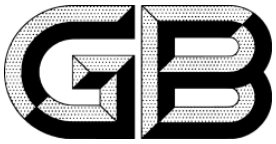

NATIONAL STANDARD OF THE

PEOPLE'S REPUBLIC OF CHINA

GB/T 9254.1-2021

Information technology equipment, multimedia equipment and receivers - Electromagnetic compatibility - Part 1: Emission requirements

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Foreword

This document was drafted in accordance with the rules given in GB/T 1.1-2020 "Directives for standardization - Part 1.Rules for the structure and drafting of standardizing documents".

This document is Part 1 of GB/T 9254 "Information technology equipment, multimedia equipment and receivers - Electromagnetic compatibility". The following parts of GB/T

9254 have been issued.

- Part 1.Emission requirements;

- Part 2.Immunity requirements.

This document replaces GB/T 9254-2008 "Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement" and GB/T 13837-

2012 "Sound and television broadcast receivers and associated equipment - Radio

disturbance characteristics - Limits and methods of measurement". This document integrates the technical content of GB/T 9254-2008 and GB/T 13837-2012.Compared with the above two documents, except for structural adjustment and editorial changes, the main technical changes are as follows.

- The scope of application is wider. It is suitable for multimedia equipment, including multimedia equipment for professional use and equipment applicable to GB/T 9254-2008 and GB/T 13837-2012;

- Change the warning words in the description of Class A equipment requirements (see Chapter 7 of this document, 4.2 of GB/T 9254-2008);

- Change boundary definitions for EUT, AE and associated cables in radiated emission measurements (see C.2.2.4 of this document, 10.3.1 of GB/T 9254-2008);

- Delete the chapter of "Explanation of CISPR harassment limits" (See Chapter 7 of GB/T 9254-2008 and Chapter 6 of GB/T 13837-2012);

- Delete the requirements for disturbance power test items (see 4.5 and 5.6 of GB/T 13837-2012);

- Delete the requirements for the measurement limit of radiation power of the tuning unit of the direct-to-home satellite receiver (see 4.7 of GB/T 13837-2012);

- Delete the requirements for the measurement limit of equivalent radiated power in the radiated power of the outdoor unit of the direct-to-home satellite receiver (see

4.7 of GB/T 13837-2012);

- Delete the requirements for RMS-average detector measurement (see Chapter 4 of GB/T 13837-2012);

- Add the limit requirements and measurement procedures for asymmetric mode conducted emissions using a combination of current probes and CVP (see Table clauses A11.2 and A12.2 and C.4.1.6.4 of this document);

- For the radiated emission measurement requirements below 1GHz, add the limit of 3m measurement distance in OATS/SAC and the limit of 3m measurement distance and 10m measurement distance in FAR/FSOATS (see A.2 of this document);

- Add the limits and test methods for radiated emission testing in GTEM and RVC (see Annex I of this document).

The revision of this document adopts CISPR 32.2015 "Electromagnetic compatibility of multimedia equipment - Emission requirements".

This document is structurally consistent with CISPR 32.2015.The main technical differences are as follows.

- According to the principle that CISPR product standards use CISPR basic standards as references in principle, change "ANSI C63.5-2006" in normative references and "ANSI C63.5" in C.2.2.2 to "GB/T 6113.106-2018";

- Delete the definition of 3.1.15 EUT. Add it as an abbreviation in 3.2;

- Since the content involves the host unit, add the definition of 3.1.18 "host unit";

- According to the broadcast signal system in China, delete the relevant abbreviations AC-3, ATSC, BPSK, DMB-T, DQPSK, ISDB, ISDB-S, MPEG, OFDM applicable to other countries and regions. Add abbreviations DTMB, DVB-S/S2;

- Since China has a relatively common rated voltage, delete the description that "Measurement at two nominal voltages of 230 V (+/-10 V) and 110 V (+/-10 V), using a frequency of 50 Hz or 60 Hz, is normally sufficient for an EUT intended for worldwide use" in "The measurements shall be limited to." in Annex A of CISPR 32.2015;

- In Table A.2 ~ Table A.6, Table A.9 ~ Table A.10 and Table A.13, add relevant

instructions that "Tighter limits shall be applied at transition frequencies", so as to make the limit requirements clearer;

- In Table A.2, Table A.4, Table A.6, Table A.10, Table A.11 and Table A.12, add relevant instructions that "The limit decreases linearly with the logarithm of the frequency", so as to make the limit requirements clearer;

- According to the scope of application of the document, MODIFY the relevant contents that "AC mains ports that also have the function of a wired network port shall meet the limits given in Table A.9" in Table A.11 of CISPR 32.2015 TO "The AC power port with wired network port function (such as. power line communication function) shall meet the limits given in Table A.9 when network

Information technology equipment, multimedia equipment and receivers - Electromagnetic compatibility - Part 1. Emission requirements

1 Scope

This document applies to information technology equipment (3.1.19) whose rated AC voltage RMS or DC voltage does not exceed 600 V, audio equipment (3.1.6), video equipment (3.1.31), broadcast receiver equipment (3.1.7), entertainment lighting control equipment (3.1.14) and combinations thereof.

This document also applies to the above-mentioned equipment for professional use.

The emission requirements specified in this document do not apply to intentional emissions from radio transmitters as defined by the ITU. Nor does it apply to spurious emissions associated with these intentional emissions.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 6113.104-2016, Specification for radio disturbance and immunity measuring apparatus and methods - Part 1-4.Radio disturbance and immunity measuring