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**Test Methods for Energy Consumption of Light-Duty
Hybrid Electric Vehicles**
轻型混合动力电动汽车能量消耗量试验方法

(English Translation)

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Test Methods for Energy Consumption of Light-Duty Hybrid Electric Vehicles

1 SCOPE

This document specifies the test methods for energy consumption of light-duty hybrid electric vehicles (HEV) equipped with a positive-ignition engine or a compression-ignition engine.

This document is applicable to the vehicles, equipped with a positive-ignition engine or a compression-ignition engine, of the Category N_1 and of the Categories M_1 and M_2 with a maximum design total mass not exceeding 3,500 kg, while the Category M_1 vehicles with a maximum design total mass exceeding 3,500 kg may use this document as a reference.

2 NORMATIVE REFERENCES

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

GB/T 15089 Classification of Power-Driven Vehicles and Trailers

GB 18352.6-2016 Limits and measurement methods for emissions from light-duty vehicles (CHINA 6)

GB/T 19233-2020 Measurement Methods of Fuel Consumption for Light-Duty Vehicles

GB/T 19596 Terminology of Electric Vehicles

GB/T 38146.1-2019 China Automotive Test Cycle - Part 1: Light-Duty Vehicles

3 TERMS AND DEFINITIONS

For the purpose of this document, the terms and definitions given in GB/T 15089, GB/T 19596, GB 18352.6-2016 and GB/T 38146.1-2019, as well as the followings apply.

3.1 all-electric range (AER)

the distance travelled by a vehicle from when the charge-depleting test begins to when the engine starts; the upper limit for this distance is the charge-depleting actual range

3.2 charge-depleting actual range (R_{CDA})

the distance travelled by a vehicle, from the beginning of the charge-depleting test, continuously operating a number of test cycles in charge-depleting operating condition until the rechargeable electric energy storage system (REESS) is balanced

3.3 charge-depleting cycle range (R_{CDC})

the distance travelled by a vehicle, from the beginning of the charge-depleting test to the end of the transition cycle, continuously operating a number of test cycles in charge-depleting operating condition until the end-of-test criterion specified in 6.2.2.5 is reached

3.4 equivalent all-electric range (EAER)

portion of the charge-depleting cycle range of a vehicle attributable to the use of electricity



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