**3GPP TSG-RAN WG4 Meeting #112 *R4-2412414***

**Maastricht, Netherlands, 19th – 23rd August 2024**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.101-1** | **CR** | **<CR#>** | **rev** | **<Rev#>** | **Current version:** | **18.6.0** |  |
|  | | | | | | | | |
| *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:*** | Big draftCR for less than 5MHz UE RF requirements in Rel-19 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Intel Corporation | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_FR1\_lessthan\_5MHz\_BW\_Ph2-Core | | | | |  | ***Date:*** | | | 2024-07-08 |
|  |  | | | |  | |  | | |  |
| ***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:*** | | UE RF requirements are specified in this big draftCR for Rel-19 less than 5MHz work item. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Specify UE RF requirements for example band combo CA/DC\_n100-n101 in the Rel-19 less than 5MHz work item.   * CA configuration * Bandwidth clarification * CA BW configurations and BCS * DC configurations * Sync raster * UE maximum output power for inter-band CA * Delta Tib,c for CA * UE maximum output power for NR-DC * Spurious emissions for UE coexistence for inter-band CA | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Requirements are missing. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.2A.2.1, 5.3.1, 5.4.3.1, 5.5A.3.1, 5.5B, 6.2A.1.3, 6.2A.4.2.3, 6.2B.1, 6.5A.3.2.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

### <<Start of Change1>>

#### 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-n411 | n1, n41 |  |
| CA\_n1-n46 | n1, n46 |  |
| CA\_n1-n67 | n1, n67 |  |
| CA\_n1-n74 | n1, n74 |  |
| CA\_n1-n75 | n1, n75 |  |
| CA\_n1-n771 | n1, n77 | No |
| CA\_n1-n781 | n1, n78 | No |
| CA\_n1-n791 | 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-n341 | n3, n34 |  |
| CA\_n3-n38 | n3, n38 |  |
| CA\_n3-n401 | n3, n40 | No |
| CA\_n3-n411 | n3, n41 | No |
| CA\_n3-n67 | n3, n67 |  |
| CA\_n3-n74 | n3, n74 |  |
| CA\_n3-n75 | n3, n75 |  |
| CA\_n3-n771 | n3, n77 | No |
| CA\_n3-n781 | n3, n78 | No |
| CA\_n3-n791 | n3, n79 | No |
| CA\_n3-n102 | n3, n102 |  |
| CA\_n3-n105 | n3, n105 |  |
| CA\_n5-n7 | n5, n7 |  |
| CA\_n5-n8 | n5, n8 |  |
| CA\_n5-n12 | n5, n12 |  |
| CA\_n5-n14 | n5, n14 |  |
| CA\_n5-n25 | n5, n25 |  |
| CA\_n5-n28 | n5, n28 |  |
| CA\_n5-n29 | 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-n771 | n5, n77 |  |
| CA\_n5-n781 | n5, n78 | No |
| CA\_n5-n791 | 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-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-n781 | 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-n341 | n8, n34 |  |
| CA\_n8-n38 | n8, n38 |  |
| CA\_n8-n391 | n8, n39 |  |
| CA\_n8-n401 | n8, n40 |  |
| CA\_n8-n411 | n8, n41 | No |
| CA\_n8-n751 | n8, n75 |  |
| CA\_n8-n771 | n8, n77 |  |
| CA\_n8-n781 | n8, n78 | No |
| CA\_n8-n791 | n8, n79 | No |
| CA\_n12-n25 | n12, n25 |  |
| 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-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-n411 | 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-n67 | n20, n67 |  |
| CA\_n20-n75 | n20, n75 |  |
| 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-n34 | n28, n34 |  |
| CA\_n28-n38 | n28, n38 |  |
| CA\_n28-n39 | n28, n39 |  |
| CA\_n28-n401 | n28, n40 |  |
| CA\_n28-n411 | 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-n771 | n28, n77 | No |
| CA\_n28-n781 | n28, n78 | No |
| CA\_n28-n791 | 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-n71 | 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-n711 | 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\_n46-n481,6 | n46, n48 |  |
| CA\_n46-n666 | n46, n66 |  |
| CA\_n46-n771,6 | n46, n77 |  |
| CA\_n46-n781,6 | n46, n78 |  |
| CA\_n46-n9615,16,17,18 | n46, n96 |  |
| CA\_n46-n10215,16,18,20 | n46, n102 |  |
| CA\_n48-n539 | n48, n53 |  |
| CA\_n48-n66 | n48, n66 |  |
| CA\_n48-n70 | n48, n70 |  |
| CA\_n48-n71 | n48, n71 |  |
| CA\_n48-n7713,14,18 | 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-n771 | n74, n77 |  |
| CA\_n74-n781 | n74, n78 |  |
| CA\_n75-n781 | n75, n78 |  |
| CA\_n76-n781 | n76, n78 |  |
| CA\_n77-n787 | n77, n78 |  |
| CA\_n77-n797 | 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-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 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: The minimum requirements apply only when there is non-simultaneous Rx/Tx operation between n77-n78 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 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: Simultaneous Rx/Tx capability for TDD combinations does not apply for UEs supporting band n48 with an n77 implementation. Same restrictions are applied when applicable NR CA configuration is part of a higher order configurations.  NOTE 14: The band n48 and n77 will synchronize their uplink and downlink configurations and in commonly TDD network coordination  NOTE 15: Simultaneous Rx/Tx capability does not apply for UEs supporting CA\_n46-n96 or CA\_n46-n102. Same restrictions are applied when applicable NR CA configuration is part of a higher order configurations  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. | | |

### <<End of Change1>>

### <<Start of Change2>>

### 5.3.1 General

The UE channel bandwidth supports a single NR RF carrier in the uplink or downlink at the UE. From a BS perspective, different UE channel bandwidths may be supported within the same spectrum for transmitting to and receiving from UEs connected to the BS. Transmission of multiple carriers to the same UE (CA) or multiple carriers to different UEs within the BS channel bandwidth can be supported.

From a UE perspective, the UE is configured with one or more BWP / carriers, each with its own UE channel bandwidth. The UE does not need to be aware of the BS channel bandwidth or how the BS allocates bandwidth to different UEs.

The placement of the UE channel bandwidth for each UE carrier is flexible but can only be completely within the BS channel bandwidth.

The relationship between the channel bandwidth, the guardband and the maximum transmission bandwidth configuration is shown in Figure 5.3.1-1.



Figure 5.3.1-1: Definition of the channel bandwidth and the maximum transmission bandwidth configuration for one NR channel

