**3GPP TSG-RAN4 Meeting #102-e *R4-2206617***

**Electronic Meeting, 21 February– 3 March, 2022**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **38.101-3** | **CR** | **CRNum** | **rev** | **-** | **Current version:** | **16.10.0** |  |
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| *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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network |  |

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| ***Title:*** | Big CR for TS 38.101-3 Maintenance (Rel-16) | | | | | | | | | |
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| ***Source to WG:*** | MCC, Huawei | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_newRAT-Core  NR\_CADC\_R16\_2BDL\_xBUL-Core  DC\_R16\_xBLTE\_2BNR\_yDL2UL-Core  NR\_CADC\_R16\_3BDL\_2BUL-Core  DC\_R16\_1BLTE\_1BNR\_2DL2UL-Core | | | | |  | ***Date:*** | | | 2021-03-07 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | This big CRs merge the mutiple endorsed draft CRs. The reason for change in each endorsed draft CR is copied below.  R4-2205305 Draft CR for 38.101-3 to add spurious response exception for intra-band EN-DC (R16)  <Reason for change>  The spurious response exception is missing for intra-band EN-DC  R4-2205615 Draft CR to correct the output power in EN-DC Rx tests  <Reason for change>  To prevent and decrease the affect on NR operation by IMD during intra-band EN-DC Rx test, the output power of the E-UTRA uplink shall be set to 29 dB below PCMAX\_L for all intra-band EN-DC tests, not only for intra-band non-contiguous EN-DC.  R4-2205706 draft Rel-16 CR 38101-3-ga0 to align spurious emission between R15 and R16  <Reason for change>   1. The UE co-existing cleanup CR in CR#0534R1 (RP-211080) to Rel-15 TS 38.101-3 v15.11.0 added protected NR band n78 to DC\_20\_n28 and DC\_20\_83. The corresponding UE co-existing cleanup CR in CR#0535R1 (RP-211077) to Rel-16 TS 38.101-3 v16.7.0 did not add NR band n78 to DC\_20\_n28 and DC\_20\_83. Protected NR band n78 need to be added to DC\_20\_n28 and DC\_20\_n83. 2. The UE co-exiting cleanup CR in CR#0232 (RP-200959) to TS 38.101-3 v16.7.0 removed E-UTRA band 42 from DC\_26\_n77 and DC\_26\_n78. The CR when implemented was by mistake removing E-UTRA band 42 from DC\_26\_n79 instead of DC\_26\_n78. 3. Editorial corrections   R4-2205447 Draft CR for clarification on per band pair simultaneous RxTx capability for TS 38.101-3  <Reason for change>  In response to the introduction of the new capability signalling of per band pair simultaneous RxTx capability in RAN2#116-e, RAN4#101-bis-e discusses the clarification on mandatory applicaibility for band pairs included in higher order band combinations, and the following proposals were agreed in R4-2202295.  *Agreement:*   * *Proposal 1: For inter-band EN-DC, NE-DC, NR CA, NR DC and SUL configurations,*   + *If mandatory simultaneous RxTx capability apply for a band configuration, mandatory simultaneous RxTx capability also apply for the band pair of the configuration when the applicable configuration is a subset of a higher order band configuration.* * *Proposal 2: Clarification in Proposal 1 should apply from Rel-15 TS 38.101 series.* * *Proposal 3: FFS how to capture proposal 1 in TS 38.101 series.*   + *Option 1: Add NOTEs in band configuration tables including higher order band configuration (more than 2 bands cases).*   + *Option 2: Add description in general sections.*   This CR tries to reflect propsals 1 and 2 into TS 38.101-3. Regarding proposal 3, this CR is based on option 2 since it is redandant to put the same NOTEs into all band configuration tables.  R4-2203673 draftCR for TS 38.101-3 Rel-16: Corrections on UE co-existence  <Reason for change>  There exist band combinations with harmonics potentially falling into protected bands. Specifying harmonic exception is important as a UE might otherwise fail coexistence tests. Furthermore, duplicate band entries were found and removed.  R4-2203995 Draft CR to TS 38.101-3 on corrections to inter-band EN-DC configurations including FR1 and FR2  <Reason for change>   1. EN-DC configuration DC\_66A\_n5A-n261A/G/H/I/J/K/L/M and DC\_66A\_n5A-n261(2A)/(3A)/(2G)/(2H)/(A-G)/(A-H)/(A-I)/(A-J)/(A-K)/(G-H)/(G-I)/(G-J)/(H-I)/(A-2G)/(A-G-H)/(A-G-I)/(2A-G)/(2A-H)/(2A-I)/(3A-G) are duplicated in Table 5.5B.6.2-1 and should be removed. 2. EN-DC configurations DC\_66A\_n12A-n258A, DC\_66A\_n12A-n260A and DC\_66A\_n12A-n261A are in disorder. 3. EN-DC configurations DC\_1A-18A-41A\_n3A-n77A, DC\_1A-18A-41C\_n3A-n77A and DC\_1A-18A-41A\_n3A-n78A, DC\_1A-18A-41C\_n3A-n78A should be regrouped. 4. EN-DC configurations DC\_1A-18A-41A\_n3A-n257A/I and DC\_1A-18A-41C\_n3A-n257A/I should be regrouped in Table 5.5B.6.4-1.   R4-2206351 Draft CR for 38.101-3 Rel-16 to modify the notes and correct the configurations for inter-band EN-DC configurations  <Reason for change>  Modify the notes for FDD-FDD or TDD-TDD inter-band EN-DC configuration with overlapping or partially overlapping DL bands,  since in Table 5.5B.4.1-1, note 4 and note 11 should apply for FDD-FDD or TDD-TDD inter-band EN-DC/NE-DC operation with completely overlapping inter-band EN-DC combination; note 11 and note 13 should apply for FDD-FDD or TDD-TDD inter-band EN-DC operation with partially overlapping inter-band EN-DC combination; as the description in the original CR R4-1904988 and R4-1913172.  R4-2206352 Draft CR for 38.101-3 updating note in MSD tables (Rel-16)  <Reason for change>  The transmit power is limited to min(+20 dBm, PCMAX\_L,f,c) for the REFSENS MSD due to dual uplink for PC3 2DL/2UL configurations. However the similar limitation is missing for PC2 configurations with 2 bands and configurations with more bands.  R4-2206353 Draft CR for 38.101-3 to specify type 2 UE requirements(Rel-16)  <Reason for change>  Based on the approved WF R4-2114905, RAN4 need to specify requirements to ensure performance with larger received PSD differences (more than 6 dB for Type 1) between inter-band with shared DL spectrum cell groups.  Based on the approved WF R4-2119844, the power imbalance requirements can be introduced based on the agreements.  R4-2205612 Draft CR to correct DC\_3A\_n38A test frequencies  <Reason for change>  Test frequency 2617MHz for n38 is not appropriate, since no valid SSB value can be found for it. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The summary of change in each endorsed draft CR is copied below.  R4-2205305 Draft CR for 38.101-3 to add spurious response exception for intra-band EN-DC (R16)  <Summary of change>  The declaration of spurious response exception is added for intra-band EN-DC.  R4-2205615 Draft CR to correct the output power in EN-DC Rx tests  <Summary of change>  Apply the general requirement about the output power to all intra-band EN-DC tests.  R4-2205706 draft Rel-16 CR 38101-3-ga0 to align spurious emission between R15 and R16  <Summary of change>   1. Adding NR band n78 to DC\_20\_n28 and DC\_20\_n83. 2. Adding E-UTRA band 42 to DC\_26\_n79. 3. Editorial corrections for DC\_66\_n71.   R4-2205447 Draft CR for clarification on per band pair simultaneous RxTx capability for TS 38.101-3  <Summary of change>  The following descriptions are added into section 5.2A.1 and 5.5B.1, respectively:  *If the mandatory simultaneous Rx/Tx capability applies for a band combination, the mandatory simultaneous Rx/Tx capability also applies for the band combination when the applicable band combination is a subset of a higher order band combination.*  *If the mandatory simultaneous Rx/Tx capability applies for a DC configuration, the mandatory simultaneous Rx/Tx capability also applies for the DC configuration when the applicable DC configuration is a subset of a higher order DC configuration.*  R4-2203673 draftCR for TS 38.101-3 Rel-16: Corrections on UE co-existence  <Summary of change>   1. DC\_1\_n41: Duplicate bands 19 and 21 are removed. 2. DC\_14\_n2: Harmonic exception is required for band n77 as the second harmonic of band n2 and the fifth harmonic of band 14 can fall into its frequency range. 3. DC\_14\_n66: Harmonic exception is required for band n77 as the second harmonic of band n66 and the fifth harmonic of band 14 can fall into its frequency range.   R4-2203995 Draft CR to TS 38.101-3 on corrections to inter-band EN-DC configurations including FR1 and FR2  <Summary of change>   1. Remove the duplicated DC configurations of DC\_66A\_n5A-n261A/G/H/I/J/K/L/M and DC\_66A\_n5A-n261(2A)/(3A)/(2G)/(2H)/(A-G)/(A-H)/(A-I)/(A-J)/(A-K)/(G-H)/(G-I)/(G-J)/(H-I)/(A-2G)/(A-G-H)/(A-G-I)/(2A-G)/(2A-H)/(2A-I)/(3A-G) in Table 5.5B.6.2-1. 2. Reorder the configurations DC\_66A\_n12A-n258A, DC\_66A\_n12A-n260A and DC\_66A\_n12A-n261A. 3. Regroup the configurations DC\_1A-18A-41A\_n3A-n77A, DC\_1A-18A-41C\_n3A-n77A and DC\_1A-18A-41A\_n3A-n78A, DC\_1A-18A-41C\_n3A-n78A. 4. Regroup the configurations DC\_1A-18A-41A\_n3A-n257A/I and DC\_1A-18A-41C\_n3A-n257A/I in Table 5.5B.6.4-1.   R4-2206351 Draft CR for 38.101-3 Rel-16 to modify the notes and correct the configurations for inter-band EN-DC configurations  <Summary of change>  Correct follow requirements   1. Modifiy the related notes for FDD-FDD or TDD-TDD inter-band EN-DC operation with overlapping or partially overlapping DL bands in Table 5.5B.4.1-2, Table 5.5B.4.1-3, Table 5.5B.4.1-4, Table 5.5B.4.1-5. 2. Correct the superscripts for the EN-DC containing DC\_42\_n77, DC\_42\_n78, DC\_48\_n77 in Table 5.5B.4.1-1, Table 5.5B.4.1-2, Table 5.5B.4.1-3, Table 5.5B.4.1-4, Table 5.5B.4.1-5.   R4-2206352 Draft CR for 38.101-3 updating note in MSD tables (Rel-16)  <Summary of change>  Adding the transmit power limitation to all relevant configurations.  R4-2206353 Draft CR for 38.101-3 to specify type 2 UE requirements(Rel-16)  <Summary of change>   1. To specify power imbalance requriements for type 2 UE of inter-band EN-DC with overlapping DL bands. 2. To correct note 11 and note 13 in table 5.5B.4.1-1 in Rel-17 due to the disalignment between Rel-16 and Rel-17.   R4-2205612 Draft CR to correct DC\_3A\_n38A test frequencies  <Summary of change>  To meet the test requirements(IMD4 creation), adjust the Band3 and n38 test frequencies. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The consequences if not approved for each endorsed draft CR are coppied below.  R4-2205305 Draft CR for 38.101-3 to add spurious response exception for intra-band EN-DC (R16)  <Consequences if not approved>  The spurious response exception is missing for intra-band EN-DC.  R4-2205615 Draft CR to correct the output power in EN-DC Rx tests  <Consequences if not approved>  IMD will affect the test channel, and may cause the incorrect test.  R4-2205706 draft Rel-16 CR 38101-3-ga0 to align spurious emission between R15 and R16  <Consequences if not approved>  Protected bands will be missing for impacted EN-DC configurations.  R4-2205447 Draft CR for clarification on per band pair simultaneous RxTx capability for TS 38.101-3  <Consequences if not approved>  Mandatory applicaibility for band pairs included in higher order band combinations is unclear considering the existence of per band pair simultaneous RxTx capability signalling of *simultaneousRxTxInterBandCAPer-band-pair/ simultaneousRxTxInterBandENDCPer-band-pair*.  R4-2203673 draftCR for TS 38.101-3 Rel-16: Corrections on UE co-existence  <Consequences if not approved>  UE coexistence requirements stay wrong which can lead to false test requirements.  R4-2203995 Draft CR to TS 38.101-3 on corrections to inter-band EN-DC configurations including FR1 and FR2  <Consequences if not approved>  The inter-band EN-DC configurations including FR1 and FR2 will be incomplete.  R4-2206351 Draft CR for 38.101-3 Rel-16 to modify the notes and correct the configurations for inter-band EN-DC configurations  <Consequences if not approved>  The requirements for FDD-FDD or TDD-TDD inter-band EN-DC/NE-DC operation with overlapping or partially overlapping DL bands are not correct  R4-2206352 Draft CR for 38.101-3 updating note in MSD tables (Rel-16)  <Consequences if not approved>  The REFSENS MSD expectation would be different with unbalanced transmit power.  R4-2206353 Draft CR for 38.101-3 to specify type 2 UE requirements(Rel-16)  <Consequences if not approved>  There is no power imbalance requriements for type 2 UE of inter-band EN-DC with overlapping DL bands.  R4-2205612 Draft CR to correct DC\_3A\_n38A test frequencies  <Consequences if not approved>  No valid test points for DC\_3A\_n38A | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.2A.1, 5.5B.1, 5.5B.4.1, 5.5B.4.2, 5.5B.4.3, 5.5B.4.4, 5.5B.4.5, 5.5B.6.2, 5.5B.6.4, 6.5B.3.3.2, 7.1, 7.3B.2.3.5.1, 7.3B.2.3.5, 7.4B.1, 7.5B.1, 7.6B.2.1, 7.6B.2.6, 7.6B.3.1, 7.6B.4.1, 7.7B.1, 7.8B.2.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | | **X** |  | Test specifications | | | | TS/TR 38.521-3 | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

## **<<Start of Change>>**

## 5.2A Operating bands for CA

### 5.2A.1 Inter-band CA between FR1 and FR2

NR carrier aggregation are designed to operate in the operating bands defined in Table 5.2A.1‑1. The band combinations include at least one FR1 operating band and one FR2 operating band.

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

Table 5.2A.1-1: Band combinations for inter-band NR CA between FR1 and FR2

|  |  |
| --- | --- |
| NR CA Band | NR Band |
| CA\_n8-n2581 | n8, n258 |
| CA\_n71-n2571 | n71, n257 |
| CA\_n77-n2571 | n77, n257 |
| CA\_n78-n2571 | n78, n257 |
| CA\_n79-n2571 | n79, n257 |
| NOTE 1: Applicable for UE supporting inter-band carrier aggregation with mandatory simultaneous Rx/Tx capability. | |

## **<<Next of Change>>**

## 5.5B Configuration for DC

### 5.5B.1 General

The operating bands and bandwidth classes are specified for operation with EN-DC, NGEN-DC, NE-DC or NR-DC configured. The EN-DC, NGEN-DC or NE-DC band combinations include at least one E-UTRA operating band.

For EN-DC or NE-DC configurations indicated by column "Single Uplink allowed" (e.g., problematic band combinations as defined in TS 38.306 [11]) in tables in this clause the UE may indicate capability of not supporting simultaneous dual and triple uplink operation due to possible intermodulation interference to its own primary downlink channel bandwidth of PCell or PSCell if the intermodulation order is 2 or if the intermodulation order is 3 for the combinations when both operating bands are between 450 MHz – 960 MHz or between 1427 MHz – 2690 MHz.

In the case for EN-DC or NE-DC configurations listed in tables in this clause for which the intermodulation products caused by the dual and triple uplink operation fall into the receive band but do not interfere with its own primary downlink channel bandwidth of PCell or PSCell as defined in Annex I the UE is mandated to operate in dual and triple uplink mode. Single Uplink is also allowed for certain band combinations where intermodulation or reverse intermodulation products could create difficulty for meeting emission requirements.

For EN-DC combinations of order 3 or higher, "Single Uplink allowed" UL configurations captured in Table 5.5B.2-1, Table 5.5B.3-1, and Table 5.5B.4-1 apply.

If multiple UL DC configurations are listed for multiple DL DC configurations, valid uplink configurations are such that uplink does not have more carriers than downlink.

Non‑contiguous resource allocation and almost contiguous allocation are not applicable for E‑UTRA or NR carrier part of intra‑band EN‑DC configuration.

If the mandatory simultaneous Rx/Tx capability applies for a DC configuration, the mandatory simultaneous Rx/Tx capability also applies for the DC configuration when the applicable DC configuration is a subset of a higher order DC configuration.

## **<<Next of Change>>**

#### 5.5B.4.1 Inter-band EN-DC configurations within FR1 (two bands)

Table 5.5B.4.1-1: Inter-band EN-DC configurations within FR1 (two bands)

| EN-DC  configuration | Uplink EN-DC  configuration  (NOTE 1) | Single UL allowed | DL interruption allowed  (Note 14) |
| --- | --- | --- | --- |
| DC\_1A\_n3A  DC\_1C\_n3A | DC\_1A\_n3A  DC\_1C\_n3A | DC\_1\_n3 |  |
| DC\_1A\_n5A | DC\_1A\_n5A | No |  |
| DC\_1A\_n7A  DC\_1A\_n7B | DC\_1A\_n7A | No |  |
| DC\_1A-1A\_n7A  DC\_1A-1A\_n7B | DC\_1A\_n7A | No |  |
| DC\_1A\_n8A | DC\_1A\_n8A | No |  |
| DC\_1A\_n20A | DC\_1A\_n20A | No |  |
| DC\_1A\_n28A | DC\_1A\_n28A | No |  |
| DC\_1A\_n38A  DC\_1C\_n38A | DC\_1A\_n38A | No |  |
| DC\_1A\_n40A | DC\_1A\_n40A | No |  |
| DC\_1A\_n41A7 | DC\_1A\_n41A | No |  |
| DC\_1A\_n50A | DC\_1A\_n50A | No |  |
| DC\_1A\_n51A | DC\_1A\_n51A | No |  |
| DC\_1A\_n71A  DC\_1A\_n71B | DC\_1A\_n71A | No |  |
| DC\_1A\_n77A7  DC\_1A\_n77C7 | DC\_1A\_n77A | DC\_1\_n77 | No |
| DC\_1A\_n77(2A)7 | DC\_1A\_n77A | DC\_1\_n77 | No |
| DC\_1A\_n78A7  DC\_1A\_n78C7 | DC\_1A\_n78A | No | No |
| DC\_1A\_n78(2A)7 | DC\_1A\_n78A | No | No |
| DC\_1A\_n79A7  DC\_1A\_n79C7 | DC\_1A\_n79A | No | No |
| DC\_2A\_n5A | DC\_2A\_n5A | No |  |
| DC\_2A-2A\_n5A | DC\_2A\_n5A | No |  |
| DC\_2A\_n7A | DC\_2A\_n7A | No |  |
| DC\_2A\_n7(2A) | DC\_2A\_n7A | No |  |
| DC\_2A\_n12A | DC\_2A\_n12A | No |  |
| DC\_2A\_n38A | DC\_2A\_n38A | No |  |
| DC\_2A-2A\_n38A | DC\_2A\_n38A | No |  |
| DC\_2A\_n41A  DC\_2A\_n41C  DC\_2C\_n41A | DC\_2A\_n41A  DC\_2C\_n41A | No |  |
| DC\_2A-2A\_n41A  DC\_2A\_n41(2A) | DC\_2A\_n41A | No |  |
| DC\_2A\_n46A | DC\_2A\_n46A | No |  |
| DC\_2A\_n48A  DC\_2A\_n48B | DC\_2A\_n48A | No |  |
| DC\_2A\_n66A | DC\_2A\_n66A | DC\_2\_n66 |  |
| DC\_2A-2A\_n66A | DC\_2A\_n66A | DC\_2\_n66 |  |
| DC\_2A\_n71A  DC\_2A\_n71B  DC\_2C\_n71A | DC\_2A\_n71A  DC\_2C\_n71A | No |  |
| DC\_2A-2A\_n71A | DC\_2A\_n71A | No |  |
| DC\_2A\_n78A | DC\_2A\_n78A | DC\_2\_n78 |  |
| DC\_2A\_n78(2A) | DC\_2A\_n78A | DC\_2\_n78 |  |
| DC\_2A-2A\_n78A | DC\_2A\_n78A | DC\_2\_n78 |  |
| DC\_3A\_n1A  DC\_3C\_n1A | DC\_3A\_n1A  DC\_3C\_n1A | DC\_3\_n1 |  |
| DC\_3A-3A\_n1A | DC\_3A\_n1A | DC\_3\_n1 |  |
| DC\_3A\_n5A  DC\_3C\_n5A | DC\_3A\_n5A  DC\_3C\_n5A | DC\_3\_n5 |  |
| DC\_3A\_n7A  DC\_3A\_n7B  DC\_3C\_n7A  DC\_3C\_n7B | DC\_3A\_n7A  DC\_3A\_n7B  DC\_3C\_n7A | No |  |
| DC\_3A-3A\_n7A  DC\_3A-3A\_n7B | DC\_3A\_n7A | No |  |
| DC\_3A\_n8A | DC\_3A\_n8A | No |  |
| DC\_3A\_n20A | DC\_3A\_n20A | No |  |
| DC\_3A\_n28A  DC\_3C\_n28A | DC\_3A\_n28A  DC\_3C\_n28A | No |  |
| DC\_3A\_n34A | DC\_3A\_n34A | No |  |
| DC\_3A\_n38A  DC\_3C\_n38A | DC\_3A\_n38A | No |  |
| DC\_3A\_n40A | DC\_3A\_n40A | No |  |
| DC\_3A\_n41A7  DC\_3C\_n41A | DC\_3A\_n41A  DC\_3C\_n41A | DC\_3\_n41 | No |
| DC\_3A\_n50A | DC\_3A\_n50A | No |  |
| DC\_3A\_n51A | DC\_3A\_n51A | No |  |
| DC\_3A\_n71A  DC\_3A\_n71B | DC\_3A\_n71A | No |  |
| DC\_3A\_n77A7  DC\_3A\_n77C7 | DC\_3A\_n77A | DC\_3\_n77 | No |
| DC\_3A\_n77(2A)7 | DC\_3A\_n77A | DC\_3\_n77 | No |
| DC\_3A-3A\_n77A7 | DC\_3A\_n77A | DC\_3\_n77 | No |
| DC\_3A\_n78A7  DC\_3A\_n78C7  DC\_3C\_n78A7 | DC\_3A\_n78A | DC\_3\_n78 | No |
| DC\_3A\_n78(2A)7  DC\_3C\_n78(2A)7 | DC\_3A\_n78A | DC\_3\_n78 | No |
| DC\_3A-3A\_n78A7 | DC\_3A\_n78A | DC\_3\_n78 | No |
| DC\_3A\_n79A7  DC\_3A\_n79C7  DC\_3C\_n79A7 | DC\_3A\_n79A  DC\_3C\_n79A | No | No |
| DC\_4A\_n38A | DC\_4A\_n38A | No |  |
| DC\_4A\_n41A | DC\_4A\_n41A | No |  |
| DC\_4A\_n78A | DC\_4A\_n78A | No |  |
| DC\_4A\_n78(2A) | DC\_4A\_n78A | No |  |
| DC\_5A\_n2A  DC\_5B\_n2A | DC\_5A\_n2A | No |  |
| DC\_5A-5A\_n2A | DC\_5A\_n2A | No |  |
| DC\_5A\_n7A | DC\_5A\_n7A | DC\_5\_n7 |  |
| DC\_5A\_n7(2A) | DC\_5A\_n7A | DC\_5\_n7 |  |
| DC\_5A\_n12A | DC\_5A\_n12A | No |  |
| DC\_5A\_n38A | DC\_5A\_n38A | DC\_5\_n38 |  |
| DC\_5A\_n40A | DC\_5A\_n40A | No |  |
| DC\_5A\_n48A  DC\_5A\_n48B | DC\_5A\_n48A | No |  |
| DC\_5A\_n66A  DC\_5B\_n66A | DC\_5A\_n66A | DC\_5\_n66 |  |
| DC\_5A-5A\_n66A | DC\_5A\_n66A | DC\_5\_n66 |  |
| DC\_5A\_n71A | DC\_5A\_n71A | No |  |
| DC\_5A\_n78A7 | DC\_5A\_n78A | No | No |
| DC\_5A\_n78(2A)7 | DC\_5A\_n78A | No | No |
| DC\_5A\_n79A | DC\_5A\_n79A | No | No |
| DC\_7A\_n1A  DC\_7C\_n1A | DC\_7A\_n1A  DC\_7C\_n1A | No |  |
| DC\_7A-7A\_n1A | DC\_7A\_n1A | No |  |
| DC\_7A\_n3A  DC\_7C\_n3A | DC\_7A\_n3A  DC\_7C\_n3A | No |  |
| DC\_7A\_n5A  DC\_7C\_n5A | DC\_7A\_n5A  DC\_7C\_n5A | DC\_7\_n5 |  |
| DC\_7A-7A\_n5A | DC\_7A\_n5A | DC\_7\_n5 |  |
| DC\_7A\_n8A | DC\_7A\_n8A | No |  |
| DC\_7A-7A\_n78A7 | DC\_7A\_n78A | No |  |
| DC\_7A-7A\_n78(2A)7 | DC\_7A\_n78A | No |  |
| DC\_7A\_n20A | DC\_7A\_n20A | No |  |
| DC\_7A\_n28A  DC\_7C\_n28A | DC\_7A\_n28A  DC\_7C\_n28A | No |  |
| DC\_7A\_n40A | DC\_7A\_n40A | Yes |  |
| DC\_7A\_n51A | DC\_7A\_n51A | No |  |
| DC\_7A\_n66A  DC\_7C\_n66A | DC\_7A\_n66A | No |  |
| DC\_7A-7A\_n66A | DC\_7A\_n66A | No |  |
| DC\_7A\_n71A | DC\_7A\_n71A | No |  |
| DC\_7A\_n77A7 | DC\_7A\_n77A | No |  |
| DC\_7A-7A\_n77A7 | DC\_7A\_n77A | No |  |
| DC\_7A\_n78A7  DC\_7C\_n78A7 | DC\_7A\_n78A  DC\_7C\_n78A | No |  |
| DC\_7A\_n78(2A)7  DC\_7C\_n78(2A)7 | DC\_7A\_n78A  DC\_7C\_n78A | No |  |
| DC\_8A\_n1A | DC\_8A\_n1A | No |  |
| DC\_8A\_n3A | DC\_8A\_n3A | No |  |
| DC\_8A\_n20A | DC\_8A\_n20A | Yes |  |
| DC\_8A\_n28A | DC\_8A\_n28A | No |  |
| DC\_8A\_n34A | DC\_8A\_n34A | No |  |
| DC\_8A\_n39A | DC\_8A\_n39A | No |  |
| DC\_8A\_n40A7 | DC\_8A\_n40A | No |  |
| DC\_8A\_n41A7  DC\_8A\_n41C | DC\_8A\_n41A | No | No |
| DC\_8A\_n41(2A) | DC\_8A\_n41A | No | No |
| DC\_8A\_n77A7 | DC\_8A\_n77A | No | No |
| DC\_8A\_n77(2A)7 | DC\_8A\_n77A | No | No |
| DC\_8A\_n78A7 | DC\_8A\_n78A | No | No |
| DC\_8A\_n79A7  DC\_8A\_n79C | DC\_8A\_n79A  DC\_8A\_n79C | No | No |
| DC\_8A\_n93A | DC\_8A\_n93A\_ULSUP-TDM | N/A |  |
| DC\_8A\_n94A | DC\_8A\_n94A\_ULSUP-TDM | N/A |  |
| DC\_11A\_n3A | DC\_11A\_n3A | No |  |
| DC\_11A\_n28A | DC\_11A\_n28A | No |  |
| DC\_11A\_n77A7 | DC\_11A\_n77A | No | No |
| DC\_11A\_n77(2A)7 | DC\_11A\_n77A | No | No |
| DC\_11A\_n78A7 | DC\_11A\_n78A | No | No |
| DC\_11A\_n79A7 | DC\_11A\_n79A | No |  |
| DC\_12A\_n2A | DC\_12A\_n2A | No |  |
| DC\_12A\_n5A | DC\_12A\_n5A | No |  |
| DC\_12A\_n7A  DC\_12A\_n7(2A) | DC\_12A\_n7A | No |  |
| DC\_12A\_n25A | DC\_12A\_n25A | No |  |
| DC\_12A\_n38A | DC\_12A\_n38A | No |  |
| DC\_12A\_n41A | DC\_12A\_n41A | No |  |
| DC\_12A\_n66A | DC\_12A\_n66A | No |  |
| DC\_12A\_n78A  DC\_12A\_n78(2A) | DC\_12A\_n78A | DC\_12\_n78 |  |
| DC\_13A\_n2A | DC\_13A\_n2A | No |  |
| DC\_13A\_n5A | DC\_13A\_n5A | DC\_13\_n5 |  |
| DC\_13A\_n7A  DC\_13A\_n7(2A) | DC\_13A\_n7A | No |  |
| DC\_13A\_n48A  DC\_13A\_n48B | DC\_13A\_n48A | No |  |
| DC\_13A\_n66A | DC\_13A\_n66A | No |  |
| DC\_13A\_n71A | DC\_13A\_n71A | No |  |
| DC\_13A\_n78A  DC\_13A\_n78(2A) | DC\_13A\_n78A | No |  |
| DC\_14A\_n2A | DC\_14A\_n2A | No |  |
| DC\_14A\_n66A | DC\_14A\_n66A | No |  |
| DC\_18A\_n3A | DC\_18A\_n3A | No |  |
| DC\_18A\_n77A7 | DC\_18A\_n77A | No | No |
| DC\_18A\_n78A7 | DC\_18A\_n78A | No | No |
| DC\_20A\_n91A | DC\_20A\_n91A\_ULSUP-TDM | N/A |  |
| DC\_20A\_n92A | DC\_20A\_n92A\_ULSUP-TDM | N/A |  |
| DC\_18A\_n79A7 | DC\_18A\_n79A | No |  |
| DC\_19A\_n77A7  DC\_19A\_n77C7 | DC\_19A\_n77A | No |  |
| DC\_19A\_n78A7  DC\_19A\_n78C7 | DC\_19A\_n78A | No | No |
| DC\_19A\_n79A7  DC\_19A\_n79C7 | DC\_19A\_n79A | No | No |
| DC\_20A\_n1A | DC\_20A\_n1A | No |  |
| DC\_20A\_n3A | DC\_20A\_n3A | No |  |
| DC\_20A\_n7A | DC\_20A\_n7A | DC\_20\_n7 |  |
| DC\_20A\_n8A | DC\_20A\_n8A | DC\_20\_n8 |  |
| DC\_20A\_n28A8, 11,13 | DC\_20A\_n28A | No |  |
| DC\_20A\_n38A | DC\_20A\_n38A | No |  |
| DC\_20A\_n41A | DC\_20A\_n41A | DC\_20\_n41 |  |
| DC\_20A\_n50A | DC\_20A\_n50A | No |  |
| DC\_20A\_n51A | DC\_20A\_n51A | No |  |
| DC\_20A\_n77A7 | DC\_20A\_n77A | No |  |
| DC\_20A\_n78A7 | DC\_20A\_n78A | No |  |
| DC\_20A\_n78(2A)7 | DC\_20A\_n78A | No |  |
| DC\_21A\_n77A7  DC\_21A\_n77C7 | DC\_21A\_n77A | No |  |
| DC\_21A\_n78A7  DC\_21A\_n78C7 | DC\_21A\_n78A | No | No |
| DC\_21A\_n79A7  DC\_21A\_n79C7 | DC\_21A\_n79A | No | No |
| DC\_25A\_n41A | DC\_25A\_n41A | No |  |
| DC\_25A-25A\_n41A | DC\_25A\_n41A | No |  |
| DC\_26A\_n25A | DC\_26A\_n25A | No |  |
| DC\_26A\_n41A | DC\_26A\_n41A | No |  |
| DC\_26A\_n77A7 | DC\_26A\_n77A | No |  |
| DC\_26A\_n78A7 | DC\_26A\_n78A | No |  |
| DC\_26A\_n79A7 | DC\_26A\_n79A | No |  |
| DC\_28A\_n3A | DC\_28A\_n3A | No |  |
| DC\_28A\_n5A8 | DC\_28A\_n5A | No |  |
| DC\_28A\_n7A  DC\_28A\_n7B | DC\_28A\_n7A  DC\_28A\_n7B | No |  |
| DC\_28A\_n51A | DC\_28A\_n51A | No |  |
| DC\_28A\_n8A | DC\_28A\_n8A | No |  |
| DC\_28A\_n40A | DC\_28A\_n40A | No |  |
| DC\_28A\_n41A7 | DC\_28A\_n41A | No |  |
| DC\_28A\_n50A | DC\_28A\_n50A | No |  |
| DC\_28A\_n77A7  DC\_28A\_n77C7 | DC\_28A\_n77A | No | No |
| DC\_28A\_n77(2A)7 | DC\_28A\_n77A | No | No |
| DC\_28A\_n78A7  DC\_28A\_n78C7 | DC\_28A\_n78A | No | No |
| DC\_28A\_n78(2A)7 | DC\_28A\_n78A | No | No |
| DC\_28A\_n79A7  DC\_28A\_n79C7 | DC\_28A\_n79A | No |  |
| DC\_30A\_n2A | DC\_30A\_n2A | No |  |
| DC\_30A\_n5A | DC\_30A\_n5A | No |  |
| DC\_30A\_n66A | DC\_30A\_n66A | No |  |
| DC\_38A\_n78A7 | DC\_38A\_n78A | No |  |
| DC\_39A\_n40A3 | DC\_39A\_n40A | No |  |
| DC\_39A\_n41A3  DC\_39C\_n41A3 | DC\_39A\_n41A  DC\_39C\_n41A | No | No |
| DC\_39A\_n78A5,7 | DC\_39A\_n78A | No |  |
| DC\_39A\_n79A7  DC\_39A\_n79C7 | DC\_39A\_n79A | No | No |
| DC\_40A\_n1A | DC\_40A\_n1A | No |  |
| DC\_40A\_n41A3  DC\_40C\_n41A3 | DC\_40A\_n41A | No |  |
| DC\_40A\_n77A | DC\_40A\_n77A | No |  |
| DC\_40A\_n78A  DC\_40C\_n78A | DC\_40A\_n78A  DC\_40C\_n78A | No |  |
| DC\_40A\_n79A7,12  DC\_40C\_n79A7,12 | DC\_40A\_n79A | No | No |
| DC\_41A\_n3A7  DC\_41C\_n3A7 | DC\_41A\_n3A  DC\_41C\_n3A | No |  |
| DC\_41A\_n28A7  DC\_41C\_n28A7 | DC\_41A\_n28A  DC\_41C\_n28A | No |  |
| DC\_41A\_n77A  DC\_41C\_n77A | DC\_41A\_n77A  DC\_41C\_n77A | No |  |
| DC\_41A\_n77(2A)  DC\_41C\_n77(2A) | DC\_41A\_n77A  DC\_41C\_n77A | No |  |
| DC\_41A\_n78A  DC\_41C\_n78A  DC\_41D\_n78A | DC\_41A\_n78A  DC\_41C\_n78A | No |  |
| DC\_41A\_n78(2A)  DC\_41C\_n78(2A) | DC\_41A\_n78A  DC\_41C\_n78A | No |  |
| DC\_41A\_n79A6,7  DC\_41A\_n79C6,7  DC\_41C\_n79A6,7 | DC\_41A\_n79A  DC\_41C\_n79A | No | No |
| DC\_42A\_n28A7  DC\_42C\_n28A7 | DC\_42A\_n28A  DC\_42C\_n28A | No |  |
| DC\_42A\_n51A | DC\_42A\_n51A | No |  |
| DC\_42A\_n77A3,4,9,11  DC\_42A\_n77C3,4,9,11  DC\_42C\_n77A3,4,9,11  DC\_42C\_n77C3,4,9,11  DC\_42D\_n77A3,4,9,11  DC\_42D\_n77C3,4,9,11  DC\_42E\_n77A3,4,9,11  DC\_42E\_n77C3,4,9,11 | N/A | N/A |  |
| DC\_42A\_n77(2A)3,4,9,11  DC\_42C\_n77(2A)3,4,9,11 | N/A | N/A |  |
| DC\_42A\_n78A3,4,9,11  DC\_42A\_n78C3,4,9,11  DC\_42C\_n78A3,4,9,11  DC\_42C\_n78C3,4,9,11  DC\_42D\_n78A3,4,9,11  DC\_42D\_n78C3,4,9,11  DC\_42E\_n78A3,4,9,11  DC\_42E\_n78C3,4,9,11 | N/A | N/A |  |
| DC\_42A\_n79A9,15  DC\_42A\_n79C9,15  DC\_42C\_n79A9,15  DC\_42C\_n79C9,15  DC\_42D\_n79A9,15  DC\_42D\_n79C9,15  DC\_42E\_n79A9,15  DC\_42E\_n79C9,15 | N/A | N/A |  |
| DC\_46A\_n78A2  DC\_46C\_n78A2  DC\_46D\_n78A2  DC\_46E\_n78A2 | N/A | N/A |  |
| DC\_48A\_n5A | DC\_48A\_n5A | No |  |
| DC\_48A\_n12A | DC\_48A\_n12A | No |  |
| DC\_48A\_n46A  DC\_48B\_n46A  DC\_48C\_n46A  DC\_48D\_n46A  DC\_48E\_n46A  DC\_48A\_n46B  DC\_48B\_n46B  DC\_48C\_n46B  DC\_48D\_n46B  DC\_48E\_n46B  DC\_48A\_n46C  DC\_48B\_n46C  DC\_48C\_n46C  DC\_48D\_n46C  DC\_48E\_n46C  DC\_48A\_n46D  DC\_48B\_n46D  DC\_48C\_n46D  DC\_48D\_n46D  DC\_48E\_n46D  DC\_48A\_n46E  DC\_48B\_n46E  DC\_48C\_n46E  DC\_48D\_n46E  DC\_48E\_n46E | DC\_48A\_n46A  DC\_48B\_n46A | No |  |
| DC\_48A\_n66A | DC\_48A\_n66A | No |  |
| DC\_48A\_n71A  DC\_48B\_n71A  DC\_48C\_n71A  DC\_48D\_n71A | DC\_48A\_n71A | No |  |
| DC\_48A-48A\_n71A  DC\_48A-48A-48A\_n71A | DC\_48A\_n71A | No |  |
| DC\_66A\_n2A | DC\_66A\_n2A | DC\_66\_n2 |  |
| DC\_66A-66A\_n2A | DC\_66A\_n2A | DC\_66\_n2 |  |
| DC\_66A\_n5A  DC\_66B\_n5A  DC\_66C\_n5A | DC\_66A\_n5A | DC\_66\_n5 |  |
| DC\_66A-66A\_n5A  DC\_66A-66A-66A\_n5A | DC\_66A\_n5A | DC\_66\_n5 |  |
| DC\_66A\_n7A  DC\_66A-66A\_n7A  DC\_66A\_n7(2A)  DC\_66A-66A\_n7(2A) | DC\_66A\_n7A | No |  |
| DC\_66A\_n12A | DC\_66A\_n12A | No |  |
| DC\_66A\_n25A | DC\_66A\_n25A | DC\_66\_n25 |  |
| DC\_66A\_n38A | DC\_66A\_n38A | No |  |
| DC\_66A-66A\_n38A | DC\_66A\_n38A | No |  |
| DC\_66A\_n41A  DC\_66A\_n41C | DC\_66A\_n41A | No |  |
| DC\_66A\_n41(2A) | DC\_66A\_n41A | No |  |
| DC\_66A\_n46A | DC\_66A\_n46A | No |  |
| DC\_66A\_n48A  DC\_66A\_n48B | DC\_66A\_n48A | No |  |
| DC\_66A-66A\_n48A  DC\_66A-66A\_n48B | DC\_66A\_n48A | No |  |
| DC\_66A\_n71A  DC\_66C\_n71A  DC\_66A\_n71B | DC\_66A\_n71A | No |  |
| DC\_66A-66A\_n71A | DC\_66A\_n71A | No |  |
| DC\_66A\_n78A | DC\_66A\_n78A | No |  |
| DC\_66A\_n78(2A) | DC\_66A\_n78A | No |  |
| DC\_66A-66A\_n78A | DC\_66A\_n78A | No |  |
| DC\_66A-66A\_n78(2A) | DC\_66A\_n78A | No |  |
| DC\_71A\_n5A | DC\_71A\_n5A | No |  |
| DC\_71A\_n38A | DC\_71A\_n38A | No |  |
| DC\_71A\_n48A | DC\_71A\_n48A | No |  |
| DC\_71A\_n66A | DC\_71A\_n66A | No |  |
| DC\_71A\_n78A | DC\_71A\_n78A | No |  |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.  NOTE 2: Restricted to E-UTRA operation when inter-band carrier aggregation is configured. The downlink operating band for Band 46 is paired with the uplink operating band (external E-UTRA band) of the carrier aggregation configuration that is supporting the configured Pcell.  NOTE 3: The minimum requirements apply only when there is non-simultaneous Tx/Rx operation between E-UTRA and NR carriers. This restriction applies also for these carriers when applicable EN-DC configuration is part of a higher order EN-DC configuration.  NOTE 4: For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, the minimum requirements for intra-band non-contiguous EN-DC apply for the Band 42 and Band n77/n78 combination. For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, when UE capability *interBandContiguousMRDC* is indicated, the minimum requirements for intra-band-contiguous EN-DC also should be met in addtion to intra-band non-contiguous EN-DC*.* For these UEs, the said intra-band requirements also apply for these carriers when applicable EN-DC configuration is a subset of a higher order EN-DC configuration.  NOTE 5: The frequency range above 3600 MHz for Band n78 is not used in this combination.  NOTE 6: The frequency range below 2506 MHz for Band 41 is not used in this combination.  NOTE 7: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability.  NOTE 8: 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 9: The combination is not used alone as fall back mode of other band combinations in which UL in Band 42 is not used.  NOTE 10: Void.  NOTE 11: For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, the minimum requirements for inter-band EN-DC apply when the maximum power spectral density imbalance between downlink carriers is within 6 dB. For UEs indicating interBandMRDC-WithOverlapDL-Bands-r16, the power imbalance requirement defined in clause 7.6B.2.6 apply.For these UEs, the power spectral density imbalance condition also applies for these carriers when applicable EN-DC configuration is a subset of a higher order EN-DC configuration.  NOTE 12: Applicable for frequency range above 4800 MHz for Band n79 in this combination.  NOTE 13: For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, the minimum requirements apply for synchronized DL carriers with a maximum receive time difference ≤ 3 usec. The requirements also apply for these carriers when applicable EN-DC configuration is a subset of a higher order EN-DC configuration.  NOTE 14: Applicable when dynamic switching between two uplink carriers is conducted. The DL interruption requirements for NR DL carrier(s) and E-UTRA DL carrier(s) are specified in clause 8.2.1.2.14 of 38.133 [15] and clause 7.32.2.12 of 36.133 [16] respectively.  NOTE 15: Simultaneous Rx/Tx capability does not apply for UEs supporting band 42 with a n77 implementation only. Same restrictions are applied to related higher order configurations. | | | |

#### 5.5B.4.2 Inter-band EN-DC configurations within FR1 (three bands)

Table 5.5B.4.2-1: Inter-band EN-DC configurations within FR1 (three bands)

