

## 8 CONDUCTED RF OUPUT POWER

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## 8.1 GSM Output Power

| GSM-Full Power-Ant.2    |                          |       |       |                       |                     |                      |       |       |                        |
|-------------------------|--------------------------|-------|-------|-----------------------|---------------------|----------------------|-------|-------|------------------------|
| GSM850 Band<br>Channel  | Burst Average Power(dBm) |       |       | Tune-up<br>Power(dBm) | Division<br>Factors | Frame-Averaged power |       |       | Tune-up<br>Power(dBm ) |
|                         | 128                      | 190   | 251   |                       |                     | 128                  | 190   | 251   |                        |
| GSM (GMSK, 1-Slot)      | 32.75                    | 32.84 | 32.84 | 33.50                 | 9.19                | 23.56                | 23.65 | 23.65 | 24.31                  |
| GPRS (GMSK, 1-Slot)     | 32.70                    | 32.78 | 32.78 | 33.50                 | 9.19                | 23.51                | 23.59 | 23.59 | 24.31                  |
| GPRS (GMSK, 2-Slots)    | 30.74                    | 30.72 | 30.72 | 32.00                 | 6.13                | <b>24.61</b>         | 24.59 | 24.59 | 25.87                  |
| GPRS (GMSK, 3-Slots)    | 28.63                    | 28.64 | 28.63 | 30.50                 | 4.42                | 24.21                | 24.22 | 24.21 | <b>26.08</b>           |
| GPRS (GMSK, 4-Slots)    | 27.16                    | 27.13 | 27.12 | 29.00                 | 3.18                | 23.98                | 23.95 | 23.94 | 25.82                  |
| EGPRS (8PSK, 1-Slot)    | 25.68                    | 25.86 | 25.33 | 27.50                 | 9.19                | 16.49                | 16.67 | 16.14 | 18.31                  |
| EGPRS (8PSK, 2-Slots)   | 24.30                    | 24.44 | 24.35 | 25.50                 | 6.13                | 18.17                | 18.31 | 18.22 | 19.37                  |
| EGPRS (8PSK, 3-Slots)   | 22.03                    | 22.11 | 22.16 | 23.50                 | 4.42                | 17.61                | 17.69 | 17.74 | 19.08                  |
| EGPRS (8PSK, 4-Slots)   | 20.14                    | 20.20 | 20.10 | 22.50                 | 3.18                | 16.96                | 17.02 | 16.92 | 19.32                  |
| GSM1900 Band<br>Channel | Burst Average Power(dBm) |       |       | Tune-up<br>Power(dBm) | Division<br>Factors | Frame-Averaged       |       |       | Tune-up<br>Power(dBm ) |
|                         | 512                      | 661   | 810   |                       |                     | 512                  | 661   | 810   |                        |
| GSM (GMSK, 1-Slot)      | 30.45                    | 30.42 | 30.36 | 30.50                 | 9.19                | 21.26                | 21.23 | 21.17 | 21.31                  |
| GPRS (GMSK, 1-Slot)     | 30.43                    | 30.40 | 30.34 | 30.50                 | 9.19                | 21.24                | 21.21 | 21.15 | 21.31                  |
| GPRS (GMSK, 2-Slots)    | 28.45                    | 28.40 | 28.33 | 28.50                 | 6.13                | <b>22.32</b>         | 22.27 | 22.20 | 22.37                  |
| GPRS (GMSK, 3-Slots)    | 26.48                    | 26.45 | 26.39 | 27.50                 | 4.42                | 22.06                | 22.03 | 21.97 | <b>23.08</b>           |
| GPRS (GMSK, 4-Slots)    | 24.96                    | 24.95 | 24.86 | 25.50                 | 3.18                | 21.78                | 21.77 | 21.68 | 22.32                  |
| EGPRS (8PSK, 1-Slot)    | 27.30                    | 27.11 | 27.21 | 28.00                 | 9.19                | 18.11                | 17.92 | 18.02 | 18.81                  |
| EGPRS (8PSK, 2-Slots)   | 24.02                    | 24.02 | 24.80 | 25.00                 | 6.13                | 17.89                | 17.89 | 18.67 | 18.87                  |
| EGPRS (8PSK, 3-Slots)   | 22.92                    | 22.94 | 22.89 | 23.00                 | 4.42                | 18.50                | 18.52 | 18.47 | 18.58                  |
| EGPRS (8PSK, 4-Slots)   | 20.90                    | 20.95 | 20.79 | 22.50                 | 3.18                | 17.72                | 17.77 | 17.61 | 19.32                  |

| GSM-State 1-Ant.2       |                          |       |       |                       |                     |                      |              |       |                        |
|-------------------------|--------------------------|-------|-------|-----------------------|---------------------|----------------------|--------------|-------|------------------------|
| GSM850 Band<br>Channel  | Burst Average Power(dBm) |       |       | Tune-up<br>Power(dBm) | Division<br>Factors | Frame-Averaged power |              |       | Tune-up<br>Power(dBm ) |
|                         | 128                      | 190   | 251   |                       |                     | 128                  | 190          | 251   |                        |
| GSM (GMSK, 1-Slot)      | 31.66                    | 31.75 | 31.63 | 32.50                 | 9.19                | 22.47                | 22.56        | 22.44 | 23.31                  |
| GPRS (GMSK, 1-Slot)     | 31.64                    | 31.72 | 31.60 | 32.50                 | 9.19                | 22.45                | 22.53        | 22.41 | 23.31                  |
| GPRS (GMSK, 2-Slots)    | 29.53                    | 29.64 | 29.59 | 30.50                 | 6.13                | 23.40                | <b>23.51</b> | 23.46 | 24.37                  |
| GPRS (GMSK, 3-Slots)    | 27.69                    | 27.76 | 27.73 | 29.50                 | 4.42                | 23.27                | 23.34        | 23.31 | <b>25.08</b>           |
| GPRS (GMSK, 4-Slots)    | 25.02                    | 25.38 | 25.01 | 27.00                 | 3.18                | 21.84                | 22.20        | 21.83 | 23.82                  |
| EGPRS (8PSK, 1-Slot)    | 23.66                    | 23.53 | 23.52 | 24.00                 | 9.19                | 14.47                | 14.34        | 14.33 | 14.81                  |
| EGPRS (8PSK, 2-Slots)   | 21.34                    | 21.49 | 21.23 | 22.00                 | 6.13                | 15.21                | 15.36        | 15.10 | 15.87                  |
| EGPRS (8PSK, 3-Slots)   | 19.09                    | 19.50 | 19.05 | 20.00                 | 4.42                | 14.67                | 15.08        | 14.63 | 15.58                  |
| EGPRS (8PSK, 4-Slots)   | 17.36                    | 17.03 | 17.87 | 18.00                 | 3.18                | 14.18                | 13.85        | 14.69 | 14.82                  |
| GSM1900 Band<br>Channel | Burst Average Power(dBm) |       |       | Tune-up<br>Power(dBm) | Division<br>Factors | Frame-Averaged       |              |       | Tune-up<br>Power(dBm ) |
|                         | 512                      | 661   | 810   |                       |                     | 512                  | 661          | 810   |                        |
| GSM (GMSK, 1-Slot)      | 26.00                    | 25.95 | 25.89 | 26.50                 | 9.19                | 16.81                | 16.76        | 16.70 | 17.31                  |
| GPRS (GMSK, 1-Slot)     | 25.17                    | 25.12 | 25.07 | 26.50                 | 9.19                | 15.98                | 15.93        | 15.88 | 17.31                  |
| GPRS (GMSK, 2-Slots)    | 23.36                    | 23.30 | 23.26 | 24.50                 | 6.13                | 17.23                | 17.17        | 17.13 | 18.37                  |
| GPRS (GMSK, 3-Slots)    | 22.30                    | 22.36 | 22.25 | 23.50                 | 4.42                | 17.88                | <b>17.94</b> | 17.83 | <b>19.08</b>           |
| GPRS (GMSK, 4-Slots)    | 20.44                    | 20.38 | 20.32 | 21.50                 | 3.18                | 17.26                | 17.20        | 17.14 | 18.32                  |
| EGPRS (8PSK, 1-Slot)    | 22.21                    | 22.60 | 22.39 | 24.00                 | 9.19                | 13.02                | 13.41        | 13.20 | 14.81                  |
| EGPRS (8PSK, 2-Slots)   | 20.78                    | 21.22 | 20.83 | 21.50                 | 6.13                | 14.65                | 15.09        | 14.70 | 15.37                  |
| EGPRS (8PSK, 3-Slots)   | 14.01                    | 14.19 | 14.26 | 15.00                 | 4.42                | 9.59                 | 9.77         | 9.84  | 10.58                  |
| EGPRS (8PSK, 4-Slots)   | 12.49                    | 12.88 | 12.35 | 13.00                 | 3.18                | 9.31                 | 9.70         | 9.17  | 9.82                   |

| GSM-State 2-Ant.2     |                          |       |       |            |                      |              |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|--------------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |              |       | Tune-up      |
| Channel               | 128                      | 190   | 251   | Power(dBm) | 128                  | 190          | 251   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 31.66                    | 31.75 | 31.63 | 32.50      | 22.47                | 22.56        | 22.44 | 23.31        |
| GPRS (GMSK, 1-Slot)   | 31.64                    | 31.72 | 31.60 | 32.50      | 22.45                | 22.53        | 22.41 | 23.31        |
| GPRS (GMSK, 2-Slots)  | 29.53                    | 29.64 | 29.59 | 30.50      | 23.40                | <b>23.51</b> | 23.46 | 24.37        |
| GPRS (GMSK, 3-Slots)  | 27.69                    | 27.76 | 27.73 | 29.50      | 23.27                | 23.34        | 23.31 | <b>25.08</b> |
| GPRS (GMSK, 4-Slots)  | 25.02                    | 25.38 | 25.01 | 27.00      | 21.84                | 22.20        | 21.83 | 23.82        |
| EGPRS (8PSK, 1-Slot)  | 23.66                    | 23.53 | 23.52 | 24.00      | 14.47                | 14.34        | 14.33 | 14.81        |
| EGPRS (8PSK, 2-Slots) | 21.34                    | 21.49 | 21.23 | 22.00      | 15.21                | 15.36        | 15.10 | 15.87        |
| EGPRS (8PSK, 3-Slots) | 19.09                    | 19.50 | 19.05 | 20.00      | 14.67                | 15.08        | 14.63 | 15.58        |
| EGPRS (8PSK, 4-Slots) | 17.36                    | 17.03 | 17.87 | 18.00      | 14.18                | 13.85        | 14.69 | 14.82        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged       |              |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 512                  | 661          | 810   | Power(dBm)   |
| GSM (GMSK, 1-Slot)    | 26.00                    | 25.95 | 25.89 | 26.50      | 16.81                | 16.76        | 16.70 | 17.31        |
| GPRS (GMSK, 1-Slot)   | 25.17                    | 25.12 | 25.07 | 26.50      | 15.98                | 15.93        | 15.88 | 17.31        |
| GPRS (GMSK, 2-Slots)  | 23.36                    | 23.30 | 23.26 | 24.50      | 17.23                | 17.17        | 17.13 | 18.37        |
| GPRS (GMSK, 3-Slots)  | 22.30                    | 22.36 | 22.25 | 23.50      | 17.88                | <b>17.94</b> | 17.83 | <b>19.08</b> |
| GPRS (GMSK, 4-Slots)  | 20.44                    | 20.38 | 20.32 | 21.50      | 17.26                | 17.20        | 17.14 | 18.32        |
| EGPRS (8PSK, 1-Slot)  | 22.21                    | 22.60 | 22.39 | 24.00      | 13.02                | 13.41        | 13.20 | 14.81        |
| EGPRS (8PSK, 2-Slots) | 20.78                    | 21.22 | 20.83 | 21.50      | 14.65                | 15.09        | 14.70 | 15.37        |
| EGPRS (8PSK, 3-Slots) | 14.01                    | 14.19 | 14.26 | 15.00      | 9.59                 | 9.77         | 9.84  | 10.58        |
| EGPRS (8PSK, 4-Slots) | 12.49                    | 12.88 | 12.35 | 13.00      | 9.31                 | 9.70         | 9.17  | 9.82         |

| GSM-State 3-Ant.2     |                          |       |       |            |                      |       |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|-------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |       |       | Tune-up      |
| Channel               | 128                      | 190   | 251   | Power(dBm) | 128                  | 190   | 251   | Power(dBm )  |
| GSM (GMSK, 1-Slot)    | 32.75                    | 32.84 | 32.84 | 33.50      | 23.56                | 23.65 | 23.65 | 24.31        |
| GPRS (GMSK, 1-Slot)   | 32.70                    | 32.78 | 32.78 | 33.50      | 23.51                | 23.59 | 23.59 | 24.31        |
| GPRS (GMSK, 2-Slots)  | 30.74                    | 30.72 | 30.72 | 32.00      | <b>24.61</b>         | 24.59 | 24.59 | 25.87        |
| GPRS (GMSK, 3-Slots)  | 28.63                    | 28.64 | 28.63 | 30.50      | 24.21                | 24.22 | 24.21 | <b>26.08</b> |
| GPRS (GMSK, 4-Slots)  | 27.16                    | 27.13 | 27.12 | 29.00      | 23.98                | 23.95 | 23.94 | 25.82        |
| EGPRS (8PSK, 1-Slot)  | 25.68                    | 25.86 | 25.33 | 27.50      | 16.49                | 16.67 | 16.14 | 18.31        |
| EGPRS (8PSK, 2-Slots) | 24.30                    | 24.44 | 24.35 | 25.50      | 18.17                | 18.31 | 18.22 | 19.37        |
| EGPRS (8PSK, 3-Slots) | 22.03                    | 22.11 | 22.16 | 23.50      | 17.61                | 17.69 | 17.74 | 19.08        |
| EGPRS (8PSK, 4-Slots) | 20.14                    | 20.20 | 20.10 | 22.50      | 16.96                | 17.02 | 16.92 | 19.32        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged       |       |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 512                  | 661   | 810   | Power(dBm )  |
| GSM (GMSK, 1-Slot)    | 29.00                    | 28.94 | 28.87 | 29.50      | 19.81                | 19.75 | 19.68 | 20.31        |
| GPRS (GMSK, 1-Slot)   | 29.01                    | 28.94 | 28.89 | 29.50      | 19.82                | 19.75 | 19.70 | 20.31        |
| GPRS (GMSK, 2-Slots)  | 26.97                    | 26.91 | 26.85 | 27.50      | <b>20.84</b>         | 20.78 | 20.72 | 21.37        |
| GPRS (GMSK, 3-Slots)  | 25.13                    | 25.18 | 25.08 | 26.50      | 20.71                | 20.76 | 20.66 | <b>22.08</b> |
| GPRS (GMSK, 4-Slots)  | 23.38                    | 23.33 | 23.28 | 24.50      | 20.20                | 20.15 | 20.10 | 21.32        |
| EGPRS (8PSK, 1-Slot)  | 25.60                    | 25.84 | 25.39 | 27.00      | 16.41                | 16.65 | 16.20 | 17.81        |
| EGPRS (8PSK, 2-Slots) | 23.30                    | 23.38 | 23.04 | 24.00      | 17.17                | 17.25 | 16.91 | 17.87        |
| EGPRS (8PSK, 3-Slots) | 20.37                    | 20.68 | 20.48 | 22.00      | 15.95                | 16.26 | 16.06 | 17.58        |
| EGPRS (8PSK, 4-Slots) | 17.35                    | 17.57 | 17.27 | 18.50      | 14.17                | 14.39 | 14.09 | 15.32        |

| GSM-State 4-Ant.3       |                          |       |       |                       |                     |                      |       |       |                        |
|-------------------------|--------------------------|-------|-------|-----------------------|---------------------|----------------------|-------|-------|------------------------|
| GSM850 Band<br>Channel  | Burst Average Power(dBm) |       |       | Tune-up<br>Power(dBm) | Division<br>Factors | Frame-Averaged power |       |       | Tune-up<br>Power(dBm ) |
|                         | 128                      | 190   | 251   |                       |                     | 128                  | 190   | 251   |                        |
| GSM (GMSK, 1-Slot)      | 32.75                    | 32.84 | 32.84 | 33.50                 | 9.19                | 23.56                | 23.65 | 23.65 | 24.31                  |
| GPRS (GMSK, 1-Slot)     | 32.70                    | 32.78 | 32.78 | 33.50                 | 9.19                | 23.51                | 23.59 | 23.59 | 24.31                  |
| GPRS (GMSK, 2-Slots)    | 30.74                    | 30.72 | 30.72 | 32.00                 | 6.13                | <b>24.61</b>         | 24.59 | 24.59 | 25.87                  |
| GPRS (GMSK, 3-Slots)    | 28.63                    | 28.64 | 28.63 | 30.50                 | 4.42                | 24.21                | 24.22 | 24.21 | <b>26.08</b>           |
| GPRS (GMSK, 4-Slots)    | 27.16                    | 27.13 | 27.12 | 29.00                 | 3.18                | 23.98                | 23.95 | 23.94 | 25.82                  |
| EGPRS (8PSK, 1-Slot)    | 25.68                    | 25.86 | 25.33 | 27.50                 | 9.19                | 16.49                | 16.67 | 16.14 | 18.31                  |
| EGPRS (8PSK, 2-Slots)   | 24.30                    | 24.44 | 24.35 | 25.50                 | 6.13                | 18.17                | 18.31 | 18.22 | 19.37                  |
| EGPRS (8PSK, 3-Slots)   | 22.03                    | 22.11 | 22.16 | 23.50                 | 4.42                | 17.61                | 17.69 | 17.74 | 19.08                  |
| EGPRS (8PSK, 4-Slots)   | 20.14                    | 20.20 | 20.10 | 22.50                 | 3.18                | 16.96                | 17.02 | 16.92 | 19.32                  |
| GSM1900 Band<br>Channel | Burst Average Power(dBm) |       |       | Tune-up<br>Power(dBm) | Division<br>Factors | Frame-Averaged       |       |       | Tune-up<br>Power(dBm ) |
|                         | 512                      | 661   | 810   |                       |                     | 512                  | 661   | 810   |                        |
| GSM (GMSK, 1-Slot)      | 29.00                    | 28.94 | 28.87 | 29.50                 | 9.19                | 19.81                | 19.75 | 19.68 | 20.31                  |
| GPRS (GMSK, 1-Slot)     | 29.01                    | 28.94 | 28.89 | 29.50                 | 9.19                | 19.82                | 19.75 | 19.70 | 20.31                  |
| GPRS (GMSK, 2-Slots)    | 26.97                    | 26.91 | 26.85 | 27.50                 | 6.13                | <b>20.84</b>         | 20.78 | 20.72 | 21.37                  |
| GPRS (GMSK, 3-Slots)    | 25.13                    | 25.18 | 25.08 | 26.50                 | 4.42                | 20.71                | 20.76 | 20.66 | <b>22.08</b>           |
| GPRS (GMSK, 4-Slots)    | 23.38                    | 23.33 | 23.28 | 24.50                 | 3.18                | 20.20                | 20.15 | 20.10 | 21.32                  |
| EGPRS (8PSK, 1-Slot)    | 25.60                    | 25.84 | 25.39 | 27.00                 | 9.19                | 16.41                | 16.65 | 16.20 | 17.81                  |
| EGPRS (8PSK, 2-Slots)   | 23.30                    | 23.38 | 23.04 | 24.00                 | 6.13                | 17.17                | 17.25 | 16.91 | 17.87                  |
| EGPRS (8PSK, 3-Slots)   | 20.37                    | 20.68 | 20.48 | 22.00                 | 4.42                | 15.95                | 16.26 | 16.06 | 17.58                  |
| EGPRS (8PSK, 4-Slots)   | 17.35                    | 17.57 | 17.27 | 18.50                 | 3.18                | 14.17                | 14.39 | 14.09 | 15.32                  |

| GSM-Full Power-Ant.3    |                          |       |       |                       |                     |                      |              |       |                        |
|-------------------------|--------------------------|-------|-------|-----------------------|---------------------|----------------------|--------------|-------|------------------------|
| GSM850 Band<br>Channel  | Burst Average Power(dBm) |       |       | Tune-up<br>Power(dBm) | Division<br>Factors | Frame-Averaged power |              |       | Tune-up<br>Power(dBm ) |
|                         | 128                      | 190   | 251   |                       |                     | 128                  | 190          | 251   |                        |
| GSM (GMSK, 1-Slot)      | 32.80                    | 32.86 | 32.81 | 33.50                 | 9.19                | 23.61                | 23.67        | 23.62 | 24.31                  |
| GPRS (GMSK, 1-Slot)     | 32.76                    | 32.82 | 32.78 | 33.50                 | 9.19                | 23.57                | 23.63        | 23.59 | 24.31                  |
| GPRS (GMSK, 2-Slots)    | 30.75                    | 30.75 | 30.72 | 31.50                 | 6.13                | <b>24.62</b>         | 24.62        | 24.59 | 25.37                  |
| GPRS (GMSK, 3-Slots)    | 28.62                    | 28.66 | 28.64 | 30.50                 | 4.42                | 24.20                | 24.24        | 24.22 | <b>26.08</b>           |
| GPRS (GMSK, 4-Slots)    | 27.12                    | 27.16 | 27.15 | 28.00                 | 3.18                | 23.94                | 23.98        | 23.97 | 24.82                  |
| EGPRS (8PSK, 1-Slot)    | 25.64                    | 26.11 | 25.72 | 27.00                 | 9.19                | 16.45                | 16.92        | 16.53 | 17.81                  |
| EGPRS (8PSK, 2-Slots)   | 24.42                    | 24.63 | 24.40 | 26.00                 | 6.13                | 18.29                | 18.50        | 18.27 | 19.87                  |
| EGPRS (8PSK, 3-Slots)   | 22.20                    | 22.12 | 22.12 | 24.00                 | 4.42                | 17.78                | 17.70        | 17.70 | 19.58                  |
| EGPRS (8PSK, 4-Slots)   | 20.02                    | 20.10 | 20.18 | 22.00                 | 3.18                | 16.84                | 16.92        | 17.00 | 18.82                  |
| GSM1900 Band<br>Channel | Burst Average Power(dBm) |       |       | Tune-up<br>Power(dBm) | Division<br>Factors | Frame-Averaged       |              |       | Tune-up<br>Power(dBm ) |
|                         | 512                      | 661   | 810   |                       |                     | 512                  | 661          | 810   |                        |
| GSM (GMSK, 1-Slot)      | 30.11                    | 30.14 | 30.09 | 30.50                 | 9.19                | 20.92                | 20.95        | 20.90 | 21.31                  |
| GPRS (GMSK, 1-Slot)     | 30.10                    | 30.13 | 30.07 | 30.50                 | 9.19                | 20.91                | 20.94        | 20.88 | 21.31                  |
| GPRS (GMSK, 2-Slots)    | 28.11                    | 28.12 | 28.05 | 28.50                 | 6.13                | 21.98                | <b>21.99</b> | 21.92 | 22.37                  |
| GPRS (GMSK, 3-Slots)    | 26.13                    | 26.14 | 26.10 | 27.00                 | 4.42                | 21.71                | 21.72        | 21.68 | <b>22.58</b>           |
| GPRS (GMSK, 4-Slots)    | 24.60                    | 24.63 | 24.57 | 25.00                 | 3.18                | 21.42                | 21.45        | 21.39 | 21.82                  |
| EGPRS (8PSK, 1-Slot)    | 26.21                    | 26.24 | 26.44 | 26.50                 | 9.19                | 17.02                | 17.05        | 17.25 | 17.31                  |
| EGPRS (8PSK, 2-Slots)   | 24.78                    | 24.68 | 24.53 | 25.00                 | 6.13                | 18.65                | 18.55        | 18.40 | 18.87                  |
| EGPRS (8PSK, 3-Slots)   | 22.88                    | 22.81 | 22.64 | 23.00                 | 4.42                | 18.46                | 18.39        | 18.22 | 18.58                  |
| EGPRS (8PSK, 4-Slots)   | 20.85                    | 20.90 | 20.81 | 21.00                 | 3.18                | 17.67                | 17.72        | 17.63 | 17.82                  |

