**3GPP TSG-RAN WG4 Meeting # 102-e R4-2203967 R4-22xxxxx**

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

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| *CR-Form-v12.2* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.101-1** | **CR** | **0994** | **rev** | **-** | **Current version:** | **17.4.0** |  |
|  | | | | | | | | |
| *For* ***[HE](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)******[LP](http://www.3gpp.org/3G_Specs/CRs.htm" \l "_blank)*** *on using this form: comprehensive instructions can be found at  <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 on Introducing NR inter-band CA for 3DL Bands and 1UL band for 38.101-1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | CATT | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_CA\_R17\_3BDL\_1BUL | | | | |  | ***Date:*** | | | 2022-03-07 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | B |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | In terms of the agreements captured in TR38.862 (R4-2119074):  In RAN4 #102-e meeting, each rapporteur should use the new formats in their rapporteur big CR to reflect the approved TPs and endorsed CRs.  Therefore, this big CR use the new formats to reflect the completed inter-band CA combinations are introduced into TS 38.101-1 from RAN4 #101bis-e and #102 meetings.  This big CR is to merge all endorsed CR and to capture newly introduced band combinations in the respective TP for NR inter-band CA for 3DL/1UL and 3DL/2UL CA configurations(Only for table 5.2A.2.2). | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. Add operating bands in Table 5.2A.2.2-1 in section 5.2A.2.2. 2. Add configurations for these band combinations in Table 5.5A.3.2-1in section 5.5A.3.2. 3. Add ΔTIB,c in Table 6.2A.4.2.4-1 in section 6.2A.4.2.4. 4. Add ΔRIB,c in Table 7.3A.3.2.3-1 in section 7.3A.3.2.3.   The 2UL/3DL CA/DC configurations approved in the following contributions are added:   1. R4-2200190, Draft CR for 38.101-1: support of n77(2A) in 2UL CA\_n1A-n77-n79A, SoftBank Corp. 2. R4-2200351, BCS corrections for CA\_n7-n66-n77 and CA\_n66-n71-n77, Nokia, [Bell Mobility, Telus] 3. R4-2201048, Draft CR for 38.101-1 to introduce CA\_n3A-n28A-n77(3A) and CA\_n1A-n3A-n77(2A), Samsung, KDDI 4. R4-2201064, Draft CR for 38.101-1 to introduce new configurations to CA\_n5-n25-n77 and CA\_n5-n66-n77 with 2UL, Samsung, Telus, Bell Mobility 5. R4-2201087, draftCR to add n78(2A) to CA\_n7A-n28A-n78 already in 38.101-1, Nokia, BT 6. R4-2201516, DraftCR for 38.101-1: Correction on CA\_n7-n66-n78, Huawei, HiSilicon, Bell Mobility, Telus 7. R4-2201517, DraftCR for 38.101-1: CA\_n25(2A)-n38A-n66(2A), Huawei, HiSilicon, Bell Mobility, Telus 8. R4-2201518, DraftCR for 38.101-1: additional combinations for CA\_n7-n25-n66, Huawei, HiSilicon, Bell Mobility, Telus 9. R4-2201547, draft CR 38.101-1 to add new configurations for CA\_n25-n41-n66, CA\_n25-n41-n71, CA\_n25-n66-n71, CA\_n41-n66-n71, CA\_n66-n71-n77 10. R4-2200202, TP for TR 38.717-03-02: CA\_n1-n3-n79, SoftBank Corp. 11. R4-2200204, TP for TR 38.717-03-02: CA\_n1-n28-n41, SoftBank Corp. 12. R4-2200205, TP for TR 38.717-03-02: CA\_n1-n28-n77, SoftBank Corp. 13. R4-2200206, TP for TR 38.717-03-02: CA\_n1-n28-n79, SoftBank Corp. 14. R4-2200208, TP for TR 38.717-03-02: CA\_n1-n41-n77, SoftBank Corp. 15. R4-2200355, TP for CA\_n28-n78-n79 for TR 38.717-03-02, NTT DOCOMO, INC. MediaTek Inc. 16. R4-2201036, TP for TR 38.717-03-02: CA\_n1A-n3A-n18A, Samsung, KDDI 17. R4-2201037, TP for TR 38.717-03-02: CA\_n1A-n18A-n28A, Samsung, KDDI 18. R4-2201038, TP for TR 38.717-03-02: CA\_n1A-n18A-n41A, Samsung, KDDI 19. R4-2201039, TP for TR 38.717-03-02: CA\_n1A-n18A-n77A, Samsung, KDDI 20. R4-2201043, TP for TR 38.717-03-02: CA\_n3A-n18A-n28A, Samsung, KDDI 21. R4-2201044, TP for TR 38.717-03-02: CA\_n3A-n18A-n77A, Samsung, KDDI 22. R4-2201045, TP for TR 38.717-03-02: CA\_n18A-n28A-n41A, Samsung, KDDI 23. R4-2201046, TP for TR 38.717-03-02: CA\_n18A-n28A-n77A, Samsung, KDDI 24. R4-2201047, TP for TR 38.717-03-02: CA\_n18A-n41A-n77A, Samsung, KDDI 25. R4-2201053, TP for TR 38.717-03-02: CA\_n2-n5-n48, Samsung, Verizon 26. R4-2201054, TP for TR 38.717-03-02: CA\_n2-n48-n66, Samsung, Verizon 27. R4-2201055, TP for TR 38.717-03-02: CA\_n2-n48-n77, Samsung, Verizon 28. R4-2201056, TP for TR 38.717-03-02: CA\_n5-n48-n66, Samsung, Verizon 29. R4-2201057, TP for TR 38.717-03-02: CA\_n5-n48-n77, Samsung, Verizon 30. R4-2201114, TP to TR 38.717-03-02: Addition of CA\_n12-n30-n66, Nokia, AT&T 31. R4-2201116, TP to TR 38.717-03-02: Addition of CA\_n2-n12-n30, Nokia, AT&T 32. R4-2201117, TP to TR 38.717-03-02: Addition of CA\_n2-n12-n66, Nokia, AT&T 33. R4-2201118, TP to TR 38.717-03-02: Addition of CA\_n2-n29-n30, Nokia, AT&T 34. R4-2201119, TP to TR 38.717-03-02: Addition of CA\_n2-n29-n66, Nokia, AT&T 35. R4-2201560, TP for TR 38.717-03-02: CA\_n1-n3-n20, Ericsson, BT plc 36. R4-2201563,TP for TR 38.717-03-02: CA\_n1-n3-n67, Ericsson, BT plc 37. R4-2201567,TP for TR 38.717-03-02: CA\_n1-n20-n67, Ericsson, BT plc 38. R4-2201569, TP for TR 38.717-03-02: CA\_n3-n20-n67, Ericsson, BT plc 39. R4-2202187, TP to TR 38.717-03-02 Addition of CADC\_n7A-n46-n78A, Nokia, BT 40. R4-2202188, TP to TR 38.717-03-02: Addition of CA\_n29-n30-n66，Nokia, AT&T 41. R4-2202190, TP for TR 38.717-03-02: CA\_n41-n70-n78, Ericsson 42. R4-2204130, Draft CR for 38.101-1: support of DL n77(2A) in 2UL CA of CA\_n1A-n28A-n77, SoftBank Corp. 43. R4-2205565, draftCR to add BCS for CA\_n1A-n40A-n78A to 38.101-1, Nokia 44. R4-2205698, draft CR to add new configurations for CA\_n3-n7-n78, Ericsson, BT plc 45. R4-2205699, draft CR to add new configurations for CA\_n3-n7-n28 and CA\_n3-n28-n78, Ericsson, BT plc 46. R4-2205694, TP for TR 38.717-03-02: CA\_n66-n70-n78, Ericsson 47. R4-2206250, TP for TR38.717-03-02\_CA\_n28A-n40A-n41A, ZTE 48. R4-2206251, TP for TR 38.717-03-02: CA\_n41-n66-n70, Ericsson   The 1UL/3DL CA/DC configurations approved in the following contributions are added:   1. R4-2201024 TP for TR 38.717-03-01 CA\_n1-n3-n18 2. R4-2201025 TP for TR 38.717-03-01 CA\_n1-n18-n28 3. R4-2201026 TP for TR 38.717-03-01 CA\_n1-n18-n41 4. R4-2201027 TP for TR 38.717-03-01 CA\_n1-n18-n77 5. R4-2201028 TP for TR 38.717-03-01 CA\_n1-n28-n41 6. R4-2201029 TP for TR 38.717-03-01 CA\_n1-n28-n77 7. R4-2201030 TP for TR 38.717-03-01 CA\_n1-n41-n77 8. R4-2201031 TP for TR 38.717-03-01 CA\_n3-n18-n28 9. R4-2201032 TP for TR 38.717-03-01 CA\_n3-n18-n77 10. R4-2201033 TP for TR 38.717-03-01 CA\_n18-n28-n41 11. R4-2201034 TP for TR 38.717-03-01 CA\_n18-n28-n77 12. R4-2201035 TP for TR 38.717-03-01 CA\_n18-n41-n77 13. R4-2201108 TP to TR 38.717-03-01 Addition of CA\_n12-n30-n66 14. R4-2201109 TP to TR 38.717-03-01 Addition of CA\_n29-n30-n66 15. R4-2201110 TP to TR 38.717-03-01 Addition of CA\_n2-n12-n30 16. R4-2201111 TP to TR 38.717-03-01 Addition of CA\_n2-n12-n66 17. R4-2201112 TP to TR 38.717-03-01 Addition of CA\_n2-n29-n30 18. R4-2201113 TP to TR 38.717-03-01 Addition of CA\_n2-n29-n66 19. R4-2201552 TP for TR 38.717-03-01 to include CA\_n41-n70-n78 20. R4-2201566 TP for TR 38.717-03-01 to include CA\_n1-n20-n67 21. R4-2201568 TP for TR 38.717-03-01 to include CA\_n3-n20-n67 22. R4-2201724 TP for TR 38.717-03-01 to include CA\_n2-n71-n78 23. R4-2201725 TP for TR 38.717-03-01 to include CA\_n2-n66-n78 24. R4-2200200 Draft CR\_n3-n28-n41\_tibrib 25. R4-2201063 Draft CR for 38.101-1 to introduce new configurations to CA\_n5-n25-n77 and CA\_n5-n66-n77 with 1UL 26. R4-2202184 draft CR to 38101-1-h40 improve note for CA\_n20-n28 and higher order combos 27. R4-2202185 Draft CR for 38.101-1 to introduce new configurations to CA\_n5-n48-n77 and CA\_n48-n66-n77 with 1UL 28. R4-2205171 draft CR for 38.101-1 CA\_n7-n25-n66 29. R4-2205172 draft CR for 38.101-1 CA\_n25-n38-n66 | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | These band combinations would not be supported in Rel-17. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.2A.2.2, 5.5A.3.2, 6.2A.4.2.4, 7.3A.3.2.3 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **x** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | | **x** |  | Test specifications | | | | TS 38.521-1 | | |
| ***(show related CRs)*** | |  | **x** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

## << Start of change 1>>

5.2A.2.2 Inter-band CA (three bands)

**Table 5.2A.2.2-1: Inter-band CA operating bands involving FR1 (three bands)**

|  |  |  |
| --- | --- | --- |
| **NR CA Band** | **NR Band**  **(Table 5.2-1)** | **DL interruption allowed**  **(Note 4)** |
| CA\_n1-n3-n5 | n1, n3, n5 |  |
| CA\_n1-n3-n7 | n1, n3, n7 |  |
| CA\_n1-n3-n8 | n1, n3, n8 |  |
| CA\_n1-n3-n18 | n1, n3, n18 |  |
| CA\_n1-n3-n20 | n1, n3, n20 |  |
| CA\_n1-n3-n28 | n1, n3, n28 |  |
| CA\_n1-n3-n413 | n1, n3, n41 |  |
| CA\_n1-n3-n77 | n1, n3, n77 |  |
| CA\_n1-n3-n783 | n1, n3, n78 | No for CA\_n1-n78, CA\_n3-n78 |
| CA\_n1-n3-n793 | n1, n3, n79 |  |
| CA\_n1-n5-n7 | n1, n5, n7 |  |
| CA\_n1-n5-n28 | n1, n5, n28 |  |
| CA\_n1-n5-n78 | n1, n5, n78 |  |
| CA\_n1-n7-n8 | n1, n7, n8 |  |
| CA\_n1-n7-n28 | n1, n7, n28 |  |
| CA\_n1-n7-n783 | n1，n7, n78 |  |
| CA\_n1-n8-n28 | n1, n8, n28 |  |
| CA\_n1-n8-n77 | n1, n8, n77 |  |
| CA\_n1-n8-n783 | n1, n8, n78 |  |
| CA\_n1-n8-n79 | n1, n8, n79 |  |
| CA\_n1-n18-n28 | n1, n18, n28 |  |
| CA\_n1-n18-n41 | n1, n18, n41 |  |
| CA\_n1-n18-n77 | n1, n18, n77 |  |
| CA\_n1-n20-n67 | n1, n20, n67 |  |
| CA\_n1-n20-n78 | n1, n20, n78 |  |
| CA\_n1A-n28A-n40 | n1, n28, n40 |  |
| CA\_n1-n28-n413 | n1, n28, n41 |  |
| CA\_n1-n28-n773 | n1, n28, n77 |  |
| CA\_n1-n28-n793 | n1, n28, n79 |  |
| CA\_n1-n28-n783 | n1, n28, n78 |  |
| CA\_n1-n40-n78 | n1, n40, n78 |  |
| CA\_n1-n41-n773 | n1, n41, n77 |  |
| CA\_n1-n77-n79 | n1, n77, n79 |  |
| CA\_n1-n78-n79 | n1, n78, n79 |  |
| CA\_n2-n5-n30 | n2, n5, n30 |  |
| CA\_n2-n5-n48 | n2, n5, n48 |  |
| CA\_n2-n5-n66 | n2, n5, n66 |  |
| CA\_n2-n5-n77 | n2, n5, n77 |  |
| CA\_n2-n12-n30 | n2, n12, n30 |  |
| CA\_n2-n12-n66 | n2, n12, n66 |  |
| CA\_n2-n12-n77 | n2, n12, n77 |  |
| CA\_n2-n14-n30 | n2, n14, n30 |  |
| CA\_n2-n14-n66 | n2, n14, n66 |  |
| CA\_n2-n14-n77 | n2, n14, n77 |  |
| CA\_n2-n29-n30 | n2, n29, n30 |  |
| CA\_n2-n29-n66 | n2, n29, n66 |  |
| CA\_n2-n29-n77 | n2, n29, n77 |  |
| CA\_n2-n30-n66 | n2, n30, n66 |  |
| CA\_n2-n30-n77 | n2, n30, n77 |  |
| CA\_n2-n48-n66 | n2, n48, n66 |  |
| CA\_n2-n48-n77 | n2, n48, n77 |  |
| CA\_n2-n66-n77 | n2, n66, n77 |  |
| CA\_n2-n66-n78 | n2, n66, n78 |  |
| CA\_n2-n71-n78 | n2, n71, n78 |  |
| CA\_n3-n5-n7 | n3, n5, n7 |  |
| CA\_n3-n5-n28 | n3, n5, n28 |  |
| CA\_n3-n5-n78 | n3, n5, n78 |  |
| CA\_n3-n7-n8 | n3, n7, n8 |  |
| CA\_n3-n7-n28 | n3, n7, n28 |  |
| CA\_n3-n7-n783 | n3, n7, n78 |  |
| CA\_n3-n8-n28 | n3, n8, n28 |  |
| CA\_n3-n8-n77 | n3, n8, n77 |  |
| CA\_n3-n8-n783 | n3, n8, n78 |  |
| CA\_n3-n18-n28 | n3, n18, n28 |  |
| CA\_n3-n18-n41 | n3, n18, n41 |  |
| CA\_n3-n18-n77 | n3, n18, n77 |  |
| CA\_n3-n20-n67 | n3, n20, n67 |  |
| CA\_n3-n20-n78 | n3, n20, n78 |  |
| CA\_n3-n28-n413 | n3, n28, n41 |  |
| CA\_n3-n28-n773 | n3, n28, n77 |  |
| CA\_n3-n28-n783 | n3, n28, n78 |  |
| CA\_n3-n28-n793 | n3, n28, n79 |  |
| CA\_n3-n40-n41 | n3, n40, n41 | No for CA n3-n40, CA n3-n41 |
| CA\_n3-n41-n77 | n3, n41, n77 |  |
| CA\_n3-n41-n78 | n3, n41, n78 |  |
| CA\_n3-n41-n793 | n3, n41, n79 | No |
| CA\_n3-n77-n79 | n3, n77, n79 |  |
| CA\_n5-n7-n28 | n5, n7, n28 |  |
| CA\_n5-n7-n78 | n5, n7, n78 |  |
| CA\_n5-n12-n77 | n5, n12, n77 |  |
| CA\_n5-n14-n77 | n5, n14, n77 |  |
| CA\_n5-n25-n66 | n5, n25, n66 |  |
| CA\_n5-n25-n77 | n5, n25, n77 |  |
| CA\_n5-n25-n78 | n5, n25, n78 |  |
| CA\_n5-n29-n77 | n5, n29, n77 |  |
| CA\_n5-n30-n66 | n5, n30, n66 |  |
| CA\_n5-n30-n77 | n5, n30, n77 |  |
| CA\_n5-n48-n77 | n5, n48, n77 |  |
| CA\_n5-n48-n66 | n5, n48, n66 |  |
| CA\_n5-n66-n77 | n5, n66, n77 |  |
| CA\_n5-n66-n78 | n5, n66, n78 |  |
| CA\_n7-n8-n28 | n7, n8, n28 |  |
| CA\_n7-n8-n78 | n7, n8, n78 |  |
| CA\_n7-n25-n66 | n7, n25, n66 |  |
| CA\_n7-n25-n77 | n7, n25, n77 |  |
| CA\_n7-n25-n78 | n7, n25, n78 |  |
| CA\_n7-n28-n78 | n7, n28, n78 |  |
| CA\_n7-n46-n78 | n7, n46, n78 |  |
| CA\_n7-n66-n78 | n7, n66, n78 |  |
| CA\_n7-n66-n77 | n7, n66, n77 |  |
| CA\_n8-n28-n783 | n8, n28, n78 |  |
| CA\_n8-n39-n41 | n8, n39, n41 | No for CA n8-n41, CA n39-n41 |
| CA\_n8-n40-n41 | n8, n40, n41 |  |
| CA\_n8-n41-n793 | n8, n41, n79 | No |
| CA\_n8-n78-n79 | n8, n78, n79 |  |
| CA\_n12-n30-n66 | n12, n30, n66 |  |
| CA\_n12-n30-n77 | n12, n30, n77 |  |
| CA\_n12-n66-n77 | n12, n66, n77 |  |
| CA\_n13-n25-n66 | n13, n25, n66 |  |
| CA\_n13-n25-n77 | n13, n25, n77 |  |
| CA\_n13-n66-n77 | n13, n66, n77 |  |
| CA\_n14-n30-n66 | n14, n30, n66 |  |
| CA\_n14-n30-n77 | n14, n30, n77 |  |
| CA\_n14-n66-n77 | n14, n66, n77 |  |
| CA\_n18-n28-n41 | n18, n28, n41 |  |
| CA\_n18-n28-n77 | n18, n28, n77 |  |
| CA\_n18-n41-n77 | n18, n41, n77 |  |
| CA\_n20-n28-n78 | n20, n28, n78 |  |
| CA\_n24-n41-n48 | n24, n41, n48 |  |
| CA\_n24-n41-n77 | n24, n41, n77 |  |
| CA\_n24-n48-n77 | n24, n48, n77 |  |
| CA\_n25-n41-n77 | n25, n41, n77 |  |
| CA\_n25-n29-n66 | n25, n29, n66 |  |
| CA\_n25-n38-n78 | n25, n38, n78 |  |
| CA\_n25-n41-n66 | n25, n41, n66 |  |
| CA\_n25-n41-n71 | n25, n41, n71 |  |
| CA\_n25-n41-n77 | n25, n41, n77 | No for CA\_n1-n78, CA\_n3-n78 |
| CA\_n25-n41-n78 | n25, n41, n78 |  |
| CA\_n25-n48-n66 | n25, n48, n66 |  |
| CA\_n25-n66-n71 | n25, n66, n71 |  |
| CA\_n25-n66-n77 | n25, n66, n77 |  |
| CA\_n25-n66-n78 | n25, n66, n78 |  |
| CA\_n25-n71-n77 | n25, n71, n77 |  |
| CA\_n25-n71-n78 | n25, n71, n78 |  |
| CA\_n26-n66-n70 | n26, n66, n70 |  |
| CA\_n28-n40-n41 | n28, n40, n41 |  |
| CA\_n28-n40-n79 | n28, n40, n79 |  |
| CA\_n28-n41-n793 | n28, n41, n79 |  |
| CA\_n28-n46-n78 | n28, n46, n78 |  |
| CA\_n28-n77-n79 | n28, n77, n79 |  |
| CA\_n28-n78-n79 | n28, n78, n79 |  |
| CA\_n28-n40-n78 | n28, n40, n78 |  |
| CA\_n28-n41-n77 | n28, n41, n77 |  |
| CA\_n28-n41-n78 | n28, n41, n78 |  |
| CA\_n29-n30-n66 | n29, n30, n66 |  |
| CA\_n29-n30-n77 | n29, n30, n77 |  |
| CA\_n29-n66-n70 | n29, n66, n70 |  |
| CA\_n29-n66-n77 | n29, n66, n77 |  |
| CA\_n30-n66-n77 | n30, n66, n77 |  |
| CA\_n38-n66-n78 | n38, n66, n78 |  |
| CA\_n39-n40-n41 | n39, n40, n41 |  |
| CA\_n39-n40-n79 | n39, n40, n79 |  |
| CA\_n39-n41-n79 | n39, n41, n79 | No |
| CA\_n40-n41-n791,2 | n40, n41, n79 | No for CA n40-n79, CA n41-n79 |
| CA\_ n41-n66-n71 | n41, n66, n71 |  |
| CA\_n41-n66-n78 | n41, n66, n78 |  |
| CA\_ n41-n66-n77 | n41, n66, n77 |  |
| CA\_n41-n70-n78 | n41, n70, n78 |  |
| CA\_n41-n71-n77 | n41, n71, n77 |  |
| CA\_n41-n71-n78 | n41, n71, n78 |  |
| CA\_n48-n66-n70 | n48, n66, n70 |  |
| CA\_n48-n66-n71 | n48, n66, n71 |  |
| CA\_n48-n66-n77 | n48, n66, n77 |  |
| CA\_n48-n70-n71 | n48, n70, n71 |  |
| CA\_n66-n70-n71 | n66, n70, n71 |  |
| CA\_n66-n71-n77 | n66, n71, n77 |  |
| CA\_n66-n71-n78 | n66, n71, n78 |  |
| NOTE 1: The frequency range below 2506 MHz for Band n41 is not used in this band combination.  NOTE 2: Applicable for frequency range above 4800 MHz for Band n79 in this band combination.  NOTE 3: Applicable for UE supporting inter-band carrier aggregation with mandatory simultaneous Rx/Tx capability  NOTE 4: Applicable when dynamic Tx switching is conducted. The DL interruption requirement is specified in clause 8.2.2.2.10 of 38.133 [13]. | | |

