**3GPP TSG-RAN WG4 Meeting #116 R4-25xxxxx**

**Bengaluru, IN, August 25 – 29, 2025**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.101-1** | **CR** | **2898** | **rev** | **1** | **Current version:** | **19.2.0** |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | (NR\_LBCA\_Sw-Core) Introducing low NR band aggregation via switching to TS38.101-1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Apple, Telus | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_LBCA\_Sw-Core | | | | |  | ***Date:*** | | | 2025-08-25 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-19 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19) Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The applicable low band CA configuration for the example band combinations, the time mask requirements, and MSD applicability are defined in this CR to introduce the feature to the RF specification. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | * Change 1: clarify the applicability of simultaneous Rx/Tx requirements to band combinations which are supported via switching in Clause 5.2A.2 (CA\_n5A-n29A, CA\_n12A-n29A, CA\_n14A-n29A, CA\_n28A-n67A, CA\_n29A-n71A) * Change 2: introduce the indication of support via switching for the band combinations which are supported via switching in Clause 5.5A.3.1 (CA\_n5A-n29A, CA\_n12A-n29A, CA\_n14A-n29A, CA\_n28A-n67A, CA\_n29A-n71A), including BCS for newly added band combinations which are supported via switching only (CA\_n12A-n29A, CA\_n14A-n29A, CA\_n28A-n67A) * Change 3: define the applicability of ΔTIB,c requirements to band combinations which are supported via switching (CA\_n5A-n29A, CA\_n29A-n71A) * Change 4: define the applicability of the ON/OFF time mask for carrier aggregation via switching in Clause 6.3A.3.3.1 * Change 5: define the ON/OFF time mask for the UL transmissions in the new Clause 6.3A.3.3.7. * Change 6: clarify the applicability of ΔRIB,c requirements to band combinations which are supported via switching (CA\_n28-n71) * Change 7: clarify the applicability of reference sensitivity exceptions due to cross band isolation to band combinations which are supported via switching (CA\_n29-n71) | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | RF requirements for the feature low NR band carrier aggregation via switching will not be specified. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.2A.2, 5.2A.2.1, 5.5A.3.0, 5.5A.3.1, 6.2A.4.2.3, 6.3A.3.3.1, 6.3A.3.3.7(new), 7.3A.3.2.1, 7.3A.6 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | |  | | |
| ***affected:*** | | **X** |  | Test specifications | | | | TS38.521-1 | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | |  | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | Refer to TR38.768 for the technical background | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

<< begin change 1 >>

### 5.2A.2 Inter-band CA

NR inter-band carrier aggregation is designed to operate in the operating bands defined in Table 5.2A.2.1-1, Table 5.2A.2.2-1, Table 5.2A.2.3-1, Table 5.2A.2.4-1 and Table 5.2A.2.5-1, where all operating bands are within FR1.

If the mandatory simultaneous Rx/Tx capability applies for a lower order band combination, when the applicable lower order band combination is a band pair in a higher order band combination, the mandatory simultaneous Rx/Tx capability also applies for the band pair in the higher order band combination.

Unless stated otherwise, simultaneous Rx/Tx capability is mandatory for FR1+FR1 FDD-TDD and TDD-SDL CA combinations. Simultaneous Rx/Tx capability is mandatory without signaling for FR1+FR1 FDD-FDD and FDD-SDL CA combinations. For low NR band inter-band configurations supported via switching [*supportedLowBandSwitching-r19*], the simultaneous Rx/Tx capability does not apply.

Table 5.2A.2-1: Void

Table 5.2A.2-2: Void

Table 5.2A.2-3: Void

#### 5.2A.2.1 Inter-band CA (two bands)

Table 5.2A.2.1-1: Inter-band CA operating bands involving FR1 (two bands)

| NR CA Band | NR Band  (Table 5.2-1) | DL interruption allowed (Note 8) |
| --- | --- | --- |
| CA\_n1-n3 | n1, n3 |  |
| CA\_n1-n5 | n1, n5 |  |
| CA\_n1-n7 | n1, n7 |  |
| CA\_n1-n8 | n1, n8 |  |
| CA\_n1-n18 | n1, n18 |  |
| CA\_n1-n20 | n1, n20 |  |
| CA\_n1-n26 | n1, n26 |  |
| CA\_n1-n28 | n1, n28 |  |
| CA\_n1-n38 | n1, n38 |  |
| CA\_n1-n40 | n1, n40 |  |
| CA\_n1-n41 | n1, n41 |  |
| CA\_n1-n46 | n1, n46 |  |
| CA\_n1-n67 | n1, n67 |  |
| CA\_n1-n71 | n1, n71 |  |
| CA\_n1-n74 | n1, n74 |  |
| CA\_n1-n75 | n1, n75 |  |
| CA\_n1-n77 | n1, n77 | No |
| CA\_n1-n78 | n1, n78 | No |
| CA\_n1-n79 | n1, n79 | No |
| CA\_n1-n102 | n1, n102 |  |
| CA\_n1-n105 | n1, n105 |  |
| CA\_n2-n5 | n2, n5 |  |
| CA\_n2-n7 | n2, n7 |  |
| CA\_n2-n12 | n2, n12 |  |
| CA\_n2-n14 | n2, n14 |  |
| CA\_n2-n29 | n2, n29 |  |
| CA\_n2-n30 | n2, n30 |  |
| CA\_n2-n41 | n2, n41 |  |
| CA\_n2-n48 | n2, n48 |  |
| CA\_n2-n66 | n2, n66 |  |
| CA\_n2-n71 | n2, n71 |  |
| CA\_n2-n77 | n2, n77 |  |
| CA\_n2-n78 | n2, n78 |  |
| CA\_n3-n5 | n3, n5 |  |
| CA\_n3-n7 | n3, n7 |  |
| CA\_n3-n8 | n3, n8 |  |
| CA\_n3-n18 | n3, n18 |  |
| CA\_n3-n20 | n3, n20 |  |
| CA\_n3-n26 | n3, n26 |  |
| CA\_n3-n28 | n3, n28 |  |
| CA\_n3-n34 | n3, n34 |  |
| CA\_n3-n38 | n3, n38 |  |
| CA\_n3-n39 | n3, n39 |  |
| CA\_n3-n40 | n3, n40 | No |
| CA\_n3-n41 | n3, n41 | No |
| CA\_n3-n67 | n3, n67 |  |
| CA\_n3-n74 | n3, n74 |  |
| CA\_n3-n75 | n3, n75 |  |
| CA\_n3-n77 | n3, n77 |  |
| CA\_n3-n78 | n3, n78 | No |
| CA\_n3-n79 | n3, n79 | No |
| CA\_n3-n34 | n3, n34 | No |
| CA\_n3-n102 | n3, n102 |  |
| CA\_n3-n104 | n3, n104 |  |
| CA\_n3-n105 | n3, n105 |  |
| CA\_n5-n7 | n5, n7 |  |
| CA\_n5-n8 | n5, n8 |  |
| CA\_n5-n12 | n5, n12 |  |
| CA\_n5-n13 | n5, n13 |  |
| CA\_n5-n14 | n5, n14 |  |
| CA\_n5-n25 | n5, n25 |  |
| CA\_n5-n28 | n5, n28 |  |
| CA\_n5-n2921 | n5, n29 |  |
| CA\_n5-n30 | n5, n30 |  |
| CA\_n5-n40 | n5, n40 |  |
| CA\_n5-n41 | n5, n41 |  |
| CA\_n5-n48 | n5, n48 |  |
| CA\_n5-n66 | n5, n66 |  |
| CA\_n5-n71 | n5, n71 |  |
| CA\_n5-n77 | n5, n77 |  |
| CA\_n5-n78 | n5, n78 | No |
| CA\_n5-n79 | n5, n79 | No |
| CA\_n5-n105 | n5, n105 |  |
| CA\_n7-n8 | n7, n8 |  |
| CA\_n7-n12 | n7, n12 |  |
| CA\_n7-n20 | n7, n20 |  |
| CA\_n7-n25 | n7, n25 |  |
| CA\_n7-n26 | n7, n26 |  |
| CA\_n7-n28 | n7, n28 |  |
| CA\_n7-n29 | n7, n29 |  |
| CA\_n7-n40 | n7, n40 |  |
| CA\_n7-n466 | n7, n46 |  |
| CA\_n7-n66 | n7, n66 |  |
| CA\_n7-n67 | n7, n67 |  |
| CA\_n7-n71 | n7, n71 |  |
| CA\_n7-n75 | n7, n75 |  |
| CA\_n7-n77 | n7, n77 |  |
| CA\_n7-n78 | n7, n78 |  |
| CA\_n7-n79 | n7, n79 |  |
| CA\_n7-n102 | n7, n102 |  |
| CA\_n7-n105 | n7, n105 |  |
| CA\_n8-n20 | n8, n20 |  |
| CA\_n8-n28 | n8, n28 |  |
| CA\_n8-n34 | n8, n34 |  |
| CA\_n8-n38 | n8, n38 |  |
| CA\_n8-n39 | n8, n39 |  |
| CA\_n8-n40 | n8, n40 |  |
| CA\_n8-n41 | n8, n41 | No |
| CA\_n8-n751 | n8, n75 |  |
| CA\_n8-n77 | n8, n77 |  |
| CA\_n8-n78 | n8, n78 | No |
| CA\_n8-n79 | n8, n79 | No |
| CA\_n8-n104 | n8, n104 |  |
| CA\_n12-n25 | n12, n25 |  |
| CA\_n12-n2921 | n12, n29 |  |
| CA\_n12-n30 | n12, n30 |  |
| CA\_n12-n41 | n12, n41 |  |
| CA\_n12-n48 | n12, n48 |  |
| CA\_n12-n66 | n12, n66 |  |
| CA\_n12-n71 | n12, n71 |  |
| CA\_n12-n77 | n12, n77 |  |
| CA\_n12-n78 | n12, n78 |  |
| CA\_n13-n25 | n13, n25 |  |
| CA\_n13-n66 | n13, n66 |  |
| CA\_n13-n77 | n13, n77 |  |
| CA\_n14-n2921 | n14, n29 |  |
| CA\_n14-n30 | n14, n30 |  |
| CA\_n14-n66 | n14, n66 |  |
| CA\_n14-n77 | n14, n77 |  |
| CA\_n18-n28 | n18, n28 |  |
| CA\_n18-n40 | n18, n40 |  |
| CA\_n18-n41 | n18, n41 |  |
| CA\_n18-n74 | n18, n74 |  |
| CA\_n18-n7710 | n18, n77 |  |
| CA\_n18-n7811 | n18, n78 |  |
| CA\_n20-n282 | n20, n28 |  |
| CA\_n20-n40 | n20, n40 |  |
| CA\_n20-n41 | n20, n41 |  |
| CA\_n20-n67 | n20, n67 |  |
| CA\_n20-n71 | n20, n71 |  |
| CA\_n20-n75 | n20, n75 |  |
| CA\_n20-n77 | n20, n77 |  |
| CA\_n20-n78 | n20, n78 |  |
| CA\_n24-n41 | n24, n41 |  |
| CA\_n24-n48 | n24, n48 |  |
| CA\_n24-n77 | n24, n77 |  |
| CA\_n25-n29 | n25, n29 |  |
| CA\_n25-n38 | n25, n38 |  |
| CA\_n25-n41 | n25, n41 |  |
| CA\_n25-n466 | n25, n46 |  |
| CA\_n25-n48 | n25, n48 |  |
| CA\_n25-n66 | n25, n66 |  |
| CA\_n25-n71 | n25, n71 |  |
| CA\_n25-n77 | n25, n77 |  |
| CA\_n25-n78 | n25, n78 |  |
| CA\_n25-n85 | n25, n85 |  |
| CA\_n26-n28 | n26, n28 |  |
| CA\_n26-n29 | n26, n29 |  |
| CA\_n26-n48 | n26, n48 |  |
| CA\_n26-n66 | n26, n66 |  |
| CA\_n26-n70 | n26, n70 |  |
| CA\_n26-n71 | n26, n71 |  |
| CA\_n26-n77 | n26, n77 |  |
| CA\_n26-n78 | n26, n78 |  |
| CA\_n28-n6721 | n28, n67 |  |
| CA\_n28-n34 | n28, n34 |  |
| CA\_n28-n38 | n28, n38 |  |
| CA\_n28-n39 | n28, n39 |  |
| CA\_n28-n40 | n28, n40 |  |
| CA\_n28-n41 | n28, n41 |  |
| CA\_n28-n466 | n28, n46 |  |
| CA\_n28-n50 | n28, n50 |  |
| CA\_n28-n7112 | n28, n71 |  |
| CA\_n28-n74 | n28, n74 |  |
| CA\_n28-n752 | n28, n75 |  |
| CA\_n28-n77 | n28, n77 | No |
| CA\_n28-n78 | n28, n78 | No |
| CA\_n28-n79 | n28, n79 |  |
| CA\_n28-n94 | n28, n94 |  |
| CA\_n28-n102 | n28, n102 |  |
| CA\_n28-n105 | n28, n105 |  |
| CA\_n29-n30 | n29, n30 |  |
| CA\_n29-n48 | n29, n48 |  |
| CA\_n29-n66 | n29, n66 |  |
| CA\_n29-n70 | n29, n70 |  |
| CA\_n29-n7121 | n29, n71 |  |
| CA\_n29-n77 | n29, n77 |  |
| CA\_n30-n66 | n30, n66 |  |
| CA\_n30-n77 | n30, n77 |  |
| CA\_n34-n399 | n34, n39 |  |
| CA\_n34-n40 | n34, n40 |  |
| CA\_n34-n41 | n34, n41 |  |
| CA\_n34-n791 | n34, n79 |  |
| CA\_n38-n409 | n38, n40 |  |
| CA\_n38-n66 | n38, n66 |  |
| CA\_n38-n71 | n38, n71 |  |
| CA\_n38-n781 | n38, n78 |  |
| CA\_n38-n791 | n38, n79 |  |
| CA\_n39-n40 | n39, n40 |  |
| CA\_n39-n41 | n39, n41 | No |
| CA\_n39-n791 | n39, n79 | No |
| CA\_n40-n41 | n40, n41 |  |
| CA\_n40-n771 | n40, n77 |  |
| CA\_n40-n781 | n40, n78 |  |
| CA\_n40-n791,4 | n40, n79 | No |
| CA\_n40-n105 | n40, n105 |  |
| CA\_n41-n481 | n41, n48 |  |
| CA\_n41-n501 | n41, n50 |  |
| CA\_n41-n66 | n41, n66 |  |
| CA\_n41-n70 | n41, n70 |  |
| CA\_n41-n71 | n41, n71 |  |
| CA\_n41-n74 | n41, n74 |  |
| CA\_n41-n771 | n41, n77 |  |
| CA\_n41-n781 | n41, n78 |  |
| CA\_n41-n791,3 | n41, n79 | No |
| CA\_n41-n85 | n41, n85 |  |
| CA\_n41-n104 | n41, n104 |  |
| CA\_n46-n481,6 | n46, n48 |  |
| CA\_n46-n666 | n46, n66 |  |
| CA\_n46-n771,6 | n46, n77 |  |
| CA\_n46-n781,6 | n46, n78 |  |
| CA\_n46-n969,16,17,18 | n46, n96 |  |
| CA\_n46-n1029,16,18,20 | n46, n102 |  |
| CA\_n48-n539 | n48, n53 |  |
| CA\_n48-n66 | n48, n66 |  |
| CA\_n48-n70 | n48, n70 |  |
| CA\_n48-n71 | n48, n71 |  |
| CA\_n48-n779,14,18 | n48, n77 |  |
| CA\_n48-n961, 6 | n48, n96 |  |
| CA\_n50-n78 | n50, n78 |  |
| CA\_n66-n70 | n66, n70 |  |
| CA\_n66-n71 | n66, n71 |  |
| CA\_n66-n77 | n66, n77 |  |
| CA\_n66-n78 | n66, n78 |  |
| CA\_n66-n85 | n66, n85 |  |
| CA\_n67-n78 | n67, n78 |  |
| CA\_n70-n71 | n70, n71 |  |
| CA\_n70-n77 | n70, n77 |  |
| CA\_n70-n78 | n70, n78 |  |
| CA\_n71-n77 | n71, n77 |  |
| CA\_n71-n78 | n71, n78 |  |
| CA\_n71-n85 | n71, n85 |  |
| CA\_n74-n77 | n74, n77 |  |
| CA\_n74-n78 | n74, n78 |  |
| CA\_n75-n781 | n75, n78 |  |
| CA\_n76-n781 | n76, n78 |  |
| CA\_n77-n789 | n77, n78 |  |
| CA\_n77-n795 | n77, n79 |  |
| CA\_n77-n85 | n77, n85 |  |
| CA\_n77-n102 | n77, n102 |  |
| CA\_n78-n795 | n78, n79 |  |
| CA\_n78-n92 | n78, n92 |  |
| CA\_n78-n94 | n78, n94 |  |
| CA\_n78-n102 | n78, n102 |  |
| CA\_n78-n104 | n78, n104 |  |
| CA\_n78-n105 | n78, n105 |  |
| CA\_n100-n101 | n100, n101 |  |
| NOTE 1: Applicable for UE supporting inter-band carrier aggregation with mandatory simultaneous Rx/Tx capability.  NOTE 2: The frequency range in band n28 is restricted for this band combination to 703-733 MHz for the UL and 758-788 MHz for the DL.  NOTE 3: The frequency range below 2506 MHz for Band n41 is not used in this combination.  NOTE 4: Applicable for frequency range above 4800 MHz for Band n79 in this combination.  NOTE 5: For UEs supporting band n77, the minimum requirements apply only when there is non-simultaneous Rx/Tx operation between n78-n79 or n77-n79 NR carriers. This restriction applies also for these carriers when applicable NR CA configuration is part of a higher order configuration.  NOTE 6: The PCell is allocated in the licensed band in this combination.  NOTE 7: Void.  NOTE 8: Applicable when dynamic Tx switching is conducted. The DL interruption requirement is specified in clause 8.2.2.2.10 of 38.133 [13].  NOTE 9: Only applicable for UE supporting inter-band carrier aggregation without simultaneous Rx/Tx. Same restrictions are applied when applicable NR CA configuration is part of a higher order configurations.  NOTE 10 The frequency range in band n77 is restricted for this band combination to 3520-3560 MHz, 3700-3800 MHz, 4000-4100 MHz.  NOTE 11: The frequency range in band n78 is restricted for this band combination to 3520 -3560 MHz and 3700– 3800 MHz.  NOTE 12: The implementation with 4 antennas is targeted for FWA form factor for this band combination.  NOTE 13: Void  NOTE 14: The band n48 and n77 will synchronize their uplink and downlink configurations and in commonly TDD network coordination  NOTE 15: Void  NOTE 16: The minimum requirements for intra-band non-contiguous CA/DC apply for CA\_n46-n96 or CA\_n46-n102 and related higher order CA/DC configurations.  NOTE 17: The combination is not used alone as fall back mode of other band combinations in which UL in Band 48 is not used.  NOTE 18: The minimum requirements for inter-band CA apply when the maximum power spectral density imbalance between downlink carriers is within 6 dB. The power spectral density imbalance condition also applies for these carriers when applicable CA configuration is a subset of a higher order CA configuration.  NOTE 19: Void  NOTE 20: The combination is not used alone as fall back mode of other band combinations in which UL in Band n78 is not used.  NOTE 21: Concurrent operation between these bands is not applicable to UEs indicating support of low NR band aggregation via switching [*supportedLowBandSwitching-r19*] for this band combination. | | |