| EN-DC  configuration | Uplink EN-DC  configuration  (NOTE 1) |
| --- | --- |
| DC\_1A-3A\_n5A  DC\_1A-3C\_n5A | DC\_1A\_n5A  DC\_3A\_n5A  DC\_3C\_n5A |
| DC\_1A-3A\_n7A  DC\_1A-3A\_n7B  DC\_1A-3C\_n7A  DC\_1A-3C\_n7B | DC\_1A\_n7A  DC\_3A\_n7A  DC\_3C\_n7A |
| DC\_1A-1A-3A\_n7A  DC\_1A-1A-3A\_n7B  DC\_1A-1A-3C\_n7A  DC\_1A-1A-3C\_n7B  DC\_1A-3A-3A\_n7A  DC\_1A-3A-3A\_n7B  DC\_1A-1A-3A-3A\_n7A | DC\_1A\_n7A  DC\_3A\_n7A  DC\_3C\_n7A |
| DC\_1A-3A\_n8A | DC\_1A\_n8A  DC\_3A\_n8A |
| DC\_1A-3A\_n28A  DC\_1A-3C\_n28A | DC\_1A\_n28A  DC\_3A\_n28A  DC\_3C\_n28A |
| DC\_1A\_n3A-n28A | DC\_1A\_n3A  DC\_1A\_n28A |
| DC\_1A-3A\_n38A | DC\_1A\_n38A  DC\_3A\_n38A |
| DC\_1A-3A\_n40A | DC\_1A\_n40A  DC\_3A\_n40A |
| DC\_1A-3A\_n41A5  DC\_1A-3C\_n41A | DC\_1A\_n41A  DC\_3A\_n41A  DC\_3C\_n41A |
| DC\_1A-3A\_n71A  DC\_1A-3A\_n71B | DC\_1A\_n71A  DC\_3A\_n71A |
| DC\_1A-3A\_n77A5  DC\_1A-3A\_n77C5 | DC\_1A\_n77A  DC\_3A\_n77A |
| DC\_1A-3A\_n77(2A)5 | DC\_1A\_n77A  DC\_3A\_n77A |
| DC\_1A-3A\_n78A5  DC\_1A-3A\_n78C5  DC\_1A-3C\_n78A5 | DC\_1A\_n78A  DC\_3A\_n78A |
| DC\_1A-3A\_n78(2A)5  DC\_1A-3C\_n78(2A)5 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_3C\_n78A |
| DC\_1A\_n3A-n78A5 | DC\_1A\_n3A  DC\_1A\_n78A |
| DC\_1A-3A\_n79A5  DC\_1A-3A\_n79C5 | DC\_1A\_n79A  DC\_3A\_n79A |
| DC\_1A-5A\_n78A5 | DC\_1A\_n78A  DC\_5A\_n78A |
| DC\_1A-5A\_n79A | DC\_1A\_n79A  DC\_5A\_n79A |
| DC\_1A\_n5A-n78A5 | DC\_1A\_n5A  DC\_1A\_n78A |
| DC\_1A-7A\_n3A  DC\_1A-7C\_n3A | DC\_1A\_n3A  DC\_7A\_n3A  DC\_7C\_n3A |
| DC\_1A-7A\_n5A  DC\_1A-7C\_n5A | DC\_1A\_n5A  DC\_7A\_n5A  DC\_7C\_n5A |
| DC\_1A-7A\_n7A | DC\_1A\_n7A  DC\_7A\_n7A2 |
| DC\_1A-1A-7A\_n7A | DC\_1A\_n7A  DC\_7A\_n7A2 |
| DC\_1A-7A\_n8A | DC\_1A\_n8A  DC\_7A\_n8A |
| DC\_1A-7A\_n28A5  DC\_1A-7C\_n28A | DC\_1A\_n28A  DC\_7A\_n28A  DC\_7C\_n28A |
| DC\_1A-7A\_n40A | DC\_1A\_n40A  DC\_7A\_n40A |
| DC\_1A-7A\_n78A5  DC\_1A-7C\_n78A | DC\_1A\_n78A  DC\_7A\_n78A  DC\_7C\_n78A |
| DC\_1A-7A\_n78(2A)5  DC\_1A-7C\_n78(2A)5 | DC\_1A\_n78A  DC\_7A\_n78A  DC\_7C\_n78A |
| DC\_1A-7A-7A\_n78A5 | DC\_1A\_n78A  DC\_7A\_n78A |
| DC\_1A\_n7A-n78A  DC\_1A\_n7B-n78A | DC\_1A\_n7A  DC\_1A\_n78A |
| DC\_1A-8A\_n3A | DC\_1A\_n3A  DC\_8A\_n3A |
| DC\_1A-8A\_n28A | DC\_1A\_n28A  DC\_8A\_n28A |
| DC\_1A\_n8A-n40A | DC\_1A\_n8A  DC\_1A\_n40A |
| DC\_1A-8A\_n77A5 | DC\_1A\_n77A  DC\_8A\_n77A |
| DC\_1A-8A\_n77(2A)5 | DC\_1A\_n77A  DC\_8A\_n77A |
| DC\_1A-8A\_n78A5 | DC\_1A\_n78A  DC\_8A\_n78A |
| DC\_1A\_n8A-n78A5 | DC\_1A\_n8A  DC\_1A\_n78A |
| DC\_1A-8A\_n79A5 | DC\_1A\_n79A  DC\_8A\_n79A |
| DC\_1A-11A\_n3A | DC\_1A\_n3A  DC\_11A\_n3A |
| DC\_1A-11A\_n77A5 | DC\_1A\_n77A  DC\_11A\_n77A |
| DC\_1A-11A\_n77(2A)5 | DC\_1A\_n77A  DC\_11A\_n77A |
| DC\_1A-11A\_n78A5 | DC\_1A\_n78A  DC\_11A\_n78A |
| DC\_1A-18A\_n3A | DC\_1A\_n3A  DC\_18A\_n3A |
| DC\_1A-18A\_n77A5 | DC\_1A\_n77A  DC\_18A\_n77A |
| DC\_1A-18A\_n78A5 | DC\_1A\_n78A  DC\_18A\_n78A |
| DC\_1A-18A\_n79A | DC\_1A\_n79A  DC\_18A\_n79A |
| DC\_1A-19A\_n77A5  DC\_1A-19A\_n77C5 | DC\_1A\_n77A  DC\_19A\_n77A |
| DC\_1A-19A\_n78A5  DC\_1A-19A\_n78C5 | DC\_1A\_n78A  DC\_19A\_n78A |
| DC\_1A-19A\_n79A5  DC\_1A-19A\_n79C5 | DC\_1A\_n79A  DC\_19A\_n79A |
| DC\_1A-20A\_n3A  DC\_1C-20A\_n3A | DC\_1A\_n3A  DC\_20A\_n3A |
| DC\_1A-20A\_n8A | DC\_1A\_n8A  DC\_20A\_n8A |
| DC\_1A-20A\_n28A6,11,12 | DC\_1A\_n28A  DC\_20A\_n28A |
| DC\_1A-20A\_n38A | DC\_1A\_n38A  DC\_20A\_n38A |
| DC\_1A-20A\_n41A | DC\_1A\_n41A  DC\_20A\_n41A |
| DC\_1A-20A\_n78A5 | DC\_1A\_n78A  DC\_20A\_n78A |
| DC\_1A-21A\_n77A5  DC\_1A-21A\_n77C5 | DC\_1A\_n77A  DC\_21A\_n77A |
| DC\_1A-21A\_n78A5  DC\_1A-21A\_n78C5 | DC\_1A\_n78A  DC\_21A\_n78A |
| DC\_1A-21A\_n79A5  DC\_1A-21A\_n79C5 | DC\_1A\_n79A  DC\_21A\_n79A |
| DC\_1A-28A\_n3A | DC\_1A\_n3A  DC\_28A\_n3A |
| DC\_1A-28A\_n5A6 | DC\_1A\_n5A  DC\_28A\_n5A |
| DC\_1A-28A\_n7A  DC\_1A-28A\_n7B | DC\_1A\_n7A  DC\_28A\_n7A  DC\_1A\_n7B  DC\_28A\_n7B |
| DC\_1A-1A-28A\_n7A  DC\_1A-1A-28A\_n7B | DC\_1A\_n7A  DC\_28A\_n7A  DC\_1A\_n7B  DC\_28A\_n7B |
| DC\_1A\_n28A-n40A | DC\_1A\_n28A  DC\_1A\_n40A |
| DC\_1A-28A\_n40A | DC\_1A\_n40A  DC\_28A\_n40A |
| DC\_1A-28A\_n77A5  DC\_1A-28A\_n77C5 | DC\_1A\_n77A  DC\_28A\_n77A |
| DC\_1A-28A\_n78A5  DC\_1A-28A\_n78C5 | DC\_1A\_n78A  DC\_28A\_n78A |
| DC\_1A\_n28A-n77A5  DC\_1A\_n28A-n77(2A)5 | DC\_1A\_n28A  DC\_1A\_n77A |
| DC\_1A\_n28A-n78A5 | DC\_1A\_n28A  DC\_1A\_n78A |
| DC\_1A-28A\_n79A5  DC\_1A-28A\_n79C5 | DC\_1A\_n79A  DC\_28A\_n79A |
| DC\_1A-32A\_n78A  DC\_1A-32A\_n78(2A) | DC\_1A\_n78A |
| DC\_1A-(n)38AA | DC\_1A\_n38A |
| DC\_1A\_n40A-n78A  DC\_1A\_n40A-n78(2A) | DC\_1A\_n40A  DC\_1A\_n78A |
| DC\_1A-41A\_n3A5  DC\_1A-41C\_n3A5 | DC\_41A\_n3A  DC\_41C\_n3A |
| DC\_1A-41A\_n28A5  DC\_1A-41C\_n28A5 | DC\_1A\_n28A  DC\_41A\_n28A  DC\_41C\_n28A |
| DC\_1A-(n)41AA  DC\_1A-(n)41CA  DC\_1A-(n)41DA | DC\_1A\_n41A |
| DC\_1A-41A\_n41A  DC\_1A-41C\_n41A | DC\_1A\_n41A |
| DC\_1A-41A\_n77A  DC\_1A-41C\_n77A | DC\_1A\_n77A  DC\_41A\_n77A |
| DC\_1A-41A\_n77(2A)  DC\_1A-41C\_n77(2A) | DC\_1A\_n77A  DC\_41A\_n77A  DC\_41C\_n77A |
| DC\_1A-41A\_n78A  DC\_1A-41C\_n78A | DC\_1A\_n78A  DC\_41A\_n78A |
| DC\_1A\_n41A-n78A | DC\_1A\_n41A  DC\_1A\_n78A |
| DC\_1A-41A\_n78(2A)  DC\_1A-41C\_n78(2A) | DC\_1A\_n78A  DC\_41A\_n78A  DC\_41C\_n78A |
| DC\_1A-41A\_n79A5  DC\_1A-41C\_n79A5 | DC\_1A\_n79A |
| DC\_1A-42A\_n28A5 | DC\_1A\_n28A  DC\_42A\_n28A |
| DC\_1A-42C\_n28A5 | DC\_1A\_n28A  DC\_42A\_n28A  DC\_42C\_n28A |
| DC\_1A-42A\_n77A10,11  DC\_1A-42A\_n77C10,11  DC\_1A-42C\_n77A10,11  DC\_1A-42C\_n77C10,11  DC\_1A-42D\_n77A10,11  DC\_1A-42D\_n77C10,11  DC\_1A-42E\_n77A10,11  DC\_1A-42E\_n77C10,11 | DC\_1A\_n77A |
| DC\_1A-42A\_n77(2A) 10,11  DC\_1A-42C\_n77(2A) 10,11 | DC\_1A\_n77A |
| DC\_1A-42A\_n78A10,11  DC\_1A-42A\_n78C10,11  DC\_1A-42C\_n78A10,11  DC\_1A-42C\_n78C10,11  DC\_1A-42D\_n78A10,11  DC\_1A-42D\_n78C10,11  DC\_1A-42E\_n78A10,11  DC\_1A-42E\_n78C10,11 | DC\_1A\_n78A |
| DC\_1A-42A\_n79A  DC\_1A-42A\_n79C  DC\_1A-42C\_n79A  DC\_1A-42C\_n79C  DC\_1A-42D\_n79A  DC\_1A-42D\_n79C  DC\_1A-42E\_n79A  DC\_1A-42E\_n79C | DC\_1A\_n79A |
| DC\_1A\_n75A-n78A  DC\_1A\_n75A-n78(2A) | DC\_1A\_n78A |
| DC\_1A\_n77A-n79A | DC\_1A\_n77A  DC\_1A\_n79A |
| DC\_1A\_SUL\_n77A-n80A | DC\_1A\_n77A  DC\_1A\_n80A |
| DC\_1A\_SUL\_n77A-n84A | DC\_1A\_n77A  DC\_1A\_n84A\_ULSUP-TDM\_n77A |
| DC\_1A\_n78A-n79A | DC\_1A\_n78A  DC\_1A\_n79A |
| DC\_1A\_SUL\_n78A-n80A | DC\_1A\_n78A  DC\_1A\_n80A |
| DC\_1A\_SUL\_n78A-n84A5 | DC\_1A\_n78A,  DC\_1A\_n84A\_ULSUP-TDM\_n78A |
| DC\_1A\_SUL\_n79A-n84A | DC\_1A\_n79A,  DC\_1A\_n84A\_ULSUP-TDM\_n79A |
| DC\_2A-4A\_n38A | DC\_2A\_n38A  DC\_4A\_n38A |
| DC\_2A-4A\_n41A | DC\_2A\_n41A  DC\_4A\_n41A |
| DC\_2A-5A\_n2A | DC\_5A\_n2A |
| DC\_2A-5B\_n2A | DC\_5A\_n2A |
| DC\_2A-5A-5A\_n2A | DC\_5A\_n2A |
| DC\_2A-5A\_n5A | DC\_2A\_n5A |
| DC\_2A-2A-5A\_n5A | DC\_2A\_n5A |
| DC\_2A-5A\_n66A  DC\_2A-5B\_n66A | DC\_2A\_n66A  DC\_5A\_n66A |
| DC\_2A-5A-5A\_n66A | DC\_2A\_n66A  DC\_5A\_n66A |
| DC\_2A-5A\_n71A | DC\_2A\_n71A  DC\_5A\_n71A |
| DC\_2A-7A\_n38A | 2A8 |
| DC\_2A-2A-7A\_n38A | 2A8 |
| DC\_2A-7A\_n66A  DC\_2A-7C\_n66A | DC\_2A\_n66A  DC\_7A\_n66A |
| DC\_2A-7A-7A\_n66A  DC\_2A-2A-7A\_n66A | DC\_2A\_n66A  DC\_7A\_n66A |
| DC\_2A-7A\_n71A | DC\_2A\_n71A  DC\_7A\_n71A |
| DC\_2A-2A-7A\_n71A | DC\_2A\_n71A  DC\_7A\_n71A |
| DC\_2A-7A\_n78A  DC\_2A-7C\_n78A  DC\_2A-7A\_n78(2A)  DC\_2A-7C\_n78(2A) | DC\_2A\_n78A  DC\_7A\_n78A  DC\_7C\_n78A |
| DC\_2A\_n7A-n78A | DC\_2A\_n7A  DC\_2A\_n78A |
| DC\_2A\_n7(2A)-n78A | DC\_2A\_n7A  DC\_2A\_n78A |
| DC\_2A\_n7A-n78(2A) | DC\_2A\_n7A  DC\_2A\_n78A |
| DC\_2A\_n7(2A)-n78(2A) | DC\_2A\_n7A  DC\_2A\_n78A |
| DC\_2A-7A-7A\_n78A  DC\_2A-7A-7A\_n78(2A) | DC\_2A\_n78A  DC\_7A\_n78A |
| DC\_2A-12A\_n2A | DC\_12A\_n2A |
| DC\_2A-(n)12AA | DC\_2A\_n12A  DC\_(n)12AA2 |
| DC\_2A-12A\_n66A | DC\_2A\_n66A  DC\_12A\_n66A |
| DC\_2A-2A-12A\_n66A | DC\_2A\_n66A  DC\_12A\_n66A |
| DC\_2A-13A\_n2A | DC\_13A\_n2A |
| DC\_2A-13A\_n5A | DC\_2A\_n5A |
| DC\_2A-2A-13A\_n5A | DC\_2A\_n5A |
| DC\_2A-13A\_n66A | DC\_2A\_n66A  DC\_13A\_n66A |
| DC\_2A-2A-13A\_n66A | DC\_2A\_n66A  DC\_13A\_n66A |
| DC\_2A-14A\_n2A | DC\_2A\_n2A2  DC\_14A\_n2A |
| DC\_2A-14A\_n66A | DC\_2A\_n66A  DC\_14A\_n66A |
| DC\_2A-2A-14A\_n66A | DC\_2A\_n66A  DC\_14A\_n66A |
| DC\_2A-29A\_n66A | DC\_2A\_n66A |
| DC\_2A-2A-29A\_n66A | DC\_2A\_n66A |
| DC\_2A-30A\_n2A | DC\_2A\_n2A2  DC\_30A\_n2A |
| DC\_2A-30A\_n5A | DC\_2A\_n5A  DC\_30A\_n5A |
| DC\_2A-2A-30A\_n5A | DC\_2A\_n5A  DC\_30A\_n5A |
| DC\_2A-30A\_n66A | DC\_2A\_n66A  DC\_30A\_n66A |
| DC\_2A-2A-30A\_n66A | DC\_2A\_n66A  DC\_30A\_n66A |
| DC\_2A\_n38A-n78A | DC\_2A\_n38A  DC\_2A\_n78A |
| DC\_2A\_n41A-n66A  DC\_2A\_n41C-n66A | DC\_2A\_n41A  DC\_2A\_n66A |
| DC\_2A\_n41(2A)-n66A | DC\_2A\_n41A  DC\_2A\_n66A |
| DC\_2A\_n41A-n71A  DC\_2A\_n41C-n71A | DC\_2A\_n41A  DC\_2A\_n71A |
| DC\_2A\_n41(2A)-n71A | DC\_2A\_n41A  DC\_2A\_n71A |
| DC\_2A-46A\_n41A  DC\_2A-46C\_n41A  DC\_2A-46D\_n41A | DC\_2A\_n41A |
| DC\_2A-46A\_n41(2A)  DC\_2A-46C\_n41(2A)  DC\_2A-46D\_n41(2A) | DC\_2A\_n41A |
| DC\_2A-46A\_n66A  DC\_2A-46C\_n66A  DC\_2A-46D\_n66A | DC\_2A\_n66A |
| DC\_2A-46A\_n71A  DC\_2A-46C\_n71A  DC\_2A-46D\_n71A | DC\_2A\_n71A |
| DC\_2A-48A\_n71A | DC\_2A\_n71A  DC\_48A\_n71A |
| DC\_2A-48A\_n12A | DC\_2A\_n12A  DC\_48A\_n12A |
| DC\_2A-48A\_n66A | DC\_2A\_n66A  DC\_48A\_n66A |
| DC\_2A-66A\_n2A | DC\_2A\_n2A2  DC\_66A\_n2A |
| DC\_2A-66A\_n5A | DC\_2A\_n5A  DC\_66A\_n5A |
| DC\_2A-2A-66A\_n5A  DC\_2A-66A-66A\_n5A  DC\_2A-2A-66A-66A\_n5A  DC\_2A-66A-66A-66A\_n5A | DC\_2A\_n5A  DC\_66A\_n5A |
| DC\_2A-66A\_n12A | DC\_2A\_n12A  DC\_66A\_n12A |
| DC\_2A-66A\_n25A11,12 | DC\_66A\_n25A |
| DC\_2A-66A\_n38A | DC\_2A\_n38A  DC\_66A\_n38A |
| DC\_2A-2A-66A\_n38A  DC\_2A-66A-66A\_n38A | DC\_2A\_n38A  DC\_66A\_n38A |
| DC\_2A-66A\_n41A  DC\_2A-66A\_n41C  DC\_2C-66A\_n41A | DC\_2A\_n41A  DC\_66A\_n41A |
| DC\_2A-2A-66A\_n41A  DC\_2A-66A\_n41(2A) | DC\_2A\_n41A  DC\_66A\_n41A |
| DC\_2A-66A\_n48A | DC\_2A\_n48A  DC\_66A\_n48A |
| DC\_2A-66A\_n48B | DC\_2A\_n48A  DC\_66A\_n48A |
| DC\_2A-66A-66A\_n48A | DC\_2A\_n48A  DC\_66A\_n48A |
| DC\_2A-66A-66A\_n48B | DC\_2A\_n48A  DC\_66A\_n48A |
| DC\_2A-66A\_n66A | DC\_2A\_n66A  DC\_66A\_n66A2 |
| DC\_2A-2A-66A\_n66A | DC\_2A\_n66A  DC\_66A\_n66A2 |
| DC\_2A-66A\_n71A  DC\_2A-66A\_n71B  DC\_2A-66C\_n71A  DC\_2C-66A\_n71A | DC\_2A\_n71A  DC\_66A\_n71A |
| DC\_2A-2A-66A\_n71A  DC\_2A-66A-66A\_n71A  DC\_2A-2A-66A-66A\_n71A | DC\_2A\_n71A  DC\_66A\_n71A |
| DC\_2A\_n66A-n71A | DC\_2A\_n66A  DC\_2A\_n71A |
| DC\_2A-66A\_n78A  DC\_2A-66A\_n78(2A) | DC\_2A\_n78A  DC\_66A\_n78A |
| DC\_2A\_n66A-n78A | DC\_2A\_n66A  DC\_2A\_n78A |
| DC\_2A-66A-66A\_n78A  DC\_2A-66A-66A\_n78(2A) | DC\_2A\_n78A  DC\_66A\_n78A |
| DC\_2A-71A\_n38A | DC\_71A\_n38A  DC\_2A\_n38A |
| DC\_2A-2A-71A\_n38A | DC\_71A\_n38A  DC\_2A\_n38A |
| DC\_2A-71A\_n66A | DC\_2A\_n66A  DC\_71A\_n66A |
| DC\_2A-2A-71A\_n66A | DC\_2A\_n66A  DC\_71A\_n66A |
| DC\_2A-71A\_n78A | DC\_71A\_n78A  DC\_2A\_n78A |
| DC\_2A-2A-71A\_n78A | DC\_71A\_n78A  DC\_2A\_n78A |
| DC\_2A-(n)71AA | DC\_2A\_n71A  DC\_(n)71AA |
| DC\_3A\_n1A-n7A | DC\_3A\_n1A  DC\_3A\_n7A |
| DC\_3C\_n1A-n7A | DC\_3A\_n1A  DC\_3A\_n7A  DC\_3C\_n1A  DC\_3C\_n7A |
| DC\_3A\_n1A-n28A | DC\_3A\_n1A  DC\_3A\_n28A |
| DC\_3C\_n1A-n28A | DC\_3A\_n1A  DC\_3A\_n28A  DC\_3C\_n1A  DC\_3C\_n28A |
| DC\_3A\_n1A-n40A | DC\_3A\_n1A  DC\_3A\_n40A |
| DC\_3A\_n1A-n77A5 | DC\_3A\_n1A  DC\_3A\_n77A |
| DC\_3A\_n1A-n78A5  DC\_3C\_n1A-n78A5 | DC\_3A\_n1A  DC\_3A\_n78A |
| DC\_3A-3A\_n1A-n78A5 | DC\_3A\_n1A  DC\_3A\_n78A |
| DC\_3A\_n1A-n79A5 | DC\_3A\_n1A  DC\_3A\_n79A |
| DC\_3A\_n3A-n77A5 | DC\_3A\_n77A  DC\_3A\_n3A2 |
| DC\_3A\_n3A-n78A5 | DC\_3A\_n78A  DC\_3A\_n3A2 |
| DC\_3A-5A\_n78A5 | DC\_3A\_n78A  DC\_5A\_n78A |
| DC\_3A\_n5A-n78A5  DC\_3C\_n5A-n78A5 | DC\_3A\_n5A  DC\_3A\_n78A  DC\_3C\_n5A  DC\_3C\_n78A |
| DC\_3A-5A\_n79A5 | DC\_3A\_n79A  DC\_5A\_n79A |
| DC\_3A-7A\_n1A  DC\_3A-7C\_n1A  DC\_3C-7A\_n1A  DC\_3C-7C\_n1A | DC\_3A\_n1A  DC\_3C\_n1A  DC\_7A\_n1A  DC\_7C\_n1A |
| DC\_3A-3A-7A\_n1A  DC\_3A-7A-7A\_n1A  DC\_3A-3A-7A-7A\_n1A | DC\_3A\_n1A  DC\_7A\_n1A |
| DC\_3A-7A\_n5A  DC\_3C-7A\_n5A  DC\_3A-7C\_n5A  DC\_3C-7C\_n5A | DC\_3A\_n5A  DC\_3C\_n5A  DC\_7A\_n5A  DC\_7C\_n5A |
| DC\_3A-7A\_n7A  DC\_3C-7A\_n7A | DC\_3A\_n7A  DC\_3C\_n7A  DC\_7A\_n7A2 |
| DC\_3A-3A-7A\_n7A | DC\_3A\_n7A  DC\_7A\_n7A2 |
| DC\_3A-7A\_n8A | DC\_3A\_n8A  DC\_7A\_n8A |
| DC\_3A-7A\_n28A  DC\_3A-7C\_n28A  DC\_3C-7A\_n28A  DC\_3C-7C\_n28A | DC\_3A\_n28A  DC\_3C\_n28A  DC\_7A\_n28A  DC\_7C\_n28A |
| DC\_3A-7A\_n40A | DC\_3A\_n40A  DC\_7A\_n40A |
| DC\_3A-7A\_n77A5 | DC\_3A\_n77A  DC\_7A\_n77A |
| DC\_3A-3A-7A\_n77A5  DC\_3A-7A-7A\_n77A5  DC\_3A-3A-7A-7A\_n77A5 | DC\_3A\_n77A  DC\_7A\_n77A |
| DC\_3A-7A\_n78A5  DC\_3C-7A\_n78A5  DC\_3A-7C\_n78A5  DC\_3C-7C\_n78A5 | DC\_3A\_n78A  DC\_3C\_n78A  DC\_7A\_n78A  DC\_7C\_n78A |
| DC\_3A-7A\_n78(2A)5  DC\_3C-7A\_n78(2A)5  DC\_3A-7C\_n78(2A)5  DC\_3C-7C\_n78(2A)5 | DC\_3A\_n78A  DC\_7A\_n78A  DC\_3C\_n78A  DC\_7C\_n78A |
| DC\_3A\_n7A-n28A  DC\_3C\_n7A-n28A | DC\_3A\_n7A  DC\_3A\_n28A  DC\_3C\_n7A  DC\_3C\_n28A |
| DC\_3A-3A-7A\_n78A5  DC\_3A-7A-7A\_n78A5  DC\_3A-3A-7A-7A\_n78A5 | DC\_3A\_n78A  DC\_7A\_n78A |
| DC\_3A\_n7A-n78A5  DC\_3A\_n7B-n78A5  DC\_3C\_n7A-n78A5  DC\_3C\_n7B-n78A5 | DC\_3A\_n7A  DC\_3C\_n7A  DC\_3A\_n78A |
| DC\_3A-3A\_n7A-n78A5  DC\_3A-3A\_n7B-n78A5 | DC\_3A\_n7A  DC\_3A\_n7B  DC\_3A\_n78A |
| DC\_3A\_n7A-n78(2A)  DC\_3C\_n7A-n78(2A) | DC\_3A\_n7A  DC\_3A\_n78A  DC\_3C\_n7A  DC\_3C\_n78A |
| DC\_3A-8A\_n1A  DC\_3C-8A\_n1A | DC\_3A\_n1A  DC\_8A\_n1A |
| DC\_3A-3A-8A\_n1A | DC\_3A\_n1A  DC\_8A\_n1A |
| DC\_3A\_n8A-n40A | DC\_3A\_n8A  DC\_3A\_n40A |
| DC\_3A-8A\_n28A | DC\_3A\_n28A  DC\_8A\_n28A |
| DC\_3A-8A\_n77A5 | DC\_3A\_n77A  DC\_8A\_n77A |
| DC\_3A-8A\_n77(2A)5 | DC\_3A\_n77A  DC\_8A\_n77A |
| DC\_3A-8A\_n78A5  DC\_3C-8A\_n78A5 | DC\_3A\_n78A  DC\_8A\_n78A |
| DC\_3A-3A-8A\_n78A5 | DC\_3A\_n78A  DC\_8A\_n78A |
| DC\_3A-8A\_n79A5 | DC\_3A\_n79A  DC\_8A\_n79A |
| DC\_3A\_n8A-n78A5 | DC\_3A\_n8A  DC\_3A\_n78A |
| DC\_3A-18A\_n77A | DC\_3A\_n77A  DC\_18A\_n77A |
| DC\_3A-18A\_n78A | DC\_3A\_n78A  DC\_18A\_n78A |
| DC\_3A-18A\_n79A | DC\_3A\_n79A  DC\_18A\_n79A |
| DC\_3A-19A\_n77A5  DC\_3A-19A\_n77C5 | DC\_3A\_n77A  DC\_19A\_n77A |
| DC\_3A-19A\_n78A5  DC\_3A-19A\_n78C5 | DC\_3A\_n78A  DC\_19A\_n78A |
| DC\_3A-19A\_n79A5  DC\_3A-19A\_n79C5 | DC\_3A\_n79A  DC\_19A\_n79A |
| DC\_3A-20A\_n1A  DC\_3C-20A\_n1A | DC\_3A\_n1A  DC\_3C\_n1A  DC\_20A\_n1A |
| DC\_3A-20A\_n7A  DC\_3C-20A\_n7A | DC\_3A\_n7A  DC\_3C\_n7A  DC\_20A\_n7A |
| DC\_3A-20A\_n8A | DC\_3A\_n8A  DC\_20A\_n8A |
| DC\_3A-20A\_n28A5,6,11,12  DC\_3C-20A\_n28A5,6,11,12 | DC\_3A\_n28A  DC\_3C\_n28A  DC\_20A\_n28A |
| DC\_3A-20A\_n41A | DC\_3A\_n41A  DC\_20A\_n41A |
| DC\_3C-20A\_n41A | DC\_3C\_n41A  DC\_20A\_n41A |
| DC\_3A-20A\_n38A | DC\_3A\_n38A  DC\_20A\_n38A |
| DC\_3A-20A\_n78A5  DC\_3C-20A\_n78A5 | DC\_3A\_n78A  DC\_20A\_n78A |
| DC\_3A\_n20A-n78A | DC\_3A\_n20A  DC\_3A\_n78A |
| DC\_3A-21A\_n77A5  DC\_3A-21A\_n77C5 | DC\_3A\_n77A  DC\_21A\_n77A |
| DC\_3A-21A\_n78A5  DC\_3A-21A\_n78C5 | DC\_3A\_n78A  DC\_21A\_n78A |
| DC\_3A-21A\_n79A5  DC\_3A-21A\_n79C5 | DC\_3A\_n79A  DC\_21A\_n79A |
| DC\_3A-28A\_n5A  DC\_3C-28A\_n5A | DC\_3A\_n5A  DC\_3C\_n5A  DC\_28A\_n5A |
| DC\_3A-28A\_n7A  DC\_3C-28A\_n7A  DC\_3A-28A\_n7B  DC\_3C-28A\_n7B | DC\_3A\_n7A  DC\_3C\_n7A  DC\_28A\_n7A  DC\_3A\_n7B  DC\_28A\_n7B |
| DC\_3A-28A\_n40A | DC\_3A\_n40A  DC\_28A\_n40A |
| DC\_3A-3A-28A\_n7A  DC\_3A-3A-28A\_n7B | DC\_3A\_n7A  DC\_28A\_n7A  DC\_3A\_n7B  DC\_28A\_n7B |
| DC\_3A\_n28A-n40A | DC\_3A\_n28A  DC\_3A\_n40A |
| DC\_3A-28A\_n41A5 | **DC\_3A\_n41A**  DC\_28A\_n41A |
| DC\_3A-28A\_n77A5  DC\_3A-28A\_n77C5 | DC\_3A\_n77A  DC\_28A\_n77A |
| DC\_3A-28A\_n77(2A)5 | DC\_3A\_n77A  DC\_28A\_n77A |
| DC\_3A\_n28A-n77A5 | DC\_3A\_n28A  DC\_3A\_n77A |
| DC\_3A\_n28A-n77(2A)5 | DC\_3A\_n28A  DC\_3A\_n77A |
| DC\_3A-28A\_n78A5  DC\_3C-28A\_n78A5  DC\_3A-28A\_n78C5 | DC\_3A\_n78A  DC\_28A\_n78A |
| DC\_3A-3A-28A\_n78A | DC\_3A\_n78A  DC\_28A\_n78A |
| DC\_3A\_n28A-n78A5  DC\_3C\_n28A-n78A5 | DC\_3A\_n28A  DC\_3A\_n78A  DC\_3C\_n28A |
| DC\_3A-28A\_n79A5  DC\_3A-28A\_n79C5 | DC\_3A\_n79A  DC\_28A\_n79A |
| DC\_3A-32A\_n78A  DC\_3A-32A\_n78(2A) | DC\_3A\_n78A |
| DC\_3A-38A\_n78A | DC\_3A\_n78A |
| DC\_3A-40A\_n1A | DC\_3A\_n1A  DC\_40A\_n1A |
| DC\_3A\_n40A-n41A | DC\_3A\_n40A  DC\_3A\_n41A |
| DC\_3A\_n40A-n78A | DC\_3A\_n40A  DC\_3A\_n78A |
| DC\_3A\_n40A-n79A | DC\_3A\_n40A  DC\_3A\_n79A |
| DC\_3A-41A\_n28A5 | DC\_3A\_n28A  DC\_41A\_n28A |
| DC\_3A-41C\_n28A5 | DC\_3A\_n28A  DC\_41A\_n28A  DC\_41C\_n28A |
| DC\_3A-41A\_n41A  DC\_3A-41C\_n41A  DC\_3A-41D\_n41A | DC\_3A\_n41A |
| DC\_3A-(n)41AA  DC\_3A-(n)41CA  DC\_3A-(n)41DA | DC\_3A\_n41A |
| DC\_3A-41A\_n77A  DC\_3A-41C\_n77A | DC\_3A\_n77A  DC\_41A\_n77A |
| DC\_3A-41A\_n77(2A)  DC\_3A-41C\_n77(2A) | DC\_3A\_n77A  DC\_41A\_n77A  DC\_41C\_n77A |
| DC\_3A-41A\_n78A  DC\_3A-41C\_n78A | DC\_3A\_n78A  DC\_41A\_n78A  DC\_41C\_n78A |
| DC\_3A\_n41A-n78A | DC\_3A\_n41A  DC\_3A\_n78A |
| DC\_3A-41A\_n78(2A)  DC\_3A-41C\_n78(2A) | DC\_3A\_n78A  DC\_41A\_n78A  DC\_41C\_n78A |
| DC\_3A-42A\_n28A5 | DC\_3A\_n28A  DC\_42A\_n28A |
| DC\_3A-42C\_n28A5 | DC\_3A\_n28A  DC\_42A\_n28A  DC\_42C\_n28A |
| DC\_3A-41A\_n79A5  DC\_3A-41C\_n79A5 | DC\_3A\_n79A  DC\_41A\_n79A |
| DC\_3A\_n41A-n79A5 | DC\_3A\_n41A  DC\_3A\_n79A |
| DC\_3A\_SUL\_n41A-n80A  DC\_3C\_SUL\_n41A-n80A | DC\_3A\_n41A  DC\_3C\_n41A  DC\_3A\_n80A\_ULSUP-TDM\_n41A  DC\_3C\_n80A\_ULSUP-TDM\_n41A |
| DC\_3A-42A\_n77A10,11  DC\_3A-42A\_n77C10,11  DC\_3A-42C\_n77A10,11  DC\_3A-42C\_n77C10,11  DC\_3A-42D\_n77A10,11  DC\_3A-42D\_n77C10,11  DC\_3A-42E\_n77A10,11  DC\_3A-42E\_n77C10,11 | DC\_3A\_n77A |
| DC\_3A-42A\_n77(2A) 10,11  DC\_3A-42C\_n77(2A) 10,11 | DC\_3A\_n77A |
| DC\_3A-42A\_n78A10,11  DC\_3A-42A\_n78C10,11  DC\_3A-42C\_n78A10,11  DC\_3A-42C\_n78C10,11  DC\_3A-42D\_n78A10,11  DC\_3A-42D\_n78C10,11  DC\_3A-42E\_n78A10,11  DC\_3A-42E\_n78C10,11 | DC\_3A\_n78A |
| DC\_3A-42A\_n79A  DC\_3A-42A\_n79C  DC\_3A-42C\_n79A  DC\_3A-42C\_n79C  DC\_3A-42D\_n79A  DC\_3A-42D\_n79C  DC\_3A-42E\_n79A  DC\_3A-42E\_n79C | DC\_3A\_n79A |
| DC\_3A\_n75A-n78A | DC\_3A\_n78A |
| DC\_3A\_n75A-n78(2A) | DC\_3A\_n78A |
| DC\_3A\_n77A-n79A | DC\_3A\_n77A  DC\_3A\_n79A |
| DC\_3A\_n78A-n79A | DC\_3A\_n78A  DC\_3A\_n79A |
| DC\_3A\_SUL\_n77A-n80A | DC\_3A\_n77A  DC\_3A\_n80A\_ULSUP-TDM\_n77A |
| DC\_3A\_SUL\_n77A-n84A | DC\_3A\_n77A  DC\_3A\_n84A |
| DC\_3A\_SUL\_n78A-n80A5  DC\_3C\_SUL\_n78A-n80A | DC\_3A\_n78A  DC\_3A\_n80A\_ULSUP-TDM\_n78A |
| DC\_3A\_SUL\_n78A-n82A5 | DC\_3A\_n78A  DC\_3A\_n82A |
| DC\_3A\_SUL\_n78A-n84A | DC\_3A\_n78A  DC\_3A\_n84A |
| DC\_3A\_SUL\_n79A-n80A5 | DC\_3A\_n79A,  DC\_3A\_n80A\_ULSUP-TDM\_n79A |
| DC\_5A-7A\_n71A | DC\_5A\_n71A  DC\_7A\_n71A |
| DC\_5A-7A\_n78A | DC\_5A\_n78A  DC\_7A\_n78A |
| DC\_5A\_n7A-n78A | DC\_5A\_n7A  DC\_5A\_n78A |
| DC\_5A\_n7(2A)-n78A | DC\_5A\_n7A  DC\_5A\_n78A |
| DC\_5A\_n7A-n78(2A) | DC\_5A\_n7A  DC\_5A\_n78A |
| DC\_5A\_n7(2A)-n78(2A) | DC\_5A\_n7A  DC\_5A\_n78A |
| DC\_5A-7A-7A\_n78A | DC\_5A\_n78A  DC\_7A\_n78A |
| DC\_5A-(n)12AA | DC\_5A\_n12A  DC\_(n)12AA2 |
| DC\_5A-30A\_n66A | DC\_5A\_n66A  DC\_30A\_n66A |
| DC\_5A-41A\_n79A | DC\_5A\_n79A  DC\_41A\_n79A |
| DC\_5A-66A\_n2A  DC\_5B-66A\_n2A | DC\_5A\_n2A |
| DC\_5A-5A-66A\_n2A  DC\_5A-66A-66A\_n2A  DC\_5B-66A-66A\_n2A  DC\_5A-5A-66A-66A\_n2A | DC\_5A\_n2A |
| DC\_5A-66A\_n5A | DC\_66A\_n5A |
| DC\_5A-66A-66A\_n5A | DC\_66A\_n5A |
| DC\_5A-66A\_n66A | DC\_5A\_n66A |
| DC\_5A-5A-66A\_n66A  DC\_5B-66A\_n66A | DC\_5A\_n66A |
| DC\_5A-5A-66A-66A\_n66A  DC\_5A-66A-66A\_n66A  DC\_5B-66A-66A\_n66A | DC\_5A\_n66A |
| DC\_5A-66A\_n71A | DC\_5A\_n71A  DC\_66A\_n71A |
| DC\_5A-66A\_n78A  DC\_5A-66A\_n78(2A) | DC\_5A\_n78A  DC\_66A\_n78A |
| DC\_5A-13A\_n2A | DC\_5A\_n2A  DC\_13A\_n2A |
| DC\_7A\_n1A-n40A | DC\_7A\_n1A  DC\_7A\_n40A |
| DC\_7A\_n1A-n78A5  DC\_7C\_n1A-n78A5 | DC\_7A\_n1A  DC\_7A\_n78A  DC\_7C\_n1A  DC\_7C\_n78A |
| DC\_7A-7A\_n1A-n78A5 | DC\_7A\_n1A  DC\_7A\_n78A |
| DC\_7A\_n3A-n78A  DC\_7C\_n3A-n78A | DC\_7A\_n3A  DC\_7A\_n78A  DC\_7C\_n3A  DC\_7C\_n78A |
| DC\_7A\_n5A-n78A  DC\_7C\_n5A-n78A | DC\_7A\_n5A  DC\_7C\_n5A  DC\_7A\_n78A  DC\_7C\_n78A |
| DC\_7A\_n7A-n78A5 | DC\_7A\_n78A  DC\_7A\_n7A2 |
| DC\_7A\_n7A-n78(2A) | DC\_7A\_n78A  DC\_7A\_n7A2 |
| DC\_7A-8A\_n1A | DC\_7A\_n1A  DC\_8A\_n1A |
| DC\_7A-7A-8A\_n1A | DC\_7A\_n1A  DC\_8A\_n1A |
| DC\_7A-8A\_n3A | DC\_7A\_n3A  DC\_8A\_n3A |
| DC\_7A\_n8A-n40A | DC\_7A\_n8A  DC\_7A\_n40A |
| DC\_7A-8A\_n77A5 | DC\_7A\_n77A  DC\_8A\_n77A |
| DC\_7A-8A\_n78A5 | DC\_7A\_n78A  DC\_8A\_n78A |
| DC\_7A-7A-8A\_n78A5 | DC\_7A\_n78A  DC\_8A\_n78A |
| DC\_7A\_n8A-n78A5 | DC\_7A\_n8A  DC\_7A\_n78A |
| DC\_7A-13A\_n66A  DC\_7A-7A-13A\_n66A  DC\_7C-13A\_n66A | DC\_7A\_n66A  DC\_13A\_n66A |
| DC\_7A-20A\_n1A  DC\_7C-20A\_n1A | DC\_7A\_n1A  DC\_7C\_n1A  DC\_20A\_n1A |
| DC\_7A-20A\_n3A  DC\_7C-20A\_n3A | DC\_7A\_n3A  DC\_7C\_n3A  DC\_20A\_n3A |
| DC\_7A-20A\_n8A | DC\_7A\_n8A  DC\_20A\_n8A |
| DC\_7A-20A\_n28A6,11,12 | DC\_7A\_n28A  DC\_20A\_n28A |
| DC\_7A-20A\_n78A5 | DC\_7A\_n78A  DC\_20A\_n78A |
| DC\_7A-28A\_n3A  DC\_7C-28A\_n3A | DC\_7A\_n3A  DC\_7C\_n3A  DC\_28A\_n3A |
| DC\_7A-28A\_n5A6  DC\_7C-28A\_n5A6 | DC\_7A\_n5A  DC\_7C\_n5A  DC\_28A\_n5A |
| DC\_7A-28A\_n7A | DC\_7A\_n7A2  DC\_28A\_n7A |
| DC\_7A\_n28A-n40A | DC\_7A\_n28A  DC\_7A\_n40A |
| DC\_7A-28A\_n40A | DC\_7A\_n40A  DC\_28A\_n40A |
| DC\_7A-28A\_n78A5  DC\_7C-28A\_n78A5 | DC\_7A\_n78A  DC\_7C\_n78A  DC\_28A\_n78A |
| DC\_7A\_n28A-n78A5  DC\_7C\_n28A-n78A | DC\_7A\_n28A  DC\_7A\_n78A  DC\_7C\_n28A  DC\_7C\_n78A |
| DC\_7A-40A\_n1A | DC\_7A\_n1A  DC\_40A\_n1A |
| DC\_7A-46A\_n78A3  DC\_7A-46C\_n78A3  DC\_7A-46D\_n78A3  DC\_7A-46E\_n78A3 | DC\_7A\_n78A |
| DC\_7A-66A\_n38A | 66A9 |
| DC\_7A-66A\_n66A  DC\_7C-66A\_n66A | DC\_7A\_n66A  DC\_66A\_n66A2 |
| DC\_7A-7A-66A\_n66A | DC\_7A\_n66A  DC\_66A\_n66A2 |
| DC\_7A-66A\_n71A | DC\_7A\_n71A  DC\_66A\_n71A |
| DC\_7A-66A-66A\_n71A | DC\_7A\_n71A  DC\_66A\_n71A |
| DC\_7A\_n66A-n78A  DC\_7A-7A\_n66A-n78A  DC\_7C\_n66A-n78A | DC\_7A\_n66A  DC\_7A\_n78A |
| DC\_7A-66A\_n78A  DC\_7C-66A\_n78A  DC\_7A-66A\_n78(2A)  DC\_7C-66A\_n78(2A) | DC\_7A\_n78A  DC\_7C\_n78A  DC\_66A\_n78A |
| DC\_7A-7A-66A\_n78A  DC\_7A-7A-66A\_n78(2A) | DC\_7A\_n78A  DC\_66A\_n78A |
| DC\_7A-7A-66A-66A\_n78A  DC\_7A-7A-66A-66A\_n78(2A) | DC\_7A\_n78A  DC\_66A\_n78A |
| DC\_7A-66A-66A\_n78A  DC\_7C-66A-66A\_n78A  DC\_7A-66A-66A\_n78(2A)  DC\_7C-66A-66A\_n78(2A) | DC\_7A\_n78A  DC\_66A\_n78A |
| DC\_7A\_SUL\_n78A-n80A | DC\_7A\_n78A  DC\_7A\_n80A |
| DC\_8A\_n1A-n78A5 | DC\_8A\_n1A  DC\_8A\_n78A |
| DC\_8A\_n3A-n28A | DC\_8A\_n3A  DC\_8A\_n28A |
| DC\_8A-11A\_n3A | DC\_8A\_n3A  DC\_11A\_n3A |
| DC\_8A-11A\_n77A5 | DC\_8A\_n77A  DC\_11A\_n77A |
| DC\_8A-11A\_n77(2A)5 | DC\_8A\_n77A  DC\_11A\_n77A |
| DC\_8A-11A\_n78A5 | DC\_8A\_n78A  DC\_11A\_n78A |
| DC\_8A-20A\_n78A | DC\_8A\_n78A  DC\_20A\_n78A |
| DC\_8A\_n28A-n77A5 | DC\_8A\_n28A  DC\_8A\_n77A |
| DC\_8A\_n28A-n77(2A)5 | DC\_8A\_n28A  DC\_8A\_n77A |
| DC\_8A\_n40A-n41A | DC\_8A\_n40A  DC\_8A\_n41A |
| DC\_8A\_n40A-n79A | DC\_8A\_n40A  DC\_8A\_n79A |
| DC\_8A\_n41A-n79A5 | DC\_8A\_n41A  DC\_8A\_n79A |
| DC\_8A-42A\_n28A5 | DC\_8A\_n28A  DC\_42A\_n28A |
| DC\_8A-42C\_n28A5 | DC\_8A\_n28A  DC\_42A\_n28A  DC\_42C\_n28A |
| DC\_8A-42A\_n77A10,11  DC\_8A-42C\_n77A10,11 | DC\_8A\_n77A |
| DC\_8A-42A\_n77(2A) 10,11  DC\_8A-42C\_n77(2A) 10,11 | DC\_8A\_n77A |
| DC\_8A\_SUL\_n41A-n81A | DC\_8A\_n41A,  DC\_8A\_n81A\_ULSUP-TDM\_n41A |
| DC\_8A\_SUL\_n78A-n80A | DC\_8A\_n78A  DC\_8A\_n80A |
| DC\_8A\_SUL\_n78A-n81A5 | DC\_8A\_n78A,  DC\_8A\_n81A\_ULSUP-TDM\_n78A |
| DC\_8A\_SUL\_n79A-n81A5 | DC\_8A\_n79A,  DC\_8A\_n81A\_ULSUP-TDM\_n79A |
| DC\_11A-18A\_n77A | DC\_11A\_n77A  DC\_18A\_n77A |
| DC\_11A-18A\_n78A | DC\_11A\_n78A  DC\_18A\_n78A |
| DC\_12A-(n)5AA | DC\_12A\_n5A  DC\_(n)5AA2 |
| DC\_12A\_n7A-n78A | DC\_12A\_n7A  DC\_12A\_n78A |
| DC\_12A\_n7(2A)-n78A | DC\_12A\_n7A  DC\_12A\_n78A |
| DC\_12A\_n7A-n78(2A) | DC\_12A\_n7A  DC\_12A\_n78A |
| DC\_12A\_n7(2A)-n78(2A) | DC\_12A\_n7A  DC\_12A\_n78A |
| DC\_12A-30A\_n2A | DC\_12A\_n2A  DC\_30A\_n2A |
| DC\_12A-30A\_n66A | DC\_12A\_n66A  DC\_30A\_n66A |
| DC\_12A-66A\_n2A | DC\_12A\_n2A  DC\_66A\_n2A |
| DC\_12A-66A-66A\_n2A | DC\_12A\_n2A  DC\_66A\_n2A |
| DC\_12A-66A\_n25A | DC\_12A\_n25A  DC\_66A\_n25A |
| DC\_12A-66A\_n66A | DC\_12A\_n66A  DC\_66A\_n66A2 |
| DC\_13A-46A\_n5A | DC\_13A\_n5A |
| DC\_13A-66A\_n2A | DC\_13A\_n2A  DC\_66A\_n2A |
| DC\_13A-66A-66A\_n2A | DC\_13A\_n2A  DC\_66A\_n2A |
| DC\_13A-66A\_n48A  DC\_13A-66A\_n48B | DC\_13A\_n48A  DC\_66A\_n48A |
| DC\_13A-66A-66A\_n48A  DC\_13A-66A-66A\_n48B | DC\_13A\_n48A  DC\_66A\_n48A |
| DC\_13A-66A\_n66A | DC\_13A\_n66A |
| DC\_13A-66A-66A\_n66A | DC\_13A\_n66A |
| DC\_18A\_n3A-n78A | DC\_18A\_n3A  DC\_18A\_n78A |
| DC\_13A-48A\_n2A  DC\_13A-48B\_n2A  DC\_13A-48D\_n2A  DC\_13A-48E\_n2A | DC\_13A\_n2A |
| DC\_13A-48A\_n66A  DC\_13A-48B\_n66A  DC\_13A-48D\_n66A  DC\_13A-48E\_n66A | DC\_13A\_n66A |
| DC\_18A\_n3A-n77A | DC\_18A\_n3A  DC\_18A\_n77A |
| DC\_14A-66A\_n2A | DC\_14A\_n2A  DC\_66A\_n2A |
| DC\_14A-66A-66A\_n2A | DC\_14A\_n2A  DC\_66A\_n2A |
| DC\_14A-66A\_n66A | DC\_14A\_n66A  DC\_66A\_n66A2 |
| DC\_18A-28A\_n77A5 | DC\_18A\_n77A  DC\_28A\_n77A |
| DC\_18A-28A\_n78A5 | DC\_18A\_n78A  DC\_28A\_n78A |
| DC\_18A-28A\_n79A5 | DC\_18A\_n79A  DC\_28A\_n79A |
| DC\_18A-41A\_n3A  DC\_18A-41C\_n3A | DC\_18A\_n3A  DC\_41A\_n3A  DC\_41C\_n3A |
| DC\_18A-41A\_n77A  DC\_18A-41C\_n77A | DC\_18A\_n77A  DC\_41A\_n77A  DC\_41C\_n77A |
| DC\_18A-41A\_n78A  DC\_18A-41C\_n78A | DC\_18A\_n78A  DC\_41A\_n78A  DC\_41C\_n78A |
| DC\_18A-42A\_n77A10,11  DC\_18A-42C\_n77A10,11 | DC\_18A\_n77A |
| DC\_18A-42A\_n78A10,11  DC\_18A-42C\_n78A10,11 | DC\_18A\_n78A |
| DC\_18A-42A\_n79A  DC\_18A-42C\_n79A | DC\_18A\_n79A |
| DC\_19A-21A\_n78A5  DC\_19A-21A\_n78C5 | DC\_19A\_n78A  DC\_21A\_n78A |
| DC\_19A-21A\_n79A5  DC\_19A-21A\_n79C5 | DC\_19A\_n79A  DC\_21A\_n79A |
| DC\_19A-21A\_n77A5  DC\_19A-21A\_n77C5 | DC\_19A\_n77A  DC\_21A\_n77A |
| DC\_19A-42A\_n77A10,11  DC\_19A-42A\_n77C10,11  DC\_19A-42C\_n77A10,11  DC\_19A-42C\_n77C10,11  DC\_19A-42D\_n77A10,11  DC\_19A-42D\_n77C10,11 | DC\_19A\_n77A |
| DC\_19A-42A\_n78A10,11  DC\_19A-42A\_n78C10,11  DC\_19A-42C\_n78A10,11  DC\_19A-42C\_n78C10,11  DC\_19A-42D\_n78A10,11  DC\_19A-42D\_n78C10,11 | DC\_19A\_n78A |
| DC\_19A-42A\_n79A  DC\_19A-42A\_n79C  DC\_19A-42C\_n79A  DC\_19A-42C\_n79C  DC\_19A-42D\_n79A  DC\_19A-42D\_n79C | DC\_19A\_n79A |
| DC\_19A\_n77A-n79A | DC\_19A\_n77A  DC\_19A\_n79A |
| DC\_19A\_n78A-n79A | DC\_19A\_n78A  DC\_19A\_n79A |
| DC\_20A\_n1A-n7A | DC\_20A\_n1A  DC\_20A\_n7A |
| DC\_20A\_n1A-n28A11,12 | DC\_20A\_n1A  DC\_20A\_n28A |
| DC\_20A\_n1A-n78A | DC\_20A\_n1A  DC\_20A\_n78A |
| DC\_20A\_n3A-n78A | DC\_20A\_n3A  DC\_20A\_n78A |
| DC\_20A\_n7A-n28A5,6,11,12 | DC\_20A\_n7A  DC\_20A\_n28A |
| DC\_20A\_n8A-n75A6 | DC\_20A\_n8A |
| DC\_20A\_n28A-n75A6,11,12 | DC\_20A\_n28A |
| DC\_20A\_n28A-n78A5,6,11,12 | DC\_20A\_n28A  DC\_20A\_n78A |
| DC\_20A-32A\_n78A  DC\_20A-32A\_n78(2A) | DC\_20A\_n78A |
| DC\_20A-(n)38AA | DC\_20A\_n38A |
| DC\_20A-38A\_n78A | DC\_20A\_n78A  DC\_38A\_n78A |
| DC\_20A\_n41A-n78A | DC\_20A\_n41A  DC\_20A\_n78A |
| DC\_20A-(n)41AA  DC\_20A-(n)41CA  DC\_20A-(n)41DA | DC\_20A\_n41A |
| DC\_20A\_n75A-n78A5 | DC\_20A\_n78A |
| DC\_20A\_n76A-n78A5 | DC\_20A\_n78A |
| DC\_20A\_SUL\_n78A-n80A | DC\_20A\_n78A  DC\_20A\_n80A |
| DC\_20A\_SUL\_n78A-n82A5 | DC\_20A\_n78A  DC\_20A\_n82A\_ULSUP-TDM\_n78A |
| DC\_20A\_SUL\_n78A-n83A5 | DC\_20A\_n78A  DC\_20A\_n83A |
| DC\_20A\_n78A-n92A  DC\_20A\_n78(2A)-n92A | DC\_20A\_n78A  DC\_20A\_n92A\_ULSUP-TDM\_n78A |
| DC\_21A-28A\_n77A  DC\_21A-28A\_n77C | DC\_21A\_n77A  DC\_28A\_n77A |
| DC\_21A-28A\_n78A  DC\_21A-28A\_n78C | DC\_21A\_n78A  DC\_28A\_n78A |
| DC\_21A-28A\_n79A  DC\_21A-28A\_n79C | DC\_21A\_n79A  DC\_28A\_n79A |
| DC\_21A-42A\_n77A10,11  DC\_21A-42A\_n77C10,11  DC\_21A-42C\_n77A10,11  DC\_21A-42C\_n77C10,11  DC\_21A-42D\_n77A10,11  DC\_21A-42D\_n77C10,11  DC\_21A-42E\_n77A10,11  DC\_21A-42E\_n77C10,11 | DC\_21A\_n77A |
| DC\_21A-42A\_n78A10,11  DC\_21A-42A\_n78C10,11  DC\_21A-42C\_n78A10,11  DC\_21A-42C\_n78C10,11  DC\_21A-42D\_n78A10,11  DC\_21A-42D\_n78C10,11  DC\_21A-42E\_n78A10,11  DC\_21A-42E\_n78C10,11 | DC\_21A\_n78A |
| DC\_21A-42A\_n79A  DC\_21A-42A\_n79C  DC\_21A-42C\_n79A  DC\_21A-42C\_n79C  DC\_21A-42D\_n79A  DC\_21A-42D\_n79C  DC\_21A-42E\_n79A  DC\_21A-42E\_n79C | DC\_21A\_n79A |
| DC\_21A\_n77A-n79A | DC\_21A\_n77A  DC\_21A\_n79A |
| DC\_21A\_n78A-n79A | DC\_21A\_n78A  DC\_21A\_n79A |
| DC\_25A-41A\_n41A  DC\_25A-41C\_n41A  DC\_25A-41D\_n41A  DC\_25A-25A-41A\_n41A  DC\_25A-25A-41C\_n41A  DC\_25A-25A-41D\_n41A | DC\_25A\_n41A  DC\_41A\_n41A |
| DC\_25A-(n)41AA  DC\_25A-25A-(n)41AA | DC\_25A\_n41A  DC\_(n)41AA |
| DC\_25A-(n)41CA  DC\_25A-(n)41DA  DC\_25A-25A-(n)41CA  DC\_25A-25A-(n)41DA | DC\_25A\_n41A  DC\_(n)41AA  DC\_41A\_n41A |
| DC\_28A-41A\_n77A  DC\_28A-41C\_n77A | DC\_28A\_n77A  DC\_41A\_n77A |
| DC\_28A-41A\_n78A  DC\_28A-41C\_n78A | DC\_28A\_n78A  DC\_41A\_n78A |
| DC\_28A-41A\_n79A5  DC\_28A-41C\_n79A5 | DC\_28A\_n79A  DC\_41A\_n79A |
| DC\_28A\_n3A-n77A5 | DC\_28A\_n3A  DC\_28A\_n77A |
| DC\_28A\_n3A-n78A5 | DC\_28A\_n3A  DC\_28A\_n78A |
| DC\_28A\_n5A-n78A | DC\_28A\_n5A  DC\_28A\_n78A |
| DC\_28A\_n7A-n78A | DC\_28A\_n7A  DC\_28A\_n78A |
| DC\_28A\_n7B-n78A | DC\_28A\_n7A  DC\_28A\_n7B  DC\_28A\_n78A |
| DC\_28A\_n8A-n78A5 | DC\_28A\_n8A  DC\_28A\_n78A |
| DC\_28A\_n40A-n78A | DC\_28A\_n40A  DC\_28A\_n78A |
| DC\_28A-42A\_n77A10,11  DC\_28A-42A\_n77C10,11  DC\_28A-42C\_n77A10,11 | DC\_28A\_n77A |
| DC\_28A-42A\_n78A10,11  DC\_28A-42A\_n78C10,11  DC\_28A-42C\_n78A10,11 | DC\_28A\_n78A |
| DC\_28A-42A\_n79A  DC\_28A-42A\_n79C  DC\_28A-42C\_n79A | DC\_28A\_n79A |
| DC\_28A\_SUL\_n78A-n83A5 | DC\_28A\_n78A  DC\_28A\_n83A\_ULSUP-TDM\_n78A |
| DC\_29A-30A\_n2A | DC\_30A\_n2A |
| DC\_29A-30A\_n66A | DC\_30A\_n66A |
| DC\_29A-66A\_n2A | DC\_66A\_n2A |
| DC\_29A-66A-66A\_n2A | DC\_66A\_n2A |
| DC\_30A-66A\_n2A | DC\_30A\_n2A  DC\_66A\_n2A |
| DC\_30A-66A-66A\_n2A | DC\_30A\_n2A  DC\_66A\_n2A |
| DC\_30A-66A\_n5A | DC\_30A\_n5A  DC\_66A\_n5A |
| DC\_30A-66A-66A\_n5A  DC\_30A-66A-66A-66A\_n5A | DC\_30A\_n5A  DC\_66A\_n5A |
| DC\_30A-66A\_n66A | DC\_30A\_n66A  DC\_66A\_n66A2 |
| DC\_39A\_n40A-n41A | DC\_39A\_n40A  DC\_39A\_n41A |
| DC\_39A\_n40A-n79A | DC\_39A\_n40A  DC\_39A\_n79A |
| DC\_39A\_n41A-n79A | DC\_39A\_n41A  DC\_39A\_n79A |
| DC\_40A\_n41A-n79A | DC\_40A\_n41A  DC\_40A\_n79A |
| DC\_41A\_n3A-n77A | DC\_41A\_n3A  DC\_41A\_n77A |
| DC\_41C\_n3A-n77A | DC\_41A\_n3A  DC\_41A\_n77A  DC\_41C\_n3A  DC\_41C\_n77A |
| DC\_41A\_n3A-n78A | DC\_41A\_n3A  DC\_41A\_n78A |
| DC\_41C\_n3A-n78A | DC\_41A\_n3A  DC\_41A\_n78A  DC\_41C\_n3A  DC\_41C\_n78A |
| DC\_41A\_n28A-n77A | DC\_41A\_n28A  DC\_41A\_n77A |
| DC\_41C\_n28A-n77A | DC\_41A\_n28A  DC\_41A\_n77A  DC\_41C\_n28A  DC\_41C\_n77A |
| DC\_41A\_n28A-n78A | DC\_41A\_n28A  DC\_41A\_n78A |
| DC\_41C\_n28A-n78A | DC\_41A\_n28A  DC\_41A\_n78A  DC\_41C\_n28A  DC\_41C\_n78A |
| DC\_(n)41AA-n78A  DC\_(n)41CA-n78A  DC\_(n)41DA-n78A | DC\_41A\_n78A |
| DC\_41A-42A\_n77A10,11  DC\_41A-42C\_n77A10,11  DC\_41C-42A\_n77A10,11  DC\_41C-42C\_n77A10,11 | DC\_41A\_n77A |
| DC\_41A-42A\_n78A10,11  DC\_41A-42C\_n78A10,11  DC\_41C-42A\_n78A10,11  DC\_41C-42C\_n78A10,11 | DC\_41A\_n78A |
| DC\_41A-42A\_n79A  DC\_41A-42C\_n79A  DC\_41C-42A\_n79A  DC\_41C-42C\_n79A | DC\_41A\_n79A |
| DC\_42A\_n28A-n77A10,11 | DC\_42A\_n28A |
| DC\_42A\_n28A-n77(2A)10,11 | DC\_42A\_n28A |
| DC\_42C\_n28A-n77A10,11 | DC\_42A\_n28A  DC\_42C\_n28A |
| DC\_42C\_n28A-n77(2A)10,11 | DC\_42A\_n28A  DC\_42C\_n28A |
| DC\_46A-66A\_n5A  DC\_46C-66A\_n5A  DC\_46D-66A\_n5A  DC\_46E-66A\_n5A | DC\_66A\_n5A |
| DC\_46A-66A\_n25A  DC\_46C-66A\_n25A  DC\_46D-66A\_n25A | DC\_66A\_n25A |
| DC\_46A-66A\_n41A  DC\_46C-66A\_n41A  DC\_46D-66A\_n41A | DC\_66A\_n41A |
| DC\_46A-66A\_n41(2A)  DC\_46C-66A\_n41(2A)  DC\_46D-66A\_n41(2A) | DC\_66A\_n41A |
| DC\_46A-66A\_n71A  DC\_46C-66A\_n71A  DC\_46D-66A\_n71A | DC\_66A\_n71A |
| DC\_48A-(n)5AA | DC\_48A\_n5A  DC\_(n)5AA2 |
| DC\_48A-(n)12AA | DC\_48A\_n12A  DC\_(n)12AA2 |
| DC\_48A-66A\_n5A  DC\_48B-66A\_n5A  DC\_48D-66A\_n5A  DC\_48E-66A\_n5A | DC\_66A\_n5A |
| DC\_48A-66A\_n12A | DC\_48A\_n12A  DC\_66A\_n12A |
| DC\_48A-66A\_n71A | DC\_48A\_n71A  DC\_66A\_n71A |
| DC\_66A\_n7A-n78A  DC\_66A-66A\_n7A-n78A | DC\_66A\_n7A  DC\_66A\_n78A |
| DC\_66A\_n7(2A)-n78A  DC\_66A-66A\_n7(2A)-n78A | DC\_66A\_n7A  DC\_66A\_n78A |
| DC\_66A\_n7A-n78(2A)  DC\_66A-66A\_n7A-n78(2A) | DC\_66A\_n7A  DC\_66A\_n78A |
| DC\_66A\_n7(2A)-n78(2A)  DC\_66A-66A\_n7(2A)-n78(2A) | DC\_66A\_n7A  DC\_66A\_n78A |
| DC\_66A\_n25A-n71A | DC\_66A\_n25A  DC\_66A\_n71A |
| DC\_66A\_n38A-n78A | DC\_66A\_n38A  DC\_66A\_n78A |
| DC\_66A\_n66A-n78A | DC\_66A\_n66A2  DC\_66A\_n78A |
| DC\_66A-(n)12AA | DC\_66A\_n12A  DC\_(n)12AA2 |
| DC\_66A-(n)71AA  DC\_66C-(n)71AA | DC\_66A\_n71A  DC\_(n)71AA |
| DC\_66A\_n25A-n41A  DC\_66A\_n25A-n41C | DC\_66A\_n25A  DC\_66A\_n41A |
| DC\_66A\_n25A-n41(2A) | DC\_66A\_n25A  DC\_66A\_n41A |
| DC\_66A\_n41A-n71A  DC\_66A\_n41C-n71A | DC\_66A\_n41A  DC\_66A\_n71A |
| DC\_66A\_n41(2A)-n71A | DC\_66A\_n41A  DC\_66A\_n71A |
| DC\_66A-71A\_n38A | DC\_71A\_n38A  DC\_66A\_n38A |
| DC\_66A-71A\_n66A | DC\_71A\_n66A  DC\_66A\_n66A2 |
| DC\_66A-71A\_n78A | DC\_71A\_n78A  DC\_66A\_n78A |
| DC\_66A\_SUL\_n78A-n86A5  DC\_66A\_SUL\_n78(2A)-n86A5 | DC\_66A\_n78A  DC\_66A\_n86A\_ULSUP-TDM\_n78A |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.  NOTE 2: Only single switched UL is supported  NOTE 3: Restricted to E-UTRA operation when inter-band carrier aggregation is configured. The downlink operating band for Band 46 is paired with the uplink operating band (external E-UTRA band) of the carrier aggregation configuration that is supporting the configured Pcell.  NOTE 4: If a UE is configured with both NR UL and NR SUL carriers in a cell, the switching time between NR UL carrier and NR SUL carrier can be up to 140us and placed in SUL resources.  NOTE 5: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability  NOTE 6: 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 7: Void.  NOTE 8: UL carrier shall be supported in Band 2 only. Power imbalance between downlink carriers on Band 7 and Band 38 is assumed to be within 6dB.  NOTE 9: UL carrier shall be supported in Band 66 only. Power imbalance between downlink carriers on Band 7 and Band 38 is assumed to be within 6dB.  NOTE 10: For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, the minimum requirements for intra-band non-contiguous EN-DC apply for the Band 42 and Band n77/n78 combination. For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, when UE capability *interBandContiguousMRDC* is indicated, the minimum requirements for intra-band-contiguous EN-DC also should be met in addtion to intra-band non-contiguous EN-DC*.*  NOTE 11: For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, the minimum requirements for inter-band EN-DC apply when the maximum power spectral density imbalance between downlink carriers contained in overlapping or partially overlapping DL bands is within 6 dB.  NOTE 12: For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, the minimum requirements apply for synchronized DL carriers with a maximum receive time difference ≤ 3 usec between overlapping or partially overlapping DL bands contained in different cell groups. | |

