**3GPP TSG-RAN WG4 Meeting #104-e R4-2214431**

**Electronic Meeting, 15 August – 26 August 2022**

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| *CR-Form-v12.2* |
| **DRAFT CHANGE REQUEST** |
|  |
|  | **38.101-3** | **CR** |  | **rev** |  | **Current version:** | **17.6.0** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network |  |

|  |
| --- |
|  |
| ***Title:***  | Draft CR for TS 38.101-3 to add new NR\_CADC 2BDL\_xBUL combinations containing FR1 + FR2-2 |
|  |  |
| ***Source to WG:*** |  |
| ***Source to TSG:*** | R4 |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** | 2022-08-22 |
|  |  |  |  |  |
| ***Category:*** | B |  | ***Release:*** |  |
|  | *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 canbe 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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
|  |  |
| ***Reason for change:*** | Adding new combinations |
|  |  |
| ***Summary of change:*** | Adding:CA\_n48A/B/C-n263A/G/H/I/J/K/L/MCA\_n48(2A)/(3A)/(4A)- n263A/G/H/I/J/K/L/MCA\_n48(A-B)- n263A/G/H/I/J/K/L/M |
|  |  |
| ***Consequences if not approved:*** | New combinations are not added |
|  |  |
| ***Clauses affected:*** | 5.2A.1-1, 5.5A.1-1K |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ... |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

---Start of changes---

**Table 5.2A.1-1: Band combinations for inter-band CA between FR1 and FR2 (two bands)**

|  |  |
| --- | --- |
| NR CA Band | NR Band |
| CA\_n1-n2571 | n1, n257 |
| CA\_n1-n2581 | n1, n258 |
| CA\_n2-n2601 | n2, n260 |
| CA\_n2-n2611 | n2, n261 |
| CA\_n3-n2571 | n3, n257 |
| CA\_n3-n2581 | n3, n258 |
| CA\_n5-n2601 | n5, n260 |
| CA\_n5-n2611 | n5, n261 |
| CA\_n7-n2581 | n7, n258 |
| CA\_n7-n2571 | n7, n257 |
| CA\_n8-n2571 | n8, n257 |
| CA\_n8-n2581 | n8, n258 |
| CA\_n12-n2601 | n12, n260 |
| CA\_n14-n2601 | n14, n260 |
| CA\_n30-n2601 | n30, n260 |
| CA\_n25-n2581 | n25, n258 |
| CA\_n25-n2601 | n25, n260 |
| CA\_n25-n2611 | n25, n261 |
| CA\_n28-n2571 | n28, n257 |
| CA\_n34-n2581 | n34, n258 |
| CA\_n38-n2571 | n38, n257 |
| CA\_n38-n2581 | n38, n258 |
| CA\_n39-n2571 | n39, n257 |
| CA\_n39-n2581 | n39, n258 |
| CA\_n40-n2571 | n40, n257 |
| CA\_n40-n2581 | n40, n258 |
| CA\_n41-n2571 | n41, n257 |
| CA\_n41-n2581 | n41, n258 |
| CA\_n41-n2601 | n41, n260 |
| CA\_n41-n2611 | n41, n261 |
| CA\_n48-n2601 | n48, n260 |
| CA\_n48-n2611 | n48, n261 |
| CA\_n48-n2631 | n48, n263 |
| CA\_n66-n2581 | n66, n258 |
| CA\_n66-n260 | n66, n260 |
| CA\_n66-n261 | n66, n261 |
| CA\_n71-n2571 | n71, n257 |
| CA\_n71-n2601 | n71, n260 |
| CA\_n71-n2611 | n71, n261 |
| CA\_n77-n2571 | n77, n257 |
| CA\_n77-n2581 | n77, n258 |
| CA\_n77-n2601 | n77, n260 |
| CA\_n77-n2611 | n77, n261 |
| CA\_n78-n2571 | n78, n257 |
| CA\_n78-n2581 | n78, n258 |
| CA\_n79-n2571 | n79, n257 |
| CA\_n79-n2581 | n79, n258 |
| NOTE 1: Applicable for UE supporting inter-band carrier aggregation with mandatory simultaneous Rx/Tx capability. |

---Text omitted---

Table 5.5A.1-1k: Inter-band CA configurations and bandwith combinations sets between FR1 and FR2 (two bands)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **NR CA configuration** | **Uplink CA configuration**  | **NR Band** | **Channel bandwidth (MHz) (NOTE 3)** | **Bandwidth combination set** |
