

Test Conditions for Type Certification

As of Nov. 2006

No	Classification of Radio Equipment	Test frequency *1	Test for equipment or function other than transmitter and receiver *2	Overall operation test and characteristics test *3	Environmental test for Type certification *4	
					Temp. & humidity	Vibration
1	MCA	L, C, H	Controller	Radio Equipment Regulations (Item 1- b-(4) of Article 49-7)	x	x
2	Airport MCA	L, C, H		Switching to assigned speech channel	x	x
3	SSB (Item 1-9 of Article 2)	L, C, H or Applied freq.			x	x
4	Digital radio	L, C, H or Applied freq.			x	x
5	F3E radio, etc. (Item 1-11 of Article 2)	L, C, H or Applied freq.	Selective calling device		x	x
6	Specified radio microphone	L, C, H or Applied freq.			x	x
7	Maritime DSB	L, C, H or Applied freq.	<ul style="list-style-type: none"> • Automatic identification device • Selective calling device • Modulation signal processing device 		x	x

8	SSB (Item 1-14 of Article 2)		L, C, H or Applied freq.	<ul style="list-style-type: none"> • Automatic identification device • Selective calling device • Modulation signal processing device 		x	x
9	F3E radio, etc. (Item 1-15 of Article 2)		L, C, H or Applied freq.	<ul style="list-style-type: none"> • Automatic identification device • Selective calling device 		x	x
10	Radiolocation equipment		10.525GHz, 24.2GHz			x	x
11	Radio buoy		L, C, H or Applied freq.	<ul style="list-style-type: none"> • Automatic identification device • Selective calling device 		x	x
12	Citizen radio		Applied freq.			N/A	N/A
13	Meteorological Aids	Radiosonde	L, C, H or			x	x
	Station	Robot	Applied freq.			x	N/A
14	Personal radio		L, C, H	Memory device of call name	Overall test by using overall test equipment	x	x
15	Convenience radio		L, C, H or Applied freq.	Automatic identification device		x	x
16	Short range convenience radio		L, C, H or Applied freq.	Automatic identification device		x	x
17	Convenience radio for radio-control		L, C, H or Applied freq.			x	x
18	50GHz band convenience radio		Applied freq.			x	x

19	Premises radio	L, C, H or Applied freq.	<ul style="list-style-type: none"> • Transmitter identification device • Transmission time restriction device • Carrier sensing function 		x	x
20	Cordless telephone	L, C, H	<ul style="list-style-type: none"> • Interference prevention function • Automatic cessation function • Carrier sensing function 		x	x
21	Specified low-power radio equipment	L, C, H or Applied freq.	<ul style="list-style-type: none"> • Transmission time restriction device • Carrier sensing function 		N/A	N/A
	Millimeter wave radar				x	x
	Detector of moving objects				x	x
22	VSAT	L, C, H or Applied freq.		<ul style="list-style-type: none"> • Degree of cross polarized wave identification • Off-beam radiation • Automatic transmission cessation • Interlock 	x	N/A

23	Ka-band VSAT	L, C, H or Applied freq.		<ul style="list-style-type: none"> • Degree of cross polarized wave identification • Off-beam radiation • Automatic transmission cessation • Interlock 	x	N/A
24	Land mobile station for TDMA cellular radio telephone	L, C, H		<ul style="list-style-type: none"> • Automatic transmitter identification • Automatic freq. selection • Antenna power control 	x	x
25	Base station, etc. for TDMA cellular radio telephone	L, C, H			x	N/A
26	Land mobile station for CDMA cellular radio telephone	L, C, H		<ul style="list-style-type: none"> • Channel switch during call • Reading unique number of mobile station • Power reduction 	x	x
27	Base station, etc. for CDMA cellular radio telephone	L, C, H			x	N/A