<< end change 1 >>

<< begin change 2 >>

### 5.5A.3 Configurations for inter-band CA

Table 5.5A.3-1: Void

Table 5.5A.3-2: Void

Table 5.5A.3-3: Void

#### 5.5A.3.0 General

For the NR inter-band CA configurations in sub-clause 5.5A.3, when the capability *supportedBandPairListNR-r18* is present, three or four bands can be configured in the uplink with simultaneous uplink transmission on up to two bands, and the corresponding inter-band CA requirements with uplink assigned to one or two bands shall apply. For each uplink band pair in the NR inter-band CA configurations, according to the capability *uplinkTxSwitchingOptionForBandPair-r18*,

– if *switchedUL* is supported, uplink transmission on any one band of the band pair in the band combination shall be supported according to the scheduling commands, and the corresponding inter-band CA requirements with uplink assigned to one band on band X or band Y apply;

– if *dualUL* is supported, simultaneous uplink transmission on the two NR UL bands from the band pair for which *dualUL* is declared in the band combination shall be supported according to the scheduling commands, and the corresponding inter-band CA requirements with uplink CA between the two uplink bands apply.

Low NR band inter-band CA configurations in which the UE is allowed to indicate support of the configuration via switching [*supportedLowBandSwitching-r19*] are indicated with the corresponding note in the configuration tables in sub-clause 5.5A.3.1.

<< unchanged content omitted >>

#### 5.5A.3.1 Configurations for inter-band CA (two bands)

<< unchanged content omitted >>

Table 5.5A.3.1-1d: NR CA configurations and bandwidth combinations  
sets defined for inter-band CA (two bands)

| NR CA configuration | Uplink CA configuration or single uplink carrier10 | NR Band | Channel bandwidth (MHz) (NOTE 3) | Bandwidth combination set |
| --- | --- | --- | --- | --- |
| CA\_n5A-n7A | CA\_n5A-n7A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n7 | n7 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n7B | CA\_n5A-n7A  CA\_n7B | n5 | 5, 10, 15, 20 | 0 |
|  |  | n7 | CA\_n7B\_BCS0 |  |
| CA\_n5A-n8A15 | - | n5 | 5, 10 | 0 |
|  |  | n8 | 5, 10 |  |
| CA\_n5A-n12A | CA\_n5A-n12A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n12 | 5, 10, 15 |  |
| CA\_n5B-n12A | CA\_n5A-n12A  CA\_n5B | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n12 | 5, 10, 15 |  |
| CA\_n5A-n13A | CA\_n5A-n13A | n5 | 5, 10, 15, 20 | 4 and 5 |
|  |  | n13 | 5, 10 |  |
| CA\_n5B-n13A | CA\_n5A-n13A | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n13 | 5, 10 |  |
| CA\_n5A-n14A | CA\_n5A-n14A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n14 | 5, 10 |  |
| CA\_n5B-n14A | CA\_n5A-n14A  CA\_n5B | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n14 | 5, 10 |  |
| CA\_n5A-n25A | CA\_n5A-n25A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n25 | n25 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n25(2A) | CA\_n5A-n25A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
| CA\_n5A-n28A | CA\_n5A-n28A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 20, 30 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n28 | 5, 10, 15, 20, 25, 30 |  |
| CA\_n5A-n29A17 | - | n5 | 5, 10, 15, 20 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n29 | n29 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5B-n29A | CA\_n5B | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n29 | 5, 10 |  |
| CA\_n5A-n30A | CA\_n5A-n30A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n30 | 5, 10 |  |
| CA\_n5A-n40A | CA\_n5A-n40A | n5 | 5, 10, 15, 20, 251 | 0 |
|  |  | n40 | 55, 10, 15, 20, 25, 30, 40, 50, 60, 70, 80,90,100 |  |
| CA\_n5A-n41A | CA\_n5A-n41A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n41 | n41 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n48A | CA\_n5A-n48A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | 5, 10, 15, 20, 40, 506, 606, 806, 906, 1006 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 506, 606,706, 806, 906, 1006 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n48 | n48 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n48(2A) | CA\_n5A-n48A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48(2A)\_BCS1 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n48 | CA\_n48(2A)\_BCS 4 and 5 |  |
| CA\_n5A-n48B | CA\_n48B  CA\_n5A-n48A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48B\_BCS2 |  |
|  | CA\_n48B  CA\_n5A-n48A  CA\_n5A-n48B | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n48 | CA\_n48B\_BCS 4 and 5 |  |
| CA\_n5A-n48C | CA\_n5A-n48A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
| CA\_n5A-n48(A-B) | CA\_n5A-n48A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48(A-B)\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48(A-B)\_BCS1 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n48 | CA\_n48(A-B)\_BCS 4 and 5 |  |
| CA\_n5B-n48A | CA\_n5B  CA\_n5A-n48A  CA\_n5B-n48A | n5 | CA\_n5B\_BCS 4 and 5 | 4 and 5 |
|  |  | n48 | n48 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5B-n48B | CA\_n5B  CA\_n48B  CA\_n5A-n48A  CA\_n5A-n48B | n5 | CA\_n5B\_BCS 4 and 5 | 4 and 5 |
|  |  | n48 | CA\_n48B\_BCS 4 and 5 |  |
| CA\_n5B-n48(2A) | CA\_n5B  CA\_n5A-n48A | n5 | CA\_n5B\_BCS 4 and 5 | 4 and 5 |
|  |  | n48 | CA\_n48(2A)\_BCS 4 and 5 |  |
| CA\_n5A-n66A | n668  CA\_n5A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n66 | n66 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n66B | CA\_n5A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66B\_BCS0 |  |
| CA\_n5B-n66A | CA\_n5A-n66A  CA\_n5B | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n5 | CA\_n5B\_BCS 4 and 5 | 4 and 5 |
|  |  | n66 | n66 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5B-n66B | CA\_n5A-n66A | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n66 | CA\_n66B\_BCS0 |  |
| CA\_n5A-n66(2A) | CA\_n5A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 |  |
| CA\_n5A-n66(3A) | CA\_n5A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66(3A)\_BCS0 |  |
| CA\_n5B-n66(2A) | CA\_n5A-n66A  CA\_n5B | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n5 | CA\_n5B\_BCS 4 and 5 | 4 and 5 |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 |  |
| CA\_n5A-n71A | - | n5 | 5, 10, 15, 20 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n71 | n71 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n77A | n778,9  CA\_n5A-n77A8,13,14 | n5 | 5, 10, 15, 20 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n77B | CA\_n5A-n77A  n778,9 | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77B\_BCS 4 and 5 |  |
| CA\_n5A-n77(2A) | n778,9  CA\_n5A-n77A8  CA\_n77(2A)8 | n5 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77(2A)\_BCS4 and 5 |  |
| CA\_n5A-n77(3A) | n778,9  CA\_n77(2A)8  CA\_n5A-n77A8 | n5 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77(3A)\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n77 | CA\_n77(3A)\_BCS1 |  |
|  |  | n5 | n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77(3A)\_BCS4 and 5 |  |
| CA\_n5(2A)-n77A | n778,9  CA\_n5A-n77A8 | n5 | CA\_n5(2A)\_BCS0 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n77C | n778,9  CA\_n5A-n77A8  CA\_n77C | n5 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  | CA\_n5A-n77A  CA\_n77C  CA\_n5A-n77C | n5 | See n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77C\_BCS 4 and 5 |  |
| CA\_n5(2A)-n77C | n778,9  CA\_n77C  CA\_n5A-n77A8 | n5 | CA\_n5(2A)\_BCS0 | 0 |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n5 | CA\_n5(2A)\_BCS0 | 1 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n5B-n77A | n778,9  CA\_n5A-n77A8  CA\_n5B | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  | CA\_n5A-n77A  CA\_n5B | n5 | CA\_n5B\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5B-n77C | n778,9  CA\_n5A-n77A8  CA\_n5B  CA\_n77C | n5 | CA\_n5B\_BCS0 | 0 |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n5 | CA\_n5B\_BCS0 | 1 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  | CA\_n5A-n77A  CA\_n5B  CA\_n77C  CA\_n5A-n77C | n5 | CA\_n5B\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | CA\_n77C\_BCS 4 and 5 |  |
| CA\_n5A-n78A | n788,9  CA\_n5A-n78A8 | n5 | 5, 10, 15, 20 | 0 |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n5 | See n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | See n78 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n78(2A) | n788,9  CA\_n5A-n78A8  CA\_n78(2A)8 | n5 | 5, 10, 15, 20 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
|  |  | n5 | See n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | CA\_n78(2A)\_BCS4 and 5 |  |
| CA\_n5A-n78C | CA\_n5A-n78A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n78 | CA\_n78C\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n78 | CA\_n78C\_BCS1 |  |
|  | CA\_n78C  CA\_n5A-n78C | n5 | See n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | CA\_n78C\_BCS4 and 5 |  |
| CA\_n5A-n78(A-C) | CA\_n78C  CA\_n5A-n78A | n5 | 5, 10, 15, 20, 25 | 0 |
|  |  | n78 | CA\_n78(A-C)\_BCS1 |  |
| CA\_n5A-n79A | CA\_n5A-n79A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
|  |  | n5 | See n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n79 | See n79 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n5A-n79C | CA\_n5A-n79A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n79 | CA\_n79C\_BCS0 |  |
|  |  | n5 | See n5 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n79 | CA\_n79C\_BCS4 and 5 |  |
| CA\_n5A-n105A | CA\_n5A-n105A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n105 | 5, 10, 15, 20, 25, 30, 35 |  |