| CA\_n48A-n260A | CA\_n48A-n260A | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n260 | 50, 100, 200, 400 |  |
| CA\_n48A-n260G | CA\_n48A-n260ACA\_n48A-n260G | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n260 | CA\_n260G |  |
| CA\_n48A-n260H | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260H | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n260 | CA\_n260H |  |
| CA\_n48A-n260I | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n260 | CA\_n260I |  |
| CA\_n48A-n260J | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n260 | CA\_n260J |  |
| CA\_n48A-n260K | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n260 | CA\_n260K |  |
| CA\_n48A-n260L | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n260 | CA\_n260L |  |
| CA\_n48A-n260M | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n260 | CA\_n260M |  |
| CA\_n48(2A)-n260A | CA\_n48A-n260A | n48 | CA\_n48(2A) | 0 |
|  |  | n260 | 50, 100, 200, 400 |  |
| CA\_n48(2A)-n260G | CA\_n48A-n260ACA\_n48A-n260G | n48 | CA\_n48(2A) | 0 |
|  |  | n260 | CA\_n260G |  |
| CA\_n48(2A)-n260H | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260H | n48 | CA\_n48(2A) | 0 |
|  |  | n260 | CA\_n260H |  |
| CA\_n48(2A)-n260I | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48(2A) | 0 |
|  |  | n260 | CA\_n260I |  |
| CA\_n48(2A)-n260J | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48(2A) | 0 |
|  |  | n260 | CA\_n260J |  |
| CA\_n48(2A)-n260K | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48(2A) | 0 |
|  |  | n260 | CA\_n260K |  |
| CA\_n48(2A)-n260L | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48(2A) | 0 |
|  |  | n260 | CA\_n260L |  |
| CA\_n48(2A)-n260M | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48(2A) | 0 |
|  |  | n260 | CA\_n260M |  |
| CA\_n48B-n260A | CA\_n48A-n260A | n48 | CA\_n48B | 0 |
|  |  | n260 | 50, 100, 200, 400 |  |
| CA\_n48B-n260G | CA\_n48A-n260ACA\_n48A-n260G | n48 | CA\_n48B | 0 |
|  |  | n260 | CA\_n260G |  |
| CA\_n48B-n260H | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260H | n48 | CA\_n48B | 0 |
|  |  | n260 | CA\_n260H |  |
| CA\_n48B-n260I | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48B | 0 |
|  |  | n260 | CA\_n260I |  |
| CA\_n48B-n260J | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48B | 0 |
|  |  | n260 | CA\_n260J |  |
| CA\_n48B-n260K | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48B | 0 |
|  |  | n260 | CA\_n260K |  |
| CA\_n48B-n260L | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48B | 0 |
|  |  | n260 | CA\_n260L |  |
| CA\_n48B-n260M | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48B | 0 |
|  |  | n260 | CA\_n260M |  |
| CA\_n48(A-B)-n260A | CA\_n48A-n260A | n48 | CA\_n48(A-B) | 0 |
|  |  | n260 | 50, 100, 200, 400 |  |
| CA\_n48(A-B)-n260G | CA\_n48A-n260ACA\_n48A-n260G | n48 | CA\_n48(A-B) | 0 |
|  |  | n260 | CA\_n260G |  |
| CA\_n48(A-B)-n260H | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260H | n48 | CA\_n48(A-B) | 0 |
|  |  | n260 | CA\_n260H |  |
| CA\_n48(A-B)-n260I | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48(A-B) | 0 |
|  |  | n260 | CA\_n260I |  |
| CA\_n48(A-B)-n260J | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48(A-B) | 0 |
