**3GPP TSG-RAN4 Meeting #110bis *R4-2405390***

**Changsha, China, April 15 – 19, 2024**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **38.786** | **CR** | draft | **rev** |  | **Current version:** | **18.1.0** |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | Big draft CR to TR 38.786 UE NR sidelink evolution | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | OPPO | | | | | | | | | |
| ***Source to TSG:*** | R4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NR\_SL\_enh2-Core | | | | |  | ***Date:*** | | | 2024-04-18 |
|  |  | | | |  | |  | | |  |
| ***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 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-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19) Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | This big draft CR is to capture the endorsed draft CRs in the RAN4#110bis meeting. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Below draft CRs are agreed.  R4-2404811 draft CR to TR 38.786 on SL-U A-MPR for remaining NS values LG Electronics Finland  R4-2405382 draft CR to TR 38.786 for Rel-18 A-MPR simulation results, OPPO | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The endorsed draft CRs are not captured correctly | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.1.3.1.1.3, 6.1.3.2, 6.1.3.6, 6.1.3.8, 6.1.3.11~6.1.3.17 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

< START OF CHANGE #1 >

<<<<<<<<<<< Start of changes in section 6 >>>>>>>>>>

### 6.1.3 UE additional maximum output power reduction for NR SL-U

Based on the NR-U agreement for the additional spectrum emission mask in clause 6.5F.2.3 in TS38.101-1, RAN4 do not consider the additional spectrum emission mask.

For the additional spurious emission requirements for SL-U, RAN4 will consider the NR-U additional spurious emission requirements in clause 6.5F.3.3 in TS38.101-1.

To derive A-MPR requirements for SL-U operation in single CC, RAN4 will assume the basic simulation parameters and assumptions in section 6.1.2 and the additional spurious emission requirements in clause 6.5F.3.3 in TS38.101-1 will be considered.

6.1.3.1.1.3 OPPO’s simulation results (R4-2405384)

For NS\_28, the PSD requirement is 10dBm/MHz and the ASE is captured as below:

Table 6.1.3.1.1.3-1 ASE for NS\_28

|  |  |  |
| --- | --- | --- |
| **Frequency band**  **(MHz)** | **Channel bandwidth /**  **Spectrum emission limit**  **(dBm)** | **Measurement bandwidth** |
| **20 MHz** |
| 47 ≤ f ≤ 74 | -54 | 100 kHz |
| 87.5 ≤ f ≤ 118 | -54 | 100 kHz |
| 174 ≤ f ≤ 230 | -54 | 100 kHz |
| 470 ≤ f ≤ 862 | -54 | 100 kHz |
| 1000 ≤ f ≤ 5150 | -30 | 1 MHz |
| 5350 ≤ f ≤ 5470 | -30 | 1 MHz |
| 5725 ≤ f ≤ 26000 | -30 | 1 MHz |

The band edge of -30dBm/MHz ASE makes the channel next to channel edge should have larger A-MPR while for inner channels that are far from edge can enjoy a little bit lower A-MPR considering also the PSD is 10dBm/MHz which is quite large. The simulation results for PSSCH and PSCCH is shown below. Also the simulation cases are listed.

The simulation cases are captured in sub-clause 6.1.2.1.1.2.

For the A-MPR simulation result, they are captured below for edge channel and non-edge channel.

Table 6.1.3.1.1.3-2 A-MPR for single CC NS\_28 edge channel

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| case | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| QPSK | 5.3 | 5.4 | 4.4 | 4.4 | 3.9 | 3.5 | 3.2 | 5.5 | 5.8 | 4.4 | 4.4 | 3.9 | 3.5 | 3.2 |
| 16QAM | 5.3 | 5.4 | 4.4 | 4.4 | 3.9 | 3.7 | 3.6 | 5.5 | 5.8 | 4.5 | 4.4 | 3.9 | 3.5 | 3.2 |
| 64QAM | 5.3 | 5.5 | 5.1 | 5.0 | 5.2 | 5.1 | 5.1 | 5.5 | 5.8 | 4.5 | 4.5 | 4.1 | 3.9 | 4.0 |
| 256QAM | 8.8 | 8.6 | 8.6 | 8.8 | 8.6 | 8.5 | 8.7 | 7.9 | 7.5 | 7.6 | 7.9 | 6.6 | 6.5 | 6.8 |

Table 6.1.3.1.1.3-3 A-MPR for single CC NS\_28 non-edge channel

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| case | 1 | 2 | 3 | 4 | 5 | 6 |
| QPSK | 3.2 | 3.1 | 3.2 | 3.2 | 3.2 | 3.2 |
| 16QAM | 3.7 | 3.6 | 3.7 | 3.7 | 3.7 | 3.7 |
| 64QAM | 5.0 | 5.2 | 5.1 | 5.0 | 5.2 | 5.1 |
| 256QAM | 8.8 | 8.6 | 8.6 | 8.8 | 8.6 | 8.5 |

The wide-band operation simulation result is further provided below for edge channel:

Table 6.1.3.1.1.3-4 A-MPR for Wideband operation NS\_28 edge channel

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Bitmap | 10 | 100 | 110 | 010 | 1100 | 1000 | 1110 | 0100 | 0110 | 10000 | 11000 | 11100 | 11110 | 01000 | 01100 | 01110 | 00100 |
| Contiguous | QPSK | 4.4 | 3.9 | 3.9 | 2.8 | 3.5 | 3.5 | 3.5 | 2.8 | 2.8 | 3.2 | 3.2 | 3.2 | 3.2 | 2.8 | 2.8 | 2.8 | 2.8 |
| 16QAM | 4.4 | 3.9 | 3.9 | 3.5 | 3.6 | 3.5 | 3.6 | 3.5 | 3.7 | 3.5 | 3.6 | 3.5 | 3.6 | 3.5 | 3.6 | 3.7 | 3.6 |
| 64QAM | 5.1 | 5.1 | 4.8 | 5.2 | 4.7 | 5.1 | 4.9 | 5.1 | 4.9 | 5.1 | 4.7 | 4.8 | 5.0 | 5.1 | 4.8 | 5.0 | 5.2 |
| 256QAM | 7.4 | 7.5 | 7.7 | 8.5 | 7.3 | 7.4 | 8.0 | 7.5 | 8.5 | 7.4 | 7.3 | 7.6 | 8.0 | 7.4 | 7.7 | 8.5 | 8.5 |
| Interlace | QPSK | 4.7 | 4.1 | 3.9 | 2.8 | 3.6 | 3.7 | 3.5 | 2.6 | 2.6 | 3.4 | 3.3 | 3.3 | 3.2 | 2.6 | 2.7 | 2.8 | 2.6 |
| 16QAM | 4.7 | 4.1 | 4.0 | 2.9 | 3.6 | 3.7 | 3.5 | 2.9 | 3.0 | 3.4 | 3.3 | 3.3 | 3.2 | 2.9 | 3.0 | 3.0 | 2.8 |
| 64QAM | 4.6 | 4.1 | 4.2 | 4.1 | 4.2 | 4.1 | 4.1 | 4.1 | 4.2 | 4.1 | 4.2 | 4.1 | 4.0 | 4.1 | 4.2 | 4.1 | 4.1 |
| 256QAM | 6.5 | 6.6 | 6.8 | 6.6 | 6.8 | 6.6 | 6.7 | 6.6 | 6.8 | 6.6 | 6.8 | 6.7 | 6.6 | 6.6 | 6.8 | 6.7 | 6.5 |

Table 6.1.3.1.1.3-5 A-MPR for Wideband operation NS\_28 non-edge channel

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Bitmap | 10 | 100 | 110 | 010 | 1100 | 1000 | 1110 | 0100 | 0110 |
| Contiguous | QPSK | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| 16QAM | 3.5 | 3.5 | 3.6 | 3.5 | 3.6 | 3.5 | 3.6 | 3.5 | 3.7 |
| 64QAM | 5.1 | 5.1 | 4.8 | 5.2 | 4.7 | 5.1 | 4.9 | 5.1 | 4.9 |
| 256QAM | 7.4 | 7.5 | 7.7 | 8.5 | 7.3 | 7.4 | 8.0 | 7.5 | 8.5 |
| Interlace | QPSK | 2.6 | 2.6 | 2.7 | 2.8 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| 16QAM | 2.9 | 2.9 | 3.0 | 2.9 | 3.0 | 2.9 | 3.0 | 2.9 | 3.0 |
| 64QAM | 4.1 | 4.1 | 4.2 | 4.1 | 4.2 | 4.1 | 4.1 | 4.1 | 4.2 |
| 256QAM | 6.5 | 6.6 | 6.8 | 6.6 | 6.8 | 6.6 | 6.7 | 6.6 | 6.8 |

Based on the simulations shown above, it can be seen for inner channels, the MPR for QPSK and 16QAM is around 1 to 1.5dB lower compared to the edge channels. For the 64QAM and 256QAM, the dominate factor is mostly still the EVM and hence the difference for inner channel and edge channels are not that different.

<<<<<<<<<<< New changes >>>>>>>>>>

#### 6.1.3.2 A-MPR for SL-U with NS\_29

##### 6.1.3.2.1 A-MPR for simultaneous PSSCH/PSCCH transmission

6.1.3.2.1.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.2.1.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.2.1.1-1: NS\_29-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| '20MHz' | Scenario # | #1 | #7 | #2 | #8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.16 | 2.16 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.17 | 2.15 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.48 | 3.17 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.08 | 5.47 | 5.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '40MHz' | Scenario # | #3 | #9 | #13 | #30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 2.81 | 2.82 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.49 | 2.81 | 2.82 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.48 | 2.81 | 2.82 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.08 | 5.47 | 5.07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '60MHz' | Scenario # | #4 | #10 | #14 | #31 | #15 | #32 | #16 | #33 |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 3.53 | 6.32 | 2.47 | 3.17 | 3.52 | 6.30 |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.49 | 3.52 | 6.31 | 2.47 | 3.17 | 3.52 | 6.30 |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 3.17 | 2.48 | 3.53 | 6.31 | 3.17 | 3.17 | 3.52 | 6.30 |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 6.32 | 5.47 | 5.07 | 5.88 | 6.30 |  |  |  |  |  |  |  |  |  |  |
| '80MHz' | Scenario # | #5 | #11 | #17 | #34 | #18 | #35 | #19 | #36 | #20 | #37 | #21 | #38 |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 3.52 | 6.32 | 2.47 | 3.17 | 2.48 | 1.23 | 3.52 | 6.29 | 2.13 | 3.15 |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.48 | 3.53 | 6.32 | 2.47 | 3.17 | 2.48 | 1.22 | 3.52 | 6.30 | 2.13 | 3.16 |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.48 | 3.53 | 6.31 | 3.16 | 3.17 | 3.16 | 2.48 | 3.52 | 6.31 | 3.16 | 3.15 |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 6.31 | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 6.30 | 5.47 | 5.06 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 6.1.3.2.1.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.2.1.1-2: NS\_29-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | |
| Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | 3.53 | 6.32 | 2.48 | 3.17 | 2.48 | 2.48 | 2.48 | 2.48 |
| 16 QAM | 3.53 | 6.32 | 2.48 | 3.17 | 2.48 | 2.49 | 2.48 | 2.48 |
| *64 QAM* | 3.53 | 6.31 | 3.17 | 3.17 | 3.17 | 2.48 | 2.82 | 2.48 |
| 256 QAM | 5.88 | 6.32 | 5.47 | 5.08 | 5.47 | 5.07 | 5.47 | 5.07 |

Considering implementation margin, Table 6.1.3.2.1.1-3 can be proposed for SL-U NS\_29 PSSCH/PSCCH A-MPR.

Table 6.1.3.2.1.1-3. NS\_29 PSSCH/PSCCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | |
| Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | ≤ 4.5 | ≤ 7.5 | ≤ 3.5 | ≤ 4.5 | ≤ 3.5 | ≤ 4.0 | ≤ 3.5 | ≤ 4.0 |
| 16 QAM | ≤ 5.0 | ≤ 7.5 | ≤ 4.0 | ≤ 4.5 | ≤ 4.0 | ≤ 4.0 | ≤ 4.0 | ≤ 4.0 |
| *64 QAM* | ≤ 5.5 | ≤ 7.5 | ≤ 5.5 | ≤ 5.5 | ≤ 5.5 | ≤ 5.0 | ≤ 5.5 | ≤ 5.0 |
| 256 QAM | ≤ 7.5 | ≤ 7.5 | ≤ 7.5 | ≤ 7.5 | ≤ 7.5 | ≤ 7.5 | ≤ 7.5 | ≤ 7.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously allocated in the channel.  NOTE 2: Full allocation A-MPR applies when all RB’s in a 20 MHz channel or all RB’s in all sub-bands for wideband operation are fully allocated and all sub-bands are transmitted. Partial allocation A-MPR applies when one or more RB’s in one or more sub-bands are not allocated but when all sub-bands within the channel are transmitted. When not all sub-bands within the channel are transmitted, the A-MPR associated with the channel bandwidth according to the bandwidth of the contiguously transmitted sub-bands and according to the allocation type applies.  NOTE 3: In current release larger CBW than 80MHz are not applicable for this network signalling. | | | | | | | | | |

##### 6.1.3.2.2 A-MPR for S-SSB transmission

6.1.3.2.2.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.2.2.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.2.2.1-1: NS\_29-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 | #3 | #4 | #5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5239.98) | 8.90 | 7.13 | 5.64 | 6.39 | 5.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #6 | #7 | #8 | #9 | #10 | #11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5230.02) | 10.90 | 8.84 | 6.45 | 8.74 | 7.31 | 7.11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #12 | #13 | #14 | #15 | #16 | #17 | #18 | #19 | #20 | #21 |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (5220) | 9.20 | 7.14 | 7.29 | 6.10 | 6.35 | 7.21 | 6.43 | 7.20 | 8.22 | 7.30 |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 | #38 | #39 |  |  |
| '80MHz'  (5210) | 9.81 | 7.53 | 7.31 | 6.14 | 7.08 | 6.21 | 6.34 | 7.19 | 7.50 | 6.02 | 6.26 | 7.21 | 8.39 | 7.37 | 8.34 | 7.08 | 7.58 | 6.81 |  |  |

Table 6.1.3.2.2.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.2.2.1-2: NS\_29-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation / (dB) | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 |
| Contiguous/ Non-contiguous sub-band RB sets | 8.90 | 5.64 | 10.90 | 7.31 | 9.20 | 7.30 | 9.81 | 7.53 |

Considering implementation margin, Table 6.1.3.2.2.1-3 shows proposal for SL-U NS\_29 S-SSB A-MPR.

