

# ETSI TS 136 307 V10.17.0 (2016-01)



**LTE;  
Evolved Universal Terrestrial Radio Access (E-UTRA);  
Requirements on User Equipments (UEs)  
supporting a release-independent frequency band  
(3GPP TS 36.307 version 10.17.0 Release 10)**



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Reference

RTS/TSGR-0436307vah0

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Keywords

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# Foreword

This Technical Specification has been produced by the 3<sup>rd</sup> Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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- z the third digit is incremented when editorial only changes have been incorporated in the document.

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# 1 Scope

The present document specifies requirements on UEs supporting a frequency band and inter-band/intra-band CA configurations that are independent of release.

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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.
- For a specific reference, subsequent revisions do not apply.
- 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] 3GPP TS 36.101 (Release 11): "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) Radio Transmission and Reception".
- [3] 3GPP TS 36.133 (Release 11): "Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements for Support of Radio Resource Management".
- [4] 3GPP TS 36.101 (Release 12): "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) Radio Transmission and Reception".
- [5] 3GPP TS 36.133 (Release 12): "Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements for Support of Radio Resource Management".
- [6] 3GPP TS 36.307 (Release 11): "Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements on User Equipments (UEs) Supporting a release-independent frequency band".
- [7] 3GPP TS 36.307 (Release 12): "Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements on User Equipments (UEs) Supporting a release-independent frequency band".
- [8] 3GPP TS 36.133 (Release 10): "Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements for Support of Radio Resource Management".
- [9] 3GPP TS 36.101 (Release 10): "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) Radio Transmission and Reception".
- [10] 3GPP TS 36.306 (Release 10): "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) radio access capabilities".
- [11] 3GPP TS 36.101 (Release 13): "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) Radio Transmission and Reception".
- [12] 3GPP TS 36.133 (Release 13): "Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements for Support of Radio Resource Management".
- [13] 3GPP TS 36.307 (Release 13): "Evolved Universal Terrestrial Radio Access (E-UTRA); Requirements on User Equipments (UEs) Supporting a release-independent frequency band".

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## 3 Definitions and Abbreviations

### 3.1 Definitions

For the purposes of the present document, the terms and definitions given in [1] apply.

### 3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

CA	Carrier Aggregation
FDD	Frequency Division Duplex
RRC	Radio Resource Control
RRM	Radio Resource Management
TDD	Time Division Duplex
UE	User Equipment

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## 3A General

TSG-RAN has agreed that the standardisation of new frequency bands may be independent of a release, and that the standardisations of new inter-band/intra-band CA configurations also may be independent of a release for Rel-10 upwards. However, in order to implement a UE that conforms to a particular release but supports a band of operation or carrier aggregation of particular inter-band/intra-band CA configurations that is specified in a later release, it is necessary to specify some extra requirements.

For example, Band 19 is contained in the Release 9 specifications. In order to implement a UE conforming to Release 8 but supporting Band 19, it is necessary for the UE to additionally conform to some parts of the Release 9 specifications, such as the radio frequency and radio resource management requirements for the Band 19.

For another example on carrier aggregations, CA configuration CA\_1A-19A is contained in the Release 11 specifications. In order to implement a UE conforming to Release 10 but supporting the CA configuration CA\_1A-19A, it is necessary for the UE to additionally conform to some parts of the Release 11 specifications, such as the radio frequency and radio resource management requirements for the CA configuration CA\_1A-19A.

All frequency bands are fully specified in this release of the specifications. The present document does not contain any requirements for UEs supporting frequency bands independent of release.

NOTE: See NOTE in clause 4.4 in [9].

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## 4 Void

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## 5 Void

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## 6 Void

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Void

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8 Void

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9 Void

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10 Void

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11 Void

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12 Void

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13 Void

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14 Void

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## 15 Band 26 Independent of Release

Band 26 is specified in Release 11 but is defined as a release-independent frequency band. This approach aligns the Band 26 with other frequency bands when considering features that have to be supported in different releases.

### 15.1 Band 26 UE

UEs that conform to Release 10 and support Band 26 shall support the following requirements in Release 11.

#### 15.1.1 RF Requirements

The UE shall comply with the RF requirements for Band 26 specified in [2] which are listed in Table B.4.1-1 of [6].

**Table 15.1.1-1: Void**

## 15.1.2 RRM Requirements

The UE shall comply with the RRM requirements for Band 26 specified in [3] which are listed in Table B.2.1-1 of [6].

**Table 15.1.2-1: Void**

## 15.1.3 Void

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# 16 Band 27 Independent of Release

Band 27 is specified in Release 11, but is defined as a release-independent frequency band. This approach aligns the Band 27 with other frequency bands when considering features that have to be supported in different releases.

## 16.1 Band 27 UE

UEs that conform to Release 10 and support Band 27 shall support the following requirements in Release 11.

### 16.1.1 RF Requirements

The UE shall comply with the Release 11 RF requirements for Band 27 specified [2] which are listed in Table B.4.1-1 of [6].

**Table 16.1.1-1: RF Void**

### 16.1.2 RRM Requirements

The UE shall comply with the RRM requirements for Band 27 specified in [3] which are listed in Table B.2.1-1 of [6].

**Table 16.1.2-1: Void**

### 16.1.3 Void

---

# 17 Band 28 Independent of Release

Band 28 is specified in Release 11 but is defined as a release-independent frequency band. This approach aligns the Band 28 with other frequency bands when considering features that have to be supported in different releases.

## 17.1 Band 28 UE

UEs that conform to Release 10 and support Band 28 shall support the following requirements in Release 11.

### 17.1.1 RF Requirements

The UE shall comply with the RF requirements for Band 28 specified [2] which are listed in Table B.4.1-1 of [6].



**Table 17.1.1-1: Void**

## 17.1.2 RRM Requirements

The UE shall comply with the RRM requirements for Band 28 specified in [3] which are listed in Table B.2.1-1 of [6].

**Table 17.1.2-1: Void**

## 17.1.3 Void

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# 18 Band 44 Independent of Release

Band 44 is specified in Release 11 but is defined as a release-independent frequency band. This approach aligns the Band 44 with other frequency bands when considering features that have to be supported in different releases.

## 18.1 Band 44 UE

UEs that conform to Release 10 and support Band 44 shall support the following requirements in Release 11.

### 18.1.1 RF Requirements

The UE shall comply with the RF requirements for Band 44 specified [2] which are listed in Table B.4.1-1 of [6].

**Table 18.1.1-1: Void**

### 18.1.2 RRM Requirements

The UE shall comply with the RRM requirements for Band 44 specified in [3] which are listed in Table B.2.1-1 of [6].

**Table 18.1.2-1: Void**

### 18.1.3 Void

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# 19 CA configuration CA\_41C Independent of Release

CA\_41C is specified in Release 11 and Release 13 but is defined as a release-independent E-UTRA CA configuration.

## 19.1 Band 41 UE

UEs that conform to Release 10 and support CA\_41C shall support the following requirements in Release 11 for both one uplink and simultaneous transmission on two uplinks.

### 19.1.1 RF Requirements

The UE shall comply with the following RF requirements for CA\_41C specified in [11] which are listed in Table B.4.2-1 of [13].

**Table 19.1.1-1: Void**

## 19.1.2 RRM Requirements

The UE shall comply with the RRM Requirements for CA\_41C specified in [12] which are listed in Table B.2.2-1 of [13].

**Table 19.1.1-2: Void**

## 19.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_41C among the CA demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

---

# 20 CA configuration CA\_1A-19A Independent of Release

CA configuration CA\_1A-19A is specified in Release 11 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 20.1 CA\_1A-19A UE

UEs that conform to Release 10 and support CA\_1A-19A shall support the following requirements in Release 11.

### 20.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-19A specified in [2] which are listed in Table B.4.3-1 of [6].

**Table 20.1.1-1: Void**

### 20.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-19A specified in [3] which are listed in Table B.2.4-1 of [6].

**Table 20.1.2-1: Void**

### 20.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-19A among the CA demodulation performance and CSI reporting requirements specified in [2] and listed in Table B.3.2-1 of [6].

---

# 21 CA configuration CA\_7C Independent of Release

CA configuration CA\_7C is specified in Release 11, Release 12 and Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 21.1 CA\_7C UE

UEs that conform to Release 10 and support CA\_7C shall support the following requirements in Release 13.

### 21.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_7C specified in [11] which are listed in Table B.4.2-1 of [13].

**Table 21.1.1-1: Void**

### 21.1.2 RRM Requirements

The UE shall comply with the RRM Requirements for CA\_7C specified in [12] which are listed in Table B.2.2-1 of [13].

**Table 21.1.1-2: Void**

### 21.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_7C among the CA demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

---

## 22 CA configuration CA\_38C Independent of Release

CA\_38C is specified in Release 11 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 22.1 Band 38 UE

UEs that conform to Release 10 and support CA\_38C shall support the following requirements in Release 11 for both one uplink and simultaneous transmission on two uplinks.

#### 22.1.1 RF Requirements

The UE shall comply with the following RF requirements for CA\_38C specified in [2] which are listed in Table B.4.2-1 of [6].

**Table 22.1.1-1: Void**

#### 22.1.2 RRM Requirements

The UE shall comply with the RRM Requirements for CA\_38C specified in [3] which are listed in Table B.2.2-1 of [6].

**Table 22.1.2-1: Void**

#### 22.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_38C among the CA demodulation performance and CSI reporting requirements specified in [2] and listed in Table B.3.2-1 of [6].

---

## 23 CA configuration CA\_1A-18A Independent of Release

CA configuration CA\_1A-18A is specified in Release 11 and 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 23.1 CA\_1A-18A UE

UEs that conform to Release 10 and support CA\_1A-18A shall support the following requirements in Release 12.

#### 23.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-18A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 23.1.1-1: Void**

#### 23.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-18A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 23.1.2-1: Void**

#### 23.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-18A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

---

## 24 CA configuration CA\_1A-21A Independent of Release

CA configuration CA\_1A-21A is specified in Release 11 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 24.1 CA\_1A-21A UE

UEs that conform to Release 10 and support CA\_1A-21A shall support the following requirements in Release 11.

#### 24.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-21A specified in [2] which are listed in Table B.4.3-1 of [6].

**Table 24.1.1-1: Void**

## 24.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-21A specified in [3] which are listed in Table B.2.4-1 of [6].

**Table 24.1.2-1: Void**

## 24.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-21A among the demodulation performance and CSI reporting requirements specified in [2] and listed in Table B.3.2-1 of [6].

---

# 25 CA configuration CA\_3A-5A Independent of Release

CA configuration CA\_3A-5A is specified in Release 11, Release 12 and Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 25.1 CA\_3A-5A UE

UEs that conform to Release 10 and support CA\_3A-5A shall support the following requirements in Release 13.

### 25.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3A-5A specified in [11] which are listed in Table B.4.3-1 of [13].

**Table 25.1.1-1: Void**

### 25.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3A-5A specified in [12] which are listed in Table B.2.4-1 of [13].

**Table 25.1.2-1: Void**

### 25.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3A-5A among the demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

---

# 26 CA configuration CA\_3A-7A Independent of Release

CA configuration CA\_3A-7A is specified in Release 11 and Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 26.1 CA\_3A-7A UE

UEs that conform to Release 10 and support CA\_3A-7A shall support the following requirements in Release 13.

### 26.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3A-7A specified in [11] which are listed in Table B.4.3-1 of [13].

**Table 26.1.1-1: Void**

### 26.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3A-7A specified in [12] which are listed in Table B.2.4-1 of [13].

**Table 26.1.2-1: Void**

### 26.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3A-7A among the demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

---

## 27 CA configuration CA\_3A-20A Independent of Release

CA configuration CA\_3A-20A is specified in Release 11 and Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 27.1 CA\_3A-20A UE

UEs that conform to Release 10 and support CA\_3A-20A shall support the following requirements in Release 11 and Release 12.

#### 27.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3A-20A specified in 3GPP TS TS 36.101 [4] which are listed in Table B.4.3-1 of [7].

**Table 27.1.1-1: Void**

#### 27.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3A-20A specified in [3] which are listed in Table B.2.4-1 of [7].

**Table 27.1.2-1: Void**

#### 27.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3A-20A among the demodulation performance and CSI reporting requirements specified in [2] and listed in Table B.3.2-1 of [6].

---

## 28 CA configuration CA\_7A-20A Independent of Release

CA configuration CA\_7A-20A is specified in Release 11 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 28.1 CA\_7A-20A UE

UEs that conform to Release 10 and support CA\_7A-20A shall support the following requirements in Release 11.

#### 28.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_7A-20A specified in [2] which are listed in Table B.4.3-1 of [6].

**Table 28.1.1-1: Void**

#### 28.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_7A-20A specified in [3] which are listed in Table B.2.4-1 of [6].

**Table 28.1.2-1: Void**

#### 28.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_7A-20A among the demodulation performance and CSI reporting requirements specified in [2] and listed in Table B.3.2-1 of [6].

---

## 29 CA configuration CA\_8A-20A Independent of Release

CA configuration CA\_8A-20A is specified in Release 11 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 29.1 CA\_8A-20A UE

UEs that conform to Release 10 and support CA\_8A-20A shall support the following requirements in Release 11.

#### 29.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_8A-20A specified in [2] which are listed in Table B.4.3-1 of [6].

**Table 29.1.1-1: Void**

## 29.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_8A-20A specified in [3] which are listed in Table B.2.4-1 of [6].

**Table 29.1.2-1: Void**

## 29.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_8A-20A among the demodulation performance and CSI reporting requirements specified in [2] and listed in Table B.3.2-1 of [6].

