**3GPP TSG-RAN WG4 Meeting #97-e R4-2016801**

**Electronic Meeting, 02 November – 13 November 2020**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.101-3** | **CR** | **0402** | **rev** | **1** | **Current version:** | **16.5.0** |  |
|  | | | | | | | | |
| *For* [***HELP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
|  | | | | | | | | |

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | CR to add NR-U EN-DC combinations | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson, Charter Communication, T-Mobile US | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_unlic-Core | | | | |  | ***Date:*** | | | 2020-10-23 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | B |  | | | | | ***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:*** | | CR to add NR-U EN-DC combinations. Same CR as R4-2008431 that was endorsed at RAN4 95-e | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | CR to add NR-U EN-DC combinations  DC\_2\_n46  DC\_48\_n46  DC\_66\_n46 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | NR-U EN-DC combinations are not added | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.5, 6.2, 7.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | | **X** |  | Test specifications | | | | TS 36.521 | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

---Start of changes---

---Start of changes---

Table 4.3-1: Definition of suffixes

|  |  |
| --- | --- |
| Clause suffix | Variant |
| None | Single Carrier |
| A | Carrier Aggregation (CA) between FR1 and FR2 |
| B | Dual-Connectivity (DC) with and without SUL including UL sharing from UE perspective, inter-band NR DC between FR1 and FR2 |
| D | UL MIMO |
| E | V2X |
| F | Shared spectrum channel access |

---Text omitted---

#### 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 |
| --- | --- | --- |
| 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\_n41A | 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 |
| DC\_1A\_n77(2A) | DC\_1A\_n77A | DC\_1\_n77 |
| DC\_1A\_n78A7  DC\_1A\_n78C7 | DC\_1A\_n78A | No |
| DC\_1A\_n78(2A)7 | DC\_1A\_n78A | No |
| DC\_1A\_n79A7  DC\_1A\_n79C7 | DC\_1A\_n79A | 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\_n41A  DC\_3C\_n41A | DC\_3A\_n41A  DC\_3C\_n41A | DC\_3\_n41 |
| 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 |
| DC\_3A\_n77(2A)7 | DC\_3A\_n77A | DC\_3\_n77 |
| DC\_3A-3A\_n77A | DC\_3A\_n77A | DC\_3\_n77 |
| DC\_3A\_n78A7  DC\_3A\_n78C7  DC\_3C\_n78A7 | DC\_3A\_n78A | DC\_3\_n78 |
| DC\_3A\_n78(2A)7  DC\_3C\_n78(2A)7 | DC\_3A\_n78A | DC\_3\_n78 |
| DC\_3A-3A\_n78A | DC\_3A\_n78A | DC\_3\_n78 |
| DC\_3A\_n79A7  DC\_3A\_n79C7  DC\_3C\_n79A7 | DC\_3A\_n79A  DC\_3C\_n79A | 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 |
| DC\_5A\_n78(2A)7 | DC\_5A\_n78A | No |
| DC\_5A\_n79A | DC\_5A\_n79A | 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\_n77A | DC\_7A\_n77A | No |
| DC\_7A-7A\_n77A | 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\_n41A  DC\_8A\_n41C | DC\_8A\_n41A | No |
| DC\_8A\_n41(2A) | DC\_8A\_n41A | No |
| DC\_8A\_n77A7 | DC\_8A\_n77A | No |
| DC\_8A\_n77(2A)7 | DC\_8A\_n77A | No |
| DC\_8A\_n78A7 | DC\_8A\_n78A | No |
| DC\_8A\_n79A7  DC\_8A\_n79C | DC\_8A\_n79A  DC\_8A\_n79C | 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 |
| DC\_11A\_n77(2A)7 | DC\_11A\_n77A | No |
| DC\_11A\_n78A7 | DC\_11A\_n78A | 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 |
| DC\_18A\_n78A7 | DC\_18A\_n78A | 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 |
| DC\_19A\_n79A7  DC\_19A\_n79C7 | DC\_19A\_n79A | 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\_n28A8,10,11,13 | 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 |
| DC\_21A\_n79A7  DC\_21A\_n79C7 | DC\_21A\_n79A | 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\_n41A | DC\_28A\_n41A | No |
| DC\_28A\_n50A | DC\_28A\_n50A | No |
| DC\_28A\_n77A7  DC\_28A\_n77C7 | DC\_28A\_n77A | No |
| DC\_28A\_n77(2A)7 | DC\_28A\_n77A | No |
| DC\_28A\_n78A7  DC\_28A\_n78C7 | DC\_28A\_n78A | No |
| DC\_28A\_n78(2A) | DC\_28A\_n78A | 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 |
| DC\_39A\_n78A5,7 | DC\_39A\_n78A | No |
| DC\_39A\_n79A7  DC\_39A\_n79C7 | DC\_39A\_n79A | 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 |
| DC\_41A\_n3A  DC\_41C\_n3A | DC\_41A\_n3A  DC\_41C\_n3A | No |
| DC\_41A\_n28A  DC\_41C\_n28A | 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 |
| DC\_42A\_n28A  DC\_42C\_n28A | 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\_n77C  DC\_42E\_n77A3,4,9,11  DC\_42E\_n77C | 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\_n78C  DC\_42E\_n78A3,4,9,11  DC\_42E\_n78C | N/A | N/A |
| DC\_42A\_n79A9  DC\_42A\_n79C9  DC\_42C\_n79A9  DC\_42C\_n79C9  DC\_42D\_n79A9  DC\_42D\_n79C  DC\_42E\_n79A9  DC\_42E\_n79C | 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: The minimum requirements for intra-band contiguous or non-contiguous EN-DC apply. The 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: The maximum power spectral density imbalance between downlink carriers is within 6 dB. The power spectral density imbalance condition also applies for these carriers when applicable EN-DC configuration is a subset of a higher order EN-DC configuration.  NOTE 11: The minimum requirements for inter-band EN-DC apply when the maximum power spectral density imbalance between downlink carriers is within 6 dB. The power spectral density imbalance condition also applies for these carriers when applicable 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: 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. | | |

---Text omitted---

Table 6.2B.1.3-1: Maximum output power for inter-band EN-DC (two bands)