## << End of change 1>>

## << Start of change 2>>

5.5A.3.2 Configurations for inter-band CA (three bands)

**Table 5.5A.3.2-1: NR CA configurations and bandwidth combinations sets defined for inter-band CA (three bands)**

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| **NR CA configuration** | **Uplink CA configuration**  **or single uplink carrier6** | **NR Band** | **Channel bandwidth (MHz) (NOTE 3)** | **Bandwidth combination set** |
| CA\_n1A-n3A-n5A | CA\_n1A-n3A  CA\_n1A-n5A  CA\_n3A-n5A | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n5 | 5, 10, 15, 20 |  |
| CA\_n1A-n3A-n7A | - | n1 | 5, 10, 15, 20 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30 |  |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  | CA\_n1A-n3A  CA\_n1A-n7A  CA\_n3A-n7A | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 1 |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n1 | 5, 10, 15, 20 | 2 |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
| CA\_n1A-n3A-n7B | - | n1 | 5, 10, 15, 20 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30 |  |
|  |  | n7 | CA\_n7B\_BCS0 |  |
|  | CA\_n1A-n3A  CA\_n1A-n7A  CA\_n3A-n7A  CA\_n7B | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 1 |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n7 | CA\_n7B\_BCS0 |  |
| CA\_n1A-n3A-n8A | - | n1 | 5, 10, 15, 20 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30 |  |
|  |  | n8 | 5, 10, 15, 20 |  |
| CA\_n1A-n3A-n18A | CA\_n1A-n3A  CA\_n1A-n18A  CA\_n3A-n18A | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n18 | 5, 10, 15 |  |
| CA\_n1A-n3A-n20A | - | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 |
|  |  | n20 | 5, 10, 15, 20 |
| CA\_n1A-n3A-n28A | - | n1 | 5, 10, 15, 20 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30 |  |
|  |  | n28 | 5, 10, 15, 202 |  |
|  | CA\_n1A-n3A  CA\_n1A-n28A  CA\_n3A-n28A | n1 | 5, 10, 15, 20 | 1 |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 2 |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n28 | 5, 10, 15, 201, 301 |  |
| CA\_n1A-n3A-n41A | CA\_n1A-n3A  CA\_n1A-n41A  CA\_n3A-n41A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30 |  |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
| CA\_n1A-n3A-n67A | CA\_n1A-n3A | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n67 | 5, 10, 15, 20 |  |
| CA\_n1A-n3A-n77A | CA\_n1A-n3A  CA\_n1A-n77A  CA\_n3A-n77A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30 |  |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 1 |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n1A-n3A-n77(2A) | CA\_n1A-n3A  CA\_n1A-n77A  CA\_n3A-n77A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n1A-n3A-n78A | CA\_n1A-n3A  CA\_n1A-n78A7  CA\_n3A-n78A7A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30 |  |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 1 |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n1 | 5, 10, 15, 20 | 2 |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n1A-n3A-n78(2A) | CA\_n1A-n3A  CA\_n1A-n78A  CA\_n3A-n78A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n1A-n3A-n79A | CA\_n1A-n3A  CA\_n1A-n79A  CA\_n3A-n79A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n1A-n5A-n7A | CA\_n1A-n5A  CA\_n1A-n7A  CA\_n5A-n7A | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
| CA\_n1A-n5A-n7B | CA\_n1A-n5A  CA\_n1A-n7A  CA\_n5A-n7A  CA\_n7B | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n7 | CA\_n7B\_BCS0 |  |
| CA\_n1A-n5A-n28A | - | n1 | 5, 10, 15, 20, 25, 30, 40, 45, 50 | 0 |
|  |  | n5 | 5, 10, 15, 20, 25 |  |
|  |  | 28 | 5, 10, 15, 20, 30 |  |
| CA\_n1A-n5A-n78A | CA\_n1A-n5A  CA\_n1A-n78A  CA\_n5A-n78A | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 704, 80, 90, 100 |  |
| CA\_n1A-n7A-n8A | - | n1 | 5, 10, 15, 20, 25, 30, 40, 45, 50 | 0 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 35, 40, 50 |  |
|  |  | n8 | 5, 10, 15, 20, 35 |  |
| CA\_n1A-n8A-n28A | - | n1 | 5, 10, 15, 20, 25, 30, 40, 45, 50 | 0 |
|  |  | n8 | 5, 10, 15, 20, 35 |  |
|  |  | n28 | 10, 15, 20 |  |
| CA\_n1A-n8A-n77A | - | n1 | 5, 10, 15, 20 | 0 |
|  |  | n8 | 5, 10, 15, 20 |  |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n1A-n8A-n77(2A) | - | n1 | 5, 10, 15, 20 | 0 |
|  |  | n8 | 5, 10, 15, 20 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n1A-n7A-n28A | CA\_n1A-n7A  CA\_n1A-n28A  CA\_n7A-n28A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n28 | 5, 10, 15, 20 |  |
| CA\_n1A-n7B-n28A | CA\_n1A-n28A  CA\_n1A-n7A  CA\_n7A-n28A  CA\_n7B | n1 | 5, 10, 15, 20 | 0 |
|  |  | n7 | CA\_n7B\_BCS0 |  |
|  |  | n28 | 5, 10, 15, 20 |  |
| CA\_n1A-n7A-n78A | CA\_n1A-n7A  CA\_n1A-n78A  CA\_n7A-n78A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 901,100 |  |
|  |  | n1 | 5, 10, 15, 20 | 1 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 901, 100 |  |
| CA\_n1A-n7B-n78A | CA\_n1A-n78A  CA\_n1A-n7A  CA\_n7A-n78A  CA\_n7B | n1 | 5, 10, 15, 20 | 0 |
|  |  | n7 | CA\_n7B\_BCS0 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 704, 80, 90, 100 |  |
| CA\_n1A-n7A-n78(2A) | CA\_n1A-n7A  CA\_n1A-n78A  CA\_n7A-n78A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n78 | CA\_n78(2A)\_BCS0 |  |
|  |  | n1 | 5, 10, 15, 20 | 1 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n1A-n8A-n78A | - | n1 | 5, 10, 15, 20 | 0 |
|  |  | n8 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n1 | 5, 10, 15, 20 | 1 |
|  |  | n8 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
| CA\_n1A-n8A-n78(2A) | - | n1 | 5, 10, 15, 20 | 0 |
|  |  | n8 | 5, 10, 15, 20 |  |
|  |  | n78 | CA\_n78(2A)\_BCS1 |  |
| CA\_n1A-n8A-n79A | - | n1 | 5, 10, 15, 20 | 0 |
|  |  | n8 | 5, 10, 15, 20 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n1A-n18A-n28A | CA\_n1A-n18A  CA\_n1A-n28A  CA\_n18A-n28A | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n18 | 5, 10, 15 |  |
|  |  | n28 | 5, 10 |  |
| CA\_n1A-n18A-n41A | CA\_n1A-n18A  CA\_n1A-n41A  CA\_n18A-n41A | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n18 | 5, 10, 15 |  |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
| CA\_n1A-n18A-n77A | CA\_n1A-n18A  CA\_n1A-n77A  CA\_n18A-n77A | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n18 | 5, 10, 15 |  |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n1A-n20A-n67A | CA\_n1A-n20A | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n20 | 5, 10, 15, 20 |  |
|  |  | n67 | 5, 10, 15, 20 |  |
| CA\_n1A-n20A-n78A | - | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n20 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n1A-n28A-n40A | - | n1 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n40 | 5, 10, 15, 20, 25, 30, 40, 50, 60, 80 |  |
| CA\_n1A-n28A-n40B | - | n1 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n40 | CA\_n40B\_BCS0 |  |
| CA\_n1A-n28A-n41A | CA\_n1A-n28A  CA\_n1A-n41A  CA\_n28A-n41A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
| CA\_n1A-n28A-n77A | CA\_n1A-n28A  CA\_n1A-n77A  CA\_n28A-n77A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n1A-n28A-n77(2A) | CA\_n1A-n28A CA\_n1A-n77A  CA\_n28A-n77A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
| CA\_n1A-n28A-n78A | CA\_n1A-n28A  CA\_n1A-n78A  CA\_n28A-n78A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 202 |  |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n1 | 5, 10, 15, 20 | 1 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n1A-n28A-n78(2A) | CA\_n1A-n28A  CA\_n1A-n78A  CA\_n28A-n78A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n1A-n28A-n79A | CA\_n1A-n28A  CA\_n1A-n79A  CA\_n28A-n79A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n1A-n3A-n20A | CA\_n1A-n3A CA\_n1A-n20A CA\_n3A-n20A | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n20 | 5, 10, 15, 20 |  |
| CA\_n1A-n40A-n78A | CA\_n1A-n40A  CA\_n1A-n78A  CA\_n40A-n78A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n40 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  | CA\_n1A-n40A  CA\_n1A-n78A  CA\_n40A-n78A | n1 | 5, 10, 15, 20 | 1 |
|  |  | n40 | 5, 10, 15, 20, 25, 30, 40, 50, 60, 80 |  |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  | CA\_n1A-n40A  CA\_n1A-n78A  CA\_n40A-n78A | n1 | 5, 10, 15, 20 | 2 |
|  |  | n40 | 5, 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n1A-n40B-n78A | - | n1 | 5, 10, 15, 20 | 0 |
|  |  | n40 | CA\_n40B\_BCS0 |  |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n1A-n41A-n77A | CA\_n1A-n41A  CA\_n1A-n77A  CA\_n41A-n77A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n1A-n77A-n79A4 | CA\_n1A-n77A  CA\_n1A-n79A  CA\_n77A-n79A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n1A-n77(2A)-n79A4 | CA\_n1A-n77A  CA\_n1A-n79A  CA\_n77A-n79A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n1A-n78A-n79A5 | CA\_n1A-n78A  CA\_n1A-n79A  CA\_n78A-n79A | n1 | 5, 10, 15, 20 | 0 |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
|  |  | n1 | 5, 10, 15, 20 | 1 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n1A-n78(2A)-n79A | - | n1 | 5, 10, 15, 20 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS1 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n2A-n5A-n30A | CA\_n2A-n5A  CA\_n2A-n30A  CA\_n5A-n30A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n30 | 5, 10 |  |
| CA\_n2A-n5A-n48A | CA\_n2A-n5A  CA\_n2A-n48A  CA\_n5A-n48A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n5A-n48B | CA\_n2A-n5A  CA\_n2A-n48A  CA\_n5A-n48A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n2 | 5, 10, 15, 20 | 1 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n48 | CA\_n48B\_BCS1 |  |
|  |  | n2 | 5, 10, 15, 20 | 2 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n48 | CA\_n48B\_BCS2 |  |
| CA\_n2A-n5A-n48(2A) | CA\_n2A-n5A  CA\_n2A-n48A  CA\_n5A-n48A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n2 | 5, 10, 15, 20 | 1 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 |  |
| CA\_n2A-n5A-n48(A-B) | CA\_n2A-n5A  CA\_n2A-n48A  CA\_n5A-n48A | n2 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n5 | 5, 10, 15, 20, 251 |  |
|  |  | n48 | CA\_n48(A-B)\_BCS0 |  |
|  |  | n2 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n5 | 5, 10, 15, 20, 251 |  |
|  |  | n48 | CA\_n48(A-B)\_BCS1 |  |
| CA\_n2(2A)-n5A-n30A | CA\_n2A-n5A  CA\_n2A-n30A  CA\_n5A-n30A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n30 | 5, 10 |  |
| CA\_n2A-n5A-n66A | CA\_n2A-n5A  CA\_n2A-n66A  CA\_n5A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2(2A)-n5A-n66A | CA\_n2A-n5A  CA\_n2A-n66A  CA\_n5A-n66A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2A-n5A-n66(2A) | CA\_n2A-n5A  CA\_n2A-n66A  CA\_n5A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n66 | CA\_n66(2A)\_BCS0 |  |
| CA\_n2A-n5A-n77A | n777  CA\_n2A-n5A  CA\_n2A-n77A7  CA\_n5A-n77A7 | n2 | 5, 10, 15, 20 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n5A-n77C | CA\_n2A-n5A  CA\_n2A-n77A  CA\_n5A-n77A | n2 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n5 | 5, 10, 15, 20, 251 |  |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n2 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n5 | 5, 10, 15, 20, 251 |  |
|  |  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n2A-n5A-n77(2A) | CA\_n2A-n5A  CA\_n2A-n77A  CA\_n5A-n77A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n2(2A)-n5A-n77A | CA\_n2A-n5A  CA\_n2A-n77A  CA\_n5A-n77A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n12A-n30A | CA\_n2A-n12A  CA\_n2A-n30A  CA\_n12A-n30A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n30 | 5, 10 |  |
| CA\_n2(2A)-n12A-n30A | CA\_n2A-n12A  CA\_n2A-n30A  CA\_n12A-n30A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n30 | 5, 10 |  |
| CA\_n2A-n12A-n66A | CA\_n2A-n12A  CA\_n2A-n66A  CA\_n12A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2(2A)-n12A-n66A | CA\_n2A-n12A  CA\_n2A-n66A  CA\_n12A-n66A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2A-n12A-n66(2A) | CA\_n2A-n12A  CA\_n2A-n66A  CA\_n12A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n2(2A)-n12A-n66(2A) | CA\_n2A-n12A  CA\_n2A-n66A  CA\_n12A-n66A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n2A-n12A-n66(3A) | CA\_n2A-n12A  CA\_n2A-n66A  CA\_n12A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n66 | CA\_n66(3A)\_BCS0 |  |
| CA\_n2A-n12A-n77A | n777  CA\_n2A-n12A  CA\_n2A-n77A7  CA\_n12A-n77A7 | n2 | 5, 10, 15, 20 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2(2A)-n12A-n77A | CA\_n2A-n12A  CA\_n2A-n77A  CA\_n12A-n77A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n12A-n77(2A) | CA\_n2A-n12A  CA\_n2A-n77A  CA\_n12A-n77A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n2A-n14A-n30A | CA\_n2A-n14A  CA\_n2A-n30A  CA\_n14A-n30A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n14 | 5, 10 |  |
|  |  | n30 | 5, 10 |  |
| CA\_n2(2A)-n14A-n30A | CA\_n2A-n14A  CA\_n2A-n30A  CA\_n14A-n30A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n14 | 5, 10 |  |
|  |  | n30 | 5, 10 |  |
| CA\_n2A-n14A-n66A | CA\_n2A-n14A  CA\_n2A-n66A  CA\_n14A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n14 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2(2A)-n14A-n66A | CA\_n2A-n14A  CA\_n2A-n66A  CA\_n14A-n66A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n14 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2A-n14A-n66(2A) | CA\_n2A-n14A  CA\_n2A-n66A  CA\_n14A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n14 | 5, 10 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n2A-n14A-n77A | n777  CA\_n2A-n14A  CA\_n2A-n77A7  CA\_n14A-n77A7 | n2 | 5, 10, 15, 20 | 0 |
|  |  | n14 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n14A-n77(2A) | CA\_n2A-n14A  CA\_n2A-n77A  CA\_n14A-n77A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n14 | 5, 10 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n2(2A)-n14A-n77A | CA\_n2A-n14A  CA\_n2A-n77A  CA\_n14A-n77A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n14 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n29A-n30A | CA\_n2A-n30A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n30 | 5, 10 |  |
| CA\_n2(2A)-n29A-n30A | CA\_n2A-n30A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n30 | 5, 10 |  |
| CA\_n2A-n29A-n66A | CA\_n2A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2(2A)-n29A-n66A | CA\_n2A-n66A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2A-n29A-n66(2A) | CA\_n2A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n2(2A)-n29A-n66(2A) | CA\_n2A-n66A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n2A-n29A-n77A | CA\_n2-n77 | n2 | 5, 10, 15, 20 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2(2A)-n29A-n77A | CA\_n2-n77 | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n29A-n77(2A) | CA\_n2-n77 | n2 | 5, 10, 15, 20 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n2A-n30A-n66A | CA\_n2A-n30A  CA\_n30A-n66A  CA\_n2A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
| CA\_n2(2A)-n30A-n66A | CA\_n2A-n30A  CA\_n30A-n66A  CA\_n2A-n66A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
| CA\_n2A-n30A-n66(2A) | CA\_n2A-n30A  CA\_n30A-n66A  CA\_n2A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | CA\_n66(2A)\_BCS0 |  |
