**3GPP TSG-RAN WG4 Meeting #111 R4-2409342**

**Fukuoka, Japan, 20 - 24 May, 2024**

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| *CR-Form-v12.3* |
| **CHANGE REQUEST** |
|  |
|  | **38.101-3** | **CR** |  | **rev** | **-** | **Current version:** | **18.5.1** |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network |  |

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| ***Title:***  | Draft CR 38.101-3 Rel-18 Correction of the MSD values for DC\_18A\_n77A |
|  |  |
| ***Source to WG:*** | KDDI, Samsung, LGE, Murata, Skyworks |
| ***Source to TSG:*** | R4 |
|  |  |
| ***Work item code:*** | DC\_R18\_1BLTE\_1BNR\_2DL2UL-Core. |  | ***Date:*** | 2024-05-01 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-18 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)…Rel-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)**Rel-20 (Release 20)* |
|  |  |
| ***Reason for change:*** | Correction of both the PC3 MSD values and Note for DC\_18A\_n77A so that the TS will be more consistent to define MSD values for band n77 global frequency range, with the Note addressing that the test points for MSD can be skipped due to the frequency range limitation in Japan. |
|  |  |
| ***Summary of change:*** | 1. Addition of the PC3 MSD values and the corresponding Note 10 for DC\_18A\_n77A.

These corrections follow the approved TP (R4-2406674) in RAN4#110bis. 1. Deletion of DC\_18A\_n77A test configuration from Table 7.3B.2.3.5.1-1 where the MSD test configuration for both DC\_18A\_n77A and DC\_18A\_n78A is defined (all filled with N/A when operator specific test configurations were acceptable in RAN4).
2. Addition to DC\_18A\_n78A of the test configuration and MSD of DC\_1 8A\_n77A in the range of n78 as well as Note 11 to show that the test point for MSD can be skipped due to the frequency range limitation in Japan.
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| ***Consequences if not approved:*** | The requested band combination is not properly specified.  |
|  |  |
| ***Clauses affected:*** | 7.3B.2 (7.3B.2.3.5.1) |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** | **X** |  |  Test specifications | TS 38.521-3 CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

**---Start of changes---**

### 7.3B.2 Reference sensitivity for DC

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

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

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