| EN-DC configuration | Power class 2  (dBm) | Tolerance  (dB) | Power class 3  (dBm) | Tolerance  (dB) |
| --- | --- | --- | --- | --- |
| DC\_1A\_n3A |  |  | 23 | +2/-3 |
| DC\_1A\_n5A |  |  | 23 | +2/-3 |
| DC\_1A\_n7A |  |  | 23 | +2/-3 |
| DC\_1A\_n8A |  |  | 23 | +2/-3 |
| DC\_1A\_n20A |  |  | 23 | +2/-3 |
| DC\_1A\_n28A |  |  | 23 | +2/-3 |
| DC\_1A\_n38A |  |  | 23 | +2/-3 |
| DC\_1A\_n40A |  |  | 23 | +2/-3 |
| DC\_1A\_n41A |  |  | 23 | +2/-3 |
| DC\_1A\_n50A |  |  | 23 | +2/-3 |
| DC\_1A\_n51A |  |  | 23 | +2/-3 |
| DC\_1A\_n71A |  |  | 23 | +2/-3 |
| DC\_1A\_n77A  DC\_1A\_n84A\_ULSUP-TDM\_n77A |  |  | 23 | +2/-3 |
| DC\_1A\_n78A  DC\_1A\_n84A\_ULSUP-TDM\_n78A |  |  | 23 | +2/-3 |
| DC\_1A\_n79A  DC\_1A\_n84A\_ULSUP-TDM\_n79A |  |  | 23 | +2/-3 |
| DC\_1A\_n80A |  |  | 23 | +2/-3 |
| DC\_2A\_n5A |  |  | 23 | +2/-31 |
| DC\_2A\_n7A |  |  | 23 | +2/-3 |
| DC\_2A\_n12A |  |  | 23 | +2/-3 |
| DC\_2A\_n38A |  |  | 23 | +2/-3 |
| DC\_2A\_n41A |  |  | 23 | +2/-3 |
| DC\_2A\_n46A |  |  | 23 | +2/-3 |
| DC\_2A\_n48A |  |  | 23 | +2/-3 |
| DC\_2A\_n66A |  |  | 23 | +2/-31 |
| DC\_2A\_n71A |  |  | 23 | +2/-3 |
| DC\_2A\_n78A |  |  | 23 | +2/-3 |
| DC\_3A\_n1A |  |  | 23 | +2/-3 |
| DC\_3A\_n5A  DC\_3C\_n5A |  |  | 23 | +2/-3 |
| DC\_3A\_n7A |  |  | 23 | +2/-31 |
| DC\_3A\_n8A |  |  | 23 | +2/-3 |
| DC\_3A\_n20A |  |  | 23 | +2/-3 |
| DC\_3A\_n28A |  |  | 23 | +2/-31 |
| DC\_3A\_n34A |  |  | 23 | +2/-31 |
| DC\_3A\_n38A |  |  | 23 | +2/-3 |
| DC\_3A\_n40A |  |  | 23 | +2/-31 |
| DC\_3A\_n41A,  DC\_3C\_n41A,  DC\_3C\_n41A, | 266 | +2/-3 | 23 | +2/-3 |
| DC\_3A\_n50A |  |  | 23 | +2/-3 |
| DC\_3A\_n51A |  |  | 23 | +2/-31 |
| DC\_3A\_n71A |  |  | 23 | +2/-3 |
| DC\_3A\_n77A |  |  | 23 | +2/-31 |
| DC\_3A\_n78A | 266 | +2/-31 | 23 | +2/-31 |
| DC\_3A\_n79A  DC\_3C\_n79A |  |  | 23 | +2/-31 |
| DC\_3A\_n80A\_ULSUP-TDM\_n41  DC\_3C\_n80A\_ULSUP-TDM\_n41 |  |  | 23 | +2/-3 |
| DC\_3A\_n80A\_ULSUP-TDM\_n77A |  |  | 23 | +2/-31 |
| DC\_3A\_n80A\_ULSUP-TDM\_n78A |  |  | 23 | +2/-31 |
| DC\_3A\_n80A\_ULSUP-TDM\_n79A |  |  | 23 | +2/-31 |
| DC\_3A\_n82A |  |  | 23 | +2/-31 |
| DC\_3A\_n84A |  |  | 23 | +2/-31 |
| DC\_4A\_n38A |  |  | 23 | +2/-3 |
| DC\_4A\_n41A |  |  | 23 | +2/-3 |
| DC\_4A\_n78A |  |  | 23 | +2/-3 |
| DC\_5A\_n2A |  |  | 23 | +2/-3 |
| DC\_5A\_n7A |  |  | 23 | +2/-3 |
| DC\_5A\_n12A |  |  | 23 | +2/-3 |
| DC\_5A\_n38A |  |  | 23 | +2/-3 |
| DC\_5A\_n40A |  |  | 23 | +2/-31 |
| DC\_5A\_n48A |  |  | 23 | +2/-3 |
| DC\_5A\_n66A |  |  | 23 | +2/-31 |
| DC\_5A\_n71A |  |  | 23 | +2/-3 |
| DC\_5A\_n78A |  |  | 23 | +2/-3 |
| DC\_5A\_n79A |  |  | 23 | +2/-3 |
| DC\_7A\_n1A |  |  | 23 | +2/-3 |
| DC\_7A\_n3A |  |  | 23 | +2/-3 |
| DC\_7A\_n5A  DC\_7C\_n5A |  |  | 23 | +2/-3 |
| DC\_7A\_n8A |  |  | 23 | +2/-3 |
| DC\_7A\_n20A |  |  | 23 | +2/-3 |
| DC\_7A\_n28A |  |  | 23 | +2/-31 |
| DC\_7A\_n40A |  |  | 23 | +2/-3 |
| DC\_7A\_n51A |  |  | 23 | +2/-31 |
| DC\_7A\_n66A |  |  | 23 | +2/-31 |
| DC\_7A\_n71A |  |  | 23 | +2/-3 |
| DC\_7A\_n77A |  |  | 23 | +2/-3 |
| DC\_7A\_n78A  DC\_7C\_n78A |  |  | 23 | +2/-3 |
| DC\_7A\_n80A |  |  | 23 | +2/-3 |
| DC\_8A\_n1A |  |  | 23 | +2/-3 |
| DC\_8A\_n3A |  |  | 23 | +2/-3 |
| DC\_8A\_n20A |  |  | 23 | +2/-3 |
| DC\_8A\_n28A |  |  | 23 | +2/-3 |
| DC\_8A\_n34A |  |  | 23 | +2/-31 |
| DC\_8A\_n39A |  |  | 23 | +2/-3 |
| DC\_8A\_n40A |  |  | 23 | +2/-31 |
| DC\_8A\_n41A, |  |  | 23 | +2/-3 |
| DC\_8A\_n77A |  |  | 23 | +2/-3 |
| DC\_8A\_n78A |  |  | 23 | +2/-3 |
| DC\_8A\_n79A  DC\_8A\_n79C |  |  | 23 | +2/-3 |
| DC\_8A\_n80A |  |  | 23 | +2/-3 |
| DC\_8A\_n81A\_ULSUP-TDM\_n41 |  |  | 23 | +2/-3 |
| DC\_8A\_n81A\_ULSUP-TDM\_n78A |  |  | 23 | +2/-3 |
| DC\_8A\_n81A\_ULSUP-TDM\_n79A |  |  | 23 | +2/-3 |
| DC\_11A\_n3A |  |  | 23 | +2/-3 |
| DC\_11A\_n28A |  |  | 23 | +2/-3 |
| DC\_11A\_n77A |  |  | 23 | +2/-3 |
| DC\_11A\_n78A |  |  | 23 | +2/-3 |
| DC\_11A\_n79A |  |  | 23 | +2/-3 |
| DC\_12A\_n2A |  |  | 23 | +2/-3 |
| DC\_12A\_n5A |  |  | 23 | +2/-3 |
| DC\_12A\_n7A |  |  | 23 | +2/-3 |
| DC\_12A\_n25A |  |  | 23 | +2/-3 |
| DC\_12A\_n38A |  |  | 23 | +2/-3 |
| DC\_12A\_n41A |  |  | 23 | +2/-3 |
| DC\_12A\_n66A |  |  | 23 | +2/-3 |
| DC\_12A\_n78A |  |  | 23 | +2/-3 |
| DC\_13A\_n2A |  |  | 23 | +2/-3 |
| DC\_13A\_n5A |  |  | 23 | +2/-3 |
| DC\_13A\_n7A |  |  | 23 | +2/-3 |
| DC\_13A\_n48A |  |  | 23 | +2/-3 |
| DC\_13A\_n66A |  |  | 23 | +2/-3 |
| DC\_13A\_n71A |  |  | 23 | +2/-3 |
| DC\_13A\_n78A |  |  | 23 | +2/-3 |