| CA\_n2A-n30A-n77A | n777  CA\_n2A-n30A  CA\_n2A-n77A7  CA\_n30A-n77A7 | n2 | 5, 10, 15, 20 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n30A-n77(2A) | CA\_n2A-n30A  CA\_n2A-n77A  CA\_n30A-n77A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n2(2A)-n30A-n77A | CA\_n2A-n30A  CA\_n2A-n77A  CA\_n30A-n77A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n48A-n66A | CA\_n2A-n48A  CA\_n2A-n66A  CA\_n48A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2A-n48(A-B)-n66A | CA\_n2A-n48A  CA\_n2A-n66A  CA\_n48A-n66A | n2 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n48 | CA\_n48(A-B)\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n2 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n48 | CA\_n48(A-B)\_BCS1 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2A-n48B-n66A | CA\_n2A-n48A  CA\_n2A-n66A  CA\_n48A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n2 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48B\_BCS1 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n2 | 5, 10, 15, 20 | 2 |
|  |  | n48 | CA\_n48B\_BCS2 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2A-n48(2A)-n66A | CA\_n2A-n48A  CA\_n2A-n66A  CA\_n48A-n66A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n2 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48(2A)\_BCS1 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2A-n48A-n77A | CA\_n2A-n48A  CA\_n2A-n77A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n48A-n77C | CA\_n2A-n48A  CA\_n2A-n77A  CA\_n77C | n2 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n2 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n2A-n48B-n77A | CA\_n2A-n48A  CA\_n2A-n77A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n2 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48B\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n2 | 5, 10, 15, 20 | 2 |
|  |  | n48 | CA\_n48B\_BCS2 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n48(2A)-n77A | CA\_n2A-n48A  CA\_n2A-n77A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n2 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n66A-n77A | CA\_n2A-n66A  CA\_n66A-n77A  CA\_n2A-n77A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2(2A)-n66A-n77A | CA\_n2A-n66A  CA\_n66A-n77A  CA\_n2A-n77A | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n66(2A)-n77A | CA\_n2A-n66A  CA\_n66A-n77A  CA\_n2A-n77A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n66A-n77C | CA\_n2A-n66A  CA\_n66A-n77A  CA\_n2A-n77A | n2 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n2 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n2A-n66A-n77(2A) | CA\_n2A-n66A  CA\_n66A-n77A  CA\_n2A-n77A | n2 | 5, 10, 15, 20 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n2A-n66A-n78A | - | n2 | 5, 10, 15, 20 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n66A-n78(2A) | - | n2 | 5, 10, 15, 20 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n2A-n71A-n78A | - | n2 | 5, 10, 15, 20 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n2A-n71A-n78(2A) | - | n2 | 5, 10, 15, 20 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n3A-n5A-n7A | - | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40 |  |
|  | CA\_n3A-n5A  CA\_n3A-n7A  CA\_n5A-n7A | n3 | 5, 10, 15, 20, 25, 30, 40, 50 | 1 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
| CA\_n3A-n5A-n7B | - | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n7 | CA\_n7B\_BCS0 |  |
|  | CA\_n3A-n5A  CA\_n3A-n7A  CA\_n5A-n7A  CA\_n7B | n3 | 5, 10, 15, 20, 25, 30, 40, 50 | 1 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n7 | CA\_n7B\_BCS0 |  |
| CA\_n3A-n5A-n28A | - | n3 | 5, 10, 15, 20, 25, 30, 40, 45, 50 | 0 |
|  |  | n5 | 5, 10, 15, 20, 25 |  |
|  |  | n28 | 5, 10, 15, 20, 30 |  |
| CA\_n3A-n5A-n78A | CA\_n3A-n5A  CA\_n3A-n78A  CA\_n5A-n78A | n3 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n5 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n3A-n7A-n8A | - | n3 | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 | 0 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 35, 40, 50 |  |
|  |  | n8 | 5, 10, 15, 20, 35 |  |
| CA\_n3A-n7A-n28A | - | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n28 | 5, 10, 15, 20 |  |
|  | CA\_n3A-n7A  CA\_n3A-n28A  CA\_n7A-n28A | n3 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40, 50 | 2 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n28 | 5, 10, 15, 20 |  |
| CA\_n3A-n7B-n28A | - | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n7 | CA\_n7B\_BCS0 |  |
|  |  | n28 | 5, 10, 15, 20 |  |
|  | CA\_n3A-n7A  CA\_n3A-n28A  CA\_n7A-n28A  CA\_n7B | n3 | 5, 10, 15, 20, 25, 30, 40, 50 | 1 |
|  |  | n7 | CA\_n7B\_BCS0 |  |
|  |  | n28 | 5, 10, 15, 20 |  |
| CA\_n3A-n7A-n78A | - | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  | CA\_n3A-n7A  CA\_n3A-n78A  CA\_n7A-n78A | n3 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 704, 80, 90, 100 |  |
| CA\_n3A-n7B-n78A | - | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n7 | CA\_n7B\_BCS0 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  | CA\_n3A-n7A  CA\_n3A-n78A  CA\_n7A-n78A  CA\_n7B | n3 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n7 | CA\_n7B\_BCS0 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 704, 80, 90, 100 |  |
| CA\_n3A-n7A-n78(2A) | CA\_n3A-n7A  CA\_n3A-n78A  CA\_n7A-n78A | n3 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n3A-n8A-n28A | - | n3 | 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 | 0 |
|  |  | n8 | 5, 10, 15, 20, 35 |  |
|  |  | n28 | 5, 10, 15, 20, 30 |  |
| CA\_n3A-n8A-n77A | - | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n8 | 5, 10, 15, 20 |  |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n3A-n8A-n77(2A) | - | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n8 | 5, 10, 15, 20 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n3A-n8A-n78A | CA\_n3A-n8A  CA\_3A-n78A  CA\_n8A-n78A | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n8 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n3A-n18A-n28A | CA\_n3A-n18A  CA\_n3A-n28A  CA\_n18A-n28A | n3 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n18 | 5, 10, 15 |
|  |  | n28 | 5, 10 |
| CA\_n3A-n18A-n41A | CA\_n3A-n41A  CA\_n3A-n18A  CA\_n18A-n41A | n3 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n18 | 5, 10, 15 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |
| CA\_n3A-n18A-n77A | CA\_n3A-n18A  CA\_n3A-n77A  CA\_n18A-n77A | n3 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n18 | 5, 10, 15 |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |
| CA\_n3A-n20A-n67A | CA\_n3A-n20A | n3 | 5, 10, 15, 20, 25, 30, 40 | 0 |
| n20 | 5, 10, 15, 20 |
| n67 | 5, 10, 15, 20 |
| CA\_n3A-n20A-n78A | - | n3 | 5, 10, 15, 20, 25, 30, 40 | 0 |
| n20 | 5, 10, 15, 20 |
| n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |
| CA\_n3A-n28A-n41A | CA\_n3A-n28A | n3 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n28 | 5, 10, 15, 20, 30 |  |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
| CA\_n3A-n28A-n77A | CA\_n3A-n28A  CA\_n3A-n77A  CA\_n28A-n77A | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n28 | 5, 10, 15, 20, 30 |  |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n3A-n28A-n77(2A) | CA\_n3A-n28A  CA\_n3A-n77A  CA\_n28A-n77A | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  | CA\_n77(2A) | n28 | 5, 10, 15, 20 |  |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n28 | 5, 10, 15, 20, 30 |  |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
| CA\_n3A-n28A-n77(3A) | CA\_n3A-n28A  CA\_n3A-n77A  CA\_n28A-n77A | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n77 | CA\_n77(3A)\_BCS0 |  |
| CA\_n3A-n28A-n78A | CA\_n3A-n28A  CA\_n3A-n78A  CA\_n28A-n78A | n3 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 202 |  |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n28 | 5, 10, 15, 202 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 | 2 |
|  |  | n28 | 5, 10 |  |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n3A-n28A-n78(2A) | CA\_n3A-n28A  CA\_n3A-n78A  CA\_n28A-n78A | n3 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 202 |  |
|  |  | n78 | CA\_n78(2A)\_BCS0 |  |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n28 | 5, 10 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
|  |  | n3 | 5, 10, 15, 20, 25, 30, 40 | 2 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n3A-n28A-n79A | CA\_n3A-n28A  CA\_n3A-n79A  CA\_n28A-n79A | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n79 | 40, 50, 80, 100 |  |
| CA\_n3A-n77A-n79A4 | CA\_n3A-n77A  CA\_n3A-n79A  CA\_n77A-n79A | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n3A-n77(2A)-n79A4 | CA\_n3A-n77A  CA\_n3A-n79A  CA\_n77A-n79A | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n3A-n40A-n41A | CA\_n3A-n40A  CA\_n3A-n41A  CA\_n40A-n41A | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n40 | 5, 10, 15, 20, 25, 30, 40, 50, 60, 80 |  |
|  |  | n41 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n3A-n41A-n77A | CA\_n3A-n41A | n3 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  | CA\_n3A-n77A | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  | CA\_n41A-n77A | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n3A-n41A-n77(2A) | CA\_n3A-n41A | n3 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  | CA\_n3A-n77A | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  | CA\_n41A-n77A | n77 | CA\_n77(2A)\_BCS0 |  |
| CA\_n3A-n41A-n78A | - | n3 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  | CA\_n3A-n41A | n3 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  | CA\_n3A-n78A | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  | CA\_n41A-n78A | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n3A-n41A-n78(2A) | CA\_n3A-n41A | n3 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  | CA\_n3A-n78A | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  | CA\_n41A-n78A | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n3A-n41A-n79A | - | n3 | 5, 10, 15, 20, 25, 30 | 0 |
|  |  | n41 | 10, 15, 20, 40, 50, 60, 80, 100 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
|  |  | n3 | 5, 10, 15, 20, 25, 30 | 1 |
|  |  | n41 | 10, 15, 20, 40, 50, 60, 80 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n5A-n7A-n28A | - | n5 | 5, 10, 15, 20, 25 | 0 |
|  |  | n7 | 5, 10, 15, 25, 30, 35, 40, 50 |  |
|  |  | n28 | 5, 10, 15, 20, 30 |  |
| CA\_n5A-n7A-n78A | - | n5 | 5, 10, 15, 20 | 0 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  | CA\_n5A-n7A  CA\_n5A-n78A  CA\_n7A-n78A | n5 | 5, 10, 15, 20 | 1 |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 704, 80, 90, 100 |  |
| CA\_n5A-n7B-n78A | - | n5 | 5, 10, 15, 20 | 0 |
|  |  | n7 | CA\_n7B\_BCS0 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  | CA\_n5A-n7A  CA\_n5A-n78A  CA\_n7A-n78A  CA\_n7B | n5 | 5, 10, 15, 20 | 1 |
|  |  | n7 | CA\_n7B\_BCS0 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 704, 80, 90, 100 |  |
| CA\_n5A-n12A-n77A | n777  CA\_n5A-n12A  CA\_n5A-n77A7  CA\_n12A-n77A7 | n5 | 5, 10, 15, 20 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n12A-n77(2A) | CA\_n5A-n12A  CA\_n5A-n77A  CA\_n12A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n5A-n14A-n77A | n777  CA\_n5A-n14A  CA\_n5A-n77A7  CA\_n14A-n77A7 | n5 | 5, 10, 15, 20 | 0 |
|  |  | n14 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n14A-n77(2A) | CA\_n5A-n14A  CA\_n5A-n77A  CA\_n14A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n14 | 5, 10 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n5A-n25A-n66A | CA\_n5A-n25A  CA\_n5A-n66A  CA\_n25A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n5A-n25(2A)-n66A | CA\_n5A-n25A  CA\_n5A-n66A  CA\_n25A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n5A-n25A-n66(2A) | CA\_n5A-n25A  CA\_n5A-n66A  CA\_n25A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n5A-n25(2A)-n66(2A) | CA\_n5A-n25A  CA\_n5A-n66A  CA\_n25A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n5A-n25A-n77A | CA\_n5A-n25A | n5 | 5, 10, 15, 20 | 0 |
|  | CA\_n5A-n77A | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  | CA\_n25A-n77A | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n25(2A)-n77A | CA\_n5A-n25A  CA\_n5A-n77A  CA\_n25A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n25A-n77(2A) | CA\_n5A-n25A  CA\_n5A-n77A  CA\_n25A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n5A-n25(2A)-n77(2A) | CA\_n5A-n25A  CA\_n5A-n77A  CA\_n25A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n5A-n25A-n78A | CA\_n5A-n25A  CA\_n5A-n78A  CA\_n25A-n78A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n25(2A)-n78A | CA\_n5A-n25A  CA\_n5A-n78A  CA\_n25A-n78A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n25A-n78(2A) | CA\_n5A-n25A  CA\_n5A-n78A  CA\_n25A-n78A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n5A-n25(2A)-n78(2A) | CA\_n5A-n25A  CA\_n5A-n78A  CA\_n25A-n78A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n5A-n29A-n77A | CA\_n5A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n29A-n77(2A) | CA\_n5A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n5A-n30A-n66A | CA\_n5A-n30A  CA\_n30A-n66A  CA\_n5A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
| CA\_n5A-n30A-n66(2A) | CA\_n5A-n30A  CA\_n30A-n66A  CA\_n5A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | CA\_n66(2A)\_BCS0 |  |
| CA\_n5A-n30A-n77A | n777  CA\_n5A-n30A  CA\_n5A-n77A7  CA\_n30A-n77A7 | n5 | 5, 10, 15, 20 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n30A-n77(2A) | CA\_n5A-n30A  CA\_n5A-n77A  CA\_n30A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n5A-n48A-n66A | CA\_n5A-n48A  CA\_n5A-n66A  CA\_n48A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n5A-n48(A-B)-n66A | CA\_n5A-n48A  CA\_n5A-n66A  CA\_n48A-n66A | n5 | 5, 10, 15, 20, 251 | 0 |
|  |  | n48 | CA\_n48(A-B)\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n5 | 5, 10, 15, 20, 251 | 1 |
|  |  | n48 | CA\_n48(A-B)\_BCS1 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n5A-n48B-n66A | CA\_n5A-n48A  CA\_n5A-n66A  CA\_n48A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48B\_BCS1 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n5 | 5, 10, 15, 20 | 2 |
|  |  | n48 | CA\_n48B\_BCS2 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n5A-n48(2A)-n66A | CA\_n5A-n48A  CA\_n5A-n66A  CA\_n48A-n66A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48(2A)\_BCS1 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n5A-n48A-n77A | CA\_n5A-n48A  CA\_n5A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n48A-n77C | CA\_n5A-n48A  CA\_n5A-n77A  CA\_n77C | n5 | 5, 10, 15, 20, 251 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20, 251 | 1 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n5A-n48B-n77A | CA\_n5A-n48A  CA\_n5A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48B\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n5 | 5, 10, 15, 20 | 2 |
|  |  | n48 | CA\_n48B\_BCS2 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n48B-n77C | CA\_n5A-n48A  CA\_n5A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  | n48 | CA\_n48B\_BCS0 |  |
|  | n77 | CA\_n77C\_BCS0 |  |
|  | n5 | 5, 10, 15, 20 | 1 |
|  | n48 | CA\_n48B\_BCS0 |  |
|  | n77 | CA\_n77C BCS0 |  |
|  | n5 | 5, 10, 15, 20 | 2 |
|  | n48 | CA\_n48B\_BCS1 |  |
|  | n77 | CA\_n77C BCS0 |  |
|  | n5 | 5, 10, 15, 20 | 3 |
|  | n48 | CA\_n48B\_BCS1 |  |
|  | n77 | CA\_n77C BCS1 |  |
| CA\_n5A-n48(2A)-n77A | CA\_n5A-n48A  CA\_n5A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n48 | CA\_n48(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n48(2A)-n77C | CA\_n5A-n48A  CA\_n5A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  | n48 | CA\_n48(2A)\_BCS0 |  |
|  | n77 | CA\_n77C\_BCS0 |  |
|  | n5 | 5, 10, 15, 20 | 1 |
|  | n48 | CA\_n48(2A)\_BCS0 |  |
|  | n77 | CA\_n77C\_BCS1 |  |
|  | n5 | 5, 10, 15, 20 | 2 |
|  | n48 | CA\_n48(2A)\_BCS1 |  |