### <<End of Change2>>

### <<Start of Change3>>

Table 5.5A.3.1-1n: 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\_n70A-n71A | CA\_n70A-n71A | n70 | 5, 10, 15, 201, 251 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n70A-n71(2A) | CA\_n70A-n71A | n70 | 5, 10, 15, 201, 251 | 0 |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
| CA\_n70A-n77A | CA\_n70A-n77A | n70 | 5, 10, 15, 201, 251 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n70A-n78A | CA\_n70A-n78A | n70 | 5, 10, 15, 201, 251 | 0 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n71A-n77A | n778, 9  CA\_n71A-n77A8,13 | n71 | 5, 10, 15, 20 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n71 | n71 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n71A-n77(2A) | n778, 9  CA\_n77(2A)8  CA\_n71A-n77A8 | n71 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
|  |  | n71 | n71 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77(2A)\_BCS 4 and 5 |  |
| CA\_n71A-n77(3A) | 778, 9  CA\_n77(2A)8  CA\_n71A-n77A8 | n71 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77(3A)\_BCS1 |  |
| CA\_n71A-n77B | - | n71 | n71 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77B\_BCS 4 and 5 |  |
| CA\_n71A-n77C | - | n71 | n71 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n77 | CA\_n77C\_BCS 4 and 5 |  |
| CA\_n71B-n77A | n778, 9  CA\_n71A-n77A8 | n71 | CA\_n71B\_BCS2 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n71 | CA\_n71B\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n71B-n77(2A) | n778, 9  CA\_n71A-n77A8 | n71 | CA\_n71B\_BCS2 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
|  |  | n71 | CA\_n71B\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | CA\_n77(2A)\_BCS 4 and 5 |  |
| CA\_n71(2A)-n77A | n778, 9  CA\_n71A-n77A8 | n71 | CA\_n71(2A)\_BCS0 | 0 |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n71 | CA\_n71(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | n77 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n71(2A)-n77(2A) | n778, 9  CA\_n71A-n77A8 | n71 | CA\_n71(2A)\_BCS0 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
|  |  | n71 | CA\_n71(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | CA\_n77(2A)\_BCS 4 and 5 |  |
| CA\_n71(2A)-n77B | - | n71 | CA\_n71(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | CA\_n77B\_BCS 4 and 5 |  |
| CA\_n71(2A)-n77C | - | n71 | CA\_n71(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n77 | CA\_n77C\_BCS 4 and 5 |  |
| CA\_n71A-n78A | n788,9  CA\_n71A-n78A8 | n71 | 5, 10, 15, 20 | 0 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n71 | See n71 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | See n78 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n71A-n78(2A) | n788,9  CA\_n71A-n78A8 | n71 | 10, 15, 20 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
|  |  | n71 | See n71 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | CA\_n78(2A)\_BCS4 and 5 |  |
| CA\_n71A-n85A | - | n71 | See n71 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n85 | See n85 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n71(2A)-n85A | - | n71 | CA\_n71(2A) BCS 4 and 5 | 4 and 5 |
|  |  | n85 | See n85 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n71B-n85A | - | n71 | CA\_n71B BCS 4 and 5 | 4 and 5 |
|  |  | n85 | See n85 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n74A-n77A | CA\_n74A-n77A | n74 | 5, 10, 15, 20 | 0 |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n74A-n78A | CA\_n74A-n78A | n74 | 5, 10, 15, 20 | 0 |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n75A-n78A | - | n75 | 5, 10, 15, 20 | 0 |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n75 | n75 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | n78 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n75A-n78(2A) | - | n75 | 5, 10, 15, 20 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS1 |  |
|  |  | n75 | n75 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | CA\_n78(2A)\_BCS4 and 5 |  |
| CA\_n76A-n78A | - | n76 | 5 | 0 |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n77A-n78A2 | - | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n77 | See n77 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | See n78 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n77A-n78C2 | - | n77 | 10,15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n78 | CA\_n78C\_BCS1 |  |
| CA\_n77A-n78(2A)2 | - | n77 | 10,15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
|  |  | n77 | See n77 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n78 | CA\_n78(2A)\_BCS4 and 5 |  |
| CA\_n77A-n79A | n778,9  n798,9  CA\_n77A-n79A8 | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n77(2A)-n79A | n778,9  n798,9  CA\_n77(2A)12  CA\_n77A-n79A8 | n77 | CA\_n77(2A)\_BCS1 | 0 |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n77(3A)-n79A | n778,9  n798,9  CA\_n77(2A)12  CA\_n77A-n79A8 | n77 | CA\_n77(3A)\_BCS1 | 0 |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n77A-n85A | n778,9  CA\_n77A-n85A8 | n77 | See n77 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n85 | See n85 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n77(2A)-n85A | CA\_n77A-n85A | n77 | CA\_n77(2A)\_BCS 4 and 5 | 4 and 5 |
|  |  | n85 | See n85 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n77A-n102A | CA\_n77A-n102A | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n102 | 20, 40, 60, 80, 100 |  |
| CA\_n77A-n102(2A) | CA\_n77A-n102A | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n102 | CA\_n102(2A)\_BCS0 |  |
| CA\_n77A-n102B | CA\_n77A-n102A  CA\_n77A-n102B | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n102 | CA\_n102B\_BCS0 |  |
| CA\_n77A-n102C | CA\_n77A-n102A  CA\_n77A-n102C | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n102 | CA\_n102C\_BCS0 |  |
| CA\_n77A-n102D | CA\_n77A-n102A | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n102 | CA\_n102D\_BCS0 |  |
| CA\_n77A-n102E | CA\_n77A-n102A | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n102 | CA\_n102E\_BCS0 |  |
| CA\_n77(2A)-n102A | CA\_n77(2A) CA\_n77A-n102A | n77 | CA\_n77(2A)\_BCS4 and 5 | 0 |
|  |  | n102 | 20, 40, 60, 80, 100 |  |
| CA\_n77(2A)-n102(2A) | CA\_n77(2A) CA\_n77A-n102A | n77 | CA\_n77(2A)\_BCS4 and 5 | 0 |
|  |  | n102 | CA\_n102(2A)\_BCS0 |  |
| CA\_n77(2A)-n102B | CA\_n77(2A) CA\_n77A-n102A  CA\_n77A-n102B | n77 | CA\_n77(2A)\_BCS4 and 5 | 0 |
|  |  | n102 | CA\_n102B\_BCS0 |  |
| CA\_n77(2A)-n102C | CA\_n77(2A) CA\_n77A-n102A  CA\_n77A-n102C | n77 | CA\_n77(2A)\_BCS4 and 5 | 0 |
|  |  | n102 | CA\_n102C\_BCS0 |  |
| CA\_n77(2A)-n102D | CA\_n77(2A) CA\_n77A-n102A | n77 | CA\_n77(2A)\_BCS4 and 5 | 0 |
|  |  | n102 | CA\_n102D\_BCS0 |  |
| CA\_n77(2A)-n102E | CA\_n77(2A) CA\_n77A-n102A | n77 | CA\_n77(2A)\_BCS4 and 5 | 0 |
|  |  | n102 | CA\_n102E\_BCS0 |  |
| CA\_n78A-n79A | n78A8,9  n79A8,9  CA\_n78A-n79A8 | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 | 1 |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
|  |  | n78 | See n78 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n79 | See n79 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n78A-n79C | - | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n79 | CA\_n79C\_BCS0 |  |
|  |  | n78 | See n78 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n79 | CA\_n79C\_BCS4 and 5 |  |
| CA\_n78(2A)-n79A | CA\_n78A-n79A | n78 | CA\_n78(2A)\_BCS1 | 0 |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
|  |  | n78 | CA\_n78(2A)\_BCS4 and 5 | 4 and 5 |
|  |  | n79 | See n79 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n78A-n92A | CA\_n78A-n92A | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n92 | 5, 10, 15, 20 |  |
|  |  | n78 | See n78 channel bandwidths in Table 5.3.5-1 | 4 and 5 |
|  |  | n92 | See n92 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n78(2A)-n92A | CA\_n78A-n92A | n78 | CA\_n78(2A)\_BCS0 | 0 |
|  |  | n92 | 5, 10, 15, 20 |  |
|  |  | n78 | CA\_n78(2A)\_BCS4 and 5 | 4 and 5 |
|  |  | n92 | See n92 channel bandwidths in Table 5.3.5-1 |  |
| CA\_n78A-n94A | - | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n94 | 5, 10, 15, 20 |  |
| CA\_n78A-n102A | CA\_n78A-n102A | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n102 | 20, 40, 60, 80, 100 |  |
| CA\_n78A-n102(2A) | CA\_n78A-n102A | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n102 | CA\_n102(2A)\_BCS0 |  |
| CA\_n78A-n102B | CA\_n78A-n102A  CA\_n78A-n102B | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n102 | CA\_n102B\_BCS0 |  |
| CA\_n78A-n102C | CA\_n78A-n102A  CA\_n78A-n102C | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n102 | CA\_n102C\_BCS0 |  |
| CA\_n78A-n102D | CA\_n78A-n102A | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n102 | CA\_n102D\_BCS0 |  |
| CA\_n78A-n102E | CA\_n78A-n102A | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n102 | CA\_n102E\_BCS0 |  |
| CA\_n78(2A)-n102A | CA\_n78A-n102A  CA\_n78(2A) | n78 | CA\_n78(2A)\_BCS2 | 0 |
|  |  | n102 | 20, 40, 60, 80, 100 |  |
| CA\_n78(2A)-n102B | CA\_n78A-n102A  CA\_n78(2A)  CA\_n78A-n102B | n78 | CA\_n78(2A)\_BCS2 | 0 |
|  |  | n102 | CA\_n102B\_BCS0 |  |
| CA\_n78(2A)-n102C | CA\_n78A-n102A  CA\_n78(2A)  CA\_n78A-n102C | n78 | CA\_n78(2A)\_BCS2 | 0 |
|  |  | n102 | CA\_n102C\_BCS0 |  |
| CA\_n78(2A)-n102D | CA\_n78A-n102A  CA\_n78(2A) | n78 | CA\_n78(2A)\_BCS2 | 0 |
|  |  | n102 | CA\_n102D\_BCS0 |  |
| CA\_n78(2A)-n102E | CA\_n78A-n102A  CA\_n78(2A) | n78 | CA\_n78(2A)\_BCS2 | 0 |
|  |  | n102 | CA\_n102E\_BCS0 |  |
| CA\_n78(2A)-n102(2A) | CA\_n78A-n102A  CA\_n78(2A) | n78 | CA\_n78(2A)\_BCS2 | 0 |
|  |  | n102 | CA\_n102(2A)\_BCS0 |  |
| CA\_n78A-n105A | CA\_n78A-n105A | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n105 | 5, 10, 15, 20, 25, 30, 35 |  |

