Power Measuring	Torque	V. R.of Equipment of Power Measuring JJG 653	(0.01～500)Nm	U_{rel}=0.5%	Non-contact type only(grade B、grade C)	
		Rotate speed		(1～30000)r/min	U_{rel}=0.2%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
44	*Metallic Brinell Hardness Testers	Hardness	V. R.of Metallic Brinell Hardness Testers JJG 150	(90～125)HBW	U_{rel}=2.0%		
				(125～225)HBW	U_{rel}=1.9%		
				(225～350)HBW	U_{rel}=2.0%		
45	*Portable Brinell Hardness Tester	Hardness	C. S. for Portable Brinell Hardness Tester JJF 1595	(70～300)HBW	U_{rel}=1.7%		
		Force		（0.06～30）kN	U_{rel}=0.6%		
46	*Portable Rockwell Hardness Tester	Hardness	C. S. for Portable Rockwell Hardness Tester JJF 1594	(20～70)HRC	U=1.0HRC		
				(80～100)HRBW	U=1.2HRBW		
				(75～88)HRA	U=1.0HRA		
		Force		（0.08～1.5）kN	U_{rel}=0.6%		
47	*Metallic Rockwell Hardness Testing Machines	Hardness	V. R.of Metallic Rockwell Hardness Testing Machines(Scales A, B, C, D, E, F, G, H, K, N, T) JJG 112	(20～30)HRC	U=0.7HRC		
				(35～55)HRC	U=0.6HRC		
				(60～70)HRC	U=0.5HRC		
				(45～88) HRA	U=0.6HRA		
				(85～100) HRBW	U=0.7HRBW		
				(89～91) HR15N	U=0.9HR15N		
				(42～54) HR30N	U=1.0HR30N		
				(74～80) HR30N	U=0.9HR30N		
				(32～61) HR45N	U=1.1HR45N		
				(88～93) HR15TW	U=1.0HR15TW		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				(70～82) HR30TW	U=0.9HR30TW		
		Time		（0.1～20）s	U=0.4s		
		Length		（0～2）mm	U=0.6 μ m		
		Angle		（119～121）°	U=0.08°		
48	*Ultrasonic Hardness Testers	Hardness	C. S. for Ultrasonic Hardness Testers JJF1436	(175～200)HV	U_{rel}=5.0%		
				(200～400)HV	U_{rel}=3.0%		
				(400～600)HV	U_{rel}=1.7%		
				(600～800)HV	U_{rel}=1.4%		
				(20～70)HRC	U=0.5HRC		
				(85～650)HBW	U_{rel}=3.0%		
		Force		(1～98)N	U_{rel}=1.2%		
49	*Plastic Rock Well Hardness Testing Machine	Hardness	V. R.of Plastic Rock Well Hardness Testing Machine JJG 884	(70～94)HRE	U=0.9HRE		
				(100～120)HRL	U=0.8HRL		
				(114～125)HRR	U=0.9HRR		
50	*Metallic Webster Hardness Testing Machines	Hardness	V. R.of Metallic Webster Hardness Testing Machines JJG 944	(8～17)HWA	U=0.3HWA		
				(4～6)HWB	U=0.3HWB		
51	*Equotip Hardness Tester	Mass	V. R.of Equotip Hardness Tester JJG 747	(0～30)g	U=0.08g		
		Hardness		(490～570)HLD	U=5HLD		
				(590～670)HLD	U=6HLD		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				(750～830)HLD	U=6HLD		
				(460～540)HLG	U=6HLG		
				(550～630)HLG	U=6HLG		
52	*Shore Hardness Tester	Hardness	V. R.of Shore Hardness Tester JJG 346	(25～140)HSD	U=0.8HSD		
53	*Metal Vickers Hardness Testers	Hardness	V. R.of Metal Vickers Hardness Testers JJG 151	(700～800) HV5	U_{rel}=2.7%		
				(175～225) HV5	U_{rel}=3.9%		
				(400～600) HV10	U_{rel}=2.6%		
				(400～600) HV30	U_{rel}=2.6%		
				(700～800) HV1	U_{rel}=3.5%		
				(700～800) HV0.5	U_{rel}=4.5%		
				(700～800) HV0.2	U_{rel}=5.0%		
				(400～600) HV0.1	U_{rel}=5.5%		
				(175～225) HV0.05	U_{rel}=6.0%		
54	Shore A Durometers	Hardness	V. R.of Shore A Durometers JJG 304	(0～100)HA	U=0.2HA		
		Length		（0.5～2）mm	U=0.01mm		
		Angle		（34～36）°	U=0.08°		
		Force		（0.5～8.5）N	U=0.03N		
55	Shore D Durometer	Hardness	V. R.of Shore D Durometer JJG 1039	(0～100)HD	U=0.2HD		
		Length		（0.05～4）mm	U=0.005mm		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Angle		（28～32）°	U=0.08°		
		Force		（0.05～45）N	U=0.03N		
56	*Type A Barcol Hardness Testers	Hardness	V. R.of Type A Barcol Hardness Testers JJG 610	(42～52)HBa	U=0.7HBa		
				(82～88)HBa	U=1.2HBa		
57	*Shore Durometer Calibrating Apparatus	Force	C. S. for Shore Durometer Calibrating Apparatus SBJZ-ZB-L002	1959mN	U=2mN	g=9.7946m/s^2	
				4897mN	U=2mN		
				9795mN	U=3mN		
				19589mN	U=5mN		
				48973mN	U=8mN		
		Length		(0～3)mm	U=0.5 μm		
58	Vibration Displacement Transducer	Displacement	V. R.of Vibration Displacement Transducer JJG 644	(0.1～5)mm, (3～2000)Hz	U_{rel}=1.8%		
59	Electromagnetic Velocity Transducer	Velocity	V. R.of Electromagnetic Velocity Transducer JJG 134	(0.1～100)cm/s, (3～2000)Hz	U_{rel}=1.6%		
		Velocity sensitivity		(1～30)mV/(mm • s^{-1}), (3～2000)Hz	U_{rel}=1.6%		
60	Piezoelectric accelerometer	Acceleration	V. R.of Piezoelectric Accelerometer JJG 233	reference point:100m/s^2,160Hz	U_{rel}=0.9%	Comparative method only	
				Passband:（1～441）m/s^2,(2～52000)Hz	U_{rel}=1.2%		
61	Portable Vibration Calibrator	Acceleration	V. R.of Portable Vibration Calibrator JJG1062	(1～980)m/s^2,(3～3570)Hz	U_{rel}=1.0%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				(1～980)m/s^2,(3570～5300)Hz	U_{rel}=1.5%		
		Frequency		(3～5300)Hz	U_{rel}=0.01%		
		Distortion factor		1%～20%	U_{rel}=1%		
62	*Standard Vibrators	Frequency	V. R.of Standard Vibrators JJG 298	(3～5000)Hz	U_{rel}=0.02%		
		Acceleration		(1～980)m/s^2,(3～5000)Hz	U_{rel}=2.3%		
		Distortion factor		1%～50%	U_{rel}=1%		
		Transverse vibration ratio		0.1%～50%	U_{rel}=4.0%		
		Voltage		10mv～10v , (1～10)kHz	U_{rel}=0.1%		
63	*Electrodynamic Vibration Testing Systems	Frequency	V. R.of Electrodynamic Vibration Testing Systems JJG 948	(1～5000)Hz	U_{rel}=0.02%		
		Acceleration		(1～980)m/s^2,(1～5000)Hz	U_{rel}=2.6%		
		Distortion factor		0.1%～50%	U_{rel}=1%		
		Velocity		Sinusoidal：(0.001～10)m/s	U_{rel}=2.1%		
				Change of impact velocity：(0.1～30)m/s	U_{rel}=3.2%		
		Displacement		(0.001～200)mm	U_{rel}=2.1%		
		PSD		(0.001～100)m^2/s^3	U_{rel}=4.7%		
		Impact acceleration amplitude		(30～3000)m/s^2	U_{rel}=4.7%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		pulse duration		(3～50)ms	U_{rel}=3.2%		
		Random dynamic range		(20～100)dB	U=0.3dB		
		Sound pressure level		(30～130)dB	U=0.7dB		
		Vibration control channel consistency		(0.01～3)dB	U=0.01dB		
		Magnetic Induction		(0.01～20)mT	U_{rel}=2.0%		
		Force		(1.0～700)kN	U_{rel}=2.8%		
64	*Mechanical Vibration Generator for Tseting	Frequency	V. R.of Mechanical Vibration Generator for Tseting JJG 189	(3～2000)Hz	U_{rel}=0.2%		
		Displacement		(0.1～50)mm	U_{rel}=2.6%		
		Distortion factor		1%～50%	U_{rel}=1%		
		Acceleration		(1～200)m/s^2	U_{rel}=2.6%		
		Sound Pressure Level		(30～130)dB	U=0.7dB		
65	*Hydraulic Vibration Testing System	Frequency	V. R.of Hydraulic Vibration Testing System JJG 638	(1～5000)Hz	U_{rel}=0.02%		
		Acceleration		(1～200)m/s^2	U_{rel}=3.0%		
		Distortion factor		0.1%～50%	U_{rel}=3%		
		Velocity		(0.001～10)m/s	U_{rel}=2.1%		

The scope of the accreditation in Chinese remains the definitive version.

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Displacement		(0.1～500)mm	U_{rel}=2.1%		
		PSD		(0.001～100)m^2/s^3	U_{rel}=4.7%		
		Noise		(30～130)dB	U=0.7dB		
66	*Shock and Bump Testing Machines	Acceleration	V. R.of Shock and Bump Testing Machines JJG 1174	(30～1000) m/s^2	U_{rel}=5%		
				(1000～50000) m/s^2	U_{rel}=7%		
		Time		(0.3～60)ms	U_{rel}=5%		
		Velocity		(0.01～20)m/s	U_{rel}=4.2%		
		Repeat frequency of shock		(2～100) min^{-1}	U_{rel}=1.0%		
67	*Electrodynamic Horizontal Vibration Generator for Testing	Frequency	V. R.of Electrodynamic Horizontal Vibration Generator for Testing JJG 1000	(1～4000)Hz	U_{rel}=0.05%		
		Acceleration		(1～980)m/s^2，(1～4000)Hz	U_{rel}=2.6%		
		Displacement		(0.001～300)mm	U_{rel}=2.6%		
		Distortion factor		0.1%～50%	U_{rel}=1%		
		Sound pressure level		(30～130)dB	U=0.7dB		
68	Vibration Meters	Acceleration	V. R.of Vibration Meters JJG 676	(1～441)m/s^2，(2～6000)Hz	U_{rel}=2.0%	Comparative method only	
		Speed		(0.1～1500)mm/s, (2～1000)Hz	U_{rel}=2.0%		
		Displacement		(0.01～16)mm ,(2～500)Hz	U_{rel}=2.0%		
		Frequency		(2～6000)Hz	U_{rel}=0.012%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
69	*Spring Hammers	Force	C. S. for Spring Hammers JJF 1475	10N	U_{rel}=0.28%		
		Length		(9.8～10.2)mm	U=0.06mm		
		Energy		(0.18～0.22)J	U_{rel}=2.0%		
				(0.32～0.38)J	U_{rel}=2.0%		
				(0.46～0.54)J	U_{rel}=2.5%		
				(0.65～0.75)J	U_{rel}=2.3%		
				(0.95～1.05)J	U_{rel}=2.2%		
				(1.95～2.05)J	U_{rel}=2.1%		
70	Tachometers	Rotate speed	V. R.of Tachometers JJG 105	(20～30000)r/min	U_{rel}=0.02%		
71	*Table Friability Surveymeters	Rotate speed	C. S. for Table Friability Surveymeters JJF(Lu) 131	(1～200)r/min	U_{rel}=1.5%		
		Count		(1～100)round	U=1 round		
		Length		(150～160)mm	U=0.4mm		
72	*Flow Integration Meters	DC Electric current	V. R.of Flow Integration Meters JJG 1003	(0.1～20)mA	U_{rel}=0.04%		
		DC Voltage		(0.01～5)V	U_{rel}=0.04%		
		Resistance		(1～10000) Ω	U_{rel}=0.04%		
		Frequency		(0.1～10)kHz	U_{rel}=0.02%		
73	*Type Pressure Gauges	Pressure	V. R.of Type Pressure Gauges JJG 927	(0～2.5)MPa	U=0.7%FS		
74	*Simulation Test-bed for Road Transportation	Frequency	C. S. for Simulation Test-bed for Road Transportation JJF 1271	(3～400)Hz	U_{rel}=2.0%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Acceleration		(0.1～100)m/s^2	U_{rel}=3.0%		
75	*Tablet Hardness Tester Needle Tube	Force	C.S. for Tablet Hardness Tester Needle Tube JJF(E) 46	1N～500N	U_{rel}=0.1%		
76	*Analogue Indicating Weighing Instruments	Mass	V. R of Analogue Indicating Weighing Instruments JJG 13	（0.02～100）kg	U=1.2g～0.5kg		
77	*Stature and Weight Instrument	Mass	C. S for Stature and Weight Instrument JJF（E）96	Analogue Indicating：（0.1～300）kg	U=（0.012～1.2）kg		
				Digtial Indicating：（0.1～30）kg	U=（0.006～0.29）kg		
		Length		（20～200）cm	U=0.12cm		
78	Liquid Level Gauges	Length	V.R of Liquid Level Gauges JJG 971	Vertical method: (0～2000)mm	U=0.7mm		
				Horizontal Simulation method: (0.1～50)m	U_{rel}=0.013%		
79	*Constant Revolution Speed Sources	Rotate speed	C. S. for Constant Revolution Speed Sources JJF(Ji) 146	(100～300)r/min	U_{rel}=0.1%		
80	Plastic Containers	Volume	C. S. for Plastic Containers JJF(Ji) 108	(0.1～1)mL	U=（0.001～0.003）mL		
				(1～10)mL	U=（0.003～0.010）mL		
				(10～100)mL	U=（0.010～0.03）mL		
				(100～500)mL	U=（0.03～0.08）mL		
				(500～1000)mL	U=（0.08～0.14）mL		
				(1000～2000)mL	U=（0.14～0.22）mL		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				(2000～5000)mL	U=（0.22～1.4）mL		
81	Bottle Top Dispenser	Volume	C. S. for Bottle Top Dispenser JJF(Ji) 181	(0.1～10)mL	U=0.007mL		
				(10～50)mL	U=0.03mL		
				(50～100)mL	U=0.05mL		
				(100～200)mL	U=0.08mL		
82	Micro sampling syringe	Volume	V. R.of Micro sampling syringe JJG(Ji) 166	(0.1～1) μL	U=0.016 μL		
				(1～25) μL	U=0.08 μL		
				(25～100) μL	U=0.2 μL		
				(100～1000) μL	U=1.0 μL		
83	Soil meter	Density	V. R.of Working Glass Hydrometers JJG 42	Type I：(-5～50）s°	U=0.2s°	Only use direct comparison method.	
				Type II：0.995～1.030	U=0.0005		
84	*Abrasion Resistance Instruments	Length	C. S. for Abrasion Resistance Instruments JJF(Zhe)1070	（0.01～25）mm	U=0.01mm		
		Angle		（80～100）°	U=0.2°		
		Rotational speed		（100～300）r/min	U_{rel}=0.2%		
		Mass		（500～2000）g	U=0.1g		
		Time		（0.1～1200）s	U=0.3s		
85	Pile Dynamic Measuring Instrument	Acceleration	V. R.of Pile Dynamic Measuring Instrument JJG 930	(2～450)m/s^2，(2～5000)Hz	U_{rel}=2.0%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
86	*Concrete Batching Scales	Mass	V. R.of Concrete Batching Scales JJG 1171	（0.2～3000）kg	U=（0.01～0.7）kg		
87	*Asphalt Mixture and Cement Concrete Mixing Device Measure System	Mass	V.R. of Asphalt Mixture and Cement Concrete Mixing Device Measure System JJG（JT）071	（2～3000）kg	U_{rel}=0.08%	Only for (static) of the indication of the measuring device for the preparation of component materials	
88	*Density of Abrasive Grains Testers	Volume	C. S. for Density of Abrasive Grains Testers JJF（JX）1076	（195～205）cm^3	U=0.08cm^3	Only for ordinary abrasive bulk density measuring instrument	
		Length		（10～300）mm	U=0.03mm		
89	*laboratory oscillation-type liquid density meters	Density	Calibration Specification for Laboratory Oscillation-type Liquid Density Meters JJF 2165	(650～2000)kg/m^3	U=0.06kg/m^3		
90	*AutomaticPipetting Workstation	Volume	Calibration Specification for AutomaticPipetting Workstation JJF(Ji) 233	(1～5) μL	U=(0.06～0.15) μL		
				(5～10) μL	U=(0.15～0.24) μL		
				(10～100) μL	U=(0.24～0.6) μL		
				(100～1000) μL	U=(0.6～2.6) μL		
91	*Automated Dilution and	Volume	Calibration Specification for Automated Dilution and	(1～10) μL	U=(0.06～0.32) μL		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
	Standard SolutionPreparation Instrument		Standard SolutionPreparation Instrument JJF(Ji) 189	(10～100) μL	U=(0.32～0.7) μL		
				(100～1000) μL	U=(0.7～3.0) μL		
				(1000～10000) μL	U=(3.0～12) μL		
92	*Elevator Overspeed Governor Testers	Speed	Calibration Specification for Elevator Overspeed Governor Testers JJF 1374	(0.1～10)m/s	U_{rel}=0.18%		
93	*Helium Mass Spectrometer Leak Detector	Leak rate	Calibration Specification of Helium Mass Spectrometer Leak Detector JJF(JG) 186	$(5\times10^{-10}$～$5\times10^{-5})$Pa·m^3/s	U_{rel}=13%	Using Only the Vacuum Standard Leakage Set Method	
		Calibration coefficient		0.5～1.5	U_{rel}=13%		
94	LX-C Micropore Material Durometers	Length	Calibration Specification for LX-C Micropore Material Durometers JJF(Su) 285	(0.02～2.52)mm	U=0.006mm		
		Force		(0.5～8.5)N	U=0.03N		
95	AO Durometers	Hardness	Calibration Specification for Shore AO Durometers JJF 1312	(0～100)HAO	U=0.3HAO		
		Length		(0.02～5.60)mm	U=(0.006～0.02)mm		
		Force		(0.5～8.1)N	U=0.03N		
96	*Filter Integrity Testers	Pressure	Calibration Specification for Filter Integrity Testers JJF 2142	(0～1000)kPa	U=0.15%FS		
		Flow		(0.8～100)mL/min	U_{rel}=1.4%		
97	*Screen Tension Meter Calibration Instruments	Force	Calibration Specification of Screen Tension Meter Calibration Instruments JJF(Su) 304	(100～1500)N	U_{rel}=0.15%		
		Length		(100～300)mm	U=0.15mm		
		Tension		(7～50)N/cm	U=0.15%FS		
98	*Mass Comparators	Weight	CalibrationSpecificationforMassComparators JJF 1326	Repeatability:1g～100g	U=(0.1～1.6) μg		

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№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				Repeatability:1mg～1000g	U=(1.6～23) μ g		
				Load unbalance error:1mg～1000g	U=(1.0～6.0) μ g		
				Load unbalance error:100g～1kg	U=(6.0～46) μ g		
				Local indication error:1g～100g	U=(2.1～18) μ g		
				Local indication error:100g～1kg	U=(18～60) μ g		
99	Aneroid Barometers and Aneroid Barographs	Pressure	Verification Regulation of Aneroid Barometers and Aneroid Barographs JJG 272	(500～1060)hPa	U=0.7hPa		
Electromagnetism measuring instruments(including magnetism)							
1	*Charge Amplifiers	Voltage	V.R.of Charge Amplifiers JJG338	10mV～10V	U_{rel}=0.1%		
		Amplitude Frequency Characteristic		10mV～10V,(0.01～20)kHz	U_{rel}=0.1%		
		Distortion factor		0.01%～100%	U_{rel}=5%		
2	*Instantaneous Discontinuity Testing Instruments	Resistance	Calibration Specification of Instantaneous Discontinuity Testing Instruments JJF(DZ)0042	10m Ω ～99.99 Ω	U_{rel}=1.0%		
		Time		(0.01～99.99) μ s	U_{rel}=0.2%		
3	*Process Calibrators	IN-DC resistor	Calibration specification for process calibrators JJF 1472	(10～400) Ω	U_{rel}=0.012%		
				(400～4000) Ω	U_{rel}=0.010%		
		IN-DC		(0.2～2)mA	U_{rel}=0.013%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		current		(2～100)mA	U_{rel}=0.015%		
		IN-DC voltage		(10～1000)mV	U_{rel}=0.007%		
				(1～50)V	U_{rel}=0.006%		
		IN-AC voltage		(10～1000)mV (10Hz～20kHz)	U_{rel}=0.02%		
				(1～20)V (10Hz～20kHz)	U_{rel}=0.01%		
		IN-Freqency		10Hz～50kHz	U_{rel}=0.009%		
		IN-Temperature(TC)		(-100～1300)℃	U=0.4℃		
		IN-Temperature (RTD)		(-100～800)℃	U=0.3℃		
		OUT-DC resistor		(10～400) Ω	U_{rel}=0.007%		
				(400～10000) Ω	U_{rel}=0.006%		
		OUT-DC current		(0.2～2)mA	U_{rel}=0.008%		
				(2～24)mA	U_{rel}=0.009%		
		OUT-DC voltage		(10～1000)mV	U_{rel}=0.006%		
				(1～100)V	U_{rel}=0.005%		
		IN-Temperature (TC)		(-100～1300)℃	U=0.2℃		

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№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		IN-Temperature (RTD)		(-100～800)℃	U=0.2℃		
4	*DC Standard Voltage Source	DC Voltage	Verification regulation of DC Standard Voltage Source JJG（JG）193	10mV～330mV	U_{rel}=0.0019%		
				0.33V～3.3V	U_{rel}=0.0015%		
				3.3V～330V	U_{rel}=0.0015%		
				330V～1000V	U_{rel}=0.0016%		
5	*DC Voltage Stable Source	DC Voltage	DC Voltage Stable Source JJG(JG) 77	0.1V～100V	U_{rel}=0.003%		
				100V～1000V	U_{rel}=0.002%		
		DC Current		0.01A～20A	U_{rel}=0.02%		
				20A～200A	U_{rel}=0.03%		
		Regulation rate of regulated power supply		0.01%～10%	U_{rel}=0.006%		
		Regulated load adjustment rate		0.01%～10%	U_{rel}=0.01%		
		Ripple voltage		0.1mV～1000mV	U_{rel}=2%		
6	*Precise AC Voltage Calibration Source	AC Voltage	V.R.of Precise AC Voltage Calibration Source JJG 410	2V～400V(45Hz～1kHz)	U_{rel}=0.2%		
		Frequency		40Hz～1kHz	U_{rel}=0.015%		
		Distortion factor		0.01%～10%	U=0.3%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
7	*DC Digital Voltmeter	DC Voltage	Verification regulation of DC Digital Voltmeter JJG（JG）198	10mV～100mV	U_{rel}=0.009%		
				0.1V～10V	U_{rel}=0.0015%		
				10V～100V	U_{rel}=0.0016%		
				100V～1000V	U_{rel}=0.0017%		
8	*AC Digital Voltmeter	AC Voltage	V.R.of AC Digital Voltmeter JJG(JG)72	10mV～100mV (50Hz)	U_{rel}=0.11%		
				10mV～100mV (1kHz)	U_{rel}=0.11%		
				0.1V～100V (50Hz)	U_{rel}=0.032%		
				0.1V～100V (1kHz)	U_{rel}=0.032%		
				100V～1000V (50Hz)	U_{rel}=0.038%		
				100V～1000V (1kHz)	U_{rel}=0.038%		
9	*D.C.Potentiometers	DC Voltage	Verification Regulation Of D.C.Potentiometers JJG 123	10mV～200mV	U_{rel}=0.01%		
				0.2V～2V	U_{rel}=0.003%		
10	*Digital High Voltmeter	DC Voltage	Verification Regulation of Digital High Voltmeter DL/T973	0.1kV～50kV	U_{rel}=0.1%		
		AC Voltage		0.1kV～50kV (50Hz,60Hz)	U_{rel}=0.2%		
11	High Voltage Electrostatic Voltmeters	DC Voltage	V.R.of High Voltage Electrostatic Voltmeters JJG 494	0.1kV～50kV	U_{rel}=0.1%		
		AC Voltage		0.1kV～50kV (50Hz,60Hz)	U_{rel}=0.2%		
12	*DC Resistive Volt Ratio Box	DC Voltage	V.R.of the DC Resistive Volt Ratio Box JJG 531	(0.01～1000)V	U_{rel}=0.005%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
13	*High-voltage Divider At Power Frequency	AC Voltage	Verification Regulation of High-voltage Divider At Power Frequency JJG 496	0.1kV～50kV(50Hz)	U_{rel}=0.2%		
14	DC High voltage Divider	DC Voltage	Verification Regulation of DC High voltage Dividers JJG 1007	0.1kV～50kV	U_{rel}=0.1%		
15	*AC Voltage Stable Source	Frequency	Calibration specification for Stable Character of AC Voltage Stable Source JJF(JG) 85	10Hz～40Hz	U_{rel}=0.03%		
				40Hz～1kHz	U_{rel}=0.012%		
		AC Voltage		0.1V～300V (40Hz～1kHz)	U_{rel}=0.12%		
		Rate of adjustment of supply voltage		0.01%～10%	U_{rel}=0.12%		
		Load adjustment rate		0.01%～10%	U_{rel}=0.12%		
		Degree of distortion		0.01%～10%	U=1.2dB		
		Efficiency		0.1%～100%	U=0.5%		
16	contactless electrostatic voltage measuring instrument	Voltage	Calibration specification for contactless electrostatic voltage measuring instrument JJF 1517	0.1kV～20kV	U_{rel}=3%		
17	*Withstanding Voltage Testers	DC Voltage	V.R. of Withstanding Voltage Testers JJG 795	0.1kV～15kV	U_{rel}=0.6%		
		AC voltage		0.1kV～15kV(50Hz, 60Hz)	U_{rel}=0.6%		
		DC Current		0.01mA～200mA	U_{rel}=0.6%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		AC current		0.01mA～200mA(50Hz,60Hz)	U_{rel}=0.6%		
		Time		(0.01～999.99)s	U=0.8%T+0.03s		
18	*DC Standard Current Source	DC Current	V.R.for Direct Current Standard Source JJG(JG) 69	0.01A～20A	U_{rel}=0.05%		
				20A～200A	U_{rel}=0.07%		
				200A～2000A	U_{rel}=0.12%		
19	*DC Digital Amperemeter	DC Current	Verification regulation of DC Digital Amperemete JJG（JG）197	10μA～100μA	U_{rel}=0.11%		
				0.1mA～100mA	U_{rel}=0.012%		
				0.1A～1A	U_{rel}=0.025%		
				1A～3A	U_{rel}=0.031%		
				3A～10A	U_{rel}=0.058%		
				10A～20A	U_{rel}=0.077%		
20	*AC Digital Amperemeter	AC Current	V.R.of AC Digital Ampere-meter JJG(JG)68	29μA～100μA (50Hz)	U_{rel}=0.43%		
				29μA～100μA (1kHz)	U_{rel}=0.38%		
				0.1mA～1mA (50Hz)	U_{rel}=0.27%		
				0.1mA～1mA (1kHz)	U_{rel}=0.26%		
				1mA～100mA (50Hz)	U_{rel}=0.071%		
				1mA～100mA (1kHz)	U_{rel}=0.070%		
				100mA～1A (50Hz)	U_{rel}=0.075%		
				100mA～1A (1kHz)	U_{rel}=0.074%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				1A～3A (50Hz)	U_{rel}=0.078%		
				1A～3A (1kHz)	U_{rel}=0.077%		
				3A～10A (50Hz)	U_{rel}=0.16%		
				3A～10A (1kHz)	U_{rel}=0.15%		
				10A～20A (50Hz)	U_{rel}=0.19%		
				10A～20A (1kHz)	U_{rel}=0.17%		
21	*Clamp Ammeters	DC Current	C. S. of Clamp Ammeters JJF 1075	analog:1A～20A	U_{rel}=0.4%		
				analog:2A～1000A	U_{rel}=0.6%		
				digitale： 1A～20A	U_{rel}=0.3%		
				digitale： 20A～1000A	U_{rel}=0.6%		
		AC Current		analog:1A～20A (45Hz～60Hz)	U_{rel}=0.5%		
				analog:20A～1000A (45Hz～60Hz)	U_{rel}=0.7%		
				digitale： 1A～20A(45Hz～60Hz)	U_{rel}=0.3%		
				analog:20A～1000A (45Hz～60Hz)	U_{rel}=0.6%		
22	*MagneticYokeDetectors	DC current	Calibration specification of Magnetic YokeDetectors JJF 1458	(0～20)A	U=0.3A		
		Lifting Power		(1～300)N	U_{rel}=1%		
23	*instrument Current Transformers	AC Current	Verification Regulation of instrument Current Transformers JJG 313	(5～5000)/5A (5%～120%)(50Hz)	U_{rel}=0.07%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		phase		(0～900)′，5%～120%(50Hz)	U=2′		
24	Leakage Current Meter	AC Current	V.R. of Leakage Current Testers JJG 843	(0.1～2)mA (45Hz～60Hz)	U=0.004mA		
				(2～20)mA (45Hz～60Hz	U=0.04mA		
		AC Voltage		(0.1～250)V (45Hz～60Hz)	U=0.8V		
		DC Current		(0.1～2)mA	U=0.004mA		
				(2～20)mA	U=0.04mA		
		DC Voltage		(0.1～250)V	U=0.8V		
		Input Resistance		100Ω～1MΩ	U_{rel}=0.3%		
25	*Electroly-tic Capacitor Leakage Current Meter	DC Voltage	Electrolytic Capacitor Leakage Current Meter JJG(DZ) 306003	10V～1000V	U_{rel}=0.08%		
		DC Current		0.1μA～200μA	U_{rel}=0.6%		
				200μA～30mA	U_{rel}=0.4%		
26	Hall effect current sensor	DC Current	Calibration specification of Hoare current sensor JJF(machinery) 1067	(1 ～100)A	U_{rel}=0.02%		
				(100 ～2000)A	U_{rel}=0.03%		
		AC Current		(1 ～100)A，(45～60)Hz	U_{rel}=0.07%		
				(100 ～2000)A，(45～60)Hz	U_{rel}=0.08%		
				(2000 ～6000)A，(45～60)Hz	U_{rel}=0.6%		
27	*DC Standard Resistors	Resistance	V.R. of DC Standard Resistors JJG 166	0.01Ω～0.1Ω	U_{rel}=0.2%		

