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**Technical Requirements and Test Methods for On-Board  
Positioning System—Part 1: Satellite Positioning**  
**车载定位系统技术要求及试验方法**  
**第 1 部分：卫星定位**

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# Technical Requirements and Test Methods for On-Board Positioning System—Part 1: Satellite Positioning

## 1 SCOPE

This document specifies the technical requirements for the onboard satellite positioning system, and describes the corresponding test methods.

This document is applicable to onboard satellite positioning systems.

## 2 NORMATIVE REFERENCES

The following normative documents contain provisions which, through normative reference in this text, constitute essential provision of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendment) applies.

GB/T 2828.1	Sampling procedures for inspection by attributes - Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection
GB/T 16422.2-2022	Plastics - Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps
GB/T 18655-2018	Vehicles, boats and internal combustion engines - Radio disturbance characteristics - Limits and methods of measurement for the protection of on-board receivers
GB/T 19951-2019	Road vehicles - Disturbances test methods for electrical/electronic component from electrostatic discharge
GB/T 21437.2-2021	Road vehicles - Test method of electrical disturbances from conduction and coupling - Part 2: Electrical transient conduction along supply lines only
GB/T 21437.3-2021	Road vehicles - Test method of electrical disturbances from conduction and coupling - Part 3: Electrical transient transmission by capacitive and inductive coupling via lines other than supply lines
GB/T 28046.1-2011	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 1: General
GB/T 28046.2-2019	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 2: Electrical loads
GB/T 28046.3-2011	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 3: Mechanical loads
GB/T 28046.4-2011	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 4: Climatic loads
GB/T 28046.5-2013	Road vehicles - Environmental conditions and testing for electrical and electronic equipment - Part 5: Chemical loads
GB/T 30038-2013	Road vehicles - Degrees of electrical equipment protection (IP-Code)
GB 34660-2017	Road vehicles - Requirements and test methods of electromagnetic compatibility

## 3 TERMS AND DEFINITIONS

For the purpose of this document, the following terms and definitions apply.

### 3.1 onboard satellite positioning system (OSPS)

system that is mounted on the vehicle and uses the radio signals transmitted by man-made earth satellites for positioning, velocity measurement and timing

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