Table 5.5A.3.1-1o: 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\_n100A-n101A | CA\_n100A-n101A | n100 | 3, [5] | 0 |
|  |  | n101 | 5, 10 |  |

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: The SCS of each channel bandwidth for NR band refers to Table 5.3.5-1.

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: UL configurations are for non simultaneous Rx/Tx operation.

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.

### <<End of Change3>>

### <<Start of Change4>>

## 5.5B Configurations for DC

For an NR DC configuration specified in Table 5.5B-1, the bandwidth combination sets for the corresponding NR CA configuration in 5.5A.3, i.e., dual uplink inter-band carrier aggregation with uplink assigned to two NR bands, are applicable to Dual Connectivity.

Table 5.5B-1: Inter-band NR DC configurations (two bands)

| NR DC  configuration | Uplink NR DC  configuration |
| --- | --- |
| DC\_n1A-n3A | DC\_n1A-n3A |
| DC\_n1A-n7A | DC\_n1A-n7A |
| DC\_n1A-n20A | DC\_n1A-n20A |
| DC\_n1A-n28A | DC\_n1A-n28A |
| DC\_n1A-n41A | DC\_n1A-n41A |
| DC\_n1A-n46A  DC\_n1A-n46C  DC\_n1A-n46D | DC\_n1A-n46A |
| DC\_n1A-n46(2A) | DC\_n1A-n46A |
| DC\_n1A-n77A2 | DC\_n1A-n77A |
| DC\_n1A-n78A | DC\_n1A-n78A |
| DC\_n1A-n78(2A) | DC\_n1A-n78A |
| DC\_n1A-n79A2 | DC\_n1A-n79A |
| DC\_n1A-n102A  DC\_n1A-n102B  DC\_n1A-n102C  DC\_n1A-n102D  DC\_n1A-n102E | DC\_n1A-n102A  DC\_n1A-n102B  DC\_n1A-n102C |
| DC\_n1A-n102(2A) | DC\_n1A-n102A |
| DC\_n2A-n5A  DC\_n2A-n5B | DC\_n2A-n5A |
| DC\_n2A-n48A  DC\_n2A-n48B  DC\_n2A-n48C | DC\_n2A-n48A |
| DC\_n2A-n48(2A)  DC\_n2A-n48(A-B)  DC\_n2A-n48(A-C) | DC\_n2A-n48A |
| DC\_n2A-n66A  DC\_n2A-n66B | DC\_n2A-n66A |
| DC\_n2A-n77A  DC\_n2A-n77B  DC\_n2A-n77C | DC\_n2A-n77A |
| DC\_n2A-n77(2A)  DC\_n2A-n77(3A)  DC\_n2(2A)-n77A  DC\_n2(2A)-n77B  DC\_n2(2A)-n77(2A)  DC\_n2(2A)-n77C | DC\_n2A-n77A |
| DC\_n3A-n7A | DC\_n3A-n7A |
| DC\_n3A-n20A | DC\_n3A-n20A |
| DC\_n3A-n28A | DC\_n3A-n28A |
| DC\_n3A-n41A | DC\_n3A-n41A |
| DC\_n3A-n77A2 | DC\_n3A-n77A |
| DC\_n3A-n77(2A) 2 | DC\_n3A-n77A |
| DC\_n3A-n78A2 | DC\_n3A-n78A |
| DC\_n3A-n78(2A)2 | DC\_n3A-n78A |
| DC\_n3A-n79A | DC\_n3A-n79A |
| DC\_n3A-n102A  DC\_n3A-n102B  DC\_n3A-n102C  DC\_n3A-n102D  DC\_n3A-n102E | DC\_n3A-n102A  DC\_n3A-n102B  DC\_n3A-n102C |
| DC\_n3A-n102(2A) | DC\_n3A-n102A |
| DC\_n5A-n48A  DC\_n5A-n48B  DC\_n5A-n48C | DC\_n5A-n48A |
| DC\_n5A-n48(2A) | DC\_n5A-n48A |
| DC\_n5A-n66A  DC\_n5B-n66A | DC\_n5A-n66A |
| DC\_n5A-n66(2A)  DC\_n5A-n66(3A)  DC\_n5B-n66(2A) | DC\_n5A-n66A |
| DC\_n5A-n77A  DC\_n5A-n77B  DC\_n5A-n77C  DC\_n5B-n77A  DC\_n5B-n77C | DC\_n5A-n77A |
| DC\_n5A-n77(2A)  DC\_n5A-n77(3A)  DC\_n5(2A)-n77A  DC\_n5(2A)-n77C | DC\_n5A-n77A |
| DC\_n7A-n20A | DC\_n7A-n20A |
| DC\_n7A-n28A | DC\_n7A-n28A |
| DC\_n7A-n46A  DC\_n7A-n46C  DC\_n7A-n46D | DC\_n7A-n46A |
| DC\_n7A-n46(2A) | DC\_n7A-n46A |
| DC\_n7A-n78A | DC\_n7A-n78A |
| DC\_n7A-n78(2A) | DC\_n7A-n78A |
| DC\_n7A-n102A  DC\_n7A-n102B  DC\_n7A-n102C  DC\_n7A-n102D  DC\_n7A-n102E | DC\_n7A-n102A  DC\_n7A-n102B  DC\_n7A-n102C |
| DC\_n7A-n102(2A) | DC\_n7A-n102A |
| DC\_n8A-n78A2 | DC\_n8A-n78A |
| DC\_n12A-n77A | DC\_n12A-n77A |
| DC\_n12A-n77(2A) | DC\_n12A-n77A |
| DC\_n20A-n78A | DC\_n20A-n78A |
| DC\_n20A-n78(2A) | DC\_n20A-n78A |
| DC\_n28A-n41A | DC\_n28A-n41A |
| DC\_n28A-n46A  DC\_n28A-n46C  DC\_n28A-n46D | DC\_n28A-n46A |
| DC\_n28A-n46(2A) | DC\_n28A-n46A |
| DC\_n28A-n77A2 | DC\_n28A-n77A |
| DC\_n28A-n77(2A) | DC\_n28A-n77A |
| DC\_n28A-n78A2 | DC\_n28A-n78A |
| DC\_n28A-n78(2A)2 | DC\_n28A-n78A |
| DC\_n28A-n79A | DC\_n28A-n79A |
| DC\_n28A-n102A  DC\_n28A-n102B  DC\_n28A-n102C  DC\_n28A-n102D  DC\_n28A-n102E | DC\_n28A-n102A  DC\_n28A-n102B  DC\_n28A-n102C |
| DC\_n28A-n102(2A) | DC\_n28A-n102A |
| DC\_n41A-n77A | DC\_n41A-n77A |
| DC\_n41A-n78A | DC\_n41A-n78A |
| DC\_n41A-n79A2, 3 | DC\_n41A-n79A |