| GSM-State 1&2&3-Ant.3   |                          |       |       |                       |                     |                      |              |       |                        |
|-------------------------|--------------------------|-------|-------|-----------------------|---------------------|----------------------|--------------|-------|------------------------|
| GSM850 Band<br>Channel  | Burst Average Power(dBm) |       |       | Tune-up<br>Power(dBm) | Division<br>Factors | Frame-Averaged power |              |       | Tune-up<br>Power(dBm ) |
|                         | 128                      | 190   | 251   |                       |                     | 128                  | 190          | 251   |                        |
| GSM (GMSK, 1-Slot)      | 32.80                    | 32.86 | 32.81 | 33.50                 | 9.19                | 23.61                | 23.67        | 23.62 | 24.31                  |
| GPRS (GMSK, 1-Slot)     | 32.76                    | 32.82 | 32.78 | 33.50                 | 9.19                | 23.57                | 23.63        | 23.59 | 24.31                  |
| GPRS (GMSK, 2-Slots)    | 30.75                    | 30.75 | 30.72 | 31.50                 | 6.13                | <b>24.62</b>         | 24.62        | 24.59 | 25.37                  |
| GPRS (GMSK, 3-Slots)    | 28.62                    | 28.66 | 28.64 | 30.50                 | 4.42                | 24.20                | 24.24        | 24.22 | <b>26.08</b>           |
| GPRS (GMSK, 4-Slots)    | 27.12                    | 27.16 | 27.15 | 28.00                 | 3.18                | 23.94                | 23.98        | 23.97 | 24.82                  |
| EGPRS (8PSK, 1-Slot)    | 25.64                    | 26.11 | 25.72 | 27.00                 | 9.19                | 16.45                | 16.92        | 16.53 | 17.81                  |
| EGPRS (8PSK, 2-Slots)   | 24.42                    | 24.63 | 24.40 | 26.00                 | 6.13                | 18.29                | 18.50        | 18.27 | 19.87                  |
| EGPRS (8PSK, 3-Slots)   | 22.20                    | 22.12 | 22.12 | 24.00                 | 4.42                | 17.78                | 17.70        | 17.70 | 19.58                  |
| EGPRS (8PSK, 4-Slots)   | 20.02                    | 20.10 | 20.18 | 22.00                 | 3.18                | 16.84                | 16.92        | 17.00 | 18.82                  |
| GSM1900 Band<br>Channel | Burst Average Power(dBm) |       |       | Tune-up<br>Power(dBm) | Division<br>Factors | Frame-Averaged       |              |       | Tune-up<br>Power(dBm ) |
|                         | 512                      | 661   | 810   |                       |                     | 512                  | 661          | 810   |                        |
| GSM (GMSK, 1-Slot)      | 30.11                    | 30.14 | 30.09 | 30.50                 | 9.19                | 20.92                | 20.95        | 20.90 | 21.31                  |
| GPRS (GMSK, 1-Slot)     | 30.10                    | 30.13 | 30.07 | 30.50                 | 9.19                | 20.91                | 20.94        | 20.88 | 21.31                  |
| GPRS (GMSK, 2-Slots)    | 28.11                    | 28.12 | 28.05 | 28.50                 | 6.13                | 21.98                | <b>21.99</b> | 21.92 | 22.37                  |
| GPRS (GMSK, 3-Slots)    | 26.13                    | 26.14 | 26.10 | 27.00                 | 4.42                | 21.71                | 21.72        | 21.68 | <b>22.58</b>           |
| GPRS (GMSK, 4-Slots)    | 24.60                    | 24.63 | 24.57 | 25.00                 | 3.18                | 21.42                | 21.45        | 21.39 | 21.82                  |
| EGPRS (8PSK, 1-Slot)    | 26.21                    | 26.24 | 26.44 | 26.50                 | 9.19                | 17.02                | 17.05        | 17.25 | 17.31                  |
| EGPRS (8PSK, 2-Slots)   | 24.78                    | 24.68 | 24.53 | 25.00                 | 6.13                | 18.65                | 18.55        | 18.40 | 18.87                  |
| EGPRS (8PSK, 3-Slots)   | 22.88                    | 22.81 | 22.64 | 23.00                 | 4.42                | 18.46                | 18.39        | 18.22 | 18.58                  |
| EGPRS (8PSK, 4-Slots)   | 20.85                    | 20.90 | 20.81 | 21.00                 | 3.18                | 17.67                | 17.72        | 17.63 | 17.82                  |



| GSM-State 4-Ant.3     |                          |       |       |            |                      |       |       |              |
|-----------------------|--------------------------|-------|-------|------------|----------------------|-------|-------|--------------|
| GSM850 Band           | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged power |       |       | Tune-up      |
| Channel               | 128                      | 190   | 251   | Power(dBm) | 128                  | 190   | 251   | Power(dBm )  |
| GSM (GMSK, 1-Slot)    | 32.80                    | 32.86 | 32.81 | 33.50      | 23.61                | 23.67 | 23.62 | 24.31        |
| GPRS (GMSK, 1-Slot)   | 32.76                    | 32.82 | 32.78 | 33.50      | 23.57                | 23.63 | 23.59 | 24.31        |
| GPRS (GMSK, 2-Slots)  | 30.75                    | 30.75 | 30.72 | 31.50      | <b>24.62</b>         | 24.62 | 24.59 | 25.37        |
| GPRS (GMSK, 3-Slots)  | 28.62                    | 28.66 | 28.64 | 30.50      | 24.20                | 24.24 | 24.22 | <b>26.08</b> |
| GPRS (GMSK, 4-Slots)  | 27.12                    | 27.16 | 27.15 | 28.00      | 23.94                | 23.98 | 23.97 | 24.82        |
| EGPRS (8PSK, 1-Slot)  | 25.64                    | 26.11 | 25.72 | 27.00      | 16.45                | 16.92 | 16.53 | 17.81        |
| EGPRS (8PSK, 2-Slots) | 24.42                    | 24.63 | 24.40 | 26.00      | 18.29                | 18.50 | 18.27 | 19.87        |
| EGPRS (8PSK, 3-Slots) | 22.20                    | 22.12 | 22.12 | 24.00      | 17.78                | 17.70 | 17.70 | 19.58        |
| EGPRS (8PSK, 4-Slots) | 20.02                    | 20.10 | 20.18 | 22.00      | 16.84                | 16.92 | 17.00 | 18.82        |
| GSM1900 Band          | Burst Average Power(dBm) |       |       | Tune-up    | Frame-Averaged       |       |       | Tune-up      |
| Channel               | 512                      | 661   | 810   | Power(dBm) | 512                  | 661   | 810   | Power(dBm )  |
| GSM (GMSK, 1-Slot)    | 29.03                    | 29.01 | 28.93 | 29.50      | 19.84                | 19.82 | 19.74 | 20.31        |
| GPRS (GMSK, 1-Slot)   | 29.01                    | 29.00 | 28.91 | 29.50      | 19.82                | 19.81 | 19.72 | 20.31        |
| GPRS (GMSK, 2-Slots)  | 26.92                    | 26.90 | 26.84 | 27.50      | <b>20.79</b>         | 20.77 | 20.71 | 21.37        |
| GPRS (GMSK, 3-Slots)  | 25.12                    | 25.14 | 25.05 | 26.00      | 20.70                | 20.72 | 20.63 | <b>21.58</b> |
| GPRS (GMSK, 4-Slots)  | 23.33                    | 23.30 | 23.24 | 24.00      | 20.15                | 20.12 | 20.06 | 20.82        |
| EGPRS (8PSK, 1-Slot)  | 25.49                    | 25.73 | 25.36 | 25.50      | 16.30                | 16.54 | 16.17 | 16.31        |
| EGPRS (8PSK, 2-Slots) | 23.08                    | 23.58 | 23.12 | 24.00      | 16.95                | 17.45 | 16.99 | 17.87        |
| EGPRS (8PSK, 3-Slots) | 20.19                    | 20.70 | 20.22 | 21.00      | 15.77                | 16.28 | 15.80 | 16.58        |
| EGPRS (8PSK, 4-Slots) | 17.12                    | 17.41 | 17.09 | 18.00      | 13.94                | 14.23 | 13.91 | 14.82        |

## 8.2 WCDMA Output Power

| WCDMA-Full Power-Ant.2 |         |         |         |                          |
|------------------------|---------|---------|---------|--------------------------|
| Band                   | Band 2  |         |         | Tune-up Limit Power(dBm) |
| Channel                | 9262    | 9400    | 9538    |                          |
| Frequency              | 1852.40 | 1880.00 | 1907.60 |                          |
| AMR 12.2Kbps           | 23.33   | 23.48   | 23.49   | 24.00                    |
| RMC 12.2Kbps           | 23.48   | 23.49   | 23.56   | 24.00                    |
| HSDPA Subtest-1        | 22.86   | 22.66   | 22.87   | 23.00                    |
| HSDPA Subtest-2        | 22.91   | 22.95   | 22.70   | 23.00                    |
| HSDPA Subtest-3        | 22.56   | 22.42   | 22.32   | 23.00                    |
| HSDPA Subtest-4        | 22.33   | 22.43   | 22.62   | 23.00                    |
| DC-HSDPA Subtest-1     | 22.88   | 22.79   | 22.73   | 23.00                    |
| DC-HSDPA Subtest-2     | 22.68   | 22.92   | 22.88   | 23.00                    |
| DC-HSDPA Subtest-3     | 22.57   | 22.43   | 22.47   | 23.00                    |
| DC-HSDPA Subtest-4     | 22.46   | 22.39   | 22.72   | 23.00                    |
| HSUPA Subtest-1        | 22.39   | 22.37   | 22.16   | 22.50                    |
| HSUPA Subtest-2        | 20.87   | 20.98   | 21.07   | 22.00                    |
| HSUPA Subtest-3        | 20.50   | 20.66   | 20.83   | 22.00                    |
| HSUPA Subtest-4        | 21.70   | 21.62   | 21.73   | 22.50                    |
| HSUPA Subtest-5        | 22.95   | 22.99   | 23.14   | 23.50                    |
| HSPA+                  | 20.93   | 21.17   | 21.20   | 22.00                    |
| Band                   | Band 4  |         |         | Tune-up Limit Power(dBm) |
| Channel                | 1312    | 1412    | 1513    |                          |
| Frequency              | 1712.40 | 1732.40 | 1752.60 |                          |
| AMR 12.2Kbps           | 23.76   | 23.82   | 23.72   | 24.00                    |
| RMC 12.2Kbps           | 23.80   | 23.83   | 23.85   | 24.00                    |
| HSDPA Subtest-1        | 23.34   | 23.41   | 23.33   | 23.50                    |
| HSDPA Subtest-2        | 23.27   | 23.38   | 23.37   | 23.50                    |
| HSDPA Subtest-3        | 22.92   | 22.79   | 22.97   | 23.50                    |
| HSDPA Subtest-4        | 22.76   | 22.83   | 23.00   | 23.50                    |
| DC-HSDPA Subtest-1     | 23.11   | 23.46   | 23.41   | 23.50                    |
| DC-HSDPA Subtest-2     | 23.25   | 23.27   | 23.44   | 23.50                    |
| DC-HSDPA Subtest-3     | 22.73   | 22.67   | 23.01   | 23.50                    |
| DC-HSDPA Subtest-4     | 22.81   | 22.85   | 23.10   | 23.50                    |
| HSUPA Subtest-1        | 22.63   | 22.86   | 22.96   | 23.00                    |
| HSUPA Subtest-2        | 21.58   | 21.80   | 21.54   | 23.00                    |
| HSUPA Subtest-3        | 21.52   | 21.50   | 21.87   | 23.00                    |
| HSUPA Subtest-4        | 22.76   | 22.68   | 22.63   | 23.50                    |
| HSUPA Subtest-5        | 23.26   | 23.31   | 23.26   | 23.50                    |
| HSPA+                  | 21.59   | 21.85   | 21.77   | 23.00                    |
| Band                   | Band 5  |         |         | Tune-up Limit Power(dBm) |
| Channel                | 4132    | 4182    | 4233    |                          |
| Frequency              | 826.40  | 836.40  | 846.60  |                          |
| AMR 12.2Kbps           | 23.91   | 23.93   | 23.85   | 24.50                    |
| RMC 12.2Kbps           | 23.94   | 24.02   | 23.96   | 24.50                    |
| HSDPA Subtest-1        | 23.21   | 23.19   | 23.16   | 24.00                    |
| HSDPA Subtest-2        | 23.07   | 23.10   | 22.92   | 24.00                    |
| HSDPA Subtest-3        | 22.81   | 22.73   | 22.61   | 23.50                    |
| HSDPA Subtest-4        | 22.58   | 22.71   | 22.58   | 23.50                    |
| DC-HSDPA Subtest-1     | 23.14   | 23.20   | 23.00   | 24.00                    |
| DC-HSDPA Subtest-2     | 23.07   | 22.94   | 23.05   | 24.00                    |
| DC-HSDPA Subtest-3     | 22.72   | 22.85   | 22.50   | 23.50                    |
| DC-HSDPA Subtest-4     | 22.66   | 22.57   | 22.75   | 23.50                    |
| HSUPA Subtest-1        | 22.61   | 22.77   | 22.83   | 23.50                    |
| HSUPA Subtest-2        | 21.24   | 21.43   | 21.50   | 22.50                    |
| HSUPA Subtest-3        | 21.04   | 21.14   | 20.96   | 22.50                    |
| HSUPA Subtest-4        | 22.64   | 22.51   | 22.38   | 23.50                    |
| HSUPA Subtest-5        | 23.00   | 22.96   | 22.85   | 23.50                    |
| HSPA+                  | 21.20   | 21.54   | 21.34   | 22.50                    |

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| <b>WCDMA-Power State1&amp;2-Ant.2</b> |         |         |         |                             |
|---------------------------------------|---------|---------|---------|-----------------------------|
| Band                                  | Band 2  |         |         | Tune-up Limit<br>Power(dBm) |
| Channel                               | 9262    | 9400    | 9538    |                             |
| Frequency                             | 1852.40 | 1880.00 | 1907.60 |                             |
| AMR 12.2Kbps                          | 15.34   | 15.09   | 15.18   | 16.00                       |
| RMC 12.2Kbps                          | 15.23   | 15.32   | 15.07   | 16.00                       |
| HSDPA Subtest-1                       | 14.60   | 14.72   | 14.86   | 15.50                       |
| HSDPA Subtest-2                       | 14.76   | 14.76   | 14.64   | 15.50                       |
| HSDPA Subtest-3                       | 14.02   | 13.99   | 14.05   | 15.00                       |
| HSDPA Subtest-4                       | 14.14   | 13.95   | 14.07   | 15.00                       |
| DC-HSDPA Subtest-1                    | 14.72   | 14.69   | 14.82   | 15.50                       |
| DC-HSDPA Subtest-2                    | 14.69   | 14.59   | 14.58   | 15.50                       |
| DC-HSDPA Subtest-3                    | 14.00   | 14.18   | 14.11   | 15.00                       |
| DC-HSDPA Subtest-4                    | 14.01   | 13.91   | 14.18   | 15.00                       |
| HSUPA Subtest-1                       | 14.10   | 13.96   | 14.16   | 15.00                       |
| HSUPA Subtest-2                       | 12.47   | 12.43   | 12.70   | 13.50                       |
| HSUPA Subtest-3                       | 12.31   | 12.32   | 12.18   | 13.00                       |
| HSUPA Subtest-4                       | 13.12   | 13.27   | 13.06   | 14.00                       |
| HSUPA Subtest-5                       | 14.71   | 14.67   | 14.57   | 15.50                       |
| HSPA+                                 | 12.57   | 12.70   | 12.28   | 13.50                       |
| Band                                  | Band 4  |         |         | Tune-up Limit<br>Power(dBm) |
| Channel                               | 1312    | 1412    | 1513    |                             |
| Frequency                             | 1712.40 | 1732.40 | 1752.60 |                             |
| AMR 12.2Kbps                          | 16.77   | 16.83   | 16.92   | 17.50                       |
| RMC 12.2Kbps                          | 16.75   | 16.61   | 16.70   | 17.50                       |
| HSDPA Subtest-1                       | 16.19   | 16.20   | 16.31   | 17.00                       |
| HSDPA Subtest-2                       | 16.13   | 16.21   | 16.24   | 17.00                       |
| HSDPA Subtest-3                       | 15.62   | 15.51   | 15.83   | 16.50                       |
| HSDPA Subtest-4                       | 15.51   | 15.54   | 15.47   | 16.50                       |
| DC-HSDPA Subtest-1                    | 16.26   | 15.94   | 16.20   | 17.00                       |
| DC-HSDPA Subtest-2                    | 15.96   | 16.23   | 16.37   | 17.00                       |
| DC-HSDPA Subtest-3                    | 15.53   | 15.77   | 15.57   | 16.50                       |
| DC-HSDPA Subtest-4                    | 15.78   | 15.65   | 15.65   | 16.50                       |
| HSUPA Subtest-1                       | 15.67   | 15.73   | 15.49   | 16.50                       |
| HSUPA Subtest-2                       | 14.34   | 14.42   | 14.05   | 15.00                       |
| HSUPA Subtest-3                       | 14.01   | 14.02   | 14.11   | 15.00                       |
| HSUPA Subtest-4                       | 15.47   | 15.48   | 15.51   | 16.50                       |
| HSUPA Subtest-5                       | 16.47   | 16.29   | 16.30   | 17.00                       |
| HSPA+                                 | 14.18   | 14.34   | 14.47   | 15.50                       |
| Band                                  | Band 5  |         |         | Tune-up Limit<br>Power(dBm) |
| Channel                               | 4132    | 4182    | 4233    |                             |
| Frequency                             | 826.40  | 836.40  | 846.60  |                             |
| AMR 12.2Kbps                          | 22.90   | 22.75   | 22.82   | 23.50                       |
| RMC 12.2Kbps                          | 22.74   | 22.79   | 22.77   | 23.50                       |
| HSDPA Subtest-1                       | 22.22   | 22.08   | 21.99   | 23.00                       |
| HSDPA Subtest-2                       | 22.01   | 22.07   | 21.95   | 23.00                       |
| HSDPA Subtest-3                       | 21.51   | 21.52   | 21.40   | 22.50                       |
| HSDPA Subtest-4                       | 21.56   | 21.48   | 21.45   | 22.50                       |
| DC-HSDPA Subtest-1                    | 22.02   | 22.03   | 21.93   | 23.00                       |
| DC-HSDPA Subtest-2                    | 21.98   | 22.16   | 22.05   | 23.00                       |
| DC-HSDPA Subtest-3                    | 21.66   | 21.62   | 21.40   | 22.50                       |
| DC-HSDPA Subtest-4                    | 21.51   | 21.57   | 21.60   | 22.50                       |
| HSUPA Subtest-1                       | 21.64   | 21.54   | 21.68   | 22.50                       |
| HSUPA Subtest-2                       | 20.14   | 20.22   | 20.36   | 21.50                       |
| HSUPA Subtest-3                       | 19.75   | 19.89   | 19.78   | 21.50                       |
| HSUPA Subtest-4                       | 21.36   | 21.32   | 21.18   | 22.50                       |
| HSUPA Subtest-5                       | 21.76   | 21.71   | 21.57   | 22.50                       |
| HSPA+                                 | 20.26   | 20.10   | 20.10   | 21.50                       |