#### 5.5B.4.3 Inter-band EN-DC configurations within FR1 (four bands)

Table 5.5B.4.3-1: Inter-band EN-DC configurations within FR1 (four bands)

| EN-DC  configuration | Uplink EN-DC  configuration  (NOTE 1) |
| --- | --- |
| DC\_1A-3A-5A\_n78A2 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_5A\_n78A |
| DC\_1A-3A\_n5A-n78A2  DC\_1A-3C\_n5A-n78A2 | DC\_1A\_n5A  DC\_1A\_n78A  DC\_3A\_n5A  DC\_3A\_n78A  DC\_3C\_n5A  DC\_3C\_n78A |
| DC\_1A-3A-5A\_n79A2 | DC\_1A\_n79A  DC\_3A\_n79A  DC\_5A\_n79A |
| DC\_1A-3A-7A\_n5A  DC\_1A-3A-7C\_n5A  DC\_1A-3C-7A\_n5A  DC\_1A-3C-7C\_n5A | DC\_1A\_n5A  DC\_3A\_n5A  DC\_3C\_n5A  DC\_7A\_n5A  DC\_7C\_n5A |
| DC\_1A-3A-7A\_n7A  DC\_1A-3C-7A\_n7A | DC\_1A\_n7A  DC\_3A\_n7A  DC\_7A\_n7A4 |
| DC\_1A-1A-3A-7A\_n7A  DC\_1A-1A-3C-7A\_n7A  DC\_1A-3A-3A-7A\_n7A | DC\_1A\_n7A  DC\_3A\_n7A  DC\_3C\_n7A  DC\_7A\_n7A4 |
| DC\_1A-3A-7A\_n8A | DC\_1A\_n8A  DC\_3A\_n8A  DC\_7A\_n8A |
| DC\_1A-3A-7A\_n28A  DC\_1A-3A-7C\_n28A  DC\_1A-3C-7A\_n28A  DC\_1A-3C-7C\_n28A | DC\_1A\_n28A  DC\_3A\_n28A  DC\_3C\_n28A  DC\_7A\_n28A  DC\_7C\_n28A |
| DC\_1A-3A-7A\_n40A | DC\_1A\_n40A  DC\_3A\_n40A  DC\_7A\_n40A |
| DC\_1A-3A-7A\_n78A2  DC\_1A-3A-7C\_n78A  DC\_1A-3C-7A\_n78A2  DC\_1A-3C-7C\_n78A | DC\_1A\_n78A  DC\_3A\_n78A  DC\_3C\_n78A  DC\_7A\_n78A  DC\_7C\_n78A |
| DC\_1A-3A-7A\_n78(2A)  DC\_1A-3C-7A\_n78(2A)  DC\_1A-3A-7C\_n78(2A)  DC\_1A-3C-7C\_n78(2A) | DC\_1A\_n78A  DC\_3A\_n78A  DC\_3C\_n78A  DC\_7A\_n78A  DC\_7C\_n78A |
| DC\_1A-3A\_n7A-n78A  DC\_1A-3A\_n7B-n78A | DC\_1A\_n7A  DC\_1A\_n78A  DC\_3A\_n7A  DC\_3A\_n78A |
| DC\_1A-3A\_n7A-n78(2A)  DC\_1A-3C\_n7A-n78(2A) | DC\_1A\_n7A  DC\_1A\_n78A  DC\_3A\_n7A  DC\_3A\_n78A |
| DC\_1A-3C\_n7A-n78A | DC\_1A\_n7A  DC\_1A\_n78A  DC\_3A\_n7A  DC\_3A\_n78A  DC\_3C\_n7A |
| DC\_1A-3A-7A-7A\_n78A2 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_7A\_n78A |
| DC\_1A-3A-8A\_n28A | DC\_1A\_n28A  DC\_3A\_n28A  DC\_8A\_n28A |
| DC\_1A-3A-8A\_n77A2 | DC\_1A\_n77A  DC\_3A\_n77A  DC\_8A\_n77A |
| DC\_1A-3A-8A\_n77(2A)2 | DC\_1A\_n77A  DC\_3A\_n77A  DC\_8A\_n77A |
| DC\_1A-3A-8A\_n78A2  DC\_1A-3C-8A\_n78A | DC\_1A\_n78A  DC\_3A\_n78A  DC\_8A\_n78A |
| DC\_1A-3A-8A\_n79A2 | DC\_1A\_n79A  DC\_3A\_n79A  DC\_8A\_n79A |
| DC\_1A-3A-18A\_n77A | DC\_1A\_n77A  DC\_3A\_n77A  DC\_18A\_n77A |
| DC\_1A-3A-18A\_n78A | DC\_1A\_n78A  DC\_3A\_n78A  DC\_18A\_n78A |
| DC\_1A-3A-18A\_n79A | DC\_1A\_n79A  DC\_3A\_n79A  DC\_18A\_n79A |
| DC\_1A-3A-19A\_n77A2  DC\_1A-3A-19A\_n77C2 | DC\_1A\_n77A  DC\_3A\_n77A  DC\_19A\_n77A |
| DC\_1A-3A-19A\_n78A2  DC\_1A-3A-19A\_n78C2 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_19A\_n78A |
| DC\_1A-3A-19A\_n79A2  DC\_1A-3A-19A\_n79C2 | DC\_1A\_n79A  DC\_3A\_n79A  DC\_19A\_n79A |
| DC\_1A-3A-20A\_n8A | DC\_1A\_n8A  DC\_3A\_n8A  DC\_20A\_n8A |
| DC\_1A-3A-20A\_n28A3,7,8 | DC\_1A\_n28A  DC\_3A\_n28A  DC\_20A\_n28A |
| DC\_1A-3A-20A\_n38A | DC\_3A\_n38A  DC\_20A\_n38A |
| DC\_1A-3A-20A\_n41A  DC\_1A-3C-20A\_n41A | DC\_1A\_n41A  DC\_3A\_n41A  DC\_3C\_n41A  DC\_20A\_n41A |
| DC\_1A-3A-20A\_n78A2 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_20A\_n78A |
| DC\_1A-3A-21A\_n77A2  DC\_1A-3A-21A\_n77C2 | DC\_1A\_n77A  DC\_3A\_n77A  DC\_21A\_n77A |
| DC\_1A-3A-21A\_n78A2  DC\_1A-3A-21A\_n78C2 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_21A\_n78A |
| DC\_1A-3A-21A\_n79A2  DC\_1A-3A-21A\_n79C2 | DC\_1A\_n79A  DC\_3A\_n79A  DC\_21A\_n79A |
| DC\_1A-3A-28A\_n5A  DC\_1A-3C-28A\_n5A | DC\_1A\_n5A  DC\_3A\_n5A  DC\_3C\_n5A  DC\_28A\_n5A |
| DC\_1A-3A-28A\_n7A  DC\_1A-3C-28A\_n7A  DC\_1A-3A-28A\_n7B  DC\_1A-3C-28A\_n7B | DC\_1A\_n7A  DC\_3A\_n7A  DC\_3C\_n7A  DC\_28A\_n7A |
| DC\_1A-3A-3A-28A\_n7A  DC\_1A-1A-3A-28A\_n7A  DC\_1A-1A-3C-28A\_n7A  DC\_1A-1A-3A-3A-28A\_n7A  DC\_1A-3A-3A-28A\_n7B  DC\_1A-1A-3A-28A\_n7B  DC\_1A-1A-3C-28A\_n7B  DC\_1A-1A-3A-3A-28A\_n7B | DC\_1A\_n7A  DC\_3A\_n7A  DC\_3C\_n7A  DC\_28A\_n7A |
| DC\_1A-3A-28A\_n40A | DC\_1A\_n40A DC\_3A\_n40A DC\_28A\_n40A |
| DC\_1A-3A-28A\_n77A2  DC\_1A-3A-28A\_n77C2 | DC\_1A\_n77A  DC\_3A\_n77A  DC\_28A\_n77A |
| DC\_1A-3A\_n28A-n77A2 | DC\_1A\_n28A  DC\_1A\_n77A  DC\_3A\_n28A  DC\_3A\_n77A |
| DC\_1A-3A\_n28A-n77(2A)2 | DC\_1A\_n28A  DC\_1A\_n77A  DC\_3A\_n28A  DC\_3A\_n77A |
| DC\_1A-3A-28A\_n78A2  DC\_1A-3C-28A\_n78A2  DC\_1A-3A-28A\_n78C2 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_28A\_n78A |
| DC\_1A-3A-28A\_n79A2  DC\_1A-3A-28A\_n79C2 | DC\_1A\_n79A  DC\_3A\_n79A  DC\_28A\_n79A |
| DC\_1A-3A\_n28A-n78A2  DC\_1A-3C\_n28A-n78A2 | DC\_1A\_n28A  DC\_1A\_n78A  DC\_3A\_n28A  DC\_3A\_n78A  DC\_3C\_n28A |
| DC\_1A-3A-32A\_n78A  DC\_1A-3A-32A\_n78(2A) | DC\_1A\_n78A  DC\_3A\_n78A |
| DC\_1A-3A\_n38A-n78A | DC\_3A\_n38A  DC\_3A\_n78A |
| DC\_1A-3A\_n40A-n78A | DC\_1A\_n40A  DC\_1A\_n78A  DC\_3A\_n40A  DC\_3A\_n78A |
| DC\_1A-3A-41A\_n77A  DC\_1A-3A-41C\_n77A | DC\_1A\_n77A  DC\_3A\_n77A  DC\_41A\_n77A |
| DC\_1A-3A-41A\_n77(2A)  DC\_1A-3A-41C\_n77(2A) | DC\_1A\_n77A  DC\_3A\_n77A  DC\_41A\_n77A  DC\_41C\_n77A |
| DC\_1A-3A-41A\_n78A  DC\_1A-3A-41C\_n78A | DC\_1A\_n78A  DC\_3A\_n78A  DC\_41A\_n78A |
| DC\_1A-3A\_n41A-n78A | DC\_1A\_n41A  DC\_1A\_n78A  DC\_3A\_n41A  DC\_3A\_n78A |
| DC\_1A-3A-41A\_n78(2A)  DC\_1A-3A-41C\_n78(2A) | DC\_1A\_n78A  DC\_3A\_n78A  DC\_41A\_n78A  DC\_41C\_n78A |
| DC\_1A-3A-41A\_n79A2  DC\_1A-3A-41C\_n79A2 | DC\_1A\_n79A  DC\_3A\_n79A  DC\_41A\_n79A |
| DC\_1A-3A-42A\_n77A6,7  DC\_1A-3A-42A\_n77C6,7  DC\_1A-3A-42C\_n77A6,7  DC\_1A-3A-42C\_n77C6,7  DC\_1A-3A-42D\_n77A6,7 | DC\_1A\_n77A  DC\_3A\_n77A |
| DC\_1A-3A-42A\_n78A6,7  DC\_1A-3A-42A\_n78C6,7  DC\_1A-3A-42C\_n78A6,7  DC\_1A-3A-42C\_n78C6,7  DC\_1A-3A-42D\_n78A6,7 | DC\_1A\_n78A  DC\_3A\_n78A |
| DC\_1A-3A-42A\_n79A  DC\_1A-3A-42A\_n79C  DC\_1A-3A-42C\_n79A  DC\_1A-3A-42C\_n79C  DC\_1A-3A-42D\_n79A | DC\_1A\_n79A  DC\_3A\_n79A |
| DC\_1A-3A\_n77A-n79A | DC\_1A\_n77A  DC\_1A\_n79A  DC\_3A\_n77A  DC\_3A\_n79A |
| DC\_1A-3A\_n78A-n79A | DC\_1A\_n78A  DC\_1A\_n79A  DC\_3A\_n78A  DC\_3A\_n79A |
| DC\_1A-3A\_SUL\_n78A-n80A | DC\_1A\_n78A  DC\_1A\_n80A  DC\_3A\_n78A  DC\_3A\_n80A\_ULSUP-TDM\_n78A |
| DC\_1A-5A-7A\_n78A | DC\_1A\_n78A  DC\_5A\_n78A  DC\_7A\_n78A |
| DC\_1A-5A-7A-7A\_n78A | DC\_1A\_n78A  DC\_5A\_n78A  DC\_7A\_n78A |
| DC\_1A-5A-41A\_n79A | DC\_1A\_n79A  DC\_5A\_n79A  DC\_41A\_n79A |
| DC\_1A-7A\_n3A-n78A | DC\_1A\_n3A  DC\_1A\_n78A  DC\_7A\_n3A  DC\_7A\_n78A |
| DC\_1A-7A\_n5A-n78A  DC\_1A-7C\_n5A-n78A | DC\_1A\_n5A  DC\_1A\_n78A  DC\_7A\_n5A  DC\_7A\_n78A  DC\_7C\_n5A  DC\_7C\_n78A |
| DC\_1A-7A-8A\_n3A | DC\_1A\_n3A  DC\_7A\_n3A  DC\_8A\_n3A |
| DC\_1A-7A\_n7A-n78A | DC\_1A\_n7A  DC\_7A\_n7A4  DC\_1A\_n78A  DC\_7A\_n78A |
| DC\_1A-7A-8A\_n78A | DC\_1A\_n78A  DC\_7A\_n78A  DC\_8A\_n78A |
| DC\_1A-7A-20A\_n3A  DC\_1A-7C-20A\_n3A | DC\_1A\_n3A  DC\_7A\_n3A  DC\_7C\_n3A  DC\_20A\_n3A |
| DC\_1A-7A-20A\_n8A | DC\_1A\_n8A  DC\_7A\_n8A  DC\_20A\_n8A |
| DC\_1A-7A-20A\_n28A3,7,8 | DC\_1A\_n28A  DC\_7A\_n28A  DC\_20A\_n28A |
| DC\_1A-7A-20A\_n78A2 | DC\_1A\_n78A  DC\_7A\_n78A  DC\_20A\_n78A |
| DC\_1A-7A-28A\_n5A  DC\_1A-7C-28A\_n5A | DC\_1A\_n5A  DC\_7A\_n5A  DC\_7C\_n5A  DC\_28A\_n5A |
| DC\_1A-7A-28A\_n7A | DC\_1A\_n7A  DC\_7A\_n7A4  DC\_28A\_n7A |
| DC\_1A-1A-7A-28A\_n7A | DC\_1A\_n7A  DC\_7A\_n7A4  DC\_28A\_n7A |
| DC\_1A-7A-28A\_n40A | DC\_1A\_n40A  DC\_7A\_n40A  DC\_28A\_n40A |
| DC\_1A-7A-28A\_n78A  DC\_1A-7C-28A\_n78A | DC\_1A\_n78A  DC\_7A\_n78A  DC\_7C\_n78A  DC\_28A\_n78A |
| DC\_1A-7A\_n28A-n78A2  DC\_1A-7C\_n28A-n78A | DC\_1A\_n28A  DC\_1A\_n78A  DC\_7A\_n28A  DC\_7A\_n78A  DC\_7C\_n28A  DC\_7C\_n78A |
| DC\_1A-8A\_n3A-n28A | DC\_1A\_n3A  DC\_1A\_n28A  DC\_8A\_n3A  DC\_8A\_n28A |
| DC\_1A-8A-11A\_n77A2 | DC\_1A\_n77A  DC\_8A\_n77A  DC\_11A\_n77A |
| DC\_1A-8A-11A\_n77(2A)2 | DC\_1A\_n77A  DC\_8A\_n77A  DC\_11A\_n77A |
| DC\_1A-8A-11A\_n78A2 | DC\_1A\_n78A  DC\_8A\_n78A  DC\_11A\_n78A |
| DC\_1A-8A-20A\_n78A | DC\_1A\_n78A  DC\_8A\_n78A  DC\_20A\_n78A |
| DC\_1A-8A\_n28A-n77A2 | DC\_1A\_n28A  DC\_1A\_n77A  DC\_8A\_n28A  DC\_8A\_n77A |
| DC\_1A-8A\_n28A-n77(2A)2 | DC\_1A\_n28A  DC\_1A\_n77A  DC\_8A\_n28A  DC\_8A\_n77A |
| DC\_1A-8A-42A\_n77A6,7  DC\_1A-8A-42C\_n77A6,7 | DC\_1A\_n77A  DC\_8A\_n77A |
| DC\_1A-8A-42A\_n77(2A) 6,7  DC\_1A-8A-42C\_n77(2A)6,7 | DC\_1A\_n77A  DC\_8A\_n77A |
| DC\_1A-11A-18A\_n77A | DC\_1A\_n77A  DC\_11A\_n77A  DC\_18A\_n77A |
| DC\_1A-11A-18A\_n78A | DC\_1A\_n78A  DC\_11A\_n78A  DC\_18A\_n78A |
| DC\_1A-18A\_n3A-n77A | DC\_18A\_n3A  DC\_18A\_n77A |
| DC\_1A-18A\_n3A-n78A | DC\_1A\_n3A  DC\_1A\_n78A  DC\_18A\_n3A  DC\_18A\_n78A |
| DC\_1A-18A-28A\_n77A | DC\_1A\_n77A  DC\_18A\_n77A  DC\_28A\_n77A |
| DC\_1A-18A-28A\_n78A | DC\_1A\_n78A  DC\_18A\_n78A  DC\_28A\_n78A |
| DC\_1A-18A-28A\_n79A2 | DC\_1A\_n79A  DC\_18A\_n79A  DC\_28A\_n79A |
| DC\_1A-18A-41A\_n3A  DC\_1A-18A-41C\_n3A | DC\_1A\_n3A  DC\_18A\_n3A  DC\_41A\_n3A  DC\_41C\_n3A |
| DC\_1A-18A-41A\_n77A  DC\_1A-18A-41C\_n77A | DC\_1A\_n77A  DC\_18A\_n77A  DC\_41A\_n77A  DC\_41C\_n77A |
| DC\_1A-18A-41A\_n78A  DC\_1A-18A-41C\_n78A | DC\_1A\_n78A  DC\_18A\_n78A  DC\_41A\_n78A  DC\_41C\_n78A |
| DC\_1A-18A-42A\_n77A6,7  DC\_1A-18A-42C\_n77A6,7 | DC\_1A\_n77A  DC\_18A\_n77A |
| DC\_1A-18A-42A\_n78A6,7  DC\_1A-18A-42C\_n78A6,7 | DC\_1A\_n78A  DC\_18A\_n78A |
| DC\_1A-18A-42A\_n79A  DC\_1A-18A-42C\_n79A | DC\_1A\_n79A  DC\_18A\_n79A |
| DC\_1A-19A-21A\_n77A2  DC\_1A-19A-21A\_n77C2 | DC\_1A\_n77A  DC\_19A\_n77A  DC\_21A\_n77A |
| DC\_1A-19A-21A\_n78A2,  DC\_1A-19A-21A\_n78C2, | DC\_1A\_n78A  DC\_19A\_n78A  DC\_21A\_n78A |
| DC\_1A-19A-21A\_n79A2  DC\_1A-19A-21A\_n79C2 | DC\_1A\_n79A  DC\_19A\_n79A  DC\_21A\_n79A |
| DC\_1A-19A-42A\_n77A6,7  DC\_1A-19A-42A\_n77C6,7  DC\_1A-19A-42C\_n77A6,7  DC\_1A-19A-42C\_n77C6,7 | DC\_1A\_n77A  DC\_19A\_n77A |
| DC\_1A-19A-42A\_n78A6,7  DC\_1A-19A-42A\_n78C6,7  DC\_1A-19A-42C\_n78A6,7  DC\_1A-19A-42C\_n78C6,7 | DC\_1A\_n78A  DC\_19A\_n78A |
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| DC\_1A-19A\_n78A-n79A | DC\_19A\_n78A  DC\_19A\_n79A |
| DC\_1A-20A\_n3A-n38A | DC\_1A\_n3A  DC\_20A\_n3A  DC\_1A\_n38A  DC\_20A\_n38A |
| DC\_1A-20A\_n3A-n78A | DC\_1A\_n3A  DC\_20A\_n3A  DC\_1A\_n78A  DC\_20A\_n78A |
| DC\_1A-20A\_n28A-n78A2,3,7,8 | DC\_1A\_n28A  DC\_1A\_n78A  DC\_20A\_n28A  DC\_20A\_n78A |
| DC\_1A-20A-(n)38AA | DC\_1A\_n38A  DC\_20A\_n38A |
| DC\_1A-20A-38A\_n78A | DC\_1A\_n78A |
| DC\_1A-20A\_n41A-n78A | DC\_1A\_n41A  DC\_1A\_n78A  DC\_20A\_n41A  DC\_20A\_n78A |
| DC\_1A-21A-28A\_n77A2 | DC\_1A\_n77A  DC\_21A\_n77A  DC\_28A\_n77A |
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| DC\_1A-21A-28A\_n79A2 | DC\_1A\_n79A  DC\_21A\_n79A  DC\_28A\_n79A |
| DC\_1A-21A-42A\_n77A6,7  DC\_1A-21A-42A\_n77C6,7  DC\_1A-21A-42C\_n77A6,7  DC\_1A-21A-42C\_n77C6,7  DC\_1A-21A-42D\_n77A6,7  DC\_1A-21A-42D\_n77C6,7 | DC\_1A\_n77A  DC\_21A\_n77A |
| DC\_1A-21A-42A\_n78A6,7  DC\_1A-21A-42A\_n78C6,7  DC\_1A-21A-42C\_n78A6,7  DC\_1A-21A-42C\_n78C6,7  DC\_1A-21A-42D\_n78A6,7  DC\_1A-21A-42D\_n78C6,7 | DC\_1A\_n78A  DC\_21A\_n78A |
| DC\_1A-21A-42A\_n79A  DC\_1A-21A-42A\_n79C  DC\_1A-21A-42C\_n79A  DC\_1A-21A-42C\_n79C  DC\_1A-21A-42D\_n79A  DC\_1A-21A-42D\_n79C | DC\_1A\_n79A  DC\_21A\_n79A |
| DC\_1A-21A\_n77A-n79A | DC\_1A\_n77A  DC\_1A\_n79A |
| DC\_1A-21A\_n78A-n79A | DC\_1A\_n78A  DC\_1A\_n79A |
| DC\_1A-28A\_n3A-n77A2 | DC\_28A\_n3A  DC\_28A\_n77A |
| DC\_1A-28A\_n3A-n78A2 | DC\_1A\_n3A  DC\_1A\_n78A  DC\_28A\_n3A  DC\_28A\_n78A |
| DC\_1A-28A\_n5A-n78A2 | DC\_1A\_n5A  DC\_1A\_n78A  DC\_28A\_n5A  DC\_28A\_n78A |
| DC\_1A-28A\_n7A-n78A | DC\_1A\_n7A  DC\_28A\_n7A  DC\_1A\_n78A  DC\_28A\_n78A |
| DC\_1A-28A\_n7B-n78A | DC\_1A\_n7A  DC\_1A\_n7B  DC\_28A\_n7A  DC\_28A\_n7B  DC\_1A\_n78A  DC\_28A\_n78A |
| DC\_1A-28A\_n40A-n78A | DC\_1A\_n40A  DC\_1A\_n78A  DC\_28A\_n40A  DC\_28A\_n78A |
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| DC\_1A-41A\_n3A\_n77A | DC\_41A\_n3A  DC\_41A\_n77A |
| DC\_1A-41C\_n3A\_n77A | DC\_41A\_n3A  DC\_41A\_n77A  DC\_41C\_n3A  DC\_41C\_n77A |
| DC\_1A-41A\_n3A\_n78A | DC\_41A\_n3A  DC\_41A\_n78A |
| DC\_1A-41C\_n3A\_n78A | DC\_41A\_n3A  DC\_41A\_n78A  DC\_41C\_n3A  DC\_41C\_n78A |
| DC\_1A-41A\_n28A\_n77A | DC\_1A\_n28A  DC\_1A\_n77A  DC\_41A\_n28A  DC\_41A\_n77A |
| DC\_1A-41C\_n28A\_n77A | DC\_1A\_n28A  DC\_1A\_n77A  DC\_41A\_n28A  DC\_41A\_n77A  DC\_41C\_n28A  DC\_41C\_n77A |
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| DC\_1A-41A-42A\_n78A6,7  DC\_1A-41A-42C\_n78A6,7  DC\_1A-41C-42A\_n78A6,7  DC\_1A-41C-42C\_n78A6,7 | DC\_1A\_n78A  DC\_41A\_n78A |
| DC\_1A-41A-42A\_n79A  DC\_1A-41A-42C\_n79A  DC\_1A-41C-42A\_n79A  DC\_1A-41C-42C\_n79A | DC\_1A\_n79A  DC\_41A\_n79A |
| DC\_1A-42A\_n77A-n79A6,7  DC\_1A-42C\_n77A-n79A6,7 | DC\_1A\_n77A  DC\_1A\_n79A |
| DC\_1A-42A\_n78A-n79A6,7  DC\_1A-42C\_n78A-n79A6,7 | DC\_1A\_n78A  DC\_1A\_n79A |
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| DC\_2A-12A-(n)5AA | DC\_2A\_n5A  DC\_12A\_n5A  DC\_(n)5AA4 |
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| DC\_2A-5A-48A\_n71A | DC\_2A\_n71A  DC\_5A\_n71A  DC\_48A\_n71A |
| DC\_2A-5A-66A\_n2A  DC\_2A-5B-66A\_n2A | DC\_2A\_n2A4  DC\_5A\_n2A  DC\_66A\_n2A |
| DC\_2A-5A-5A-66A\_n2A  DC\_2A-5A-66A-66A\_n2A  DC\_2A-5B-66A-66A\_n2A  DC\_2A-5A-5A-66A-66A\_n2A | DC\_2A\_n2A4  DC\_5A\_n2A  DC\_66A\_n2A |
| DC\_2A-5A-66A\_n5A | DC\_2A\_n5A  DC\_66A\_n5A |
| DC\_2A-2A-5A-66A\_n5A  DC\_2A-2A-5A-66A-66A\_n5A  DC\_2A-5A-66A-66A\_n5A | DC\_2A\_n5A  DC\_66A\_n5A |
| DC\_2A-5A-66A\_n12A | DC\_2A\_n12A  DC\_5A\_n12A  DC\_66A\_n12A |
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| DC\_2A-5A-5A-66A\_n66A  DC\_2A-5A-66A-66A\_n66A  DC\_2A-5B-66A-66A\_n66A  DC\_2A-2A-5A-66A-66A\_n66A  DC\_2A-5A-5A-66A-66A\_n66A | DC\_5A\_n66A |
| DC\_2A-5A-66A\_n71A | DC\_2A\_n71A  DC\_5A\_n71A  DC\_66A\_n71A |
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| DC\_2A-7A\_n38A-n78A  DC\_2A-7A-7A\_n38A-n78A  DC\_2A-7C\_n38A-n78A | DC\_2A\_n78A |
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| DC\_2A-7A-66A\_n66A  DC\_2A-7C-66A\_n66A  DC\_2A-7A-7A-66A\_n66A | DC\_2A\_n66A  DC\_7A\_n66A  DC\_66A\_n66A4 |
| DC\_2A-7A-66A\_n71A | DC\_2A\_n71A  DC\_7A\_n71A  DC\_66A\_n71A |
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| DC\_2A-12A-48A\_n5A | DC\_2A\_n5A  DC\_12A\_n5A  DC\_48A\_n5A |
| DC\_2A-12A-66A\_n5A | DC\_2A\_n5A  DC\_12A\_n5A  DC\_66A\_n5A |
| DC\_2A-12A-30A\_n66A  DC\_2A-2A-12A-30A\_n66A | DC\_2A\_n66A  DC\_12A\_n66A  DC\_30A\_n66A |
| DC\_2A-12A-66A\_n2A | DC\_12A\_n2A  DC\_66A\_n2A |
| DC\_2A-12A-66A-66A\_n2A | DC\_12A\_n2A  DC\_66A\_n2A |
| DC\_2A-12A-66A\_n66A | DC\_2A\_n66A  DC\_12A\_n66A  DC\_66A\_n66A4 |
| DC\_2A-2A-12A-66A\_n66A | DC\_2A\_n66A  DC\_12A\_n66A  DC\_66A\_n66A4 |
| DC\_2A-13A-66A\_n2A | DC\_13A\_n2A |
| DC\_2A-13A-66A-66A\_n2A | DC\_13A\_n2A |
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| DC\_7A-13A-66A\_n66A  DC\_7C-13A-66A\_n66A | DC\_7A\_n66A  DC\_13A\_n66A  DC\_66A\_n66A4 |
| DC\_7A-20A\_n3A-n78A | DC\_7A\_n3A  DC\_20A\_n3A  DC\_7A\_n78A  DC\_20A\_n78A |
| DC\_7A-20A\_n28A-n78A2,3,7,8 | DC\_7A\_n28A  DC\_7A\_n78A  DC\_20A\_n28A  DC\_20A\_n78A |
| DC\_7A-28A\_n3A-n78A | DC\_7A\_n3A  DC\_28A\_n3A  DC\_7A\_n78A  DC\_28A\_n78A |
| DC\_7C-28A\_n3A-n78A | DC\_7A\_n3A  DC\_7C\_n3A  DC\_28A\_n3A  DC\_7A\_n78A  DC\_7C\_n78A  DC\_28A\_n78A |
| DC\_7A-28A\_n5A-n78A  DC\_7C-28A\_n5A-n78A | DC\_7A\_n5A  DC\_7C\_n5A DC\_7A\_n78A  DC\_7C\_n78A  DC\_28A\_n5A DC\_28A\_n78A |
| DC\_7A-28A\_n7A-n78A | DC\_7A\_n7A4  DC\_28A\_n7A  DC\_7A\_n78A  DC\_28A\_n78A |
| DC\_7A-66A\_n66A-n78A  DC\_7A-7A-66A\_n66A-n78A  DC\_7C-66A\_n66A-n78A | DC\_7A\_n66A  DC\_7A\_n78A  DC\_66A\_n66A4  DC\_66A\_n78A |
| DC\_12A-30A-66A\_n2A  DC\_12A-30A-66A-66A\_n2A | DC\_12A\_n2A  DC\_30A\_n2A  DC\_66A\_n2A |
| DC\_12A-30A-66A\_n66A | DC\_12A\_n66A  DC\_30A\_n66A  DC\_66A\_n66A4 |
| DC\_12A-48A-(n)5AA | DC\_12A\_n5A  DC\_48A\_n5A  DC\_(n)5AA4 |
| DC\_12A-48A-66A\_n5A | DC\_12A\_n5A  DC\_48A\_n5A  DC\_66A\_n5A |
| DC\_12A-66A-(n)5AA | DC\_12A\_n5A  DC\_66A\_n5A  DC\_(n)5AA4 |
| DC\_18A-41A\_n3A-n77A | DC\_18A\_n3A  DC\_18A\_n77A  DC\_41A\_n3A  DC\_41A\_n77A |
| DC\_18A-41C\_n3A-n77A | DC\_18A\_n3A  DC\_18A\_n77A  DC\_41A\_n3A  DC\_41A\_n77A  DC\_41C\_n3A  DC\_41C\_n77A |
| DC\_18A-41A\_n3A-n78A | DC\_18A\_n3A  DC\_18A\_n78A  DC\_41A\_n3A  DC\_41A\_n78A |
| DC\_18A-41C\_n3A-n78A | DC\_18A\_n3A  DC\_18A\_n78A  DC\_41A\_n3A  DC\_41A\_n78A  DC\_41C\_n3A  DC\_41C\_n78A |
| DC\_19A-21A-42A\_n77A6,7  DC\_19A-21A-42A\_n77C6,7  DC\_19A-21A-42C\_n77A6,7  DC\_19A-21A-42C\_n77C6,7 | DC\_19A\_n77A  DC\_21A\_n77A |
| DC\_19A-21A-42A\_n78A6,7  DC\_19A-21A-42A\_n78C6,7  DC\_19A-21A-42C\_n78A6,7  DC\_19A-21A-42C\_n78C6,7 | DC\_19A\_n78A  DC\_21A\_n78A |
| DC\_19A-21A-42A\_n79A  DC\_19A-21A-42A\_n79C  DC\_19A-21A-42C\_n79A  DC\_19A-21A-42C\_n79C | DC\_19A\_n79A  DC\_21A\_n79A |
| DC\_19A-21A\_n77A-n79A | DC\_19A\_n77A  DC\_19A\_n79A |
| DC\_19A-21A\_n78A-n79A | DC\_19A\_n78A  DC\_19A\_n79A |
| DC\_19A-42A\_n77A-n79A6,7  DC\_19A-42C\_n77A-n79A6,7 | DC\_19A\_n77A  DC\_19A\_n79A |
| DC\_19A-42A\_n78A-n79A6,7  DC\_19A-42C\_n78A-n79A6,7 | DC\_19A\_n78A  DC\_19A\_n79A |
| DC\_21A-28A-42A\_n77A67  DC\_21A-28A-42C\_n77A6,7 | DC\_21A\_n77A  DC\_28A\_n77A |
| DC\_21A-28A-42A\_n78A6,7  DC\_21A-28A-42C\_n78A6,7 | DC\_21A\_n78A  DC\_28A\_n78A |
| DC\_21A-28A-42A\_n79A  DC\_21A-28A-42C\_n79A | DC\_21A\_n79A  DC\_28A\_n79A |
| DC\_21A-42A\_n77A-n79A6,7  DC\_21A-42C\_n77A-n79A6,7 | DC\_21A\_n77A  DC\_21A\_n79A |
| DC\_21A-42A\_n78A-n79A6,7  DC\_21A-42C\_n78A-n79A6,7 | DC\_21A\_n78A  DC\_21A\_n79A |
| DC\_28A-41A-42A\_n78A6,7  DC\_28A-41C-42A\_n78A6,7  DC\_28A-41A-42C\_n78A6,7  DC\_28A-41C-42C\_n78A6,7 | DC\_28A\_n78A  DC\_41A\_n78A  DC\_41C\_n78A  DC\_42A\_n78A  DC\_42C\_n78A |
| DC\_29A-30A-66A\_n2A | DC\_30A\_n2A  DC\_66A\_n2A |
| DC\_29A-30A-66A-66A\_n2A | DC\_30A\_n2A  DC\_66A\_n2A |
| DC\_29A-30A-66A\_n66A | DC\_30A\_n66A  DC\_66A\_n66A4 |
| DC\_46A-66A\_n25A-n41A  DC\_46C-66A\_n25A-n41A  DC\_46D-66A\_n25A-n41A | DC\_66A\_n25A  DC\_66A\_n41A |
| DC\_46A-66A\_n25A-n71A  DC\_46C-66A\_n25A-n71A  DC\_46D-66A\_n25A-n71A | DC\_66A\_n25A  DC\_66A\_n71A |
| DC\_46A-66A\_n41A-n71A  DC\_46C-66A\_n41A-n71A  DC\_46D-66A\_n41A-n71A | DC\_66A\_n41A  DC\_66A\_n71A |
| DC\_46A-66A\_n41(2A)-n71A  DC\_46C-66A\_n41(2A)-n71A  DC\_46D-66A\_n41(2A)-n71A | DC\_66A\_n41A  DC\_66A\_n71A |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.  NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability  NOTE 3: 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 4: Only single switched UL is supported.  NOTE 5: UL carrier shall be supported in Band 2 or band 66 only. Power imbalance between downlink carriers on Band 7 and Band 38 is assumed to be within 6dB.  NOTE 6: For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, the minimum requirements for intra-band non-contiguous EN-DC apply for the Band 42 and Band n77/n78 combination. For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, when UE capability *interBandContiguousMRDC* is indicated, the minimum requirements for intra-band-contiguous EN-DC also should be met in addtion to intra-band non-contiguous EN-DC*.*  NOTE 7: For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, the minimum requirements for inter-band EN-DC apply for when the maximum power spectral density imbalance between downlink carriers contained in overlapping or partially overlapping DL bands is within 6 dB.  NOTE 8: For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, the minimum requirements apply for synchronized DL carriers with a maximum receive time difference ≤ 3 usec between overlapping or partially overlapping DL bands contained in different cell groups. | |

#### 5.5B.4.4 Inter-band EN-DC configurations within FR1 (five bands)

Table 5.5B.4.4-1: Inter-band EN-DC configurations within FR1 (five bands)

| EN-DC  configuration | Uplink EN-DC  configuration  (NOTE 1) |
| --- | --- |
| DC\_1A-3A-5A-7A\_n78A | DC\_1A\_n78A  DC\_3A\_n78A  DC\_5A\_n78A  DC\_7A\_n78A |
| DC\_1A-3A-5A-7A-7A\_n78A | DC\_1A\_n78A  DC\_3A\_n78A  DC\_5A\_n78A  DC\_7A\_n78A |
| DC\_1A-3A-5A-41A\_n79A | DC\_1A\_n79A  DC\_3A\_n79A  DC\_5A\_n79A  DC\_41A\_n79A |
| DC\_1A-3A-7A\_n5A-n78A  DC\_1A-3C-7A\_n5A-n78A  DC\_1A-3A-7C\_n5A-n78A  DC\_1A-3C-7C\_n5A-n78A | DC\_1A\_n5A  DC\_1A\_n78A  DC\_3A\_n5A  DC\_3C\_n5A  DC\_3A\_n78A  DC\_3C\_n78A  DC\_7A\_n5A  DC\_7C\_n5A  DC\_7A\_n78A  DC\_7C\_n78A |
| DC\_1A-3A-7A\_n7A-n78A | DC\_1A\_n7A  DC\_3A\_n7A  DC\_7A\_n7A4  DC\_1A\_n78A  DC\_3A\_n78A  DC\_7A\_n78A |
| DC\_1A-3C-7A\_n7A-n78A | DC\_1A\_n7A  DC\_3A\_n7A  DC\_3C\_n7A  DC\_7A\_n7A4  DC\_1A\_n78A  DC\_3A\_n78A  DC\_3C\_n78A  DC\_7A\_n78A |
| DC\_1A-3A-7A-8A\_n78A | DC\_1A\_n78A  DC\_3A\_n78A  DC\_7A\_n78A  DC\_8A\_n78A |
| DC\_1A-3A-7A-20A\_n8A | DC\_1A\_n8A  DC\_3A\_n8A  DC\_7A\_n8A  DC\_20A\_n8A |
| DC\_1A-3A-7A-20A\_n28A3,6,7 | DC\_1A\_n28A  DC\_3A\_n28A  DC\_7A\_n28A  DC\_20A\_n28A |
| DC\_1A-3A-7A-20A\_n78A2 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_7A\_n78A  DC\_20A\_n78A |
| DC\_1A-3A-7A-28A\_n5A  DC\_1A-3C-7A-28A\_n5A  DC\_1A-3A-7C-28A\_n5A  DC\_1A-3C-7C-28A\_n5A | DC\_1A\_n5A  DC\_3A\_n5A  DC\_3C\_n5A  DC\_7A\_n5A  DC\_7C\_n5A  DC\_28A\_n5A |
| DC\_1A-3A-7A-28A\_n7A  DC\_1A-3C-7A-28A\_n7A  DC\_1A-1A-3A-7A-28A\_n7A  DC\_1A-1A-3A-3A-7A-28A\_n7A  DC\_1A-3A-3A-7A-28A\_n7A  DC\_1A-1A-3C-7A-28A\_n7A | DC\_1A\_n7A  DC\_3A\_n7A  DC\_3C\_n7A  DC\_7A\_n7A4  DC\_28A\_n7A |
| DC\_1A-3A-7A-28A\_n40A | DC\_1A\_n40A  DC\_3A\_n40A  DC\_7A\_n40A  DC\_28A\_n40A |
| DC\_1A-3A-7A-28A\_n78A  DC\_1A-3A-7C-28A\_n78A  DC\_1A-3C-7A-28A\_n78A  DC\_1A-3C-7C-28A\_n78A | DC\_1A\_n78A  DC\_3A\_n78A  DC\_3C\_n78A  DC\_7A\_n78A  DC\_7C\_n78A  DC\_28A\_n78A |
| DC\_1A-3A-7A\_n28A-n78A2  DC\_1A-3A-7C\_n28A-n78A  DC\_1A-3C-7A\_n28A-n78A  DC\_1A-3C-7C\_n28A-n78A | DC\_1A\_n28A  DC\_1A\_n78A  DC\_3A\_n28A  DC\_3C\_n28A  DC\_3A\_n78A  DC\_7A\_n28A  DC\_7A\_n78A  DC\_7C\_n28A  DC\_7C\_n78A |
| DC\_1A-3A-8A-42A\_n77A5,6  DC\_1A-3A-8A-42C\_n77A5,6 | DC\_1A\_n77A  DC\_3A\_n77A  DC\_8A\_n77A |
| DC\_1A-3A-18A-42A\_n77A5,6  DC\_1A-3A-18A-42C\_n77A5,6 | DC\_1A\_n77A  DC\_3A\_n77A  DC\_18A\_n77A |
| DC\_1A-3A-18A-42A\_n78A5,6  DC\_1A-3A-18A-42C\_n78A5,6 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_18A\_n78A |
| DC\_1A-3A-18A-42A\_n79A  DC\_1A-3A-18A-42C\_n79A | DC\_1A\_n79A  DC\_3A\_n79A  DC\_18A\_n79A |
| DC\_1A-3A-19A-21A\_n77A2  DC\_1A-3A-19A-21A\_n77C2 | DC\_1A\_n77A  DC\_3A\_n77A  DC\_19A\_n77A  DC\_21A\_n77A |
| DC\_1A-3A-19A-21A\_n78A2  DC\_1A-3A-19A-21A\_n78C2 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_19A\_n78A  DC\_21A\_n78A |
| DC\_1A-3A-19A-21A\_n79A2  DC\_1A-3A-19A-21A\_n79C2 | DC\_1A\_n79A  DC\_3A\_n79A  DC\_19A\_n79A  DC\_21A\_n79A |
| DC\_1A-3A-19A-42A\_n77A56  DC\_1A-3A-19A-42A\_n77C5,6  DC\_1A-3A-19A-42C\_n77A5,6  DC\_1A-3A-19A-42C\_n77C5,6 | DC\_1A\_n77A  DC\_3A\_n77A  DC\_19A\_n77A |
| DC\_1A-3A-19A-42A\_n78A5,6  DC\_1A-3A-19A-42A\_n78C5,6  DC\_1A-3A-19A-42C\_n78A5,6  DC\_1A-3A-19A-42C\_n78C5,6 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_19A\_n78A |
| DC\_1A-3A-19A-42A\_n79A  DC\_1A-3A-19A-42A\_n79C  DC\_1A-3A-19A-42C\_n79A  DC\_1A-3A-19A-42C\_n79C | DC\_1A\_n79A  DC\_3A\_n79A  DC\_19A\_n79A |
| DC\_1A-3A-20A\_n28A-n78A2,3,6,7 | DC\_1A\_n28A  DC\_1A\_n78A  DC\_3A\_n28A  DC\_3A\_n78A  DC\_20A\_n28A  DC\_20A\_n78A |
| DC\_1A-3A-20A-38A\_n78A | DC\_3A\_n78A  DC\_20A\_n78A |
| DC\_1A-3A-20A\_n38A-n78A | DC\_1A\_n78A  DC\_3A\_n78A  DC\_20A\_n78A  DC\_1A\_n38A  DC\_3A\_n38A  DC\_20A\_n38A |
| DC\_1A-3A-20A\_n41A-n78A | DC\_1A\_n41A  DC\_1A\_n78A  DC\_3A\_n41A  DC\_3A\_n78A  DC\_20A\_n41A  DC\_20A\_n78A |
| DC\_1A-3A-21A-42A\_n77A5,6  DC\_1A-3A-21A-42A\_n77C5,6  DC\_1A-3A-21A-42C\_n77A5,6  DC\_1A-3A-21A-42C\_n77C5,6 | DC\_1A\_n77A  DC\_3A\_n77A  DC\_21A\_n77A |
| DC\_1A-3A-21A-42A\_n78A5,6  DC\_1A-3A-21A-42A\_n78C5,6  DC\_1A-3A-21A-42C\_n78A5,6  DC\_1A-3A-21A-42C\_n78C5,6 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_21A\_n78A |
| DC\_1A-3A-21A-42A\_n79A  DC\_1A-3A-21A-42A\_n79C  DC\_1A-3A-21A-42C\_n79A  DC\_1A-3A-21A-42C\_n79C | DC\_1A\_n79A  DC\_3A\_n79A  DC\_21A\_n79A |
| DC\_1A-3A-21A\_n77A-n79A | DC\_3A\_n77A  DC\_3A\_n79A |
| DC\_1A-3A-21A\_n78A-n79A | DC\_3A\_n78A  DC\_3A\_n79A |
| DC\_1A-3A-28A\_n5A-n78A2  DC\_1A-3C-28A\_n5A-n78A2 | DC\_1A\_n5A  DC\_1A\_n78A  DC\_3A\_n5A  DC\_3C\_n5A  DC\_3A\_n78A  DC\_3C\_n78A  DC\_28A\_n5A  DC\_28A\_n78A |
| DC\_1A-3A-28A\_n7A-n78A | DC\_1A\_n7A  DC\_3A\_n7A  DC\_28A\_n7A  DC\_1A\_n78A  DC\_3A\_n78A  DC\_28A\_n78A |
| DC\_1A-3A-28A\_n7B-n78A | DC\_1A\_n7A  DC\_3A\_n7A  DC\_28A\_n7A  DC\_1A-n7B  DC\_3A-n7B  DC\_28A\_n7B  DC\_1A\_n78A  DC\_3A\_n78A  DC\_28A\_n78A |
| DC\_1A-3C-28A\_n7A-n78A | DC\_1A\_n7A  DC\_3A\_n7A  DC\_3C\_n7A  DC\_28A\_n7A  DC\_1A\_n78A  DC\_3A\_n78A  DC\_3C\_n78A  DC\_28A\_n78A |
| DC\_1A-3C-28A\_n7B-n78A | DC\_1A\_n7A  DC\_3A\_n7A  DC\_3C\_n7A  DC\_28A\_n7A  DC\_1A\_n7B  DC\_3A\_n7B  DC\_3C\_n7B  DC\_28A\_n7B  DC\_1A\_n78A  DC\_3A\_n78A  DC\_3C\_n78A  DC\_28A\_n78A |
| DC\_1A-3A-28A\_n40A-n78A | DC\_1A\_n40A  DC\_1A\_n78A  DC\_3A\_n40A  DC\_3A\_n78A  DC\_28A\_n40A  DC\_28A\_n78A |
| DC\_1A-3A-28A-42A\_n77A5,6  DC\_1A-3A-28A-42A\_n77C5,6  DC\_1A-3A-28A-42C\_n77A5,6  DC\_1A-3A-28A-42C\_n77C5,6 | DC\_1A\_n77A  DC\_3A\_n77A  DC\_28A\_n77A |
| DC\_1A-3A-28A-42A\_n78A5,6  DC\_1A-3A-28A-42A\_n78C5,6  DC\_1A-3A-28A-42C\_n78A5,6  DC\_1A-3A-28A-42C\_n78C5,6 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_28A\_n78A |
| DC\_1A-3A-28A-42A\_n79A  DC\_1A-3A-28A-42A\_n79C  DC\_1A-3A-28A-42C\_n79A  DC\_1A-3A-28A-42C\_n79C | DC\_1A\_n79A  DC\_3A\_n79A  DC\_28A\_n79A |
| DC\_1A-3A-41A\_n28A-n77A | DC\_1A\_n28A  DC\_1A\_n77A  DC\_3A\_n28A  DC\_3A\_n77A  DC\_41A\_n28A  DC\_41A\_n77A |
| DC\_1A-3A-41C\_n28A-n77A | DC\_1A\_n28A  DC\_1A\_n77A  DC\_3A\_n28A  DC\_3A\_n77A  DC\_41A\_n28A  DC\_41A\_n77A  DC\_41C\_n28A  DC\_41C\_n77A |
| DC\_1A-3A-41A\_n28A-n78A | DC\_1A\_n28A  DC\_1A\_n78A  DC\_3A\_n28A  DC\_3A\_n78A  DC\_41A\_n28A  DC\_41A\_n78A |
| DC\_1A-3A-41C\_n28A-n78A | DC\_1A\_n28A  DC\_1A\_n78A  DC\_3A\_n28A  DC\_3A\_n78A  DC\_41A\_n28A  DC\_41A\_n78A  DC\_41C\_n28A  DC\_41C\_n78A |
| DC\_1A-3A-41A-42A\_n77A5,6  DC\_1A-3A-41A-42C\_n77A5,6  DC\_1A-3A-41C-42A\_n77A5,6  DC\_1A-3A-41C-42C\_n77A5,6 | DC\_1A\_n77A  DC\_3A\_n77A  DC\_41A\_n77A |
| DC\_1A-3A-41A-42A\_n78A5,6  DC\_1A-3A-41A-42C\_n78A5,6  DC\_1A-3A-41C-42A\_n78A5,6  DC\_1A-3A-41C-42C\_n78A5,6 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_41A\_n78A |
| DC\_1A-3A-41A-42A\_n79A  DC\_1A-3A-41A-42C\_n79A  DC\_1A-3A-41C-42A\_n79A  DC\_1A-3A-41C-42C\_n79A | DC\_1A\_n79A  DC\_3A\_n79A  DC\_41A\_n79A |
| DC\_1A-7A-20A\_n3A-n78A | DC\_1A\_n3A |
| DC\_1A-7A-28A\_n5A-n78A  DC\_1A-7C-28A\_n5A-n78A | DC\_1A\_n5A  DC\_1A\_n78A  DC\_7A\_n5A  DC\_7C\_n5A  DC\_7A\_n78A  DC\_7C\_n78A  DC\_28A\_n5A  DC\_28A\_n78A |
| DC\_1A-7A-28A\_n7A-n78A | DC\_1A\_n7A  DC\_7A\_n7A4  DC\_28A\_n7A  DC\_1A\_n78A  DC\_7A\_n78A  DC\_28A\_n78A |
| DC\_1A-7A-20A\_n28A-n78A2,3,6,7 | DC\_1A\_n28A  DC\_1A\_n78A  DC\_7A\_n28A  DC\_7A\_n78A  DC\_20A\_n28A  DC\_20A\_n78A |
| DC\_1A-19A-21A-42A\_n77A56  DC\_1A-19A-21A-42A\_n77C5,6  DC\_1A-19A-21A-42C\_n77A5,6  DC\_1A-19A-21A-42C\_n77C5,6 | DC\_1A\_n77A  DC\_19A\_n77A  DC\_21A\_n77A |
| DC\_1A-19A-21A-42A\_n78A5,6  DC\_1A-19A-21A-42A\_n78C5,6  DC\_1A-19A-21A-42C\_n78A5,6  DC\_1A-19A-21A-42C\_n78C5,6 | DC\_1A\_n78A  DC\_19A\_n78A  DC\_21A\_n78A |
| DC\_1A-19A-21A-42A\_n79A  DC\_1A-19A-21A-42A\_n79C  DC\_1A-19A-21A-42C\_n79A  DC\_1A-19A-21A-42C\_n79C | DC\_1A\_n79A  DC\_19A\_n79A  DC\_21A\_n79A |
| DC\_1A-19A-42A\_n77A-n79A5,6  DC\_1A-19A-42C\_n77A-n79A5,6 | DC\_19A\_n77A  DC\_19A\_n79A |
| DC\_1A-19A-42A\_n78A-n79A5,6  DC\_1A-19A-42C\_n78A-n79A5,6 | DC\_19A\_n78A  DC\_19A\_n79A |
| DC\_1A-20A-38A\_n3A-n78A | DC\_1A\_n3A  DC\_20A\_n3A  DC\_38A\_n3A  DC\_1A\_n78A  DC\_20A\_n78A  DC\_38A\_n78A |
| DC\_1A-21A-28A-42A\_n77A5,6  DC\_1A-21A-28A-42C\_n77A5,6 | DC\_1A\_n77A  DC\_21A\_n77A  DC\_28A\_n77A |
| DC\_1A-21A-28A-42A\_n78A5,6  DC\_1A-21A-28A-42C\_n78A5,6 | DC\_1A\_n78A  DC\_21A\_n78A  DC\_28A\_n78A |
| DC\_1A-21A-28A-42A\_n79A  DC\_1A-21A-28A-42C\_n79A | DC\_1A\_n79A  DC\_21A\_n79A  DC\_28A\_n79A |
| DC\_1A-21A-42A\_n77A-n79A5,6  DC\_1A-21A-42C\_n77A-n79A5,6 | DC\_1A\_n77A  DC\_1A\_n79A |
| DC\_1A-21A-42A\_n78A-n79A5,6  DC\_1A-21A-42C\_n78A-n79A5,6 | DC\_1A\_n78A  DC\_1A\_n79A |
| DC\_2A-7A-13A-66A\_n66A  DC\_2A-7C-13A-66A\_n66A | DC\_2A\_n66A  DC\_7A\_n66A  DC\_13A\_n66A  DC\_66A\_n66A4 |
| DC\_2A-7A-66A\_n66A-n78A  DC\_2A-7A-7A-66A\_n66A-n78A  DC\_2A-7C-66A\_n66A-n78A | DC\_2A\_n66A  DC\_2A\_n78A  DC\_7A\_n66A  DC\_7A\_n78A  DC\_66A\_n66A4  DC\_66A\_n78A |
| DC\_2A-12A-30A-66A\_n2A | DC\_12A\_n2A  DC\_30A\_n2A  DC\_66A\_n2A |
| DC\_2A-12A-30A-66A\_n66A | DC\_2A\_n66A  DC\_12A\_n66A  DC\_30A\_n66A  DC\_66A\_n66A4 |
| DC\_2A-29A-30A-66A\_n2A | DC\_2A\_n2A  DC\_30A\_n2A  DC\_66A\_n2A |
| DC\_2A-46A-66A\_n41A-n71A  DC\_2A-46C-66A\_n41A-n71A  DC\_2A-46D-66A\_n41A-n71A | DC\_2A\_n41A  DC\_2A\_n71A  DC\_66A\_n41A  DC\_66A\_n71A |
| DC\_3A-7A-8A\_n1A-n78A2  DC\_3A-3A-7A-8A\_n1A-n78A2  DC\_3A-7A-7A-8A\_n1A-n78A2  DC\_3A-3A-7A-7A-8A\_n1A-n78A2 | DC\_3A\_n1A  DC\_3A\_n78A  DC\_7A\_n1A  DC\_7A\_n78A  DC\_8A\_n1A  DC\_8A\_n78A |
| DC\_3A-7A-20A\_n28A-n78A2,3,6,7 | DC\_3A\_n28A  DC\_3A\_n78A  DC\_7A\_n28A  DC\_7A\_n78A  DC\_20A\_n28A  DC\_20A\_n78A |
| DC\_3A-7A-28A\_n5A-n78A  DC\_3C-7A-28A\_n5A-n78A  DC\_3A-7C-28A\_n5A-n78A  DC\_3C-7C-28A\_n5A-n78A | DC\_3A\_n5A  DC\_3C\_n5A  DC\_3A\_n78A  DC\_3C\_n78A  DC\_7A\_n5A  DC\_7C\_n5A  DC\_7A\_n78A  DC\_7C\_n78A  DC\_28A\_n5A  DC\_28A\_n78A |
| DC\_3A-7A-28A\_n7A-n78A | DC\_3A\_n7A  DC\_7A\_n7A4  DC\_28A\_n7A  DC\_3A\_n78A  DC\_7A\_n78A  DC\_28A\_n78A |
| DC\_3C-7A-28A\_n7A-n78A | DC\_3A\_n7A  DC\_3C\_n7A  DC\_7A\_n7A4  DC\_28A\_n7A  DC\_3A\_n78A  DC\_3C\_n78A  DC\_7A\_n78A  DC\_28A\_n78A |
| DC\_3A-19A-21A-42A\_n77A5,6  DC\_3A-19A-21A-42A\_n77C5,6  DC\_3A-19A-21A-42C\_n77A5,6  DC\_3A-19A-21A-42C\_n77C5,6 | DC\_3A\_n77A  DC\_19A\_n77A  DC\_21A\_n77A |
| DC\_3A-19A-21A-42A\_n78A5,6  DC\_3A-19A-21A-42A\_n78C5,6  DC\_3A-19A-21A-42C\_n78A5,6  DC\_3A-19A-21A-42C\_n78C5,6 | DC\_3A\_n78A  DC\_19A\_n78A  DC\_21A\_n78A |
| DC\_3A-19A-21A-42A\_n79A5,6  DC\_3A-19A-21A-42A\_n79C5,6  DC\_3A-19A-21A-42C\_n79A5,6  DC\_3A-19A-21A-42C\_n79C5,6 | DC\_3A\_n79A  DC\_19A\_n79A  DC\_21A\_n79A |
| DC\_3A-28A-41A-42A\_n78A5,6  DC\_3A-28A-41A-42C\_n78A5,6DC\_3A-28A-41C-42A\_n78A5,6  DC\_3A-28A-41C-42C\_n78A5,6 | DC\_1A\_n78A  DC\_3A\_n78A  DC\_41A\_n78A  DC\_41C\_n78A |
| DC\_19A-21A-42A\_n77A-n79A5,6  DC\_19A-21A-42C\_n77A-n79A5,6 | DC\_19A\_n77A  DC\_19A\_n79A |
| DC\_19A-21A-42A\_n78A-n79A5,6  DC\_19A-21A-42C\_n78A-n79A5,6 | DC\_19A\_n78A  DC\_19A\_n79A |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.  NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability  NOTE 3: 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 4: Only single switched UL is supported.  NOTE 5: For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, the minimum requirements for intra-band non-contiguous EN-DC apply for the Band 42 and Band n77/n78 combination. For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, when UE capability *interBandContiguousMRDC* is indicated, the minimum requirements for intra-band-contiguous EN-DC also should be met in addtion to intra-band non-contiguous EN-DC*.*  NOTE 6: For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, the minimum requirements for inter-band EN-DC apply when the maximum power spectral density imbalance between downlink carriers contained in overlapping or partially overlapping DL bands is within 6 dB.  NOTE 7: For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, the minimum requirements apply for synchronized DL carriers with a maximum receive time difference ≤ 3 usec between overlapping or partially overlapping DL bands contained in different cell groups. | |