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№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				0.1 Ω ～1 Ω	U_{rel}=0.05%		
				1 Ω ～10 Ω	U_{rel}=0.01%		
				10 Ω ～100 Ω	U_{rel}=0.004%		
				100 Ω ～100k Ω	U_{rel}=0.002%		
				100k Ω ～1M Ω	U_{rel}=0.005%		
				1M Ω ～10M Ω	U_{rel}=0.01%		
28	*DC Resistance Box	Resistance	V. R.of D.C. Resistance Boxes JJG 982	0.01 Ω ～0.1 Ω	U_{rel}=0.2%		
				0.1 Ω ～1 Ω	U_{rel}=0.05%		
				1 Ω ～10 Ω	U_{rel}=0.01%		
				10 Ω ～100 Ω	U_{rel}=0.005%		
				100 Ω ～100000 Ω	U_{rel}=0.002%		
29	*DC Digital Ohmmeter	Resistance	Verification regulation of DC Digital Ohmmeter JJG（JG）199	1 Ω ～10 Ω	U=0.0045%Rx+0.01 Ω		
				10 Ω ～100 Ω	U=0.0035%Rx+0.015 Ω		
				100 Ω ～100k Ω	U=0.0035%Rx+1 Ω		
				100k Ω ～1M Ω	U=0.0035%Rx+10 Ω		
				1M Ω ～10M Ω	U=0.0015%Rx+0.15k Ω		
				10M Ω ～100M Ω	U=0.0055%Rx+3k Ω		
30	*DC Low Resistance Meters	Resistance	V.R.of DC Low Resistance Meters JJG 837	(1～20) μ Ω	U_{rel}=1.3%		
				(20～200) μ Ω	U_{rel}=0.6%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				(0.2～2)m Ω	U_{rel}=0.13%		
				(2～20) m Ω	U_{rel}=0.06%		
				20m Ω ～20k Ω	U_{rel}=0.013%		
				20k Ω～1M Ω	U_{rel}=0.024%		
				1m Ω， 10m Ω， 100m Ω， 1 Ω， 10 Ω， 100 Ω， 1k Ω， 10k Ω， 100k Ω	U_{rel}=0.012%		
31	*D.C Bridges	Resistance	V.R.of D.C Bridges JJG 125	(0.01～0.1) Ω	U_{rel}=6%		
				(0.1～1) Ω	U_{rel}=1.2%		
				(1～10) Ω	U_{rel}=0.12%		
				(10～100) Ω	U_{rel}=0.04%		
				100 Ω ～100k Ω	U_{rel}=0.03%		
32	*Insulation Resistance	Insulation Resistance	V.R. of Megohmmeter JJG 622	0.1M Ω ～10M Ω	U_{rel}=0.3%		
				10M Ω ～100M Ω	U_{rel}=0.6%		
				100M Ω ～1G Ω	U_{rel}=1.2%		
				1G Ω ～10G Ω	U_{rel}=3%		
		Terminal voltage		50V～10000V	U_{rel}=0.3%		
33	*Electronic Insulating Resistance Meters	Insulation Resistance	V.R. of Electronic Insulating Resistance meters JJG 1005	0.1M Ω ～10M Ω	U_{rel}=0.3%		
				10M Ω ～100M Ω	U_{rel}=0.6%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				100MΩ～1GΩ	U_{rel}=1.2%		
				1GΩ～1000GΩ	U_{rel}=3%		
		Charging Voltage		10V～10000V	U_{rel}=0.6%		
34	*High Insulation Resistance Meters	Resistance	C.S. for High Insulation Resistance Meters JJF 2225	1MΩ～100MΩ	U_{rel}=0.6%		
				100MΩ～1GΩ	U_{rel}=1.2%		
				1GΩ～1000GΩ	U_{rel}=3%		
		Terminal voltage		25V～1kV	U_{rel}=0.3%		
35	*Earth Resistance Meters	Resistance	V.R.of Earth Resistance Meters JJG 366	0.01Ω～0.1Ω	U_{rel}=7%		
				0.1Ω～1Ω	U_{rel}=1.2%		
				1Ω～1000Ω	U_{rel}=0.7%		
36	*Earth-Continuity Testers	Resistance	V.R. of Earth-Continuity Testers JJG 984	(0.01～0.1)mΩ	U_{rel}=12%		
				(0.1～1)mΩ	U_{rel}=5%		
				(1～10)mΩ	U_{rel}=0.8%		
				(10～1000)mΩ	U_{rel}=0.7%		
		Current		(0.1～60)A	U_{rel}=0.4%		
37	*Clamp Earth Resistance Meters	Resistance	V.R. of Clamp Earth Resistance Meters JJG 1054	0.100Ω～9.999Ω	U_{rel}=0.6%		
				10.00Ω～99.99Ω	U_{rel}=0.5%		
				100.0Ω～199.9Ω	U_{rel}=0.7%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				200 Ω ～400 Ω	U_{rel}=1%		
				400 Ω ～600 Ω	U_{rel}=3%		
				600 Ω ～1111 Ω	U_{rel}=5%		
38	*Wrist Strap Tester	Insulation Resistance	C.S. for Wrist Strap Tester JJF(DZ) 31502	0.01M Ω ～10M Ω	U_{rel}=1.5%		
				10M Ω ～100M Ω	U_{rel}=2%		
				100M Ω ～1G Ω	U_{rel}=3%		
39	*Resistance	Resistance	C.S.for Surface Resistance Tester JJF 1285	0.001M Ω ～10M Ω	U_{rel}=0.3%		
				10M Ω ～100M Ω	U_{rel}=0.6%		
				100M Ω ～1G Ω	U_{rel}=1.2%		
				1G Ω ～1000G Ω	U_{rel}=3%		
		Open circuit voltage		10V～250V	U_{rel}=0.3%		
40	*Loop Resistance Meters	Resistance	V.R. of Loop Resistance Testers JJG 1052	10 μ Ω ～2m Ω	U_{rel}=0.4%		
				2m Ω ～200m Ω	U_{rel}=0.2%		
		Current		(10～100)A	U_{rel}=0.3%		
41	DC Shunt	Resistance	V. R. of DC Shunts JJG 1069	(0.001～10) Ω	U_{rel}=0.08%		
42	*Air Ionizer	Voltage	Periodic Verification of Air Ionizers ANSI/ESDSP3.3,Calibration Specification for Ionizer JJF(DZ) 0110	(1～1000)V	U=3V		
		Time		(0.1～999.9)s	U=0.2s		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
43	*Charged Plate Monitor	Electrostatic voltage	Calibration Regulation of Charged Plate Monitor JJF(DZ) 31003	(0.1～1000)V	U_{rel}=0.3%		
		decay time		(0.01～60)s	U_{rel}=0.1%		
44	*Standard Digital Power Meters	AC Digital Powermeter	Calibration Specification for Standard Digital Power Meters JJF 2226	0.1W～20W (45Hz～65Hz)	U_{rel}=0.10%	Only calibrate AC Digital Powermeter	
				20W～500W(45Hz～65Hz)	U_{rel}=0.12%		
				500W～20kW(45Hz～65Hz)	U_{rel}=0.15%		
		AC Digital Voltmeter		(1～600)V(45Hz～65Hz)	U_{rel}=0.08%		
		AC Digital Ampere-meter		10mA～20A (45Hz～65Hz)	U_{rel}=0.09%		
45	*Digital electric parameters test meter	Frequency	Calibration Specification for Digital AC Electrical Parameters Meter JJF 1491	40Hz～1000Hz	U_{rel}=0.03%		
		AC Voltage		(1～600)V (40Hz～1kHz)	U_{rel}=0.08%		
		AC Current		10mA～20A (40Hz～1kHz)	U_{rel}=0.09%		
		AC Powermeter		500W～20kW (40Hz～1kHz)	U_{rel}=0.15%		
46	*Industry Frequency Singlephase Phase Meter	Phase	V.R.of Industry Frequency Singlephase Phase Meter JJG 440	Phase：(0～360)° (50Hz)	U=0.15°		
				Power factor：(0～1.000)(50Hz)	U=0.001		
47	*AC Impedance Parameter Testers	AC Voltage	C. S. of AC Impedance Parameter Testers JJF(Zhe) 1083	(10～1000)V (45～65)Hz	U_{rel}=0.10%		
		AC Current		(0.1～20)A (45～65)Hz	U_{rel}=0.12%		
		AC Power		1W～10kW(45～65)Hz	U_{rel}=0.15%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Frequency		(45～65)Hz	U_{rel}=0.02%		
		Phase		0° ～359.99°	U=0.02°		
48	*Motor Stator Testing System	DC Resistance	Calibration Specification for Motor Stator Testing System JJF(Min)1060	1mΩ～2mΩ	U_{rel}=0.13%		
				(2～20) mΩ	U_{rel}=0.06%		
				20mΩ～20kΩ	U_{rel}=0.02%		
		AC Voltage		(0.1～3)kV(45～65)Hz	U_{rel}=0.7%		
		AC Current		(0.1～100)mA(45～65)Hz	U_{rel}=0.8%		
		Insulation Resistance		(0.1～10)MΩ	U_{rel}=0.3%		
				(10～100)MΩ	U_{rel}=0.7%		
				(100～1000)MΩ	U_{rel}=0.8%		
		DC Voltage		(500～1000)V	U_{rel}=0.8%		
		Pulse voltage		(0.1～3)kV(45～65)Hz	U_{rel}=1.2%		
		Front time		(0.1～1.2) μs	U_{rel}=1.0%		
49	*Multifunction Calibrator	DC Voltage	Calibration Specification for Mulifunction Standard Sources JJF 1638	10mV～200mV	U=0.0011%Vx+1.0 μV		
				200mV～2V	U=0.0010%Vx+1.4 μV		
				2V～10V	U=0.00096%Vx+4.8 μV		
				10V～20V	U=0.0010%Vx+10 μV		
				20V～200V	U=0.0011%Vx+0.12mV		
				200V～1000V	U=0.0013%Vx+0.7mV		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		AC Voltage		10mV～200mV(40Hz～20kHz)	U=0.013%Vx+12 μ V		
				10mV～200mV(20kHz～50kHz)	U=0.043%Vx+12 μ V		
				10mV～200mV(50kHz～100kHz)	U=0.11%Vx+36 μ V		
				10mV～200mV(100kHz～300kHz)	U=0.13%Vx+36 μ V		
				10mV～200mV(300kHz～500kHz)	U=0.22%Vx+48 μ V		
				0.2V～2V(40Hz～20kHz)	U=0.01%Vx+8 μ V		
				0.2V～2V(20kHz～50kHz)	U=0.017%Vx+24 μ V		
				0.2V～2V(50kHz～100kHz)	U=0.034%Vx+96 μ V		
				0.2V～2V(100kHz～300kHz)	U=0.058%Vx+0.18mV		
				0.2V～2V(300kHz～500kHz)	U=0.14%Vx+0.5mV		
				2V～20V(40Hz～20kHz)	U=0.01%Vx+84 μ V		
				2V～20V(20kHz～50kHz)	U=0.017%Vx+0.24mV		
				2V～20V(50kHz～100kHz)	U=0.034%Vx+0.5mV		
				2V～20V(100kHz～300kHz)	U=0.072%Vx+1.7mV		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				2V～20V(300kHz～500kHz)	U=0.17%Vx+6mV		
				20V～200V(40Hz～20kHz)	U=0.011%Vx+1.2mV		
				20V～200V(20kHz～50kHz)	U=0.03%Vx+5mV		
				20V～200V(50kHz～100kHz)	U=0.072%Vx+12mV		
				200V～1000V(40Hz～10kHz)	U=0.0119%Vx+5mV		
		DC Current		10μA～200μA	U=0.007%Ix+11nA		
				200μA～2mA	U=0.007%Ix+11nA		
				2mA～20mA	U=0.007%Ix+0.11μA		
				20mA～200mA	U=0.007%Ix+11μA		
				200mA～2A	U=0.01%Ix+33μA		
				2A～10A	U=0.04%Ix+0.53mA		
				10A～20A	U=0.11%Ix+0.83mA		
		AC Current		(10～20)mA 40Hz～1kHz	U=0.018%Ix+0.4μA		
				(10～20)mA (1～5)kHz	U=0.077%Ix+6μA		
				(10～20)mA 5kHz～10kHz	U=0.2%Ix+11μA		
				(20～200)mA 40Hz～1kHz	U=0.02%Ix+5μA		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				(20～200)mA 1kHz～5kHz	U=0.08%Ix+60 μA		
				(20～200)mA 5kHz～10kHz	U=0.2%Ix+0.11mA		
				(0.20～2)A 40Hz～1kHz	U=0.083%Ix+44 μA		
				(0.2～2)A 1kHz～5kHz	U=0.094%Ix+0.11mA		
				(0.2～2)A 5kHz～10kHz	U=1.1%Ix+0.22mA		
				(2～10)A 40Hz～1kHz	U=0.051%Ix+0.19mA		
				(10～20)A 45Hz～100Hz	U=0.13%Ix+6mA		
				(10～20)A 100Hz～1kHz	U=0.17%Ix+6mA		
				(10～20)A 1kHz～5kHz	U=0.33%Ix+6mA		
		AC Current		1 Ω～10 Ω	U_{rel}=0.022%		
				10 Ω～100 Ω	U_{rel}=0.0054%		
				100 Ω～10k Ω	U_{rel}=0.0014%		
				10k Ω～100k Ω	U_{rel}=0.016%		
				100k Ω～1M Ω	U_{rel}=0.0028%		
				1M Ω～10M Ω	U_{rel}=0.005%		
				10M Ω～100M Ω	U_{rel}=0.015%		
50	*Calibrators for Electrical Meters	DC voltage	Calibration Sepecification of Calibrators for Electrical Meters JJF 1284	(10～200)mV	U_{rel}=0.003%		
				(0.2～1000)V	U_{rel}=0.002%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		AC voltage		10mV～1000V，(40Hz～2kHz)	U_{rel}=0.04%		
		DC current		10 μA～20A	U_{rel}=0.05%		
		AC current		(20～200) μA(40Hz～2kHz)	U_{rel}=0.1%		
				(0.2～200)mA,(40Hz～2kHz)	U_{rel}=0.09%		
				(0.2～2)A(40Hz～2kHz)	U_{rel}=0.15%		
				(2～20)A(40Hz～2kHz)	U_{rel}=0.4%		
		resistance		(1～20) Ω	U_{rel}=0.01%		
				20 Ω～2M Ω	U_{rel}=0.003%		
				(2～20)M Ω	U_{rel}=0.004%		
				(20～200)M Ω	U_{rel}=0.1%		
		Frequency		40Hz～10kHz	U_{rel}=6×10^{-6}		
51	*Digital Multimeter	DC Voltage	Calibration Specification for Multimeter JJF 1587	10mV～220mV	U=0.0009%Vx+0.8 μV		
				220mV～2.2V	U=0.0008%Vx+1.2 μV		
				2.2V～11V	U=0.0008%Vx+4 μV		
				11V～22V	U=0.0008%Vx+8 μV		
				22V～220V	U=0.0009%Vx+100 μV		
				220V～1000V	U=0.0011%Vx+0.6mV		
		AC Voltage		(10～220)mV 40Hz～20kHz	U=0.011%Vx+10 μV		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				(10～220)mV 20kHz～50kHz	U=0.036%Vx+10 μ V		
				(10～220)mV 50kHz～100kHz	U=0.090%Vx+30 μ V		
				(10～220)mV 100kHz～300kHz	U=0.11%Vx+30 μ V		
				(10～220)mV 300kHz～500kHz	U=0.18%Vx+40 μ V		
				(10～220)mV 500kHz～1MHz	U=0.36%Vx+0.1mV		
				(0.22～2.2)V 40Hz～20kHz	U=0.0085%Vx+7 μ V		
				(0.22～2.2)V 20kHz～50kHz	U=0.014%Vx+20 μ V		
				(0.22～2.2)V 50kHz～100kHz	U=0.028%Vx+80 μ V		
				(0.22～2.2)V 100kHz～300kHz	U=0.048%Vx+0.15mV		
				(0.22～2.2)V 300kHz～500kHz	U=0.12%Vx+0.4mV		
				(0.22～2.2)V 500kHz～1MHz	U=0.24%Vx+1mV		
				(2.2～22)V 40Hz～20kHz	U=0.0085%Vx+70 μ V		
				(2.2～22)V 20kHz～50kHz	U=0.014%Vx+0.2mV		
				(2.2～22)V 50kHz～100kHz	U=0.028%Vx+0.4mV		
				100V～1000V(45Hz～10kHz)	U_{rel}= 2.0×10^{-4}～9×10^{-4}		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				(2.2～22)V 100kHz～300kHz	U=0.060%Vx+1.7mV		
				(2.2～22)V 300kHz～500kHz	U=0.14%Vx+5mV		
				(2.2～22)V 500kHz～1MHz	U=0.30%Vx+9mV		
				(22～220)V 40Hz～20kHz	U=0.0090%Vx+1mV		
				(22～220)V 20kHz～50kHz	U=0.025%Vx+4mV		
				(22～220)V 50kHz～100kHz	U=0.060%Vx+10mV		
				(22～220)V 100kHz～300kHz	U=0.16%Vx+0.11V		
				(22～220)V 300kHz～500kHz	U=0.54%Vx+0.11V		
				(22～220)V 500kHz～1MHz	U=1.3%Vx+0.22V		
				(220～1000)V 40Hz～1kHz	U=0.009%Vx+4mV		
		DC Current		10 μA～220 μA	U=0.006%Ix+10nA		
				220 μA～2.2mA	U=0.0060%Ix+10nA		
				2.2mA～22mA	U=0.0060%Ix+100nA		
				22mA～220mA	U=0.0070%Ix+1 μA		
				220mA～2.2A	U=0.0095%Ix+30 μA		
				2.2A～11A	U=0.036%Ix+0.48mA		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				11A～20A	U=0.1%Ix+0.75mA		
		AC Current		(1～22)mA 40Hz～1kHz	U=0.016%Ix+0.4μA		
				(1～22)mA 1kHz～5kHz	U=0.070%Ix+5μA		
				(1～22)mA 5kHz～10kHz	U=0.18%Ix+10μA		
				(22～220)mA 40Hz～1kHz	U=0.018%Ix+4μA		
				(22～220)mA 1kHz～5kHz	U=0.070%Ix+50μA		
				(22～220)mA 5kHz～10kHz	U=0.18%Ix+0.1mA		
				(0.22～2.2)A 40Hz～1kHz	U=0.075%Ix+40μA		
				(0.22～2.2)A 1kHz～5kHz	U=0.085%Ix+0.1mA		
				(0.22～2.2)A 5kHz～10kHz	U=1.0%Ix+0.2mA		
				(2.2～11)A 40Hz～1kHz	U=0.046%Ix+0.17mA		
				(2.2～11)A 1kHz～5kHz	U=0.095%Ix+0.38mA		
				(2.2～11)A 5kHz～10kHz	U=0.36%Ix+0.75mA		
				(11～20)A 45Hz～100Hz	U=0.12%Ix+5mA		
				(11～20)A 100Hz～1kHz	U=0.15%Ix+5mA		
				(11～20)A 1kHz～5kHz	U=0.3%Ix+5mA		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		DC Resistance		1 Ω	U_{rel}=0.011%		
				10 Ω	U_{rel}=0.0027%		
				100 Ω	U_{rel}=0.0012%		
				1k Ω	U_{rel}=0.0010%		
				10k Ω	U_{rel}=0.0010%		
				100k Ω	U_{rel}=0.0013%		
				1M Ω	U_{rel}=0.0023%		
				10M Ω	U_{rel}=0.0046%		
				100M Ω	U_{rel}=0.012%		
52	*Amperemet-er,Volmeter,Wattmeter And Ohmmeter	DC Voltage	V.R. of Amperemeters, Voltmeters, Wattmeters and Ohmmeter JJG 124	10mV～1000V	U_{rel}=7×10^{-4}		
		DC Current		1mA～1A	U_{rel}=8×10^{-4}		
				1A～10A	U_{rel}=1×10^{-3}		
				10A～20A	U_{rel}=2×10^{-3}		
		AC Voltage		10mV～1000V(45Hz～1kHz)	U_{rel}=8×10^{-4}		
		AC Current		1mA～10mA(45Hz～1kHz)	U_{rel}=2×10^{-3}		
				10mA～1A(45Hz～1kHz)	U_{rel}=9×10^{-4}		
				1A～10A(45Hz～100Hz)	U_{rel}=1×10^{-3}		
				10A～20A(45Hz～100Hz)	U_{rel}=2×10^{-3}		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		DC Resistance		100Ω～1MΩ	$U_{rel}=7\times10^{-4}$		
		DC Powermeter		(1～3000)W	$U_{rel}=0.09\%$		
		AC Powermeter		(1～3000)W(45Hz～65Hz)	$U_{rel}=0.10\%$		
				1MΩ～10MΩ	$U_{rel}=1\times10^{-3}$		
53	*DC Voltage Stable Source	DC Voltage	Calibration specification for DC Stabilized Power Supplies JJF 1597	0.1V～100V	$U_{rel}=0.007\%$		
				100V～1000V	$U_{rel}=0.008\%$		
		DC Current		10μA～200A	$U_{rel}=0.07\%$		
				200A～1000A	$U_{rel}=0.09\%$		
		Regulated power supply adjustment rate		0.01%～10%	$U_{rel}=0.008\%$		
		Regulation rate of steady current power supply		0.01%～10%	$U_{rel}=0.09\%$		
		Regulated load adjustment rate		0.01%～10%	$U_{rel}=0.008\%$		
		Steady current load regulation rate		0.01%～10%	$U_{rel}=0.09\%$		
		Ripple voltage		0.1mV～1000mV	$U_{rel}=2\%$		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Ripple current		0.1mA～10A	U_{rel}=2.4%		
54	Resistance strain gauge indicators	Strain Gauge	Resistance strain gauge indicators JJG 623	(10～100000) μ ε	U_{rel}=0.09%		
		Indication Stability		(10～100000) μ ε	U_{rel}=0.09%		
55	*High-voltage Withstanding Voltage Tester	DC Voltage	Verfication Regulation of High-voltage Withstanding Voltage Tester JJG(JG) 18	(1～15)kV	U_{rel}=0.9%		
				(15～50)kV	U_{rel}=1.0%		
		AC Voltage		(1～15)kV(45～65)Hz	U_{rel}=0.9%		
				(15～50)kV(45～65)Hz	U_{rel}=1.0%		
		DC Current		(0.1～100) mA	U_{rel}=1.0%		
		AC Current		(0.1～100) mA(45～65)Hz	U_{rel}=1.2%		
		Time		(0.1～999.99)s	U=0.8%T+0.03s		
56	*Strength Detector of Insulating Oils	AC Voltage	V. R. of Dielectric Strength Detector of Insulating Oils JJG (Ji)112	(1～50)kV(45Hz～65Hz)	U_{rel}=1.5%		
		Speed of pressure Rise		(0.2～10)kV/s	U_{rel}=2%		
57	*DC High Voltage Test Device	DC Voltage	Calibration Specification for DC High Voltage Test Device JJF(Zhe)1146	(10～50)kV	U_{rel}=0.9%		
				(50～100)kV	U_{rel}=1.2%		
		ripple voltage		(0.1～50)V	U_{rel}=0.9%		
		DC Current		(0.1～100) mA	U_{rel}=1.0%		
		Short Term Stability		(10～100)kV	U_{rel}=0.9%		
58	*AC High Voltage Test Device	AC Voltage	Calibration Specification for AC High Voltage Test Device	(10～50)kV(45Hz～65Hz)	U_{rel}=0.9%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
			JJF(Zhe)1144	(50～100)kV(45Hz～65Hz)	U_{rel}=1.2%		
		Frequency		(45～65)Hz	U_{rel}=0.02%		
		Total Harmonic Distortion		(0.1～100)%	U_{rel}=0.9%		
		Short Term Stability		(10～100)kV	U_{rel}=0.9%		
59	*Magnetic Partical Detector	DC current	Calibration specification for Magnetic Particle Flaw Detectors JJF 1273	(100～2000)A	U_{rel}=1.2%		
		AC current		(200～10000)A, (50Hz～400Hz)	U_{rel}=1.2%		
		Residual magnetic induction intensity		(0.01～0.2)mT	U=0.05mT		
		Magnetization time		(0.4～20)s	U=0.03s		
60	Fluxgate Magnetometer	magnetism	Calibration Specification for Fluxgate Magnetometer JJF 1519	-250 μT～250 μT	U=1%B+1 μT		
61	Magnetometer	magnetism	Calibration Specification for Magnetometers JJF 1656	（0.05～10）mT	U_{rel}=1.6%		
62	Pointer Magnetometer	magnetism	Calibration Specification for Pointer Magnetometer JJF (JG) 75	50 μT～5mT	U=1%B+1 μT		
63	Tesla meter	magnetism	Calibration Specification for(1 mT～2.5 T) Magnetometers JJF 1832	1mT～2.5T	U_{rel}=0.3%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
64	Alternating magnetometer	magnetism	Verification regulation of weak magnetic field alternating magnetometer JJG 1049	1pT～1mT	U_{rel}=1%		
65	*Eddy current conductivity meter	Eddy current conductivity	C. S. fHr Eddy current cHnductivity meter JJF 1692	(0.58～58)MS/m	U=（0.11～0.36）MS/m		
66	*source meter	DC voltage (output)	Calibration specification for source meter JJF(DZ)0024	(0.5～1)mV	U_{rel}=0.5%		
				(1～10)mV	U_{rel}=0.2%		
				(10～200)mV	U_{rel}=0.0018%		
				(0.2～200)V	U_{rel}=0.0017%		
				(200～1000)V	U_{rel}=0.0018%		
		DC current (output)		(10～20) μA	U_{rel}=0.16%		
				20 μA～200mA	U_{rel}=0.12%		
				(0.2～20)A	U_{rel}=0.07%		
		DC voltage (measured)		(10～200)mV	U_{rel}=0.0091%		
				(0.2～200)V	U_{rel}=0.0022%		
				(200～1000)V	U_{rel}=0.0025%		
		DC current (measurement)		(10～200) μA	U_{rel}=0.11%		
				(0.2～200)mA	U_{rel}=0.012%		
				(0.2～2)A	U_{rel}=0.019%		
				(2～10)A	U_{rel}=0.061%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		DC resistance (measurement)		(100Ω～1MΩ)	U_{rel}=0.007%		
				(1MΩ～10MΩ)	U_{rel}=0.023%		
				(10MΩ～100MΩ)	U_{rel}=0.07%		
67	*Magnetic FLUX Meter	Magnetic FLUX	Calibration Specification for Magnetic Flux Meters JJF 1905	0.1mWb～1mWb	U_{rel}=0.4%		
				1mWb～10Wb	U_{rel}=0.07%		
68	*hand - held digital Multimeters	DC voltage	Calibration Specification for hand - held digital Multimeters JJF(DZ) 0023	(10～330)mV	U=0.005%Vx+0.78μV		
				(0.33～3.3)V	U=0.006%Vx +1.6μV		
				(3.3～33)V	U=0.006%Vx +16μV		
				(33～330)V	U=0.007%Vx +0.12mV		
				(330～1000)V	U=0.007%Vx +1.2mV		
		AC voltage		(10～33)mV(20～45)Hz	U=0.10%Vx+7μV		
				(10～33)mV(45Hz～10kHz)	U=0.018%Vx +7μV		
				(33～330)mV(20Hz~45Hz)	U=0.040%Vx +7μV		
				(33～330)mV(45Hz～10kHz)	U=0.018%Vx +9μV		
				(0.33～3.3)V(20Hz～45Hz)	U=0.04%Vx +38μV		
				(0.33～3.3)V(45Hz～10kHz)	U=0.014%Vx +46μV		
				(3.3～33)V(20Hz～45Hz)	U=0.04%Vx +0.7mV		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				(3.3～33)V(45Hz～10kHz)	U=0.014%Vx +0.5mV		
				(33～330)V(45Hz～1kHz)	U=0.022%Vx +5mV		
				(33～330)V(1kHz ～10kHz)	U=0.03%Vx +12mV		
				(330～1000)V(40Hz～1kHz)	U=0.04%Vx+12mV		
				(330～1000)V(1kHz～5kHz)	U=0.03%Vx+12mV		
		DC current		(10～330) μA	U=0.033%Ix+0.04 μA		
				(0.33～3.3)mA	U=0.020%Ix+0.039 μA		
				(3.3～33)mA	U=0.030%Ix+1.9 μA		
				(33～330)mA	U=0.030%Ix+1.9 μA		
				(0.33～1.1)A	U=0.03%Ix+31 μA		
				(1.1～3)A	U=0.03%Ix+32 μA		
				(3～11)A	U=0.04%Ix+0.26mA		
				(11～20)A	U=0.008%Ix+0.9mA		
		AC current		(30～330) μA(20～45)Hz	U=0.22%Ix +0.2 μA		
				(30～330) μA(45Hz～1kHz)	U=0.16%Ix +0.2 μA		
				(0.33～3.3)mA(45Hz～1kHz)	U=0.15%Ix +0.3 μA		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				(0.33～3.3mA(100Hz～1kHz)	U=0.12%Ix +0.3 μ A		
				(3.3～33)mA(45Hz～1kHz)	U=0.11%Ix +3 μ A		
				(3.3～33)mA(45Hz～1kHz)	U=0.06%Ix +3 μ A		
				(33～330)mA(20～45)Hz	U=0.11%Ix +30 μ A		
				(33～330)mA(45Hz～1kHz)	U=0.06%Ix +30 μ A		
				(0.33～1.1)A(20～45)Hz	U=0.2%Ix +0.3mA		
				(0.33～1.1)A(45Hz～1kHz)	U=0.07%Ix +0.3mA		
				1.1A～3A(20～45)Hz	U=0.2%Ix +0.6mA		
				1.1A～3A(45Hz～1kHz)	U=0.07%Ix +0.6mA		
				3A～11A(20～100)Hz	U=0.07%Ix +3mA		
				3A～11A(100Hz～1kHz)	U=0.12%Ix +3mA		
				11A～20A(20～45)Hz	U=0.14%Ix+6mA		
				11A～20A(45Hz～1kHz)	U=0.17%Ix +6mA		
		Resistance		1 Ω ～11 Ω	U=0.07%Rx +0.04 Ω		
				11 Ω ～33 Ω	U=0.06%Rx +0.06 Ω		
				33 Ω ～1.1M Ω	U=0.06%Rx +0.08 Ω		
				1.1M Ω ～3.3M Ω	U=0.08%Rx +0.1 Ω		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				3.3MΩ～33M Ω	U=0.3%Rx +0.3Ω		
				33MΩ～100M Ω	U=2.4%Rx +0.4Ω		
		Frequency		10Hz～100kHz	U=0.0003%Rx +6μHz		
		Capacitors		1nF ～10nF	U=0.6%Cx+0.02nF		
				10nF ～100nF	U=0.3%Cx+0.1nF		
				100nF ～1000nF	U=0.3%Cx+0.7nF		
				1μF ～10μF	U=0.3%Cx+6nF		
				10μF～100μF	U=0.5%Cx+60nF		
				100μF～1000μF	U=0.5%Cx+0.6μF		
				1mF～10mF	U=0.5%Cx+6μF		
				10mF～100mF	U=1.3%Cx+60μF		
		Temperature		With Thermocouple: ：(-200～1200)° C	U=0.5℃		
		Temperature		With Platinum thermal resistance:(-200～800)° C	U=0.3℃		
69	*Medical leakage current testers	DC leakage current	Verification regulation of medical leakage current testers JJG 1188	(0.01～20)mA	U_{rel}=0.2%		
		AC leakage current		(0.001～20)mA(50Hz/60Hz)	U_{rel}=0.2%		
		Test voltage		100mV～600V(40Hz～60Hz)	U_{rel}=0.2%		
		DC input resistance		(0.3～3)kΩ	U_{rel}=0.2%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Input impedance		(0.3～3)kΩ(10Hz～100kHz)	U_{rel}=0.4%		
				(0.3～3)kΩ(100kHz～1MHz)	U_{rel}=0.7%		
		Frequency response characteristics of transmission impedance		(-70～-0.01)dB(10Hz～1kHz)	U=0.05dB		
				(-70～-0.01)dB(1kHz～1MHz)	U=0.1dB		
70	*Touch Current Testers	AC leakage current	Verification Regulation for Touch Current Testers JJG(Yue) 027	(0.001～20)mA(10Hz～3000Hz)	U_{rel}=0.2%		
				(0.001～20)mA(3kHz～1MHz)	U_{rel}=0.6%		
		DC input resistance		(0.3～3)kΩ	U_{rel}=0.2%		
		Input impedance		(0.3～3)kΩ(10Hz～1kHz)	U_{rel}=0.4%		
				(0.3～3)kΩ(1kHz～1MHz)	U_{rel}=0.7%		
71	*DC High Current Meters	DC Current	Verification Regulation for DC High Current Meters JJG(JG)195	100A～2000A	U_{rel}=0.007%		
72	*Thepower supply of AC/DC electric welder	DC Voltage	Calibration Specification for the power supply of AC/DC electric welder JJF（Jin) 02	(15～500)V	U_{rel}=0.08%		
		DC Current		(50～2000)A	U_{rel}=0.12%		
		AC Voltage		(15～500)V/50Hz	U_{rel}=0.08%		
		AC Current		(50～2000)A/50Hz	U_{rel}=0.12%		
73	*Arc welding and	DC Voltage	Calibration Specification for	15V～500V	U_{rel}=0.08%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
	resistance welding	DC Current	Arc welding and resistance welding JJF(JX) 1025	50A～2000A	U_{rel}=0.12%		
		AC Voltage		(15～500)V/50Hz	U_{rel}=0.08%		
		AC Current		(50～2000)A/50Hz	U_{rel}=0.12%		
		DC Power		10W～20kW	U_{rel}=0.3%		
		AC Power		(10W～3.9kW)/50Hz	U_{rel}=0.3%		
		Power factor		0.01～1.0	U=0.02		
		Frequency		40Hz～200Hz	U_{rel}=0.3%		
		Conversion time		10ms～10s	U_{rel}=0.3%		
		Duration		10s～600s	U_{rel}=0.03%		
		Electrode Force		1N～50kN	U_{rel}=1%		
74	*Uninterruptible power supply	No-load output voltage	Calibration Specification for Uninterruptible Power Supply JJF （DZ）0027	(10～400)V （50Hz，60Hz）	U_{rel}=0.14%		
		Frequency		20Hz～1kHz	U_{rel}=0.03%		
		Distortion		0.01%～10%	U_{rel}=7%		
		Rated Output Power		(0.1W～6000W)/50Hz	U_{rel}=0.3%		
		Efficiency		0.1%～100%	U_{rel}=0.4%		
		Load adjustment rate		0.01% ～10%	U_{rel}=0.2%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Source voltage adjustment rate		0.01% ～10%	U_{rel}=0.2%		
		Conversion time		0.1ms ～10ms	U_{rel}=0.3%		
		Duration		1s～1000s	U=0.02%T_x+0.07s		
75	*DC High Current Sources	DC Current	Verification Regulation of DC High Current Sources JJG(JG) 196	(100～2000)A	U_{rel}=0.007%		
76	*DC Low Current Reference Sources	DC Current	Verification Regulation of DC Low Current Reference Sources JJG(JG) 19	5pA～200pA	U_{rel}=1.2%		
				0.2nA～200nA	U_{rel}=0.24%		
				200nA～20μA	U_{rel}=0.12%		
				20μA～200μA	U_{rel}=0.003%		
77	Hall Current (Voltage) Transducer	AC Current	Verification Regulation of Hall Current (Voltage) Transducer JJG(Chuan) 136	1A～20A,(40Hz～400Hz)	U_{rel}=0.03%		
				1A～20A,(400Hz～1000Hz)	U_{rel}=0.06%		
				20A～2000A,(50Hz)	U_{rel}=0.03%		
		DC Current		1A～2000A	U_{rel}=0.007%		
		AC Voltage		5V～300V,(45Hz～10kHz)	U_{rel}=0.03%		
				300V～1000V,(45Hz～10kHz)	U_{rel}=0.04%		
		DC Voltage		5V～1000V	U_{rel}=0.003%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
78	*Standard AC power source	AC Voltage	Verification regulation for standard AC power source JJG(JG）6	10mV～200mV,(40Hz～20kHz)	U=0.004%V_x+0.002mV		
				0.2V～1000V,(40Hz～20kHz)	U_{rel}=0.003%		