| <b>WCDMA-Power State3-Ant.2</b> |         |         |         |                             |
|---------------------------------|---------|---------|---------|-----------------------------|
| Band                            | Band 2  |         |         | Tune-up Limit<br>Power(dBm) |
| Channel                         | 9262    | 9400    | 9538    |                             |
| Frequency                       | 1852.40 | 1880.00 | 1907.60 |                             |
| AMR 12.2Kbps                    | 20.22   | 20.21   | 20.39   | 21.00                       |
| RMC 12.2Kbps                    | 20.29   | 20.40   | 20.31   | 21.00                       |
| HSDPA Subtest-1                 | 19.47   | 19.61   | 19.48   | 20.00                       |
| HSDPA Subtest-2                 | 19.50   | 19.57   | 19.52   | 20.00                       |
| HSDPA Subtest-3                 | 18.91   | 19.03   | 19.09   | 20.00                       |
| HSDPA Subtest-4                 | 19.07   | 19.05   | 19.08   | 20.00                       |
| DC-HSDPA Subtest-1              | 19.30   | 19.71   | 19.49   | 20.00                       |
| DC-HSDPA Subtest-2              | 19.35   | 19.75   | 19.39   | 20.00                       |
| DC-HSDPA Subtest-3              | 18.84   | 18.99   | 18.99   | 20.00                       |
| DC-HSDPA Subtest-4              | 19.12   | 18.86   | 19.24   | 20.00                       |
| HSUPA Subtest-1                 | 19.13   | 19.08   | 18.92   | 19.50                       |
| HSUPA Subtest-2                 | 17.31   | 17.48   | 17.52   | 19.00                       |
| HSUPA Subtest-3                 | 17.02   | 17.18   | 17.12   | 19.00                       |
| HSUPA Subtest-4                 | 18.24   | 18.42   | 18.42   | 19.50                       |
| HSUPA Subtest-5                 | 19.88   | 19.68   | 19.55   | 20.50                       |
| HSPA+                           | 17.39   | 17.63   | 17.32   | 19.00                       |
| Band                            | Band 4  |         |         | Tune-up Limit<br>Power(dBm) |
| Channel                         | 1312    | 1412    | 1513    |                             |
| Frequency                       | 1712.40 | 1732.40 | 1752.60 |                             |
| AMR 12.2Kbps                    | 20.14   | 20.28   | 20.35   | 21.00                       |
| RMC 12.2Kbps                    | 20.40   | 20.31   | 20.29   | 21.00                       |
| HSDPA Subtest-1                 | 19.73   | 19.61   | 19.78   | 20.50                       |
| HSDPA Subtest-2                 | 19.44   | 19.57   | 19.76   | 20.50                       |
| HSDPA Subtest-3                 | 19.22   | 19.03   | 19.18   | 20.50                       |
| HSDPA Subtest-4                 | 19.38   | 19.05   | 19.13   | 20.50                       |
| DC-HSDPA Subtest-1              | 19.64   | 19.70   | 19.97   | 20.50                       |
| DC-HSDPA Subtest-2              | 19.30   | 19.47   | 19.95   | 20.50                       |
| DC-HSDPA Subtest-3              | 19.32   | 19.11   | 19.26   | 20.50                       |
| DC-HSDPA Subtest-4              | 19.33   | 19.19   | 19.28   | 20.50                       |
| HSUPA Subtest-1                 | 19.14   | 19.08   | 19.02   | 20.00                       |
| HSUPA Subtest-2                 | 17.85   | 17.88   | 17.73   | 18.00                       |
| HSUPA Subtest-3                 | 17.39   | 17.58   | 17.60   | 18.00                       |
| HSUPA Subtest-4                 | 18.95   | 18.82   | 18.98   | 20.50                       |
| HSUPA Subtest-5                 | 19.80   | 19.68   | 19.57   | 20.50                       |
| HSPA+                           | 17.86   | 18.00   | 17.88   | 19.00                       |
| Band                            | Band 5  |         |         | Tune-up Limit<br>Power(dBm) |
| Channel                         | 4132    | 4182    | 4233    |                             |
| Frequency                       | 826.40  | 836.40  | 846.60  |                             |
| AMR 12.2Kbps                    | 23.91   | 23.93   | 23.85   | 24.50                       |
| RMC 12.2Kbps                    | 23.94   | 24.02   | 23.96   | 24.50                       |
| HSDPA Subtest-1                 | 23.21   | 23.19   | 23.16   | 24.00                       |
| HSDPA Subtest-2                 | 23.07   | 23.10   | 22.92   | 24.00                       |
| HSDPA Subtest-3                 | 22.81   | 22.73   | 22.61   | 23.50                       |
| HSDPA Subtest-4                 | 22.58   | 22.71   | 22.58   | 23.50                       |
| DC-HSDPA Subtest-1              | 23.14   | 23.20   | 23.00   | 24.00                       |
| DC-HSDPA Subtest-2              | 23.07   | 22.94   | 23.05   | 24.00                       |
| DC-HSDPA Subtest-3              | 22.72   | 22.85   | 22.50   | 23.50                       |
| DC-HSDPA Subtest-4              | 22.66   | 22.57   | 22.75   | 23.50                       |
| HSUPA Subtest-1                 | 22.61   | 22.77   | 22.83   | 23.50                       |
| HSUPA Subtest-2                 | 21.24   | 21.43   | 21.50   | 22.50                       |
| HSUPA Subtest-3                 | 21.04   | 21.14   | 20.96   | 22.50                       |
| HSUPA Subtest-4                 | 22.64   | 22.51   | 22.38   | 23.50                       |
| HSUPA Subtest-5                 | 23.00   | 22.96   | 22.85   | 23.50                       |
| HSPA+                           | 21.20   | 21.54   | 21.34   | 22.50                       |

| WCDMA-Power State4-Ant.2 |         |         |         |                          |
|--------------------------|---------|---------|---------|--------------------------|
| Band                     | Band 2  |         |         | Tune-up Limit Power(dBm) |
| Channel                  | 9262    | 9400    | 9538    |                          |
| Frequency                | 1852.40 | 1880.00 | 1907.60 |                          |
| AMR 12.2Kbps             | 19.39   | 19.33   | 19.49   | 20.00                    |
| RMC 12.2Kbps             | 19.59   | 19.62   | 19.56   | 20.00                    |
| HSDPA Subtest-1          | 18.53   | 18.56   | 18.60   | 19.00                    |
| HSDPA Subtest-2          | 18.68   | 18.44   | 18.69   | 19.00                    |
| HSDPA Subtest-3          | 18.16   | 18.02   | 17.99   | 19.00                    |
| HSDPA Subtest-4          | 18.12   | 18.09   | 18.20   | 19.00                    |
| DC-HSDPA Subtest-1       | 18.46   | 18.49   | 18.50   | 19.00                    |
| DC-HSDPA Subtest-2       | 18.61   | 18.72   | 18.95   | 19.00                    |
| DC-HSDPA Subtest-3       | 18.08   | 18.04   | 17.92   | 19.00                    |
| DC-HSDPA Subtest-4       | 18.25   | 18.39   | 17.97   | 19.00                    |
| HSUPA Subtest-1          | 18.37   | 18.23   | 18.02   | 18.50                    |
| HSUPA Subtest-2          | 16.70   | 16.42   | 16.64   | 18.00                    |
| HSUPA Subtest-3          | 16.13   | 16.03   | 16.16   | 18.00                    |
| HSUPA Subtest-4          | 17.27   | 17.46   | 17.49   | 18.50                    |
| HSUPA Subtest-5          | 18.81   | 18.80   | 18.88   | 19.50                    |
| HSPA+                    | 16.73   | 16.45   | 16.47   | 18.00                    |
| Band                     | Band 4  |         |         | Tune-up Limit Power(dBm) |
| Channel                  | 1312    | 1412    | 1513    |                          |
| Frequency                | 1712.40 | 1732.40 | 1752.60 |                          |
| AMR 12.2Kbps             | 20.09   | 20.16   | 20.14   | 20.50                    |
| RMC 12.2Kbps             | 20.29   | 20.28   | 20.28   | 20.50                    |
| HSDPA Subtest-1          | 19.79   | 19.66   | 19.78   | 20.00                    |
| HSDPA Subtest-2          | 19.93   | 19.66   | 19.88   | 20.00                    |
| HSDPA Subtest-3          | 19.58   | 19.44   | 19.41   | 20.00                    |
| HSDPA Subtest-4          | 19.57   | 19.44   | 19.25   | 20.00                    |
| DC-HSDPA Subtest-1       | 19.74   | 19.75   | 19.87   | 20.00                    |
| DC-HSDPA Subtest-2       | 19.68   | 19.69   | 19.89   | 20.00                    |
| DC-HSDPA Subtest-3       | 19.67   | 19.38   | 19.55   | 20.00                    |
| DC-HSDPA Subtest-4       | 19.40   | 19.47   | 19.26   | 20.00                    |
| HSUPA Subtest-1          | 18.77   | 18.97   | 19.15   | 19.50                    |
| HSUPA Subtest-2          | 17.45   | 17.60   | 17.45   | 18.00                    |
| HSUPA Subtest-3          | 17.28   | 17.31   | 17.15   | 18.00                    |
| HSUPA Subtest-4          | 18.62   | 18.80   | 18.71   | 20.00                    |
| HSUPA Subtest-5          | 19.59   | 19.62   | 19.80   | 20.00                    |
| HSPA+                    | 17.32   | 17.77   | 17.29   | 18.50                    |
| Band                     | Band 5  |         |         | Tune-up Limit Power(dBm) |
| Channel                  | 4132    | 4182    | 4233    |                          |
| Frequency                | 826.40  | 836.40  | 846.60  |                          |
| AMR 12.2Kbps             | 23.91   | 23.93   | 23.85   | 24.50                    |
| RMC 12.2Kbps             | 23.94   | 24.02   | 23.96   | 24.50                    |
| HSDPA Subtest-1          | 23.21   | 23.19   | 23.16   | 24.00                    |
| HSDPA Subtest-2          | 23.07   | 23.10   | 22.92   | 24.00                    |
| HSDPA Subtest-3          | 22.81   | 22.73   | 22.61   | 23.50                    |
| HSDPA Subtest-4          | 22.58   | 22.71   | 22.58   | 23.50                    |
| DC-HSDPA Subtest-1       | 23.14   | 23.20   | 23.00   | 24.00                    |
| DC-HSDPA Subtest-2       | 23.07   | 22.94   | 23.05   | 24.00                    |
| DC-HSDPA Subtest-3       | 22.72   | 22.85   | 22.50   | 23.50                    |
| DC-HSDPA Subtest-4       | 22.66   | 22.57   | 22.75   | 23.50                    |
| HSUPA Subtest-1          | 22.61   | 22.77   | 22.83   | 23.50                    |
| HSUPA Subtest-2          | 21.24   | 21.43   | 21.50   | 22.50                    |
| HSUPA Subtest-3          | 21.04   | 21.14   | 20.96   | 22.50                    |
| HSUPA Subtest-4          | 22.64   | 22.51   | 22.38   | 23.50                    |
| HSUPA Subtest-5          | 23.00   | 22.96   | 22.85   | 23.50                    |
| HSPA+                    | 21.20   | 21.54   | 21.34   | 22.50                    |

| WCDMA-Full Power-Ant.3 |         |         |         |                          |
|------------------------|---------|---------|---------|--------------------------|
| Band                   | Band 2  |         |         | Tune-up Limit Power(dBm) |
| Channel                | 9262    | 9400    | 9538    |                          |
| Frequency              | 1852.40 | 1880.00 | 1907.60 |                          |
| AMR 12.2Kbps           | 23.17   | 23.22   | 23.23   | 24.00                    |
| RMC 12.2Kbps           | 23.30   | 23.38   | 23.33   | 24.00                    |
| HSDPA Subtest-1        | 22.83   | 22.69   | 22.72   | 23.00                    |
| HSDPA Subtest-2        | 22.60   | 22.57   | 22.49   | 23.00                    |
| HSDPA Subtest-3        | 21.85   | 22.04   | 21.92   | 23.00                    |
| HSDPA Subtest-4        | 22.00   | 22.05   | 22.21   | 23.00                    |
| DC-HSDPA Subtest-1     | 22.68   | 22.59   | 22.75   | 23.00                    |
| DC-HSDPA Subtest-2     | 22.58   | 22.68   | 22.39   | 23.00                    |
| DC-HSDPA Subtest-3     | 21.88   | 22.23   | 21.84   | 23.00                    |
| DC-HSDPA Subtest-4     | 22.18   | 21.99   | 22.21   | 23.00                    |
| HSUPA Subtest-1        | 21.82   | 22.00   | 22.02   | 22.50                    |
| HSUPA Subtest-2        | 20.64   | 20.58   | 20.69   | 22.00                    |
| HSUPA Subtest-3        | 20.36   | 20.27   | 20.30   | 22.00                    |
| HSUPA Subtest-4        | 21.43   | 21.27   | 21.08   | 22.50                    |
| HSUPA Subtest-5        | 22.50   | 22.57   | 22.62   | 23.50                    |
| HSPA+                  | 20.82   | 20.42   | 20.85   | 22.00                    |
| Band                   | Band 4  |         |         | Tune-up Limit Power(dBm) |
| Channel                | 1312    | 1412    | 1513    |                          |
| Frequency              | 1712.40 | 1732.40 | 1752.60 |                          |
| AMR 12.2Kbps           | 23.49   | 23.54   | 23.62   | 24.00                    |
| RMC 12.2Kbps           | 23.65   | 23.64   | 23.60   | 24.00                    |
| HSDPA Subtest-1        | 23.09   | 23.00   | 23.09   | 23.50                    |
| HSDPA Subtest-2        | 23.16   | 22.99   | 23.12   | 23.50                    |
| HSDPA Subtest-3        | 22.46   | 22.41   | 22.47   | 23.50                    |
| HSDPA Subtest-4        | 22.40   | 22.45   | 22.49   | 23.50                    |
| DC-HSDPA Subtest-1     | 23.07   | 23.19   | 23.10   | 23.50                    |
| DC-HSDPA Subtest-2     | 23.22   | 22.94   | 23.09   | 23.50                    |
| DC-HSDPA Subtest-3     | 22.62   | 22.21   | 22.48   | 23.50                    |
| DC-HSDPA Subtest-4     | 22.24   | 22.39   | 22.42   | 23.50                    |
| HSUPA Subtest-1        | 22.51   | 22.41   | 22.25   | 23.00                    |
| HSUPA Subtest-2        | 20.95   | 20.98   | 21.12   | 22.00                    |
| HSUPA Subtest-3        | 20.57   | 20.70   | 20.86   | 22.00                    |
| HSUPA Subtest-4        | 22.08   | 22.27   | 22.30   | 23.50                    |
| HSUPA Subtest-5        | 23.16   | 23.03   | 23.19   | 23.50                    |
| HSPA+                  | 20.85   | 21.12   | 21.22   | 22.00                    |
| Band                   | Band 5  |         |         | Tune-up Limit Power(dBm) |
| Channel                | 4132    | 4182    | 4233    |                          |
| Frequency              | 826.40  | 836.40  | 846.60  |                          |
| AMR 12.2Kbps           | 23.69   | 23.81   | 23.66   | 24.50                    |
| RMC 12.2Kbps           | 23.75   | 23.83   | 23.80   | 24.50                    |
| HSDPA Subtest-1        | 23.13   | 23.03   | 22.90   | 24.00                    |
| HSDPA Subtest-2        | 23.00   | 22.94   | 23.14   | 24.00                    |
| HSDPA Subtest-3        | 22.36   | 22.42   | 22.52   | 23.50                    |
| HSDPA Subtest-4        | 22.45   | 22.40   | 22.21   | 23.50                    |
| DC-HSDPA Subtest-1     | 23.00   | 23.02   | 22.95   | 24.00                    |
| DC-HSDPA Subtest-2     | 23.10   | 23.06   | 23.16   | 24.00                    |
| DC-HSDPA Subtest-3     | 22.52   | 22.36   | 22.62   | 23.50                    |
| DC-HSDPA Subtest-4     | 22.31   | 22.36   | 22.02   | 23.50                    |
| HSUPA Subtest-1        | 22.59   | 22.59   | 22.68   | 23.50                    |
| HSUPA Subtest-2        | 21.26   | 21.26   | 21.31   | 22.50                    |
| HSUPA Subtest-3        | 20.94   | 20.94   | 20.96   | 22.50                    |
| HSUPA Subtest-4        | 22.42   | 22.37   | 22.40   | 23.50                    |
| HSUPA Subtest-5        | 22.57   | 22.75   | 22.64   | 23.50                    |
| HSPA+                  | 21.14   | 21.11   | 21.25   | 22.50                    |

| <b>WCDMA-Power State1&amp;2-Ant.3</b> |         |         |         |                          |
|---------------------------------------|---------|---------|---------|--------------------------|
| Band                                  | Band 2  |         |         | Tune-up Limit Power(dBm) |
| Channel                               | 9262    | 9400    | 9538    |                          |
| Frequency                             | 1852.40 | 1880.00 | 1907.60 |                          |
| AMR 12.2Kbps                          | 23.17   | 23.22   | 23.23   | 24.00                    |
| RMC 12.2Kbps                          | 23.30   | 23.38   | 23.33   | 24.00                    |
| HSDPA Subtest-1                       | 22.83   | 22.69   | 22.72   | 23.00                    |
| HSDPA Subtest-2                       | 22.60   | 22.57   | 22.49   | 23.00                    |
| HSDPA Subtest-3                       | 21.85   | 22.04   | 21.92   | 23.00                    |
| HSDPA Subtest-4                       | 22.00   | 22.05   | 22.21   | 23.00                    |
| DC-HSDPA Subtest-1                    | 22.68   | 22.59   | 22.75   | 23.00                    |
| DC-HSDPA Subtest-2                    | 22.58   | 22.68   | 22.39   | 23.00                    |
| DC-HSDPA Subtest-3                    | 21.88   | 22.23   | 21.84   | 23.00                    |
| DC-HSDPA Subtest-4                    | 22.18   | 21.99   | 22.21   | 23.00                    |
| HSUPA Subtest-1                       | 21.82   | 22.00   | 22.02   | 22.50                    |
| HSUPA Subtest-2                       | 20.64   | 20.58   | 20.69   | 22.00                    |
| HSUPA Subtest-3                       | 20.36   | 20.27   | 20.30   | 22.00                    |
| HSUPA Subtest-4                       | 21.43   | 21.27   | 21.08   | 22.50                    |
| HSUPA Subtest-5                       | 22.50   | 22.57   | 22.62   | 23.50                    |
| HSPA+                                 | 20.82   | 20.42   | 20.85   | 22.00                    |
| Band                                  | Band 4  |         |         | Tune-up Limit Power(dBm) |
| Channel                               | 1312    | 1412    | 1513    |                          |
| Frequency                             | 1712.40 | 1732.40 | 1752.60 |                          |
| AMR 12.2Kbps                          | 23.49   | 23.54   | 23.62   | 24.00                    |
| RMC 12.2Kbps                          | 23.65   | 23.64   | 23.60   | 24.00                    |
| HSDPA Subtest-1                       | 23.09   | 23.00   | 23.09   | 23.50                    |
| HSDPA Subtest-2                       | 23.16   | 22.99   | 23.12   | 23.50                    |
| HSDPA Subtest-3                       | 22.46   | 22.41   | 22.47   | 23.50                    |
| HSDPA Subtest-4                       | 22.40   | 22.45   | 22.49   | 23.50                    |
| DC-HSDPA Subtest-1                    | 23.07   | 23.19   | 23.10   | 23.50                    |
| DC-HSDPA Subtest-2                    | 23.22   | 22.94   | 23.09   | 23.50                    |
| DC-HSDPA Subtest-3                    | 22.62   | 22.21   | 22.48   | 23.50                    |
| DC-HSDPA Subtest-4                    | 22.24   | 22.39   | 22.42   | 23.50                    |
| HSUPA Subtest-1                       | 22.51   | 22.41   | 22.25   | 23.00                    |
| HSUPA Subtest-2                       | 20.95   | 20.98   | 21.12   | 22.00                    |
| HSUPA Subtest-3                       | 20.57   | 20.70   | 20.86   | 22.00                    |
| HSUPA Subtest-4                       | 22.08   | 22.27   | 22.30   | 23.50                    |
| HSUPA Subtest-5                       | 23.16   | 23.03   | 23.19   | 23.50                    |
| HSPA+                                 | 20.85   | 21.12   | 21.22   | 22.00                    |
| Band                                  | Band 5  |         |         | Tune-up Limit Power(dBm) |
| Channel                               | 4132    | 4182    | 4233    |                          |
| Frequency                             | 826.40  | 836.40  | 846.60  |                          |
| AMR 12.2Kbps                          | 23.69   | 23.81   | 23.66   | 24.50                    |
| RMC 12.2Kbps                          | 23.75   | 23.83   | 23.80   | 24.50                    |
| HSDPA Subtest-1                       | 23.13   | 23.03   | 22.90   | 24.00                    |
| HSDPA Subtest-2                       | 23.00   | 22.94   | 23.14   | 24.00                    |
| HSDPA Subtest-3                       | 22.36   | 22.42   | 22.52   | 23.50                    |
| HSDPA Subtest-4                       | 22.45   | 22.40   | 22.21   | 23.50                    |
| DC-HSDPA Subtest-1                    | 23.00   | 23.02   | 22.95   | 24.00                    |
| DC-HSDPA Subtest-2                    | 23.10   | 23.06   | 23.16   | 24.00                    |
| DC-HSDPA Subtest-3                    | 22.52   | 22.36   | 22.62   | 23.50                    |
| DC-HSDPA Subtest-4                    | 22.31   | 22.36   | 22.02   | 23.50                    |
| HSUPA Subtest-1                       | 22.59   | 22.59   | 22.68   | 23.50                    |
| HSUPA Subtest-2                       | 21.26   | 21.26   | 21.31   | 22.50                    |
| HSUPA Subtest-3                       | 20.94   | 20.94   | 20.96   | 22.50                    |
| HSUPA Subtest-4                       | 22.42   | 22.37   | 22.40   | 23.50                    |
| HSUPA Subtest-5                       | 22.57   | 22.75   | 22.64   | 23.50                    |
| HSPA+                                 | 21.14   | 21.11   | 21.25   | 22.50                    |