| DC\_n46A-n48A  DC\_n46A-n48B  DC\_n46A-n48C  DC\_n46B-n48A  DC\_n46B-n48B  DC\_n46B-n48C  DC\_n46C-n48A  DC\_n46C-n48B  DC\_n46C-n48C  DC\_n46D-n48A  DC\_n46D-n48B  DC\_n46D-n48C  DC\_n46N-n48A  DC\_n46N-n48B  DC\_n46N-n48C | DC\_n46A-n48A  DC\_n46A-n48B |
| DC\_n46A-n77A  DC\_n46C-n77A  DC\_n46D-n77A | DC\_n46A-n77A |
| DC\_n46A-n77(2A)  DC\_n46C-n77(2A)  DC\_n46D-n77(2A)  DC\_n46(2A)-n77A  DC\_n46(2A)-n77(2A) | DC\_n46A-n77A |
| DC\_n46A-n78A  DC\_n46C-n78A  DC\_n46D-n78A | DC\_n46A-n78A |
| DC\_n46A-n78(2A)  DC\_n46C-n78(2A)  DC\_n46D-n78(2A)  DC\_n46(2A)-n78A  DC\_n46(2A)-n78(2A) | DC\_n46A-n78A |
| DC\_n48A-n66A  DC\_n48B-n66A  DC\_n48C-n66A | DC\_n48A-n66A |
| DC\_n48A-n66(2A)  DC\_n48B-n66(2A)  DC\_n48(2A)-n66A  DC\_n48(2A)-n66(2A)  DC\_n48(A-C)-n66A | DC\_n48A-n66A |
| DC\_n48A-n70A  DC\_n48B-n70A | DC\_n48A-n70A |
| DC\_n48(2A)-n70A | DC\_n48A-n70A |
| DC\_n48A-n71A  DC\_n48B-n71A  DC\_n48C-n71A | DC\_n48A-n71A |
| DC\_n48A-n71(2A)  DC\_n48(2A)-n71A  DC\_n48(2A)-n71(2A)  DC\_n48(3A)-n71A  DC\_n48(4A)-n71A  DC\_n48B-n71(2A) | DC\_n48A-n71A |
| DC\_n48A-n96A  DC\_n48B-n96A  DC\_n48C-n96A  DC\_n48A-n96B  DC\_n48B-n96B  DC\_n48C-n96B  DC\_n48A-n96C  DC\_n48B-n96C  DC\_n48C-n96C  DC\_n48A-n96D  DC\_n48B-n96D  DC\_n48C-n96D  DC\_n48A-n96E  DC\_n48B-n96E  DC\_n48C-n96E | DC\_n48A-n96A DC\_n48B-n96A |
| DC\_n66A-n77A  DC\_n66A-n77B  DC\_n66A-n77C  DC\_n66B-n77A  DC\_n66B-n77C | DC\_n66A-n77A |
| DC\_n66A-n77(2A)  DC\_n66A-n77(3A)  DC\_n66(2A)-n77(2A)  DC\_n66(2A)-n77(3A)  DC\_n66(3A)-n77(2A)  DC\_n66(2A)-n77A  DC\_n66(2A)-n77B  DC\_n66(2A)-n77C  DC\_n66(3A)-n77A | DC\_n66A-n77A |
| DC\_n71A-n77A | DC\_n71A-n77A |
| DC\_n71A-n77(2A) | DC\_n71A-n77A |
| DC\_n77A-n79A1 | DC\_n77A-n79A |
| DC\_n77(2A)-n79A1 | DC\_n77A-n79A |
| DC\_n78A-n79A  DC\_n78(2A)-n79A | DC\_n78A-n79A |
| DC\_n77A-n102A  DC\_n77A-n102B  DC\_n77A-n102C  DC\_n77A-n102D  DC\_n77A-n102E | DC\_n77A-n102A  DC\_n77A-n102B  DC\_n77A-n102C |
| DC\_n77A-n102(2A)  DC\_n77(2A)-n102A  DC\_n77(2A)-n102B  DC\_n77(2A)-n102C  DC\_n77(2A)-n102D  DC\_n77(2A)-n102E  DC\_n77(2A)-n102(2A) | DC\_n77A-n102A  DC\_n77A-n102B  DC\_n77A-n102C |
| DC\_n78A-n102A  DC\_n78A-n102B  DC\_n78A-n102C  DC\_n78A-n102D  DC\_n78A-n102E | DC\_n78A-n102A  DC\_n78A-n102B  DC\_n78A-n102C |
| DC\_n78A-n102(2A)  DC\_n78(2A)-n102A  DC\_n78(2A)-n102B  DC\_n78(2A)-n102C  DC\_n78(2A)-n102D  DC\_n78(2A)-n102E  DC\_n78(2A)-n102(2A) | DC\_n78A-n102A  DC\_n78A-n102B  DC\_n78A-n102C |
| DC\_n100A-n101A | DC\_n100A-n101A |
| NOTE 1: The minimum requirements apply only when there is non-simultaneous Rx/Tx operation between n77-n79 NR carriers. This restriction applies also for these carriers when applicable NR DC configuration is part of a higher order configuration.  NOTE 2: Applicable for UE supporting inter-band NR DC with mandatory simultaneous Rx/Tx capability.  NOTE 3: The frequency range below 2506 MHz for Band n41 is not used in this combination. | |

### <<End of Change4>>

### <<Start of Change5>>

#### 6.2A.1.3 UE maximum output power for Inter-band CA

For inter-band downlink carrier aggregation with one uplink carrier assigned to one NR band, the transmitter power requirements in Table 6.2.1-1 apply for power class 3 and other power classes if indicated in clause 5.5A.3.

For inter-band carrier aggregation with two uplink contiguous carrier assigned to one NR band, the transmitter power requirements specified in subclause 6.2A.1.1 apply.

For inter-band carrier aggregation with two uplink non-contiguous carrier assigned to one NR band, the transmitter power requirements specified in subclause 6.2A.1.2 apply. For inter-band uplink carrier aggregation with uplink assigned to two NR bands, UE maximum output power shall be measured over all component carriers from different bands. If each band has separate antenna connectors, maximum output power is defined as the sum of maximum output power from each UE antenna connector. The period of measurement shall be at least one sub frame (1 ms). The maximum output power is specified in Table 6.2A.1.3-1.