		AC Cuurent		1mA～20A,(40Hz～10kHz)	U_{rel}=0.007%		
				20A～80A,(40Hz～1kHz)	U_{rel}=0.03%		
		AC power		(1～1000)V,(0.001～80)A,(45Hz～60Hz)	U_{rel}=0.03%		
		Phase		-150°～150°	U=0.009°		
		Frequency		40Hz～10kHz	U_{rel}=0.002%		
		Voltage Distortion		0.1%～30%,(40Hz～1kHz)	U_{rel}=7%		
		Current distortion		0.1%～30%,(40Hz～1kHz)	U_{rel}=7%		
79	*Current TransformerVolt-Ampere Characteristic Meters	AC Voltage	Calibration Specification for Current Transformer Volt-Ampere Characteristic JJF 1584	(1～200)V, (50Hz)	U_{rel}=0.08%		
		AC Current		(0.1～5)A, (50 Hz)	U_{rel}=0.12%		
80	*Mutual Inductor Error and Volt-ampere characteristic tester	voltage	Calibration Specification of Mutual Inductor Error andVolt-ampere characteristic tester JJF(Min) 1108	(1～200)V, (50Hz)	U_{rel}=0.08%		
		current		(0.1～5)A, (50 Hz)	U_{rel}=0.12%		
		Current Transformer Ratio		(5A～2000A)/(5A)	U_{rel}=0.06%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Voltage Transformer Ratio		(0.1～10)kV，(0.1～35)kV，(0.1～50)kV/(0.1、0.1/√3)kV	U_{rel}=0.06%		
		Ratio difference		0.01%～10%	U=0.06%		
		phase difference		(0.1～900)′	U=1.4′		
		Secondary circuit load		(0.01～10000) Ω	U_{rel}=0.03%		
81	*High Current Generator	AC Current	Calibration Specification of High Current Generator JJF(JX) 1037	(20～2000)A 50Hz	U_{rel}=0.03%		
82	*Instrument Voltage Transformers	Ratio difference	Verification Regulation of Instrument Voltage Transformers JJG 314	（0.1kV～35kV）/100V，(0～35kV)/(100/√3）V20%Rated voltage	U_{rel}=0.06%		
				（0.1kV～35kV）/100V，(0～35kV)/(100/√3）V50%Rated voltage	U_{rel}=0.05%		
				（0.1kV～35kV）/100V，(0～35kV)/(100/√3）V80%～120%Rated voltage	U_{rel}=0.03%		
				（0.1kV～10kV）/100V，(0～35kV)/(100/√3）V20%Rated voltage	U_{rel}=0.06%		
				（0.1kV～10kV）/100V，(0～35kV)/(100/√3）V50%Rated voltage	U_{rel}=0.05%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				（0.1kV～10kV）/100V，(0～35kV)/(100/√3）V80%～120%Rated voltage	U_{rel}=0.03%		
		Phase difference		(0.001～900)′ 20% Rated voltage	U=1.4′		
				(0.001～900)′ 50% Rated voltage	U=1.2′		
				(0.001～900)′ 80%～120%Rated voltage	U=0.9′		
83	*Resistive Current Testers for Zinc-oxide Surge Arrester	AC Voltage	Calibration Specification for Zinc-oxide Arrester Testersde Surge Arrester JJF2194	(1～300)V，(45Hz～65Hz)	U_{rel}=0.1%		
		AC current		(0.1～30)mA，(45Hz～65Hz)	U_{rel}=0.2%		
		Phase		0°～270°	U=0.1°		
84	*Power Analyzer	DC Voltage	Calibration Specification for Power Analyzers JJF 2040	10mV～220mV	U=9×10^{-6}Ux+0.8 μV		
				0.22V～2.2V	U=8×10^{-6}Ux+1.2 μV		
				2.2V～22V	U=8×10^{-6}Ux+8 μV		
				22V～220V	U=9×10^{-6}Ux+100 μV		
				220V～1000V	U=11×10^{-6}Ux+0.6mV		
		AC voltage		10mV～220mV,(10Hz～20Hz)	U=0.06%Ux+16 μV		
				10mV～220mV(20Hz～40Hz)	U=0.024%Ux+10 μV		
				10mV～220mV(40Hz～20kHz)	U=0.011%Ux+10 μV		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				0.22V～2.2V,(10Hz～20Hz)	U=0.06%Ux+100 μ V		
				220mV～2.2V,(20Hz～40Hz)	U=0.018%Ux+30 μ V		
				220mV～2.2V,(40Hz～20kHz)	U=0.0085%Ux+7 μ V		
				2.2V～22V,(10Hz～20Hz)	U=0.06%Ux+0.1mV		
				2.2V～22V,(20Hz～40Hz)	U=0.018%Ux+0.3mV		
				2.2V～22V,(40Hz～20kHz)	U=0.0085%Ux+70 μ V		
				22V～220V,(10Hz～20Hz)	U=0.06%Ux+10mV		
				22V～220V,(20Hz～40Hz)	U=0.018%Ux+3mV		
				22V～220V,(40Hz～20kHz)	U=0.009%Ux+1mV		
				220V～1000V,(15Hz～50Hz)	U=0.05%Ux+20mV		
				220V～1000V,(50Hz～1kHz)	U=0.009%Ux+4mV		
		DC Current		10 μ A～220 μ A	U=0.005%Ix+7nA		
				1mA～2.2mA	U=0.006%Ix+10nA		
				2.2mA～22mA	U=0.006%Ix+100nA		
				22mA～220mA	U=0.007%Ix+1 μ A		
				0.22A～2.2A	U=0.009%Ix+30 μ A		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				2.2A～10A	U=0.02%Ix+3mA		
				10A～20A	U=0.03%Ix+6mA		
		AC current		0.1mA～2.2mA,(10Hz～20Hz)	U=0.08%Ix+30nA		
				0.1mA～2.2mA,(20Hz～40Hz)	U=0.042%Ix+25nA		
				0.1mA～2.2mA,(40Hz～1kHz)	U=0.016%Ix+20nA		
				0.1mA～2.2mA,(1kHz～5kHz)	U=0.07%Ix+0.05μA		
				0.1mA～2.2mA,(5kHz～10kHz)	U=0.18%Ix+0.1μA		
				2.2mA～22mA,(10Hz～20Hz)	U=0.08%Ix+0.5μA		
				2.2mA～22mA,(20Hz～40Hz)	U=0.042%Ix+0.4μA		
				2.2mA～22mA,(40Hz～1kHz)	U=0.016%Ix+0.4μA		
				2.2mA～22mA,(1kHz～5kHz)	U=0.07%Ix+5μA		
				2.2mA～22mA,(5kHz～10kHz)	U=0.18%Ix+10μA		
				22mA～220mA,(10Hz～20Hz)	U=0.08%Ix+5μA		
				22mA～220mA,(20Hz～40Hz)	U=0.042%Ix+4μA		
				22mA～220mA,(40Hz～1kHz)	U=0.018%Ix+4μA		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				22mA～220mA,(1kHz～5kHz)	U=0.07%Ix+50μA		
				22mA～220mA,(5kHz～10kHz)	U=0.18%Ix+100μA		
				0.22A～2A,(16Hz～850Hz)	U=0.02%Ix+48μA		
				0.22A～2A,(850Hz～6kHz)	U=0.06%Ix+60μA		
				0.22A～2.2A,(6kHz～10kHz)	U=0.1%Ix+0.2mA		
				2A～10A,(16Hz～450Hz)	U=0.02%Ix+0.3mA		
				2A～10A,(450Hz～850Hz)	U=0.03%Ix+0.3mA		
				2A～10A ,(850Hz～6kHz)	U=0.06%Ix+0.4mA		
				10A～20A,(16Hz～450Hz)	U=0.024%Ix+0.8mA		
				10A～20A,(450Hz～850Hz)	U=0.03%Ix+0.9mA		
				10A～20A,(850Hz～6kHz)	U=0.07%Ix+1mA		
				20A～80A,(40Hz～450Hz)	U=0.03%Ix+3mA		
				20A～80A,(450Hz～850Hz)	U=0.04%Ix+3mA		
				20A～80A,(850Hz～3kHz)	U=0.07%Ix+3mA		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		DC power		33mV～1000V,0.33mA～2.9999A	U_{rel}=0.03%		
				33mV～1000V,3A～20A	U_{rel}=0.08%		
		AC power		0.1A～20A,6.4V～1000V,(16Hz～69Hz,0.75≤PF≤1)	U_{rel}=0.03%		
				0.1A～20A,6.4V～1000V,(16Hz～69Hz,0.5≤PF≤0.75)	U_{rel}=0.032%		
				0.1A～20A,6.4V～1000V,(16Hz～69Hz,0.25≤PF≤0.5)	U_{rel}=0.04%		
				0.1A～20A,6.4V～1000V,(69Hz～180Hz,0.75≤PF≤1)	U_{rel}=0.032%		
				0.1A～20A,6.4V～1000V,(69Hz～180Hz,0.5≤PF≤0.75)	U_{rel}=0.04%		
				0.1A～20A,6.4V～1000V,(69Hz～180Hz,0.25≤PF≤0.5)	U_{rel}=0.06%		
				0.1A～20A,6.4V～1000V,(180Hz～450Hz,0.75≤PF≤1)	U_{rel}=0.05%		
				0.1A～20A,6.4V～1000V,(180Hz～450Hz,0.5≤PF≤0.75)	U_{rel}=0.07%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				0.1A～20A,6.4V～1000V,180Hz～450Hz,0.25≤PF≤0.5)	U_{rel}=0.14%		
				20A～80A,6.4V～1000V,(16Hz～69Hz,0.75≤PF≤1)	U_{rel}=0.041%		
				20A～80A,6.4V～1000V,(16Hz～69Hz,0.5≤PF≤0.75)	U_{rel}=0.043%		
				20A～80A,6.4V～1000V,(16Hz～69Hz,0.25≤PF≤0.5)	U_{rel}=0.05%		
				20A～80A,6.4V～1000V,(69Hz～180Hz,0.75≤PF≤1)	U_{rel}=0.042%		
				20A～80A,6.4V～1000V,(69Hz～180Hz,0.5≤PF≤0.75)	U_{rel}=0.05%		
				20A～80A,6.4V～1000V,(69Hz～180Hz,0.25≤PF≤0.5)	U_{rel}=0.07%		
				20A～80A,6.4V～1000V,(180Hz～450Hz,0.75≤PF≤1)	U_{rel}=0.06%		
				20A～80A,6.4V～1000V,(180Hz～450Hz,0.5≤PF≤0.75)	U_{rel}=0.09%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				20A～80A,6.4V～1000V,180Hz～450Hz,0.25≤PF≤0.5)	U_{rel}=0.18%		
		Frequency		10Hz～2MHz	U=0.0003%fx+5 μ Hz		
		Phase		(1～360)°,(16～850)Hz	U=0.007°		
85	*DC ground fault detectors	DC Voltage	Calibration Specification for DC ground fault detectors JJF (DZ) 0094	24V～300V	U_{rel}=0.06%		
		AC Voltage		(10～300)V,(45Hz～55Hz)	U_{rel}=0.1%		
		Resistance		(1～999)k Ω	U_{rel}=0.2%		
		Capacitor		(0.1～100) μ F,(45Hz～55Hz)	U_{rel}=0.3%		
86	*Clamp Meter Calibrators	DC Current	Calibration Specification for Clamp Meter Calibrators JJF (Min) 1031	0.01A～20A	U_{rel}=0.003%		
				20A～2000A	U_{rel}=0.007%		
		AC Current		0.01A～20A(40Hz～1kHz)	U_{rel}=0.005%		
				20A～1000A(40Hz～400Hz)	U_{rel}=0.03%		
		Distortion		0.03%～10%	U_{rel}=12%		
		Ripple Coefficient		0.01%～10%	U_{rel}=2%		
87	*Frequency series resonance device	AC Voltage	Calibration Specification for Frequency series resonance device JJF(Gan) 0081	(10～100)kV，50Hz	U_{rel}=1.2%		
		Frequency		(30～300) Hz	U_{rel}=0.02%		
		Distortion Degree		0.1%～10%，(30Hz～300Hz)	U_{rel}=12%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
88	*Transformer Core Grounding Current Tester	AC current	Calibration Specification for Transformer Core Grounding Current Tester JJF (Zhe) 1143	1mA～10A,(45Hz～65Hz)	U_{rel}=0.5%		
89	*Clamp Digital Phase voltammeters	AC Voltage	Calibration Specification for Clamp Digital Phase voltammeters JJF (Ji) 210	(0.1～600)V,(45Hz～65Hz)	U_{rel}=0.1%		
		AC current		(0.01～20)A,(45Hz～65Hz)	U_{rel}=0.1%		
				(20～600)A,(45Hz～65Hz)	U_{rel}=0.5%		
		AC power		1mW～12kW,(45Hz～65Hz)	U_{rel}=0.2%		
		Phase		0°～360°,(45Hz～65Hz)	U=0.2°		
90	*AC/DC High Current Measuring Instruments	DC Current	Calibration Specification of AC/DC High Current Measuring Instruments JJF(HuSuZheWan) 4007	100A～2000A	U_{rel}=0.007%		
		AC Current		100A～2000A，(50Hz)	U_{rel}=0.03%		
91	*Power Frequency A.C. Electrical QuantitiesMeasuring Transducers	AC voltage	Power Frequency A.C. Electrical QuantitiesMeasuring Transducers JJG 126	10mV～1000V,(45Hz～65Hz)	U_{rel}=0.02%		
		AC current		1mA～80A,(45Hz～65Hz)	U_{rel}=0.02%		
		AC power		1V～600V,1mA～80A,(45Hz～65Hz)	U_{rel}=0.03%		
		Power factor		0.5C～1～0.5L	U_{rel}=0.03%		
		Frequency		45Hz～65Hz	U_{rel}=0.02%		
		Ripple content		0.01%～1%	U_{rel}=0.05%		
92	*Clamp Ammeters for Measurement	DC current	Verification Regulation of Clamp Ammeters	1mA～60A	U_{rel}=0.3%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
	of Leakage Currents	AC current	for Measurement of Leakage Currents JJG(ji) 3007	1mA～60A(40Hz～400Hz)	U_{rel}=0.3%		
93	AC shunts	AC Resistance	Calibration specification for AC shunts JJF (DZ) 0020	0.01Ω～10Ω,(0.02A～20A，50Hz)	U_{rel}=0.015%		
				0.01mΩ～0.01Ω,(20A～2000A，50Hz)	U_{rel}=0.03%		
94	AC & DC Resistance Simulators	DC Resistance	Calibration Specification for AC & DC Resistance Simulators JJF 1723	1μΩ～10μΩ	U_{rel}=0.2%		
				10μΩ～100μΩ	U_{rel}=0.03%		
				0.1mΩ～1Ω	U_{rel}=0.012%		
				1Ω～200Ω	U_{rel}=0.01%		
		AC Resistance		0.1mΩ～1mΩ,(45Hz～65Hz)	U_{rel}=0.05%		
				1mΩ～10mΩ,(45Hz～65Hz)	U_{rel}=0.03%		
				10mΩ～200Ω,(45Hz～65Hz)	U_{rel}=0.02%		
		DC current		0.1A～60A	U_{rel}=0.012%		
		AC current		0.1A～80A,(45Hz～65Hz)	U_{rel}=0.03%		
95	DC Low-resistance Meters	DC Resistance	Calibration Specification for Calibrators of DC Low-resistance Meters（JJF (CHUAN) 173-2020） JJF (CHUAN) 173	5μΩ～10μΩ	U_{rel}=0.1%		
				10μΩ～100μΩ	U_{rel}=0.03%		
				100μΩ～1mΩ	U_{rel}=0.02%		
				1mΩ～100Ω	U_{rel}=0.003%		
				100Ω～20kΩ	U_{rel}=0.0024%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
96	Transformer Capacity Tester	AC Voltage	Calibration Specification for Transformer Capacity Tester JJF (shan) 087	40V～660V(45Hz～65Hz)	U_{rel}=0.02%		
		AC Current		0.05A～80A(45Hz～65Hz)	U_{rel}=0.02%		
		AC Power		0.1kW～140kW，(45Hz～65Hz)	U_{rel}=0.03%		
		Frequency		45Hz～65Hz	U_{rel}=0.006%		
		Phase		0°～360°(45Hz～65Hz)	U=0.005°		
97	*Cable Fault Flashover Tester	Test Distance	Calibration Specification for Cable Fault Flashover Tester JJF(zhe)1164	5m～100km	U_{rel}=0.1%		
98	*Welding Power Sources of DC Electric Welding Machines	DC Current	Calibration Specification for Welding Power Sources of DC Electric Welding Machines JJF 1985	1A～2000A	U_{rel}=0.12%		
		DC Voltage		1V～150V	U_{rel}=0.08%		
99	*Equipotential Testers	Resistance	Calibration Specification for Equipotential Testers JJF(JI)3022	0.001 Ω～0.1 Ω	U_{rel}=0.3%		
				0.1 Ω～1 Ω	U_{rel}=0.2%		
				1 Ω～10 Ω	U_{rel}=0.12%		
				10 Ω～3000 Ω	U_{rel}=0.3%		
100	*Voltage Monitor	AC Voltage	Calibration Specification of Voltage Monitor JJF (zhe) 1098	(5～456)V,(45Hz～65Hz)	U_{rel}=0.08%		
		Time		(0.5～120)min	U=0.4s		
101	*DC Digital Power Meters	DC Power	Calibration Specification for Dc Power Meters JJF (e) 163	1W～330W	U_{rel}=0.029%		
				330W～3300W	U_{rel}=0.027%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				3.3kW～20kW	U_{rel}=0.083%		
102	*DC High Voltage Generator	DC Voltage	Calibration Specification of DC High Voltage Generator JJF (JX) 1036	(0.1～50)kV	U_{rel}=0.07%		
		DC Current		(0.1～50)mA	U_{rel}=0.07%		
103	*Standard DC Power Sources	DC Voltage	Verification Regulation for Standard DC Power Sources JJG (Yue) 064	(1～200)mV	U=0.0005%Vx+0.1 μ V		
				(0.2～2)V	U=0.0004%Vx+0.4 μ V		
				(2～20)V	U=0.0004%Vx+4 μ V		
				(20～200)V	U=0.0005%Vx+0.04mV		
				(200～1000)V	U=0.0005%Vx+0.5mV		
		DC Current		(10～200) μ A	U=0.0014%Ix+0.4nA		
				(0.2～2)mA	U=0.0014%Ix+4nA		
				(2～20)mA	U=0.0015%Ix+40nA		
				(20～200)mA	U=0.0037%Ix+0.8 μ A		
				(0.2～20)A	U_{rel}=0.008%		
				(20～100)A	U_{rel}=0.015%		
		DC Power		1W～1kW	U_{rel}=0.006%		
				1kW～10kW	U_{rel}=0.02%		
104	*Current Coils	AC Current-Voltage Conversion Value	Calibration Specification of Current Coils JJF(Wan) 170	1A～1000A/1mV～5V(50Hz)	U_{rel}=0.1%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		DC Current-Voltage Conversion Value		1A～1000A/1mV～5V	U_{rel}=0.1%		
105	*Measuring Transducers for Coverting DC Electrical Quantities	DC voltage	Verification Regulation of Measuring Transducers for Coverting DC Electrical Quantities JJG（JG）191	10mV～1000V	U_{rel}=0.01%		
		DC current		10μA～2000A	U_{rel}=0.01%		
Radio measuring instrument							
1	*Passive Intermodulation Analyzers	Carrier Output Frequency	Calibration Specification for Passive Intermidulation Analyzers JJF 1463	800MHz～3GHz	U_{rel}=1.2×10^{-7}		
		Carrier output level		20dBm～46dBm(800MHz～3GHz)	U=0.5dB		
		The Receiver Displays the Average Noise Level		-120dBm～-60dBm(800MHz～3GHz)	U=0.7dB		
		Passive Intermodulation		-170dBc～-90dBc(800MHz～3GHz)	U=0.5dB		
		System residual intermodulation		-170dBc～-90dBc	U=0.7dB		
2	*RF and Microwave Power Meters	power	Calibration Specification for RF and Microwave Power Meters JJF 1885	（0.01～25）mW，(0.01～2)GHz	U_{rel}=1.9%	JJG 1024：except Instrument Accuracy;JJ	
				（0.01～25）mW，（2.1～12.4）GHz	U_{rel}=2.6%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				（0.01～25）mW，(12.75 ～18)GHz	U_{rel}=3.3%	G（ELECTRONIC）30202:Instrument Accuracy	
		VSWR		1.0～2.0，(10MHz～18GHz)	U=0.07		
		Instrument Accuracy		3.16μW～100mW	U_{rel}=0.5%		
		Power Reference		1mW(50MHz)	U_{rel}=1.9%		
		Source Frequency Accuracy		50MHz	U_{rel}=1×10^{-4}		
3	*Function Generator	Frequency	V.R. of Function Generator JJG 840	1Hz～225MHz	U_{rel}=4.6×10^{-7}		
		Voltage		10mV～20V(p-p)，(1Hz～225MHz)	U_{rel}=1.2%		
		DC Offset		0.01V～5V	U_{rel}=0.1%		
		Attenuation		(0～80)dB，1kHz	U=0.10dB		
		Distortion		(0.03～10)%，(20Hz～20kHz)	U_{rel}=12%		
		Sine wave amplitude flatness		100mV～10V（1kHz～225MHz）	U=0.10dB		
		Pulse duty cycle		1%～99%	U_{rel}=0.14%		
		Overshoot		0.001%～20%	U_{rel}=1.8%		
		rise time		1ns～10μs	U_{rel}=5.5%		
4	*Low-frequency Volt-meters	Voltage	Calibration Specification for Low-frequency Volt-meters JJF 1925	10mV ～300V，(10Hz～500kHz)	U_{rel}=0.6%～1.0%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Frequency Response		10Hz ～ 500kHz	U_{rel}=0.9%		
5	*RF Power sensor	power	Calibration Specification for RF & Microwave Power Sensors JJF 1887	（0.01～25）mW，(0.01～2)GHz	U_{rel}=1.9%		
				（0.01～25）mW，（2.1～12.4）GHz	U_{rel}=2.6%		
				（0.01～25）mW，(12.75 ～18)GHz	U_{rel}=3.3%		
		VSWR		1.0～2.0，(10MHz～18GHz)	U=0.07		
6	*Attenuators from Radio Frequency to Microwave Frequency	Attenuation	C.S. for Attenuators from Radio Frequency to Microwave Frequency JJF 2092	0dB～110dB，(10MHz～18GHz)	U=0.3dB		
		VSWR		1.0～2.0，(10MHz～18GHz)	U=0.07		
7	*Spectrum Analyzer	Frequency	C.S.for Spectrum Analyzers JJF 1396	9kHz～18GHz	U_{rel}=1.2×10^{-7}～3.2×10^{-5}		
		Electrical Level		(-120～30)dBm	U=0.3dB		
		Frequency Response		(-120～30)dBm，9kHz～18GHz	U=0.38dB		
		Sweep frequency		100Hz～18GHz	U_{rel}=0.02%		
		Resolution bandwidth		1Hz～30MHz	U_{rel}=0.9%		
		nfluence of resolution bandwidth conversion on amplitude measurement		0dB～2dB(1Hz～30MHz)	U=0.02dB		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Reference level		(-90～10)dBm	U=0.22dB		
		Vertical display scale		1dB/div~10dB/div（9kHz~18GHz）	U=0.22dB		
		Display average noise		(-160～0)dBm	U=1.4dB		
		Calibration signal level		(-40~0)dBm	U=0.2dB		
		Calibration signal frequency		150kHz～1000MHz	U_{rel}=1.2×10^{-7}		
8	*Vector Network Analyzers	Frequency	Calibration Specification for Vector Network Analyzers JJF 1495	9kHz～40GHz	U_{rel}=1.2×10^{-7}		
		Electrical Level		(-55 ～ 10)dBm ，(9kHz～18GHz)	U=0.20dB		
				(-25 ～ 10)dBm，(18GHz～26.5GHz)	U=0.22dB		
				(-25 ～ 10)dBm，(26.5GHz～40GHz)	U=0.26dB		
		Transmission Amplitude		20dB，50dB，(50MHz～18GHz)	U=0.54dB		
		VSWR		1.0～2.0，(10MHz～2GHz)	U_{rel}=4%		
				1.0～2.0，(2GHz～12GHz)	U_{rel}=4.2%		
				1.0～2.0，(12GHz～18GHz)	U_{rel}=5.2%		
		Modular dynamic accuracy		(0～-100)dB,1MHz～18GHz	U=(0.06～0.40)dB		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Sweep noise (modulus)		0～1(9KHz～18GHz)	U=0.02dB		
		Sweep noise (phase)		(0～1)° (9kHz～18GHz)	U=0.02°		
		Background noise		-140dBm~-60dBm(9kHz～ 18GHz)	U=2.3dB		
		Crosstalk		-140dBm~-60dBm(9kHz～ 18GHz)	U=2.0dB		
		Calibration piece reflection coefficient (modulus)		0～1,300kHz～18GHz	U=0.004～0.014		
				0～1,300kHz～18GHz	U=0.020～0.044		
		Calibration piece reflection coefficient (phase)		(-180～180)° ,300kHz～18GHz	U=(1.1～2.5)°		
		Scattering parameters(S21/S12 modulus)		(-20～-50)dB,10MHz～18GHz	U=0.26dB		
		Scattering parameters(S21/S12 phase)		(-180～180)° ,10MHz～18GHz	U=1.5°		
		Scattering parameters(modulus)		0～1,10MHz～18GHz	U=0.03		
		Scattering parameters(phase)		(-180～180)° ,10MHz～18GHz	U=1.5°		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
9	*543-1 noise signal generator	Sound pressure level	543-1 noise signal generator calibration wi SBJZ-ZB-D001	(75～118)dB	U=2.4dB		
		AC Voltage		(0.05V～1.1V)，14kHz	U=0.01V		
10	*Pulse Generator	Output Level	Verification Regulation of Pulse Generator JJG 490	10mV～200V，(1kHz)	U_{rel}=0.15%		
		Rise/Fall time		（1～100）ns	U_{rel}=4.2%		
		Pulse Width		（0.5～100）ns	U_{rel}=4.2%		
		Output Frequency		5Hz～300MHz	U_{rel}=4.2×10^{-6}		
		DC Offset		0.1V～20V	U_{rel}=0.12%		
11	*Low frequency Signal Generator	Frequency	V.R. of Low Frequency Signal Generator JJG 602	1Hz～1MHz	U_{rel}=6×10^{-6}		
		Voltage		10mV～100V，(1Hz～1MHz)	U_{rel}=0.1%～1.2%		
		Attenuation		(0～60)dB，(10Hz～300kHz)	U=0.10dB～0.12dB		
		Distortion		(0.001～10)%，(20Hz～20kHz)	U_{rel}=12%		
12	*High frequency Signal Generator	Frequency	C.S. for Signal Generators JJF 1931	150kHz～18GHz	U_{rel}=6×10^{-9}～1.8×10^{-6}		
		Electrical Level		(30～-110)dBm(2.5MHz～18GHz)	U=0.38dB		
		AM		5%～99%， (150kHz～18GHz)，（0.01～100）Hz	U_{rel}=2.6%～1.5%		
		FM		(0.4 ～ 400)kHz，(150kHz～18GHz)，（0.01～200）kHz	U_{rel}=2.7%～1.2%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		PM		(0.4 ～ 400)rad，(150kHz～18GHz)	U_{rel}=3.5%～5.0%		
13	*Distortion Meter	Distortion	Calibration Specification for Distortion Meters JJF 1852	0.03%～100%(10Hz～10kHz)	U_{rel}=2.5%～1.2%		
		Voltage		10mV ～300V(10Hz～500kHz)	U_{rel}=0.6%～1.0%		
		Frequency Response		10Hz～500kHz	U_{rel}=0.9%		
14	*Audio Analyzer	Output Frequency	Calibration Specification for Audio Analyzer JJF 1395	10Hz～200kHz	U_{rel}=2.0×10^{-6}		
		Output Level		10mV～20V（10Hz～20kHz）	U_{rel}=0.10%		
				10mV～20V（20kHz～50kHz）	U_{rel}=0.11%		
				10mV～20V（50kHz～100kHz）	U_{rel}=0.14%		
				10mV～20V（100kHz～200kHz）	U_{rel}=0.36%		
		Total Harmonic Distortion		（0.03%～0.3%）(20Hz～20kHz)	U_{rel}=12%		
		Frequency Measurement		10Hz～200kHz	U_{rel}=6×10^{-4}		
		level Measurement		10mV～300V（10Hz～45Hz）	U_{rel}=0.22%		
				10mV～300V（45Hz～10kHz）	U_{rel}=0.10%		
				10mV～300V（10kHz～20kHz）	U_{rel}=0.14%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				10mV～300V（20kHz～50kHz）	U_{rel}=0.22%		
				10mV～300V（50kHz～100kHz）	U_{rel}=0.5%		
				10mV～300V（100kHz～200kHz）	U_{rel}=0.9%		
		Distortion Measurement		0.03%～0.05%（10Hz～200kHz）	U_{rel}=2.3%		
				0.05%～0.1%（10Hz～200kHz）	U_{rel}=1.6%		
				0.1%～0.3%（10Hz～200kHz）	U_{rel}=0.8%		
				0.3%～100%（10Hz～200kHz）	U_{rel}=0.6%		
15	*Oscilloscopes Recorder	Input Impedance	Calibration standards on Oscilloscopes Recorder JJF(Min)1061	50Ω,1MΩ	U_{rel}=0.12%		
		Voltage		6mV～0.3V(1MΩ)	U_{rel}=1.0%		
				0.6V～120V(1MΩ)	U_{rel}=0.37%		
				6mV～ 6V(50Ω)	U_{rel}=1.1%		
		Time		2ns ～ 200ms	U_{rel}=0.16%		
				400ms ～ 5s	U_{rel}=0.5%		
		RiseTime		500ps ～ 50ns	U_{rel}=4.2%		
		Bandwidth		10MHz ～ 100MHz	U_{rel}=3.2%		
				100MHz ～300MHz	U_{rel}=3.6%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				300MHz ～600M	U_{rel}=5.4%		
16	*Digital Oscilloscope	Voltage	Verification regulation for digital oscilloscope GJB 7691,C.S. of Digital Storage Oscilloscope JJF 1057	6mV～0.3V(1MΩ)	U_{rel}=0.97%～0.38%		
				0.6V～120V(1MΩ)	U_{rel}=0.37%		
				6mV～ 6V(50Ω)	U_{rel}=1.1%～0.45%		
		Time		2ns ～ 200ms	U_{rel}=0.16%		
				400ms ～ 5s	U_{rel}=0.17%～0.49%		
		RiseTime		30ps ～ 500ns	U_{rel}=4.2%		
		Bandwidth		10MHz ～ 100MHz	U_{rel}=3.2%		
				100MHz ～300MHz	U_{rel}=3.6%		
				300MHz ～600M	U_{rel}=5.4%		
				600MHz ～2GHz	U_{rel}=5.0%		
				2GHz ～6GHz	U_{rel}=5.3%		
		Input Impedance		50Ω,1MΩ	U_{rel}=0.12%		
		Calibration signal frequency		5Hz ～300kHz	U_{rel}=1.2×10^{-7}		
		Calibration signal amplitude		10mV～10V	U_{rel}=0.5%		
17	*Analogue Oscilloscope	Voltage	V.R. of Analogue Oscilloscope JJG 262	12mV～ 0.3V(1MΩ)	U_{rel}=0.56%～0.28%		
				0.6V～30V(1MΩ)	U_{rel}=0.27%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Time		20ns ～500ms	U_{rel}=0.25%		
		RiseTime		500ps ～ 50ns	U_{rel}=4.2%		
		Bandwidth		10MHz ～ 100MHz	U_{rel}=3.2%		
				100MHz ～300MHz	U_{rel}=3.6%		
				300MHz ～600M	U_{rel}=5.4%		
		Input Impedance		50Ω,1MΩ	U_{rel}=0.12%		
18	*Televition video Signal Generator	level	C.S. for Televition video Signal Generator JJF 1235	Luminance :(1～1000)mV；Chroma:(1～1000)mV	U=4.1mV		
		Time		1ns～100ms	U=0.06 μs		
		phase		(0～360)°	U=0.6°		
		Drive signal frequency		10Hz～10MHz	U_{rel}=1.6×10^{-7}		
		Drive signal amplitude		(0.1～10) V	U_{rel}=2.1%		
19	*Impedance/Material Analyzers	DC voltage	Calibration Specification for RF Impedance/Material Analyzers JJF 1127	(0.01～40)V	U_{rel}=0.10%		
		signal level		-40dBm～20dBm	U=0.3dB		
		Test signal frequency		100kHz～3GHz	U_{rel}=4×10^{-7}		
		Admittance		(1MHz～3GHz)1μS～13mS	U_{rel}=2.2%		
		Impedance		(1MHz～3GHz)1mΩ～22kΩ	U_{rel}=2.2%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		phase		(1MHz～3GHz)(-1.57～1.57)rad	U=16mrad		
20	*Standard Capacitors	Capacitors	Verification Regulation of Standard Capacitors JJG 183	1pF～10μF (100Hz～10kHz)	U_{rel}=0.03%		
				10μF～10mF (1kHz)	U_{rel}=0.05%		
21	*Standard Inductors	Inductors	Verification Regulation of Standard inductors JJG 726	1μH～10μH (1kHz)	U_{rel}=0.6%		
				10μH～100μH (1kHz)	U_{rel}=0.10%		
				100μH～100H (1kHz)	U_{rel}=0.04%		
22	*Digital LCR meter	Resistance	Verification Regulation for wide digital RLC meter GJB/J5412,Alternating Current Bridge JJG 441	1Ω～10Ω (1kHz)	U_{rel}=0.06%		
				10Ω～100Ω (1kHz)	U_{rel}=0.04%		
				100Ω～100kΩ (1kHz)	U_{rel}=0.03%		
				1mΩ (100Hz～1kHz)	U_{rel}=0.8%		
				10mΩ (100Hz～10kHz)	U_{rel}=0.6%		
				100mΩ (100Hz～1000kHz)	U_{rel}=0.3%		
				1Ω (100Hz～1kHz)	U_{rel}=0.03%		
				1Ω (1kHz～1MHz)	U_{rel}=0.06%		
				10Ω,100Ω,1kΩ (100Hz～1kHz)	U_{rel}=0.03%		
				10Ω,100Ω,1kΩ (1kHz～1MHz)	U_{rel}=0.06%		
				10Ω,100Ω,1kΩ (1MHz～3MHz)	U_{rel}=0.17%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				10Ω,100Ω,1kΩ (3MHz～4MHz)	U_{rel}=0.23%		
				10Ω,100Ω,1kΩ (4MHz～5MHz)	U_{rel}=0.29%		
				10Ω,100Ω,1kΩ (5MHz～10MHz)	U_{rel}=0.8%		
				10Ω,100Ω,1kΩ (10MHz～13MHz)	U_{rel}=1.2%		
				10kΩ,100kΩ(100Hz～1kHz)	U_{rel}=0.03%		
				10kΩ,100kΩ(1kHz～100kHz)	U_{rel}=0.06%		
				10kΩ,100kΩ(100kHz～1MHz)	U_{rel}=0.12%		
		Capacitance		100pF～1μF (1kHz)	U_{rel}=0.06%		
				1μF～100μF(1kHz)	U_{rel}=0.07%		
				1pF,10pF,100pF,1000pF (100Hz～1MHz)	U_{rel}=0.12%		
				10nF,100nF(100Hz～100kHz)	U_{rel}=0.12%		
				1000nF(100Hz～10kHz)	U_{rel}=0.12%		
		Inductance		1μH～10μH (1kHz)	U_{rel}=0.6%～6%		
				10μH～100μH (1kHz)	U=0.09%～0.6%		
				100μH～1H (1kHz)	U_{rel}=0.07%～0.09%		
				1μH (100Hz～1MHz)	U_{rel}=1%		