---

# 30 CA configuration CA\_2A-17A Independent of Release

CA configuration CA\_2A-17A is specified in Release 11 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 30.1 CA\_2A-17A UE

UEs that conform to Release 10 and support CA\_2A-17A shall support the following requirements in Release 11.

### 30.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-17A specified in [2] which are listed in Table B.4.3-1 of [6].

**Table 30.1.1-1: Void**

### 30.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-17A specified in [3] which are listed in Table B.2.4-1 of [6].

**Table 30.1.2-1: Void**

### 30.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-17A among the demodulation performance and CSI reporting requirements specified in [2] and listed in Table B.3.2-1 of [6].

---

# 31 CA configuration CA\_2A-29A Independent of Release

CA configuration CA\_2A-29A is specified in Release 11 and Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 31.1 CA\_2A-29A UE

UEs that conform to Release 10 and support CA\_2A-29A shall support the following requirements in Release 12.



### 31.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-29A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 31.1.1-1: Void**

### 31.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-29A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 31.1.2-1: Void**

### 31.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-29A among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

---

## 32 CA configuration CA\_4A-29A Independent of Release

CA configuration CA\_4A-29A is specified in Release 11 and Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 32.1 CA\_4A-29A UE

UEs that conform to Release 10 and support CA\_4A-29A shall support the following requirements in Release 12.

#### 32.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-29A specified in [4] which are listed in Table B.4.4-1 of [7].

**Table 32.1.1-1: Void**

#### 32.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-29A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 32.1.2-1: Void**

#### 32.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-29A among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

---

## 33 CA configuration CA\_3A-8A Independent of Release

CA configuration CA\_3A-8A is specified in Release 11 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 33.1 CA\_3A-8A UE

UEs that conform to Release 10 and support CA\_3A-8A shall support the following requirements in Release 11.

#### 33.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3A-8A specified in [2] which are listed in Table B.4.3-1 of [6].

**Table 33.1.1-1: Void**

#### 33.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3A-8A specified in [3] which are listed in Table B.2.4-1 of [6].

**Table 33.1.2-1: Void**

#### 33.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3A-8A among the demodulation performance and CSI reporting requirements specified in [2] and listed in Table B.3.2-1 of [6].

---

## 34 CA configuration CA\_4A-5A Independent of Release

CA configuration CA\_4A-5A is specified in Release 11 and Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 34.1 CA\_4A-5A UE

UEs that conform to Release 10 and support CA\_4A-5A shall support the following requirements in Release 12.

#### 34.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-5A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 34.1.1-1: Void**

#### 34.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-5A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 34.1.2-1: Void**

### 34.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-5A among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

---

## 35 CA configuration CA\_4A-12A Independent of Release

CA configuration CA\_4A-12A is specified in Release 11, Release 12 and Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 35.1 CA\_4A-12A UE

UEs that conform to Release 10 and support CA\_4A-12A shall support the following requirements in Release 13.

#### 35.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-12A specified in [11] which are listed in Table B.4.3-1 of [13].

**Table 35.1.1-1: Void**

#### 35.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-12A specified in [12] which are listed in Table B.2.4-1 of [13].

**Table 35.1.2-1: Void**

#### 35.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-12A among the demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

---

## 36 CA configuration CA\_4A-13A Independent of Release

CA configuration CA\_4A-13A is specified in Release 11 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 36.1 CA\_4A-13A UE

UEs that conform to Release 10 and support CA\_4A-13A shall support the following requirements in Release 11.

#### 36.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-13A specified in [2] which are listed in Table B.4.3-1 of [6].

**Table 36.1.1-1: Void**

## 36.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-13A specified in [3] which are listed in Table B.2.4-1 of [6].

**Table 36.1.2-1: Void**

## 36.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-13A among the demodulation performance and CSI reporting requirements specified in [2] and listed in Table B.3.2-1 of [6].

---

# 37 CA configuration CA\_4A-17A Independent of Release

CA configuration CA\_4A-17A is specified in Release 11 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 37.1 CA\_4A-17A UE

UEs that conform to Release 10 and support CA\_4A-17A shall support the following requirements in Release 11.

### 37.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-17A specified in [2] which are listed in Table B.4.3-1 of [6].

**Table 37.1.1-1: Void**

### 37.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-17A specified in [3] which are listed in Table B.2.4-1 of [6].

**Table 37.1.2-1: Void**

### 37.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-17A among the demodulation performance and CSI reporting requirements specified in [2] and listed in Table B.3.2-1 of [6].

---

# 38 CA configuration CA\_5A-12A Independent of Release

CA configuration CA\_5A-12A is specified in Release 11 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 38.1 CA\_5A-12A UE

UEs that conform to Release 10 and support CA\_5A-12A shall support the following requirements in Release 11.

### 38.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_5A-12A specified in [2] which are listed in Table B.4.3-1 of [6].

**Table 38.1.1-1: Void**

### 38.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_5A-12A specified in [3] which are listed in Table B.2.4-1 of [6].

**Table 38.1.2-1: Void**

### 38.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_5A-12A among the demodulation performance and CSI reporting requirements specified in [2] and listed in Table B.3.2-1 of [6].

---

## 39 CA configuration CA\_5A-17A Independent of Release

CA configuration CA\_5A-17A is specified in Release 11 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 39.1 CA\_5A-17A UE

UEs that conform to Release 10 and support CA\_5A-17A shall support the following requirements in Release 11.

### 39.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_5A-17A specified in [2] which are listed in Table B.4.3-1 of [6].

**Table 39.1.1-1: Void**

### 39.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_5A-17A specified in [3] which are listed in Table B.2.4-1 of [6].

**Table 39.1.2-1: Void**

### 39.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_5A-17A among the demodulation performance and CSI reporting requirements specified in [2] and listed in Table Table B.3.2-1 of [6].

---

## 40 CA configuration CA\_4A-7A Independent of Release

CA\_4A-7A is specified in Release 11 and Release 13 but is defined as a release-independent E-UTRA CA configuration.

### 40.1 CA\_4A-7A UE

UEs that conform to Release 10 and support CA\_4A-7A shall support the following requirements in Release 13 for one uplink.

#### 40.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-7A specified in [11] which are listed in Table B.4.3-1 of [13].

**Table 40.1.1-1: Void**

#### 40.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-7A specified in [12] which are listed in Table B.2.4-1 of [13].

**Table 40.1.2-1: Void**

#### 40.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-7A among the demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 41 CA configuration CA\_11A-18A Independent of Release

CA configuration CA\_11A-18A is specified in Release 11 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 41.1 CA\_11A-18A UE

UEs that conform to Release 10 and support CA\_11A-18A shall support the following requirements in Release 11.

#### 41.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_11A-18A specified in [2] which are listed in Table B.4.3-1 of [6].

**Table 41.1.1-1: Void**

#### 41.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_11A-18A specified in [3] which are listed in Table B.2.4-1 of [6].

**Table 41.1.2-1: Void**

### 41.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_11A-18A among the demodulation performance and CSI reporting requirements specified in [2] and listed in Table B.3.2-1 of [6].

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## 42 Band 30 Independent of Release

Band 30 is specified in Release 12 but is defined as a release-independent frequency band. This approach aligns the Band 30 with other frequency bands when considering features that have to be supported in different releases.

### 42.1 Band 30 UE

UEs that conform to Release 10 and support Band 30 shall support the following requirements in Release 12.

#### 42.1.1 RF Requirements

The UE shall comply with the RF requirements for Band 30 specified in [4] which are listed in Table B.4.1-1 of [7].

**Table 42.1.1-1: Void**

#### 42.1.2 RRM Requirements

The UE shall comply with the RRM requirements for Band 30 specified in [5] which are listed in Table B.2.1-1 of [7].

**Table 42.1.2-1: Void**

#### 42.1.3 Void

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## 43 Band 31 Independent of Release

Band 31 is specified in Release 12 but is defined as a release-independent frequency band. This approach aligns the Band 31 with other frequency bands when considering features that have to be supported in different releases.

### 43.1 Band 31 UE

UEs that conform to Release 10 and support Band 31 shall support the following requirements in Release 12.

#### 43.1.1 RF Requirements

The UE shall comply with the RF requirements for Band 31 specified [4] which are listed in Table B.4.1-1 of [7].

**Table 43.1.1-1: Void**

#### 43.1.2 RRM Requirements

The UE shall comply with the RRM requirements for Band 31, for 5 MHz only, specified in [5] which are listed in Table B.2.1-1 of [7].

**Table 43.1.2-1: Void**

### 43.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the subset of demodulation performance and CSI reporting requirements specified in [4] which are listed in Table 43.1.3-2.

**Table 43.1.3-1: Void****Table 43.1.3-2: Demodulation performance and CSI reporting requirements for Band 31 UE**

Section / Clause	Description	Test case
8.2.1.1.1	Single-antenna port performance	6, 7, 8
8.2.1.2.1	Transmit diversity performance	1
8.2.1.3.1	Open-loop spatial multiplexing performance	2
8.2.1.4.1	Closed-loop spatial multiplexing performance	1A
8.2.1.4.2	Closed-loop spatial multiplexing performance	2A
8.5.1.2.1	PHICH transmit diversity performance	1A
9.2.1.1	CQI reporting definition under AWGN conditions	Table 9.2.1.1-2
9.3.2.1.1	CQI reporting under fading conditions	Table 9.3.2.1.1-3

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## 44 CA configuration CA\_1A-8A Independent of Release

CA configuration CA\_1A-8A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 44.1 CA\_1A-8A UE

UEs that conform to Release 10 and support CA\_1A-8A shall support the following requirements in Release 12.

#### 44.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-8A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 44.1.1-1: Void**

#### 44.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-8A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 44.1.2-1: Void**

#### 44.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-8A among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].



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## 45 CA configuration CA\_2A-13A Independent of Release

CA configuration CA\_2A-13A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 45.1 CA\_2A-13A UE

UEs that conform to Release 10 and support CA\_2A-13A shall support the following requirements in Release 12.

#### 45.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-13A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 45.1.1-1: Void**

#### 45.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-13A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 45.1.2-1: Void**

#### 45.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-13A among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 46 CA configuration CA\_3A-19A Independent of Release

CA configuration CA\_3A-19A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 46.1 CA\_3A-19A UE

UEs that conform to Release 10 and support CA\_3A-19A shall support the following requirements in Release 12.

#### 46.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3A-19A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 46.1.1-1: Void**

## 46.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3A-19A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 46.1.2-1: Void**

## 46.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3A-19A among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 47 CA configuration CA\_3A-26A Independent of Release

CA configuration CA\_3A-26A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 47.1 CA\_3A-26A UE

UEs that conform to Release 10 and support CA\_3A-26A shall support the following requirements in Release 12.

### 47.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3A-26A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 47.1.1-1: Void**

### 47.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3A-26A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 47.1.2-1: Void**

### 47.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3A-26A among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

---

# 48 CA configuration CA\_3A-28A Independent of Release

CA configuration CA\_3A-28A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 48.1 CA\_3A-28A UE

UEs that conform to Release 10 and support CA\_3A-28A shall support the following requirements in Release 12.

### 48.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3A-28A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 48.1.1-1: Void**

### 48.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3A-28A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 48.1.2-1: Void**

### 48.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3A-28A among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 49 CA configuration CA\_19A-21A Independent of Release

CA configuration CA\_19A-21A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 49.1 CA\_19A-21A UE

UEs that conform to Release 10 and support CA\_19A-21A shall support the following requirements in Release 12.

#### 49.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_19A-21A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 49.1.1-1: Void**

#### 49.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_19A-21A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 49.1.2-1: Void**

#### 49.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_19A-21A among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 50 CA configuration CA\_23A-29A Independent of Release

CA configuration CA\_23A-29A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 50.1 CA\_23A-29A UE

UEs that conform to Release 10 and support CA\_23A-29A shall support the following requirements in Release 12.

#### 50.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_23A-29A specified in [4] which are listed in Table B.4.4-1 of [7].

**Table 50.1.1-1: Void**

#### 50.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_23A-29A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 50.1.2-1: Void**

#### 50.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_23A-29A among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 51 Void

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## 52 CA configuration CA\_3C Independent of Release

CA configuration CA\_3C is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 52.1 CA\_3C UE

UEs that conform to Release 10 and support CA\_3C shall support the following requirements in Release 12.

#### 52.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3C specified in [4] which are listed in Table B.4.2-1 of [7].

**Table 52.1.1-1: Void**

## 52.1.2 RRM Requirements

The UE shall comply with the RRM Requirements for CA\_3C specified in [5] which are listed in Table B.2.2-1 of [7].

**Table 52.1.2-2: Void**

## 52.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3C among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 53 CA configuration CA\_1A-26A Independent of Release

CA configuration CA\_1A-26A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 53.1 CA\_1A-26A UE

UEs that conform to Release 10 and support CA\_1A-26A shall support the following requirements in Release 12.

### 53.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-26A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 53.1.1-1: Void**

### 53.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-26A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 53.1.2-1: Void**

### 53.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-26A among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 54 CA configuration CA\_2A-4A Independent of Release

CA configuration CA\_2A-4A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 54.1 CA\_2A-4A UE

UEs that conform to Release 10 and support CA\_2A-4A shall support the following requirements in Release 12.

### 54.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-4A specified in [2] which are listed in Table B.4.3-1 of [7].

**Table 54.1.1-1: Void**

### 54.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-4A specified in [3] which are listed in Table B.2.4-1 of [7].

**Table 54.1.2-1: Void**

### 54.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-4A among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 55 CA configuration CA\_2A-5A Independent of Release

CA configuration CA\_2A-5A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 55.1 CA\_2A-5A UE

UEs that conform to Release 10 and support CA\_2A-5A shall support the following requirements in Release 12.