#### 5.5B.4.5 Inter-band EN-DC configurations within FR1 (six bands)

Table 5.5B.4.5-1: Inter-band EN-DC configurations within FR1 (six bands)

|  |  |
| --- | --- |
| EN-DC  configuration | Uplink EN-DC  configuration  (NOTE 1) |
| DC\_1A-3A-7A-20A\_n28A-n78A2,3,5,6 | DC\_1A\_n28A  DC\_1A\_n78A  DC\_3A\_n28A  DC\_3A\_n78A  DC\_7A\_n28A  DC\_7A\_n78A  DC\_20A\_n28A  DC\_20A\_n78A |
| DC\_1A-3A-7A-28A\_n5A-n78A  DC\_1A-3A-7C-28A\_n5A-n78A  DC\_1A-3C-7A-28A\_n5A-n78A  DC\_1A-3C-7C-28A\_n5A-n78A | DC\_1A\_n5A  DC\_1A\_n78A  DC\_3A\_n5A  DC\_3C\_n5A  DC\_3A\_n78A  DC\_3C\_n78A  DC\_7A\_n5A  DC\_7C\_n5A  DC\_7A\_n78A  DC\_7C\_n78A  DC\_28A\_n5A  DC\_28A\_n78A |
| DC\_1A-3A-7A-28A\_n7A-n78A | DC\_1A\_n7A  DC\_3A\_n7A  DC\_7A\_n7A4  DC\_28A\_n7A  DC\_1A\_n78A  DC\_3A\_n78A  DC\_7A\_n78A  DC\_28A\_n78A |
| DC\_1A-3C-7A-28A\_n7A-n78A | DC\_1A\_n7A  DC\_3A\_n7A  DC\_3C\_n7A  DC\_7A\_n7A4  DC\_28A\_n7A  DC\_1A\_n78A  DC\_3A\_n78A  DC\_3C\_n78A  DC\_7A\_n78A  DC\_28A\_n78A |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.  NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability.  NOTE 3: 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 4: Only single switched UL is supported.  NOTE 5: For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, the minimum requirements for inter-band EN-DC apply when the maximum power spectral density imbalance between downlink carriers contained in overlapping or partially overlapping DL bands is within 6 dB.  NOTE 6: For UEs not indicating *interBandMRDC-WithOverlapDL-Bands-r16*, the minimum requirements apply for synchronized DL carriers with a maximum receive time difference ≤ 3 usec between overlapping or partially overlapping DL bands contained in different cell groups. | |

## **<<Next of Change>>**

#### 5.5B.6.2 Inter-band EN-DC configurations including FR1 and FR2 (three bands)

Table 5.5B.6.2-1: Inter-band EN-DC configurations including FR1 and FR2 (three bands)

| EN-DC configuration | Uplink EN-DC configuration (NOTE 1) |
| --- | --- |
| DC\_1A\_n3A-n257A2  DC\_1A\_n3A-n257G2  DC\_1A\_n3A-n257H2  DC\_1A\_n3A-n257I2 | DC\_1A\_n3A  DC\_1A\_n257A  DC\_1A\_n257G  DC\_1A\_n257H  DC\_1A\_n257I |
| DC\_1A\_n28A-n257A2  DC\_1A\_n28A-n257G2  DC\_1A\_n28A-n257H2  DC\_1A\_n28A-n257I2 | DC\_1A\_n28A  DC\_1A\_n257A  DC\_1A\_n257G  DC\_1A\_n257H  DC\_1A\_n257I |
| DC\_1A\_n77A-n257A2  DC\_1A\_n77A-n257D2  DC\_1A\_n77A-n257E2  DC\_1A\_n77A-n257F2  DC\_1A\_n77A-n257G2  DC\_1A\_n77A-n257H2  DC\_1A\_n77A-n257I2  DC\_1A\_n77C-n257A2  DC\_1A\_n77C-n257D2  DC\_1A\_n77C-n257E2  DC\_1A\_n77C-n257F2 | DC\_1A\_n77A  DC\_1A\_n257A  DC\_1A\_n257D  DC\_1A\_n257G  DC\_1A\_n257H  DC\_1A\_n257I  DC\_1A\_n77A-n257A  DC\_1A\_n77A-n257G  DC\_1A\_n77A-n257H  DC\_1A\_n77A-n257I |
| DC\_1A\_n77(2A)-n257A2  DC\_1A\_n77(2A)-n257D2  DC\_1A\_n77(2A)-n257G2  DC\_1A\_n77(2A)-n257H2  DC\_1A\_n77(2A)-n257I2 | DC\_1A\_n77A  DC\_1A\_n257A  DC\_1A\_n257D  DC\_1A\_n257G  DC\_1A\_n257H  DC\_1A\_n257I |
| DC\_1A\_n77A-n258A | DC\_1A\_n77A  DC\_1A\_n258A |
| DC\_1A\_n78A-n257A2  DC\_1A\_n78A-n257D2  DC\_1A\_n78A-n257E2  DC\_1A\_n78A-n257F2  DC\_1A\_n78C-n257A2  DC\_1A\_n78C-n257D2  DC\_1A\_n78C-n257E2  DC\_1A\_n78C-n257F2 | DC\_1A\_n78A  DC\_1A\_n257A  DC\_1A\_n257D  DC\_1A\_n78A-n257A |
| DC\_1A\_n78A-n257G2  DC\_1A\_n78A-n257H2  DC\_1A\_n78A-n257I2  DC\_1A\_n78A-n257J2  DC\_1A\_n78A-n257K2  DC\_1A\_n78A-n257L2  DC\_1A\_n78A-n257M2 | DC\_1A\_n78A  DC\_1A\_n257A  DC\_1A\_n257G  DC\_1A\_n257H  DC\_1A\_n257I  DC\_1A\_n78A-n257A  DC\_1A\_n78A-n257G  DC\_1A\_n78A-n257H  DC\_1A\_n78A-n257I |
| DC\_1A\_n78A-n258A | DC\_1A\_n78A  DC\_1A\_n258A |
| DC\_1A\_n79A-n257A2  DC\_1A\_n79A-n257D2  DC\_1A\_n79A-n257E2  DC\_1A\_n79A-n257F2  DC\_1A\_n79A-n257G2  DC\_1A\_n79A-n257H2  DC\_1A\_n79A-n257I2  DC\_1A\_n79C-n257A2  DC\_1A\_n79C-n257D2  DC\_1A\_n79C-n257E2  DC\_1A\_n79C-n257F2  DC\_1A\_n79A-n257G2  DC\_1A\_n79A-n257H2  DC\_1A\_n79A-n257I2 | DC\_1A\_n79A  DC\_1A\_n257A  DC\_1A\_n257G  DC\_1A\_n257H  DC\_1A\_n257I  DC\_1A\_n79A-n257A  DC\_1A\_n79A-n257G  DC\_1A\_n79A-n257H  DC\_1A\_n79A-n257I |
| DC\_1A\_n79A-n258A | DC\_1A\_n79A  DC\_1A\_n258A |
| DC\_2A\_n12A-n258A | DC\_2A\_n258A  DC\_2A\_n12A |
| DC\_2A\_n12A-n260A | DC\_2A\_n260A  DC\_2A\_n12A |
| DC\_2A\_n12A-n261A | DC\_2A\_n261A  DC\_2A\_n12A |
| DC\_2A\_n41A-n260A  DC\_2A\_n41A-n260(2A)  DC\_2A\_n41A-n260(3A)  DC\_2A\_n41A-n260(4A) | DC\_2A\_n41A |
| DC\_2A\_n41A-n261A  DC\_2A\_n41A-n261(2A) | DC\_2A\_n41A |
| DC\_2A\_n71A-n261A  DC\_2A\_n71A-n261(2A) | DC\_2A\_n261A  DC\_2A\_n71A |
| DC\_3A\_n1A-n257A2  DC\_3A-3A\_n1A-n257A2 | DC\_3A\_n1A  DC\_3A\_n257A |
| DC\_3A\_n40A-n258A | DC\_3A\_n40A  DC\_3A\_n258A |
| DC\_3A\_n28A-n257A2  DC\_3A\_n28A-n257G2  DC\_3A\_n28A-n257H2  DC\_3A\_n28A-n257I2 | DC\_3A\_n28A  DC\_3A\_n257A  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I |
| DC\_3A\_n40A-n258A | DC\_3A\_n40A  DC\_3A\_n258A |
| DC\_3A\_n77A-n257A2  DC\_3A\_n77A-n257D2  DC\_3A\_n77A-n257E2  DC\_3A\_n77A-n257F2  DC\_3A\_n77A-n257G2  DC\_3A\_n77A-n257H2  DC\_3A\_n77A-n257I2  DC\_3A\_n77C-n257A2  DC\_3A\_n77C-n257D2  DC\_3A\_n77C-n257E2  DC\_3A\_n77C-n257F2 | DC\_3A\_n77A  DC\_3A\_n257A  DC\_3A\_n257D  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I  DC\_3A\_n77A-n257A  DC\_3A\_n77A-n257G  DC\_3A\_n77A-n257H  DC\_3A\_n77A-n257I |
| DC\_3A\_n77(2A)-n257A2  DC\_3A\_n77(2A)-n257D2  DC\_3A\_n77(2A)-n257G2  DC\_3A\_n77(2A)-n257H2  DC\_3A\_n77(2A)-n257I2 | DC\_3A\_n77A  DC\_3A\_n257A  DC\_3A\_n257D  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I |
| DC\_3A\_n77A-n258A | DC\_3A\_n77A  DC\_3A\_n258A  DC\_3A\_n77A-n258A |
| DC\_3A\_n78A-n257A2  DC\_3A\_n78A-n257D2  DC\_3A\_n78A-n257E2  DC\_3A\_n78A-n257F2  DC\_3A\_n78A-n257G2  DC\_3A\_n78A-n257H2  DC\_3A\_n78A-n257I2  DC\_3A\_n78A-n257J2  DC\_3A\_n78A-n257K2  DC\_3A\_n78A-n257L2  DC\_3A\_n78A-n257M2  DC\_3A\_n78C-n257A2  DC\_3A\_n78C-n257D2  DC\_3A\_n78C-n257E2  DC\_3A\_n78C-n257F2 | DC\_3A\_n78A  DC\_3A\_n257A  DC\_3A\_n257D  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I  DC\_3A\_n78A-n257A  DC\_3A\_n78A-n257G  DC\_3A\_n78A-n257H  DC\_3A\_n78A-n257I |
| DC\_3C\_n78A-n257A2  DC\_3C\_n78A-n257D2  DC\_3C\_n78A-n257E2  DC\_3C\_n78A-n257F2  DC\_3C\_n78A-n257G2  DC\_3C\_n78A-n257H2  DC\_3C\_n78A-n257I2  DC\_3C\_n78A-n257J2  DC\_3C\_n78A-n257K2  DC\_3C\_n78A-n257L2  DC\_3C\_n78A-n257M2 | DC\_3A\_n78A  DC\_3A\_n257A |
| DC\_3A\_n78A-n258A | DC\_3A\_n78A  DC\_3A\_n258A |
| DC\_3A-3A\_n78A-n257A2  DC\_3A-3A\_n78A-n257D2  DC\_3A-3A\_n78A-n257E2  DC\_3A-3A\_n78A-n257F2  DC\_3A-3A\_n78A-n257G2  DC\_3A-3A\_n78A-n257H2  DC\_3A-3A\_n78A-n257I2  DC\_3A-3A\_n78A-n257J2  DC\_3A-3A\_n78A-n257K2  DC\_3A-3A\_n78A-n257L2  DC\_3A-3A\_n78A-n257M2 | DC\_3A\_n78A  DC\_3A\_n257A |
| DC\_3A\_n79A-n257A2  DC\_3A\_n79A-n257D2  DC\_3A\_n79A-n257E2  DC\_3A\_n79A-n257F2  DC\_3A\_n79A-n257G2  DC\_3A\_n79A-n257H2  DC\_3A\_n79A-n257I2  DC\_3A\_n79C-n257A2  DC\_3A\_n79C-n257D2  DC\_3A\_n79C-n257E2  DC\_3A\_n79C-n257F2 | DC\_3A\_n79A  DC\_3A\_n257A  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I  DC\_3A\_n79A-n257A  DC\_3A\_n79A-n257G  DC\_3A\_n79A-n257H  DC\_3A\_n79A-n257I |
| DC\_3A\_n79A-n258A  DC\_3A\_n79A-n258D  DC\_3A\_n79A-n258E  DC\_3A\_n79A-n258F  DC\_3A\_n79A-n258G  DC\_3A\_n79A-n258H  DC\_3A\_n79A-n258I  DC\_3A\_n79A-n258J  DC\_3A\_n79A-n258K  DC\_3A\_n79A-n258L | DC\_3A\_n79A  DC\_3A\_n258A  DC\_3A\_n79A-n258A |
| DC\_5A\_n78A-n257A2  DC\_5A\_n78A-n257D  DC\_5A\_n78A-n257E  DC\_5A\_n78A-n257F  DC\_5A\_n78A-n257G  DC\_5A\_n78A-n257H  DC\_5A\_n78A-n257I  DC\_5A\_n78A-n257J  DC\_5A\_n78A-n257K  DC\_5A\_n78A-n257L  DC\_5A\_n78A-n257M | DC\_5A\_n78A  DC\_5A\_n257A |
| DC\_7A\_n1A-n257A2  DC\_7A-7A\_n1A-n257A2 | DC\_7A\_n1A  DC\_7A\_n257A |
| DC\_7A\_n78A-n257A2  DC\_7A\_n78A-n257D2  DC\_7A\_n78A-n257E2  DC\_7A\_n78A-n257F2  DC\_7A\_n78A-n257G2  DC\_7A\_n78A-n257H2  DC\_7A\_n78A-n257I2  DC\_7A\_n78A-n257J2  DC\_7A\_n78A-n257K2  DC\_7A\_n78A-n257L2  DC\_7A\_n78A-n257M2 | DC\_7A\_n78A  DC\_7A\_n257A |
| DC\_7A-7A\_n78A-n257A2  DC\_7A-7A\_n78A-n257D2  DC\_7A-7A\_n78A-n257E2  DC\_7A-7A\_n78A-n257F2  DC\_7A-7A\_n78A-n257G2  DC\_7A-7A\_n78A-n257H2  DC\_7A-7A\_n78A-n257I2  DC\_7A-7A\_n78A-n257J2  DC\_7A-7A\_n78A-n257K2  DC\_7A-7A\_n78A-n257L2  DC\_7A-7A\_n78A-n257M2 | DC\_7A\_n78A  DC\_7A\_n257A  DC\_7A\_n78A-n257A |
| DC\_8A\_n77A-n257A2  DC\_8A\_n77A-n257D2  DC\_8A\_n77A-n257G2  DC\_8A\_n77A-n257H2  DC\_8A\_n77A-n257I2 | DC\_8A\_n77A  DC\_8A\_n257A |
| DC\_8A\_n77(2A)-n257A2  DC\_8A\_n77(2A)-n257D2  DC\_8A\_n77(2A)-n257G2  DC\_8A\_n77(2A)-n257H2  DC\_8A\_n77(2A)-n257I2 | DC\_8A\_n77A  DC\_8A\_n257A |
| DC\_11A\_n77A-n257A2  DC\_11A\_n77A-n257D2  DC\_11A\_n77A-n257G2  DC\_11A\_n77A-n257H2  DC\_11A\_n77A-n257I2 | DC\_11A\_n77A  DC\_11A\_n257A |
| DC\_11A\_n77(2A)-n257A2  DC\_11A\_n77(2A)-n257D2  DC\_11A\_n77(2A)-n257G2  DC\_11A\_n77(2A)-n257H2  DC\_11A\_n77(2A)-n257I2 | DC\_11A\_n77A  DC\_11A\_n257A |
| DC\_19A\_n77A-n257A2  DC\_19A\_n77A-n257D2  DC\_19A\_n77A-n257E2  DC\_19A\_n77A-n257F2  DC\_19A\_n77A-n257G2  DC\_19A\_n77A-n257H2  DC\_19A\_n77A-n257I2  DC\_19A\_n77C-n257A2  DC\_19A\_n77C-n257D2  DC\_19A\_n77C-n257E2  DC\_19A\_n77C-n257F2 | DC\_19A\_n77A  DC\_19A\_n257A  DC\_19A\_n257G  DC\_19A\_n257H  DC\_19A\_n257I  DC\_19A\_n77A-n257A  DC\_19A\_n77A-n257G  DC\_19A\_n77A-n257H  DC\_19A\_n77A-n257I |
| DC\_19A\_n78A-n257A2  DC\_19A\_n78A-n257D2  DC\_19A\_n78A-n257E2  DC\_19A\_n78A-n257F2  DC\_19A\_n78A-n257G2  DC\_19A\_n78A-n257H2  DC\_19A\_n78A-n257I2  DC\_19A\_n78C-n257A2  DC\_19A\_n78C-n257D2  DC\_19A\_n78C-n257E2  DC\_19A\_n78C-n257F2 | DC\_19A\_n78A  DC\_19A\_n257A  DC\_19A\_n257G  DC\_19A\_n257H  DC\_19A\_n257I  DC\_19A\_n78A-n257A  DC\_19A\_n78A-n257G  DC\_19A\_n78A-n257H  DC\_19A\_n78A-n257I |
| DC\_19A\_n79A-n257A2  DC\_19A\_n79A-n257D2  DC\_19A\_n79A-n257E2  DC\_19A\_n79A-n257F2  DC\_19A\_n79A-n257G2  DC\_19A\_n79A-n257H2  DC\_19A\_n79A-n257I2  DC\_19A\_n79C-n257A2  DC\_19A\_n79C-n257D2  DC\_19A\_n79C-n257E2  DC\_19A\_n79C-n257F2 | DC\_19A\_n79A  DC\_19A\_n257A  DC\_19A\_n257G  DC\_19A\_n257H  DC\_19A\_n257I  DC\_19A\_n79A-n257A  DC\_19A\_n79A-n257G  DC\_19A\_n79A-n257H  DC\_19A\_n79A-n257I |
| DC\_21A\_n77A-n257A2  DC\_21A\_n77A-n257G2  DC\_21A\_n77A-n257H2  DC\_21A\_n77A-n257I2 | DC\_21A\_n77A  DC\_21A\_n257A  DC\_21A\_n257G  DC\_21A\_n257H  DC\_21A\_n257I  DC\_21A\_n77A-n257A  DC\_21A\_n77A-n257G  DC\_21A\_n77A-n257H  DC\_21A\_n77A-n257I |
| DC\_8A\_n78A-n257A2  DC\_8A\_n78A-n257D2  DC\_8A\_n78A-n257E2  DC\_8A\_n78A-n257F2  DC\_8A\_n78A-n257G2  DC\_8A\_n78A-n257H2  DC\_8A\_n78A-n257I2  DC\_8A\_n78A-n257J2  DC\_8A\_n78A-n257K2  DC\_8A\_n78A-n257L2  DC\_8A\_n78A-n257M2 | DC\_8A\_n78A  DC\_8A\_n257A |
| DC\_18A\_n3A-n257A  DC\_18A\_n3A-n257G  DC\_18A\_n3A-n257H  DC\_18A\_n3A-n257I | DC\_18A\_n3A  DC\_18A\_n257A  DC\_18A\_n257G  DC\_18A\_n257H  DC\_18A\_n257I |
| DC\_18A\_n78A-n257A  DC\_18A\_n78A-n257G  DC\_18A\_n78A-n257H  DC\_18A\_n78A-n257I | DC\_18A\_n78A  DC\_18A\_n257A  DC\_18A\_n257G  DC\_18A\_n257H  DC\_18A\_n257I |
| DC\_21A\_n78A-n257A2  DC\_21A\_n78A-n257G2  DC\_21A\_n78A-n257H2  DC\_21A\_n78A-n257I2 | DC\_21A\_n78A  DC\_21A\_n257A  DC\_21A\_n257G  DC\_21A\_n257H  DC\_21A\_n257I  DC\_21A\_n78A-n257A  DC\_21A\_n78A-n257G  DC\_21A\_n78A-n257H  DC\_21A\_n78A-n257I |
| DC\_21A\_n79A-n257A2  DC\_21A\_n79A-n257G2  DC\_21A\_n79A-n257H2  DC\_21A\_n79A-n257I2 | DC\_21A\_n79A  DC\_21A\_n257A  DC\_21A\_n257G  DC\_21A\_n257H  DC\_21A\_n257I  DC\_21A\_n79A-n257A  DC\_21A\_n79A-n257G  DC\_21A\_n79A-n257H  DC\_21A\_n79A-n257I |
| DC\_28A\_n3A-n257A2  DC\_28A\_n3A-n257G2  DC\_28A\_n3A-n257H2  DC\_28A\_n3A-n257I2 | DC\_28A\_n3A  DC\_28A\_n257A  DC\_28A\_n257G  DC\_28A\_n257H  DC\_28A\_n257I |
| DC\_28A\_n77A-n257A2  DC\_28A\_n77A-n257D2  DC\_28A\_n77A-n257G2  DC\_28A\_n77A-n257H2  DC\_28A\_n77A-n257I2 | DC\_28A\_n77A  DC\_28A\_n257A  DC\_28A\_n257G  DC\_28A\_n257H  DC\_28A\_n257I |
| DC\_28A\_n77(2A)-n257A2  DC\_28A\_n77(2A)-n257D2  DC\_28A\_n77(2A)-n257G2  DC\_28A\_n77(2A)-n257H2  DC\_28A\_n77(2A)-n257I2 | DC\_28A\_n77A  DC\_28A\_n257A  DC\_28A\_n257G  DC\_28A\_n257H  DC\_28A\_n257I |
| DC\_28A\_n78A-n257A2  DC\_28A\_n78A-n257G2  DC\_28A\_n78A-n257H2  DC\_28A\_n78A-n257I2 | DC\_28A\_n78A  DC\_28A\_n257A  DC\_28A\_n257G  DC\_28A\_n257H  DC\_28A\_n257I |
| DC\_28A\_n8A-n258A | DC\_28A\_n8A  DC\_28A\_n258A |
| DC\_41A\_n3A-n257A2  DC\_41A\_n3A-n257G2  DC\_41A\_n3A-n257H2  DC\_41A\_n3A-n257I2  DC\_41C\_n3A-n257A2  DC\_41C\_n3A-n257G2  DC\_41C\_n3A-n257H2  DC\_41C\_n3A-n257I2 | DC\_41A\_n3A  DC\_41A\_n257A  DC\_41A\_n257G  DC\_41A\_n257H  DC\_41A\_n257I  DC\_41C\_n3A  DC\_41C\_n257A  DC\_41C\_n257G  DC\_41C\_n257H  DC\_41C\_n257I |
| DC\_41A\_n28A-n257A2  DC\_41A\_n28A-n257G2  DC\_41A\_n28A-n257H2  DC\_41A\_n28A-n257I2  DC\_41C\_n28A-n257A2  DC\_41C\_n28A-n257G2  DC\_41C\_n28A-n257H2  DC\_41C\_n28A-n257I2 | DC\_41A\_n28A  DC\_41A\_n257A  DC\_41A\_n257G  DC\_41A\_n257H  DC\_41A\_n257I  DC\_41C\_n28A  DC\_41C\_n257A  DC\_41C\_n257G  DC\_41C\_n257H  DC\_41C\_n257I |
| DC\_41A\_n77A-n257A  DC\_41A\_n77A-n257G  DC\_41A\_n77A-n257H  DC\_41A\_n77A-n257I  DC\_41C\_n77A-n257A  DC\_41C\_n77A-n257G  DC\_41C\_n77A-n257H  DC\_41C\_n77A-n257I | DC\_41A\_n77A  DC\_41A\_n257A  DC\_41A\_n257G  DC\_41A\_n257H  DC\_41A\_n257I  DC\_41C\_n77A  DC\_41C\_n257A  DC\_41C\_n257G  DC\_41C\_n257H  DC\_41C\_n257I |
| DC\_41A\_n78A-n257A  DC\_41A\_n78A-n257G  DC\_41A\_n78A-n257H  DC\_41A\_n78A-n257I  DC\_41C\_n78A-n257A  DC\_41C\_n78A-n257G  DC\_41C\_n78A-n257H  DC\_41C\_n78A-n257I | DC\_41A\_n78A  DC\_41A\_n257A  DC\_41A\_n257G  DC\_41A\_n257H  DC\_41A\_n257I  DC\_41C\_n78A  DC\_41C\_n257A  DC\_41C\_n257G  DC\_41C\_n257H  DC\_41C\_n257I |
| DC\_42A\_n77A-n257A  DC\_42A\_n77A-n257G  DC\_42A\_n77A-n257H  DC\_42A\_n77A-n257I  DC\_42C\_n77A-n257A  DC\_42C\_n77A-n257G  DC\_42C\_n77A-n257H  DC\_42C\_n77A-n257I | DC\_42A\_n257A  DC\_42A\_n257G  DC\_42A\_n257H  DC\_42A\_n257I |
| DC\_42A\_n78A-n257A  DC\_42A\_n78A-n257G  DC\_42A\_n78A-n257H  DC\_42A\_n78A-n257I  DC\_42C\_n78A-n257A  DC\_42C\_n78A-n257G  DC\_42C\_n78A-n257H  DC\_42C\_n78A-n257I | DC\_42A\_n257A  DC\_42A\_n257G  DC\_42A\_n257H  DC\_42A\_n257I  DC\_42C\_n257A  DC\_42C\_n257G  DC\_42C\_n257H  DC\_42C\_n257I |
| DC\_42A\_n79A-n257A  DC\_42A\_n79A-n257G  DC\_42A\_n79A-n257H  DC\_42A\_n79A-n257I  DC\_42C\_n79A-n257A  DC\_42C\_n79A-n257G  DC\_42C\_n79A-n257H  DC\_42C\_n79A-n257I | DC\_42A\_n257A  DC\_42A\_n257G  DC\_42A\_n257H  DC\_42A\_n257I |
| DC\_66A\_n5A-n260A  DC\_66A\_n5A-n260G  DC\_66A\_n5A-n260H  DC\_66A\_n5A-n260I  DC\_66A\_n5A-n260J  DC\_66A\_n5A-n260K  DC\_66A\_n5A-n260L  DC\_66A\_n5A-n260M | DC\_66A\_n5A  DC\_66A\_n260A  DC\_66A\_n5A-n260A |
|  |  |
|  |  |
|  |  |
| DC\_66A\_n5A-n260(2A)  DC\_66A\_n5A-n260(3A)  DC\_66A\_n5A-n260(4A)  DC\_66A\_n5A-n260(5A)  DC\_66A\_n5A-n260(6A)  DC\_66A\_n5A-n260(2H)  DC\_66A\_n5A-n260(2G)  DC\_66A\_n5A-n260(A-2G)  DC\_66A\_n5A-n260(A-H)  DC\_66A\_n5A-n260(A-G)  DC\_66A\_n5A-n260(G-H)  DC\_66A\_n5A-n260(2A-G)  DC\_66A\_n5A-n260(2A-2G)  DC\_66A\_n5A-n260(3A-G) | DC\_66A\_n5A-n260A |
| DC\_66A\_n5A-n261A  DC\_66A\_n5A-n261G  DC\_66A\_n5A-n261H  DC\_66A\_n5A-n261I  DC\_66A\_n5A-n261J  DC\_66A\_n5A-n261K  DC\_66A\_n5A-n261L  DC\_66A\_n5A-n261M | DC\_66A\_n5A-n261A |
| DC\_66A\_n5A-n261(2A)  DC\_66A\_n5A-n261(3A)  DC\_66A\_n5A-n261(2G)  DC\_66A\_n5A-n261(2H)  DC\_66A\_n5A-n261(A-G)  DC\_66A\_n5A-n261(A-H)  DC\_66A\_n5A-n261(A-I)  DC\_66A\_n5A-n261(A-J)  DC\_66A\_n5A-n261(A-K)  DC\_66A\_n5A-n261(G-H)  DC\_66A\_n5A-n261(G-I)  DC\_66A\_n5A-n261(G-J)  DC\_66A\_n5A-n261(H-I)  DC\_66A\_n5A-n261(A-2G)  DC\_66A\_n5A-n261(A-G-H)  DC\_66A\_n5A-n261(A-G-I)  DC\_66A\_n5A-n261(2A-G)  DC\_66A\_n5A-n261(2A-H)  DC\_66A\_n5A-n261(2A-I)  DC\_66A\_n5A-n261(3A-G) | DC\_66A\_n5A-n261A |
|  | 12  258 |
|  | 12  260 |
|  | 12  261 |
| DC\_66A\_n41A-n260A  DC\_66A\_n41A-n260(2A)  DC\_66A\_n41A-n260(3A)  DC\_66A\_n41A-n260(4A) | DC\_66A\_n41A |
| DC\_66A\_n41A-n261A  DC\_66A\_n41A-n261(2A) | DC\_66A\_n41A |
| DC\_66A\_n71A-n260A  DC\_66A\_n71A-n260(2A) | DC\_66A\_n71A  DC\_66A\_n260A |
| DC\_66A\_n71A-n261A  DC\_66A\_n71A-n261(2A) | DC\_66A\_n71A  DC\_66A\_n261A |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.  NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability. | |

## **<<Next of Change>>**

#### 5.5B.6.4 Inter-band EN-DC configurations including FR1 and FR2 (five bands)

Table 5.5B.6.4-1: Inter-band EN-DC configurations including FR1 and FR2 (five bands)

| EN-DC configuration | Uplink EN-DC configuration (NOTE 1) |
| --- | --- |
| DC\_1A-3A-5A\_n78A-n257A  DC\_1A-3A-5A\_n78A-n257D  DC\_1A-3A-5A\_n78A-n257E  DC\_1A-3A-5A\_n78A-n257F  DC\_1A-3A-5A\_n78A-n257G  DC\_1A-3A-5A\_n78A-n257H  DC\_1A-3A-5A\_n78A-n257I  DC\_1A-3A-5A\_n78A-n257J  DC\_1A-3A-5A\_n78A-n257K  DC\_1A-3A-5A\_n78A-n257L  DC\_1A-3A-5A\_n78A-n257M | DC\_1A\_n78A  DC\_1A\_n257A  DC\_3A\_n78A  DC\_3A\_n257A  DC\_5A\_n78A  DC\_5A\_n257A |
| DC\_1A-3A-7A\_n78A-n257A  DC\_1A-3A-7A\_n78A-n257D  DC\_1A-3A-7A\_n78A-n257E  DC\_1A-3A-7A\_n78A-n257F  DC\_1A-3A-7A\_n78A-n257G  DC\_1A-3A-7A\_n78A-n257H  DC\_1A-3A-7A\_n78A-n257I  DC\_1A-3A-7A\_n78A-n257J  DC\_1A-3A-7A\_n78A-n257K  DC\_1A-3A-7A\_n78A-n257L  DC\_1A-3A-7A\_n78A-n257M | DC\_1A\_n78A  DC\_1A\_n257A  DC\_3A\_n78A  DC\_3A\_n257A  DC\_7A\_n78A  DC\_7A\_n257A |
| DC\_1A-3A-7A-7A\_n78A-n257A  DC\_1A-3A-7A-7A\_n78A-n257D  DC\_1A-3A-7A-7A\_n78A-n257E  DC\_1A-3A-7A-7A\_n78A-n257F  DC\_1A-3A-7A-7A\_n78A-n257G  DC\_1A-3A-7A-7A\_n78A-n257H  DC\_1A-3A-7A-7A\_n78A-n257I  DC\_1A-3A-7A-7A\_n78A-n257J  DC\_1A-3A-7A-7A\_n78A-n257K  DC\_1A-3A-7A-7A\_n78A-n257L  DC\_1A-3A-7A-7A\_n78A-n257M | DC\_1A\_n78A  DC\_1A\_n257A  DC\_3A\_n78A  DC\_3A\_n257A  DC\_7A\_n78A  DC\_7A\_n257A |
| DC\_1A-3A-8A\_n78A-n257A2  DC\_1A-3A-8A\_n78A-n257D2  DC\_1A-3A-8A\_n78A-n257E2  DC\_1A-3A-8A\_n78A-n257F2  DC\_1A-3A-8A\_n78A-n257G2  DC\_1A-3A-8A\_n78A-n257H2  DC\_1A-3A-8A\_n78A-n257I2  DC\_1A-3A-8A\_n78A-n257J2  DC\_1A-3A-8A\_n78A-n257K2  DC\_1A-3A-8A\_n78A-n257L2  DC\_1A-3A-8A\_n78A-n257M2  DC\_1A-3C-8A\_n78A-n257A  DC\_1A-3C-8A\_n78A-n257D  DC\_1A-3C-8A\_n78A-n257E  DC\_1A-3C-8A\_n78A-n257F  DC\_1A-3C-8A\_n78A-n257G  DC\_1A-3C-8A\_n78A-n257H  DC\_1A-3C-8A\_n78A-n257I  DC\_1A-3C-8A\_n78A-n257J  DC\_1A-3C-8A\_n78A-n257K  DC\_1A-3C-8A\_n78A-n257L  DC\_1A-3C-8A\_n78A-n257M | DC\_1A\_n78A  DC\_1A\_n257A  DC\_3A\_n78A  DC\_3A\_n257A  DC\_8A\_n78A  DC\_8A\_n257A |
| DC\_1A-3A-18A\_n78A-n257A  DC\_1A-3A-18A\_n78A-n257G  DC\_1A-3A-18A\_n78A-n257H  DC\_1A-3A-18A\_n78A-n257I | DC\_1A\_n78A  DC\_1A\_n257A  DC\_1A\_n257G  DC\_1A\_n257H  DC\_1A\_n257I  DC\_3A\_n78A  DC\_3A\_n257A  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I  DC\_18A\_n78A  DC\_18A\_n257A  DC\_18A\_n257G  DC\_18A\_n257H  DC\_18A\_n257I |
| DC\_1A-3A-21A\_n77A-n257A2  DC\_1A-3A-21A\_n77A-n257G2  DC\_1A-3A-21A\_n77A-n257H2  DC\_1A-3A-21A\_n77A-n257I2 | DC\_1A\_n77A  DC\_1A\_n257A  DC\_1A\_n257G  DC\_1A\_n257H  DC\_1A\_n257I  DC\_3A\_n77A  DC\_3A\_n257A  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I  DC\_21A\_n77A  DC\_21A\_n257A  DC\_21A\_n257G  DC\_21A\_n257H  DC\_21A\_n257I |
| DC\_1A-3A-21A\_n78A-n257A2  DC\_1A-3A-21A\_n78A-n257G2  DC\_1A-3A-21A\_n78A-n257H2  DC\_1A-3A-21A\_n78A-n257I2 | DC\_1A\_n78A  DC\_1A\_n257A  DC\_1A\_n257G  DC\_1A\_n257H  DC\_1A\_n257I  DC\_3A\_n78A  DC\_3A\_n257A  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I  DC\_21A\_n78A  DC\_21A\_n257A  DC\_21A\_n257G  DC\_21A\_n257H  DC\_21A\_n257I |
| DC\_1A-3A-21A\_n79A-n257A2  DC\_1A-3A-21A\_n79A-n257G2  DC\_1A-3A-21A\_n79A-n257H2  DC\_1A-3A-21A\_n79A-n257I2 | DC\_1A\_n79A  DC\_1A\_n257A  DC\_1A\_n257G  DC\_1A\_n257H  DC\_1A\_n257I  DC\_3A\_n79A  DC\_3A\_n257A  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I  DC\_21A\_n79A  DC\_21A\_n257A  DC\_21A\_n257G  DC\_21A\_n257H  DC\_21A\_n257I |
| DC\_1A-3A-21A\_n77A-n257A2  DC\_1A-3A-21A\_n77A-n257G2  DC\_1A-3A-21A\_n77A-n257H2  DC\_1A-3A-21A\_n77A-n257I2 | DC\_1A\_n77A-n257A  DC\_1A\_n77A-n257G  DC\_1A\_n77A-n257H  DC\_1A\_n77A-n257I  DC\_3A\_n77A-n257A  DC\_3A\_n77A-n257G  DC\_3A\_n77A-n257H  DC\_3A\_n77A-n257I  DC\_21A\_n77A-n257A  DC\_21A\_n77A-n257G  DC\_21A\_n77A-n257H  DC\_21A\_n77A-n257I |
| DC\_1A-3A-21A\_n78A-n257A2  DC\_1A-3A-21A\_n78A-n257G2  DC\_1A-3A-21A\_n78A-n257H2  DC\_1A-3A-21A\_n78A-n257I2 | DC\_1A\_n78A-n257A  DC\_1A\_n78A-n257G  DC\_1A\_n78A-n257H  DC\_1A\_n78A-n257I  DC\_3A\_n78A-n257A  DC\_3A\_n78A-n257G  DC\_3A\_n78A-n257H  DC\_3A\_n78A-n257I  DC\_21A\_n78A-n257A  DC\_21A\_n78A-n257G  DC\_21A\_n78A-n257H  DC\_21A\_n78A-n257I |
| DC\_1A-3A-21A\_n79A-n257A2  DC\_1A-3A-21A\_n79A-n257G2  DC\_1A-3A-21A\_n79A-n257H2  DC\_1A-3A-21A\_n79A-n257I2 | DC\_1A\_n79A-n257A  DC\_1A\_n79A-n257G  DC\_1A\_n79A-n257H  DC\_1A\_n79A-n257I  DC\_3A\_n79A-n257A  DC\_3A\_n79A-n257G  DC\_3A\_n79A-n257H  DC\_3A\_n79A-n257I  DC\_21A\_n79A-n257A  DC\_21A\_n79A-n257G  DC\_21A\_n79A-n257H  DC\_21A\_n79A-n257I |
| DC\_1A-3A-28A\_n78A-n257A2  DC\_1A-3A-28A\_n78A-n257G2  DC\_1A-3A-28A\_n78A-n257H2  DC\_1A-3A-28A\_n78A-n257I2 | DC\_1A\_n78A  DC\_1A\_n257A  DC\_1A\_n257G  DC\_1A\_n257H  DC\_1A\_n257I  DC\_3A\_n78A  DC\_3A\_n257A  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I  DC\_28A\_n78A  DC\_28A\_n257A  DC\_28A\_n257G  DC\_28A\_n257H  DC\_28A\_n257I |
| DC\_1A-3A-41A\_n28A-n257A2  DC\_1A-3A-41A\_n28A-n257I | DC\_1A\_n28A  DC\_1A\_n257A  DC\_3A\_n28A  DC\_3A\_n257A  DC\_41A\_n28A  DC\_41A\_n257A  DC\_41A\_n257I |
| DC\_1A-3A-41C\_n28A-n257A2  DC\_1A-3A-41C\_n28A-n257I | DC\_1A\_n28A  DC\_1A\_n257A  DC\_3A\_n28A  DC\_3A\_n257A  DC\_41A\_n28A  DC\_41A\_n257A  DC\_41A\_n257I  DC\_41C\_n28A  DC\_41C\_n257A  DC\_41C\_n257I |
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| DC\_3A-5A-7A-7A\_n78A-n257A  DC\_3A-5A-7A-7A\_n78A-n257D  DC\_3A-5A-7A-7A\_n78A-n257E  DC\_3A-5A-7A-7A\_n78A-n257F  DC\_3A-5A-7A-7A\_n78A-n257G  DC\_3A-5A-7A-7A\_n78A-n257H  DC\_3A-5A-7A-7A\_n78A-n257I  DC\_3A-5A-7A-7A\_n78A-n257J  DC\_3A-5A-7A-7A\_n78A-n257K  DC\_3A-5A-7A-7A\_n78A-n257L  DC\_3A-5A-7A-7A\_n78A-n257M | DC\_3A\_n78A  DC\_3A\_n257A  DC\_5A\_n78A  DC\_5A\_n257A  DC\_7A\_n78A  DC\_7A\_n257A |
| DC\_3A-18A-42A\_n78A-n257A  DC\_3A-18A-42A\_n78A-n257G  DC\_3A-18A-42A\_n78A-n257H  DC\_3A-18A-42A\_n78A-n257I  DC\_3A-18A-42C\_n78A-n257A  DC\_3A-18A-42C\_n78A-n257G  DC\_3A-18A-42C\_n78A-n257H  DC\_3A-18A-42C\_n78A-n257I | DC\_3A\_n78A  DC\_3A\_n257A  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I  DC\_18A\_n78A  DC\_18A\_n257A  DC\_18A\_n257G  DC\_18A\_n257H  DC\_18A\_n257I  DC\_42A\_n257A  DC\_42A\_n257G  DC\_42A\_n257H  DC\_42A\_n257I  DC\_42C\_n257A  DC\_42C\_n257G  DC\_42C\_n257H  DC\_42C\_n257I |
| DC\_3A-41A-42A\_n77A-n257A  DC\_3A-41A-42A\_n77A-n257G  DC\_3A-41A-42A\_n77A-n257H  DC\_3A-41A-42A\_n77A-n257I  DC\_3A-41A-42C\_n77A-n257A  DC\_3A-41A-42C\_n77A-n257G  DC\_3A-41A-42C\_n77A-n257H  DC\_3A-41A-42C\_n77A-n257I  DC\_3A-41C-42A\_n77A-n257A  DC\_3A-41C-42A\_n77A-n257G  DC\_3A-41C-42A\_n77A-n257H  DC\_3A-41C-42A\_n77A-n257I  DC\_3A-41C-42C\_n77A-n257A  DC\_3A-41C-42C\_n77A-n257G  DC\_3A-41C-42C\_n77A-n257H  DC\_3A-41C-42C\_n77A-n257I | DC\_3A\_n77A  DC\_3A\_n257A  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I  DC\_41A\_n77A  DC\_41A\_n257A  DC\_41A\_n257G  DC\_41A\_n257H  DC\_41A\_n257I  DC\_41C\_n77A  DC\_41C\_n257A  DC\_41C\_n257G  DC\_41C\_n257H  DC\_41C\_n257I  DC\_42A\_n257A  DC\_42A\_n257G  DC\_42A\_n257H  DC\_42A\_n257I  DC\_42C\_n257A  DC\_42C\_n257G  DC\_42C\_n257H  DC\_42C\_n257I |
| DC\_3A-28A-41A\_n78A-n257A  DC\_3A-28A-41A\_n78A-n257G  DC\_3A-28A-41A\_n78A-n257H  DC\_3A-28A-41A\_n78A-n257I  DC\_3A-28A-41C\_n78A-n257A  DC\_3A-28A-41C\_n78A-n257G  DC\_3A-28A-41C\_n78A-n257H  DC\_3A-28A-41C\_n78A-n257I | DC\_3A\_n78A  DC\_3A\_n257A  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I  DC\_28A\_n78A  DC\_28A\_n257A  DC\_28A\_n257G  DC\_28A\_n257H  DC\_28A\_n257I  DC\_41A\_n78A  DC\_41A\_n257A  DC\_41A\_n257G  DC\_41A\_n257H  DC\_41A\_n257I  DC\_41C\_n78A  DC\_41C\_n257A  DC\_41C\_n257G  DC\_41C\_n257H  DC\_41C\_n257I |
| DC\_3A-28A-42A\_n78A-n257A  DC\_3A-28A-42A\_n78A-n257G  DC\_3A-28A-42A\_n78A-n257H  DC\_3A-28A-42A\_n78A-n257I  DC\_3A-28A-42C\_n78A-n257A  DC\_3A-28A-42C\_n78A-n257G  DC\_3A-28A-42C\_n78A-n257H  DC\_3A-28A-42C\_n78A-n257I | DC\_3A\_n78A  DC\_3A\_n257A  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I  DC\_28A\_n78A  DC\_28A\_n257A  DC\_28A\_n257G  DC\_28A\_n257H  DC\_28A\_n257I  DC\_42A\_n257A  DC\_42A\_n257G  DC\_42A\_n257H  DC\_42A\_n257I  DC\_42C\_n257A  DC\_42C\_n257G  DC\_42C\_n257H  DC\_42C\_n257I |
| DC\_3A-41A-42A\_n78A-n257A  DC\_3A-41A-42A\_n78A-n257G  DC\_3A-41A-42A\_n78A-n257H  DC\_3A-41A-42A\_n78A-n257I  DC\_3A-41A-42C\_n78A-n257A  DC\_3A-41A-42C\_n78A-n257G  DC\_3A-41A-42C\_n78A-n257H  DC\_3A-41A-42C\_n78A-n257I  DC\_3A-41C-42A\_n78A-n257A  DC\_3A-41C-42A\_n78A-n257G  DC\_3A-41C-42A\_n78A-n257H  DC\_3A-41C-42A\_n78A-n257I  DC\_3A-41C-42C\_n78A-n257A  DC\_3A-41C-42C\_n78A-n257G  DC\_3A-41C-42C\_n78A-n257H  DC\_3A-41C-42C\_n78A-n257I | DC\_3A\_n78A  DC\_3A\_n257A  DC\_3A\_n257G  DC\_3A\_n257H  DC\_3A\_n257I  DC\_41A\_n78A  DC\_41A\_n257A  DC\_41A\_n257G  DC\_41A\_n257H  DC\_41A\_n257I  DC\_41C\_n78A  DC\_41C\_n257A  DC\_41C\_n257G  DC\_41C\_n257H  DC\_41C\_n257I  DC\_42A\_n257A  DC\_42A\_n257G  DC\_42A\_n257H  DC\_42A\_n257I  DC\_42C\_n257A  DC\_42C\_n257G  DC\_42C\_n257H  DC\_42C\_n257I |
| DC\_19A-21A-42A\_n77A-n257A  DC\_19A-21A-42A\_n77A-n257G  DC\_19A-21A-42A\_n77A-n257H  DC\_19A-21A-42A\_n77A-n257I  DC\_19A-21A-42C\_n77A-n257A  DC\_19A-21A-42C\_n77A-n257G  DC\_19A-21A-42C\_n77A-n257H  DC\_19A-21A-42C\_n77A-n257I | DC\_19A\_n77A  DC\_19A\_n257A  DC\_19A\_n257G  DC\_19A\_n257H  DC\_19A\_n257I  DC\_21A\_n77A  DC\_21A\_n257A  DC\_21A\_n257G  DC\_21A\_n257H  DC\_21A\_n257I  DC\_42A\_n257A  DC\_42A\_n257G  DC\_42A\_n257H  DC\_42A\_n257I |
| DC\_19A-21A-42A\_n78A-n257A  DC\_19A-21A-42A\_n78A-n257G  DC\_19A-21A-42A\_n78A-n257H  DC\_19A-21A-42A\_n78A-n257I  DC\_19A-21A-42C\_n78A-n257A  DC\_19A-21A-42C\_n78A-n257G  DC\_19A-21A-42C\_n78A-n257H  DC\_19A-21A-42C\_n78A-n257I | DC\_19A\_n78A  DC\_19A\_n257A  DC\_19A\_n257G  DC\_19A\_n257H  DC\_19A\_n257I  DC\_21A\_n78A  DC\_21A\_n257A  DC\_21A\_n257G  DC\_21A\_n257H  DC\_21A\_n257I  DC\_42A\_n257A  DC\_42A\_n257G  DC\_42A\_n257H  DC\_42A\_n257I |
| DC\_19A-21A-42A\_n79A-n257A  DC\_19A-21A-42A\_n79A-n257G  DC\_19A-21A-42A\_n79A-n257H  DC\_19A-21A-42A\_n79A-n257I  DC\_19A-21A-42C\_n79A-n257A  DC\_19A-21A-42C\_n79A-n257G  DC\_19A-21A-42C\_n79A-n257H  DC\_19A-21A-42C\_n79A-n257I | DC\_19A\_n79A  DC\_19A\_n257A  DC\_19A\_n257G  DC\_19A\_n257H  DC\_19A\_n257I  DC\_21A\_n79A  DC\_21A\_n257A  DC\_21A\_n257G  DC\_21A\_n257H  DC\_21A\_n257I  DC\_42A\_n257A  DC\_42A\_n257G  DC\_42A\_n257H  DC\_42A\_n257I |
| DC\_19A-21A-42A\_n77A-n257A  DC\_19A-21A-42A\_n77A-n257G  DC\_19A-21A-42A\_n77A-n257H  DC\_19A-21A-42A\_n77A-n257I  DC\_19A-21A-42C\_n77A-n257A  DC\_19A-21A-42C\_n77A-n257G  DC\_19A-21A-42C\_n77A-n257H  DC\_19A-21A-42C\_n77A-n257I | DC\_19A\_n77A-n257A  DC\_19A\_n77A-n257G  DC\_19A\_n77A-n257H  DC\_19A\_n77A-n257I  DC\_21A\_n77A-n257A  DC\_21A\_n77A-n257G  DC\_21A\_n77A-n257H  DC\_21A\_n77A-n257I |
| DC\_19A-21A-42A\_n78A-n257A  DC\_19A-21A-42A\_n78A-n257G  DC\_19A-21A-42A\_n78A-n257H  DC\_19A-21A-42A\_n78A-n257I  DC\_19A-21A-42C\_n78A-n257A  DC\_19A-21A-42C\_n78A-n257G  DC\_19A-21A-42C\_n78A-n257H  DC\_19A-21A-42C\_n78A-n257I | DC\_19A\_n78A-n257A  DC\_19A\_n78A-n257G  DC\_19A\_n78A-n257H  DC\_19A\_n78A-n257I  DC\_21A\_n78A-n257A  DC\_21A\_n78A-n257G  DC\_21A\_n78A-n257H  DC\_21A\_n78A-n257I |
| DC\_19A-21A-42A\_n79A-n257A  DC\_19A-21A-42A\_n79A-n257G  DC\_19A-21A-42A\_n79A-n257H  DC\_19A-21A-42A\_n79A-n257I  DC\_19A-21A-42C\_n79A-n257A  DC\_19A-21A-42C\_n79A-n257G  DC\_19A-21A-42C\_n79A-n257H  DC\_19A-21A-42C\_n79A-n257I | DC\_19A\_n79A-n257A  DC\_19A\_n79A-n257G  DC\_19A\_n79A-n257H  DC\_19A\_n79A-n257I  DC\_21A\_n79A-n257A  DC\_21A\_n79A-n257G  DC\_21A\_n79A-n257H  DC\_21A\_n79A-n257I |
| DC\_28A-41A-42A\_n78A-n257A  DC\_28A-41A-42A\_n78A-n257G  DC\_28A-41A-42A\_n78A-n257H  DC\_28A-41A-42A\_n78A-n257I  DC\_28A-41A-42C\_n78A-n257A  DC\_28A-41A-42C\_n78A-n257G  DC\_28A-41A-42C\_n78A-n257H  DC\_28A-41A-42C\_n78A-n257I  DC\_28A-41C-42A\_n78A-n257A  DC\_28A-41C-42A\_n78A-n257G  DC\_28A-41C-42A\_n78A-n257H  DC\_28A-41C-42A\_n78A-n257I  DC\_28A-41C-42C\_n78A-n257A  DC\_28A-41C-42C\_n78A-n257G  DC\_28A-41C-42C\_n78A-n257H  DC\_28A-41C-42C\_n78A-n257I | DC\_28A\_n78A  DC\_28A\_n257A  DC\_28A\_n257G  DC\_28A\_n257H  DC\_28A\_n257I  DC\_41A\_n78A  DC\_41A\_n257A  DC\_41A\_n257G  DC\_41A\_n257H  DC\_41A\_n257I  DC\_41C\_n78A  DC\_41C\_n257A  DC\_41C\_n257G  DC\_41C\_n257H  DC\_41C\_n257I  DC\_42A\_n257A  DC\_42A\_n257G  DC\_42A\_n257H  DC\_42A\_n257I  DC\_42C\_n257A  DC\_42C\_n257G  DC\_42C\_n257H  DC\_42C\_n257I |
| NOTE 1: Uplink EN-DC configurations are the configurations supported by the present release of specifications.  NOTE 2: Applicable for UE supporting inter-band EN-DC with mandatory simultaneous Rx/Tx capability. | |

## **<<Next of Change>>**

##### 6.5B.3.3.2 Spurious emission band UE co-existence

This clause specifies the requirements for the specified EN-DC, for coexistence with protected bands. The requirements in Table 6.5B.3.3.2-1 apply on each component carrier with all component carriers are active.