Table 6.2A.1.3-1: UE Power Class for uplink inter-band CA (two bands)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Uplink CA Configuration | Class 1 (dBm) | Tolerance (dB) | Class 2 (dBm) | Tolerance  (dB) | Class 3 (dBm) | Tolerance (dB) | Class 4 (dBm) | Tolerance (dB) |
| CA\_n1A-n3A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n5A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n7A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n8A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n18A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n20A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n26A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n28A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n40A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n41A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n1A-n46A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n74A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n1A-n78A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n1A-n78C |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n79A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n1A-n102A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n102B |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n102C |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n1A-n105A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n2A-n5A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n2A-n7A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n2A-n12A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n2A-n14A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n2A-n30A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n2A-n41A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n2A-n48A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n2A-n66A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n2A-n71A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n2A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n2A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n5A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n7A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n8A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n18A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n20A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n26A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n28A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n34A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n38A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n40A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n3A-n41A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n3A-n41C |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n74A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n3A-n78A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n3A-n78C |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n79A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n3A-n79C |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n3A-n102A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n102B |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n102C |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n3A-n105A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n5A-n7A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n5A-n12A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n5A-n14A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n5A-n25A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n5A-n28A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n5A-n30A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n5A-n40A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n5A-n41A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n5A-n48A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n5A-n66A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n5A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n5A-n78A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n5A-n79A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n5A-n105A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n7A-n8A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n7A-n20A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n7A-n25A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n7A-n26A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n7A-n28A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n7A-n40A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n7A-n46A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n7A-n66A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n7A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n7A-n78A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n7A-n102A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n7A-n102B |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n7A-n102C |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n7A-n105A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n8A-n20A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n8A-n28A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n8A-n34A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n8A-n39A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n8A-n40A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n8A-n41A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n8A-n41C |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n8A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n8A-n78A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n8A-n78C |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n8A-n79A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n8A-n79C |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n12A-n25A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n12A-n30A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n12A-n66A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n12A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n12A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n13A-n25A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n13A-n66A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n13A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n14A-n30A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n14A-n66A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n14A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n18A-n28A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n18A-n40A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n18A-n41A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n18A-n74A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n18A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n18A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n20A-n28A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n20A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n24A-n41A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n24A-n48A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n24A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n25A-n38A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n25A-n41A |  |  | 266 | +2/-32 | 23 | +2/-3 |  |  |
| CA\_25A-n48A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n25A-n66A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n25A-n71A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n25A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n25A-n78A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n25A-n85A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n26A-n28A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n26A-n48A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n26A-n66A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n26A-n70A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n26A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n26A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n28A-n34A |  |  | 266 | +2/-32 | 23 | +2/-3 |  |  |
| CA\_n28A-n39A |  |  | 266 | +2/-32 | 23 | +2/-3 |  |  |
| CA\_n28A-n40A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n28A-n41A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n28A-n41C |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n28A-n46A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n28A-n50A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n28A-n74A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n28A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n28A-n78A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n28A-n79A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n28A-n79C |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n28A-n102A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n28A-n102B |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n28A-n102C |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n34A-n79A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n30A-n66A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n30A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n34A-n39A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n34A-n40A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n34A-n41A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n34A-n41C |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n34A-n79A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n38A-n66A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n38A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n39A-n40A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n39A-n41A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n39A-n41C |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n39A-n79A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n40A-n41A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n40A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n40A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n40A-n79A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n40A-n79C |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n41A-n48A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n41A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n40A-n105A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n41A-n50A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n41A-n66A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n41A-n70A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n41A-n71A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n41A-n74A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n41A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n41A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n41A-n79A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n41A-n79C |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n41C-n79A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n41A-n85A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n46A-n48A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n46A-n48B |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n46A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n46A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n48A-n66A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n48A-n70A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n48A-n71A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n48A-n96A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n48B-n96A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n48A-n96B |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n50A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n66A-n71A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n66A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n66A-n78A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n66A-n85A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n70A-n71A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n70A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n70A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n71A-n77A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n71A-n78A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n74A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n74A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n77A-n79A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n77A-n85A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n77A-n102A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n77A-n102B |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n77A-n102C |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n78A-n79A |  |  | 266 | +2/-3 | 23 | +2/-3 |  |  |
| CA\_n78A-n92A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n78A-n102A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n78A-n102B |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n78A-n102C |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n78A-n105A |  |  |  |  | 23 | +2/-3 |  |  |
| CA\_n100A-n101A |  |  |  |  | 23 | +2/-3 |  |  |
| NOTE 1: Void  NOTE 2: An uplink CA configuration in which at least one of the bands has NOTE 3 in Table 6.2.1-1 is allowed to reduce the lower tolerance limit by 1.5 dB when the transmission bandwidths of at least one of the bands is confined within FUL\_low and FUL\_low + 4 MHz or FUL\_high - 4 MHz and FUL\_high.  NOTE 3: PPowerClass is the maximum UE power specified without taking into account the tolerance  NOTE 4: For inter-band carrier aggregation the maximum power requirement should apply to the total transmitted power over all component carriers (per UE).  NOTE 5: Power class 3 is the default power class unless otherwise stated.  NOTE 6: The UE supports PC3 within NR FDD band, and supports either PC3 or PC2 within NR TDD band.  NOTE 7: The UE that supports a PC2 uplink CA configuration with single carrier for each individual band and a composite of supporting PC3 within an NR TDD or FDD band and PC2 within a second NR TDD band may signal a *higherPowerLimit-r17* capability whereby the maximum output power indicated in the table may be exceeded in accordance with sub-clause 6.2A.4.1.3. The power classes referenced are according to the reported *ue-PowerClassPerBandPerBC-r17* if indicated or ue-PowerClass otherwise.  NOTE 8: The UE that supports a PC3 uplink CA configuration with a composite of supporting PC3 within an NR TDD or FDD band and PC5 within a second NR band listed in Table 6.2F.1-1 may signal a *higherPowerLimit-r17* capability whereby the maximum output power indicated in the table may be exceeded in accordance with sub-clause 6.2A.4.1.3. The power classes referenced are according to the reported *ue-PowerClassPerBandPerBC-r17* if indicated or ue-PowerClass otherwise. | | | | | | | | |

### <<End of Change5>>

### <<Start of Change6>>

##### 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-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-n40 | 0.5 | 0.5 |
| CA\_n3-n41 | 0.5 | 0.34 / 0.85 |
| 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-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-n14 | 0.5 | 0.5 |
| CA\_n5-n25 | 0.3 | 0.3 |
| CA\_n5-n28 | 0.7 | 0.7 |
| CA\_n5-n29 | 0.5 | 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-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\_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-n75 | 0.3 | N/A |
| CA\_n20-n78 | 0.6 | 0.8 |
| CA\_n20-n67 | 0.5 | N/A |
| 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 |
| 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-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\_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-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. | | |

Table 6.2A.4.2.3-2: Void

Table 6.2A.4.2.3-3: Void

### <<End of Change6>>

### <<Start of Change7>>

### 6.2B.1 UE maximum output power for NR-DC

For inter-band NR-DC with one uplink carrier assigned per NR band, the transmitter power requirements in clause 6.2 apply per band.

For inter-band NR-DC with one uplink assigned per band, the UE maximum output power shall be measured over all component carriers from different bands. If each band has separate antenna connectors, the maximum output power is defined as the sum of maximum output power from each UE antenna connector. The period of measurement shall be at least one sub frame (1 ms). The maximum output power is specified in Table 6.2B.1.3-1.

