

ICS 33.060

CCS M 36



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

GB/T 44183-2024

**Technical requirements and measurement methods for mobile
terminals supporting BeiDou-Radiated RF performance**

支持北斗的移动终端性能技术要求及测量方法 空间射频性能

Issued on: June 29, 2024

Implemented on: October 1, 2024

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

Preface	III
1 Scope	1
2 Normative references	1
3 Terms, definitions and abbreviations	1
4 Technical Requirements	2
5 Test conditions	3
6 General measurement method for radiated power	3
7 General measurement method for receiver performance	3
Appendix A (Normative) Beidou Positioning Receiver Performance Measurement Method	7
Appendix B (Normative) Linearization Method	10
Appendix C (Normative) Sensitivity calculation method	12
Appendix D (Informative) Autonomous Satellite Positioning Test Message Format	13

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This document is under the jurisdiction of the National Communications Standardization Technical Committee (SAC/TC485).

This document was drafted by: China Academy of Information and Communications Technology, Yantai Zhuge Software Technology Co., Ltd., China Unicom Group Co., Ltd.

Company, China Mobile Communications Group Co., Ltd., China Telecom Group Co., Ltd., Coreray Microelectronics (Kunshan) Co., Ltd., Qualcomm Wireless Communications Technology (China) Co., Ltd., MediaTek Bodong Technology (Beijing) Co., Ltd., OPPO Guangdong Mobile Communications Co., Ltd., Vivo Mobile Communications Co., Ltd.

Ltd., Lenovo (Beijing) Co., Ltd., Beijing Honor Terminal Co., Ltd., Shenzhen Sailun Beidou

Technology Co., Ltd., Spirent Communications Technology (Beijing) Co., Ltd., National Radio Monitoring Center Testing Center, Shenzhen Information and Communication Research Institute, ZTE Corporation, Guangdong Province Communication Terminal Product Quality Supervision and Inspection Center, Huawei Terminal Co., Ltd., Kunshan Ruixiang Xuntong Communication Technology Co., Ltd., Beijing Huawei Lichuangtong Technology Co., Ltd., Shenzhen Yidajietong Testing Technology Co., Ltd., Shanghai Yike Communication Technology Co., Ltd., Beijing University of Posts and Telecommunications, Shenzhen University, Hefei University of Technology, Sina Communication (Beijing) Technology Co., Ltd., Core Wireless (Beijing) Communication Technology Co., Ltd., Boding Shihua (Beijing) Technology Co., Ltd., Nanchang University, and Ruimaster (Shenzhen) Technology Co., Ltd.

The main drafters of this document are: Zhang Qinjuan, Dai Xun, Zhang Weiwei, An Xudong, Chen Xiaochen, Gao Lu, Han Bin, Kou Li, Liu Xiaoyu, Li Deqiang, Zhang Zhi, Liu Qifei, Xing Jinqiang, Wang Ruixin, Zhao Deng, Pan Zheng, Yuan Congzeng, Liu Zheng, Huang Rui, Zhu Qingyi, He Wei, Tang Lei, Ye Yang, Mu Jiasong, Shao Wei, Shao Song, Dong Kefang, Xiao Hai, He Ping, Chen Bo, Zhang Yunyun, Xie Yuming, Lü Cheng, Ma Lei, Sun Dong, Tian Mengchuan, Wang Huaqing, Liu Yuanan, Wang Weimin, Wu Yongle, Yuan Tao, Huang Wen, Shi Yang, Zheng Haixia, Ma Zhigang, Liu Guanghui, Liu Xianhui, Yang Meng, Wang Na, Jing Huanhuan, Sun Siyang, Gao Zhanyuan, Zhu Siting, Chen Xinyue, Yi Xuan, Wang Yuhao, and Ma Xin.

Technical requirements for mobile terminal performance supporting Beidou Measurement Methods Spatial RF Performance

1 Scope

This document specifies the spatial RF performance requirements for BeiDou-enabled mobile terminals and describes their measurement methods.

This document is applicable to the design of mobile communication terminals that support Beidou or are compatible with Beidou fusion positioning and wireless terminals used in fixed locations.

R&D, production and inspection and testing.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

YD/T 1484.1-2023 Measurement methods for radio frequency radiated power and receiver performance of wireless terminals Part 1: General requirements

3GPPTS37.571-1V16.11.0(2021-12) Universal Terrestrial Radio Access (UTRA) and Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Packet Core (EPC) User Equipment (UE) Positioning Conformance Specification Part 1: Conformance Test Specification [U- testspecification] UTRA) and Evolved Packet Core (EPC) User Equipment (UE) Positioning Conformance Specification Part 5: Test Scenarios and Assistance Data

3.1 Terms and Definitions

The terms and definitions defined in YD/T 1484.1-2023 apply to this document.

3.2 Abbreviations

The following abbreviations apply to this document. EUT. Equipment Under Test