|  |  | n260 | CA\_n260J |  |
| CA\_n48(A-B)-n260K | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48(A-B) | 0 |
|  |  | n260 | CA\_n260K |  |
| CA\_n48(A-B)-n260L | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48(A-B) | 0 |
|  |  | n260 | CA\_n260L |  |
| CA\_n48(A-B)-n260M | CA\_n48A-n260ACA\_n48A-n260GCA\_n48A-n260HCA\_n48A-n260I | n48 | CA\_n48(A-B) | 0 |
|  |  | n260 | CA\_n260M |  |
| CA\_n48A-n261A | CA\_n48A-n261A | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | 50, 100, 200, 400 |  |
| CA\_n48A-n261G | CA\_n48A-n261ACA\_n48A-n261G | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261G |  |
| CA\_n48A-n261H | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261H | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261H |  |
| CA\_n48A-n261I | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261I |  |
| CA\_n48A-n261J | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261J |  |
| CA\_n48A-n261K | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261K |  |
| CA\_n48A-n261L | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261L |  |
| CA\_n48A-n261M | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261M |  |
| CA\_n48A-n261(2A) | CA\_n48A-n261A | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261(2A) |  |
| CA\_n48A-n261(2G) | CA\_n48A-n261A | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261(2G) |  |
| CA\_n48A-n261(2I) | CA\_n48A-n261A | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261(2I) |  |
| CA\_n48A-n261(2H) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261H | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261(2H) |  |
| CA\_n48A-n261(3A) | CA\_n48A-n261A | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261(3A) |  |
| CA\_n48A-n261(4A) | CA\_n48A-n261A | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261(4A) |  |
| CA\_n48A-n261(A-G) | CA\_n48A-n261A | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261(A-G) |  |
| CA\_n48A-n261(A-G-H) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261H | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261(A-G-H) |  |
| CA\_n48A-n261(A-G-I) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261(A-G-I) |  |
| CA\_n48A-n261(A-H) | CA\_n48A-n261A | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261(A-H) |  |
| CA\_n48A-n261(A-I) | CA\_n48A-n261A | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261(A-I) |  |
| CA\_n48A-n261(G-H) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261H | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261(G-H) |  |
| CA\_n48A-n261(H-I) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261(H-I) |  |
| CA\_n48A-n261(G-I) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n261 | CA\_n261(G-I) |  |
| CA\_n48(2A)-n261A | CA\_n48A-n261A | n48 | CA\_n48(2A) | 0 |
|  |  | n261 | 50, 100, 200, 400 |  |
| CA\_n48(2A)-n261G | CA\_n48A-n261ACA\_n48A-n261G | n48 | CA\_n48(2A) | 0 |
|  |  | n261 | CA\_n261G |  |
| CA\_n48(2A)-n261H | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261H | n48 | CA\_n48(2A) | 0 |
|  |  | n261 | CA\_n261H |  |
| CA\_n48(2A)-n261I | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48(2A) | 0 |
|  |  | n261 | CA\_n261I |  |
| CA\_n48(2A)-n261J | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48(2A) | 0 |