Table 6.1.3.2.2.1-3. NS\_29 S-SSB A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 |
| Contiguous/Non-contiguous | ≤ 11.5 | ≤ 8.0 | ≤12.0 | ≤10.0 | ≤12.0 | ≤10.0 | ≤12.5 | ≤10.0 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel. | | | | | | | | |

##### 6.1.3.2.3 A-MPR for PSFCH transmission

6.1.3.2.3.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.2.3.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.2.3.1-1: NS\_29-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5239.98) | 8.27 | 7.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #3 | #4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5230.02) | 10.01 | 6.53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #5 | #6 | #7 | #8 | #9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (5220) | 11.13 | 8.65 | 7.30 | 7.00 | 9.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #10 | #11 | #12 | #13 | #14 | #15 | #16 | #17 | #18 |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (5210) | 12.23 | 10.01 | 8.43 | 7.43 | 9.96 | 7.02 | 10.54 | 9.26 | 9.66 |  |  |  |  |  |  |  |  |  |  |

Table 6.1.3.2.3.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.2.3.1-2: NS\_29-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | | |
| 20MHz  (Full/Partial) | 40MHz  (Full/Partial) | 60MHz  (Full/Partial) | 80MHz  (Full/Partial) |
| Contiguous/Non-contiguous sub-band RB sets | 8.27 | 10.01 | 11.13 | 12.23 |

Considering implementation margin, Table 6.1.3.2.3.1-3 can be proposed for SL-U NS\_29 PSFCH A-MPR.

Table 6.1.3.2.3.1-3. NS\_29 PSFCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | | |
| 20MHz  (Full/Partial) | 40MHz  (Full/Partial) | 60MHz  (Full/Partial) | 80MHz  (Full/Partial) |
| Contiguous/Non-contiguous sub-band RB sets | ≤ 11.0 | ≤12.5 | ≤13.5 | ≤15.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel.  NOTE 2: Larger CBW than 80MHz are not applicable for this network signalling. | | | | |

<<<<<<<<<<< No changes >>>>>>>>>>

#### 6.1.3.6 A-MPR for SL-U with NS\_54

##### 6.1.3.6.1 A-MPR for simultaneous PSSCH/PSCCH transmission

6.1.3.6.1.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.6.1.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.6.1.1-1: NS\_54-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| '20MHz'  (5955) | Scenario # | #1 | #7 | #2 | #8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.16 | 2.15 | 2.49 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.16 | 2.15 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.49 | 3.18 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.08 | 5.48 | 5.09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '20MHz'  (5975) | Scenario # | #1 | #7 | #2 | #8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.16 | 2.16 | 2.49 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.16 | 2.16 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.16 | 3.17 | 2.49 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.08 | 5.89 | 5.49 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '40MHz'  (5965) | Scenario # | #3 | #9 | #13 | #30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 3.18 | 2.81 | 0.15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 3.17 | 2.81 | 0.39 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 3.53 | 2.81 | 2.14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '40MHz'  (5985) | Scenario # | #3 | #9 | #13 | #30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 2.81 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.48 | 2.81 | 0.40 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.48 | 2.81 | 2.15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '60MHz'  (5975) | Scenario # | #4 | #10 | #14 | #31 | #15 | #32 | #16 | #33 |
| 'QPSK' | 2.82 | 3.53 | 2.14 | 0.14 | 2.47 | 3.17 | 2.13 | 0.10 |
| '16QAM' | 2.82 | 3.53 | 2.14 | 0.40 | 2.47 | 3.17 | 2.13 | 0.35 |
| '64QAM' | 3.17 | 3.54 | 3.17 | 2.16 | 3.17 | 3.17 | 3.15 | 2.12 |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.06 |
| '60MHz'  (5995) | Scenario # | #4 | #10 | #14 | #31 | #15 | #32 | #16 | #33 |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 2.14 | 0.14 | 2.47 | 0.66 | 2.13 | 0.36 |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.48 | 2.14 | 0.39 | 2.47 | 0.66 | 2.13 | 0.10 |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 3.17 | 2.48 | 3.17 | 2.15 | 3.17 | 2.48 | 3.16 | 2.13 |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.07 | 5.88 | 5.05 |  |  |  |  |  |  |  |  |  |  |
| '60MHz'  (6055) | Scenario # | #4 | #10 | #14 | #31 | #15 | #32 | #16 | #33 |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 2.14 | 0.39 | 2.47 | 0.66 | 2.13 | 0.10 |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.48 | 2.14 | 0.15 | 2.47 | 0.66 | 2.13 | 0.36 |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 3.17 | 2.49 | 3.16 | 2.15 | 3.16 | 2.48 | 3.16 | 2.12 |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.08 | 5.47 | 5.06 | 5.88 | 5.05 |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (5985) | Scenario # | #5 | #11 | #17 | #34 | #18 | #35 | #19 | #36 | #20 | #37 | #21 | #38 |  |  |  |  |  |  |
| 'QPSK' | 2.82 | 3.53 | 2.14 | 0.14 | 2.47 | 3.16 | 2.82 | 3.53 | 2.46 | 0.10 | 2.13 | 0.37 |  |  |  |  |  |  |
| '16QAM' | 2.82 | 3.53 | 2.15 | 0.15 | 2.47 | 3.17 | 2.81 | 3.53 | 2.46 | 0.36 | 2.13 | 0.64 |  |  |  |  |  |  |
| '64QAM' | 2.82 | 3.53 | 3.16 | 2.15 | 2.81 | 3.17 | 3.17 | 3.53 | 3.16 | 2.12 | 2.80 | 2.46 |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.07 | 5.46 | 5.06 | 5.47 | 5.06 |  |  |  |  |  |  |
| '80MHz'  (6065)' | Scenario # | #5 | #11 | #17 | #34 | #18 | #35 | #19 | #36 | #20 | #37 | #21 | #38 |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 2.14 | 0.14 | 2.47 | 0.39 | 2.47 | 0.40 | 2.46 | 0.11 | 2.13 | 0.37 |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.48 | 2.14 | 0.40 | 2.47 | 0.39 | 2.47 | 0.66 | 2.46 | 0.36 | 2.13 | 0.63 |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.48 | 3.17 | 2.15 | 2.81 | 2.48 | 3.17 | 2.47 | 3.16 | 2.13 | 2.80 | 2.46 |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.05 | 5.47 | 5.06 |  |  |  |  |  |  |

Table 6.1.3.6.1.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.6.1.1-2 : NS\_54-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | RB Allocation /Centre frequency of CBW (MHz) | | | | | | | |
|  |  | 40MHz : 5965  60MHz : 5975  80MHz : 5985 | | | | 20MHz : 5955/5975  40MHz : 5985  60MHz : 5995/6055  80MHz : 6065 | | | |
|  |  | Outer RB set configuration | | Inner RB set configuration | | Outer RB set configuration | | Inner RB set configuration | |
|  |  | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | 2.82 | 3.53 | 2.46 | 0.37 | 2.81 | 2.49 | 2.46 | 0.37 |
|  | 16 QAM | 2.82 | 3.53 | 2.46 | 0.64 | 2.81 | 2.50 | 2.46 | 0.63 |
|  | 64 QAM | 3.18 | 3.54 | 3.16 | 2.46 | 3.18 | 2.50 | 3.16 | 2.46 |
|  | 256 QAM | 5.48 | 5.09 | 5.47 | 5.06 | 5.89 | 5.49 | 5.88 | 5.06 |

Considering implementation margin and the centre frequency, the right side A-MPR in Table 6.1.3.6.1.1-2, such as, 5955/5975MHz for CBW 20MHz, 5985MHz for CBW 40MHz, 5995/6055MHz for CBW 60MHz, and 6065MHz for CBW 80MHz, can be reused with SL-U PSSCH/PSCCH MPR requirement in Table 6.2E.2F-1 of TS 38.101-1.

As a result, considering implementation margin and the centre frequency, Table 6.1.3.6.1.1-3 can be proposed for SL-U NS\_54 PSSCH/PSCCH A-MPR.

Table 6.1.3.6.1.1-3. NS\_54 PSSCH/PSCCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | RB Allocation (Note 3) | | | | RB Allocation (Note 4) |
|  |  | Outer RB set configuration5 | | Inner RB set configuration5 | |
|  |  | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full/Partial |
| CP-OFDM | QPSK | ≤ 4.5 | ≤ 6.0 | ≤ 4.5 | ≤ 2.0 | Table 6.2E.2F-1 |
|  | 16 QAM | ≤ 4.5 | ≤ 6.0 | ≤ 4.5 | ≤ 3.0 |
|  | 64 QAM | ≤ 5.5 | ≤ 6.0 | ≤ 5.5 | ≤ 5.5 |
|  | 256 QAM | ≤ 7.5 | ≤ 7.5 | ≤ 7.5 | ≤ 7.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously allocated in the channel.  NOTE 2: Full allocation A-MPR applies when all RB’s in a 20 MHz channel or all RB’s in all sub-bands for wideband operation are fully allocated and all sub-bands are transmitted. Partial allocation A-MPR applies when one or more RB’s in one or more sub-bands are not allocated or when not all transmitted sub-bands for wideband operation are transmitted.  NOTE 3: Applicable for 40 MHz channels centered at the nearest NR-ARFCN corresponding to 5965 MHz, 60 MHz channels centered at the nearest NR-ARFCN corresponding to 5975 MHz, and 80 MHz channels centered at the nearest NR-ARFCN corresponding to 5985 MHz.  NOTE 4: Applicable for all valid channels other than those enumerated under NOTE 3.  NOTE 5: Contiguous outer sub-band configuration and contiguous inner sub-band configuration in Table 6.1.2.1.1.1-5 apply.  NOTE 6: In current release larger CBW than 80MHz are not applicable for this network signalling. | | | | | | |

##### 6.1.3.6.2 A-MPR for S-SSB transmission

6.1.3.6.2.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.6.2.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.6.2.1-1: NS\_54-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 | #3 | #4 | #5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5955) | 8.90 | 7.13 | 5.64 | 6.39 | 5.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #6 | #7 | #8 | #9 | #10 | #11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5965) | 10.90 | 8.84 | 6.45 | 8.74 | 7.31 | 5.52 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #12 | #13 | #14 | #15 | #16 | #17 | #18 | #19 | #20 | #21 |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (5975) | 9.20 | 7.14 | 7.29 | 6.10 | 6.35 | 5.52 | 6.43 | 4.95 | 8.22 | 7.30 |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 | #38 | #39 |  |  |
| '80MHz'  (5985) | 9.81 | 7.53 | 7.31 | 6.14 | 7.08 | 6.27 | 6.34 | 5.74 | 7.50 | 6.02 | 6.26 | 5.04 | 8.39 | 7.26 | 8.34 | 7.00 | 7.58 | 7.17 |  |  |

Table 6.1.3.6.2.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.6.2.1-2 : NS\_54-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | RB Allocation / (dB) | | | |
| Outer RB set configuration | | Inner RB set configuration | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 |
| Contiguous/ Non-contiguous sub-band RB sets | 10.90 | 7.53 | 7.50 | 6.02 |

Considering implementation margin, Table 6.1.3.6.2.1-3 shows proposal for SL-U NS\_54 S-SSB A-MPR.

Table 6.1.3.6.2.1-3 : NS\_54 S-SSB A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | RB Allocation2 | | | | RB Allocation3 |
| Outer RB set configuration | | Inner RB set configuration | | Outer/Inner RB sets |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 |
| Contiguous/Non-contiguous sub-band RB sets | ≤ 13.5 | ≤ 10.0 | ≤ 10.0 | ≤ 8.5 | Table 6.2E.2F-5(TS38.101-1) |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel.  NOTE 2: Applicable for 40 MHz channels centered at the nearest NR-ARFCN corresponding to 5965 MHz, 60 MHz channels centered at the nearest NR-ARFCN corresponding to 5975 MHz, and 80 MHz channels centered at the nearest NR-ARFCN corresponding to 5985 MHz.  NOTE 3: Applicable for all valid channels and bandwidths other than those enumerated under NOTE 2.  NOTE 5: In current release larger CBW than 80MHz are not applicable for this network signalling. | | | | | |

##### 6.1.3.6.3 A-MPR for PSFCH transmission

6.1.3.6.3.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.6.3.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.6.3.1-1: NS\_54-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’ | 8.27 | 7.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #3 | #4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’ | 10.01 | 6.53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #5 | #6 | #7 | #8 | #9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’ | 11.13 | 8.65 | 7.30 | 7.00 | 9.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #10 | #11 | #12 | #13 | #14 | #15 | #16 | #17 | #18 |  |  |  |  |  |  |  |  |  |  |
| '80MHz' | 12.23 | 10.01 | 8.43 | 7.43 | 9.96 | 7.02 | 10.54 | 9.26 | 9.66 |  |  |  |  |  |  |  |  |  |  |

Table 6.1.3.6.3.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.6.3.1-2: NS\_54-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |
| --- | --- | --- |
| RB set configuration | RB Allocation | |
| Outer RB set configuration | Inner RB set configuration |
| Contiguous/Non-contiguous sub-band RB sets | 12.23 | 9.96 |

Considering implementation margin, Table 6.1.3.6.3.1-3 can be proposed for SL-U NS\_54 PSFCH A-MPR.

Table 6.1.3.6.3.1-3 : NS\_54 PSFCH A-MPR for SL-U UE power class 5

|  |  |  |  |
| --- | --- | --- | --- |
|  | RB Allocation2 | | RB Allocation3 |
| Outer RB set configuration | Inner RB set configuration | Outer/Inner RB sets |
| Contiguous/Non-contiguous sub-band RB sets | ≤ 15.0 | ≤ 12.5 | Table 6.2E.2F-4(TS38.101-1) |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel.  NOTE 2: Applicable for 40 MHz channels centered at the nearest NR-ARFCN corresponding to 5965 MHz, 60 MHz channels centered at the nearest NR-ARFCN corresponding to 5975 MHz, and 80 MHz channels centered at the nearest NR-ARFCN corresponding to 5985 MHz.  NOTE 3: Applicable for all valid channels and bandwidths other than those enumerated under NOTE 2.  NOTE 5: In current release larger CBW than 80MHz are not applicable for this network signalling. | | | |