28	Land mobile station for DS-CDMA cellular radio telephone	L, C, H		<ul style="list-style-type: none"> • Test call (Calling and response, including registration and hand over) • Reading unique number of mobile station • Location registration • Power reduction 	x	x
29	Land mobile station for MC-CDMA cellular radio telephone	L, C, H			x	x
30	Base station, etc. for DS-CDMA cellular radio telephone	L, C, H			x	N/A
31	Base station, etc. for MC-CDMA cellular radio telephone	L, C, H			x	N/A
32	Land mobile station for T-HCDMA cellular radio telephone	L, C, H			x	x
33	Land mobile station for T-CDMA cellular radio telephone	L, C, H			x	x
34	Base station, etc. for T-HCDMA cellular radio telephone	L, C, H			x	N/A
35	Base station, etc. for T-CDMA cellular radio telephone	L, C, H			x	N/A

36	Land mobile station for TD-CDMA cellular radio telephone	L, C, H			x	x
37	Land mobile station for TD-SCDMA cellular radio telephone	L, C, H			x	x
38	Base station, etc. for TD-CDMA cellular radio telephone	L, C, H			x	N/A
39	Base station, etc. for TD-SCDMA cellular radio telephone	L, C, H			x	N/A
40	Amateur radio station	L, C, H (*5)			N/A	N/A
41	Low-power security radio	L, C, H or Applied freq.	<ul style="list-style-type: none"> • Transmission time restriction device • Interference prevention function (Automatic transmission and reception of ID code) 		N/A	N/A
42	Earth station for portable mobile satellite data communication (geostationary)	L, C, H or Applied freq.		<ul style="list-style-type: none"> • Radiation of cross polarized wave • Off-beam radiation • Automatic transmission cessation • Interlock • Automatic tracking 	x	x

43	Earth station for portable mobile satellite data communication (non-geostationary)	L, C, H		Test call (Calling and response)	x	x
44	Base station for multidirectional fixed wireless access	L, C, H or Applied freq.			x	N/A
45	Mobile station for multidirectional fixed wireless access	L, C, H or Applied freq.			x	N/A
46	Mobile station for point-to-point fixed wireless access	L, C, H or Applied freq.		Off-beam radiation	x	N/A
47	Fixed station for telemeter, etc.	L, C, H or Applied freq.			x	N/A
48	Fixed station for emergency alarm	Applied freq.			x	N/A
49	22GHz band fixed station	L, C, H or Applied freq.			x	N/A
50	2.4GHz band wide band low-power data communication system	L, C, H or Applied freq.	<ul style="list-style-type: none"> • Interference prevention function (ID code) • Holding time of hopping • Absolute gain of transmission antenna • Angle width of principal radiation from transmission antenna 		N/A	N/A

51	2.4GHz band low-power data communication system	L, C, H or Applied freq.	Interference prevention function (ID code, Carrier sensing, Correlation signal sensing)		N/A	N/A
52	5GHz band low-power data communication system	L, C, H or Applied freq.	<ul style="list-style-type: none"> • Interference prevention function • Transmission burst length • Transmission power control (TPC) device • Carrier sensing function (1) • Carrier sensing function (2) (DFS) 		N/A	N/A
53	Quasi-millimeter band low-power data communication system	L, C, H or Applied freq.	<ul style="list-style-type: none"> • Interference prevention function (ID code) • Transmission burst length • Carrier sensing 		N/A	N/A
54	Base station for 5GHz band wireless access system (1)	L, C, H or Applied freq.	<ul style="list-style-type: none"> • Absolute gain of transmission antenna • Angle width of principal radiation from transmission antenna • Transmission burst length • Carrier sensing function 		N/A	N/A

55	Base Station for 5GHz Band Wireless access system (2)	L, C, H or Applied freq.	<ul style="list-style-type: none"> • Absolute gain of transmission antenna • Angle width of principal radiation from transmission antenna • Transmission burst length • Carrier sensing function 		N/A	N/A
56	Land mobile relay station for 5 GHz band wireless access system (1)	L, C, H or Applied freq.	<ul style="list-style-type: none"> • Absolute gain of transmission antenna • Angle width of principal radiation from transmission antenna • Transmission burst length • Carrier sensing function 		N/A	N/A
57	Land mobile relay station for 5 GHz band wireless access system (2)	L, C, H or Applied freq.	<ul style="list-style-type: none"> • Absolute gain of transmission antenna • Angle width of principal radiation from transmission antenna • Transmission burst length • Carrier sensing function 		N/A	N/A