|  |  | n261 | CA\_n261J |  |
| CA\_n48(2A)-n261K | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48(2A) | 0 |
|  |  | n261 | CA\_n261K |  |
| CA\_n48(2A)-n261L | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48(2A) | 0 |
|  |  | n261 | CA\_n261L |  |
| CA\_n48(2A)-n261M | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48(2A) | 0 |
|  |  | n261 | CA\_n261M |  |
| CA\_n48(2A)-n261(G-H) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261H | n48 | CA\_n48(2A) | 0 |
|  |  | n261 | CA\_n261(G-H) |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 | 1 |
|  |  | n261 | CA\_n261(G-H) |  |
| CA\_n48(2A)-n261(2H) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261H | n48 | CA\_n48(2A) | 0 |
|  |  | n261 | CA\_n261(2H) |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 | 1 |
|  |  | n261 | CA\_n261(2H) |  |
| CA\_n48(2A)-n261(G-I) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48(2A) | 0 |
|  |  | n261 | CA\_n261(G-I) |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 | 1 |
|  |  | n261 | CA\_n261(G-I) |  |
| CA\_n48(2A)-n261(A-G-H) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261H | n48 | CA\_n48(2A) | 0 |
|  |  | n261 | CA\_n261(A-G-H) |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 | 1 |
|  |  | n261 | CA\_n261(A-G-H) |  |
| CA\_n48(2A)-n261(H-I) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48(2A) | 0 |
|  |  | n261 | CA\_n261(H-I) |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 | 1 |
|  |  | n261 | CA\_n261(H-I) |  |
| CA\_n48(2A)-n261(A-G-I) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48(2A) | 0 |
|  |  | n261 | CA\_n261(A-G-I) |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 | 1 |
|  |  | n261 | CA\_n261(A-G-I) |  |
| CA\_n48B-n261A | CA\_n48A-n261A | n48 | CA\_n48B | 0 |
|  |  | n261 | 50, 100, 200, 400 |  |
| CA\_n48B-n261G | CA\_n48A-n261ACA\_n48A-n261G | n48 | CA\_n48B | 0 |
|  |  | n261 | CA\_n261G |  |
| CA\_n48B-n261H | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261H | n48 | CA\_n48B | 0 |
|  |  | n261 | CA\_n261H |  |
| CA\_n48B-n261I | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48B | 0 |
|  |  | n261 | CA\_n261I |  |
| CA\_n48B-n261J | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48B | 0 |
|  |  | n261 | CA\_n261J |  |
| CA\_n48B-n261K | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48B | 0 |
|  |  | n261 | CA\_n261K |  |
| CA\_n48B-n261L | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48B | 0 |
|  |  | n261 | CA\_n261L |  |
| CA\_n48B-n261M | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48B | 0 |
|  |  | n261 | CA\_n261M |  |
| CA\_n48B-n261(G-H) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261H | n48 | CA\_n48B | 0 |
|  |  | n261 | CA\_n261(G-H) |  |
|  |  | n48 | CA\_n48B\_BCS1 | 1 |
|  |  | n261 | CA\_n261(G-H) |  |
|  |  | n48 | CA\_n48B\_BCS2 | 2 |
|  |  | n261 | CA\_n261(G-H) |  |
| CA\_n48B-n261(2H) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261H | n48 | CA\_n48B | 0 |
|  |  | n261 | CA\_n261(2H) |  |
|  |  | n48 | CA\_n48B\_BCS1 | 1 |
|  |  | n261 | CA\_n261(2H) |  |
|  |  | n48 | CA\_n48B\_BCS2 | 2 |
|  |  | n261 | CA\_n261(2H) |  |
| CA\_n48B-n261(G-I) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48B | 0 |
|  |  | n261 | CA\_n261(G-I) |  |
|  |  | n48 | CA\_n48B\_BCS1 | 1 |