| <b>WCDMA-Power State3-Ant.3</b> |         |         |         |                          |
|---------------------------------|---------|---------|---------|--------------------------|
| Band                            | Band 2  |         |         | Tune-up Limit Power(dBm) |
| Channel                         | 9262    | 9400    | 9538    |                          |
| Frequency                       | 1852.40 | 1880.00 | 1907.60 |                          |
| RMC 12.2Kbps                    | 20.18   | 20.30   | 20.32   | 21.00                    |
| RMC 12.2Kbps                    | 20.29   | 20.42   | 20.33   | 21.00                    |
| HSDPA Subtest-1                 | 19.36   | 19.44   | 19.40   | 20.50                    |
| HSDPA Subtest-2                 | 19.37   | 19.48   | 19.63   | 20.50                    |
| HSDPA Subtest-3                 | 19.12   | 18.93   | 18.99   | 20.50                    |
| HSDPA Subtest-4                 | 19.02   | 18.94   | 18.86   | 20.50                    |
| HSDPA Subtest-1                 | 19.20   | 19.36   | 19.36   | 20.50                    |
| HSDPA Subtest-2                 | 19.51   | 19.36   | 19.48   | 20.50                    |
| HSDPA Subtest-3                 | 18.97   | 18.96   | 18.95   | 20.50                    |
| HSDPA Subtest-4                 | 19.11   | 18.92   | 18.79   | 20.50                    |
| HSUPA Subtest-1                 | 19.08   | 18.94   | 19.04   | 20.00                    |
| HSUPA Subtest-2                 | 17.67   | 17.76   | 17.85   | 19.50                    |
| HSUPA Subtest-3                 | 17.56   | 17.84   | 17.84   | 19.50                    |
| HSUPA Subtest-4                 | 18.15   | 18.26   | 18.21   | 20.00                    |
| HSUPA Subtest-5                 | 19.66   | 19.54   | 19.61   | 21.00                    |
| HSUPA Subtest-5                 | 17.56   | 17.88   | 17.67   | 19.50                    |
| Band                            | Band 4  |         |         | Tune-up Limit Power(dBm) |
| Channel                         | 1312    | 1412    | 1513    |                          |
| Frequency                       | 1712.40 | 1732.40 | 1752.60 |                          |
| RMC 12.2Kbps                    | 21.05   | 21.06   | 21.14   | 21.50                    |
| RMC 12.2Kbps                    | 21.22   | 21.21   | 21.14   | 21.50                    |
| HSDPA Subtest-1                 | 20.45   | 20.45   | 20.27   | 21.00                    |
| HSDPA Subtest-2                 | 20.50   | 20.42   | 20.30   | 21.00                    |
| HSDPA Subtest-3                 | 20.15   | 20.01   | 19.81   | 21.00                    |
| HSDPA Subtest-4                 | 19.92   | 20.05   | 20.02   | 21.00                    |
| HSDPA Subtest-1                 | 20.40   | 20.36   | 20.45   | 21.00                    |
| HSDPA Subtest-2                 | 20.35   | 20.42   | 20.41   | 21.00                    |
| HSDPA Subtest-3                 | 19.96   | 20.04   | 20.01   | 21.00                    |
| HSDPA Subtest-4                 | 20.02   | 20.04   | 20.20   | 21.00                    |
| HSUPA Subtest-1                 | 19.90   | 20.06   | 20.10   | 21.00                    |
| HSUPA Subtest-2                 | 18.71   | 18.55   | 18.72   | 20.00                    |
| HSUPA Subtest-3                 | 18.38   | 18.24   | 18.14   | 20.00                    |
| HSUPA Subtest-4                 | 19.87   | 19.94   | 19.91   | 21.50                    |
| HSUPA Subtest-5                 | 20.57   | 20.56   | 20.65   | 21.50                    |
| HSUPA Subtest-5                 | 18.71   | 18.70   | 18.73   | 20.00                    |
| Band                            | Band 5  |         |         | Tune-up Limit Power(dBm) |
| Channel                         | 4132    | 4182    | 4233    |                          |
| Frequency                       | 826.40  | 836.40  | 846.60  |                          |
| RMC 12.2Kbps                    | 23.69   | 23.81   | 23.66   | 24.50                    |
| RMC 12.2Kbps                    | 23.75   | 23.83   | 23.80   | 24.50                    |
| HSDPA Subtest-1                 | 23.13   | 23.03   | 22.90   | 24.00                    |
| HSDPA Subtest-2                 | 23.00   | 22.94   | 23.14   | 24.00                    |
| HSDPA Subtest-3                 | 22.36   | 22.42   | 22.52   | 23.50                    |
| HSDPA Subtest-4                 | 22.45   | 22.40   | 22.21   | 23.50                    |
| HSDPA Subtest-1                 | 23.00   | 23.02   | 22.95   | 24.00                    |
| HSDPA Subtest-2                 | 23.10   | 23.06   | 23.16   | 24.00                    |
| HSDPA Subtest-3                 | 22.52   | 22.36   | 22.62   | 23.50                    |
| HSDPA Subtest-4                 | 22.31   | 22.36   | 22.02   | 23.50                    |
| HSUPA Subtest-1                 | 22.59   | 22.59   | 22.68   | 23.50                    |
| HSUPA Subtest-2                 | 21.26   | 21.26   | 21.31   | 22.50                    |
| HSUPA Subtest-3                 | 20.94   | 20.94   | 20.96   | 22.50                    |
| HSUPA Subtest-4                 | 22.42   | 22.37   | 22.40   | 23.50                    |
| HSUPA Subtest-5                 | 22.57   | 22.75   | 22.64   | 23.50                    |
| HSUPA Subtest-5                 | 21.14   | 21.11   | 21.25   | 22.50                    |



| WCDMA-Power State4-Ant.3 |         |         |         |                          |
|--------------------------|---------|---------|---------|--------------------------|
| Band                     | Band 2  |         |         | Tune-up Limit Power(dBm) |
| Channel                  | 9262    | 9400    | 9538    |                          |
| Frequency                | 1852.40 | 1880.00 | 1907.60 |                          |
| RMC 12.2Kbps             | 19.73   | 19.85   | 19.88   | 20.50                    |
| RMC 12.2Kbps             | 19.78   | 20.00   | 19.87   | 20.50                    |
| HSDPA Subtest-1          | 18.90   | 19.01   | 18.81   | 19.50                    |
| HSDPA Subtest-2          | 18.89   | 18.99   | 18.96   | 19.50                    |
| HSDPA Subtest-3          | 18.27   | 18.43   | 18.46   | 19.50                    |
| HSDPA Subtest-4          | 18.29   | 18.43   | 18.23   | 19.50                    |
| HSDPA Subtest-1          | 18.91   | 19.07   | 18.84   | 19.50                    |
| HSDPA Subtest-2          | 19.08   | 19.00   | 19.15   | 19.50                    |
| HSDPA Subtest-3          | 18.17   | 18.44   | 18.54   | 19.50                    |
| HSDPA Subtest-4          | 18.38   | 18.61   | 18.13   | 19.50                    |
| HSUPA Subtest-1          | 18.18   | 18.36   | 18.17   | 19.00                    |
| HSUPA Subtest-2          | 16.96   | 16.85   | 16.89   | 18.50                    |
| HSUPA Subtest-3          | 16.66   | 16.50   | 16.77   | 18.50                    |
| HSUPA Subtest-4          | 17.59   | 17.73   | 17.72   | 19.00                    |
| HSUPA Subtest-5          | 19.16   | 19.00   | 18.90   | 20.00                    |
| HSUPA Subtest-5          | 16.94   | 16.94   | 17.04   | 18.50                    |
| Band                     | Band 4  |         |         | Tune-up Limit Power(dBm) |
| Channel                  | 1312    | 1412    | 1513    |                          |
| Frequency                | 1712.40 | 1732.40 | 1752.60 |                          |
| RMC 12.2Kbps             | 20.55   | 20.60   | 20.64   | 21.00                    |
| RMC 12.2Kbps             | 20.66   | 20.64   | 20.64   | 21.00                    |
| HSDPA Subtest-1          | 19.89   | 20.06   | 20.25   | 20.50                    |
| HSDPA Subtest-2          | 20.10   | 20.07   | 20.11   | 20.50                    |
| HSDPA Subtest-3          | 19.52   | 19.57   | 19.59   | 20.50                    |
| HSDPA Subtest-4          | 19.69   | 19.58   | 19.76   | 20.50                    |
| HSDPA Subtest-1          | 19.96   | 19.89   | 20.40   | 20.50                    |
| HSDPA Subtest-2          | 19.98   | 19.91   | 20.11   | 20.50                    |
| HSDPA Subtest-3          | 19.61   | 19.42   | 19.58   | 20.50                    |
| HSDPA Subtest-4          | 19.84   | 19.64   | 19.64   | 20.50                    |
| HSUPA Subtest-1          | 19.63   | 19.50   | 19.34   | 20.00                    |
| HSUPA Subtest-2          | 17.90   | 18.09   | 18.05   | 19.50                    |
| HSUPA Subtest-3          | 17.73   | 17.83   | 17.90   | 19.50                    |
| HSUPA Subtest-4          | 19.48   | 19.47   | 19.46   | 20.50                    |
| HSUPA Subtest-5          | 20.24   | 20.23   | 20.28   | 20.50                    |
| HSUPA Subtest-5          | 17.97   | 18.07   | 18.15   | 19.50                    |
| Band                     | Band 5  |         |         | Tune-up Limit Power(dBm) |
| Channel                  | 4132    | 4182    | 4233    |                          |
| Frequency                | 826.40  | 836.40  | 846.60  |                          |
| RMC 12.2Kbps             | 23.24   | 23.25   | 23.23   | 24.00                    |
| RMC 12.2Kbps             | 23.25   | 23.31   | 23.29   | 24.00                    |
| HSDPA Subtest-1          | 22.40   | 22.42   | 22.47   | 23.50                    |
| HSDPA Subtest-2          | 22.36   | 22.41   | 22.27   | 23.50                    |
| HSDPA Subtest-3          | 21.98   | 21.88   | 21.70   | 23.00                    |
| HSDPA Subtest-4          | 21.78   | 21.87   | 22.07   | 23.00                    |
| HSDPA Subtest-1          | 22.29   | 22.62   | 22.51   | 23.50                    |
| HSDPA Subtest-2          | 22.28   | 22.51   | 22.43   | 23.50                    |
| HSDPA Subtest-3          | 22.02   | 22.02   | 21.79   | 23.00                    |
| HSDPA Subtest-4          | 21.95   | 21.74   | 21.95   | 23.00                    |
| HSUPA Subtest-1          | 22.28   | 22.08   | 22.20   | 23.00                    |
| HSUPA Subtest-2          | 20.72   | 20.74   | 20.76   | 22.00                    |
| HSUPA Subtest-3          | 20.52   | 20.44   | 20.37   | 22.00                    |
| HSUPA Subtest-4          | 21.86   | 21.87   | 21.79   | 23.00                    |
| HSUPA Subtest-5          | 22.26   | 22.24   | 22.21   | 23.00                    |
| HSUPA Subtest-5          | 20.81   | 20.71   | 20.67   | 22.00                    |

### 8.3.1 LTE Band2 Output Power

| LTE B2-Full Power -Ant.2 |                 |           |            |            |       |       |                    |                    |
|--------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)          | RB Size         | RB offset | Modulation | 18607      | 18900 | 19193 | Tune-up power(dBm) |                    |
| 1.4                      | 1               | LOW       | QPSK       | 23.25      | 23.31 | 23.27 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 23.17      | 23.27 | 23.27 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 23.20      | 23.28 | 23.29 | 23.50              |                    |
|                          | 3               | LOW       | QPSK       | 23.26      | 23.31 | 23.34 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 23.26      | 23.39 | 23.36 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 23.25      | 23.36 | 23.36 | 23.50              |                    |
|                          | 6               | LOW       | QPSK       | 22.22      | 22.36 | 22.26 | 22.50              |                    |
|                          | 1.4             | 1         | LOW        | Q16        | 22.81 | 21.95 | 22.39              | 23.00              |
|                          |                 |           | MID        | Q16        | 22.75 | 21.90 | 22.39              | 23.00              |
| HIGH                     |                 |           | Q16        | 22.70      | 21.96 | 22.41 | 23.00              |                    |
| 3                        |                 | LOW       | Q16        | 22.38      | 22.22 | 22.25 | 23.00              |                    |
|                          |                 | MID       | Q16        | 22.36      | 22.23 | 22.22 | 23.00              |                    |
|                          |                 | HIGH      | Q16        | 22.38      | 22.18 | 22.28 | 23.00              |                    |
| 6                        |                 | LOW       | Q16        | 20.96      | 20.81 | 20.78 | 21.50              |                    |
| 1.4                      |                 | 1         | LOW        | 64QAM      | 21.36 | 20.47 | 21.04              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 21.30 | 20.39 | 20.82              | 21.50              |
|                          | HIGH            |           | 64QAM      | 21.26      | 20.38 | 20.86 | 21.50              |                    |
|                          | 3               | LOW       | 64QAM      | 20.91      | 20.59 | 20.71 | 21.50              |                    |
|                          |                 | MID       | 64QAM      | 20.87      | 20.84 | 20.71 | 21.50              |                    |
|                          |                 | HIGH      | 64QAM      | 20.90      | 20.67 | 20.92 | 21.50              |                    |
|                          | 6               | LOW       | 64QAM      | 20.00      | 19.85 | 19.86 | 20.50              |                    |
|                          | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18615 | 18900 | 19185              | Tune-up power(dBm) |
|                          | 3               | 1         | LOW        | QPSK       | 23.28 | 23.47 | 23.23              | 23.50              |
| MID                      |                 |           | QPSK       | 23.42      | 23.41 | 23.27 | 23.50              |                    |
| HIGH                     |                 |           | QPSK       | 23.14      | 23.42 | 23.40 | 23.50              |                    |
| 8                        |                 | LOW       | QPSK       | 22.26      | 22.16 | 22.10 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 22.13      | 22.44 | 22.24 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.12      | 22.25 | 22.16 | 22.50              |                    |
| 15                       |                 | LOW       | QPSK       | 22.22      | 22.37 | 22.24 | 22.50              |                    |
| 3                        |                 | 1         | LOW        | Q16        | 22.37 | 22.05 | 22.73              | 23.00              |
|                          |                 |           | MID        | Q16        | 22.40 | 22.10 | 22.74              | 23.00              |
|                          | HIGH            |           | Q16        | 22.61      | 22.09 | 22.73 | 23.00              |                    |
|                          | 8               | LOW       | Q16        | 20.80      | 20.84 | 20.83 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.83      | 20.73 | 20.75 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.88      | 20.70 | 20.71 | 21.50              |                    |
|                          | 15              | LOW       | Q16        | 20.94      | 20.91 | 20.85 | 21.50              |                    |
|                          | 3               | 1         | LOW        | 64QAM      | 21.13 | 20.46 | 21.47              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 21.04 | 20.83 | 21.21              | 21.50              |
| HIGH                     |                 |           | 64QAM      | 21.03      | 20.54 | 21.05 | 21.50              |                    |
| 8                        |                 | LOW       | 64QAM      | 19.75      | 19.90 | 19.80 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 20.04      | 19.86 | 19.64 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.74      | 19.83 | 19.51 | 20.50              |                    |
| 15                       |                 | LOW       | 64QAM      | 19.85      | 20.03 | 19.68 | 20.50              |                    |
| Bandwidth (MHz)          |                 | RB Size   | RB offset  | Modulation | 18625 | 18900 | 19175              | Tune-up power(dBm) |
| 5                        |                 | 1         | LOW        | QPSK       | 23.30 | 23.36 | 23.16              | 23.50              |
|                          | MID             |           | QPSK       | 23.24      | 23.32 | 23.38 | 23.50              |                    |
|                          | HIGH            |           | QPSK       | 23.21      | 23.46 | 23.29 | 23.50              |                    |
|                          | 12              | LOW       | QPSK       | 22.20      | 22.17 | 22.36 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 22.17      | 22.28 | 22.28 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.22      | 22.33 | 22.35 | 22.50              |                    |
|                          | 25              | LOW       | QPSK       | 22.43      | 22.46 | 22.20 | 22.50              |                    |
|                          | 5               | 1         | LOW        | Q16        | 22.57 | 22.00 | 22.69              | 23.00              |
|                          |                 |           | MID        | Q16        | 22.57 | 22.22 | 22.77              | 23.00              |
| HIGH                     |                 |           | Q16        | 22.63      | 22.11 | 22.77 | 23.00              |                    |
| 12                       |                 | LOW       | Q16        | 20.91      | 20.80 | 20.62 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.81      | 20.73 | 20.69 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.87      | 20.74 | 20.82 | 21.50              |                    |
| 25                       |                 | LOW       | Q16        | 20.82      | 20.83 | 20.56 | 21.50              |                    |
| 5                        |                 | 1         | LOW        | 64QAM      | 21.13 | 20.46 | 21.48              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 21.17 | 20.69 | 21.31              | 21.50              |
|                          | HIGH            |           | 64QAM      | 21.13      | 20.56 | 21.08 | 21.50              |                    |
|                          | 12              | LOW       | 64QAM      | 19.85      | 19.96 | 19.57 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.85      | 19.72 | 19.41 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.96      | 19.80 | 19.53 | 20.50              |                    |
|                          | 25              | LOW       | 64QAM      | 19.74      | 19.92 | 19.78 | 20.50              |                    |

| LTE B2-Full Power -Ant.2 |                 |           |            |            |       |       |                    |                    |
|--------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)          | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
| 10                       | 1               | LOW       | QPSK       | 23.07      | 23.28 | 23.35 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 23.28      | 23.47 | 23.40 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 23.30      | 23.45 | 23.47 | 23.50              |                    |
|                          | 25              | LOW       | QPSK       | 22.21      | 22.11 | 22.39 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 22.33      | 22.42 | 22.36 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.22      | 22.31 | 22.27 | 22.50              |                    |
|                          | 50              | LOW       | QPSK       | 22.39      | 22.50 | 22.10 | 22.50              |                    |
|                          | 10              | 1         | LOW        | Q16        | 22.54 | 22.08 | 22.90              | 23.00              |
|                          |                 |           | MID        | Q16        | 22.53 | 22.26 | 22.72              | 23.00              |
| HIGH                     |                 |           | Q16        | 22.64      | 22.10 | 22.77 | 23.00              |                    |
| 25                       |                 | LOW       | Q16        | 20.87      | 20.76 | 20.56 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.91      | 20.97 | 20.74 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.92      | 20.79 | 20.67 | 21.50              |                    |
| 50                       |                 | LOW       | Q16        | 20.78      | 20.78 | 20.70 | 21.50              |                    |
| 10                       |                 | 1         | LOW        | 64QAM      | 21.13 | 20.48 | 21.34              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 20.98 | 20.54 | 21.34              | 21.50              |
|                          | HIGH            |           | 64QAM      | 21.05      | 20.41 | 21.00 | 21.50              |                    |
|                          | 25              | LOW       | 64QAM      | 19.68      | 20.05 | 19.81 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.88      | 19.80 | 19.47 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.82      | 19.74 | 19.61 | 20.50              |                    |
|                          | 50              | LOW       | 64QAM      | 19.83      | 19.83 | 19.63 | 20.50              |                    |
|                          | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                          | 15              | 1         | LOW        | QPSK       | 23.11 | 23.47 | 23.25              | 23.50              |
| MID                      |                 |           | QPSK       | 23.43      | 23.15 | 23.23 | 23.50              |                    |
| HIGH                     |                 |           | QPSK       | 23.37      | 23.48 | 23.30 | 23.50              |                    |
| 36                       |                 | LOW       | QPSK       | 22.40      | 22.23 | 22.30 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 22.19      | 22.47 | 22.28 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.33      | 22.28 | 22.24 | 22.50              |                    |
| 75                       |                 | LOW       | QPSK       | 22.28      | 22.49 | 22.09 | 22.50              |                    |
| 15                       |                 | 1         | LOW        | Q16        | 22.30 | 21.98 | 22.69              | 23.00              |
|                          |                 |           | MID        | Q16        | 22.64 | 22.19 | 22.65              | 23.00              |
|                          | HIGH            |           | Q16        | 22.54      | 22.30 | 22.88 | 23.00              |                    |
|                          | 36              | LOW       | Q16        | 20.76      | 20.90 | 20.82 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.90      | 20.79 | 20.67 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.83      | 20.66 | 20.62 | 21.50              |                    |
|                          | 75              | LOW       | Q16        | 20.94      | 21.01 | 20.57 | 21.50              |                    |
|                          | 15              | 1         | LOW        | 64QAM      | 20.95 | 20.28 | 21.25              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 21.02 | 20.63 | 21.21              | 21.50              |
| HIGH                     |                 |           | 64QAM      | 21.09      | 20.60 | 21.11 | 21.50              |                    |
| 36                       |                 | LOW       | 64QAM      | 19.90      | 19.87 | 19.67 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.90      | 19.75 | 19.59 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 20.00      | 19.88 | 19.58 | 20.50              |                    |
| 75                       |                 | LOW       | 64QAM      | 19.75      | 19.90 | 19.87 | 20.50              |                    |
| Bandwidth (MHz)          |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20                       |                 | 1         | LOW        | QPSK       | 23.19 | 23.42 | 23.28              | 23.50              |
|                          | MID             |           | QPSK       | 23.33      | 23.50 | 23.28 | 23.50              |                    |
|                          | HIGH            |           | QPSK       | 23.26      | 23.41 | 23.35 | 23.50              |                    |
|                          | 50              | LOW       | QPSK       | 22.26      | 22.25 | 22.24 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 22.25      | 22.38 | 22.21 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.25      | 22.30 | 22.23 | 22.50              |                    |
|                          | 100             | LOW       | QPSK       | 22.28      | 22.35 | 22.20 | 22.50              |                    |
|                          | 20              | 1         | LOW        | Q16        | 22.45 | 22.00 | 22.78              | 23.00              |
|                          |                 |           | MID        | Q16        | 22.51 | 22.15 | 22.75              | 23.00              |
| HIGH                     |                 |           | Q16        | 22.49      | 22.16 | 22.73 | 23.00              |                    |
| 50                       |                 | LOW       | Q16        | 20.78      | 20.87 | 20.70 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.82      | 20.88 | 20.69 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.86      | 20.81 | 20.75 | 21.50              |                    |
| 100                      |                 | LOW       | Q16        | 20.88      | 20.93 | 20.71 | 21.50              |                    |
| 20                       |                 | 1         | LOW        | 64QAM      | 20.99 | 20.42 | 21.37              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 21.05 | 20.69 | 21.25              | 21.50              |
|                          | HIGH            |           | 64QAM      | 21.13      | 20.56 | 21.14 | 21.50              |                    |
|                          | 50              | LOW       | 64QAM      | 19.78      | 19.96 | 19.69 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.94      | 19.79 | 19.55 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.87      | 19.84 | 19.61 | 20.50              |                    |
|                          | 100             | LOW       | 64QAM      | 19.75      | 19.91 | 19.77 | 20.50              |                    |