The scope of the accreditation in Chinese remains the definitive version.

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				5 μ H,10 μ H (100Hz～5MHz)	U_{rel}=1%		
				50 μ H,100 μ H (100Hz～5MHz)	U_{rel}=0.5%		
				500 μ H,1000 μ H (100Hz～1MHz)	U_{rel}=0.3%		
				5mH (100Hz～500kHz)	U_{rel}=0.3%		
		Frequency		10Hz～1MHz	U_{rel}=6×10^{-6}		
		Voltage		10mV～100V(10Hz～20kHz)	U_{rel}=0.2%		
				10mV～100V(20kHz～100kHz)	U_{rel}=0.8%		
				10mV～100V(100kHz～2MHz)	U_{rel}=1.4%		
		loss		1～10^{-5}	U=0.4%R+0.0002		
23	*r A. C. Resistance Boxes	AC Resistance	C. S.for AC Resistance Boxes JJF 1636	(0.01～0.1) Ω （100Hz～1kHz）	U_{rel}=0.15%		
				(0.1～1000) Ω （60Hz～10kHz）	U_{rel}=0.08%		
				(1～100)k Ω （60Hz～10kHz）	U_{rel}=0.03%		
				(100～1000)k Ω （1kHz）	U_{rel}=0.08%		
24	*RF Coaxial Impedance Standard	Impedance(short,load)	Verification Regulation of RF Coaxial Impedance Standard JJG(DZ) 306001	(0.01～34) Ω (1MHz～3GHz)	U=0.5 Ω		
				50 Ω (1MHz～3GHz)	U=0.8 Ω		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		admittance(open)		10 μ S～71 μ S(1MHz～3GHz)	U=6 μ S		
25	*Transistor Character Graphic Meter	Step Current	C.S.for Semiconductor Device Curve Tracers JJF 1236	100 μ A～10A	U_{rel}=1.4%		
		Step Voltage		20mV～10V	U_{rel}=1.4%		
		Collector Voltage		20mV～1000V	U_{rel}=1.4%		
		Base Voltage		20mV～100V	U_{rel}=1.6%		
		Collector Current		100 μ A～20A	U_{rel}=1.5%		
		Calibration Voltage		20mV～100V	U_{rel}=0.12%		
26	*Communication Testers	RF SignalSource Frequency	C.S. for TDMA-GSM Radio Communication Testers JJF 1131,C.S. for CDMA Digital Radio Communication Testers JJF 1177,C.S. for LTE Digital Radio Communication Testers JJF 1443,C.S. for TD-SCDMA Digital Radio Communication Testers JJF 1204,C.S. for WCDMA Digital Radio Communication Testers JJF 1276,C.S. for RF Communication Test Set JJF 1065	30MHz～3.8GHz	U_{rel}=1.2×10^{-7}		
		RF SignalSource Electrical Level		(-20～ 0)dBm(30MHz～3.8GHz)	U=0.20dB		
				(-20～ -110)dBm(30MHz～3.8GHz)	U=0.38dB		
		RF SignalSource SpectrumPurity		(-80～-25)dBc	U=1.5dB～2.1dB		
		RF SignalSource Phase Noise		（-110～-25）dBc/Hz Bias frequency(20～1990)kHz	U=3dB		
		RF AnalyzerFrequency		30MHz～3.8GHz	U_{rel}=6×10^{-8}		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		RF AnalyzerElectrical Level		(-50dBm ～ 20dBm)(30MHz～3.8GHz)	U=0.20dB		
		AF SignalSource Frequency		10Hz～ 40Hz	U_{rel}=0.035%		
				40Hz～20kHz	U_{rel}=0.012%		
		AF SignalSource Voltage		10mV～ 100mV(40Hz～20kHz)	U_{rel}=0.054%～0.12%		
				100mV～ 1V(40Hz～20kHz)	U_{rel}=0.042%～0.11%		
				1V～ 5V(40Hz～20kHz)	U_{rel}=0.042%～0.07%		
		AF SignalSource Distortion		(0.001～0.3)%(20Hz～20kHz)	U_{rel}=12%		
		AF AnalyzerFrequency		20Hz～ 2kHz	U_{rel}=0.015%～0.003%		
				2kHz ～ 40kHz	U_{rel}=0.003%		
		AF AnalyzerVoltage		20mV～33mV(10Hz～45Hz)	U_{rel}=5%～3.2%		
				20mV～33mV(45Hz～10kHz)	U_{rel}=5%～3.2%		
				20mV～33mV(10kHz～20kHz)	U_{rel}=5%～3.2%		
				20mV～33mV(20kHz～40kHz)	U_{rel}=5%～3.2%		
				33mV～330mV(10Hz～45Hz)	U_{rel}=3.2%～0.44%		
				33mV～330mV(45Hz～10kHz)	U_{rel}=3.2%～0.32%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				33mV～330mV(10kHz～20kHz)	U_{rel}=3.2%～0.34%		
				33mV～330mV(20kHz～40kHz)	U_{rel}=3.2%～0.38%		
				0.33V～3.3V(10Hz～45Hz)	U_{rel}=0.42%～0.18%		
				0.33V～3.3V(45Hz～10kHz)	U_{rel}=0.32%～0.05%		
				0.33V～3.3V(10kHz～20kHz)	U_{rel}=0.34%～0.10%		
				0.33V～3.3V(20kHz～40kHz)	U_{rel}=0.42%～0.18%		
				3.3V～5V(10Hz～45Hz)	U_{rel}=0.26%～0.23%		
				3.3V～5V(45Hz～10kHz)	U_{rel}=0.08%～0.07%		
				3.3V～5V(10kHz～20kHz)	U_{rel}=0.19%～0.16%		
				3.3V～5V(20kHz～40kHz)	U_{rel}=0.40%～0.34%		
		Channel power		(-70～20)dBm	U=0.6dB		
		Adjacent channel power rate		(0.01～90)dBc	U=0.5dB		
		Frequency error		(-1～1)MHz	U=9Hz		
		EVM		(0.01～10)%	U=0.6%		
				(0.01～10)%(CDMA)	U=1.2%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Mag error		(0.01～10)%	U=0.6%		
		Phase error		(0.01～15)°	U=0.6°		
		FSK error		(0.01～10)%	U=2.0%		
		Waveform quality factor		(0.8～1.0)	U_{rel}=0.18%		
		Frequency Measurement error		(-1～1)MHz	U=9Hz		
		Channel power Measurement		(-70～10)dBm	U=0.6dB		
		Adjacent channel power rate Measurement		(0.01～90)dBc	U=0.5dB		
		EVM Measurement		(0.01～10)%	U=0.6%		
				(0.01～10)%(CDMA)	U=1.2%		
		Phase error Measurement		(0.01～15)°	U=0.6°		
		Mag error Measurement		(0.01～10)%	U=0.6%		
27	*Telephone analyzer	Feed voltage	C.S. for Telephone analyzer JJF(DZ) 30702	(10～100)V	U_{rel}=0.08%		
		Feed current		(10～150)mA	U_{rel}=0.2%		
		level		(-50～0)dBm	U=0.2dB		
		signal frequency		1Hz～20kHz	U_{rel}=0.05%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
28	*Bluetooth Test Set	Output Frequency	Calibration Specification for Bluetooth Test Set JJF 1278	2.402GHz～2.480GHz	U_{rel}=1.2×10^{-7}		
		Output Level		(0～ -20)dBm(2.402GHz～2.480GHz)	U=0.20dB		
				(-20～ -90)dBm(2.402GHz～2.480GHz)	U=0.38dB		
		Harmonic		(-80～-30)dBc(2.402GHz～2.480GHz)	U=1.8dB		
		Phase Noise		(-110～-30)dBc/Hz(2.402GHz～2.480GHz)	U=1.1dB		
		Frequency Measurement		（2402～2480）MHz	U_{rel}=6×10^{-8}		
		level Measurement		（-70～13）dBm(2.402GHz～2.480GHz)	U=0.20dB		
		Mag error		(0.01～10)%	U=1.2%		
		Modulation level		（-50～-10）dBm	U=0.25dB		
		EVM		(0.01～10)%	U=1.2%		
		Frequency error Measurement		(-1～1)MHz	U=10Hz		
		Modulation level Measurement		（-50～-10）dBm	U=0.4dB		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		EVM Measurement		(0.01～10)%	U=1.2%		
		Frequency error Measurement		(-1～1)MHz	U=10Hz		
29	*WLAN Test Set	Output Frequency	Calibration Specification for WLAN Test Set JJF 1277	2.412GHz～5.945GHz	U_{rel}=1.2×10^{-7}		
		Output Level		(0～ -20)dBm(2.412GHz～5.945GHz)	U=0.20dB		
				(-20～ -90)dBm(2.412GHz～5.945GHz)	U=0.38dB		
		Harmonic		(-80～-25)dBc（2412～2484）MHz	U=1.8dB		
				(-80～-25)dBc（4900～5945）MHz	U=2.4dB		
		Phase Noise		(-110～-30)dBc/Hz(2.412GHz～5.945GHz)	U=1.1dB		
		level Measurement		（-50～13）dBm(2.412GHz～5.945GHz)	U=0.20dB		
		Modulation level		（-50～-10）dBm(2.412GHz～5.945GHz)	U=0.25dB		
		EVM		(0.01～10)%	U=1.2%		
		Mag error		(0.01～10)%	U=1.2%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Frequency error Measurement		(-1～1)MHz	U=10Hz		
		Phase error		(0.01～15)°	U=0.6°		
		Modulation level Measurement		（-50～-10）dBm	U=0.25dB		
		EVM Measurement		(0.01～10)%	U=1.2%		
		Frequency error Measurement		(-1～1)MHz	U=10Hz		
		Phase error Measurement		(0.01～15)°	U=0.6°		
30	*Antenna Analyzers	Frequency	C. S. of Cable and Antenna Analyzers JJF 1740	25Hz～6GHz	U_{rel}=4.3×10^{-7}		
		VSWR		1.01～2.0	U_{rel}=6.2%		
		Terminal load reflection loss		（0～50）dB(10MHz～6GHz）	U=0.22dB		
		Power		(-50～20)dBm10MHz～6GHz	U=0.20dB		
31	*Range calibrator of power meter	DC Voltage	Verification regulation for range calibrator of power meter GJB 8819	0.01V～5V	U_{rel}=4×10^{-5}		
				5V～20V	U_{rel}=2×10^{-5}		
		Resistance		30Ω～100Ω	U_{rel}=4×10^{-5}		
				100Ω～10kΩ	U_{rel}=2×10^{-5}		
32	*Road vehicles-Electrical Transient	Peak pulse voltage	Calibration specification for Road vehicles-Electrical Transient Conduction	1V～4kV	U_{rel}=3%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
	Conduction Disturbance Simulator	Pulse voltage rise and fall time	Disturbance Simulator JJF(DZ) 0019	1ns～1s	U_{rel}=5%		
		Pulse duration		10ns～10s	U_{rel}=1.2%		
		Test voltage		1V～100V	U_{rel}=0.1%		
33	*TS-109 Semi-automatic Sorting Instrument for Electrolytic Capacitors	Capacitance	Verification regulation of TS-109 semi-automatic sorting instrument for electrolytic capacitors JJG(DZ) 05009	(0.1～1000) μF,(100Hz)	U_{rel}=0.2%		
				(0.1～100) μF,(1kHz)	U_{rel}=0.2%		
				(0.1～1) μF,(10kHz)	U_{rel}=0.3%		
		Voltage		0.1V～100V	U_{rel}=0.4%		
				100V～500V	U_{rel}=0.3%		
		Current		1 μA～10mA	U_{rel}=0.3%		
		Loss factor		0.0001～1,(100Hz～10kHz)	U=0.002		
34	*Oscilloscope Calibrator	DC calibration voltage	Verification regulation of oscilloscope calibrator JJG 278	1mV～1V	U=8.6×10^{-5}Vx+0.0003mV		
				1V～10V	U=8.6×10^{-5}Vx+0.0005mV		
				10V～100V	U=8.6×10^{-5}Vx+0.003mV		
				100V～200V	U=8.6×10^{-5}Vx+0.01mV		
		Square wave calibration voltage		1mV～100mV	U=8×10^{-5}Vx+0.002mV		
				0.1V～10V	U=8×10^{-5}Vx+0.02mV		
				10V～100V	U=0.024%Vx+0.2mV		
				100V～200V	U=0.046%Vx+2mV		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Fast edge rise/fall time		150ps～1ms	U_{rel}=2.5%		
		Waveform distortion overshoot		0.01%～20%	U_{rel}=1.8%		
		Fast-edge pulse duty cycle		1%～99%	U_{rel}=0.1%		
		Hour markers		500ps～10s	U_{rel}=5.0×10^{-8}		
		Stabilize the amplitude of the signal		(-60～20)dBm，(9kHz～3.05GHz)	U=0.17dB		
				(-60～20)dBm，(3.05～6.6)GHz	U=0.15dB		
				(-60～20)dBm，(6.6～13.2)GHz	U=0.19dB		
				(-60～20)dBm，dBm，(13.2～18)GHz	U=0.23dB		
		Amplitude stabilization signal frequency		10Hz～18GHz	U_{rel}=5.0×10^{-8}		
		Amplitude stabilization signal harmonics		1dB～140dB,(9kHz～3GHz)	U=0.65dB		
				1dB～140dB,(3GHz～6GHz)	U=1.2dB		
		Waveform generator amplitude		10mV～1000mV，(10Hz～20kHz)	U_{rel}=0.035%		
				1V～50V，(10Hz～20kHz)	U_{rel}=0.024%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Pulse period		4ns～100ms	$U_{rel}=5\times10^{-8}$		
		Pulse width		2ns～50ms	$U_{rel}=0.1\%$		
		Resistance measurement		10Ω～100Ω	$U_{rel}=0.12\%$		
				100Ω～1MΩ	$U_{rel}=0.024\%$		
				1MΩ～15MΩ	$U_{rel}=0.24\%$		
35	*Dynamical Signal Analyzer	Frequency	V.R.of Dynamical Signal Analyzer JJG 834	10Hz～200kHz	$U_{rel}=1.1\times10^{-6}$		
		Amplitude		10mV～10V，(10Hz～20kHz)	$U_{rel}=0.10\%$		
				10mV～10V，(20～50)kHz	$U_{rel}=0.16\%$		
				10mV～10V，(50～200)kHz	$U_{rel}=0.3\%$		
		Dynamic range		(0～120)dB	U=0.20dB		
		Channel conformance		(-1～1)dB	U=0.02dB		
36	*Components of Lightning Testers	DC Voltage	C. S. for Components of Lightning Testers JJF(Gui）18	(0.1～2)kV	$U_{rel}=0.12\%$		
				(1～2)kV	$U_{rel}=0.5\%$		
		DC Current		(0.1～2000) μA	$U_{rel}=0.3\%$		
		Rate Of Voltage Rise		100V/s～1000V/s	$U_{rel}=3\%$		
37	*VDR DC Parameter Testers	DC Voltage	C. S. for VDR DC Parameter Testers JJF(Zhe)1088	(0.1～2)kV	$U_{rel}=0.12\%$		
				(1～2)kV	$U_{rel}=0.5\%$		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		DC Current		(0.1～2000) μA	U_{rel}=0.3%		
		Rate Of Voltage Rise		100V/s～1000V/s	U_{rel}=3%		
38	*Transformer Winding Deformation Testers	Attenuation of amplitude	Calibration Specification for Transformer Winding Deformation Testers JJF(Zhe) 1138	（-80～0）dB	U=0.3dB		
		Sweep frequency		10Hz～1MHz	U_{rel}=0.002%		
39	*High Voltage Dielectric Loss Tester	Electric capacity	Verification Regulation of High Voltage Dielectric Loss Tester JJG 1126	100pF(50Hz)	U_{rel}=0.3%		
		Dielectric Loss Factor		(0.0002～0.1)	U=0.3%Dx+0.0002		
40	Electric spark leak detectors	Pulse voltage	Calibration Specification for electric spark leak detectors JJF(Lu) 101	(0.5～20) kV	U_{rel}=3.0%		
41	Artificial Mains Networks	Impedance	Calibration Specification of Artificial Mains Networks JJF 1705	1Ω～100Ω（9kHz～108MHz）	U_{rel}=7%		
				-180°～180°（9kHz～108MHz）	U=3.9°～4.0°		
		Voltage divider coefficient		-20dB～0dB（9kHz～108MHz）	U=1.24dB		
42	Electromagnetic Clamps	Input Impedance	Calibration Specification of Electromagnetic Clamps JJF（DZ）0031	50Ω～350Ω（0.1MHz～100MHz）	U_{rel}=11%		
		Decoupling factor		-10dB～0dB（0.1MHz～100MHz）	U=2.2dB		
		Coupling factor		-5dB～3dB（0.1MHz～1000MHz）	U=2.2dB～2.3dB		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
43	Coupling/Decoupling Networks of Conducted Disturbances Induced by Radio-Frequency Fields Testing	Common-Mode Impedance Modulus	Calibration Specification of Coupling/Decoupling Networks of Conducted Disturbances Induced by Radio-Frequency Fields Testing JJF 2079	5Ω～300Ω（0.15MHz～230MHz）	U_{rel}=6.4%		
		Decoupling attenuation		10dB～50dB（0.15MHz～230MHz）	U=2.4dB～2.6dB		
		Coupling coefficient		-5dB～5dB（0.15MHz～230MHz）	U=0.54dB		
		Adapter Insertion Loss		5dB～15dB（0.15MHz～230MHz）	U=0.32dB		
Time and Frequency							
1	*Microwave Frequency Counters	Frequency Measurement and input sensitivity	Verification Regulation of Microwave Frequency Counters JJG 841	10mV～300mV(0.1Hz～1MHz)	U=1.8mV		
				(-33～-20)dBm(1MHz～18GHz)	U=1dB		
		Frequency Measurement error		1Hz～18GHz	$U_{rel}=1.5\times10^{-8}$		
		Crystal oscillator		10MHz	$U_{rel}=3\times10^{-8}$		
2	*Universal Counters	Frequency Measurement and input sensitivity	Calibration Specification for Universal Counters JJF 2196	10mV～300mV(0.1Hz～1MHz)	U=1.8mV		
				(-33～-20)dBm(1MHz～18GHz)	U=1dB		
		Frequency Measurement error		1Hz～18GHz	$U_{rel}=1.5\times10^{-8}$		
		Period Measurement and input		(-33～-20)dBm(1ps～1μs)	U=1dB		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		sensitivity		10mV～300mV(1 μs～1s)	U=1.8mV		
		Frequency Measurement error		1 μs	$U_{rel}=1.5\times10^{-8}$		
		Crystal oscillator		10MHz	$U_{rel}=3\times10^{-8}$		
3	*Frequency Meters	Frequency	Verification Regulation of Frequency Meters JJG 603	10Hz～10kHz	U_{rel}=0.03%		
4	*Stopwatches	time interval	C.S.for Stopwatches JJF 2195	electronic stopwatch：(1～3600)s	U=15ms		
				Electronic stopwatch daily deviation：(-10～10)s/d	U=0.05s		
				Mechanical stopwatch：(1～3600)s	U=0.11s		
				Electric stopwatch：(1～3600)s	U=5ms		
5	*Time Delay Relays	time error	Calibration Specification for Time Delay Relays JJF 1282	0.01s～10.00s	U=7ms	Only Calibrate electronic time relays	
				10.00s～60.00s	U=8ms		
				0.1s～60.0s	U=0.06s		
				1s～2h	U=0.6s		
6	*Time interval meters	Time interval	Verification Regulation of Time Interval Meters JJG 238	50ns～1000s	$U=2\times10^{-7}T_X$+15ns		
		frequency		5MHz,10MHz	$U_{rel}=1\times10^{-9}$		
7	*Online Timer	Time Interval	Calibration Specification of Online Timer JJF（Liao）492	(1～18000)s	$U=2\times10^{-5}T$+0.62s		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
8	*Pulse Counters	Frequency of Internal Time Base	Calibration Specification for Pulse Counters JJF1686	5MHz,10MHz	U_{rel}=1.2×10^{-8}		
		Pulse Counting		1～1000000	U=0.0006%Tx+2		
9	*Vibrating Wire Frequency Readouts	Excitation signal	Calibration Specification for Vibrating Wire Frequency Readouts JJF1401	1mV～100V	U_{rel}=1.8%		
		Frequency		300Hz～6000Hz	U_{rel}=0.007%		
Optics measuring instrument							
1	Optical Power Meter in Telecommunication	Optical Power	V.R.of Optical Power Meter in Telecommunication JJG965	(-50～0)dBm (850nm，1310nm，1550nm)	U=0.18dB		
2	Stabilized Laser Sources for Optical Transmit	Output Power	V.R.of Stabilized Laser Sources for Optical Transmit JJG958	(-50～0)dBm	U=0.18dB		
		Light Wavelength		(1270～1580)nm	U=0.06nm		
		Spectral bandwidth		（0.2～10）nm	U=0.06nm		
3	Optical Attenuator for Telecommunications	Insertion Loss	C.S. of Optical Attenuator for Telecommunications JJF1199	(0.01～3)dB	U=0.18dB		
		Attenuation Indication		(0.01～50)dB (850nm，1310nm，1550nm)	U=0.18dB		
4	Illuminance Meter	Illumination	V.R.of Illuminance Meter JJG 245	（50～3000）lx	U_{rel}=1.5%		
5	Color Temperature Meter	Color temperature	C.S. for Colour Temperature Meters JJF 2100	(2300～3200)K	U=16K～26K		
				(3200～9000)K	U=52K～1.7×10^{2}K		
		chroma		Full color gamut	U=0.005		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Rendering Index		0～100	U=0.4		
6	*Clarity Test Equipment	Illumination	C.S. for Clarity Test Equipment JJF 1287	（100～3000）lx	U_{rel}=8%		
		Time		（0～30）s	U=0.2s		
7	Luminance Meter	luminance	V.R. of Luminance Meter JJG 211	(50～1000)cd/m^2	U_{rel}=2.2%	Do not make shading cylinder type	
		chroma		Panchromatic Gamut	U=0.005		
8	*Whiteness Meter	Whiteness	V.R. of the Whiteness Meters JJG 512	50～100	$U(R_{457})$=1.8		
9	*Colorimeters and Color Difference Meters	Chroma	V.R. of Colorimeters and Color Difference Meters JJG 595	Y:0～100	U(Y)=2.2		
				Panchromatic Gamut	U=0.0060		
10	*Water Colorimeters	chroma	C. S. for Water Colorimeters JJF 1689	Digital Instrument：(1～70) PCU	U=1 PCU		
				Visual Instrument：(1～70）PCU	U=6 PCU		
11	Ultraviolet Radiometers	UV Irradiance	V.R. of Ultraviolet Radiometers JJG 879	(0.1～100) mW/cm^2	U_{rel}=20%		
12	*Abbe Refractometer	Refraction Ratio	V.R. of Abbe Refractometer JJG 625	n_D：1.47000～1.67000	$U(n_D)=6\times10^{-5}$		
		Average dispersion		n_F-n_C：0.0070～0.0210	$U(n_F-n_C)=1.5\times10^{-4}$		
13	*Reflection Densitometers	optical density	C.S. for Reflection Densitometers JJF 1492	0.00＜D≤1.00	U=0.03		
				1.00＜D≤2.00	U=0.04		
14	*Diffuse Transmission Visual	Transmission density	V.R.of Diffuse Transmission Visual Densitometers JJG 920	0.0＜D≤2.0	U=0.020		
				2.0＜D≤4.0	U=0.024		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
	Densitometers			4.0＜D≤5.0	U=0.032		
15	*Specular Gloss Meters	Specular Gloss	V.R. of Specular Gloss Meters and Gloss Plates JJG 696	(0.0～120.0)GU	U=1.4GU		
16	*Reflectometers	reflectivity	C.S. for Reflectometers JJF 1232	(50～100)%	U=2.3%		
17	*Hazemeter	Haze	C.S. for Hazemeters JJF 1303	0.1～35.0	U=0.30		
		Transmission		(10～100)%	U=0.8%		
18	*Standard Light Sources Boxes	Illumination	C.S.(FZ) for Standard Light Source Boxes JJF(FZ) 055	(200～3000)lx	U_{rel}=6%		
		Color temperature		(2300～7500)K	U=37K～1.4×10^{2}K		
19	*UV Analyzers	Irradiance	C.S. for UV Analyzers JJF 1936	（10～1000）μW/cm^2	U_{rel}=22%		
		wavelength		(254～365)nm	U=0.7nm		
20	*Electrical Light Source Spectrum Test System	wavelength	C.S. for Electrical Light Source Spectrum Test System JJF(Su) 153	(250～580)nm	U=0.13nm		
		Luminous flux		(1 ～2000)lm	U_{rel}=2%		
		chromaticity coordinates		Panchromatic Gamut	U=0.005		
		Correlated color temperature		(2000～3400)K	U=26K		
21	Cathode Ray Tubes (CRT) Color Analyzers	Brightness	C.S. for Cathode Ray Tubes (CRT) Color Analyzers JJF 1079	(20～400)cd/m^2	U_{rel}=2.6%		
		Chroma		Panchromatic Gamut	U=0.004		
22	Retroreflectometers	Retroreflective luminance coefficient	Calibration Specification for Retroreflectometers JJF1809	(0.1～1999)mcd・m^{-2}・lx^{-1}	U_{rel}=15%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
23	*Automatic Lamp-Inspecting Machines	Illuminance	Calibration Specification for Automatic Lamp-Inspecting Machines JJF 1824	(100～3000)lx	U_{rel}=5%		
24	Ultraviolet Radiant Exposure Meters	Radiant Exposure	C.S. for Ultraviolet Radiant Exposure Meters JJF 2130	(0.01～6)J/cm^2 (320 nm～390 nm)	U_{rel}=9%		
Chemistry measuring instrument							
1	*Extrusion Plastometer	Temperature	V.R. of Extrusion Plastometer JJG 878	(125～400)℃	U=0.2℃		
		Rate		Melt Flow Rate:(0.1～25)g/10min	U_{rel}=5.0 %		
		Length		(1～3) mm	U=0.001 mm		
		Mass		(0～200) g	U=0.002 g		
				(0.2～20)kg	U=3 g		
		Time		(0～10) min	U=0.2 s		
2	*Differential Scanning Calorimeters	Heating rate	V.R.of the Differential Scanning Calorimeters JJG 936	(1～20) ℃/min	U_{rel}=6 %		
		Temperature		Melting temperature:(100～500)℃	U=(0.3～1.0) ℃		
				Phase transition temperature:(100～600)℃	U=(0.8～1.5) ℃		
		Heat		Melting heat:(20～110)J/g	U=(0.4～1.5) J/g		
3	*Open/Closed Cup Flash Point Testers	Temperature	Calibration Specification for Open/Closed Cup Flash Point Testers JJF1385	Open Cup:(80～200) ℃	U=8 ℃		
				Open Cup:(200～300) ℃	U=(8.2～11) ℃		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				Closed Cup:（40～110）℃	U=6.4 ℃		
				Closed Cup:（110～300）℃	U=6.8 ℃		
4	*Thermogravimetric Analyzers	Temperature	V.R.of Thermogravimetric Analyzers JJG 1135	Curie point:(20～800) ℃	U=(1.0～2.0) ℃		
				Curie point:(100～500) ℃	U=(0.3～1.2) ℃		
		Mass		(1～20) mg	U=(7～12) μg		
5	*Melting-point Measurement Instruments	Temperature	V.R.of Melting-point Measurement Instruments JJG 701	Capillary method:(50～300)℃	0.2 ℃/min：U=0.3 ℃		
				Hot stage:(50～300) ℃	1.0 ℃/min:U=0.4 ℃		
		Heating rate		(0.2～2.0) ℃/min	U_{rel}=6 %		
6	*Thermogravimetric Moisture Meters	Content	Verification Regulation of Thermogravimetric Moisture Meters JJG 658	Water content:5 %～95 %	U_{rel}=0.06 %		
		Mass		1 mg～1100 g	U=（0.06～21）mg		
7	*pH Meters	Voltage	Verification Regulation of pH Meters JJG 919	(10～1000) mV	U_{rel}=3×10^{-3}		
		Resistance		(1～3) GΩ	U_{rel}=1.3 %		
		pH		0～14	U=0.0002		
8	*Verficating Meter for Chromatograph	DC Voltage	Verification Regulation of Verficating Meter for Chromatograph JJG 937	（0.01～10）V	U_{rel}=0.02 %		
		Resistence		（1～1000）Ω	U_{rel}=0.03 %		
		DC Current		(0.1～10) mA	U_{rel}=0.3 %		
9	*Ultraviolet, visible and near-infrared	Wavelength	V.R. of Ultraviolet, Visible, Near-Infrared Spectrophotometers JJG 178	(240～900) nm	U=0.5 nm		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
	spectrophotometer	Wavelength		(1000～2000) nm	U=0.8 nm		
		Transmission		（0～35）%	U=0.5 %		
10	*Dispersive Infrared Spectrophotometers	Wave numbe	V.R. of Dispersive Infrared Spectrophotometers JJG 681	(3100～800)cm^{-1}	U=0.4cm^{-1}		
11	*Atomic Absorption Spectrophotometers	Concentration	V.R. of Atomic Absorption Spectrophotometers JJG 694	Flame method (Cu) detection limit：≤0.02 μg/mL	U=0.006 μg/mL		
				Graphite furnace method (Cd) detection limit：≤4pg	U=0.3 pg		
12	*luorescence Spectro photometer	Concentration	V.R. of Fluorescence Spectrophotometer JJG 537	Detection Limit:≤1×10^{-8} g/mL	U_{rel}=2.7 %		
13	*Emission Spectrometer	Wavelength	V.R. of Emission Spectrometer JJG 768	ICP spectrometer:(190～1100) nm	U=0.01 nm		
		Concentration		Detection limit of ICP spectrometer(Zn):≤0.01 mg/L	U_{rel}=7 %		
				Detection limit of ICP spectrometer(Ni):≤0.03 mg/L	U_{rel}=7 %		
				Detection limit of ICP spectrometer(Mn、Ba):≤0.005 mg/L	U_{rel}=7 %		
				Detection limit of ICP spectrometer(Cr、Cu):≤0.02 mg/L	U_{rel}=7 %		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Content		Detection limit of direct reading spectrometer(C、Mn):≤0.02 %	U_{rel}=7 %		
				Detection limit of direct reading spectrometer(Si、Ni):≤0.02 %	U_{rel}=8 %		
				Detection limit of direct reading spectrometer(Cr、V):≤0.01 %	U_{rel}=8 %		
14	*Flame photo-meter	Concentration	V.R. of Flame Photometer JJG 630	Detection limit(K):≤0.004 mmoL/L	U=0.0005 mmol/L		
				Detection limit(Na):≤0.008 mmoL/L	U=0.0024mmol/L		
15	*Polarimeter	Polarimete	V.R.of Polarimeter and Saccharimeter JJG 536	(-45～45)°	U=0.003°		
16	*Hand Saccharimeter(Content-meter) and Hand Refractometer	Saccharimeter (Content-meter)	V.R. of Hand Saccharimeter(Content-meter) and Hand Refractometer JJG 820	5%～60%	U=0.07 %		
		Refractivity		1.3330～1.5200	U=0.0002		
17	*energy dispersive X ray fluorescence spectrometer	Energy	Calibration Specification for Energy Dispersive X-Ray Fluorescence Spectrometers JJF 2024	Resolution≤280eV	U=13eV		
		Content		In Polymer：Pb（60~1200）mg/kg、Hg（8~1200）mg/kg、Cr（40~1200）mg/kg、Br（1400~1500）mg/kg、Cd（5~150）mg/kg	U_{rel}=10%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				Cl in Polymer：（350~400）mg/kg	U_{rel}=19%		
				Pb、Cd in Metal：（0.002%~0.110%）	U_{rel}=11%		
				Cr、Ni in metal：（7%~27%）	U_{rel}=0.6%~1.0%		
18	*Gas Chromatograph	Flow rate	V.R. of Gas Chromatograph JJG 700	Carrier gas flow rate:(20~150) mL/min	U_{rel}=5.2 %		
		Detection limit		TCD Sensitivity:≥800 mV•mL/mg	U_{rel}=9 %		
				FID Detection Limit:≤ 0.5 ng/s	U_{rel}=9 %		
				FPD Detection Limit(S): ≤0.5ng/s	U_{rel}=9 %		
				FPD Detection Limit(P): ≤0.1 ng/s	U_{rel}=9 %		
				ECD Detection Limit:≤5 pg/mL	U_{rel}=9 %		
				NPD Detection Limit(N): ≤5 pg/s	U_{rel}=9 %		
				NPD Detection Limit(N):(P)≤10 pg/s	U_{rel}=9 %		
19	*Liquid Chromatograph	Flow	V.R. of Liquid Chromatograph JJG 705	(0.2～10) mL/min	U_{rel}=0.3 %		
		Detection limit		UV-VisD and DAD Detection limit:≤5×10^{-8}g/ml	U_{rel}=9 %		
				FLD Detection limit:≤5×10^{-8}g/ml	U_{rel}=9 %		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				RID Detection limit:≤5×10^{-6}g/m	U_{rel}=10 %		
				ELSD Detection limit:≤5×10^{-6}g/ml	U_{rel}=11 %		
20	*Ion Chromatographs	Detection limit	V.R. of Ion Chromatographs JJG 823	Detection limit of conductivity detector:≤0.02 μg/mL	U_{rel}=6 %		
				Detection limit of UV-visible light detector:≤0.02 μg/mL	U_{rel}=6 %		
				Detection limit of electrochemical detector:≤0.02 μg/mL	U_{rel}=6 %		
21	*Capillary electrophoresis apparatus	Wavelength	V. R. of Capillary electrophoresis apparatus JJG 964	(190～360) nm	U=1 nm		
		Detection limit		≤1 μg/mL	U_{rel}=15 %		
22	*Liquid Chromatograph-Atomic Fluorescence	Flow	V. R. of Liquid Chromatograph-Atomic Fluorescence JJG 1151	（0.1～10）mL/min	U_{rel}=0.3 %		
		Detection limit		Detection limit（As(V)）:＜1.0 ng	U_{rel}=10 %		
				Detection limit（MMA）:＜0.7 ng	U_{rel}=10 %		
				Detection limit（DMA）:＜0.7 ng	U_{rel}=10 %		
23	*Chromatography-Mass Spectrometer	Mass	C.S. for Gas Chromatography-Mass Spectrometers JJF 1164	(50~350) u	U_{rel}=2 %		
		Concentration		Electron impact source (EI+) ion trap、single quadrupole、triple quadrupole S/N: ≥10:1	U_{rel}=15 %		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				Electron bombardment source (EI+) flight time、electrostatic field orbitrap (octafluoronaphthalene) S/N: ≥50:1	U_{rel}=15 %		
				Positive chemical ionization source (CI+) ion trap、single quadrupole、triple quadrupole (benzophenone) S/N: ≥10:1	U_{rel}=15 %		
				Negative chemical ionization source (CI-) ion trap、single quadrupole (octafluoronaphthalene) S/N: ≥10:1	U_{rel}=15 %		
		Temperature		(50～300)℃	U_{rel}=0.2 %		
24	*liquid chromatography-mass spectrometers	Signal to Noise Ratio	C.S. for liquid chromatography-mass spectrometers JJF 1317	hree pole quadrupole（ESI+、APCI+）S/N: ≥30:1	U_{rel}=11 %		
				Three pole quadrupole（ESI-）S/N:≥10:1	U_{rel}=15 %		
				Single quadrupole（ESI+、APCI+、ESI-）S/N:≥10:1	U_{rel}=15 %		
		Mass		（1～600）u	U_{rel}=2 %		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				（600～1000）u	U_{rel}=3 %		
				（1000～2500）u	U_{rel}=5 %		
		Time		Retention time:（0.1～30）min	U_{rel}=3 %		
		Abundance Ratio		Abundance ratio:(40～150) %	U_{rel}=10 %		
25	*Analyzers for oil content in water	Concentra-tion	V.R. of Instrument for measuring oil concentration in water JJG 950	(0.1～1000) mg/L	U_{rel}=4%		
26	*Turbidity Meter	Turbidity	V.R.of Turbidimeters JJG 880	(0.1～400) NTU	U_{rel}=4%		
27	*On-line Dissolved Oxygen Meter with Covered-Membrane-Electrode	Concentration	V.R. of On-line Dissolved Oxygen Meter with Covered-Membrane-Electroder JJG(Zhe) 111	(6～15) mg/L	U=0.12 mg/L		
		Time		（0～90）s	U=0.08 s		
28	Dissolved Oxygen Meter	Concentration	V.R. of Dissolved Oxygen Meter JJG 291	(6～15) mg/L	U=0.12 mg/L		
		Time		（0～60）s	U=0.08 s		
		Temperature		(0～50) ℃	U=0.2℃		
29	*On-line Automatic Determinator of Chemical Oxygen Demand(COD)	Concentra-tion	V.R. of On-line Automatic Determinator of Chemical Oxygen Demand(COD) JJG 1012	(10～1000) mg/L	U_{rel}=2.5 %		
30	*Chemical Oxygen Demand(COD)Meters	Temperature	V.R. of Chemical Oxygen Demand(COD) Meters JJG 975	(0～200) ℃	U=0.6 ℃		
		Time		（1～120）min	U_{rel}=0.2 %		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Concentra-tion		(10～2000) mg/L	U_{rel}=2.1 %		
31	*ON-LINE Automatic Analyzer of Total Organic Carbon	Concentra-tion	V.R. of ON-LINE Automatic Analyzer of Total Organic Carbon JJG(Zhe) 132	(0.01～20000) mg/L	U_{rel}=2.2 %		
32	*Total Organic Carbon Analyzer	Concentra-tion	V.R. of Total Organic Carbon Analyzer JJG 821	Inorganic carbon:(0.001～1000) mg/L	U_{rel}=2.2 %		
				Organic carbon:(0.001～1000)mg/L	U_{rel}=2.2 %		
33	*Ammonia-nitrogen automatic analyzers	Concentration	V. R. of Ammonia nitrogen automatic monitor JJG 631	(0.1～100) mg/L	U_{rel}=3 %		
		Time		(1~360) s	U=2.0 s		
		Voltage		（0.1～500） MΩ	U_{rel}=16 %		
34	*Water quality on-line analyzers of total phosphorus and total nitrogen	Concentration	V. R. of On-line water quality analyzer for total phosphorus and total nitrogen JJG 1094	Total phosphorus:(0.1～100) mg/L	U=0.01 mg/L		
				Total phosphorus:(0.5～100) mg/L	U_{rel}=3 %		
				Total nitrogen:(0.1～2) mg/L	U=0.06 mg/L		
				Total nitrogen:(2～100) mg/L	U_{rel}=3 %		
35	*Water Quality On-line Analyzers of Heavy Metals	Concentration	C. S. for On line analyzer for heavy metal water quality JJF 1565	Pb:(0.001～1000) mg/L	U_{rel}=2.8 %		
				Cd:(0.0001～1000) mg/L	U_{rel}=2.8 %		
				Hg:(0.0001～1000) mg/L	U_{rel}=2.8 %		
				As:(0.001～1000) mg/L	U_{rel}=2.8 %		