|  | n77 | CA\_n77C\_BCS0 |  |
|  | n5 | 5, 10, 15, 20 | 3 |
|  | n48 | CA\_n48(2A)\_BCS1 |  |
|  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n5A-n66A-n77A | CA\_n5A-n66A  CA\_n66A-n77A  CA\_n5A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n66(2A)-n77A | CA\_n5A-n66A  CA\_n66A-n77A  CA\_n5A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n66(2A)-n77(2A) | CA\_n5A-n66A  CA\_n5A-n77A  CA\_n66A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n5A-n66A-n77C | CA\_n5A-n66A  CA\_n66A-n77A  CA\_n5A-n77A | n5 | 5, 10, 15, 20, 251 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n5 | 5, 10, 15, 20, 251 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n5A-n66A-n77(2A) | CA\_n5A-n66A  CA\_n66A-n77A  CA\_n5A-n77A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n5A-n66A-n78A | CA\_n5A-n66A  CA\_n5A-n78A  CA\_n66A-n78A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n5 | 5, 10, 15, 20 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n66(2A)-n78A | CA\_n5A-n66A CA\_n5A-n78A CA\_n66A-n78A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n5A-n66A-n78(2A) | CA\_n5A-n66A CA\_n5A-n78A CA\_n66A-n78A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n5A-n66(2A)-n78(2A) | CA\_n5A-n66A CA\_n5A-n78A CA\_n66A-n78A | n5 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n7A-n8A-n28A | - | n7 | 5, 10, 15, 20, 25, 30, 35, 40, 50 | 0 |
|  |  | n8 | 5, 10, 15, 20, 35 |  |
|  |  | n28 | 5, 10, 15, 20, 30 |  |
| CA\_n7A-n8A-n78A | - | n7 | 5, 10, 15, 20, 25, 30, 35, 40, 50 | 0 |
|  |  | n8 | 5, 10, 15, 20, 35 |  |
|  |  | n78 | 10, 15, 20, 30 |  |
| CA\_n7A-n25A-n66A | CA\_n7A-n25A  CA\_n7A-n66A  CA\_n25A-n66A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n7A-n25(2A)-n66A | CA\_n7A-n25A  CA\_n7A-n66A  CA\_n25A-n66A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n7A-n25(2A)-n66(2A) | CA\_n7A-n25A  CA\_n7A-n66A  CA\_n25A-n66A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n7A-n25A-n66(2A) | CA\_n7A-n25A  CA\_n7A-n66A  CA\_n25A-n66A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n7(2A)-n25A-n66A | CA\_n7A-n25A  CA\_n7A-n66A  CA\_n25A-n66A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n7(2A)-n25(2A)-n66A | CA\_n7A-n25A  CA\_n7A-n66A  CA\_n25A-n66A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n7(2A)-n25A-n66(2A) | CA\_n7A-n25A  CA\_n7A-n66A  CA\_n25A-n66A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n7(2A)-n25(2A)-n66(2A) | CA\_n7A-n25A  CA\_n7A-n66A  CA\_n25A-n66A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n7A-n25A-n77A | CA\_n7A-n25A CA\_n7A\_n77A  CA\_n25A-n77A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7A-n25(2A)-n77A | CA\_n7A-n25A CA\_n7A\_n77A  CA\_n25A-n77A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7A-n25A-n77(2A) | CA\_n7A-n25A CA\_n7A\_n77A  CA\_n25A-n77A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n7A-n25(2A)-n77(2A) | CA\_n7A-n25A CA\_n7A\_n77A  CA\_n25A-n77A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n7(2A)-n25A-n77A | CA\_n7A-n25A CA\_n7A\_n77A  CA\_n25A-n77A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7(2A)-n25(2A)-n77A | CA\_n7A-n25A CA\_n7A\_n77A  CA\_n25A-n77A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7(2A)-n25A-n77(2A) | CA\_n7A-n25A CA\_n7A\_n77A  CA\_n25A-n77A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n7(2A)-n25(2A)-n77(2A) | CA\_n7A-n25A CA\_n7A\_n77A CA\_n25A-n77A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n25 | CA\_n25(2A)\_BCS0 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n7A-n25A-n78A | CA\_n7A-n25A  CA\_n7A-n78A  CA\_n25A-n78A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 704, 80, 904, 100 |  |
| CA\_n7A-n25A-n78(2A) | CA\_n7A-n25A  CA\_n7A-n78A  CA\_n25A-n78A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS0 |  |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 1 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n7A-n28A-n78(2A) | CA\_n7A-n28A  CA\_n7A-n78A  CA\_n28A-n78A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n7A-n28A-n78A | - | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  | CA\_n7A-n28A  CA\_n7A-n78A  CA\_n28A-n78A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 1 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 704, 80, 90, 100 |  |
| CA\_n7B-n28A-n78A | - | n7 | CA\_n7B\_BCS0 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  | CA\_n7A-n28A  CA\_n7A-n78A  CA\_n28A-n78A  CA\_n7B | n7 | CA\_n7B\_BCS0 | 1 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 704, 80, 90, 100 |  |
| CA\_n7A-n46A-n78A | CA\_n7A-n46A CA\_n7A-n78A CA\_n46A-n78A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n46 | 20, 40, 60, 80 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7A-n46C-n78A | CA\_n7A-n46A CA\_n7A-n78A CA\_n46A-n78A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n46 | CA\_n46C\_BCS0 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7A-n46D-n78A | CA\_n7A-n46A CA\_n7A-n78A CA\_n46A-n78A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n46 | CA\_n46D\_BCS0 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7A-n66A-n77A | CA\_n7A-n66A  CA\_n7A-n77A  CA\_n66A-n77A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7A-n66(2A)-n77A | CA\_n7A-n66A  CA\_n7A-n77A  CA\_n66A-n77A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7A-n66A-n77(2A) | CA\_n7A-n66A CA\_n7A-n77A CA\_n66A-n77A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n7A-n66(2A)-n77(2A) | CA\_n7A-n66A CA\_n7A-n77A CA\_n66A-n77A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n7(2A)-n66A-n77A | CA\_n7A-n66A CA\_n7A-n77A CA\_n66A-n77A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7(2A)-n66(2A)-n77A | CA\_n7A-n66A CA\_n7A-n77A CA\_n66A-n77A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7(2A)-n66A-n77(2A) | CA\_n7A-n66A CA\_n7A-n77A CA\_n66A-n77A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n7(2A)-n66(2A)-n77(2A) | CA\_n7A-n66A CA\_n7A-n77A CA\_n66A-n77A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n7A-n66A-n78A | CA\_n7A-n66A  CA\_n7A-n78A  CA\_n66A-n78A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7A-n66A-n78(2A) | CA\_n7A-n66A  CA\_n7A-n78A  CA\_n66A-n78A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS1 |  |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n7(2A)-n66A-n78A | CA\_n7A-n66A  CA\_n7A-n78A  CA\_n66A-n78A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7A-n66(2A)-n78A | CA\_n7A-n66A  CA\_n7A-n78A  CA\_n66A-n78A | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7(2A)-n66(2A)-n78A | CA\_n7A-n66A  CA\_n7A-n78A  CA\_n66A-n78A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n7(2A)-n66A-n78(2A) | CA\_n7A-n66A  CA\_n7A-n78A  CA\_n66A-n78A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n7(2A)-n66(2A)-n78(2A) | CA\_n7A-n66A  CA\_n7A-n78A  CA\_n66A-n78A | n7 | CA\_n7(2A)\_BCS0 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n8A-n28A-n78A | - | n8 | 5, 10, 15, 20 | 0 |
|  | n28 | 5, 10, 15, 20 |
|  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |
| CA\_n8A-n39A-n41A | - | n8 | 5, 10, 15, 20 | 0 |
|  |  | n39 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n41 | 10, 15, 20, 40, 50, 60, 80, 100 |  |
|  |  | n8 | 5, 10, 15, 20 | 1 |
|  |  | n39 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n41 | 10, 15, 20, 40, 50, 60 |  |
| CA\_n8A-n40A-n41A | CA\_n8A-n40A  CA\_n8A-n41A  CA\_n40A-n41A | n8 | 5, 10, 15, 20 | 0 |
|  |  | n40 | 5, 10, 15, 20, 25, 30, 40, 50, 60, 80 |  |
|  |  | n41 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n8A-n41A-n79A | - | n8 | 5, 10, 15, 20 | 0 |
|  |  | n41 | 10, 15, 20, 40, 50, 60, 80, 100 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
|  |  | n8 | 5, 10, 15, 20 | 1 |
|  |  | n41 | 10, 15, 20, 40, 50, 60 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n8A-n78A-n79A | - | n8 | 5, 10, 15, 20 | 0 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n8A-n78(2A)-n79A | - | n8 | 5, 10, 15, 20 | 0 |
|  |  | n78 | CA\_n78(2A)\_BCS1 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n12A-n30A-n66A | CA\_n12A-n30A  CA\_n12A-n66A  CA\_n30A-n66A | n12 | 5, 10, 15 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n12A-n30A-n66(2A) | CA\_n12A-n30A  CA\_n12A-n66A  CA\_n30A-n66A | n12 | 5, 10, 15 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n12A-n30A-n66(3A) | CA\_n12A-n30A  CA\_n12A-n66A  CA\_n30A-n66A | n12 | 5, 10, 15 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | CA\_n66(3A)\_BCS0 |  |
| CA\_n12A-n30A-n77A | CA\_n12A-n30A,  n777  CA\_n12A-n77A7  CA\_n30A-n77A7 | n12 | 5, 10 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n12A-n30A-n77(2A) | CA\_n12A-n30A  CA\_n12A- n77A  CA\_n30A-n77A | n12 | 5, 10 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n12A-n66A-n77A | CA\_n12A-n66A,  n777  CA\_n12A-n77A7  CA\_n66A-n77A7 | n12 | 5, 10, 15 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n12A-n66(2A)-n77A | CA\_n12A-n66A  CA\_n12A-n77A  CA\_n66A-n77A | n12 | 5, 10, 15 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n12A-n66A-n77(2A) | CA\_n12A-n66A  CA\_n12A-n77A  CA\_n66A-n77A | n12 | 5, 10, 15 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n13A-n25A-n66A | CA\_n13A-n25A  CA\_n13A-n66A  CA\_n25A-n66A | n13 | 5, 10 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n13A-n25A-n77A | - | n13 | 5, 10 | 0 |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n13A-n66A-n77A | - | n13 | 5, 10 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n14A-n30A-n66A | CA\_n14A-n30A  CA\_n14A-n66A  CA\_n30A-n66A | n14 | 5, 10 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n14A-n30A-n66(2A) | CA\_n14A-n30A  CA\_n14A-n66A  CA\_n30A-n66A | n14 | 5, 10 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n14A-n30A-n77A | n777  CA\_n14A-n30A  CA\_n14A-n77A7  CA\_n30A-n77A7 | n14 | 5, 10 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n14A-n30A-n77(2A) | CA\_n14A-n30A  CA\_n14A-n77A  CA\_n30A-n77A | n14 | 5, 10 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n14A-n66A-n77A | n777  CA\_n14A-n66A  CA\_n14A-n77A7  CA\_n66A-n77A7 | n14 | 5, 10 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n14A-n66(2A)-n77A | CA\_n14A-n66A  CA\_n14A-n77A  CA\_n66A-n77A | n14 | 5, 10 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n14A-n66A-n77(2A) | CA\_n14A-n66A  CA\_n14A-n77A  CA\_n66A-n77A | n14 | 5, 10 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n18A-n28A-n41A | CA\_n18A-n28A  CA\_n18A-n41A  CA\_n28A-n41A | n18 | 5, 10, 15 | 0 |
|  |  | n28 | 5, 10 |  |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
| CA\_n18A-n28A-n77A | CA\_n18A-n28A  CA\_n18A-n41A  CA\_n28A-n41A | n18 | 5, 10, 15 | 0 |
|  |  | n28 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n18A-n41A-n77A | CA\_n18A-n28A  CA\_n18A-n41A  CA\_n28A-n41A | n18 | 5, 10, 15 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n20A-n28A-n78A | - | n20 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
| CA\_n24A-n41A-n48A | CA\_n24A-n41A  CA\_n24A\_n48A  CA\_n41\_n48A | n24 | 5, 10 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n48 | 5, 10, 15, 20, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n24A-n41(2A)-n48A | CA\_n24A-n41A  CA\_n24A\_n48A  CA\_n41\_n48A | n24 | 5, 10 | 0 |
|  |  | n41 | CA\_n41(2A) BCS1 |  |
|  |  | n48 | 5, 10, 15, 20, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n24A-n41A-n48(2A) | CA\_n24A-n41A  CA\_n24A\_n48A  CA\_n41\_n48A | n24 | 5, 10 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n48 | CA\_n48(2A) BCS0 |  |
| CA\_n24A-n41(2A)-n48(2A) | CA\_n24A-n41A  CA\_n24A\_n48A  CA\_n41\_n48A | n24 | 5, 10 | 0 |
|  |  | n41 | CA\_n41(2A) BCS1 |  |
|  |  | n48 | CA\_n48(2A) BCS0 |  |
| CA\_n24A-n41A-n77A | CA\_n24A-n41A  CA\_n24A\_n77A  CA\_n41\_n77A | n24 | 5, 10 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n24A-n41(2A)-n77A | CA\_n24A-n41A  CA\_n24A\_n77A  CA\_n41\_n77A | n24 | 5, 10 | 0 |
|  |  | n41 | CA\_n41(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n24 | 5, 10 | 1 |
|  |  | n41 | CA\_n41(2A) BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n24A-n41A-n77(2A) | CA\_n24A-n41A  CA\_n24A\_n77A  CA\_n41\_n77A | n24 | 5, 10 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
|  |  | n24 | 5, 10 | 1 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n77 | CA\_n77(2A) BCS0 |  |
| CA\_n24A-n41(2A)-n77(2A) | CA\_n24A-n41A  CA\_n24A\_n77A  CA\_n41\_n77A | n24 | 5, 10 | 0 |
|  |  | n41 | CA\_n41(2A)\_BCS1 |  |
|  |  | n77 | CA\_n77(2A)\_BCS0 |  |
|  |  | n24 | 5, 10 | 1 |
|  |  | n41 | CA\_n41(2A) BCS1 |  |
|  |  | n77 | CA\_n77(2A) BCS0 |  |
| CA\_n24A-n48A-n77A |  | n24 | 5, 10 | 0 |
|  |  | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n24A-n48(2A)-n77A |  | n24 | 5, 10 | 0 |
|  |  | n48 | CA\_n48(2A) BCS0 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n24A-n48A-n77(2A) |  | n24 | 5, 10 | 0 |
|  |  | n48 | 5, 10, 15, 20, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n77 | CA\_n77(2A) BCS0 |  |
| CA\_n24A-n48(2A)-n77(2A) |  | n24 | 5, 10 | 0 |
|  |  | n48 | CA\_n48(2A) BCS0 |  |
|  |  | n77 | CA\_n77(2A) BCS0 |  |
| CA\_n25A-n29A-n66A | CA\_n25A-n66A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n25A-n38A-n66A | CA\_n25A-n38A  CA\_n25A-n66A  CA\_n38A-n66A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n38 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n25(2A)-n38A-n66A | CA\_n25A-n38A  CA\_n25A-n66A  CA\_n38A-n66A | n25 | CA\_n25(2A)\_BCS0 | 0 |
|  |  | n38 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n25(2A)-n38A-n66(2A) | CA\_n25A-n38A  CA\_n25A-n66A  CA\_n38A-n66A | n25 | CA\_n25(2A)\_BCS0 | 0 |
|  |  | n38 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n25A-n38A-n66(2A) | CA\_n25A-n38A  CA\_n25A-n66A  CA\_n38A-n66A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n38 | 5, 10, 15, 20 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n25A-n38A-n78A | CA\_n25A-n38A  CA\_n25A-n78A  CA\_n38A-n78A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n38 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25A-n38A-n78(2A) | CA\_n25A-n38A  CA\_n25A-n78A  CA\_n38A-n78A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n38 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n25(2A)-n38A-n78A | CA\_n25A-n38A  CA\_n25A-n78A  CA\_n38A-n78A | n25 | CA\_n25(2A)\_BCS0 | 0 |
|  |  | n38 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25(2A)-n38A-n78(2A) | CA\_n25A-n38A  CA\_n25A-n78A  CA\_n38A-n78A | n25 | CA\_n25(2A)\_BCS0 | 0 |
|  |  | n38 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n25A-n41A-n66A | - | n25 | 5, 10, 15, 20 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  | CA\_n25A-n41A  CA\_n25A-n66A  CA\_n41A-n66A | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n25A-n41A-n66(2A) | - | n25 | 5, 10, 15, 20 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  | CA\_n25A-n41A  CA\_n25A-n66A  CA\_n41A-n66A | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n25A-n41C-n66A | - | n25 | 5, 10, 15, 20 | 0 |
|  |  | n41 | CA\_n41C\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  | CA\_n25A-n41A  CA\_n25A-n66A  CA\_n41A-n66A | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n41 | CA\_n41C\_BCS1 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n25A-n41(2A)-n66A | - | n25 | 5, 10, 15, 20 | 0 |