**Table 6.2B.1.3-1 UE Power Class for inter-band NR-DC**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Uplink CA Configuration | Class 1 (dBm) | Tolerance (dB) | Class 2 (dBm) | Tolerance  (dB) | Class 3 (dBm) | Tolerance (dB) | Class 4 (dBm) | Tolerance (dB) |
| DC\_n1A-n3A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n1A-n7A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n1A-n20A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n1A-n28A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n1A-n41A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n1A-n46A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n1A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n1A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n1A-n79A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n1A-n102A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n1A-n102B |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n1A-n102C |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n2A-n5A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n2A-n48A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n2A-n66A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n2A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n3A-n7A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n3A-n20A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n3A-n28A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n3A-n41A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n3A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n3A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n3A-n79A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n3A-n102A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n5A-n48A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n5A-n66A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n5A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n7A-n20A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n7A-n28A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n7A-n46A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n7A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n7A-n102A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n7A-n102B |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n7A-n102C |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n8A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n12A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n20A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n28A-n41A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n28A-n46A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n28A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n28A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n28A-n79A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n28A-n102A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n28A-n102B |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n28A-n102C |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n41A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n41A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n41A-n79A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n46A-n48A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n46A-n48B |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n46A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n46A-n78A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n48A-n66A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n48A-n70A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n48A-n71A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n48A-n96A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n48B-n96A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n66A-n77A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n77A-n79A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n77A-n102A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n77A-n102B |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n77A-n102C |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n78A-n79A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n78A-n102A |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n78A-n102B |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n78A-n102C |  |  |  |  | 23 | +2/-3 |  |  |
| DC\_n100A-n101A |  |  |  |  | 23 | +2/-3 |  |  |
| NOTE 1: An uplink DC configuration in which at least one of the bands has NOTE 3 in Table 6.2.1-1 is allowed to reduce the lower tolerance limit by 1.5 dB when the transmission bandwidths of at least one of the bands is confined within FUL\_low and FUL\_low + 4 MHz or FUL\_high - 4 MHz and FUL\_high.  NOTE 2: PPowerClass is the maximum UE power specified without account of the tolerance  NOTE 3: The maximum power requirement applies to the total transmitted power over both the MCG and SCG.  NOTE 4: Power class 3 is the default power class unless otherwise stated. | | | | | | | | |

### <<End of Change7>>

### <<Start of Change8>>

##### 6.5A.3.2.3 Spurious emissions for UE co-existence for Inter-band CA

This clause specifies the additional requirements for inter-band uplink carrier aggregation configurations with the single CC uplink assigned to two NR bands for coexistence with protected bandsfor the specified uplink carrier aggregation configurations in Table 6.5A.3.2.3-1. The intersection of the requirements for the individual bands specified in clause 6.5.3.2 shall also apply for the specified uplink carrier aggregation configurations. Intersection of a requirement means that both UL constituent bands have the same protected band requirement specified and if one or both protected bands have note(s) associated those note(s) also apply.

For inter-band carrier aggregation with two contiguous carriers assigned to one NR band, the requirements in subclause 6.5A.3.2.1 apply for that band.

For inter-band carrier aggregation with two uplink non-contiguous carrier assigned to one NR band, the spurious emissions for UE co-existence requirements in subclause 6.5A.3.2.2 apply for that band.

For inter-band carrier aggregation with the uplink assigned to two NR bands, the requirements in Table 6.5A.3.2.3-1 apply on each component carrier with all component carriers are active.

NOTE: For inter-band carrier aggregation with uplink assigned to two NR bands the requirements in Table 6.5A.3.2.3-1 could be verified by measuring spurious emissions at the specific frequencies where second and third order intermodulation products generated by the two transmitted carriers can occur; in that case, the requirements for remaining applicable frequencies in Table 6.5A.3.2.3-1 and in clause 6.5.3.2 would be considered to be verified by the measurements verifying the one uplink inter-band CA UE to UE co-existence requirements.