The scope of the accreditation in Chinese remains the definitive version.

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				Cr:(0.01～1000) mg/L	U_{rel}=2.8 %		
				Cr^{6+}:(0.001～1000) mg/L	U_{rel}=2.8 %		
				Cu:(0.01～1000) mg/L	U_{rel}=2.8 %		
				Zn:(0.01～1000) mg/L	U_{rel}=2.8 %		
				Ni:(0.001～1000) mg/L	U_{rel}=2.8 %		
				Fe:(0.01～1000) mg/L	U_{rel}=2.8 %		
				Mn:(0.01～1000) mg/L	U_{rel}=2.8 %		
36	*Residual Chlorine Meters	Concentration	C.S. for Residual Chlorine Meters JJF 1609	Free residual chlorine:（0.1～50）mg/L	U_{rel}=1.6 %		
				Total residual chlorine:（0.1～500）mg/L	U_{rel}=0.9 %		
37	Wood moisture content measuring instrument	Content	V.R. of moisture content measuring instrument JJG 986	Content of water: 6 %～28 %	U=0.3 %		
38	*Instrument for KF Coulometry Titration	Content	V.R. of Carle Fischer Coulomb method micro moisture meter JJG 1044	Moisture content:（10～5000） μg	U_{rel}=(1.6~0.8) %		
		Time		Electrolytic rate:(1～180) s	U=4 s		
				Zero balance:(1～120) s	U=4 s		
39	*Karl Fischer Volumetric Titrators for Water Content	Content	Karl V.R. of Fischer Volumetric Titrators for Water Content JJG 1154	Moisture content:0.1 %~5.0 %	U_{rel}=1.6 %		
40	*Liquid-borne Particle Counters	Count	V.R for Liquid-borne Particle Counters JJG 1061	(1～3000) Counter/mL	U_{rel}=5 %	Only test particles in water	