<<<<<<<<<<< No changes >>>>>>>>>>

#### 6.1.3.8 A-MPR for SL-U with NS\_59

##### 6.1.3.8.1 A-MPR for simultaneous PSSCH/PSCCH transmission

6.1.3.8.1.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.8.1.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.8.1.1-1: NS\_59-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| '20MHz'  (7115) | Scenario # | #1 | #7 | #2 | #8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 4.68 | 2.82 | 4.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 4.68 | 2.48 | 4.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 4.68 | 3.17 | 4.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.08 | 5.89 | 5.09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '40MHz'  (5965) | Scenario # | #3 | #9 | #13 | #30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 2.81 | 4.67 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.48 | 2.81 | 4.68 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.48 | 2.81 | 4.68 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '60MHz'  (7095) | Scenario # | #4 | #10 | #14 | #31 | #15 | #32 | #16 | #33 |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 2.82 | 5.07 | 2.47 | 1.83 | 2.80 | 5.05 |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.48 | 2.81 | 5.48 | 2.47 | 2.15 | 2.46 | 5.06 |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 3.17 | 2.48 | 3.17 | 5.48 | 3.17 | 2.47 | 3.16 | 5.06 |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.08 | 5.47 | 5.07 | 5.47 | 5.06 |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (5985) | Scenario # | #5 | #11 | #17 | #34 | #18 | #35 | #19 | #36 | #20 | #37 | #21 | #38 |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 2.47 | 5.08 | 2.47 | 1.83 | 2.47 | 0.40 | 2.46 | 5.06 | 2.13 | 2.13 |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.48 | 2.82 | 5.07 | 2.47 | 2.15 | 2.47 | 0.66 | 2.80 | 5.46 | 2.13 | 2.13 |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.48 | 3.17 | 5.48 | 3.16 | 2.47 | 3.16 | 2.47 | 3.16 | 5.47 | 3.15 | 2.46 |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.07 | 5.46 | 5.46 | 5.47 | 5.06 |  |  |  |  |  |  |
| '100MHz'  (7075) | Scenario # | #6 | #12 | #22 | #39 | #23 | #40 | #24 | #41 | #25 | #42 | #26 | #43 | #27 | #44 | #28 | #45 | #29 | #46 |
| 'QPSK' | 2.48 | 2.48 | 2.47 | 5.08 | 2.47 | 2.14 | 2.47 | 0.39 | 2.14 | 0.66 | 2.80 | 5.05 | 2.46 | 1.81 | 2.47 | 0.38 | 2.80 | 5.06 |
| '16QAM' | 2.48 | 2.48 | 2.82 | 5.48 | 2.47 | 2.15 | 2.47 | 0.66 | 2.14 | 0.66 | 2.80 | 5.06 | 2.46 | 1.81 | 2.47 | 0.64 | 2.80 | 5.05 |
| '64QAM' | 2.82 | 2.48 | 3.17 | 5.48 | 2.81 | 2.48 | 3.16 | 2.47 | 2.81 | 2.48 | 3.16 | 5.06 | 2.80 | 2.46 | 3.16 | 2.46 | 3.16 | 5.06 |
| '256QAM' | 5.47 | 5.06 | 5.47 | 5.48 | 5.47 | 5.07 | 5.47 | 5.06 | 5.47 | 5.06 | 5.47 | 5.47 | 5.47 | 5.05 | 5.47 | 5.47 | 5.88 | 5.06 |

Table 6.1.3.8.1.1-12shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.8.1.1-2 : NS\_59-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | RB Allocation /Centre frequency of CBW (MHz) | | | |
|  |  | Outer RB set configuration | | Inner RB set configuration | |
|  |  | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | 2.82 | 5.08 | 2.80 | 5.06 |
|  | 16 QAM | 2.82 | 5.48 | 2.80 | 5.46 |
|  | 64 QAM | 3.17 | 5.48 | 3.16 | 5.47 |
|  | 256 QAM | 5.89 | 5.48 | 5.88 | 5.47 |

Considering implementation margin, Table 6.1.3.8.1.1-3 can be proposed for SL-U NS\_59 PSSCH/PSCCH A-MPR.

Table 6.1.3.8.1.1-3 : NS\_59 PSSCH/PSCCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | RB Allocation | | | |
|  |  | Outer RB set configuration3 | | Inner RB set configuration3 | |
|  |  | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | ≤ 4.0 | ≤ 7.0 | ≤ 4.0 | ≤ 7.0 |
|  | 16 QAM | ≤ 4.0 | ≤ 7.5 | ≤ 4.0 | ≤ 7.5 |
|  | 64 QAM | ≤ 6.0 | ≤ 7.5 | ≤ 6.0 | ≤ 7.5 |
|  | 256 QAM | ≤ 7.5 | ≤ 7.5 | ≤ 7.5 | ≤ 7.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously allocated in the channel.  NOTE 2: Full allocation A-MPR applies when all RB’s in a 20 MHz channel or all RB’s in all sub-bands for wideband operation are fully allocated and all sub-bands are transmitted. Partial allocation A-MPR applies when one or more RB’s in one or more sub-bands are not allocated or when not all transmitted sub-bands for wideband operation are transmitted.  NOTE 3: Contiguous outer sub-band configuration and contiguous inner sub-band configuration in Table 6.2E.2F-3 apply. | | | | | |

##### 6.1.3.8.2 A-MPR for S-SSB transmission

6.1.3.8.2.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.8.2.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.8.2.1-1: NS\_59-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 | #3 | #4 | #5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (7115) | 8.90 | 7.13 | 9.15 | 6.39 | 6.18 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #6 | #7 | #8 | #9 | #10 | #11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5965) | 10.90 | 8.84 | 6.45 | 8.74 | 7.31 | 9.14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #12 | #13 | #14 | #15 | #16 | #17 | #18 | #19 | #20 | #21 |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (7095) | 9.20 | 7.14 | 7.29 | 6.10 | 6.35 | 6.20 | 6.43 | 6.19 | 8.22 | 7.30 |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 | #38 | #39 |  |  |
| '80MHz'  (5985) | 9.81 | 7.53 | 7.31 | 6.14 | 7.08 | 6.27 | 6.34 | 6.16 | 7.50 | 6.02 | 6.26 | 6.19 | 8.39 | 7.26 | 8.34 | 7.00 | 7.57 | 6.85 |  |  |
| Scenario # | #40 | #41 | #42 | #43 | #44 | #45 | #46 | #47 | #48 | #49 | #50 | #51 | #52 | #53 | #54 | #55 | #56 | #57 | #58 | #59 |
| '100MHz'  (7075) | 10.69 | 7.18 | 7.08 | 5.65 | 7.87 | 5.93 | 7.09 | 6.21 | 6.45 | 6.10 | 7.26 | 5.03 | 7.17 | 4.89 | 6.58 | 6.27 | 6.36 | 6.08 | 9.82 | 7.47 |
| Scenario # | #60 | #61 | #62 | #63 | #64 | #65 | #66 | #67 | #68 | #69 | #70 | #71 | #72 | #73 | #74 | #75 | #76 | #77 |  |  |
| '100MHz'  (7095) | 8.41 | 7.26 | 8.46 | 7.25 | 8.97 | 6.85 | 8.76 | 6.54 | 8.36 | 6.89 | 7.26 | 6.92 | 7.61 | 6.84 | 7.75 | 6.46 | 8.99 | 7.26 |  |  |

Table 6.1.3.8.2.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.8.2.1-2 : NS\_59-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | RB Allocation / (dB) | | | |
| Outer RB set configuration | | Inner RB set configuration | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 |
| Contiguous/ Non-contiguous sub-band RB sets | 10.90 | 9.15 | 7.75 | 6.46 |

Considering implementation margin, Table 6.1.3.8.2.1-3 shows proposal for SL-U NS\_59 S-SSB A-MPR.

Table 6.1.3.8.2.1-3 : NS\_59 S-SSB A-MPR for SL-U UE power class 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | RB Allocation | | | |
| Outer RB set configuration | | Inner RB set configuration | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 |
| Contiguous/Non-contiguous sub-band RB sets | ≤ 13.5 | ≤ 11.5 | ≤ 10.5 | ≤ 9.0 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel. | | | | |

##### 6.1.3.8.3 A-MPR for PSFCH transmission

6.1.3.8.3.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.8.3.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.8.3.1-1: NS\_59-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’ | 8.27 | 7.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #3 | #4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’ | 10.01 | 6.53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #5 | #6 | #7 | #8 | #9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’ | 11.13 | 8.65 | 7.30 | 7.00 | 9.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #10 | #11 | #12 | #13 | #14 | #15 | #16 | #17 | #18 |  |  |  |  |  |  |  |  |  |  |
| '80MHz' | 12.23 | 10.01 | 8.43 | 7.43 | 9.96 | 7.02 | 10.54 | 9.26 | 9.66 |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #19 | #20 | #21 | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 |
| '100MHz' | 13.28 | 9.85 | 9.67 | 8.69 | 7.42 | 9.44 | 7.96 | 7.09 | 6.49 | 12.15 | 10.18 | 10.14 | 10.33 | 10.60 | 9.33 | 8.97 | 9.67 | 8.81 | 11.33 |

Table 6.1.3.8.3.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.8.3.1-2: NS\_59-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |
| --- | --- | --- |
| RB set configuration | RB Allocation | |
| Outer RB set configuration | Inner RB set configuration |
| Contiguous/Non-contiguous sub-band RB sets | 13.28 | 9.96 |

Considering implementation margin, Table 6.1.3.8.3.1-3 can be proposed for SL-U NS\_59 PSFCH A-MPR.

Table 6.1.3.8.3.1-3 : NS\_59 PSFCH A-MPR for SL-U UE power class 5

|  |  |  |
| --- | --- | --- |
|  | RB Allocation | |
| Outer RB set configuration | Inner RB set configuration |
| Contiguous/Non-contiguous sub-band RB sets | ≤ 16.0 | ≤ 12.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel. | | |

<<<<<<<<<<< No changes >>>>>>>>>>

#### 6.1.3.11 A-MPR for SL-U with NS\_63

##### 6.1.3.11.1 A-MPR for simultaneous PSSCH/PSCCH transmission

6.1.3.11.1.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.11.1.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.11.1.1-1: NS\_63-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| '20MHz'  (5955) | Scenario # | #1 | #7 | #2 | #8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.17 | 2.16 | 2.49 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.16 | 2.16 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.49 | 3.17 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.08 | 5.89 | 5.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '20MHz'  (6415) | Scenario # | #1 | #7 | #2 | #8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.16 | 2.16 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.17 | 2.16 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.16 | 3.18 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.89 | 5.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '40MHz'  (5965) | Scenario # | #3 | #9 | #13 | #30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.83 | 2.81 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.82 | 2.81 | 0.40 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.83 | 2.81 | 2.15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (5985) | Scenario # | #5 | #11 | #17 | #34 | #18 | #35 | #19 | #36 | #20 | #37 | #21 | #38 |  |  |  |  |
| 'QPSK' | 2.48 | 3.17 | 2.14 | 0.14 | 2.47 | 3.17 | 2.47 | 3.17 | 2.46 | 0.11 | 2.13 | 0.37 |  |  |  |  |
| '16QAM' | 2.48 | 3.17 | 2.15 | 0.40 | 2.47 | 2.82 | 2.47 | 3.17 | 2.46 | 0.10 | 2.13 | 0.36 |  |  |  |  |
| '64QAM' | 2.82 | 3.17 | 3.17 | 2.15 | 3.16 | 2.81 | 3.16 | 3.17 | 3.15 | 2.12 | 3.16 | 2.46 |  |  |  |  |
| '256QAM' | 5.47 | 5.06 | 5.47 | 5.08 | 5.47 | 5.07 | 5.47 | 5.06 | 5.46 | 5.05 | 5.47 | 5.06 |  |  |  |  |
| '80MHz'  (6385)' | Scenario # | #5 | #11 | #17 | #34 | #18 | #35 | #19 | #36 | #20 | #37 | #21 | #38 |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 2.14 | 0.15 | 2.47 | 0.39 | 2.47 | 0.40 | 2.46 | 0.10 | 2.13 | 0.37 |  |  |  |  |
| '16QAM' | 2.48 | 2.48 | 2.14 | 0.40 | 2.47 | 0.66 | 2.47 | 0.66 | 2.46 | 0.35 | 2.13 | 0.37 |  |  |  |  |
| '64QAM' | 2.82 | 2.48 | 3.17 | 2.15 | 2.81 | 2.48 | 3.16 | 2.48 | 3.16 | 2.13 | 2.80 | 2.46 |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.06 | 5.47 | 5.06 |  |  |  |  |

Table 6.1.3.11.1.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.11.1.1-2: NS\_63-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | RB Allocation /Centre frequency of CBW (MHz) | | | | | | | |
|  |  | 20MHz : 6415  40MHz : 5965  80MHz : 5985/6385 | | | | 20MHz : 5955 | | | |
|  |  | Outer RB set configuration | | Inner RB set configuration | | Outer RB set configuration | | Inner RB set configuration | |
|  |  | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | 2.81 | 3.17 | 2.46 | 0.37 | 2.48 | 2.50 | - | - |
|  | 16 QAM | 2.81 | 3.17 | 2.46 | 0.36 | 2.48 | 2.50 | - | - |
|  | 64 QAM | 3.17 | 3.17 | 3.16 | 2.46 | 3.18 | 2.50 | - | - |
|  | 256 QAM | 5.89 | 5.08 | 5.47 | 5.06 | 5.89 | 5.08 | - | - |

Considering implementation margin and the centre frequency, the right side A-MPR in Table 6.1.3.11.1.1-2, including the centre frequencies other than the centre frequencies in the left side(such as, the centre frequency other than 6415MHz for 20MHz, 5965MHz for 40MHz, 5985/6385 MHz for 80MHz), can be reused with SL-U PSSCH/PSCCH MPR requirement in Table 6.2E.2F-1 of TS 38.101-1.

As a result, considering implementation margin and the centre frequency, Table 6.1.3.11.1.1-3 can be proposed for SL-U NS\_63 PSSCH/PSCCH A-MPR.

Table 6.1.3.11.1.1-3 : NS\_63 PSSCH/PSCCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | RB Allocation (Note 3) | | | | RB Allocation (Note 4) |
|  |  | Outer RB set configuration5 | | Inner RB set configuration5 | |
|  |  | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full/Partial |
| CP-OFDM | QPSK | ≤ 4.5 | ≤ 5.0 | ≤ 4.5 | ≤ 2.0 | Table 6.2E.2F-1 |
|  | 16 QAM | ≤ 4.5 | ≤ 5.5 | ≤ 4.5 | ≤ 3.0 |
|  | 64 QAM | ≤ 5.5 | ≤ 5.5 | ≤ 5.5 | ≤ 5.5 |
|  | 256 QAM | ≤ 7.5 | ≤ 7.5 | ≤ 7.5 | ≤ 7.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously allocated in the channel.  NOTE 2: Full allocation A-MPR applies when all RB’s in a 20 MHz channel or all RB’s in all sub-bands for wideband operation are fully allocated and all sub-bands are transmitted. Partial allocation A-MPR applies when one or more RB’s in one or more sub-bands are not allocated or when not all transmitted sub-bands for wideband operation are transmitted.  NOTE 3: Applicable for 20 MHz channels centered at the nearest NR-ARFCN corresponding to 6415 MHz, 40 MHz channels centered at the nearest NR-ARFCN corresponding to 5965 and 6405 MHz, and 80 MHz channels centered at the nearest NR-ARFCN corresponding to 5985 and 6385 MHz.  NOTE 4: Applicable for all valid channels and bandwidths other than those enumerated in NOTE 3.  NOTE 5: Channel bandwidth sizes of 60MHz and 100MHz are not applicable for this network signalling. | | | | | | |

##### 6.1.3.11.2 A-MPR for S-SSB transmission

6.1.3.11.2.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.11.2.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.11.2.1-1: NS\_63-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 | #3 | #4 | #5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5955) | 8.90 | 7.13 | 5.64 | 6.39 | 5.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #6 | #7 | #8 | #9 | #10 | #11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5965) | 10.90 | 8.84 | 6.45 | 8.74 | 7.31 | 5.52 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 | #38 | #39 |  |  |
| '80MHz'  (5985) | 10.16 | 7.34 | 7.49 | 6.24 | 7.19 | 6.26 | 6.44 | 5.61 | 7.61 | 5.97 | 6.45 | 4.96 | 8.47 | 7.28 | 8.23 | 7.07 | 7.62 | 6.92 |  |  |

Table 6.1.3.11.2.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.11.2.1-2 : NS\_63-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | RB Allocation / (dB) | | | |
| Outer RB set configuration | | Inner RB set configuration | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 |
| Contiguous/ Non-contiguous sub-band RB sets | 10.90 | 7.34 | 7.61 | 5.97 |

Considering implementation margin, Table 6.1.3.11.2.1-3 shows proposal for SL-U NS\_63 S-SSB A-MPR.