<< unchanged content omitted >>

Table 5.5A.3.1-1f: NR CA configurations and bandwidth combinations  
sets defined for inter-band CA (two bands)

| NR CA configuration | Uplink CA configuration or single uplink carrier10 | NR Band | Channel bandwidth (MHz) (NOTE 3) | Bandwidth combination set |
| --- | --- | --- | --- | --- |
| CA\_n12A-n25A | CA\_n12A-n25A | n12 | 5, 10, 15 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n12 | n12 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n25 | n25 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n12A-n29A18 | - | n12 | n12 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
| n29 | n29 channel bandwidths in Table 5.3.5-1 |
| CA\_n12A-n30A | CA\_n12A-n30A | n12 | 5, 10, 15 | 0 |
|  |  | n30 | 5, 10 |  |
| CA\_n12A-n41A | - | n12 | 5, 10, 15 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n12 | n12 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n41 | n41 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n12A-n48A | - | n12 | 5, 10, 15 | 0 |
|  |  | n48 | 10, 15, 20, 30, 40 |  |
| CA\_n12A-n66A | CA\_n12A-n66A | n12 | 5, 10, 15 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n12 | n12 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n66 | n66 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n12A-n66(2A) | CA\_n12A-n66A | n12 | 5, 10, 15 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n12A-n66(3A) | CA\_n12A-n66A | n12 | 5, 10, 15 | 0 |
|  |  | n66 | CA\_n66(3A)\_BCS0 |  |
| CA\_n12A-n71A | - | n12 | 5, 10, 15 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n12A-n77A | n778, 9  CA\_n12A-n77A8 | n12 | 5, 10, 15 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n12 | n12 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n12A-n77B | CA\_n12A-n77A | n12 | n12 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77B\_BCS 4 and 5 |  |
| CA\_n12A-n77C | CA\_n12A-n77A | n12 | n12 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77C\_BCS 4 and 5 |  |
| CA\_n12A-n77(2A) | n778, 9  CA\_n12A-n77A8 | n12 | 5, 10, 15 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n12A-n78A | CA\_n12A-n78A | n12 | 5, 10, 15 | 0 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n12A-n78(2A) | CA\_n12A-n78A | n12 | 5, 10, 15 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n13A-n25A | CA\_n13A-n25A | n13 | 5, 10 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n13A-n66A | CA\_n13A-n66A | n13 | 5, 10 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n13 | 5, 10, | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n13A-n66B | CA\_n13A-n66A | n13 | 5, 10 | 0 |
|  |  | n66 | CA\_n66B\_BCS0 |  |
| CA\_n13A-n66(2A) | CA\_n13A-n66A | n13 | 5, 10 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n13A-n77A | n778, 9  CA\_n13A-n77A8 | n13 | 5, 10 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n13A-n77(2A) | n778,9  CA\_n77(2A)8  CA\_n13A-n77A8 | n13 | 5, 10 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n13A-n77C | n778,9  CA\_n77C  CA\_n13A-n77A8 | n13 | 5, 10 | 0 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n14A-n29A18 | - | n14 | 5, 10 | 0 |
| n29 | 5, 10 |
| CA\_n14A-n30A | n148  CA\_n14A-n30A | n14 | 5, 10 | 0 |
|  |  | n30 | 5, 10 |  |
| CA\_n14A-n66A | n148  n668  CA\_n14A-n66A | n14 | 5, 10 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n14 | n14 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n66 | n66 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n14A-n66(2A) | CA\_n14A-n66A | n14 | 5, 10 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n14 | n14 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n66 | CA\_n66(2A)\_BCS 4 and 5 |  |
| CA\_n14A-n66(3A) | CA\_n14A-n66A | n14 | 5, 10 | 0 |
|  |  | n66 | CA\_n66(3A)\_BCS0 |  |
| CA\_n14A-n77A | n148  n778, 9  CA\_n14A-n77A8 | n14 | 5, 10 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n14 | n14 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n14A-n77(2A) | n778, 9  CA\_n14A-n77A8 | n14 | 5, 10 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
|  |  | n14 | n14 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77(2A)\_BCS 4 and 5 |  |
| CA\_n18A-n28A | CA\_n18A-n28A | n18 | 5, 10, 15 | 0 |
|  |  | n28 | 5, 10 |  |
| CA\_n18A-n40A | CA\_n18A-n40A | n18 | 5, 10, 15 | 0 |
|  |  | n40 | 10, 15, 20, 30, 40 |  |
| CA\_n18A-n41A | n418  CA\_n18A-n41A8 | n18 | 5, 10, 15 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
| CA\_n18A-n74A | CA\_n18A-n74A | n18 | 5, 10, 15 | 0 |
|  |  | n74 | 5, 10, 15, 20 |  |
| CA\_n18A-n77A | n778  CA\_n18A-n77A8 | n18 | 5, 10, 15 | 0 |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n18 | See n18 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | See n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n18A-n77(2A) | n778  CA\_n18A-n77A8 | n18 | 5, 10, 15 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
|  |  | n18 | See n18 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77(2A)\_BCS4 and 5 |  |
| CA\_n18A-n77(3A) | CA\_n18A-n77A8 | n18 | 5, 10, 15 | 0 |
|  |  | n77 | CA\_n77(3A)\_BCS1 |  |
| CA\_n18A-n78A | CA\_n18A-n78A | n18 | 5, 10, 15 | 0 |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n18 | See n18 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | See n78 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n18A-n78(2A) | CA\_n18A-n78A | n18 | 5, 10, 15 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
|  |  | n18 | See n18 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | CA\_n78(2A)\_BCS4 and 5 |  |

<< unchanged content omitted >>

Table 5.5A.3.1-1h: NR CA configurations and bandwidth combinations sets defined for inter-band CA (two bands)