#### 55.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-5A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 55.1.1-1: Void**

#### 55.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-5A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 55.1.2-1: Void**

#### 55.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-5A among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 56 CA configuration CA\_23B Independent of Release

CA configuration CA\_23B is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 56.1 CA\_23B UE

UEs that conform to Release 10 and support CA\_23B shall support the following requirements in Release 12.

### 56.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_23B specified in [4] which are listed in Table B.4.2-1 of [7].

**Table 56.1.1-1: Void**

### 56.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_23B specified in [5] which are listed in Table B.2.2-1 of [7].

**Table 56.1.2-1: Void**

### 56.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_23B among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 57 A configuration CA\_27B Independent of Release

CA configuration CA\_27B is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 57.1 CA\_27B UE

UEs that conform to Release 10 and support CA\_27B shall support the following requirements in Release 12.

### 57.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_27B specified in [4] which are listed in Table B.4.2-1 of [7].

**Table 57.1.1-1: Void**

### 57.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_27B specified in [5] which are listed in Table B.2.2-1 of [7].

**Table 57.1.1-2: Void**

### 57.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_27B among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 58 CA configuration CA\_2A-12A Independent of Release

CA configuration CA\_2A-12A is specified in Release 12 and Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 58.1 CA\_2A-12A UE

UEs that conform to Release 10 and support CA\_2A-12A shall support the following requirements in Release 13.

#### 58.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-12A specified in [11] which are listed in Table B.4.3-1 of [13].

**Table 58.1.1-1: Void**

#### 58.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-12A specified in [12] which are listed in Table B.2.4-1 of [13].

Table 58.1.2-1: Void

#### 58.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-12A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 59 CA configuration CA\_5A-7A Independent of Release

CA configuration CA\_5A-7A is specified in Release 12 and Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 59.1 CA\_5A-7A UE

UEs that conform to Release 10 and support CA\_5A-7A shall support the following requirements in Release 13.

#### 59.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_5A-7A specified in [11] which are listed in Table B.4.3-1 of [13].

**Table 59.1.1-1: Void**



## 59.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_5A-7A specified in [12] which are listed in Table B.2.4-1 of [13].

**Table 59.1.2-1: Void**

## 59.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_5A-7A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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# 60 CA configuration CA\_5A-25A Independent of Release

CA configuration CA\_5A-25A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 60.1 CA\_5A-25A UE

UEs that conform to Release 10 and support CA\_5A-25A shall support the following requirements in Release 12.

### 60.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_5A-25A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 60.1.1-1: Void**

### 60.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_5A-25A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 60.1.2-1: Void**

### 60.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_5A-25A among demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 61 CA configuration CA\_7A-28A Independent of Release

CA configuration CA\_7A-28A is specified in Release 12 and Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 61.1 CA\_7A-28A UE

UEs that conform to Release 10 and support CA\_7A-28A shall support the following requirements in Release 13.

### 61.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_7A-28A specified in [11] which are listed in Table B.4.3-1 of [13].

**Table 61.1.1-1: Void**

### 61.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_7A-28A specified in [12] which are listed in Table B.2.4-1 of [13].

### 61.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_7A-28A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 62 CA configuration CA\_12A-25A Independent of Release

CA configuration CA\_12A-25A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 62.1 CA\_12A-25A UE

UEs that conform to Release 10 and support CA\_12A-25A shall support the following requirements in Release 12.

#### 62.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_12A-25A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 62.1.1-1: Void**

#### 62.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_12A-25A specified in [5] which are listed in Table B.2.4-1 of [7].

**Table 62.1.2-1: Void**

#### 62.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable CA\_12A-25A among demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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63 Void

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64 Void

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65 Void

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## 66 CA configuration CA\_3A-27A Independent of Release

CA configuration CA\_3A-27A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 66.1 CA\_3A-27A UE

UEs that conform to Release 10 and support CA\_3A-27A shall support the following requirements in Release 12.

#### 66.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3A-27A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 66.1.1-1: Void**

#### 66.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3A-27A specified in [5] which are listed in Table B.2.4-1 of [7].

#### 66.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3A-27A among demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 67 CA configuration CA\_39C Independent of Release

CA configuration CA\_39C is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 67.1 CA\_39C UE

UEs that conform to Release 10 and support CA\_39C shall support the following requirements in Release 12.

### 67.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_39C specified in [4] which are listed in Table B.4.2-1 of [7].

**Table 67.1.1-1: Void**

### 67.1.2 RRM Requirements

The UE shall comply with the RRM Requirements for CA\_39C specified in [5] which are listed in Table B.2.2-1 of [7].

### 67.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_39C among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 68 CA configuration CA\_39A-41A Independent of Release

CA configuration CA\_39A-41A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 68.1 CA\_39A-41A UE

UEs that conform to Release 10 and support CA\_39A-41A shall support the following requirements in Release 12.

#### 68.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_39A-41A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 68.1.1-1: Void**

#### 68.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_39A-41A specified in [5] which are listed in Table B.2.4-1 of [7].

#### 68.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_39A-41A among demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 69 Band 14 Class 1 HPUE Independent of Release

Band 14 class 1 high power UE is specified in Release 11 but is defined as a release -independent feature and frequency band.

## 69.1 Band 14 HPUE

UEs that conform to Release 10 and support Band 14 class 1 high power UE shall support the following requirements in Release 11 in addition to all other requirements for Band 14 class 3 UE specified in [9].

### 69.1.1 RF Requirements

The UE shall comply with the RF requirements for Band 14 class 1 HPUE specified in [2] which are listed in Table B.4.1-1 of [7].

**Table 69.1.1-1: Void**

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## 70 CA configuration CA\_1A-5A Independent of Release

CA configuration CA\_1A-5A with bandwidth combination set1 is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 70.1 CA\_1A-5A UE

UEs that conform to Release 10 and support CA\_1A-5A shall support the following requirements in Release 12.

#### 70.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-5A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 70.1.1-1: Void**

#### 70.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-5A specified in [5] which are listed in Table B.2.4-1 of [7].

#### 70.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-5A among demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 71 CA configuration CA\_1A-11A Independent of Release

CA configuration CA\_1A-11A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 71.1 CA\_1A-11A UE

UEs that conform to Release 10 and support CA\_1A-11A shall support the following requirements in Release 12.

### 71.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-11A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 71.1.1-1: Void**

### 71.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-11A specified in [5] which are listed in Table B.2.4-1 of [7].

### 71.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-11A among demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 72 CA configuration CA\_1A-20A Independent of Release

CA configuration CA\_1A-20A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 72.1 CA\_1A-20A UE

UEs that conform to Release 10 and support CA\_1A-20A shall support the following requirements in Release 12.

#### 72.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-20A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 72.1.1-1: Void**

#### 72.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-20A specified in [5] which are listed in Table B.2.4-1 of [7].

#### 72.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-20A among demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 73 CA configuration CA\_4A-27A Independent of Release

CA configuration CA\_4A-27A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 73.1 CA\_4A-27A UE

UEs that conform to Release 10 and support CA\_4A-27A shall support the following requirements in Release 12.

### 73.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-27A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 73.1.1-1: Void**

### 73.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-27A specified in [5] which are listed in Table B.2.4-1 of [7].

### 73.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-27A among demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 74 CA configuration CA\_20A-32A Independent of Release

CA configuration CA\_20A-32A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 74.1 CA\_20A-32A UE

UEs that conform to Release 10 and support CA\_20A-32A shall support the following requirements in Release 12.

### 74.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_20A-32A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 74.1.1-1: Void**

### 74.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_20A-32A specified in [5] which are listed in Table B.2.4-1 of [7].

### 74.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_20A-32A among demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 75 CA configuration CA\_41D Independent of Release

CA configuration CA\_41D is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 75.1 CA\_41D UE

UEs that conform to Release 10 and support CA\_41D shall support the following requirements in Release 12.

#### 75.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_41D specified in [4] which are listed in Table B.4.2-1 of [7].

**Table 75.1.1-1: Void**

#### 75.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_41D specified in [5] which are listed in Table B.2.2-1 of [7].

#### 75.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_41D among demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 76 CA configuration CA\_42C Independent of Release

CA configuration CA\_42C is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 76.1 CA\_42C UE

UEs that conform to Release 10 and support CA\_42C shall support the following requirements in Release 12.

#### 76.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_42C specified in [4] which are listed in Table B.4.2-1 of [7].

**Table 76.1.1-1: Void**

#### 76.1.2 RRM Requirements

The UE shall comply with the RRM Requirements for CA\_42C specified in [5] which are listed in Table B.2.2-1 of [7].

#### 76.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_42C among demodulation performance and CSI reporting requirements specified in [2] and listed in Table B.3.2-1 of [6].



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## 77 Void

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## 78 Void

## 79 CA configuration CA\_40C Independent of Release

CA\_40C is specified in Release 10, Release 11 and Release 12. It is defined as a release-independent CA configuration for Rel-10 upwards.

### 79.1 CA\_40C UE

UEs that conform to Release 10 and support CA\_40C shall support the following requirements in Release 12 for both one uplink and simultaneous transmission on two uplinks.

#### 79.1.1 RF Requirements

The UE shall comply with the following RF requirements for CA\_40C specified in [4] which are listed in Table B.4.2-1 of [7].

**Table 79.1.1-1: Void**

#### 79.1.2 RRM Requirements

The UE shall comply with the RRM Requirements for CA\_40C specified in [5] which are listed in Table B.2.2-1 of [7].

#### 79.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_40C among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 80 CA configuration CA\_8A-11A Independent of Release

CA configuration CA\_8A-11A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 80.1 CA\_8A-11A UE

UEs that conform to Release 10 and support CA\_8A-11A shall support the following requirements in Release 12.

#### 80.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_8A-11A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 80.1.1-1: Void**

## 80.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_8A-11A specified in [5] which are listed in Table B.2.4-1 of [7].

## 80.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_8A-11A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 81 CA configuration CA\_41A-42A Independent of Release

CA configuration CA\_41A-42A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 81.1 CA\_41A-42A UE

UEs that conform to Release 10 and support CA\_41A-42A shall support the following requirements in Release 12.

### 81.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_41A-42A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 81.1.1-1: Void**

## 81.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_41A-42A specified in [5] which are listed in Table B.2.4-1 of [7].

## 81.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_41A-42A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 82 CA configuration CA\_18A-28A Independent of Release

CA configuration CA\_18A-28A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 82.1 CA\_18A-28A UE

UEs that conform to Release 10 and support CA\_18A-28A shall support the following requirements in Release 12.

### 82.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_18A-28A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 82.1.1-1: Void**

### 82.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_18A-28A specified in [5] which are listed in Table B.2.4-1 of [7].

### 82.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_18A-28A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 83 CA configuration CA\_1A-5A-7A Independent of Release

CA configuration CA\_1A-5A-7A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 83.1 CA\_1A-5A-7A UE

UEs that conform to Release 10 and support CA\_1A-5A-7A shall support the following requirements in Release 12.

#### 83.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-5A-7A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 83.1.1-1: Void**

#### 83.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-5A-7A specified in [5].

#### 83.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-5A-7A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 84 CA configuration CA\_1A-3A-5A Independent of Release

CA configuration CA\_1A-3A-5A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 84.1 CA\_1A-3A-5A UE

UEs that conform to Release 10 and support CA\_1A-3A-5A shall support the following requirements in Release 12.

### 84.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-3A-5A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 84.1.1-1: Void**

### 84.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-3A-5A specified in [5].

### 84.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-3A-5A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 85 CA configuration CA\_1A-3A-8A Independent of Release

CA configuration CA\_1A-3A-8A is specified in Release 12 and Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 85.1 CA\_1A-3A-8A UE

UEs that conform to Release 10 and support CA\_1A-3A-8A shall support the following requirements in Release 13.

### 85.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-3A-8A specified in [11] which are listed in Table B.4.3-1 of [13].

**Table 85.1.1-1: Void**

### 85.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-3A-8A specified in [12].

### 85.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-3A-8A among the CA demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 86 CA configuration CA\_1A-3A-19A Independent of Release

CA configuration CA\_1A-3A-19A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 86.1 CA\_1A-3A-19A UE

UEs that conform to Release 10 and support CA\_1A-3A-19A shall support the following requirements in Release 12.

#### 86.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-3A-19A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 86.1.1-1: Void**

#### 86.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-3A-19A specified in [5] which are listed in Table B.2.4-1 of [7].

#### 86.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-3A-19A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 87 CA configuration CA\_1A-3A-20A Independent of Release

CA configuration CA\_1A-3A-20A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 87.1 CA\_1A-3A-20A UE

UEs that conform to Release 10 and support CA\_1A-3A-20A shall support the following requirements in Release 12.

#### 87.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-3A-20A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 87.1.1-1: Void**

#### 87.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-3A-20A specified in [5] which are listed in Table B.2.4-1 of [7].

### 87.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-3A-20A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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## 88 CA configuration CA\_1A-3A Independent of Release

CA configuration CA\_1A-3A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 88.1 CA\_1A-3A UE

UEs that conform to Release 10 and support CA\_1A-3A shall support the following requirements in Release 12.

#### 88.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-3A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 88.1.1-1: Void**

#### 88.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-3A specified in [5] which are listed in Table B.2.4-1 of [7].

### 88.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-3A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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## 89 CA configuration CA\_1A-7A-20A Independent of Release

CA configuration CA\_1A-7A-20A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 89.1 CA\_1A-7A-20A UE

UEs that conform to Release 10 and support CA\_1A-7A-20A shall support the following requirements in Release 12.

#### 89.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-7A-20A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 89.1.1-1: Void**

## 89.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-7A-20A specified in [5] which are listed in Table B.2.4-1 of [7].