| NR or E-UTRA Band / Channel bandwidth / NRB / MSD |
| --- |
| EN-DCConfiguration | EUTRA or NR band | UL Fc (MHz) | UL/DL BW (MHz) | UL LCRB | DL Fc (MHz) | MSD (dB) | IMD order |
| DC\_1\_n3 | 1 | 1950 | 5 | 25 | 2140 | 23 | IMD3 |
|  | n3 | 1760 | 5 | 25 | 1855 | N/A | N/A |
| DC\_1C\_n3 | 1C | 19501970 | 2020 | 1 (RBstart=0)1 (RBstart=67) | 21402160 | N/A | N/A |
|  | n3 | N/A | 5 | N/A | 1877.5 | 36 | IMD5 |
| DC\_1A\_n8A | 1 | 1965 | 5 | 25 | 2155 | 6.0 | IMD4 |
|  | n8 | 887.5 | 5 | 25 | 932.5 | N/A | N/A |
| DC\_1A\_n71ADC\_1A\_n71B | 1 | 1958 | 5 | 25 | 2148 | N/A | N/A |
|  | n71 | 668 | 5 | 25 | 622 | 15.1 | IMD3 |
| DC\_1A\_n77A,DC\_1A\_SUL\_n77A-n84A,DC\_1A\_n77(2A), | 1 | 1950 | 5 | 25 | 2140 | 29.8 | IMD23 |
|  |  |  |  |  |  |  |  |
|  | n77 | 4090 | 10 | 50 | 4090 | N/A | N/A |
| DC\_1A\_n77A,DC\_1A\_SUL\_n77A-n84A,DC\_1A\_n77(2A),DC\_1A\_n77(3A),DC\_1A\_n78A,DC\_1A\_SUL\_n78A-n84A,DC\_1A\_n78(2A)DC\_1A\_n78(A-C) | 1 | 1950 | 5 | 25 | 2140 | 8.0 | IMD43 |
|  |  |  |  |  |  |  |  |
|  | n77, n78 | 3710 | 10 | 50 | 3710 | N/A | N/A |
| DC\_2A\_n46A | 2 | 1880 | 5 | 25 | 1960 | 12.0 | IMD3 |
|  | n46 | 5720 | 20 | 100 | 5720 | N/A | N/A |
| DC\_2A\_n48A | 2 | 1852.5 | 5 | 25 | 1932.5 | 12 | IMD4 |
|  | n48 | 3625 | 20 | 100 | 3625 | N/A | N/A |
| DC\_2A\_n66A, DC\_2A-2A\_n66ADC\_2A\_n66(2A) | 2 | 1855 | 5 | 25 | 1935 | 20 | IMD3 |
|  | n66 | 1775 | 5 | 25 | 2175 | N/A | N/A |
| DC\_2A\_n66A, DC\_2A-2A\_n66ADC\_2A\_n66(2A) | 2 | 1883.3 | 5 | 25 | 1963.3 | N/A | N/A |
|  | n66 | 1750 | 5 | 25 | 2150 | 4 | IMD5 |
| DC\_2A\_n77ADC\_2A\_n77(2A)DC\_2A-2A\_n77ADC\_2A\_n77(2A)DC\_2A-2A\_n77(2A) | 2 | 1855 | 5 | 25 | 1935 | 26 | IMD2 |
|  |  |  |  |  |  |  |  |
|  | n77 | 3790 | 10 | 50 | 3790 | N/A | N/A |
|  | 2 | 1900 | 5 | 25 | 1980 | 8.0 | IMD4 |
|  |  |  |  |  |  |  |  |
|  | n77 | 3720 | 10 | 50 | 3720 | N/A | N/A |
|  | 2 | 1885 | 5 | 25 | 1965 | 5 | IMD5 |
|  |  |  |  |  |  |  |  |
|  | n77 | 3810 | 10 | 50 | 3810 | N/A | N/A |
| DC\_2A\_n78ADC\_2A\_n78(2A)DC\_2A-2A\_n78(2A) | 2 | 1855 | 5 | 25 | 1935 | 26 | IMD23 |
|  |  |  |  |  |  |  |  |
|  | n78 | 3790 | 10 | 50 | 3790 | N/A | N/A |
|  | 2 | 1885 | 5 | 25 | 1965 | 8.0 | IMD43 |
|  |  |  |  |  |  |  |  |
|  | n78 | 3690 | 10 | 50 | 3690 | N/A | N/A |
| DC\_3\_n1 | 3 | 1760 | 5 | 25 | 1855 | N/A | N/A |
|  | n1 | 1950 | 5 | 25 | 2140 | 23 | IMD3 |
| DC\_3\_n5 | 3 | 1771 | 10 | 50 | 1866 | 4 | IMD4 |
|  | n5 | 838 | 5 | 25 | 883 | N/A | N/A |
|  | 3 | 1721 | 10 | 50 | 1816 | N/A | N/A |