| NR CA configuration | Uplink CA configuration or single uplink carrier10 | NR Band | Channel bandwidth (MHz) (NOTE 3) | Bandwidth combination set |
| --- | --- | --- | --- | --- |
| CA\_n26A-n28A | CA\_n26A-n28A16 | n26 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n26 | 5, 10, 15, 20, 25, 30 | 1 |
|  |  | n28 | 5, 10, 15, 20, 25, 30 |  |
| CA\_n26A-n29A | - | n26 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n29 | 5, 10 |  |
| CA\_n26A-n48A | CA\_n26A-n48A | n26 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 |  |
| CA\_n26A-n48(2A) | CA\_n26A-n48A | n26 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
| CA\_n26A-n66A | CA\_n26A-n66A | n26 | 5, 10, 15, 20 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n26A-n66(2A) | CA\_n26A-n66A | n26 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS0 |  |
| CA\_n26A-n66(3A) | - | n26 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66(3A)\_BCS0 |  |
| CA\_n26A-n70A | CA\_n26A-n70A | n26 | 5, 10, 15, 20 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
| CA\_n26A-n71A | - | n26 | 5, 10, 15, 20 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n26A-n77A | CA\_n26A-n77A | n26 | 5, 10, 15, 20 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n26A-n78A | n788,9  CA\_n26A-n78A8,13,14 | n26 | 5, 10, 15, 20 | 0 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n26A-n78C | n788,9  CA\_n26A-n78A8,14  CA\_n78C8 | n26 | 5, 10, 15, 20 | 0 |
|  |  | n78 | CA\_n78C\_BCS0 |  |
| CA\_n26A-n78(A-C) | CA\_n78C  CA\_n26A-n78A | n26 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n78 | CA\_n78(A-C)\_BCS1 |  |
| CA\_n26(2A)-n78A | n788,9  CA\_n26(2A)  CA\_n26A-n78A8,14 | n26 | CA\_n26(2A)\_BCS0 | 0 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n26(2A)-n78C | n788,9  CA\_n26A-n78A8,14  CA\_n26(2A)  CA\_n78C8 | n26 | CA\_n26(2A)\_BCS0 | 0 |
|  |  | n78 | CA\_n78C\_BCS0 |  |
| CA\_n26A-n78(2A) | n788,9  CA\_n26A-n78A8,14  CA\_n78(2A)8 | n26 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS0 |  |
|  | CA\_n78(2A) | n26 | n26 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | CA\_n78(2A)\_BCS4 and 5 |  |
| CA\_n26(2A)-n78(2A) | n788,9  CA\_n26(2A)  CA\_n78(2A)8  CA\_n26A-n78A8,14 | n26 | CA\_n26(2A)\_BCS0 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS0 |  |
| CA\_n26(2A)-n78(A-C) | CA\_n26(2A)  CA\_n26A-n78A  CA\_n78C | n26 | CA\_n26(2A)\_BCS0 | 0 |
|  |  | n78 | CA\_n78(A-C)\_BCS1 |  |
| CA\_n28A-n34A | n348,9  CA\_n28A-n34A8 | n28 | 5, 10, 15, 20, 30 | 0 |
|  |  | n34 | 5, 10, 15 |  |
| CA\_n28A-n38A | - | n28 | 5, 10, 15, 20, 30 | 0 |
|  |  | n38 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n28A-n39A | n398  CA\_n28A-n39A8 | n28 | 5, 10, 15, 20, 30 | 0 |
|  |  | n39 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n28 | See n28 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n39 | See n39 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n28A-n40A | n408,9  CA\_n28A-n40A8 | n28 | 5, 10, 15, 20 | 0 |
|  |  | n40 | 5, 10, 15, 20, 25, 30, 40, 50, 60, 80 |  |
|  |  | n28 | 5, 10, 15, 20, 25, 30 | 1 |
|  |  | n40 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n28 | See n28 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n40 | See n40 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n28A-n40B | - | n28 | 5, 10, 15, 20 | 0 |
|  |  | n40 | CA\_n40B\_BCS0 |  |
|  |  | n28 | See n28 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n40 | CA\_n40B\_BCS4 and 5 |  |
| CA\_n28A-n41A | n418,9  CA\_n28A-n41A8,13 | n28 | 5, 10, 15, 20 | 0 |
|  |  | n41 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n28 | 5, 10, 15, 20, 30 | 1 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n28 | See n28 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n41 | See n41 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n28A-n41B | CA\_n28A-n41A | n28 | 5, 10 | 0 |
|  |  | n41 | CA\_n41B\_BCS0 |  |
| CA\_n28A-n41C | n418,9  CA\_n41C8  CA\_n28A-n41A8 | n28 | 5, 10, 15, 20, 30 | 0 |
|  |  | n41 | CA\_n41C\_BCS1 |  |
|  | CA\_n41C  CA\_n28A-n41A  CA\_n28A-n41C | n28 | See n28 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n41 | CA\_n41C\_BCS4 and 5 |  |
| CA\_n28A-n46A | CA\_n28A-n46A | n28 | 5, 10, 15, 20 | 0 |
|  |  | n46 | 20, 40, 60, 80 |  |
| CA\_n28A-n46C | CA\_n28A-n46A | n28 | 5, 10, 15, 20 | 0 |
|  |  | n46 | CA\_n46C\_BCS0 |  |
| CA\_n28A-n46D | CA\_n28A-n46A | n28 | 5, 10, 15, 20 | 0 |
|  |  | n46 | CA\_n46D\_BCS0 |  |
| CA\_n28A-n46(2A) | CA\_n28A-n46A | n28 | 5, 10, 15, 20 | 0 |
|  |  | n46 | CA\_n46(2A)\_BCS0 |  |
| CA\_n28A-n50A | CA\_n28A-n50A | n28 | 5, 10, 15, 20 | 0 |
|  |  | n50 | 5, 10, 15, 20, 40, 50, 60, 801 |  |
| CA\_n28A-n67A18 | - | n28 | n28 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
| n67 | n67 channel bandwidths in Table 5.3.5-1 |
| CA\_n28A-n71A | - | n28 | 5, 10, 15, 20, 30 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n28A-n74A | CA\_n28A-n74A | n28 | 5, 10, 15, 20, 30 | 0 |
|  |  | n74 | 5, 10, 15, 20 |  |
| CA\_n28A-n75A | - | n28 | 5, 10, 15, 20 | 0 |
|  |  | n75 | 5, 10, 15, 20 |  |
|  |  | n28 | 5, 10, 15, 20 | 1 |
|  |  | n75 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n28 | 5, 10, 15, 20, 25, 30 | 2 |
|  |  | n75 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
| CA\_n28A-n77A | n778,9  CA\_n28A-n77A8 | n28 | 5, 10, 15, 20 | 0 |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n28 | 5, 10, 15, 20, 25, 30 | 1 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n28 | See n28 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | See n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n28A-n77C | CA\_n28A-n77A | n28 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n28A-n77(2A) | n778,9  CA\_n77(2A)8  CA\_n28A-n77A8 | n28 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
|  |  | n28 | 5, 10, 15, 20, 25, 30 | 1 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
|  |  | n28 | See n28 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77(2A)\_BCS4 and 5 |  |
| CA\_n28A-n77(3A) | n778,9  CA\_n77(2A)8  CA\_n28A-n77A8 | n28 | 5, 10 | 0 |
|  |  | n77 | CA\_n77(3A)\_BCS0 |  |
|  |  | n28 | See n28 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77(3A)\_BCS4 and 5 |  |
| CA\_n28A-n78A | n788,9  CA\_n28A-n78A8,13,14 | n28 | 5, 10, 15, 20 | 0 |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n28 | 5, 10, 15, 20, 30 | 1 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n28 | See n28 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | See n78 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n28A-n78C | n788,9  CA\_n28A-n78A8,14  CA\_n78C8 | n28 | 5, 10, 15, 20 | 0 |
|  |  | n78 | CA\_n78C\_BCS1 |  |
| CA\_n28A-n78(2A) | n788,9  CA\_n78(2A)8  CA\_n28A-n78A8,13, 14 | n28 | 5, 10, 15, 20 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS0 |  |
|  |  | n28 | 5, 10, 15, 20 | 1 |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
|  |  | n28 | See n28 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | CA\_n78(2A)\_BCS4 and 5 |  |
| CA\_n28A-n78(A-C) | CA\_n28A-n78A  CA\_n78C | n28 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n78 | CA\_n78(A-C)\_BCS1 |  |
| CA\_n28A-n79A | n798,9  CA\_n28A-n79A8 | n28 | 5, 10, 15, 20, 30 | 0 |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
|  |  | n28 | See n28 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n79 | See n79 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n28A-n79C | n798,9  CA\_n79C8 | n28 | 5, 10, 15, 20, 30 | 0 |
|  |  | n79 | CA\_n79C\_BCS0 |  |
|  | CA\_n79C  CA\_n28A-n79A  CA\_n28A-n79C | n28 | See n28 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n79 | CA\_n79C\_BCS4 and 5 |  |
| CA\_n28A-n94A | - | n28 | 5, 10, 15, 20 | 0 |
|  |  | n94 | 5, 10, 15, 20 |  |
| CA\_n28A-n102A | CA\_n28A-n102A | n28 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n102 | 20, 40, 60, 80, 100 |  |
| CA\_n28A-n102(2A) | CA\_n28A-n102A | n28 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n102 | CA\_n102(2A)\_BCS0 |  |
| CA\_n28A-n102B | CA\_n28A-n102A  CA\_n28A-n102B | n28 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n102 | CA\_n102B\_BCS0 |  |
| CA\_n28A-n102C | CA\_n28A-n102A  CA\_n28A-n102C | n28 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n102 | CA\_n102C\_BCS0 |  |
| CA\_n28A-n102D | CA\_n28A-n102A | n28 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n102 | CA\_n102D\_BCS0 |  |
| CA\_n28A-n102E | CA\_n28A-n102A | n28 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n102 | CA\_n102E\_BCS0 |  |
| CA\_n28A-n105A | - | n28 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n105 | 5, 10, 15, 20, 25, 30, 35 |  |
| CA\_n29A-n30A | - | n29 | 5, 10 | 0 |
|  |  | n30 | 5, 10 |  |
| CA\_n29A-n48A | - | n29 | 5, 10 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 506, 606, 706, 806, 906, 1006 |  |
| CA\_n29A-n66A | n668 | n29 | 5, 10 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n29 | 5, 10 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n29 | n29 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n66 | n66 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n29A-n66B | n668 | n29 | 5, 10 | 0 |
|  |  | n66 | CA\_n66B\_BCS0 |  |
| CA\_n29A-n66(2A) | n668 | n29 | 5, 10 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS0 |  |
|  |  | n29 | 5, 10 | 1 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n29A-n66(3A) | n668 | n29 | 5, 10 | 0 |
|  |  | n66 | CA\_n66(3A)\_BCS0 |  |
| CA\_n29A-n70A | n708 | n29 | 5, 10 | 0 |
|  |  | n70 | 5, 10, 15, 201,, 251 |  |
| CA\_n29A-n71A17 | n718 | n29 | 5, 10 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n29A-n71(2A) | - | n29 | 5, 10 | 0 |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
| CA\_n29A-n77A | n778, 9 | n29 | 5, 10 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  | - | n29 | n29 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n29A-n77(2A) | n778, 9 | n29 | 5, 10 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
|  | CA\_n77(2A) | n29 | n29 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77(2A)\_BCS4 and 5 |  |
| CA\_n29A-n77(3A) | CA\_n77(2A) | n29 | n29 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77(3A)\_BCS4 and 5 |  |

<< unchanged content omitted >>

The following notes are applied to the above tables:

NOTE 1: This UE channel bandwidth is applicable only to downlink.

NOTE 2: The minimum requirements for intra-band contiguous or non-contiguous CA apply.

NOTE 3: For each channel bandwidth of each component carrier, refer to Table 5.3.5-1 for the applicable SCSs. For a given band, not all UE channel bandwidths support the same SCSs.

NOTE 4: This UE channel bandwidth is optional in this release of the specification.

NOTE 5: For this bandwidth, the minimum requirements are restricted to operation when carrier is configured as an SCell part of DC or CA configuration.

NOTE 6: For this bandwidth, the minimum requirements are restricted to operation when carrier is configured as an downlink SCell part of CA configuration

NOTE 7: Limited to operation at 3450-3550 MHz and 3700–3980 MHz.

NOTE 8: Minimum requirements for Power Class 2 are applicable for this uplink combination with 1Tx antenna connector in each band or single uplink carrier with up to 2Tx antenna connectors in this downlink/uplink combination

NOTE 9: Minimum requirements for Power Class 1.5 are applicable for this single uplink carrier with up to 2Tx antenna connectors in this downlink/uplink combination

NOTE 10: Only single uplink carriers with power class other than PC3 are listed.

NOTE 11: The CA configurations are given in Table 5.5A.1-1 or Table 5.5A.2-1 in this specification

NOTE 12: Void.

NOTE 13: Minimum requirements for Power Class 2 are applicable for this uplink configuration with 1Tx antenna connector in one band and 2Tx antenna connectors in the other band.

NOTE 14 Minimum requirements for Power Class 1.5 are applicable for this uplink configuration with 1Tx antenna connector in one band and 2Tx antenna connectors in the other band.

NOTE 15: Uplink is only in n5 for CA\_n5-n8.

NOTE 16: For UEs only supporting DL CA\_n26-n28, uplink support in band n26 is optional, if the UE supports CA\_n26-n28 UL configuration, it should also support UL in band n26 and n28.

NOTE 17: The UEs is allowed to indicate support of low NR band carrier aggregation via switching [*supportedLowBandSwitching-r19*] for this NR CA configuration

NOTE 18: Applicable only for UEs which indicate support of low NR band carrier aggregation via switching [*supportedLowBandSwitching-r19*] for this NR CA configuration

<< end change 2 >>

<< begin change 3 >>

##### 6.2A.4.2.3 ΔTIB,c for Inter-band CA (two bands)

Table 6.2A.4.2.3-1: ΔTIB,c due to NR CA (two bands)