| LTE B2-State1&2-Ant.2 |                 |           |            |            |       |       |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 18607      | 18900 | 19193 | Tune-up power(dBm) |                    |
| 1.4                   | 1               | LOW       | QPSK       | 16.32      | 16.60 | 16.51 | 18.00              |                    |
|                       |                 | MID       | QPSK       | 16.51      | 16.72 | 16.67 | 18.00              |                    |
|                       |                 | HIGH      | QPSK       | 16.30      | 16.49 | 16.46 | 18.00              |                    |
|                       | 3               | LOW       | QPSK       | 16.40      | 16.67 | 16.61 | 18.00              |                    |
|                       |                 | MID       | QPSK       | 16.46      | 16.70 | 16.67 | 18.00              |                    |
|                       |                 | HIGH      | QPSK       | 16.39      | 16.61 | 16.60 | 18.00              |                    |
|                       | 6               | LOW       | QPSK       | 15.34      | 15.52 | 15.52 | 17.00              |                    |
|                       | 1.4             | 1         | LOW        | Q16        | 15.37 | 15.85 | 15.49              | 17.00              |
|                       |                 |           | MID        | Q16        | 15.57 | 15.98 | 15.66              | 17.00              |
| HIGH                  |                 |           | Q16        | 15.39      | 15.75 | 15.47 | 17.00              |                    |
| 3                     |                 | LOW       | Q16        | 15.41      | 15.77 | 15.76 | 17.00              |                    |
|                       |                 | MID       | Q16        | 15.47      | 15.81 | 15.81 | 17.00              |                    |
|                       |                 | HIGH      | Q16        | 15.41      | 15.74 | 15.75 | 17.00              |                    |
| 6                     |                 | LOW       | Q16        | 14.22      | 14.29 | 14.23 | 16.00              |                    |
| 1.4                   |                 | 1         | LOW        | 64QAM      | 14.17 | 14.88 | 15.29              | 16.00              |
|                       |                 |           | MID        | 64QAM      | 14.90 | 15.06 | 15.20              | 16.00              |
|                       | HIGH            |           | 64QAM      | 15.70      | 15.28 | 14.78 | 16.00              |                    |
|                       | 3               | LOW       | 64QAM      | 14.08      | 14.80 | 15.16 | 16.00              |                    |
|                       |                 | MID       | 64QAM      | 14.77      | 14.97 | 15.18 | 16.00              |                    |
|                       |                 | HIGH      | 64QAM      | 15.56      | 15.35 | 14.81 | 16.00              |                    |
|                       | 6               | LOW       | 64QAM      | 13.85      | 14.17 | 13.67 | 15.00              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18615 | 18900 | 19185              | Tune-up power(dBm) |
|                       | 3               | 1         | LOW        | QPSK       | 16.85 | 16.48 | 17.05              | 18.00              |
| MID                   |                 |           | QPSK       | 16.62      | 16.69 | 16.87 | 18.00              |                    |
| HIGH                  |                 |           | QPSK       | 17.31      | 17.03 | 16.58 | 18.00              |                    |
| 8                     |                 | LOW       | QPSK       | 15.05      | 16.66 | 16.13 | 17.00              |                    |
|                       |                 | MID       | QPSK       | 15.56      | 15.87 | 15.77 | 17.00              |                    |
|                       |                 | HIGH      | QPSK       | 16.12      | 15.73 | 15.70 | 17.00              |                    |
| 15                    |                 | LOW       | QPSK       | 15.69      | 16.05 | 15.90 | 17.00              |                    |
| 3                     |                 | 1         | LOW        | Q16        | 15.09 | 15.77 | 16.37              | 17.00              |
|                       |                 |           | MID        | Q16        | 15.92 | 16.08 | 16.10              | 17.00              |
|                       | HIGH            |           | Q16        | 16.83      | 16.52 | 15.90 | 17.00              |                    |
|                       | 8               | LOW       | Q16        | 14.84      | 15.00 | 14.73 | 16.00              |                    |
|                       |                 | MID       | Q16        | 14.01      | 14.32 | 14.55 | 16.00              |                    |
|                       |                 | HIGH      | Q16        | 14.79      | 14.33 | 14.33 | 16.00              |                    |
|                       | 15              | LOW       | Q16        | 14.22      | 14.65 | 14.54 | 16.00              |                    |
|                       | 3               | 1         | LOW        | 64QAM      | 14.09 | 14.77 | 15.37              | 16.00              |
|                       |                 |           | MID        | 64QAM      | 14.92 | 15.08 | 15.10              | 16.00              |
| HIGH                  |                 |           | 64QAM      | 15.83      | 15.52 | 14.90 | 16.00              |                    |
| 8                     |                 | LOW       | 64QAM      | 13.84      | 14.00 | 13.73 | 15.00              |                    |
|                       |                 | MID       | 64QAM      | 13.01      | 13.32 | 13.55 | 15.00              |                    |
|                       |                 | HIGH      | 64QAM      | 13.79      | 13.33 | 13.33 | 15.00              |                    |
| 15                    |                 | LOW       | 64QAM      | 13.22      | 13.65 | 13.54 | 15.00              |                    |
| Bandwidth (MHz)       |                 | RB Size   | RB offset  | Modulation | 13.09 | 13.77 | 14.37              | Tune-up power(dBm) |
| 5                     |                 | 1         | LOW        | QPSK       | 16.88 | 16.61 | 17.35              | 18.00              |
|                       | MID             |           | QPSK       | 16.60      | 16.71 | 16.96 | 18.00              |                    |
|                       | HIGH            |           | QPSK       | 17.29      | 17.11 | 16.55 | 18.00              |                    |
|                       | 12              | LOW       | QPSK       | 15.09      | 16.66 | 16.10 | 17.00              |                    |
|                       |                 | MID       | QPSK       | 15.50      | 15.91 | 15.84 | 17.00              |                    |
|                       |                 | HIGH      | QPSK       | 16.05      | 15.68 | 15.54 | 17.00              |                    |
|                       | 25              | LOW       | QPSK       | 15.56      | 16.11 | 15.82 | 17.00              |                    |
|                       | 5               | 1         | LOW        | Q16        | 15.25 | 15.93 | 16.26              | 17.00              |
|                       |                 |           | MID        | Q16        | 15.78 | 15.99 | 16.10              | 17.00              |
| HIGH                  |                 |           | Q16        | 16.64      | 16.55 | 15.94 | 17.00              |                    |
| 12                    |                 | LOW       | Q16        | 14.92      | 14.95 | 14.68 | 16.00              |                    |
|                       |                 | MID       | Q16        | 14.04      | 14.36 | 14.63 | 16.00              |                    |
|                       |                 | HIGH      | Q16        | 14.68      | 14.06 | 14.39 | 16.00              |                    |
| 25                    |                 | LOW       | Q16        | 14.17      | 14.51 | 14.43 | 16.00              |                    |
| 5                     |                 | 1         | LOW        | 64QAM      | 14.25 | 14.93 | 15.26              | 16.00              |
|                       |                 |           | MID        | 64QAM      | 14.78 | 14.99 | 15.10              | 16.00              |
|                       | HIGH            |           | 64QAM      | 15.64      | 15.55 | 14.94 | 16.00              |                    |
|                       | 12              | LOW       | 64QAM      | 13.92      | 13.95 | 13.68 | 15.00              |                    |
|                       |                 | MID       | 64QAM      | 13.04      | 13.36 | 13.63 | 15.00              |                    |
|                       |                 | HIGH      | 64QAM      | 13.68      | 13.06 | 13.39 | 15.00              |                    |
|                       | 25              | LOW       | 64QAM      | 13.17      | 13.51 | 13.43 | 15.00              |                    |

| LTE B2-State1&2-Ant.2 |                 |           |            |            |       |       |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
| 10                    | 1               | LOW       | QPSK       | 16.72      | 16.68 | 17.09 | 18.00              |                    |
|                       |                 | MID       | QPSK       | 16.53      | 16.59 | 17.13 | 18.00              |                    |
|                       |                 | HIGH      | QPSK       | 17.38      | 17.13 | 16.68 | 18.00              |                    |
|                       | 25              | LOW       | QPSK       | 15.07      | 16.72 | 15.98 | 17.00              |                    |
|                       |                 | MID       | QPSK       | 15.45      | 15.74 | 15.80 | 17.00              |                    |
|                       |                 | HIGH      | QPSK       | 16.08      | 15.54 | 15.77 | 17.00              |                    |
|                       | 50              | LOW       | QPSK       | 15.44      | 16.21 | 15.83 | 17.00              |                    |
|                       | 10              | 1         | LOW        | Q16        | 15.00 | 15.74 | 16.33              | 17.00              |
|                       |                 |           | MID        | Q16        | 16.04 | 16.15 | 16.15              | 17.00              |
| HIGH                  |                 |           | Q16        | 16.82      | 16.35 | 15.80 | 17.00              |                    |
| 25                    |                 | LOW       | Q16        | 14.77      | 15.09 | 14.58 | 16.00              |                    |
|                       |                 | MID       | Q16        | 14.24      | 14.27 | 14.38 | 16.00              |                    |
|                       |                 | HIGH      | Q16        | 14.72      | 14.10 | 14.47 | 16.00              |                    |
| 50                    |                 | LOW       | Q16        | 14.29      | 14.68 | 14.40 | 16.00              |                    |
| 10                    |                 | 1         | LOW        | 64QAM      | 14.00 | 14.74 | 15.33              | 16.00              |
|                       |                 |           | MID        | 64QAM      | 15.04 | 15.15 | 15.15              | 16.00              |
|                       | HIGH            |           | 64QAM      | 15.82      | 15.35 | 14.80 | 16.00              |                    |
|                       | 25              | LOW       | 64QAM      | 13.77      | 14.09 | 13.58 | 15.00              |                    |
|                       |                 | MID       | 64QAM      | 13.24      | 13.27 | 13.38 | 15.00              |                    |
|                       |                 | HIGH      | 64QAM      | 13.72      | 13.10 | 13.47 | 15.00              |                    |
|                       | 50              | LOW       | 64QAM      | 13.29      | 13.68 | 13.40 | 15.00              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                       | 15              | 1         | LOW        | QPSK       | 16.79 | 16.45 | 17.09              | 18.00              |
| MID                   |                 |           | QPSK       | 16.44      | 16.80 | 16.98 | 18.00              |                    |
| HIGH                  |                 |           | QPSK       | 17.37      | 16.87 | 16.74 | 18.00              |                    |
| 36                    |                 | LOW       | QPSK       | 15.12      | 16.61 | 16.09 | 17.00              |                    |
|                       |                 | MID       | QPSK       | 15.60      | 15.83 | 15.83 | 17.00              |                    |
|                       |                 | HIGH      | QPSK       | 16.09      | 15.84 | 15.74 | 17.00              |                    |
| 75                    |                 | LOW       | QPSK       | 15.48      | 16.10 | 15.90 | 17.00              |                    |
| 15                    |                 | 1         | LOW        | Q16        | 15.07 | 15.87 | 16.28              | 17.00              |
|                       |                 |           | MID        | Q16        | 15.76 | 16.02 | 16.29              | 17.00              |
|                       | HIGH            |           | Q16        | 16.62      | 16.39 | 15.92 | 17.00              |                    |
|                       | 36              | LOW       | Q16        | 14.84      | 15.18 | 14.82 | 16.00              |                    |
|                       |                 | MID       | Q16        | 14.04      | 14.31 | 14.43 | 16.00              |                    |
|                       |                 | HIGH      | Q16        | 14.71      | 14.17 | 14.32 | 16.00              |                    |
|                       | 75              | LOW       | Q16        | 14.10      | 14.52 | 14.68 | 16.00              |                    |
|                       | 15              | 1         | LOW        | 64QAM      | 14.07 | 14.87 | 15.28              | 16.00              |
|                       |                 |           | MID        | 64QAM      | 14.76 | 15.02 | 15.29              | 16.00              |
| HIGH                  |                 |           | 64QAM      | 15.62      | 15.39 | 14.92 | 16.00              |                    |
| 36                    |                 | LOW       | 64QAM      | 13.84      | 14.18 | 13.82 | 15.00              |                    |
|                       |                 | MID       | 64QAM      | 13.04      | 13.31 | 13.43 | 15.00              |                    |
|                       |                 | HIGH      | 64QAM      | 13.71      | 13.17 | 13.32 | 15.00              |                    |
| 75                    |                 | LOW       | 64QAM      | 13.10      | 13.52 | 13.68 | 15.00              |                    |
| Bandwidth (MHz)       |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20                    |                 | 1         | LOW        | QPSK       | 16.80 | 16.55 | 17.34              | 18.00              |
|                       | MID             |           | QPSK       | 16.47      | 16.71 | 17.02 | 18.00              |                    |
|                       | HIGH            |           | QPSK       | 17.20      | 17.02 | 16.68 | 18.00              |                    |
|                       | 50              | LOW       | QPSK       | 15.02      | 16.05 | 16.61 | 17.00              |                    |
|                       |                 | MID       | QPSK       | 15.46      | 15.80 | 15.89 | 17.00              |                    |
|                       |                 | HIGH      | QPSK       | 16.02      | 15.69 | 15.69 | 17.00              |                    |
|                       | 100             | LOW       | QPSK       | 15.55      | 15.86 | 16.14 | 17.00              |                    |
|                       | 20              | 1         | LOW        | Q16        | 15.14 | 15.89 | 16.31              | 17.00              |
|                       |                 |           | MID        | Q16        | 15.89 | 16.07 | 16.25              | 17.00              |
| HIGH                  |                 |           | Q16        | 16.69      | 16.40 | 15.81 | 17.00              |                    |
| 50                    |                 | LOW       | Q16        | 14.89      | 15.08 | 14.70 | 16.00              |                    |
|                       |                 | MID       | Q16        | 14.12      | 14.27 | 14.53 | 16.00              |                    |
|                       |                 | HIGH      | Q16        | 14.69      | 14.18 | 14.34 | 16.00              |                    |
| 100                   |                 | LOW       | Q16        | 14.20      | 14.62 | 14.53 | 16.00              |                    |
| 20                    |                 | 1         | LOW        | 64QAM      | 14.24 | 14.91 | 15.19              | 16.00              |
|                       |                 |           | MID        | 64QAM      | 15.04 | 15.04 | 15.27              | 16.00              |
|                       | HIGH            |           | 64QAM      | 15.54      | 15.35 | 14.74 | 16.00              |                    |
|                       | 50              | LOW       | 64QAM      | 13.86      | 13.97 | 13.80 | 15.00              |                    |
|                       |                 | MID       | 64QAM      | 13.26      | 13.24 | 13.62 | 15.00              |                    |
|                       |                 | HIGH      | 64QAM      | 13.57      | 13.05 | 13.32 | 15.00              |                    |
|                       | 100             | LOW       | 64QAM      | 13.27      | 13.61 | 13.62 | 15.00              |                    |

| LTE B2-State3-Ant.2 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 18607      | 18900 | 19193 | Tune-up power(dBm) |                    |
| 1.4                 | 1               | LOW       | QPSK       | 20.82      | 21.20 | 20.70 | 22.00              |                    |
|                     |                 | MID       | QPSK       | 20.67      | 20.62 | 21.00 | 21.50              |                    |
|                     |                 | HIGH      | QPSK       | 20.81      | 21.06 | 20.94 | 21.50              |                    |
|                     | 3               | LOW       | QPSK       | 20.70      | 21.28 | 20.89 | 21.50              |                    |
|                     |                 | MID       | QPSK       | 20.61      | 20.68 | 20.96 | 21.50              |                    |
|                     |                 | HIGH      | QPSK       | 20.82      | 20.88 | 20.78 | 21.50              |                    |
|                     | 6               | LOW       | QPSK       | 20.56      | 20.74 | 20.56 | 21.00              |                    |
|                     | 1.4             | 1         | LOW        | Q16        | 20.33 | 20.23 | 20.30              | 20.50              |
|                     |                 |           | MID        | Q16        | 20.45 | 20.42 | 20.36              | 20.50              |
| HIGH                |                 |           | Q16        | 19.78      | 19.86 | 19.79 | 20.50              |                    |
| 3                   |                 | LOW       | Q16        | 20.47      | 20.22 | 20.42 | 20.50              |                    |
|                     |                 | MID       | Q16        | 20.34      | 20.50 | 20.36 | 20.50              |                    |
|                     |                 | HIGH      | Q16        | 19.67      | 20.01 | 20.00 | 20.50              |                    |
| 6                   |                 | LOW       | Q16        | 18.79      | 19.13 | 18.76 | 19.50              |                    |
| 1.4                 |                 | 1         | LOW        | 64QAM      | 19.19 | 19.38 | 19.48              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 19.43 | 19.22 | 19.27              | 19.50              |
|                     | HIGH            |           | 64QAM      | 18.87      | 19.07 | 18.78 | 19.50              |                    |
|                     | 3               | LOW       | 64QAM      | 19.21      | 19.28 | 19.40 | 19.50              |                    |
|                     |                 | MID       | 64QAM      | 19.46      | 19.35 | 19.28 | 19.50              |                    |
|                     |                 | HIGH      | 64QAM      | 18.81      | 19.16 | 18.89 | 19.50              |                    |
|                     | 6               | LOW       | 64QAM      | 17.47      | 17.59 | 17.34 | 18.50              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18615 | 18900 | 19185              | Tune-up power(dBm) |
|                     | 3               | 1         | LOW        | QPSK       | 20.84 | 21.15 | 20.87              | 21.50              |
| MID                 |                 |           | QPSK       | 20.80      | 20.87 | 20.95 | 21.50              |                    |
| HIGH                |                 |           | QPSK       | 20.81      | 21.05 | 20.90 | 21.50              |                    |
| 8                   |                 | LOW       | QPSK       | 20.54      | 20.51 | 20.69 | 21.00              |                    |
|                     |                 | MID       | QPSK       | 19.23      | 19.92 | 20.53 | 21.00              |                    |
|                     |                 | HIGH      | QPSK       | 19.61      | 19.59 | 20.41 | 21.00              |                    |
| 15                  |                 | LOW       | QPSK       | 19.26      | 20.13 | 20.71 | 21.00              |                    |
| 3                   |                 | 1         | LOW        | Q16        | 20.19 | 20.45 | 20.28              | 20.50              |
|                     |                 |           | MID        | Q16        | 20.43 | 20.22 | 20.39              | 20.50              |
|                     | HIGH            |           | Q16        | 19.77      | 19.93 | 19.87 | 20.50              |                    |
|                     | 8               | LOW       | Q16        | 18.51      | 18.38 | 18.33 | 19.50              |                    |
|                     |                 | MID       | Q16        | 17.94      | 17.92 | 18.06 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 17.94      | 17.86 | 18.03 | 19.50              |                    |
|                     | 15              | LOW       | Q16        | 18.26      | 18.09 | 18.15 | 19.50              |                    |
|                     | 3               | 1         | LOW        | 64QAM      | 19.19 | 19.45 | 19.28              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 19.43 | 19.22 | 19.39              | 19.50              |
| HIGH                |                 |           | 64QAM      | 18.77      | 18.93 | 18.87 | 19.50              |                    |
| 8                   |                 | LOW       | 64QAM      | 17.51      | 17.38 | 17.33 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 16.94      | 16.92 | 17.06 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 16.94      | 16.86 | 17.03 | 18.50              |                    |
| 15                  |                 | LOW       | 64QAM      | 17.26      | 17.09 | 17.15 | 18.50              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 18625 | 18900 | 19175              | Tune-up power(dBm) |
| 5                   |                 | 1         | LOW        | QPSK       | 20.84 | 21.29 | 20.66              | 21.50              |
|                     | MID             |           | QPSK       | 20.58      | 20.78 | 20.88 | 21.50              |                    |
|                     | HIGH            |           | QPSK       | 20.68      | 21.00 | 20.95 | 21.50              |                    |
|                     | 12              | LOW       | QPSK       | 20.70      | 20.57 | 20.69 | 21.00              |                    |
|                     |                 | MID       | QPSK       | 19.24      | 19.89 | 20.70 | 21.00              |                    |
|                     |                 | HIGH      | QPSK       | 19.74      | 19.68 | 20.51 | 21.00              |                    |
|                     | 25              | LOW       | QPSK       | 19.43      | 20.15 | 20.64 | 21.00              |                    |
|                     | 5               | 1         | LOW        | Q16        | 20.45 | 20.16 | 20.28              | 20.50              |
|                     |                 |           | MID        | Q16        | 20.36 | 20.36 | 20.28              | 20.50              |
| HIGH                |                 |           | Q16        | 19.82      | 19.93 | 19.86 | 20.50              |                    |
| 12                  |                 | LOW       | Q16        | 18.49      | 18.45 | 18.19 | 19.50              |                    |
|                     |                 | MID       | Q16        | 18.00      | 17.79 | 18.02 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 17.78      | 17.73 | 17.83 | 19.50              |                    |
| 25                  |                 | LOW       | Q16        | 18.17      | 18.31 | 18.24 | 19.50              |                    |
| 5                   |                 | 1         | LOW        | 64QAM      | 19.45 | 19.16 | 19.28              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 19.36 | 19.36 | 19.28              | 19.50              |
|                     | HIGH            |           | 64QAM      | 18.82      | 18.93 | 18.86 | 19.50              |                    |
|                     | 12              | LOW       | 64QAM      | 17.49      | 17.45 | 17.19 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 17.00      | 16.79 | 17.02 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 16.78      | 16.73 | 16.83 | 18.50              |                    |
|                     | 25              | LOW       | 64QAM      | 17.17      | 17.31 | 17.24 | 18.50              |                    |