|  | n5 | 838 | 5 | 25 | 883 | 24 | IMD23 |
| DC\_3A\_n7ADC\_3C\_n7A | 3 | 1730 | 5 | 25 | 1825 | N/A | N/A |
|  | n7 | 2535 | 10 | 50 | 2655 | 10.2 | IMD4 |
| DC\_3\_n8 | n8 | 900 | 5 | 25 | 945 | 8 | IMD43 |
|  | 3 | 1755 | 10 | 50 | 1850 | N/A | N/A |
|  | n8 | 897.5 | 5 | 25 | 942.5 | N/A | N/A |
|  | 3 | 1747.5 | 10 | 50 | 1842.5 | 6.4 | IMD5 |
| DC\_3A\_n20ADC\_3C\_n20A | 3 | 1775 | 5 | 25 | 1870 | 4 | IMD4 |
|  | n20 | 840 | 5 | 25 | 799 | N/A | N/A |
|  | 3 | 1735 | 5 | 25 | 1830 | N/A | N/A |
|  | n20 | 847 | 5 | 25 | 806 | 9 | IMD4 |
| DC\_3A\_n26A | 3 | 1771 | 10 | 50 | 1866 | 4 | IMD4 |
|  | n26 | 838 | 5 | 25 | 883 | N/A | N/A |
|  | 3 | 1721 | 10 | 50 | 1816 | N/A | N/A |
|  | n26 | 838 | 5 | 25 | 883 | 24 | IMD23 |
| DC\_3C\_n26A | 3 | 1720 | 20 | 1 (RBSTART=0) | 1815 | N/A | N/A |
|  |  | 1739.8 | 20 | 1 (RBSTART=99) | 1834.8 | N/A |  |
|  | n26 | 841.5 | 15 | 25(RBSTART=54) | 886.5 | 18.9 | IMD3 |
| DC\_3C\_n28A | n28 | 715.5 | 25 | 25(RBSTART=108) | 770.5 | 11 | IMD39 |
|  | 3 | 1720 | 20 | 1 (RBSTART=0) | 1815 | N/A | N/A |
|  |  | 1739.8 | 20 | 1 (RBSTART=99) | 1834.8 |  |  |
| DC\_3A\_n38A | 3 | 1712.8 | 5 | 25 | 1807.8 | 8.2 | IMD4 |
|  | n38 | 2616.7 | 10 | 50 | 2616.7 | N/A | N/A |
| DC\_3A\_n41ADC\_3C\_n41ADC\_3A\_SUL\_n41A-n80A, DC\_3C\_SUL\_n41A-n80A | 3 | 1740 | 5 | 25 | 1835 | 8.2 | IMD4 |
|  | n41 | 2657.5 | 10 | 50 | 2657.5 | N/A | N/A |
| DC\_3A\_n77A,DC\_3A\_n77(2A),DC\_3A\_n77(3A),DC\_3A\_SUL\_n77A-n80A,DC\_3A\_n78A,DC\_3A\_SUL\_n78A-n80A,DC\_3A\_n78(2A),DC\_3A\_n78(A-C)DC\_3C\_n78ADC\_3C\_n78(2A) | 3 | 1740 | 5 | 25 | 1835 | 26 | IMD23 |
|  |  |  |  |  |  |  |  |
|  | n77, n78 | 3575 | 10 | 50 | 3575 | N/A | N/A |
| DC\_3A\_n77A,DC\_3A\_n77(2A),DC\_3C\_n77A,DC\_3C\_n77(2A),DC\_3A\_SUL\_n77A-n80A,DC\_3A\_n78A, DC\_3A\_SUL\_n78A-n80A,DC\_3A\_n78(2A),DC\_3C\_n78ADC\_3C\_n78(2A) | 3 | 1765 | 5 | 25 | 1860 | 8.0 | IMD43 |
|  |  |  |  |  |  |  |  |
|  | n77, n78 | 3435 | 10 | 50 | 3435 | N/A | N/A |
| DC\_4A\_n2A | 2 | 1860 | 20 | 502 | 1940 | 5 | IMD3 |
|  | 4 | 1752.5 | 5 | 25 | 2152.5 | N/A | N/A |
|  | 2 | 1868.3 | 5 | 25 | 1948.3 | N/A | N/A |
|  | 4 | 1735 | 5 | 25 | 2135 | 5 | IMD5 |
| DC\_4A\_n5A | n5 | 838 | 5 | 25 | 883 | 30 | IMD23 |
|  | 4 | 1721 | 5 | 25 | 2121 | N/A | N/A |
| DC\_4A\_n7A | 4 | 1730 | 5 | 25 | 2130 | N/A | N/A |
|  | n7 | 2535 | 10 | 50 | 2655 | 15 | IMD4 |
| DC\_5A\_n3A | 5 | 838 | 5 | 25 | 883 | N/A | N/A |
|  | n3 | 1771 | 10 | 50 | 1866 | 4 | IMD4 |