| Inter-band CA combination | ΔTIB,c for NR bands (dB)9 | |
| --- | --- | --- |
| Component band in order of bands in configuration10 | |
| CA\_n1-n3 | 0.3 | 0.3 |
| CA\_n1-n5 | 0.3 | 0.3 |
| CA\_n1-n7 | 0.5 | 0.6 |
| CA\_n1-n8 | 0.3 | 0.3 |
| CA\_n1-n18 | 0.3 | 0.3 |
| CA\_n1-n20 | 0.3 | 0.3 |
| CA\_n1-n26 | 0.3 | 0.3 |
| CA\_n1-n28 | 0.3 | 0.6 |
| CA\_n1-n38 | 0.5 | 0.5 |
| CA\_n1-n40 | 0.5 | 0.5 |
| CA\_n1-n41 | 0.5 | 0.5 |
| CA\_n1-n67 | 0.3 | N/A |
| CA\_n1-n71 | 0.3 | 0.6 |
| CA\_n1-n74 | 0.3 | 0.3 |
| CA\_n1-n75 | 0.3 | N/A |
| CA\_n1-n77 | 0.6 | 0.8 |
| CA\_n1-n78 | 0.3 | 0.8 |
| CA\_n1-n102 | 0.6 | 0.8 |
| CA\_n1-n105 | 0.3 | 0.6 |
| CA\_n2-n5 | 0.3 | 0.3 |
| CA\_n2-n7 | 0.5 | 0.5 |
| CA\_n2-n12 | 0.3 | 0.3 |
| CA\_n2-n14 | 0.3 | 0.3 |
| CA\_n2-n29 | 0.3 | N/A |
| CA\_n2-n30 | 0.5 | 0.3 |
| CA\_n2-n41 | 0.5 | 0.45/0.96 |
| CA\_n2-n48 | 0.6 | 0.8 |
| CA\_n2-n66 | 0.5 | 0.5 |
| CA\_n2-n71 | 0.3 | 0.6 |
| CA\_n2-n77 | 0.6 | 0.8 |
| CA\_n2-n78 | 0.6 | 0.8 |
| CA\_n3-n7 | 0.5 | 0.5 |
| CA\_n3-n8 | 0.3 | 0.3 |
| CA\_n3-n18 | 0.3 | 0.3 |
| CA\_n3-n20 | 0.3 | 0.3 |
| CA\_n3-n26 | 0.3 | 0.3 |
| CA\_n3-n28 | 0.3 | 0.3 |
| CA\_n3-n34 | 0.5 | 0.5 |
| CA\_n3-n38 | 0.5 | 0.5 |
| CA\_n3-n39 | 0.5 | 0.5 |
| CA\_n3-n40 | 0.5 | 0.5 |
| CA\_n3-n41 | 0.5 | 0.34 / 0.85 |
| CA\_n3-n71 | 0.3 | 0.3 |
| CA\_n3-n74 | 0.8 | 0.9 |
| CA\_n3-n77 | 0.6 | 0.8 |
| CA\_n3-n78 | 0.6 | 0.8 |
| CA\_n3-n79 | 0.3 | 0.8 |
| CA\_n3-n102 | 0.3 | 0.8 |
| CA\_n3-n104 | 0.3 | 0.8 |
| CA\_n3-n105 | 0.3 | 0.6 |
| CA\_n5-n7 | 0.3 | 0.3 |
| CA\_n5-n8 | 0.5 | 0.5 |
| CA\_n5-n12 | 0.8 | 0.4 |
| CA\_n5-n13 | 0.5 | 0.5 |
| CA\_n5-n14 | 0.5 | 0.5 |
| CA\_n5-n25 | 0.3 | 0.3 |
| CA\_n5-n28 | 0.7 | 0.7 |
| CA\_n5-n29 | 0.5~~11~~ | N/A |
| CA\_n5-n30 | 0.3 | 0.3 |
| CA\_n5-n40 | 0.3 | 0.3 |
| CA\_n5-n41 | 0.6 | 0.3 |
| CA\_n5-n48 | 0.3 | 0.3 |
| CA\_n5-n66 | 0.3 | 0.3 |
| CA\_n5-n71 | 0.5 | 0.5 |
| CA\_n5-n77 | 0.6 | 0.8 |
| CA\_n5-n78 | 0.6 | 0.8 |
| CA\_n5-n105 | 0.5 | 0.5 |
| CA\_n7-n8 | 0.3 | 0.6 |
| CA\_n7-n12 | 0.3 | 0.3 |
| CA\_n7-n20 | 0.3 | 0.3 |
| CA\_n7-n25 | 0.5 | 0.5 |
| CA\_n7-n26 | 0.3 | 0.3 |
| CA\_n7-n28 | 0.3 | 0.3 |
| CA\_n7-n29 | 0.3 | N/A |
| CA\_n7-n40 | 0.5 | 0.6 |
| CA\_n7-n46 | 0.3 | - |
| CA\_n7-n66 | 0.5 | 0.5 |
| CA\_n7-n67 | 0.3 | N/A |
| CA\_n7-n71 | 0.6 | 0.3 |
| CA\_n7-n75 | 0.7 | N/A |
| CA\_n7-n77 | 0.5 | 0.8 |
| CA\_n7-n78 | 0.5 | 0.8 |
| CA\_n7-n79 | 0.5 | 0.8 |
| CA\_n7-n102 | 0.5 | 0.8 |
| CA\_n7-n105 | 0.3 | 0.6 |
| CA\_n8-n20 | 0.4 | 0.4 |
| CA\_n8-n28 | 0.6 | 0.5 |
| CA\_n8-n34 | 0.3 | 0.3 |
| CA\_n8-n38 | 0.6 | 0.3 |
| CA\_n8-n39 | 0.3 | 0.3 |
| CA\_n8-n40 | 0.3 | 0.3 |
| CA\_n8-n41 | 0.6 | 0.3 |
| CA\_n8-n75 | 0.3 | N/A |
| CA\_n8-n77 | 0.6 | 0.8 |
| CA\_n8-n78 | 0.6 | 0.8 |
| CA\_n8-n79 | 0.3 | 0.8 |
| CA\_n8-n104 | 0.3 | 0.8 |
| CA\_n12-n25 | 0.3 | 0.3 |
| CA\_n12-n30 | 0.3 | 0.3 |
| CA\_n12-n41 | 0.3 | 0.3 |
| CA\_n12-n48 | 0.3 | 0.3 |
| CA\_n12-n66 | 0.8 | 0.3 |
| CA\_n12-n71 | 1.0 | 1.0 |
| CA\_n12-n77 | 0.5 | 0.8 |
| CA\_n12-n78 | 0.5 | 0.8 |
| CA\_n13-n25 | 0.3 | 0.3 |
| CA\_n13-n66 | 0.3 | 0.3 |
| CA\_n13-n77 | 0.5 | 0.8 |
| CA\_n14-n30 | 0.3 | 0.3 |
| CA\_n14-n66 | 0.3 | 0.3 |
| CA\_n14-n77 | 0.5 | 0.8 |
| CA\_n18-n28 | 0.5 | 0.5 |
| CA\_n18-n40 | 0.3 | 0.3 |
| CA\_n18-n41 | 0.3 | 0.3 |
| CA\_n18-n74 | 0.3 | 0.3 |
| CA\_n18-n77 | 0.3 | 0.8 |
| CA\_n18-n78 | 0.3 | 0.8 |
| CA\_n20-n28 | 0.5 | 0.5 |
| CA\_n20-n40 | 0.3 | 0.3 |
| CA\_n20-n41 | 0.3 | 0.3 |
| CA\_n20-n67 | 0.5 | N/A |
| CA\_n20-n71 | 0.8 | 0.5 |
| CA\_n20-n75 | 0.3 | N/A |
| CA\_n20-n77 | 0.6 | 0.8 |
| CA\_n20-n78 | 0.6 | 0.8 |
| CA\_n24-n41 | 0.3 | 0.46 / 0.97 |
| CA\_n24-n48 | 0.6 | 0.8 |
| CA\_n24-n77 | 0.6 | 0.8 |
| CA\_n25-n29 | 0.3 | N/A |
| CA\_n25-n38 | 0.5 | 0.5 |
| CA\_n25-n41 | 0.5 | 0.46 / 0.97 |
| CA\_n25-n48 | 0.6 | 0.8 |
| CA\_n25-n66 | 0.5 | 0.5 |
| CA\_n25-n71 | 0.3 | 0.6 |
| CA\_n25-n77 | 0.6 | 0.8 |
| CA\_n25-n85 | 0.3 | 0.6 |
| CA\_n26-n28 | 0.7 | 0.7 |
| CA\_n26-n29 | 0.5 | N/A |
| CA\_n26-n48 | 0.3 | 0.8 |
| CA\_n26-n66 | 0.3 | 0.3 |
| CA\_n26-n70 | 0.3 | 0.3 |
| CA\_n26-n71 | 0.5 | 0.5 |
| CA\_n26-n77 | 0.3 | 0.8 |
| CA\_n26-n78 | 0.3 | 0.8 |
| CA\_n28-n34 | 0.3 | 0.3 |
| CA\_n28-n38 | 0.3 | 0.3 |
| CA\_n28-n39 | 0.3 | 0.3 |
| CA\_n28-n40 | 0.3 | 0.3 |
| CA\_n28-n41 | 0.3 | 0.3 |
| CA\_n28-n50 | 0.3 | 0.4 |
| CA\_n28-n71 | 1.1 | 1.1 |
| CA\_n28-n74 | 0.6 | 0.4 |
| CA\_n28-n75 | 0.3 | N/A |
| CA\_n28-n77 | 0.5 | 0.8 |
| CA\_n28-n78 | 0.5 | 0.8 |
| CA\_n28-n79 | 0.5 | 0.8 |
| CA\_n28-n94 | 0.5 | 0.6 |
| CA\_n28-n102 | 0.5 | 0.8 |
| CA\_n28-n105 | 1.0 | 1.0 |
| CA\_n29-n30 | N/A | 0.3 |
| CA\_n29-n48 | N/A | 0.8 |
| CA\_n29-n66 | N/A | 0.3 |
| CA\_n29-n70 | N/A | 0.3 |
| CA\_n29-n71 | N/A | 0.5~~11~~ |
| CA\_n29-n77 | N/A | 0.8 |
| CA\_n34-n79 | 0.3 | 0.8 |
| CA\_n30-n66 | 0.5 | 0.8 |
| CA\_n30-n77 | 0.3 | 0.8 |
| CA\_n34-n41 | 0.3 | 0.3 |
| CA\_n34-n79 | 0.3 | 0.8 |
| CA\_n38-n40 | 0.53 | 0.53 |
| CA\_n38-n66 | 0.5 | 0.5 |
| CA\_n38-n78 | 0.3 | 0.8 |
| CA\_n38-n79 | 0.3 | 0.8 |
| CA\_n39-n41 | 02 / 0.5 | 02 / 0.5 |
| CA\_n39-n79 | 0.3 | 0.8 |
| CA\_n40-n41 | 0.5 | 0.5 |
| CA\_n40-n71 | 0.3 | 0.3 |
| CA\_n40-n77 | N/A | 0.5 |
| CA\_n40-n78 | N/A | 0.5 |
| CA\_n40-n79 | 0.3 | 0.8 |
| CA\_n40-n105 | 0.3 | 0.6 |
| CA\_n41-n48 | 0.3 | 0.8 |
| CA\_n41-n50 | 0.3 | 0.4 |
| CA\_n41-n66 | 0.86 / 1.37 | 0.5 |
| CA\_n41-n70 | 0.5 | 0.5 |
| CA\_n41-n71 | 0.3 | 0.6 |
| CA\_n41-n74 | 0.3 | 0.3 |
| CA\_n41-n771 | 0.3 | 0.8 |
| CA\_n41-n781 | 0.3 | 0.8 |
| CA\_n41-n79 | 0.3 | 0.8 |
| CA\_n41-n85 | 0.3 | 0.6 |
| CA\_n41-n104 | 0.3 | 0.8 |
| CA\_n46-n48 | - | 0.5 |
| CA\_n46-n77 | - | 0.8 |
| CA\_n46-n78 | - | 0.8 |
| CA\_n46-n96 | - | 0.5 |
| CA\_n46-n102 | - | 0.5 |
| CA\_n48-n53 | 0.53 | 0.33 |
| CA\_n48-n66 | 0.8 | 0.6 |
| CA\_n48-n70 | 0.8 | 0.6 |
| CA\_n48-n71 | 0.3 | 0.3 |
| CA\_n48-n96 | 0.5 | 0.5 |
| CA\_n50-n78 | 02 / 0.53 | 02 / 0.53 |
| CA\_n66-n70 | 0.5 | 0.5 |
| CA\_n66-n71 | 0.3 | 0.3 |
| CA\_n66-n77 | 0.6 | 0.8 |
| CA\_n66-n78 | 0.6 | 0.8 |
| CA\_n66-n85 | 0.3 | 0.3 |
| CA\_n67-n78 | N/A | 0.8 |
| CA\_n70-n71 | 0.3 | 0.6 |
| CA\_n70-n77 | 0.6 | 0.8 |
| CA\_n70-n78 | 0.6 | 0.8 |
| CA\_n71-n77 | 0.5 | 0.8 |
| CA\_n71-n78 | 0.5 | 0.8 |
| CA\_n71-n85 | 1 | 1 |
| CA\_n74-n77 | 0.4 | 0.8 |
| CA\_n74-n78 | 0.4 | 0.8 |
| CA\_n75-n78 | - | 0.8 |
| CA\_n76-n78 | - | 0.8 |
| CA\_n77-n79 | 0.5 | 0.5 |
| CA\_n77-n85 | 0.7 | 0.5 |
| CA\_n77-n102 | 1.5 | 1.5 |
| CA\_n78-n79 | 0.5 / 1.58 | 0.5 / 1.58 |
| CA\_n78-n92 | 0.8 | 0.6 |
| CA\_n78-n102 | 1.5 | 1.5 |
| CA\_n78-n104 | 0.9 | 1.0 |
| CA\_n78-n105 | 0.8 | 0.5 |
| CA\_n100-n101 | 0.3 | 0.3 |
| NOTE 1: The requirements only apply when the sub-frame and Tx-Rx timings are synchronized between the component carriers. In the absence of synchronization, the requirements are not within scope of these specifications.  NOTE 2: Only applicable for UE supporting inter-band carrier aggregation with uplink in one NR band and without simultaneous Rx/Tx.  NOTE 3: Applicable for UE supporting inter-band carrier aggregation without simultaneous Rx/Tx.  NOTE 4: The requirement is applied for UE transmitting on the frequency range of 2515-2690 MHz.  NOTE 5: The requirement is applied for UE transmitting on the frequency range of 2496-2515 MHz.  NOTE 6: The requirement is applied for UE transmitting on the frequency range of 2545-2690 MHz.  NOTE 7: The requirement is applied for UE transmitting on the frequency range of 2496-2545 MHz.  NOTE 8: The requirements only apply for UE supporting inter-band carrier aggregation with simultaneous Rx/Tx capability, and NR UL carrier frequencies are confined to 3700 MHz-3800MHz for n78 and 4400 MHz-4500MHz for n79. Simultaneous Rx/Tx capability does not apply for UEs supporting band n78 with a n77 implementation.  NOTE 9: “-” denotes ΔTIB,c = 0.  NOTE 10: The component band order in the configuration should be listed by the order of NR bands, such as for CA\_n1-n3 the band order from left to right is n1 and n3.  NOTE 11: Not applicable to UEs indicating support of low NR band aggregation only via switching [*supportedLowBandSwitching-r19*] for this band combination | | |

<< end change 3 >>

<< begin change 4 >>

#### 6.3A.3.3 Transmit ON/OFF time mask for inter-band CA

##### 6.3A.3.3.1 General

For inter-band carrier aggregation with one uplink carrier assigned to one NR band, the transmit ON/OFF time mask requirements in subclause 6.3.3 apply.

For inter-band carrier aggregation with two contiguous carriers assigned to one NR band, the transmit ON/OFF time mask requirements in subclause 6.3A.3.1 apply for those carriers.

For inter-band carrier aggregation with two uplink non-contiguous carrier assigned to one NR band, the transmit ON/OFF time mask requirements in subclause 6.3A.3.2 apply for those carriers.

For inter-band carrier aggregation with uplink assigned to two NR bands, the general output power ON/OFF time mask specified in clause 6.3.3.1 is applicable for each component carrier during the ON power period and the transient periods. The OFF period as specified in clause 6.3.3.1 shall only be applicable for each component carrier when all the component carriers are OFF.