## 89.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-7A-20A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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# 90 CA configuration CA\_1A-7A Independent of Release

CA configuration CA\_1A-7A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 90.1 CA\_1A-7A UE

UEs that conform to Release 10 and support CA\_1A-7A shall support the following requirements in Release 12.

### 90.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-7A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 90.1.1-1: Void**

### 90.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-7A specified in [5] which are listed in Table B.2.4-1 of [7].

### 90.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-7A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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# 91 CA configuration CA\_1A-19A-21A Independent of Release

CA configuration CA\_1A-19A-21A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 91.1 CA\_1A-19A-21A UE

UEs that conform to Release 10 and support CA\_1A-19A-21A shall support the following requirements in Release 12.

### 91.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-19A-21A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 91.1.1-1: Void**

## 91.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-19A-21A specified in [5].

## 91.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-19A-21A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

---

## 92 Void

## 93 CA configuration CA\_2A-4A-5A Independent of Release

CA configuration CA\_2A-4A-5A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 93.1 CA\_2A-4A-5A UE

UEs that conform to Release 10 and support CA\_2A-4A-5A shall support the following requirements in Release 12.

#### 93.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-4A-5A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 93.1.1-1: Void**

#### 93.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-4A-5A specified in [5].

#### 93.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-4A-5A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 94 CA configuration CA\_2A-4A-13A Independent of Release

CA configuration CA\_2A-4A-13A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].



## 94.1 CA\_2A-4A-13A UE

UEs that conform to Release 10 and support CA\_2A-4A-13A shall support the following requirements in Release 12.

### 94.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-4A-13A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 94.1.1-1: Void**

### 94.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-4A-13A specified in [5].

### 94.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-4A-13A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 95 CA configuration CA\_2A-4A-12A Independent of Release

CA configuration CA\_2A-4A-12A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 95.1 CA\_2A-4A-12A UE

UEs that conform to Release 10 and support CA\_2A-4A-12A shall support the following requirements in Release 12.

### 95.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-4A-12A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 95.1.1-1: Void**

### 95.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-4A-12A specified in [5].

### 95.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-4A-12A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 96 CA configuration CA\_2A-12B Independent of Release

CA configuration CA\_2A-12B is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 96.1 CA\_2A-12B UE

UEs that conform to Release 10 and support CA\_2A-12B shall support the following requirements in Release 12.

#### 96.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-12B specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 96.1.1-1: Void**

#### 96.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-12B specified in [5].

#### 96.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-12B among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 97 CA configuration CA\_3A-7C Independent of Release

CA configuration CA\_3A-7C is specified in Release 12 and Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 97.1 CA\_3A-7C UE

UEs that conform to Release 10 and support CA\_3A-7C shall support the following requirements in Release 13.

#### 97.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3A-7C specified in [11] which are listed in Table B.4.3-1 of [13].

**Table 97.1.1-1: Void**

#### 97.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3A-7C specified in [12].

#### 97.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3A-7C among the CA demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 98 CA configuration CA\_3A-7A-20A Independent of Release

CA configuration CA\_3A-7A-20A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 98.1 CA\_3A-7A-20A UE

UEs that conform to Release 10 and support CA\_3A-7A-20A shall support the following requirements in Release 12.

#### 98.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3A-7A-20A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 98.1.1-1: Void**

#### 98.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3A-7A-20A specified in [5].

#### 98.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3A-7A-20A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 99 Void

## 100 CA configuration CA\_4A-12B Independent of Release

CA configuration CA\_4A-12B is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 100.1 CA\_4A-12B UE

UEs that conform to Release 10 and support CA\_4A-12B shall support the following requirements in Release 12.

#### 100.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-12B specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 100.1.1-1: Void**

#### 100.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-12B specified in [5].

## 100.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-12B among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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# 101 CA configuration CA\_12B Independent of Release

CA configuration CA\_12B is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 101.1 CA\_12B UE

UEs that conform to Release 10 and support CA\_12B shall support the following requirements in Release 12.

### 101.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_12B specified in [4] which are listed in Table B.4.2-1 of [7].

**Table 101.1.1-1: Void**

### 101.1.2 RRM Requirements

The UE shall comply with the RRM Requirements for CA\_12B specified in [5] which are listed in Table B.2.2-1 of [7].

### 101.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_12B among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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# 102 Void

## 102.1 Void

### 102.1.1 Void

**Table 102.1.1-1: Void**

### 102.1.2 Void

### 102.1.3 Void

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## 103 Void

### 103.1 Void

#### 103.1.1 Void

**Table 103.1.1-1: Void**

#### 103.1.2 Void

#### 103.1.3 Void

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## 104 CA configuration CA\_3C-7A Independent of Release

CA configuration CA\_3C-7A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 104.1 CA\_3C-7A UE

UEs that conform to Release 10 and support CA\_3C-7A shall support the following requirements in Release 12.

#### 104.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3C-7A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 104.1.1-1: Void**

#### 104.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3C-7A specified in [5].

#### 104.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3C-7A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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## 105 CA configuration CA\_2A-5A-12A Independent of Release

CA configuration CA\_2A-5A-12A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 105.1 CA\_2A-5A-12A UE

UEs that conform to Release 10 and support CA\_4A-4A-12A shall support the following requirements in Release 12.

## 105.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-5A-12A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 105.1.1-1: Void**

## 105.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-5A-12A specified in [5].

## 105.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-5A-12A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 106 CA configuration CA\_4A-5A-12A Independent of Release

CA configuration CA\_4A-5A-12A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 106.1 CA\_4A-5A-12A UE

UEs that conform to Release 10 and support CA\_2A-4A-12A shall support the following requirements in Release 12.

### 106.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-5A-12A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 106.1.1-1: Void**

### 106.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-5A-12A specified in [5].

### 106.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-5A-12A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 107 CA configuration CA\_2A-5A-30A Independent of Release

CA configuration CA\_2A-5A-30A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 107.1 CA\_2A-5A-30A UE

UEs that conform to Release 10 and support CA\_2A-5A-30A shall support the following requirements in Release 12.

### 107.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-5A-30A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 107.1.1-1: Void**

### 107.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-5A-30A specified in [3].

### 107.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-5A-30A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 108 CA configuration CA\_2A-12A-30A Independent of Release

CA configuration CA\_2A-12A-30A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 108.1 CA\_2A-12A-30A UE

UEs that conform to Release 10 and support CA\_2A-12A-30A shall support the following requirements in Release 12.

### 108.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-12A-30A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 108.1.1-1: Voir**

### 108.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-12A-30A specified in [5].

### 108.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-12A-30A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 109 CA configuration CA\_2A-29A-30A Independent of Release

CA configuration CA\_2A-29A-30A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 109.1 CA\_2A-29A-30A UE

UEs that conform to Release 10 and support CA\_2A-29A-30A shall support the following requirements in Release 12.

#### 109.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-29A-30A specified in [4] which are listed in Table B.4.4-1 of [7].

**Table 109.1.1-1: Void**

#### 109.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-29A-30A specified in [5].

#### 109.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-29A-30A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 110 CA configuration CA\_4A-5A-30A Independent of Release

CA configuration CA\_4A-5A-30A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 110.1 CA\_4A-5A-30A UE

UEs that conform to Release 10 and support CA\_4A-5A-30A shall support the following requirements in Release 12.

#### 110.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-5A-30A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 110.1.1-1: Void**

#### 110.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-5A-30A specified in [5].



### 110.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-5A-30A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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## 111 CA configuration CA\_4A-12A-30A Independent of Release

CA configuration CA\_4A-12A-30A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 111.1 CA\_4A-12A-30A UE

UEs that conform to Release 10 and support CA\_4A-12A-30A shall support the following requirements in Release 12.

#### 111.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-12A-30A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 111.1.1-1: Void**

#### 111.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-12A-30A specified in [5].

#### 111.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-12A-30A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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## 112 CA configuration CA\_4A-29A-30A Independent of Release

CA configuration CA\_4A-29A-30A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 112.1 CA\_4A-29A-30A UE

UEs that conform to Release 10 and support CA\_4A-29A-30A shall support the following requirements in Release 12.

#### 112.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-29A-30A specified in [4] which are listed in Table B.4.4-1 of [7].

**Table 112.1.1-1: Void**

## 112.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-92A-30A specified in [5].

## 112.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-92A-30A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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# 113 CA configuration CA\_2A-30A Independent of Release

CA configuration CA\_2A-30A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10.

## 113.1 CA\_2A-30A UE

UEs that conform to Release 10 and support CA\_2A-30A shall support the following requirements in Release 12.

### 113.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-30A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 113.1.1-1: Void**

### 113.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-30A specified in [5] which are listed in Table B.2.4-1 of [7].

### 113.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-30A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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# 114 CA configuration CA\_4A-30A Independent of Release

CA configuration CA\_4A-30A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 114.1 CA\_4A-30A UE

UEs that conform to Release 10 and support CA\_4A-30A shall support the following requirements in Release 12.

### 114.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-30A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 114.1.1-1: Void**

## 114.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-30A specified in [5] which are listed in Table B.2.4-1 of [7].

## 114.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-30A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 115 CA configuration CA\_5A-30A Independent of Release

CA configuration CA\_5A-30A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards

## 115.1 CA\_5A-30A UE

UEs that conform to Release 10 and support CA\_5A-30A shall support the following requirements in Release 12.

### 115.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_5A-30A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 115.1.1-1: Void**

## 115.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_5A-30A specified in [5] which are listed in Table B.2.4-1 of [7].

## 115.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_5A-30A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 116 CA configuration CA\_12A-30A Independent of Release

CA configuration CA\_12A-30A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 116.1 CA\_12A-30A UE

UEs that conform to Release 10 and support CA\_12A-30A shall support the following requirements in Release 12.

## 116.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_12A-30A specified in [4] which are listed in Table B.4.3-1 of [7].

**Table 116.1.1-1: Void**

## 116.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_12A-30A specified in [5] which are listed in Table B.2.4-1 of [7].

## 116.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-4A-13A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 117 CA configuration CA\_29A-30A Independent of Release

CA configuration CA\_29A-30A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 117.1 CA\_29A-30A UE

UEs that conform to Release 10 and support CA\_29A-30A shall support the following requirements in Release 12.

### 117.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_29A-30A specified in [4] which are listed in Table B.4.4-1 of [7].

**Table 117.1.1-1: Void**

### 117.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_29A-30A specified in [5] which are listed in Table B.2.4-1 of [7].

### 117.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_29A-30A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 118 CA configuration CA\_40D Independent of Release

CA configuration CA\_40D is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 118.1 CA\_40D UE

UEs that conform to Release 10 and support CA\_40D shall support the following requirements in Release 12.

### 118.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_40D specified in [4] which are listed in Table B.4.2-1 of [7].

### 118.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_40D specified in [5] which are listed in Table B.2.2-1 of [7].

### 118.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_40D among demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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119 Void

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120 Void

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121 Void

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## 122 CA configuration CA\_1A-28A Independent of Release

CA configuration CA\_1A-28A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 122.1 CA\_1A-28A UE

UEs that conform to Release 10 and support CA\_1A-28A shall support the following requirements in Release 12.

#### 122.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-28A specified in [4] which are listed in Table B.4.3-1 of [7].

## 122.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-28A specified in [5] which are listed in Table B.2.4-1 of [7].

## 122.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-28A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 123 CA configuration CA\_5A-13A Independent of Release

CA configuration CA\_5A-13A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 123.1 CA\_5A-13A UE

UEs that conform to Release 10 and support CA\_5A-13A shall support the following requirements in Release 12.

### 123.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_5A-13A specified in [4] which are listed in Table B.4.3-1 of [7].

### 123.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_5A-13A specified in [5] which are listed in Table B.2.4-1 of [7].

### 123.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_5A-13A among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 124 CA configuration CA\_1A-3A-26A Independent of Release

CA configuration CA\_1A-3A-26A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 124.1 CA\_1A-3A-26A UE

UEs that conform to Release 10 and support CA\_1A-3A-26A shall support the following requirements in Release 12.

### 124.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-3A-26A specified in [4] which are listed in Table B.4.3-1 of [7].

## 124.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-3A-26A specified in [5].

## 124.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-3A-26A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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# 125 CA configuration CA\_2C Independent of Release

CA configuration CA\_2C is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 125.1 CA\_2C UE

UEs that conform to Release 10 and support CA\_2C shall support the following requirements in Release 12.

### 125.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2C specified in [4] which are listed in Table B.4.2-1 of [7].

### 125.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2C specified in [5] which are listed in Table B.2.2-1 of [7].

### 125.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2C among the demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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# 126 CA configuration CA\_2C-29A Independent of Release

CA configuration CA\_2C-29A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 126.1 CA\_2C-29A UE

UEs that conform to Release 10 and support CA\_2C-29A shall support the following requirements in Release 12.

### 126.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2C-29A specified in [4] which are listed in Table B.4.4-1 of [7].

### 126.1.2 RRM Requirements

The UE shall comply with the RRM requirements for 2C-29A specified in [5].

### 126.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2C-29A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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## 127 CA configuration CA\_2A-4A-29A Independent of Release

CA configuration CA\_2A-4A-29A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 127.1 CA\_2A-4A-29A UE

UEs that conform to Release 10 and support CA\_2A-4A-29A shall support the following requirements in Release 12.

#### 127.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-4A-29A specified in [4] which are listed in Table B.4.4-1 of [7].

#### 127.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-4A-29A specified in [5].

#### 127.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-4A-29A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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## 128 CA configuration CA\_7A-8A Independent of Release

CA configuration CA\_7A-8A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 128.1 CA\_7A-8A UE

UEs that conform to Release 10 and support CA\_7A-8A shall support the following requirements in Release 12.