| DC\_14A\_n2A |  |  | 23 | +2/-3 |
| DC\_14A\_n66A |  |  | 23 | +2/-3 |
| DC\_18A\_n3A |  |  | 23 | +2/-3 |
| DC\_18A\_n77A |  |  | 23 | +2/-3 |
| DC\_18A\_n78A |  |  | 23 | +2/-3 |
| DC\_18A\_n79A |  |  | 23 | +2/-3 |
| DC\_19A\_n77A |  |  | 23 | +2/-3 |
| DC\_19A\_n78A |  |  | 23 | +2/-3 |
| DC\_19A\_n79A |  |  | 23 | +2/-3 |
| DC\_20A\_n1A |  |  | 23 | +2/-3 |
| DC\_20A\_n3A |  |  | 23 | +2/-3 |
| DC\_20A\_n7A |  |  | 23 | +2/-3 |
| DC\_20A\_n8A |  |  | 23 | +2/-3 |
| DC\_20A\_n38A |  |  | 23 | +2/-3 |
| DC\_20A\_n28A |  |  | 23 | +2/-3 |
| DC\_20A\_n41A |  |  | 23 | +2/-3 |
| DC\_20A\_n50A |  |  | 23 | +2/-3 |
| DC\_20A\_n51A |  |  | 23 | +2/-3 |
| DC\_20A\_n77A |  |  | 23 | +2/-3 |
| DC\_20A\_n80A |  |  | 23 | +2/-3 |
| DC\_20A\_n78A |  |  | 23 | +2/-3 |
| DC\_20A\_n82A\_ULSUP-TDM\_n78A |  |  | 23 | +2/-3 |
| DC\_20A\_n83A |  |  | 23 | +2/-3 |
| DC\_21A\_n77A |  |  | 23 | +2/-3 |
| DC\_21A\_n78A |  |  | 23 | +2/-3 |
| DC\_21A\_n79A |  |  | 23 | +2/-3 |
| DC\_25A\_n41A |  |  | 23 | +2/-3 |
| DC\_26A\_n25A |  |  | 23 | +2/-3 |
| DC\_26A\_n41A |  |  | 23 | +2/-3 |
| DC\_26A\_n77A |  |  | 23 | +2/-3 |
| DC\_26A\_n78A |  |  | 23 | +2/-3 |
| DC\_26A\_n79A |  |  | 23 | +2/-3 |
| DC\_28A\_n3A |  |  | 23 | +2/-3 |
| DC\_28A\_n5A |  |  | 23 | +2/-3 |
| DC\_28A\_n7A  DC\_28A\_n7B |  |  | 23 | +2/-3 |
| DC\_28A\_n8A |  |  | 23 | +2/-3 |
| DC\_28A\_n40A |  |  | 23 | +2/-3 |
| DC\_28A\_n41A |  |  | 23 | +2/-3 |
| DC\_28A\_n50A |  |  | 23 | +2/-3 |
| DC\_28A\_n51A |  |  | 23 | +2/-3 |
| DC\_28A\_n77A |  |  | 23 | +2/-3 |
| DC\_28A\_n78A |  |  | 23 | +2/-3 |
| DC\_28A\_n79A |  |  | 23 | +2/-3 |
| DC\_28A\_n83A\_ULSUP-TDM\_n78A |  |  | 23 | +2/-3 |
| DC\_30A\_n2A |  |  | 23 | +2/-3 |
| DC\_30A\_n5A |  |  | 23 | +2/-3 |
| DC\_30A\_n66A |  |  | 23 | +2/-3 |
| DC\_38A\_n78A |  |  | N/A | N/A |
| DC\_39A\_n40A |  |  | 23 | +2/-3 |
| DC\_39A\_n41A  DC\_39C\_n41A | 265 | +2/-31 | 23 | +2/-3 |
| DC\_39A\_n78A |  |  | 23 | +2/-31 |
| DC\_39A\_n79A | 265 | +2/-31 | 23 | +2/-31 |
| DC\_40A\_n1A |  |  | 23 | +2/-3 |
| DC\_40A\_n41A  DC\_40C\_n41A |  |  | 23 | +2/-3 |
| DC\_40A\_n77A |  |  | N/A | N/A |
| DC\_40A\_n78A |  |  | 23 | +2/-3 |
| DC\_40A\_n79A |  |  | 23 | +2/-3 |
| DC\_41A\_n3A  DC\_41C\_n3A |  |  | 23 | +2/-3 |
| DC\_41A\_n28A  DC\_41C\_n28A |  |  | 23 | +2/-3 |
| DC\_41A\_n77A  DC\_41C\_n77A |  |  | 23 | +2/-31 |
| DC\_41A\_n78A  DC\_41C\_n78A |  |  | 23 | +2/-31 |
| DC\_41A\_n79A  DC\_41C\_n79A | 265 | +2/-31 | 23 | +2/-31 |
| DC\_42A\_n28A  DC\_42C\_n28A |  |  | 23 | +2/-3 |
| DC\_42A\_n51A |  |  | 23 | +2/-3 |
| DC\_42A\_n77A |  |  | N/A | N/A |
| DC\_42A\_n78A |  |  | N/A | N/A |
| DC\_42A\_n79A |  |  | N/A | N/A |
| DC\_48A\_n5A |  |  | 23 | +2/-3 |
| DC\_48A\_n12A |  |  | 23 | +2/-3 |
| DC\_48A\_n46A |  |  | 23 | +2/-3 |
| DC\_48A\_n66A |  |  | 23 | +2/-3 |
| DC\_48A\_n71A |  |  | 23 | +2/-3 |
| DC\_66A\_n2A |  |  | 23 | +2/-3 |
| DC\_66A\_n5A |  |  | 23 | +2/-31 |
| DC\_66A\_n7A |  |  | 23 | +2/-3 |
| DC\_66A\_n12A |  |  | 23 | +2/-3 |
| DC\_66A\_n25A |  |  | 23 | +2/-3 |
| DC\_66A\_n38A |  |  | 23 | +2/-3 |
| DC\_66A\_n41A |  |  | 23 | +2/-3 |
| DC\_66A\_n46A |  |  | 23 | +2/-3 |
| DC\_66A\_n48A |  |  | 23 | +2/-3 |
| DC\_66A\_n71A |  |  | 23 | +2/-3 |
| DC\_66A\_n78A  DC\_66A-66A\_n78A |  |  | 23 | +2/-3 |
| DC\_66A\_n86A\_ULSUP-TDM\_n78A |  |  | 23 | +2/-3 |
| DC\_71A\_n5A |  |  | 23 | +2/-3 |
| DC\_71A\_n38A |  |  | 23 | +2/-3 |
| DC\_71A\_n48A |  |  | 23 | +2/-3 |
| DC\_71A\_n66A |  |  | 23 | +2/-3 |
| DC\_71A\_n78A |  |  | 23 | +2/-3 |
| NOTE 1: For the transmission bandwidths confined within FUL\_low and FUL\_low + 4 MHz or FUL\_high – 4 MHz and FUL\_high, the maximum output power requirement is relaxed by reducing the lower tolerance limit by 1.5 dB  NOTE 2: PPowerClass, EN-DC is the maximum UE power specified without taking into account the tolerance  NOTE 3: For inter-band EN-DC the maximum power requirement should apply to the total transmitted power over all component carriers (per UE).  NOTE 4: Power Class 3 is the default power class unless otherwise stated.  NOTE 5: The UE is not required to support PC2 within each individual cell group. Power class support within each individual cell group is signaled separately by the UE.  NOTE 6: The UE supports PC3 within E-UTRA cell group, and supports either PC3 or PC2 within NR cell group. Power class support within each individual cell group is signaled separately by the UE. | | | | |