Time masks for Tx switching due to switching period are defined in clauses 6.3A.3.3.2-6.3A.3.3.5 for both single TAG and dual-TAG scenarios. When a UE is configured with dual-TAG with at least two cells corresponding to two TAGs involved in one switching event, the timing advance difference should be considered in the time masks in sub-clauses 6.3A.3.3.2-6.3A.3.3.5 for two uplink carriers or two uplink bands and in sub-clause 6.3A.3.3.6 for 3-4 uplink bands. The UE may omit uplink transmission on OFDM symbols that partially or fully overlap with the configured switching period for any timing advance difference.

When the location of the switching period by *uplinkTxSwitchingPeriodLocation* is ignored by the UE, the length and location of allowed transient periods for dual TAG are as specified in 6.3A.3.3.2 – 6.3A.3.3.5 and in 6.3A.3.3.6 for a switching band pair with the UE scheduled or configured with uplink transmissions that do not result in

- simultaneous transmission on two antenna ports on one uplink carrier on one band, and any transmission on another uplink carrier on another band

- transmission of any of the carriers for a duration of at least the uplink switching gap indicated by UE capability

for any timing difference between uplink carriers in different bands up to the MTTD specified for UL CA in clause 7.5.4 of [7] in case of dual TAG.

Carriers within the same band belong to the same TAG in all cases.

For low NR band inter-band carrier aggregation via switching [*supportedLowBandSwitching-r19*], the general output power ON/OFF time mask specified in clause 6.3A.3.3.7 is applicable.

<< end change 4 >>

<< begin change 5 >>

##### 6.3A.3.3.7 Time mask for low NR band carrier aggregation via switching

For low NR band inter-band carrier aggregation supported via switching [*supportedLowBandSwitching-r19*], the time mask for UL transmissions in slots configured with switching gaps via RRC is specified in Figure 6.3A.3.3.7-1.



Figure 6.3A.3.3.7-1: ON/OFF time mask for NR UL transmission for DL CA via switching with non-CA in the UL

In the figure above, the switching period is shown for information only and may not necessarily be adjacent to the transient period.

In the case of SDL to FDD transition:

- The switching period is located inside the [switching gap], as configured by [*LBCA-SwitchingGap-Duration-SCelltoPCell*]

- The switching period is not overlapping with the UL transient period and the UL symbols of the FDD carrier.

In the case of FDD to SDL transition:

- The switching period is located inside the [switching gap], as configured by [*LBCA-SwitchingGap-Duration-PCelltoSCell*]

- The switching period is after the UL transient period and not overlapping with the UL symbols of the FDD carrier

<comment: figure needs to have a mark to indicate where the OFF requirement applies>

<< end change 5 >>

<< begin change 6 >>

### 7.3A.3 ΔRIB,c for CA

#### 7.3A.3.1 General

For a UE supporting a CA configuration, the ΔRIB,c applies for both SC and CA operation.

#### 7.3A.3.2 ΔRIB,c for Inter-band CA

For the UE which supports inter-band carrier aggregation, the minimum requirement for reference sensitivity in clause 7.3A.2 shall be increased by the amount given by ΔRIB,c defined in clause 7.3A.3.2 for the applicable operating bands. Unless otherwise stated, ΔRIB,c is set to zero.

In case the UE supports more than one of band combinations for CA, SUL or DC, and an operating band belongs to more than one band combinations then

- When the operating band frequency range is ≤ 1 GHz, the applicable additional ΔRIB,c shall be the average value for all band combinations defined in clause 7.3A, 7.3B, 7.3C in this specification and 7.3A, 7.3B in TS 38.101-3 [3], truncated to one decimal place that apply for that operating band among the supported band combinations. In case there is a harmonic relation between low band UL and high band DL, then the maximum ΔRIB,c among the different supported band combinations involving such band shall be applied

- When the operating band frequency range is > 1 GHz, the applicable additional ΔRIB,c shall be the maximum value for all band combinations defined in clause 7.3A, 7.3B, 7.3C in this specification and 7.3A, 7.3B in TS 38.101-3 [3] for the applicable operating bands.

##### 7.3A.3.2.1 ΔRIB,c for two bands

Table 7.3A.3.2.1-1: ΔRIB,c due to CA (two bands)

| Inter-band CA combination | ΔRIB,c for NR bands (dB)8 | |
| --- | --- | --- |
| Component band in order of bands in configuration9 | |
| CA\_n1-n28 | - | 0.2 |
| CA\_n1-n67 | - | 0.2 |
| CA\_n1-n71 | - | 0.3 |
| CA\_n1-n77 | 0.2 | 0.5 |
| CA\_n1-n78 | - | 0.5 |
| CA\_n1-n102 | 0.2 | 0.5 |
| CA\_n1-n105 | - | 0.3 |
| CA\_n2-n48 | 0.2 | 0.5 |
| CA\_n2-n66 | 0.3 | 0.3 |
| CA\_n2-n71 | - | 0.3 |
| CA\_n2-n77 | 0.2 | 0.5 |
| CA\_n2-n78 | 0.2 | 0.5 |
| CA\_n3-n41 | - | 04 / 0.55 |
| CA\_n3-n67 | 0.3 | - |
| CA\_n3-n74 | 0.3 | 0.5 |
| CA\_n3-n77 | 0.2 | 0.5 |
| CA\_n3-n78 | 0.2 | 0.5 |
| CA\_n3-n79 | - | 0.5 |
| CA\_n3-n102 | - | 0.5 |
| CA\_n3-n104 | - | 0.5 |
| CA\_n3-n105 | - | 0.3 |
| CA\_n5-n8 | 0.4 | 0.4 |
| CA\_n5-n12 | 0.5 | 0.3 |
| CA\_n5-n28 | 0.2 | 0.2 |
| CA\_n5-n41 | 0.2 | - |
| CA\_n5-n77 | 0.2 | 0.5 |
| CA\_n5-n78 | 0.2 | 0.5 |
| CA\_n5-n105 | 0.1 | 0.1 |
| CA\_n7-n8 | - | 0.2 |
| CA\_n7-n20 | 0.5 | - |
| CA\_n7-n40 | - | 0.5 |
| CA\_n7-n46 | 0.3 | - |
| CA\_n7-n66 | 0.5 | 0.5 |
| CA\_n7-n71 | 0.2 | - |
| CA\_n7-n77 | - | 0.5 |
| CA\_n7-n78 | 0.5 | 0.5 |
| CA\_n7-n79 | - | 0.5 |
| CA\_n7-n102 | - | 0.5 |
| CA\_n7-n105 | - | 0.2 |
| CA\_n8-n28 | 0.2 | 0.2 |
| CA\_n8-n77 | 0.2 | 0.5 |
| CA\_n8-n78 | 0.2 | 0.5 |
| CA\_n8-n79 | - | 0.5 |
| CA\_n8-n104 | - | 0.5 |
| CA\_n12-n66 | 0.5 | - |
| CA\_n12-n71 | 0.8 | 0.8 |
| CA\_n12-n77 | 0.2 | 0.5 |
| CA\_n12-n78 | 0.2 | 0.5 |
| CA\_n13-n77 | 0.2 | 0.5 |
| CA\_n14-n77 | 0.2 | 0.5 |
| CA\_n18-n77 | - | 0.5 |
| CA\_n18-n78 | - | 0.5 |
| CA\_n20-n40 | - | 0.5 |
| CA\_n20-n71 | 0.4 | 0.4 |
| CA\_n20-n77 | - | 0.5 |
| CA\_n20-n78 | - | 0.5 |
| CA\_n24-n48 | 0.2 | 0.5 |
| CA\_n24-n77 | 0.2 | 0.5 |
| CA\_n25-n48 | 0.2 | 0.5 |
| CA\_n25-n66 | 0.3 | 0.3 |
| CA\_n25-n71 | - | 0.3 |
| CA\_n25-n77 | 0.2 | 0.5 |
| CA\_n25-n78 | 0.2 | 0.5 |
| CA\_n25-n85 | - | 0.3 |
| CA\_n26-n28 | 0.2 | 0.2 |
| CA\_n26-n29 | 0.5 | 0.3 |
| CA\_n26-n48 | - | 0.5 |
| CA\_n26-n71 | 0.5 | 0.3 |
| CA\_n26-n77 | - | 0.5 |
| CA\_n26-n78 | - | 0.5 |
| CA\_n28-n71 | 0.7 | 0.7 |
| CA\_n28-n74 | 0.2 | - |
| CA\_n28-n75 | 0.2 | - |
| CA\_n28-n77 | 0.2 | 0.5 |
| CA\_n28-n78 | 0.2 | 0.5 |
| CA\_n28-n79 | 0.2 | 0.5 |
| CA\_n28-n102 | 0.2 | 0.5 |
| CA\_n28-n105 | 0.7 | 0.7 |
| CA\_n29-n48 | 0.2 | 0.5 |
| CA\_n29-n71 | 0.5~~10~~ | 0.7~~10~~ |
| CA\_n29-n77 | 0.2 | 0.5 |
| CA\_n28-n94 | 0.1 | 0.2 |
| CA\_n30-n66 | 0.5 | 0.4 |
| CA\_n30-n77 | - | 0.5 |
| CA\_n34-n39 | 0.3 | 0.3 |
| CA\_n34-n40 | 0.3 | 0.3 |
| CA\_n34-n79 | - | 0.5 |
| CA\_n38-n66 | 0.5 | 0.5 |
| CA\_n38-n78 | 0.4 | 0.5 |
| CA\_n38-n79 | 0.5 | 0.5 |
| CA\_n39-n40 | 0.3 | 0.3 |
| CA\_n39-n41 | 0.2 | 0.2 |
| CA\_n39-n79 | - | 0.5 |
| CA\_n40-n77 | 0.4 | 0.5 |
| CA\_n40-n78 | 0.4 | 0.5 |
| CA\_n40-n79 | - | 0.5 |
| CA\_n40-n105 | - | 0.2 |
| CA\_n41-n48 | 0.5 | 0.5 |
| CA\_n41-n66 | 0.56 / 17 | 0.5 |
| CA\_n41-n71 | - | 0.2 |
| CA\_n41-n771 | - | 0.5 |
| CA\_n41-n781 | - | 0.5 |
| CA\_n41-n79 | 0.5 | 0.5 |
| CA\_n41-n85 | - | 0.2 |
| CA\_n41-n104 | 0.5 | 0.5 |
| CA\_n46-n48 | - | 0.5 |
| CA\_n46-n77 | - | 0.5 |
| CA\_n46-n78 | - | 0.5 |
| CA\_n48-n53 | 0.53 | - |
| CA\_n48-n66 | 0.5 | 0.2 |
| CA\_n48-n70 | 0.5 | 0.2 |
| CA\_n48-n96 | 0.5 | - |
| CA\_n50-n78 | 0.22 / 0.23 | 0.22 / 0.23 |
| CA\_n66-n77 | 0.2 | 0.5 |
| CA\_n66-n78 | 0.2 | 0.5 |
| CA\_n67-n78 | 0.2 | 0.5 |
| CA\_n70-n77 | 0.2 | 0.5 |
| CA\_n70-n78 | 0.2 | 0.5 |
| CA\_n71-n77 | 0.2 | 0.5 |
| CA\_n71-n78 | 0.2 | 0.5 |
| CA\_n71-n85 | 0.8 | 0.8 |
| CA\_n74-n77 | - | 0.5 |
| CA\_n74-n78 | - | 0.5 |
| CA\_n75-n78 | - | 0.5 |
| CA\_n76-n78 | - | 0.5 |
| CA\_n77-n85 | 0.5 | 0.2 |
| CA\_n77-n102 | 0.5 | - |
| CA\_n78-n92 | 0.5 | - |
| CA\_n78-n102 | 0.5 | - |
| CA\_n78-n104 | 0.7 | 0.8 |
| CA\_n78-n105 | 0.5 | 0.2 |
| NOTE 1: The requirements only apply when the sub-frame and Tx-Rx timings are synchronized between the component carriers. In the absence of synchronization, the requirements are not within scope of these specifications.  NOTE 2: Only applicable for UE supporting inter-band carrier aggregation with uplink in one NR band and without simultaneous Rx/Tx.  NOTE 3: Applicable for UE supporting inter-band carrier aggregation without simultaneous Rx/Tx.  NOTE 4: The requirement is applied for UE transmitting on the frequency range of 2515 – 2690 MHz.  NOTE 5: The requirement is applied for UE transmitting on the frequency range of 2496 – 2515 MHz.  NOTE 6: The requirement is applied for UE transmitting on the frequency range of 2545-2690 MHz.  NOTE 7: The requirement is applied for UE transmitting on the frequency range of 2496-2545 MHz  NOTE 8: “-” denotes ΔRIB,c = 0.  NOTE 9: The component band order in the configuration should be listed by the order of NR bands, such as for CA\_n1-n77 the band order from left to right is n1 and n77.  NOTE 10: Not applicable to UEs indicating support of low NR band aggregation only via switching [*supportedLowBandSwitching-r19*] for this band combination | | |

<< end change 6 >>

<< begin change 7 >>

### 7.3A.6 Reference sensitivity exceptions due to cross band isolation for CA

Sensitivity degradation is allowed for a band if it is impacted by UL of another band part which belongs to NR band of the same NR CA configuration due to cross band isolation issues. The reference sensitivity degradation for the victim band due to cross band isolation is specified only for the specific uplink and downlink test points specified in Table 7.3A.6-1 for either PC3 and PC2 NR CA from a PC3 aggressor NR UL band, and for PC2 NR CA, in Table 7.3A.6-1afrom a PC2 aggressor NR UL band, and in Table 7.3A.6-1b from a PC1.5 aggressor NR single band uplink, and in Table 7.3A.6-3 when a DL band < 1 GHz is victim of two simultaneous PC3 aggressor NR UL bands.