#### 128.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_7A-8A specified in [4] which are listed in Table B.4.3-1 of [7].

#### 128.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_7A-8A specified in [5] which are listed in Table B.2.4-1 of [7].

#### 128.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_7A-8A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].



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## 129 CA configuration CA\_7A-8A-20A Independent of Release

CA configuration CA\_7A-8A-20A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 129.1 CA\_7A-8A-20A UE

UEs that conform to Release 10 and support CA\_7A-8A-20A shall support the following requirements in Release 12.

#### 129.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_7A-8A-20A specified in [4] which are listed in Table B.4.3-1 of [7].

#### 129.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_7A-8A-20A specified in [5].

#### 129.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_7A-8A-20A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 130 CA configuration CA\_39C-41A Independent of Release

CA configuration CA\_39C-41A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 130.1 CA\_39C-41A UE

UEs that conform to Release 10 and support CA\_39C-41A shall support the following requirements in Release 12.

#### 130.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_39C-41A specified in [4] which are listed in Table B.4.3-1 of [7].

#### 130.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_39C-41A specified in [5].

#### 130.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_39C-41A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 131 CA configuration CA\_39A-41C Independent of Release

CA configuration CA\_39A-41C is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 131.1 CA\_39A-41C UE

UEs that conform to Release 10 and support 39A-41C shall support the following requirements in Release 12.

#### 131.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_39A-41C specified in [4] which are listed in Table B.4.3-1 of [7].

#### 131.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_39A-41C specified in [5].

#### 131.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_39A-41C among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 132 CA configuration CA\_7A-12A Independent of Release

CA configuration CA\_7A-12A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 132.1 CA\_7A-12A UE

UEs that conform to Release 10 and support CA\_7A-12A shall support the following requirements in Release 12.

#### 132.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_7A-12A specified in [4] which are listed in Table B.4.3-1 of [7].

#### 132.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_7A-12A specified in [5] which are listed in Table B.2.4-1 of [7].

#### 132.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_7A-12A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 133 CA configuration CA\_4A-7A-12A Independent of Release

CA configuration CA\_4A-7A-12A is specified in Release 12 and Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 133.1 CA\_4A-7A-12A UE

UEs that conform to Release 10 and support CA\_4A-7A-12A shall support the following requirements in Release 13.

#### 133.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-7A-12A specified in [11] which are listed in Table B.4.3-1 of [13].

#### 133.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-7A-12A specified in [12].

#### 133.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-7A-12A among the CA demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 134 CA configuration CA\_2A-5A-13A Independent of Release

CA configuration CA\_2A-5A-13A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 134.1 CA\_2A-5A-13A UE

UEs that conform to Release 10 and support CA\_2A-5A-13A shall support the following requirements in Release 12.

#### 134.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-5A-13A specified in [4] which are listed in Table B.4.3-1 of [7].

#### 134.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-5A-13A specified in [5].

#### 134.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-5A-13A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1 of [7].

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## 135 CA configuration CA\_4A-5A-13A Independent of Release

CA configuration CA\_4A-5A-13A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 135.1 CA\_4A-5A-13A UE

UEs that conform to Release 10 and support CA\_4A-5A-13A shall support the following requirements in Release 12.

#### 135.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-5A-13A specified in [4] which are listed in Table B.4.3-1 of [7].

#### 135.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-5A-13A specified in [5].

#### 135.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-5A-13A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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## 136 CA configuration CA\_1A-18A-28A Independent of Release

CA configuration CA\_1A-18A-28A is specified in Release 12 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 136.1 CA\_1A-18A-28A UE

UEs that conform to Release 10 and support CA\_1A-18A-28A shall support the following requirements in Release 12.

#### 136.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-18A-28A specified in [4] which are listed in Table B.4.3-1 of [7].

#### 136.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-18A-28A specified in [5].

#### 136.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-18A-28A among the CA demodulation performance and CSI reporting requirements specified in [4] and listed in Table B.3.2-1of [7].

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## 137 Void

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## 138 Void

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## 139 Void

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## 140 CA configuration CA\_1A-3A-28A Independent of Release

CA configuration CA\_1A-3A-28A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 140.1 CA\_1A-3A-28A UE

UEs that conform to Release 10 and support CA\_1A-3A-28A shall support the following requirements in Release 13.

#### 140.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-3A-28A specified in [11] which are listed in Table B.4.3-1 of [13].

#### 140.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-3A-28A specified in [12] which are listed in Table B.2.4-1 of [13].

#### 140.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-3A-28A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 141 CA configuration CA\_1A-7A-28A Independent of Release

CA configuration CA\_1A-7A-28A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 141.1 CA\_1A-7A-28A UE

UEs that conform to Release 10 and support CA\_1A-7A-28A shall support the following requirements in Release 13.

#### 141.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-7A-28A specified in [11] which are listed in Table B.4.3-1 of [13].

## 141.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-7A-28A specified in [12] which are listed in Table B.2.4-1 of [13].

## 141.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-7A-28A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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# 142 CA configuration CA\_2A\_5A\_29A Independent of Release

CA configuration CA\_2A-5A-29A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 142.1 CA\_2A-5A-29A UE

UEs that conform to Release 10 and support CA\_2A-5A-29A shall support the following requirements in Release 13.

### 142.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-5A-29A specified in [11] which are listed in Table B.4.4-1 of [13].

### 142.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-5A-29A specified in [12] which are listed in Table B.2.4-1 of [13].

### 142.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-5A-29A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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# 143 CA configuration CA\_3C\_5A Independent of Release

CA configuration CA\_3C-5A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 143.1 CA\_3C-5A UE

UEs that conform to Release 10 and support CA\_3C-5A shall support the following requirements in Release 13.

### 143.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3C-5A specified in [11] which are listed in Table B.4.3-1 of [13].

## 143.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3C-5A specified in [12] which are listed in Table B.2.4-1 of [13].

## 143.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3C-5A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

---

# 144 CA configuration CA\_3A\_7B Independent of Release

CA configuration CA\_3A-7B is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 144.1 CA\_3A-7B UE

UEs that conform to Release 10 and support CA\_3A-7B shall support the following requirements in Release 13.

### 144.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3A-7B specified in [11] which are listed in Table B.4.3-1 of [13].

### 144.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3A-7 B specified in [12] which are listed in Table B.2.4-1 of [13].

### 144.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3A-7B among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

---

# 145 CA configuration CA\_3A\_7A\_8A Independent of Release

CA configuration CA\_3A-7A-8A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 145.1 CA\_3A-7A-8A UE

UEs that conform to Release 10 and support CA\_3A-7A-8A shall support the following requirements in Release 13.

### 145.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3A-7A-8A specified in [11] which are listed in Table B.4.3-1 of [13].

## 145.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3A-7A-8A specified in [12] which are listed in Table B.2.4-1 of [13].

## 145.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3A-7A-8A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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# 146 CA configuration CA\_3A\_7A\_28A Independent of Release

CA configuration CA\_3A-7A-28A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 146.1 CA\_3A-7A-28A UE

UEs that conform to Release 10 and support CA\_3A-7A-28A shall support the following requirements in Release 13.

### 146.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3A-7A-28A specified in [11] which are listed in Table B.4.3-1 of [13].

### 146.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3A-7A-28A specified in [12] which are listed in Table B.2.4-1 of [13].

### 146.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3A-7A-28A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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# 147 CA configuration CA\_5A-29A Independent of Release

CA configuration CA\_5A-29A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 147.1 CA\_5A-29A UE

UEs that conform to Release 10 and support CA\_5A-29A shall support the following requirements in Release 13.

### 147.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_5A-29A specified in [11] which are listed in Table B.4.4-1 of [13].



## 147.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_5A-29A specified in [12] which are listed in Table B.2.4-1 of [13].

## 147.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_5A-29A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

---

# 148 CA configuration CA\_7B Independent of Release

CA configuration CA\_7B is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 148.1 CA\_7B UE

UEs that conform to Release 10 and support CA\_7B shall support the following requirements in Release 13.

### 148.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_7B specified in [11] which are listed in Table B.4.2-1 of [13].

### 148.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_7B specified in [12] which are listed in Table B.2.4-1 of [13].

### 148.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_7B among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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# 149 CA configuration CA\_7B\_28A Independent of Release

CA configuration CA\_7B-28A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 149.1 CA\_7B-28A UE

UEs that conform to Release 10 and support CA\_7B-28A shall support the following requirements in Release 13.

### 149.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_7B-28A specified in [11] which are listed in Table B.4.3-1 of [13].

### 149.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_7B-28A specified in [12] which are listed in Table B.2.4-1 of [13].

### 149.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_7B-28A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

---

## 150 CA configuration CA\_7C\_28A Independent of Release

CA configuration CA\_7C-28A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 150.1 CA\_7C-28A UE

UEs that conform to Release 10 and support CA\_7C-28A shall support the following requirements in Release 13.

#### 150.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_7C-28A specified in [11] which are listed in Table B.4.3-1 of [13].

#### 150.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_7C-28A specified in [12] which are listed in Table B.2.4-1 of [13].

#### 150.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_7C-28A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 151 Void

### 151.1 Void

#### 151.1.1 Void

#### 151.1.2 Void

#### 151.1.3 Void

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## 152 CA configuration CA\_38A-40A Independent of Release

CA configuration CA\_38A-40A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 152.1 CA\_38A-40A UE

UEs that conform to Release 10 and support CA\_38A-40A shall support the following requirements in Release 13.

### 152.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_38A-40A specified in [11] which are listed in Table B.4.3-1 of [13].

### 152.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_38A-40A specified in [12] which are listed in Table B.2.4-1 of [13].

### 152.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_38A-40A among the demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 153 CA configuration CA\_38A-40C Independent of Release

CA configuration CA\_38A-40C is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 153.1 CA\_38A-40C UE

UEs that conform to Release 10 and support CA\_38A-40C shall support the following requirements in Release 13.

### 153.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_38A-40C specified in [11] which are listed in Table B.4.3-1 of [13].

### 153.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_38A-40C specified in [12] which are listed in Table B.2.4-1 of [13].

### 153.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_38A-40C among the demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 154 Void

### 154.1 Void

#### 154.1.1 Void

#### 154.1.2 Void

#### 154.1.3 Void

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## 155 CA configuration CA\_41A\_42C Independent of Release

CA configuration CA\_41A-42C is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 155.1 CA\_41A-42C UE

UEs that conform to Release 10 and support CA\_41A-42C shall support the following requirements in Release 13.

#### 155.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_41A-42C specified in [11] which are listed in Table B.4.3-1 of [13].

#### 155.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_41A-42C specified in [12] which are listed in Table B.2.4-1 of [13].

#### 155.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_41A-42C among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 156 CA configuration CA\_2A-28A Independent of Release

CA configuration CA\_2A-28A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 156.1 CA\_2A-28A UE

UEs that conform to Release 10 and support CA\_2A-28A shall support the following requirements in Release 13.

## 156.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-28A specified in [11] which are listed in Table B.4.3-1 of [13].

## 156.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-28A specified in [12] which are listed in Table B.2.4-1 of [13].

## 156.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-28A among the demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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# 157 CA configuration CA\_3A-31A Independent of Release

CA configuration CA\_3A-31A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 157.1 CA\_3A-31A UE

UEs that conform to Release 10 and support CA\_3A-31A shall support the following requirements in Release 13.

### 157.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_3A-31A specified in [11] which are listed in Table B.4.3-1 of [13].

### 157.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_3A-31A specified in [12] which are listed in Table B.2.4-1 of [13].

### 157.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_3A-31A among the demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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# 158 CA configuration CA\_4A-28A Independent of Release

CA configuration CA\_4A-28A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 158.1 CA\_4A-28A UE

UEs that conform to Release 10 and support CA\_4A-28A shall support the following requirements in Release 13.

## 158.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_4A-28A specified in [11] which are listed in Table B.4.3-1 of [13].

## 158.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_4A-28A specified in [12] which are listed in Table B.2.4-1 of [13].

## 158.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_4A-28A among the demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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# 159 CA configuration CA\_7A-22A Independent of Release

CA configuration CA\_7A-22A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 159.1 CA\_7A-22A UE

UEs that conform to Release 10 and support CA\_7A-22A shall support the following requirements in Release 13.

### 159.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_7A-22A specified in [11] which are listed in Table B.4.3-1 of [13].

### 159.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_7A-22A specified in [12] which are listed in Table B.2.4-1 of [13].

### 159.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_7A-22A among the demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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# 160 CA configuration CA\_20A-31A Independent of Release

CA configuration CA\_20A-31A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 160.1 CA\_20A-31A UE

UEs that conform to Release 10 and support CA\_20A-31A shall support the following requirements in Release 13.

## 160.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_20A-31A specified in [11] which are listed in Table B.4.3-1 of [13].

## 160.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_20A-31A specified in [12] which are listed in Table B.2.4-1 of [13].

## 160.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_20A-31A among the demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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# 161 CA configuration CA\_25A-26A Independent of Release

CA configuration CA\_25A-12A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 161.1 CA\_25A-26A UE

UEs that conform to Release 10 and support CA\_25A-26A shall support the following requirements in Release 13.

### 161.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_25A-26A specified in [11] which are listed in Table B.4.3-1 of [13] with the following exception. For uplink transmissions in Band 26, the UE shall comply with the additional spurious emissions requirements in sub-clause 6.6.3.3.5 (“NS\_12”) and sub-clause 6.6.3.36 (“NS\_13”) as specified in [2].

### 161.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_25A-26A specified in [12] which are listed in Table B.2.4-1 of [13].