|  |  | n261 | CA\_n261(G-I) |  |
|  |  | n48 | CA\_n48B\_BCS2 | 2 |
|  |  | n261 | CA\_n261(G-I) |  |
| CA\_n48B-n261(A-G-H) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261H | n48 | CA\_n48B | 0 |
|  |  | n261 | CA\_n261(A-G-H) |  |
|  |  | n48 | CA\_n48B\_BCS1 | 1 |
|  |  | n261 | CA\_n261(A-G-H) |  |
|  |  | n48 | CA\_n48B\_BCS2 | 2 |
|  |  | n261 | CA\_n261(A-G-H) |  |
| CA\_n48B-n261(H-I) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48B | 0 |
|  |  | n261 | CA\_n261(H-I) |  |
|  |  | n48 | CA\_n48B\_BCS1 | 1 |
|  |  | n261 | CA\_n261(H-I) |  |
|  |  | n48 | CA\_n48B\_BCS2 | 2 |
|  |  | n261 | CA\_n261(H-I) |  |
| CA\_n48B-n261(A-G-I) | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48B | 0 |
|  |  | n261 | CA\_n261(A-G-I) |  |
|  |  | n48 | CA\_n48B\_BCS1 | 1 |
|  |  | n261 | CA\_n261(A-G-I) |  |
|  |  | n48 | CA\_n48B\_BCS2 | 2 |
|  |  | n261 | CA\_n261(A-G-I) |  |
| CA\_n48(A-B)-n261A | CA\_n48A-n261A | n48 | CA\_n48(A-B) | 0 |
|  |  | n261 | 50, 100, 200, 400 |  |
| CA\_n48(A-B)-n261G | CA\_n48A-n261ACA\_n48A-n261G | n48 | CA\_n48(A-B) | 0 |
|  |  | n261 | CA\_n261G |  |
| CA\_n48(A-B)-n261I | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261H | n48 | CA\_n48(A-B) | 0 |
|  |  | n261 | CA\_n261H |  |
| CA\_n48(A-B)-n261I | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48(A-B) | 0 |
|  |  | n261 | CA\_n261I |  |
| CA\_n48(A-B)-n261J | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48(A-B) | 0 |
|  |  | n261 | CA\_n261J |  |
| CA\_n48(A-B)-n261K | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48(A-B) | 0 |
|  |  | n261 | CA\_n261K |  |
| CA\_n48(A-B)-n261L | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48(A-B) | 0 |
|  |  | n261 | CA\_n261L |  |
| CA\_n48(A-B)-n261M | CA\_n48A-n261ACA\_n48A-n261GCA\_n48A-n261HCA\_n48A-n261I | n48 | CA\_n48(A-B) | 0 |
|  |  | n261 | CA\_n261M |
| CA\_n48A-n263A | CA\_n48A-n263A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
| n263 | 400, 800, 1600, 2000 |
| CA\_n48A-n263G | CA\_n48A-n263A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
| n263 | CA\_n263G |
| CA\_n48A-n263H | CA\_n48A-n263A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
| n263 | CA\_n263H |
| CA\_n48A-n263I | CA\_n48A-n263A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
| n263 | CA\_n263I |
| CA\_n48A-n263J | CA\_n48A-n263A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
| n263 | CA\_n263J |
| CA\_n48A-n263K | CA\_n48A-n263A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
| n263 | CA\_n263K |
| CA\_n48A-n263L | CA\_n48A-n263A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
| n263 | CA\_n263L |
| CA\_n48A-n263M | CA\_n48A-n263A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
| n263 | CA\_n263M |
| CA\_n48(2A)-n263A | CA\_n48A-n263A | n48 | CA\_n48(2A) | 0 |
| n263 | 400, 800, 1600, 2000 |
| CA\_n48(2A)-n263G | CA\_n48A-n263A | n48 | CA\_n48(2A) | 0 |
| n263 | CA\_n263G |
| CA\_n48(2A)-n263H | CA\_n48A-n263A | n48 | CA\_n48(2A) | 0 |
| n263 | CA\_n263H |  |
| CA\_n48(2A)-n263I | CA\_n48A-n263A | n48 | CA\_n48(2A) | 0 |
| n263 | CA\_n263I |
| CA\_n48(2A)-n263J | CA\_n48A-n263A | n48 | CA\_n48(2A) | 0 |
| n263 | CA\_n263J |
| CA\_n48(2A)-n263K | CA\_n48A-n263A | n48 | CA\_n48(2A) | 0 |
| n263 | CA\_n263K |