In Tables 7.3A.6-1, 7.3A.6-1a and 7.3A.6-1b the following terminology is used to define the source of cross-band isolation interference:

- “ACLR1” indicates that the first adjacent channel of the aggressor UL band falls into the Rx channel of victim band.

- “ACLR2” indicates that the second adjacent channel of the aggressor UL band falls into the Rx channel of victim band.

- “>ACLR2” indicates that neither the first, nor the second adjacent channel of the aggressor UL band falls into the Rx channel of victim band.

In Table 7.3A.6-3 only two DL / two UL < 1 GHz bands cases where one DL is simultaneously victim of UL channel ACLR1 of one band and UL channel ACLR1 or 2 of the other band are specified.

Table 7.3A.6-1: Reference sensitivity exceptions (MSD) and uplink/downlink configurations due to cross band isolation from a PC3 aggressor NR UL band for NR CA FR1

| UL band | DL band | UL Fc | UL BW | SCS of UL band | UL RB Allocation | DL Fc | DL BW | MSD | Cross-band  Interference  source |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| (MHz) | (MHz) | (kHz) | LCRB | (MHz) | (MHz) | (dB) |
| n1 | n3 | 1922.5 | 5 | 15 | 25 (RBstart=0) | 1877.5 | 5 | 3 | >ACLR2 |
| n1 | n3 | 1945 | 50 | 15 | 128 (RBstart=0) | 1877.5 | 5 | 19.7 | ACLR1 |
| n1 | n38 | 1955 | 50 | 15 | 128 (RBstart=142) | 2572.5 | 5 | 2.9 | >ACLR2 |
| n1 | n38 | 1955 | 50 | 15 | 128 (RBstart=142) | 2590 | 40 | 2.9 | >ACLR2 |
| n1 | n40 | 1955 | 50 | 15 | 128 (RBstart=142) | 2302.5 | 5 | 6.6 | >ACLR2 |
| n1 | n40 | 1970 | 20 | 15 | 100 (RBstart=6) | 2302.5 | 5 | 6.6 | >ACLR2 |
| n1 | n41 | 1955 | 50 | 15 | 128 (RBstart=142) | 2501 | 10 | 6.1 | >ACLR2 |
| n1 | n41 | 1970 | 20 | 15 | 100 (RBstart=6) | 2546 | 100 | 0.7 | >ACLR2 |
| n2 | n66 | 1910 | 40 | 15 | 40 (RBstart=176) | 2112.5 | 5 | 0 | >ACLR2 |
| n3 | n39 | 1770 | 30 | 15 | 50 (RBstart=110) | 1882.5 | 5 | 2.1 | >ACLR2 |
| n3 | n41 | 1760 | 50 | 15 | 50 (RBstart=220) | 2501 | 10 | 0.7 | >ACLR2 |
| n3 | n41 | 1760 | 50 | 15 | 50 (RBstart=220) | 2546 | 100 | 0.7 | >ACLR2 |
| n3 | n74 | 1712.5 | 5 | 15 | 25 (RBstart=0) | 1515.5 | 5 | 2.6 | >ACLR2 |
| n3 | n75 | 1712.5 | 5 | 15 | 25 (RBstart=0) | 1515.5 | 5 | 4.3 | >ACLR2 |
| n5 | n8 | 844 | 10 | 15 | 25 (RBstart=27) | 951.5 | 5 | 2.8 | >ACLR2 |
| n5 | n13 | 834 | 20 | 15 | 20 (RBstart=0) | 753.5 | 5 | 2.4 | >ACLR2 |
| n5 | n28 | 834 | 20 | 15 | 20 (RBstart=0) | 800.5 | 5 | 17.5 | ACLR2 |
| n5 | n71 | 834 | 20 | 15 | 20 (RBstart=0) | 649.5 | 5 | 3.9 | >ACLR2 |
| n5 | n105 | 834 | 20 | 15 | 20 (RBstart=0) | 649.5 | 5 | 3.3 | >ACLR2 |
| n7 | n3 | 2525 | 50 | 15 | 45 (RBstart=0) | 1877.5 | 5 | 0.6 | >ACLR2 |
| n7 | n40 | 2525 | 50 | 15 | 45 (RBstart=0) | 2397.5 | 5 | 3.7 | >ACLR2 |
| n12 | n71 | 706.5 | 15 | 15 | 20 (RBstart=0) | 649.5 | 5 | 3.8 | >ACLR2 |
| n13 | n5 | 782 | 10 | 15 | 20 (RBstart=32) | 871.5 | 5 | 2.1 | >ACLR2 |
| n18 | n285 | 822.5 | 15 | 15 | 25 (RBstart=0) | 800.5 | 5 | 31.3 | ACLR1 |
| n18 | n28 | 822.5 | 15 | 15 | 25 (RBstart=0) | 785.5 | 5 | 12.7 | ACLR2 |
| n20 | n71 | 842 | 20 | 15 | 20 (RBstart=0) | 649.5 | 5 | 2.6 | >ACLR2 |
| n26 | n28 | 824 | 20 | 15 | 25 (RBstart=0) | 800.5 | 5 | 36.9 | ACLR1 |
| n26 | n29 | 824 | 20 | 15 | 25 (RBstart=0) | 719.5 | 5 | 3.9 | >ACLR2 |
| n26 | n71 | 824 | 20 | 15 | 20 (RBstart=0) | 649.5 | 5 | 3.9 | >ACLR2 |
| n28 | n71 | 718 | 30 | 15 | 25 (RBstart=0) | 649.5 | 5 | 13.3 | ACLR2 |
| n28 | n105 | 718 | 30 | 15 | 25 (RBstart=0) | 649.5 | 5 | 12.1 | ACLR2 |
| n30 | n66 | 2310 | 10 | 15 | 20 (RBstart=0) | 2197.5 | 5 | 8.3 | >ACLR2 |
| n34 | n3 | 2017.5 | 15 | 15 | 75 (RBstart=0) | 1877.5 | 5 | 3 | >ACLR2 |
| n34 | n40 | 2017.5 | 15 | 15 | 75 (RBstart=4) | 2302.5 | 5 | 6 | >ACLR2 |
| n34 | n41 | 2017.5 | 15 | 15 | 75 (RBstart=4) | 2501 | 10 | 3.2 | >ACLR2 |
| n38 | n1 | 2590 | 40 | 15 | 216 (RBstart=0) | 2167.5 | 5 | 1.9 | >ACLR2 |
| n38 | n2 | 2590 | 40 | 15 | 216 (RBstart=0) | 1987.5 | 5 | 0.6 | >ACLR2 |
| n38 | n25 | 2590 | 40 | 15 | 216 (RBstart=0) | 1992.5 | 5 | 0.6 | >ACLR2 |
| n38 | n66 | 2590 | 40 | 15 | 216 (RBstart=0) | 2197.5 | 5 | 1.9 | >ACLR2 |
| n38 | n78 | 2600 | 40 | 15 | 216 (RBstart=0) | 3305 | 10 | 8.3 | >ACLR2 |
| n39 | n41 | 1900 | 40 | 15 | 216 (RBstart=0) | 2501 | 10 | 3.3 | >ACLR2 |
| n40 | n1 | 2340 | 100 | 30 | 270 (RBstart=0) | 2167.5 | 5 | 21.9 | ACLR2 |
| n40 | n7 | 2350 | 100 | 30 | 270 (RBstart=3) | 2622.5 | 5 | 22.3 | >ACLR2 |
| n40 | n7 | 2350 | 100 | 30 | 270 (RBstart=3) | 2645 | 50 | 15.6 | >ACLR2 |
| n40 | n34 | 2350 | 100 | 30 | 270 (RBstart=0) | 2022.5 | 5 | 17.9 | >ACLR2 |
| n40 | n41 | 2345 | 50 | 30 | 128 (RBstart=5) | 2565 | 100 | 11.28 | >ACLR2 |
| n40 | n41 | 2350 | 100 | 30 | 270 (RBstart=3) | 2501 | 10 | 28.1 | ACLR2 |
| n41 | n1 | 2546 | 100 | 30 | 270 (RBstart=0) | 2167.5 | 5 | 18.1 | >ACLR2 |
| n41 | n2 | 2546 | 100 | 30 | 270 (RBstart=0) | 1987.5 | 5 | 0.6 | >ACLR2 |
| n41 | n3 | 2546 | 100 | 30 | 270 (RBstart=0) | 1877.5 | 5 | 0.6 | >ACLR2 |
| n41 | n25 | 2546 | 100 | 30 | 270 (RBstart=0) | 1992.5 | 5 | 0.6 | >ACLR2 |
| n41 | n34 | 2456 | 100 | 30 | 270 (RBstart=0) | 2022.5 | 5 | 7.2 | >ACLR2 |
| n41 | n39 | 2546 | 100 | 30 | 270 (RBstart=3) | 1917.5 | 5 | 1.6 | >ACLR2 |
| n41 | n40 | 2546 | 100 | 30 | 270 (RBstart=0) | 2397.5 | 5 | 31.4 | ACLR2 |
| n41 | n40 | 2565 | 100 | 30 | 270 (RBstart=0) | 2345 | 50 | 27.18 | ACLR2 |
| n41 | n48 | 2680 | 100 | 30 | 270 (RBstart=3) | 3552.5 | 5 | 8.3 | >ACLR2 |
| n411 | n66 | 2546 | 100 | 30 | 270 (RBstart=0) | 2197.5 | 5 | 10.5 | >ACLR2 |
| n41 | n70 | 2546 | 100 | 30 | 270 (RBstart=0) | 2017.5 | 5 | 0.6 | >ACLR2 |
| n41 | n77 | 2640 | 100 | 30 | 270 (RBstart=3) | 3305 | 10 | 8.3 | >ACLR2 |
| n41 | n78 | 2640 | 100 | 30 | 270 (RBstart=3) | 3305 | 10 | 8.3 | >ACLR2 |
| n46 | n48 | 5190 | 80 | 30 | 216 (RBstart=0) | 3697.5 | 5 | 13.3 | >ACLR2 |
| n46 | n48 | 5190 | 80 | 30 | 216 (RBstart=0) | 3650 | 100 | 6.2 | >ACLR2 |
| n46 | n77 | 5190 | 80 | 30 | 216 (RBstart=0) | 3975 | 10 | 10.5 | >ACLR2 |
| n46 | n77 | 5190 | 80 | 30 | 216 (RBstart=0) | 3930 | 100 | 5.5 | >ACLR2 |
| n46 | n78 | 5190 | 80 | 30 | 216 (RBstart=0) | 3795 | 10 | 10.4 | >ACLR2 |
| n46 | n78 | 5190 | 80 | 30 | 216 (RBstart=0) | 3750 | 100 | 5.1 | >ACLR2 |
| n48 | n411 | 3570 | 40 | 15 | 216 (RBstart=0) | 2685 | 10 | 4.5 | >ACLR2 |
| n48 | n411 | 3570 | 40 | 15 | 216 (RBstart=0) | 2640 | 100 | 4.5 | >ACLR2 |
| n48 | n46 | 3680 | 40 | 15 | 216 (RBstart=0) | 5160 | 20 | 15.7 | >ACLR2 |
| n48 | n96 | 3680 | 40 | 15 | 216 (RBstart=0) | 5935 | 20 | 15.7 | >ACLR2 |
| n66 | n2 | 1760 | 40 | 15 | 216 (RBstart=0) | 1932.5 | 5 | 1.2 | >ACLR2 |
| n66 | n25 | 1757.5 | 45 | 15 | 240 (RBstart=2) | 1932.5 | 5 | 1.4 | >ACLR2 |
| n66 | n2 | 1757.5 | 45 | 15 | 240 (RBstart=2) | 1932.5 | 5 | 1.2 | >ACLR2 |
| n66 | n41 | 1760 | 40 | 15 | 216 (RBstart=0) | 2501 | 10 | 0.4 | >ACLR2 |
| n71 | n5 | 688 | 20 | 15 | 20 (RBstart=86) | 871.5 | 5 | 2.0 | >ACLR2 |
| n71 | n12 | 688 | 20 | 15 | 20 (RBstart=86) | 731.5 | 5 | 8.2 | ACLR2 |
| n71 | n20 | 688 | 20 | 15 | 20 (RBstart=86) | 796 | 5 | 3.0 | >ACLR2 |
| n71 | n26 | 688 | 20 | 15 | 20 (RBstart=86) | 861.5 | 5 | 2.0 | >ACLR2 |
| n71 | n28 | 688 | 20 | 15 | 20 (RBstart=86) | 760.5 | 5 | 6.5 | >ACLR2 |
| n71 | n29 | 688 | 20 | 15 | 20 (RBstart=86) | 719.5 | 5 | 17.59 | ACLR2 |
| n71 | n85 | 688 | 20 | 15 | 20 (RBstart=86) | 730.5 | 5 | 8.26 | ACLR2 |
| n71 | n85 | 680.5 | 35 | 15 | 20 (Rbstart=168) | 730.5 | 5 | 237 | ACLR1 |
| n77 | n7 | 3350 | 100 | 30 | 270 (RBstart=0) | 2687.5 | 5 | 4.5 | >ACLR2 |
| n77 | n401 | 3350 | 100 | 30 | 270 (RBstart=0) | 2395 | 10 | 4.5 | >ACLR2 |
| n77 | n401 | 3350 | 100 | 30 | 270 (RBstart=0) | 2350 | 100 | 4.5 | >ACLR2 |
| n77 | n411 | 3350 | 100 | 30 | 270 (RBstart=0) | 2685 | 10 | 4.5 | >ACLR2 |
| n77 | n411 | 3350 | 100 | 30 | 270 (RBstart=0) | 2640 | 100 | 4.5 | >ACLR2 |
| n78 | n71 | 3350 | 100 | 30 | 270 (RBstart=0) | 2687.5 | 5 | 4.5 | >ACLR2 |
| n78 | n38 | 3350 | 100 | 30 | 270 (RBstart=0) | 2617.5 | 5 | 3.3 | >ACLR2 |
| n78 | n38 | 3350 | 100 | 30 | 270 (RBstart=0) | 2600 | 40 | 3.3 | >ACLR2 |
| n78 | n401 | 3350 | 100 | 30 | 270 (RBstart=0) | 2397.5 | 5 | 4.5 | >ACLR2 |
| n78 | n401 | 3350 | 100 | 30 | 270 (RBstart=0) | 2350 | 100 | 4.5 | >ACLR2 |
| n78 | n411 | 3350 | 100 | 30 | 270 (RBstart=0) | 2685 | 10 | 4.5 | >ACLR2 |
| n78 | n411 | 3350 | 100 | 30 | 270 (RBstart=0) | 2640 | 100 | 4.5 | >ACLR2 |
| n78 | n46 | 3750 | 100 | 30 | 270 (RBstart=3) | 5160 | 20 | 13.5 | >ACLR2 |
| n783 | n79 | 3750 | 100 | 30 | 270 (RBstart=3) | 4420 | 40 | 2 | >ACLR2 |
| n783 | n79 | 3750 | 100 | 30 | 270 (RBstart=3) | 4405 | 10 | 2 | >ACLR2 |
| n78 | n104 | 3750 | 100 | 30 | 270 (RBstart=0) | 6435 | 20 | 14.4 | >ACLR2 |
| n79 | n783 | 4450 | 100 | 30 | 270 (RBstart=0) | 3795 | 10 | 2.6 | >ACLR2 |
| n79 | n783 | 4450 | 100 | 30 | 270 (RBstart=0) | 3750 | 100 | 2.6 | >ACLR2 |
| n85 | n71 | 705.5 | 15 | 15 | 20 (Rbstart=0) | 649.5 | 5 | 3.8 | >ACLR2 |
| n96 | n48 | 5965 | 80 | 30 | 216 (RBstart=0) | 3697.5 | 5 | 13.3 | >ACLR2 |
| n96 | n48 | 5965 | 80 | 30 | 216 (RBstart=0) | 3650 | 100 | 6.2 | >ACLR2 |
| n104 | n78 | 6475 | 100 | 30 | 270 (RBstart=0) | 3795 | 10 | 15.8 | >ACLR2 |
| n105 | n5 | 693 | 20 | 15 | 20 (RBstart=86) | 871.5 | 5 | 1.7 | >ACLR2 |
| n105 | n28 | 693 | 20 | 15 | 20 (RBstart=86) | 760.5 | 5 | 6.9 | >ACLR2 |
| NOTE 1: Applicable only when harmonic mixing MSD for this combination is not applied.  NOTE 2: Void  NOTE 3: The requirements only apply for UEs supporting inter-band carrier aggregation with simultaneous Rx/Tx capability. Simultaneous Rx/Tx capability does not apply for UEs supporting band n78 with a n77 implementation.  NOTE 4: Void  NOTE 5: The MSD exceptions are applicable to the case that interference of UL band 3rd order IMD product falls into the affected DL channels.  NOTE 6: Applicable to UE not supporting n71 optional maximum symmetrical UL/DL channel bandwidth  NOTE 7: Applicable to UE supporting n71 optional maximum symmetrical UL/DL channel bandwidth  NOTE 8: Applicable when n41 spectrum is restricted to 2515-2675MHz  NOTE 9: Not applicable to UEs indicating support of low NR band aggregation via switching [*supportedLowBandSwitching-r19*] for this band combination | | | | | | | | | |