---Text omitted---

Table 6.2B.4.2.3.1-1: ΔTIB,c due to EN-DC(two bands)

| Inter-band EN-DC configuration | E-UTRA or NR Band | ΔTIB,c (dB) |
| --- | --- | --- |
| DC\_1\_n3 | 1 | 0.3 |
| n3 | 0.3 |
| DC\_1\_n5 | 1 | 0.3 |
| n5 | 0.3 |
| DC\_1\_n7 | 1 | 0.5 |
| n7 | 0.6 |
| DC\_1\_n8 | 1 | 0.3 |
| n8 | 0.3 |
| DC\_1\_n20 | 1 | 0.3 |
| n20 | 0.3 |
| DC\_1\_n28 | 1 | 0.3 |
| n28 | 0.6 |
| DC\_1\_n38 | 1 | 0.5 |
| n38 | 0.5 |
| DC\_1\_n40 | 1 | 0.5 |
| n40 | 0.5 |
| DC\_1\_n50 | 1 | 0.5 |
| n50 | 0.5 |
| DC\_1\_n41 | 1 | 0.5 |
| n41 | 0.5 |
| DC\_1\_n51 | 1 | 0.6 |
| n51 | 0.6 |
| DC\_1\_n71 | 1 | 0.3 |
| n71 | 0.3 |
| DC\_1\_n77 | 1 | 0.6 |
| n77 | 0.8 |
| DC\_1\_n78 | 1 | 0.3 |
| n78 | 0.8 |
| DC\_2\_n5 | 2 | 0.3 |
| n5 | 0.3 |
| DC\_2\_n7 | 2 | 0.5 |
| n7 | 0.5 |
| DC\_2\_n12 | 2 | 0.3 |
| n12 | 0.3 |
| DC\_2\_n38 | 2 | 0.5 |
| n38 | 0.9 |
| DC\_2\_n41 | 2 | 0.5 |
| n41 | 0.41 |
| 0.92 |
| DC\_2\_n48 | 2 | 0.6 |
| n48 | 0.8 |
| DC\_2\_n66 | 2 | 0.5 |
| n66 | 0.5 |
| DC\_2\_n71 | 2 | 0.3 |
| n71 | 0.3 |
| DC\_2\_n78 | 2 | 0.6 |
| n78 | 0.8 |
| DC\_3\_n1 | 3 | 0.3 |
| n1 | 0.3 |
| DC\_3\_n5 | 3 | 0.3 |
| n5 | 0.3 |
| DC\_3\_n8 | 3 | 0.3 |
| n8 | 0.3 |
| DC\_3\_n7 | 3 | 0.5 |
| n7 | 0.5 |
| DC\_3\_n20 | 3 | 0.3 |
| n20 | 0.3 |
| DC\_3\_n28 | 3 | 0.3 |
| n28 | 0.3 |
| DC\_3\_n34 | 3 | 0.5 |
| n34 | 0.5 |
| DC\_3\_n38 | 3 | 0.5 |
| n38 | 0.5 |
| DC\_3\_n40 | 3 | 0.5 |
| n40 | 0.5 |
| DC\_3-n41 | 3 | 0.5 |
| n41 | 0.33 |
| 0.84 |
| DC\_3\_n50 | 3 | 0.5 |
| n50 | 0.5 |
| DC\_3\_n51 | 3 | 0.3 |
| n51 | 0.3 |
| DC\_3\_n71 | 3 | 0.3 |
| n71 | 0.3 |
| DC\_7\_n66, DC\_7-7\_n66 | 7 | 0.5 |
| n66 | 0.5 |
| DC\_3\_n77, DC\_3-3\_n77 | 3 | 0.6 |
| n77 | 0.8 |
| DC\_3\_n78, DC\_3-3\_n78 | 3 | 0.6 |
| n78 | 0.8 |
| DC\_4\_n38 | 4 | 0.5 |
| n38 | 0.8 |
| DC\_4\_n41 | 4 | 0.5 |
| n41 | 0.81 |
| 1.32 |
| DC\_4\_n78 | 4 | 0.6 |
| n78 | 0.8 |
| DC\_5\_n2,  DC\_5-5\_n2 | 5 | 0.3 |
| n2 | 0.3 |
| DC\_5\_n7 | 5 | 0.3 |
| n7 | 0.3 |
| DC\_5\_n12 | 5 | 0.8 |
| n12 | 0.4 |
| DC\_5\_n38 | 5 | 0.3 |
| n38 | 0.3 |
| DC\_5\_n40 | 5 | 0.3 |
| n40 | 0.3 |
| DC\_5\_n48 | 5 | 0.3 |
| n48 | 0.3 |
| DC\_5\_n66,  DC\_5-5\_n66 | 5 | 0.3 |
| n66 | 0.3 |
| DC\_5\_n71 | 5 | 0.5 |
| n71 | 0.5 |
| DC\_5\_n78 | 5 | 0.6 |
| n78 | 0.8 |
| DC\_7\_n1, DC\_7-7\_n1 | 7 | 0.6 |
| n1 | 0.5 |
| DC\_7\_n3 | 7 | 0.5 |
| n3 | 0.5 |
| DC\_7\_n5 | 7 | 0.3 |
| n5 | 0.3 |
| DC\_7\_n8 | 7 | 0.3 |
| n8 | 0.6 |
| DC\_7\_n20 | 7 | 0.3 |
| n20 | 0.3 |
| DC\_7\_n28 | 7 | 0.3 |
| n28 | 0.3 |
| DC\_7\_n40 | 7 | 0.5 |
| n40 | 0.6 |
| DC\_7\_n51 | 7 | 0.3 |
| n51 | 0.3 |
| DC\_7\_n71 | 7 | 0.3 |
| n71 | 0.6 |
| DC\_7\_n77, DC\_7-7\_n77 | 7 | 0.5 |
| n77 | 0.8 |
| DC\_7\_n78, DC\_7-7\_n78 | 7 | 0.5 |
| n78 | 0.8 |
| DC\_8\_n1 | 8 | 0.3 |
| n1 | 0.3 |
| DC\_8\_n3 | 8 | 0.3 |
| n3 | 0.3 |
| DC\_8\_n20 | 8 | 0.4 |
| n20 | 0.4 |
| DC\_8\_n28 | 8 | 0.6 |
| n28 | 0.5 |
| DC\_8\_n34 | 8 | 0.3 |
| n34 | 0.3 |
| DC\_8\_n39 | 8 | 0.3 |
| n39 | 0.3 |
| DC\_8\_n40 | 8 | 0.3 |
| n40 | 0.3 |
| DC\_8\_n41 | 8 | 0.3 |
| n41 | 0.3 |
| DC\_8\_n77 | 8 | 0.6 |
| n77 | 0.8 |
| DC\_8\_n78 | 8 | 0.6 |
| n78 | 0.8 |
| DC\_11\_n3 | 11 | 0.8 |
| n3 | 0.9 |
| DC\_11\_n28 | 11 | 0.4 |
| n28 | 0.6 |
| DC\_11\_n77 | 11 | 0.4 |
| n77 | 0.8 |
| DC\_11\_n78 | 11 | 0.4 |
| n78 | 0.8 |
| DC\_12\_n2 | 12 | 0.3 |
| n2 | 0.3 |
| DC\_12\_n5 | 12 | 0.4 |
| n5 | 0.8 |
| DC\_12\_n7 | 12 | 0.3 |
| n7 | 0.3 |
| DC\_12\_n25 | 12 | 0.3 |
| n25 | 0.3 |
| DC\_12\_n38 | 12 | 0.3 |
| n38 | 0.3 |
| DC\_12\_n41 | 12 | 0.3 |
| n41 | 0.3 |
| DC\_12\_n66 | 12 | 0.8 |
| n66 | 0.3 |
| DC\_12\_n78 | 12 | 0.5 |
| n78 | 0.8 |
| DC\_13\_n2 | 13 | 0.3 |
| n2 | 0.3 |
| DC\_13\_n5 | 13 | 0.5 |
| n5 | 0.5 |
| DC\_13\_n7 | 13 | 0.5 |
| n7 | 0.5 |
| DC\_13\_n48 | 13 | 0.3 |
| n48 | 0.3 |
| DC\_13\_n66 | 13 | 0.3 |
| n66 | 0.3 |
| DC\_13\_n71 | 13 | 0.5 |
| n71 | 0.5 |
| DC\_13\_n78 | 13 | 0.5 |
| n78 | 0.8 |
| DC\_14\_n2 | 14 | 0.3 |
| n2 | 0.3 |
| DC\_14\_n66 | 14 | 0.3 |
| n66 | 0.3 |
| DC\_18\_n3 | 18 | 0.3 |
| n3 | 0.3 |
| DC\_18\_n77 | 18 | 0.3 |
| n77 | 0.8 |
| DC\_18\_n78 | 18 | 0.3 |
| n78 | 0.8 |
| DC\_19\_n77 | 19 | 0.3 |
| n77 | 0.8 |
| DC\_19\_n78 | 19 | 0.3 |
| n78 | 0.8 |
| DC\_20\_n1 | 20 | 0.3 |
| n1 | 0.3 |
| DC\_20\_n3 | 20 | 0.3 |
| n3 | 0.3 |
| DC\_20\_n7 | 20 | 0.3 |
| n7 | 0.3 |
| DC\_20\_n8 | 20 | 0.4 |
| n8 | 0.4 |
| DC\_20\_n28 | 20 | 0.5 |
| n28 | 0.5 |
| DC\_20\_n38 | 20 | 0.3 |
| n38 | 0.3 |
| DC\_20\_n41 | 20 | 0.3 |
| n41 | 0.3 |
| DC\_20\_n50 | 20 | 0.3 |
| n50 | 0.4 |
| DC\_20\_n51 | 20 | 0.5 |
| n51 | 0.5 |
| DC\_20\_n77 | 20 | 0.6 |
| n77 | 0.8 |
| DC\_20\_n78 | 20 | 0.6 |
| n78 | 0.8 |
| DC\_21\_n77 | 21 | 0.4 |
| n77 | 0.8 |
| DC\_21\_n78 | 21 | 0.4 |
| n78 | 0.8 |
| DC\_25\_n41,  DC\_25-25\_n41 | 25 | 0.5 |
| n41 | 0.41 |
| 0.92 |
| DC\_26\_n25 | 26 | 0.3 |
| n25 | 0.3 |
| DC\_26\_n41 | 26 | 0.3 |
| n41 | 0.3 |
| DC\_26\_n77 | 26 | 0.3 |
| n77 | 0.8 |
| DC\_26\_n78 | 26 | 0.3 |
| n78 | 0.8 |
| DC\_28\_n3 | 28 | 0.3 |
| n3 | 0.3 |
| DC\_28\_n5 | 28 | 0.5 |
| n5 | 0.5 |
| DC\_28\_n7 | 28 | 0.3 |
| n7 | 0.3 |
| DC\_28\_n8 | 28 | 0.5 |
| n8 | 0.6 |
| DC\_28\_n40 | 28 | 0.3 |
| n40 | 0.3 |
| DC\_28\_n41 | 28 | 0.3 |
| n41 | 0.3 |
| DC\_28\_n50 | 28 | 0.3 |
| n50 | 0.4 |
| DC\_28\_n51 | 28 | 0.5 |
| n51 | 0.5 |
| DC\_28\_n77 | 28 | 0.5 |
| n77 | 0.8 |
| DC\_28\_n78 | 28 | 0.5 |
| n78 | 0.8 |
| DC\_30\_n2 | 30 | 0.3 |
| n2 | 0.5 |
| DC\_30\_n5 | 30 | 0.3 |
| n5 | 0.3 |
| DC\_30\_n66 | 30 | 0.5 |
| n66 | 0.8 |
| DC\_38\_n78 | n78 | 0.5 |
| DC\_39-n41 | 39 | 0.5 |
| n41 | 0.5 |
| DC\_39\_n78 | 39 | 0.3 |
| n78 | 0.8 |
| DC\_39\_n79 | 39 | 0.3 |
| n79 | 0.8 |
| DC\_40\_n1 | n1 | 0.5 |
| 40 | 0.5 |
| DC\_40\_n415 | 40 | 0.5 |
| n41 | 0.5 |
| DC\_40\_n77 | n77 | 0.5 |
| DC\_40\_n78 | n78 | 0.56 |
| DC\_40\_n79 | 40 | 0.3 |
| n79 | 0.8 |
| DC\_41\_n3 | 41 | 0.33 |
| 0.84 |
| n3 | 0.5 |
| DC\_41\_n28 | 41 | 0.3 |
| n28 | 0.3 |
| DC\_41\_n77 | 41 | 0.3 |
| n77 | 0.8 |
| DC\_41\_n78 | 41 | 0.3 |
| n78 | 0.8 |
| DC\_41\_n79 | 41 | 0.3 |
| n79 | 0.8 |
| DC\_42\_n28 | 42 | 0.5 |
| n28 | 0.8 |
| DC\_42\_n51 | 42 | 0.6 |
| n51 | 0.8 |
| DC\_48\_n5 | 48 | 0.3 |
| n5 | 0.3 |
| DC\_48\_n12 | 48 | 0.3 |
| n12 | 0.3 |
| DC\_48\_n46 | 48 | 0.8 |
| DC\_48\_n66 | 48 | 0.8 |
| n66 | 0.6 |
| DC\_48\_n71  DC\_48-48\_n71  DC\_48-48-48\_n71 | 48 | 0.3 |
| n71 | 0.3 |
| DC\_66\_n2 | 66 | 0.5 |
| n2 | 0.5 |
| DC\_66\_n5,  DC\_66-66\_n5,  DC\_66-66-66\_n5 | 66 | 0.3 |
| n5 | 0.3 |
| DC\_66\_n7 | 66 | 0.5 |
| n7 | 0.5 |
| DC\_66\_n12 | 66 | 0.8 |
| n12 | 0.3 |
| DC\_66\_n25 | 66 | 0.5 |
| n25 | 0.5 |
| DC\_66\_n38 | 66 | 0.5 |
| n38 | 0.5 |
| DC\_66\_n41 | 66 | 0.5 |
| n41 | 0.81 |
| 1.32 |
| DC\_66\_n48,  DC\_66-66\_n48 | 66 | 0.6 |
| n48 | 0.8 |
| DC\_66\_n71 | 66 | 0.3 |
| n71 | 0.3 |
| DC\_66\_n78 | 66 | 0.6 |
| n78 | 0.8 |
| DC\_71\_n5 | 71 | 0.5 |
| n5 | 0.5 |
| DC\_71\_n38 | 71 | 0.6 |
| n38 | 0.3 |
| DC\_71\_n48 | 71 | 0.3 |
| n48 | 0.3 |
| DC\_71\_n66 | 71 | 0.3 |
| n66 | 0.3 |
| DC\_71\_n78 | 71 | 0.5 |
| n78 | 0.8 |
| NOTE 1: The requirement is applied for UE transmitting on the frequency range of 2545-2690 MHz.  NOTE 2: The requirement is applied for UE transmitting on the frequency range of 2496-2545 MHz.  NOTE 3: Applicable for the frequency range of 2515 – 2690 MHz.  NOTE 4: Applicable for the frequency range of 2496 - 2515 MHz.  NOTE 5: Applicable for UE supporting inter-band EN-DC without simultaneous Rx/Tx.  NOTE 6: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx. | | |