### 161.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_25A-26A among the demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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# 162 CA configuration CA\_42D Independent of Release

CA configuration CA\_42D is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

## 162.1 CA\_42D UE

UEs that conform to Release 10 and support CA\_42D shall support the following requirements in Release 13.

### 162.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_42D specified in [11] which are listed in Table B.4.2-1 of [13].

### 162.1.2 RRM Requirements

The UE shall comply with the following RRM Requirements for CA\_42D specified in [12] which are listed in Table B.2.2-1 of [13].

### 162.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the demodulation performance and CSI reporting requirements for CA\_42D specified in [11], which are listed in section B.3.2-1 of [13].

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## 163 Void

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## 164 Void

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## 165 CA configuration CA\_2C-5A Independent of Release

CA configuration CA\_2C-5A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 165.1 CA\_2C-5A UE

UEs that conform to Release 10 and support CA\_2C-5A shall support the following requirements in Release 13.

#### 165.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2C-5A specified in [11] which are listed in Table B.4.3-1 of [13].

#### 165.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2C-5A specified in [12].

#### 165.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2C-5A among the CA demodulation performance and CSI reporting requirements demodulation performance and CSI reporting specified in [11].

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## 166 Void



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## 167 CA configuration CA\_2C-12A Independent of Release

CA configuration CA\_2C-12A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 167.1 CA\_2C-12A UE

UEs that conform to Release 10 and support CA\_2C-12A shall support the following requirements in Release 13.

#### 167.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2C-12A specified in [11] which are listed in Table B.4.3-1 of [13].

#### 167.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2C-12A specified in [12].

#### 167.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2C-12A among the CA demodulation performance and CSI reporting requirements demodulation performance and CSI reporting specified in [11].

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## 168 CA configuration CA\_2C-30A Independent of Release

CA configuration CA\_2C-30A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 168.1 CA\_2C-30A UE

UEs that conform to Release 10 and support CA\_2C-30A shall support the following requirements in Release 13.

#### 168.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2C-30A specified in [11] which are listed in Table B.4.3-1 of [13].

#### 168.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2C-30A specified in [12].

#### 168.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2C-30A among the CA demodulation performance and CSI reporting requirements demodulation performance and CSI reporting specified in [11].

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## 169 Void

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170 Void

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171 Void

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172 Void

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173 Void

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## 174 CA configuration CA\_2A-4A-30A Independent of Release

CA configuration CA\_2A-4A-30A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 174.1 CA\_2A-4A-30A UE

UEs that conform to Release 10 and support CA\_2A-4A-30A shall support the following requirements in Release 13.

#### 174.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_2A-4A-30A specified in [11] which are listed in Table B.4.3-1 of [13].

#### 174.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_2A-4A-30A specified in [12].

#### 174.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_2A-4A-30A among the CA demodulation performance and CSI reporting requirements demodulation performance and CSI reporting specified in [11].

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175 to 194 Void

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## 195 CA configuration 4A-5A-29A Independent of Release

CA configuration 4A-5A-29A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 195.1 4A-5A-29A UE

UEs that conform to Release 10 and support 4A-5A-29A shall support the following requirements in Release 13.

#### 195.1.1 RF Requirements

The UE shall comply with the RF requirements for 4A-5A-29A specified in [11] which are listed in Table B.4.2-1 of [13].

#### 195.1.2 RRM Requirements

The UE shall comply with the following RRM Requirements for 4A-5A-29A specified in [12] which are listed in Table B.2.2-1 of [13].

#### 195.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the demodulation performance and CSI reporting requirements for 4A-5A-29A specified in [11], which are listed in section B.3.2-1 of [13].

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## 195 to 204 Void

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## 205 CA configuration CA\_19A-28A Independent of Release

CA configuration CA\_19A-28A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 205.1 CA\_19A-28A UE

UEs that conform to Release 10 and support CA\_19A-28A shall support the following requirements in Release 13.

#### 205.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_19A-28A specified in [11] which are listed in Table B.4.3-1 of [13].

#### 205.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_19A-28A specified in [12] which are listed in Table B.2.4-1 of [13].

### 205.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_19A-28A among the demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 206 CA configuration CA\_1A-19A-28A Independent of Release

CA configuration CA\_1A-19A-28A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 206.1 CA\_1A-19A-28A UE

UEs that conform to Release 10 and support CA\_1A-19A-28A shall support the following requirements in Release 13.

#### 206.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-19A-28A specified in [11] which are listed in Table B.4.3-1 of [13].

#### 206.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-19A-28A specified in [12] which are listed in Table B.2.4-1 of [13].

#### 206.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-19A-28A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 207 CA configuration CA\_1A-8A-11A Independent of Release

CA configuration CA\_1A-8A-11A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 207.1 CA\_1A-8A-11A UE

UEs that conform to Release 10 and support CA\_1A-8A-11A shall support the following requirements in Release 13.

#### 207.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-8A-11A specified in [11] which are listed in Table B.4.3-1 of [13].

#### 207.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-8A-11A specified in [12] which are listed in Table B.2.4-1 of [13].

### 207.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-8A-11A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 208 CA configuration CA\_1A-3C Independent of Release

CA configuration CA\_1A-3C is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 208.1 CA\_1A-3C UE

UEs that conform to Release 10 and support CA\_1A-3C shall support the following requirements in Release 13.

#### 208.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-3C specified in [11] which are listed in Table B.4.3-1 of [13].

#### 208.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-3C specified in [12] which are listed in Table B.2.4-1 of [13].

### 208.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-3C among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 209 – 213 Void

## 214 Band 45 Independent of Release

Band 45 is specified in Release 13 but is defined as a release-independent frequency band. This approach aligns the Band 45 with other frequency bands when considering features that have to be supported in different releases.

### 214.1 Band 45 UE

UEs that conform to Release 10 and support Band 45 shall support the following requirements in Release 13.

#### 214.1.1 RF Requirements

The UE shall comply with the RF requirements for Band 45 specified in [11] which are listed in Table B.4.1-1 of [13].

#### 214.1.2 RRM Requirements

The UE shall comply with the RRM requirements for Band 45 specified in [12] which are listed in Table B.2.1-1 of [13].

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## 215 Band 65 Independent of Release

Band 65 is specified in Release 13 but is defined as a release-independent frequency band. This approach aligns the Band 65 with other frequency bands when considering features that have to be supported in different releases.

### 215.1 Band 65 UE

UEs that conform to Release 10 and support Band 65 shall support the following requirements in Release 13.

#### 215.1.1 RF Requirements

The UE shall comply with the RF requirements for Band 65 specified in [11] which are listed in Table B.4.1-1 of [13].

#### 215.1.2 RRM Requirements

The UE shall comply with the RRM requirements for Band 65 specified in [12] which are listed in Table B.2.1-1 of [13].

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## 216 Band 66 Independent of Release

Band 66 is specified in Release 13 but is defined as a release-independent frequency band. This approach aligns the Band 66 with other frequency bands when considering features that have to be supported in different releases.

### 216.1 Band 66 UE

UEs that conform to Release 10 and support Band 66 shall support the following requirements in Release 13.

#### 216.1.1 RF Requirements

The UE shall comply with the RF requirements for Band 66 specified in [11] which are listed in Table B.4.1-1 of [13].

#### 216.1.2 RRM Requirements

The UE shall comply with the RRM requirements for Band 66 specified in [12] which are listed in Table B.2.1-1 of [13].

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## 217 CA configuration CA\_66B Independent of Release

CA configuration CA\_66B is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 217.1 CA\_66B UE

UEs that conform to Release 10 and support CA\_66B shall support the following requirements in Release 13.

#### 217.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_66B specified in [11] which are listed in Table B.4.2-1 of [13].

## 217.1.2 RRM Requirements

The UE shall comply with the RRM Requirements for CA\_66B specified in [12] which are listed in Table B.2.2-1 of [13].

## 217.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_66B among the CA demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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# 218 CA configuration CA\_66C Independent of Release

CA configuration CA\_66C is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 218.1 CA\_66C UE

UEs that conform to Release 10 and support CA\_66C shall support the following requirements in Release 13.

### 218.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_66C specified in [11] which are listed in Table B.4.2-1 of [13].

### 218.1.2 RRM Requirements

The UE shall comply with the RRM Requirements for CA\_66C specified in [12] which are listed in Table B.2.2-1 of [13].

### 218.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_66C among the CA demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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# 219 Void

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# 220 CA configuration CA\_5B Independent of Release

CA configuration CA\_5B is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

## 220.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_5B specified in [11] which are listed in Table B.4.2-1 of [13].

## 220.1.2 RRM Requirements

The UE shall comply with the RRM Requirements for CA\_5B specified in [12] which are listed in Table B.2.2-1 of [13].

### 220.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_5B among the CA demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 221 CA configuration CA\_8B Independent of Release

CA configuration CA\_8B is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 221.1 CA\_8B UE

UEs that conform to Release 10 and support CA\_8B shall support the following requirements in Release 13.

#### 221.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_8B specified in [11] which are listed in Table B.4.2-1 of [13].

#### 221.1.2 RRM Requirements

The UE shall comply with the following RRM Requirements for CA\_8B specified in [12] which are listed in Table B.2.2-1 of [13].

#### 221.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_8B among the CA demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 222 CA configuration CA\_20A-67A Independent of Release

CA configuration CA\_20A-67A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 222.1 CA\_20A-67A UE

UEs that conform to Release 10 and support CA\_20A-67A shall support the following requirements in Release 13.

#### 222.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_20A-67A specified in [11] which are listed in Table B.4.3-1 of [13].

#### 222.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_20A-67A specified in [12] which are listed in Table B.2.4-1 of [13].

#### 222.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_20A-67A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].



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## 223 CA configuration CA\_1A-3A-7A Independent of Release

CA configuration CA\_1A-3A-7A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 223.1 CA\_1A-3A-7A UE

UEs that conform to Release 10 and support CA\_1A-3A-7A shall support the following requirements in Release 13.

#### 223.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-3A-7A specified in [11] which are listed in Table B.4.3-1 of [13].

#### 223.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-3A-7A specified in [12] which are listed in Table B.2.4-1 of [13].

#### 223.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-3A-7A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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## 224 CA configuration CA\_1A-11A-18A Independent of Release

CA configuration CA\_1A-11A-18A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards for UE Categories specified in [10].

### 224.1 CA\_1A-11A-18A UE

UEs that conform to Release 10 and support CA\_1A-11A-18A shall support the following requirements in Release 13.

#### 224.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-11A-18A specified in [11] which are listed in Table B.4.3-1 of [13].

#### 224.1.2 RRM Requirements

The UE shall comply with the RRM requirements for CA\_1A-11A-18A specified in [12] which are listed in Table B.2.4-1 of [13].

#### 224.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the tests applicable for CA\_1A-11A-18A among demodulation performance and CSI reporting requirements specified in [11] and listed in Table B.3.2-1 of [13].

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225 Void

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226 Void

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## 227 CA configuration CA\_5A-12B Independent of Release

CA configuration CA\_5A-12B is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 227.1 CA\_5A-12B UE

UEs that conform to Release 10 and support CA\_5A-12B shall support the following requirements in Release 13.

#### 227.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_5A-12B specified in [11] which are listed in Table B.4.2-1 of [13].

#### 227.1.2 RRM Requirements

The UE shall comply with the following RRM Requirements for CA\_5A-12B specified in [12] which are listed in Table B.2.2-1 of [13].

#### 227.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the demodulation performance and CSI reporting requirements for CA\_5A-12B specified in [11], which are listed in section B.3.2-1 of [13].

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228 to 230 Void

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## 231 CA configuration 41C-42A Independent of Release

CA configuration 41C-42A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 231.1 41C-42A UE

UEs that conform to Release 10 and support 41C-42A shall support the following requirements in Release 13.

#### 231.1.1 RF Requirements

The UE shall comply with the RF requirements for 41C-42A specified in [11] which are listed in Table B.4.2-1 of [13].

## 231.1.2 RRM Requirements

The UE shall comply with the following RRM Requirements for 41C-42A specified in [12] which are listed in Table B.2.2-1 of [13].

## 231.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the demodulation performance and CSI reporting requirements for 41C-42A specified in [11], which are listed in section B.3.2-1 of [13].

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## 232 to 237 Void

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## 238 CA configuration CA\_1A-7A-8A Independent of Release

CA configuration CA\_1A-7A-8A is specified in Release 13 but is defined as a release-independent CA configuration for Rel-10 upwards.

### 238.1 CA\_1A-7A-8A UE

UEs that conform to Release 10 and support CA\_1A-7A-8A shall support the following requirements in Release 13.

#### 238.1.1 RF Requirements

The UE shall comply with the RF requirements for CA\_1A-7A-8A specified in [11] which are listed in Table B.4.2-1 of [13].

#### 238.1.2 RRM Requirements

The UE shall comply with the following RRM Requirements for CA\_1A-7A-8A specified in [12] which are listed in Table B.2.2-1 of [13].

#### 238.1.3 Demodulation performance and CSI reporting Requirements

The UE shall comply with the demodulation performance and CSI reporting requirements for CA\_1A-7A-8A specified in [11], which are listed in section B.3.2-1 of [13].

## Annex A (informative): Frequency arrangement for overlapping operating bands

The following information is provided in order to assist a UE derive the DL EARFCN and UL EARFCN in a multi-band environment, in which multiple overlapping operating bands may be indicated in the fields *freqBandIndicator* and *multiBandInfoList* of SIB1.

The overlapping bands, independent of release, which may be indicated in a cell are shown in Table A-1 for applicable E-UTRA bands. The DL EARFCN and UL EARFCN are derived according to [2].