Table 6.1.3.11.2.1-3 : NS\_63 S-SSB A-MPR for SL-U UE power class 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | RB Allocation | | | |
| Outer RB set configuration | | Inner RB set configuration | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 |
| Contiguous/Non-contiguous sub-band RB sets | ≤ 13.5 | ≤ 10.0 | ≤ 10.0 | ≤ 8.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel. | | | | |

##### 6.1.3.11.3 A-MPR for PSFCH transmission

6.1.3.11.3.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.11.3.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.11.3.1-1: NS\_63-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (6415) | 8.27 | 7.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #3 | #4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (6405) | 10.01 | 6.53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #10 | #11 | #12 | #13 | #14 | #15 | #16 | #17 | #18 |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (6385) | 12.23 | 10.01 | 8.43 | 7.43 | 9.96 | 7.02 | 10.54 | 9.26 | 9.66 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 6.1.3.11.3.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.11.3.1-2 : NS\_63-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |
| --- | --- | --- |
| RB set configuration | RB Allocation | |
| Outer RB set configuration | Inner RB set configuration |
| Contiguous/Non-contiguous sub-band RB sets | 12.23 | 9.96 |

Considering implementation margin, Table 6.1.3.11.3.1-3 can be proposed for SL-U NS\_63 PSFCH A-MPR. Here, same A-MPR can be assumed for the centred frequency for each edge side, as follows.

: 20MHz – A-MPR for 6415 MHz = A-MPR for 5955 MHz

: 40MHz – A-MPR for 6405 MHz = A-MPR for 5965 MHz

: 80MHz – A-MPR for 6385 MHz = A-MPR for 5985 MHz

Table 6.1.3.11.3.1-3 : NS\_63 PSFCH A-MPR for SL-U UE power class 5

|  |  |  |  |
| --- | --- | --- | --- |
|  | RB Allocation2 | | RB Allocation3 |
| Outer RB set configuration | Inner RB set configuration | Outer/Inner RB sets |
| Contiguous/Non-contiguous sub-band RB sets | ≤ 15.0 | ≤ 12.5 | Table 6.2E.2F-4(TS38.101-1) |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel.  NOTE 2: Applicable for 40 MHz channels centered at the nearest NR-ARFCN corresponding to 5965 MHz and 6405 MHz, and 80 MHz channels centered at the nearest NR-ARFCN corresponding to 5985 MHz and 6385 MHz.  NOTE 3: Applicable for all valid channels and bandwidths other than those enumerated under NOTE 2.  NOTE 5: In current release, CBWs of 60MHz and 100MHz are not applicable for this network signalling. | | | |

#### 6.1.3.12 A-MPR for SL-U with NS\_64

##### 6.1.3.12.1 A-MPR for simultaneous PSSCH/PSCCH transmission

6.1.3.12.1.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.12.1.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.12.1.1-1: NS\_64-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| '20MHz'  (5955) | Scenario # | #1 | #7 | #2 | #8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 8.96 | 9.44 | 12.74 | 13.25 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 8.96 | 9.43 | 12.74 | 12.76 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 8.96 | 9.43 | 12.74 | 13.24 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 8.96 | 8.97 | 12.74 | 12.76 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '20MHz'  (5975) | Scenario # | #1 | #7 | #2 | #8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 6.31 | 8.98 | 6.74 | 8.98 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 6.31 | 8.98 | 6.74 | 8.98 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 6.31 | 8.97 | 6.74 | 8.98 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 6.31 | 8.97 | 6.74 | 8.98 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '40MHz'  (5965) | Scenario # | #3 | #9 | #13 | #30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 8.05 | 8.50 | 8.96 | 9.43 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 8.05 | 8.51 | 8.50 | 9.43 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 8.05 | 8.51 | 8.96 | 8.97 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 8.05 | 8.51 | 8.96 | 9.43 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '40MHz'  (6005) | Scenario # | #3 | #9 | #13 | #30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 3.17 | 5.89 | 6.30 | 8.97 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 3.17 | 5.89 | 6.30 | 8.98 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 3.17 | 5.89 | 6.30 | 8.97 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.89 | 6.30 | 8.97 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '60MHz'  (5975) | Scenario # | #4 | #10 | #14 | #31 | #15 | #32 | #16 | #33 |
| 'QPSK' | 8.50 | 8.50 | 12.73 | 13.23 | 9.88 | 9.89 | 6.73 | 9.42 |
| '16QAM' | 8.50 | 8.50 | 12.74 | 12.75 | 9.88 | 9.89 | 6.73 | 9.42 |
| '64QAM' | 8.50 | 8.51 | 12.73 | 13.23 | 9.42 | 9.89 | 6.73 | 9.42 |
| '256QAM' | 8.50 | 8.51 | 12.73 | 13.23 | 9.88 | 9.89 | 6.73 | 8.96 |
| '60MHz'  (5995) | Scenario # | #4 | #10 | #14 | #31 | #15 | #32 | #16 | #33 |
| 'QPSK' | 7.17 | 7.17 | 6.73 | 9.44 | 5.88 | 6.31 | 6.73 | 8.95 |
| '16QAM' | 7.17 | 7.17 | 6.73 | 9.43 | 6.30 | 6.31 | 6.73 | 9.42 |
| '64QAM' | 7.17 | 7.17 | 6.73 | 9.43 | 5.88 | 6.30 | 6.73 | 8.96 |
| '256QAM' | 7.17 | 7.17 | 6.73 | 9.43 | 5.88 | 6.31 | 6.73 | 9.42 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| '80MHz'  (5985) | Scenario # | #5 | #11 | #17 | #34 | #18 | #35 | #19 | #36 | #20 | #37 | #21 | #38 |  |  |  |  |  |  |
| 'QPSK' | 8.05 | 8.05 | 12.74 | 13.73 | 9.88 | 9.89 | 8.50 | 8.51 | 6.73 | 9.42 | 5.88 | 6.30 |  |  |  |  |  |  |
| '16QAM' | 8.05 | 8.05 | 12.74 | 13.24 | 9.42 | 9.42 | 8.50 | 8.50 | 6.73 | 9.41 | 5.88 | 6.30 |  |  |  |  |  |  |
| '64QAM' | 8.05 | 8.05 | 13.22 | 13.72 | 9.88 | 12.26 | 8.50 | 8.50 | 6.73 | 9.42 | 5.88 | 6.30 |  |  |  |  |  |  |
| '256QAM' | 8.05 | 8.06 | 12.73 | 13.72 | 9.88 | 9.42 | 8.50 | 8.50 | 6.73 | 9.42 | 5.88 | 6.30 |  |  |  |  |  |  |
| '80MHz'  (6065) | Scenario # | #5 | #11 | #17 | #34 | #18 | #35 | #19 | #36 | #20 | #37 | #21 | #38 |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.82 | 6.73 | 9.43 | 3.53 | 5.89 | 2.47 | 4.28 | 6.73 | 9.41 | 3.52 | 5.88 |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.82 | 6.73 | 9.43 | 3.53 | 5.89 | 2.47 | 4.28 | 6.73 | 9.42 | 3.52 | 5.88 |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.82 | 6.73 | 9.43 | 3.53 | 5.88 | 3.17 | 4.28 | 6.73 | 9.42 | 3.52 | 5.88 |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.06 | 6.73 | 9.44 | 5.47 | 5.89 | 5.47 | 5.07 | 6.73 | 9.42 | 5.47 | 5.88 |  |  |  |  |  |  |
| '100MHz'  (5995) | Scenario # | #6 | #12 | #22 | #39 | #23 | #40 | #24 | #41 | #25 | #42 | #26 | #43 | #27 | #44 | #28 | #45 | #29 | #46 |
| 'QPSK' | 8.05 | 8.05 | 13.22 | 12.75 | 9.88 | 9.89 | 8.50 | 8.51 | 8.05 | 8.05 | 6.73 | 9.42 | 5.88 | 6.30 | 7.16 | 7.17 | 6.73 | 8.95 |
| '16QAM' | 8.05 | 8.05 | 12.73 | 13.23 | 9.42 | 10.83 | 8.50 | 8.51 | 8.05 | 8.05 | 6.73 | 9.42 | 5.88 | 6.30 | 7.16 | 7.60 | 6.73 | 9.42 |
| '64QAM' | 8.05 | 8.05 | 13.22 | 13.23 | 9.88 | 9.89 | 8.50 | 8.51 | 8.05 | 8.05 | 6.73 | 9.42 | 5.88 | 6.30 | 7.16 | 7.16 | 6.73 | 9.42 |
| '256QAM' | 8.05 | 8.05 | 12.73 | 13.23 | 9.88 | 9.89 | 8.50 | 8.51 | 8.05 | 8.05 | 6.73 | 9.41 | 5.88 | 6.30 | 7.17 | 7.16 | 6.73 | 8.96 |
| '100MHz'  (6055) | Scenario # | #6 | #12 | #22 | #39 | #23 | #40 | #24 | #41 | #25 | #42 | #26 | #43 | #27 | #44 | #28 | #45 | #29 | #46 |
| 'QPSK' | 5.06 | 5.89 | 6.73 | 9.43 | 3.52 | 5.89 | 2.47 | 4.28 | 3.16 | 4.28 | 6.73 | 9.41 | 3.52 | 5.88 | 2.47 | 3.89 | 6.73 | 8.96 |
| '16QAM' | 5.06 | 5.88 | 6.73 | 9.43 | 3.53 | 5.89 | 2.47 | 4.28 | 3.16 | 4.28 | 6.73 | 9.41 | 3.52 | 5.88 | 2.47 | 3.89 | 6.72 | 9.41 |
| '64QAM' | 5.06 | 5.88 | 6.73 | 9.43 | 3.53 | 5.88 | 3.16 | 4.28 | 3.16 | 4.28 | 6.73 | 9.42 | 3.52 | 5.88 | 3.16 | 3.89 | 6.73 | 9.41 |
| '256QAM' | 5.47 | 5.88 | 6.73 | 9.43 | 5.47 | 5.89 | 5.47 | 5.07 | 5.47 | 5.07 | 6.73 | 9.42 | 5.47 | 5.88 | 5.47 | 5.06 | 6.73 | 9.42 |

Table 6.1.3.12.1.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.12.1.1-2 : NS\_64-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | RB Allocation /Centre frequency of CBW (MHz) | | | | | | | |
|  |  | 20MHz : 5955  40MHz : 5965  60MHz : 5975  80MHz : 5985  100MHz: 5995 | | | | 20MHz : 5975  40MHz : 6005  60MHz : 5995  80MHz : 6065  100MHz: 6055 | | | |
|  |  | Outer RB set configuration | | Inner RB set configuration | | Outer RB set configuration | | Inner RB set configuration | |
|  |  | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | 13.22 | 13.73 | 7.16 | 9.42 | 7.17 | 9.44 | 6.73 | 9.41 |
|  | 16 QAM | 12.74 | 13.24 | 7.16 | 9.42 | 7.17 | 9.43 | 6.73 | 9.42 |
|  | 64 QAM | 13.22 | 13.72 | 7.16 | 9.42 | 7.17 | 9.43 | 6.73 | 9.42 |
|  | 256 QAM | 12.74 | 13.72 | 7.17 | 9.42 | 7.17 | 9.44 | 6.73 | 9.42 |

Considering implementation margin and VLP UE, Table 6.1.3.12.1.1-3 can be proposed for SL-U NS\_64 PSSCH/PSCCH A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.12.1.1-3 : NS\_64 PSSCH/PSCCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | RB Allocation3 | | | | RB Allocation4 | | | |
|  |  | Outer RB set configuration | | Inner RB set configuration | | Outer RB set configuration | | Inner RB set configuration | |
|  |  | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | ≤ 14.0 | ≤ 15.0 | ≤ 9.0 | ≤ 11.5 | ≤ 9.0 | ≤ 11.5 | ≤ 8.5 | ≤ 11.5 |
|  | 16 QAM | ≤ 14.0 | ≤ 15.0 | ≤ 9.0 | ≤ 11.5 | ≤ 9.0 | ≤ 11.5 | ≤ 8.5 | ≤ 11.5 |
|  | 64 QAM | ≤ 14.0 | ≤ 15.0 | ≤ 9.0 | ≤ 11.5 | ≤ 9.0 | ≤ 11.5 | ≤ 8.5 | ≤ 11.5 |
|  | 256 QAM | ≤ 15.0 | ≤ 15.0 | ≤ 9.0 | ≤ 11.5 | ≤ 9.0 | ≤ 11.5 | ≤ 8.5 | ≤ 11.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously allocated in the channel.  NOTE 2: Full allocation A-MPR applies when all RB’s in a 20 MHz channel or all RB’s in all sub-bands for wideband operation are fully allocated and all sub-bands are transmitted. Partial allocation A-MPR applies when one or more RB’s in one or more sub-bands are not allocated or when not all transmitted sub-bands for wideband operation are transmitted.  NOTE 3: Applicable for 20 MHz channels centered at the nearest NR-ARFCN corresponding to 5955 MHz, 40 MHz channels centered at the nearest NR-ARFCN corresponding to 5965 MHz, 60 MHz channels centered at the nearest NR-ARFCN corresponding to 5975 MHz, 80 MHz channels centered at the nearest NR-ARFCN corresponding to 5985 MHz, and 100 MHz channels centered at the nearest NR-ARFCN corresponding to 5995 MHz.  NOTE 4: Applicable for all valid channels other than those enumerated under NOTE 3. | | | | | | | | | |