|  | 5 | 838 | 5 | 25 | 883 | 24 | IMD23 |
|  | n3 | 1721 | 10 | 50 | 1816 | N/A | N/A |
| DC\_5\_n7 | n7 | 2547 | 10 | 50 | 2667 | N/A | N/A |
|  | 5 | 834 | 5 | 25 | 879 | 12 | IMD33 |
| DC\_5\_n38 | 5 | 844 | 5 | 25 | 889 | 12 | IMD33 |
|  | n38 | 2577 | 10 | 50 | 2577 | N/A | N/A |
| DC\_5A\_n41A | 5 | 839 | 5 | 25 | 884 | 15.6 | IMD33 |
|  | n41 | 2562 | 10 | 50 | 2562 | N/A | N/A |
| DC\_5A\_n66A | 5 | 838 | 5 | 25 | 883 | 30 | IMD23 |
|  | n66 | 1721 | 5 | 25 | 2121 | N/A | N/A |
| DC\_5A\_n77A8DC\_5A\_n77(2A)8DC\_5A\_n77(3A)8 | 5 | 844 | 5 | 25 | 889 | 8.3 | IMD4 |
|  | n77 | 3421 | 10 | 50 | 3421 | N/A | N/A |
|  | 5 | 826.5 | 5 | 25 | 871.5 | 5.5 | IMD5 |
|  | n77 | 4177.5 | 10 | 50 | 4177.5 | N/A | N/A |
| DC\_5A\_n78ADC\_5A\_n78(2A)DC\_5A\_n78(A-C)DC\_5A\_n78C | 5 | 844 | 5 | 25 | 889 | 8.3 | IMD4 |
|  | n78 | 3421 | 10 | 50 | 3421 | N/A | N/A |
| DC\_7\_n3 | 7 | 2535 | 10 | 50 | 2655 | 13 | IMD4 |
|  | n3 | 1730 | 5 | 25 | 1825 | N/A | N/A |
| DC\_7\_n5 | 7 | 2547 | 10 | 50 | 2667 | N/A | N/A |
|  | n5 | 834 | 5 | 25 | 879 | 12 | IMD33 |
| DC\_7A\_n20A | 7 | 2512 | 10 | 50 | 2632 | N/A | N/A |
|  | n20 | 851 | 5 | 25 | 810 | 12 | IMD33 |
| DC\_7A\_n26ADC\_7C\_n26A | 7 | 2547 | 10 | 50 | 2667 | N/A | N/A |
|  | n26 | 834 | 5 | 25 | 879 | 12 | IMD33 |
|  | 7 | 2567.5 | 5 | 25 | 2687.5 | 2.5 | IMD5 |
|  | n26 | 816.5 | 5 | 25 | 861.5 | N/A | N/A |
| DC\_7A\_n40A DC\_7A-7A\_n40A | 7 | 2510 | 5 | 25 | 2630 | 23 | IMD3 |
|  | n40 | 2390 | 5 | 25 | 2390 | N/A | N/A |
| DC\_7A\_n66ADC\_7A-7A\_n66ADC\_7C\_n66A | 7 | 2535 | 10 | 50 | 2655 | 15 | IMD4 |
|  | n66 | 1730 | 5 | 25 | 2130 | N/A | N/A |
| DC\_7A\_n77ADC\_7A-7A\_n77(2A)DC\_7A-7A\_n77(3A)DC\_7A\_n77(2A)DC\_7A\_n77(3A)DC\_7C\_n77ADC\_7C\_n77(2A) | 7 | 2540 | 5 | 25 | 2660 | 7.1 | IMD4 |
|  | n77 | 3870 | 10 | 50 | 3870 | N/A | N/A |
| DC\_7\_n79DC\_7-7\_n79 | 7 | 2510 | 5 | 25 | 2630 | [8] | IMD4 |
| n79 | 4900 | 40 | 216 | 4900 | N/A | N/A |
| DC\_8A\_n1ADC\_8B\_n1A | 8 | 887.5 | 5 | 25 | 932.5 | N/A | N/A |
|  | n1 | 1965 | 5 | 25 | 2155 | 6 | IMD4 |
| DC\_8A\_n3ADC\_8B\_n3A | 8 | 900 | 5 | 25 | 945 | 8 | IMD43 |
|  | n3 | 1755 | 10 | 50 | 1850 | N/A | N/A |
|  | 8 | 897.5 | 5 | 25 | 942.5 | N/A | N/A |
|  | n3 | 1747.5 | 10 | 50 | 1842.5 | 6.4 | IMD5 |
| DC\_8A\_n20A | n20 | 849.5 | 5 | 25 | 808.5 | 25 | IMD33 |
|  | 8 | 890.5 | 5 | 25 | 935.5 | N/A | N/A |
|  | n20 | 847.5 | 5 | 25 | 806.5 | N/A | N/A |
|  | 8 | 892.5 | 5 | 25 | 937.5 | 25 | IMD33 |
