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Replacing GB/Z 37150-2018

Electromagnetic compatibility - Risk assessment - Basic requirements

电磁兼容 风险评估 基本要求

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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.

This document replaces GB /Z 37150-2018 "Guidelines for Risk Assessment of Electromagnetic Compatibility Reliability". Compared with GB /Z 37150-2018, In addition to structural adjustments and editorial changes, the main technical changes are as follows.

- Added the terms "electromagnetic compatibility risk assessment" and "risk assessment

value", changed the definitions of the terms "ideal model" and "risk factor", deleted In addition to the term "risk criteria" (see Chapter 3, Chapter 3 of the 2018 edition);

- Changed the system-level EMC risk assessment requirements (see Chapter 5, Chapter 5 of the 2018 edition);

- Changed "risk criteria" to "EMC ideal model" and deleted the content related to "risk criteria" (see Chapter 6, 2018 edition Chapter 6);

- Changed the risk factor level and risk impact level of qualitative EMC risk analysis (see 7.4 and 7.5.2, 2018 edition 7.4 and 7.5.2);

- Added "MC risk level should be determined by the EMC risk assessment value of the equipment, system and engineering site (including EMS risk assessment value and EMI risk assessment value) and the type of application location. "(see 7.5.2);

- Added "other EMC risk assessment activities" (see 7.6);

- Added "EMC risk assessment results" (see Chapter 9).

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 is proposed and coordinated by the National Technical Committee for Radio Interference Standardization (SAC/TC79).

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The previous versions of this document and the documents it replaces are as follows.

- First published in 2018 as GB /Z 37150-2018;

- This is the first revision.

Basic requirements for electromagnetic compatibility risk assessment

1 Scope

This document specifies the object, ideal model, process, risk factors, risk assessment tools and procedures of electromagnetic compatibility (hereinafter referred to as EMC) risk assessment.

Basic requirements for risk assessment tools, risk assessment results and risk assessment reports.

This document is applicable to EMC risk assessment at the equipment level, system level and engineering site level.

2 Normative references

GB/T 4365

GB/T 15706-2012

GB/T 38659

3 Terms and definitions

The terms and definitions defined in GB/T 4365, GB/T 15706-2012 and GB/T 38659 (all

parts) and the following terms and definitions apply to this specification. document.

3.1 [Source. GB/T 38659.1-2020, 3.1]

The probability of a product having an EMC problem due to its design is the probability of failing the EMC test in a test environment.

3.2 risk analysis

The process of understanding the nature of risk and determining its level.

Note 1.Risk analysis is the basis for risk assessment and risk response decisions.

Note 2 to entry. Risk analysis includes the estimation of risk factors.

3.3 risk evaluation

Based on risk analysis, determine whether the goal of reducing risk has been achieved.

[Source. GB/T 15706-2012, 3.16]

3.4 risk assessment

The entire process includes risk identification, risk analysis and risk assessment.

[Source. GB/T 15706-2012, 3.17, modified]