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

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

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| *CR-Form-v12.1* | | | | | | | | |
| **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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | This big CR is to merge all endorsed CR and to capture newly introduced band combinations in corresponding TP for NR inter-band CA for 3DL/1DL. | | | | | | | | |
|  | |  | | | | | | | | |
| ***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. | | | | | | | | |
|  | |  | | | | | | | | |
| ***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)**

|  |  |  |
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| **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 | - | 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-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) | - | 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 | - | 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 | - | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n18 | 5, 10, 15 |  |
|  |  | n28 | 5, 10 |  |
| CA\_n1A-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 | - | 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 | - | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n28 | 5, 10 |  |
|  |  | n41 | 10, 15, 20, 30, 40, 50, 60, 80, 90, 100 |  |
| CA\_n1A-n28A-n77A | - | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 0 |
|  |  | n28 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| 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 | - | n1 | 5, 10, 15, 20 | 0 |
|  |  | n28 | 5, 10, 15, 20 |  |
|  |  | n79 | 40, 50, 60, 80, 100 |  |
| 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-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 | - | n1 | 5, 10, 15, 20, 25, 30, 40, 50 | 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-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 | - | 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 | - | 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) | - | 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) | - | 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 | - | n2 | 5, 10, 15, 20 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n30 | 5, 10 |  |
| CA\_n2(2A)-n12A-n30A | - | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n30 | 5, 10 |  |
| CA\_n2A-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 | - | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2A-n12A-n66(2A) | - | n2 | 5, 10, 15, 20 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n2(2A)-n12A-n66(2A) | - | n2 | See CA\_n2(2A)\_BCS0 | 0 |
|  |  | n12 | 5, 10, 15 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n2A-n12A-n66(3A) | - | 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 | - | n2 | 5, 10, 15, 20 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n30 | 5, 10 |  |
| CA\_n2(2A)-n29A-n30A | - | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n30 | 5, 10 |  |
| CA\_n2A-n29A-n66A | - | n2 | 5, 10, 15, 20 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2(2A)-n29A-n66A | - | n2 | CA\_n2(2A)\_BCS0 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n2A-n29A-n66(2A) | - | n2 | 5, 10, 15, 20 | 0 |
|  |  | n29 | 5, 10 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n2(2A)-n29A-n66(2A) | - | 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 | - | 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 | - | 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 | - | 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 | - | 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 | - | 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 | - | 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 in Table 55A.1-1 |  |
| CA\_n2A-n48B-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 | - | 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\_n7A-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-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-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 | - | 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 | - | 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) | - | 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-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 |  |
| 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 | - | 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) | - | 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) | - | 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 | - | 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 | - | 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 | - | 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 | - | 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 | - | 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 | - | 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 | - | 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 | - | 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 | - | 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 | - | 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) | - | 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 | - | 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) | - | 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) | - | 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 | - | 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 | - | 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) | - | 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) | - | 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-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 | - | 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 | - | 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 | - | 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)\_BCS0 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 1 |
|  |  | 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)\_BCS0 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
|  |  | n7 | 5, 10, 15, 20, 25, 30, 40, 50 | 1 |
|  |  | 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)\_BCS0 |  |
|  |  | n77 | 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 |  |
|  |  | n7 | CA\_n7(2A)\_BCS0 | 1 |
|  |  | 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)\_BCS0 |  |
|  |  | n77 | CA\_n77(2A)\_BCS1 |  |
|  |  | n7 | CA\_n7(2A)\_BCS0 | 1 |
|  |  | 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)\_BCS1 |  |
| 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 | - | n12 | 5, 10, 15 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n12A-n30A-n66(2A) | - | n12 | 5, 10, 15 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| CA\_n12A-n30A-n66(3A) | - | 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 | - | n18 | 5, 10, 15 | 0 |
|  |  | n28 | 5, 10 |  |
|  |  | n41 | 10, 15, 20, 25, 30, 40, 50, 60, 80, 90, 100 |  |
| CA\_n18A-n28A-n77A | - | n18 | 5, 10, 15 | 0 |
|  |  | n28 | 5, 10 |  |
|  |  | n77 | 10, 15, 20, 40, 50, 60, 80, 90, 100 |  |
| CA\_n18A-n41A-n77A | - | 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) | - | 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-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-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-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-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-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 in Table 5.5A.2- |  |
|  |  | 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 | - | 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) | - | 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 | - | 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 | - | 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 | - | 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 | - | n29 | 5, 10 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
| CA\_n29A-n30A-n66(2A) | - | n29 | 5, 10 | 0 |
|  |  | n30 | 5, 10 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 |  |
| 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-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 | - | 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) | - | 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-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\_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 | - | 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 | - | 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 | - | 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 | - | 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 | - | n48 | CA\_n48(2A)\_BCS0 | 0 |
|  |  | n66 | 5, 10, 15, 20, 25, 30, 40 |  |
|  |  | n77 | CA\_n77C\_BCS0 |  |
|  |  | n48 | CA\_n48(2A)\_BCS1 | 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-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 | - | 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 | - | 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 |  |
|  |  | n66 | CA\_n66(2A)\_BCS1 | 1 |
|  |  | 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\_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\_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>>