---Text omitted---

Table 7.3B.3.3.1-1: ΔRIB,c due to EN-DC(two bands)

| Inter-band EN-DC configuration | E-UTRA or NR Band | ΔRIB,c (dB) |
| --- | --- | --- |
| DC\_1\_n28 | n28 | 0.2 |
| DC\_1\_n51 | n51 | 0.1 |
| DC\_1\_n77 | 1 | 0.2 |
| n77 | 0.5 |
| DC\_1\_n78 | n78 | 0.5 |
| DC\_2\_n48 | 2 | 0.2 |
| n48 | 0.5 |
| DC\_2\_n66 | 2 | 0.3 |
| n66 | 0.3 |
| DC\_2\_n78 | 2 | 0.2 |
| n78 | 0.5 |
| DC\_3-n41 | n41 | 03 |
| 0.54 |
| DC\_3\_n51 | 3 | 0.2 |
| n51 | 0.2 |
| DC\_3\_n77, DC\_3-3\_n77 | 3 | 0.2 |
| n77 | 0.5 |
| DC\_3\_n78, DC\_3-3\_n78 | 3 | 0.2 |
| n78 | 0.5 |
| DC\_5\_n78 | 5 | 0.2 |
| n78 | 0.5 |
| DC\_4\_n38 | 4 | 0.5 |
| n38 | 0.5 |
| DC\_4\_n41 | 4 | 0.5 |
| n41 | 0.51 |
| 12 |
| DC\_4\_n78 | 4 | 0.2 |
| n78 | 0.5 |
| DC\_5\_n12 | 5 | 0.5 |
| n12 | 0.3 |
| DC\_7\_n8 | n8 | 0.2 |
| DC\_7\_n40 | n40 | 0.5 |
| DC\_7\_n51 | n51 | 0.2 |
| DC\_7\_n66, DC\_7-7\_n66 | 7 | 0.5 |
| n66 | 0.5 |
| DC\_7\_n71 | n71 | 0.2 |
| DC\_7\_n77, DC\_7-7\_n77 | n77 | 0.5 |
| DC\_7\_n78, DC\_7-7\_n78 | n78 | 0.5 |
| DC\_8\_n28 | 8 | 0.2 |
| n28 | 0.1 |
| DC\_8\_n77 | 8 | 0.2 |
| n77 | 0.5 |
| DC\_8\_n78 | 8 | 0.2 |
| n78 | 0.5 |
| DC\_11\_n3 | 11 | 0.3 |
| n3 | 0.5 |
| DC\_11\_n28 | n28 | 0.2 |
| DC\_11\_n77 | n77 | 0.5 |
| DC\_11\_n78 | n78 | 0.5 |
| DC\_12\_n5 | 12 | 0.3 |
| n5 | 0.5 |
| DC\_12\_n66 | 12 | 0.5 |
| DC\_12\_n78 | 12 | 0.2 |
| n78 | 0.5 |
| DC\_13\_n7 | 13 | 0.5 |
| n7 | 0.5 |
| DC\_13\_n78 | 13 | 0.2 |
| n78 | 0.5 |
| DC\_18\_n77 | n77 | 0.5 |
| DC\_19\_n77 | n77 | 0.5 |
| DC\_19\_n78 | n78 | 0.5 |
| DC\_20\_n51 | n51 | 0.2 |
| DC\_20\_n77 | n77 | 0.5 |
| DC\_20\_n78 | n78 | 0.5 |
| DC\_21\_n77 | n77 | 0.5 |
| DC\_21\_n78 | n78 | 0.5 |
| DC\_25\_n41,  DC\_25-25\_n41 | n41 | 01 |
| 0.52 |
| DC\_26\_n77 | n77 | 0.5 |
| DC\_26\_n78 | n78 | 0.5 |
| DC\_28\_n8 | 28 | 0.1 |
| n8 | 0.2 |
| DC\_28A\_n51 | n51 | 0.2 |
| DC\_28\_n77 | 28 | 0.2 |
| n77 | 0.5 |
| DC\_28\_n78 | 28 | 0.2 |
| n78 | 0.5 |
| DC\_30\_n66 | 30 | 0.5 |
| n66 | 0.4 |
| DC\_38\_n78 | 38 | 0.4 |
| n78 | 0.5 |
| DC\_39\_n40 | 39 | 0.3 |
| n40 | 0.3 |
| DC\_39-n41 | 39 | 0.2 |
| n41 | 0.2 |
| DC\_39\_n78 | n78 | 0.5 |
| DC\_39\_n79 | n79 | 0.5 |
| DC\_40\_n77 | 40 | 0.4 |
| n77 | 0.5 |
| DC\_40\_n78 | 40 | 0.45 |
| n78 | 0.55 |
| DC\_40\_n79 | n79 | 0.5 |
| DC\_41\_n3 | 41 | 03 |
| 0.54 |
| DC\_42\_n28 | 42 | 0.2 |
| n28 | 0.5 |
| DC\_41\_n77 | n77 | 0.5 |
| DC\_41\_n78 | n78 | 0.5 |
| DC\_41\_n79 | n79 | 0.5 |
| DC\_42\_n51 | n51 | 0.2 |
| DC\_48\_n46 | 48 | 0.5 |
| DC\_48\_n66 | 48 | 0.5 |
| n66 | 0.2 |
| DC\_66\_n2 | 66 | 0.3 |
| n2 | 0.3 |
| DC\_66\_n7 | 66 | 0.5 |
| n7 | 0.5 |
| DC\_66\_n12 | 66 | 0.5 |
| DC\_66\_n25 | 66 | 0.3 |
| n25 | 0.3 |
| DC\_66\_n38 | 66 | 0.5 |
| n38 | 0.5 |
| DC\_66\_n41 | 66 | 0.5 |
| n41 | 0.51 |
| 12 |
| DC\_66\_n48,  DC\_66-66\_n48 | 66 | 0.2 |
| n48 | 0.5 |
| DC\_66\_n78 | 66 | 0.2 |
| n78 | 0.5 |
| DC\_71\_n38 | 71 | 0.2 |
| DC\_71\_n78 | 71 | 0.2 |
| n78 | 0.5 |
| NOTE 1: The requirement is applied for UE transmitting on the frequency range of 2545 – 2690 MHz.  NOTE 2: The requirement is applied for UE transmitting on the frequency range of 2496 – 2545 MHz.  NOTE 3: Applicable for the frequency range of 2515 – 2690 MHz.  NOTE 4: Applicable for the frequency range of 2496 – 2515 MHz.  NOTE 5: Only applicable for UE supporting inter-band carrier aggregation with uplink in one E-UTRA band and without simultaneous Rx/Tx. | | |