**Table A-1: Overlapping bands (multi-band environments) for each E-UTRA band**

E-UTRA Operating Band	Overlapping E-UTRA operating bands	Duplex Mode
2	25	FDD
3	9	FDD
4	10	FDD
5	18, 19, 26	FDD
9	3	FDD
10	4	FDD
12	17	FDD
17	12	FDD
18	5, 26, 27	FDD
19	5, 26	FDD
25	2	FDD
26	5, 18, 19, 27	FDD
27	18, 26	FDD
33	39	TDD
38	41	TDD
39	33	TDD
41	38	TDD

## Annex B (normative): Common Requirements

### B.1 Purpose of annex

The purpose of Annex B is to group the requirements that are common for several bands or CA configurations in this specification and use the common tables as references.

### B.2 Common RRM requirements

#### B.2.1 Common RRM requirements for a band independent of release

The requirements and test cases listed in Table B.2.1-1 are specified in [8].

**Table B.2.1-1: Common RRM requirements for a band independent of release**

Section / Clause	Description
4 <sup>Note 1</sup>	E-UTRAN RRC_IDLE state mobility
5	E-UTRAN RRC_CONNECTED state mobility
6 <sup>Note 2</sup>	RRC Connection Mobility Control
7 <sup>Note 3</sup>	Timing and signalling characteristics
8 <sup>Note 4</sup>	UE Measurements Procedures in RRC_CONNECTED State
9 <sup>Note 5</sup>	Measurements performance requirements for UE
A.4 <sup>Note 1</sup>	E-UTRAN RRC_IDLE state
A.5	E-UTRAN RRC CONNECTED Mode Mobility
A.6 <sup>Note 2</sup>	RRC Connection Control
A.7 <sup>Note 3</sup>	Timing and Signalling Characteristics
A.8 <sup>Note 4</sup>	UE Measurements Procedures
A.9 <sup>Note 5</sup>	Measurement Performance Requirements
<p>NOTE 1: All requirements and the corresponding test cases shall apply, except:  - for supporting the corresponding band in Rel-9 and below: clause 4.3 (Minimization of Drive Tests).</p> <p>NOTE 2: All requirements and the corresponding test cases shall apply, except:  - for supporting the corresponding band in Rel-8: clauses 6.3 (RRC Connection Release with Redirection), 6.4 (CSG Proximity Indication for E-UTRAN and UTRAN).</p> <p>NOTE 3: All requirements and corresponding test cases shall apply, except those defined in sections 7.4 and 7.5.</p> <p>NOTE 4: All requirements and corresponding test cases shall apply, except:  - for supporting the corresponding band in Rel-8: clauses 8.1.2.5 (E-UTRAN OTDOA Intra-Frequency RSTD Measurements), 8.1.2.6 (E-UTRAN Inter-Frequency OTDOA Measurements), 8.1.2.7 (E-UTRAN E-CID Measurements).</p> <p>NOTE 5: All requirements and corresponding test cases shall apply, except:  - for supporting the corresponding band in Rel-8: clauses 9.1.9 (UE Rx-Tx time difference), 9.1.10 (Reference Signal Time Difference).</p> <p>NOTE 6: All requirements and test cases in this table shall apply, except those defined for: carrier aggregation; measurements under time-domain measurement resource restriction, in addition to the exceptions listed above.</p>	

## B.2.2 Common RRM requirements for an intra-band contiguous CA configuration

The requirements and test cases listed in Table B.2.2-1 are specified in [8].

**Table B.2.2-1: Common RRM requirements for a single-band CA configuration independent of release**

Section / Clause	Description
7.1	UE transmit timing
7.7	SCell Activation and Deactivation Delay for E-UTRA Carrier Aggregation
7.8	Interruptions with Carrier Aggregation
8.2	Capabilities for Support of Event Triggering and Reporting Criteria
8.3	Measurements for E-UTRA carrier aggregation
8.4	OTDOA RSTD Measurements for E-UTRAN carrier aggregation
9.1.11	Carrier aggregation measurement accuracy
9.1.12	Reference Signal Time Difference (RSTD) Measurement Accuracy Requirements for Carrier Aggregation
A.8	UE Measurements Procedures
A.9	Measurement Performance Requirements
NOTE:	Only requirements and test cases in this table defined for intra-band contiguous carrier aggregation shall apply.

## B.2.3 Common RRM requirements for an inter-band CA configuration

The requirements and test cases listed in Table B.2.3-1 are specified in [8].

**Table B.2.3-1: Common RRM requirements for a band-combination CA configuration**

Section / Clause	Description
7.1	UE transmit timing
7.7	SCell Activation and Deactivation Delay for E-UTRA Carrier Aggregation
7.8	Interruptions with Carrier Aggregation
8.2	Capabilities for Support of Event Triggering and Reporting Criteria
8.3	Measurements for E-UTRA carrier aggregation
8.4	OTDOA RSTD Measurements for E-UTRAN carrier aggregation
9.1.11	Carrier aggregation measurement accuracy
9.1.12	Reference Signal Time Difference (RSTD) Measurement Accuracy Requirements for Carrier Aggregation
A.8	UE Measurements Procedures
A.9	Measurement Performance Requirements
NOTE:	Only requirements and test cases in this table defined for inter-band carrier aggregation shall apply.

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## B.3 Common UE performance requirements

### B.3.1 Void

Table B.3.1-1: Void

### B.3.2 Void

Table B.3.2-1: Void

### B.3.3 Void

Table B.3.3-1: Void

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## B.4 Common UE RF requirements

### B.4.1 Common UE RF requirements for a band independent of release

The requirements and test cases listed in Table B.4.1-1 are specified in [9].

**Table B.4.1-1: Common UE RF requirements for a band independent of release**

Section / Clause	Description
5.5	Operating bands
5.6	Channel bandwidth
5.7	Channel arrangement
6.2	Transmit power
6.3	Output power dynamics
6.5	Transmit signal quality
6.6	Output RF spectrum emissions
6.7	Transmit intermodulation
7.3	Reference sensitivity power level
7.4	Maximum input level
7.5	Adjacent Channel Selectivity (ACS)
7.6	Blocking characteristics
7.7	Spurious response
7.8	Intermodulation characteristics
7.9	RX spurious emissions

### B.4.2 Common UE RF requirements for an intra-band contiguous CA configuration

The requirements and test cases listed in Table B.4.2-1 are specified in [9].

**Table B.4.2-1: Common UE RF requirements for an intra-band contiguous CA configuration independent of release**

Section / Clause	Description
5.5A	Operating bands for CA
5.6A	Channel bandwidths per operating band for CA
5.7.1A	Channel spacing for CA
5.7.2A	Channel raster for CA
5.7.4A	TX–RX frequency separation for CA
6.2.2A	UE maximum output power for CA
6.2.3A	UE maximum output power for modulation/channel bandwidth for CA
6.2.4A	UE maximum output power with additional requirements for CA
6.2.5A	Configured transmitted power for CA
6.3.2A	UE Minimum output power for CA
6.3.3A	UE Transmit OFF power for CA
6.3.4A	ON/OFF time mask for CA
6.3.5A	Power control for CA
6.5.1A	Frequency error for CA
6.5.2A	Transmit modulation quality for CA
6.6.1A	Occupied bandwidth for CA
6.6.2.1A	Spectrum emission mask for CA
6.6.2.2A	Additional Spectrum Emission mask for CA
6.6.2.3.2A	UTRA ACLR for CA
6.6.2.3.3A	E-UTRA ACLR for CA
6.6.3.1A	Minimum requirements for CA
6.6.3.2A	Spurious emission band UE co-existence for CA
6.6.3.3A	Additional spurious emissions for CA
6.7.1A	Minimum requirement for CA
7.3.1A	Reference sensitivity for CA
7.4.1A	Maximum input level for CA
7.5.1A	Adjacent Channel Selectivity (ACS) for CA
7.6.1.1A	In-band blocking for CA
7.6.2.1A	Out-of-band blocking for CA
7.6.3.1A	Narrow band blocking for CA
7.7.1A	Spurious response for CA
7.8.1A	Wideband intermodulation for CA
7.10.1A	Receiver response for CA

### B.4.3 Common UE RF requirements for an inter-band CA configuration

The requirements and test cases listed in Table B.4.3-1 are specified in [9].



**Table B.4.3-1: Common UE RF requirements for an inter-band CA configuration independent of release**

<b>Section / Clause</b>	<b>Description</b>
5.5A	Operating bands for CA
5.6A.1	Channel bandwidths per operating band for CA
5.7.2A	Channel raster for CA
6.2.2A	UE maximum output power for CA
6.2.3A	UE maximum output power for modulation/channel bandwidth for CA
6.2.5	Configured transmitted power
7.3.1A	Reference sensitivity for CA
7.4.1A	Maximum input level for CA
7.5.1A	Adjacent Channel Selectivity (ACS) for CA
7.6.1.1A	In-band blocking for CA
7.6.2.1A	Out-of-band blocking for CA
7.6.3.1A	Narrow band blocking for CA
7.7.1A	Spurious response for CA
7.8.1A	Wideband intermodulation for CA

## Annex C (informative): Change history

**Table C.1: Change History**

Date	TSG#	TSG Doc.	CR	Subject	Old	New
11-2009	RP#46	RP-091141		TS36.307 V0.1.0 approved by RAN (Originally in R4-095022)	-	0.1.0
02-2010	R4#54	R4-100419		For release 9 version, replace sections 4 to 6 as 'Void' and add a new void section as section 7.	0.1.0	0.2.0
03-2010	RP#47	RP-100162		TS36.307 v1.0.0 for approval	0.2.0	1.0.0
03-2010	RP#47	RP-100162		Approved by RAN	1.0.0	9.0.0
09-2010	RP-49	RP-100927	2	CR LTE_TDD_2600_US spectrum band definition additions to TS 36.307 V900	9.0.0	9.1.0
				Correction of section numbering	9.1.0	9.1.1
12-2010	RP-50	RP-101356	008	Band 42 and 43 parameters for UMTS/LTE 3500 (TDD) for TS 36.307	9.1.1	9.2.0
12-2010	RP-50	RP-101361	005	Introduction of L-band in TS 36.307	9.1.1	9.2.0
12-2010	RP-50	RP-101344	016	CR creating the rel-10 of the 36.307 specification	9.2.0	9.3.0
12-2010	RP-50	RP-101356	012	Band 42 and 43 parameters for UMTS/LTE 3500 (TDD) for TS 36.307	9.2.0	9.3.0
12-2010	RP-50			Raised to Rel-10 with no technical change	9.3.0	10.0.0
01-2011				Correction to history table	10.0.0	10.0.1
06-2011	RP-52	RP-110804	015	Add Expanded 1900 MHz Band (Band 25) in 36.307	10.0.1	10.1.0
06-2011	RP-52	RP-110812	022	Add 2GHz S-Band (Band 23) in 36.307 (Rel 10)	10.0.1	10.1.0
09-2011	RP-53	RP-111255	025	Add Band 22 for LTE/UMTS 3500 (FDD) to TS 36.307	10.1.0	10.2.0
03-2012	RP-55	RP-120305	028	Introduction of Band 26/XXVI to TS 36.307	10.2.0	10.3.0
2012-06	RP-56	RP-120778	036r1	Correction of references	10.3.0	10.4.0
2012-06	RP-56	RP-120789	042	Introduction of CA_1A-19A to TS 36.307	10.3.0	10.4.0
2012-06	RP-56	RP-120785	044r1	Backdating CA_41C to Rel-10	10.3.0	10.4.0
2012-06	RP-56	RP-120793	048	Introduction of APAC700(FDD) into TS 36.307 Rel.10	10.3.0	10.4.0
2012-06	RP-56	RP-120793	052	Introduction of APAC700(TDD) into TS 36.307 Rel.10	10.3.0	10.4.0
2012-06	RP-56	RP-120791	056	Introduction of e850_LB (Band 27) to TS 36.307	10.3.0	10.4.0
2012-09	RP-57	RP-121335	058	Introduction of CA_1A-21A to TS 36.307	10.4.0	10.5.0
2012-09	RP-57	RP-121337	060r1	TS 36.307 CR for CA_38	10.4.0	10.5.0
2012-09	RP-57	RP-121327	061	Introduction of CA_B7_B20 in 36.307	10.4.0	10.5.0
2012-09	RP-57	RP-121334	062r1	Add requirements for inter-band CA of B_1-18 in TS36.307	10.4.0	10.5.0
2012-09	RP-57	RP-121329	063	Introduction of CA band combination Band3 + Band5 to TS 36.307	10.4.0	10.5.0
2012-09	RP-57	RP-121338	064r1	36.307 CR for LTE_CA_B7	10.4.0	10.5.0
2012-09	RP-57	RP-121331	065	Introduction of CA_3A-20A to TS 36.307	10.4.0	10.5.0
2012-09	RP-57	RP-121333	066	Introduction of CA_8_20 RF requirements into TS36.307	10.4.0	10.5.0
2012-09	RP-57	RP-121295	069r1	Relation between EARFCN for overlapping bands with multiple FBI indication	10.4.0	10.5.0
2012-09	RP-57	RP-121324	071	Introduction of CA_B3_B7 in 36.307	10.4.0	10.5.0
2012-12	RP-58	RP-121884	080	Introduction of CA_3A-8A to TS 36.307	10.5.0	10.6.0
2012-12	RP-58	RP-121890	085	Introduction of CA_4A-5A into 36.307	10.5.0	10.6.0
2012-12	RP-58	RP-121889	087	Introduction of CA band combination Band4 + Band13 to TS 36.307 (Rel-10)	10.5.0	10.6.0
2012-12	RP-58	RP-121894	089	Introduction of CA_B5_B12 in 36.307	10.5.0	10.6.0
2012-12	RP-58	RP-121896	090	Introduction of Band 5 + Band 17 inter-band CA configuration into 36.307	10.5.0	10.6.0
2012-12	RP-58	RP-121887	094	Introduction of CA_4-12 into TS 36.307 (Rel-10)	10.5.0	10.6.0
2012-12	RP-58	RP-121882	096	[Rel-10] Introduction of inter-band CA_11-18 into TS36.307	10.5.0	10.6.0
2012-12	RP-58	RP-121861	098	Release-independent implementation of carrier aggregation configuration CA_4-7	10.5.0	10.6.0
2012-12	RP-58	RP-121901	100	Introduction of Band 29	10.5.0	10.6.0
2012-12	RP-58	RP-121719	0103	Introduction of CA band combination Band2 + Band17 to TS 36.307 (Rel-10)	10.5.0	10.6.0
2012-12	RP-58	RP-121721	0105	Introduction of CA band combination Band4 + Band17 to	10.5.0	10.6.0