NOTE: For inter-band EN-DC with uplink assigned to one LTE band and one NR band the requirements in Table 6.5B.3.3.2-1 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;

Table 6.5B.3.3.2-1: Requirements

| EN-DC Configuration | Spurious emission | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Protected band | Frequency range (MHz) | | | Maximum Level (dBm) | MBW (MHz) | NOTE |
| DC\_1\_n3 | E-UTRA Band 1, 5, 7, 8, 11, 18, 19, 20, 21, 26, 27, 28, 31, 32, 38, 40, 41, 43, 44, 50, 51, 65, 67, 72, 73, 74, 75, 76  NR Band n79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3, 34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA band 22, 42, 52  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1880 |  | 1895 | -40 | 1 | 5,16 |
|  | Frequency range | 1895 |  | 1915 | -15.5 | 5 | 5, 7, 16 |
|  | Frequency range | 1915 |  | 1920 | +1.6 | 5 | 5, 7, 16 |
| DC\_1\_n5 | E-UTRA Band 1, 5, 7, 8, 11, 18, 19, 21, 22, 26, 28, 31, 38, 40, 42, 43, 50, 51, 65, 73, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3,34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA band 41, 52  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_1\_n7 | E-UTRA Band 1, 5, 7, 8, 20, 22, 26, 27, 28, 31,32, 40, 42, 43, 50, 51, 52, 65, 67, 72, 74, 75, 76  NR Band n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | band 3, 34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | Frequency range | 1880 |  | 1895 | -40 | 1 | 5,16 |
|  | Frequency range | 1895 |  | 1915 | -15.5 | 5 | 5, 7, 16 |
|  | Frequency range | 1915 |  | 1920 | +1.6 | 5 | 5, 7, 16 |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_1\_n8 | E-UTRA Band 11, 20, 21, 28, 31, 32, 38, 40, 45, 50, 51, 65, 67, 68, 69, 72, 73, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3, 7, 22, 41, 42, 43, 52  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 1, 8, 34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | Frequency range | 1880 |  | 1895 | -40 | 1 | 5, 16 |
|  | Frequency range | 1895 |  | 1915 | -15.5 | 5 | 5, 7, 16 |
|  | Frequency range | 1915 |  | 1920 | +1.6 | 5 | 5, 7, 16 |
| DC\_1\_n20 | E-UTRA Band 1, 3, 7, 8, 22, 31, 32, 40, 43, 50, 51, 65, 67, 68, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 38, 42, 69  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 20, 34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | Frequency range | 758 | - | 788 | -50 | 1 |  |
| DC\_1\_n28 | E-UTRA Band 5, 7, 8, 18, 19, 20, 26, 27, 31, 38, 40, 41, 72, 73  NR band n79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 1, 22, 32, 42, 43, 50, 51, 52, 65, 74, 75, 76  NR band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA band 3, 34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 11 |
|  | E-UTRA Band 1, 65 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10 |
|  | Frequency range | 470 | - | 694 | -42 | 8 | 5, 17 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 14 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 5 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 5 |
|  | Frequency range | 1880 | - | 1895 | -40 | 1 | 5,16 |
|  | Frequency range | 1895 | - | 1915 | -15.5 | 5 | 5, 7, 16 |
|  | Frequency range | 1915 | - | 1920 | +1.6 | 5 | 5, 7, 16 |
| DC\_1\_n38 | E-UTRA Band 1, 3, 5, 8, 20, 22, 27, 28, 31, 32, 34, 40, 42, 43, 50, 51, 65, 67, 68, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
| DC\_1\_n40 | E-UTRA Band 1, 5, 7, 8, 11, 18, 19, 20, 21, 22, 26, 27, 28, 31, 32, 38, 41, 42, 43, 44, 45, 50, 51, 52, 65, 67, 68, 69, 72, 73, 74, 75, 76  NR band n78 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Band 3, 34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | NR band n77, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1880 |  | 1895 | -40 | 1 | 5, 16 |
|  | Frequency range | 1895 |  | 1915 | -15.5 | 5 | 5, 7, 16 |
|  | Frequency range | 1915 |  | 1920 | +1.6 | 5 | 5, 7, 16 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_1\_n41 | E-UTRA Band 3, 4, 5, 8, 12, 13, 14, 17, 19, 20, 21, 24, 26, 27, 28, 29, 30, 31, 32, 42, 43, 44, 45, 50, 51, 52, 66, 67, 68, 71, 72, 73, 75, 76, 85  NR Band n78 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | NR Band n77, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 40 | FDL\_low | - | FDL\_high | -40 | 1 |  |
|  | Frequency range | 1880 |  | 1895 | -40 | 1 | 5, 8 |
|  | Frequency range | 1895 |  | 1915 | -15.5 | 5 | 5, 7, 8 |
|  | Frequency range | 1915 |  | 1920 | +1.6 | 5 | 5, 7, 8, 20 |
|  | E-UTRA Band 11, 18, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
| DC\_1A\_n50A | E-UTRA Band 3, 4, 5, 7, 8, 12, 13, 17, 18, 19, 20, 26, 27, 28, 29, 31, 38, 40, 41, 42, 43, 44, 48, 52, 66, 67, 68, 69, 72, 73, 85  NR Band n78 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | NR Band n77, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1880 |  | 1895 | -40 | 1 | 5,16 |
|  | Frequency range | 1895 |  | 1915 | -15.5 | 5 | 5, 7, 16 |
|  | Frequency range | 1915 |  | 1920 | +1.6 | 5 | 5, 7, 16 |
| DC\_1\_n51 | E-UTRA Band 7, 12, 13, 17, 20, 22, 27, 28, 29, 31, 38, 44, 48, 67, 68, 69, 72, 73 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3, 34 | FDL\_low | - | FDL\_high | -50 | 1 | 5, 2 |
|  | Frequency range | 1880 | - | 1895 | -40 | 1 | 5, 16 |
|  | Frequency range | 1895 | - | 1915 | -15.5 | 5 | 5, 7, 16 |
|  | Frequency range | 1915 | - | 1920 | +1.6 | 5 | 5, 7, 16 |
|  | E-UTRA Band 5, 6, 8, 26, 30, 40, 41, 42, 43, 46  NR Band n77, n78, n79, | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_1\_n71 | E-UTRA Band 1, 5, 26, | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 41 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 71 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_1\_n77  DC\_1\_n84\_ULSUP-TDM\_n77 | E-UTRA Band 1, 3, 5, 7, 8, 11, 18, 19, 20, 21, 26, 28, 34, 40, 41, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 1880 | - | 1895 | -40 | 1 | 5, 8 |
|  | Frequency range | 1895 | - | 1915 | -15.5 | 5 | 5, 7, 8 |
|  | Frequency range | 1915 | - | 1920 | +1.6 | 5 | 5, 7, 8 |
| DC\_1\_n78  DC\_1\_n84\_ULSUP-TDM\_n78 | E-UTRA Band 1, 3, 5, 7, 8, 11, 18, 19, 20, 21, 26, 28, 34, 40, 41, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 1880 | - | 1895 | -40 | 1 | 5, 8 |
|  | Frequency range | 1895 | - | 1915 | -15.5 | 5 | 5, 7, 8 |
|  | Frequency range | 1915 | - | 1920 | +1.6 | 5 | 5, 7, 8 |
| DC\_1\_n79  DC\_1\_n84\_ULSUP-TDM\_n79 | E-UTRA Band 1, 3, 5, 7, 8, 11, 18, 19, 21, 26, 28, 34, 40, 41, 42, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 1880 | - | 1895 | -40 | 1 | 5, 8 |
|  | Frequency range | 1895 | - | 1915 | -15.5 | 5 | 5, 7, 8 |
|  | Frequency range | 1915 | - | 1920 | +1.6 | 5 | 5, 7, 8 |
| DC\_1\_n80 | E-UTRA Band 1, 5, 7, 8, 11, 18, 19, 20, 21, 26, 27, 28, 31, 32, 38, 40, 41, 43, 44, 45, 50, 51, 65, 67, 68, 69, 72, 73,74, 75, 76,  NR Band n79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3, 34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 22, 42,  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_2\_n5 | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 26, 28, 29, 30, 42, 50, 51, 66, 70, 71, 74, 85, | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2, 5 |
|  | E-UTRA Band 2, 25, 48 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 41, 43, 53 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_2\_n7 | E-UTRA Band 2, 4, 5, 7, 12, 13, 14, 17, 26, 27, 28, 29, 30, 42, 50, 51, 66, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 43 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 2570 | - | 2575 | 1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_2\_n12 | E-UTRA Band 5, 13, 14, 17, 24, 26, 27, 30, 41, 50, 53, 71, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 25, 85  NR band n12 | FDL\_low | - | FDL\_high | -50 | 1 | 3 |
|  | E-UTRA Band 2 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 4, 51, 66, 70,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_2\_n38 | E-UTRA Band 4, 5, 12, 13, 14,17, 27, 28, 29, 30, 42, 50, 51, 66, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 43 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_2\_n41 | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 26, 27, 28, 29, 30, 42, 48, 50, 51, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 25 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 43,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_2A\_n48A | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 26, 29, 30, 41, 50, 51, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 25 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_2\_n66 | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 26, 27, 28, 29, 30, 41, 50, 51, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 25 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 42, 48,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_2\_n71 | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 26, 29, 30, 48, 66 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 25, 41, 70,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 71 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_2\_n78 | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 26, 27, 28, 29, 30, 41, 50, 51, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 25 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_3\_n1 | E-UTRA Band 1, 5, 7, 8, 11, 18, 19, 20, 21, 26, 27, 28, 31, 32, 38, 40, 41, 43, 44, 50, 51, 65, 67, 72, 73, 74, 75, 76  NR Band n79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3, 34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA band 22, 42, 52  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1880 |  | 1895 | -40 | 1 | 5,16 |
|  | Frequency range | 1895 |  | 1915 | -15.5 | 5 | 5, 7, 16 |
|  | Frequency range | 1915 |  | 1920 | +1.6 | 5 | 5, 7, 16 |
| DC\_3\_n5 | E-UTRA Band 1, 5, 7, 8, 11, 18, 19, 21, 26, 28, 31, 38, 40, 43, 50, 51, 65, 73, 74  NR Band n79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3,34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 22, 42, 52  Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_3\_n7 | E-UTRA Band 1, 5, 7, 8, 20, 26, 27, 28, 31, 32, 33, 34, 40, 43, 44, 50, 51, 65, 67, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA band 22, 42 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_3\_n8 | E-UTRA Band 1, 11, 20, 21, 28, 31, 32, 33, 34, 38, 39, 40, 45, 50, 51, 65, 67,68, 69, 72, 73, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3, 8 | FDL\_low | - | FDL\_high | -50 | 1 | 2, 5 |
|  | E-UTRA band 7, 22, 41, 42, 43, 52  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_3\_n20 | E-UTRA Band 1, 7, 8, 31, 32, 33, 34, 40, 43, 50, 51, 65, 67, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3  NR band n20 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 22, 38, 42, 52 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 758 | - | 788 | -50 | 1 |  |
| DC\_3\_n28 | E-UTRA Band 1, 42, 43, 50, 51, 65, 74, 75, 76  NR band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 11 |
|  | E-UTRA band 3 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 5, 7, 8, 18, 19, 20, 26, 27, 31, 34, 38, 40, 41, 72 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 13 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 14 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 5 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 9 |
| DC\_3\_n34 | E-UTRA Band 1, 7, 8, 11, 18, 19, 20, 21, 26, 28, 31, 32, 33, 38, 39, 40, 41, 43, 44, 45, 50, 51, 65, 67, 69,72, 73, 74, 75, 76, 79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 22, 42, 52  NR Band n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 3 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_3\_n38 | E-UTRA Band 1, 5, 8, 20, 27, 28, 31, 32, 33, 34, 40, 43, 50, 51, 65, 67, 68, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 22, 42 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_3\_n40 | E-UTRA Band 1, 5, 7, 8, 11, 18, 19, 20, 21, 26, 27, 28, 31, 32, 33, 34, 38, 39, 41, 43, 44. 45, 50, 51, 65, 67, 68, 69, 72, 73, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 22, 42, 52  NR band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_3\_n41,  DC\_3\_n80\_ULSUP-TDM\_n41 | E-UTRA Band 1, 5, 8, 11, 18, 19, 21, 26, 27, 28, 34, 39, 44, 45, 50, 51, 65, 73, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 42, 52  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 40 | FDL\_low | - | FDL\_high | -40 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_3\_n50 | E-UTRA Band 5, 7, 8, 12, 13, 17, 18, 19, 20, 26, 27, 28, 29, 31, 38, 40, 41, 43, 44, 52, 67, 68, 69, 72, 73 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 1, 2, 4, 33, 34, 39, 42, 48, 65, 66  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 |  |
| DC\_3\_n51 | E-UTRA Band 7, 8, 12, 13, 17, 20, 27, 28, 31, 33, 38, 67, 68, 69, 72, 73 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 1, 5, 6, 22, 26, 30, 34, 36, 40, 41, 42, 43, 44, 48, 46, 65, 71 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_3\_n71 | E-UTRA Band 5, 26, | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 41 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 3, 71 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_3\_n77  DC\_3\_n80\_ULSUP-TDM\_n77 | E-UTRA Band 1, 3, 5, 7, 8, 11, 18, 19, 20, 21, 26, 28, 34, 39, 40, 41, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_3\_n78  DC\_3\_n80\_ULSUP-TDM\_n78 | E-UTRA Band 1, 3, 5, 7, 8, 11, 18, 19, 20, 21, 26, 28, 34, 39, 40, 41, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_3\_n79 DC\_3\_n80\_ULSUP-TDM\_n79 | E-UTRA Band 1, 3, 5, 8, 11, 18, 19, 21, 28, 34, 39, 40, 41, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 42 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_3\_n82 | E-UTRA Band 1, 3 7, 8, 20,31, 32, 33, 34, 40, 43, 50, 51, 65, 67, 68, 72,74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 22, 38, 42, 69 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_3\_n84 | E-UTRA Band 1, 5, 7, 8, 11, 18, 19, 20, 21, 26, 27, 28, 31, 32, 38, 40, 41, 43, 44, 45, 50, 51, 65, 67, 68, 69, 72, 73,74, 75, 76  NR Band n79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_4\_n38 | E-UTRA Band 2, 4, 5, 12, 13, 14, 17, 27, 28, 29, 30, 43, 50, 51, 66, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 42 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_4\_n41 | E-UTRA Band 2, 4, 5, 12, 13, 14, 17, 24, 25, 26, 27, 28, 29, 30, 48, 50, 51, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 42,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_4\_n78 | E-UTRA Band 5, 7, 26, 28, 41 | FDL\_low | - | FDL\_high | -50 | 1 |  |
| DC\_5\_n2 | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 28, 29, 30, 42, 50, 51, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 25 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | NR Band n2 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 26 | 859 | - | 869 | -27 | 1 |  |
|  | E-UTRA Band 41, 43, 53  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_5\_n7 | E-UTRA Band 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 28, 29, 30, 31, 34, 40, 42, 43, 65, 66, 71, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 52  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA band 26 | 859 | - | 869 | -27 | 1 |  |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 7, 6 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 7, 6 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 14 |
| DC\_5\_n12 | E-UTRA Band 2, 5, 13, 14, 17, 24, 25, 26, 30, 43, 50, 71, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Bands 4, 41, 42, 48, 51, 66, 70,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 12, 85 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_5\_n38 | E-UTRA Band 1, 2, 3, 4, 5, 8, 12, 13, 14, 17, 28, 29, 30, 31, 34, 40, 42, 43, 50, 51, 65, 66, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 52 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_5\_n40 | E-UTRA Band 1, 3, 5, 7, 8, 11, 18, 19, 21, 28, 31, 34, 38, 42, 43, 45, 65, 73, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 26 | 859 | - | 869 | -27 | 1 |  |
|  | E-UTRA Band 41, 52  NR band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_5\_n48 | E-UTRA Band 2, 4, 5, 12, 13, 14, 17, 24, 25, 29, 30, 50, 51, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 26 | 859 | - | 869 | -27 | 1 |  |
|  | E-UTRA Band 41 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_5\_n66 | E-UTRA Band 1, 2, 3, 4, 5, 6, 7, 8, 12, 13, 14, 17, 24, 25, 28, 29, 30, 34, 38, 40, 43, 45, 50, 51, 65, 66, 70, 71, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 26 | 859 | - | 869 | -27 | 1 |  |
|  | E-UTRA Band 41, 42, 48, 52,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_5\_n71 | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 26, 30, 48, 66, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 25, 41, 70,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 29 | FDL\_low | - | FDL\_high | -38 | 1 | 5 |
|  | E-UTRA Band 71 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_5\_n78 | E-UTRA Band 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 24, 25, 28, 29, 30, 31, 34, 38, 40, 45, 65, 66, 70 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 26 | 859 | - | 869 | -27 | 1 |  |
|  | E-UTRA Band 41 | FDL\_low | - | FDL\_high | -50 | 1 | 2, 7 |
| DC\_5\_n79 | Bands 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 24, 25, 28, 29, 30, 31, 34, 38, 40, 42, 43, 45, 48, 50, 51, 65, 66, 70, 71, 73, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 26 | 859 | - | 869 | -27 | 1 |  |
|  | Bands 41, 52 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_7\_n1 | Band 1, 5, 7, 8, 20, 22, 26, 27, 28, 31,32, 40, 42, 43, 50, 51, 52, 65, 67, 72, 74, 75, 76, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | band 3, 34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | Frequency range | 1880 |  | 1895 | -40 | 1 | 5,16 |
|  | Frequency range | 1895 |  | 1915 | -15.5 | 5 | 5, 7,16 |
|  | Frequency range | 1915 |  | 1920 | +1.6 | 5 | 5, 7,16 |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_7\_n3 | E-UTRA Band 1, 5, 7, 8, 20, 26, 27, 28, 31, 32, 33, 34, 40, 43, 50, 51, 65, 67, 68, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA band 22, 42, 52  NR band n78, n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_7\_n5 | E-UTRA Band 1, 2, 3, 4, 5, 7, 8, 12, 13, 14, 17, 22, 26, 28, 29, 30, 31, 40, 42, 43, 50, 51, 65, 66, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 52  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 7, 6 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 7, 6 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 14 |
| DC\_7\_n8 | E-UTRA Band 1, 20, 28, 31, 32, 33, 34, 40, 50, 51, 65, 67, 68, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3, 7, 22, 42, 43, 52  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 8 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_7\_n20 | E-UTRA Band 1, 3, 7, 8, 22, 31, 32, 33, 34, 40, 43, 50, 51, 65, 67, 68, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 42, 52  NR band n78, n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 20 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_7\_n28 | E-UTRA Band 2, 3, 5, 7, 8, 20, 26, 27, 31, 34, 40, 72 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 1, 4, 42, 43, 50, 51, 65, 66, 74, 75, 76  NR band n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 5 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_7\_n40 | E-UTRA Band 1, 3, 5, 7, 8, 20, 22, 26, 27, 28, 31, 32, 33, 34, 42, 43, 50, 51, 52, 65, 67, 68, 72, 74, 75, 76, 77, 78 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_7\_n51 | E-UTRA Band 2, 3, 5, 8, 26, 30, 31, 32, 33, 34, 40, 48, 72 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 7, 16 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 7, 16 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5 |
|  | E-UTRA Band 1, 4, 12, 13, 14, 17, 20, 22, 23, 27, 28, 29, 42, 43, 44, 46, 65, 66, 67, 68  NR Band n77, n78, n79, | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_7\_n66 | E-UTRA Band 2, 4, 5, 7, 12, 13, 14, 17, 26, 27, 28, 29, 30, 43, 50, 51, 66, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 42 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_7\_n71 | E-UTRA Band 4, 5, 12, 13, 14, 17, 26, 30, 66, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 70 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 29 | FDL\_low | - | FDL\_high | -38 | 1 | 5 |
|  | Frequency range | 2570 | - | 2575 | 1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_7\_n77 | E-UTRA Band 1, 2, 3, 4, 5, 7, 8, 11, 18, 19, 20, 21, 26, 27, 28, 31, 32, 33, 34, 40, 50, 51, 65, 66, 67, 68, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_7\_n78 | E-UTRA Band 1, 2, 3, 4, 5, 7, 8, 11, 18, 19, 20, 21, 26, 27, 28, 31, 32, 33, 34, 40, 50, 51, 65, 66, 67, 68, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_8\_n1 | E-UTRA Band 20, 28, 31, 32, 38, 40, 50, 51, 65, 67, 72, 73, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3, 7, 22, 41, 42, 43, 52  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 1, 8, 34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 12 |
|  | Frequency range | 860 | - | 890 | -40 | 1 | 5, 12 |
|  | Frequency range | 1880 |  | 1895 | -40 | 1 | 5, 16 |
|  | Frequency range | 1895 |  | 1915 | -15.5 | 5 | 5, 7, 16 |
|  | Frequency range | 1915 |  | 1920 | +1.6 | 5 | 5, 7, 16 |
| DC\_8\_n3 | E-UTRA Band 1, 20, 28, 31, 32, 33, 34, 38, 39, 40, 44, 50, 51, 65, 67, 72, 73, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3, 8 | FDL\_low | - | FDL\_high | -50 | 1 | 2, 5 |
|  | E-UTRA band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 12 |
|  | E-UTRA band 7, 22, 41, 42, 43, 52  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3.12 |
|  | Frequency range | 860 | - | 890 | -40 | 1 | 5. 12 |
| DC\_7\_n80 | E-UTRA Band 1, 5, 7, 8, 20, 26, 27, 28, 31, 32, 33, 34, 40, 43, 50, 51, 65, 67, 68, 72, 74, 75, 76.  NR Band n79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 22, 42,  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_8\_n20 | E-UTRA Band 1, 31, 32, 33, 34, 40, 50, 51, 65, 67, 68, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3, 7, 22, 38, 42, 43, 52, 69  NR band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 8, 20 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | Frequency range | 758 | - | 788 | -50 | 1 |  |
| DC\_8\_n28 | E-UTRA Band 20, 31, 34, 38, 40, 72 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3, 7, 22, 41, 42, 43, 50, 51, 65, 73, 74, 75, 76  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 2, 9, 11 |
|  | E-UTRA Band 8 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10, 12 |
|  | Frequency range | 470 | - | 694 | -42 | 8 | 5, 17 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 14 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 5 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 5 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 860 | - | 890 | -40 | 1 | 5, 12 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 9, 12 |
| DC\_8\_n34 | E-UTRA Band 1, 20, 28, 31, 32, 33, 38, 39, 40, 45, 50, 51, 65, 67, 69,72, 73, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3, 7, 22, 41, 42, 43, 52  NR Band n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 8 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 12 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 12 |
|  | Frequency range | 860 | - | 890 | -40 | 1 | 5, 12 |
| DC\_8\_n39 | E-UTRA Band 1, 28, 34, 40, 45, 50, 51, 73, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | UTRA Band 22, 41, 42, 52  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 8 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_8\_n40 | E-UTRA Band 1, 5, 11, 18, 19, 20, 21, 26, 28, 31, 32, 33, 34, 38, 39,, 45, 50, 51, 65, 67, 68, 69, 72, 73, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3, 7, 22, 41, 42, 43, 52  NR band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 8 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_8\_n41,  DC\_8\_n81\_ULSUP-TDM\_n41 | E-UTRA Band 1, 11, 21, 28, 34, 39, 45, 50, 51, 65, 73, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3, 42, 52  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 8 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 40 | FDL\_low | - | FDL\_high | -40 | 1 |  |
|  | Frequency range | 860 | - | 890 | -40 | 1 | 5, 12 |
|  | Frequency range | 1884.5 |  | 1915.7 | -41 | 0.3 | 3 |
| DC\_8\_n77 | E-UTRA Band 1, 20, 28, 31, 32, 33, 34, 38, 39, 40, 44, 45, 50, 51, 65, 67, 68, 69, 72, 73, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3, 7, 41 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 8 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 12 |
|  | Frequency range | 860 | - | 890 | -40 | 1 | 5, 12 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 12 |
| DC\_8\_n78  DC\_8\_n81\_ULSUP-TDM\_n78 | E-UTRA Band 1, 20, 28, 34, 39, 40, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3, 7, 41 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 8 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 12 |
|  | Frequency range | 860 | - | 890 | -40 | 1 | 5, 12 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 12 |
| DC\_8\_n79  DC\_8\_n81\_ULSUP-TDM\_n79 | E-UTRA Band 1, 8, 28, 34, 39, 40, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3,41,42 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 12 |
|  | Frequency range | 860 | - | 890 | -40 | 1 | 5, 12 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_8\_n80 | E-UTRA Band 1, 20, 28, 31, 32, 33, 34, 38, 39, 40, 45, 50, 51, 65, 67, 68, 69, 72, 73, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3, 8 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 3, 7, 22, 41, 42, 43, 52  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 13 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_8A\_93A\_ULSUP-TDM,  DC\_8A\_94A\_ULSUP-TDM | E-UTRA Band 1, 20, 28, 31, 32, 33, 34, 38, 39, 40, 45, 50, 51, 52, 65, 67, 68, 69, 72, 73, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3, 7, 22, 41, 42, 43  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2, 5 |
|  | E-UTRA 8 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_11\_n3 | E-UTRA Band 1, 11, 18, 19, 21, 28, 34, 40, 65  NR band n79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 42  NR band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | 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 |  |
| DC\_11\_n28 | E-UTRA Band 3, 18, 19, 34, 40  NR band n79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 42, 65, 74  NR band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 11 |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 14 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 945 | - | 960 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 9 |
|  | Frequency range | 2545 | - | 2575 | -50 | 1 |  |
|  | Frequency range | 2595 | - | 2645 | -50 | 1 |  |
| DC\_11\_n77 | E-UTRA Band 1, 3, 18, 19, 28, 34, 40, 65 | FDL\_low | - | FDL\_high | -50 | 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 |  |
| DC\_11\_n78 | E-UTRA Band 1, 3, 18, 19, 28, 34, 40, 65 | FDL\_low | - | FDL\_high | -50 | 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 |  |
| DC\_11\_n79 | E-UTRA Band 1, 3, 18, 19, 28, 34, 40, 42, 65 | FDL\_low | - | FDL\_high | -50 | 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 |  |
| DC\_12\_n2 | E-UTRA Band 5, 13, 14, 17, 24, 26, 27, 30, 41, 50, 53, 71, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 12, 25, 85 | FDL\_low | - | FDL\_high | -50 | 1 | 3 |
|  | E-UTRA Band 2 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 4, 51, 66, 70,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_12\_n5 | E-UTRA Band 2, 5, 13, 14, 17, 24, 25, 26, 30, 43 50, 71, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Bands 4, 41, 42, 48, 51, 66, 70,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 12, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
| DC\_12\_n66 | E-UTRA Band 2, 5, 13, 14, 17, 25, 26, 27, 30, 41, 53, 71, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 4, 48, 50, 51, 66, 70  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 12, 85 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_12\_n7 | E-UTRA Band 2, 5, 7, 13, 14, 17, 26, 27, 30, 74, | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 4, 50, 51,66  NR Band n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 12, 85 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_12\_n25 | E-UTRA Band 5, 13, 14, 17, 24, 26, 27, 30, 41, 53, 71 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 4, 48, 66, 70.  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 2, 12, 25, 85 | FDL\_low | - | FDL\_high | -50 | 1 | 15 |
| DC\_12\_n38 | E-UTRA Band 2, 5, 13. 14. 17, 27, 30, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 4, 50, 51, 66 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA band 12, 85 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_12\_n41 | E-UTRA Band 2, 5, 13, 14, 17, 24, 25, 26, 27, 30, 71, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 4, 48, 50, 51, 66, 70 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA band 12, 85 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_12\_n78 | E-UTRA Band 2, 5, 7. 13, 17, 25, 26, 41, 71 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 4, 66 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA band 12 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_13\_n2 | E-UTRA Band 4, 5,12,13,17, 26, 29, 41, 48, 66, 70, 71 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2,14, 25 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 30 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 769 | - | 775 | -35 | 0.00625 | 5 |
|  | Frequency range | 799 | - | 805 | -35 | 0.00625 | 5 |
| DC\_13\_n5 | E-UTRA Band 2, 4, 5, 12, 13, 17, 25, 29, 48, 50, 51, 66, 70, 71, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 26 | 859 | - | 869 | -27 | 1 |  |
|  | E-UTRA Band 24, 30, 41, 53 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 14 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | Frequency range | 769 | - | 775 | -35 | 0.00625 | 5 |
|  | Frequency range | 799 | - | 805 | -35 | 0.00625 | 5 |
| DC\_13\_n7 | E-UTRA Band 2, 4, 5, 7, 12, 13, 17,25，26, 27, 29, 50, 51, 66，74, 85  NR Band n78 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 30 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 14 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | Frequency range | 769 | - | 775 | -35 | 0.00625 | 5 |
|  | Frequency range | 799 | - | 805 | -35 | 0.00625 | 5 |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_13\_n48 | E-UTRA Band 2, 4, 5, 12, 13, 17, 25, 26, 27, 29, 41, 50, 51, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 14 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 24, 30 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 769 | - | 775 | -35 | 0.00625 | 5 |
|  | Frequency range | 799 | - | 805 | -35 | 0.00625 | 5 |
| DC\_13\_n66 | E-UTRA Band 2, 4, 5, 12, 13, 17, 25, 26, 27, 29, 41, 50, 51, 53, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 14 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 30, 48,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 769 | - | 775 | -35 | 0.00625 | 5 |
|  | Frequency range | 799 | - | 803 | -35 | 0.00625 | 5 |
| DC\_13\_n71 | E-UTRA Band 4, 5, 12, 13, 17, 26, 48, 66, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 24, 25, 30, 41, 70,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 29 | FDL\_low | - | FDL\_high | -38 | 1 | 5 |
|  | E-UTRA Band 14, 71 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | Frequency range | 769 | - | 775 | -35 | 0.00625 | 5 |
|  | Frequency range | 799 | - | 805 | -35 | 0.00625 | 5 |
| DC\_13\_n78 | E-UTRA Band 2, 5, 7, 12, 13, 25, 26, 41, 66 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 769 | - | 775 | -35 | 0.00625 | 5 |
|  | Frequency range | 799 | - | 805 | -35 | 0.00625 | 5 |
| DC\_14\_n2 | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 26, 27, 29, 30, 41, 48, 53, 66, 70, 71, 85, | FDL\_low | - | FDL\_high | -50 | 1 |  |
| E-UTRA band 2, 25  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| Frequency range | 769 | - | 775 | -35 | 0.00625 | 5 |
| Frequency range | 799 | - | 805 | -35 | 0.00625 | 5 |
| DC\_14\_n66 | E-UTRA Band 2, 4, 5, 12, 13, 14, 17, 25, 26, 27, 29, 30, 41, 53, 66, 70, 71, 85, | FDL\_low | - | FDL\_high | -50 | 1 |  |
| E-UTRA band 48  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| Frequency range | 769 | - | 775 | -35 | 0.00625 | 5 |
| Frequency range | 799 | - | 805 | -35 | 0.00625 | 5 |
| DC\_18\_n3 | E-UTRA Band 1, 3, 11, 18, 19, 21, 28, 34, 40, 65  NR Band n79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 42  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | 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 |  |
| DC\_18\_n77 | E-UTRA Band 1, 3, 11, 21, 28, 34, 40, 65, 74 | FDL\_low | - | FDL\_high | -50 | 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 |  |
| DC\_18\_n78 | E-UTRA Band 1, 3, 11, 21, 28, 34, 40, 65, 74 | FDL\_low | - | FDL\_high | -50 | 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 |  |
| DC\_18\_n79 | E-UTRA Band 1, 3, 11, 21, 28, 34, 40, 42, 65, 74 | FDL\_low | - | FDL\_high | -50 | 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 |  |
| DC\_19\_n77 | E-UTRA Band 1, 3, 11, 21, 28, 34, 40, 65, 74 | FDL\_low | - | FDL\_high | -50 | 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 |  |
| DC\_19\_n78 | E-UTRA Band 1, 3, 11, 21, 28, 34, 40, 65, 74 | FDL\_low | - | FDL\_high | -50 | 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 |  |
| DC\_19\_n79 | E-UTRA Band 1, 3, 11, 21, 28, 34, 40, 42, 65, 74 | FDL\_low | - | FDL\_high | -50 | 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 |  |
| DC\_20\_n1 | E-UTRA Band 1, 3, 7, 8, 20, 22, 31, 32, 34, 40, 43, 50, 51, 65, 67, 68, 72, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 38, 42, 69  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 758 | - | 788 | -50 | 1 |  |
| DC\_20\_n3 | E-UTRA Band 1, 7, 8, 31, 32, 33, 34, 40, 43, 50, 51, 65, 67, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 20  E-UTRA Band 3 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 22, 38, 42, 52 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 758 | - | 788 | -50 | 1 |  |
| DC\_20\_n7 | E-UTRA Band 1, 3, 7, 8, 22, 31, 32, 33, 34, 40, 43, 50, 51, 65, 67, 68, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 42, 52 NR band n78, n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 20 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_20\_n8 | E-UTRA Band 1, 28, 31, 32, 34, 65, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3, 7, 22, 38, 42, 43  NR Band n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_20\_n38 | E-UTRA Band 1, 3, 8, 22, 31, 32, 33, 34, 40, 43, 50, 51, 65, 67, 68, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 42, 52 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 20 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_20\_n41 | E-UTRA Band 1, 2, 4, 24, 25, 30, 31, 32, 33, 34, 39, 43, 48, 50, 51, 65, 66, 70, 72, 73, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3, 8, 12, 13, 14, 17, 42, 44, 45, 52, 67, 68, 71, 85  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 40 | FDL\_low | - | FDL\_high | -40 | 1 |  |
|  | Frequency range | 758 | - | 788 | -50 | 1 |  |
|  | E-UTRA Band 9, 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 19 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 19 |
| DC\_20\_n28  DC\_20\_n83 | E-UTRA Band 3, 7, 8, 31, 34 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 1, 22, 32, 38, 42, 43, 65, 75, 76, NR Band 78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_20\_n50 | E-UTRA Band 2, 3, 7, 12, 17, 31, 33, 39, 43, 48, 65, 67, 68, 72, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 1, 4, 5, 8, 13, 34, 38, 40, 41, 42, 52, 69  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 758 | - | 788 | -50 | 1 |  |
| DC\_20\_n51 | E-UTRA Band 1, 3, 4, 8, 17, 22, 28, 29, 31, 40, 43, 48, 65, 66, 68, 72 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 20 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | Frequency range | 758 | - | 788 | -50 | 1 |  |
|  | E-UTRA Band 2, 7, 25, 32, 33, 34, 35, 36, 37, 38, 39, 41, 42, 46, 69, 70  NR Band n77, n78, n79, | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_20\_n77 | E-UTRA Band 1, 3, 7, 8, 31, 32, 33, 34, 40, 50, 51, 65, 67, 68, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 20 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 38, 69 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_20\_n78,  DC\_20\_n82\_ULSUP-TDM\_n78 | E-UTRA Band 1, 3, 7, 8, 31, 32, 33, 34, 40, 50, 51, 65, 67, 68, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 20 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 38, 69 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_20\_n80 | E-UTRA Band 1, 7, 8, 28, 31, 32, 33, 34, 40, 43, 50, 51, 65, 67, 68, 72, 74, 75, 76.  NR Band n79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3, 20 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 22, 42,  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_20A\_91A\_ULSUP-TDM,  DC\_20A\_92A\_ULSUP-TDM | E-UTRA Band 1, 3, 7, 8, 22, 31, 32, 33, 34, 40, 43, 50, 51, 65, 67, 68, 72, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 20 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 38, 42, 69,  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 758 | - | 788 | -50 | 1 |  |
| DC\_21\_n77 | E-UTRA Band 1, 3, 18, 19, 21, 28, 34, 40, 65 | FDL\_low | - | FDL\_high | -50 | 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 |  |
| DC\_21\_n78 | E-UTRA Band 1, 3, 18, 19, 21, 28, 34, 40, 65 | FDL\_low | - | FDL\_high | -50 | 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 |  |
| DC\_21\_n79 | E-UTRA Band 1, 3, 18, 19, 21, 28, 34, 40, 42, 65 | FDL\_low | - | FDL\_high | -50 | 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 |  |
| DC\_25\_n41 | E-UTRA Band 4, 5, 12, 13 , 14, 17, 24, 26, 27, 28, 29, 30, 42, 45, 48, 66, 70, 71 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 25, | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_26\_n25 | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 26, 29, 30, 42, 48, 66, 70, 71, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 25 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 41, 43, 53 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_26\_n41 | E-UTRA Band 1, 2, 3, 4, 5, 11, 12, 13 , 14, 17, 18, 19, 21, 24, 25, 26, 29, 30, 31, 34, 39, 42, 43, 48, 50, 51, 65, 66, 70, 71, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 1884.5 |  | 1915.7 | -41 | 0.3 | 3 |
|  | Frequency range | 703 | - | 799 | -50 | 1 |  |
|  | Frequency range | 799 | - | 803 | -40 | 1 | 5 |
|  | Frequency range | 945 | - | 960 | -50 | 1 |  |
| DC\_26\_n77 | E-UTRA Band 1, 3, 5, 11, 18, 19, 21, 26, 34, 39, 40, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 41 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 703 | - | 799 | -50 | 1 |  |
|  | Frequency range | 799 | - | 803 | -40 | 1 | 5 |
|  | 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 |  |
| DC\_26\_n78 | E-UTRA Band 1, 3, 5, 11, 18, 19, 21, 26, 34, 39, 40, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 41 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 703 | - | 799 | -50 | 1 |  |
|  | Frequency range | 799 | - | 803 | -40 | 1 | 5 |
|  | 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 |  |
| DC\_26\_n79 | E-UTRA Band 1, 3, 5, 11, 18, 19, 21, 26, 34, 39, 40, 42, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 41 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 703 | - | 799 | -50 | 1 |  |
|  | Frequency range | 799 | - | 803 | -40 | 1 | 5 |
|  | 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 |  |
| DC\_28\_n3 | E-UTRA Band 1, 22, 42, 43, 50, 51, 65, 74, 75, 76,  NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 11 |
|  | E-UTRA Band 3, 5, 7, 8, 18, 19, 20, 26, 27, 31, 34, 38, 40, 41, 72, 73  NR Band n79 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 14 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 5 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 9 |
| DC\_28\_n5 | E-UTRA Band 2, 3, 5, 7, 8, 14, 18, 19, 24, 25, 26, 28, 30, 31, 34, 38, 40, 70, 71 | FDL\_low | - | FDL\_high | -50 |  |  |
|  | E-UTRA Band 4, 22, 32, 41, 42, 43, 45, 48, 50, 51, 52, 65, 66, 73, 74, 75, 76 NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 11 |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 9 |
|  | Frequency range | 470 | - | 694 | -42 | 8 | 5, 17 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 14 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 5 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 5 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
| DC\_28\_n7 | E-UTRA Band 2, 3, 5, 8, 20, 26, 27, 31, 34, 40, 72 NR band n7 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 4, 22, 32, 42, 43, 50, 51, 52, 65, 66, 74, 75, 76  NR band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 5 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_28\_n8 | E-UTRA Band 20, 31, 34, 38, 40, 72 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 3, 7, 22, 41, 42, 43, 50, 51, 52, 65, 73, 74, 75, 76  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 8 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10 |
|  | E-UTRA Band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 11 |
|  | Frequency range | 470 | - | 694 | -42 | 8 | 5, 17 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 14 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 5 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 5 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 9 |
| DC\_28\_n40 | E-UTRA Band 3, 5, 7, 8, 18, 19, 20, 26, 27, 28, 31, 34, 38, 41, 72 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA band 1, 11, 21, 22, 32, 42, 43, 50, 51, 52, 65, 73, 74, 75, 76  NR Band, n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_28\_n41 | E-UTRA Band 4, 14, 18, 19, 20, 26, 27, 39, 42, 43, 48, 50, 51, 52, 65, 66, 71, 73  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 11 |
|  | E-UTRA Band 2, 3, 5, 8, 24, 25, 30, 31, 34, 70, 72 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 11, 21, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10 |
|  | E-UTRA Band 40 | FDL\_low | - | FDL\_high | -40 | 1 |  |
|  | Frequency range | 470 | - | 694 | -42 | 8 | 5, 17 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 14 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 5 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 5 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 9 |
| DC\_28\_n50 | E-UTRA Band 4, 40, 42, 43, 48, 65, 66, 73  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10 |
|  | E-UTRA Band 2, 3, 5, 7, 8, 18, 19, 25, 26, 27, 31, 34, 38, 39, 41, 72 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 470 | - | 694 | -42 | 8 | 5, 17 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 14 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 5 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 5 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
| DC\_28\_n51 | E-UTRA Band 2, 3, 5, 7, 8, 25, 26, 31, 34, 38, 40, 41, 72 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 4, 20, 22, 24, 32, 42, 43, 45, 46, 65, 66, 71, 73  NR band n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 2, 9, 10 |
|  | Frequency range | 470 | - | 694 | -42 | 8 | 5, 17 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 14 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 5 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 5 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
| DC\_28\_n77 | E-UTRA Band 3, 5, 7, 8, 18, 19, 20, 26, 34, 39, 40, 41 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 1, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 11 |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10 |
|  | Frequency range | 758 | - | 773 | -32 | 1 |  |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 9 |
| DC\_28\_n78  DC\_28\_n83\_ULSUP-TDM\_n78 | E-UTRA Band 3, 5, 7, 8, 18, 19, 20, 26, 34, 39, 40, 41 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 1, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 11 |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10 |
|  | Frequency range | 758 | - | 773 | -32 | 1 |  |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 9 |
| DC\_28\_n79 | E-UTRA Band 3, 5, 8, 18, 19, 34, 39, 40, 41 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 1, 42, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 11 |
|  | E-UTRA Band 11, 21 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10 |
|  | Frequency range | 758 | - | 773 | -32 | 1 |  |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 9 |
| DC\_30\_n2 | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 26, 27, 28, 29, 30, 41, 42, 48, 50, 51, 53, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 25 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 2 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 43,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_30\_n5 | E-UTRA Band 2, 4, 5, 7, 12, 13, 14, 17, 24, 25, 26, 29, 30, 38, 48, 66, 70, 71, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 41, 53  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_30\_n66 | E-UTRA Band 2, 4, 5, 12, 13, 14, 17, 24, 25, 26, 27, 29, 30, 38, 41, 66, 70, 71 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 48,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_38\_n78 | N/A | | | | | | |
| DC\_39\_n40 | E-UTRA Band 1, 8, 22, 26, 28, 34, 41, 42, 44, 45, 50, 51, 52, 73, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1805 |  | 1855 | -40 | 1 | 18 |
|  | Frequency range | 1855 |  | 1880 | -15.5 | 5 | 5, 7, 18 |
| DC\_39\_n41 | E-UTRA Band 1, 8, 26, 28, 34, 42, 44, 45, 50, 51, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 40 | FDL\_low | - | FDL\_high | -40 | 1 |  |
|  | Frequency range | 1805 | - | 1855 | -40 | 1 | 5 |
|  | Frequency range | 1855 | - | 1880 | -15.5 | 5 | 5, 7, 19 |
| DC\_39\_n78 | E-UTRA Band 1, 8, 28, 34, 40, 41, 44, 45 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 1805 | - | 1855 | -40 | 1 | 18 |
|  | Frequency range | 1855 | - | 1880 | -15.5 | 5 | 18 |
| DC\_39\_n79 | E-UTRA Band 1, 8, 28, 34, 40, 41, 44, 45 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 1805 | - | 1855 | -40 | 1 | 18 |
|  | Frequency range | 1855 | - | 1880 | -15.5 | 5 | 18 |
| DC\_40\_n1 | E-UTRA Band 1, 3, 5, 7, 8, 11, 18, 19, 20, 21, 22, 26, 27, 28, 31, 32, 38, 41, 42, 43, 44, 45, 50, 51, 52, 65, 67, 68, 69, 72, 73, 74, 75, 76  NR Band n78 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 34 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | NR Band n77, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_40\_n41 | Bands 1, 3, 5, 8, 11, 18, 19, 21, 26, 27, 28, 34, 39, 42, 44, 45, 50, 51, 65, 73, 74, NR Band n77, n78 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | NR Band n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_40\_n77 | N/A | | | | | | |
| DC\_40\_n78 | E-UTRA Band 1, 3, 5, 7, 8, 11, 18, 19, 20, 21, 26, 27, 28, 31, 32, 33, 34, 38, 39, 41, 44, 45, 50, 51, 65, 67, 68, 69, 72, 73, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | NR Band n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_40\_n79 | Bands 1, 3, 5, 8, 11, 18, 19, 21, 26, 28, 34, 39, 41, 42, 65, 74  NR band n78 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_41\_n3 | E-UTRA Band 1, 5, 8, 26, 27, 28, 34, 39, 44, 45, 50, 51, 65, 73, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 3 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 42, 52  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 40 | FDL\_low | - | FDL\_high | -40 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_41\_n28 | E-UTRA Band 4, 14, 18, 19, 20, 26, 27, 39, 42, 43, 48, 50, 51, 52, 65, 66, 71, 73  NR Band n77, n78, n79 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 1 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 11 |
|  | E-UTRA Band 2, 3, 5, 8, 24, 25, 30, 31, 34, 70, 72 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 11, 21, 74, 75, 76 | FDL\_low | - | FDL\_high | -50 | 1 | 9, 10 |
|  | E-UTRA Band 40 | FDL\_low | - | FDL\_high | -40 | 1 |  |
|  | Frequency range | 470 | - | 694 | -42 | 8 | 5, 17 |
|  | Frequency range | 470 | - | 710 | -26.2 | 6 | 14 |
|  | Frequency range | 662 | - | 694 | -26.2 | 6 | 5 |
|  | Frequency range | 758 | - | 773 | -32 | 1 | 5 |
|  | Frequency range | 773 | - | 803 | -50 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3, 9 |
| DC\_41\_n77 | E-UTRA Band 1, 3, 5, 8, 11, 18, 19, 21, 26, 28, 33, 34, 39, 44, 45, 73, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 40 | FDL\_low | - | FDL\_high | -40 | 1 |  |
|  | Frequency range | 1884.5 |  | 1915.7 | -41 | 0.3 | 3 |
| DC\_41\_n78 | E-UTRA Band 1, 3, 5, 8, 11, 18, 19, 21, 26, 28, 34, 39, 44, 45, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 40 | FDL\_low | - | FDL\_high | -40 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_41\_n79 | E-UTRA Band 1, 3, 5, 8, 11, 18, 19, 21, 26, 28, 34, 42, 44, 45, 65, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 40 | FDL\_low | - | FDL\_high | -40 | 1 |  |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_42\_n51 | E-UTRA Band 3, 8, 20, 25, 30, 31, 34, 39, 41, 73 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 1, 2, 4, 5, 6, 7, 12, 13, 14, 17, 23, 24, 26, 27, 28, 29, 32, 38, 40, 44, 46, 65, 66, 67, 68, 70, 71 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_42\_n77 | N/A | | | | | | |
| DC\_42\_n78 | N/A | | | | | | |
| DC\_42\_n79 | N/A | | | | | | |
| DC\_48\_n5 | E-UTRA Band 2, 4, 5, 12, 13, 14, 17, 24, 25, 26, 29, 30, 50, 51, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 41 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 1884.5 | - | 1915.7 | -41 | 0.3 | 3 |
| DC\_48\_n12 | E-UTRA Band 2, 5, 13, 14, 17, 24, 25, 26, 30, 41, 71, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 4, 50, 51, 66, 70 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 12, 85 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_48\_n66 | E-UTRA Band 2, 4, 5, 12, 13, 14, 17, 24, 25, 26, 29, 30, 41, 50, 51, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
| DC\_48\_n71 | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 26, 30, 50, 51, 53, 66, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 25, 41, 70 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 29 | FDL\_low | - | FDL\_high | -38 | 1 | 5 |
|  | E-UTRA Band 71 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_66\_n2 | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 26, 27, 28, 29, 30, 41, 50, 51, 53, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 25 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 2 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 22, 42, 43,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_66\_n5 | E-UTRA Band 1, 2, 3, 4, 5, 6, 7, 8, 12, 13, 14, 17, 24, 25, 26, 28, 29, 30, 34, 38, 40, 43, 45, 50, 51, 65, 66, 70, 71, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 41, 42, 48, 52,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_66\_n7 | E-UTRA Band 2, 4, 5, 7, 12, 13, 14, 17, 26, 27, 28, 29, 30, 43, 50, 51, 66, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 42 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 2570 | - | 2575 | +1.6 | 5 | 5, 6, 7 |
|  | Frequency range | 2575 | - | 2595 | -15.5 | 5 | 5, 6, 7 |
|  | Frequency range | 2595 | - | 2620 | -40 | 1 | 5, 6 |
| DC\_66\_n12 | E-UTRA Band 2, 5, 13, 14, 17, 24, 25, 26, 27, 30, 41, 50, 53, 70, 71, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 4, 51, 66, 48,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 12, 85 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_66\_n25 | E-UTRA Band 4, 5, 7, 12, 13, 14, 17, 24, 26, 27, 28, 29, 30, 38, 41, 50, 51, 53, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 42, 48,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 2 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 25 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
|  | E-UTRA Band 43 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_66\_n41 | E-UTRA Band 2, 4, 5, 12, 13, 14, 17, 24, 25, 26, 27, 28, 29, 30, 43, 50, 51, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 42, 48,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_66\_n38 | EUTRA 2, 4, 5, 12, 13,14,17, 25, 27, 28, 29, 30, 43, 50, 51, 66, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 42 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | Frequency range | 2620 | - | 2645 | -15.5 | 5 | 5, 7, 22 |
|  | Frequency range | 2645 | - | 2690 | -40 | 1 | 5, 22 |
| DC\_66\_n48 | E-UTRA Band 2, 4, 5, 12, 13, 14, 17, 24, 25, 26, 29, 30, 41, 50, 51, 66, 70, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
| DC\_66\_n71 | E-UTRA Band 4, 5, 13, 14, 17, 24, 26, 27, 29, 30, 43, 50, 51, 66, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 7, 22, 25, 41, 42, 48, 70,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 71 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_66\_n78,  DC\_66\_n86\_ULSUP-TDM\_n78 | E-UTRA Band 1, 3, 5, 7, 8, 20, 26, 28, 34, 39, 40, 41, 65 | FDL\_low | - | FDL\_high | -50 | 1 |  |
| DC\_71\_n5 | E-UTRA Band 4, 12, 13, 14, 17, 24, 26, 30, 48, 66, 85  NR Band n5 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 25, 41, 70,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 29 | FDL\_low | - | FDL\_high | -38 | 1 | 5 |
|  | E-UTRA Band 71 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_71\_n38 | E-UTRA Band 4, 5, 12, 13, 14, 17, 30, 66, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA band 29 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_71\_n48 | E-UTRA Band 4, 5, 12, 13, 14, 17, 24, 26, 29, 30, 50, 51, 66, 71, 74, 85 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 25, 41, 70 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| DC\_71\_n66 | E-UTRA Band 4, 5, 13, 14, 17, 24, 26, 27, 29, 30, 43, 50, 51, 66, 74 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 2, 7, 22, 25, 41, 42, 48, 70,  NR Band n77 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
|  | E-UTRA Band 71 | FDL\_low | - | FDL\_high | -50 | 1 | 5 |
| DC\_71\_n78 | E-UTRA Band 5, 26 | FDL\_low | - | FDL\_high | -50 | 1 |  |
|  | E-UTRA Band 41 | FDL\_low | - | FDL\_high | -50 | 1 | 2 |
| NOTE 1: FDL\_low and FDL\_high refer to each frequency band specified in Table 5.5-1 in TS 36.101 [4] or in Table 5.2-1 in 3GPP TS 38.101-1 [2].  NOTE 2: As exceptions, measurements with a level up to the applicable requirements defined in Table 6.6.3.1-2 in 3GPP TS 36.101 [4] and Table 6.5.3.1-2 in 3GPP TS 38.101-1 [2] are permitted for each assigned 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 180 kHz), 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: Void  NOTE 5: These requirements also apply for the frequency ranges that are less than FOOB (MHz) in Table 6.6.3.1-1, Table 6.6.3.1A-1 in 3GPP TS 36.101 [4] or in Table 6.5.3.1-1 in 3GPP TS 38.101-1 [2] from the edge of the channel bandwidth.  NOTE 6: This requirement is applicable for any channel bandwidths within the range 2500 - 2570 MHz with the following restriction: for carriers of 15 MHz bandwidth when carrier centre frequency is within the range 2560.5 - 2562.5 MHz and for carriers of 20 MHz bandwidth when carrier centre frequency is within the range 2552 - 2560 MHz the requirement is applicable only for an uplink transmission bandwidth less than or equal to 54 RB.  NOTE 7: For these adjacent bands, the emission limit could imply risk of harmful interference to UE(s) operating in the protected operating band.  NOTE 8: This requirement is applicable for any channel bandwidths within the range 1920 - 1980 MHz with the following restriction: for carriers of 15 MHz bandwidth when carrier centre frequency is within the range 1927.5 - 1929.5 MHz and for carriers of 20 MHz bandwidth when carrier centre frequency is within the range 1930 - 1938 MHz the requirement is applicable only for an uplink  NOTE 9: Applicable when the assigned E-UTRA or NR carrier is confined within 718 MHz and 748 MHz and when the channel bandwidth used is 5 or 10 MHz.  NOTE 10: As exceptions, measurements with a level up to the applicable requirement of -38 dBm/MHz is permitted for each assigned E-UTRA carrier used in the measurement due to 2nd 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 2nd harmonic totally or partially overlaps the measurement bandwidth (MBW).  NOTE 11: 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 12: This requirement is applicable only for the following cases: A: for carriers of 5 MHz channel bandwidth when carrier centre frequency (Fc) is within the range 902.5 MHz ≤ Fc < 907.5 MHz with an uplink transmission bandwidth less than or equal to 20 RB; B: for carriers of 5 MHz channel bandwidth when carrier centre frequency (Fc) is within the range 907.5 MHz ≤ Fc ≤ 912.5 MHz without any restriction on uplink transmission bandwidth; C: for carriers of 10 MHz channel bandwidth when carrier centre frequency (Fc) is Fc = 910 MHz with an uplink transmission bandwidth less than or equal to 32 RB with RBstart > 3.  NOTE 13: Void  NOTE 14: This requirement is applicable for 5 and 10 MHz E-UTRA or NR channel bandwidth allocated within 718-728MHz. 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 15: Void  NOTE 16: This requirement is applicable for any channel bandwidths within the range 1920 - 1980 MHz with the following restriction: for carriers of 15 MHz bandwidth when carrier centre frequency is within the range 1927.5 - 1929.5 MHz and for carriers of 20 MHz bandwidth when carrier centre frequency is within the range 1930 - 1938 MHz the requirement is applicable only for an uplink transmission bandwidth less than or equal to 54 RB.  NOTE 17: This requirement is applicable in the case of a 10 MHz E-UTRA or NR carrier confined within 703 MHz and 733 MHz, otherwise the requirement of -25 dBm with a measurement bandwidth of 8 MHz applies.  NOTE 18: This requirement is only applicable for E-UTRA 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 E-UTRA carriers of 15 MHz bandwidth when carrier center frequency is within the range 1892.5 - 1894.5 MHz and for E-UTRA carriers of 20 MHz bandwidth when carrier center frequency is within the range 1895 - 1903 MHz.  NOTE 19: Void  NOTE 20: Void.  NOTE 21: Void  NOTE 22: 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. | | | | | | | |

