

STN	Elektromagnetická kompatibilita Vysokofrekvenčné emisie Štatistické hľadiská pri určovaní zhody sériovo vyrábaných výrobkov s emisnými požiadavkami	STN EN 50715 33 3431
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Electromagnetic compatibility - Radio frequency emission - Statistical considerations in the determination of compliance for mass-produced products with requirements for unwanted radio frequency emission

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

**Electromagnetic compatibility - Radio frequency emission -
Statistical considerations in the determination of compliance for
mass-produced products with requirements for unwanted radio
frequency emission**

Compatibilité électromagnétique - Emissions
radiofréquences - Considérations statistiques pour la
détermination de la conformité des produits de série aux
exigences en matière d'émissions radiofréquences
indésirables

Elektromagnetische Verträglichkeit - Hochfrequente
Störaussendungen - Statistische Betrachtungen bei der
Bestimmung der Übereinstimmung von seriengefertigten
Produkten mit Anforderungen zur unerwünschten
hochfrequenten Störaussendung

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European Committee for Electrotechnical Standardization
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Europäisches Komitee für Elektrotechnische Normung

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Contents	Page
European foreword	3
1 Scope.....	4
2 Normative references	4
3 Terms and definitions	5
4 Interpretation of CISPR radio disturbance limits	5
4.1 Significance of a CISPR limit.....	5
4.2 General	5
4.2.1 Equipment producing continuous disturbance	5
4.2.2 Equipment producing discontinuous disturbance (clicks)	5
4.3 Compliance with limits for equipment in large-scale production.....	5
4.3.1 General	5
4.3.2 Method based on a general margin to the limit	6
4.3.3 Test based on the non-central t-distribution	6
4.3.4 Test based on the binomial distribution	7
4.3.5 Larger sample size	8
5 Definition of sub-ranges for the test based on the non-central t-distribution.....	8
5.1 General	8
5.2 Definition of subranges for products in the scope of EN 55011	8
5.3 Definition of subranges for products in the scope of EN 55014-1	8
5.4 Definition of subranges for products in the scope of EN 55015	9
Figure	
Figure 1 — Unit-to-unit variation of the sub-range maximum.....	7
Tables	
Table 1 — General margin to the limit for statistical evaluation	6
Table 2 — Factor k for the application of the non-central t-distribution.....	6
Table 3 — Application of the binomial distribution.....	7

European foreword

This document (EN 50715:2022) has been prepared by CLC/TC 210 “Electromagnetic Compatibility (EMC)”.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2023-06-06
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2025-06-06

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EN 50715:2022 (E)

1 Scope

This document specifies statistical considerations for the evaluation of unwanted radio frequency emissions of mass-produced products.

NOTE 1 It is based on CISPR TR 16-4-3.

The reasons for such statistical considerations are:

- a) that the abatement of interference aims that the majority of the products to be approved shall not cause interference;
- b) that the CISPR limits should be suitable for the purpose of type approval of mass-produced products as well as approval of single-produced products;
- c) that to ensure compliance of mass-produced products with the CISPR limits, statistical techniques have to be applied;
- d) that it is important for international trade that the limits shall be interpreted in the same way in every country.

Therefore, this document specifies requirements and provides guidance based on statistical techniques. EMC compliance of mass-produced products with the requirements of this document are based on the application of statistical techniques that reassure the consumer, with an 80 % degree of confidence, that 80 % of the products of a type being investigated comply with the limits for unintended radio frequency emission.

This document does not define limits or measuring methods. It can be used only after measurements of unwanted radio frequency emissions have been performed according to the applicable standard for the unwanted radio frequency emissions.

NOTE 2 Clause 4 gives some general requirements on the interpretation of CISPR radio disturbance limits and specifies different methods, which can be used alternatively. Clause 5 gives some specific requirements for certain product groups.

NOTE 3 This document does not give a calculation method about the manufacturer's risk, whether a type of products will be accepted during a second statistical evaluation. More information on the acceptance probability for a repeated measurement is given in CISPR TR 16-4-3, Edition 2.1, Annex D.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 55011, *Industrial, scientific and medical equipment — Radio-frequency disturbance characteristics — Limits and methods of measurement*

EN 55014-1, *Electromagnetic compatibility — Requirements for household appliances, electric tools and similar apparatus — Part 1: Emission*

EN 55015, *Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment*

CISPR TR 16-4-3:2004+AMD1:2006, *Specification for radio disturbance and immunity measuring apparatus and methods — Part 4-3: Uncertainties, statistics and limit modelling — Statistical considerations in the determination of EMC compliance of mass-produced products*

IEC 60050-161, *International Electrotechnical Vocabulary (IEV) — Chapter 161: Electromagnetic compatibility*

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