| DC\_8A\_n38A | 8 | 887.5 | 5 | 25 | 932.5 | 8.1 | IMD5 |
|  | n38 | 2617.5 | 5 | 25 | 2617.5 | N/A | N/A |
| DC\_8A\_n41ADC\_8A\_SUL\_n41A-n81A | 8 | 882.5 | 5 | 25 | 927.5 | 12.1 | IMD33 |
|  | n41 | 2685 | 10 | 50 | 2685 | N/A | N/A |
| DC\_8A\_n77A,DC\_8B\_n77A,DC\_8A\_n78A,DC\_8B\_n78ADC\_8A\_n78(2A),DC\_8A\_n77(3A),DC\_8A\_SUL\_n78A-n81A | 8 | 897.5 | 5 | 25 | 942.5 | 8.3 | IMD4 |
|  | n77, n78 | 3635 | 10 | 50 | 3635 | N/A | N/A |
| DC\_8A\_n79A,DC\_8A\_n79C,DC\_8A\_SUL\_n79A-n81A | 8 | 897.5 | 5 | 25 | 942.5 | 4.8 | IMD5 |
|  | n79 | 4532.5 | 40 | 216 | 4532.5 | N/A | N/A |
| DC\_11A\_n28A | 11 | 1430.5 | 5 | 25 | 1478.5 | N/A | N/A |
|  | n28 | 743 | 5 | 25 | 798 | 10.4 | IMD4 |
| DC\_12A\_n77ADC\_12A\_n77(2A) | 12 | 702 | 5 | 20 | 732 | 5.5 | IMD5 |
|  | n77 | 3540 | 10 | 50 | 3540 | N/A | N/A |
| DC\_12A\_n78A | 12 | 710 | 5 | 25 | 740 | 5.5 | IMD5 |
|  | n78 | 3580 | 10 | 50 | 3580 | N/A | N/A |
| DC\_13A\_n5A | 13 | 783 | 5 | 25 | 752 | N/A | N/A |
|  | n5 | 828 | 5 | 25 | 873 | 25 | IMD3 |
| DC\_13A\_n7ADC\_13A\_n7(2A) | 13 | 784.5 | 5 | 25 | 753.5 | N/A | N/A |
|  | n7 | 2520 | 40 | 216 | 2640 | 2.5 | IMD5 |
| DC\_13A\_n77A | 13 | 784.5 | 5 | 20 | 753.5 | 5.5 | IMD5 |
|  | n77 | 3891.5 | 10 | 50 | 3891.5 | N/A | N/A |
| DC\_14A\_n5A | 14 | 791 | 5 | 25 | 761 | N/A | N/A |
|  | n5 | 836 | 5 | 25 | 881 | 25 | IMD3 |
|  | 14 | 795.5 | 5 | 25 | 765.5 | 25 | IMD3 |
|  | n5 | 826.5 | 5 | 25 | 871.5 | N/A | N/A |
| DC\_14A\_n77ADC 14A n77(2A) | 14 | 795.5 | 5 | 15 | 765.5 | 5.5 | IMD5 |
|  | n77 | 3947.5 | 10 | 50 | 3947.5 | N/A | N/A |
| DC\_18A\_n3A | 18 | 823 | 5 | 25 | 868 | N/A | N/A |
|  | n3 | 1721 | 5 | 25 | 1816 | 4 | IMD4 |
| DC\_18A\_n77A10 | 18 | 827.5 | 5 | 25 | 872.5 | 8.4 | IMD4 10 |
| n77 | 3355 | 10 | 50 | 3355 | N/A | N/A |
| 18 | 817.5 | 5 | 25 | 862.5 | 4.5 | IMD5 10 |
| n77 | 4130 | 10 | 50 | 4130 | N/A | N/A |
| DC\_18A\_n78A | 18 | 827.5 | 5 | 25 | 872.5 | 8.4 | IMD4 11 |
|  | n78 | 3355 | 10 | 50 | 3355 | N/A | N/A |
|  DC\_19A\_n77A | 19 | 836.5 | 5 | 25 | 881.5 | 13.6 | IMD43 |
|  | n77 | 3391 | 10 | 50 | 3391 | N/A | N/A |
| DC\_19A\_n78A | 19 | 836.5 | 5 | 25 | 881.5 | 13.6 | IMD4 |
|  | n78 | 3391 | 10 | 50 | 3391 | N/A | N/A |
| DC\_20A\_n3A | 20 | 840 | 5 | 25 | 799 | N/A | N/A |
|  | n3 | 1775 | 5 | 25 | 1870 | 4 | IMD4 |
|  | 20 | 847 | 5 | 25 | 806 | 9 | IMD4 |
|  | n3 | 1735 | 5 | 25 | 1830 | N/A | N/A |
| DC\_20A\_n38A | 20 | N/A | N/A | N/A | N/A | N/A | IMD5 |
|  | n38 | N/A | N/A | N/A | N/A | N/A | N/A |