| LTE B2-State3-Ant.2 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
| 10                  | 1               | LOW       | QPSK       | 20.67      | 21.19 | 20.65 | 21.50              |                    |
|                     |                 | MID       | QPSK       | 20.59      | 20.81 | 20.89 | 21.50              |                    |
|                     |                 | HIGH      | QPSK       | 20.79      | 21.14 | 20.99 | 21.50              |                    |
|                     | 25              | LOW       | QPSK       | 20.49      | 20.49 | 20.70 | 21.00              |                    |
|                     |                 | MID       | QPSK       | 19.04      | 19.77 | 20.78 | 21.00              |                    |
|                     |                 | HIGH      | QPSK       | 19.59      | 19.74 | 20.34 | 21.00              |                    |
|                     | 50              | LOW       | QPSK       | 19.33      | 20.02 | 20.61 | 21.00              |                    |
|                     | 10              | 1         | LOW        | Q16        | 20.24 | 20.38 | 20.30              | 20.50              |
|                     |                 |           | MID        | Q16        | 20.48 | 20.29 | 20.30              | 20.50              |
| HIGH                |                 |           | Q16        | 19.76      | 20.00 | 19.75 | 20.50              |                    |
| 25                  |                 | LOW       | Q16        | 18.66      | 18.50 | 18.21 | 19.50              |                    |
|                     |                 | MID       | Q16        | 17.78      | 17.93 | 17.94 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 17.88      | 17.73 | 18.02 | 19.50              |                    |
| 50                  |                 | LOW       | Q16        | 18.26      | 18.08 | 18.16 | 19.50              |                    |
| 10                  |                 | 1         | LOW        | 64QAM      | 19.24 | 19.38 | 19.30              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 19.48 | 19.29 | 19.30              | 19.50              |
|                     | HIGH            |           | 64QAM      | 18.76      | 19.00 | 18.75 | 19.50              |                    |
|                     | 25              | LOW       | 64QAM      | 17.66      | 17.50 | 17.21 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 16.78      | 16.93 | 16.94 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 16.88      | 16.73 | 17.02 | 18.50              |                    |
|                     | 50              | LOW       | 64QAM      | 17.26      | 17.08 | 17.16 | 18.50              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                     | 15              | 1         | LOW        | QPSK       | 20.58 | 21.05 | 20.78              | 21.50              |
| MID                 |                 |           | QPSK       | 20.81      | 20.71 | 20.75 | 21.50              |                    |
| HIGH                |                 |           | QPSK       | 20.67      | 20.95 | 20.86 | 21.50              |                    |
| 36                  |                 | LOW       | QPSK       | 20.73      | 20.46 | 20.81 | 21.00              |                    |
|                     |                 | MID       | QPSK       | 19.02      | 19.96 | 20.66 | 21.00              |                    |
|                     |                 | HIGH      | QPSK       | 19.67      | 19.62 | 20.46 | 21.00              |                    |
| 75                  |                 | LOW       | QPSK       | 19.29      | 20.01 | 20.54 | 21.00              |                    |
| 15                  |                 | 1         | LOW        | Q16        | 20.21 | 20.43 | 20.45              | 20.50              |
|                     |                 |           | MID        | Q16        | 20.44 | 20.49 | 20.39              | 20.50              |
|                     | HIGH            |           | Q16        | 19.66      | 19.93 | 19.95 | 20.50              |                    |
|                     | 36              | LOW       | Q16        | 18.46      | 18.65 | 18.18 | 19.50              |                    |
|                     |                 | MID       | Q16        | 17.93      | 17.69 | 18.15 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 17.90      | 17.75 | 18.00 | 19.50              |                    |
|                     | 75              | LOW       | Q16        | 18.21      | 18.31 | 18.20 | 19.50              |                    |
|                     | 15              | 1         | LOW        | 64QAM      | 19.21 | 19.43 | 19.45              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 19.45 | 19.49 | 19.39              | 19.50              |
| HIGH                |                 |           | 64QAM      | 18.66      | 18.93 | 18.95 | 19.50              |                    |
| 36                  |                 | LOW       | 64QAM      | 17.46      | 17.65 | 17.18 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 16.93      | 16.69 | 17.15 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 16.90      | 16.75 | 17.00 | 18.50              |                    |
| 75                  |                 | LOW       | 64QAM      | 17.21      | 17.31 | 17.20 | 18.50              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20                  |                 | 1         | LOW        | QPSK       | 20.72 | 21.15 | 20.77              | 21.50              |
|                     | MID             |           | QPSK       | 20.69      | 20.76 | 20.99 | 21.50              |                    |
|                     | HIGH            |           | QPSK       | 20.75      | 20.87 | 20.84 | 21.50              |                    |
|                     | 50              | LOW       | QPSK       | 20.61      | 20.59 | 20.81 | 21.00              |                    |
|                     |                 | MID       | QPSK       | 19.09      | 19.85 | 20.65 | 21.00              |                    |
|                     |                 | HIGH      | QPSK       | 19.72      | 19.72 | 20.45 | 21.00              |                    |
|                     | 100             | LOW       | QPSK       | 19.39      | 20.14 | 20.60 | 21.00              |                    |
|                     | 20              | 1         | LOW        | Q16        | 20.33 | 20.30 | 20.35              | 20.50              |
|                     |                 |           | MID        | Q16        | 20.42 | 20.35 | 20.32              | 20.50              |
| HIGH                |                 |           | Q16        | 19.73      | 20.01 | 19.86 | 20.50              |                    |
| 50                  |                 | LOW       | Q16        | 18.60      | 18.53 | 18.30 | 19.50              |                    |
|                     |                 | MID       | Q16        | 17.87      | 17.82 | 18.09 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 17.85      | 17.76 | 17.90 | 19.50              |                    |
| 100                 |                 | LOW       | Q16        | 18.11      | 18.18 | 18.10 | 19.50              |                    |
| 20                  |                 | 1         | LOW        | 64QAM      | 19.21 | 19.19 | 19.36              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 19.34 | 19.35 | 19.37              | 19.50              |
|                     | HIGH            |           | 64QAM      | 18.63      | 19.02 | 18.93 | 19.50              |                    |
|                     | 50              | LOW       | 64QAM      | 17.60      | 17.56 | 17.27 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 16.87      | 16.78 | 17.17 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 16.86      | 16.89 | 16.91 | 18.50              |                    |
|                     | 100             | LOW       | 64QAM      | 17.16      | 17.28 | 17.16 | 18.50              |                    |

| LTE B2-State4-Ant.2 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 18607      | 18900 | 19193 | Tune-up power(dBm) |                    |
| 1.4                 | 1               | LOW       | QPSK       | 20.33      | 20.67 | 20.29 | 21.00              |                    |
|                     |                 | MID       | QPSK       | 20.37      | 20.30 | 20.31 | 21.00              |                    |
|                     |                 | HIGH      | QPSK       | 20.20      | 20.49 | 20.24 | 21.00              |                    |
|                     | 3               | LOW       | QPSK       | 20.21      | 20.79 | 20.19 | 21.00              |                    |
|                     |                 | MID       | QPSK       | 20.26      | 20.32 | 20.24 | 21.00              |                    |
|                     |                 | HIGH      | QPSK       | 20.31      | 20.65 | 20.29 | 21.00              |                    |
|                     | 6               | LOW       | QPSK       | 19.76      | 19.76 | 19.85 | 20.50              |                    |
|                     | 1.4             | 1         | LOW        | Q16        | 19.64 | 19.94 | 19.56              | 20.00              |
|                     |                 |           | MID        | Q16        | 18.05 | 18.12 | 19.66              | 20.00              |
| HIGH                |                 |           | Q16        | 18.50      | 18.62 | 19.14 | 20.00              |                    |
| 3                   |                 | LOW       | Q16        | 19.52      | 19.87 | 19.64 | 20.00              |                    |
|                     |                 | MID       | Q16        | 18.03      | 18.06 | 19.73 | 20.00              |                    |
|                     |                 | HIGH      | Q16        | 18.79      | 18.41 | 19.24 | 20.00              |                    |
| 6                   |                 | LOW       | Q16        | 17.33      | 17.50 | 17.80 | 19.00              |                    |
| 1.4                 |                 | 1         | LOW        | 64QAM      | 18.61 | 18.90 | 18.55              | 19.00              |
|                     |                 |           | MID        | 64QAM      | 17.01 | 17.05 | 18.80              | 19.00              |
|                     | HIGH            |           | 64QAM      | 17.52      | 17.63 | 18.13 | 19.00              |                    |
|                     | 3               | LOW       | 64QAM      | 18.77      | 18.82 | 18.61 | 19.00              |                    |
|                     |                 | MID       | 64QAM      | 17.00      | 17.19 | 18.78 | 19.00              |                    |
|                     |                 | HIGH      | 64QAM      | 17.51      | 17.44 | 18.24 | 19.00              |                    |
|                     | 6               | LOW       | 64QAM      | 16.17      | 16.59 | 16.55 | 18.00              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18615 | 18900 | 19185              | Tune-up power(dBm) |
|                     | 3               | 1         | LOW        | QPSK       | 20.27 | 20.91 | 20.46              | 21.00              |
| MID                 |                 |           | QPSK       | 20.34      | 20.28 | 20.29 | 21.00              |                    |
| HIGH                |                 |           | QPSK       | 20.43      | 20.54 | 20.40 | 21.00              |                    |
| 8                   |                 | LOW       | QPSK       | 20.05      | 20.23 | 19.99 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 19.49      | 19.39 | 19.81 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 19.54      | 19.51 | 19.70 | 20.50              |                    |
| 15                  |                 | LOW       | QPSK       | 19.90      | 19.73 | 19.94 | 20.50              |                    |
| 3                   |                 | 1         | LOW        | Q16        | 19.76 | 19.87 | 19.54              | 20.00              |
|                     |                 |           | MID        | Q16        | 18.17 | 18.31 | 19.77              | 20.00              |
|                     | HIGH            |           | Q16        | 18.60      | 18.57 | 19.09 | 20.00              |                    |
|                     | 8               | LOW       | Q16        | 17.93      | 18.09 | 17.84 | 19.00              |                    |
|                     |                 | MID       | Q16        | 17.08      | 17.33 | 17.65 | 19.00              |                    |
|                     |                 | HIGH      | Q16        | 17.65      | 17.16 | 17.58 | 19.00              |                    |
|                     | 15              | LOW       | Q16        | 17.27      | 17.55 | 17.69 | 19.00              |                    |
|                     | 3               | 1         | LOW        | 64QAM      | 18.76 | 18.87 | 18.54              | 19.00              |
|                     |                 |           | MID        | 64QAM      | 17.17 | 17.31 | 18.77              | 19.00              |
| HIGH                |                 |           | 64QAM      | 17.60      | 17.57 | 18.09 | 19.00              |                    |
| 8                   |                 | LOW       | 64QAM      | 16.93      | 17.09 | 16.84 | 18.00              |                    |
|                     |                 | MID       | 64QAM      | 16.08      | 16.33 | 16.65 | 18.00              |                    |
|                     |                 | HIGH      | 64QAM      | 16.65      | 16.16 | 16.58 | 18.00              |                    |
| 15                  |                 | LOW       | 64QAM      | 16.27      | 16.55 | 16.69 | 18.00              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 18625 | 18900 | 19175              | Tune-up power(dBm) |
| 5                   |                 | 1         | LOW        | QPSK       | 20.29 | 20.79 | 20.48              | 21.00              |
|                     | MID             |           | QPSK       | 20.25      | 20.47 | 20.32 | 21.00              |                    |
|                     | HIGH            |           | QPSK       | 20.37      | 20.45 | 20.43 | 21.00              |                    |
|                     | 12              | LOW       | QPSK       | 20.10      | 20.45 | 19.90 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 19.65      | 19.39 | 19.77 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 19.40      | 19.47 | 19.60 | 20.50              |                    |
|                     | 25              | LOW       | QPSK       | 19.70      | 19.96 | 19.75 | 20.50              |                    |
|                     | 5               | 1         | LOW        | Q16        | 19.74 | 19.89 | 19.67              | 20.00              |
|                     |                 |           | MID        | Q16        | 18.11 | 18.18 | 19.85              | 20.00              |
| HIGH                |                 |           | Q16        | 18.51      | 18.65 | 19.28 | 20.00              |                    |
| 12                  |                 | LOW       | Q16        | 18.20      | 18.01 | 17.90 | 19.00              |                    |
|                     |                 | MID       | Q16        | 17.04      | 17.21 | 17.60 | 19.00              |                    |
|                     |                 | HIGH      | Q16        | 17.68      | 17.06 | 17.55 | 19.00              |                    |
| 25                  |                 | LOW       | Q16        | 17.03      | 17.65 | 17.69 | 19.00              |                    |
| 5                   |                 | 1         | LOW        | 64QAM      | 18.74 | 18.89 | 18.67              | 19.00              |
|                     |                 |           | MID        | 64QAM      | 17.09 | 17.18 | 18.85              | 19.00              |
|                     | HIGH            |           | 64QAM      | 17.51      | 17.65 | 18.28 | 19.00              |                    |
|                     | 12              | LOW       | 64QAM      | 17.20      | 17.01 | 16.90 | 18.00              |                    |
|                     |                 | MID       | 64QAM      | 16.04      | 16.21 | 16.60 | 18.00              |                    |
|                     |                 | HIGH      | 64QAM      | 16.68      | 16.06 | 16.55 | 18.00              |                    |
|                     | 25              | LOW       | 64QAM      | 16.03      | 16.65 | 16.69 | 18.00              |                    |



| LTE B2-State4-Ant.2 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
| 10                  | 1               | LOW       | QPSK       | 20.18      | 20.79 | 20.30 | 21.00              |                    |
|                     |                 | MID       | QPSK       | 20.34      | 20.41 | 20.49 | 21.00              |                    |
|                     |                 | HIGH      | QPSK       | 20.22      | 20.64 | 20.49 | 21.00              |                    |
|                     | 25              | LOW       | QPSK       | 20.23      | 20.42 | 19.91 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 19.57      | 19.64 | 19.78 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 19.47      | 19.27 | 19.62 | 20.50              |                    |
|                     | 50              | LOW       | QPSK       | 19.65      | 19.78 | 19.95 | 20.50              |                    |
|                     | 10              | 1         | LOW        | Q16        | 19.69 | 20.00 | 19.79              | 20.00              |
|                     |                 |           | MID        | Q16        | 18.13 | 18.33 | 19.71              | 20.00              |
| HIGH                |                 |           | Q16        | 18.54      | 18.49 | 19.04 | 20.00              |                    |
| 25                  |                 | LOW       | Q16        | 18.05      | 18.01 | 17.84 | 19.00              |                    |
|                     |                 | MID       | Q16        | 17.19      | 17.29 | 17.72 | 19.00              |                    |
|                     |                 | HIGH      | Q16        | 17.52      | 17.21 | 17.53 | 19.00              |                    |
| 50                  |                 | LOW       | Q16        | 17.24      | 17.58 | 17.85 | 19.00              |                    |
| 10                  |                 | 1         | LOW        | 64QAM      | 18.69 | 19.00 | 18.79              | 19.00              |
|                     |                 |           | MID        | 64QAM      | 17.23 | 17.33 | 18.71              | 19.00              |
|                     | HIGH            |           | 64QAM      | 17.54      | 17.49 | 18.04 | 19.00              |                    |
|                     | 25              | LOW       | 64QAM      | 17.05      | 17.01 | 16.84 | 18.00              |                    |
|                     |                 | MID       | 64QAM      | 16.19      | 16.29 | 16.72 | 18.00              |                    |
|                     |                 | HIGH      | 64QAM      | 16.52      | 16.21 | 16.53 | 18.00              |                    |
|                     | 50              | LOW       | 64QAM      | 16.24      | 16.58 | 16.85 | 18.00              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                     | 15              | 1         | LOW        | QPSK       | 20.37 | 20.93 | 20.25              | 21.00              |
| MID                 |                 |           | QPSK       | 20.47      | 20.40 | 20.31 | 21.00              |                    |
| HIGH                |                 |           | QPSK       | 20.21      | 20.55 | 20.36 | 21.00              |                    |
| 36                  |                 | LOW       | QPSK       | 20.04      | 20.33 | 20.15 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 19.63      | 19.61 | 20.01 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 19.46      | 19.41 | 19.72 | 20.50              |                    |
| 75                  |                 | LOW       | QPSK       | 19.91      | 19.81 | 19.82 | 20.50              |                    |
| 15                  |                 | 1         | LOW        | Q16        | 19.73 | 19.87 | 19.52              | 20.00              |
|                     |                 |           | MID        | Q16        | 18.15 | 18.22 | 19.83              | 20.00              |
|                     | HIGH            |           | Q16        | 18.68      | 18.44 | 19.13 | 20.00              |                    |
|                     | 36              | LOW       | Q16        | 17.94      | 17.99 | 17.70 | 19.00              |                    |
|                     |                 | MID       | Q16        | 17.06      | 17.18 | 17.54 | 19.00              |                    |
|                     |                 | HIGH      | Q16        | 17.53      | 17.08 | 17.44 | 19.00              |                    |
|                     | 75              | LOW       | Q16        | 17.09      | 17.59 | 17.70 | 19.00              |                    |
|                     | 15              | 1         | LOW        | 64QAM      | 18.73 | 18.87 | 18.52              | 19.00              |
|                     |                 |           | MID        | 64QAM      | 17.11 | 17.22 | 18.83              | 19.00              |
| HIGH                |                 |           | 64QAM      | 17.68      | 17.44 | 18.13 | 19.00              |                    |
| 36                  |                 | LOW       | 64QAM      | 16.94      | 16.99 | 16.70 | 18.00              |                    |
|                     |                 | MID       | 64QAM      | 16.06      | 16.18 | 16.54 | 18.00              |                    |
|                     |                 | HIGH      | 64QAM      | 16.53      | 16.08 | 16.44 | 18.00              |                    |
| 75                  |                 | LOW       | 64QAM      | 16.09      | 16.59 | 16.70 | 18.00              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20                  |                 | 1         | LOW        | QPSK       | 20.28 | 20.39 | 20.33              | 21.00              |
|                     | MID             |           | QPSK       | 20.39      | 20.34 | 20.52 | 21.00              |                    |
|                     | HIGH            |           | QPSK       | 20.30      | 20.37 | 20.38 | 21.00              |                    |
|                     | 50              | LOW       | QPSK       | 20.17      | 20.04 | 20.32 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 19.56      | 19.51 | 19.90 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 19.44      | 19.40 | 19.68 | 20.50              |                    |
|                     | 100             | LOW       | QPSK       | 19.77      | 19.82 | 19.83 | 20.50              |                    |
|                     | 20              | 1         | LOW        | Q16        | 19.65 | 19.92 | 19.66              | 20.00              |
|                     |                 |           | MID        | Q16        | 18.06 | 18.20 | 19.79              | 20.00              |
| HIGH                |                 |           | Q16        | 18.65      | 18.53 | 19.16 | 20.00              |                    |
| 50                  |                 | LOW       | Q16        | 18.06      | 18.08 | 17.78 | 19.00              |                    |
|                     |                 | MID       | Q16        | 17.06      | 17.26 | 17.61 | 19.00              |                    |
|                     |                 | HIGH      | Q16        | 17.64      | 17.21 | 17.51 | 19.00              |                    |
| 100                 |                 | LOW       | Q16        | 17.18      | 17.65 | 17.70 | 19.00              |                    |
| 20                  |                 | 1         | LOW        | 64QAM      | 18.72 | 18.91 | 18.51              | 19.00              |
|                     |                 |           | MID        | 64QAM      | 17.22 | 17.27 | 18.66              | 19.00              |
|                     | HIGH            |           | 64QAM      | 17.79      | 17.64 | 18.18 | 19.00              |                    |
|                     | 50              | LOW       | 64QAM      | 17.08      | 16.94 | 16.70 | 18.00              |                    |
|                     |                 | MID       | 64QAM      | 16.04      | 16.30 | 16.58 | 18.00              |                    |
|                     |                 | HIGH      | 64QAM      | 16.69      | 16.17 | 16.58 | 18.00              |                    |
|                     | 100             | LOW       | 64QAM      | 16.06      | 16.58 | 16.73 | 18.00              |                    |