NOTE: To simplify the above Table, E-UTRA band numbers are listed for bands which are specified only for E-UTRA operation or both E-UTRA and NR operation. NR band numbers are listed for bands which are specified only for NR operation.

## **<<Next of Change>>**

# 7 Receiver characteristics

## 7.1 General

Unless otherwise stated the receiver characteristics are specified at the antenna connector(s) of the UE for the bands operating on frequency range 1 and over the air of the UE for the bands operating on frequency range 2. The requirements for frequency range 1 and frequency range 2 can be verified separately. For the carrier in frequency range 1, requirements can be verified with NR FR2 link disabled. For the carrier in frequency range 2, requirements can be verified in OTA mode with E-UTRA connecting to the network by OTA without calibration.

The requirements defined in this clause are the extra requirements compared with the single carrier requirements defined in TS 38.101-1 [2] and TS 38.101-2 [3].

Unless otherwise stated, the UL and DL reference measurement channels are the same with the configurations specified in TS 38.101-1 [2] and TS 38.101-2 [3].

Unless otherwise stated, requirements for NR receiver written in TS 38.101-1 [2] and TS 38.101-2 [3] apply and are assumed anchor agnostic. Requirements are verified under conditions where anchor resources do not interfere NR operation.

For intra-band EN-DC, the output power is configured as follows:

- One E-UTRA uplink carrier with the output power set to 29 dB below PCMAX\_L and the NR band whose downlink is being tested has its uplink carrier output power set to 4 dB below PCMAX\_L,f,c.

- One NR uplink carrier with the output power set to 29 dB below PCMAX\_L,f,c and the E-UTRA band whose downlink is being tested has its uplink carrier output power set to 4 dB below PCMAX\_L,c.

For the additional requirements for intra-band non-contiguous EN-DC of two sub-blocks, an in-gap test refers to the case when the interfering signal is located at a negative offset with respect to the assigned lowest channel frequency of the highest sub-block and located at a positive offset with respect to the assigned highest channel frequency of the lowest sub-block.

For the additional requirements for intra-band non-contiguous EN-DC of two sub-blocks, an out-of-gap test refers to the case when the interfering signal(s) is (are) located at a positive offset with respect to the assigned channel frequency of the highest carrier frequency or located at a negative offset with respect to the assigned channel frequency of the lowest carrier frequency.

For the additional requirements for intra-band non-contiguous EN-DC of two sub-blocks with channel bandwidth larger than or equal to 5 MHz, the existing adjacent channel selectivity requirements, in-band blocking requirements (for each case), and narrow band blocking requirements apply for in-gap tests only if the corresponding interferer frequency offsets with respect to the two measured carriers satisfy the following condition in relation to the sub-block gap size Wgap for at least one of the E-UTRA or NR sub-blocks, so that the interferer frequency position does not change the nature of the core requirement tested:

Wgap ≥ 2∙|FInterferer (offset)| – BWChannel

For the E-UTRA sub-block, the FInterferer (offset), for a sub-block with a single component carrier is the interferer frequency offset with respect to carrier as specified in clause 7.5.1, clause 7.6.1 and clause 7.6.3 for the respective requirement in TS 36.101 [4] and BWChannel. FInterferer (offset) for the E-UTRA sub-block with two or more contiguous component carriers is the interference frequency offset with respect to the carrier adjacent to the gap is specified in clause 7.5.1A, 7.6.1A and 7.6.3A in TS 36.101 [4].

For the NR sub-block, the FInterferer (offset), for a sub-block with a single component carrier is the interferer frequency offset with respect to carrier as specified in clause 7.5.1, clause 7.6.1 and clause 7.6.3 for the respective requirement in TS 38.101-1 [2] and BWChannel.

The interferer frequency offsets for adjacent channel selectivity, each in-band blocking case and narrow-band blocking shall be tested separately with a single in-gap interferer at a time.

For sub-clauses with suffix A or B: the minimum requirements for band combinations including Band n41 also apply for the corresponding band combinations with Band n90 replacing Band n41 but with otherwise identical parameters. For brevity the said band combinations with Band n90 are not listed in the tables below but are covered by this specification.

For the requirements of FR1 in this clause, the UE shall be verified with four Rx antenna ports and skip two Rx antenna ports requirements in operating bands where the UE is equipped with four Rx antenna ports, otherwise, the UE shall be verified with two Rx antenna ports.

## **<<Next of Change>>**

##### 7.3B.2.3.5 MSD for intermodulation interference due to dual uplink operation for EN-DC in NR FR1

7.3B.2.3.5.0 General

For EN-DC configurations in NR FR1 the UE may indicate capability of not supporting simultaneous dual uplink operation due to possible intermodulation interference overlapping in frequency to its own primary downlink channel bandwidth if

- the intermodulation order is 2;

- the intermodulation order is 3 when both operating bands are between 450 MHz – 960 MHz or between 1427 MHz – 2690 MHz

In the case for EN-DC configurations in NR FR1 for which the intermodulation products caused by dual uplink operation do not interfere with its own primary downlink channel bandwidth as defined in Annex I the UE is mandated to operate in dual and triple uplink mode.

For EN-DC configurations in NR FR1 with uplink and downlink assigned to E-UTRA and NR FR1 bands given in Table 7.3B.2.3.5.1-1, Table 7.3B.2.3.5.1-1a, Table 7.3B.2.3.5.2-0 and Table 7.3B.2.3.5.2-1 the reference sensitivity is defined only for the specific uplink and downlink test points specified in Table 7.3B.2.3.5.1-1, Table 7.3B.2.3.5.1-1a, Table 7.3B.2.3.5.2-0 and Table 7.3B.2.3.5.2-1. For these test points the reference sensitivity levels specified in clause 7.3.1 in TS 36.101 [4] and 7.3.2 of TS 38.101-1 [2] for the corresponding channel bandwidths or in clause 7.3.1 of TS 36.101 [4] are relaxed by the amount of the parameter MSD given in Table 7.3B.2.3.5.1-1, Table 7.3B.2.3.5.1-1a, Table 7.3B.2.3.5.2-0 and Table 7.3B.2.3.5.2-1.

The throughput on each of the CGs shall be ≥ 95% of the maximum throughput of the respective reference measurement channels as specified in Annex A of TS 38.101-1 [2] and Annex A of TS 36.101 [4], with parameters specified in Table 7.3B.2.3.5.1-1, Table 7.3B.2.3.5.1-1a, Table 7.3B.2.3.5.2-0 and Table 7.3B.2.3.5.2-1 with dual UL transmissions overlapping in time unless otherwise stated.

###### 7.3B.2.3.5.1 MSD test points for intermodulation interference due to dual uplink operation for PC3 EN-DC in NR FR1 involving two bands

Table 7.3B.2.3.5.1-1: MSD test points for PCell due to dual uplink operation for PC3 EN-DC in NR FR1 (two bands)

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| EN-DC  Configuration | EUTRA or NR band | UL Fc  (MHz) | UL/DL BW  (MHz) | UL  LCRB | DL Fc (MHz) | MSD  (dB) | IMD order |
| DC\_1\_n3 | 1 | 1950 | 5 | 25 | 2140 | 23 | IMD3 |
|  | n3 | 1760 | 5 | 25 | 1855 | N/A | N/A |
| DC\_1A-n5A | 1 | 1965 | 5 | 25 | 2155 | 6 | IMD4 |
|  | n5 | 836.5 | 5 | 25 | 876.5 | N/A | N/A |
| DC\_1A\_n8A | 1 | 1965 | 5 | 25 | 2155 | 6.0 | IMD4 |
|  | n8 | 887.5 | 5 | 25 | 932.5 | N/A | N/A |
| DC\_1A\_n71A  DC\_1A\_n71B | 1 | 1958 | 5 | 25 | 2148 | N/A | N/A |
|  | n71 | 668 | 5 | 25 | 622 | 15.1 | IMD3 |
| DC\_1A\_n77A,  DC\_1A\_SUL\_n77A-n84A,  DC\_1A\_n77(2A), | 1 | 1950 | 5 | 25 | 2140 | 29.8 | IMD23 |
|  |  |  |  |  |  | 32.54 |  |
|  | n77 | 4090 | 10 | 50 | 4090 | N/A | N/A |
| DC\_1A\_n77A,  DC\_1A\_SUL\_n77A-n84A,  DC\_1A\_n77(2A),  DC\_1A\_n78A,  DC\_1A\_SUL\_n78A-n84A,  DC\_1A\_n78(2A) | 1 | 1950 | 5 | 25 | 2140 | 8.0 | IMD43 |
|  |  |  |  |  |  | 10.74 |  |
|  | n77, n78 | 3710 | 10 | 50 | 3710 | N/A | N/A |
| DC\_2A\_n46A | 2 | 1880 | 5 | 25 | 1960 | 12.0 | IMD3 |
|  | n46 | 5720 | 20 | 100 | 5720 | N/A | N/A |
| DC\_2A\_n48A | 2 | 1852.5 | 5 | 25 | 1932.5 | 12 | IMD4 |
|  | n48 | 3625 | 20 | 100 | 3625 | N/A | N/A |
| DC\_2A\_n66A, DC\_2A-2A\_n66A | 2 | 1855 | 5 | 25 | 1935 | 20 | IMD3 |
|  | n66 | 1775 | 5 | 25 | 2175 | N/A | N/A |
| DC\_2A\_n66A, DC\_2A-2A\_n66A | 2 | 1883.3 | 5 | 25 | 1963.3 | N/A | N/A |
|  | n66 | 1750 | 5 | 25 | 2150 | 4 | IMD5 |
| DC\_2A\_n78A  DC\_2A\_n78(2A) | 2 | 1855 | 5 | 25 | 1935 | 26 | IMD23 |
|  |  |  |  |  |  | 28.74 |  |
|  | n78 | 3790 | 10 | 50 | 3790 | N/A | N/A |
| DC\_2A\_n78A  DC\_2A\_n78(2A) | 2 | 1885 | 5 | 25 | 1965 | 8.0 | IMD43 |
|  |  |  |  |  |  | 10.74 |  |
|  | n78 | 3690 | 10 | 50 | 3690 | N/A | N/A |
| DC\_3\_n1 | 3 | 1760 | 5 | 25 | 1855 | N/A | N/A |
|  | n1 | 1950 | 5 | 25 | 2140 | 23 | IMD3 |
| DC\_3\_n5 | 3 | 1771 | 10 | 50 | 1866 | 4 | IMD4 |
|  | n5 | 838 | 5 | 25 | 883 | N/A | N/A |
|  | 3 | 1721 | 10 | 50 | 1816 | N/A | N/A |
|  | n5 | 838 | 5 | 25 | 883 | 24 | IMD23 |
| DC\_3A\_n7A  DC\_3C\_n7A | 3 | 1730 | 5 | 25 | 1825 | N/A | N/A |
|  | n7 | 2535 | 10 | 50 | 2655 | 10.2 | IMD4 |
| DC\_3\_n8 | n8 | 900 | 5 | 25 | 945 | 8 | IMD43 |
|  | 3 | 1755 | 10 | 50 | 1850 | N/A | N/A |
|  | n8 | 897.5 | 5 | 25 | 942.5 | N/A | N/A |
|  | 3 | 1747.5 | 10 | 50 | 1842.5 | 6.4 | IMD5 |
| DC\_3A-n20A | 3 | 1775 | 5 | 25 | 1870 | 4 | IMD4 |
|  | n20 | 840 | 5 | 25 | 799 | N/A | N/A |
|  | 3 | 1735 | 5 | 25 | 1830 | N/A | N/A |
|  | n20 | 847 | 5 | 25 | 806 | 9 | IMD4 |
| DC\_3A\_n38A | 3 | 1712.8 | 5 | 25 | 1807.8 | 8.2 | IMD4 |
|  | n38 | 2616.7 | 5 | 25 | 2616.7 | N/A | N/A |
| DC\_3A\_n41A  DC\_3C\_n41A  DC\_3A\_SUL\_n41A-n80A, DC\_3C\_SUL\_n41A-n80A | 3 | 1740 | 5 | 25 | 1835 | 8.2 | IMD4 |
|  | n41 | 2657.5 | 10 | 50 | 2657.5 | N/A | N/A |
| DC\_3A\_n77A,  DC\_3A\_n77(2A),  DC\_3A\_SUL\_n77A-n80A,  DC\_3A\_n78A,  DC\_3A\_SUL\_n78A-n80A,  DC\_3A\_n78(2A),  DC\_3C\_n78A  DC\_3C\_n78(2A) | 3 | 1740 | 5 | 25 | 1835 | 26 | IMD23 |
|  |  |  |  |  |  | 28.74 |  |
|  | n77, n78 | 3575 | 10 | 50 | 3575 | N/A | N/A |
| DC\_3A\_n77A,  DC\_3A\_n77(2A),  DC\_3A\_SUL\_n77A-n80A,  DC\_3A\_n78A, DC\_3A\_SUL\_n78A-n80A,  DC\_3A\_n78(2A),  DC\_3C\_n78A  DC\_3C\_n78(2A) | 3 | 1765 | 5 | 25 | 1860 | 8.0 | IMD43 |
|  |  |  |  |  |  | 10.74 |  |
|  | n77, n78 | 3435 | 10 | 50 | 3435 | N/A | N/A |
| DC\_5\_n7 | n7 | 2547 | 10 | 50 | 2667 | N/A | N/A |
|  | 5 | 834 | 5 | 25 | 879 | 12 | IMD33 |
| DC\_5\_n38 | 5 | 844 | 5 | 25 | 889 | 12 | IMD33 |
|  | n38 | 2577 | 10 | 50 | 2577 | N/A | N/A |
| DC\_5A\_n66A | 5 | 838 | 5 | 25 | 883 | 30 | IMD23 |
|  | n66 | 1721 | 5 | 25 | 2121 | N/A | N/A |
| DC\_5A\_n78A  DC\_5A\_n78(2A) | 5 | 844 | 5 | 25 | 889 | 8.3 | IMD4 |
|  | n78 | 3421 | 10 | 50 | 3421 | N/A | N/A |
| DC\_7\_n3 | 7 | 2535 | 10 | 50 | 2655 | 13 | IMD4 |
|  | n3 | 1730 | 5 | 25 | 1825 | N/A | N/A |
| DC\_7\_n5 | 7 | 2547 | 10 | 50 | 2667 | N/A | N/A |
|  | n5 | 834 | 5 | 25 | 879 | 12 | IMD33 |
| DC\_7A\_n20A | 7 | 2512 | 10 | 50 | 2632 | N/A | N/A |
|  | n20 | 851 | 5 | 25 | 810 | 12 | IMD33 |
| DC\_7\_n40 | 7 | 2510 | 5 | 25 | 2630 | 23 | IMD3 |
|  | n40 | 2390 | 5 | 25 | 2390 | N/A | N/A |
| DC\_7A\_n66A  DC\_7A-7A\_n66A  DC\_7C\_n66A | 7 | 2535 | 10 | 50 | 2655 | 15 | 4th IMD |
|  | n66 | 1730 | 5 | 25 | 2130 | N/A | N/A |
| DC\_7A\_n77A | 7 | 2540 | 5 | 25 | 2660 | 7.1 | IMD4 |
|  | n77 | 3870 | 10 | 50 | 3870 | N/A | N/A |
| DC\_8A\_n1A | 8 | 887.5 | 5 | 25 | 932.5 | N/A | N/A |
|  | n1 | 1965 | 5 | 25 | 2155 | 6 | IMD4 |
| DC\_8A\_n3A | 8 | 900 | 5 | 25 | 945 | 8 | IMD43 |
|  | n3 | 1755 | 10 | 50 | 1850 | N/A | N/A |
|  | 8 | 897.5 | 5 | 25 | 942.5 | N/A | N/A |
|  | n3 | 1747.5 | 10 | 50 | 1842.5 | 6.4 | IMD5 |
| DC\_8A\_n20A | n20 | 849.5 | 5 | 25 | 808.5 | 25 | IMD33 |
|  | 8 | 890.5 | 5 | 25 | 935.5 | N/A | N/A |
|  | n20 | 847.5 | 5 | 25 | 806.5 | N/A | N/A |
|  | 8 | 892.5 | 5 | 25 | 937.5 | 25 | IMD33 |
| DC\_8A\_n41A  DC\_8A\_SUL\_n41A-n81A | 8 | 882.5 | 5 | 25 | 927.5 | 12.1 | IMD33 |
|  | n41 | 2685 | 10 | 50 | 2685 | N/A | N/A |
| DC\_8A\_n77A,  DC\_8A\_n78A, DC\_8A\_SUL\_n78A-n81A | 8 | 897.5 | 5 | 25 | 942.5 | 8.3 | IMD4 |
|  | n77, n78 | 3635 | 10 | 50 | 3635 | N/A | N/A |
| DC\_8A\_n79A,  DC\_8A-n79C,  DC\_8A\_SUL\_n79A-n81A | 8 | 897.5 | 5 | 25 | 942.5 | 4.8 | IMD5 |
|  | n79 | 4532.5 | 40 | 216 | 4532.5 | N/A | N/A |
| DC\_11A\_n28A | 11 | 1430.5 | 5 | 25 | 1478.5 | N/A | N/A |
|  | n28 | 743 | 5 | 25 | 798 | 10.4 | IMD4 |
| DC\_12\_n78 | 12 | 710 | 5 | 25 | 740 | 5.5 | IMD5 |
|  | n78 | 3580 | 10 | 50 | 3580 | N/A | N/A |
| DC\_13\_n5 | 13 | 783 | 5 | 25 | 752 | N/A | N/A |
|  | n5 | 828 | 5 | 25 | 873 | 25 | IMD3 |
| DC\_13A\_n7A  DC\_13A\_n7(2A) | 13 | 784.5 | 5 | 25 | 753.5 | N/A | N/A |
|  | n7 | 2520 | 40 | 216 | 2640 | 2.5 | IMD5 |
| DC\_18A\_n3A | 18 | 823 | 5 | 25 | 868 | N/A | N/A |
|  | n3 | 1721 | 5 | 25 | 1816 | 4 | IMD4 |
| DC\_18A\_n77A  DC\_18A\_n78A | 18 | N/A | N/A | N/A | N/A | N/A | IMD4 |
|  | n77, n78 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_19A\_n78A | 19 | N/A | N/A | N/A | N/A | N/A | IMD4 |
|  | n78 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_20A\_n3A | 20 | 840 | 5 | 25 | 799 | N/A | N/A |
|  | n3 | 1775 | 5 | 25 | 1870 | 4 | IMD4 |
|  | 20 | 847 | 5 | 25 | 806 | 9 | IMD4 |
|  | n3 | 1735 | 5 | 25 | 1830 | N/A | N/A |
| DC\_20A\_n38A | 20 | N/A | N/A | N/A | N/A | N/A | IMD5 |
|  | n38 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_20\_n7 | 20 | 851 | 5 | 25 | 810 | 12 | IMD33 |
|  | n7 | 2512 | 10 | 50 | 2632 | N/A | N/A |
| DC\_20A\_n8A | 20 | 849.5 | 5 | 25 | 808.5 | 25 | IMD3 |
|  | n8 | 892.5 | 5 | 25 | 937.5 | 25 | IMD3 |
| DC\_20\_n41 | 20 | 851 | 5 | 25 | 810 | 12.1 | IMD3 |
|  | n41 | 2512 | 10 | 50 | 2512 | N/A | N/A |
| DC\_20\_n41 | 20 | 841 | 5 | 25 | 800 | 8.1 | IMD5 |
|  | n41 | 2564 | 10 | 50 | 2564 | N/A | N/A |
| DC\_20A\_n77A,  DC\_20A\_n78A,  DC\_20A\_n78(2A),  DC\_20A\_SUL\_n78A-n82A | 20 | 850 | 5 | 25 | 809 | 11 | IMD4 |
|  | n77, n78 | 3359 | 10 | 50 | 3359 | N/A | N/A |
| DC\_20A\_n77A | 20 | 840 | 5 | 25 | 799 | 6.5 | IMD5 |
|  | n77 | 4159 | 10 | 50 | 4159 | N/A | N/A |
| DC\_21A\_n79A | 21 | 1457.5 | 5 | 25 | 1505.5 | 18.4 | IMD3 |
|  | n79 | 4420.5 | 40 | 216 | 4420.5 | N/A | N/A |
| DC\_26A\_n41A | 26 | 839 | 5 | 25 | 884 | 15.6 | IMD33 |
|  | n41 | 2562 | 10 | 50 | 2562 | N/A | N/A |
| DC\_28\_n50 | 28 | 730 | 10 | 50 | 775 | 15.3 | IMD 2 |
|  | n50 | 1500 | 10 | 50 | 1500 | N/A | N/A |
|  | 28 | 740 | 10 | 50 | 785 | 6 | IMD 4 |
|  | n50 | 1500 | 10 | 50 | 1500 | N/A | N/A |
|  | 28 | 740 | 10 | 50 | 785 | 0.5 | IMD 5 |
|  | n50 | 1500 | 10 | 50 | 1500 | N/A | N/A |
| DC\_28A\_n51A | 28 | 742.3 | 5 | 25 | 797.3 | 5 | IMD4 |
|  | n51 | 1429.5 | 5 | 25 | 1429.5 | N/A | N/A |
| DC\_26A\_n77A,  DC\_26A\_n78A | 26 | 836.5 | 5 | 25 | 881.5 | 11.1 | IMD4 |
|  | n77, n78 | 3391 | 10 | 50 | 3391 | N/A | N/A |
| DC\_28A\_n77A,  DC\_28A\_n78A,  DC\_28A\_n78(2A),  DC\_28A\_SUL\_n78A-n83A | 28 | 705.5 | 5 | 25 | 760.5 | 5.5 | IMD5 |
|  | n77, n78 | 3582.5 | 10 | 50 | 3582.5 | N/A | N/A |
| DC\_41A\_n3A  DC\_41C\_n3A | n3 | 1740 | 5 | 25 | 1835 | 8.2 | IMD4 |
|  | 41 | 2657.5 | 5 | 25 | 2657.5 | N/A | N/A |
| DC\_42\_n28 | 42 | 3582.5 | 10 | 50 | 3582.5 | N/A | N/A |
|  | n28 | 705.5 | 5 | 25 | 760.5 | 5.5 | IMD5 |
| DC\_48A\_n12A | 48 | 3557.5 | 10 | 50 | 3557.5 | N/A | N/A |
|  | n12 | 705.5 | 5 | 25 | 735.5 | 5.5 | IMD5 |
| DC\_48A\_n66A | 48 | 3630 | 20 | 100 | 3630 | N/A | N/A |
|  | n66 | 1715 | 5 | 25 | 2115 | 4 | IMD5 |
| DC\_66A\_n2A, DC\_66A-66A\_n2A | 66 | 1775 | 5 | 25 | 2175 | N/A | N/A |
|  | n2 | 1855 | 5 | 25 | 1935 | 20 | IMD3 |
|  | 66 | 1750 | 5 | 25 | 2150 | 4 | IMD5 |
|  | n2 | 1883.3 | 5 | 25 | 1963.3 | N/A | N/A |
| DC\_66A\_n5A | n5 | 838 | 5 | 25 | 883 | 30 | IMD23 |
|  | 66 | 1721 | 5 | 25 | 2121 | N/A | N/A |
| DC\_66A\_n7A  DC\_66A-66A\_n7A  DC\_66A\_n7(2A)  DC\_66A-66A\_n7(2A) | 66 | 1730 | 5 | 25 | 2130 | N/A | N/A |
|  | n7 | 2535 | 10 | 50 | 2655 | 15 | IMD4 |
| DC\_66A\_n25A | 66 | 1775 | 5 | 25 | 2175 | N/A | N/A |
|  | n25 | 1855 | 5 | 25 | 1935 | 20 | IMD3 |
|  | 66 | 1712.5 | 5 | 25 | 2112.5 | 23 | IMD3 |
|  | n25 | 1912.5 | 5 | 25 | 1992.5 | N/A | N/A |
|  | 66 | 1750 | 5 | 25 | 2150 | 4 | IMD5 |
|  | n25 | 1883.3 | 5 | 25 | 1963.3 | N/A | N/A |
| DC\_66A\_n46A | 66 | 1735 | 5 | 25 | 2135 | 12.0 | IMD3 |
|  | n46 | 5605 | 20 | 100 | 5605 | N/A | N/A |
| DC\_66A\_n48A | 66 | 1715 | 5 | 25 | 2115 | 4 | IMD5 |
|  | n48 | 3630 | 20 | 100 | 3630 | N/A | N/A |
| DC\_66A\_n71A | 66 | 1750 | 5 | 25 | 2150 | 5 | IMD4 |
|  | n71 | 675 | 5 | 25 | 629 | N/A | N/A |
| DC\_66A\_n78A | 66 | 1730 | 5 | 25 | 2150 | 5.0 | IMD5 |
|  | n78 | 3660 | 10 | 50 | 3660 | N/A | N/A |
| DC\_71A\_n38A | 71 | 665 | 5 | 25 | 619 | 11 | IMD4 |
|  | n38 | 2614 | 5 | 25 | 2614 | N/A | N/A |
| DC\_71A\_n66A | 71 | 675 | 5 | 25 | 629 | N/A | N/A |
|  | n66 | 1750 | 5 | 25 | 2150 | 5 | IMD4 |
| DC\_71A\_n78A | 71 | 681.5 | 5 | 25 | 635.5 | 5.5 | IMD5 |
|  | n78 | 3361.5 | 10 | 50 | 3582.5 | N/A | N/A |
| NOTE 1: E-UTRA carrier shall be set to min(+20 dBm, PCMAX\_L\_E-UTRA,c) and NR carrier shall be set to min(+20 dBm, PCMAX\_L,f,c,NR) as defined in clause 6.2B.4.1.3.NOTE 2: RBstart = 0  NOTE 3: This band is subject to IMD5 also which MSD is not specified.  NOTE 4: Applicable only if operation with 4 antenna ports is supported in the band with EN-DC configured.  NOTE 5: Void  NOTE 6: For NR band, UL/DL BW and UL LCRB can be adjusted according to the supported BW and lowest SCS supported by the UE. | | | | | | | |

Table 7.3B.2.3.5.1-1a: MSD test points for PCell due to dual uplink operation for PC2 EN-DC in NR FR1 (two bands)

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| EN-DC  Configuration | EUTRA or NR band | UL Fc  (MHz) | UL/DL BW  (MHz) | UL  LCRB | DL Fc (MHz) | MSD  (dB) | IMD order |
| DC\_3A\_n41A | 3 | 1740 | 5 | 25 | 1835 | 18.4 | IMD4 |
|  | n41 | 2657.5 | 10 | 50 | 2657.5 | N/A | N/A |
| DC\_3A\_n78A | 3 | 1740 | 5 | 25 | 1835 | 31.9 | IMD2 |
|  | n78 | 3575 | 10 | 50 | 3575 | N/A | N/A |
| DC\_3A\_n78A | 3 | 1765 | 5 | 25 | 1860 | 18.5 | IMD4 |
|  | n78 | 3435 | 10 | 50 | 3435 | N/A | N/A |
| NOTE 1: E-UTRA carrier shall be set to min(+23 dBm, PCMAX\_L\_E-UTRA,c) and NR carrier shall be set to min(+23 dBm, PCMAX\_L,f,c,NR) as defined in clause 6.2B.4.1.3. | | | | | | | |

###### 7.3B.2.3.5.2 MSD test points for intermodulation interference due to dual uplink operation for EN-DC in NR FR1 involving three bands

Table 7.3B.2.3.5.2-0: MSD test points for Pcell due to dual uplink operation for EN-DC in NR FR1 (three bands)

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| EN-DC Configuration | EUTRA/NR band | UL Fc  (MHz) | UL/DL BW  (MHz) | UL  LCRB | DL Fc (MHz) | MSD  (dB) | IMD order |
| DC\_66A-(n)71AA | 66 | 1750 | 5 | 25 | 2150 | 5 | IMD4 |
|  | n71 | 678 | 10 | 10 (RBstart =0) | 632 | N/A | N/A |
| NOTE 1: For NR band, UL/DL BW and UL LCRB can be adjusted according to the supported BW and lowest SCS supported by the UE.  NOTE 2: E-UTRA carrier shall be set to min(+20 dBm, PCMAX\_L\_E-UTRA,c) and NR carrier shall be set to min(+20 dBm, PCMAX\_L,f,c,NR) as defined in clause 6.2B.4.1.3. | | | | | | | |

Table 7.3B.2.3.5.2-1: MSD test points for Scell due to dual uplink operation for EN-DC in NR FR1 (three bands)