| DC\_20\_n7 | 20 | 851 | 5 | 25 | 810 | 12 | IMD33 |
|  | n7 | 2512 | 10 | 50 | 2632 | N/A | N/A |
| DC\_20A\_n8A | 20 | 849.5 | 5 | 25 | 808.5 | 25 | IMD3 |
|  | n8 | 892.5 | 5 | 25 | 937.5 | 25 | IMD3 |
| DC\_20\_n41 | 20 | 851 | 5 | 25 | 810 | 12.1 | IMD3 |
|  | n41 | 2512 | 10 | 50 | 2512 | N/A | N/A |
| DC\_20\_n41 | 20 | 841 | 5 | 25 | 800 | 8.1 | IMD5 |
|  | n41 | 2564 | 10 | 50 | 2564 | N/A | N/A |
| DC\_20A\_n77A,DC\_20A\_n78ADC\_20A\_n78C7,DC\_20A\_n78(2A),DC\_20A\_SUL\_n78A-n82A | 20 | 850 | 5 | 25 | 809 | 11 | IMD4 |
|  | n77, n78 | 3359 | 10 | 50 | 3359 | N/A | N/A |
| DC\_20A\_n77A | 20 | 840 | 5 | 25 | 799 | 6.5 | IMD5 |
|  | n77 | 4159 | 10 | 50 | 4159 | N/A | N/A |
| DC\_21A\_n28A7 | 21 | 1450.4 | 5 | 25 | 1498.4 | 2.5 | IMD5 |
| n28 | 735.5 | 5 | 25 | 790.5 | N/A | N/A |
| DC\_21A\_n79A | 21 | 1457.5 | 5 | 25 | 1505.5 | 18.4 | IMD3 |
|  | n79 | 4420.5 | 40 | 216 | 4420.5 | N/A | N/A |
| DC\_25A\_n77ADC\_25A-25A\_n77A | 25 | 1855 | 5 | 25 | 1935 | 26 | IMD2 |
|  | n77 | 3790 | 10 | 50 | 3790 | N/A | N/A |
|  | 25 | 1900 | 5 | 25 | 1980 | 8 | IMD4 |
|  | n77 | 3720 | 10 | 50 | 3720 | N/A | N/A |
|  | 25 | 1885 | 5 | 25 | 1965 | 5 | IMD5 |
|  | n77 | 3810 | 10 | 50 | 3810 | N/A | N/A |
| DC\_25A\_n78ADC\_25A-25A\_n78A | 25 | 1855 | 5 | 25 | 1935 | 26 | IMD2 |
| n78 | 3790 | 10 | 50 | 3790 | N/A | N/A |
| 25 | 1885 | 5 | 25 | 1965 | 8 | IMD4 |
| n78 | 3690 | 10 | 50 | 3690 | N/A | N/A |
| 25 | 1875 | 5 | 25 | 1955 | 5 | IMD5 |
| n78 | 3790 | 10 | 50 | 3790 | N/A | N/A |
| DC\_26A\_n41A | 26 | 839 | 5 | 25 | 884 | 15.6 | IMD33 |
|  | n41 | 2562 | 10 | 50 | 2562 | N/A | N/A |
| DC\_28\_n50 | 28 | 730 | 10 | 50 | 775 | 15.3 | IMD 2 |
|  | n50 | 1500 | 10 | 50 | 1500 | N/A | N/A |
|  | 28 | 740 | 10 | 50 | 785 | 6 | IMD 4 |
|  | n50 | 1500 | 10 | 50 | 1500 | N/A | N/A |
|  | 28 | 740 | 10 | 50 | 785 | 0.5 | IMD 5 |
|  | n50 | 1500 | 10 | 50 | 1500 | N/A | N/A |
| DC\_28A\_n51A | 28 | 742.3 | 5 | 25 | 797.3 | 5 | IMD4 |
|  | n51 | 1429.5 | 5 | 25 | 1429.5 | N/A | N/A |
| DC\_26A\_n77A,DC\_26A\_n78A,DC\_26A\_n78(2A) | 26 | 836.5 | 5 | 25 | 881.5 | 11.1 | IMD4 |
|  | n77, n78 | 3391 | 10 | 50 | 3391 | N/A | N/A |
| DC\_28A\_n77A,DC\_28A\_n78A,DC\_28A\_n78(2A),DC\_28A\_SUL\_n78A-n83A | 28 | 705.5 | 5 | 25 | 760.5 | 5.5 | IMD5 |
|  | n77, n78 | 3582.5 | 10 | 50 | 3582.5 | N/A | N/A |
| DC\_30A\_n77ADC\_30A\_n77(2A) | 30 | 2310 | 5 | 25 | 2355 | 8.0 | IMD4 |
|  | n77 | 3487.5 | 10 | 50 | 3487.5 | N/A | N/A |