| LTE B2-Full Power -Ant.3 |                 |           |            |            |       |       |                    |                    |
|--------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)          | RB Size         | RB offset | Modulation | 18607      | 18900 | 19193 | Tune-up power(dBm) |                    |
| 1.4                      | 1               | LOW       | QPSK       | 23.02      | 23.06 | 23.04 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 23.05      | 23.08 | 23.06 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 23.04      | 23.05 | 23.09 | 23.50              |                    |
|                          | 3               | LOW       | QPSK       | 23.08      | 23.18 | 23.10 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 23.03      | 23.10 | 23.09 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 23.09      | 23.13 | 23.17 | 23.50              |                    |
|                          | 6               | LOW       | QPSK       | 22.11      | 22.24 | 22.08 | 22.50              |                    |
|                          | 1.4             | 1         | LOW        | Q16        | 21.98 | 21.80 | 22.21              | 22.50              |
|                          |                 |           | MID        | Q16        | 21.91 | 21.73 | 22.16              | 22.50              |
| HIGH                     |                 |           | Q16        | 21.99      | 21.74 | 22.22 | 22.50              |                    |
| 3                        |                 | LOW       | Q16        | 22.18      | 22.02 | 22.08 | 22.50              |                    |
|                          |                 | MID       | Q16        | 22.18      | 22.02 | 22.05 | 22.50              |                    |
|                          |                 | HIGH      | Q16        | 22.19      | 21.97 | 22.04 | 22.50              |                    |
| 6                        |                 | LOW       | Q16        | 20.80      | 20.66 | 20.60 | 21.50              |                    |
| 1.4                      |                 | 1         | LOW        | 64QAM      | 21.09 | 20.67 | 21.24              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 20.81 | 20.60 | 21.06              | 21.50              |
|                          | HIGH            |           | 64QAM      | 21.01      | 20.65 | 21.19 | 21.50              |                    |
|                          | 3               | LOW       | 64QAM      | 21.25      | 21.08 | 20.95 | 21.50              |                    |
|                          |                 | MID       | 64QAM      | 21.05      | 21.12 | 21.13 | 21.50              |                    |
|                          |                 | HIGH      | 64QAM      | 21.18      | 21.11 | 21.09 | 21.50              |                    |
|                          | 6               | LOW       | 64QAM      | 19.87      | 19.60 | 19.54 | 20.50              |                    |
|                          | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18615 | 18900 | 19185              | Tune-up power(dBm) |
|                          | 3               | 1         | LOW        | QPSK       | 23.08 | 23.14 | 23.02              | 23.50              |
| MID                      |                 |           | QPSK       | 22.96      | 23.39 | 23.24 | 23.50              |                    |
| HIGH                     |                 |           | QPSK       | 23.24      | 23.46 | 23.08 | 23.50              |                    |
| 8                        |                 | LOW       | QPSK       | 22.28      | 22.23 | 22.08 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 22.04      | 22.12 | 22.10 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.18      | 22.01 | 22.05 | 22.50              |                    |
| 15                       |                 | LOW       | QPSK       | 22.00      | 22.37 | 22.02 | 22.50              |                    |
| 3                        |                 | 1         | LOW        | Q16        | 21.82 | 21.76 | 22.13              | 22.50              |
|                          |                 |           | MID        | Q16        | 21.93 | 21.83 | 22.28              | 22.50              |
|                          | HIGH            |           | Q16        | 21.93      | 21.87 | 21.96 | 22.50              |                    |
|                          | 8               | LOW       | Q16        | 20.63      | 20.76 | 20.60 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.54      | 20.79 | 20.46 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.71      | 20.49 | 20.47 | 21.50              |                    |
|                          | 15              | LOW       | Q16        | 20.73      | 20.66 | 20.57 | 21.50              |                    |
|                          | 3               | 1         | LOW        | 64QAM      | 20.92 | 20.85 | 21.09              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 21.09 | 20.85 | 21.09              | 21.50              |
| HIGH                     |                 |           | 64QAM      | 20.93      | 21.02 | 20.88 | 21.50              |                    |
| 8                        |                 | LOW       | 64QAM      | 19.47      | 19.68 | 19.28 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.62      | 19.74 | 19.53 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.84      | 19.55 | 19.47 | 20.50              |                    |
| 15                       |                 | LOW       | 64QAM      | 19.55      | 19.48 | 19.28 | 20.50              |                    |
| Bandwidth (MHz)          |                 | RB Size   | RB offset  | Modulation | 18625 | 18900 | 19175              | Tune-up power(dBm) |
| 5                        |                 | 1         | LOW        | QPSK       | 22.96 | 23.22 | 23.02              | 23.50              |
|                          | MID             |           | QPSK       | 22.89      | 23.35 | 23.08 | 23.50              |                    |
|                          | HIGH            |           | QPSK       | 23.25      | 23.34 | 23.33 | 23.50              |                    |
|                          | 12              | LOW       | QPSK       | 22.23      | 22.06 | 22.22 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 22.14      | 22.23 | 21.95 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.12      | 22.08 | 21.98 | 22.50              |                    |
|                          | 25              | LOW       | QPSK       | 21.96      | 22.36 | 22.22 | 22.50              |                    |
|                          | 5               | 1         | LOW        | Q16        | 21.92 | 21.76 | 22.18              | 22.50              |
|                          |                 |           | MID        | Q16        | 21.92 | 21.86 | 22.05              | 22.50              |
| HIGH                     |                 |           | Q16        | 22.02      | 22.10 | 22.00 | 22.50              |                    |
| 12                       |                 | LOW       | Q16        | 20.64      | 20.52 | 20.38 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.68      | 20.88 | 20.42 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.57      | 20.61 | 20.61 | 21.50              |                    |
| 25                       |                 | LOW       | Q16        | 20.54      | 20.59 | 20.41 | 21.50              |                    |
| 5                        |                 | 1         | LOW        | 64QAM      | 20.80 | 20.92 | 21.25              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 20.94 | 21.01 | 21.29              | 21.50              |
|                          | HIGH            |           | 64QAM      | 20.73      | 20.91 | 21.12 | 21.50              |                    |
|                          | 12              | LOW       | 64QAM      | 19.42      | 19.58 | 19.48 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.78      | 19.75 | 19.60 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.86      | 19.45 | 19.28 | 20.50              |                    |
|                          | 25              | LOW       | 64QAM      | 19.37      | 19.46 | 19.48 | 20.50              |                    |

| LTE B2-Full Power -Ant.3 |                 |           |            |            |       |       |                    |                    |
|--------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)          | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
| 10                       | 1               | LOW       | QPSK       | 22.93      | 23.30 | 23.03 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 23.08      | 23.45 | 23.22 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 23.04      | 23.39 | 23.12 | 23.50              |                    |
|                          | 25              | LOW       | QPSK       | 22.08      | 22.32 | 22.05 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.96      | 22.11 | 22.01 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.01      | 22.25 | 22.02 | 22.50              |                    |
|                          | 50              | LOW       | QPSK       | 22.14      | 22.40 | 22.17 | 22.50              |                    |
|                          | 10              | 1         | LOW        | Q16        | 21.85 | 21.95 | 22.29              | 22.50              |
|                          |                 |           | MID        | Q16        | 22.04 | 22.03 | 22.12              | 22.50              |
| HIGH                     |                 |           | Q16        | 22.01      | 21.88 | 21.96 | 22.50              |                    |
| 25                       |                 | LOW       | Q16        | 20.45      | 20.54 | 20.51 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.77      | 20.62 | 20.51 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.50      | 20.67 | 20.51 | 21.50              |                    |
| 50                       |                 | LOW       | Q16        | 20.50      | 20.85 | 20.42 | 21.50              |                    |
| 10                       |                 | 1         | LOW        | 64QAM      | 20.86 | 20.80 | 21.02              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 20.95 | 20.99 | 21.21              | 21.50              |
|                          | HIGH            |           | 64QAM      | 20.72      | 21.01 | 20.98 | 21.50              |                    |
|                          | 25              | LOW       | 64QAM      | 19.51      | 19.61 | 19.51 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.58      | 19.73 | 19.65 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.69      | 19.51 | 19.52 | 20.50              |                    |
|                          | 50              | LOW       | 64QAM      | 19.46      | 19.74 | 19.39 | 20.50              |                    |
|                          | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                          | 15              | 1         | LOW        | QPSK       | 22.91 | 23.24 | 23.23              | 23.50              |
| MID                      |                 |           | QPSK       | 23.15      | 23.44 | 23.11 | 23.50              |                    |
| HIGH                     |                 |           | QPSK       | 23.27      | 23.44 | 23.13 | 23.50              |                    |
| 36                       |                 | LOW       | QPSK       | 22.17      | 22.07 | 22.08 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.99      | 22.36 | 22.09 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.21      | 22.22 | 22.25 | 22.50              |                    |
| 75                       |                 | LOW       | QPSK       | 21.90      | 22.33 | 22.12 | 22.50              |                    |
| 15                       |                 | 1         | LOW        | Q16        | 21.81 | 21.76 | 22.26              | 22.50              |
|                          |                 |           | MID        | Q16        | 21.76 | 21.87 | 22.29              | 22.50              |
|                          | HIGH            |           | Q16        | 21.79      | 21.86 | 21.98 | 22.50              |                    |
|                          | 36              | LOW       | Q16        | 20.66      | 20.73 | 20.51 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.56      | 20.67 | 20.48 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.70      | 20.55 | 20.56 | 21.50              |                    |
|                          | 75              | LOW       | Q16        | 20.66      | 20.61 | 20.67 | 21.50              |                    |
|                          | 15              | 1         | LOW        | 64QAM      | 20.80 | 20.97 | 21.08              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 20.79 | 21.13 | 21.13              | 21.50              |
| HIGH                     |                 |           | 64QAM      | 20.73      | 21.14 | 21.13 | 21.50              |                    |
| 36                       |                 | LOW       | 64QAM      | 19.43      | 19.83 | 19.51 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.76      | 19.75 | 19.56 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.70      | 19.40 | 19.41 | 20.50              |                    |
| 75                       |                 | LOW       | 64QAM      | 19.42      | 19.55 | 19.45 | 20.50              |                    |
| Bandwidth (MHz)          |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20                       |                 | 1         | LOW        | QPSK       | 23.04 | 23.24 | 23.16              | 23.50              |
|                          | MID             |           | QPSK       | 23.00      | 23.31 | 23.14 | 23.50              |                    |
|                          | HIGH            |           | QPSK       | 23.15      | 23.35 | 23.23 | 23.50              |                    |
|                          | 50              | LOW       | QPSK       | 22.13      | 22.20 | 22.10 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 22.05      | 22.23 | 22.10 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.10      | 22.13 | 22.10 | 22.50              |                    |
|                          | 100             | LOW       | QPSK       | 22.04      | 22.27 | 22.16 | 22.50              |                    |
|                          | 20              | 1         | LOW        | Q16        | 21.89 | 21.80 | 22.14              | 22.50              |
|                          |                 |           | MID        | Q16        | 21.89 | 21.91 | 22.14              | 22.50              |
| HIGH                     |                 |           | Q16        | 21.89      | 21.95 | 22.11 | 22.50              |                    |
| 50                       |                 | LOW       | Q16        | 20.58      | 20.67 | 20.48 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.63      | 20.76 | 20.48 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.63      | 20.64 | 20.51 | 21.50              |                    |
| 100                      |                 | LOW       | Q16        | 20.61      | 20.71 | 20.55 | 21.50              |                    |
| 20                       |                 | 1         | LOW        | 64QAM      | 20.77 | 20.83 | 21.14              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 20.94 | 20.98 | 21.17              | 21.50              |
|                          | HIGH            |           | 64QAM      | 20.86      | 21.00 | 20.98 | 21.50              |                    |
|                          | 50              | LOW       | 64QAM      | 19.45      | 19.71 | 19.39 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.69      | 19.72 | 19.57 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.72      | 19.53 | 19.39 | 20.50              |                    |
|                          | 100             | LOW       | 64QAM      | 19.47      | 19.59 | 19.41 | 20.50              |                    |

| LTE B2-State1&2-Ant.3 |                 |           |            |            |       |       |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 18607      | 18900 | 19193 | Tune-up power(dBm) |                    |
| 1.4                   | 1               | LOW       | QPSK       | 23.02      | 23.06 | 23.04 | 23.50              |                    |
|                       |                 | MID       | QPSK       | 23.05      | 23.08 | 23.06 | 23.50              |                    |
|                       |                 | HIGH      | QPSK       | 23.04      | 23.05 | 23.09 | 23.50              |                    |
|                       | 3               | LOW       | QPSK       | 23.08      | 23.18 | 23.10 | 23.50              |                    |
|                       |                 | MID       | QPSK       | 23.03      | 23.10 | 23.09 | 23.50              |                    |
|                       |                 | HIGH      | QPSK       | 23.09      | 23.13 | 23.17 | 23.50              |                    |
|                       | 6               | LOW       | QPSK       | 22.11      | 22.24 | 22.08 | 22.50              |                    |
|                       | 1.4             | 1         | LOW        | Q16        | 21.98 | 21.80 | 22.21              | 22.50              |
|                       |                 |           | MID        | Q16        | 21.91 | 21.73 | 22.16              | 22.50              |
| HIGH                  |                 |           | Q16        | 21.99      | 21.74 | 22.22 | 22.50              |                    |
| 3                     |                 | LOW       | Q16        | 22.18      | 22.02 | 22.08 | 22.50              |                    |
|                       |                 | MID       | Q16        | 22.18      | 22.02 | 22.05 | 22.50              |                    |
|                       |                 | HIGH      | Q16        | 22.19      | 21.97 | 22.04 | 22.50              |                    |
| 6                     |                 | LOW       | Q16        | 20.80      | 20.66 | 20.60 | 21.50              |                    |
| 1.4                   |                 | 1         | LOW        | 64QAM      | 21.09 | 20.67 | 21.24              | 21.50              |
|                       |                 |           | MID        | 64QAM      | 20.81 | 20.60 | 21.06              | 21.50              |
|                       | HIGH            |           | 64QAM      | 21.01      | 20.65 | 21.19 | 21.50              |                    |
|                       | 3               | LOW       | 64QAM      | 21.25      | 21.08 | 20.95 | 21.50              |                    |
|                       |                 | MID       | 64QAM      | 21.05      | 21.12 | 21.13 | 21.50              |                    |
|                       |                 | HIGH      | 64QAM      | 21.18      | 21.11 | 21.09 | 21.50              |                    |
|                       | 6               | LOW       | 64QAM      | 19.87      | 19.60 | 19.54 | 20.50              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18615 | 18900 | 19185              | Tune-up power(dBm) |
|                       | 3               | 1         | LOW        | QPSK       | 23.08 | 23.14 | 23.02              | 23.50              |
| MID                   |                 |           | QPSK       | 22.96      | 23.39 | 23.24 | 23.50              |                    |
| HIGH                  |                 |           | QPSK       | 23.24      | 23.46 | 23.08 | 23.50              |                    |
| 8                     |                 | LOW       | QPSK       | 22.28      | 22.23 | 22.08 | 22.50              |                    |
|                       |                 | MID       | QPSK       | 22.04      | 22.12 | 22.10 | 22.50              |                    |
|                       |                 | HIGH      | QPSK       | 22.18      | 22.01 | 22.05 | 22.50              |                    |
| 15                    |                 | LOW       | QPSK       | 22.00      | 22.37 | 22.02 | 22.50              |                    |
| 3                     |                 | 1         | LOW        | Q16        | 21.82 | 21.76 | 22.13              | 22.50              |
|                       |                 |           | MID        | Q16        | 21.93 | 21.83 | 22.28              | 22.50              |
|                       | HIGH            |           | Q16        | 21.93      | 21.87 | 21.96 | 22.50              |                    |
|                       | 8               | LOW       | Q16        | 20.63      | 20.76 | 20.60 | 21.50              |                    |
|                       |                 | MID       | Q16        | 20.54      | 20.79 | 20.46 | 21.50              |                    |
|                       |                 | HIGH      | Q16        | 20.71      | 20.49 | 20.47 | 21.50              |                    |
|                       | 15              | LOW       | Q16        | 20.73      | 20.66 | 20.57 | 21.50              |                    |
|                       | 3               | 1         | LOW        | 64QAM      | 20.92 | 20.85 | 21.09              | 21.50              |
|                       |                 |           | MID        | 64QAM      | 21.09 | 20.85 | 21.09              | 21.50              |
| HIGH                  |                 |           | 64QAM      | 20.93      | 21.02 | 20.88 | 21.50              |                    |
| 8                     |                 | LOW       | 64QAM      | 19.47      | 19.68 | 19.28 | 20.50              |                    |
|                       |                 | MID       | 64QAM      | 19.62      | 19.74 | 19.53 | 20.50              |                    |
|                       |                 | HIGH      | 64QAM      | 19.84      | 19.55 | 19.47 | 20.50              |                    |
| 15                    |                 | LOW       | 64QAM      | 19.55      | 19.48 | 19.28 | 20.50              |                    |
| Bandwidth (MHz)       |                 | RB Size   | RB offset  | Modulation | 18625 | 18900 | 19175              | Tune-up power(dBm) |
| 5                     |                 | 1         | LOW        | QPSK       | 22.96 | 23.22 | 23.02              | 23.50              |
|                       | MID             |           | QPSK       | 22.89      | 23.35 | 23.08 | 23.50              |                    |
|                       | HIGH            |           | QPSK       | 23.25      | 23.34 | 23.33 | 23.50              |                    |
|                       | 12              | LOW       | QPSK       | 22.23      | 22.06 | 22.22 | 22.50              |                    |
|                       |                 | MID       | QPSK       | 22.14      | 22.23 | 21.95 | 22.50              |                    |
|                       |                 | HIGH      | QPSK       | 22.12      | 22.08 | 21.98 | 22.50              |                    |
|                       | 25              | LOW       | QPSK       | 21.96      | 22.36 | 22.22 | 22.50              |                    |
|                       | 5               | 1         | LOW        | Q16        | 21.92 | 21.76 | 22.18              | 22.50              |
|                       |                 |           | MID        | Q16        | 21.92 | 21.86 | 22.05              | 22.50              |
| HIGH                  |                 |           | Q16        | 22.02      | 22.10 | 22.00 | 22.50              |                    |
| 12                    |                 | LOW       | Q16        | 20.64      | 20.52 | 20.38 | 21.50              |                    |
|                       |                 | MID       | Q16        | 20.68      | 20.88 | 20.42 | 21.50              |                    |
|                       |                 | HIGH      | Q16        | 20.57      | 20.61 | 20.61 | 21.50              |                    |
| 25                    |                 | LOW       | Q16        | 20.54      | 20.59 | 20.41 | 21.50              |                    |
| 5                     |                 | 1         | LOW        | 64QAM      | 20.80 | 20.92 | 21.25              | 21.50              |
|                       |                 |           | MID        | 64QAM      | 20.94 | 21.01 | 21.29              | 21.50              |
|                       | HIGH            |           | 64QAM      | 20.73      | 20.91 | 21.12 | 21.50              |                    |
|                       | 12              | LOW       | 64QAM      | 19.42      | 19.58 | 19.48 | 20.50              |                    |
|                       |                 | MID       | 64QAM      | 19.78      | 19.75 | 19.60 | 20.50              |                    |
|                       |                 | HIGH      | 64QAM      | 19.86      | 19.45 | 19.28 | 20.50              |                    |
|                       | 25              | LOW       | 64QAM      | 19.37      | 19.46 | 19.48 | 20.50              |                    |

| LTE B2-State1&2-Ant.3 |                 |           |            |            |       |       |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
| 10                    | 1               | LOW       | QPSK       | 22.93      | 23.30 | 23.03 | 23.50              |                    |
|                       |                 | MID       | QPSK       | 23.08      | 23.45 | 23.22 | 23.50              |                    |
|                       |                 | HIGH      | QPSK       | 23.04      | 23.39 | 23.12 | 23.50              |                    |
|                       | 25              | LOW       | QPSK       | 22.08      | 22.32 | 22.05 | 22.50              |                    |
|                       |                 | MID       | QPSK       | 21.96      | 22.11 | 22.01 | 22.50              |                    |
|                       |                 | HIGH      | QPSK       | 22.01      | 22.25 | 22.02 | 22.50              |                    |
|                       | 50              | LOW       | QPSK       | 22.14      | 22.40 | 22.17 | 22.50              |                    |
|                       | 10              | 1         | LOW        | Q16        | 21.85 | 21.95 | 22.29              | 22.50              |
|                       |                 |           | MID        | Q16        | 22.04 | 22.03 | 22.12              | 22.50              |
| HIGH                  |                 |           | Q16        | 22.01      | 21.88 | 21.96 | 22.50              |                    |
| 25                    |                 | LOW       | Q16        | 20.45      | 20.54 | 20.51 | 21.50              |                    |
|                       |                 | MID       | Q16        | 20.77      | 20.62 | 20.51 | 21.50              |                    |
|                       |                 | HIGH      | Q16        | 20.50      | 20.67 | 20.51 | 21.50              |                    |
| 50                    |                 | LOW       | Q16        | 20.50      | 20.85 | 20.42 | 21.50              |                    |
| 10                    |                 | 1         | LOW        | 64QAM      | 20.86 | 20.80 | 21.02              | 21.50              |
|                       |                 |           | MID        | 64QAM      | 20.95 | 20.99 | 21.21              | 21.50              |
|                       | HIGH            |           | 64QAM      | 20.72      | 21.01 | 20.98 | 21.50              |                    |
|                       | 25              | LOW       | 64QAM      | 19.51      | 19.61 | 19.51 | 20.50              |                    |
|                       |                 | MID       | 64QAM      | 19.58      | 19.73 | 19.65 | 20.50              |                    |
|                       |                 | HIGH      | 64QAM      | 19.69      | 19.51 | 19.52 | 20.50              |                    |
|                       | 50              | LOW       | 64QAM      | 19.46      | 19.74 | 19.39 | 20.50              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                       | 15              | 1         | LOW        | QPSK       | 22.91 | 23.24 | 23.23              | 23.50              |
| MID                   |                 |           | QPSK       | 23.15      | 23.44 | 23.11 | 23.50              |                    |
| HIGH                  |                 |           | QPSK       | 23.27      | 23.44 | 23.13 | 23.50              |                    |
| 36                    |                 | LOW       | QPSK       | 22.17      | 22.07 | 22.08 | 22.50              |                    |
|                       |                 | MID       | QPSK       | 21.99      | 22.36 | 22.09 | 22.50              |                    |
|                       |                 | HIGH      | QPSK       | 22.21      | 22.22 | 22.25 | 22.50              |                    |
| 75                    |                 | LOW       | QPSK       | 21.90      | 22.33 | 22.12 | 22.50              |                    |
| 15                    |                 | 1         | LOW        | Q16        | 21.81 | 21.76 | 22.26              | 22.50              |
|                       |                 |           | MID        | Q16        | 21.76 | 21.87 | 22.29              | 22.50              |
|                       | HIGH            |           | Q16        | 21.79      | 21.86 | 21.98 | 22.50              |                    |
|                       | 36              | LOW       | Q16        | 20.66      | 20.73 | 20.51 | 21.50              |                    |
|                       |                 | MID       | Q16        | 20.56      | 20.67 | 20.48 | 21.50              |                    |
|                       |                 | HIGH      | Q16        | 20.70      | 20.55 | 20.56 | 21.50              |                    |
|                       | 75              | LOW       | Q16        | 20.66      | 20.61 | 20.67 | 21.50              |                    |
|                       | 15              | 1         | LOW        | 64QAM      | 20.80 | 20.97 | 21.08              | 21.50              |
|                       |                 |           | MID        | 64QAM      | 20.79 | 21.13 | 21.13              | 21.50              |
| HIGH                  |                 |           | 64QAM      | 20.73      | 21.14 | 21.13 | 21.50              |                    |
| 36                    |                 | LOW       | 64QAM      | 19.43      | 19.83 | 19.51 | 20.50              |                    |
|                       |                 | MID       | 64QAM      | 19.76      | 19.75 | 19.56 | 20.50              |                    |
|                       |                 | HIGH      | 64QAM      | 19.70      | 19.40 | 19.41 | 20.50              |                    |
| 75                    |                 | LOW       | 64QAM      | 19.42      | 19.55 | 19.45 | 20.50              |                    |
| Bandwidth (MHz)       |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20                    |                 | 1         | LOW        | QPSK       | 23.04 | 23.24 | 23.16              | 23.50              |
|                       | MID             |           | QPSK       | 23.00      | 23.31 | 23.14 | 23.50              |                    |
|                       | HIGH            |           | QPSK       | 23.15      | 23.35 | 23.23 | 23.50              |                    |
|                       | 50              | LOW       | QPSK       | 22.13      | 22.20 | 22.10 | 22.50              |                    |
|                       |                 | MID       | QPSK       | 22.05      | 22.23 | 22.10 | 22.50              |                    |
|                       |                 | HIGH      | QPSK       | 22.10      | 22.13 | 22.10 | 22.50              |                    |
|                       | 100             | LOW       | QPSK       | 22.04      | 22.27 | 22.16 | 22.50              |                    |
|                       | 20              | 1         | LOW        | Q16        | 21.89 | 21.80 | 22.14              | 22.50              |
|                       |                 |           | MID        | Q16        | 21.89 | 21.91 | 22.14              | 22.50              |
| HIGH                  |                 |           | Q16        | 21.89      | 21.95 | 22.11 | 22.50              |                    |
| 50                    |                 | LOW       | Q16        | 20.58      | 20.67 | 20.48 | 21.50              |                    |
|                       |                 | MID       | Q16        | 20.63      | 20.76 | 20.48 | 21.50              |                    |
|                       |                 | HIGH      | Q16        | 20.63      | 20.64 | 20.51 | 21.50              |                    |
| 100                   |                 | LOW       | Q16        | 20.61      | 20.71 | 20.55 | 21.50              |                    |
| 20                    |                 | 1         | LOW        | 64QAM      | 20.77 | 20.83 | 21.14              | 21.50              |
|                       |                 |           | MID        | 64QAM      | 20.94 | 20.98 | 21.17              | 21.50              |
|                       | HIGH            |           | 64QAM      | 20.86      | 21.00 | 20.98 | 21.50              |                    |
|                       | 50              | LOW       | 64QAM      | 19.45      | 19.71 | 19.39 | 20.50              |                    |
|                       |                 | MID       | 64QAM      | 19.69      | 19.72 | 19.57 | 20.50              |                    |
|                       |                 | HIGH      | 64QAM      | 19.72      | 19.53 | 19.39 | 20.50              |                    |
|                       | 100             | LOW       | 64QAM      | 19.47      | 19.59 | 19.41 | 20.50              |                    |

