



General Specification for Electrical/Electronic Components and Subsystems, Electromagnetic Compatibility

1 Introduction

Note: In the event of a conflict between the text of this specification and the documents cited herein, the text of this specification takes precedence.

Note: Nothing in the specification supersedes applicable laws and regulations unless a specific exemption has been obtained.

1.1 Scope. This document applies to the Electromagnetic Compatibility (EMC) of electrical/electronic components and subsystems for passenger vehicles, light duty trucks and medium duty trucks.

This document is one out of a series of three global EMC documents, which specify EMC test and validation requirements. The complete series consists of the following documents:

GMW3091, GMW3097 and GMW3103 (All three documents of equal revision carry the same release date).

Note: Earlier versions of GMW12559, GMW12002V, GMW12002R, and GMW3100, have been integrated into GMW3097 for ease of use.

1.2 Mission/Theme. This document specifies the EMC requirements for all automotive products when evaluated in accordance with the test procedures contained within this document. It refers to International EMC Standards whenever possible, but also describes internal test procedures if necessary.

1.3 Classification. Not applicable.

2 References

Note: Only the latest approved standards are applicable unless otherwise specified.

2.1 External Standards/Specifications.

IEC CISPR 25	ISO 11452-1
IEC 61000-4-21	ISO 11452-2
ISO 7637-1	ISO 11452-4
ISO 7637-2	ISO 17025
ISO 7637-3	SAE J1113-22
ISO 10605:2001	

2.2 GM Standards/Specifications.

GMW3059	GMW3103
GMW3089	GMW3122
GMW3091	

3 Requirements

Validation testing must be performed at a laboratory that has received recognition through the Automotive EMC Laboratory Recognition Program (AEMCLRP).

To obtain recognition, a laboratory must provide evidence of:

- a. ISO 17025 certification to at least the base specifications that apply to GMW EMC test procedures. The base specifications are listed in Table 1.

Table 1: AEMCLRP List of Base Specifications

Procedure Name	Base Specification
Radiated Emissions Anechoic	IEC CISPR 25
Bulk Current Injection	ISO11452-4
Radiated Immunity Anechoic	ISO11452-2
Radiated Immunity Reverb	IEC 61000-4-21
Transient Immunity	ISO7637-2 and ISO7637-3
Electrostatic Discharge	ISO10605:2001

- b. Demonstrate meeting proficiency test requirements where applicable. This requires testing a defined artifact and comparing results

against results obtained at reference laboratory(ies). Comparisons must meet the metrics detailed in the AEMCLRP.