| DC\_38A\_n3A | n3 | 1713 | 5 | 25 | 1808 | 8.2 | IMD4 |
|  | 38 | 2617 | 5 | 25 | 2617 | N/A | N/A |
| DC\_38A\_n8A | 38 | 2617.5 | 5 | 25 | 2617.5 | N/A | N/A |
|  | n8 | 887.5 | 5 | 25 | 932.5 | 8.1 | IMD5 |
| DC\_40A\_n7A | n7 | 2510 | 5 | 25 | 2630 | 23 | IMD3 |
|  | 40 | 2390 | 5 | 25 | 2390 | N/A | N/A |
| DC\_41A\_n3ADC\_41C\_n3A | n3 | 1740 | 5 | 25 | 1835 | 8.2 | IMD4 |
|  | 41 | 2657.5 | 5 | 25 | 2657.5 | N/A | N/A |
| DC\_42\_n3 | 42 | 3575 | 10 | 50 | 3575 | N/A | N/A |
|  | n3 | 1740 | 5 | 25 | 1835 | 26 | 2nd3 |
|  |  |  |  |  |  |  |  |
|  | 42 | 3435 | 10 | 50 | 3435 | N/A | N/A |
|  | n3 | 1765 | 5 | 25 | 1860 | 8.0 | IMD4 |
|  |  |  |  |  |  |  |  |
| DC\_42\_n28 | 42 | 3582.5 | 10 | 50 | 3582.5 | N/A | N/A |
|  | n28 | 705.5 | 5 | 25 | 760.5 | 5.5 | IMD5 |
| DC\_48A\_n2ADC\_48C\_n2ADC\_48D\_n2ADC\_48E\_n2A | 48 | 3625 | 20 | 100 | 3625 | N/A | N/A |
|  | n2 | 1852.5 | 5 | 25 | 1932.5 | 12 | IMD4 |
| DC\_48A\_n12A | 48 | 3557.5 | 10 | 50 | 3557.5 | N/A | N/A |
|  | n12 | 705.5 | 5 | 25 | 735.5 | 5.5 | IMD5 |
| DC\_48A\_n25ADC\_48C\_n25ADC\_48D\_n25A | 48 | 3625 | 20 | 100 | 3625 | N/A | N/A |
|  | n25 | 1852.5 | 5 | 25 | 1932.5 | 12 | IMD4 |
| DC\_48A\_n66ADC\_48C\_n66ADC\_48D\_n66A | 48 | 3630 | 20 | 100 | 3630 | N/A | N/A |
|  | n66 | 1715 | 5 | 25 | 2115 | 4 | IMD5 |
| DC\_66A\_n2A,DC\_66A\_n2(2A)DC\_66A-66A\_n2A | 66 | 1775 | 5 | 25 | 2175 | N/A | N/A |
|  | n2 | 1855 | 5 | 25 | 1935 | 20 | IMD3 |
|  | 66 | 1750 | 5 | 25 | 2150 | 4 | IMD5 |
|  | n2 | 1883.3 | 5 | 25 | 1963.3 | N/A | N/A |
| DC\_66A\_n5A | n5 | 838 | 5 | 25 | 883 | 30 | IMD23 |
|  | 66 | 1721 | 5 | 25 | 2121 | N/A | N/A |
| DC\_66A\_n7ADC\_66A-66A\_n7ADC\_66A\_n7(2A)DC\_66A-66A\_n7(2A) | 66 | 1730 | 5 | 25 | 2130 | N/A | N/A |
|  | n7 | 2535 | 10 | 50 | 2655 | 15 | IMD4 |
| DC\_66A\_n25A | 66 | 1775 | 5 | 25 | 2175 | N/A | N/A |
|  | n25 | 1855 | 5 | 25 | 1935 | 20 | IMD3 |
|  | 66 | 1712.5 | 5 | 25 | 2112.5 | 23 | IMD3 |
|  | n25 | 1912.5 | 5 | 25 | 1992.5 | N/A | N/A |
|  | 66 | 1750 | 5 | 25 | 2150 | 4 | IMD5 |
|  | n25 | 1883.3 | 5 | 25 | 1963.3 | N/A | N/A |
| DC\_66A\_n46A | 66 | 1735 | 5 | 25 | 2135 | 12.0 | IMD3 |
|  | n46 | 5605 | 20 | 100 | 5605 | N/A | N/A |
| DC\_66A\_n48A | 66 | 1715 | 5 | 25 | 2115 | 4 | IMD5 |
|  | n48 | 3630 | 20 | 100 | 3630 | N/A | N/A |
| DC\_66A\_n71A | 66 | 1750 | 5 | 25 | 2150 | 5 | IMD4 |
|  | n71 | 675 | 5 | 25 | 629 | N/A | N/A |
| DC\_66A\_n77ADC\_66A\_n77(2A)DC\_66A-66A\_n77ADC\_66A-66A\_n77(2A)DC\_66A-66A-66A\_n77ADC\_66A-66A-66A\_n77(2A) | 66 | 1775 | 5 | 25 | 2175 | 31.0 | IMD2 |