|  |  | n41 | CA\_n41(2A)\_BCS1 |  |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  | CA\_n25A-n41A  CA\_n25A-n66A  CA\_n41A-n66A | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n41 | CA\_n41(2A)\_BCS1 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n25(2A)-n41A-n66A | - | n25 | CA\_n25(2A)\_BCS1 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  | CA\_n25A-n41A  CA\_n25A-n66A  CA\_n41A-n66A | n25 | CA\_n25(2A)\_BCS1 | 1 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n66 | 5, 10, 15, 20, 30, 40 |  |
| CA\_n25A-n41A-n71A | - | n25 | 5, 10, 15, 20 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
|  | CA\_n25A-n41A | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  | CA\_n41A-n71A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  | CA\_n25A-n71A | n71 | 5, 10, 15, 20 |  |
| CA\_n25A-n41A-n71B | - | n25 | 5, 10, 15, 20 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n71 | CA\_n71B\_BCS2 |  |
|  | CA\_n25A-n41A  CA\_n41A-n71A  CA\_n25A-n71A | n25 | 5, 10, 15, 20, 30, 40, 50 | 1 |
|  |  | n41 | 10, 15. 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n71 | CA\_n71B\_BCS2 |  |
| CA\_n25A-n41A-n71(2A) | - | n25 | 5, 10, 15, 20 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
|  | CA\_n25A-n41A  CA\_n41A-n71A  CA\_n25A-n71A | n25 | 5, 10, 15, 20, 30, 40, 50 | 1 |
|  |  | n41 | 10, 15. 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n71 | CA\_n71B\_BCS0 |  |
| CA\_n25A-n41(2A)-n71A | - | n25 | 5, 10, 15, 20 | 0 |
|  |  | n41 | CA\_n41(2A)\_BCS1 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
|  | CA\_n25A-n41A  CA\_n41A-n71A  CA\_n25A-n71A | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n41 | CA\_n41(2A)\_BCS1 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n25A-n41C-n71A | - | n25 | 5, 10, 15, 20 | 0 |
|  |  | n41 | CA\_n41C\_BCS0 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
|  | CA\_n25A-n41A  CA\_n41A-n71A  CA\_n25A-n71A | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n41 | CA\_n41C\_BCS1 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n25(2A)-n41A-n71A | - | n25 | CA\_n25(2A)\_BCS1 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
|  | CA\_n25A-n41A  CA\_n41A-n71A  CA\_n25A-n71A | n25 | CA\_n25(2A)\_BCS1 | 1 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n25A-n41A-n77A | CA\_n25A-n41A  CA\_n25A-n77A  CA\_n41A-n77A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25A-n41(2A)-n77A | CA\_n25A-n41A  CA\_n25A-n77A  CA\_n41A-n77A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n41 | CA\_n41(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n41 | CA\_n41(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
| CA\_n25A-n41A-n77(2A) | CA\_n25A-n41A  CA\_n25A-n77A  CA\_n41A-n77A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n25(2A)-n41A-n77A | CA\_n25A-n41A  CA\_n25A-n77A  CA\_n41A-n77A | n25 | CA\_n25(2A)\_BCS1 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25A-n41C-n77A | CA\_n41C  CA\_n25A-n41A  CA\_n25A-n77A  CA\_n41A-n77A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n41 | CA\_n41C\_BCS0 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n41 | CA\_n41C\_BCS2 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25A-n41A-n78A | CA\_n25A-n41A  CA\_n25A-n78A  CA\_n41A-n78A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25A-n41A-n78(2A) | CA\_n25A-n41A  CA\_n25A-n78A  CA\_n41A-n78A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n25A-n48A-n66A | CA\_n25A-n48A  CA\_n25A-n66A  CA\_n48A-n66A | n25 | 5, 10, 15, 20 | 0 |
|  |  | n48 | 5, 10, 15, 20, 40, 50 |  |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n48 | 5, 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n25A-n48(2A)-n66A | CA\_n25A-n48A  CA\_n25A-n66A  CA\_n48A-n66A | n25 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n25A-n48C-n66A | CA\_n25A-n48A  CA\_n25A-n66A  CA\_n48A-n66A | n25 | 5, 10, 15, 20 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n25A-n66A-n71A | - | n25 | 5, 10, 15, 20 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
|  | CA\_n25A-n66A  CA\_n25A-n71A  CA\_n66A-n71A | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n25A-n66A-n71B | CA\_n25A-n66A  CA\_n25A-n71A  CA\_n66A-n71A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n71 | CA\_n71B\_BCS2 |  |
| CA\_n25A-n66A-n71(2A) | CA\_n25A-n66A  CA\_n25A-n71A  CA\_n66A-n71A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
| CA\_n25A-n66(2A)-n71A | CA\_n25A-n66A  CA\_n25A-n71A  CA\_n66A-n71A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n25(2A)-n66A-n71A | CA\_n25A-n66A  CA\_n25A-n71A  CA\_n66A-n71A | n25 | CA\_n25(2A)\_BCS1 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n25A-n66A-n77A | CA\_n25A-n66A  CA\_n25A-n77A  CA\_n66A-n77A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25A-n66(2A)-n77A | CA\_n25A-n66A  CA\_n25A-n77A  CA\_n66A-n77A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25A-n66A-n77(2A) | CA\_n25A-n66A  CA\_n25A-n77A  CA\_n66A-n77A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n25A-n66(2A)-n77(2A) | CA\_n25A-n66A  CA\_n25A-n77A  CA\_n66A-n77A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n25(2A)-n66A-n77A | CA\_n25A-n66A  CA\_n25A-n77A  CA\_n66A-n77A | n25 | CA\_n25(2A)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25(2A)-n66(2A)-n77A | CA\_n25A-n66A  CA\_n25A-n77A  CA\_n66A-n77A | n25 | CA\_n25(2A)\_BCS0 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25(2A)-n66A-n77(2A) | CA\_n25A-n66A  CA\_n25A-n77A  CA\_n66A-n77A | n25 | CA\_n25(2A)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n25(2A)-n66(2A)-n77(2A) | CA\_n25A-n66A  CA\_n25A-n77A  CA\_n66A-n77A | n25 | CA\_n25(2A)\_BCS0 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n25A-n66A-n78A | CA\_n25A-n66A  CA\_n25A-n78A  CA\_n66A-n78A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n25 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25(2A)-n66A-n78A | CA\_n25A-n66A CA\_n25A-n78A CA\_n66A-n78A | n25 | CA\_n25(2A)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25A-n66(2A)-n78A | CA\_n25A-n66A CA\_n25A-n78A CA\_n66A-n78A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25A-n66A-n78(2A) | CA\_n25A-n66A CA\_n25A-n78A CA\_n66A-n78A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n25(2A)-n66(2A)-n78A | CA\_n25A-n66A CA\_n25A-n78A CA\_n66A-n78A | n25 | CA\_n25(2A)\_BCS0 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25(2A)-n66A-n78(2A) | CA\_n25A-n66A CA\_n25A-n78A CA\_n66A-n78A | n25 | CA\_n25(2A)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n25A-n66(2A)-n78(2A) | CA\_n25A-n66A CA\_n25A-n78A CA\_n66A-n78A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n25(2A)-n66(2A)-n78(2A) | CA\_n25A-n66A CA\_n25A-n78A CA\_n66A-n78A | n25 | CA\_n25(2A)\_BCS0 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n25A-n71A-n77A | CA\_n25A-n71A  CA\_n25A-n77A  CA\_n71A-n77A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25A-n71B-n77A | CA\_n25A-n71A  CA\_n25A-n77A  CA\_n71A-n77A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n71 | CA\_n71B\_BCS2 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25A-n71(2A)-n77A | CA\_n25A-n71A  CA\_n25A-n77A  CA\_n71A-n77A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25(2A)-n71A-n77A | CA\_n25A-n71A  CA\_n25A-n77A  CA\_n71A-n77A | n25 | CA\_n25(2A)\_BCS1 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25A-n71A-n78A | CA\_n25A-n71A  CA\_n25A-n78A  CA\_n71A-n78A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n25A-n71A-n78(2A) | CA\_n25A-n71A  CA\_n25A-n78A  CA\_n71A-n78A | n25 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n26A-n66A-n70A | CA\_n26A-n66A  CA\_n26A-n70A | n26 | 5, 10, 15, 20 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
| CA\_n26A-n66(2A)-n70A | CA\_n26A-n66A  CA\_n26A-n70A | n26 | 5, 10, 15, 20 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS0 |  |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
| CA\_n28A-n40A-n41A | CA\_n28A-n40A  CA\_n28A-n41A  CA\_n40A-n41A | n28 | 5, 10, 15, 20, 30 | 0 |
|  |  | n40 | 5, 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n28A-n40A-n78A | CA\_n28A-n40A  CA\_n28A-n78A  CA\_n40A-n78A | n28 | 5, 10, 15, 20 | 0 |
|  |  | n40 | 5, 10, 15, 20, 25, 30, 40, 50 |  |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  | CA\_n28A-n40A  CA\_n28A-n78A  CA\_n40A-n78A | n28 | 5, 10, 15, 20 | 1 |
|  |  | n40 | 5, 10, 15, 20, 25, 30, 40, 50, 60, 80, 100 |  |
|  |  | n78 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n28A-n40A-n79A | CA\_n28A-n40A  CA\_n28A-n79A  CA\_n40A-n79A | n28 | 5, 10, 15, 20, 30 | 0 |
|  |  | n40 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n28A-n41A-n77A | CA\_n28A-n41A | n28 | 5, 10, 15, 20, 30 | 0 |
|  | CA\_n28A-n77A | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  | CA\_n41A-n77A | n77 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n28A-n41A-n77(2A) | CA\_n28A-n41A | n28 | 5, 10, 15, 20, 30 | 0 |
|  | CA\_n28A-n77A | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  | CA\_n41A-n77A | n77 | CA\_n77(2A)\_BCS0 |  |
| CA\_n28A-n41A-n78A | CA\_n28A-n41A  CA\_n41A-n78A  CA\_n28A-n78A | n28 | 5, 10, 15, 20 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 90, 100 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
| CA\_n28A-n41A-n78(2A) | CA\_n78(2A) | n28 | 5, 10, 15, 20, 30 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n28A-n41A-n79A | CA\_n28A-n41A  CA\_n28A-n79A  CA\_n41A-n79A | n28 | 5, 10, 15, 20, 30 | 0 |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n28A-n46A-n78A | CA\_n28A-n46A  CA\_n28A-n78A  CA\_n46A-n78A | n28 | 5, 10, 15, 20 | 0 |
|  |  | n46 | 20, 40, 60, 80 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n28A-n46C-n78A | CA\_n28A-n46A  CA\_n28A-n78A  CA\_n46A-n78A | n28 | 5, 10, 15, 20 | 0 |
|  |  | n46 | CA\_n46C\_BCS0 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n28A-n46D-n78A | CA\_n28A-n46A  CA\_n28A-n78A  CA\_n46A-n78A | n28 | 5, 10, 15, 20 | 0 |
|  |  | n46 | CA\_n46D\_BCS0 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n28A-n77A-n79A4 | CA\_n28A-n77A  CA\_n28A-n79A  CA\_n77A-n79A | n28 | 5, 10, 15, 20 | 0 |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n28A-n77(2A)-n79A4 | CA\_n28A-n77A  CA\_n28A-n79A  CA\_n77A-n79A | n28 | 5, 10, 15, 20 | 0 |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n28A-n78A-n79A | CA\_n28A-n78A  CA\_n28A-n79A  CA\_n78A-n79A | n28 | 5, 10, 15, 20 | 0 |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n29A-n30A-n66A | CA\_n30A-n66A | n29 | 5, 10 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n29A-n30A-n66(2A) | CA\_n30A-n66A | n29 | 5, 10 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n29A-n30A-n77A | CA\_n30A-n77A | n29 | 5, 10 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n29A-n30A-n77(2A) | CA\_n30A-n77A | n29 | 5, 10 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n29A-n66A-n70A | - | n29 | 5, 10 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n70 | 5, 10, 15, 201,251 |  |
| CA\_n29A-n66B-n70A | - | n29 | 5, 10 | 0 |
|  |  | n66 | CA\_n66B\_BCS0. |  |
|  |  | n70 | 5, 10, 15, 201,251 |  |
| CA\_n29A-n66(2A)-n70A | - | n29 | 5, 10 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS0 |  |
|  |  | n70 | 5, 10, 15, 201,251 |  |
| CA\_n29A-n66A-n77A | CA\_n66A-n77A | n29 | 5, 10 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n29A-n66(2A)-n77A | CA\_n66A-n77A | n29 | 5, 10 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n29A-n66A-n77(2A) | CA\_n66A-n77A | n29 | 5, 10 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n30A-n66A-n77A | n777  CA\_n30A-n66A  CA\_n30A-n77A7  CA\_n66A-n77A7 | n30 | 5, 10 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n30A-n66(2A)-n77A | CA\_n30A-n66A  CA\_n30A-n77A  CA\_n66A-n77A | n30 | 5, 10 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n30A-n66A-n77(2A) | CA\_n30A-n66A  CA\_n30A-n77A  CA\_n66A-n77A | n30 | 5, 10 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n38A-n66A-n78A | CA\_n38A-n66A  CA\_n38A-n78A  CA\_n66A-n78A | n38 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n38A-n66A-n78(2A) | CA\_n38A-n66A  CA\_n38A-n78A  CA\_n66A-n78A | n38 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n38A-n66(2A)-n78A | CA\_n38A-n66A  CA\_n38A-n78A  CA\_n66A-n78A | n38 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n38A-n66(2A)-n78(2A) | CA\_n38A-n66A  CA\_n38A-n78A  CA\_n66A-n78A | n38 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n39A-n40A-n41A | CA\_n39A-n40A  CA\_n39A-n41A  CA\_n40A-n41A | n39 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n40 | 5, 10, 15, 20, 25, 30, 40, 50, 60, 80 |  |
|  |  | n41 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n39A-n40A-n79A | CA\_n39A-n40A  CA\_n40A-n79A  CA\_n39A-n79A | n39 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n40 | 5, 10, 15, 20, 25, 30, 40, 50, 60, 80 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n39A-n41A-n79A | - | n39 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n41 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
|  |  | n39 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n41 | 10, 15, 20, 40, 50, 60 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| CA\_n40A-n41A-n79A | CA\_n40A-n41A  CA\_n40A-n79A  CA\_n41A-n79A | n40 | 5, 10, 15, 20, 25, 30, 40, 50, 60, 80 | 0 |
|  |  | n41 | 10, 15, 20, 40, 50, 60, 80, 100 |  |
|  |  | n79 | , 40, 50, 60, 80, 100 |  |
|  |  | n40 | 5, 10, 15, 20, 25, 30, 40 | 1 |
|  |  | n41 | 10, 15, 20, 40, 50, 60 |  |
|  |  | n79 | , 40, 50, 60, 80, 100 |  |
| CA\_n41A-n66A-n70A | CA\_n41A-n66A  CA\_n41A-n70A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | 10, 15, 20, 25, 30, 40 |  |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
| CA\_n41A-n66A-n71A | - | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
|  | CA\_n41A-n71A  CA\_n66A-n71A  CA\_n41A-n66A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n41A-n66A-n71B | CA\_n41A-n66A  CA\_n41A-n71A  CA\_n66A-n71A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n71 | CA\_n71B\_BCS2 |  |
| CA\_n41A-n66A-n71(2A) | CA\_n41A-n66A  CA\_n41A-n71A  CA\_n66A-n71A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n71(2A)\_BCS0 |  |
| CA\_n41A-n66(2A)-n71A | CA\_n41A-n66A  CA\_n66A-n71A  CA\_n41A-n71A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n41(2A)-n66A-n71A | - | n41 | CA\_n41(2A)\_BCS1 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
|  | CA\_n41A-n71A  CA\_n66A-n71A  CA\_n41A-n66A | n41 | CA\_n41(2A)\_BCS1 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n41C-n66A-n71A | - | n41 | CA\_n41C\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 40 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