Table 6.5A.3.2.3-1: Requirements for uplink inter-band carrier aggregation (two bands)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NR CA combination | Spurious emission | | | | | | |
|  | Protected Band | Frequency range (MHz) | | | Maximum Level (dBm) | MBW (MHz) | NOTE |
| CA\_n1-n18 | Frequency range | 758 | - | 799 | -50 | 1 |  |
|  | Frequency range | 799 | - | 803 | -40 | 1 | 4 |
|  | Frequency range | 860 | - | 890 | -40 | 1 |  |
|  | Frequency range | 945 | - | 960 | -50 | 1 |  |
|  | Frequency range | 2545 | - | 2575 | -50 | 1 |  |
|  | Frequency range | 2595 | - | 2645 | -50 | 1 |  |
| CA\_n1-n20 | Frequency range | 758 | - | 788 | -50 | 1 |  |
| CA\_n1-n26 | Frequency range | 945 | - | 960 | -50 | 1 |  |
|  | Frequency range | 703 | - | 79924 | -50 | 1 |  |
|  | Frequency range | 79924 | - | 803 | -40 | 1 | 4 |
| CA\_n1-n28 | Frequency range | 470 | - | 694 | -42 | 8 | 4, 14 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 15 |
|  | Frequency range | 758 | - | 773 | -30 | 1 | 4 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 4 |
| CA\_n1-n40 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n1-n74 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
|  | Frequency range | 1400 | - | 1427 | -32 | 27 | 4, 20 |
|  | Frequency range | 1475 | - | 1488 | -28 | 1 | 4, 21 |
|  | Frequency range | 1475 | - | 1488 | -50 | 1 | 4, 22 |
|  | Frequency range | 1488 | - | 1510.9 | -35 | 1 | 4, 23 |
|  | Frequency range | 1488 | - | 1518 | -50 | 1 | 4 |
| CA\_n2-n14 | Frequency range | 769 | - | 775 | -35 | 0.00625 | 4 |
|  | Frequency range | 799 | - | 805 | -35 | 0.00625 | 4 |
| CA\_n3-n5 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n3-n8 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n3-n18 | Frequency range | 945 | - | 960 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
|  | Frequency range | 2545 | - | 2575 | -50 | 1 |  |
|  | Frequency range | 2595 | - | 2645 | -50 | 1 |  |
| CA\_n3-n20 | Frequency range | 758 | - | 788 | -50 | 1 |  |
| CA\_n3-n26 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
|  | Frequency range | 703 | - | 79924 | -50 | 1 |  |
|  | Frequency range | 79924 | - | 803 | -40 | 1 | 4 |
|  | Frequency range | 945 | - | 960 | -50 | 1 |  |
| CA\_n3-n34 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n3-n28 | Frequency range | 470 | - | 694 | -42 | 8 | 4, 14 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 15 |
|  | Frequency range | 758 | - | 773 | -30 | 1 | 4 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 4 |
|  | Frequency range | 1839.9 | - | 1879.9 | -50 | 1 | 4 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 11 |
| CA\_n3-n40 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n3-n41 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n3-n74 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
|  | Frequency range | 1400 | - | 1427 | -32 | 27 | 4, 20 |
|  | Frequency range | 1475 | - | 1488 | -28 | 1 | 4, 21 |
|  | Frequency range | 1475 | - | 1488 | -50 | 1 | 4, 22 |
|  | Frequency range | 1488 | - | 1510.9 | -35 | 1 | 4, 23 |
|  | Frequency range | 1488 | - | 1518 | -50 | 1 | 4 |
| CA\_n3-n77 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n3-n78 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n3-n79 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n5-n7 | Frequency range | 859 | - | 869 | -27 | 1 |  |
| CA\_n5-n28 | Frequency range | 470 | - | 710 | -26.2 | 6 | 13 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 4 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n5-n40 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n5-n48 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 8 |
| CA\_n5-n66 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n5-n77 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n5-n78 | Frequency range | 945 | - | 960 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
|  | Frequency range | 2545 | - | 2575 | -50 | 1 | 2 |
|  | Frequency range | 2595 | - | 2645 | -50 | 1 |  |
| CA\_n5-n79 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n5-n105 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n7-n26 | Frequency range | 703 | - | 79924 | -50 | 1 |  |
|  | Frequency range | 79924 | - | 803 | -40 | 1 | 4 |
|  | Frequency range | 945 | - | 960 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n7-n28 | Frequency range | 758 | - | 773 | -32 | 1 | 4 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
| CA\_n8-n20 | Frequency range | 758 | - | 788 | -50 | 1 |  |
| CA\_n8-n28 | Frequency range | 470 | - | 694 | -42 | 8 | 4, 14 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 13 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 4 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 4 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 11 |
| CA\_n8-n34 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n8-n40 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n8-n41 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n8-n77 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n8-n78 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n8-n79 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n12-n78 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n13-n25 | Frequency range | 769 | - | 775 | -35 | 0.00625 | 4 |
|  | Frequency range | 799 | - | 805 | -35 | 0.00625 | 4 |
| CA\_n13-n66 | Frequency range | 769 | - | 775 | -35 | 0.00625 | 4 |
|  | Frequency range | 799 | - | 805 | -35 | 0.00625 | 4 |
| CA\_n13-n77 | Frequency range | 769 | - | 775 | -35 | 0.00625 | 4 |
|  | Frequency range | 799 | - | 805 | -35 | 0.00625 | 4 |
| CA\_n14-n30 | Frequency range | 769 | - | 775 | -35 | 0.00625 | 4 |
|  | Frequency range | 799 | - | 805 | -35 | 0.00625 | 4 |
| CA\_n14-n66 | Frequency range | 769 | - | 775 | -35 | 0.00625 | 4 |
|  | Frequency range | 799 | - | 805 | -35 | 0.00625 | 4 |
| CA\_n14-n77 | Frequency range | 769 | - | 775 | -35 | 0.00625 | 4, 20 |
|  | Frequency range | 799 | - | 805 | -35 | 0.00625 | 4, 20 |
| CA\_n18-n28 | Frequency range | 470 | - | 694 | -42 | 8 | 4, 14 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 13 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 4 |
|  | Frequency range | 758 | - | 799 | -50 | 1 |  |
|  | Frequency range | 799 | - | 803 | -40 | 1 | 4 |
|  | Frequency range | 860 | - | 890 | -40 | 1 |  |
|  | Frequency range | 945 | - | 960 | -50 | 1 | 4 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
|  | Frequency range | 2545 | - | 2575 | -50 | 1 |  |
|  | Frequency range | 2595 | - | 2645 | -50 | 1 |  |
| CA\_n18-n40 | Frequency range | 758 | - | 799 | -50 | 1 |  |
|  | Frequency range | 799 | - | 803 | -40 | 1 |  |
|  | Frequency range | 860 | - | 890 | -40 | 1 |  |
|  | Frequency range | 945 | - | 960 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
|  | Frequency range | 2545 | - | 2575 | -50 | 1 |  |
|  | Frequency range | 2595 | - | 2645 | -50 | 1 |  |
| CA\_n18-n41 | Frequency range | 758 | - | 799 | -50 | 1 |  |
|  | Frequency range | 799 | - | 803 | -40 | 1 |  |
|  | Frequency range | 860 | - | 890 | -40 | 1 |  |
|  | Frequency range | 945 | - | 960 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n18-n74 | Frequency range | 758 | - | 799 | -50 | 1 |  |
|  | Frequency range | 799 | - | 803 | -40 | 1 |  |
|  | Frequency range | 860 | - | 890 | -40 | 1 |  |
|  | Frequency range | 945 | - | 960 | -50 | 1 |  |
|  | Frequency range | 1400 | - | 1427 | -32 | 27 | 4, 20 |
|  | Frequency range | 1475 | - | 1488 | -28 | 1 | 4, 21 |
|  | Frequency range | 1475 | - | 1488 | -50 | 1 | 4, 22 |
|  | Frequency range | 1488 | - | 1510.9 | -35 | 1 | 4, 23 |
|  | Frequency range | 1488 | - | 1518 | -50 | 1 | 4 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
|  | Frequency range | 2545 | - | 2575 | -50 | 1 |  |
|  | Frequency range | 2595 | - | 2645 | -50 | 1 |  |
| CA\_n18-n77 | Frequency range | 758 | - | 799 | -50 | 1 |  |
|  | Frequency range | 799 | - | 803 | -40 | 1 |  |
|  | Frequency range | 860 | - | 890 | -40 | 1 |  |
|  | Frequency range | 945 | - | 960 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
|  | Frequency range | 2545 | - | 2575 | -50 | 1 |  |
|  | Frequency range | 2595 | - | 2645 | -50 | 1 |  |
| CA\_n18-n78 | Frequency range | 758 | - | 799 | -50 | 1 |  |
|  | Frequency range | 799 | - | 803 | -40 | 1 |  |
|  | Frequency range | 860 | - | 890 | -40 | 1 |  |
|  | Frequency range | 945 | - | 960 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
|  | Frequency range | 2545 | - | 2575 | -50 | 1 |  |
|  | Frequency range | 2595 | - | 2645 | -50 | 1 |  |
| CA\_n20-n28 | Frequency range | 758 | - | 773 | -32 | 1 | 4 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
| CA\_n26-n28 | Frequency range | 470 | - | 710 | -26.2 | 6 | 13 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 4 |
|  | Frequency range | 773 | - | 79924 | -50 | 1 |  |
|  | Frequency range | 79924 | - | 803 | -40 | 1 | 4 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n26-n48 | Frequency range | 703 | - | 79924 | -50 | 1 |  |
|  | Frequency range | 79924 | - | 803 | -40 | 1 | 4 |
|  | Frequency range | 945 | - | 960 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n26-n66 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n26-n70 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n26-n77 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n26-n78 | Frequency range | 703 | - | 799x | -50 | 1 |  |
|  | Frequency range | 799x | - | 803 | -40 | 1 | 4 |