---Text omitted---

Table 7.3B.2.3.1-2: Uplink configuration for reference sensitivity exceptions due to UL harmonic interference for EN-DC in NR FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | E-UTRA or NR Band / Channel bandwidth of the affected DL band / UL RB allocation of the agressor band | | | | | | | | | | | | |
| UL band | DL band | 5  MHz  (LCRB) | 10 MHz  (LCRB) | 15 MHz  (LCRB) | 20 MHz  (LCRB) | 25 MHz  (LCRB) | 30 MHz  (LCRB) | 40 MHz  (LCRB) | 50 MHz  (LCRB) | 60 MHz  (LCRB) | 80 MHz  (LCRB) | 90 MHz  (LCRB) | 100 MHz  (LCRB) |
| 1 | n77 |  | 25 | 36 | 50 |  |  | 100 | 100 | 100 | 100 | 100 | 100 |
| 2 | n48 | 12 | 25 | 36 | 50 |  |  | 100 | 100 | 100 | 100 | 100 | 100 |
| 2 | n78 |  | 25 | 36 | 50 |  |  | 50 | 50 | 50 | 50 | 50 | 50 |
| 3 | n77, n78 |  | 25 | 36 | 50 |  |  | 50 | 50 | 50 | 50 | 50 | 50 |
| 4 | n78 |  | 25 | 36 | 50 |  |  | 100 | 100 | 100 | 100 | 100 | 100 |
| 5 | n78 | 8 | 16 | 25 | 25 |  |  | 25 |  |  |  |  |  |
| 8 | n41 |  | 16 | 25 | 25 |  |  | 25 | 25 | 25 | 25 | 25 | 25 |
| 8 | n77  n78 |  | 16 | 25 | 25 |  |  | 25 | 25 | 25 | 25 | 25 | 25 |
| 8 | n79 |  |  |  |  |  |  | 25 | 25 | 25 | 25 |  | 25 |
| n8 | 3 | 8 | 16 | 25 | 25 |  |  |  |  |  |  |  |  |
| n8 | 7 | 8 | 16 | 25 | 25 |  |  |  |  |  |  |  |  |
| 12 | n66 | 8 | 16 | 20 | 20 |  |  | 20 |  |  |  |  |  |
| 12 | n78 |  | 10 | 15 | 20 |  |  | 25 | 25 | 25 | 25 | 25 | 25 |
| n12 | 48 | 5 | 10 | 15 | 20 |  |  |  |  |  |  |  |  |
| 18 | n77 |  | 16 | 25 | 25 |  |  | 25 | 25 | 25 | 25 | 25 | 25 |
| 19 | n77 |  | 16 | 25 | 25 |  |  | 25 | 25 | 25 | 25 | 25 | 25 |
| 20 | n38 | 8 | 16 | 25 | 25 |  |  |  |  |  |  |  |  |
| 20 | n77, n78 |  | 16 | 25 | 25 |  |  | 25 | 25 | 25 | 25 | 25 | 25 |
| 26 | n41 |  | 16 | 25 | 25 |  |  | 25 | 25 |  |  |  |  |
| 26 | n77,  n78 |  | 16 | 25 | 25 |  |  | 25 | 25 | 25 | 25 | 25 | 25 |
| n28 | 1 | 8 | 16 | 25 | 25 |  |  |  |  |  |  |  |  |
| 28 | n77,  n78 |  | 10 | 15 | 20 |  |  | 25 | 25 | 25 | 25 | 25 | 25 |
| 66 | n48 | 12 | 25 | 36 | 50 |  |  | 100 | 100 | 100 | 100 | 100 | 100 |
| 66 | n78 |  | 25 | 36 | 50 |  |  | 100 | 100 | 100 | 100 | 100 | 100 |
| n66 | 48 | 12 | 25 | 36 | 50 |  |  |  |  |  |  |  |  |
| n71 | 2 | 254  85 | 254  85 | 204  85 | 204  85 |  |  |  |  |  |  |  |  |
| n71 | 7 | 8 | 16 | 25 | 25 |  |  |  |  |  |  |  |  |
| 71 | n78 |  | 10 | 15 | 20 |  |  | 25 | 25 | 25 | 25 | 25 | 25 |
| NOTE 1: The UL configuration applies regardless of the channel bandwidth of the UL band unless the UL resource blocks exceed that specified in Table 7.3.1-2 in TS 36.101 [4] or Table 7.3.2-3 in TS 38.101-1 [2] for the uplink bandwidth in which case the allocation according to Table 7.3.1-2 in TS 36.101 [4] or Table 7.3.2-3 in TS 38.101-1 [2] applies  NOTE 2: Void  NOTE 3: Unless stated otherwise, UL resource blocks shall be centred within the transmission bandwidth configuration for the channel bandwidth.  NOTE 4: These requirements apply when the lower edge frequency of the 5 MHz uplink channel in Band 71 is located at or below 668 MHz and the downlink channel in Band 2 is located with its upper edge at 1990 MHz.  NOTE 5: These requirements apply when the lower edge frequency of the 10 MHz, 15 MHz, or 20 MHz uplink channel in Band 71 is located at or below 668 MHz and the downlink channel in Band 2 is located with its upper edge at 1990 MHz. | | | | | | | | | | | | | |

