

# ETSI TS 125 116 V14.0.0 (2017-04)



TECHNICAL SPECIFICATION

**Universal Mobile Telecommunications System (UMTS);  
UTRA repeater radio transmission and reception (LCR TDD)  
(3GPP TS 25.116 version 14.0.0 Release 14)**



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# 1 Scope

The present document establishes the minimum RF characteristics of LCR TDD Repeater.

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## 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
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- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] ITU-R Recommendation SM.329, "Unwanted emissions in the spurious domain".
- [3] ITU-R Recommendation M.1545: "Measurement uncertainty as it applies to test limits for the terrestrial component of International Mobile Telecommunications-2000".
- [4] 3GPP TS 25.153: "LCR TDD Repeater conformance testing"
- [5] 3GPP TR 25.942: "RF system scenarios".
- [6] IEC 60721-3-3 (2002): "Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 3: Stationary use at weather protected locations".
- [7] IEC 60721-3-4 (1995): "Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 4: Stationary use at non-weather protected locations".

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## 3 Definitions, symbols and abbreviations

### 3.1 Definitions

For the purposes of the present document, the terms and definitions given in TR 21.905 [1] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in TR 21.905 [1].

**Carrier:** The modulated waveform conveying the LCR TDD physical channels

**Channel bandwidth:** The RF bandwidth supporting a single LCR TDD RF carrier with the transmission bandwidth configured in the uplink or downlink of a cell. The channel bandwidth is measured in MHz and is used as a reference for transmitter and receiver RF requirements.

**Channel edge:** The lowest and highest frequency of the LCR TDD carrier, separated by the channel bandwidth.

**Donor coupling loss:** is the coupling loss between the repeater and the donor base station.

**Downlink:** Signal path where base station transmits and mobile receives.