##### 6.1.3.12.2 A-MPR for S-SSB transmission

6.1.3.12.2.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.12.2.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.12.2.1-1: NS\_64-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 | #3 | #4 | #5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5955) | 19.86 | 24.46 | 27.75 | 11.93 | 24.97 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5975) | 8.79 | 9.20 | 13.16 | 7.21 | 10.17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5995) | 8.88 | 9.19 | 13.06 | 7.22 | 10.15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #6 | #7 | #8 | #9 | #10 | #11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5965) | 32.62 | 31.97 | 29.55 | 20.84 | 24.92 | 27.97 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (6005) | 9.12 | 8.11 | 10.13 | 8.80 | 9.20 | 13.20 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (6045) | 9.10 | 8.11 | 10.22 | 8.73 | 9.15 | 13.05 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #12 | #13 | #14 | #15 | #16 | #17 | #18 | #19 | #20 | #21 |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (5975) | 31.91 | 29.55 | 28.14 | 25.74 | 16.86 | 25.48 | 7.22 | 10.17 | 28.63 | 25.76 |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (5995) | 13.06 | 10.69 | 11.39 | 9.94 | 7.11 | 10.17 | 7.22 | 10.26 | 28.36 | 26.68 |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (6055) | 7.98 | 7.11 | 7.17 | 7.10 | 7.24 | 10.13 | 7.25 | 10.13 | 8.31 | 7.21 |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 | #38 | #39 |  |  |
| '80MHz'  (5985) | 31.43 | 27.72 | 31.07 | 26.57 | 28.14 | 25.17 | 19.46 | 25.15 | 12.71 | 9.30 | 7.15 | 10.18 | 28.31 | 26.27 | 27.95 | 26.88 | 27.89 | 26.00 |  |  |
| '80MHz'  (6055) | 7.71 | 6.79 | 7.22 | 6.25 | 7.10 | 7.21 | 7.18 | 10.18 | 7.31 | 7.10 | 7.12 | 10.11 | 8.73 | 7.37 | 8.16 | 7.24 | 7.22 | 7.27 |  |  |
| '80MHz'  (6145) | 7.46 | 6.87 | 7.45 | 6.19 | 7.16 | 7.19 | 7.13 | 10.17 | 7.53 | 7.21 | 7.16 | 10.17 | 8.45 | 7.34 | 8.24 | 7.16 | 6.97 | 7.27 |  |  |
| Scenario # | #40 | #41 | #42 | #43 | #44 | #45 | #46 | #47 | #48 | #49 | #50 | #51 | #52 | #53 | #54 | #55 | #56 | #57 | #58 | #59 |
| '100MHz'  (5995) | 32.11 | 27.94 | 30.84 | 26.80 | 31.55 | 26.23 | 28.52 | 25.30 | 16.69 | 26.04 | 21.59 | 9.74 | 13.85 | 8.53 | 7.20 | 10.17 | 7.26 | 10.14 | 28.51 | 26.97 |
| '100MHz'  (6055) | 14.05 | 8.77 | 8.15 | 6.39 | 7.85 | 6.25 | 7.08 | 7.21 | 7.22 | 10.15 | 7.15 | 5.56 | 7.19 | 7.17 | 7.25 | 10.23 | 7.22 | 10.08 | 11.32 | 9.75 |
| '100MHz'  (6115) | 7.56 | 6.68 | 7.06 | 5.66 | 7.80 | 6.29 | 7.15 | 7.12 | 7.24 | 10.16 | 7.36 | 5.46 | 7.21 | 7.14 | 7.17 | 10.14 | 7.23 | 10.16 | 8.62 | 7.50 |
| Scenario # | #60 | #61 | #62 | #63 | #64 | #65 | #66 | #67 | #68 | #69 | #70 | #71 | #72 | #73 | #74 | #75 | #76 | #77 |  |  |
| '100MHz'  (5995) | 28.78 | 25.66 | 28.27 | 25.81 | 29.44 | 25.21 | 29.49 | 23.01 | 27.41 | 25.41 | 27.65 | 25.39 | 28.29 | 25.62 | 28.41 | 26.21 | 29.68 | 24.07 |  |  |
| '100MHz'  (6055) | 8.53 | 7.85 | 11.85 | 9.28 | 11.60 | 9.09 | 8.76 | 7.34 | 8.14 | 7.30 | 7.05 | 8.78 | 27.86 | 25.10 | 7.72 | 7.19 | 10.73 | 8.83 |  |  |
| '100MHz'  (6155) | 8.68 | 7.24 | 8.43 | 7.38 | 8.63 | 6.94 | 8.74 | 6.58 | 8.23 | 7.17 | 7.00 | 7.23 | 7.09 | 7.19 | 7.75 | 7.24 | 9.06 | 7.25 |  |  |

Table 6.1.3.12.2.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.12.2.1-2 : NS\_64-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | RB Allocation /Centre frequency of CBW (MHz)/ (dB) | | | | | | | |
| 20MHz : 5955  40MHz : 5965  60MHz : 5975/5995  80MHz : 5985  100MHz: 5995/6055 | | | | 20MHz : 5975/5995  40MHz : 6005/6045  60MHz : 6055  80MHz : 6065/6145  100MHz: 6115 | | | |
| Outer RB set configuration | | Inner RB set configuration | | Outer RB set configuration | | Inner RB set configuration | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 |
| Contiguous/ Non-contiguous sub-band RB sets | 32.62 | 29.55 | 21.59 | 10.26 | 9.20 | 13.16 | 7.53 | 10.17 |

Considering implementation margin and VLP UE, Table 6.1.3.12.2.1-3 can be proposed for SL-U NS\_64 S-SSB A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.12.2.1-3 : NS\_64 S-SSB A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | RB Allocation2 | | | | RB Allocation3 | | | |
| Outer RB set configuration | | Inner RB set configuration | | Outer RB set configuration | | Inner RB set configuration | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 |
| Contiguous/ Non-contiguous sub-band RB sets | ≤ 35.0 | ≤ 32.0 | ≤ 24.0 | ≤ 13.0 | ≤ 11.5 | ≤ 15.5 | ≤ 10.0 | ≤ 12.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel.  NOTE 2: Applicable for 20 MHz channels centered at the nearest NR-ARFCN corresponding to 5955 MHz, 40 MHz channels centered at the nearest NR-ARFCN corresponding to 5965 MHz, 60 MHz channels centered at the nearest NR-ARFCN corresponding to 5975 and 5995 MHz, 80 MHz channels centered at the nearest NR-ARFCN corresponding to 5985 MHz and 100 MHz channels centered at the nearest NR-ARFCN corresponding to 5995 and 6055 MHz.  NOTE 3: Applicable for all valid channels other than those enumerated under NOTE 2. | | | | | | | | |

##### 6.1.3.12.3 A-MPR for PSFCH transmission

6.1.3.12.3.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.12.3.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.12.3.1-1: NS\_64-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario #  ‘20MHz’ | #1 | #2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5955) | 25.67 | 20.09 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5975) | 8.74 | 11.14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5995) | 8.74 | 8.94 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #3 | #4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5965) | 32.37 | 25.82 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (6005) | 7.85 | 8.74 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (6045) | 7.85 | 8.74 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #5 | #6 | #7 | #8 | #9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (5975) | 34.40 | 31.13 | 19.97 | 11.27 | 30.74 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (5995) | 24.77 | 15.64 | 11.23 | 8.91 | 30.74 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (6055) | 9.69 | 8.65 | 8.93 | 8.91 | 9.40 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #10 | #11 | #12 | #13 | #14 | #15 | #16 | #17 | #18 |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (5985) | 33.48 | 32.10 | 31.04 | 20.83 | 15.48 | 11.07 | 31.77 | 30.73 | 30.81 |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (6065) | 10.43 | 10.01 | 8.43 | 8.86 | 9.96 | 8.64 | 10.17 | 9.26 | 8.73 |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (6415) | 10.43 | 10.01 | 8.43 | 8.86 | 9.96 | 8.64 | 10.17 | 9.26 | 8.73 |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #19 | #20 | #21 | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 |
| '100MHz'  (5995) | 34.37 | 33.10 | 34.28 | 31.06 | 20.18 | 24.48 | 15.30 | 11.37 | 8.55 | 32.00 | 31.74 | 31.21 | 32.25 | 31.40 | 30.68 | 30.66 | 30.71 | 30.42 | 32.95 |
| '100MHz'  (6055) | 10.35 | 9.85 | 9.67 | 8.69 | 8.93 | 9.44 | 7.96 | 8.89 | 8.55 | 16.46 | 15.27 | 12.30 | 24.64 | 13.48 | 9.33 | 8.71 | 30.71 | 8.81 | 16.09 |
| '100MHz'  (6155) | 10.32 | 9.85 | 9.67 | 8.69 | 8.93 | 9.44 | 7.96 | 8.89 | 8.55 | 10.78 | 10.18 | 9.84 | 10.19 | 10.60 | 9.33 | 8.71 | 8.76 | 8.81 | 10.67 |

Table 6.1.3.12.3.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.12.3.1-2 : NS\_64-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| RB set configuration | RB Allocation /Centre frequency of CBW (MHz) | | | |
| 20MHz : 5955  40MHz : 5965  60MHz : 5975/5995  80MHz : 5985  100MHz: 5995/6055 | | 20MHz : 5975/5995  40MHz : 6005/6045  60MHz : 6055  80MHz : 6065/6145  100MHz: 6155 | |
| Outer RB set configuration  (Full/Partial) | Inner RB set configuration  (Full/Partial) | Outer RB set configuration  (Full/Partial) | Inner RB set configuration  (Full/Partial) |
| Contiguous/Non-contiguous sub-band RB sets | 34.4 | 30.42 | 11.14 | 9.66 |

Considering implementation margin and VLP UE, Table 6.1.3.12.3.1-3 can be proposed for SL-U NS\_64 PSFCH A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.12.3.1-3 : NS\_64 PSFCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | RB Allocation2 | | RB Allocation3 | |
|  | Outer RB set configuration | Inner RB set configuration | Outer RB set configuration | Inner RB set configuration |
| Contiguous/Non-contiguous sub-band RB sets | ≤36.0 | ≤32.0 | ≤13.5 | ≤12.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously allocated in the channel.  NOTE 2: Applicable for 20 MHz channels centered at the nearest NR-ARFCN corresponding to 5955 MHz, 40 MHz channels centered at the nearest NR-ARFCN corresponding to 5965 MHz, 60 MHz channels centered at the nearest NR-ARFCN corresponding to 5975 and 5995 MHz, 80 MHz channels centered at the nearest NR-ARFCN corresponding to 5985 MHz, and 100 MHz channels centered at the nearest NR-ARFCN corresponding to 5995 and 6055 MHz.  NOTE 3: Applicable for all valid channels other than those enumerated under NOTE 2. | | | | |

#### 6.1.3.13 A-MPR for SL-U with NS\_65

##### 6.1.3.13.1 A-MPR for simultaneous PSSCH/PSCCH transmission

6.1.3.13.1.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.13.1.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.13.1.1-1: NS\_65-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| '20MHz'  (5955) | Scenario # | #1 | #7 | #2 | #8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.16 | 2.16 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.16 | 2.16 | 2.49 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.17 | 3.18 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.08 | 5.89 | 5.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '40MHz'  (5965) | Scenario # | #3 | #9 | #13 | #30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 2.81 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.48 | 2.81 | 0.40 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.49 | 2.81 | 2.15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.06 | 5.47 | 5.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '60MHz'  (5975) | Scenario # | #4 | #10 | #14 | #31 | #15 | #32 | #16 | #33 |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 2.14 | 0.15 | 2.47 | 0.66 | 2.13 | 0.36 |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.48 | 2.14 | 0.39 | 2.47 | 0.66 | 2.13 | 0.36 |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 3.17 | 2.48 | 3.17 | 2.15 | 3.16 | 2.48 | 3.16 | 2.12 |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.08 | 5.47 | 5.07 | 5.88 | 5.06 |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (5985) | Scenario # | #5 | #11 | #17 | #34 | #18 | #35 | #19 | #36 | #20 | #37 | #21 | #38 |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 2.14 | 0.40 | 2.48 | 0.66 | 2.47 | 0.40 | 2.46 | 0.10 | 2.13 | 0.37 |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.48 | 2.14 | 0.39 | 2.47 | 0.39 | 2.47 | 0.66 | 2.46 | 0.35 | 2.13 | 0.37 |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.48 | 3.17 | 2.15 | 2.81 | 2.48 | 3.16 | 2.47 | 3.16 | 2.11 | 3.16 | 2.47 |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.06 | 5.47 | 5.05 |  |  |  |  |  |  |
| '100MHz'  (5995) | Scenario # | #6 | #12 | #22 | #39 | #23 | #40 | #24 | #41 | #25 | #42 | #26 | #43 | #27 | #44 | #28 | #45 | #29 | #46 |
| 'QPSK' | 2.48 | 2.48 | 2.14 | 0.39 | 2.47 | 0.66 | 2.47 | 0.40 | 2.14 | 0.67 | 2.13 | 0.36 | 2.46 | 0.11 | 2.47 | 0.38 | 2.13 | 0.10 |
| '16QAM' | 2.48 | 2.48 | 2.14 | 0.40 | 2.47 | 0.66 | 2.47 | 0.65 | 2.14 | 0.66 | 2.13 | 0.36 | 2.46 | 0.36 | 2.47 | 0.64 | 2.13 | 0.09 |
| '64QAM' | 2.82 | 2.48 | 3.17 | 2.15 | 2.81 | 2.48 | 3.16 | 2.47 | 2.81 | 2.47 | 3.16 | 2.12 | 3.16 | 2.46 | 3.16 | 2.47 | 3.16 | 2.12 |
| '256QAM' | 5.47 | 5.06 | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.06 | 5.47 | 5.07 | 5.47 | 5.06 | 5.46 | 5.06 | 5.47 | 5.06 | 5.46 | 5.05 |

Table 6.1.3.13.1.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.13.1.1-2 : NS\_65-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | RB Allocation /Centre frequency of CBW (MHz) | | | |
|  |  | Outer RB set configuration | | Inner RB set configuration | |
|  |  | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | 2.81 | 2.50 | 2.47 | 0.38 |
|  | 16 QAM | 2.81 | 2.49 | 2.47 | 0.64 |
|  | 64 QAM | 3.18 | 2.50 | 3.16 | 2.47 |
|  | 256 QAM | 5.89 | 5.08 | 5.88 | 5.06 |

Considering implementation margin and VLP UE, Table 6.1.3.13.1.1-3 can be proposed for SL-U NS\_65 PSSCH/PSCCH A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.13.1.1-3 : NS\_65 PSSCH/PSCCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | RB Allocation | | | |
|  |  | Outer RB set configuration3 | | Inner RB set configuration3 | |
|  |  | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 |
|  | 16 QAM | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 |
|  | 64 QAM | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 |
|  | 256 QAM | ≤ 7.0 | ≤ 7.5 | ≤ 7.0 | ≤ 7.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously allocated in the channel.  NOTE 2: Full allocation A-MPR applies when all RB’s in a 20 MHz channel or all RB’s in all sub-bands for wideband operation are fully allocated and all sub-bands are transmitted. Partial allocation A-MPR applies when one or more RB’s in one or more sub-bands are not allocated or when not all transmitted sub-bands for wideband operation are transmitted.  NOTE 3: Contiguous outer sub-band configuration and contiguous inner sub-band configuration in Table 6.2E.2F-3 apply. | | | | | |

##### 6.1.3.13.2 A-MPR for S-SSB transmission

6.1.3.13.2.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.13.2.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.13.2.1-1: NS\_65-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 | #3 | #4 | #5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5955) | 8.90 | 7.13 | 5.64 | 6.39 | 5.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #6 | #7 | #8 | #9 | #10 | #11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5965) | 10.90 | 8.84 | 6.45 | 8.74 | 7.31 | 5.52 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #12 | #13 | #14 | #15 | #16 | #17 | #18 | #19 | #20 | #21 |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (5975) | 9.20 | 7.14 | 7.29 | 6.10 | 6.35 | 5.52 | 6.43 | 4.95 | 8.22 | 7.30 |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 | #38 | #39 |  |  |
| '80MHz'  (5985) | 9.81 | 7.53 | 7.31 | 6.14 | 7.08 | 6.27 | 6.34 | 5.74 | 7.50 | 6.02 | 6.26 | 5.04 | 8.39 | 7.26 | 8.34 | 7.00 | 7.58 | 7.17 |  |  |
| Scenario # | #40 | #41 | #42 | #43 | #44 | #45 | #46 | #47 | #48 | #49 | #50 | #51 | #52 | #53 | #54 | #55 | #56 | #57 | #58 | #59 |
| '100MHz'  (5995) | 10.69 | 7.18 | 7.08 | 5.65 | 7.93 | 5.93 | 7.09 | 5.98 | 6.36 | 5.51 | 7.26 | 5.03 | 7.17 | 4.89 | 6.58 | 5.02 | 6.09 | 4.84 | 9.82 | 7.47 |
| Scenario # | #60 | #61 | #62 | #63 | #64 | #65 | #66 | #67 | #68 | #69 | #70 | #71 | #72 | #73 | #74 | #75 | #76 | #77 |  |  |
| '100MHz'  (5995) | 8.41 | 7.26 | 8.43 | 7.39 | 8.97 | 6.85 | 8.88 | 6.56 | 8.17 | 7.18 | 7.16 | 6.87 | 7.61 | 6.88 | 7.82 | 6.47 | 8.99 | 7.08 |  |  |

