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

GB/T 47858.3-2026

**Road vehicles - Test devices for target vehicles, vulnerable road users
and other objects, for assessment of active safety functions - Part 3:
Requirements for passenger vehicle 3D targets**

道路车辆 用于评估主动安全功能的目标车辆、易受伤害的道路使用者和其他物体
的测试设备 第3部分：乘用车3D目标物要求

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is based on GB/T 47858 "Road vehicles - Target vehicles, vulnerable road users and..." Part 3 of GB/T 47858, "Test Apparatus for Other Objects," has been published, including the following parts.

---Part 3: Requirements for 3D Target Objects of Passenger Vehicles;

---Part 4: Target Requirements for Cyclists this document is modified to adopt ISO 19206-3:2021 "Road vehicles - Target vehicles for evaluating active safety functions, vulnerable road vehicles".

Test equipment for road users and other objects, Part 3: Requirements for 3D target objects for passenger vehicles.

This document has undergone the following structural adjustments compared to ISO 19206-3:2021.

---Tables A.1 and A.2 correspond to Table A.1 in ISO 19206-3:2021, and subsequent table numbers follow accordingly;

---C.3.3.1.1 corresponds to the suspension section of C.3.3.1 in ISO 19206-3:2021, and C.3.3.1.2 corresponds to the suspension section in ISO 19206-3:2021.

---Appendix D corresponds to Appendix E in ISO 19206-3:2021;

---Appendix E corresponds to Appendix D in ISO 19206-3:2021.

The technical differences between this document and ISO 19206-3:2021, and the reasons therefor, are as follows.

---Based on my country's relevant vehicle classification standards, the original phrase "Class B and Class C passenger vehicles" has been replaced with "small and compact vehicles".

The term "passenger vehicle" (see Chapter 1) is used to adapt to my country's technological conditions;

---UNR104 (see B.2.3) has been replaced with the normatively referenced GB 11564-2024 to adapt to my country's technical conditions and improve [the system/technology].

Operability;

---The abbreviation "sRGB " (see Chapter 4) has been added to clarify the standard red, green, and blue color language protocol and avoid ambiguity;

---The qualifier regarding the timeliness of typical vehicle models has been removed (see 5.2). This document adopts the reference in Annex A of ISO 19206-3:2021.

Due to the size, the relevant time-sensitive qualifiers do not apply to this document;

---The statement "The outline of VT should represent a real vehicle" is revised to "The outline of VT should represent a real vehicle" (see 6.2.5).

B.2.1), to avoid ambiguity;

---The frequency band used by the vehicle-mounted radar will be changed to 76GHz~79GHz (see 6.3.1) to comply with my country's radar radio management regulations.

Regulation;

---ISO 8608 (see 7.3.1, 7.4.1) has been replaced with the normatively referenced GB/T 7031-2025 to adapt to my country's technical requirements.

Improve operability;

---The statement "other colors are also permitted" (see B.1) has been deleted, and only the visual characteristics of white vehicle bodies are specified to conform to the actual situation in my country.

Road traffic conditions are taken into account to ensure the consistency of test results.

The following editorial changes have been made to this document.

---The source explanation for the definition of M1 vehicle type in Note 2 of section 5.4 has been deleted to adapt to my country's technical conditions and improve operability;

---The phrases "(13.9m/s)" and "(22.2m/s)" in section 5.7 have been deleted. 50km/h is inaccurate and is not equivalent to 13.9m/s; 80km/h is also inaccurate.

Equivalent to 22.2 m/s; the wording has been revised to avoid ambiguity.

---The phrase " $(\pm 0.3\text{m/s})$ " in section 7.2.1 has been deleted. 1 km/h is not precisely equivalent to 0.3 m/s; the wording has been modified to avoid ambiguity.

---Tables A.3, A.4, and A.5, along with their corresponding Figures A.1, A.2, and A.3, have been readjusted in ascending order.

Vehicle size designations and drawing numbers;

---The descriptions of dimensions in Tables A.3, A.4, and A.5 have been revised (see Appendix A) to clarify the start and end positions of the dimensions;

---The illustrative images of spatial RCS in Figures C.11, C.12, C.14, and C.15 have been removed (see Appendix C).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

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This document is under the jurisdiction of the National Automotive Standardization Technical Committee (SAC/TC114).

Introduction

In the field of intelligent connected vehicle testing equipment, ISO 19206 "Road vehicles - Test equipment for evaluating active safety functions" is widely adopted internationally.

Test equipment for target vehicles, vulnerable road users, and other objects. This ISO standard has been published in six parts. [List of parts to be filled in].

Vehicle rear-end targets, pedestrian targets, 3D passenger vehicle targets, cyclist targets, motorized two-wheeled vehicle targets, target carriers System behavior testing methods.

The main parts of this ISO standard under development include. animal targets, stationary

roadside targets, etc.

GB/T 47858 Road vehicles - Target vehicles, vulnerable road users and other objects for evaluating active safety functions the "Test Equipment" standard, based on ISO 19206 and adapted to China's specific needs, sets forth relevant requirements for test equipment used to evaluate active safety functions.

The proposed solution consists of four parts.

---Part 1: Requirements for Rear-End Targets of Passenger Vehicles. The purpose is to specify the requirements for the appearance, size, and reflectivity of rear-end targets of passenger vehicles.

Requirements such as these ensure that the relevant target products conform to the characteristics of the back end of real passenger vehicles in China's actual road traffic.

---Part 2: Requirements for Pedestrian Targets. The purpose is to specify the requirements for pedestrian targets in terms of appearance, motion characteristics, and reflective properties.

The requirement is to ensure that the relevant target products conform to the characteristics of real pedestrians in actual road traffic in China.

---Part 3: Requirements for 3D Target Objects for Passenger Vehicles. The purpose is to specify the appearance, reflective properties, etc., of 3D target objects for passenger vehicles.

The requirements are to ensure that the relevant target products conform to the characteristics of real passenger vehicles in China's actual road traffic.

---Part 4: Requirements for Cyclist Target Objects. The purpose is to specify the requirements for cyclist target objects in terms of appearance, motion characteristics, etc.

Requirements such as reflectivity ensure that the products meet the characteristics of real cyclists on Chinese roads.

Road vehicles used to evaluate active safety features Test equipment for other objects, Part 3.

Passenger vehicle 3D target object requirements

1 Scope

This document specifies the characteristics and performance requirements for 3D target objects used to evaluate active safety functions in passenger vehicles. These vehicle target objects are used for...

It replaces small and compact passenger cars and is used to evaluate vehicle interactions in a variety of traffic scenarios.