|  | CA\_n41A-n71A  CA\_n66A-n71A  CA\_n41A-n66A | n41 | CA\_n41C\_BCS1 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n41A-n66A-n77A | CA\_n41A-n66A  CA\_n41A-n77A  CA\_n66A-n77A | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n41A-n66A-n77(2A) | CA\_n41A-n71A  CA\_n66A-n71A  CA\_n41A-n66A | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n41A-n66(2A)-n77A | CA\_n41A-n66A  CA\_n41A-n77A  CA\_n66A-n77A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n41A-n66(2A)-n77(2A) | CA\_n41A-n66A  CA\_n41A-n77A  CA\_n66A-n77A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n41(2A)-n66A-n77A | CA\_n41A-n66A  CA\_n41A-n77A  CA\_n66A-n77A | n41 | CA\_n41(2A)\_BCS1 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n41C-n66A-n77A | CA\_41C  CA\_n41A-n66A  CA\_n41A-n77A  CA\_n66A-n77A | n41 | CA\_n41C\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n41A-n66A-n78A | CA\_n41A-n66A  CA\_n41A-n78A  CA\_n66A-n78A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n41A-n66A-n78(2A) | CA\_n41A-n66A  CA\_n41A-n78A  CA\_n66A-n78A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n41A-n70A-n78A | CA\_n41A-n70A CA\_n41A-n78A CA\_n70A-n78A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n41A-n66(2A)-n78A | CA\_n41A-n66A  CA\_n41A-n78A  CA\_n66A-n78A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n41A-n66(2A)-n78(2A) | CA\_n41A-n66A  CA\_n41A-n78A  CA\_n66A-n78A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n41A-n70A-n78A | - | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n70 | 5, 10, 15, 20, 25 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n41A-n71A-n77A | CA\_n41A-n71A  CA\_n41A-n77A  CA\_n71A-n77A | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 1 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n41A-n71B-n77A | CA\_n41A-n71A  CA\_n41A-n77A  CA\_n71A-n77A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n71 | CA\_n71B\_BCS2 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n41A-n71(2A)-n77A | CA\_n41A-n71A  CA\_n41A-n77A  CA\_n71A-n77A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n41A-n71A-n77(2A) | CA\_n41A-n71A  CA\_n41A-n77A  CA\_n71A-n77A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n41(2A)-n71A-n77A | CA\_n41A-n71A  CA\_n41A-n77A  CA\_n71A-n77A | n41 | CA\_n41(2A)\_BCS1 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n41C-n71A-n77A | CA\_41C  CA\_n41A-n71A  CA\_n41A-n77A  CA\_n71A-n77A | n41 | CA\_n41C\_BCS0 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n41A-n71A-n78A | CA\_n41A-n71A  CA\_n41A-n78A  CA\_n71A-n78A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n41A-n71A-n78(2A) | CA\_n41A-n71A  CA\_n41A-n78A  CA\_n71A-n78A | n41 | 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n46A-n48A-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46B-n48A-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46C-n48A-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46D-n48A-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46N-n48A-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46A-n48B-n96A | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46B-n48B-n96A | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46C-n48B-n96A | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46D-n48B-n96A | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46N-n48B-n96A | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46A-n48C-n96A | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46B-n48C-n96A | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46C-n48C-n96A | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46D-n48C-n96A | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46N-n48C-n96A | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46A-n48A-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46B-n48A-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46C-n48A-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46D-n48A-n96B | CA\_n46A-n48A CA\_n48A-n96A CA | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46N-n48A-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46A-n48B-n96C | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46B-n48B-n96C | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46C-n48B-n96C | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46D-n48B-n96C | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46N-n48B-n96C | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48B\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46A-n48C-n96D | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46B-n48C-n96D | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46C-n48C-n96D | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46D-n48C-n96D | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46N-n48C-n96D | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46A-n48C-n96E | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46B-n48C-n96E | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46C-n48C-n96E | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46D-n48C-n96E | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46N-n48C-n96E | CA\_n48B  CA\_n46A-n48A CA\_n48A-n96A CA\_n46A-n48B CA\_n48B-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48C\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46A-n48(2A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46B-n48(2A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46C-n48(2A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46D-n48(2A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46N-n48(2A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46A-n48(2A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46B-n48(2A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46C-n48(2A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46D-n48(2A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46N-n48(2A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46A-n48(2A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46B-n48(2A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46C-n48(2A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46D-n48(2A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46N-n48(2A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46A-n48(2A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46B-n48(2A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46C-n48(2A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46D-n48(2A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46N-n48(2A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46A-n48(2A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46B-n48(2A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46C-n48(2A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46D-n48(2A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46N-n48(2A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(2A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46A-n48(3A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46B-n48(3A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46C-n48(3A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46D-n48(3A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46N-n48(3A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46A-n48(3A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46B-n48(3A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46C-n48(3A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46D-n48(3A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46N-n48(3A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46A-n48(3A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46B-n48(3A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46C-n48(3A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46D-n48(3A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46N-n48(3A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46A-n48(3A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46B-n48(3A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46C-n48(3A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46D-n48(3A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46N-n48(3A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46A-n48(3A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46B-n48(3A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46C-n48(3A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46D-n48(3A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(3A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46N-n48(3A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46A-n48(4A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46B-n48(4A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46C-n48(4A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46D-n48(4A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46N-n48(4A)-n96A | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | 20, 40, 60, 80 |  |
| CA\_n46A-n48(4A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46B-n48(4A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46C-n48(4A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46D-n48(4A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46N-n48(4A)-n96B | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96B\_BCS0 |  |
| CA\_n46A-n48(4A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46B-n48(4A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46C-n48(4A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46D-n48(4A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46N-n48(4A)-n96C | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96C\_BCS0 |  |
| CA\_n46A-n48(4A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46B-n48(4A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46C-n48(4A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46D-n48(4A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46N-n48(4A)-n96D | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96D\_BCS0 |  |
| CA\_n46A-n48(4A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | 10, 20, 40, 60, 80 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46B-n48(4A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46B\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46C-n48(4A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46C\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46D-n48(4A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46D\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n46N-n48(4A)-n96E | CA\_n46A-n48A CA\_n48A-n96A | n46 | CA\_n46N\_BCS0 | 0 |
|  |  | n48 | CA\_n48(4A)\_BCS0 |  |
|  |  | n96 | CA\_n96E\_BCS0 |  |
| CA\_n48A-n66A-n70A | CA\_n48A-n66A  CA\_n48-n70A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
| CA\_n48A-n66(2A)-n70A | CA\_n48A-n66A  CA\_n48-n70A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS0 |  |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
| CA\_n48(2A)-n66A-n70A | CA\_n48A-n66A  CA\_n48-n70A | n48 | CA\_n48(2A)\_BCS1 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
| CA\_n48B-n66A-n70A | CA\_n48A-n66A  CA\_n48-n70A | n48 | CA\_n48B\_BCS2 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
| CA\_n48A-n66A-n71A | CA\_n48A-n71A  CA\_n66A-n71A  CA\_n48A-n66A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n48A-n66(2A)-n71A | CA\_n48A-n71A  CA\_n66A-n71A  CA\_n48A-n66A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | CA\_n66(2A)\_BCS0 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n48(2A)-n66A-n71A | CA\_n48A-n71A  CA\_n66A-n71A  CA\_n48A-n66A | n48 | CA\_n48(2A)\_BCS1 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n48B-n66A-n71A | CA\_n48A-n71A  CA\_n66A-n71A  CA\_n48A-n66A | n48 | CA\_n48B\_BCS2 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n48A-n66A-n71(2A) | CA\_n48A-n71A  CA\_n66A-n71A  CA\_n48A-n66A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
| CA\_n48A-n66A-n77A | CA\_n48A-n66A  CA\_n66A-n77A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n48A-n66A-n77C | CA\_n48A-n66A  CA\_n66A-n77A  CA\_n77C | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n48B-n66A-n77A | CA\_n48A-n66A  CA\_n66A-n77A | n48 | CA\_n48B\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n48 | CA\_n48B\_BCS1 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n48 | CA\_n48B\_BCS2 | 2 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n48(2A)-n66A-n77A | CA\_n48A-n66A  CA\_n66A-n77A | n48 | CA\_n48(2A)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n48(2A)-n66A-n77C | CA\_n48A-n66A  CA\_n66A-n77A | n48 | CA\_n48(2A)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n48 | CA\_n48(2A)\_BCS0 | 1 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77C\_BCS1 |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 | 2 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 | 3 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77C\_BCS1 |  |
| CA\_n48A-n70A-n71A | CA\_n48A-n71A  CA\_n70A-n71A  CA\_n48A-n70A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n48(2A)-n70A-n71A | CA\_n48A-n71A  CA\_n70A-n71A  CA\_n48A-n70A | n48 | CA\_n48(2A)\_BCS1 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n48B-n70A-n71A | CA\_n48A-n71A  CA\_n70A-n71A  CA\_n48A-n70A | n48 | CA\_n48B\_BCS2 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n48A-n70A-n71(2A) | CA\_n48A-n71A  CA\_n70A-n71A  CA\_n48A-n70A | n48 | 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90, 100 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
| CA\_n66A-n70A-n71A | CA\_n66A-n71A  CA\_n70A-n71A | n66 | 5, 10, 15, 20, 40 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| \_CA\_n66A-n70A-n78A | CA\_n66A-n78A CA\_n70A-n78A | n66 | 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n66A-n70A-n71(2A) | CA\_n66A-n71A  CA\_n70A-n71A | n66 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
| CA\_n66B-n70A-n71A | CA\_n66A-n71A  CA\_n70A-n71A | n66 | CA\_n66B\_BCS0. | 0 |
|  |  | n70 | 5, 10, 15, 201,251 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n66(2A)-n70A-n71A | CA\_n66A-n71A  CA\_n70A-n71A | n66 | CA\_n66(2A)\_BCS0 | 0 |
|  |  | n70 | 5, 10, 15, 201, 251 |  |
|  |  | n71 | 5, 10, 15, 20 |  |
| CA\_n66A-n71A-n77A | CA\_n66A-n71A  CA\_n66A-n77A  CA\_n71A-n77A | n66 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n66A-n71B-n77A | CA\_n66A-n71A  CA\_n66A-n77A  CA\_n71A-n77A | n66 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n71 | CA\_n71B\_BCS2 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n66A-n71(2A)-n77A | CA\_n66A-n71A  CA\_n66A-n77A  CA\_n71A-n77A | n66 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n71 | CA\_n71(2A)\_BCS0 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n66(2A)-n71A-n77A | CA\_n66A-n71A,  CA\_n66A-n77A,  CA\_n71A-n77A | n66 | CA\_n66(2A)\_BCS1 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n66A-n71A-n77(2A) | CA\_n66A-n71A,  CA\_n66A-n77A,  CA\_n71A-n77A | n66 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n66(2A)-n71A-n77(2A) | CA\_n66A-n71A,  CA\_n66A-n77A,  CA\_n71A-n77A | n66 | CA\_n66(2A)\_BCS1 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
| CA\_n66A-n71A-n78A | CA\_n66A-n78A  CA\_n66A-n71A  CA\_n71A-n78A | n66 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n66A-n71A-n78(2A) | CA\_n66A-n78A  CA\_n66A-n71A  CA\_n71A-n78A | n66 | 5, 10, 15, 20, 25, 30, 40 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| CA\_n66(2A)-n71A-n78A | CA\_n66A-n78A  CA\_n66A-n71A  CA\_n71A-n78A | n66 | CA\_n66(2A)\_BCS1 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n78 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
| CA\_n66(2A)-n71A-n78(2A) | CA\_n66A-n78A  CA\_n66A-n71A  CA\_n71A-n78A | n66 | CA\_n66(2A)\_BCS1 | 0 |
|  |  | n71 | 5, 10, 15, 20 |  |
|  |  | n78 | CA\_n78(2A)\_BCS2 |  |
| NOTE 1: This UE channel bandwidth is applicable only to downlink  NOTE 2: For the 20 MHz bandwidth, the minimum requirements are specified for NR UL carrier frequencies confined to either 713-723 MHz or 728-738 MHz.  NOTE 3: The SCS of each channel bandwidth for NR band refers to Table 5.3.5-1.  NOTE 4: The minimum requirements only apply for non-simultaneous Tx/Rx between all carriers for TDD combinations.  NOTE 5: Simultaneous Rx/Tx capability for TDD combinations does not apply for UEs supporting band n78 with an n77 implementation.  NOTE 6: Only single uplink carriers with power class other than PC3 are listed.  NOTE 7: Power Class 2 is allowed for this uplink combination or single uplink carrier in this downlink/uplink combination | | | | |