**Table 7.3B.2.3.1-3: Reference sensitivity QPSK PREFSENS (EN-DC with n46)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E-UTRA or NR Band / Channel bandwidth of the affected DL band / MSD | | | | | | | | | | | | |
| UL band | DL band | 5  MHz  (dB) | 10 MHz  (dB) | 15 MHz  (dB) | 20 MHz  (dB) | 25 MHz  (dB) | 40 MHz  (dB) | 50 MHz  (dB) | 60 MHz  (dB) | 80 MHz  (dB) | 90 MHz  (dB) | 100 MHz  (dB) |
| 2 | n461 |  |  |  | N/A |  | N/A |  | N/A | N/A |  |  |
| n46 | 22,3 | 28 | 28 | 28 | 28 |  |  |  |  |  |  |  |
| 66 | n46 |  |  |  | N/A |  | N/A |  | N/A | N/A |  |  |
| NOTE 1: These requirements apply when there is at least one individual RE within the downlink (victim) transmission bandwidth which falls into the reference sensitivity exclusion region as specified in Table 6.x.1.7-2 and Table 6.x.1.7-3.  NOTE 2: These requirements apply when there is at least one individual RE within the uplink transmission bandwidth of the aggressor (higher) band and when the frequency range of relative higher band’s uplink channel bandwidth or uplink 1st adjacent channel bandwidth is fully or partially overlapped with the downlink transmission bandwidth of a victim (lower) band.  NOTE 3:   The requirements for a victim (lower) band apply for UL EARFCN of the aggressor (higher) band (superscript HB) such that cid:image004.png@01D629D8.2A3DDB60  in MHz with cid:image005.png@01D629D8.2A3DDB60  the DL carrier frequency in the lower band and the UL carrier frequency in the higher band, both in MHz. . | | | | | | | | | | | | |

**Table 7.3B.2.3.1-4: n46 Reference sensitivity measurement exclusion region in MHz**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Licensed Component Carriers / E-UTRA Band / Harmonic order / Channel BW in UL | | | | | |
| Band | Harmonic order | 5MHz | 10MHz | 15MHz | 20MHz |
| 2 | 3 | +/- 15 | +/- 23 | +/- 35 | +/- 45 |
| 66 | 3 | +/- 15 | +/- 23 | +/- 35 | +/- 45 |
| NOTE 1: Even though UL harmonic does not fall directly into n46 the exclusion region still applies.  NOTE 2: The center of the exclusion region is obtained by multiplying the uplink channel center frequency by the harmonic order. | | | | | |

**Table 7.3B.2.3.1-5: Uplink configuration for reference sensitivity exceptions due to receiver harmonic mixing for EN-DC paring with n46**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E-UTRA or NR Band / SCS / Channel bandwidth of the affected DL band / UL RB allocation of the agressor band | | | | | | | | | | | | | |
| UL band | DL band | SCS of UL band  (kHz) | 5 MHz  (LCRB) | 10 MHz  (LCRB) | 15 MHz  (LCRB) | 20 MHz  (LCRB) | 25 MHz  (LCRB) | 40 MHz  (LCRB) | 50 MHz  (LCRB) | 60 MHz  (LCRB) | 80 MHz  (LCRB) | 90 MHz  (LCRB) | 100 MHz  (LCRB) |
| n46 | 2 | 15 | 25 | 50 | 75 | 100 |  |  |  |  |  |  |  |

---Text omitted---

Table 7.3B.2.3.5.1-1: MSD test points for PCell due to dual uplink operation for 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 | 1713 | 5 | 25 | 1808 | 8.2 | IMD4 |
| n38 | 2617 | 5 | 25 | 2617 | 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: Both of the transmitters shall be set min(+20 dBm, PCMAX\_L,c) as defined in clause 6.2.5A.  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. | | | | | | | |

---Text omitted---

Table 7.3B.2.3.4-1: Reference sensitivity exceptions (MSD) due to cross band isolation for PC3 EN-DC in NR FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E-UTRA or NR Band / Channel bandwidth of the affected DL band / MSD | | | | | | | | | | | | | | |
| UL band | DL band | 5 MHz  (dB) | 10 MHz  (dB) | 15 MHz  (dB) | 20 MHz  (dB) | 25 MHz  (dB) | 30 MHz  (dB) | 40 MHz  (dB) | 50 MHz  (dB) | 60 MHz  (dB) | 70 MHz  (dB) | 80 MHz  (dB) | 90 MHz  (dB) | 100 MHz  (dB) |
| n13 | 3 | [3] | 2.3 | 2 | 1.8 |  |  |  |  |  |  |  |  |  |
| n1 | 40 | 6.6 | 6.6 | 6.6 | 6.6 |  |  |  |  |  |  |  |  |  |
| 13 | n3 | 3 | 2.2 | 1.9 | 1.7 | 1.6 | 1.5 | [1.4] |  |  |  |  |  |  |
| 1 | n40 | 6.6 | 6.6 | 6.6 | 6.6 | 6.6 | 6.6 | 6.6 | 6.6 | 6.6 |  | 6.6 |  |  |
| 1 | n41 |  | 6.1 | 6.1 | 6.1 |  | [6.1] | 6.1 | 6.1 | 6.1 |  | 6.1 | 6.1 | 6.1 |
| n3 | 11 | 6.4 | 6.1 |  |  |  |  |  |  |  |  |  |  |  |
| 3 | n41 |  | 0.7 | 0.7 | 0.7 |  | [0.7] | 0.7 | 0.7 | 0.7 |  | 0.7 | 0.7 | 0.7 |
| 3 | n51 | 6.4 |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 | n66 | 8.3 | 8.3 | 8.3 | 8.3 | [8.3] | [8.3] | 8.3 |  |  |  |  |  |  |
| n3 | 41 | 0.7 | 0.7 | 0.7 | 0.7 |  |  |  |  |  |  |  |  |  |
| n5 | 28 | 4.5 | 3 | 2.2 | 0.3 |  |  |  |  |  |  |  |  |  |
| 7 | n40 | 3.7 | 3.4 | 3.2 | 3.1 | [3.1] | [3.1] | 3.1 | 3.1 | 3.1 |  | 3.1 |  |  |
| n38 | 1 | 1.9 | 1.9 | 1.9 | 1.9 |  |  |  |  |  |  |  |  |  |
| n38 | 2 | 0.6 | 0.6 | 0.6 | 0.6 |  |  |  |  |  |  |  |  |  |
| n38 | 4 | 1.9 | 1.9 | 1.9 | 1.9 |  |  |  |  |  |  |  |  |  |
| n38 | 66 | 1.9 | 1.9 | 1.9 | 1.9 |  |  |  |  |  |  |  |  |  |
| n40 | 1 | 8.3 | 8.3 | 8.3 | 8.3 |  |  |  |  |  |  |  |  |  |
| n41 | 4 | 3.5 | 3.5 | 3.5 | 3.5 |  |  |  |  |  |  |  |  |  |
| 40 | n1 | 8.3 | 8.3 | 8.3 | 8.3 | [8.3] | [8.3] | [8.3] | [8.3] |  |  |  |  |  |
| n40 | 7 | 3.7 | 3.7 | 3.7 | 3.7 |  |  |  |  |  |  |  |  |  |
| n41 | 1 | 9.1 | 9.1 | 9.1 | 9.1 |  |  |  |  |  |  |  |  |  |
| n41 | 2 | 0.6 | 0.6 | 0.6 | 0.6 |  |  |  |  |  |  |  |  |  |
| n41 | 3 | 0.6 | 0.6 | 0.6 | 0.6 |  |  |  |  |  |  |  |  |  |
| 41 | n3 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 | [0.6] |  |  |  |  |  |  |
| n41 | 661 | 3.5 | 3.5 | 3.5 | 3.5 |  |  |  |  |  |  |  |  |  |
| n41 | 25 | 0.6 | 0.6 | 0.6 | 0.6 |  |  |  |  |  |  |  |  |  |
| n50 | 3 | 2.5 | 1.9 | 1.6 | 1.5 |  |  |  |  |  |  |  |  |  |
| n77 | 71 | 4.5 | 4.5 | 4.5 | 4.5 |  |  |  |  |  |  |  |  |  |
| n77 | 411 | 4.5 | 4.5 | 4.5 | 4.5 |  |  |  |  |  |  |  |  |  |
| 41 | n77 |  | 8.3 | 8.3 | 8.3 | [7.3] | [6.5] | 6.3 | 5.3 | 4.5 | [4.3] | 4.0 | 3.9 | 3.8 |
| n78 | 71 | 4.5 | 4.5 | 4.5 | 4.5 |  |  |  |  |  |  |  |  |  |
| n78 | 38 | 3.3 | 3.3 | 3.3 | 3.3 |  |  |  |  |  |  |  |  |  |
| n78 | 411 | 4.5 | 4.5 | 4.5 | 4.5 |  |  |  |  |  |  |  |  |  |
| n78 | 46 |  |  |  | 7 |  |  |  |  |  |  |  |  |  |
| 41 | n78 |  | 8.3 | 8.3 | 8.3 | [7.3] | [6.5] | 6.3 | 5.3 | 4.5 | [4.3] | 4.0 | 3.9 | 3.8 |
| n843 | 3 | 3 | 2.3 | 2 | 1.8 |  |  |  |  |  |  |  |  |  |
| 48 | n46 | - | - | - | 7 | - | - | 5.7 | - | 5.1 | - | 4.7 | - | - |
| n46 | 48 | 13.3 | 10.4 | 8.8 | 7.8 | - | - | 7.8 | 7 | 6.5 | - | 5.7 | 5.4 | 5.1 |
| NOTE 1: Applicable only when harmonic mixing MSD for this combination is not applied.  NOTE 2: The B41 requirements are modified by -0.5dB when carrier frequency of the assigned E-UTRA channel bandwidth is within 2515 – 2690 MHz.  NOTE 3: These requirements apply when the uplink is active in Band n1, n84 and the separation between the lower edge of the uplink channel in Band n1, n84 and the upper edge of the downlink channel in Band 3 is < 60 MHz. For each channel bandwidth in Band 3, the requirement applies regardless of channel bandwidth in Band n1, n84.  NOTE 4: The DL victim band should be configured using the lowest SCS that is compatible with the highest CBW for which an MSD is specified.  NOTE 5: MSD test point can be chosen according to supported BW and lowest SCS supported by the UE. | | | | | | | | | | | | | | |