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| EN-DC Configuration | EUTRA / NR band | UL Fc  (MHz) | UL/DL BW  (MHz) | UL  LCRB | DL Fc (MHz) | MSD  (dB) | IMD order |
| DC\_1A-3A\_n28A  DC\_1A-3C\_n28A | 1 | 1975 | 5 | 25 | 2165 | N/A | N/A |
|  | n28 | 710.5 | 5 | 25 | 765.5 | N/A | N/A |
|  | 3 | 1723.5 | 5 | 25 | 1818.5 | 4.0 | IMD5 |
| DC\_1A\_n3A-n28A | 1 | 1975 | 5 | 25 | 2165 | N/A | N/A |
|  | n28 | 710.5 | 5 | 25 | 765.5 | N/A | N/A |
|  | n3 | 1723.5 | 5 | 25 | 1818.5 | 4.0 | IMD5 |
| DC\_1A-3A\_n28A  DC\_1A-3C\_n28A | 3 | 1780 | 5 | 25 | 1875 | N/A | N/A |
|  | n28 | 710.5 | 5 | 25 | 765.5 | N/A | N/A |
|  | 1 | 1949 | 5 | 25 | 2139 | 11.0 | IMD4 |
| DC\_1A-3A\_n71A  DC\_1A-3A\_n71B | 1 | 1960 | 5 | 25 | 2150 | 5 | IMD4 |
|  | 3 | 1750 | 5 | 25 | 1845 | N/A | N/A |
|  | n71 | 675 | 5 | 25 | 629 | N/A | N/A |
| DC\_1A-7A\_n28A  DC\_1A-7C\_n28A | 1 | 1935 | 5 | 25 | 2125 | N/A | N/A |
|  | n28 | 718 | 5 | 25 | 773 | N/A | N/A |
|  | 7 | 2533 | 10 | 50 | 2653 | 30.0 | IMD2 |
| DC\_1A-7A\_n40A | 1 | 1970 | 5 | 25 | 2160 | N/A | N/A |
|  | 7 | 2510 | 5 | 25 | 2630 | 23 | IMD3 |
|  | n40 | 2390 | 5 | 25 | 2390 | N/A | N/A |
|  | 1 | 1930 | 5 | 25 | 2120 | 16.4 | IMD3 |
|  | 7 | 2530 | 5 | 25 | 2650 | N/A | N/A |
|  | n40 | 2310 | 5 | 25 | 2310 | N/A | N/A |
| DC\_1A-8A\_n78A | 1 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 8 | N/A | N/A | N/A | N/A | N/A | IMD5 |
|  | n78 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_1A-3A\_n77A | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | 3 | 1712.5 | 5 | 25 | 1807.5 | 31.5 | IMD2 |
|  | n77 | 3757.5 | 10 | 50 | 3757.5 | N/A | N/A |
|  | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | 3 | 1775 | 5 | 25 | 1870 | 8.5 | IMD4 |
|  | n77 | 3980 | 10 | 50 | 3980 | N/A | N/A |
|  | 1 | 1950 | 5 | 25 | 2140 | 31.0 | IMD2 |
|  | 3 | 1775 | 5 | 25 | 1870 | N/A | N/A |
|  | n77 | 3915 | 10 | 50 | 3915 | N/A | N/A |
| DC\_1A-3A\_n78A  DC\_1A-3C\_n78A  DC\_1A-3A\_n78(2A)  DC\_1A-3C\_n78(2A) | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | 3 | 1712.5 | 5 | 25 | 1807.5 | 31.2 | IMD2 |
|  | n78 | 3757.5 | 10 | 50 | 3757.5 | N/A | N/A |
|  | 1 | 1935 | 5 | 25 | 2125 | 2.8 | IMD5 |
|  | 3 | 1775 | 5 | 25 | 1870 | N/A | N/A |
|  | n78 | 3725 | 10 | 50 | 3725 | N/A | N/A |
| DC\_1A\_n3A-n78A | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | n3 | 1750 | 5 | 25 | 1845 | N/A | N/A |
|  | n78 | 3700 | 10 | 50 | 3700 | 28.4 | IMD2 |
|  | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | n3 | 1735 | 5 | 25 | 1830 | 27.9 | IMD2 |
|  | n78 | 3780 | 10 | 50 | 3780 | N/A | N/A |
| DC\_1A-5A\_n78A | 1 | 1932 | 5 | 25 | 2122 | 18.1 | IMD3 |
|  | 5 | 829 | 5 | 25 | 874 | N/A | N/A |
|  | n78 | 3780 | 10 | 50 | 3780 | N/A | N/A |
|  | 1 | 1975 | 5 | 25 | 2165 | N/A | N/A |
|  | 5 | 840 | 5 | 25 | 885 | 3.1 | IMD5 |
|  | n78 | 3405 | 10 | 50 | 3405 | N/A | N/A |
| DC\_1A-7A\_n78A  DC\_1A-7C\_n78A  DC\_1A-7A\_n78(2A)  DC\_1A-7C\_n78(2A) | 1 | 1977.5 | 5 | 25 | 2167.5 | N/A | N/A |
|  | 7 | 2507.5 | 5 | 25 | 2627.5 | 9.1 | IMD4 |
|  | n78 | 3305 | 10 | 50 | 3305 | N/A | N/A |
|  | 1 | 1950 | 5 | 25 | 2140 | 8.7 | IMD4 |
|  | 7 | 2510 | 10 | 50 | 2630 | N/A | N/A |
|  | n78 | 3580 | 10 | 50 | 3580 | N/A | N/A |
| DC\_1A\_n7A-n78A  DC\_1A\_n7B-n78A | 1 | 1977.5 | 5 | 25 | 2167.5 | N/A | N/A |
|  | n7 | 2507.5 | 5 | 25 | 2627.5 | 9.1 | IMD4 |
|  | n78 | 3305 | 10 | 50 | 3305 | N/A | N/A |
|  | 1 | 1970 | 5 | 25 | 2160 | N/A | N/A |
|  | n7 | 2520 | 5 | 25 | 2640 | N/A | N/A |
|  | n78 | 3390 | 10 | 50 | 3390 | 10.1 | IMD4 |
| DC\_1A-3A\_n79A | 1 | 1950 | 5 | 25 | 2140 | 3.6 | IMD5 |
|  | 3 | 1750 | 5 | 25 | 1845 | N/A | N/A |
|  | n79 | 4860 | 40 | 216 | 4860 | N/A | N/A |
| DC\_1A-5A\_n79A | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | 5 | 837.5 | 5 | 25 | 882.5 | 18.3 | IMD3 |
|  | n79 | 4782.5 | 40 | 216 | 4782.5 | N/A | N/A |
|  | 1 | 1930 | 5 | 25 | 2120 | N/A | N/A |
|  | 5 | 837.5 | 5 | 25 | 882.5 | 8.9 | IMD4 |
|  | n79 | 4907.5 | 40 | 216 | 4907.5 | N/A | N/A |
|  | 1 | 1950 | 5 | 25 | 2140 | 8.1 | IMD4 |
|  | 5 | 837.5 | 5 | 25 | 882.5 | N/A | N/A |
|  | n79 | 4652.5 | 40 | 216 | 4652.5 | N/A | N/A |
| DC\_1A-8A\_n28A | 1 | 1970 | 5 | 25 | 2160 | N/A | N/A |
|  | n28 | 730 | 5 | 25 | 785 | N/A | N/A |
|  | 8 | 905 | 5 | 25 | 950 | 3.3 | IMD5 |
| DC\_1A\_n8A-n40A | 1 | 1930 | 5 | 25 | 2120 | N/A | N/A |
|  | n8 | 885 | 5 | 25 | 930 | 8.0 | IMD4 |
|  | n40 | 2395 | 5 | 25 | 2395 | N/A | N/A |
| DC\_1A-8A\_n77A | 1 | 1955 | 5 | 25 | 2145 | N/A | N/A |
|  | n77 | 3410 | 10 | 50 | 3410 | N/A | N/A |
|  | 8 | 910 | 5 | 25 | 955 | 3.3 | IMD5 |
| DC\_1A-8A\_n77A | 8 | 910 | 5 | 25 | 955 | N/A | N/A |
|  | n77 | 3960 | 10 | 50 | 3960 | N/A | N/A |
|  | 1 | 1950 | 5 | 25 | 2140 | 14.4 | IMD3 |
| DC\_1A\_n8A-n78A | 1 | 1945 | 5 | 25 | 2135 | N/A | N/A |
|  | n8 | 900 | 5 | 25 | 945 | N/A | N/A |
|  | n78 | 3745 | 10 | 50 | 3745 | 14.9 | IMD3 |
|  | 1 | 1940 | 5 | 25 | 2130 | N/A | N/A |
|  | n8 | 895 | 5 | 25 | 940 | 3.3 | IMD5 |
|  | n78 | 3380 | 10 | 50 | 3330 | N/A | N/A |
| DC\_1A-8A\_n79A | 1 | 1935 | 5 | 25 | 2125 | N/A | N/A |
|  | n79 | 4815 | 40 | 216 | 4815 | N/A | N/A |
|  | 8 | 900 | 5 | 25 | 945 | 15.8 | IMD3 |
| DC\_1A-8A\_n79A | 8 | 900 | 5 | 25 | 945 | N/A | N/A |
|  | n79 | 4845 | 40 | 216 | 4845 | N/A | N/A |
|  | 1 | 1955 | 5 | 25 | 2145 | 8.2 | IMD4 |
| DC\_1A-11A\_n3A | 1 | 1960 | 5 | 25 | 2150 | N/A | N/A |
|  | n3 | 1720 | 5 | 25 | 1815 | N/A | N/A |
|  | 11 | 1432 | 5 | 25 | 1480 | 15.2 | IMD3 |
| DC\_1A-11A\_n77A | 1 | 1955 | 5 | 25 | 2145 | N/A | N/A |
|  | n77 | 3441 | 10 | 50 | 3441 | N/A | N/A |
|  | 11 | 1438 | 5 | 25 | 1486 | 31.4 | IMD2 |
| DC\_1A-11A\_n77A | 11 | 1438 | 5 | 25 | 1486 | N/A | N/A |
|  | n77 | 3578 | 10 | 50 | 3578 | N/A | N/A |
|  | 1 | 1950 | 5 | 25 | 2140 | 30.8 | IMD2 |
| DC\_1A-11A\_n78A | 1 | 1955 | 5 | 25 | 2145 | N/A | N/A |
|  | n78 | 3441 | 10 | 50 | 3441 | N/A | N/A |
|  | 11 | 1438 | 5 | 25 | 1486 | 31.4 | IMD2 |
| DC\_1A-11A\_n78A | 11 | 1438 | 5 | 25 | 1486 | N/A | N/A |
|  | n78 | 3578 | 10 | 50 | 3578 | N/A | N/A |
|  | 1 | 1950 | 5 | 25 | 2140 | 30.8 | IMD2 |
| DC\_1A-18A\_n77A | 1 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 18 | N/A | N/A | N/A | N/A | N/A | IMD5 |
|  | n77 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 1 | 1930 | 5 | 25 | 2120 | 16.4 | IMD3 |
|  | 18 | 825 | 5 | 25 | 870 | N/A | N/A |
|  | n77 | 3770 | 10 | 50 | 3770 | N/A | N/A |
| DC\_1A-18A\_n78A | 1 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 18 | N/A | N/A | N/A | N/A | N/A | IMD5 |
|  | n78 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 1 | 1930 | 5 | 25 | 2120 | 16.4 | IMD3 |
|  | 18 | 819 | 5 | 25 | 864 | N/A | N/A |
|  | n78 | 3758 | 10 | 50 | 3758 | N/A | N/A |
| DC\_1A-18A\_n79A | 1 | 1935 | 5 | 25 | 2125 | N/A | N/A |
|  | 18 | 822.5 | 5 | 25 | 867.5 | 18.3 | IMD3 |
|  | n79 | 4737.5 | 40 | 216 | 4737.5 | N/A | N/A |
|  | 1 | 1930 | 5 | 25 | 2120 | N/A | N/A |
|  | 18 | 820 | 5 | 25 | 865 | 8.9 | IMD4 |
|  | n79 | 4925 | 40 | 216 | 4925 | N/A | N/A |
|  | 1 | 1935 | 5 | 25 | 2125 | 8.1 | IMD4 |
|  | 18 | 822.5 | 5 | 25 | 867.5 | N/A | N/A |
|  | n79 | 4592.5 | 40 | 216 | 4592.5 | N/A | N/A |
| DC\_1A-19A\_n77A  DC\_1A-19A\_n78A | 1 | 1940 | 5 | 25 | 2130 | 17.8 | IMD3 |
|  | 19 | 832.5 | 5 | 25 | 877.5 | N/A | N/A |
|  | n77, n78 | 3795 | 10 | 50 | 3795 | N/A | N/A |
|  | 1 | N/A | N/A | N/A | N/A | N/A | IMD5 |
|  | 19 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | n78 | N/A | N/A | N/A | N/A | N/A | IMD5 |
| DC\_1A-20A\_n8A | 1 | 1925 | 5 | 25 | 2115 | N/A | N/A |
|  | n8 | 910 | 5 | 25 | 955 | N/A | N/A |
|  | 20 | 846 | 5 | 25 | 805 | 11.5 | IMD4 |
| DC\_1A-20A\_n38A | 1 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 20 | N/A | N/A | N/A | N/A | N/A | IMD5 |
|  | n38 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_1A-28A\_n3A | 28 | 710.5 | 5 | 25 | 765.5 | N/A | N/A |
|  | n3 | 1780 | 5 | 25 | 1875 | N/A | N/A |
|  | 1 | 1949 | 5 | 25 | 2139 | 11.0 | IMD4 |
| DC\_1A-28A\_n7A  DC\_1A-1A-28A\_n7A  DC\_1A-28A\_n7B  DC\_1A-1A-28A\_n7B | 1 | 1935 | 5 | 25 | 2125 | N/A | N/A |
|  | 28 | 730 | 10 | 50 | 785 | 4.5 | IMD5 |
|  | n7 | 2510 | 10 | 50 | 2630 | N/A | N/A |
| DC\_1A-19A\_n79A | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | 19 | 837.5 | 5 | 25 | 882.5 | 18.3 | IMD3 |
|  | n79 | 4782.5 | 40 | 216 | 4782.5 | N/A | N/A |
|  | 1 | 1950 | 5 | 25 | 2140 | 8.1 | IMD4 |
|  | 19 | 837.5 | 5 | 25 | 882.5 | N/A | N/A |
|  | n79 | 4652.5 | 40 | 216 | 4652.5 | N/A | N/A |
| DC\_1A-20A\_n78A | 1 | 1930 | 5 | 25 | 2120 | 20.3 | IMD3 |
|  | 20 | 835 | 5 | 25 | 794 | N/A | N/A |
|  | n78 | 3790 | 10 | 50 | 3790 | N/A | N/A |
| DC\_1A-20A\_n78A | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | 20 | 851 | 5 | 25 | 810 | 3.0 | IMD5 |
|  | n78 | 3330 | 10 | 50 | 3330 | N/A | N/A |
| DC\_1A-21A\_n77A  DC\_1A-21A\_n78A | 1 | 1964.6 | 5 | 25 | 2154.6 | 30.6 | IMD2 |
|  | 21 | 1450.4 | 5 | 25 | 1498.4 | N/A | N/A |
|  | n77, n78 | 3605 | 10 | 50 | 3605 | N/A | N/A |
|  | 1 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 21 | N/A | N/A | N/A | N/A | N/A | IMD2 |
|  | n78 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | 21 | 1452 | 5 | 25 | 1500 | 2.9 | IMD5 |
|  | n77, n78 | 3675 | 10 | 50 | 3675 | N/A | N/A |
| DC\_1A-21A\_n79A | 1 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 21 | N/A | N/A | N/A | N/A | N/A | IMD4 |
|  | n79 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_1A\_n28A-n40A | 1 | 1930 | 5 | 25 | 2120 | N/A | N/A |
|  | n28 | 743 | 5 | 25 | 798 | N/A | N/A |
|  | n40 | 2374 | 5 | 25 | 2374 | 10.1 | IMD4 |
|  | 1 | 1930 | 5 | 25 | 2120 | N/A | N/A |
|  | n28 | 713 | 5 | 25 | 768 | 8.6 | IMD4 |
|  | n40 | 2314 | 5 | 25 | 2314 | N/A | N/A |
| DC\_1A-28A\_n40A | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | 28 | 725 | 5 | 25 | 780 | 8.9 | IMD4 |
|  | n40 | 2340 | 5 | 25 | 2340 | N/A | N/A |
| DC\_1A-28A\_n77A | 1 | 1960 | 5 | 25 | 2150 | 15.8 | IMD3 |
|  | 28 | 740 | 5 | 25 | 795 | N/A | N/A |
|  | n77 | 3630 | 10 | 50 | 3630 | N/A | N/A |
| DC\_1A-28A\_n77A | 1 | 1960 | 5 | 25 | 2150 | N/A | N/A |
|  | 28 | 725 | 5 | 25 | 780 | 4.3 | IMD5 |
|  | n77 | 3330 | 10 | 50 | 3330 | N/A | N/A |
| DC\_1A-28A\_n77A DC\_1A-28A\_n78A | 1 | 1960 | 5 | 25 | 2150 | 15.7 | IMD3 |
|  | 28 | 740 | 5 | 25 | 795 | N/A | N/A |
|  | n77/n78 | 3630 | 10 | 50 | 3630 | N/A | N/A |
| DC\_1A-28A\_n77A DC\_1A-28A\_n78A | 1 | 1970 | 5 | 25 | 2160 | N/A | N/A |
|  | 28 | 739 | 5 | 25 | 794 | 4.2 | IMD5 |
|  | n77/n78 | 3352 | 10 | 50 | 3352 | N/A | N/A |
| DC\_1A\_n28A-n78A | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | n28 | 733 | 5 | 25 | 788 | N/A | N/A |
|  | n78 | 3416 | 10 | 50 | 3416 | 15.7 | IMD3 |
|  | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | n78 | 3320 | 10 | 50 | 3320 | N/A | N/A |
|  | n28 | 735 | 5 | 25 | 790 | 3.3 | IMD5 |
| DC\_1A-28A\_n79A | 1 | 1930 | 5 | 25 | 2120 | N/A | N/A |
|  | 28 | 733 | 5 | 25 | 788 | 15.2 | IMD3 |
|  | n79 | 4648 | 40 | 216 | 4648 | N/A | N/A |
|  | 1 | 1925 | 5 | 25 | 2115 | N/A | N/A |
|  | 28 | 740 | 5 | 25 | 795 | 10.0 | IMD4 |
|  | n79 | 4980 | 40 | 216 | 4980 | N/A | N/A |
|  | 1 | 1977.5 | 5 | 25 | 2167.5 | 1.2 | IMD4 |
|  | 28 | 745.5 | 5 | 25 | 800.5 | N/A | N/A |
|  | n79 | 4420 | 40 | 216 | 4420 | N/A | N/A |
|  | 1 | 1935 | 5 | 25 | 2125 | 4.5 | IMD5 |
|  | 28 | 718 | 5 | 25 | 773 | N/A | N/A |
|  | n79 | 4807 | 40 | 216 | 4807 | N/A | N/A |
| DC\_1A-32A\_n78A  DC\_1A-32A\_n78(2A) | 1 | 1930 | 5 | 25 | 2120 | N/A | N/A |
|  | 32 | N/A | 5 | 25 | 1470 | 31.8 | IMD2 |
|  | n78 | 3400 | 10 | 50 | 3400 | N/A | N/A |
|  | 1 | 1930 | 5 | 25 | 2120 | N/A | N/A |
|  | 32 | N/A | 5 | 25 | 1470 | 0 | IMD5 |
|  | n78 | 3630 | 10 | 50 | 3630 | N/A | N/A |
| DC\_1A\_n40A-n78A  DC\_1A\_n40A-n78(2A) | 1 | 1930 | 5 | 25 | 2120 | N/A | N/A |
|  | n40 | 2340 | 5 | 25 | 2340 | N/A | N/A |
|  | n78 | 3450 | 10 | 50 | 3450 | 9.8 | IMD4 |
|  | 1 | 1960 | 5 | 25 | 2150 | N/A | N/A |
|  | n40 | 2360 | 5 | 25 | 2360 | 10.6 | IMD4 |
|  | n78 | 3520 | 10 | 50 | 3520 | N/A | N/A |
| DC\_1A-41A\_n3A  DC\_1A-41C\_n3A | 1 | 1977.5 | 5 | 25 | 2167.5 | N/A | N/A |
|  | n3 | 1712.5 | 5 | 25 | 1807.5 | N/A | N/A |
|  | 41 | 2507.5 | 5 | 25 | 2507.5 | 5.0 | IMD5 |
| DC\_1A-41A\_n28A | 1 | 1935 | 5 | 25 | 2125 | N/A | N/A |
|  | n28 | 718 | 5 | 25 | 773 | N/A | N/A |
|  | 41 | 2653 | 10 | 50 | 2653 | 30 | IMD2 |
| DC\_1A-41A\_n77A  DC\_1A-41C\_n77A  DC\_1A-41A\_n77(2A)  DC\_1A-41C\_n77(2A) | 1 | 1970 | 5 | 25 | 2160 | N/A | N/A |
|  | n77 | 3400 | 10 | 50 | 3400 | N/A |  |
|  | 41 | 2510 | 5 | 25 | 2510 | N/A | IMD4 |
|  | 1 | 1950 | 5 | 25 | 2140 | 9.3 | IMD4 |
|  | n77 | 3710 | 10 | 50 | 3710 | N/A | N/A |
|  | 41 | 2640 | 5 | 25 | 2640 | N/A | N/A |
|  | 1 | 1930 | 5 | 25 | 2120 | 11.0 | N/A |
|  | n77 | 4150 | 10 | 50 | 4150 | N/A |  |
|  | 41 | 2510 | 5 | 25 | 2510 | N/A | IMD5 |
| DC\_1A-41A\_n78A  DC\_1A-41C\_n78A  DC\_1A-41A\_n78(2A)  DC\_1A-41C\_n78(2A) | 1 | 1950 | 5 | 25 | 2140 | 9.3 | IMD4 |
|  | 41 | 2640 | 5 | 25 | 2640 | N/A | N/A |
|  | n78 | 3710 | 10 | 50 | 3710 | N/A | N/A |
|  | 1 | 1975 | 5 | 25 | 2165 | N/A | N/A |
|  | 41 | 2515 | 5 | 25 | 2515 | 12 | IMD4 |
|  | n78 | 3410 | 10 | 50 | 3410 | N/A | N/A |
| DC\_1A-41A\_n78A | 1 | 1955 | 5 | 25 | 2145 | 8.7 | IMD4 |
|  | 41 | 2507.5 | 10 | 50 | 2507.5 | N/A | N/A |
|  | n78 | 3580 | 10 | 50 | 3580 | N/A | N/A |
| DC\_1A\_n41A-n78A | 1 | 1975 | 5 | 25 | 2165 | N/A | N/A |
|  | n41 | 2515 | 10 | 50 | 2515 | 11.5 | IMD4 |
|  | n78 | 3410 | 10 | 50 | 3410 | N/A | N/A |
|  | 1 | 1970 | 5 | 25 | 2160 | N/A | N/A |
|  | n41 | 2650 | 10 | 25 | 2650 | N/A | N/A |
|  | n78 | 3330 | 10 | 50 | 3330 | 19.6 | IMD3 |
| DC\_1A-41A\_n79A | 1 | 1970 | 5 | 25 | 2160 | N/A | N/A |
|  | n79 | 4500 | 40 | 216 | 4500 | N/A |  |
|  | 41 | 2530 | 5 | 25 | 2530 | 29.4 | IMD2 |
| DC\_1A\_n75A-n78A  DC\_1A\_n75A-n78(2A) | 1 | 1930 | 5 | 25 | 2120 | N/A | N/A |
|  | n78 | 3400 | 10 | 50 | 3400 | N/A | N/A |
|  | n75 | - | - | - | 1470 | 30.4 | IMD2 |
| DC\_1A-42A\_n28A | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | n28 | 733 | 5 | 25 | 788 | N/A | N/A |
|  | 42 | 3416 | 5 | 25 | 3416 | 15.7 | IMD3 |
| DC\_1A-42A\_n28A | 42 | 3580 | 5 | 25 | 3580 | N/A | N/A |
|  | n28 | 723 | 5 | 25 | 778 | N/A | N/A |
|  | 1 | 1944 | 5 | 25 | 2134 | 15.7 | IMD3 |
| DC\_1A-42A\_n79A | 1 | 1977.5 | 5 | 25 | 2167.5 | N/A | N/A |
|  | n79 | 4420 | 40 | 216 | 4420 | N/A | N/A |
|  | 42 | 3490 | 5 | 25 | 3490 | 4.8 | IMD5 |
|  | 42 | 3402.5 | 5 | 25 | 3402.5 | N/A | N/A |
|  | n79 | 4640 | 40 | 216 | 4640 | N/A | N/A |
|  | 1 | 1975 | 5 | 25 | 2165 | 15.5 | IMD3 |
|  | 42 | 3450 | 5 | 25 | 3450 | N/A | N/A |
|  | n79 | 4520 | 40 | 216 | 4520 | N/A | N/A |
|  | 1 | 1950 | 5 | 25 | 2140 | 9.3 | IMD4 |
| DC\_1A\_SUL\_n77A-n80A | 1 | 1950 | 5 | 25 | 2140 | 23 | IMD3 |
|  | n80 | 1760 | 5 | 25 |  | N/A | N/A |
| DC\_1A\_SUL\_n77A-n80A | 1 | 1922.5 | 5 | 25 | 2112.5 | N/A | N/A |
|  | n80 | 1782.5 | 5 | 25 |  | N/A | N/A |
|  | n78 | 3425 | 10 | 50 | 3425 | 13.0 | IMD4 |
| DC\_1A\_n78A-n79A | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | n78 | 3410 | 10 | 50 | 3410 | N/A | N/A |
|  | n79 | 4870 | 40 | 216 | 4870 | 15.9 | IMD3 |
|  | 1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | n79 | 4670 | 40 | 216 | 4670 | N/A | N/A |
|  | n78 | 3490 | 10 | 50 | 3490 | 4.6 | IMD5 |
| DC\_1A\_SUL\_n78A-n80A | 1 | 1950 | 5 | 25 | 2140 | 23 | IMD3 |
|  | n80 | 1760 | 5 | 25 |  | N/A | N/A |
|  | 1 | 1922.5 | 5 | 25 | 2112.5 | N/A | N/A |
|  | n80 | 1782.5 | 5 | 25 |  | N/A | N/A |
|  | n78 | 3425 | 10 | 50 | 3425 | 13.0 | IMD4 |
| DC\_2A-4A\_n41A | 2 | 1860 | 5 | 25 | 1940 | 11.0 | IMD4 |
|  | 4 | 1715 | 5 | 25 | 2115 | N/A | N/A |
|  | n41 | 2685 | 10 | 50 | 2685 | N/A | N/A |
| DC\_2A-5A\_n71A | 2 | 1855 | 5 | 25 | 1935 | N/A | N/A |
|  | n71 | 686.5 | 5 | 25 | 640.5 | N/A | N/A |
|  | 5 | 846.5 | 5 | 25 | 891.5 | 4.2 | IMD5 |
| DC\_2A-7A\_n78A  DC\_2A-7C\_n78A  DC\_2A-7A-7A\_n78A  DC\_2A-7A\_n78(2A)  DC\_2A-7C\_n78(2A)  DC\_2A-7A-7A\_n78(2A) | 2 | 1870 | 5 | 25 | 1950 | 8.6 | IMD4 |
|  | 7 | 2550 | 5 | 25 | 2685 | N/A | N/A |
|  | n78 | 3525 | 10 | 50 | 3475 | N/A | N/A |
| DC\_2A\_n7A-n78A,  DC\_2A\_n7(2A)-n78A  DC\_2A\_n7A-n78(2A)  DC\_2A\_n7(2A)-n78(2A) | 2 | 1900 | 5 | 25 | 1980 | N/A | N/A |
|  | n7 | 2525 | 5 | 25 | 2645 | N/A | N/A |
|  | n78 | 3775 | 10 | 50 | 3775 | 4.2 | IMD5 |
| DC\_2A\_12A-n66A | 2 | N/A | N/A | N/A | N/A | N/A | IMD4 |
|  | 12 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | n66 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_2A-13A\_n66A  DC\_2A-2A-13A\_n66A | 2 | 1860 | 5 | 25 | 1940 | 6.2 | IMD4 |
|  | 13 | 780 | 10 | 50 | 749 | N/A | N/A |
|  | n66 | 1750 | 5 | 25 | 2150 | N/A | N/A |
| DC\_2A\_n38A-n78A | 2 | 1870 | 5 | 25 | 1950 | N/A | N/A |
|  | n38 | 2610 | 5 | 25 | 2610 | N/A | N/A |
|  | n78 | 3350 | 10 | 50 | 3350 | 14.8 | IMD3 |
| DC\_2A-14A\_n66A | 2 | 1874 | 5 | 25 | 1954 | 7.2 | IMD4 |
|  | 14 | 793 | 5 | 25 | 763 | N/A | N/A |
|  | 66 | 1770 | 5 | 25 | 2170 | N/A | N/A |
| DC\_2A\_n41A-n71A | 2 | 1900 | 5 | 25 | 1980 | N/A | N/A |
|  | n41 | 2530 | 10 | 50 | 2530 | N/A | N/A |
|  | n71 | 676 | 5 | 50 | 630 | 28.7 | IMD2 |
|  | 2 | 1900 | 5 | 25 | 1980 | N/A | N/A |
|  | n41 | 2586 | 10 | 50 | 2586 | 29.2 | IMD2 |
|  | n71 | 686 | 5 | 50 | 640 | N/A | N/A |
| DC\_2A-46A\_n66A5  DC\_2A-46C\_n66A5  DC\_2A-46D\_n66A5 | 2 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 46 | N/A | N/A | N/A | N/A | N/A | IMD3,  IMD5 |
|  | n66 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_2A-48A\_n66A | 2 | 1880 | 5 | 25 | 1960 | N/A | N/A |
|  | 48 | 3620 | 10 | 50 | 3620 | 29.4 | IMD2 |
|  | n66 | 1740 | 5 | 25 | 2140 | N/A | N/A |
|  | 2 | 1880 | 5 | 25 | 1960 | 28.3 | IMD2 |
|  | 48 | 3695 | 5 | 25 | 3695 | N/A | N/A |
|  | n66 | 1735 | 5 | 25 | 2135 | N/A | N/A |
| DC\_2A-66A\_n2A | 2 | 1900 | 5 | 25 | 1980 | 20 | IMD3 |
| 66 | 1730 | 5 | 25 | 2130 | N/A | N/A |
| n2 | 1855 | 5 | 25 | 1935 | N/A | N/A |
| DC\_2A-66A\_n5A | 2 | 1900 | 5 | 25 | 1980 | N/A | N/A |
|  | 66 | 1740 | 5 | 25 | 2140 | 7.2 | IMD4 |
|  | n5 | 830 | 5 | 25 | 875 | N/A | N/A |
| DC\_2A-66A\_n25A | 2 | 1855 | 5 | 25 | 1935 | 20 | IMD3 |
|  | 66 | 1775 | 5 | 25 | 2175 | N/A | N/A |
|  | n25 | 1855 | 5 | 25 | 1935 | 20 | IMD3 |
|  | 2 | 1883.3 | 5 | 25 | 1963.3 | N/A | N/A |
|  | 66 | 1750 | 5 | 25 | 2150 | 4 | IMD5 |
|  | n25 | 1883.3 | 5 | 25 | 1963.3 | N/A | N/A |
|  | 2 | 1883.3 | 5 | 25 | 1963.3 | N/A | N/A |
|  | 66 | 1712.5 | 5 | 25 | 2112.5 | 23 | IMD3 |
|  | n25 | 1912.5 | 5 | 25 | 1992.5 | N/A | N/A |
| DC\_2A-66A\_n41A  DC\_2A-66A\_n41C  DC\_2A-66A\_n41(2A) | 2 | 1860 | 5 | 25 | 1940 | 11.0 | IMD4 |
|  | 66 | 1715 | 5 | 25 | 2115 | N/A | N/A |
|  | n41 | 2685 | 5 | 25 | 2685 | N/A | N/A |
| DC\_2A-66A\_n48A  DC\_2A-66A\_n48B  DC\_2A-66A-66A\_n48A  DC\_2A-66A-66A\_n48B | 2 | 1905 | 5 | 25 | 1985 | N/A | N/A |
|  | 66 | 1755 | 5 | 25 | 2155 | 12.1 | IMD4 |
|  | n48 | 3560 | 5 | 25 | 3560 | N/A | N/A |
| DC\_2A-66A\_n48A  DC\_2A-66A\_n48B  DC\_2A-66A-66A\_n48A  DC\_2A-66A-66A\_n48B | 2 | 1880 | 5 | 25 | 1960 | 28.3 | IMD5 |
|  | 66 | 1735 | 5 | 25 | 2135 | N/A | N/A |
|  | n48 | 3695 | 5 | 25 | 3695 | N/A | N/A |
| DC\_2A-66A\_n78A  DC\_2A-66A\_n78(2A)  DC\_2A-66A-66A\_n78A  DC\_2A-66A-66A\_n78(2A)  DC\_2A\_n66A-n78A | 2 | 1880 | 5 | 25 | 1960 | N/A | N/A |
|  | 66/n66 | 1760 | 5 | 25 | 2160 | 10.3 | IMD4 |
|  | n78 | 3480 | 10 | 50 | 3480 | N/A | N/A |
| DC\_2A-66A\_n78A  DC\_2A-66A\_n78(2A)  DC\_2A-66A-66A\_n78A  DC\_2A-66A-66A\_n78(2A) | 2 | 1880 | 5 | 25 | 1960 | 32.1 | IMD2 |
|  | 66 | 1740 | 5 | 25 | 2140 | N/A | N/A |
|  | n78 | 3700 | 10 | 50 | 3700 | N/A | N/A |
| DC\_2A-66A\_n78A  DC\_2A-66A\_n78(2A)  DC\_2A-66A-66A\_n78A  DC\_2A-66A-66A\_n78(2A) | 2 | 1880 | 5 | 25 | 1960 | 9.1 | IMD4 |
|  | 66 | 1770 | 5 | 25 | 2170 | N/A | N/A |
|  | n78 | 3350 | 10 | 50 | 3350 | N/A | N/A |
| DC\_2A-66A\_n78A  DC\_2A-66A\_n78(2A)  DC\_2A-66A-66A\_n78A  DC\_2A-66A-66A\_n78(2A) | 2 | 1880 | 5 | 25 | 1960 | 2.1 | IMD5 |
|  | 66 | 1760 | 5 | 25 | 2160 | N/A | N/A |
|  | n78 | 3620 | 10 | 50 | 3620 | N/A | N/A |
| DC\_2A\_n66A-n78A | 2 | 1880 | 5 | 25 | 1960 | N/A | N/A |
|  | n66 | 1740 | 5 | 25 | 2140 | N/A | N/A |
|  | n78 | 3620 | 10 | 50 | 3620 | 29.4 | IMD2 |
|  | 2 | 1880 | 5 | 25 | 1960 | N/A | N/A |
|  | n66 | 1740 | 5 | 25 | 2140 | N/A | N/A |
|  | n78 | 3340 | 10 | 50 | 3340 | 8.9 | IMD4 |
| DC\_2A-71A\_n38A DC\_2A-2A-71A\_n38A | 2 | 1862 | 5 | 25 | 1942 | 26 | IMD2 |
|  | 71 | 668 | 5 | 25 | 622 | N/A | N/A |
|  | n38 | 2610 | 10 | 50 | 2610 | N/A | N/A |
| DC\_2A-71A\_n78A DC\_2A-2A-71A\_n78A | 2 | 1874 | 5 | 25 | 1954 | 16.5 | IMD3 |
|  | 71 | 693 | 5 | 25 | 647 | N/A | N/A |
|  | n78 | 3340 | 10 | 50 | 3340 | N/A | N/A |
| DC\_3A\_n1A-n28A  DC\_3C\_n1A-n28A | 3 | 1780 | 5 | 25 | 1875 | N/A | N/A |
|  | n28 | 710.5 | 5 | 25 | 765.5 | N/A | N/A |
|  | n1 | 1949 | 5 | 25 | 2139 | 11.0 | IMD4 |
| DC\_3A\_n1A-n40A | n1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | 3 | 1735 | 5 | 25 | 1830 | N/A | N/A |
|  | 40 | 2380 | 5 | 25 | 2380 | 8.0 | IMD5 |
| DC\_3A\_n1A-n77A | 3 | 1750 | 5 | 25 | 1845 | N/A | N/A |
|  | n1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | n77 | 3700 | 10 | 50 | 3700 | 28.4 | IMD2 |
|  | 3 | 1775 | 5 | 25 | 1870 | N/A | N/A |
|  | n1 | 1950 | 5 | 25 | 2140 | 31.0 | IMD2 |
|  | n77 | 3915 | 10 | 50 | 3915 | N/A | N/A |
| DC\_3A\_n1A-n78A  DC\_3C\_n1A-n78A | 3 | 1750 | 5 | 25 | 1845 | N/A | N/A |
|  | n1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | n78 | 3700 | 10 | 50 | 3700 | 28.4 | IMD2 |
|  | 3 | 1770 | 5 | 25 | 1865 | N/A | N/A |
|  | n1 | 1940 | 5 | 25 | 2130 | 3.5 | IMD5 |
|  | n78 | 3720 | 10 | 50 | 3720 | N/A | N/A |
| DC\_3A-5A\_n78A | 3 | N/A | N/A | N/A | N/A | N/A | IMD3 |
|  | 5 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | n78 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_3A-5A\_n79A | 3 | 1775 | 5 | 25 | 1870 | N/A | N/A |
|  | 5 | 840 | 5 | 25 | 885 | 18.5 | IMD3 |
|  | n79 | 4435 | 40 | 216 | 4435 | N/A | N/A |
|  | 3 | 1782.5 | 5 | 25 | 1877.5 | 0.2 | IMD4 |
|  | 5 | 842.5 | 5 | 25 | 887.5 | N/A | N/A |
|  | n79 | 4420 | 40 | 216 | 4420 | N/A | N/A |
| DC\_3A-7A\_n5A | 3 | 1780 | 10 | 50 | 1875 | N/A | N/A |
|  | 7 | 2505 | 10 | 50 | 2625 | 30.0 | IMD21 |
|  | n5 | 845 | 5 | 25 | 890 | N/A | N/A |
| DC\_3A-7A\_n8A | 3 | 1780 | 5 | 25 | 1875 | N/A | N/A |
|  | n8 | 890 | 5 | 25 | 935 | N/A | N/A |
|  | 7 | 2550 | 10 | 50 | 2670 | 29.0 | IMD2  IMD33 |
| DC\_3A-7A\_n28A  DC\_3A-7C\_n28A  DC\_3C-7A\_n28A  DC\_3C-7C\_n28A | 3 | 1712.5 | 5 | 25 | 1807.5 | N/A | N/A |
|  | n28 | 743 | 5 | 25 | 798 | N/A | N/A |
|  | 7 | 2562 | 10 | 50 | 2682 | 16.9 | IMD3 |
|  | 7 | 2543 | 10 | 50 | 2663 | N/A | N/A |
|  | n28 | 710.5 | 5 | 25 | 765.5 | N/A | N/A |
|  | 3 | 1737.5 | 5 | 25 | 1832.5 | 26.0 | IMD2 |
| DC\_3A-18A\_n77A  DC\_3A-18A\_n78A | 3 | N/A | N/A | N/A | N/A | N/A | IMD3 |
|  | 18 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | n77, n78 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_3A-19A\_n78A | 3 | N/A | N/A | N/A | N/A | N/A | IMD3 |
|  | 19 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | n78 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_3A\_n7A-n28A | 3 | 1747 | 5 | 25 | 1842 | N/A | N/A |
| DC\_3C\_n7A-n28A | n7 | 2543 | 5 | 25 | 2663 | N/A | N/A |
|  | n28 | 741 | 5 | 25 | 796.0 | 20.0 | IMD2 |
|  | 3 | 1712.5 | 5 | 25 | 1807.5 | N/A | N/A |
|  | n7 | 2562 | 5 | 25 | 2682 | 17.0 | IMD3 |
|  | n28 | 743 | 5 | 25 | 798 | N/A | N/A |
| DC\_3A-7A\_n40A | 3 | 1771.6 | 5 | 25 | 1866.6 | 3.4 | IMD5 |
|  | 7 | 2530 | 5 | 25 | 2650 | N/A | N/A |
|  | n40 | 2310 | 5 | 25 | 2310 | N/A | N/A |
| DC\_3A-7A\_n77A | 3 | 1725 | 5 | 25 | 1820 | 17.6 | IMD3 |
|  | 7 | 2565 | 5 | 25 | 2685 | N/A | N/A |
|  | n77 | 3310 | 10 | 50 | 3310 | N/A | N/A |
| DC\_3A-7A\_n77A | 3 | 1725 | 5 | 25 | 1820 | 8.6 | IMD4 |
|  | 7 | 2565 | 5 | 25 | 2685 | N/A | N/A |
|  | n77 | 3475 | 10 | 50 | 3475 | N/A | N/A |
| DC\_3A-7A\_n77A | 3 | 1715 | 5 | 25 | 1810 | N/A | N/A |
|  | 7 | 2550 | 5 | 25 | 2670 | 5.2 | IMD5 |
|  | n77 | 4190 | 10 | 50 | 4190 | N/A | N/A |
| DC\_3A-7A\_n77A | 3 | 1720 | 5 | 25 | 1815 | N/A | N/A |
|  | 7 | 2520 | 5 | 25 | 2640 | 3.4 | IMD5 |
|  | n77 | 3900 | 10 | 50 | 3900 | N/A | N/A |
| DC\_3A-7A\_n78A  DC\_3C-7A\_n78A DC\_3C-7C\_n78A  DC\_3A-3A-7A\_n78A  DC\_3A-3A-7A-7A\_n78A  DC\_3A-7A\_SUL\_n78A-n80A  DC\_3C-7A\_SUL\_n78A-n80A  DC\_3A-7A\_n78(2A)  DC\_3C-7A\_n78(2A)  DC\_3A-7C\_n78(2A)  DC\_3C-7C\_n78(2A) | 3 | 1725 | 5 | 25 | 1820 | 17.6 | IMD3 |
|  | 7 | 2565 | 5 | 25 | 2685 | N/A | N/A |
|  | n78 | 3310 | 10 | 50 | 3310 | N/A | N/A |
|  | 3 | 1725 | 5 | 25 | 1820 | 8.6 | IMD4 |
|  | 7 | 2565 | 5 | 25 | 2685 | N/A | N/A |
|  | n78 | 3475 | 10 | 50 | 3475 | N/A | N/A |
| DC\_3A-8A\_n77A | 3 | 1715 | 5 | 25 | 1810 | N/A | N/A |
|  | n77 | 4190 | 10 | 50 | 4190 | N/A | N/A |
|  | 8 | 910 | 5 | 25 | 955 | 9.7 | IMD4 |
| DC\_3A-8A\_n77A | 8 | 910 | 5 | 25 | 955 | N/A | N/A |
|  | n77 | 3640 | 10 | 50 | 3640 | N/A | N/A |
|  | 3 | 1725 | 5 | 25 | 1820 | 16.5 | IMD3 |
| DC\_3A-8A\_n78A  DC\_3A-3A-8A\_n78A | 8 | 910 | 5 | 25 | 955 | N/A | N/A |
|  | n78 | 3640 | 10 | 50 | 3640 | N/A | N/A |
|  | 3 | 1725 | 5 | 25 | 1820 | 16.5 | IMD3 |
| DC\_3A\_n8A-n78A | 3 | 1740 | 5 | 25 | 1835 | N/A | N/A |
|  | n8 | 900 | 5 | 25 | 945 | N/A | N/A |
|  | n78 | 3540 | 10 | 50 | 3540 | 16.3 | IMD3 |
| DC\_3A-8A\_n79A | 3 | 1755 | 5 | 25 | 1850 | N/A | N/A |
|  | n79 | 4465 | 40 | 216 | 4465 | N/A | N/A |
|  | 8 | 910 | 5 | 25 | 955 | 15.3 | IMD3 |
| DC\_3A-8A\_n79A | 8 | 910 | 5 | 25 | 955 | N/A | N/A |
|  | n79 | 4580 | 40 | 216 | 4580 | N/A | N/A |
|  | 3 | 1755 | 5 | 25 | 1850 | 8.8 | IMD4 |
| DC\_3A\_n7A-n78A  DC\_3A\_n7B-n78A  DC\_3C\_n7A-n78A  DC\_3C\_n7B-n78A | 3 | 1730 | 5 | 25 | 1825 | N/A | N/A |
| DC\_3A\_n7A-n78(2A) | n7 | 2560 | 5 | 25 | 2680 | N/A | N/A |
| DC\_3C\_n7A-n78(2A) | n78 | 3390 | 10 | 50 | 3390 | 16.1 | IMD3 |
| DC\_3A-19A\_n79A | 3 | 1775 | 5 | 25 | 1870 | N/A | N/A |
|  | 19 | 840 | 5 | 25 | 885 | 18.5 | IMD3 |
|  | n79 | 4435 | 40 | 216 | 4435 | N/A | N/A |
|  | 3 | 1782.5 | 5 | 25 | 1877.5 | 0.2 | IMD4 |
|  | 19 | 842.5 | 5 | 25 | 887.5 | N/A | N/A |
|  | n79 | 4420 | 40 | 216 | 4420 | N/A | N/A |
| DC\_3A-20A\_n7A  DC\_3C-20A\_n7A | 3 | 1737 | 5 | 25 | 1832 | N/A | N/A |
|  | 20 | 847 | 10 | 20 | 806 | 10.5 | IMD2 |
|  | n7 | 2543 | 10 | 50 | 2663 | N/A | N/A |
| DC\_3A-20A\_n8A | 3 | 1720 | 5 | 25 | 1815 | N/A | N/A |
|  | n8 | 910 | 5 | 25 | 955 | N/A | N/A |
|  | 20 | 851 | 5 | 25 | 810 | 27 | IMD2 |
| DC\_3A-20A\_n8A | 3 | 1765 | 5 | 25 | 1860 | 14.5 | IMD4 |
|  | n8 | 900 | 5 | 25 | 945 | N/A | N/A |
|  | 20 | 840 | 5 | 25 | 799 | N/A | N/A |
| DC\_3A-20A\_n28A  DC\_3C-20A\_n28A | 20 | 852 | 5 | 25 | 811 | N/A | N/A |
|  | n28 | 728 | 5 | 25 | 783 | N/A | N/A |
|  | 3 | 1733 | 5 | 25 | 1828 | 9.4 | IMD4 |
| DC\_3A-20A\_n38A | 3 | 1779 | 5 | 25 | 1874 | N/A | N/A |
|  | 20 | 852 | 10 | 20 | 811 | 26.0 | IMD21 |
|  | n38 | 2590 | 10 | 50 | 2590 | N/A | N/A |
| DC\_3A-20A\_n41A  DC\_3C-20A\_n41A | 3 | 1744 | 5 | 25 | 1839 | 26.0 | IMD2 |
|  | n41 | 2680 | 10 | 50 | 2680 | N/A | N/A |
|  | 20 | 841 | 10 | 50 | 800 | N/A | N/A |
| DC\_3A-20A\_n41A  DC\_3C-20A\_n41A | 3 | 1779 | 5 | 25 | 1874 | N/A | N/A |
|  | n41 | 2590 | 10 | 50 | 2590 | N/A | N/A |
|  | 20 | 852 | 10 | 50 | 811 | 26.0 | IMD2 |
| DC\_3A-20A\_n41A  DC\_3C-20A\_n41A | 3 | 1730 | 5 | 25 | 1825 | N/A | N/A |
|  | n41 | 2660 | 10 | 50 | 2660 | N/A | N/A |
|  | 20 | 841 | 5 | 25 | 800 | 12.5 | IMD3 |
| DC\_3A\_20A\_SUL\_n78A-n80A  DC\_3C\_20A\_SUL\_n78A-n80A | 3 | 1725 | 5 | 25 | 1820 | 17.3 | IMD3 |
|  | 20 | 845 | 5 | 25 | 804 | N/A | N/A |
|  | n78 | 3510 | 10 | 50 | 3510 | N/A | N/A |
| DC\_3A\_n20A-n78A | 3 | 1730 | 5 | 25 | 1825 | N/A | N/A |
|  | n20 | 845 | 5 | 25 | 804 | N/A | N/A |
|  | n78 | 3420 | 10 | 50 | 3420 | 16.1 | IMD3 |
| DC\_3A-20A\_n78A  DC\_3C-20A\_n78A | 3 | 1725 | 5 | 25 | 1820 | 17.3 | IMD3 |
|  | 20 | 845 | 5 | 25 | 804 | N/A | N/A |
|  | n78 | 3510 | 10 | 50 | 3510 | N/A | N/A |
| DC\_3A-21A\_n77A  DC\_3A-21A\_n78A | 3 | 1767.5 | 5 | 25 | 1862.5 | N/A | N/A |
|  | 21 | 1459.5 | 5 | 25 | 1507.5 | 8.8 | IMD4 |
|  | n77, n78 | 3795 | 10 | 50 | 3795 | N/A | N/A |
|  | 3 | N/A | N/A | N/A | N/A | N/A | IMD2 |
|  | 21 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | n78 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_3A-21A\_n77A | 3 | 1771.6 | 5 | 25 | 1866.6 | 3.4 | IMD5 |
|  | 21 | 1450.4 | 5 | 25 | 1498.4 | N/A | N/A |
|  | n77 | 3935 | 10 | 50 | 3935 | N/A | N/A |
| DC\_3A-21A\_n79A | 3 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 21 | N/A | N/A | N/A | N/A | N/A | IMD3 |
|  | n79 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 3 | 1774.2 | 5 | 25 | 1869.2 | 17.8 | IMD3 |
|  | 21 | 1450.4 | 5 | 25 | 1498.4 | N/A | N/A |
|  | n79 | 4770 | 40 | 216 | 4770 | N/A | N/A |
| DC\_3A-28A\_n5A  DC\_3C-28A\_n5A | 3 | 1735 | 5 | 25 | 1830 | 8.7 | IMD4 |
|  | 28 | 705 | 5 | 25 | 798 | N/A | N/A |
|  | n5 | 845 | 5 | 25 | 874 | N/A | N/A |
|  | 3 | 1750 | 5 | 25 | 1845 | N/A | N/A |
|  | 28 | 730 | 5 | 25 | 785 | 9.4 | IMD4 |
|  | n5 | 845 | 5 | 25 | 874 | N/A | N/A |
| DC\_3A-28A\_n7A  DC\_3C-28A\_n7A  DC\_3A-3A-28A\_n7A  DC\_3A-28A\_n7B  DC\_3C-28A\_n7B  DC\_3A-3A-28A\_n7B | 3 | 1737.5 | 5 | 25 | 1832.5 | 26.0 | IMD2 |
|  | 28 | 710.5 | 5 | 25 | 765.5 | N/A | N/A |
|  | n7 | 2543 | 10 | 50 | 2663 | N/A | N/A |
|  | 3 | 1747 | 5 | 25 | 1842 | N/A | N/A |
|  | 28 | 741 | 5 | 25 | 796.0 | 20.0 | IMD2 |
|  | n7 | 2543 | 5 | 25 | 2663 | N/A | N/A |
| DC\_3A-28A\_n77A | 3 | 1712.5 | 5 | 25 | 1807.5 | N/A | N/A |
|  | 28 | 715 | 5 | 25 | 770 | 15.3 | IMD3 |
|  | n77 | 4195 | 10 | 50 | 4195 | N/A | N/A |
|  | 3 | 1755 | 5 | 25 | 1850 | 17.0 | IMD3 |
|  | 28 | 735 | 5 | 25 | 790 | N/A | N/A |
|  | n77 | 3320 | 10 | 50 | 3320 | N/A | N/A |
| DC\_3A\_n28A-n77A | 3 | 1720 | 5 | 25 | 1815 | N/A | N/A |
|  | 28 | 733 | 5 | 25 | 788 | N/A | N/A |
|  | n77 | 4173 | 10 | 50 | 4173 | 15.9 | IMD3 |
|  | 3 | 1712.5 | 5 | 25 | 1807.5 | N/A | N/A |
|  | 28 | 715 | 5 | 25 | 770 | 15.3 | IMD3 |
|  | n77 | 4195 | 10 | 50 | 4195 | N/A | N/A |
| DC\_3A-28A\_n41A | 3 | 1720 | 5 | 25 | 1815 | N/A | N/A |
|  | n41 | 2510 | 5 | 25 | 2510 | N/A | N/A |
|  | 28 | 735 | 5 | 25 | 790 | 26.0 | IMD21 |
|  | 3 | 1737.5 | 5 | 25 | 1832.5 | 26.0 | IMD2 |
|  | n41 | 2543 | 10 | 50 | 2543 | N/A | N/A |
|  | 28 | 710.5 | 5 | 25 | 765.5 | N/A | N/A |
| DC\_3A-28A\_n78A  DC\_3C-28A\_n78A  DC\_3A-3A-28A\_n78A | 3 | 1775 | 5 | 25 | 1870 | 17.3 | IMD3 |
|  | 28 | 740 | 5 | 25 | 760 | N/A | N/A |
|  | n78 | 3350 | 10 | 25 | 3350 | N/A | N/A |
| DC\_3A-28A\_n79A | 3 | 1770 | 5 | 25 | 1865 | N/A | N/A |
|  | 28 | 725 | 5 | 25 | 780 | 10.3 | IMD4 |
|  | n79 | 4530 | 40 | 216 | 4530 | N/A | N/A |
|  | 3 | 1775 | 5 | 25 | 1870 | 5.7 | IMD5 |
|  | 28 | 725 | 5 | 25 | 780 | N/A | N/A |
|  | n79 | 4770 | 40 | 216 | 4770 | N/A | N/A |
| DC\_3A\_n28A-n78A  DC\_3C\_n28A-n78A | 3 | 1750 | 5 | 25 | 1845 | N/A | N/A |
|  | n28 | 743 | 5 | 25 | 798 | N/A | N/A |
|  | n78 | 3764 | 10 | 50 | 3764 | 4.5 | IMD5 |
| DC\_3A\_SUL\_n77A-n84A | 3 | 1782.5 | 5 | 25 | 1877.5 | N/A | N/A |
|  | n84 | 1922.5 | 5 | 25 |  | N/A | N/A |
|  | n77 | 3425 | 10 | 50 | 3425 | 13.0 | IMD4 |
| DC\_3A\_n40A-n78A | 3 | 1730 | 5 | 25 | 1825 | N/A | N/A |
|  | n40 | 2360 | 5 | 25 | 2360 | N/A | N/A |
|  | n78 | 3620 | 10 | 50 | 3620 | 4.8 | IMD5 |
|  | 3 | 1720 | 5 | 25 | 1815 | N/A | N/A |
|  | n40 | 2360 | 5 | 25 | 2360 | 4.4 | IMD5 |
|  | n78 | 3760 | 10 | 50 | 3760 | N/A | N/A |
| DC\_3A\_n40A-n79A | 3 | 1720 | 5 | 25 | 1815 | N/A | N/A |
|  | n40 | 2330 | 5 | 25 | 2330 | N/A | N/A |
|  | n79 | 4550 | 40 | 216 | 4550 | 4.7 | IMD5 |
|  | 3 | 1720 | 5 | 25 | 1815 | N/A | N/A |
|  | n40 | 2330 | 5 | 25 | 2330 | 3.2 | IMD5 |
|  | n79 | 4550 | 40 | 216 | 4550 | N/A | N/A |
| DC\_3A\_n41A-n79A | 3 | 1770 | 5 | 25 | 1865 | N/A | N/A |
|  | n41 | 2670 | 10 | 50 | 2670 | N/A | N/A |
|  | n79 | 4440 | 40 | 216 | 4440 | 30.8 | IMD24 |
| DC\_3A\_n75A-n78A  DC\_3A\_n75A-n78(2A) | 3 | 1782.5 | 5 | 25 | 1877.5 | N/A | N/A |
|  | n78 | 3305 | 10 | 50 | 3305 | N/A | N/A |
|  | n75 | - | - | - | 1514.5 | 10.0 | IMD2 |
| DC\_3A\_n78A-n79A | 3 | 1770 | 5 | 25 | 1865 | N/A | N/A |
|  | n78 | 3340 | 10 | 50 | 3340 | N/A | N/A |
|  | n79 | 4910 | 40 | 216 | 4910 | 16.3 | IMD3 |
|  | 3 | 1770 | 5 | 25 | 1865 | N/A | N/A |
|  | n79 | 4510 | 40 | 216 | 4510 | N/A | N/A |
|  | n78 | 3710 | 10 | 50 | 3710 | 4.2 | IMD5 |
| DC\_3A\_SUL\_n78A-n82A | 3 | 1775 | 5 | 25 | 1870 | 4 | IMD4 |
|  | n82 | 840 | 5 | 25 |  | N/A | N/A |
| DC\_3A\_SUL\_n78A-n84A | 3 | 1782.5 | 5 | 25 | 1877.5 | N/A | N/A |
|  | n84 | 1922.5 | 5 | 25 |  | N/A | N/A |
|  | n78 | 3425 | 10 | 50 | 3425 | 13.0 | IMD4 |
| DC\_3A-21A\_n79A | 3 | 1774.2 | 5 | 25 | 1869.2 | 17.8 | IMD3 |
|  | 21 | 1450.4 | 5 | 25 | 1498.4 | N/A | N/A |
|  | n79 | 4770 | 40 | 216 | 4770 | N/A | N/A |
| DC\_3A-32A\_n78A  DC\_3A-32A\_n78(2A) | 3 | 1730 | 5 | 25 | 1825 | N/A | N/A |
|  | 32 | N/A | 5 | 25 | 1470 | 4.9 | IMD4 |
|  | n78 | 3720 | 10 | 50 | 3720 | N/A | N/A |
|  | 3 | 1775 | 5 | 25 | 1870 | N/A | N/A |
|  | 32 | N/A | 5 | 25 | 1475 | 0 | IMD5 |
|  | n78 | 3400 | 10 | 50 | 3400 | N/A | N/A |
| DC\_3A-40A\_n1A | n1 | 1950 | 5 | 25 | 2140 | N/A | N/A |
|  | 3 | 1735 | 5 | 25 | 1830 | N/A | N/A |
|  | 40 | 2380 | 5 | 25 | 2380 | 8.0 | IMD5 |
| DC\_3A-41A\_n28A  DC\_3A-41C\_n28A | 41 | 2543 | 10 | 50 | 2543 | N/A | N/A |
|  | n28 | 710.5 | 5 | 25 | 765.5 | N/A | N/A |
|  | 3 | 1737.5 | 5 | 25 | 1832.5 | 26 | IMD2 |
|  | 3 | 1780 | 5 | 25 | 1875 | N/A | N/A |
|  | n28 | 738 | 5 | 25 | 793 | N/A | N/A |
|  | 41 | 2518 | 5 | 25 | 2518 | 27.4 | IMD2 |
|  | 3 | 1715 | 5 | 25 | 1810 | N/A | N/A |
|  | n28 | 743 | 5 | 25 | 798 | N/A | N/A |
|  | 41 | 2687 | 5 | 25 | 2687 | 15.9 | IMD3 |
| DC\_3A-41A\_n77A  DC\_3A-41C\_n77A  DC\_3A-41A\_n77(2A)  DC\_3A-41C\_n77(2A) | 3 | 1720 | 5 | 25 | 1815 | N/A | N/A |
|  | n77 | 3900 | 10 | 50 | 3900 | N/A | N/A |
|  | 41 | 2640 | 5 | 25 | 2640 | 5.3 | IMD5 |
|  | 41 | 2620 | 5 | 25 | 2620 | N/A | N/A |
|  | n77 | 3400 | 10 | 50 | 3400 | N/A | N/A |
|  | 3 | 1745 | 5 | 25 | 1840 | 16.4 | IMD3 |
| DC\_3A-41A\_n78A  DC\_3A-41C\_n78A  DC\_3A-41A\_n78(2A)  DC\_3A-41C\_n78(2A) | 41 | 2620 | 5 | 25 | 2620 | N/A | N/A |
|  | n78 | 3400 | 10 | 50 | 3400 | N/A | N/A |
|  | 3 | 1745 | 5 | 25 | 1840 | 16.4 | IMD3 |
| DC\_3A\_n41A-n78A | 3 | 1730 | 5 | 25 | 1825 | N/A | N/A |
|  | n41 | 2560 | 10 | 50 | 2560 | N/A | N/A |
|  | n78 | 3390 | 10 | 50 | 3390 | 16.4 | IMD3 |
| DC\_3A-41A\_n79A | 3 | 1770 | 5 | 25 | 1865 | N/A | N/A |
|  | n79 | 4440 | 40 | 216 | 4440 | N/A | N/A |
|  | 41 | 2670 | 5 | 25 | 2670 | 30.2 | IMD2 |
|  | 41 | 2570 | 5 | 25 | 2570 | N/A | N/A |
|  | n79 | 4420 | 40 | 216 | 4420 | N/A | N/A |
|  | 3 | 1755 | 5 | 25 | 1850 | 29.4 | IMD2 |
| DC\_5A-7A\_n71A | 5 | 835 | 5 | 25 | 880 | N/A | N/A |
|  | 7 | 2540 | 5 | 25 | 2660 | 6.5 | IMD5 |
|  | n71 | 680 | 5 | 25 | 634 | N/A | N/A |
| DC\_5A-7A\_n78A | 5 | 844 | 5 | 25 | 889 | N/A | N/A |
|  | 7 | 2525 | 5 | 25 | 2645 | 30.1 | IMD2 |
|  | n78 | 3489 | 10 | 50 | 3489 | N/A | N/A |
|  | 5 | 834 | 5 | 25 | 879 | 30.2 | IMD2 |
|  | 7 | 2550 | 5 | 25 | 2670 | N/A | N/A |
|  | n78 | 3429 | 10 | 50 | 3429 | N/A | N/A |
|  | 5 | 830 | 5 | 25 | 875 | 3.3 | IMD5 |
|  | 7 | 2525 | 5 | 25 | 2645 | N/A | N/A |
|  | n78 | 3350 | 10 | 50 | 3350 | N/A | N/A |
| DC\_5A\_n7A-n78A,  DC\_5A\_n7(2A)-n78A  DC\_5A\_n7A-n78(2A)  DC\_5A\_n7(2A)-n78(2A) | 5 | 844 | 5 | 25 | 889 | N/A | N/A |
|  | n7 | 2525 | 5 | 25 | 2645 | 30.1 | IMD2 |
|  | n78 | 3489 | 10 | 50 | 3489 | N/A | N/A |
|  | 5 | 835 | 5 | 25 | 880 | N/A | N/A |
|  | n7 | 2540 | 5 | 25 | 2660 | N/A | N/A |
|  | n78 | 3375 | 10 | 50 | 3375 | 29.7 | IMD2 |
| DC\_5A\_41A\_n78A | 5 | 860 | 5 | 25 | 885 | 30.2 | IMD2 |
|  | 41 | 2615 | 5 | 25 | 2615 | N/A | N/A |
|  | n78 | 3500 | 10 | 50 | 3500 | N/A | N/A |
|  | 5 | 856.5 | 5 | 25 | 881.5 | 3.1 | IMD5 |
|  | 41 | 2620.5 | 5 | 25 | 2620.5 | N/A | N/A |
|  | n78 | 3490 | 10 | 50 | 3490 | N/A | N/A |
| DC\_5A-41A\_n79A | 5 | 835 | 5 | 25 | 880 | 23.9 | IMD3 |
|  | 41 | 2665 | 5 | 25 | 2665 | N/A | N/A |
|  | n79 | 4450 | 40 | 216 | 4450 | N/A | N/A |
|  | 5 | 826.5 | 5 | 25 | 871.5 | N/A | N/A |
|  | 41 | 2517.5 | 5 | 25 | 2517.5 | 1.8 | IMD4 |
|  | n79 | 4980 | 40 | 216 | 4980 | N/A | N/A |
| DC\_5A-66A\_n2A  DC\_5BA-66A\_n2A  DC\_5A-5A-66A\_n2A  DC\_5A-66A-66A\_n2A  DC\_5B-66A-66A\_n2A  DC\_5A-5A-66A-66A\_n2A | 5 | 834 | 5 | 25 | 879 | N/A | N/A |
|  | 66 | 1712 | 5 | 25 | 2132 | 7.2 | IMD4 |
|  | n2 | 1900 | 5 | 25 | 1980 | N/A | N/A |
| DC\_5A-66A\_n71A | 5 | 830 | 5 | 25 | 875 | N/A | N/A |
|  | 66 | 1761 | 5 | 25 | 2161 | 13 | IMD3 |
|  | n71 | 665.5 | 5 | 25 | 619.5 | N/A | N/A |
|  | 5 | 846.5 | 5 | 25 | 891.5 | 4.2 | IMD5 |
|  | 66 | 1770 | 5 | 25 | 2170 | N/A | N/A |
|  | n71 | 665.5 | 5 | 25 | 619.5 | N/A | N/A |
| DC\_5A-66A\_n78A  DC\_5A-66A\_n78(2A) | 5 | 826.5 | 5 | 25 | 871.5 | N/A | N/A |
|  | 66 | 1742 | 5 | 25 | 2142 | 13.2 | IMD3 |
|  | n78 | 3795 | 10 | 50 | 3795 | N/A | N/A |
| DC\_7A\_n1A-n40A | 7 | 2540 | 5 | 25 | 2660 | N/A | N/A |
|  | n40 | 2335 | 5 | 25 | 2335 | N/A | N/A |
|  | n1 | 1940 | 5 | 25 | 2130 | 15.2 | IMD3 |
| DC\_7A\_n1A-n78A  DC\_7C\_n1A-n78A | 7 | 2520 | 5 | 25 | 2640 | N/A | N/A |
|  | n1 | 1970 | 5 | 25 | 2160 | N/A | N/A |
|  | n78 | 3390 | 10 | 50 | 3390 | 10.1 | IMD4 |
|  | 7 | 2530 | 5 | 25 | 2650 | N/A | N/A |
|  | n1 | 1970 | 5 | 25 | 2160 | 9.0 | IMD4 |
|  | n78 | 3610 | 10 | 50 | 3610 | N/A | N/A |
| DC\_7A\_n3A-n78A | 7 | 2560 | 5 | 25 | 2680 | N/A | N/A |
|  | n3 | 1730 | 5 | 25 | 1825 | N/A | N/A |
|  | n78 | 3390 | 10 | 50 | 3390 | 16.1 | IMD3 |
|  | 7 | 2565 | 5 | 25 | 2685 | N/A | N/A |
|  | n3 | 1725 | 5 | 25 | 1820 | 15.6 | IMD3 |
|  | n78 | 3310 | 10 | 50 | 3310 | N/A | N/A |
| DC\_7A\_n8A-n40A | 7 | 2530 | 5 | 25 | 2650 | N/A | N/A |
|  | n8 | 905 | 5 | 25 | 950 | N/A | N/A |
|  | n40 | 2345 | 5 | 25 | 2345 | 3.0 | IMD5 |
| DC\_7A-8A\_n3A | n3 | 1735 | 5 | 25 | 1830 | N/A | N/A |
|  | 7 | 2530 | 10 | 50 | 2650 | N/A | N/A |
|  | 8 | 895 | 5 | 25 | 940 | 18.0 | IMD3 |
| DC\_7A-8A\_n3A | n3 | 1780 | 5 | 25 | 1875 | N/A | N/A |
|  | 8 | 890 | 5 | 25 | 935 | N/A | N/A |
|  | 7 | 2550 | 10 | 50 | 2670 | 29.0 | IMD2+IMD33 |
| DC\_7A-8A\_n77A | 7 | 2530 | 5 | 25 | 2650 | N/A | N/A |
|  | 8 | 895 | 5 | 25 | 940 | 30.5 | IMD2 |
|  | n77 | 3470 | 10 | 50 | 3470 | N/A | N/A |
| DC\_7A-8A\_n77A | 7 | 2520 | 5 | 25 | 2640 | N/A | N/A |
|  | 8 | 895 | 5 | 25 | 940 | 3.1 | IMD5 |
|  | n77 | 3310 | 10 | 50 | 3310 | N/A | N/A |
| DC\_7A-8A\_n77A | 7 | 2530 | 5 | 25 | 2650 | 28 | IMD2 |
|  | 8 | 895 | 5 | 25 | 940 | N/A | N/A |
|  | n77 | 3545 | 10 | 50 | 3545 | N/A | N/A |
| DC\_7A-8A\_n78A | 7 | 2530 | 5 | 25 | 2650 | N/A | N/A |
|  | 8 | 895 | 5 | 25 | 940 | 30.5 | IMD2 |
|  | n78 | 3470 | 10 | 50 | 3470 | N/A | N/A |
| DC\_7A-8A\_n78A | 7 | 2520 | 5 | 25 | 2640 | N/A | N/A |
|  | 8 | 895 | 5 | 25 | 940 | 3.1 | IMD5 |
|  | n78 | 3310 | 10 | 50 | 3310 | N/A | N/A |
| DC\_7A-8A\_n78A | 7 | 2530 | 5 | 25 | 2650 | 28 | IMD2 |
|  | 8 | 895 | 5 | 25 | 940 | N/A | N/A |
|  | n78 | 3545 | 10 | 50 | 3545 | N/A | N/A |
| DC\_7A\_n8A-n78A | 7 | 2555 | 5 | 25 | 2675 | N/A | N/A |
|  | n8 | 900 | 5 | 25 | 945 | N/A | N/A |
|  | n78 | 3455 | 10 | 50 | 3455 | 28.5 | IMD2 |
|  | 7 | 2555 | 5 | 25 | 2675 | N/A | N/A |
|  | n8 | 900 | 5 | 25 | 945 | 29.7 | IMD2 |
|  | n78 | 3500 | 10 | 50 | 3500 | N/A | N/A |
| DC\_7A-13A\_n66A | 7 | 2520 | 5 | 25 | 2640 | N/A | N/A |
|  | 13 | 781 | 5 | 25 | 750 | 31 | IMD2 |
|  | n66 | 1770 | 5 | 25 | 2170 | N/A | N/A |
| DC\_7A-13A\_n66A | 7 | 2540 | 5 | 25 | 2660 | 18 | IMD3 |
|  | 13 | 780 | 5 | 25 | 749 | N/A | N/A |
|  | n66 | 1720 | 5 | 25 | 2120 | N/A | N/A |
| DC\_7A-20A\_n1A  DC\_7C-20A\_n1A | 7 | 2510 | 10 | 50 | 2630 | N/A | N/A |
|  | 20 | 841 | 10 | 50 | 800 | 4.5 | IMD5 |
|  | n1 | 1940 | 5 | 25 | 2130 | N/A | N/A |
| DC\_7A-20A\_n3A | 7 | 2543 | 10 | 50 | 2663 | N/A | N/A |
|  | 20 | 847 | 10 | 20 | 806 | 10.5 | IMD2 |
|  | n3 | 1737 | 5 | 25 | 1832 | N/A | N/A |
|  | 7 | 2510 | 10 | 50 | 2630 | 26.0 | IMD21 |
|  | 20 | 855 | 5 | 25 | 814 | N/A | N/A |
|  | n3 | 1775 | 10 | 50 | 1870 | N/A | N/A |
| DC\_7A-20A\_n8A | 7 | 2565 | 5 | 25 | 2685 | N/A | N/A |
|  | n8 | 885 | 5 | 25 | 930 | N/A | N/A |
|  | 20 | 836 | 5 | 25 | 795 | 17.4 | IMD3 |
| DC\_7A-20A\_n8A | 7 | 2520 | 5 | 25 | 2640 | 21.1 | IMD3 |
|  | n8 | 900 | 5 | 25 | 945 | N/A | N/A |
|  | 20 | 840 | 5 | 25 | 799 | N/A | N/A |
| DC\_7A-20A\_n8A | 7 | 2504 | 5 | 25 | 2624 | 18.8 | IMD3 |
|  | n8 | 910 | 5 | 25 | 955 | N/A | N/A |
|  | 20 | 857 | 5 | 25 | 816 | N/A | N/A |
| DC\_7A-20A\_n28A | 20 | 842 | 5 | 25 | 801 | N/A | N/A |
|  | n28 | 728 | 5 | 25 | 783 | N/A | N/A |
|  | 7 | 2520 | 10 | 50 | 2640 | 5.9 | IMD5 |
| DC\_7A-20A\_n78A | 7 | 2560 | 5 | 25 | 2680 | N/A | N/A |
|  | 20 | 851 | 5 | 25 | 810 | 30.5 | IMD2 |
|  | n78 | 3370 | 10 | 50 | 3370 | N/A | N/A |
| DC\_7A-20A\_n78A | 7 | 2560 | 5 | 25 | 2680 | N/A | N/A |
|  | 20 | 851 | 5 | 25 | 810 | 3.0 | IMD5 |
|  | n78 | 3435 | 10 | 50 | 3435 | N/A | N/A |
| DC\_7A-20A\_n78A | 7 | 2555 | 5 | 25 | 2675 | 30.8 | IMD2 |
|  | 20 | 845 | 5 | 25 | 804 | N/A | N/A |
|  | n78 | 3520 | 10 | 50 | 3520 | N/A | N/A |
| DC\_7A-28A\_n3A  DC\_7C-28A\_n3A | 7 | 2543 | 5 | 25 | 2663 | N/A | N/A |
|  | 28 | 741 | 5 | 25 | 796.0 | 20.0 | IMD2 |
|  | n3 | 1747 | 5 | 25 | 1842 | N/A | N/A |
|  | 7 | 2540 | 5 | 25 | 2685 | 18 | IMD3 |
|  | 28 | 745 | 5 | 25 | 800 | N/A | N/A |
|  | n3 | 1715 | 5 | 25 | 1810 | N/A | N/A |
| DC\_7A-28A\_n5A DC\_7C-28A\_n5A | 7 | 2540 | 5 | 25 | 2725 | N/A | N/A |
|  | 28 | 721 | 5 | 25 | 776 | 4.4 | IMD5 |
|  | n5 | 829 | 5 | 25 | 854 | N/A | N/A |
|  | 7 | 2510 | 5 | 25 | 2630 | 5.9 | IMD5 |
|  | 28 | 730 | 5 | 25 | 785 | N/A | N/A |
|  | n5 | 840 | 5 | 25 | 874 | N/A | N/A |
| DC\_7A-28A\_n40A | 7 | 2510 | 5 | 25 | 2630 | 5.9 | IMD5 |
|  | 28 | 743 | 5 | 25 | 798 | N/A | N/A |
|  | n40 | 2310 | 5 | 25 | 2310 | N/A | N/A |
| DC\_7A-28A\_n78A | 7 | 2567.5 | 5 | 25 | 2687.5 | N/A | N/A |
|  | 28 | 727.5 | 5 | 25 | 782.5 | 28.8 | IMD2 |
|  | n78 | 3350 | 10 | 50 | 3350 | N/A | N/A |
|  | 7 | 2567.5 | 5 | 25 | 2687.5 | N/A | N/A |
|  | 28 | 727.5 | 5 | 25 | 782.5 | 3.0 | IMD5 |
|  | n78 | 3460 | 10 | 50 | 3460 | N/A | N/A |
|  | 7 | 2530 | 5 | 25 | 2650 | 30.5 | IMD2 |
|  | 28 | 740 | 5 | 25 | 795 | N/A | N/A |
|  | n78 | 3390 | 10 | 50 | 3390 | N/A | N/A |
| DC\_7A\_n28A-n78A  DC\_7C\_n28A-n78A | 7 | 2565 | 5 | 25 | 2685 | N/A | N/A |
|  | n28 | 745 | 5 | 25 | 800 | N/A | N/A |
|  | n78 | 3310 | 10 | 50 | 3310 | 29.7 | IMD2 |
|  | 7 | 2565 | 5 | 25 | 2685 | N/A | N/A |
|  | n78 | 3365 | 10 | 50 | 3365 | N/A | N/A |
|  | n28 | 745 | 5 | 25 | 800 | 28.8 | IMD2 |
| DC\_7A-40A\_n1A | n1 | 1970 | 5 | 25 | 2160 | N/A | N/A |
|  | 7 | 2530 | 5 | 25 | 2650 | 32.1 | IMD3 |
|  | 40 | 2310 | 5 | 25 | 2310 | N/A | N/A |
| DC\_7A-46A\_n78A6 | 7 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 46 | N/A | N/A | N/A | N/A | N/A | IMD2, IMD5 |
|  | n78 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_7A-66A\_n78A  DC\_7C-66A\_n78A  DC\_7A-7A-66A\_n78A  DC\_7A-66A-66A\_n78A  DC\_7A-7A-66A-66A\_n78A  DC\_7C-66A-66A\_n78A  DC\_7A\_n66A-n78A  DC\_7A-7A\_n66A-n78A  DC\_7C\_n66A-n78A  DC\_7A-66A\_n78(2A)  DC\_7C-66A\_n78(2A)  DC\_7A-7A-66A\_n78(2A)  DC\_7A-66A-66A\_n78(2A)  DC\_7A-7A-66A-66A\_n78(2A)  DC\_7C-66A-66A\_n78(2A) | 7 | 2550 | 5 | 25 | 2685 | N/A | N/A |
|  | 66/n66 | 1750 | 5 | 25 | 2150 | 8.7 | IMD4 |
|  | n78 | 3625 | 10 | 50 | 3475 | N/A | N/A |
| DC\_7A\_n66A-n78A  DC\_7A-7A\_n66A-n78A  DC\_7C\_n66A-n78A | 7 | 2542 | 5 | 25 | 2662 | N/A | N/A |
|  | n66 | 1740 | 5 | 25 | 2140 | N/A | N/A |
|  | n78 | 3344 | 10 | 50 | 3344 | 16.0 | IMD3 |
| DC\_7A\_SUL\_n78A-n80A | n80 | 1730 | 5 | 25 |  | N/A | N/A |
|  | 7 | 2535 | 10 | 50 | 2655 | 13 | IMD4 |
| DC\_8A\_n1A-n78A | 8 | 900 | 5 | 25 | 945 | N/A | N/A |
|  | n1 | 1945 | 5 | 25 | 2135 | N/A | N/A |
|  | n78 | 3745 | 10 | 50 | 3745 | 14.9 | IMD3 |
| DC\_8A\_n3A-n28A | 8 | 912.5 | 5 | 25 | 957.5 | N/A | N/A |
|  | n3 | 1712.5 | 5 | 25 | 1807.5 | N/A | N/A |
|  | n28 | 745 | 5 | 25 | 800 | 30.4 | IMD2 |
| DC\_8A-11A\_n77A | 8 | 910 | 5 | 25 | 955 | N/A | N/A |
|  | n77 | 3311 | 10 | 50 | 3311 | N/A | N/A |
|  | 11 | 1443 | 5 | 25 | 1491 | 18.8 | IMD3 |
| DC\_8A-11A\_n77A | 11 | 1430.5 | 5 | 25 | 1478.5 | N/A | N/A |
|  | n77 | 3791 | 10 | 50 | 3791 | N/A | N/A |
|  | 8 | 885 | 5 | 25 | 930 | 18.2 | IMD3 |
| DC\_8A-11A\_n78A | 8 | 910 | 5 | 25 | 955 | N/A | N/A |
|  | n78 | 3311 | 10 | 50 | 3311 | N/A | N/A |
|  | 11 | 1443 | 5 | 25 | 1491 | 18.8 | IMD3 |
| DC\_8A-11A\_n78A | 11 | 1430.5 | 5 | 25 | 1478.5 | N/A | N/A |
|  | n78 | 3791 | 10 | 50 | 3791 | N/A | N/A |
|  | 8 | 885 | 5 | 25 | 930 | 18.2 | IMD3 |
| DC\_8A-20A\_n78A | 8 | 890 | 5 | 25 | 935 | N/A | N/A |
|  | n78 | 3470 | 10 | 50 | 3470 | N/A | N/A |
|  | 20 | 841 | 5 | 25 | 800 | 12.1 | IMD4 |
|  | 8 | 895 | 5 | 25 | 940 | 12.1 | IMD4 |
|  | n78 | 3481 | 10 | 50 | 3481 | N/A | N/A |
|  | 20 | 847 | 5 | 25 | 806 | N/A | N/A |
| DC\_8A\_n28A-n77A | 8 | 910 | 5 | 25 | 955 | N/A | N/A |
|  | n28 | 743 | 5 | 25 | 798 | N/A | N/A |
|  | n77 | 3473 | 10 | 50 | 3473 | 10.3 | IMD4 |
|  | 8 | 910 | 5 | 25 | 955 | N/A | N/A |
|  | n28 | 710 | 5 | 25 | 765 | 11.6 | IMD4 |
|  | n77 | 3495 | 10 | 50 | 3495 | N/A | N/A |
| DC\_8A\_n40A-n79A | 8 | 885 | 5 | 25 | 930 | N/A | N/A |
|  | n40 | 2305 | 5 | 25 | 2305 | N/A | N/A |
|  | n79 | 4960 | 40 | 216 | 4960 | 10.7 | IMD4 |
|  | 8 | 885 | 5 | 25 | 930 | N/A | N/A |
|  | n40 | 2305 | 5 | 25 | 2305 | 9.2 | IMD4 |
|  | n79 | 4960 | 40 | 216 | 4960 | N/A | N/A |
| DC\_8A\_n41A-n79A | 8 | 910 | 5 | 25 | 955 | N/A | N/A |
|  | n41 | 2650 | 10 | 50 | 2650 | N/A | N/A |
|  | n79 | 4470 | 40 | 216 | 4470 | 16.3 | IMD3 |
|  | 8 | 910 | 5 | 25 | 955 | N/A | N/A |
|  | n41 | 2650 | 10 | 50 | 2650 | 15.5 | IMD3 |
|  | n79 | 4470 | 40 | 216 | 4470 | N/A | N/A |
| DC\_8A-42A\_n28A | 8 | 900 | 5 | 25 | 945 | N/A | N/A |
|  | n28 | 743 | 5 | 25 | 798 | N/A | N/A |
|  | 42 | 3443 | 5 | 25 | 3443 | 8.7 | IMD4 |
| DC\_8A\_SUL\_n78A-n80A | n80 | 1755 | 10 | 50 |  | N/A | N/A |
|  | 8 | 900 | 5 | 25 | 945 | 8 | IMD4 |
|  | n80 | 1750 | 10 | 50 |  | N/A | N/A |
|  | 8 | 900 | 5 | 25 | 945 | N/A | N/A |
|  | n78 | 3550 | 10 | 50 | 3550 | 8 | IMD33 |
| DC\_11A-18A\_n77A | 11 | 1443 | 5 | 25 | 1491 | N/A | N/A |
|  | n77 | 3706 | 10 | 50 | 3706 | N/A | N/A |
|  | 18 | 820 | 5 | 25 | 865 | 18.7 | IMD3 |
| DC\_11A-18A\_n78A | 11 | 1443 | 5 | 25 | 1491 | N/A | N/A |
|  | n78 | 3706 | 10 | 50 | 3706 | N/A | N/A |
|  | 18 | 820 | 5 | 25 | 865 | 18.7 | IMD3 |
| DC\_12A\_n7A-n78A,  DC\_12A\_n7(2A)-n78A  DC\_12A\_n7A-n78(2A)  DC\_12A\_n7(2A)-n78(2A) | 12 | 708 | 5 | 25 | 738 | N/A | N/A |
|  | n7 | 2520 | 5 | 25 | 2640 | N/A | N/A |
|  | n78 | 3624 | 10 | 50 | 3624 | 9 | IMD4 |
|  | 12 | 708 | 5 | 25 | 738 | N/A | N/A |
|  | n78 | 3370 | 10 | 50 | 3370 | N/A | N/A |
|  | n7 | 2542 | 5 | 25 | 2662 | 29.6 | IMD2 |
| DC\_12A-30A\_n2A | 12 | 708.5 | 5 | 25 | 738.5 | N/A | N/A |
|  | 30 | 2308 | 5 | 25 | 2353 | 12.0 | IMD4 |
|  | n2 | 1885 | 5 | 25 | 1965 | N/A | N/A |
| DC\_13A-66A\_n2A  DC\_13A-66A-66A\_n2A | 13 | 782 | 5 | 25 | 751 | N/A | N/A |
|  | 66 | 1736 | 5 | 25 | 2156 | 7..2 | IMD4 |
|  | n2 | 1860 | 5 | 25 | 1940 | N/A | N/A |
| DC\_12A-66A\_n25A | 12 | 708.5 | 5 | 25 | 738.5 | N/A | N/A |
|  | 66 | 1775 | 5 | 25 | 2175 | N/A | N/A |
|  | n25 | 1855 | 5 | 25 | 1935 | 20 | IMD3 |
|  | 12 | 708.5 | 5 | 25 | 738.5 | N/A | N/A |
|  | 66 | 1750 | 5 | 25 | 2150 | 4 | IMD5 |
|  | n25 | 1883.3 | 5 | 25 | 1963.3 | N/A | N/A |
|  | 12 | 708.5 | 5 | 25 | 738.5 | N/A | N/A |
|  | 66 | 1712.5 | 5 | 25 | 2112.5 | 23 | IMD3 |
|  | n25 | 1912.5 | 5 | 25 | 1992.5 | N/A | N/A |
| DC\_13A-66A\_n48A  DC\_13A-66A\_n48B  DC\_13A-66A-66A\_n48A  DC\_13A-66A-66A\_n48B | 13 | 782 | 5 | 25 | 751 | N/A | N/A |
|  | 66 | 1731 | 5 | 25 | 2131 | 17.1 | IMD3 |
|  | n48 | 3695 | 5 | 25 | 3695 | N/A | N/A |
| DC\_18A\_n3A-n77A | 18 | 820 | 5 | 25 | 865 | N/A | N/A |
|  | n3 | 1770 | 5 | 25 | 1865 | N/A | N/A |
|  | n77 | 3410 | 10 | 50 | 3410 | 16.3 | IMD3 |
|  | 18 | 820 | 5 | 25 | 865 | N/A | N/A |
|  | n3 | 1770 | 5 | 25 | 1865 | 15.7 | IMD3 |
|  | n77 | 3505 | 10 | 50 | 3505 | N/A | N/A |
| DC\_14A-66A\_n2A  DC\_14A-66A-66A\_n2A | 14 | 793 | 5 | 25 | 763 | N/A | N/A |
|  | 66 | 1762 | 5 | 25 | 2162 | 7.6 | IMD4 |
|  | n2 | 1874 | 5 | 25 | 1954 | N/A | N/A |
| DC\_18A\_n3A-n78A | 18 | 820 | 5 | 25 | 865 | N/A | N/A |
|  | n3 | 1750 | 5 | 25 | 1845 | N/A | N/A |
|  | n78 | 3390 | 10 | 50 | 3390 | 15.2 | IMD33 |
| DC\_18A-28A\_n77A | 18 | 820 | 5 | 25 | 865 | N/A | N/A |
|  | 28 | 723 | 5 | 25 | 778 | 4.4 | IMD5 |
|  | n77 | 4058 | 10 | 50 | 4058 | N/A | N/A |
| DC\_18A-28A\_n77A | 18 | 820 | 5 | 25 | 865 | 3.9 | IMD5 |
|  | 28 | 723 | 5 | 25 | 778 | N/A | N/A |
|  | n77 | 3757 | 10 | 50 | 3757 | N/A | N/A |
| DC\_18A-28A\_n78A | 18 | 819 | 5 | 25 | 864 | 3.8 | IMD5 |
|  | 28 | 723 | 5 | 25 | 778 | N/A | N/A |
|  | n78 | 3756 | 10 | 50 | 3756 | N/A | N/A |
| DC\_18A-41A\_n3A  DC\_18A-41C\_n3A | 18 | 820 | 5 | 25 | 865 | N/A | N/A |
|  | n3 | 1725 | 5 | 25 | 1820 | N/A | N/A |
|  | 41 | 2630 | 5 | 25 | 2630 | 16.0 | IMD3 |
|  | 18 | 820 | 5 | 25 | 865 | 28.9 | IMD21 |
|  | n3 | 1765 | 5 | 25 | 1860 | N/A | N/A |
|  | 41 | 2630 | 5 | 25 | 2630 | N/A | N/A |
| DC\_18A-41A\_n77A  DC\_18A-41C\_n77A | 18 | 820 | 5 | 25 | 865 | 3.4 | IMD5 |
|  | n77 | 3527.5 | 10 | 50 | 3527.5 | N/A | N/A |
|  | 41 | 2640 | 5 | 25 | 2640 | N/A | N/A |
| DC\_18A-41A\_n78A  DC\_18A-41C\_n78A | 18 | 820 | 5 | 25 | 865 | 3.4 | IMD5 |
|  | n78 | 3527.5 | 10 | 50 | 3527.5 | N/A | N/A |
|  | 41 | 2640 | 5 | 25 | 2640 | N/A | N/A |
| DC\_19A-21A\_n77A  DC\_19A-21A\_n78A | 19 | 837.5 | 5 | 25 | 882.5 | 18.7 | IMD3 |
|  | 21 | 1450.4 | 5 | 25 | 1498.4 | N/A | N/A |
|  | n77, n78 | 3783.3 | 10 | 50 | 3783.3 | N/A | N/A |
| DC\_19A-21A\_n77A | 19 | 837.5 | 5 | 25 | 882.5 | N/A | N/A |
|  | 21 | 1454.5 | 5 | 25 | 1502.5 | 9.0 | IMD4 |
|  | n77 | 4015 | 10 | 50 | 4015 | N/A | N/A |
| DC\_19A-21A\_n79A | 19 | N/A | N/A | N/A | N/A | N/A | IMD5 |
|  | 21 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | n79 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 19 | 837.5 | 5 | 25 | 882.2 | N/A | N/A |
|  | 21 | 1452 | 5 | 25 | 1500 | 3.8 | IMD5 |
|  | n79 | 4850 | 40 | 216 | 4850 | N/A | N/A |
| DC\_20A\_n1A-n78A | 20 | 845 | 5 | 25 | 804 | N/A | N/A |
|  | n1 | 1940 | 5 | 25 | 2130 | N/A | N/A |
|  | n78 | 3630 | 10 | 50 | 3630 | 16.0 | IMD3 |
|  | 20 | 835 | 5 | 25 | 794 | N/A | N/A |
|  | n1 | 1930 | 5 | 25 | 2120 | 15.3 | IMD3 |
|  | n78 | 3790 | 10 | 50 | 3790 | N/A | N/A |
| DC\_20A\_n3A-n78A | 20 | 845 | 5 | 25 | 804 | N/A | N/A |
|  | n3 | 1730 | 5 | 25 | 1825 | N/A | N/A |
|  | n78 | 3420 | 10 | 50 | 3420 | 16.1 | IMD3 |
|  | 20 | 845 | 5 | 25 | 804 | N/A | N/A |
|  | n3 | 1765 | 5 | 25 | 1860 | 15.7 | IMD3 |
|  | n78 | 3550 | 10 | 50 | 3550 | N/A | N/A |
| DC\_20A\_38A-n78A | 20 | N/A | N/A | N/A | N/A | N/A | IMD2 |
|  | 38 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | n78 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 20 | N/A | N/A | N/A | N/A | N/A | N/A |
|  | 38 | N/A | N/A | N/A | N/A | N/A | IMD2 |
|  | n78 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_20A\_n7A-n28A | 20 | 857 | 5 | 25 | 816 | N/A | N/A |
|  | n7 | 2512 | 5 | 25 | 2632 | N/A | N/A |
|  | n28 | 743 | 5 | 25 | 798 | 13.9 | IMD3 |
|  | 20 | 852 | 5 | 25 | 811 | N/A | N/A |
|  | n7 | 2550 | 10 | 50 | 2670 | 5.9 | IMD5 |
|  | n28 | 738 | 5 | 25 | 793 | N/A | N/A |
| DC\_20A\_SUL\_n78A-n80A | 20 | 847 | 5 | 25 | 806 | 9 | IMD4 |
|  | n80 | 1735 | 5 | 25 |  | N/A | N/A |
| DC\_20A\_n41A-n78A | 20 | 845 | 5 | 25 | 804 | N/A | N/A |
|  | n41 | 2675 | 10 | 50 | 2675 | 29.8 | IMD2 |
|  | n78 | 3520 | 10 | 50 | 3520 | N/A | N/A |
|  | 20 | 850 | 5 | 25 | 809 | N/A | N/A |
|  | n41 | 2550 | 10 | 50 | 2550 | N/A | N/A |
|  | n78 | 3400 | 10 | 50 | 3400 | 28.8 | IMD2 |
| DC\_21A-28A\_n77A | 21 | 1452 | 5 | 25 | 1500 | N/A | N/A |
|  | 28 | 730.5 | 5 | 25 | 785.5 | 16.9 | IMD3 |
|  | n77 | 3689.5 | 10 | 50 | 3689.5 | N/A | N/A |
|  | 21 | 1450.5 | 5 | 25 | 1498.5 | 9.9 | IMD4 |
|  | 28 | 730.5 | 5 | 25 | 785.5 | N/A | N/A |
|  | n77 | 3690 | 10 | 50 | 3690 | N/A | N/A |
| DC\_21A-28A\_n79A | 21 | 1450 | 5 | 25 | 1498 | 5.2 | IMD5 |
|  | 28 | 730.5 | 5 | 25 | 785.5 | N/A | N/A |
|  | n79 | 4420 | 40 | 216 | 4420 | N/A | N/A |
| DC\_28A\_n3A-n77A | 28 | 735 | 5 | 25 | 790 | N/A | N/A |
|  | n3 | 1755 | 5 | 25 | 1850 | 17.0 | IMD3 |
|  | n77 | 3320 | 10 | 50 | 3320 | N/A | N/A |
|  | 28 | 733 | 5 | 25 | 788 | N/A | N/A |
|  | n3 | 1720 | 5 | 25 | 1815 | N/A | N/A |
|  | n77 | 4173 | 10 | 50 | 4173 | 15.9 | IMD3 |
| DC\_28A\_n7A-n78A  DC\_28A\_n7B-n78A | 28 | 745 | 5 | 25 | 800 | N/A | N/A |
|  | n7 | 2565 | 5 | 25 | 2685 | N/A | N/A |
|  | n78 | 3310 | 10 | 50 | 3310 | 29.7 | IMD2 |
|  | 28 | 740 | 5 | 25 | 795 | N/A | N/A |
|  | n7 | 2530 | 5 | 25 | 2650 | 30.5 | IMD2 |
|  | n78 | 3390 | 10 | 50 | 3390 | N/A | N/A |
| DC\_28A-41A\_n77A | 28 | 738 | 5 | 25 | 793 | N/A | N/A |
|  | n77 | 3380 | 10 | 50 | 3380 | N/A | N/A |
|  | 41 | 2642 | 5 | 25 | 2642 | 29.5 | IMD2 |
| DC\_28A-41A\_n77A | 41 | 2642 | 5 | 25 | 2642 | N/A | N/A |
|  | n77 | 3440 | 10 | 50 | 3440 | N/A | N/A |
|  | 28 | 743 | 5 | 25 | 798 | 30.8 | IMD2 |
| DC\_28A-41A\_n77A | 41 | 2567.5 | 10 | 50 | 2567.5 | N/A | N/A |
|  | n77 | 3460 | 10 | 50 | 3460 | N/A | N/A |
|  | 28 | 727.5 | 5 | 25 | 782.5 | 3.0 | IMD5 |
| DC\_28A-41A\_n78A | 28 | 738 | 5 | 25 | 793 | N/A | N/A |
|  | n78 | 3380 | 10 | 50 | 3380 | N/A | N/A |
|  | 41 | 2642 | 5 | 25 | 2642 | 29.5 | IMD2 |
| DC\_28A-41A\_n78A | 41 | 2642 | 5 | 25 | 2642 | N/A | N/A |
|  | n78 | 3440 | 10 | 50 | 3440 | N/A | N/A |
|  | 28 | 743 | 5 | 25 | 798 | 30.8 | IMD2 |
| DC\_28A-41A\_n79A | 28 | 743 | 5 | 25 | 798 | N/A | N/A |
|  | n79 | 4739 | 40 | 216 | 4739 | N/A | N/A |
|  | 41 | 2510 | 5 | 25 | 2510 | 8.6 | IMD4 |
| DC\_28A-41A\_n79A | 41 | 2650 | 5 | 25 | 2650 | N/A | N/A |
|  | n79 | 4502 | 40 | 216 | 4502 | N/A | N/A |
|  | 28 | 743 | 5 | 25 | 798 | 15.9 | IMD3 |
| DC\_28A-42A\_79A | 28 | 730 | 5 | 25 | 785 | N/A | N/A |
|  | 42 | 3420 | 5 | 25 | 3420 | 15.3 | IMD3 |
|  | n79 | 4880 | 40 | 216 | 4880 | N/A | N/A |
|  | 28 | 745 | 5 | 25 | 800 | 16.2 | IMD2 |
|  | 42 | 3597.5 | 5 | 25 | 3597.5 | N/A | N/A |
|  | n79 | 4420 | 40 | 216 | 4420 | N/A | N/A |
| DC\_19A\_n78A-n79A | 19 | 835 | 5 | 25 | 880 | N/A | N/A |
|  | n78 | 3680 | 10 | 50 | 3680 | N/A | N/A |
|  | n79 | 4515 | 40 | 216 | 4515 | 29.3 | IMD2 |
|  | 19 | 835 | 5 | 25 | 880 | N/A | N/A |
|  | n79 | 4550 | 40 | 216 | 4550 | N/A | N/A |
|  | n78 | 3715 | 10 | 50 | 3715 | 28.8 | IMD2 |
| DC\_20A\_n28A-n78A, DC\_20A\_SUL\_n78A-n83A | 20 | 857 | 5 | 25 | 816 | N/A | N/A |
|  | n28, n83 | 743 | 5 | 25 | 798 | N/A | N/A |
|  | n78 | 3314 | 10 | 50 | 3314 | 8.7 | IMD4 |
|  | 20 | 837 | 5 | 25 | 796 | N/A | N/A |
|  | n78 | 3310 | 10 | 50 | 3310 | N/A | N/A |
|  | n28 | 744 | 5 | 25 | 799 | 9.4 | IMD4 |
| DC\_21A\_n78A-n79A | 21 | 1453 | 5 | 25 | 1501 | N/A | N/A |
|  | n78 | 3420 | 10 | 50 | 3420 | N/A | N/A |
|  | n79 | 4873 | 40 | 216 | 4873 | 30.1 | IMD2 |
|  | 21 | 1453 | 5 | 25 | 1501 | N/A | N/A |
|  | n79 | 4940 | 40 | 216 | 4940 | N/A | N/A |
|  | n78 | 3487 | 10 | 50 | 3487 | 29.8 | IMD2 |
| DC\_28A\_n8A-n78A | 28 | 728 | 5 | 25 | 783 | N/A | N/A |
|  | n8 | 910 | 5 | 25 | 955 | N/A | N/A |
|  | n78 | 3458 | 10 | 50 | 3458 | 9.1 | IMD4 |
|  | 28 | 713 | 5 | 25 | 768 | N/A | N/A |
|  | n8 | 890 | 5 | 25 | 935 | 4.3 | IMD5 |
|  | n78 | 3787 | 10 | 50 | 3787 | N/A | N/A |
| DC\_29A-30A\_n66A | 29 | N/A | 5 | 25 | 719.5 | 4.5 | IMD5 |
| 30 | 2307.5 | 5 | 25 | 2352.5 | N/A | N/A |
| n66 | 1777.5 | 5 | 25 | 2177.5 | N/A | N/A |
| DC\_30A-66A\_n5A,  DC\_30A-66A-66A\_n5A,  DC\_30A-66A-66A-66A\_n5A | 30 | 2310 | 5 | 25 | 2355 | N/A | N/A |
|  | 66 | 1730 | 5 | 25 | 2130 | 2.5 | IMD5 |
|  | n5 | 830 | 5 | 25 | 875 | N/A | N/A |
| DC\_39A\_n40A-n79A | 39 | 1917.5 | 5 | 25 | 1917.5 | N/A | N/A |
|  | n40 | 2302.5 | 5 | 25 | 2302.5 | N/A | N/A |
|  | n79 | 4980 | 40 | 216 | 4980 | 5.8 | IMD4 |
| DC\_39A\_n41A-n79A | 39 | 1900 | 5 | 25 | 1900 | N/A | N/A |
|  | n41 | 2620 | 10 | 50 | 2620 | N/A | N/A |
|  | n79 | 4520 | 40 | 216 | 4520 | 29.8 | IMD24 |
|  | 39 | 1900 | 5 | 25 | 1900 | N/A | N/A |
|  | n41 | 2620 | 10 | 50 | 2620 | 30.2 | IMD24 |
|  | n79 | 4520 | 40 | 216 | 4520 | N/A | N/A |
| DC\_41A\_n3A-n77A  DC\_41C\_n3A-n77A  DC\_41A\_n3A-n78A  DC\_41C\_n3A-n78A | 41 | 2620 | 5 | 25 | 2620 | N/A | N/A |
|  | n3 | 1745 | 5 | 25 | 1840 | 16.4 | IMD3 |
|  | n77/n78 | 3400 | 10 | 50 | 3400 | N/A | N/A |
|  | 41 | 2580 | 5 | 25 | 2580 | N/A | N/A |
|  | n3 | 1720 | 5 | 25 | 1815 | N/A | N/A |
|  | n77/n78 | 3440 | 10 | 50 | 3440 | 16.8 | IMD34 |
| DC\_41A\_n28A-n77A  DC\_41C\_n28A-n77A  DC\_41A\_n28A-n78A  DC\_41C\_n28A-n78A | 41 | 2580 | 5 | 25 | 2580 | N/A | N/A |
|  | n28 | 743 | 5 | 25 | 798 | N/A | N/A |
|  | n77/n78 | 3323 | 10 | 50 | 3323 | 28.2 | IMD21 |
|  | 41 | 2642 | 5 | 25 | 2642 | N/A | N/A |
|  | n28 | 743 | 5 | 25 | 798 | 30.8 | IMD21 |
|  | n77/n78 | 3440 | 10 | 50 | 3440 | N/A | N/A |
| DC\_46A-66A\_n5A | 46 | 5163 | 10 | 50 | 5163 | 9.0 | IMD4 |
|  | 66 | 1775 | 5 | 25 | 2175 | N/A | N/A |
|  | n5 | 847 | 5 | 25 | 892 | N/A | N/A |
| DC\_46A-66A\_n25A4  DC\_46C-66A\_n25A4  DC\_46D-66A\_n25A4 | 46 | 5505 | 10 | 50 | 5505 | 16.1 | IMD3 |
|  | 66 | 1775 | 5 | 25 | 2175 | N/A | N/A |
|  | n25 | 1855 | 5 | 25 | 1935 | 20 | IMD3 |
|  | 46 | 5505 | 10 | 50 | 5505 | 16.1 | IMD3 |
|  | 66 | 1750 | 5 | 25 | 2150 | 4 | IMD5 |
|  | n25 | 1883.3 | 5 | 25 | 1963.3 | N/A | N/A |
|  | 46 | 5505 | 10 | 50 | 5505 | 16.1 | IMD3 |
|  | 66 | 1712.5 | 5 | 25 | 2112.5 | 23 | IMD3 |
|  | n25 | 1912.5 | 5 | 25 | 1992.5 | N/A | N/A |
| DC\_48A-66A\_n12A | 48 | 3580 | 5 | 25 | 3580 | N/A | N/A |
|  | 66 | 1760 | 5 | 25 | 2160 | 17.1 | IMD3 |
|  | n12 | 710 | 5 | 25 | 740 | N/A | N/A |
| DC\_48A-66A\_n71A | 48 | 3560 | 5 | 25 | 3560 | N/A | N/A |
|  | 66 | 1774 | 5 | 25 | 2174 | 15.8 | IMD3 |
|  | n71 | 693 | 5 | 25 | 647 | N/A | N/A |
|  | 48 | 3697.5 | 5 | 25 | 3697.5 | 13.0 | IMD4 |
|  | 66 | 1712.5 | 5 | 25 | 2112.5 | N/A | N/A |
|  | n71 | 665.5 | 5 | 25 | 619.5 | N/A | N/A |
| DC\_66A\_n7A-n78A,  DC\_66A-66A\_n7A-n78  DC\_66A\_n7(2A)-n78A  DC\_66A-66A\_n7(2A)-n78A  DC\_66A\_n7A-n78(2A)  DC\_66A-66A\_n7A-n78(2A)  DC\_66A-66A\_n7(2A)-n78(2A) | 66 | 1730 | 5 | 25 | 2130 | N/A | N/A |
|  | n7 | 2560 | 5 | 25 | 2680 | N/A | N/A |
|  | n78 | 3390 | 10 | 50 | 3390 | 16.1 | IMD3 |
| DC\_66A\_n25A-n41A | 66 | 1715 | 5 | 25 | 2115 | N/A | N/A |
|  | n41 | 2685 | 10 | 50 | 2685 | N/A | N/A |
|  | n25 | 1860 | 5 | 25 | 1940 | 5 | 11.0 |
| DC\_66A\_n38A-n78A | 66 | 1760 | 5 | 25 | 2160 | N/A | N/A |
|  | n38 | 2610 | 5 | 25 | 2610 | N/A | N/A |
|  | n78 | 3460 | 10 | 50 | 3460 | 15.0 | IMD3 |
| DC\_66A\_n66A-n78A | 66 | 1775 | 5 | 25 | 2175 | N/A | N/A |
|  | n66 | 1725 | 5 | 25 | 2125 | 2.8 | IMD5 |
|  | n78 | 3725 | 10 | 50 | 3725 | N/A | N/A |
| NOTE 1: This band is subject to IMD3 also which MSD is not specified.  NOTE 2: For DC\_3A\_n3A-n77A, DC\_3A\_n3A-n78A paired with UL\_DC\_3A\_n3A, the 3rd DL bands n77/n78 are subject to IMD2 which MSD is not specified  NOTE 3: This MSD requirement apply with both IMD2 and IMD3 products should be generated.  NOTE 4: This band is subject to IMD5 also which MSD is not specified.  NOTE 5: When Band 46 have self-interference problems by dual uplink CA/EN-DC, then the requirements do not apply in exclusion zone which is frequency range within (harmonics frequency region + FHD) and IMD frequency region as follow.  IMD frequency range   |  |  |  |  | | --- | --- | --- | --- | | DL\_CA configuration | UL\_CA configuration | Exclusion zone center frequency | Exclusion zone BW | | DC\_2A-46A\_n66A | DC\_2A\_n66A | 2\*fc\_2A + fc\_n66A | 2\*BW\_2A + BW\_n66A | | DC\_2A-46A\_n66A | DC\_2A\_n66A | fc\_2A + 2\*fc\_n66A | BW\_2A + 2\*BW\_n66A |   NOTE 6: For NR band, UL/DL BW and UL LCRB can be adjusted according to the supported BW and lowest SCS supported by the UE.  NOTE 7: E-UTRA carrier shall be set to min(+20 dBm, PCMAX\_L\_E-UTRA,c) and NR carrier shall be set to min(+20 dBm, PCMAX\_L,f,c,NR) as defined in clause 6.2B.4.1.3. | | | | | | | |