Table 6.1.3.13.2.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.13.2.1-2 : NS\_65-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | RB Allocation / (dB) | | | |
| Outer RB set configuration | | Inner RB set configuration | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 |
| Contiguous/ Non-contiguous sub-band RB sets | 10.90 | 7.53 | 7.50 | 6.02 |

Considering implementation margin and VLP UE, Table 6.1.3.13.2.1-3 can be proposed for SL-U NS\_65 S-SSB A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.13.2.1-3 : NS\_65 S-SSB A-MPR for SL-U UE power class 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | RB Allocation | | | |
| Outer RB set configuration | | Inner RB set configuration | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 |
| Contiguous/Non-contiguous sub-band RB sets | ≤ 13.5 | ≤ 10.0 | ≤ 10.0 | ≤ 8.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel. | | | | |

##### 6.1.3.13.3 A-MPR for PSFCH transmission

6.1.3.13.3.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.13.3.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.13.3.1-1: NS\_65-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5955) | 8.27 | 7.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #3 | #4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5965) | 10.01 | 6.53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #5 | #6 | #7 | #8 | #9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (5975) | 11.13 | 8.65 | 7.30 | 7.00 | 9.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #10 | #11 | #12 | #13 | #14 | #15 | #16 | #17 | #18 |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (5985) | 12.23 | 10.01 | 8.43 | 7.43 | 9.96 | 7.02 | 10.54 | 9.26 | 9.66 |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #19 | #20 | #21 | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 |
| '100MHz'  (5995) | 13.28 | 9.85 | 9.67 | 8.69 | 7.42 | 9.44 | 7.96 | 7.09 | 6.49 | 12.15 | 10.18 | 10.14 | 10.33 | 10.60 | 9.33 | 8.97 | 9.67 | 8.81 | 11.33 |

Table 6.1.3.13.3.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.13.3.1-2 : NS\_65-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |
| --- | --- | --- |
| RB set configuration | RB Allocation | |
| Outer RB set configuration  (Full/Partial) | Inner RB set configuration  (Full/Partial) |
| Contiguous/Non-contiguous sub-band RB sets | 13.28 | 9.96 |

Considering implementation margin and VLP UE, Table 6.1.3.13.3.1-3 can be proposed for SL-U NS\_65 PSFCH A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.13.3.1-3 : NS\_65 PSFCH A-MPR for SL-U UE power class 5

|  |  |  |
| --- | --- | --- |
|  | RB Allocation2 | |
| Outer RB set configuration | Inner RB set configuration |
| Contiguous/Non-contiguous sub-band RB sets | ≤ 16.0 | ≤ 12.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel. | | |

#### 6.1.3.14 A-MPR for SL-U with NS\_66

##### 6.1.3.14.1 A-MPR for simultaneous PSSCH/PSCCH transmission

6.1.3.14.1.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.14.1.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.14.1.1-1: NS\_66-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| '20MHz'  (7115) | Scenario # | #1 | #7 | #2 | #8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 15.66 | 17.65 | 15.66 | 17.66 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 15.66 | 17.65 | 15.67 | 17.65 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 15.66 | 17.65 | 15.67 | 17.66 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 15.66 | 17.65 | 15.67 | 17.66 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '40MHz'  (5965) | Scenario # | #3 | #9 | #13 | #30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 12.25 | 14.68 | 15.66 | 17.65 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 12.25 | 14.68 | 15.66 | 18.15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 12.25 | 14.68 | 15.66 | 18.14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 12.25 | 14.69 | 15.66 | 17.65 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '60MHz'  (7095) | Scenario # | #4 | #10 | #14 | #31 | #15 | #32 | #16 | #33 |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 10.82 | 13.22 | 15.66 | 18.15 | 12.73 | 15.18 | 15.66 | 18.13 |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 10.82 | 13.22 | 15.66 | 18.15 | 12.74 | 15.18 | 15.66 | 18.13 |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 10.82 | 13.22 | 15.66 | 18.15 | 12.73 | 15.18 | 15.66 | 18.13 |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 10.82 | 13.22 | 15.66 | 18.15 | 12.74 | 15.18 | 15.66 | 18.12 |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (5985) | Scenario # | #5 | #11 | #17 | #34 | #18 | #35 | #19 | #36 | #20 | #37 | #21 | #38 |  |  |  |  |  |  |
| 'QPSK' | 9.42 | 11.78 | 15.66 | 18.15 | 12.73 | 15.18 | 10.82 | 13.22 | 15.65 | 18.13 | 12.73 | 15.17 |  |  |  |  |  |  |
| '16QAM' | 9.42 | 11.77 | 15.66 | 18.15 | 12.73 | 15.18 | 10.82 | 13.22 | 15.66 | 18.13 | 12.73 | 15.16 |  |  |  |  |  |  |
| '64QAM' | 9.42 | 11.77 | 15.66 | 18.14 | 12.74 | 15.18 | 10.82 | 13.23 | 15.65 | 18.14 | 12.73 | 15.17 |  |  |  |  |  |  |
| '256QAM' | 9.42 | 11.78 | 15.67 | 18.15 | 12.73 | 15.17 | 10.82 | 13.22 | 15.65 | 18.12 | 12.73 | 15.16 |  |  |  |  |  |  |
| '100MHz'  (7075) | Scenario # | #6 | #12 | #22 | #39 | #23 | #40 | #24 | #41 | #25 | #42 | #26 | #43 | #27 | #44 | #28 | #45 | #29 | #46 |
| 'QPSK' | 8.50 | 10.82 | 15.66 | 18.14 | 12.73 | 15.17 | 10.82 | 13.22 | 9.42 | 11.78 | 15.65 | 18.13 | 12.73 | 15.17 | 10.82 | 13.21 | 15.66 | 18.13 |
| '16QAM' | 8.50 | 10.82 | 15.66 | 18.14 | 12.73 | 15.18 | 10.82 | 13.22 | 9.42 | 11.78 | 15.66 | 18.13 | 12.73 | 15.16 | 10.82 | 13.21 | 15.66 | 18.13 |
| '64QAM' | 8.50 | 10.82 | 15.66 | 18.15 | 12.73 | 15.18 | 10.82 | 13.22 | 9.42 | 11.78 | 15.66 | 18.13 | 12.73 | 15.17 | 10.82 | 13.22 | 15.65 | 18.13 |
| '256QAM' | 8.50 | 10.83 | 15.66 | 18.15 | 12.73 | 15.17 | 10.82 | 13.22 | 9.42 | 11.77 | 15.66 | 18.12 | 12.73 | 15.17 | 10.82 | 13.22 | 15.66 | 18.13 |

Table 6.1.3.14.1.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.14.1.1-2: NS\_66-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | | 100MHz | |
| Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | 15.66 | 18.15 | 12.73 | 15.18 | 10.82 | 13.22 | 9.42 | 11.78 | 8.50 | 10.82 |
| 16 QAM | 15.67 | 18.15 | 12.74 | 15.18 | 10.82 | 13.22 | 9.42 | 11.78 | 8.50 | 10.82 |
| *64 QAM* | 15.67 | 18.15 | 12.74 | 15.18 | 10.82 | 13.23 | 9.42 | 11.78 | 8.50 | 10.82 |
| 256 QAM | 15.67 | 18.15 | 12.74 | 15.18 | 10.82 | 13.22 | 9.42 | 11.78 | 8.50 | 10.83 |

Considering implementation margin and VLP UE, Table 6.1.3.14.1.1-3 can be proposed for SL-U NS\_66 PSSCH/PSCCH A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.14.1.1-3 : NS\_66 PSSCH/PSCCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | | 100MHz | |
| Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | ≤ 16.5 | ≤ 19.0 | ≤ 13.5 | ≤ 16.0 | ≤ 11.5 | ≤ 14.0 | ≤ 10.0 | ≤ 12.5 | ≤ 9.0 | ≤ 11.5 |
| 16 QAM | ≤ 16.5 | ≤ 19.0 | ≤ 13.5 | ≤ 16.0 | ≤ 11.5 | ≤ 14.0 | ≤ 10.0 | ≤ 12.5 | ≤ 9.0 | ≤ 11.5 |
| *64 QAM* | ≤ 16.5 | ≤ 19.0 | ≤ 13.5 | ≤ 16.0 | ≤ 11.5 | ≤ 14.0 | ≤ 10.0 | ≤ 12.5 | ≤ 9.0 | ≤ 11.5 |
| 256 QAM | ≤ 16.5 | ≤ 19.0 | ≤ 13.5 | ≤ 16.0 | ≤ 11.5 | ≤ 14.0 | ≤ 10.0 | ≤ 12.5 | ≤ 9.0 | ≤ 11.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously allocated in the channel.  NOTE 2: Full allocation A-MPR applies when all RB’s in a 20 MHz channel or all RB’s in all sub-bands for wideband operation are fully allocated and all sub-bands are transmitted. Partial allocation A-MPR applies when one or more RB’s in one or more sub-bands are not allocated but when all sub-bands within the channel are transmitted. When not all sub-bands within the channel are transmitted, the A-MPR associated with the channel bandwidth according to the bandwidth of the contiguously transmitted sub-bands and according to the allocation type applies. | | | | | | | | | | | |

##### 6.1.3.14.2 A-MPR for S-SSB transmission

6.1.3.14.2.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.14.2.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.14.2.1-1: NS\_66-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 | #3 | #4 | #5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (7115) | 15.81 | 18.17 | 22.10 | 16.26 | 19.13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #6 | #7 | #8 | #9 | #10 | #11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5965) | 12.75 | 15.34 | 19.15 | 15.78 | 18.33 | 22.11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #12 | #13 | #14 | #15 | #16 | #17 | #18 | #19 | #20 | #21 |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (7095) | 11.45 | 14.53 | 13.24 | 16.22 | 16.19 | 19.14 | 16.22 | 19.13 | 13.21 | 16.27 |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 | #38 | #39 |  |  |
| '80MHz'  (5985) | 10.20 | 13.16 | 11.46 | 14.38 | 13.21 | 16.11 | 16.31 | 19.21 | 13.22 | 16.15 | 16.26 | 19.23 | 11.43 | 14.40 | 13.32 | 16.20 | 13.30 | 16.12 |  |  |
| Scenario # | #40 | #41 | #42 | #43 | #44 | #45 | #46 | #47 | #48 | #49 | #50 | #51 | #52 | #53 | #54 | #55 | #56 | #57 | #58 | #59 |
| '100MHz'  (7075) | 9.48 | 12.29 | 10.12 | 13.26 | 11.60 | 14.51 | 13.24 | 16.21 | 16.32 | 19.14 | 11.42 | 14.49 | 13.33 | 16.22 | 16.20 | 19.28 | 16.15 | 19.14 | 10.16 | 13.19 |
| Scenario # | #60 | #61 | #62 | #63 | #64 | #65 | #66 | #67 | #68 | #69 | #70 | #71 | #72 | #73 | #74 | #75 | #76 | #77 |  |  |
| '100MHz'  (7095) | 11.48 | 14.47 | 11.42 | 14.35 | 11.49 | 14.53 | 11.40 | 14.46 | 13.21 | 16.16 | 13.24 | 16.19 | 13.19 | 16.23 | 13.24 | 16.21 | 10.17 | 13.29 |  |  |

Table 6.1.3.14.2.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.14.2.1-2 : NS\_66-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation / (dB) | | | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | | 100MHz | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 |
| Contiguous/ Non-contiguous sub-band RB sets | 18.17 | 22.10 | 18.33 | 22.11 | 16.22 | 19.14 | 16.31 | 19.23 | 16.32 | 19.28 |

Considering implementation margin and VLP UE, Table 6.1.3.14.2.1-3 can be proposed for SL-U NS\_66 S-SSB A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.14.2.1-3 : NS\_66 S-SSB A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | | 100MHz | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 |
| Contiguous/Non-contiguous | ≤ 21.0 | ≤ 24.5 | ≤ 21.0 | ≤24.5 | ≤19.0 | ≤21.5 | ≤19.0 | ≤21.5 | ≤19.0 | ≤21.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel. | | | | | | | | | | |

##### 6.1.3.14.3 A-MPR for PSFCH transmission

6.1.3.14.3.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.14.3.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.14.3.1-1: NS\_66-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’ | 17.52 | 17.83 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #3 | #4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’ | 14.46 | 17.46 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #5 | #6 | #7 | #8 | #9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’ | 13.10 | 14.77 | 17.78 | 17.75 | 14.80 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #10 | #11 | #12 | #13 | #14 | #15 | #16 | #17 | #18 |  |  |  |  |  |  |  |  |  |  |
| '80MHz' | 11.71 | 13.05 | 14.88 | 17.84 | 14.85 | 17.84 | 13.04 | 14.85 | 14.88 |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #19 | #20 | #21 | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 |
| '100MHz' | 11.33 | 11.70 | 13.08 | 14.82 | 17.84 | 12.93 | 14.75 | 17.72 | 17.72 | 11.67 | 13.01 | 13.04 | 13.01 | 12.92 | 14.82 | 14.82 | 14.85 | 14.76 | 11.69 |

Table 6.1.3.14.3.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.14.3.1-2: NS\_66-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | |
| 20MHz  (Full/Partial) | 40MHz  (Full/Partial) | 60MHz  (Full/Partial) | 80MHz  (Full/Partial) | 100MHz  (Full/Partial) |
| Contiguous/Non-contiguous sub-band RB sets | 17.84 | 14.88 | 13.10 | 11.71 | 11.33 |

Considering implementation margin and VLP UE, Table 6.1.3.14.3.1-3 can be proposed for SL-U NS\_66 PSFCH A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.14.3.1-3 : NS\_66 PSFCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | |
| 20MHz | 40MHz | 60MHz | 80MHz | 100MHz |
| Contiguous/Non-contiguous | ≤20.5 | ≤17.5 | ≤15.5 | ≤14.5 | ≤14.0 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel. | | | | | |