Table 7.3B.2.3.4-1a: Reference sensitivity exceptions (MSD) due to cross band isolation for PC2 EN-DC in NR FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | E-UTRA or NR Band / Channel bandwidth of the affected DL band / MSD | | | | | | | | | | | | |
| UL band | DL band | 5 MHz  (dB) | 10 MHz  (dB) | 15 MHz  (dB) | 20 MHz  (dB) | 25 MHz  (dB) | 30 MHz  (dB) | 40 MHz  (dB) | 50 MHz  (dB) | 60 MHz  (dB) | 80 MHz  (dB) | 90 MHz  (dB) | 100 MHz  (dB) |
| 3 | n41 |  | 0.7 | 0.7 | 0.7 |  |  | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 | 0.7 |
| n41 | 3 | 2.3 | 2.3 | 2.3 | 2.3 |  |  |  |  |  |  |  |  |

Table 7.3B.2.3.4-2: Uplink configuration for reference sensitivity exceptions due to cross band isolation for EN-DC in NR FR1

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| E-UTRA or NR Band / SCS / Channel bandwidth of the affected DL band / UL RB allocation of the agressor band | | | | | | | | | | | | | | | |
| UL band | DL band | SCS of UL band (kHz) | 5 MHz  (LCRB) | 10 MHz  (LCRB) | 15 MHz  (LCRB) | 20 MHz  (LCRB) | 25 MHz  (LCRB) | 30 MHz  (LCRB) | 40 MHz  (LCRB) | 50 MHz  (LCRB) | 60 MHz  (LCRB) | 70 MHz  (LCRB) | 80 MHz  (LCRB) | 90 MHz  (LCRB) | 100 MHz  (LCRB) |
| n1 | 3 | 15 | 25 | 25 | 25 | 25 |  |  |  |  |  |  |  |  |  |
| n1 | 40 | 15 | 25 | 50 | 75 | 100 |  |  |  |  |  |  |  |  |  |
| 1 | n3 | 15 | 25 | 25 | 25 | 25 | 25 | 25 | [25] |  |  |  |  |  |  |
| 1 | n40 | 15 | 25 | 50 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |  | 100 |  |  |
| 1 | n41 | 15 |  | 100 | 100 | 100 |  | [100] | 100 | 100 | 100 |  | 100 | 100 | 100 |
| n3 | 11 | 15 | 25 | 50 |  |  |  |  |  |  |  |  |  |  |  |
| 3 | n41 | 15 |  | 50 | 50 | 50 |  | [50] | 50 | 50 | 50 |  | 50 | 50 | 50 |
| 3 | n51 | 15 | 25 |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 | n66 | 15 | 25 | 25 | 25 | 25 | [25] | [25] | 25 |  |  |  |  |  |  |
| n3 | 41 | 15 | 25 | 502 | 502 | 502 |  |  |  |  |  |  |  |  |  |
| n5 | 28 | 15 | 25 | 25 | 20 | 20 |  |  |  |  |  |  |  |  |  |
| 7 | n40 | 15 | 25 | 50 | 75 | 75 | [75] | [100] | 100 | 100 | 100 |  | 100 |  |  |
| n38 | 1 | 15 | 100 | 100 | 100 | 100 |  |  |  |  |  |  |  |  |  |
| n38 | 2 | 15 | 100 | 100 | 100 | 100 |  |  |  |  |  |  |  |  |  |
| n38 | 4 | 15 | 100 | 100 | 100 | 100 |  |  |  |  |  |  |  |  |  |
| n38 | 66 | 15 | 100 | 100 | 100 | 100 |  |  |  |  |  |  |  |  |  |
| n40 | 1 | 15 | 25 | 50 | 75 | 100 |  |  |  |  |  |  |  |  |  |
| n41 | 4 | 30 | 128 | 128 | 128 | 128 |  |  |  |  |  |  |  |  |  |
| 40 | n1 | 15 | 25 | 50 | 75 | 100 |  |  |  |  |  |  |  |  |  |
| n40 | 7 | 30 | 216 | 216 | 216 | 216 |  |  |  |  |  |  |  |  |  |
| n41 | 1 | 30 | 128 | 128 | 128 | 128 |  |  |  |  |  |  |  |  |  |
| n41 | 2 | 30 | 160 | 160 | 160 | 160 |  |  |  |  |  |  |  |  |  |
| n41 | 3 | 30 | 160 | 160 | 160 | 160 |  |  |  |  |  |  |  |  |  |
| 41 | n3 | 15 | 25 | 50 | 75 | 100 | 100 | 100 | [100] |  |  |  |  |  |  |
| n41 | 66 | 30 | 128 | 128 | 128 | 128 |  |  |  |  |  |  |  |  |  |
| n41 | 25 | 30 | 160 | 160 | 160 | 160 |  |  |  |  |  |  |  |  |  |
| n50 | 3 | 30 | 160 | 160 | 160 | 160 |  |  |  |  |  |  |  |  |  |
| n77 | 7 | 30 | 270 | 270 | 270 | 270 |  |  |  |  |  |  |  |  |  |
| n77 | 41 | 30 | 270 | 270 | 270 | 270 |  |  |  |  |  |  |  |  |  |
| 41 | n77 | 15 |  | 100 | 100 | 100 | [100] | [100] | 100 | 100 | 100 | [100] | 100 | 100 | 100 |
| n78 | 7 | 30 | 270 | 270 | 270 | 270 |  |  |  |  |  |  |  |  |  |
| n78 | 38 | 30 | 270 | 270 | 270 | 270 |  |  |  |  |  |  |  |  |  |
| n78 | 41 | 30 | 270 | 270 | 270 | 270 |  |  |  |  |  |  |  |  |  |
| n78 | 46 | 30 |  |  |  | 270 |  |  |  |  |  |  |  |  |  |
| 41 | n78 | 15 |  | 100 | 100 | 100 | [100] | [100] | 100 | 100 | 100 | [100] | 100 | 100 | 100 |
| n84 | 3 | 15 | 25 | 25 | 25 | 25 |  |  |  |  |  |  |  |  |  |
| 48 | n46 | 15 |  |  |  | 216 |  |  | 216 |  | 216 |  | 216 |  |  |
| n46 | 48 | 30 | 216 | 216 | 216 | 216 |  |  | 216 | 216 | 216 |  | 216 | 216 | 216 |
| NOTE 1: The UL configuration applies regardless of the channel bandwidth of the UL band. UL resource blocks allocation in the table shall be further limited to that specified in Table 7.3.1-2 in TS 36.101 [4] or Table 7.3.2-3 in TS 38.101-1 [2].  NOTE 2: The UL resource blocks shall be located as close as possible to the downlink operating band but confined within the transmission bandwidth configuration for the channel bandwidth.  NOTE 3: When the maximum UL RB allocation “LCRB” value is less than the maximum transmission bandwidth configuration “NRB” defined in Table 5.3.2-1 in 38.101-1 [2] for the specified UL band SCS, the UL band should be configured using the lowest CBW that is compatible with the maximum specified LCRB value.  NOTE 4: If the aggressor band is NR band, the test SCS and UL RB can be adjusted according to supported BW and lowest SCS supported by the UE. | | | | | | | | | | | | | | | |

---End of changes---