
**Methods of measurement on receivers for
satellite broadcast transmissions in
the 12 GHz band**

Part 2:
Electrical measurements on DBS tuner units

*Méthodes de mesure sur les récepteurs d'émissions
de radiodiffusion par satellite dans la bande 12 GHz*

Partie 2:
*Mesures électriques sur les syntoniseurs
pour la radiodiffusion directe par satellite*

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**METHODS OF MEASUREMENT ON
RECEIVERS FOR SATELLITE BROADCAST TRANSMISSIONS
IN THE 12 GHz BAND**

Part 2: Electrical measurements on DBS tuner units

FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
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This part of International Standard IEC 1079 has been prepared by Sub-Committee 12A: Receiving equipment, of IEC Technical Committee No. 12: Radiocommunications.

The text of this part is based on the following documents:

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12A(CO)132	12A(CO)136

Full information on the voting for the approval of this part can be found in the Voting Report indicated in the above table.

METHODS OF MEASUREMENT ON RECEIVERS FOR SATELLITE BROADCAST TRANSMISSIONS IN THE 12 GHz BAND

Part 2: Electrical measurements on DBS tuner units

SECTION 1 - GENERAL

1.1 Scope

This part of IEC 1079 applies to the tuner unit of a receiver for the direct reception of satellite broadcast transmissions in the 12 GHz band. The channels are those defined by WARC BS-77 and RARC SAT-83 [1]* and the systems are those of CCIR Recommendation 650 [1].

The object of this part of IEC 1079 is to define the conditions and methods of measurement to be applied. This part does not specify performance requirements.

The tuner unit comprises the channel selector and FM demodulator. The input to this unit is a group of intermediate frequency signals, usually in the range 1 GHz to 2 GHz, which is provided from an associated outdoor unit. The outdoor unit includes at least a micro-wave antenna and the frequency converter to the first intermediate frequency.

Methods of measurement on outdoor units are described in Part 1 of International Standard IEC 1079.

A decoder for baseband and data signals may be included in the tuner unit. Methods of measurement of the decoder, however, are described in Parts 4 and 5 of International Standard IEC 1079 (under consideration).

1.2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 1079. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 1079 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 107-1: 1977, *Recommended methods of measurement on receivers for television broadcast transmissions - Part 1: General considerations - Electrical measurements other than those at audio-frequencies.*

* The figures in square brackets refer to the Bibliography (annex A).

IEC 1079: 1992, *Methods of measurement on receivers for satellite broadcast transmissions in the 12 GHz band - Part 1: Radio-frequency measurements on outdoor units.*

IEC 569: 1977, *Informative guide for subjective tests on television receivers.*

CCIR Recommendation 421-1: 1966, *Requirements for the transmission of television signals over long distances (System I excepted)*

CCIR Recommendation 500-3: 1986, *Method for the subjective assessment of the quality of television pictures.*