## << End of change 2>>

## << Start of change 3>>

6.2A.4.2.4 ΔTIB,c for Inter-band CA (three bands)

**Table 6.2A.4.2.4-1: ΔTIB,c due to NR CA (three bands)**

|  |  |  |
| --- | --- | --- |
| **Inter-band CA combination** | **NR Band** | **ΔTIB,c (dB)** |
| CA\_n1-n3-n5 | n1 | 0.3 |
|  | n3 | 0.3 |
|  | n5 | 0.3 |
| CA\_n1-n3-n7 | n1 | 0.6 |
|  | n3 | 0.6 |
|  | n7 | 0.6 |
| CA\_n1-n3-n8 | n1 | 0.3 |
|  | n3 | 0.3 |
|  | n8 | 0.3 |
| CA\_n1-n3-n18 | n1 | 0.3 |
|  | n3 | 0.3 |
|  | n18 | 0.3 |
| CA\_n1-n3-n20 | n1 | 0.3 |
| n3 | 0.3 |
| n20 | 0.3 |
| CA\_n1-n3-n28 | n1 | 0.3 |
|  | n3 | 0.3 |
|  | n28 | 0.6 |
| CA\_n1-n3-n41 | n1 | 0.5 |
|  | n3 | 0.5 |
|  | n41 | 0.35 |
|  |  | 0.86 |
| CA\_n1-n3-n77 | n1 | 0.6 |
|  | n3 | 0.6 |
|  | n77 | 0.8 |
| CA\_n1-n3-n78 | n1 | 0.6 |
|  | n3 | 0.6 |
|  | n78 | 0.8 |
| CA\_n1-n3-n79 | n1 | 0.3 |
|  | n3 | 0.3 |
|  | n79 | 0.8 |
| CA\_n1-n5-n7 | n1 | 0.5 |
|  | n5 | 0.3 |
|  | n7 | 0.6 |
| CA\_n1-n5-n28 | n1 | 0.3 |
|  | n5 | 0.6 |
|  | n28 | 0.6 |
| CA\_n1-n5-n78 | n1 | 0.6 |
|  | n5 | 0.6 |
|  | n78 | 0.8 |
| CA\_n1-n7-n8 | n1 | 0.5 |
|  | n7 | 0.6 |
|  | n8 | 0.6 |
| CA\_n1-n7-n28 | n1 | 0.5 |
|  | n7 | 0.6 |
|  | n28 | 0.6 |
| CA\_n1-n7-n78 | n1 | 0.6 |
|  | n7 | 0.6 |
|  | n78 | 0.8 |
| CA\_n1-n8-n28 | n1 | 0.3 |
|  | n8 | 0.6 |
|  | n28 | 0.6 |
| CA\_n1-n8-n77 | n1 | 0.3 |
|  | n8 | 0.6 |
|  | n77 | 0.8 |
| CA\_n1-n8-n78 | n1 | 0.3 |
|  | n8 | 0.6 |
|  | n78 | 0.8 |
| CA\_n1-n8-n79 | n1 | 0.3 |
|  | n8 | 0.6 |
|  | n79 | 0.8 |
| CA\_n1-n18-n28 | n1 | 0.3 |
|  | n18 | 0.5 |
|  | n28 | 0.5 |
| CA\_n1-n18-n41 | n1 | 0.5 |
|  | n18 | 0.3 |
|  | n41 | 0.5 |
| CA\_n1-n18-n77 | n1 | 0.3 |
|  | n18 | 0.3 |
|  | n77 | 0.8 |
| CA\_n1-n20-n67 | n1 | 0.5 |
|  | n20 | 0.6 |
|  | n67 | 0.8 |
| CA\_n1-n20-n78 | n1 | 0.3 |
| n20 | 0.6 |
| n78 | 0.8 |
| CA\_n1-n28-n40 | n1 | 0.6 |
|  | n28 | 0.3 |
|  | n40 | 0.5 |
| CA\_n1-n28-n41 | n1 | 0.5 |
|  | n28 | 0.6 |
|  | n41 | 0.6 |
| CA\_n1-n28-n77 | n1 | 0.6 |
|  | n28 | 0.6 |
|  | n77 | 0.8 |
| CA\_n1-n28-n78 | n1 | 0.3 |
|  | n28 | 0.6 |
|  | n78 | 0.8 |
| CA\_n1-n28-n79 | n1 | 0 |
|  | n28 | 0.2 |
|  | n79 | 0.5 |
| CA\_n1-n40-n78 | n1 | 0.3 |
|  | n40 | 0.5 |
|  | n78 | 0.8 |
| CA\_n1-n41-n77 | n1 | 0.5 |
|  | n41 | 0.5 |
|  | n77 | 0.8 |
| CA\_n1-n77-n79 | n1 | 0.6 |
|  | n77 | 0.8 |
|  | n79 | 0.5 |
| CA\_n1-n78-n79 | n1 | 0.3 |
|  | n78 | 0.8 |
|  |  | 1.57 |
|  | n79 | 0.5 |
|  |  | 1.57 |
| CA\_n2-n5-n30 | n2 | 0.5 |
| n5 | 0.3 |
| n30 | 0.3 |
| CA\_n2-n5-n48 | n2 | 0.6 |
|  | n5 | 0.3 |
|  | n48 | 0.8 |
| CA\_n2-n5-n66 | n2 | 0.5 |
| n5 | 0.3 |
| n66 | 0.5 |
| CA\_n2-n5-n77 | n2 | 0.6 |
| n5 | 0.8 |
| n77 | 0.8 |
| CA\_n2-n12-n30 | n2 | 0.5 |
| n12 | 0.3 |
| n30 | 0.3 |
| CA\_n2-n12-n66 | n2 | 0.5 |
| n12 | 0.8 |
| n66 | 0.5 |
| CA\_n2-n12-n77 | n2 | 0.6 |
| n12 | 0.3 |
| n77 | 0.8 |
| CA\_n2-n14-n30 | n2 | 0.5 |
|  | n14 | 0.3 |
|  | n30 | 0.5 |
| CA\_n2-n14-n66 | n2 | 0.5 |
|  | n14 | 0.3 |
|  | n66 | 0.5 |
| CA\_n2-n14-n77 | n2 | 0.5 |
| n14 | 0.3 |
| n77 | 0.8 |
| CA\_n2-n29-n30 | n2 | 0.5 |
| n30 | 0.3 |
| CA\_n2-n29-n66 | n2 | 0.5 |
| n66 | 0.5 |
| CA\_n2-n29-n77 | n2 | 0.6 |
|  | n77 | 0.8 |
| CA\_n2-n30-n66 | n2 | 0.5 |
| n30 | 0.3 |
| n66 | 0.5 |
| CA\_n2-n30-n77 | n2 | 0.6 |
| n30 | 0.3 |
| n77 | 0.8 |
| CA\_n2-n48-n66 | n2 | 0.6 |
|  | n48 | 0.8 |
|  | n66 | 0.6 |
| CA\_n2-n48-n77 | n2 | 0.6 |
|  | n48 | 0.8 |
|  | n77 | 0.8 |
| CA\_n2-n66-n77 | n2 | 0.6 |
|  | n66 | 0.6 |
|  | n77 | 0.8 |
| CA\_n2-n66-n78 | n2 | 0.6 |
|  | n66 | 0.6 |
|  | n78 | 0.8 |
| CA\_n2-n71-n78 | n2 | 0.6 |
|  | n71 | 0.6 |
|  | n78 | 0.8 |
| CA\_n3-n5-n7 | n3 | 0.5 |
|  | n5 | 0.3 |
|  | n7 | 0.5 |
| CA\_n3-n5-n28 | n3 | 0.3 |
|  | n5 | 0.6 |
|  | n28 | 0.5 |
| CA\_n3-n5-n78 | n3 | 0.6 |
|  | n5 | 0.6 |
|  | n78 | 0.8 |
| CA\_n3-n7-n8 | n3 | 0.5 |
|  | n7 | 0.5 |
|  | n8 | 0.6 |
| CA\_n3-n7-n28 | n3 | 0.5 |
|  | n7 | 0.5 |
|  | n28 | 0.3 |
| CA\_n3-n7-n78 | n3 | 0.6 |
|  | n7 | 0.6 |
|  | n78 | 0.8 |
| CA\_n3-n8-n28 | n3 | 0.3 |
|  | n8 | 0.6 |
|  | n28 | 0.5 |
| CA\_n3-n8-n77 | n3 | 0.6 |
|  | n8 | 0.6 |
|  | n77 | 0.8 |
| CA\_n3-n8-n78 | n3 | 0.6 |
|  | n8 | 0.6 |
|  | n78 | 0.8 |
| CA\_n3-n18-n28 | n3 | 0.3 |
|  | n18 | 0.5 |
|  | n28 | 0.3 |
| CA\_n3-n18-n41 | n3 | 0.5 |
|  | n18 | 0.3 |
|  | n41 | 0.31/0.82 |
| CA\_n3-n18-n77 | n3 | 0.6 |
|  | n18 | 0.3 |
|  | n77 | 0.8 |
| CA\_n3-n20-n67 | n3 | 0.3 |
|  | n20 | 0.5 |
|  | n67 | 0.5 |
| CA\_n3-n20-n78 | n3 | 0.6 |
| n20 | 0.6 |
| n78 | 0.8 |
| CA\_n3-n28-n41 | n3 | 0.5 |
| n28 | 0.3 |
| n41 | 0.31/0.82 |
| CA\_n3-n28-n77 | n3 | 0.6 |
|  | n28 | 0.5 |
|  | n77 | 0.8 |
| CA\_n3-n28-n78 | n3 | 0.5 |
|  | n28 | 0.3 |
|  | n78 | 0.8 |
| CA\_n3-n28-n79 | n3 | 0.3 |
| n28 | 0.5 |
| n79 | 0.8 |
| CA\_n3-n77-n79 | n3 | 0.6 |
| n77 | 0.8 |
| n79 | 0 |
| CA\_n3-n40-n41 | n3 | 0.5 |
|  | n40 | 0.5 |
|  | n41 | 0.51,3 |
|  |  | 0.82,3 |
| CA\_n3-n41-n77 | n3 | 0.6 |
|  | n41 | 0.31/0.82 |
|  | n77 | 0.8 |
| CA\_n3-n41-n78 | n3 | 0.6 |
|  | n41 | 0.31/0.82 |
|  | n78 | 0.8 |
| CA\_n3-n41-n79 | n3 | 0.3 |
|  | n41 | 0.31 |
|  |  | 0.82 |
|  | n79 | 0.8 |
| CA\_n5-n7-n28 | n5 | 0.5 |
|  | n7 | 0.3 |
|  | n28 | 0.6 |
| CA\_n5-n7-n78 | n5 | 0.6 |
|  | n7 | 0.6 |
|  | n78 | 0.8 |
| CA\_n5-n12-n77 | n5 | 0.8 |
| n12 | 0.4 |
| n77 | 0.5 |
| CA\_n5-n14-n77 | n5 | 0.5 |
| n14 | 0.3 |
| n77 | 0.8 |
| CA\_n5-n25-n66 | n5 | 0.3 |
|  | n25 | 0.5 |
|  | n66 | 0.5 |
| CA\_n5-n25-n77 | n5 | 0.6 |
|  | n25 | 0.6 |
|  | n77 | 0.8 |
| CA\_n5-n25-n78 | n5 | 0.6 |
|  | n25 | 0.6 |
|  | n78 | 0.8 |
| CA\_n5-n29-n77 | n5 | 0.8 |
|  | n77 | 0.5 |
| CA\_n5-n30-n66 | n5 | 0.3 |
|  | n30 | 0.3 |
|  | n66 | 0.5 |
| CA\_n5-n30-n77 | n5 | 0.6 |
|  | n30 | 0.3 |
|  | n77 | 0.8 |
| CA\_n5-n48-n66 | n5 | 0.3 |
|  | n48 | 0.8 |
|  | n66 | 0.6 |
| CA\_n5-n48-n77 | n5 | 0.6 |
|  | n48 | 0.8 |
|  | n77 | 0.8 |
| CA\_n5-n66-n77 | n5 | 0.6 |
|  | n66 | 0.6 |
|  | n77 | 0.8 |
| CA\_n5\_n66-n78 | n5 | 0.6 |
|  | n66 | 0.6 |
|  | n78 | 0.8 |
| CA\_n7-n8-n28 | n7 | 0.3 |
|  | n8 | 0.6 |
|  | n28 | 0.5 |
| CA\_n7-n8-n78 | n7 | 0.5 |
|  | n8 | 0.6 |
|  | n78 | 0.8 |
| CA\_n7\_n25-n66 | n7 | 0.5 |
|  | n25 | 0.5 |
|  | n66 | 0.5 |
| CA\_n7-n25-n77 | n7 | 0.5 |
|  | n25 | 0.6 |
|  | n77 | 0.8 |
| CA\_n7-n25-n78 | n7 | 0.5 |
|  | n25 | 0.6 |
|  | n78 | 0.8 |
| CA\_n7\_n28-n78 | n7 | 0.3 |
|  | n28 | 0.3 |
|  | n78 | 0.8 |
| CA\_n7-n46-n78 | n7 | 0.5 |
|  | n46 | 0 |
|  | n78 | 0.8 |
| CA\_n7-n66-n77 | n7 | 0.5 |
|  | n66 | 0.6 |
|  | n77 | 0.8 |
| CA\_n7\_n66-n78 | n7 | 0.5 |
|  | n66 | 0.6 |
|  | n78 | 0.8 |
| CA\_n8-n28-n78 | n8 | 0.6 |
|  | n28 | 0.5 |
|  | n78 | 0.8 |
| CA\_n8-n39-n41 | n8 | 0.6 |
|  | n39 | 0.54 |
|  | n41 | 0.54 |
| CA\_n8-n40-n41 | n8 | 0.3 |
|  | n40 | 0.33 |
|  | n41 | 0.33 |
| CA\_n8-n41-n79 | n8 | 0.6 |
|  | n41 | 0.3 |
|  | n79 | 0.8 |
| CA\_n8-n78-n79 | n8 | 0.6 |
|  | n78 | 0.8 |
|  | n79 | 0.8 |
| CA\_n12-n30-n66 | n12 | 0.8 |
|  | n30 | 0.3 |
|  | n66 | 0.5 |
| CA\_n12-n30-n77 | n12 | 0.5 |
|  | n30 | 0.3 |
|  | n77 | 0.5 |
| CA\_n12-n66-n77 | n12 | 0.8 |
|  | n66 | 0.6 |
|  | n77 | 0.8 |
| CA\_n13-n25-n66 | n13 | 0.3 |
|  | n25 | 0.5 |
|  | n66 | 0.5 |
| CA\_n13-n25-n77 | n13 | 0.3 |
|  | n25 | 0.6 |
|  | n77 | 0.8 |
| CA\_n13-n66-n77 | n13 | 0.5 |
|  | n66 | 0.6 |
|  | n77 | 0.8 |
| CA\_n14-n30-n66 | n14 | 0.3 |
|  | n30 | 0.3 |
|  | n66 | 0.5 |
| CA\_n14-n30-n77 | n14 | 0.5 |
|  | n30 | 0.3 |
|  | n77 | 0.8 |
| CA\_n14-n66-n77 | n14 | 0.6 |
|  | n66 | 0.6 |
|  | n77 | 0.8 |
| CA\_n18-n28-n41 | n18 | 0.4 |
|  | n28 | 0.4 |
|  | n41 | 0.3 |
| CA\_n18-n28-n77 | n18 | 0.5 |
|  | n28 | 0.5 |
|  | n77 | 0.8 |
| CA\_n18-n41-n77 | n18 | 0.3 |
|  | n41 | 0.3 |
|  | n77 | 0.8 |
| CA\_n20-n28-n78 | n20 | 0.6 |
|  | n28 | 0.5 |
|  | n78 | 0.8 |
| CA\_n24-n41-n48 | n24 | 0.6 |
|  | n41 | 0.41 |
|  |  | 0.92 |
|  | n48 | 0.8 |
| CA\_n24-n41-n77 | n24 | 0.6 |
| n41 | 0.45 |
|  | 0.96 |
| n77 | 0.8 |
| CA\_n24-n48-n77 | n24 | 0.6 |
|  | n48 | 0.8 |
|  | n77 | 0.8 |
| CA\_n25-n29-n66 | n25 | 0.5 |
|  | n29 | 0 |
|  | n66 | 0.5 |
| CA\_n25-n38-n78 | n25 | 0.5 |
|  | n38 | 0.4 |
|  | n78 | 0.8 |
| CA\_n25-n41-n66 | n25 | 0.5 |
|  | n41 | 0.85 |
|  |  | 1.36 |
|  | n66 | 0.5 |
| CA\_n25-n41-n71 | n25 | 0.5 |
|  | n41 | 0.5 |
|  | n71 | 0.6 |
| CA\_n25-n41-n77 | n25 | 0.5 |
|  | n41 | 0.5 |
|  | n77 | 0.6 |
| CA\_n25-n41-n78 | n25 | 0.6 |
|  | n41 | 0.5 |
|  | n78 | 0.8 |
| CA\_n25-n48-n66 | n25 | 0.6 |
|  | n48 | 0.8 |
|  | n66 | 0.6 |
| CA\_n25-n66-n71 | n25 | 0.5 |
|  | n66 | 0.5 |
|  | n71 | 0.6 |
| CA\_n25-n66-n77 | n25 | 0.6 |
|  | n66 | 0.6 |
|  | n77 | 0.8 |
| CA\_n25-n66-n78 | n25 | 0.6 |
|  | n66 | 0.6 |
|  | n78 | 0.8 |
| CA\_n25-n71-n77 | n25 | 0.6 |
|  | n71 | 0.6 |
|  | n77 | 0.8 |
| CA\_n25-n71-n78 | n25 | 0.6 |
|  | n71 | 0.6 |
|  | n78 | 0.8 |
| CA\_n26-n66-n70 | n26 | 0.3 |
|  | n66 | 0.5 |
|  | n70 | 0.5 |
| CA\_n28-n40-n41 | n28 | 0.3 |
|  | n40 | 0.5 |
|  | n41 | 0.5 |
| CA\_n28-n40-n78 | n28 | 0.5 |
|  | n40 | 0.3 |
|  | n78 | 0.8 |
| CA\_n28-n40-n79 | n28 | 0.5 |
|  | n40 | 0.3 |
|  | n79 | 0.8 |
| CA\_n28-n41-n79 | n28 | 0.5 |
|  | n41 | 0.3 |
|  | n79 | 0.8 |
| CA\_n28-n41-n77 | n28 | 0.5 |
|  | n41 | 0.3 |
|  | n77 | 0.8 |
| CA\_n28-n41-n78 | n28 | 0.5 |
|  | n41 | 0.3 |
|  | n78 | 0.8 |
| CA\_n28-n46-n78 | n28 | 0.5 |
|  | n46 | 0 |
|  | n78 | 0.8 |
| CA\_n28-n77-n79 | n28 | 0.5 |
|  | n77 | 0.8 |
|  | n79 | 0.5 |
| CA\_n28-n78-n79 | n28 | 0.5 |
|  | n78 | 0.8 |
|  |  | 1.57 |
|  | n79 | 0.5 |
|  |  | 1.57 |
| CA\_n29-n30-n66 | n30 | 0.3 |
|  | n66 | 0.5 |
| CA\_n29-n30-n77 | n30 | 0.3 |
|  | n77 | 0.5 |
| CA\_n29-n66-n70 | n29 | 0 |
|  | n66 | 0.5 |
|  | n70 | 0.5 |
| CA\_n29-n66-n77 | n66 | 0.6 |
|  | n77 | 0.8 |
| CA\_n30-n66-n77 | n30 | 0.3 |
|  | n66 | 0.6 |
|  | n77 | 0.8 |
| CA\_n38-n66-n78 | n38 | 0.5 |
|  | n66 | 0.5 |
|  | n78 | 0.8 |
| CA\_n39-n40-n41 | n39 | 0.3 |
|  | n40 | 0.3 |
|  | n41 | 0.3 |
| CA\_n39-n40-n79 | n39 | 0.3 |
|  | n40 | 0 |
|  | n79 | 0.8 |
| CA\_n39-n41-n79 | n39 | 0.3 |
|  | n41 | 0.34 |
|  | n79 | 0.84 |
| CA\_n40-n41-n79 | n40 | 0.53 |
|  | n41 | 0.53 |
|  | n79 | 0.8 |
| CA\_n41-n66-n71 | n41 | 0.85 |
|  |  | 1.36 |
|  | n66 | 0.5 |
|  | n71 | 0.3 |
| CA\_n41-n66-n77 | n41 | 0.5 |
|  | n66 | 0.6 |
|  | n77 | 0.8 |
| CA\_n41-n66-n78 | n41 | 0.5 |
|  | n66 | 0.6 |
|  | n78 | 0.8 |
| CA\_n41-n70-n78 | n41 | 0.6 |
|  | n70 | 0.6 |
|  | n78 | 0.8 |
| CA\_n41-n71-n77 | n41 | 0.3 |
|  | n71 | 0.5 |
|  | n77 | 0.8 |
| CA\_n41-n71-n78 | n41 | 0.3 |
|  | n71 | 0.5 |
|  | n78 | 0.8 |
| CA\_n46-n48-n96 | n46 | 0.5 |
|  | n48 | 0.8 |
|  | n96 | 0.6 |
| CA\_n48-n66-n70 | n48 | 0.8 |
|  | n66 | 0.6 |
|  | n70 | 0.6 |
| CA\_n48-n66-n71 | n48 | 0.5 |
|  | n66 | 0.5 |
|  | n71 | 0.3 |
| CA\_n48-n66-n77 | n48 | 0.8 |
|  | n66 | 0.6 |
|  | n77 | 0.8 |
| CA\_n48-n70-n71 | n48 | 0.5 |
|  | n70 | 0.5 |
|  | n71 | 0.3 |
| CA\_n66-n70-n71 | n66 | 0.5 |
|  | n70 | 0.5 |
|  | n71 | 0.6 |
| CA\_n66-n71-n77 | n66 | 0.6 |
|  | n71 | 0.6 |
|  | n77 | 0.8 |
| CA\_n66-n71-n78 | n66 | 0.6 |
|  | n71 | 0.5 |
|  | n78 | 0.8 |
| NOTE 1: The requirement is applied for UE transmitting on the frequency range of 2515-2690 MHz.  NOTE 2: The requirement is applied for UE transmitting on the frequency range of 2496-2515 MHz.  NOTE 3: Only applicable for UE supporting inter-band carrier aggregation without simultaneous Rx/Tx among band 40 and 41.  NOTE 4: Applicable for UE supporting inter-band carrier aggregation without simultaneous Rx/Tx between n39 and n41.  NOTE 5: The requirement is applied for UE transmitting on the frequency range of 2545 - 2690 MHz.  NOTE 6: The requirement is applied for UE transmitting on the frequency range of 2496 - 2545 MHz.  NOTE 7: The requirements only apply for UE supporting inter-band carrier aggregation with simultaneous Rx/Tx capability, and NR UL carrier frequencies are confined to 3700 MHz-3800MHz for n78 and 4400 MHz-4500MHz for n79. Simultaneous Rx/Tx capability does not apply for UEs supporting band n78 with a n77 implementation. | | |