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Particle size		(1～50) μm	U_{rel}=5 %		
41	*Static Light Scattering Particle Size Analyzers	Particle size	C.S. for Static Light Scattering Particle Size Analyzers JJF 1211	(1～5) μm	U_{rel}=5 %		
				(5～20) μm	U_{rel}=5 %		
				(20～100) μm	U_{rel}=4 %		
				(100～200) μm	U_{rel}=3 %		
42	Flow Cups Viscosimeter	Time	V.R.of Flow Cups Viscosimeter JJG 743	Time of outflow:(15～150) s	U_{rel}=（0.5%～0.8%）		
				Correction coefficient:0.95～1.05	U_{rel}=2.9 %		
43	Rotandarl Viscometer	Viscosity	V.R.of Rotational Visometers JJG 1002	（2～1×10^5）mPa•s	U_{rel}=（0.6～0.8）%		
44	*Laboratory pH Meters	pH	V.R. of Laboratory pH Meters JJG 119	Meter: 0～14	U=0.001		
				Instrument：4～9.5	U=0.013		
		Potential		（-2000～2000）mV	U=0.2 mV		
		Temperature		（0～50）℃	U=0.2 ℃		
45	*On-line pH Meters	pH	C.S. for On-line pH Meters JJF 1547	Meter：0～14	U=0.01		
				Instrument:1.6～13.5	U=0.02		
		Potential		（-2000～2000）mV	U=0.2 mV		
		Temperature		(0～50)℃	U=0.2℃		
46	*Laboratory Ion Meters	Potential	V.R. Laboratory Ion meters JJG 757	(-2000～2000) mV	U=0.2 mV		
		pX		Meter:（0～14）pX	U=0.001		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				Instrument：pX：2～4	U=0.02		
		Temperature		(0～50) ℃	U=0.2 ℃		
47	*Automatic Potentionmetric Titrator	Potential	V.R. of Automatic Potentionmetric Titrator JJG 814	(-2000～2000) mV	U=0.2 mV		
		Capacity		(1～100) mL	U=（0.003～0.030）mL		
		Concentration		0.1 mol/L	U_{rel}=0.5 %		
48	*Electrolytic Conductivity Meters	Electrolytic Conductivity	V.R. of Electrolytic Conductivity Meters JJG 376	Meter:(0.05～1×10^5) μS/cm	U=0.1%FS		
				Instrument:（100～2000) μS/cm	U_{rel}=0.4%		
				Instrument:（10～120) mS/cm	U_{rel}=0.2%		
		Temperature		（0～50）℃	U=0.2℃		
49	*Micro oxygen analyzer	Concentration	V. R. of Micro Oxygen analyzer JJG 945	(20～1000) μmol/mol	U_{rel}=2 %		
50	*Zirconia oxygen analyzer	Concentration	V. R. of Zirconia Oxygen analyzer JJG 535	(0.1～25)×10^{-2}mol/mol	U_{rel}=1.5 %		
51	*Electrochemical oxygen analyzer	Concentration	V. R. of Electrochemical Oxygen analyzer JJG 365	(5.0～25)×10^{-2}mol/mol	U_{rel}=1.5 %		
52	*Photoionization detector for volatile organic compounds	Concentration	C. S. for Photoionization detector for volatile Organic compounds JJJF 1172	（0.1～2000） μmol/mol	U_{rel}=2.3%		
53	*Carbon monoxide detection alarm	Concentration	V. R. of Carbon monoxide detection alarm JJG 915	（1～2000） μmol/mol	U_{rel}=2.3 %		
54	*Combustible gas detection alarm	Concentration	V. R. of Combustible gas detection alarm JJG 693	CH_4:(10～60)%LEL	U_{rel}=2.1 %	Only carry out the calibration of	
				H_2:(10～60)%LEL	U_{rel}=2.1 %		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				i-C_4H_{10}:(10～60)%LEL	U_{rel}=2.1 %	methane, isobutane, hydrogen, propane, and acetylene gas detectors.	
				C_3H_8:(10～60)%LEL	U_{rel}=2.1 %		
				C_2H_2:(10～60)%LEL	U_{rel}=2.1 %		
55	*Ammonia detector	Concentration	V. R. of Ammonia detector JJG 1105	（1～80） μ mol/mol	U_{rel}=2.0 %		
56	*Hydrogen sulfide gas detector	Concentration	V. R. of Hydrogen sulfide gas detector JJG695	（1～80） μ mol/mol	U_{rel}=2.2 %		
57	*Dust sampler	Flow	V. R. of Dust sampler JJG 520	（0.01～80）L/min	U_{rel}=1.2 %		
		Time		(1～300) s	U=0.3 s		
58	*samplers for stack dust	Flow	V. R. of samplers for stack dust JJG 680	:5～100）L/min	U_{rel}=1.5 %		
		Temperature		Temperature before flowmeterr:（0～50）℃	U=0.4 ℃		
				Flue gas temperature:（1～300）℃	U=1.3 ℃		
		Pressure		Dynamic pressure:（0～2000）Pa	U=0.4 %FS		
				Static pressure:（-30～30）kPa	U=0.2 %FS		
		Time		(1～600) s	U=0.2 s		
59	*air sampler	Flow	V. R. of air sampler JJG 956	(0.1～6) L/min	U_{rel}=1.2 %		
		time		(1～3600) s	U_{rel}=0.06 %		
		Temperature		（0～50）℃	U=0.2 ℃		
60	*Tsp sampler	Flow	V. R. of Tsp sampler JJG 943	(80～150) L/min	U_{rel}=1.2 %		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		time		(1～1200) s	U=0.3s		
		Temperature		（0～50）℃	U=0.2℃		
		Pressure		（800～1060）hPa	U=2.4 hPa		
		Length		(1～200) mm	U_{rel}=0.3 %		
61	*Planktonic bacteria sampler	Flow	C. S. for Planktonic bacteria sampler JJF(Su)188	（20～200）L/min	U_{rel}=1.2 %		
		Time		(1～600) s	U=0.3 s		
62	Dust Particles Counter	Flow	C.S. of Dust Particles Counter JJF 1190	（0.3～150）L/min	U_{rel}=1.3 %		
		Time		（0～600）s	U=0.30 s		
		Concentration		Particle size distribution：(0.3～10) μm	U_{rel}=11 %		
				Particle concentration：(10～100000) 个/2.83 L	U_{rel}=17 %		
63	*Particulate Analyzer	Volume	C.S. for Particulate Analyzer JJF 1290	(0.01～10) mL	U_{rel}=0.4 %		
		Count		(10～100000) counter/mL	U_{rel}=5 %		
64	*flue gas samplers	flow	V. R. of flue gas samplers JJG 1169	(0.1～2) L/min	U_{rel}=1.3 %		
		Time		(1～1200) s	U=0.3 s		
		Temperature		（0～50）℃	U=0.2 ℃		
65	*Fourier Transform Infrared Spectrometers	Wave numbe	C.S. for Fourier Transform Infrared Spectrometers JJF 1319	(3100～800) cm^{-1}	U=(0.09～0.13) cm^{-1}		
66	*Atomic Fluorescence	Concentration	V.R.of Atomic Fluoreacence Spectrometer JJG 939	Detection limit(As):≤0.4 ng	U=0.015 ng		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
	Spectrophotometers			Detection limit(Sb):≤0.4 ng	U=0.04 ng		
67	*Osmotic pressure molar concentration meter	Concentration	V.R. of Osmotic pressure molar concentration meter JJG1089	Osmotic pressure molar concentration:(100～700) mOsmol • kg^{-1}	U=(1.7～3.4) mOsmol • kg^{-1}		
68	*Fixed carbon sulfur analyzer	Content	V.R. of Carbon - Sulfur Analyzer JJG 395	C:(0.0050～0.0100) %	U=0.0005 %		
				C:(0.010～0.100) %	U=0.004 %		
				C:(0.100～0.500) %	U=0.007 %		
				C:(0.500～1.000) %	U=0.024 %		
				C:(1.00～4.00) %	U=0.04 %		
				S:(0.0030～0.0100) %	U=0.0003 %		
				S:(0.010～0.050) %	U=0.0013 %		
				S:(0.050～0.100) %	U=0.003 %		
				S:(0.100～0.200) %	U=0.005 %		
		Time		(1～1200) s	U=0.3 s		
69	*Elemental Analyzers	Content	C.S. for Element analyzer JJF1321	Kjeldahl nitrogen analyzer：0.1%～50%	U_{rel}=1.4 %		
70	*Quadrupole Inductively Coupled Plasma Mass Spectrometers	Detection limit	C.S. for Quadrupole Inductively Coupled Plasma Mass Spectrometers JJF 1159	Detection Limit(Be):≤30 ng/L	U=0.4 ng/L		
				Detection Limit(In):≤10 ng/L	U=0.2 ng/L		
				Detection Limit(Bi):≤10 ng/L	U=0.2 ng/L		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				Sensitivity(Be):≥5 Mcps/(mg/L)	U_{rel}=10 %		
				Sensitivity(In):≥30 Mcps/(mg/L)	U_{rel}=14 %		
				） Sensitivity(Bi):≥20 Mcps/(mg/L)	U_{rel}=12 %		
71	*Dynamic Light Scattering Particle Size Analyzers	Particle size	V.R. of Dynamic Light Scattering Particle Size Analyzers JJG 1104	（10～1000）nm	U_{rel}=2.6 %		
		Temperature		（0～90）℃	U=0.2 ℃		
72	*Micro-spectrophotometers	Concentration	C.S. for Micro-spectrophotometers JJF 1836	Protein：(0.1～10.0)mg/mL	U_{rel}=12%		
				DNA:（0.1～2500）ng/μL	U_{rel}=7%		
73	*Colony Counters	Total number of colonies	C.S. for Colony Counters JJF 1751	(30～300) CFU	U_{rel}=2.6 %		
		Length		(0.10～5.10) mm	U=0.04 mm		
		Color temperature		(2300～9000)K	U=(22~1.9x10^2)K		
74	*McFarland Bacterial Turbidity Analyzers	Bacteria turbidity	C.S. for McFarland Bacterial Turbidity Analyzers JJF 1825	(0～4) MCF	U=(0.06～0.23) MCF		
75	*Bacterial Endotoxin Analyzers	Temperature	C.S. for Bacterial Endotoxin Analyzers JJF 1529	37℃	U=0.14 ℃		
76	*Oxidation-reduct Potential Meters	Potential	C.S. for Oxidation-reduct Potential Meters JJF(Liao) 474	电计：(-2000～2000) mV	U=0.2 mV		
				仪器：(-2000～2000) mV	U=0.4 mV		

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№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Resistance		Impedance：（3~10）GΩ	U_{rel}=12 %		
77	*Flue Gas Analyzers	Concentration	V.R. of Flue Gas Analyzers JJG 968	O_2: (0.1～21)×10^{-2}mol/mol	U_{rel}=1.0%		
				CO：(1～2000)×10^{-6}mol/mol	U_{rel}=1.3 %		
				CO_2：(0.1～20)×10^{-2}mol/mol	U_{rel}=1.4 %		
				SO_2：(1～100)×10^{-6}mol/mol	U_{rel}=1.4 %		
				NO：(10～5000)×10^{-6}mol/mol	U_{rel}=1.4%		
78	*Sulfur Dioxide Gas Detectors	Concentration	V.R. of Sulfur Dioxide Gas Detectors JJG 551	(1～80)×10^{-6}mol/mol	U_{rel}=2.4 %		
79	*Carbon Monoxide and Carbon Dioxide Infrared Gas Analyzer	Concentration	V.R. of Carbon Monoxide and Carbon Dioxide Infrared Gas Analyzer JJG 635	CO：(1～2000)×10^{-6}mol/mol	U_{rel}=1.4 %		
				CO_2：(0.1～20)×10^{-2}mol/mol	U_{rel}=1.4 %		
80	*Nitric Oxide And Nitrogen Dioxide Gas Detectors	Concentration	V.R. of Nitric Oxide And Nitrogen Dioxide Gas Detectors JJG(Xin) 01	NO：(1～2000) μmol/mol	U_{rel}=1.4 %		
				NO_2：(1～500) μmol/mol	U_{rel}=2.3 %		
81	*Alarmer Detectors of Benzene	Concentration	C.S. for Alarmer Detectors of Benzene JJF 1674	(1～80) μmol/mol	U_{rel}=2.3 %		
82	*Hydrogen Chloride Gas Detectors and Alarms	Concentration	C.S. for Hydrogen Chloride Gas Detectors and Alarms JJF 1888	(1～100) μmol/mol	U_{rel}=2.3 %		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
83	*Chlorine Alarm Detectors	Concentration	C.S. for Chlorine Alarm Detectors JJF 1433	(1～20) μ mol/mol	U_{rel}=2.5 %		
84	*The Alarmer Detector of Sulfur Hexafluoride	Concentration	C.S. for the Alarmer Detector of Sulfur Hexafluoride JJF 1263	(1～800) μ mol/mol	U_{rel}=2.3 %		
85	*Raman Spectrometers	Frequency shift	C.S. for Raman Spectrometers JJF 1544	（300～40000）cm^{-1}	U=0.3 cm^{-1}		
		Resolution of spectrum		(0～20) cm^{-1}	U=0.1cm^{-1}		
		relative intensity		0～1	U=0.01~0.07		
86	*Gas Detectors of Ethylene Oxide	Concentration	C.S. for Gas Detectors of Ethylene Oxide JJF2288	(20～80) μ mol/mol	U_{rel}=2.5%		
87	*Methanol Gas Detection Alarm	Concentration	C.S. for Methanol Gas Detection Alarm JJF(Hei)11	(1～300) μ mol/mol	U_{rel}=2.3%		
88	*Ethanol Gas Detectors and Alarms	Concentration	C.S. for Ethanol Gas Detectors and Alarms JJF(SH)081	(1～400) μ mol/mol	U_{rel}=1.5%		
89	*Acetone Gas Detectors and Alarms	Concentration	C.S. for Acetone Gas Detectors and Alarms JJF(SH)082	(1～500) μ mol/mol	U_{rel}=2.7%		
90	*Gas Detectors and Alarms of Hydrogen Fluoride	Concentration	C.S. for Gas Detectors and Alarms of Hydrogen Fluoride JJF(SH)047	(3～8) μ mol/mol	U_{rel}=3.8%		
91	*Formaldehyde gas detection alarm	Concentration	C.S. for formaldehyde gas detection alarm JJF(SH)100	(2～8) μ mol/mol	U_{rel}=4.2%		
92	Sulfur Hexafluoride Decomposition Products Detectors	Concentration	C.S. for Sulfur Hexafluoride Decomposition Products Detectors JJF 1711	SO2(1～50) μ mol/mol	U_{rel}=3.7%		
		Concentration		H2S(1～50) μ mol/mol	U_{rel}=3.9%		
		Concentration		CO(1～500) μ mol/mol	U_{rel}=3.2%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
93	*Electrochemical Workstations	Potential	C.S. for Electrochemical Workstations JJF 1910	(0～2)V	U=0.0001V		
		Current		(0～2) μA	$U=2\times10^{-10}$A		
94	*Real-Time Fluorescent QuantitativePolymerase Chain Reaction Analyzer	Temperature	C.S. for Real-Time Fluorescent Quantitative Polymerase Chain Reaction Analyzer JJF(Su) 222	(30～95)℃	U=0.2℃		
		threshold cycle (crossing point)		10～40	U=0.7		
		Concentration		(1～10^7)copies/μL	U_{rel}=7%		
95	*Adenosine Triphosphate （ATP) Fluorescence Detectors	Fluorescence	C.S. for Adenosine Triphosphate （ATP) Fluorescence Detectors JJF 1828	(1×10^{-16}～5×10^{-10})mol/mL	U_{rel}=3.6%		
		RLU		（1～1000000）RLU	U_{rel}=17%		
96	*Total Organic Carbon Analyzer based on Conductivity Measurement	Contamination	C.S of Total Organic Carbon Analyzer based on Conductivity Measurement JJF(Jing)112	（0.1～1.0）mg/L	U_{rel}=1.3%		
97	*Surfaceion contamination tester	Surfaceion contamination	C.S of Surfaceion contamination tester JJF (DZ) 0070	（0.1～20) μg/cm^2	U_{rel}=4.8%		
		Electric conductivity		（50～150) μS/cm	U_{rel}=1.3%		
		Temperature		（5～50）℃	U=0.1℃		
98	*Water Activity Meters	Water Activity	V.R of Water Activity Meters JJG(Yue) 052	0.0～1.0	U=0.008		
99	*Bioreactor	Temperature	C.S. for Bioreactor JJF(Xiang) 97	（0～50）℃	U=0.2℃		
		pH		0～14	U=0.02		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Rotational speed		（10～2000）rpm	U_{rel}=0.6%		
		Gas Flow		（0.3～30）L/min	U_{rel}=0.8%		
		Fluid Flow		（0.1～100）mL/min	U_{rel}=0.8%		
		Concentration		Dissolved oxygen：（6～15）mg/L	U=0.1 mg/L		
100	Routine Capillary Viscometers	Kinematic viscosity	V.R. of Routine Capillary Viscometers JJG 155	(1～100000)mm²/s	U_{rel}=（0.34～0.86）%		
101	Zahn Viscosity Cups	Time	C.S. for Zahn Viscosity Cups JJF（BGMP）0009	(15～150)s	U_{rel}=（0.5%～0.8%）		
102	DIN 53211-4 Coating Viscometers	Time	C.S. for DIN 53211-4 Coating Viscometers JJF（Ji）114	(15～150)s	U_{rel}=（0.5%～0.8%）		
103	*Kinematic Viscosity Tester	Kinematic viscosity	C.S. for Kinematic Viscosity Tester JJF 1274	(1～20000)mm²/s	U_{rel}=2%	Only test the viscosity at 20℃	
		Temperature		（20～100）℃	U=0.009℃		
104	*Gold Gauge Utilizing X-ray Fluorescence Spectrometry	Concentration	C.S. of Gold Gauge Utilizing X - ray Flourescence Spectrometry JJF 1133	30%～100%	U=0.02%~0.04%		
105	*Rapid Detection Analyzers of Heavy Metal in Food	Concent	C.S. for Rapid Detection Analyzers of Heavy Metal in Food JJF(Jing)113	(0.001～0.2)mg/kg	U=0.014mg/kg		
				(0.2～0.4)mg/kg	U_{rel}=7%		
				(0.4～2.2)mg/kg	U_{rel}=3.5%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
106	*Portable Stripping Voltammetry Heavy Metal Detectors	Concentration	C.S. for Portable Stripping Voltammetry Heavy Metal Detectors JJF2037	(0.01～1000)mg/L	U_{rel}=2%		
107	*Gel Documentation Systems	Illuminance	C.S. for Gel Documentation Systems JJF1530	50 lx～50 klx	U_{rel}=5%		
		Irradiance		(0.01～2) mW/cm^2	U_{rel}=24%		
108	*Digital Refractometers	Content	C.S. for Digital Refractometers JJF(Jin)83	NaCl：0%～28%	U=0.06%		
				糖量：0%～80%	U=0.02%		
		Refractivity		1.30～1.66	U=0.0002		
109	*Total Dissolved Solids(TDS) Meters	Concentration	C.S. for Total Dissolved Solids(TDS) Meters JJF(Min) 1097	(1～20000)mg/L	U_{rel}=0.2%~0.6%		
		Temperature		(0~50)℃	U=0.2℃		
110	*Online Conductivity Meters for Water Quality	Conductivity	C.S. of Online Conductivity Meters for Water Quality JJF(Jin)74	Electronic unit:(0.05～1×10^5) μS/cm	U=0.2 %FS		
				Instrument:(0.5～20) μS/cm	U=1.2 %FS		
				Instrument:(20～2×10^5) μS/cm	U=0.3 %FS		
		Temperature		（0～50）℃	U=0.3℃		
111	*Digital Sacchar imeters and Digital Refractometers	Sugar Concent	V.R. of Digital Sacchar imeters and Digital Refractometers JJG(Jin)68	1%～80%	U=0.02%		
		Refractivity		1.30～1.66	U=0.00006		
		Temperature		（10～30）℃	U=0.13℃		
112	*Scanning Electronic	Length	C.S.for Scanning Electronic Microscopes(SEM) JJF 1916	100nm	U_{rel}=1.5%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
	Microscopes(SEM)			200nm	U_{rel}=1.2%		
				（500～10000）nm	U_{rel}=0.6%		
113	*Polymerase Chain Reaction Analyzers	Temperature	C.S. for Polymerase Chain Reaction Analyzers JJF 1527	（10～100）℃	U=0.20℃		
		Concentration		(1～10^7)copies/μL	U_{rel}=7%		
114	*Disintegration Analyzers	Length	Calibration Specification for Disintegration Analyzers JJF 1449	（0～100）mm	U=0.2mm		
		Time		0.1s～30min	U_{rel}=0.2%		
		Time limit for disintegration		1s～30min	U_{rel}=（8.2%～11%）		
115	*Drug Dissolution Testers	Temperature	Calibration Specification For Drug Dissolution Testers JJF(Su) 220	（0～50）℃	U=0.2℃		
		Speed		（0～250）r/min	U=0.6r/min		
		Time		（0～60）min	U=0.4s		
116	*Electrospray Detector of Liquid Chromatograph	Flow	Calibration Specification for Electrospray Detector of Liquid Chromatograph JJF(Shan) 129	(0.1～2)mL/min	U_{rel}=1.0%		
		minimum detectable concentration		≤5×10^{-6}g/mL	U_{rel}=9%		
		Temperature		(0～50)℃	U=0.3℃		
117	*Gel Permeation Chromatographs	Molecular weight	Verification Regulation of Gel Permeation Chromatographs JJG 342	organic mobile phase: (4×10^3～6.5×10^5)g/mol	U_{rel}=5%		
				Water flow phase: (3×10^3～6.2×10^5)g/mol	U_{rel}=8%		
118	*Automatic Amino Acid Analyzer	Flow	Verification Regulation of Automatic Amino Acid Analyzer JJG 1064	(0.1～2)mL/min	U_{rel}=1.0%		
		Detection limit		≤1nmol	U_{rel}=8%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
119	*Fourier Transform Mass Spectrometers	mass charge ratio	Calibration Specification for Fourier Transform Mass Spectrometers JJF 1531	(100～2000)u	U_{rel}=0.00003%		
120	*Time-of-Flight Mass Spectrometers	mass charge ratio	Calibration Specification for Time-of-Flight Mass Spectrometers JJF 1528	(100～4200)u	U_{rel}=0.003%		
121	*Organic High ResolutionMagnetic Sector Mass Spectrometers	Single to noise	Calibration Specification for Organic High Resolution Magnetic Sector Mass Spectrometers JJF 1930	≥1000	U_{rel}=6%		
		mass charge ratio		(49～1020)u	U_{rel}=0.004%		
122	*Superconducting Pulsed Fourier TransformNuclear Magnetic Resonance Spectrometers	Sensitivity	Calibration Specification for Superconducting Pulsed Fourier Transform Nuclear Magnetic Resonance Spectrometers JJF 1448	^{1}H≥15	U_{rel}=5%		
				^{13}C≥2	U_{rel}=5%		
123	*Liquid Chromatography-InductivelyCoupled Plasma Mass Spectrometers	Flow	Calibration Specification for Liquid Chromatography-Inductively Coupled Plasma Mass Spectrometers JJF 2115	(0.1～2)mL/min	U_{rel}=1.0%		
		Minimum detectable concentration		≤0.5ng/g	U_{rel}=8%		
124	*On-line Turbidimeters	Concentration	Calibration Specification of On-line Turbidimeters JJF(Meng) 120	(0.1～5)NTU	U_{rel}=5%		
				(5～4000)NTU	U_{rel}=4%		
125	*Water Hardness Meters	Concentration	Calibration Specification for Water Hardness Meters JJF 1949	(0.1～2000)mg/L	U_{rel}=4%		
		Temperature		(10～50)℃	U=0.2℃		
126	*Water Quality On-lineAnalyzers of Hardness	Concentration	Calibration Specification of Water Quality On-lineAnalyzers of Hardness JJF(Jing) 5006	(0.1～100)mg/L	U_{rel}=5%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
127	*Permanganate Index Analyzers	Concentration	Calibration Specification for Permanganate Index Analyzers JJF 2173	(0.1～50)mg/L	U_{rel}=5%		
		Temperature		(0～100)℃	U=0.3℃		
		Time		(0～30)min	U=0.4s		
128	*Ozone Gas Analyzers	Concentration	Verification Regulation of Ozone Gas Analyzers JJG 1077	(0.1～1) μ mol/mol	U_{rel}=4%		
				(1～400) μ mol/mol	U_{rel}=7%		
129	Aerosol Diluters	Dilution ratio	Calibration Specification for Aerosol Diluters JJF 2066	1～300	U_{rel}=4%		
		Flow		(1～30)L/min	U_{rel}=2%		
130	*Digital PolymeraseChain Reaction Analyzers	Concentration	Calibration Specification for Digital Polymerase Chain Reaction Analyzers JJF 2055	$(4\times10^2\sim2\times10^4)$copies/μL	U_{rel}=10%		
		Temperature		(10～100)℃	U=0.2℃		
131	*Protein Purification Analyzers	Flow	Calibration Specification for Protein Purification Analyzers JJF 2204	(1～500)mL/min	U_{rel}=1.0%		
		acidity		pH：(4～10)	U=0.02		
		Electrolytic Conductivity		Instrument:：(100～2000) μ S/cm	U_{rel}=0.6%		
				Instrument:（10～120) mS/cm	U_{rel}=0.4%		
		Wavelength		(230～318)nm	U=0.5 nm		
		Temperature		(0～50)℃	U=0.4℃		
		Volume		(0.1～1000) μ L	U_{rel}=0.2%		
132	*Plate Electrophoresis Apparatus	Current	Calibration Specification for Plate Electrophoresis Apparatus JJF 1654	(2～500)mA	U=0.7mA		
		Voltage		(2～500) V	U=0.7V		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
133	*Swing Bioreactors	Flow	Calibration Specification for Performance Parameters of Swing Bioreactors JJF 2260	Gas:(0.01～20)L/min	U_{rel}=2.0%		
				Liquid:(1～500)mL/min	U_{rel}=1.0%		
		Frequency		(10～50)r/min	U_{rel}=0.2%		
		Temperature		(0～50)℃	U=0.4℃		
		Angle		(0～20)°	U=0.02°		
134	*Pesticide Residue Detectors	Transmittance	Calibration Specification for Pesticide Residue Detectors JJF 1729	9%～30%	U_{rel}=0.7%		
		Wavelength		(350～450)nm	U=0.6nm		
		Sensitivity		50%～100%	U_{rel}=6%		
135	*Microplate Chemiluminescence Analyzers	Absorbance	Calibration Specification for Microplate Chemiluminescence Analyzers JJF 1849	0.1～1.5	U=0.012		
136	*Multifunctional blood gas analyzer	pH	Calibration Specification for Multifunctional blood gas analyzer JJF 2054	6～8	U=0.02		
		Concentration		K^+：(1.5～7.5)mmol/L	U_{rel}=4%		
				Na^+：(100～180)mmol/L	U_{rel}=4%		
				Cl^-：(80～160)mmol/L	U_{rel}=4%		
				iCa^{2+}：(0.50～2.50)mmol/L	U_{rel}=5%		
				Hb：(5.0～18.0)g/dL	U_{rel}=3%		
		partial pressure		p(O_2):(0.1～200) mmHg	U_{rel}=2%		
				p(CO_2):(0.1～100) mmHg	U_{rel}=2%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
137	*Hydrogen Peroxide Meter	Concentration	Calibration Specification for Hydrogen Peroxide Meter JJF(Zhe) 1156	(100～2000) μ mol/mol	U_{rel}=7%		
138	*Dry Injection Laser Particle Size Analyzers	Particle size	C.S. for Dry Injection Laser Particle Size Analyzers JJF(Jin) 82	(35～52) μ m	U_{rel}=(7～8)%		
139	*Engler Viscosimeter	Time	V.R. of Engler Viscosimeter JJG 742	(50～52)s	U=0.24s		
140	*Acid Number Testers	Concentration	C.S. for Acid Number Testers JJF(Ji) 3030	（0.04～0.1）mg/g	U=0.013mg/g		
				（0.1～1.0）mg/g	U_{rel}=6%		
141	*Laboratory Pure Water Machines	Resistivity	C.S. for Laboratory Pure Water Machines JJF(E) 166	(0.1～18.25)MΩ/cm	U_{rel}=1.3%	accredited only for volumetric method for the outflow rate	
		Temperature		(10～90)℃	U=0.2℃		
		pH		4～10	U=0.03		
		Flow rate		(10～50)mL/s	U=1.4mL/s		
142	*Carbon Dioxide Gas Detecors	Concentration	C.S. for Carbon Dioxide Gas Detecors JJF(Hei) 10	1.00%～4.00%	U_{rel}=2.4%		
143	*Portable Sulphur Hexafluoride Purity Analyzers	Concentration	C.S. for Portable Sulphur Hexafluoride Purity Analyzers JJF(Yu) 253	90%～100%	U_{rel}=0.8%		
144	*Rotational Rheometers	Shear Viscosity	C.S. for Rotational Rheometers JJF 2134	(0.9～900)Pa • s	U_{rel}=8%		
		Temperature		(5～100)℃	U=0.18℃		
145	*Rotary Evaporators	Temperature	Calibration Specification of Rotary Evaporators JJF(E) 80	（20～200）℃	U=0.7℃		
		Speed		（10～280）r/min	U=0.6r/min		
		Pressure		(-100～0)kPa	U=0.3kPa		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
ionizing radiation measuring instrument							
1	*X-ray Flaw Detectors	Air specific release energy rate	V.R.of X-ray Flaw Detectors JJG 40	0.1cGy/min～10Gy/min	U_{rel}=5%	Accredited only for field calibration	
Acoustic measuring instrument							
1	*Ultrasonic Flaw Detectors	Amplifier frequency response	V. R. of Ultrasonic Flaw Detectors JJG 746	10mV$_{pp}$～10V$_{pp}$,(0.5～25)MHz	U_{rel}=3%		
		Dynamic range		(10～40)dB	U=1dB		
		Equivalent input noise		(0.1～1000)μV	U_{rel}=1%		
		Attenuator error		(0.1～96)dB	U=0.2dB		
				(96～110)dB	U=0.3dB		
		Amplitude linear error		0.1%～100%	U=1.6%		
		Time base linear error		(0.1～10000)mm	U_{rel}=0.15%		
		Launch pulse		(0.01～10)V	U_{rel}=3%		
2	*Electro-acoustical Measurement Instruments	Frequency	C. S. for Electro-acoustical Measurement Instruments JJF 1339	20Hz～20kHz	U_{rel}=0.01%		
		AC Voltage		(0.1～30)V,(20Hz～20kHz)	U_{rel}=0.2%		
		Total distortion		0.01%～10%,(20Hz～20kHz)	U_{rel}=0.1%		
		Frequency response		(0.1～30)V,(20Hz～20kHz)	U_{rel}=0.2%		
Textile and leather special measuring instruments (including footwear testing instruments)							