				TS 36.307 (Rel-10)		
2013-06	RP-60	RP-130771	106r1	Introduction of CA 1+8 into TS36.307(Rel-10)	10.6.0	10.7.0
2013-06	RP-60	RP-130782	109r1	Introduction of LTE Advanced inter-band Carrier Aggregation of Band 3 and Band 28 to TS 36.307 Rel-10	10.6.0	10.7.0
2013-06	RP-60	RP-130785	112	Introduction of LTE Advanced inter-band Carrier Aggregation of Band 23 and Band 29 to TS 36.307 (Rel-10)	10.6.0	10.7.0
2013-06	RP-60	RP-130779	115	Introduction of LTE Advanced inter-band Carrier Aggregation of Band 3 and Band 26 to TS 36.307 (Rel-10)	10.6.0	10.7.0
2013-06	RP-60	RP-130777	118	Introduction of CA_3A-19A to TS 36.307	10.6.0	10.7.0
2013-06	RP-60	RP-130783	121	Introduction of CA_19A-21A to TS 36.307	10.6.0	10.7.0
2013-06	RP-60	RP-130775	129	Introduction of CA_2A-13A to TS 36.307	10.6.0	10.7.0
2013-06	RP-60	RP-130791	134r1	Introduction of Band 30	10.6.0	10.7.0
2013-06	RP-60	RP-130790	141	Introduction of LTE 450 into TS 36.307 R10	10.6.0	10.7.0
2013-06	RP-60	RP-130765	145	Corrections to release independent specifications	10.6.0	10.7.0
09-2013	RP-61	RP-131300	151	36.307 CR for LTE_CA_C_B3 (Rel-10)	10.7.0	10.8.0
09-2013	RP-61	RP-131303	154r1	Band 31 release independence for UE demodulation performance	10.7.0	10.8.0
09-2013	RP-61	RP-131285	156	[Rel-10] Modify requirements for CA_1A-18A in TS36.307	10.7.0	10.8.0
09-2013	RP-61	RP-131296	157	[Rel-10] Add requirements for CA_1A-26A into TS36.307	10.7.0	10.8.0
09-2013	RP-61	RP-131297	161	Introduction of CA_2A-4A into 36.307 REL-10	10.7.0	10.8.0
09-2013	RP-61	RP-131298	165	Introduction of inter-band CA Band 2+5	10.7.0	10.8.0
12-2013	RP-62	RP-131946	176	Introduction of CA band combination Band2 + Band12 to TS 36.307	10.8.0	10.9.0
12-2013	RP-62	RP-131954	179	Introduction of CA band combination Band12 + Band25 to TS 36.307	10.8.0	10.9.0
12-2013	RP-62	RP-131927	188r1	Correction to release independent specification	10.8.0	10.9.0
12-2013	RP-62	RP-131957	190	Introduction of CA_23B to TS 36.307	10.8.0	10.9.0
12-2013	RP-62	RP-131950	198	Introduction of CA band combination Band5 + Band25 to TS 36.307	10.8.0	10.9.0
12-2013	RP-62	RP-131948	202r1	Introduction of CA band combination B5 + B7 to TS 36.307	10.8.0	10.9.0
12-2013	RP-62	RP-131952	205	Introduction of CA band combination B7 + B28 to TS 36.307	10.8.0	10.9.0
12-2013	RP-62	RP-131925	214r1	UE performance requirements in release independent specification for CA	10.8.0	10.9.0
12-2013	RP-62	RP-131924	222	Introducing 'General' clause with note referring to note in clause 4.4 in TS36.101, editorial corrections and modifications to Forward and Scope clauses	10.8.0	10.9.0
12-2013	RP-62	RP-131959	224	Introduction of LTE_CA_C_B27 to 36.307 (Rel-10)	10.8.0	10.9.0
03-2014	RP-63	RP-140386	225r1	Introduction of CA band combination Band 3 and Band 27 to TS 36.307	10.9.0	10.10.0
03-2014	RP-63	RP-140368	230r1	CR on UE performance requirements in release independent specification	10.9.0	10.10.0
03-2014	RP-63	RP-140368	243r1	Correction to release independent specification	10.9.0	10.10.0
03-2014	RP-63	RP-140371	233	Release independence of Band 14 HPUE	10.9.0	10.10.0
03-2014	RP-63	RP-140187	246	Addition of bandwidth combination set for CA_2A-29A and CA_4A-29A	10.9.0	10.10.0
03-2014	RP-63	RP-140387	195r1	Introduction of CA_39A-41A to TS 36.307	10.9.0	10.10.0
03-2014	RP-63	RP-140388	208r2	Introduction of CA_39C to TS 36.307	10.9.0	10.10.0
06-2014	RP-64	RP-140911	298	Correction of Common RRM requirements for CA in release independent specification (Rel-10)	10.10.0	10.11.0
06-2014	RP-64	RP-140911	257	Introduction of CA band combination Band 1 and Band 5 to TS 36.307	10.10.0	10.11.0
06-2014	RP-64	RP-140911	270	CR on UE performance requirements in release independent specification	10.10.0	10.11.0
06-2014	RP-64	RP-140926	278	Introduction of Band 20+32 CA	10.10.0	10.11.0
06-2014	RP-64	RP-140931	263	Introduction of CA 1+11 to 36.307 (Rel-10)	10.10.0	10.11.0
06-2014	RP-64	RP-140932	344	Additional bandwidth combination set for LTE Advanced inter-band Carrier Aggregation of Band 3 and Band 20, independent of LTE Release	10.10.0	10.11.0
06-2014	RP-64	RP-140933	273	Introduction of CA band combination Band 4 and Band 27 to TS 36.307	10.10.0	10.11.0
06-2014	RP-64	RP-140935	276	Addition of bandwidth combination sets for CA_3A-5A, CA_4A-5A, and CA_4A-12A into 36.307	10.10.0	10.11.0
06-2014	RP-64	RP-140942	338	Introduction of CA band combination Band 1 and Band 20 to TS	10.10.0	10.11.0

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06-2014	RP-64	RP-140942	251	Introduction of CA band combination Band 1 and Band 20 to TS 36.307	10.10.0	10.11.0
06-2014	RP-64	RP-140943	345	Introduction of CA band combination CA_41D into TS 36.307 (Rel-10)	10.10.0	10.11.0
06-2014	RP-64	RP-140946	343	Introduction of CA_42C to TS 36.307	10.10.0	10.11.0
06-2014	RP-64	RP-140952	0304	Introduction of a new CA_7C bandwidth combination set into 36.307 (Rel-10)	10.10.0	10.11.0
09-2014	RP-65	RP-141112	0390r1	[Rel-10] Introduction of inter-band CA_18-28 into TS36.307	10.11.0	10.12.0
09-2014	RP-65	RP-141198	0364r1	Introduction of CA_B1_B3_B19 into TS 36.307 (Rel-10)	10.11.0	10.12.0
09-2014	RP-65	RP-141203	0361r1	Introduction of CA_B1_B3 into TS 36.307 (Rel-10)	10.11.0	10.12.0
09-2014	RP-65	RP-141329	0427r1	Introduction of CA_1A-7A into 36.307 (REI-10)	10.11.0	10.12.0
09-2014	RP-65	RP-141338	0374r2	Introduction of CA_B1_B5_B7 into TS 36.307 (Rel-10)	10.11.0	10.12.0
09-2014	RP-65	RP-141465	0430	Introduction of 3 DL CA for Band 1+7+20	10.11.0	10.12.0
09-2014	RP-65	RP-141527	413	CR for 36.307 on CA UE performance requirement in Rel-10	10.11.0	10.12.0
09-2014	RP-65	RP-141541	411	CR on UE performance requirement for Band 31 for 36.307 Rel-10	10.11.0	10.12.0
09-2014	RP-65	RP-141551	358	Introduction of CA 8+11 to 36.307 (Rel-10)	10.11.0	10.12.0
09-2014	RP-65	RP-141552	377	Introduction of CA_41A-42A to TS 36.307	10.11.0	10.12.0
09-2014	RP-65	RP-141554	416r1	Introduction of requirements for 3DL inter-band carrier aggregation (FDD) and 2DL fallback	10.11.0	10.12.0
09-2014	RP-65	RP-141554	419r1	Introduction of requirements for 3DL inter-band carrier aggregation including Band 30 and 2DL fallback	10.11.0	10.12.0
09-2014	RP-65	RP-141555	382r1	Introduction of 3 Band Carrier Aggregation of Band 1,Band 3 and Band 5 to TS 36.307(Rel.10)	10.11.0	10.12.0
09-2014	RP-65	RP-141556	355r1	Introduction of 3 Band Carrier Aggregation (3DL/1UL) of Band 1, Band 3 and Band 8 to TS 36.307	10.11.0	10.12.0
09-2014	RP-65	RP-141558	400	Introduction of CA band combination Band 1, Band 3 and Band 20 to TS 36.307	10.11.0	10.12.0
09-2014	RP-65	RP-141560	350	Introduction of new CA_40C bandwidth combination set into 36.307	10.11.0	10.12.0
12-2014	RP-66	RP-142142	438	UE RF requirements in the release independent spec	10.12.0	10.13.0
12-2014	RP-66	RP-142166	441	Inclusion of 40D in 36.307	10.12.0	10.13.0
12-2014	RP-66	RP-142182	446	[Rel-10] Introduction of inter-band CA_1-28 into TS36.307	10.12.0	10.13.0
12-2014	RP-66	RP-142189	453	CR for TR 36.307: LTE_CA_B5_B13	10.12.0	10.13.0
12-2014	RP-66	RP-142190	456r2	Introduction of additional band combinations for 3DL inter-band CA	10.12.0	10.13.0
03-2015	RP-67	RP-150392	466	CR for 36.307 on CA UE performance requirement in Rel-10	10.13.0	10.14.0
07-2015	RP-68	RP-151024	473r3	Introduction of CA_42D to TS 36.307(Rel-10)	10.14.0	10.15.0
07-2015	RP-68	RP-150958	480	Removal of CA_2A-2A-13A, CA_4A-4A-13A from rel-10 36.307	10.14.0	10.15.0
07-2015	RP-68	RP-150968	496r2	Release independence CR for 2DL inter-band CA Rel-10	10.14.0	10.15.0
07-2015	RP-68	RP-150972	500r1	Release independence CR for 3DL inter-band CA Rel-10	10.14.0	10.15.0
09-2015	RP-69	RP-151501	0517	Introduction of the finished 4DL inter-band CAs fall back mode to TS 36.307 This CR was not implemented as the cover page said it is for 36.101	10.15.0	10.16.0
09-2015	RP-69	RP-151498	531r1	Rel-13 2DL combinations	10.15.0	10.16.0
09-2015	RP-69	RP-151499	535	Rel-13 3DL combinations	10.15.0	10.16.0
09-2015	RP-69	RP-151487	0542	Correction of TS 36.307 for release independent	10.15.0	10.16.0
12-2015	RP-70	RP-152157	0558r1	Introducing B20 + B67 CA into TS 36.307	10.16.0	10.17.0
12-2015	RP-70	RP-152168	0565	Introduction of intra-band CA_8B to TS 36.307	10.16.0	10.17.0
12-2015	RP-70	RP-152171	0577	Introduction of Band 65	10.16.0	10.17.0
12-2015	RP-70	RP-152162	0601	Introduction of the finished 4DL inter-band CAs fall back mode to TS 36.307	10.16.0	10.17.0
12-2015	RP-70	RP-152173	0609	Introduction of 1447-1467MHz Band into 36.307	10.16.0	10.17.0
12-2015	RP-70	RP-152161	0617	Rel-13 3DL combinations	10.16.0	10.17.0
12-2015	RP-70	RP-152172	0625	Introduction of Band 66	10.16.0	10.17.0
12-2015	RP-70	RP-152167	0635	Introduction of intra-band CA_5B to TS 36.307	10.16.0	10.17.0

## History

<b>Document history</b>		
V10.0.1	January 2011	Publication
V10.1.0	June 2011	Publication
V10.2.0	November 2011	Publication
V10.3.0	April 2012	Publication
V10.4.0	July 2012	Publication
V10.5.0	November 2012	Publication
V10.6.0	February 2013	Publication
V10.7.0	July 2013	Publication
V10.8.0	October 2013	Publication
V10.9.0	January 2014	Publication
V10.10.0	April 2014	Publication
V10.11.0	July 2014	Publication
V10.12.0	October 2014	Publication
V10.13.0	February 2015	Publication
V10.14.0	April 2015	Publication
V10.15.0	July 2015	Publication
V10.16.0	October 2015	Publication
V10.17.0	January 2016	Publication