#### 6.1.3.15 A-MPR for SL-U with NS\_67

##### 6.1.3.15.1 A-MPR for simultaneous PSSCH/PSCCH transmission

6.1.3.15.1.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.15.1.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.15.1.1-1: NS\_67-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| '20MHz'  (7115) | Scenario # | #1 | #7 | #2 | #8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 12.74 | 14.69 | 12.74 | 14.70 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 12.73 | 14.69 | 12.74 | 14.70 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 12.74 | 14.70 | 12.74 | 14.71 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 12.74 | 14.70 | 12.74 | 14.70 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '40MHz'  (5965) | Scenario # | #3 | #9 | #13 | #30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 9.42 | 11.78 | 12.74 | 14.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 9.42 | 11.77 | 12.74 | 14.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 9.42 | 11.78 | 12.74 | 14.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 9.42 | 11.78 | 12.74 | 14.69 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '60MHz'  (7095) | Scenario # | #4 | #10 | #14 | #31 | #15 | #32 | #16 | #33 |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 7.61 | 9.89 | 12.74 | 15.18 | 9.42 | 12.26 | 12.73 | 15.17 |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 7.61 | 9.89 | 12.74 | 15.18 | 9.42 | 12.26 | 12.73 | 15.17 |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 7.61 | 9.89 | 12.74 | 15.19 | 9.42 | 12.26 | 12.73 | 15.17 |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 7.61 | 10.35 | 12.74 | 15.18 | 9.42 | 12.26 | 12.73 | 15.18 |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (5985) | Scenario # | #5 | #11 | #17 | #34 | #18 | #35 | #19 | #36 | #20 | #37 | #21 | #38 |  |  |  |  |  |  |
| 'QPSK' | 6.30 | 8.96 | 12.73 | 15.19 | 9.42 | 12.26 | 7.61 | 10.35 | 12.73 | 15.17 | 9.42 | 12.25 |  |  |  |  |  |  |
| '16QAM' | 6.30 | 8.96 | 12.74 | 15.19 | 9.42 | 12.26 | 7.61 | 10.35 | 12.73 | 15.17 | 9.42 | 12.25 |  |  |  |  |  |  |
| '64QAM' | 6.30 | 8.96 | 12.74 | 15.19 | 9.42 | 12.26 | 7.61 | 10.35 | 12.73 | 15.17 | 9.42 | 12.25 |  |  |  |  |  |  |
| '256QAM' | 6.30 | 8.96 | 12.74 | 15.18 | 9.42 | 12.26 | 7.60 | 10.36 | 12.73 | 15.17 | 9.42 | 12.25 |  |  |  |  |  |  |
| '100MHz'  (7075) | Scenario # | #6 | #12 | #22 | #39 | #23 | #40 | #24 | #41 | #25 | #42 | #26 | #43 | #27 | #44 | #28 | #45 | #29 | #46 |
| 'QPSK' | 5.47 | 8.05 | 12.74 | 15.18 | 9.42 | 12.26 | 7.60 | 10.35 | 6.30 | 8.96 | 12.73 | 15.17 | 9.42 | 12.25 | 7.60 | 9.88 | 12.73 | 15.17 |
| '16QAM' | 5.47 | 8.05 | 12.74 | 15.18 | 9.42 | 12.26 | 7.60 | 10.35 | 6.30 | 8.96 | 12.73 | 15.16 | 9.42 | 12.25 | 7.60 | 10.34 | 12.73 | 15.18 |
| '64QAM' | 5.47 | 8.05 | 12.74 | 15.20 | 9.42 | 12.26 | 7.61 | 10.35 | 6.30 | 8.96 | 12.73 | 15.17 | 9.41 | 12.25 | 7.60 | 9.88 | 12.73 | 15.17 |
| '256QAM' | 5.47 | 8.05 | 12.73 | 15.19 | 9.42 | 12.26 | 7.60 | 10.35 | 6.30 | 8.96 | 12.74 | 15.17 | 9.42 | 12.25 | 7.60 | 9.88 | 12.73 | 15.16 |

Table 6.1.3.15.1.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.15.1.1-2: NS\_67-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | | 100MHz | |
| Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | 12.74 | 15.19 | 9.42 | 12.26 | 7.61 | 10.35 | 6.30 | 8.96 | 5.47 | 8.05 |
| 16 QAM | 12.74 | 15.19 | 9.42 | 12.26 | 7.61 | 10.35 | 6.30 | 8.96 | 5.47 | 8.05 |
| *64 QAM* | 12.74 | 15.20 | 9.42 | 12.26 | 7.61 | 10.35 | 6.30 | 8.96 | 5.47 | 8.05 |
| 256 QAM | 12.74 | 15.19 | 9.42 | 12.26 | 7.61 | 10.36 | 6.30 | 8.96 | 5.47 | 8.05 |

Considering implementation margin and VLP UE, Table 6.1.3.15.1.1-3 can be proposed for SL-U NS\_67 PSSCH/PSCCH A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.15.1.1-3 : NS\_67 PSSCH/PSCCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | | 100MHz | |
| Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | ≤ 13.5 | ≤ 16.0 | ≤ 10.5 | ≤ 13.5 | ≤ 8.5 | ≤ 11.5 | ≤ 7.0 | ≤ 10.0 | ≤ 6.5 | ≤ 9.0 |
| 16 QAM | ≤ 13.5 | ≤ 16.0 | ≤ 10.5 | ≤ 13.5 | ≤ 8.5 | ≤ 11.5 | ≤ 7.0 | ≤ 10.0 | ≤ 6.5 | ≤ 9.0 |
| *64 QAM* | ≤ 13.5 | ≤ 16.0 | ≤ 10.5 | ≤ 13.5 | ≤ 8.5 | ≤ 11.5 | ≤ 7.0 | ≤ 10.0 | ≤ 6.5 | ≤ 9.0 |
| 256 QAM | ≤ 13.5 | ≤ 16.0 | ≤ 10.5 | ≤ 13.5 | ≤ 8.5 | ≤ 11.5 | ≤ 7.0 | ≤ 10.0 | ≤ 6.5 | ≤ 9.0 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously allocated in the channel.  NOTE 2: Full allocation A-MPR applies when all RB’s in a 20 MHz channel or all RB’s in all sub-bands for wideband operation are fully allocated and all sub-bands are transmitted. Partial allocation A-MPR applies when one or more RB’s in one or more sub-bands are not allocated but when all sub-bands within the channel are transmitted. When not all sub-bands within the channel are transmitted, the A-MPR associated with the channel bandwidth according to the bandwidth of the contiguously transmitted sub-bands and according to the allocation type applies. | | | | | | | | | | | |

##### 6.1.3.15.2 A-MPR for S-SSB transmission

6.1.3.15.2.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.15.2.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.15.2.1-1: NS\_67-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 | #3 | #4 | #5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (7115) | 12.70 | 15.23 | 19.13 | 13.26 | 16.18 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #6 | #7 | #8 | #9 | #10 | #11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5965) | 9.74 | 12.25 | 16.14 | 12.65 | 15.28 | 19.13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #12 | #13 | #14 | #15 | #16 | #17 | #18 | #19 | #20 | #21 |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (7095) | 9.20 | 11.46 | 10.24 | 13.16 | 13.17 | 16.18 | 13.22 | 16.18 | 10.20 | 13.27 |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 | #38 | #39 |  |  |
| '80MHz'  (5985) | 9.83 | 10.17 | 8.52 | 11.43 | 10.11 | 13.16 | 13.30 | 16.15 | 10.16 | 13.24 | 13.18 | 16.17 | 8.61 | 11.44 | 10.11 | 13.24 | 10.19 | 13.24 |  |  |
| Scenario # | #40 | #41 | #42 | #43 | #44 | #45 | #46 | #47 | #48 | #49 | #50 | #51 | #52 | #53 | #54 | #55 | #56 | #57 | #58 | #59 |
| '100MHz'  (7075) | 10.65 | 9.20 | 7.52 | 10.10 | 8.52 | 11.45 | 10.21 | 13.17 | 13.28 | 16.30 | 8.49 | 11.38 | 10.13 | 13.25 | 13.16 | 16.20 | 13.23 | 16.22 | 10.05 | 10.21 |
| Scenario # | #60 | #61 | #62 | #63 | #64 | #65 | #66 | #67 | #68 | #69 | #70 | #71 | #72 | #73 | #74 | #75 | #76 | #77 |  |  |
| '100MHz'  (7095) | 8.50 | 11.34 | 8.52 | 11.44 | 8.68 | 11.48 | 8.70 | 11.40 | 10.23 | 13.26 | 10.17 | 13.15 | 10.19 | 13.14 | 10.21 | 13.26 | 9.07 | 10.26 |  |  |

Table 6.1.3.15.2.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.15.2.1-2: NS\_67-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation / (dB) | | | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | | 100MHz | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 |
| Contiguous/ Non-contiguous sub-band RB sets | 15.23 | 19.13 | 15.28 | 19.13 | 13.22 | 16.18 | 13.30 | 16.17 | 13.28 | 16.30 |

Considering implementation margin and VLP UE, Table 6.1.3.15.2.1-3 can be proposed for SL-U NS\_67 S-SSB A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.15.2.1-3 : NS\_67 S-SSB A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | | 100MHz | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 |
| Contiguous/Non-contiguous | ≤ 18.5 | ≤ 21.5 | ≤18.0 | ≤21.5 | ≤16.0 | ≤18.5 | ≤16.0 | ≤18.5 | ≤16.0 | ≤18.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel. | | | | | | | | | | |

##### 6.1.3.15.3 A-MPR for PSFCH transmission

6.1.3.15.3.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.15.3.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.15.3.1-1: NS\_67-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’ | 14.44 | 14.78 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #3 | #4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’ | 11.26 | 14.42 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #5 | #6 | #7 | #8 | #9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’ | 11.13 | 11.66 | 14.74 | 14.71 | 11.68 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #10 | #11 | #12 | #13 | #14 | #15 | #16 | #17 | #18 |  |  |  |  |  |  |  |  |  |  |
| '80MHz' | 12.23 | 10.32 | 11.73 | 14.82 | 11.70 | 14.83 | 10.54 | 11.72 | 11.73 |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #19 | #20 | #21 | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 |
| '100MHz' | 11.33 | 9.85 | 10.40 | 11.71 | 14.79 | 10.34 | 11.65 | 14.71 | 14.71 | 10.78 | 10.22 | 10.18 | 10.19 | 10.60 | 11.72 | 11.72 | 11.72 | 11.67 | 10.67 |

Table 6.1.3.15.3.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.15.3.1-2: NS\_67-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | |
| 20MHz  (Full/Partial) | 40MHz  (Full/Partial) | 60MHz  (Full/Partial) | 80MHz  (Full/Partial) | 100MHz  (Full/Partial) |
| Contiguous/Non-contiguous sub-band RB sets | 14.83 | 11.73 | 11.13 | 12.23 | 11.33 |

Considering implementation margin and VLP UE, Table 6.1.3.15.3.1-3 can be proposed for SL-U NS\_67 PSFCH A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.15.3.1-3 : NS\_67 PSFCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | |
| 20MHz | 40MHz | 60MHz | 80MHz | 100MHz |
| Contiguous/Non-contiguous | ≤17.5 | ≤14.5 | ≤14.0 | ≤14.0 | ≤14.0 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel. | | | | | |

#### 6.1.3.16 A-MPR for SL-U with NS\_68

##### 6.1.3.16.1 A-MPR for simultaneous PSSCH/PSCCH transmission

6.1.3.16.1.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.16.1.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.16.1.1-1: NS\_68-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| '20MHz'  (5955) | Scenario # | #1 | #7 | #2 | #8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 6.30 | 8.97 | 6.74 | 8.98 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 6.31 | 8.97 | 6.74 | 8.98 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 6.30 | 8.97 | 6.74 | 8.98 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 6.31 | 8.97 | 6.74 | 8.98 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '40MHz'  (5965) | Scenario # | #3 | #9 | #13 | #30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 3.17 | 5.88 | 6.30 | 8.97 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 3.17 | 5.89 | 6.30 | 8.97 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 3.17 | 5.89 | 6.30 | 8.97 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.89 | 6.30 | 8.97 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '60MHz'  (5975) | Scenario # | #4 | #10 | #14 | #31 | #15 | #32 | #16 | #33 |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 3.91 | 6.73 | 9.43 | 3.53 | 5.88 | 6.73 | 8.95 |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 3.90 | 6.73 | 9.43 | 3.53 | 5.89 | 6.73 | 8.95 |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 3.17 | 3.90 | 6.74 | 9.43 | 3.53 | 5.89 | 6.73 | 8.95 |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 6.73 | 9.44 | 5.47 | 6.31 | 6.73 | 9.42 |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (5985) | Scenario # | #5 | #11 | #17 | #34 | #18 | #35 | #19 | #36 | #20 | #37 | #21 | #38 |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.82 | 6.73 | 9.43 | 3.53 | 5.89 | 2.47 | 4.28 | 6.73 | 9.42 | 3.52 | 5.88 |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.82 | 6.73 | 9.42 | 3.53 | 6.31 | 2.47 | 4.28 | 6.73 | 9.42 | 3.52 | 5.88 |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.82 | 6.74 | 9.43 | 3.53 | 5.89 | 3.16 | 4.28 | 6.73 | 9.42 | 3.52 | 5.88 |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 6.73 | 9.43 | 5.47 | 5.89 | 5.47 | 5.07 | 6.73 | 9.42 | 5.47 | 5.88 |  |  |  |  |  |  |
| '100MHz'  (5995) | Scenario # | #6 | #12 | #22 | #39 | #23 | #40 | #24 | #41 | #25 | #42 | #26 | #43 | #27 | #44 | #28 | #45 | #29 | #46 |
| 'QPSK' | 2.48 | 2.48 | 6.73 | 9.43 | 3.53 | 5.89 | 2.47 | 4.28 | 2.14 | 2.82 | 6.73 | 9.42 | 3.52 | 5.88 | 2.47 | 3.89 | 6.73 | 8.95 |
| '16QAM' | 2.48 | 2.48 | 6.73 | 9.43 | 3.52 | 5.89 | 2.47 | 4.28 | 2.14 | 2.82 | 6.73 | 9.42 | 3.52 | 5.88 | 2.47 | 3.89 | 6.73 | 9.42 |
| '64QAM' | 2.82 | 2.48 | 6.74 | 9.43 | 3.53 | 6.31 | 3.16 | 4.28 | 2.81 | 2.82 | 6.73 | 9.42 | 3.52 | 5.88 | 3.16 | 3.89 | 6.73 | 8.96 |
| '256QAM' | 5.47 | 5.07 | 6.73 | 9.43 | 5.47 | 5.89 | 5.47 | 5.07 | 5.47 | 5.06 | 6.73 | 9.42 | 5.47 | 5.88 | 5.47 | 5.47 | 6.73 | 8.95 |

Table 6.1.3.16.1.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.16.1.1-2 : NS\_68-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | | 100MHz | |
| Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | 6.74 | 9.43 | 3.53 | 5.89 | 2.48 | 4.28 | 2.48 | 2.82 | 2.48 | 2.48 |
| 16 QAM | 6.74 | 9.43 | 3.53 | 6.31 | 2.48 | 4.28 | 2.48 | 2.82 | 2.48 | 2.48 |
| *64 QAM* | 6.74 | 9.43 | 3.53 | 6.31 | 3.17 | 4.28 | 2.82 | 2.82 | 2.82 | 2.48 |
| 256 QAM | 6.74 | 9.44 | 5.47 | 6.31 | 5.47 | 5.47 | 5.47 | 5.07 | 5.47 | 5.07 |