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
1	*Fabric Thickness Instruments	Length	Calibration Specification for Fabric Thickness Instruments JJF(FZ) 020	(0.5～20)mm	U=3 μ m		
		Area		(100～10000)mm^2	U_{rel}=0.2%		
		Force value		(10～200)cN	U_{rel}=0.3%		
		Time		(5～35)s	U=0.3s		
2	*Circle Sample Cutters	Area	Calibration Specification for Circle Sample Cutters JJF(FZ) 061	(90～110)cm^2	U_{rel}=0.3%		
3	*Vertical Combustion Tester	Mass	Calibration Specification for Vertical Combustion Tester JJF(FZ) 068	54.5 g、113.4 g、226.8 g、340.2 g、453.6 g	U=0.4 g		
		Time		(10～3600)s	U=0.2 s		
		Length		11.0 mm、12.5 mm、17.0 mm、40.0 mm	U=0.04 mm		
				30 mm、51 mm、329 mm、356 mm、767 mm	U=0.3 mm		
		Angle		25°	U=0.5°		
		Velocity		45 mm/s	U=1.2 mm/s		
4	*Sliver and Roving Length Sampler	Length	Calibration Specification for Sliver and Roving Length Sampler JJF(FZ) 001	500 mm、1000 mm	U=0.3 mm		
		Mass		(2000～4500)g	U=5 g		
5	*Fabrics Water Spray Testers	Length	Calibration Specification for Fabrics Water Spray Testers JJF(FZ) 083	0.86 mm	U=0.02 mm		
				10 mm、21 mm	U=0.05 mm		
				150 mm、155 mm、195 mm	U=1.0 mm		
		Angle		45°	U=0.3°		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Time		(25～30)s	U=0.6 s		
6	*Light and Weather Fastness Tester	Temperature	Calibration Specification for Light and Weather Fastness Tester JJF(FZ) 051	Test chamber: (20～63)℃	U=0.8 ℃		
				BPT, BST: (20～63)℃	U=1.6 ℃		
		Humidity		20%RH～95%RH	U=1.7%RH		
		Rotate speed		(10～100)r/min	U=0.7 r/min		
		Time		1 min、30 min	U=0.6 s		
		Irradiance		1.1 W/m^2、42 W/m^2	U_{rel}=23%		
7	*Ventilated Textile Oven	Temperature	Calibration Specification for Ventilated Textile Oven JJF(FZ) 059	(50～150)℃	U=0.8℃		
		Velocity		(0.8～10)m/s	U=0.05 m/s		
		Time		(1～20)min	U=0.5 s		
8	*Eight-Basket Oven	Temperature	Calibration Specification for Eight-Basket Oven JJF(FZ) 011	(50～150)℃	U=0.8 ℃		
		Time		(1～25)min	U=0.5 s		
9	*Colour Fastness to Washing Testers	Temperature	Calibration Specification for Colour Fastness to Washing Testers JJF(FZ) 026	(20～98)℃	U=0.5 ℃		
		Time		(1～24)min、30 min、45 min	U=0.5 s		
		Rotating velocity		40 r/min	U=0.4 r/min		
		Length		45 mm、75 mm、90 mm、125 mm、200 mm	U=0.04 mm		
10	*Fabric Shrinkage Testers	Temperature	Calibration Specification for Fabric Shrinkage Testers JJF(FZ) 052	40 ℃、60 ℃、92 ℃	U=1.4 ℃		
		Time		3 s～22 min	U=0.5 s		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Rotating velocity		52 r/min、500 r/min	U_{rel}=1.5%		
		Length		100 mm、130 mm	U=0.3 mm		
11	*Color Fastness to Seorch and Sublimation Testers	Temperature	Calibration Specification for Color Fastness to Seorch and Sublimation Testers JJF(FZ) 029	110 ℃、150 ℃、180 ℃、200 ℃、210 ℃	U=1.4 ℃		
		Force		16 N	U=0.5 N		
		Time		15 s、30 s	U=0.5 s		
12	*Perspiration Fastness Instruments	Force	Calibration Specification for Perspiration Fastness Instruments JJF(FZ) 028	(49～51)N	U=0.1 N		
		Length		(2～120) mm	U=0.5 mm		
13	*Corlour Fastness to Friction Testers	Force	Calibration Specification for Corlour Fastness to Friction Testers JJF(FZ) 027	9 N	U=0.08 N		
		Length		16 mm、19 mm、25.4 mm、104 mm	U=0.5 mm		
		Rotating velocity		60 r/min	U=0.7 r/min		
14	*Geotextiles Abrasion Testers	Length	Calibration Specification for Geotextiles Abrasion Testers JJF(FZ) 095	25.4 mm、50.0 mm、200.0 mm	U=0.05 mm		
		Frequency		90 min^{-1}	U=0.5 min^{-1}		
		Mass		6000 g	U=0.8 g		
15	*Thickness of Geosynthetics Determinator	Length	Calibration Specification for the Thickness of Geosynthetics Determinator JJF(Min) 1125	0 mm、0.5 mm、1 mm、2 mm、3 mm、4 mm、5 mm	U=0.01 mm		
		Area		25 cm^2	U=0.04 cm^2		
		Pressure		2 kPa、20 kPa、200 kPa	U_{rel}=0.4%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
16	*Constant Temperature Water Bath Oscillator	Temperature	Calibration Specification for Constant Temperature Water Bath Oscillator JJF(FZ) 105	(20～100)℃	U=0.5℃		
		Rate		(30～120)times/min	U=0.8times/min		
		Amplitude		(20～50)mm	U=0.05mm		
		Time		(1～60)min	U=1s		
Special measuring instruments for motor vehicles							
1	*Tire Tread Depth Gauges	Length	C.S. for Tire Tread Depth Gauges JJF 1477	(0～50)mm	U=0.02mm		
2	*Transmittance Meter of Automobile	Transmittance	C.S. for Transmittance Meter of Automobile JJF 1225	（0～100）%	U=0.7%		
Special measuring instruments for Meteorology and ocean							
1	Thermo-anemoscopes	Wind speed	C. S. for Thermo-anemoscopes JJF1939	(5～25)m/s	U=（0.09～0.20）m/s		
2	Fanning Mill Anemometers	Wind speed	C. S. for Fanning Mill Anemometers JJF1971	(5～25)m/s	U=（0.09～0.27）m/s		
3	Wheel Type Digital Anemometers	Wind speed	V.R.of Wheel Type Digital Anemometers JJG 1194	(5～25)m/s	U=（0.09～0.27）m/s		
4	Wind Speed Transducer	Wind speed	C. S. for Wind Speed Transducer JJF(Zhe)1126	(5～25)m/s	U=（0.10～0.30）m/s		
5	Bucket Thermometers	Temperature	V. R. of Bucket Thermometers JJG289	(-5～40)℃	U=0.10℃		
6	Water Level Gauge	Length	V.R. of Water Level Gauge JJG(JT) 168	（0～100）mm	U=0.3mm+2×10^{-5}L		
Special measuring instrument for paper and paper							

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
1	*Compression Strength Tester for Board	Force	V. R.of Compression Strength Tester for Board JJG(QG) 49	(1～3000)N	U_{rel}=0.4%		
2	*Compression Strength Tester for Corrugated Box	Force	V. R.of Compression Strength Tester for Corrugated Box JJG(QG) 115	(0.1～50)kN	U_{rel}=0.4%		
		Length		（0～500）mm	U=0.4mm		
3	*Burshing Strength Tester for Paper and Board	Pressure	C. S. for Bursting Strength Testers for Paper(Board) JJF 1811	(0.001～6)MPa	U=0.2%FS		
Medical special measuring instrument							
1	*Baby Incubator	Temperature	C.S.for Baby Incubator JJF 1260	(20～50)℃	U=0.3℃		
		Humidity		20%RH～90%RH	U=2.0%RH		
		Noise		(30～100)dB	U=2.0dB		
		Concentration of Oxygen		30%～40%	U=2.1%		
2	*Medical Centrifuges	Rotate speed	Calibration Specification for Medical Centrifuges JJF 2004	(20～30000)r/min	U_{rel}=0.2%		
		Time		(0～3600)s	U=0.12s		
		Temperature		(-40～85)℃	U=0.12℃		
		Rate		(0～5)℃/min	U=0.12℃/min		
		Noise		(35～100)dB(A)	U_{rel}=1.3%		
3	*ELISA analytical Instruments	Wavelength	V.R.of ELISA Analytical Instruments JJG 861	(400～630) nm	U=0.5 nm		
		Absorbance		0.200～1.600	U=0.006		
				Channel difference:1.000	U=0.006		

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№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Sensitivity		⩾ 0.01 L/mg	U_{rel}=5 %		
4	*Blood Cell Analyzers	Concentration	Verification Regulations of Blood Cell Analyzers JJG 714	RBC:(1.0～6.0)×10^{12}/L	U_{rel}=3%		
				WBC:(2.0～19.0)×10^{9}/L	U_{rel}=4%		
				PLT:(80～400)×10^{9}/L	U_{rel}=4%		
				HGB:(40～200)g/L	U_{rel}=3%		
5	*Urine Analyzers	Concentration	Calibration Specification for Urine Analyzers JJF 1129	GLU:(0.1～42)mmol/L	U_{rel}=3%		
				PRO:(0.1～2.0)g/L	U_{rel}=5%		
				WBC:(30～200)个/μL	U_{rel}=7%		
				RBC:(15～200)个/μL	U_{rel}=7%		
		Density		1.005～1.025	U=0.005		
		pH		5.5～7.5	U_{rel}=5%		
6	*Electrolyte Analyzers	Concentration	Verification Regulations of Electrolyte Analyzers JJG 1051	K^+：(1.5～7.5)mmol/L	U_{rel}=4%		
				Na^+：(100～180)mmol/L	U_{rel}=4%		
				Cl^-：(80～160)mmol/L	U_{rel}=4%		
				Li^+：(0.40～2.00)mmol/L	U_{rel}=5%		
				iCa^{2+}：(0.5～2.5)mmol/L	U_{rel}=5%		
7	*Automatic Closed Luminescence Immunoassay Analyzers	Concentration	Calibration Specification for Automatic Closed Luminescence Immunoassay Analyzers JJF 1752	(10～150)pmol/L	U_{rel}=5%	Only measure human insulin	

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
8	*Portable Blood Glucose Meters	Concentration	Calibration Specification for Portable Blood Glucose Meters JJF 1383	(6～15)mmol/L	U_{rel}=4%		
9	*Multifunction Patient Monitoring Instruments	Voltage	Verification Regulations of Multifunction Patient Monitoring Instruments JJG 1163	(0.5～2.0)mV	U_{rel}=3%		
		Heart Rate		(30～300)次/分	U_{rel}=1.3%		
		Pressure		(0～40)kPa	U=0.2kPa		
		Pulse Rate		(30～250)次/分	U=1.4 次/分		
10	*Syringe Pumps and Infusion Pumps	Flow	Calibration Specification for Syringe Pumps and Infusion Pumps JJF 1259	(5～1000)mL/h	U_{rel}=2.5%		
		Pressure		(60～180)kPa	U=2.0kPa		
11	*Medical Liquid Microflow Syringe Pumps	Flow	Calibration Specificationfor Medical Liquid Microflow Syringe Pumps JJF 2263	(0.1～100)mL/h	U_{rel}=4%		
		Pressure		(60～180)kPa	U=2.0kPa		
12	*Glycohemoglobin Analyzers	Concentration	Calibration Specification for Glycohemoglobin Analyzers JJF 1841	(4.5～10.5)%	U_{rel}=5%		
13	*Flow Cytometers	Concentration	Calibration Specification for Flow Cytometers JJF 1665	(60～80) %	U=7%		
14	*Automatic Urinary Sediment Analyzers	Concentration	Calibration Specification for Automatic Urinary Sediment Analyzers JJF 1823	RBC:(150～2000)/ μ L	U_{rel}=11%		
				WBC:(150～2000)/ μ L	U_{rel}=11%		
15	*Genetic Analyzers	Concentration	Calibration Specification for Genetic Analyzers JJF 1838	(0.02～0.3) μ g/g	U_{rel}=9%		
16	*Nucleic Acids Analyzers	Concentration	Calibration Specification for Nucleic Acids Analyzers JJF 1817	(0.1～40) ng/ μ L	U_{rel}=7%		
17	*Specific Protein Analyzers	Volume	Calibration Specification for Specific Protein Analyzers	(1～200) μ L	U=0.3 μ L		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Temperature	JJF 2116	(-10～50)℃	U=0.4℃		
		concentration		(1～150)mg/L	U_{rel}=10%		
18	*Hospital Plate Washer	volume	Calibration Specification for Hospital Plate Washer JJF(Liao) 144	(1~500) μL	U_{rel}=6%		
19	*Fluorescence Meters of Nucleic Acid	Concentration	Calibration Specification for Fluorescence Meters of Nucleic Acid JJF(Jing) 3024	(10～100) ng/μL	U_{rel}=8%		
20	*（Automatic）Nucleic Acids Extractors	Temperature	Calibration Specification for （Automatic）Nucleic Acids Extractors JJF 1874	(30～95) ℃	U=0.5℃		
		Frequency		(0.1～500) Hz	U=0.6Hz		
		Volume		(1～1000) μL	U=0.6 μL		
		Recovery Rate		(80～100)%	U_{rel}=7%		
21	*Automatic Chemistry Analyzers	Absorbance	C.S. for Automatic Chemistry Analyzers JJF 1720	0.5、1.0	U=0.004		
		Concentration		ALT:(50～110)U/L	U_{rel}=5%		
				GLU:(6～15) mmol/L	U_{rel}=3%		
Petroleum and chemical specialized measuring instruments							
1	Wet Film Thickness Gauges	Length	Calibration Specification for Wet Film Thickness Gauges JJF 1484	The comb gauge： (5～100) μm	U=1 μm		
				The comb gauge ：(100～3000) μm	U=3 μm		
				Wheel gauge ：(0～125) μm	U=1 μm		
				Wheel gauge：(125～1500) μm	U=4 μm		

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№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
2	Paint Film Scribers	Length	Calibration Specification for Paint Film Scribers JJF 2163	1 mm、2 mm、3 mm	U=3 μm		
		Angle		30°	U=0.3°		
3	*Heat Distortion and Vicat Softening Temperature Apparatus	Temperature	Calibration Specification for Heat Distortion and Vicat Softening Temperature Apparatus JJF(Zhe) 1051	（20～300)℃	U=0.3 ℃		
		Hesting Rate		50 ℃/h、120 ℃/h	U=0.2 ℃/h		
		Length		(0～10)mm	U=0.03 mm		
		Mass		(1～5000)g	U=0.3 g		
4	*Pencil Hardness Tester	Angle	Calibration Specification for Pencil Hardness Testers JJF(SH) 007	45°	U=0.06°		
		Mass		500 g、750 g、765 g、1000 g	U=0.7 g		
5	*Film Impact Testers	Mass	Calibration Specification for Film Impact Testers JJF(SH) 002	1000 g	U=0.6 g		
		Length		100 mm、200 mm、300 mm、 400 mm、500 mm	U=0.1 mm		
6	*Rebound Resilience Machine for Vulcanized Rubber	Length	Calibration Specification for Rebound Resilience Machine for Vulcanized Rubber JJF(SH) 038	(2～300)mm	U=0.05 mm		
		Mass		(1～1200)g	U=0.06 g		
		Force		(50～500)N	U_{rel}=0.4%		
7	*Film Pendulum Hardness Testers	Length	Calibration Specification for Film Pendulum Hardness Testers JJF(SH) 008	400 mm、408 mm、500 mm	U=0.06 mm		
		Mass		120 g、200 g、500 g	U=0.02 g		
		Time		(1～180)s	U=0.4 s		

The scope of the accreditation in Chinese remains the definitive version.

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
8	*Coating Bend Testers (Cylindrical Mandrel)	Length	Calibration Specification for Coating Bend Testers(Cylindrical Mandrel) JJF(SH) 035	2 mm、3 mm、4 mm、5 mm、6 mm、8 mm、10 mm、12 mm、16 mm、20 mm、25 mm、32 mm	U=0.004 mm		
9	*Coating Flexibility Testers	Length	Calibration Specification for Coating Flexibility Testers JJF(SH) 006	4 mm、5 mm、10 mm、15 mm	U=3 μm		
				1 mm、2 mm、3 mm	U=0.04 mm		
10	*Film Adhesion Testers (Circle-drawing Method)	Length	Calibration Specification for Film Adhesion Testers(Circle-drawing Method) JJF(SH) 036	10.50 mm	U=0.04 mm		
11	*Putty Film Flexibility Testers	Length	Calibration Specification for Putty Film Flexibility Testers JJF(SH) 003	25 mm、50 mm	U=0.1 mm		
				78 mm	U=0.2 mm		
12	Wedge Cut Method Film Thinckness Instruments	Length	Calibration Specification for Wedge Cut Method Film Thinckness Instruments JJF(Ji) 150	(0～10)mm	U=2 μm		
		Angle		(1～90)°	U=0.03°		
13	*Horizontal and Vertical Combustion Tester	Angle	Calibration Specification for Horizontal and Vertical Combustion Tester JJF(Gui) 76	(20～90)°	U=12'		
		Length		(5～120)mm	U=0.04 mm		
		Time		(5～600)s	U=0.5 s		
		Temperature		(100～650)℃	U=1.0 ℃		
Special measuring instrument for building and traffic							
1	*Boiling testing box for soundness of the portland cement	Power	V.R.of Boiling testing box for soundness of the portland cement JJG(JC) 109	(0～4400)W	U=20W		
		Temperature		(20～100)℃	U=0.2℃		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
2	*Standard Curing Chamber for Cement and Concrete	Temperature	C. S. for the Equipment of the Environmental Testing for Temperature and Humidity Parameters JJF 1101	(18～22)℃	U=0.2℃		
		Humidity		80%RH～95%RH	U=1.5%RH		
3	Rebound Test Hammer	Force	Verification Regulation of Rebound Test Hammer JJG 817	(0.4～0.8)N	U_{rel}=2.5%		
		Rigidity		(65～820)N/m	U_{rel}=2.6%		
		Rate		72～82	U=1		
		Length		Pointer length(19.8～20.2)mm	U=0.2mm		
				Working length(61～76)mm	U=0.2mm		
4	Metrology Verification Device for Rebound Tester	Force	Verification Regulation of Metrology Verification Device for Rebound Tester JJG(Su) 59	(0.1～1)N	U=0.012N		
		Hardness		(58～62)HRC	U=1.8HRC		
		Mass		(1999～2001)g	U=0.18g		
		Length		Marking value of tension spring instrument(0～80)mm	U=0.1mm		
5	*Apparatus to Measure Water Permeability of Concrete	Pressure	Calibration Specificationo for Apparatus to Measure Water Permeability of Concrete JJF 1812	(0.1～6)MPa	U=0.7%FS		
6	*Air Entrainment Meter of Freshly Mixed Concrete by The Volumetric Method	Pressure	Verification Regulation of Air Entrainment Meter of Freshly Mixed Concrete by The Volumetric Method JJG(JT) 094	(0～0.16)MPa	U=0.7%FS		
		Volume		(6～8)L	U=0.01L		
7	*Flow Table for	Time	Verification Regulation of	(24～26)s	U=0.24s		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
	Determine Cement Mortar Fluidity	Length	Flow Table for Determine Cement Mortar Fluidity JJG(JT) 096	Diameter and die size(59～301)mm	U=0.06mm		
				Fall distance(9.8～10.2)mm	U=0.01mm		
		Mass		(4200～4500)g	U=3g		
8	*Apparatus for Normal Consistency and Setting Time of Cement Paste	Mass	Verification Regulation of Apparatus for Normal Consistency and Setting Time of Cement Paste JJG(JT) 050	(290～310)g	U=12mg		
		Length		Ruler(0～80)mm	U=0.02mm		
9	*Mortar Consistency Tester	Mass	Calibration Specification for Nonmetal Building Materials Plastic Limit Measuring Instruments JJF 1090	(40～310)g	U=12mg		
		Length		(0～300)mm	U=0.05mm		
		Angle		(5～50)°	U=0.1°		
		Roughness		Ra (1～2) μ m	U=0.3 μ m		
10	*Consistency Testing Instrument for Concrete Mixing	Length	Verification Regulation of Consistency Testing Instrument for Concrete Mixing JJG(Su) 50	(1～301)mm	U=0.3mm		
		Mass		(2700～2800)g	U=0.6g		
				(8650～8750)g	U=0.6g		
		Frequency		(40～60)Hz	U=0.4Hz		
11	*Apparatus for Time of Setting of Concrete Mixture by Penetration Resistance	Length	Verification Regulation of Apparatus for Time of Setting of Concrete Mixture by Penetration Resistance JJG(JT) 095	Tube size(0～300)mm	U=0.1mm		
				Needle size(0～15)mm	U=0.005mm		
		Force		(0.1～2)kN	U_{rel}=0.5%		
12	*Mixer for Cement Paste	Rotate speed	C.S. for Mixer for Cement Paste JJF(JC) 104	(57～305)r/min	U=0.6r/min		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Time		(10～180)s	U=0.33s		
		Length		Gap(1.0～3.0)mm	U=0.1mm		
				Mixer size(0～161)mm	U=0.1mm		
13	*Cementmortar mixer complying with ISO 679	Rotate speed	Calibration Specification for Mixer for Mixing Mortars JJF(JC) 123	(50～300)r/min	U=0.6r/min		
		Time		(29～91)s	U=0.3s		
		Length		Gap(2～4)mm	U=0.1mm		
				Pan and Ye Chicun(0～203)mm	U=0.1mm		
14	*Cement mortars mixer	Rotate speed	Verification Regulation of cement mortars mixer JJG(JC) 102	(60～150)r/min	U=0.6r/min		
		Time		(0～5)min	U=0.6s		
		Length		Gap(1.0～2.0)mm	U=0.05mm		
				Mixer size(0.5～200)mm	U=0.05mm		
15	*Apparatus of Abrasion Resistance for Cement Mortar and Concrete	Force	Verification Regulation ofApparatus of Abrasion Resistance for Cement Mortar and Concrete JJG(JT) 097	(200～400)N	U_{rel}=0.5%		
		Rotate speed		(15～650)r/min	U=(0.14～0.5)r/min		
		Length		Spindle stroke and flower wheel size(0～100)mm	U=0.04mm		
16	*Los Angeles Testing Machine	Mass	Verification Regulation of Los Angeles Testing Machine JJG(JT) 108	(300～5200)g	U=0.3g		
		Length		Roller size(95～715)mm	U=0.48mm		
				Diameter of steel ball(40～50)mm	U=0.05mm		
		Rotate speed		(30～33)r/min	U=0.42r/min		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
17	*Jolting Table for Compacting Mortars Specimen	Mass	C.S. for cement Jolting Table for complying Mortar Specimen JJF(JC) 124	(13.5～20.5)kg	U=0.09kg		
		Time		(58～62)s	U=1.0s		
		Length		(14～801)mm	U=0.12mm		
				Amplitude(14.5～15.5)mm	U=0.01mm		
18	*Building Material Testing Machine of Constant Loading Speed	Force	Verification Regulation of Buiing Material Testing Machine of Constant Loading Speed JJG 1025	(1～5000)kN	U_{rel}=0.4%		
		Speed		(0.01～25)kN/s	U_{rel}=3.0%		
19	*Sand Equivalent Tester	Length	Verification Regulation of Sand Equivalent Tester JJG(JT) 137	Oscillating distance(202～204)mm	U=0.3mm		
				Other dimensions(0.1～421)mm	U=0.1mm		
		Oscillation frequency		(178～182)time/min	U=1.0time/min		
		Time		(29～1215)s	U=0.6s		
		Mass		(995～1005)g	U=1.2g		
20	*Cement Fineness Negative Pressure Screen Analyzers	Pressure	Calibration Specification for Cement Fineness Negative Pressure Screen Analyzers JJF 1827	(-100～0)hPa	U=0.7%FS		
		Rotate speed		(28～32)r/min	U_{rel}=0.4%		
		Noise		(30～130)dB(A)	U=1dB(A)		
		Insulation resistance		(10～30)MΩ	U=1MΩ		
21	*Marshall Test Machine for Bituminous	Speed	Verification Regulation of Marshall Test Machine for Bituminous Mixtures JJG(JT)	No load(45～55)mm/min	U_{rel}=0.5%		
				load(45～55)mm/min	U_{rel}=0.7%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
	Mixtures	Force	066	(0.1～50)kN	U_{rel}=0.4%		
		Length		(0～80)mm	U=0.03mm		
				Flow value(0～20)mm	U=0.02mm		
22	*Compaction Instrument of Soil	Mass	Verification Regulation of Compaction Instrument of Soil JJG(JT) 058	(2000～5000)g	U=0.04g		
		Length		(1～60)mm	U=0.06mm		
				(290～460)mm	U=0.4mm		
23	*Asphalt Mixture's Marshall Compaction Test Apparatus	Mass	Verification Regulation of Asphalt Mixture's Marshall Compaction Test Apparatus JJG(JT) 065	(4000～15000)g	U=2g		
		Length		(50～500)mm	U=1mm		
		Speed		(50～70)times/min	U=1times/min		
24	*Instrument for Determining Location of Concrete Reinforced Bar	Length	Verification Regulation ofInstrument for Determining Location of Concrete Reinforced Bar JJG(JT) 131	(0～500)mm	U=0.7mm		
		Diameter		(0～50)mm	U=0.2mm		
25	*Reinforced Concrete Covermeter and Floorslab Thickness Tester	Length	Calibration Specification for Reinforced Concrete Covermeter and Floorslab Thickness Tester JJF 1224	(0～500)mm	U=0.7mm		
		Diameter		(0～50)mm	U=0.2mm		
26	*Liquid & Plastic Limit Gauge	Mass	Verification Regulation of Liquid & Plastic Limit Gauge JJG(JT) 069	(70～110)g	U=12mg		
		Length		(0～60)mm	U=0.02mm		
		Angle		(25～35)°	U=0.1°		
		Time		(3～6)s	U=0.04s		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
27	*Determination Specific Surface Area of Air Permeability Apparatus	Length	Verification Regulation of Determination Specific Surface Area of Air Permeability Apparatus JJG(JC) 107	(2.7～65)mm	U=(0.1～1.0)mm		
		Time		(0～900)s	U=0.3s		
		Volume		(1.5～2.5)cm^3	U_{rel}=1.0%		
28	*Accelerated Polishing Machine	Length	Verification Regulation of Accelerated Polishing Machine JJG(JT) 054	(43～46)mm	U=0.02mm		
				(204～407)mm	U=0.1mm		
		Rotate speed		(315～325)r/min	U=1.2r/min		
		Hardness		(60～72)HA	U=1.0HA		
		Rate		Sand injection(2.5～35)g/min	U=(0.1～1.5)g/min		
				Water injection (50～75)mL/min	U=2.2mL/min		
		Force		(705～735)N	U=1.2N		
29	Le Chatelier Flask for Determining Density of Hydraulic Cement	Volume	Verification Regulation of Le Chatelier Flask for Determining Density of Hydraulic Cement JJG(JT) 092	(0.01～24)mL	U_{rel}=2.0%		
30	*Flow Time Tester for Fine Aggregate	Angle	Verification Regulation of Flow Time Tester for Fine Aggregate JJG(JT) 109	(55～65)°	U=0.2°		
		Length		(10～130)mm	U=0.05mm		
31	*Le Chatelier	Length	Verification Regulation of Le Chatelier, Tester for Determining Expansion of Le Chatelier Needles JJG(JT) 093	(0～25)mm	U=0.60mm		
				(0.1～160)mm	U=0.04mm		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
32	*Needle and Flake Gages	Length	Calibration Specification for Needle and Flake Gages JJF1593	(2～90)mm	U=0.04mm		
33	*Testing Instrument for Crushing Value	Length	Verification Regulation of Testing Instrument for Crushing Value JJG(Su) 54	(8～160)mm	U=0.06mm		
34	*The Penetration Test Apparatus of Bituminous	Length	Verification Regulation of the Penetration Test Apparatus of Bituminous JJG(JT) 067	Indication(0～50)mm	U=0.02mm		
				Standard needle size(0～55)mm	U=0.02mm		
		Mass		(40～210)g	U=0.02g		
		Temperature		(0.5～55）℃	U=0.04℃		
		Angle		(5～15)°	U=0.2°		
		Time		(3～65)s	U=0.3s		
35	*Bituminous materials' determining ductility	Stretching rate	Verification Regulation of Bituminous Materials Determining Ductility JJG(JT) 023	(9～11)mm/min	U=0.1mm/min		
				(40～60)mm/min	U=0.3mm/min		
		Temperature		(0～30)℃	U=0.04℃		
		Length		(0～1500)mm	U=（0.03～0.3）mm		
36	*Bitumen softening meter	Temperature	Calibration Code for bitumen softening meter SL414	(0～200)℃	U=0.2℃		
		Length		(0～30)mm	U=0.04mm		
		Mass		(2～5)g	U=0.02g		
		Speed		(1～10)℃/min	U=0.2℃/min		
37	*Eight-wheel Continuous Vialog	Length	Verification Regulation of Eight-wheel Continuous	Indication(-20～20)mm	U=0.05mm		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
			Vialog JJG(JT) 024	Diameter(159～161)mm	U=0.05mm		
				Datum length(2970～3030)mm	U=10mm		
		Hardness		(55～70)HA	U=0.6HA		
38	*Benkelman Beam Pavement Deflectometer	Length	Verification Regulation of Benkelman Beam Pavement Deflectometer JJG(JT) 025	(0～300)mm	U=(0.005～0.05)mm		
39	*Pavement Texture Depth Manual Sanding Device	Length	Verification Regulation of Pavement Texture Depth Manual Sanding Device JJG(JT) 117	(1～100)mm	U=0.02mm		
		Roughness		Ra(0.01～100) μm	U=1 μm		
40	Measuring Instrument for Cement Bright Degumming Equipment	Acceleration sensitivity	Verification Regulation of Measuring Instrument for Cement Bright Degumming Equipment JJG 974	(1～100)m/s^2 (40～100)Hz	U_{rel}=1.2%		
		Frequency		(20～2000)Hz	U_{rel}=0.3%		
		Amplitude		(0.01～10)mm	U_{rel}=1.0%		
		Rotate speed		(15～20000)r/min	U_{rel}=0.3%		
		Time		(0～5)min	U=0.2s		
41	*Test Apparatus for Theoretical Maximum Specific Gravity of Asphalt Mixtures	Pressure	V.R. of Test Apparatus for Theoretical Maximum Specific Gravity of Asphalt Mixtures JJG(JT) 105	(1～120)kPa	U=0.7%FS		
		Vacuum		(-100～-0.1)kPa	U=0.7%FS		
		Volume		(2000～5000)mL	U=(4～8)mL		
		Time		(0～2)min	U=0.2s		
42	*Dynamic penetration tester	Mass	V.R. of Dynamic Penetration Tester JJG(JT)169	(0～15)kg	U=0.04kg		
				(60～65)kg	U=0.2kg		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Length		(0～800)mm	U=0.2mm		
		Angle		(9～16)°	U=0.2°		
43	*California Bearing Ratio Instrument	Mass	Verification Regulation of California Bearing Ratio Instrument JJG(JT) 106	(1200～1300)g	U=0.5g		
		Length		(0～200)mm	U=0.05mm		
		Force		(0.1～50)kN	U_{rel}=0.3%		
		Speed		(0.5～1.5)mm/min	U_{rel}=3.0%		
44	*Waterproof Roll Material Imperviour Instrument	Pressure	Calibration Specification for Waterproof Roll Material Imperviour Instrument JJF(Jin)03	(0～1)MPa	U=0.6%FS		
45	*Rebar Gauge Punching Machine	Length	Verification Regulation of Rebar Gauge Punching Machine JJG（JT）158	(0～400)mm	U=0.05mm		
46	*Sand-cone Density Apparatus	Length	Verification Regulation of Sand-cone Density Apparatus JJG(JT) 120	(0～400)mm	U=0.05mm		
47	*Annular sword	Length	Code for calibration of annular sword SL 110	(0～100)mm	U=0.05mm		
		Angle		(9～16)°	U=0.1°		
		Roughness		Ra(0～4) μm	U=0.3 μm		
48	*Carbonization Depth Measuring Instruments and Calipers	Length	Calibration Specification for Carbonization Depth Measuring Instruments and Calipers JJF 1721	Measuring Rule(0～8)mm	U=0.08mm		
				Measuring instrument(0～26)mm	U=0.01mm		
49	*Relative density meter	Length	V.R. of Relative density meter JJD1021	(40～160)mm	U=0.05mm		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Mass		(1200～1300)g	U=1g		
50	*Mechanical Sieve Shaker	Length	Calibration code for mechanical sieve shaker SL411	(8～14)mm	U=0.1mm		
		Frequency		(100～300)BPM	U=5BPM		
51	Pile Static Load Measuring Instrument	Force	C.S. for Pile Static Load Measuring Instrument JJF(Hei)01	(0.1～5000)kN	U_{rel}=0.4%		
		Pressure		(0～70)MPa	U=0.6%FS		
		Length		(0～50)mm	U=0.02mm		
52	*Steel Bar Tarnish Measuring Instruments	DC Voltage	Verification Regulation of Steel Bar Tarnish Measuring Instruments JJF 1341	(0.01～10)V	U_{rel}=0.1%		
		DC Current		(0.001～2)A	U_{rel}=0.2%		
53	*Cement Le Chatelier Needles	Length	Calibration Specification for the Expansion Tester of Cement Le Chatelier Needles JJF(JC)110	(0～25)mm	U=0.04mm		
		Mass		(295～305)g	U=0.02g		
54	*Vibrating Talle for Concrte Testing	Length	V.R. of Vibrating Talle for Concrte Testing JJG(Su)60	(0.33～0.52)mm	U=0.012mm		
		Force		(0.1～1000)N	U=2N		
		Frequency		(47～53)Hz	U=0.2Hz		
		Time		(0～5)s	U=0.01s		
55	*Methylene Blue Mixer	Rotational speed	Calibration Specification for Methylene Blue Mixer JJF(Gui)82	(100～900)r/min	U_{rel}=0.3%		
		Length		(65～85)mm	U=0.04mm		
		Time		(1～600)s	U_{rel}=0.5%		
56	*Permeameter	Stress	Calibration Specification for Permeameter JJF(Zhe)1165	(0～6)MPa	U=0.10%FS		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
57	*Mortar Setting Time Meter	Force	Calibration Specification for Mortar Setting Time Meter JJF(JC) 208	（1～100）N	U_{rel}=0.2%		
58	*Geosynthetic Hydrostatic Testers	Stress	Calibration Specification for Geosynthetic Hydrostatic Testers JJF(Ji) 178	（0～2.5）MPa	U=0.003MPa		
		Length		（2～4）mm	U=0.03mm		
				（190～210）mm	U=0.04mm		
59	*impermeability testing instrument of geomembranes	Length	Calibrating code for impermeability testing instrument of geomembranes SL408	（2～4）mm	U=0.03mm		
		Length		（160～350）mm	U=0.03mm		
		Stress		（0～4）MPa	U=0.3%FS		
60	*Tester for Separating Emulsified Bitumen Particle Ions	Length	V. R. of Tester for Separating Emulsified Bitumen Particle Ions JJG(JT) 115	（0.5～150）mm	U=0.04mm		
		Voltage		（5～7）V	U=0.006V		
61	*Measurer for Liner Removal Performance of Retroreflective Sheeting	Length	Verification Regulation of Measurer for Liner Removal Performance of Retroreflective Sheeting JJG(JT)　085	20 mm、25 mm、63 mm、80 mm、150 mm	U=0.04 mm		
		Mass		6600 g	U=1.6 g		
62	*Asphalt Mixture's Mixing Machine	Volume	Verification Regulation of Asphalt Mixture's Mixing Machine JJG(JT) 064	(10～15)L	U=0.006 L		
		Rotating velocity		45 r/min、75 r/min	U_{rel}=0.2%		
		Time		(10～1800) s	U=0.6 s		
		Temperature		(20～250)℃	U=0.3 ℃		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
63	*Concrete Resistivity Meter	Resistivity	Verification Regulation of Concrete Resistivity Meter JJG(JT) 159	10.4kΩ·cm、16.0kΩ·cm、31.4kΩ·cm、62.8kΩ·cm、314.0kΩ·cm	U_{rel}=0.6%		
		DC resistance		100 Ω～15 kΩ	U_{rel}=0.06%		
64	*Sliding Line Resistance Displacement Meter	Length	Verification Regulation of Sliding Line Resistance Displacement Meter JJG(JT) 040	(0～300)mm	U=0.03 mm		
65	*Vibration WireMultipoint Displacement Meter	Length	Verification Regulation of Vibration Wire Multipoint Displacement Meter JJG(JT) 039	(0～300)mm	U=0.03 mm		
66	*Shape Selector of Glass Beads	Vibration displacement	Verification Regulation for Shape Selector of Glass Beads JJG(JT) 073	(0.1～0.5)mm，50Hz	U=0.03 mm		
		Length		150 mm、380 mm	U=0.2 mm		
		Angle		(0～5)°	U=0.05°		
67	Container	Length	Verification Regulation of Container JJG(JT) 191	108 mm、109 mm、155 mm、160 mm、186 mm、204 mm、208 mm、255 mm、294 mm、295 mm、360 mm、467 mm	U=0.07 mm		
		Capacity		1 L、3 L、5 L、10 L、20 L、30 L、80 L	U_{rel}=0.3%		
68	*Rebar Bending Testing Machines	Angle	Calibration Specification for Rebar Bending Testing Machines JJF(E) 77	Horizontal:(0～360)°	U=0.010°		
				Vertical:(-90～90)°	U=0.047°		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
69	*Flexibility Test Device of Plastic Bellows	Length	Verification Regulation of Flexibility Test Device of Plastic Bellows JJG(JT) 164	(8～150)mm	U=0.05 mm		
				1500 mm、1800 mm	U=0.5 mm		
		Angle		90°	U=0.08°		
70	*Measurer for Flexibility of Retroreflective Sheeting	Length	Verification Regulation of Measurer for Flexibility of Retroreflective Sheeting JJG(JT) 098	3.20 mm	U=0.003 mm		
71	Standard Testing Sieve for Cement Fineness(80 μm)	Length	Verification Regulation of Standard Testing Sieve for Cement Fineness(80 μm) JJG(JT) 049	56 μm、(75～85) μm	U=4 μm		
				10 mm、25 mm、38 mm、50 mm、80 mm、90 mm、125 mm、135 mm、140 mm、142 mm、150 mm、160 mm	U=0.2 mm		
72	Standard Block of Reinforced Covermeter and Floorslab Thickness Tester	Length	Calibration Specification for Standard Block of Reinforced Covermeter and Floorslab Thickness Tester JJF(Jin) 76	(1～600)mm	U=0.05 mm		
73	*Cement Concrete Mixers	Rotating velocity	Verification Regulation of Cement Concrete Mixers JJG(JT) 187	48 r/min、55 r/min	U_{rel}=0.2%		
		Time		120 s	U_{rel}=0.2%		
74	*Ultrasonic Hole Forming Quality Detector	Length	Verification Regulation of the Ultrasonic Hole Forming Quality Detector JJG(JT) 171	0.5 m、0.6 m、0.8 m、1.0 m、1.4 m、2.0 m	U_{rel}=0.6%		
75	Servo Inclinometer	Angle	Verification Regulation of Servo Inclinometer JJG(JT) 038	(-20～20)°	U=6″		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
76	Borehole Clinometers	Angle	Calibration Specification for Borehole Clinometers JJF 1550	(-30～30)°	U=6″		
77	*Automated Rut-Depth Measuring System	Length	Verification Regulation of Automated Rut-Depth Measuring System JJG(JT) 051	1 mm、5 mm、10 mm、20 mm、50 mm、100 mm、200 mm	U=0.5 mm		
78	*Load Wheel Tester for Asphalt Emulsion Slurry Mixture	Frequency	Verification Regulation of Load Wheel Tester for Asphalt Emulsion Slurry Mixture JJG(JT) 091	44 min^{-1}	U=1 min^{-1}		
		Mass		56.7 kg	U=0.10 kg		
		Hardness		65 HA	U=1.2 HA		
		Length		3.2 mm、6.4 mm、12.7 mm、26.0 mm、38.0 mm、50.0 mm、76.5 mm、152 mm、355 mm、380 mm	U=0.06 mm		
79	*Emulsified Bitumen Stability Test-tube	Length	Verification Regulation of the Emulsified Bitumen Stability Test-tube JJG(JT) 116	12mm、32mm	U=0.018mm		
				30mm、50mm、62mm、174mm	U=0.05mm		
				310mm	U=0.5mm		
80	Vibrating Wire Rebar Stress Meter	Force	Verification Regulation of Vibrating Wire Rebar Stress Meter JJG(JT) 035	(10～600)kN	U_{rel}=0.8%		
81	*Testing Instrument for Crushing Value	Length	Verification Regulation of Testing Instrument for Crushing Value JJG(JT) 190	(10～150)mm	U=0.04 mm		
82	*Mortar layering Tester	Length	Calibration Specification of Mortar layering Tester JJF(Xiang) 36	100 mm、150 mm、200 mm	U=0.04 mm		