## << End of change 3>>

## << Start of change 4>>

7.3A.3.2.3 ΔRIB,c for three bands

**Table 7.3A.3.2.3-1: ΔRIB,c due to CA (three bands)**

|  |  |  |
| --- | --- | --- |
| **Inter-band CA combination** | **NR Band** | **ΔRIB,c (dB)** |
| CA\_n1-n3-n5 | n1 | 0 |
|  | n3 | 0 |
|  | n5 | 0 |
| CA\_n1-n3-n8 | n1 | 0.2 |
|  | n3 | 0.2 |
|  | n8 | 0.5 |
| CA\_n1-n3-n18 | n1 | 0 |
|  | n3 | 0 |
|  | n18 | 0 |
| CA\_n1-n3-n20 | n1 | 0 |
| n3 | 0 |
| n20 | 0 |
| CA\_n1-n3-n28 | n28 | 0.2 |
| CA\_n1-n3-n41 | n41 | 05 |
|  |  | 0.56 |
| CA\_n1-n3-n78 | n1 | 0.2 |
|  | n3 | 0.2 |
|  | n78 | 0.5 |
| CA\_n1-n3-n77 | n1 | 0.2 |
|  | n3 | 0.2 |
|  | n77 | 0.5 |
| CA\_n1-n3-n79 | n1 | 0 |
|  | n3 | 0 |
|  | n79 | 0.5 |
| CA\_n1-n5-n7 | n1 | 0 |
|  | n5 | 0 |
|  | n7 | 0 |
| CA\_n1-n5-n28 | n5 | 0.2 |
|  | n28 | 0.2 |
| CA\_n1-n5-n78 | n1 | 0.2 |
|  | n5 | 0.2 |
|  | n78 | 0.5 |
| CA\_n1-n7-n8 | n8 | 0.2 |
| CA\_n1-n7-n28 | n28 | 0.2 |
| CA\_n1-n7-n78 | n1 | 0.2 |
|  | n7 | 0.2 |
|  | n78 | 0.5 |
| CA\_n1-n8-n28 | n8 | 0.2 |
|  | n28 | 0.2 |
| CA\_n1-n8-n77 | n1 | 0 |
|  | n8 | 0.2 |
|  | n77 | 0.5 |
| CA\_n1-n8-n78 | n8 | 0.2 |
|  | n78 | 0.5 |
| CA\_n1-n8-n79 | n8 | 0.2 |
|  | n79 | 0.5 |
| CA\_n1-n18-n28 | n1 | 0 |
| n18 | 0 |
| n28 | 0 |
| CA\_n1-n18-n41 | n1 | 0 |
| n18 | 0 |
| n41 | 0 |
| CA\_n1-n18-n77 | n1 | 0 |
| n18 | 0 |
| n77 | 0.5 |
| CA\_n1-n20-n67 | n1 | 0 |
| n20 | 0.2 |
| n67 | 0.2 |
| CA\_n1-n20-n78 | n1 | 0 |
| n20 | 0 |
| n78 | 0.5 |
| CA\_n1-n28-n40 | n1 | 0 |
|  | n28 | 0.2 |
|  | n40 | 0 |
| CA\_n1-n28-n41 | n1 | 0 |
|  | n28 | 0.2 |
|  | n41 | 0 |
| CA\_n1-n28-n77 | n1 | 0.2 |
|  | n28 | 0.2 |
|  | n77 | 0.5 |
| CA\_n1-n28-n78 | n28 | 0.2 |
|  | n78 | 0.5 |
| CA\_n1-n40-n78 | n78 | 0.5 |
| CA\_n1-n41-n77 | n1 | 0 |
|  | n41 | 0 |
|  | n77 | 0.5 |
| CA\_n1-n77-n79 | n1 | 0.2 |
|  | n77 | 0.5 |
| CA\_n1-n78-n79 | n78 | 0.5 |
| CA\_n2-n5-n30 | n2 | 0.4 |
| n5 | 0 |
| n30 | 0.5 |
| CA\_n2-n5-n48 | n2 | 0.2 |
|  | n5 | 0..0 |
|  | n48 | 0.5 |
| CA\_n2-n5-n66 | n2 | 0.3 |
| n5 | 0 |
| n66 | 0.3 |
| CA\_n2-n5-n77 | n2 | 0.2 |
| n5 | 0.5 |
| n77 | 0.5 |
| CA\_n2-n12-n30 | n2 | 0.4 |
| n12 | 0 |
| n30 | 0.5 |
| CA\_n2-n12-n66 | n2 | 0.3 |
| n12 | 0.5 |
| n66 | 0.3 |
| CA\_n2-n12-n77 | n2 | 0.2 |
| n12 | 0.2 |
| n77 | 0.5 |
| CA\_n2-n14-n30 | n2 | 0.3 |
|  | n14 | 0 |
|  | n30 | 0.3 |
| CA\_n2-n14-n66 | n2 | 0.3 |
|  | n14 | 0 |
|  | n66 | 0.3 |
| CA\_n2-n14-n77 | n2 | 0.2 |
| n14 | 0.2 |
| n77 | 0.5 |
| CA\_n2-n29-n30 | n2 | 0.3 |
| n29 | 0 |
| n30 | 0.3 |
| CA\_n2-n29-n66 | n2 | 0.3 |
| n29 | 0 |
| n66 | 0.3 |
| CA\_n2-n29-n77 | n2 | 0.2 |
|  | n29 | 0.2 |
|  | n77 | 0.5 |
| CA\_n2-n30-n66 | n2 | 0.4 |
| n30 | 0.5 |
| n66 | 0.4 |
| CA\_n2-n30-n77 | n2 | 0.2 |
| n30 | 0 |
| n77 | 0.5 |
| CA\_n2-n48-n66 | n2 | 0.3 |
|  | n48 | 0.5 |
|  | n66 | 0.3 |
| CA\_n2-n48-n77 | n2 | 0.2 |
|  | n48 | 0.5 |
|  | n77 | 0.5 |
| CA\_n2-n66-n77 | n2 | 0.2 |
|  | n66 | 0.2 |
|  | n77 | 0.5 |
| CA\_n2-n66-n77 | n2 | 0.2 |
|  | n66 | 0.2 |
|  | n77 | 0.5 |
| CA\_n2-n66-n78 | n2 | 0.3 |
|  | n66 | 0.3 |
|  | n78 | 0.5 |
| CA\_n3-n5-n28 | n5 | 0.2 |
|  | n28 | 0.1 |
| CA\_n3-n7-n8 | n8 | 0.2 |
| CA\_n3-n7-n78 | n3 | 0.2 |
|  | n7 | 0.2 |
|  | n78 | 0.5 |
| CA\_n3-n8-n28 | n8 | 0.2 |
|  | n28 | 0.1 |
| CA\_n3-n8-n77 | n3 | 0.2 |
|  | n8 | 0.2 |
|  | n77 | 0.5 |
| CA\_n3-n5-n78 | n3 | 0.2 |
|  | n5 | 0.2 |
|  | n78 | 0.5 |
| CA\_n3-n8-n78 | n3 | 0.2 |
|  | n8 | 0.2 |
|  | n78 | 0.5 |
| CA\_n3-n18-n28 | n3 | 0 |
|  | n18 | 0 |
|  | n28 | 0 |
| CA\_n3-n18-n41 | n41 | 01/0.52 |
| CA\_n3-n18-n77 | n3 | 0.2 |
|  | n18 | 0 |
|  | n77 | 0.5 |
| CA\_n3-n20-n67 | n3 | 0 |
|  | n20 | 0.1 |
|  | n67 | 0.1 |
| CA\_n3-n20-n78 | n3 | 0.2 |
| n20 | 0 |
| n78 | 0.5 |
| CA\_n3-n28-n41 | n41 | 01/0.52 |
| CA\_n3-n28-n77 | n3 | 0.2 |
|  | n28 | 0.2 |
|  | n77 | 0.5 |
| CA\_n3-n28-n78 | n28 | 0.2 |
|  | n78 | 0.5 |
| CA\_n3-n28-n79 | n3 | 0 |
| n28 | 0.2 |
| n79 | 0.5 |
| CA\_n3-n77-n79 | n3 | 0.2 |
| n77 | 0.5 |
| n79 | 0 |
| CA\_n3-n40-n41 | n41 | 01,3 |
|  |  | 0.52,3 |
| CA\_n3-n41-n77 | n3 | 0.2 |
|  | n41 | 01/0.52 |
|  | n77 | 0.5 |
| CA\_n3-n41-n78 | n3 | 0.2 |
|  | n41 | 01/0.52 |
|  | n78 | 0.5 |
| CA\_n3-n41-n79 | n41 | 0.5 |
|  | n79 | 0.5 |
| CA\_n5-n7-n28 | n28 | 0.2 |
| CA\_n5-n7-n78 | n5 | 0.2 |
|  | n7 | 0.2 |
|  | n78 | 0.5 |
| CA\_n5-n12-n77 | n5 | 0.5 |
| n12 | 0.3 |
| n77 | 0.5 |
| CA\_n5-n14-n77 | n5 | 0.2 |
| n14 | 0.2 |
| n77 | 0.5 |
| CA\_n5-n25-n77 | n5 | 0.2 |
|  | n25 | 0.2 |
|  | n77 | 0.5 |
| CA\_n5-n25-n78 | n5 | 0.2 |
|  | n25 | 0.2 |
|  | n78 | 0.5 |
| CA\_n5-n29-n77 | n5 | 0.5 |
|  | n29 | 0.3 |
|  | n77 | 0.5 |
| CA\_n5-n30-n66 | n5 | 0 |
| n30 | 0.5 |
| n66 | 0.4 |
| CA\_n5-n30-n77 | n5 | 0.2 |
| n30 | 0 |
| n77 | 0.5 |
| CA\_n5-n48-n66 | n5 | 0 |
|  | n48 | 0.5 |
|  | n66 | 0.2 |
| CA\_n5-n48-n77 | n5 | 0.2 |
|  | n48 | 0.5 |
|  | n77 | 0.5 |
| CA\_n5-n66-n77 | n5 | 0.2 |
|  | n66 | 0.2 |
|  | n77 | 0.5 |
| CA\_n5-n66-n78 | n5 | 0.5 |
|  | n66 | 0.2 |
|  | n78 | 0.5 |
| CA\_n7-n8-n28 | n8 | 0.2 |
|  | n28 | 0.1 |
| CA\_n7-n8-n78 | n8 | 0.2 |
|  | n78 | 0.5 |
| CA\_n7-n25-n66 | n7 | 0.5 |
|  | n25 | 0.3 |
|  | n66 | 0.5 |
| CA\_n7-n25-n77 | n7 | 0.5 |
| n25 | 0.2 |
| n77 | 0.5 |
| CA\_n7-n25-n78 | n7 | 0.5 |
| n25 | 0.2 |
| n78 | 0.5 |
| CA\_n7-n28-n78 | n78 | 0.5 |
| CA\_n7-n46-n78 | n7 | 0.5 |
|  | n46 | 0 |
|  | n78 | 0.5 |
| CA\_n7-n66-n77 | n7 | 0.5 |
| n66 | 0.5 |
| n77 | 0.5 |
| CA\_n7-n66-n78 | n7 | 0.5 |
|  | n66 | 0.5 |
|  | n78 | 0.5 |
| CA\_n8-n28-n78 | n8 | 0.2 |
| n28 | 0.2 |
| n78 | 0.5 |
| CA\_n8-n39-n41 | n39 | 0.24 |
|  | n41 | 0.24 |
| CA\_n8-n41-n79 | n41 | 0.5 |
|  | n79 | 0.5 |
| CA\_n8-n78-n79 | n8 | 0.2 |
|  | n78 | 0.5 |
|  | n79 | 0.5 |
| CA\_n12-n30-n66 | n12 | 0.5 |
|  | n30 | 0.5 |
|  | n66 | 0.4 |
| CA\_n12-n30-n77 | n12 | 0.2 |
| n30 | 0 |
| n77 | 0.5 |
| CA\_n12-n66-n77 | n12 | 0.5 |
| n66 | 0.5 |
| n77 | 0.5 |
| CA\_n13-n25-n66 | n25 | 0.3 |
|  | n66 | 0.3 |
| CA\_n13-n25-n77 | n13 | 0 |
| n25 | 0.2 |
| n77 | 0.5 |
| CA\_n13-n66-n77 | n13 | 0.3 |
| n66 | 0.3 |
| n77 | 0.5 |
| CA\_n14-n30-n66 | n14 | 0 |
|  | n30 | 0.5 |
|  | n66 | 0.4 |
| CA\_n14-n30-n77 | n14 | 0.2 |
| n30 | 0 |
| n77 | 0.5 |
| CA\_n14-n66-n77 | n14 | 0.2 |
| n66 | 0.5 |
| n77 | 0.5 |
| CA\_n18-n28-n41 | n18 | 0 |
| n28 | 0 |
| n41 | 0 |
| CA\_n18-n28-n77 | n18 | 0 |
| n28 | 0 |
| n77 | 0.5 |
| CA\_n18-n41-n77 | n18 | 0 |
| n41 | 0 |
| n77 | 0.5 |
| CA\_n20-n28-n78 | n28 | 0.2 |
|  | n78 | 0.5 |
| CA\_n24-n41-n48 | n24 | 0.0 |
|  | n41 | 0.0 |
|  | n48 | 0.5 |
| CA\_n24-n41-n77 | n24 | 0.2 |
| n41 | 0.0 |
| n77 | 0.5 |
| CA\_n24-n48-n77 | n24 | 0.2 |
|  | n48 | 0.5 |
|  | n77 | 0.5 |
| CA\_n25-n29-n66 | n25 | 0.3 |
|  | n66 | 0.3 |
| CA\_n25-n38-n78 | n25 | 0.2 |
|  | n38 | 0.4 |
|  | n78 | 0.5 |
| CA\_n25-n41-n66 | n25 | 0.3 |
|  | n41 | 0.55 |
|  |  | 16 |
|  | n66 | 0.3 |
| CA\_n25-n41-n71 | n71 | 0.2 |
| CA\_n25-n41-n78 | n25 | 0.2 |
|  | n41 | 0.5 |
|  | n78 | 0.5 |
| CA\_n25-n48-n66 | n25 | 0.3 |
|  | n48 | 0.5 |
|  | n66 | 0.3 |
| CA\_n25-n66-n71 | n25 | 0.3 |
|  | n66 | 0.3 |
|  | n71 | 0.3 |
| CA\_n25-n66-n78 | n25 | 0.3 |
|  | n66 | 0.3 |
|  | n78 | 0.5 |
| CA\_n25-n66-n77 | n25 | 0.3 |
|  | n66 | 0.3 |
|  | n77 | 0.5 |
| CA\_n25-n71-n77 | n25 | 0.2 |
|  | n71 | 0.2 |
|  | n77 | 0.5 |
| CA\_n25-n71-n78 | n25 | 0.2 |
| n71 | 0.3 |
| n78 | 0.5 |
| CA\_n26-n66-n70 | n26 | 0 |
|  | n66 | 0 |
|  | n70 | 0 |
| CA\_n28-n40-n41 | n28 | 0 |
|  | n40 | 0 |
|  | n41 | 0 |
| CA\_n28-n40-n78 | n78 | 0.5 |
| CA\_n28-n40-n79 | n28 | 0.2 |
|  | n40 | 0 |
|  | n79 | 0.5 |
| CA\_n28-n41-n77 | n28 | 0.2 |
|  | n77 | 0.5 |
| CA\_n28-n41-n78 | n28 | 0.2 |
|  | n78 | 0.5 |
| CA\_n28-n41-n79 | n28 | 0.2 |
|  | n41 | 0.5 |
|  | n79 | 0.5 |
| CA\_n28-n46-n78 | n28 | 0.2 |
|  | n46 | 0 |
|  | n78 | 0.5 |
| CA\_n28-n77-n79 | n28 | 0.2 |
|  | n77 | 0.5 |
| CA\_n28-n78-n79 | n28 | 0.2 |
|  | n78 | 0.5 |
| CA\_n29-n30-n66 | n29 | 0 |
|  | n30 | 0.5 |
|  | n66 | 0.4 |
| CA\_n29-n30-n77 | n29 | 0.2 |
|  | n30 | 0 |
|  | n77 | 0.5 |
| CA\_n29-n66-n77 | n29 | 0.5 |
|  | n66 | 0.5 |
|  | n77 | 0.5 |
| CA\_n30-n66-n77 | n30 | 0.5 |
| n66 | 0.4 |
| n77 | 0.5 |
| CA\_n39-n40-n79 | n39 | 0.3 |
|  | n40 | 0.3 |
|  | n79 | 0.5 |
| CA\_n39-n41-n79 | n39 | 0.34 |
|  | n41 | 0.34 |
|  | n79 | 0.8 |
| CA\_n40-n41-n79 | n40 | 08 |
|  | n41 | 0.58 |
|  | n79 | 0.5 |
| CA\_n41-n66-n71 | n41 | 0.51 |
|  |  | 12 |
|  | n66 | 0.5 |
| CA\_n41-n66-n77 | n41 | 0.2 |
|  | n66 | 0.2 |
|  | n77 | 0.5 |
| CA\_n41-n66-n78 | n41 | 0.2 |
|  | n66 | 0.2 |
|  | n78 | 0.5 |
| CA\_n41-n70-n78 | n41 | 0.2 |
|  | n70 | 0.2 |
|  | n78 | 0.5 |
| CA\_n41-n71-n77 | n71 | 0.2 |
|  | n77 | 0.5 |
| CA\_n41-n71-n78 | n41 | 0 |
|  | n71 | 0.2 |
|  | n78 | 0.5 |
| CA\_n46-n48-n96 | n46 | 0.5 |
|  | n48 | 0.5 |
|  | n96 | 0.6 |
| CA\_n48-n66-n70 | n48 | 0.5 |
|  | n66 | 0.2 |
|  | n70 | 0.2 |
| CA\_n48-n66-n71 | n48 | 0.2 |
|  | n66 | 0.2 |
|  | n71 | 0.2 |
| CA\_n48-n66-n77 | n48 | 0.5 |
|  | n66 | 0.2 |
|  | n77 | 0.5 |
| CA\_n48-n70-n71 | n48 | 0.2 |
|  | n70 | 0.2 |
|  | n71 | 0.2 |
| CA\_n66-n71-n77 | n66 | 0.2 |
|  | n71 | 0.2 |
|  | n77 | 0.5 |
| CA\_n66-n71-n78 | n66 | 0.2 |
|  | n71 | 0.2 |
|  | n78 | 0.5 |
| NOTE 1: Applicable for the frequency range of 2515-2690 MHz.  NOTE 2: Applicable for the frequency range of 2496-2515 MHz.  NOTE 3: Only applicable for UE supporting inter-band carrier aggregation without simultaneous Rx/Tx among band 40 and 41.  NOTE 4: Applicable for UE supporting inter-band carrier aggregation without simultaneous Rx/Tx between n39 and n41.  NOTE 5: The requirement is applied for UE transmitting on the frequency range of 2545 - 2690 MHz.  NOTE 6: The requirement is applied for UE transmitting on the frequency range of 2496 - 2545 MHz.  NOTE 7: Void.  NOTE 8: Void. | | |

## << End of change 4>>