Considering implementation margin and VLP UE, Table 6.1.3.16.1.1-3 can be proposed for SL-U NS\_68 PSSCH/PSCCH A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.16.1.1-3 : NS\_68 PSSCH/PSCCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | | 100MHz | |
| Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | ≤ 7.5 | ≤ 10.0 | ≤ 6.0 | ≤ 7.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 |
| 16 QAM | ≤ 7.5 | ≤ 10.0 | ≤ 6.0 | ≤ 7.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 |
| *64 QAM* | ≤ 7.5 | ≤ 10.0 | ≤ 6.0 | ≤ 7.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 |
| 256 QAM | ≤ 7.5 | ≤ 10.0 | ≤ 6.0 | ≤ 7.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously allocated in the channel.  NOTE 2: Full allocation A-MPR applies when all RB’s in a 20 MHz channel or all RB’s in all sub-bands for wideband operation are fully allocated and all sub-bands are transmitted. Partial allocation A-MPR applies when one or more RB’s in one or more sub-bands are not allocated but when all sub-bands within the channel are transmitted. When not all sub-bands within the channel are transmitted, the A-MPR associated with the channel bandwidth according to the bandwidth of the contiguously transmitted sub-bands and according to the allocation type applies. | | | | | | | | | | | |

##### 6.1.3.16.2 A-MPR for S-SSB transmission

6.1.3.16.2.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.16.2.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.16.2.1-1: NS\_68-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 | #3 | #4 | #5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5955) | 8.90 | 9.08 | 13.05 | 7.17 | 10.13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #6 | #7 | #8 | #9 | #10 | #11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5965) | 10.90 | 8.84 | 10.15 | 8.74 | 9.17 | 13.17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #12 | #13 | #14 | #15 | #16 | #17 | #18 | #19 | #20 | #21 |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (5975) | 9.20 | 7.14 | 7.29 | 7.11 | 7.22 | 10.14 | 7.22 | 10.14 | 8.22 | 7.30 |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 | #38 | #39 |  |  |
| '80MHz'  (5985) | 9.81 | 7.53 | 7.31 | 6.24 | 7.08 | 7.21 | 7.20 | 10.26 | 7.50 | 7.12 | 7.22 | 10.13 | 8.61 | 7.26 | 8.37 | 7.12 | 7.53 | 7.16 |  |  |
| Scenario # | #40 | #41 | #42 | #43 | #44 | #45 | #46 | #47 | #48 | #49 | #50 | #51 | #52 | #53 | #54 | #55 | #56 | #57 | #58 | #59 |
| '100MHz'  (5995) | 10.69 | 7.18 | 7.16 | 5.59 | 7.88 | 6.35 | 7.08 | 7.20 | 7.19 | 10.15 | 7.22 | 5.48 | 7.19 | 7.18 | 7.23 | 10.18 | 7.16 | 10.14 | 9.75 | 7.47 |
| Scenario # | #60 | #61 | #62 | #63 | #64 | #65 | #66 | #67 | #68 | #69 | #70 | #71 | #72 | #73 | #74 | #75 | #76 | #77 |  |  |
| '100MHz'  (5995) | 8.61 | 7.33 | 8.45 | 7.37 | 8.66 | 7.07 | 8.65 | 6.55 | 8.24 | 7.10 | 7.15 | 7.12 | 7.70 | 7.13 | 7.94 | 7.18 | 9.17 | 7.25 |  |  |

Table 6.1.3.16.2.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.16.2.1-2: NS\_68-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation / (dB) | | | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | | 100MHz | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 |
| Contiguous/ Non-contiguous sub-band RB sets | 9.08 | 13.05 | 10.90 | 13.17 | 9.20 | 10.14 | 9.81 | 10.26 | 10.69 | 10.18 |

Considering implementation margin and VLP UE, Table 6.1.3.16.2.1-3 can be proposed for SL-U NS\_68 S-SSB A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.16.2.1-3 : NS\_68 S-SSB A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | | | | | |
| 20MHz | | 40MHz | | 60MHz | | 80MHz | | 100MHz | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 | > 2 | 2 |
| Contiguous/Non-contiguous | ≤ 13.5 | ≤ 15.5 | ≤ 13.5 | ≤ 15.5 | ≤12.0 | ≤12.5 | ≤12.0 | ≤12.5 | ≤12.0 | ≤12.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel. | | | | | | | | | | |

##### 6.1.3.16.3 A-MPR for PSFCH transmission

6.1.3.16.3.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.16.3.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.16.3.1-1: NS\_68-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5955) | 8.74 | 8.94 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #3 | #4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5965) | 7.85 | 8.74 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #5 | #6 | #7 | #8 | #9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘60MHz’  (5975) | 9.69 | 8.65 | 8.93 | 8.91 | 9.40 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #10 | #11 | #12 | #13 | #14 | #15 | #16 | #17 | #18 |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (5985) | 10.43 | 10.01 | 8.43 | 8.86 | 9.96 | 8.64 | 10.17 | 9.26 | 8.73 |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #19 | #20 | #21 | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 |
| '100MHz'  (5995) | 10.32 | 9.85 | 9.67 | 8.69 | 8.93 | 9.44 | 7.96 | 8.89 | 8.55 | 10.78 | 10.18 | 9.84 | 10.19 | 10.60 | 9.33 | 8.71 | 8.76 | 8.81 | 10.67 |

Table 6.1.3.16.3.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.16.3.1-2: NS\_68-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | |
| 20MHz  (Full/Partial) | 40MHz  (Full/Partial) | 60MHz  (Full/Partial) | 80MHz  (Full/Partial) | 100MHz  (Full/Partial) |
| Contiguous/Non-contiguous sub-band RB sets | 8.94 | 9.96 | 10.60 | 10.78 | 10.32 |

Considering implementation margin and VLP UE, Table 6.1.3.16.3.1-3 can be proposed for SL-U NS\_68 PSFCH A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.16.3.1-3 : NS\_68 PSFCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | |
| 20MHz | 40MHz | 60MHz | 80MHz | 100MHz |
| Contiguous/Non-contiguous | ≤ 13.5 | ≤ 13.5 | ≤ 13.5 | ≤ 13.5 | ≤ 13.0 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel. | | | | | |

#### 6.1.3.17 A-MPR for SL-U with NS\_69

##### 6.1.3.17.1 A-MPR for simultaneous PSSCH/PSCCH transmission

6.1.3.17.1.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.17.1.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.17.1.1-1: NS\_69-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| '20MHz'  (5955) | Scenario # | #1 | #7 | #2 | #8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.17 | 2.16 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.17 | 2.15 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.49 | 3.17 | 2.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.08 | 5.48 | 5.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '20MHz'  (6415) | Scenario # | #1 | #7 | #2 | #8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.82 | 3.54 | 3.17 | 3.92 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.82 | 3.54 | 2.83 | 3.92 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 3.54 | 3.17 | 3.92 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.08 | 5.48 | 5.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '40MHz'  (5965) | Scenario # | #3 | #9 | #13 | #30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 'QPSK' | 2.48 | 2.82 | 2.81 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '16QAM' | 2.48 | 2.83 | 2.81 | 0.40 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '64QAM' | 2.82 | 2.82 | 2.81 | 2.48 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.08 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (5985) | Scenario # | #5 | #11 | #17 | #34 | #18 | #35 | #19 | #36 | #20 | #37 | #21 | #38 |  |  |  |  |
| 'QPSK' | 2.48 | 3.17 | 2.14 | 0.14 | 2.47 | 3.17 | 2.47 | 3.17 | 2.46 | 0.09 | 2.13 | 0.37 |  |  |  |  |
| '16QAM' | 2.48 | 3.17 | 2.14 | 0.40 | 2.47 | 2.82 | 2.47 | 3.17 | 2.46 | 0.10 | 2.13 | 0.63 |  |  |  |  |
| '64QAM' | 2.82 | 3.17 | 3.17 | 2.15 | 3.16 | 2.82 | 3.16 | 3.16 | 3.16 | 2.13 | 3.16 | 2.46 |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.06 | 5.47 | 5.06 |  |  |  |  |
| '80MHz'  (6385)' | Scenario # | #5 | #11 | #17 | #34 | #18 | #35 | #19 | #36 | #20 | #37 | #21 | #38 |  |  |  |  |
| 'QPSK' | 2.48 | 2.48 | 2.14 | 0.14 | 2.47 | 0.39 | 2.47 | 0.66 | 2.46 | 0.10 | 2.13 | 0.37 |  |  |  |  |
| '16QAM' | 2.48 | 2.48 | 2.15 | 0.40 | 2.47 | 0.39 | 2.47 | 0.66 | 2.46 | 0.36 | 2.13 | 0.63 |  |  |  |  |
| '64QAM' | 2.82 | 2.48 | 3.17 | 2.15 | 3.17 | 2.47 | 3.16 | 2.48 | 3.16 | 2.12 | 3.16 | 2.46 |  |  |  |  |
| '256QAM' | 5.47 | 5.07 | 5.47 | 5.08 | 5.47 | 5.07 | 5.47 | 5.07 | 5.47 | 5.06 | 5.46 | 5.06 |  |  |  |  |

Table 6.1.3.17.1.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.17.1.1-2: NS\_69-PSSCH/PSCCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | |
| 20MHz | | 40MHz | | 80MHz | |
| Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | 2.81 | 2.50 | 2.48 | 3.17 | 2.48 | 3.17 |
| 16 QAM | 2.81 | 2.50 | 2.48 | 2.83 | 2.48 | 3.17 |
| *64 QAM* | 3.17 | 2.50 | 3.16 | 2.82 | 2.82 | 3.17 |
| 256 QAM | 5.48 | 5.08 | 5.47 | 5.07 | 5.47 | 5.07 |

Considering implementation margin and VLP UE, Table 6.1.3.17.1.1-3 can be proposed for SL-U NS\_69 PSSCH/PSCCH A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.17.1.1-3 : NS\_69 PSSCH/PSCCH A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Pre-coding | Modulation | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | |
| 20MHz | | 40MHz | | 80MHz | |
| Full (dB) | Partial (dB) | Full (dB) | Partial (dB) | Full (dB) | Partial (dB) |
| CP-OFDM | QPSK | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 8.0 | ≤ 6.5 | ≤ 8.5 |
| 16 QAM | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 8.0 | ≤ 6.5 | ≤ 8.5 |
| *64 QAM* | ≤ 6.0 | ≤ 6.0 | ≤ 6.0 | ≤ 8.0 | ≤ 6.5 | ≤ 8.5 |
| 256 QAM | ≤ 7.5 | ≤ 6.5 | ≤ 7.5 | ≤ 8.0 | ≤ 7.5 | ≤ 8.5 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously allocated in the channel.  NOTE 2: Full allocation A-MPR applies when all RB’s in a 20 MHz channel or all RB’s in all sub-bands for wideband operation are fully allocated and all sub-bands are transmitted. Partial allocation A-MPR applies when one or more RB’s in one or more sub-bands are not allocated but when all sub-bands within the channel are transmitted. When not all sub-bands within the channel are transmitted, the A-MPR associated with the channel bandwidth according to the bandwidth of the contiguously transmitted sub-bands and according to the allocation type applies.  NOTE 3: Channel bandwidth sizes of 60MHz and 100MHz are not applicable for this network signalling. | | | | | | | |

##### 6.1.3.17.2 A-MPR for S-SSB transmission

6.1.3.17.2.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.17.2.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.17.2.1-1: NS\_69-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 | #3 | #4 | #5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5955) | 8.90 | 7.13 | 5.64 | 6.39 | 5.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #6 | #7 | #8 | #9 | #10 | #11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5965) | 8.90 | 7.13 | 5.64 | 6.39 | 5.50 | 5.52 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #22 | #23 | #24 | #25 | #26 | #27 | #28 | #29 | #30 | #31 | #32 | #33 | #34 | #35 | #36 | #37 | #38 | #39 |  |  |
| '80MHz'  (5985) | 10.16 | 7.34 | 7.49 | 6.24 | 7.19 | 6.26 | 6.44 | 5.61 | 7.61 | 5.97 | 6.45 | 4.96 | 8.47 | 7.28 | 8.23 | 7.07 | 7.62 | 6.81 |  |  |

Table 6.1.3.17.2.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.17.2.1-2: NS\_69-S-SSB A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | |
| 20MHz | | 40MHz | | 80MHz | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 | > 2 | 2 |
| Contiguous/ Non-contiguous sub-band RB sets | 8.90 | 5.64 | 8.90 | 5.64 | 10.16 | 7.34 |

Considering implementation margin and VLP UE, Table 6.1.3.17.2.1-3 can be proposed for SL-U NS\_69 S-SSB A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.17.2.1-3 : NS\_69 S-SSB A-MPR for SL-U UE power class 5

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | | | | |
| 20MHz | | 40MHz | | 80MHz | |
| # of S-SSB repetition/RBset | > 2 | 2 | > 2 | 2 | > 2 | 2 |
| Contiguous/ Non-contiguous sub-band RB sets | ≤ 11.5 | ≤ 8.0 | ≤ 11.5 | ≤ 8.0 | ≤12.5 | ≤10.0 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel. | | | | | | |

##### 6.1.3.17.3 A-MPR for PSFCH transmission

6.1.3.17.3.1 LG Electronics’ simulation results (R4-2404862)

Table 6.1.3.17.3.1-1 shows the A-MPR simulation results for the agreed scenarios with different center frequencies.

Table 6.1.3.17.3.1-1: NS\_69-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Scenario # | #1 | #2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘20MHz’  (5955) | 8.27 | 7.50 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #3 | #4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ‘40MHz’  (5965) | 10.01 | 6.53 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Scenario # | #10 | #11 | #12 | #13 | #14 | #15 | #16 | #17 | #18 |  |  |  |  |  |  |  |  |  |  |
| '80MHz'  (5985) | 12.23 | 10.01 | 8.43 | 7.43 | 9.96 | 7.02 | 10.54 | 9.26 | 9.66 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 6.1.3.17.3.1-2 shows the maximum value of simulation results considering combinations of Outer/Inner sub-band configuration and Full/Partial RB allocation.

Table 6.1.3.17.3.1-2 : NS\_69-PSFCH A-MPR simulation results for SL-U power class 5

|  |  |  |  |
| --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | |
| 20MHz  (Full/Partial) | 40MHz  (Full/Partial) | 80MHz  (Full/Partial) |
| Contiguous/Non-contiguous sub-band RB sets | 8.27 | 10.01 | 12.23 |

Considering implementation margin and VLP UE, Table 6.1.3.17.3.1-3 can be proposed for SL-U NS\_69 PSFCH A-MPR.

* maximum (6dB, simulated A-MPR + implementation margin)

Table 6.1.3.17.3.1-3 : NS\_69 PSFCH A-MPR for SL-U UE power class 5

|  |  |  |  |
| --- | --- | --- | --- |
| RB set configuration | Channel bandwidth (Sub-band allocation) / RB Allocation | | |
| 20MHz | 40MHz | 80MHz |
| Contiguous/Non-contiguous sub-band RB sets | ≤ 11.0 | ≤ 12.5 | ≤ 15.0 |
| NOTE 1: The A-MPR shall apply to all SCS in all active 20 MHz sub-bands contiguously or non-contiguously allocated in the channel. | | | |

<<<<<<<<<< End of changes in section 6 >>>>>>>>>>