###### 7.3B.2.3.5.3 Void

###### 7.3B.2.3.5.4 MSD test points for intermodulation interference due to dual uplink operation for EN-DC in NR FR1 involving four bands

Table 7.3B.2.3.5.4-1: MSD test points for Scell due to dual uplink operation for EN-DC in NR FR1 (four bands)

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| EN-DC Configuration | EUTRA / NR band | UL Fc  (MHz) | UL/DL BW  (MHz) | UL  LCRB | DL Fc (MHz) | MSD  (dB) | IMD order |
| DC\_1A-7A\_n7A-n78A | 1 | 1950 | 5 | 25 | 2140 | 8.7 | IMD4 |
|  | 7, n7 | 2510 | 10 | 50 | 2630 | N/A | N/A |
|  | n78 | 3580 | 10 | 50 | 3580 | N/A | N/A |
|  | 1 | 1977.5 | 5 | 25 | 2167.5 | N/A | N/A |
|  | 7, n7 | 2507.5 | 5 | 25 | 2627.5 | 9.1 | IMD4 |
|  | n78 | 3305 | 10 | 50 | 3305 | N/A | N/A |
|  | 1 | 1970 | 5 | 25 | 2160 | N/A | N/A |
|  | 7, n7 | 2520 | 5 | 25 | 2640 | N/A | N/A |
|  | n78 | 3390 | 10 | 50 | 3390 | 10.1 | IMD4 |
| DC\_3A-7A\_n7A-n78A DC\_3A-3A-7A\_n7A-n78A DC\_3C-7A\_n7A-n78A | 3 | 1725 | 5 | 25 | 1820 | 17.6 | IMD3 |
|  | 7, n7 | 2565 | 5 | 25 | 2685 | N/A | N/A |
|  | n78 | 3310 | 10 | 50 | 3310 | N/A | N/A |
|  | 3 | 1725 | 5 | 25 | 1820 | 8.6 | IMD4 |
|  | 7, n7 | 2565 | 5 | 25 | 2685 | N/A | N/A |
|  | n78 | 3475 | 10 | 50 | 3475 | N/A | N/A |
|  | 3 | 1730 | 5 | 25 | 1825 | N/A | N/A |
|  | n7, n7 | 2560 | 5 | 25 | 2680 | N/A | N/A |
|  | n78 | 3390 | 10 | 50 | 3390 | 16.1 | IMD3 |
| DC\_7A-28A\_n7A-n78A | 7, n7 | 2565 | 5 | 25 | 2685 | N/A | N/A |
|  | 28 | 745 | 5 | 25 | 800 | 28.8 | IMD2 |
|  | n78 | 3365 | 10 | 50 | 3365 | N/A | N/A |
|  | 7, n7 | 2570 | 5 | 25 | 2670 | N/A | N/A |
|  | 28 | 720 | 5 | 25 | 790 | 3.0 | IMD5 |
|  | n78 | 3460 | 10 | 50 | 3421 | N/A | N/A |
|  | 7, n7 | 2570 | 5 | 25 | 2650 | 30.5 | IMD2 |
|  | 28 | 740 | 5 | 25 | 768 | N/A | N/A |
|  | n78 | 3390 | 10 | 50 | 3421 | N/A | N/A |
|  | 7, n7 | 2565 | 5 | 25 | 2685 | N/A | N/A |
|  | 28 | 745 | 5 | 25 | 800 | N/A | N/A |
|  | n78 | 3310 | 10 | 50 | 3310 | 29.7 | IMD2 |
| NOTE 1: For NR band, UL/DL BW and UL LCRB can be adjusted according to the supported BW and lowest SCS supported by the UE.  NOTE 2: E-UTRA carrier shall be set to min(+20 dBm, PCMAX\_L\_E-UTRA,c) and NR carrier shall be set to min(+20 dBm, PCMAX\_L,f,c,NR) as defined in clause 6.2B.4.1.3. | | | | | | | |

## **<<Next of Change>>**

## 7.4B Maximum input level for DC in FR1

### 7.4B.1 Intra-band contiguous EN-DC in FR1

Intra-band contiguous EN-DC maximum input level requirement and parameters are defined in Table 7.4B.1-1.

Table 7.4B.1-1: Maximum Input

|  |  |
| --- | --- |
| **Power in Largest CC, E-UTRA or NR, dBm** | X1 |
| **Power in each other CC, dBm** | X1 – 10\*log10(NxSCSx/NySCSy) |
| NOTE 1: Power in Largest E-UTRA or NR bandwidth CC, listed in Table 7.4-1 [2]  NOTE 2: Nx, SCSx is the number of RB's and Sub carrier spacing in the largest carrier bandwidth and could be E-UTRA or NR carrier  NOTE 3: Ny, SCSy is the number of RB's in any other carrier.  NOTE 4: Void.  NOTE 5: Void. | |

## **<<Next of Change>>**

## 7.5B Adjacent channel selectivity for DC in FR1

### 7.5B.1 Intra-band contiguous EN-DC in FR1

Intra-band contiguous EN-DC ACS requirement and parameters are defined for test case 1 in Table 7.5B.1-1 and for test case 2 in Table 7.5B.1-2.

Table 7.5B.1-1: ACS test case 1

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| EN-DC Aggregated Bandwidth, MHz | <=100 | >100, <=120 | >120, <=140 | >140, <=160 |
| ACS, dB | X1 | 19.2 | 18.5 | 17.9 |
| Pinterferer, dBm | PI 2 | Aggregated power + 17.7 dB | Aggregated power + 17 dB | Aggregated power + 16.4dB |
| Pw in Transmission BW configuration, per CC, dBm | REFSENS +14dB | | | |
| NOTE 1: X is ACS level at the specified EN-DC aggregated bandwidth from Table 7.5.1A-1 in TS 36.101 [4]  NOTE 2: PI is from Table 7.5.1A-2 in TS 36.101 [4]  NOTE 3: Jammer BW and offset is from Table 7.5.1A-2 [4] and is applied from the lowest edge of the lowest carrier and the highest edge of the highest carrier  NOTE 4: Void.  NOTE 5: Void. | | | | |

Table 7.5B.1-2: ACS test case 2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **EN-DC Aggregated Bandwidth, ENBW, MHz** | ≤100 | >100, ≤120 | >120, ≤140 | >140, ≤160 |
| **Pw in Transmission Bandwidth Configuration, perCC, dBm** | PW 1 | -42.7 +10log10(NRB,c/ NRB\_agg) | -42 +10log10(NRB,c/ NRB\_agg) | -41.4 +10log10(NRB,c/ NRB\_agg) |
| **Pinterferer, dBm** | -25 | | | |
| NOTE 1: PW is wanted signal power level at the specified EN-DC aggregated Bandwidth from Table 7.5.1A-3 in TS 36.101 [4]  NOTE 2: Jammer BW and offset is from Table 7.5.1A-3 [4] and is applied from the lowest edge of the lowest carrier and the highest edge of the highest carrier  NOTE 3: Void.  NOTE 4: Void. | | | | |

## **<<Next of Change>>**

## 7.6B Blocking characteristics for DC in FR1

### 7.6B.1 General

### 7.6B.2 In-band blocking for DC in FR1

#### 7.6B.2.1 Intra-band contiguous EN-DC in FR1

Intra-band contiguous EN-DC in-band blocking requirement and parameters are defined in Table 7.6B.2.1-1.

Table 7.6B.2.1-1: In-band blocking

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| EN-DC Aggregated Bandwidth, MHz | ≤100 | >100, ≤120 | >120, ≤140 | >140, ≤160 |
| Pw in Transmission Bandwidth Configuration, perCC, dBm |  | REFSENS + Aggregated BW specific value below | | |
|  | PW 1 | 16.8 | 17.5 | 18 |
| NOTE 1: PW is wanted signal power level at the specified EN-DC aggregated Bandwidth from Table 7.6.1.1A-1 in TS 36.101 [4]  NOTE 2: Interferer values are specified from Table 7.6.1.1A-2 in TS 36.101 [4]  NOTE 3: Jammer BW and offset is from Table 7.6.1.1A-1 [4] and is applied from the lowest edge of the lowest carrier and the highest edge of the highest carrier  NOTE 4: Void.  NOTE 5: Void. | | | | |

## **<<Next of Change>>**

### 7.6B.2.6 Power imbalance for type 2 UE of inter-band EN-DC with overlapping DL bands

Power imbalance requirement only for band combination of type 2 UE which is indicated by capability *interBandMRDC-WithOverlapDL-Bands-r16* is a measure of a receiver’s ability to receive LTE and NR signals with 25dB power imbalance. For these test parameters in table 7.5B.6-1, the throughput shall be ≥ 95 % of the maximum throughput of the reference measurement channels as specified in Annexes A.2.2, A.3.2, and A.3.3 (with one sided dynamic OCNG Pattern OP.1 FDD/TDD for the DL-signal as described in Annex A.5.1.1/A.5.2.1).

Table 7.6B.2.6-1: Test parameters for FDD-FDD or TDD-TDD inter-band EN-DC operation with overlapping or partially overlapping DL bands

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test configurations** | **Carriers** | **Rx Power in transmission bandwidth configuration (dBm)** | **channel bandwidth** | **Frequency relationship**  **(Center of BWanother Relative to edge of BWwanted)** |
| 1 | Wanted carrier | REFSENS + 1 | BWwanted ≤ BWanother | < max (5/2\* BWanother, 50MHz) |
| Another carrier with overlapping DL bands | Power of wanted carrier + 25 |
| 2 | Wanted carrier | REFSENS + 1 | BWwanted > BWanother |
| Another carrier with overlapping DL bands | Power of wanted carrier + 25 – 10\*log10(BWwanted /BWanother) |
| 3 | Wanted carrier | REFSENS + 1 | NA | ≥ max (5/2\* BWanother, 50MHz) |
| Another carrier with overlapping DL bands | Power of wanted carrier + 25 |
| NOTE 1: For NR carrier, the transmitter shall be set to 24dB below PCMAX\_L,f,c,NR at the minimum uplink configuration specified in Table 7.3.2-3 [2] with PCMAX\_L,f,c,NR as defined in clause 6.2B.4.  NOTE 2: For E-UTRA carrier, the transmitter shall be set to 24 dB below PCMAX\_L\_E-UTRA,c at the minimum uplink configuration specified in Table 7.3.1-2 [4] with PCMAX\_L\_E-UTRA,c as defined in clause 6.2B.4 for single carrier.  NOTE 3: BWwanted is the channel bandwidth of wanted carrier. BWanother is the channel bandwidth of another carrier with overlapping DL bands | | | | |

The applicability of these test configurations is shown below for type 2 UE which is indicated by capability *interBandMRDC-WithOverlapDL-Bands-r16*:

When the capability *interBandContiguousMRDC* is indicated, test configuration 1 or 2 can be used to verify the RX power imbalance requirement for type 2 UE.

When the capability *interBandContiguousMRDC* is absent, test configuration 1, 2 or 3 can be used to verify the RX power imbalance requirement for type 2 UE.

It’s allowed to use one of test configurations to verify the RX power imbalance requirement for type 2 UE.

For type 2 UEs indicating *interBandMRDC-WithOverlapDL-Bands-r16* for the following EN-DC band combinations in Table 7.6B.2.6-2, the Rx requirements for four Rx ports do not apply for each band.

Table 7.6B.2.6-2: EN‑DC combinations

|  |
| --- |
| EN-DC combination |
| DC\_42\_n77 |
| DC\_42\_n78 |

## **<<Next of Change>>**

### 7.6B.3 Out-of-band blocking for DC in FR1

#### 7.6B.3.1 Intra-band contiguous EN-DC in FR1

Intra-band contiguous EN-DC out-of-band requirement and parameters are defined in Table 7.6B.3.1-1.

Table 7.6B.3.1-1: Out-of-band blocking

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| EN-DC Aggregated Bandwidth, MHz | ≤100 | >100, ≤120 | >120, ≤140 | >140, ≤160 |
| Pw in Transmission Bandwidth Configuration, perCC, dBm | REFSENS + Aggregated BW specific value below | | | |
|  | 9 | | | |
| NOTE 1: Interferer values and offsets are specified from Table 7.6.2.1A-2 in TS 36.101 [4]  NOTE 2: Void.  NOTE 3: Void. | | | | |

For Table 7.6.2.1A-2 from TS 36.101 [4] in frequency range 1, 2 and 3, up to exceptions are allowed for spurious response frequencies in each assigned frequency channel when measured using a 1MHz step size. For these exceptions the requirements of subclause 7.7B.1 Spurious response are applicable.

## **<<Next of Change>>**

### 7.6B.4 Narrow band blocking for DC in FR1

#### 7.6B.4.1 Intra-band contiguous EN-DC in FR1

Intra-band contiguous EN-DC narrow band blocking requirement and parameters are defined in Table 7.6B.4.1-1.

Table 7.6B.4.1-1: Narrow band blocking parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| EN-DC Aggregated Bandwidth, MHz | ≤100 | >100, ≤120 | >120, ≤140 | >140, ≤160 |
| Pw in Transmission Bandwidth Configuration, perCC, dBm | REFSENS + Aggregated BW specific value below | | | |
|  | 16 | | | |
| PUW, dBm (CW) | -55 | | | |
| NOTE 1: Jammer offset is from Table 7.6.3.1A-1 [4] and is applied from the lowest edge of the lowest carrier and the highest edge of the highest carrier  NOTE 2: Void.  NOTE 3: Void.  NOTE 4: If NR carrier BW > 40 MHz, no narrow band blocking requirements apply when blocker is applied at the edge of the NR carrier. | | | | |

## **<<Next of Change>>**

## 7.7B Spurious response for DC in FR1

### 7.7B.1 Intra-band contiguous EN-DC in FR1

Intra-band contiguous EN-DC spurious response requirement and parameters are defined in Table 7.7B.1-1.

Table 7.7B.1-1: Spurious Response Parameters

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| EN-DC Aggregated Bandwidth, MHz | ≤100 | >100, ≤120 | >120, ≤140 | >140, ≤160 |
| Pw in Transmission Bandwidth Configuration, perCC, dBm | REFSENS + Aggregated BW specific value below | | | |
|  | 9 | | | |
| Pinterferer, dBm (CW) | -44 | | | |
| NOTE 1: Void.  NOTE 2: Void. | | | | |

## **<<Next of Change>>**

## 7.8B Intermodulation characteristics for DC in FR1

### 7.8B.1 General

### 7.8B.2 Wide band Intermodulation

#### 7.8B.2.1 Intra-band contiguous EN-DC in FR1

Intra-band contiguous EN-DC wide band intermodulation requirement and parameters are defined in Table 7.8B.2.1-1.

Table 7.8B.2.1-1: Wide band intermodulation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| EN-DC Aggregated Bandwidth, MHz | <=100 | >100, <=120 | >120, <=140 | >140, <=160 |
| Pw in Transmission Bandwidth Configuration, perCC, dBm | PW 1 | REFSENS + Aggregated BW specific value below | | |
|  |  | 16.8 | 17.5 | 18.0 |
| Pinterferer 1, dBm (CW)2 | -46 | | | |
| Pinterferer 2, dBm (Modulated)2 | -46 | | | |
| NOTE 1: PW is wanted signal power level from Table 7.8.1A-1 in TS 36.101 [4]  NOTE 2: Jammer BW and offsets is from Table 7.8.1A-1 [4] and is applied from the lowest edge of the lowest carrier and the highest edge of the highest carrier  NOTE 3: Void.  NOTE 4: Void. | | | | |

## **<<End of Change>>**