Table 7.3A.6-1a-1: Reference sensitivity exceptions (MSD) and uplink/downlink configurations due to cross band isolation from a PC2 aggressor NR UL band for NR CA FR1

| UL band | DL band | UL Fc | UL BW | SCS of UL band | UL RB Allocation | DL Fc | DL BW | MSD | Cross-band  Interference  source |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| (MHz) | (MHz) | (kHz) | LCRB | (MHz) | (MHz) | (dB) |
| n2 | n66 | 1900 | 20 | 15 | 50 (RBstart=56) | 2112.5 | 5 | 0.76  0.97 | >ACLR2 |
| n3 | n1 | 1760 | 50 | 15 | 50 (RBstart=220) | 2112.5 | 5 | 0.86  1.17 | >ACLR2 |
| n3 | n7 | 1760 | 50 | 15 | 50 (RBstart=220) | 2622.5 | 5 | 0.56  0.77 | >ACLR2 |
| n7 | n1 | 2525 | 50 | 15 | 45 (RBstart=0) | 2167.5 | 5 | 0.86  1.17 | >ACLR2 |
| n7 | n3 | 2525 | 50 | 15 | 45 (RBstart=0) | 1877.5 | 5 | 1.16  1.57 | >ACLR2 |
| n25 | n41 | 1760 | 40 | 15 | 40 (RBstart=176) | 2501 | 10 | 0.86  17 | >ACLR2 |
| n25 | n66 | 1895 | 40 | 15 | 40 (RBstart=176) | 2112.5 | 5 | 0.76  0.97 | >ACLR2 |
| n39 | n41 | 1900 | 40 | 15 | 216 (RBstart=0) | 2501 | 10 | 4.7 | >ACLR2 |
| n40 | n3 | 2350 | 100 | 30 | 270 (RBstart=0) | 1877.5 | 5 | 0.6 | >ACLR2 |
| n40 | n41 | 2345 | 50 | 30 | 128 (RBstart=5) | 2565 | 100 | 13.9 | >ACLR2 |
| n40 | n41 | 2350 | 100 | 30 | 270 (RBstart=3) | 2501 | 10 | 31.1 | ACLR2 |
| n41 | n1 | 2546 | 100 | 30 | 270 (RBstart=0) | 2167.5 | 5 | 20.8 | >ACLR2 |
| n41 | n3 | 2546 | 100 | 30 | 270 (RBstart=0) | 1877.5 | 5 | 2.3 | >ACLR2 |
| n41 | n25 | 2546 | 100 | 30 | 270 (RBstart=0) | 1992.5 | 5 | 1.6 | >ACLR2 |
| n41 | n39 | 2546 | 100 | 30 | 270 (RBstart=3) | 1917.5 | 5 | 2.7 | >ACLR2 |
| n41 | n40 | 2546 | 100 | 30 | 270 (RBstart=0) | 2397.5 | 5 | 34.4 | ACLR2 |
| n41 | n40 | 2565 | 100 | 30 | 270 (RBstart=0) | 2345 | 50 | 30.1 | ACLR2 |
| n41 | n66 | 2546 | 100 | 30 | 270 (RBstart=0) | 2197.5 | 5 | 13.1 | >ACLR2 |
| n41 | n77 | 2640 | 100 | 30 | 270 (RBstart=3) | 3305 | 10 | 10.5 | >ACLR2 |
| n41 | n79 | 2640 | 100 | 30 | 270 (RBstart=3) | 4405 | 10 | 3.1 | >ACLR2 |
| n66 | n2 | 1760 | 40 | 15 | 216 (RBstart=0) | 1932.5 | 5 | 1.96  3.37 | >ACLR2 |
| n66 | n25 | 1757.5 | 45 | 15 | 240 (RBstart=2) | 1932.5 | 5 | 2.26  3.87 | >ACLR2 |
| n66 | n41 | 1760 | 40 | 15 | 216 (RBstart=0) | 2501 | 10 | 0.86  17 | >ACLR2 |
| n66 | n70 | 1760 | 40 | 15 | 216 (RBstart=0) | 1997.5 | 5 | 1.96  3.37 | >ACLR2 |
| n70 | n66 | 1702.5 | 15 | 15 | 75 (RBstart=4) | 2112.5 | 5 | 0.46  0.57 | >ACLR2 |
| n71 | n29 | 688 | 20 | 15 | 20 (RBstart=86) | 719.5 | 5 | 20.46,8  23.37,8 | ACLR2 |
| n71 | n85 | 688 | 20 | 15 | 20 (RBstart=86) | 730.5 | 5 | 10.94,6  15.94,7 | ACLR2 |
| n71 | n85 | 680.5 | 35 | 15 | 20 (Rbstart=168) | 730.5 | 5 | 265,6  32.35,7 | ACLR1 |
| n77 | n2 | 3350 | 100 | 30 | 270 (RBstart=0) | 1987.5 | 5 | 1.0 | >ACLR2 |
| n77 | n7 | 3350 | 100 | 30 | 270 (RBstart=0) | 2687.5 | 5 | 6.5 | >ACLR2 |
| n77 | n25 | 3350 | 100 | 30 | 270 (RBstart=0) | 1992.5 | 5 | 1.0 | >ACLR2 |
| n77 | n30 | 3350 | 100 | 30 | 270 (RBstart=0) | 2357.5 | 5 | 1.0 | >ACLR2 |
| n77 | n401 | 3350 | 100 | 30 | 270 (RBstart=0) | 2395 | 10 | 6.5 | >ACLR2 |
| n77 | n401 | 3350 | 100 | 30 | 270 (RBstart=0) | 2350 | 100 | 6.5 | >ACLR2 |
| n77 | n411 | 3350 | 100 | 30 | 270 (RBstart=0) | 2685 | 10 | 6.5 | >ACLR2 |
| n77 | n411 | 3350 | 100 | 30 | 270 (RBstart=0) | 2640 | 100 | 6.5 | >ACLR2 |
| n77 | n66 | 3350 | 100 | 30 | 270 (RBstart=0) | 2197.5 | 5 | 1.0 | >ACLR2 |
| n78 | n7 | 3350 | 100 | 30 | 270 (RBstart=0) | 2687.5 | 5 | 6.5 | >ACLR2 |
| n78 | n401 | 3350 | 100 | 30 | 270 (RBstart=0) | 2395 | 10 | 6.5 | >ACLR2 |
| n78 | n401 | 3350 | 100 | 30 | 270 (RBstart=0) | 2350 | 100 | 1.2 | >ACLR2 |
| n783 | n79 | 3750 | 100 | 30 | 270 (RBstart=3) | 4405 | 10 | 5 | >ACLR2 |
| n783 | n79 | 3750 | 100 | 30 | 270 (RBstart=3) | 4450 | 100 | 5 | >ACLR2 |
| n79 | n41 | 4450 | 100 | 30 | 270 (RBstart=0) | 2685 | 10 | 3.5 | >ACLR2 |
| n79 | n783 | 4450 | 100 | 30 | 270 (RBstart=0) | 3795 | 10 | 5.6 | >ACLR2 |
| n79 | n783 | 4450 | 100 | 30 | 270 (RBstart=0) | 3750 | 100 | 5.6 | >ACLR2 |
| NOTE 1: Applicable only when harmonic mixing MSD for this combination is not applied.  NOTE 2: Void.  NOTE 3: The requirements only apply for UEs supporting inter-band carrier aggregation with simultaneous Rx/Tx capability. Simultaneous Rx/Tx capability does not apply for UEs supporting band n78 with a n77 implementation.  NOTE 4: Applicable to UE not supporting n71 optional maximum symmetrical UL/DL channel bandwidth  NOTE 5: Applicable to UE supporting n71 optional maximum symmetrical UL/DL channel bandwidth.  NOTE 6: Applicable to UE’s supporting PC2 with 1Tx  NOTE 7: Applicable to UE’s supporting PC2 with 2Tx  NOTE 8: Not applicable to UEs indicating support of low NR band aggregation via switching [*supportedLowBandSwitching-r19*] for this band combination | | | | | | | | | |

<< end change 7 >>