|  | n77 | 3950 | 10 | 50 | 3950 | N/A | N/A |
|  | 66 | 1760 | 5 | 25 | 2160 | 5.0 | IMD5 |
|  | n77 | 3720 | 10 | 50 | 3720 | N/A | N/A |
| DC\_66A\_n78A | 66 | 1730 | 5 | 25 | 2150 | 5.0 | IMD5 |
|  | n78 | 3660 | 10 | 50 | 3660 | N/A | N/A |
| DC\_71A\_n38A | 71 | 665 | 5 | 25 | 619 | 11 | IMD4 |
|  | n38 | 2614 | 10 | 50 | 2614 | N/A | N/A |
| DC\_71A\_n41A | 71 | 666 | 5 | 25 | 620 | 11 | IMD4 |
| n41 | 2618 | 5 | 25 | 2618 | N/A | N/A |
| DC\_71A\_n66A | 71 | 675 | 5 | 25 | 629 | N/A | N/A |
|  | n66 | 1750 | 5 | 25 | 2150 | 5 | IMD4 |
| DC\_71A\_n77A8DC\_71A\_n77(2A)8 | 71 | 671 | 5 | 25 | 625 | 5.5 | IMD5 |
|  | n77 | 3309 | 10 | 50 | 3309 | N/A | N/A |
| DC\_71A\_n78A | 71 | 681.5 | 5 | 25 | 635.5 | 5.5 | IMD5 |
| DC\_71A\_n78(2A) | n78 | 3361.5 | 10 | 50 | 3361.5 | N/A | N/A |
| NOTE 1: E-UTRA carrier shall be set to min(+20 dBm, PCMAX\_L\_E-UTRA,c) and NR carrier shall be set to min(+20 dBm, PCMAX\_L,f,c,NR) as defined in clause 6.2B.4.1.3.NOTE 2: RBstart = 0NOTE 3: This band is subject to IMD5 also which MSD is not specified.NOTE 4: VoidNOTE 5: VoidNOTE 6: For NR band, UL/DL BW and UL LCRB can be adjusted according to the supported BW and lowest SCS supported by the UE.NOTE 7: The frequency range in band n28 is restricted for this band combination to 728 – 738 MHz for the UL and 783 – 793 MHz for the DL. This band is subject to IMD2, IMD4 and IMD5 fall in n28 also which MSD is not specified. In addition, this band is subject to IMD4 fall in B21 also which MSD is not specified.NOTE 8: For a UE which supports this band combination only when the Band n77 frequency range restriction defined in NOTE 12 of Table 5.2-1 from TS 38.101-1 applies, the MSD test point(s) cannot be verified for the band combination and the test point(s) can be skipped.NOTE 9: This test configuration ensures the B3 self-interference would not interrupt the testing.NOTE 10: For a UE which supports this band combination only when the Band n77 frequency range restriction of 3400 - 4100 MHz in Japan applies, the MSD test point(s) cannot be verified for the band combination and the test point(s) can be skipped.NOTE 11: For a UE which supports this band combination only when the Band n78 frequency range restriction of 3400 - 3800 MHz in Japan applies, the MSD test point(s) cannot be verified for the band combination and the test point(s) can be skipped. |

---End of changes---