58	Land mobile station for 5GHz band wireless access system (1)	L, C, H or Applied freq.	<ul style="list-style-type: none"> • Absolute gain of transmission antenna • Angle width of principal radiation from transmission antenna • Transmission burst length • Carrier sensing function 		N/A	N/A
59	Land mobile station for 5GHz band wireless access system (2)	L, C, H or Applied freq.	<ul style="list-style-type: none"> • Absolute gain of transmission antenna • Angle width of principal radiation from transmission antenna • Transmission burst length • Carrier sensing function 		N/A	N/A
60	Land mobile station for 5GHz band wireless access system (3)	L, C, H or Applied freq.	<ul style="list-style-type: none"> • Absolute gain of transmission antenna • Angle width of principal radiation from transmission antenna • Transmission burst length • Carrier sensing function • Interference prevention function 		N/A	N/A

61	1500MHz band Digital MCA	L, C, H	<ul style="list-style-type: none"> • Automatic power control • Other control functions (Frequency selection, Time control, Automatic transmission cessation and Memory device) 	Radio Equipment Regulations (Item 1-h of Article 49-7-2)	x	x
62	800MHz band Digital MCA	L, C, H	<ul style="list-style-type: none"> • Automatic power control • Other control functions (Frequency selection, Time control, Automatic transmission cessation and Memory device) 	Radio Equipment Regulations (Item 1-h of Article 49-7-3)	x	x
63	Digital cordless telephone	L, C, H	<ul style="list-style-type: none"> • Carrier sensing • Interference prevention function (System calling sign) • Communication between slave units • Transmission cessation 		N/A	N/A

64	PHS land mobile station	L, C, H	<ul style="list-style-type: none"> Carrier sensing Interference prevention function (System calling sign) Communication between slave units Transmission cessation 	Switching to assigned speech channel	N/A	N/A
65	PHS base station	L, C, H	<ul style="list-style-type: none"> Carrier sensing Identification device 		x	N/A
66	PHS relay station	L, C, H	<ul style="list-style-type: none"> Carrier sensing Identification device 		x	x
67	PHS test station	L, C, H	<ul style="list-style-type: none"> Carrier sensing Identification device 		x	x
68	38GHz band fixed station	L, C, H or Applied freq.			x	N/A
69	RZ SSB	L, C, H			x	x
70	RZSSB with automatic frequency selection function	L, C, H		Automatic Frequency Selection	x	x
71	RZSSB with frequency tracking function	L, C, H		Frequency Tracking	x	x
72	Narrow-band digital communication radio	L, C, H			x	x
73	Narrow-band digital communication radio with automatic frequency selection function	L, C, H		Automatic Frequency Selection	x	x

74	Narrow-band digital communication radio with frequency tracking function	L, C, H		Frequency Tracking	x	x
75	Radiolocation land station for vehicle detection	Applied freq.			x	x
76	Road traffic information beacon	Applied freq.			x	N/A
77	Earth station for portable mobile satellite communication (geostationary)	L, C, H		<ul style="list-style-type: none"> • Test call (Calling and response) • Location registration 	x	x
78	Earth station for portable mobile satellite communication (non-geostationary)	L, C, H		Test call (Calling and response)	x	x
79	Class III Rader	Applied freq.			x	x
80	Class IV Rader	Applied freq.			x	x
81	INMARSAT portable mobile earth station	L, C, H			x	x
82	ESV portable mobile earth station	L, C, H			x	x
83	Rural subscriber radio	L, C, H			x	x
84	Base station for 60GHz band high speed radio link	L, C, H or Applied freq.			x	N/A
85	Multidirectional land mobile station for 60GHz band high speed radio link	L, C, H or Applied freq.			x	N/A
86	Point-to-point land mobile station for 60GHz band high speed radio link	L, C, H or Applied freq.			x	N/A

