

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

YD/T 2722-2014

**RF technical requirements and test methods for 60GHz radio
equipment**

60GHz频段无线电设备射频技术要求及测试方法
(English Translation)

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard shall be under the jurisdiction of China Communications Standards Association.

Drafting organizations of this standard. National Radio Monitoring Center Testing Center, ZTE Corporation, Telecommunication Research Institute of the Ministry of Industry and Information Technology.

1 Scope

This standard specifies the technical requirements and test methods for the equivalent isotropic radiation power, antenna port output power, transmitter spurious emission, receiver spurious emission, carrier frequency tolerance, out-of-band emission for radio equipment operating in the 60 GHz frequency band.

This standard applies to radio equipment operating in the frequency range of

59 GHz ~ 64 GHz.

2 Normative references

The following documents are indispensable for the application of this document.

For dated reference documents, only the dated version applies to this standard.

For undated references, the latest version (including all amendments) applies to this document.

GB 9254-2008 Information technology equipment - Radio disturbance characteristics - Limits and methods of measurement ITU-R SM.1539-1 (2002) Variation of the boundary between the out-of-band and spurious domains required for the application of Recommendations ITU-R SM.1541 and ITU-R SM. 329

3.1 Terms and definitions

The following terms and definitions apply to this document.

3.2 Abbreviations

The following abbreviations apply to this document.

4.1 Environmental requirements

The equipment manufacturer shall declare in advance the environmental conditions under which the equipment works; the equipment shall work in its nominal working environment.

4.2.2.1 Overview

The product of the average power output to the antenna relative to the antenna gain of the isotropic antenna in the specified direction.

4.2.3.1 Overview

The peak power output to the antenna port.

4.2.3.2 Limit

When the transmitter is working at the maximum power level, the antenna port output power's limit is 10 dBm.

4.2.4.2 Limit value

The transmitter spurious limits are as shown in Table 2.

4.2.5.1 Overview

Receiver spurious emission refers to the unwanted emission in the spurious domain when the device is in the receiving state.

4.2.6.1 Overview

Frequency range Transmit state limit Transmitter standby or idle state a Test bandwidth

4.2.7.1 Overview

The out-of-band emission in this standard specifically refers to the maximum power spectral density of the transmitter in the frequency range of 57 GHz ~ 59 GHz and 64 GHz ~ 66 GHz.

4.2.7.2 Limit value

The out-of-band emission limit is. -5 dBm/MHz

4.2.8 Integrated antenna

The device shall have an integrated antenna structure, to prevent users from disassembling the integrated antenna and installing antenna connectors to replace other antennas during use.

5.1 Environmental conditions of the test

The test items as defined in this standard shall be carried out under normal working environmental conditions. These environmental conditions shall be within the limit operating environment stated by the manufacturer.

5.3.1 Product Information

The device under test shall provide the following information before the start of the test.

5.3.2.1 Modulation method

The test modulation used shall be representative of the normal use of the equipment. If the equipment cannot conduct continuous emission during normal use, the test shall be able to ensure.

5.3.3 Peak equivalent isotropic radiated power

The peak equivalent isotropic radiated power shall be measured using the test field as described in Appendix A and the method in Appendix B.

5.3.6.1 Configuration requirements

Transmitter's unwanted emissions shall be measured using the test field as described in Appendix A and the method in Appendix B.

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