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№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
83	*Measurer for Resistance to Impact of Raised Pavement Markers	Length	Verification Regulation of Measurer for Resistance to Impact of Raised Pavement Markers JJG(JT) 080	1000 mm	U=0.3 mm		
		Mass		1040 g	U=0.2 g		
84	*Consistency Tester for Asphalt Emulsion Slurry Mixture	Length	Verification Regulation of Consistency Tester for Asphalt Emulsion Slurry Mixture JJG(JT) 114	38 mm、76 mm、89 mm、109 mm、129 mm、149 mm、169 mm、189 mm、209 mm	U=0.04 mm		
85	*Rapid Freezing and ThawingTest Machine for Concrete	Temperature	Calibration Specification of Rapid Freezing and ThawingTest Machine for Concrete JJF(Jin) 45	(-18～5)℃	U=0.15 ℃		
86	*Standard Viscometer of Bituminous Materials	Temperature	Verification Regulation of Standard Viscometer of Bituminous Materials JJG(JT) 055	40 ℃、60 ℃	U=0.08 ℃		
		Length		6.35 mm、12.70 mm	U=4 μm		
				5.0 mm、90.3 mm、92.0 mm	U=0.05 mm		
		Capacity		25 mL、50 mL、75 mL、100 mL	U=0.8 mL		
87	*Asphalt Mixture Rut-depth Testing Instrument	Temperature	Calibration Specification for Asphalt Mixture Rut-depth Testing Instrument JJF(Zhe) 1094	60 ℃	U=0.15 ℃		
		Length		Deformation measurement device: (0～30)mm	U=3 μm		
				Size: 15 mm、50 mm、200 mm	U=0.05 mm		
				230 mm	U=0.8 mm		
		Hardness		78 IRHD	U=0.4 IRHD		
		Frequency		42 min^{-1}	U=0.3 min^{-1}		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Pressure		0.70 MPa	U=0.005 MPa		
88	*Measurer for Impact Resistance of Retroreflective Sheeting	Length	V.R. of Measurer for Impact Resistance of Retroreflective Sheeting JJG(JT) 084	54 mm、60 mm、250 mm	U=0.05 mm		
		Mass		450 g	U=0.009 g		
89	*Digital Sticking Strength Testers	Force	Calibration Specification for Digital Sticking Strength Testers JJF(Ji) 224	(1～10)kN	U_{rel}=0.3%		
		Length		8 mm、40 mm、45 mm、50mm、95 mm	U=0.05 mm		
90	*Unconfined Thickness Measurement Instrument	Length	Verification Regulation of Unconfined Thickness Measurement Instrument JJG(JT) 177	1 mm、2 mm、3 mm、4 mm、5 mm、6 mm、7 mm、8 mm、9 mm、10 mm	U=4 μm		
		Area		(50～2600)mm^2	U=7 mm^2		
		Force		100 cN、200 cN	U=0.004 cN		
		Time		10 s、30 s	U=0.2 s		
91	Wedge-Shape Filler Gauges	Length	Calibration Specification for Wedge-Shape Filler Gauges JJF 1548	(0～60)mm	U=0.01 mm		
92	Test Sieves	Length	Calibration Specification for Test Sieves JJF 1175	(0.04～4)mm	U=2 μm		
				(4～125)mm	U=0.04 mm		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
93	*Molds	Length	Calibration Specification for Molds JJF 1307	40.0 mm、40.1 mm、100 mm、150 mm、160 mm、175 mm、185 mm、200 mm、300 mm、400 mm、450 mm、515 mm、550 mm、600 mm	U=0.04 mm		
94	Multifunction Slope Scale	Angle	Calibration Specification for Multifunction Slope Scale JJF(Ji) 140	(-90～90)°	U=0.3°		
95	*Insulating Glass Dew Point Analyzer	Temperature	Calibration Specification for Insulating Glass Dew Point Analyzer JJF(Min) 1112	semiconductor type：(-60～0)℃	U=0.3℃	Dry ice refrigeration type equipment is not calibrated on-site	
				dry ice cooling type：(-60～0)℃	U=0.2℃		
96	*Road Traffic Marking Thickness Measuring Instrument	Length	V.R.of Road Traffic Marking Thickness Measuring Instrument JJG(JT) 203	pointer type：(0.5～10)mm	U=0.005mm		
				displayed：(0.5～12)mm	U=0.01mm		
97	Road Quality Test Ruler	Parallelism	C.S. for Road Quality Test Ruler JJF(Xin) 67	(0～5)mm/3m	U=0.06mm/3m		
98	Construction Quality Tester Sets	angle	C.S.for Construction Quality Tester Sets JJF 1110	verticality measuring ruler：(0～15)mm/2m	U=0.2mm/2m		
				Inside and outside measuring square：(0～7)mm/150mm	U=0.2mm/150mm		
		Length		wedge-shaped feeler gauge：(0～15)mm	U=0.06mm		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				bai grid network：(100～250)mm	U_{rel}=0.1%		
				diagonal inspection ruler：(-100～100)mm	U=0.2mm		
99	Cement Length Comparator	Length	C.S.for Cement Length Comparator JJF(Su) 217	(0～10)mm	U=5 μ m		
				(156～540)mm	U=6 μ m		
100	*Crack Width Measuring Instrument	Length	Verification Regulation of Crack Width Measuring Instrument JJG(JT) 135	(0.02～10)mm	U=6 μ m		
101	*Measurer for Adhesion Performance of Retroreflective Sheeting	Length	V.R. of Measurer for Adhesion Performance of Retroreflective Sheeting JJG(JT) 083	(35～500)mm	U=0.07mm		
		Mass		(790～810)g	U=0.02g		
102	*Load Cell of static loading test of foundation pile with self-balanced method	Force value	C.S. for Load Cell of static loading test of foundation pile with self-balanced method JJF(Zhe) 1159	(10～600)kN	U_{rel}=0.3%		
				(600～10000)kN	U_{rel}=0.5%		
103	Test-tube for Determining Density of Asphalt	Length	Verification Regulation of Test-tube for Determining Density of Asphalt JJG(JT) 119	(1～72)mm	U=0.04mm		
		Mass		(1～40)g	U=0.003g		
		Capacity		(20～30)mL	U=0.003mL		
104	Steel Anvils	Mass	Calibration Specification for Steel Anvils JJF(Min) 1133	(15～46)kg	U=0.12kg		
		Length		(31～200)mm	U=0.05mm		
		Hardness		(58～62)HRC	U=1.8HRC		
105	*Testing	Force value	C.S. for Testing Apparatus	(1～300)kN	U_{rel}=0.2%		

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№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
	Apparatus for Pavement Material Strength	Length	for Pavement Material Strength JJF(Wan) 108	Displacement ：(0.5～50)mm	U_{rel}=0.03%		
				Work schedule：(60～500)mm	U=0.5mm		
		Rate		(0.9～55)mm/min	U_{rel}=0.4%		
106	*Hydraulic Static Pile Pressing Machine	Force value	C.S. for Hydraulic Static Pile Pressing Machine JJF(Zhe) 1158	(10～600)kN	U_{rel}=0.3%		
				(600～10000)kN	U_{rel}=0.5%		
Special measuring instruments for civil aviation and aviation							
1	PRO360/PRO3600 /DP-45 Protactor	Angle	C.S.for PRO360/ PRO3600 / DP-45 Protractor JJF(MH)0103	(0～90)º	U=0.01°		
2	Dynamometer of The Engine Bootstrap Equipment	Force	C.S for Dynamometer of The Engine Bootstrap Equipment JJF(MH)0122	(0.1～200)kN	U=0.2%FS		
3	Cable Tensiometer of Direct Reading Type	Force	C.S.for Cable Tensiometer of Direct Reading Type JJF(MH)0087	(0.01～5)kN	U_{rel}=1.0%		
Special measuring instruments for electrical and electronic appliances							
1	*Single Insulated Wire and Cable Vertical burning Test Device	Temperature	Verification Procedure for Test Equipment of Rubber Plastic Wire and Cable -Part 5:Single Insulated Wire and Cable Vertical Burning Test Device JB/T4278.5	（0～1300）℃	U=0.8℃		
		Time		（0～60）s	U=0.5s		
		Length		（0～150）mm	U=0.5mm		
2	*Glow-wire Apparatus	Temperature	C. S. for Glow-wire Apparatus JJF(Zhe)1050	(30～1000)℃	U=1.6℃		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Time		(0～60)s	U=0.5s		
		Length		(0～150)mm	U=0.05mm		
		Force value		(0～10)N	U=0.1N		
3	*charge &Discharge of battery tester	Charge Voltage	Calibration Specification for Battery Charge & Discharge Testers JJF 2039	（0.01～1000）V	U_{rel}=0.03%		
		Charge Current		10μA～200A	U_{rel}=0.06%		
				200A～2000A	U_{rel}=0.07%		
		Discharge Voltage		（0.01～1000）V	U_{rel}=0.03%		
		Discharge Current		10μA～200A	U_{rel}=0.06%		
				200A～2000A	U_{rel}=0.07%		
		DC power		0.1W～100W	U_{rel}=0.10%		
				100W～10kW	U_{rel}=0.15%		
		Discharge capacity		0.1Ah～10Ah	U_{rel}=0.09%		
				10Ah～1kAh	U_{rel}=0.05%		
		Constant current charging current rise time		10 μ s～10ms	U_{rel}=0.3%		
		Temperature		- 20℃～100℃	U=0.2℃		
4	*Electrical safety analyzer	Insulation Resistance	Calibration specification for comprehensive safety tester JJF(DZ)0004	（1kΩ～10MΩ）	U_{rel}=0.3%		
				（10～100）MΩ	U_{rel}=0.6%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				（100～1000）MΩ	U_{rel}=1.3%		
				（1000～5000）MΩ	U_{rel}=3%		
		Earth Continuity		（1～600）mΩ	U_{rel}=0.6%		
		Earth Current		（1～40）A	U_{rel}=0.3%		
		DC Voltage		（0.1～10）kV	U_{rel}=0.7%		
		AC voltage		（0.01～6）kV (50Hz, 60Hz)	U_{rel}=0.7%		
		DC current		（0.01～200）mA	U_{rel}=0.8%		
		AC current		（0.01～200）mA (50Hz ,60Hz)	U_{rel}=0.8%		
		Time		(0.01～999.99)s	U=0.8%T+0.03s		
5	*Voltage Dips ,Short Interruptions and Voltage Variations Generator	Output voltage	C.S. for Voltage Dips ,Short Interruptions and Voltage Variations Generator JJF(DZ) 30802	(0.01～1)kV	U_{rel}=1%		
		Time		0.01 s～50s	U_{rel}=0.6%		
6	*Cable Tester	Cable DC resistance	Calibration for Cable Tester JJF1457	0.1Ω～1Ω	U_{rel}=2%		
				1Ω～10Ω	U_{rel}=1.2%		
				10Ω～100kΩ	U_{rel}=1.0%		
		Insulation alarm resistance		1MΩ～100MΩ	U_{rel}=1.2%		
				100MΩ～1000MΩ	U_{rel}=1.5%		
		AC output voltage		(50～2000)V,(45Hz～65Hz)	U_{rel}=1.3%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		AC output voltage Total harmonic distortion		0.1%～10%	U_{rel}=3%		
		Capacitance between wires		100pF～100 μ F	U_{rel}=0.3%		
		Leakage current		(0.01～20)mA,(45Hz～65Hz)	U_{rel}=1.3%		
		Charging Voltage		50V～2000V	U_{rel}=1.2%		
7	*Transformer On-loadTap-changer Testers	Transition time	Calibration Specification of Transformer On-loadTap-changer Testers JJF(Zhe) 1084	(10～300)ms	U=0.15%Tx+0.2ms		
		resistance		(0.1～80)Ω	U=0.8%Rx+0.003Ω		
8	Electrostatic Discharge Simulators	Output voltage	C.S. for Electrostatic Discharge Simulators JJF 1397	(1～40) kV	U_{rel}=0.8%		
		Contact discharge current		(1～100)A	U_{rel}=6.6%		
		Rise Time		0.1 ns～100 ns	U_{rel}=13%		
9	*Impulse Voltage Testers for Winding Interturn Insulation	Impulse Peak Voltage	C. S. for Impulse Voltage Testers for Winding Interturn Insulation JJF 1691	(0.01～15)kV	U_{rel}=1.2%		
		Front time		(0.1～10) μ s	U_{rel}=5%		
10	*Electrical Surge Generator	Output voltage	C.S. for Electrical Surge Generator JJF(DZ) 30803	(0.1～20) kV	U_{rel}=0.8%		
		Half peak time		1 ns～1s	U_{rel}=2.5%		
		Front Time		1 ns～1s	U_{rel}=2.5%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Surge current peak		500A～8kA	U_{rel}=2.5%		
11	*Current probes of Oscilloscope	DC Current	Calibration specification for Current probes of Oscilloscope JJF(DZ) 0036	0.01A～1000A	U_{rel}=0.7%		
		AC Current		0.01A～1000A(40Hz～1kHz)	U_{rel}=0.8%		
		Attenuation coefficient		1～1000	U_{rel}=0.7%		
		Band bandwidth		50kHz～120MHz	U_{rel}=4.2%		
		Rise Time		（3.6～100）ns	U_{rel}=6%		
12	*Osciloscope Voltage Probe	Attenuation	Calibration Specification for Osciloscope Voltage Probe JJF 1437	1:1～1000:1	U_{rel}=0.7%		
		Frequency Response		10kHz～300MHz	U=0.8dB		
		Rise time		(1～100)ns	U_{rel}=6%		
		Input impedance		50Ω～100MΩ	U_{rel}=0.04%		
13	*Higt Voltage probes of Oscilloscope	Attenuation ratio	Calibration specification for Differential probes of Oscilloscope JJF((DZ) 30306	1～1000	U_{rel}=0.7%		
		frequency response		10Hz～300MHz	U_{rel}=0.8%		
		Rise Time		（1.0～100）ns	U_{rel}=6%		
		Input Resistance		50Ω～100MΩ	U_{rel}=0.7%		
		CMRR		18dB～90dB	U=1.9dB		
14	*Higt Voltage probes of Oscilloscope	DC voltage attenuation ratio	Calibration specification for Higt Voltage probes of Oscilloscope JJF(DZ) 30304	DC:1～1000 (100V～20kV）	U_{rel}=0.7%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		AC voltage attenuation ratio		AC:1～1000 (50V～20kV，45Hz～65Hz）	U_{rel}=0.8%		
15	*Impulse Voltage Tester with Respect to Eareh	Open circuit voltage peak	Calibration Specification for Impulse Voltage Tester with Respect to Eareh JJF(Zhe)1069	0.05kV～20kV	U_{rel}=3%		
		pulse wavefront time		0.5 μs～20 μs	U_{rel}=5%		
		Half wave time		20 μs～1ms	U_{rel}=4%		
16	*Electrical Fast Transient Generator	Impulse Peak Voltage	C.S.for Electrical Fast Transient Generator JJF(DZ) 30804	(0.01～5)kV	U_{rel}=3%		
		Burst Duration		(0.1～200)ms	U_{rel}=1.5%		
		Rise time of pulse voltage		（2～10)ns	U_{rel}=4.3%		
		Pulse voltage duration		（10～200)ns	U_{rel}=4%		
		Pulse repetition rate		0.1kHz～1MHz	U_{rel}=0.7%		
		Pulse group period		10ms～1000ms	U_{rel}=0.6%		
17	*Data acquisition device	DC Voltage	Calibration Specification for Multi-Parameter Data Acquisition Instrument JJF（TX）041	(10～100)mV	U_{rel}=9.0×10^{-5}		
				(100mV～1V)	U_{rel}=2.0×10^{-5}		
				(1～10)V	U_{rel}=1.8×10^{-5}		
				(10～1000)V	U_{rel}=3.0×10^{-5}		
		AC Voltage		(10～100)mV	U_{rel}=8.6×10^{-4}		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				100mV～1V(45Hz～10kHz)	U_{rel}=2.6×10^{-4}		
				1V～10V(45Hz～10kHz)	U_{rel}=2.2×10^{-4}		
				10V～100V(45Hz～10kHz)	U_{rel}=2.4×10^{-4}		
				100～1000V(45Hz～10kHz)	U_{rel}=2.4×10^{-4}		
		DC Current		(100μA～1mA)	U_{rel}=6.5×10^{-4}		
				(1～100)mA	U_{rel}=2.0×10^{-4}		
				(100mA～3A)	U_{rel}=4.0×10^{-4}		
				(3～20)A	U_{rel}=1.0×10^{-3}		
		AC Current		100μA～1mA(45Hz～5kHz)	U_{rel}=2.6×10^{-3}		
				1mA～100mA(45Hz～5kHz)	U_{rel}=7.0×10^{-4}		
				100mA～3A(45Hz～5kHz)	U_{rel}=6.0×10^{-4}		
				3A～20A(45Hz～5kHz)	U_{rel}=1.2×10^{-3}		
		DC Resistance		(10～100) Ω	U_{rel}=7.8×10^{-5}		
				100 Ω～10k Ω	U_{rel}=3.2×10^{-5}		
				10k Ω～1M Ω	U_{rel}=4.2×10^{-5}		
				(1～100)M Ω	U_{rel}=5.0×10^{-4}		
		Temperature (TC)		（-100～1300）℃	U=0.3℃		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
		Temperature (RTD)		（0～800）℃	U=0.2℃		
		Average relative frequency		10Hz～10MHz	$U_{rel}=1.4\times10^{-5}$		
18	*Spark Testers	AC Voltage	C.S. for Spark Testers JJF 2239	AC：（0.1kV～20kV）50Hz/60Hz	U_{rel}=0.7%		
		DC Voltage		DC：（0.1kV～30kV）	U_{rel}=0.6%		
19	*Online Winding Temperature Rise Tester	Resistance	Calibration Specification For Online Winding Temperature Rise Tester JJF 1540	（0.1～1）Ω	U_{rel}=0.6%		
				（1～10）Ω	U_{rel}=0.07%		
				（10Ω～10kΩ	U_{rel}=0.06%		
20	*Battery Resistance Test Instrument	Resistance	Calibration Specifcation for Battery Internal Resistance Testers JJF 1620	1mΩ～10mΩ	U_{rel}=0.08%		
				10mΩ～3kΩ	U_{rel}=0.06%		
		Voltage		(0.1～10)V	U_{rel}=0.009%		
				(10～800)V	U_{rel}=0.006%		
21	*Proof Tracking Index Testers	Test voltage	Calibration Specification for Proof Tracking Index Testers JJF(Zhe) 1087	(0.1～750)V(45Hz～60Hz)	U_{rel}=0.3%		
		Test current		(0.01～1)A(45Hz～60Hz)	U_{rel}=0.2%		
		Time		(0.01～999.9)s	U_{rel}=0.3%		
22	*DC Electronic Load	DC Voltage	C.S. forDC Electronic Load JJF 1462	0.1V～100V	U_{rel}=0.02%		
				100V～1000V	U_{rel}=0.04%		
		DC Current		0.01A～20A	U_{rel}=0.05%		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
				20A～120A	U_{rel}=0.07%		
				120A ～200A	U_{rel}=0.12%		
		DC Resistance		1Ω～1kΩ	U_{rel}=0.10%		
		DC Power		1W ～100W	U_{rel}=0.12%		
				100W ～2kW	U_{rel}=0.10%		
		Current rise and fall rate		0.1mA/μs～10A/μs	U_{rel}=1.6%		
		Current loading time and unloading time		10μs～10s	U_{rel}=0.7%		
		Constant voltage mode load regulation rate		0.01%～10%	U_{rel}=0.04%		
		Constant current mode load regulation rate		0.01%～10%	U_{rel}=0.12%		
23	*Loop tester	loops	C.S. for Coil Number Testing Instructing JJF(Zhe)1065	（1～11110）loops	U_{rel}=0.3%		
24	9kHz～30MHz whip antenna	Antenna coefficient	Calibration Specification of 9kHz~30MHz whip antenna JJF 1706	-30dB/m～70dB/m（9kHz～30MHz）	U=1.2dB		
25	*Triple-Loop Antenna Systems	Validation Factor	Calibration Specification of Triple-Loop Antenna Systems JJF（DZ）0035-2	（20～100）dBΩ（9kHz～30MHz）	U=1.3dB		

№	Instrument	Measurand	Calibration Method	Range	Expanded Uncertainty (k=2)	Note	Effective Date
26	Current Probes and Injection Probes	Insertion loss	Calibration Specification of Current Probes and Injection Probes JJF(TX) 030	（0~60）dB （9kHz~30MHz）	U=1dB		
		Transfer impedance		（-40~20）dB Ω （10Hz~1GHz）	U=1dB		
		Transfer admittance		（-26~34）dBS （10Hz~1GHz）	U=1dB		

The scope of the accreditation in Chinese remains the definitive version.