87	Mobile station for dedicated short range communications system	Applied freq.	Interference prevention function (Automatic transmission and reception of ID code)		N/A	N/A
88	Base station for dedicated short range communications system	Applied freq.			x	N/A
89	Station for testing radio equipment for dedicated short range communication system	Applied freq.	Interference prevention function (Automatic transmission and reception of ID code)		N/A	N/A
90	1.9GHz band fixed terminal station	L, C, H	Carrier sensing	Test call (Calling and response)	x	N/A
91	1.9GHz band fixed base station	L, C, H	Carrier sensing		x	N/A
92	1.9GHz band fixed relay station	L, C, H	Carrier sensing		x	N/A
93	1.9GHz band radio station for test	L, C, H	Carrier sensing		x	x
94	Fixed station for municipality disaster prevention digital radio	Applied freq.			x	N/A
95	Airport digital MCA (1)	L, C, H	Control device		x	x
96	Airport digital MCA (2)	L, C, H	Control device		x	x
97	18 GHz band base station, land mobile station, etc	L, C, H	<ul style="list-style-type: none"> • Automatic control device of antenna power • Antenna gain to elongation from principal radiation direction of transmission antenna 		x	x

98	18 GHz band land mobile station	L, C, H	<ul style="list-style-type: none"> • Automatic control device of antenna power • Antenna gain to elongation from principal radiation direction of transmission antenna 		x	x
99	18 GHz base station, etc	L, C, H	<ul style="list-style-type: none"> • Automatic control device of antenna power • Antenna gain to elongation from principal radiation direction of transmission antenna 		x	x
100	18 GHz band fixed station for telecommunications service	L, C, H	<ul style="list-style-type: none"> • Automatic control device of antenna power • Antenna gain to elongation from principal radiation direction of transmission antenna 		x	x

101	18 GHz band fixed station for public service	L, C, H	<ul style="list-style-type: none"> • Automatic control device of antenna power • Antenna gain to elongation from principal radiation direction of transmission antenna 		x	x
102	Aeronautical mobile satellite communications system	L, C, H		<ul style="list-style-type: none"> • Cross-polarization discrimination • Off-beam radiation power • Monitoring and controlling functions, etc 	x	x
103	Ultra Wideband Wireless System	Applied freq.		<ul style="list-style-type: none"> • Spreading bandwidth • Absolute gain of transmission antenna • Interference reduction function 	x	x

Notes:

- *1 The “L, C, H” means lowest, center and highest frequencies of applied frequency band.
- *2 If applied equipment includes a unit other than transmitter or receiver, the unit is subject to be tested.
- *3 Overall operation test is required if applied equipment comes under the item (3)-c of Attached Table No.3 of “Technical Regulations Conformity Certification of Specified Radio Equipment”.

*4 Environmental test is mandatory for the equipment marked “x” in case of Type Certification. “N/A” in the table means not applicable.

*5 Test frequencies for amateur radio equipment are as follows;

1.9MHz – 24MHz band: Center frequency of each band

28MHz, 144MHz band: Lowest and highest frequencies of each band

50MHz, 430 – 2400MHz band: Lowest, center and highest frequencies of each band

Test frequencies for equipment having bandwidth of over 50MHz are separately regulated, but not described here.

*6 Power supply voltage (Note relating to the whole)

The test is conducted with power supply voltage of rated voltage and +10% and -10% of rated voltage except for the following cases.

a) If applied radio equipment uses a dedicated power supply which regulates the output voltage to +/- 1% or less at +/- 10% changes of input voltage, the test is conducted with the rated voltage.

b) If the range of operation voltage is clearly stated in the specifications of applied equipment, test is conducted with the rated voltage and the lowest and the highest voltages of the stated range.