|  | Frequency range | 945 | - | 960 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n28-n34 | Frequency range | 470 | - | 694 | -42 | 8 | 4, 14 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 13 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 4 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 4 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n28-n39 | Frequency range | 470 | - | 694 | -42 | 8 | 4, 14 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 13 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 4 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 4 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
| CA\_n28-n40 | Frequency range | 758 | - | 773 | -32 | 1 | 4 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n28-n41 | Frequency range | 470 | - | 694 | -42 | 8 | 4, 14 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 13 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 4 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 4 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 11 |
| CA\_n28-n46 | Frequency range | 470 | - | 694 | -42 | 8 | 15 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 |  |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 15 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 15 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 8, 19 |
| CA\_n28-n50 | Frequency range | 470 | - | 694 | -42 | 8 | 4, 14 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 13 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 4 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 4 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 11 |
| CA\_n28-n77 | Frequency range | 758 | - | 773 | -32 | 1 |  |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 11 |
| CA\_n28-n74 | Frequency range | 470 | - | 694 | -42 | 8 | 4, 14 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 13 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 4 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 4 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 11 |
|  | Frequency range | 1400 | - | 1427 | -32 | 27 | 4, 20, 2 |
|  | Frequency range | 1475 | - | 1488 | -28 | 1 | 4, 21, 2 |
|  | Frequency range | 1475 | - | 1488 | -50 | 1 | 4, 22, 2 |
|  | Frequency range | 1488 | - | 1510.9 | -35 | 1 | 4, 23, 2 |
|  | Frequency range | 1488 | - | 1518 | -50 | 1 | 4, 2 |
| CA\_n28-n78 | Frequency range | 758 | - | 773 | -32 | 1 |  |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 11 |
| CA\_n28-n79 | Frequency range | 470 | - | 694 | -42 | 8 | 4, 14 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 13 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 4 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 4 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 11 |
| CA\_n34-n39 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n34-n40 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 8 |
| CA\_n34-n41 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n34-n79 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 8 |
| CA\_n40-n41 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n40-n77 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n40-n78 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n40-n79 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n41-n74 | Frequency range | 1884.5 |  | 1915.7 | -41 | 0.3 | 3 |
|  | Frequency range | 1400 | - | 1427 | -32 | 27 | 4, 20 |
|  | Frequency range | 1475 | - | 1488 | -28 | 1 | 4, 21 |
|  | Frequency range | 1475 | - | 1488 | -50 | 1 | 4, 22 |
|  | Frequency range | 1488 | - | 1510.9 | -35 | 1 | 4, 23 |
|  | Frequency range | 1488 | - | 1518 | -50 | 1 | 4 |
| CA\_n41-n77 | Frequency range | 1884.5 |  | 1915.7 | -41 | 0.3 | 3 |
| CA\_n41-n78 | Frequency range | 1884.5 |  | 1915.7 | -41 | 0.3 | 3 |
| CA\_n41-n79 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n46-n77 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 8 |
| CA\_n46-n78 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 8 |
| CA\_n70-n77 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n71-n77 | Frequency range | 1884.5 |  | 1915.7 | -41 | 0.3 | 3 |
| CA\_n74-n77 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
|  | Frequency range | 1400 | - | 1427 | -32 | 27 | 4, 20 |
|  | Frequency range | 1475 | - | 1488 | -50 | 1 | 21 |
|  | Frequency range | 1475 | - | 1488 | -28 | 1 | 4, 21 |
|  | Frequency range | 1475 | - | 1488 | -50 | 1 | 4, 22 |
|  | Frequency range | 1488 | - | 1510.9 | -35 | 1 | 4, 23 |
| CA\_n74-n78 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
|  | Frequency range | 1400 | - | 1427 | -32 | 27 | 4, 20 |
|  | Frequency range | 1475 | - | 1488 | -28 | 1 | 4, 21 |
|  | Frequency range | 1475 | - | 1488 | -50 | 1 | 4, 22 |
|  | Frequency range | 1488 | - | 1510.9 | -35 | 1 | 4, 23 |
|  | Frequency range | 1488 | - | 1518 | -50 | 1 | 4 |
| CA\_n77-n79 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n77-n85 | Frequency range | 1884.5 |  | 1915.7 | -41 | 0.3 | 3 |
| CA\_n78-n79 | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| CA\_n100-n101 | Frequency range | 758 | - | 788 | -50 | 1 |  |
| NOTE 1: Void.  NOTE 2: As exceptions, measurements with a level up to the applicable requirements defined in Table 6.5.3.1-2 are permitted for each assigned NR carrier used in the measurement due to 2nd, 3rd, 4th or 5th harmonic spurious emissions. Due to spreading of the harmonic emission the exception is also allowed for the first 1 MHz frequency range immediately outside the harmonic emission on both sides of the harmonic emission. This results in an overall exception interval centred at the harmonic emission of (2 MHz + N x LCRB x 180kHz), where N is 2, 3, 4, 5 for the 2nd, 3rd, 4th or 5th harmonic respectively. The exception is allowed if the measurement bandwidth (MBW) totally or partially overlaps the overall exception interval.  NOTE 3: Applicable when co-existence with PHS system operating in 1884.5 -1915.7 MHz  NOTE 4: These requirements also apply for the frequency ranges that are less than FOOB (MHz) in Table 6.5.3.1-1 from the edge of the channel bandwidth.  NOTE 5: Void.  NOTE 6: Void.  NOTE 7: Void.  NOTE 8: This requirement is only applicable for carriers with bandwidth confined within 1885-1920 MHz (requirement for carriers with at least 1RB confined within 1880 - 1885 MHz is not specified). This requirement applies for an uplink transmission bandwidth less than or equal to 54 RB for carriers of 15 MHz bandwidth when carrier center frequency is within the range 1892.5 - 1894.5 MHz and for carriers of 20 MHz bandwidth when carrier center frequency is within the range 1895 - 1903 MHz.  NOTE 9: Void.  NOTE 10: Void.  NOTE 11:Applicable when the assigned NR carrier is confined within 718 MHz and 748 MHz and when the channel bandwidth used is 5 or 10 MHz.  NOTE 12: Void.  NOTE 13: This requirement is applicable for 5 and 10 MHz NR channel bandwidth allocated within 718 - 728 MHz. For carriers of 10 MHz bandwidth, this requirement applies for an uplink transmission bandwidth less than or equal to 30 RB with RBstart > 1 and Rbstart < 48.  NOTE 14: This requirement is applicable in the case of a 10 MHz NR carrier confined within 703 MHz and 733 MHz, otherwise the requirement of -25 dBm with a measurement bandwidth of 8 MHz applies.  NOTE 15: As exceptions, measurements with a level up to the applicable requirement of -36 dBm/MHz is permitted for each assigned E-UTRA carrier used in the measurement due to 3rd harmonic spurious emissions. An exception is allowed if there is at least one individual RB within the transmission bandwidth (see Figure 5.6-1) for which the 3rd harmonic totally or partially overlaps the measurement bandwidth (MBW).  NOTE 17: Void.  NOTE 18: Void.  NOTE 19: This requirement is applicable for power class 3 UE for any channel bandwidths within the range 2570 - 2615 MHz with the following restriction: for carriers of 15 MHz bandwidth when carrier centre frequency is within the range 2605.5 - 2607.5 MHz and for carriers of 20 MHz bandwidth when carrier centre frequency is within the range 2597 - 2605 MHz the requirement is applicable only for an uplink transmission bandwidth less than or equal to 54 RB. For power class 2 UE for any channel bandwidths within the range 2570 - 2615 MHz, NS\_44 shall apply. For power class 2 or 3 UE for carriers with channel bandwidth overlapping the frequency range 2615 - 2620 MHz the requirement applies with the maximum output power configured to +19 dBm in the IE P-Max.  NOTE 20: Applicable for cases and when the lower edge of the assigned NR UL channel bandwidth frequency is greater than or equal to 1427 MHz + the channel BW assigned for 5 and 10 MHz bandwidth, and when the lower edge of the assigned NR UL channel bandwidth frequency is greater than or equal to 1440 MHz for 15 and 20 MHz bandwidth.  NOTE 21: Applicable for 5 MHz bandwidth, and when the upper edge of the assigned NR UL channel bandwidth frequency is less than or equal to 1467 MHz assigned for 10 MHz bandwidth, and when the upper edge of the assigned NR UL channel bandwidth frequency is less than or equal to 1463.8 MHz for 15 MHz bandwidth, and when the upper edge of the assigned NR UL channel bandwidth.  NOTE 22: As exceptions, for 90 and 100 MHz channel bandwidth, -40 dBm/MHz is applicable in the frequency range of 2496 – 2505 MHz.  NOTE 23: For these adjacent bands, the emission limit could imply risk of harmful interference to UE(s) operating in the protected operating band.if the measurement bandwidth (MBW) totally or partially overlaps the overall exception interval.  NOTE 24: For 20MHz channel bandwidth in band n26 this value is changed to 794MHz. | | | | | | | |

### <<End of Change8>>