| CA\_n48(2A)-n263L | CA\_n48A-n263A | n48 | CA\_n48(2A) | 0 |
| n263 | CA\_n263L |
| CA\_n48(2A)-n263M | CA\_n48A-n263A | n48 | CA\_n48(2A) | 0 |
| n263 | CA\_n263M |
| CA\_n48B-n263A | CA\_n48A-n263A | n48 | CA\_n48B | 0 |
| n263 | 400, 800, 1600, 2000 |
| CA\_n48B-n263G | CA\_n48A-n263A | n48 | CA\_n48B | 0 |
| n263 | CA\_n263G |
| CA\_n48B-n263H | CA\_n48A-n263A | n48 | CA\_n48B | 0 |
| n263 | CA\_n263H |
| CA\_n48B-n263I | CA\_n48A-n263A | n48 | CA\_n48B | 0 |
| n263 | CA\_n263I |
| CA\_n48B-n263J | CA\_n48A-n263A | n48 | CA\_n48B | 0 |
| n263 | CA\_n263J |
| CA\_n48B-n263K | CA\_n48A-n263A | n48 | CA\_n48B | 0 |
| n263 | CA\_n263K |
| CA\_n48B-n263L | CA\_n48A-n263A | n48 | CA\_n48B | 0 |
| n263 | CA\_n263L |
| CA\_n48B-n263M | CA\_n48A-n263A | n48 | CA\_n48B | 0 |
| n263 | CA\_n263M |
| CA\_n48(A-B)-n263A | CA\_n48A-n263A | n48 | CA\_n48(A-B) | **0** |
| n263 | 400, 800, 1600, 2000 |
| CA\_n48(A-B)-n263G | CA\_n48A-n263A | n48 | CA\_n48(A-B) | 0 |
| n263 | CA\_n263G |
| CA\_n48(A-B)-n263H | CA\_n48A-n263A | n48 | CA\_n48(A-B) | 0 |
| n263 | CA\_n263H |
| CA\_n48(A-B)-n263I | CA\_n48A-n263A | n48 | CA\_n48(A-B) | 0 |
| n263 | CA\_n263I |
| CA\_n48(A-B)-n263J | CA\_n48A-n263A | n48 | CA\_n48(A-B) | 0 |
| n263 | CA\_n263J |
| CA\_n48C-n263A | CA\_n48A-n263A  | n48 | CA\_n48C | 0 |
| n263 | 400, 800, 1600, 2000 |
| CA\_n48C-n263G | CA\_n48A-n263A | n48 | CA\_n48C | 0 |
| n263 | CA\_n263G |
| CA\_n48C-n263H | CA\_n48A-n263A | n48 | CA\_n48C | 0 |
| n263 | CA\_n263H |
| CA\_n48C-n263I | CA\_n48A-n263A | n48 | CA\_n48C | 0 |
| n263 | CA\_n263I |  |
| CA\_n48C-n263J | CA\_n48A-n263A | n48 | CA\_n48C | 0 |
| n263 | CA\_n263J |
| CA\_n48C-n263K | CA\_n48A-n263A | n48 | CA\_n48C | 0 |
| n263 | CA\_n263K |
| CA\_n48C-n263L | CA\_n48A-n263A | n48 | CA\_n48C | 0 |
| n263 | CA\_n263L |
| CA\_n48C-n263M | CA\_n48A-n263A | n48 | CA\_n48C | 0 |
| n263 | CA\_n263M |
| CA\_n48(3A)-n263A | CA\_n48A-n263A | n48 | CA\_n48(3A) | 0 |
| n263 | 400, 800, 1600, 2000 |
| CA\_n48(3A)-n263G | CA\_n48A-n263A | n48 | CA\_n48(3A) | 0 |
| n263 | CA\_n263G |
| CA\_n48(3A)-n263H | CA\_n48A-n263A | n48 | CA\_n48(3A) | 0 |
| n263 | CA\_n263H |
| CA\_n48(3A)-n263I | CA\_n48A-n263A | n48 | CA\_n48(3A) | 0 |
| n263 | CA\_n263I |
| CA\_n48(3A)-n263J | CA\_n48A-n263A | n48 | CA\_n48(3A) | 0 |
| n263 | CA\_n263J |
| CA\_n48(3A)-n263K | CA\_n48A-n263A | n48 | CA\_n48(3A) | 0 |
| n263 | CA\_n263K |
| CA\_n48(3A)-n263L | CA\_n48A-n263A | n48 | CA\_n48(3A) | 0 |
| n263 | CA\_n263L |
| CA\_n48(3A)-n263M | CA\_n48A-n263A | n48 | CA\_n48(3A) | 0 |
| n263 | CA\_n263M |
| CA\_n48(4A)-n263A | CA\_n48A-n263A | n48 | CA\_n48(4A) | 0 |
| n263 | 400, 800, 1600, 2000 |
| CA\_n48(4A)-n263G | CA\_n48A-n263A | n48 | CA\_n48(4A) | 0 |
| n263 | CA\_n263G |
| CA\_n48(4A)-n263H | CA\_n48A-n263A | n48 | CA\_n48(4A) |
| n263 | CA\_n263H | 0 |
| CA\_n48(4A)-n263I | CA\_n48A-n263A | n48 | CA\_n48(4A) | 0 |
| n263 | CA\_n263I |
| CA\_n48(4A)-n263J | CA\_n48A-n263A | n48 | CA\_n48(4A) | 0 |
|  | n263 | CA\_n263J |
| CA\_n48(4A)-n263K | CA\_n48A-n263A | n48 | CA\_n48(4A) | 0 |
| n263 | CA\_n263K |
| CA\_n48(4A)-n263L | CA\_n48A-n263A | n48 | CA\_n48(4A) | 0 |
| n263 | CA\_n263L |
| CA\_n48(4A)-n263M | CA\_n48A-n263A | n48 | CA\_n48(4A) | 0 |
| n263 | CA\_n263M |

---End of changes---