| LTE B2-State3-Ant.3 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 18607      | 18900 | 19193 | Tune-up power(dBm) |                    |
| 1.4                 | 1               | LOW       | QPSK       | 20.54      | 20.63 | 20.48 | 21.00              |                    |
|                     |                 | MID       | QPSK       | 20.50      | 20.63 | 20.43 | 21.00              |                    |
|                     |                 | HIGH      | QPSK       | 20.53      | 20.62 | 20.50 | 21.00              |                    |
|                     | 3               | LOW       | QPSK       | 20.57      | 20.63 | 20.51 | 21.00              |                    |
|                     |                 | MID       | QPSK       | 20.43      | 20.66 | 20.57 | 21.00              |                    |
|                     |                 | HIGH      | QPSK       | 20.50      | 20.57 | 20.50 | 21.00              |                    |
|                     | 6               | LOW       | QPSK       | 19.53      | 19.68 | 19.41 | 20.00              |                    |
|                     | 1.4             | 1         | LOW        | Q16        | 19.68 | 20.15 | 19.40              | 20.50              |
|                     |                 |           | MID        | Q16        | 19.90 | 20.29 | 19.59              | 20.50              |
| HIGH                |                 |           | Q16        | 19.75      | 20.07 | 19.42 | 20.50              |                    |
| 3                   |                 | LOW       | Q16        | 19.73      | 20.07 | 19.68 | 20.50              |                    |
|                     |                 | MID       | Q16        | 19.81      | 20.11 | 19.74 | 20.50              |                    |
|                     |                 | HIGH      | Q16        | 19.76      | 20.03 | 19.68 | 20.50              |                    |
| 6                   |                 | LOW       | Q16        | 17.63      | 17.66 | 17.81 | 19.50              |                    |
| 1.4                 |                 | 1         | LOW        | 64QAM      | 18.70 | 19.12 | 18.52              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 18.77 | 19.43 | 18.74              | 19.50              |
|                     | HIGH            |           | 64QAM      | 18.67      | 19.19 | 18.36 | 19.50              |                    |
|                     | 3               | LOW       | 64QAM      | 18.71      | 19.00 | 18.81 | 19.50              |                    |
|                     |                 | MID       | 64QAM      | 18.77      | 19.14 | 18.73 | 19.50              |                    |
|                     |                 | HIGH      | 64QAM      | 18.66      | 19.05 | 18.80 | 19.50              |                    |
|                     | 6               | LOW       | 64QAM      | 16.78      | 16.80 | 16.95 | 18.50              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18615 | 18900 | 19185              | Tune-up power(dBm) |
|                     | 3               | 1         | LOW        | QPSK       | 20.38 | 20.16 | 20.23              | 21.00              |
| MID                 |                 |           | QPSK       | 20.81      | 20.60 | 20.17 | 21.00              |                    |
| HIGH                |                 |           | QPSK       | 20.16      | 20.30 | 20.17 | 21.00              |                    |
| 8                   |                 | LOW       | QPSK       | 19.40      | 19.07 | 18.87 | 20.00              |                    |
|                     |                 | MID       | QPSK       | 19.12      | 18.88 | 18.78 | 20.00              |                    |
|                     |                 | HIGH      | QPSK       | 18.98      | 19.19 | 19.06 | 20.00              |                    |
| 15                  |                 | LOW       | QPSK       | 19.05      | 18.94 | 19.21 | 20.00              |                    |
| 3                   |                 | 1         | LOW        | Q16        | 19.71 | 19.61 | 19.70              | 20.50              |
|                     |                 |           | MID        | Q16        | 19.31 | 19.52 | 19.51              | 20.50              |
|                     | HIGH            |           | Q16        | 19.53      | 19.75 | 20.13 | 20.50              |                    |
|                     | 8               | LOW       | Q16        | 18.44      | 18.52 | 18.29 | 19.50              |                    |
|                     |                 | MID       | Q16        | 18.18      | 18.36 | 18.36 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 18.32      | 18.50 | 18.59 | 19.50              |                    |
|                     | 15              | LOW       | Q16        | 18.50      | 18.62 | 18.58 | 19.50              |                    |
|                     | 3               | 1         | LOW        | 64QAM      | 18.96 | 18.57 | 18.40              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 18.38 | 18.27 | 18.38              | 19.50              |
| HIGH                |                 |           | 64QAM      | 18.53      | 18.84 | 19.10 | 19.50              |                    |
| 8                   |                 | LOW       | 64QAM      | 17.43      | 17.38 | 17.52 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 17.36      | 17.35 | 17.28 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 17.59      | 17.42 | 17.53 | 18.50              |                    |
| 15                  |                 | LOW       | 64QAM      | 17.32      | 17.47 | 17.45 | 18.50              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 18625 | 18900 | 19175              | Tune-up power(dBm) |
| 5                   |                 | 1         | LOW        | QPSK       | 20.42 | 20.19 | 20.32              | 21.00              |
|                     | MID             |           | QPSK       | 20.71      | 20.64 | 20.41 | 21.00              |                    |
|                     | HIGH            |           | QPSK       | 20.28      | 20.50 | 20.39 | 21.00              |                    |
|                     | 12              | LOW       | QPSK       | 19.32      | 19.02 | 18.98 | 20.00              |                    |
|                     |                 | MID       | QPSK       | 19.06      | 19.03 | 18.90 | 20.00              |                    |
|                     |                 | HIGH      | QPSK       | 19.04      | 19.04 | 19.34 | 20.00              |                    |
|                     | 25              | LOW       | QPSK       | 19.26      | 19.18 | 19.17 | 20.00              |                    |
|                     | 5               | 1         | LOW        | Q16        | 19.66 | 19.65 | 19.67              | 20.50              |
|                     |                 |           | MID        | Q16        | 19.21 | 19.53 | 19.31              | 20.50              |
| HIGH                |                 |           | Q16        | 19.62      | 19.82 | 20.05 | 20.50              |                    |
| 12                  |                 | LOW       | Q16        | 18.37      | 18.40 | 18.55 | 19.50              |                    |
|                     |                 | MID       | Q16        | 18.18      | 18.45 | 18.21 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 18.24      | 18.50 | 18.60 | 19.50              |                    |
| 25                  |                 | LOW       | Q16        | 18.48      | 18.37 | 18.42 | 19.50              |                    |
| 5                   |                 | 1         | LOW        | 64QAM      | 18.81 | 18.55 | 18.55              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 18.40 | 18.46 | 18.37              | 19.50              |
|                     | HIGH            |           | 64QAM      | 18.51      | 18.97 | 19.11 | 19.50              |                    |
|                     | 12              | LOW       | 64QAM      | 17.44      | 17.64 | 17.58 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 17.42      | 17.37 | 17.18 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 17.59      | 17.44 | 17.62 | 18.50              |                    |
|                     | 25              | LOW       | 64QAM      | 17.38      | 17.24 | 17.65 | 18.50              |                    |

| LTE B2-State3-Ant.3 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
| 10                  | 1               | LOW       | QPSK       | 20.17      | 20.15 | 20.21 | 21.00              |                    |
|                     |                 | MID       | QPSK       | 20.68      | 20.67 | 20.47 | 21.00              |                    |
|                     |                 | HIGH      | QPSK       | 20.22      | 20.51 | 20.16 | 21.00              |                    |
|                     | 25              | LOW       | QPSK       | 19.36      | 18.96 | 18.75 | 20.00              |                    |
|                     |                 | MID       | QPSK       | 18.98      | 19.00 | 18.72 | 20.00              |                    |
|                     |                 | HIGH      | QPSK       | 18.99      | 19.04 | 19.05 | 20.00              |                    |
|                     | 50              | LOW       | QPSK       | 19.13      | 19.10 | 19.21 | 20.00              |                    |
|                     | 10              | 1         | LOW        | Q16        | 19.70 | 19.53 | 19.67              | 20.50              |
|                     |                 |           | MID        | Q16        | 19.28 | 19.53 | 19.46              | 20.50              |
| HIGH                |                 |           | Q16        | 19.68      | 19.92 | 20.21 | 20.50              |                    |
| 25                  |                 | LOW       | Q16        | 18.32      | 18.32 | 18.45 | 19.50              |                    |
|                     |                 | MID       | Q16        | 18.40      | 18.47 | 18.22 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 18.42      | 18.69 | 18.79 | 19.50              |                    |
| 50                  |                 | LOW       | Q16        | 18.31      | 18.45 | 18.51 | 19.50              |                    |
| 10                  |                 | 1         | LOW        | 64QAM      | 18.85 | 18.49 | 18.51              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 18.56 | 18.29 | 18.24              | 19.50              |
|                     | HIGH            |           | 64QAM      | 18.73      | 18.88 | 19.00 | 19.50              |                    |
|                     | 25              | LOW       | 64QAM      | 17.32      | 17.38 | 17.46 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 17.23      | 17.33 | 17.39 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 17.52      | 17.71 | 17.44 | 18.50              |                    |
|                     | 50              | LOW       | 64QAM      | 17.43      | 17.52 | 17.39 | 18.50              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                     | 15              | 1         | LOW        | QPSK       | 20.26 | 20.21 | 20.22              | 21.00              |
| MID                 |                 |           | QPSK       | 20.61      | 20.83 | 20.45 | 21.00              |                    |
| HIGH                |                 |           | QPSK       | 20.35      | 20.33 | 20.37 | 21.00              |                    |
| 36                  |                 | LOW       | QPSK       | 19.35      | 19.03 | 18.82 | 20.00              |                    |
|                     |                 | MID       | QPSK       | 19.21      | 19.00 | 18.78 | 20.00              |                    |
|                     |                 | HIGH      | QPSK       | 19.20      | 19.17 | 19.27 | 20.00              |                    |
| 75                  |                 | LOW       | QPSK       | 19.05      | 18.96 | 18.99 | 20.00              |                    |
| 15                  |                 | 1         | LOW        | Q16        | 19.74 | 19.77 | 19.77              | 20.50              |
|                     |                 |           | MID        | Q16        | 19.31 | 19.43 | 19.35              | 20.50              |
|                     | HIGH            |           | Q16        | 19.38      | 19.83 | 19.95 | 20.50              |                    |
|                     | 36              | LOW       | Q16        | 18.37      | 18.60 | 18.36 | 19.50              |                    |
|                     |                 | MID       | Q16        | 18.14      | 18.31 | 18.28 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 18.23      | 18.49 | 18.59 | 19.50              |                    |
|                     | 75              | LOW       | Q16        | 18.39      | 18.46 | 18.58 | 19.50              |                    |
|                     | 15              | 1         | LOW        | 64QAM      | 18.92 | 18.71 | 18.65              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 18.34 | 18.31 | 18.30              | 19.50              |
| HIGH                |                 |           | 64QAM      | 18.73      | 19.00 | 19.03 | 19.50              |                    |
| 36                  |                 | LOW       | 64QAM      | 17.53      | 17.64 | 17.44 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 17.30      | 17.54 | 17.14 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 17.49      | 17.46 | 17.61 | 18.50              |                    |
| 75                  |                 | LOW       | 64QAM      | 17.41      | 17.40 | 17.65 | 18.50              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20                  |                 | 1         | LOW        | QPSK       | 20.27 | 20.16 | 20.25              | 21.00              |
|                     | MID             |           | QPSK       | 20.67      | 20.32 | 20.70 | 21.00              |                    |
|                     | HIGH            |           | QPSK       | 20.23      | 20.39 | 20.29 | 21.00              |                    |
|                     | 50              | LOW       | QPSK       | 19.32      | 19.07 | 18.90 | 20.00              |                    |
|                     |                 | MID       | QPSK       | 19.09      | 18.95 | 18.75 | 20.00              |                    |
|                     |                 | HIGH      | QPSK       | 19.13      | 19.13 | 19.19 | 20.00              |                    |
|                     | 100             | LOW       | QPSK       | 19.19      | 19.08 | 19.08 | 20.00              |                    |
|                     | 20              | 1         | LOW        | Q16        | 19.72 | 19.67 | 19.67              | 20.50              |
|                     |                 |           | MID        | Q16        | 19.36 | 19.41 | 19.38              | 20.50              |
| HIGH                |                 |           | Q16        | 19.53      | 19.82 | 20.08 | 20.50              |                    |
| 50                  |                 | LOW       | Q16        | 18.47      | 18.46 | 18.42 | 19.50              |                    |
|                     |                 | MID       | Q16        | 18.28      | 18.36 | 18.22 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 18.33      | 18.56 | 18.66 | 19.50              |                    |
| 100                 |                 | LOW       | Q16        | 18.39      | 18.48 | 18.56 | 19.50              |                    |
| 20                  |                 | 1         | LOW        | 64QAM      | 18.82 | 18.62 | 18.53              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 18.43 | 18.41 | 18.25              | 19.50              |
|                     | HIGH            |           | 64QAM      | 18.63      | 18.95 | 19.01 | 19.50              |                    |
|                     | 50              | LOW       | 64QAM      | 17.42      | 17.49 | 17.55 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 17.37      | 17.40 | 17.25 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 17.46      | 17.56 | 17.56 | 18.50              |                    |
|                     | 100             | LOW       | 64QAM      | 17.34      | 17.37 | 17.54 | 18.50              |                    |



| LTE B2-State4-Ant.3 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 18607      | 18900 | 19193 | Tune-up power(dBm) |                    |
| 1.4                 | 1               | LOW       | QPSK       | 18.97      | 20.01 | 19.30 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 18.65      | 18.89 | 18.98 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 19.35      | 19.47 | 18.64 | 20.50              |                    |
|                     | 3               | LOW       | QPSK       | 18.73      | 19.98 | 19.24 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 18.73      | 19.10 | 18.94 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 19.51      | 19.66 | 18.50 | 20.50              |                    |
|                     | 6               | LOW       | QPSK       | 17.82      | 18.48 | 18.12 | 19.50              |                    |
|                     | 1.4             | 1         | LOW        | Q16        | 17.74 | 19.02 | 18.72              | 19.50              |
|                     |                 |           | MID        | Q16        | 18.07 | 18.63 | 18.13              | 19.50              |
| HIGH                |                 |           | Q16        | 18.94      | 19.10 | 18.29 | 19.50              |                    |
| 3                   |                 | LOW       | Q16        | 17.80      | 18.52 | 18.18 | 19.50              |                    |
|                     |                 | MID       | Q16        | 17.69      | 19.00 | 18.84 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 18.08      | 18.41 | 18.39 | 19.50              |                    |
| 6                   |                 | LOW       | Q16        | 16.77      | 17.44 | 17.15 | 18.50              |                    |
| 1.4                 |                 | 1         | LOW        | 64QAM      | 16.74 | 18.02 | 17.72              | 18.50              |
|                     |                 |           | MID        | 64QAM      | 17.07 | 17.63 | 17.13              | 18.50              |
|                     | HIGH            |           | 64QAM      | 17.94      | 18.10 | 17.29 | 18.50              |                    |
|                     | 3               | LOW       | 64QAM      | 16.69      | 18.00 | 17.84 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 17.08      | 17.41 | 17.39 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 17.82      | 17.96 | 17.28 | 18.50              |                    |
|                     | 6               | LOW       | 64QAM      | 15.77      | 16.44 | 16.15 | 17.50              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18615 | 18900 | 19185              | Tune-up power(dBm) |
|                     | 3               | 1         | LOW        | QPSK       | 18.84 | 19.98 | 19.15              | 20.50              |
| MID                 |                 |           | QPSK       | 18.75      | 18.97 | 19.10 | 20.50              |                    |
| HIGH                |                 |           | QPSK       | 19.55      | 19.68 | 18.64 | 20.50              |                    |
| 8                   |                 | LOW       | QPSK       | 17.98      | 18.90 | 18.25 | 19.50              |                    |
|                     |                 | MID       | QPSK       | 17.86      | 18.15 | 17.88 | 19.50              |                    |
|                     |                 | HIGH      | QPSK       | 18.17      | 18.32 | 17.86 | 19.50              |                    |
| 15                  |                 | LOW       | QPSK       | 17.79      | 18.65 | 18.20 | 19.50              |                    |
| 3                   |                 | 1         | LOW        | Q16        | 17.74 | 19.05 | 18.80              | 19.50              |
|                     |                 |           | MID        | Q16        | 17.94 | 18.40 | 18.24              | 19.50              |
|                     | HIGH            |           | Q16        | 18.96      | 18.92 | 18.37 | 19.50              |                    |
|                     | 8               | LOW       | Q16        | 17.17      | 17.74 | 17.30 | 18.50              |                    |
|                     |                 | MID       | Q16        | 16.94      | 16.99 | 17.00 | 18.50              |                    |
|                     |                 | HIGH      | Q16        | 17.10      | 16.93 | 16.83 | 18.50              |                    |
|                     | 15              | LOW       | Q16        | 16.81      | 17.51 | 17.31 | 18.50              |                    |
|                     | 3               | 1         | LOW        | 64QAM      | 16.74 | 18.05 | 17.80              | 18.50              |
|                     |                 |           | MID        | 64QAM      | 16.94 | 17.40 | 17.24              | 18.50              |
| HIGH                |                 |           | 64QAM      | 17.96      | 17.92 | 17.37 | 18.50              |                    |
| 8                   |                 | LOW       | 64QAM      | 16.17      | 16.74 | 16.30 | 17.50              |                    |
|                     |                 | MID       | 64QAM      | 15.94      | 15.99 | 16.00 | 17.50              |                    |
|                     |                 | HIGH      | 64QAM      | 16.10      | 15.93 | 15.83 | 17.50              |                    |
| 15                  |                 | LOW       | 64QAM      | 15.81      | 16.51 | 16.31 | 17.50              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 18625 | 18900 | 19175              | Tune-up power(dBm) |
| 5                   |                 | 1         | LOW        | QPSK       | 18.84 | 20.13 | 19.12              | 20.50              |
|                     | MID             |           | QPSK       | 18.94      | 18.92 | 18.84 | 20.50              |                    |
|                     | HIGH            |           | QPSK       | 19.40      | 19.38 | 18.69 | 20.50              |                    |
|                     | 12              | LOW       | QPSK       | 17.77      | 18.98 | 18.31 | 19.50              |                    |
|                     |                 | MID       | QPSK       | 17.62      | 18.31 | 18.06 | 19.50              |                    |
|                     |                 | HIGH      | QPSK       | 18.12      | 18.09 | 17.88 | 19.50              |                    |
|                     | 25              | LOW       | QPSK       | 17.73      | 18.37 | 17.95 | 19.50              |                    |
|                     | 5               | 1         | LOW        | Q16        | 17.72 | 19.23 | 18.92              | 19.50              |
|                     |                 |           | MID        | Q16        | 18.06 | 18.65 | 18.35              | 19.50              |
| HIGH                |                 |           | Q16        | 18.89      | 19.12 | 18.15 | 19.50              |                    |
| 12                  |                 | LOW       | Q16        | 17.23      | 17.70 | 17.27 | 18.50              |                    |
|                     |                 | MID       | Q16        | 16.84      | 16.99 | 16.93 | 18.50              |                    |
|                     |                 | HIGH      | Q16        | 17.12      | 17.18 | 16.87 | 18.50              |                    |
| 25                  |                 | LOW       | Q16        | 16.70      | 17.50 | 17.05 | 18.50              |                    |
| 5                   |                 | 1         | LOW        | 64QAM      | 16.72 | 18.23 | 17.92              | 18.50              |
|                     |                 |           | MID        | 64QAM      | 17.06 | 17.65 | 17.35              | 18.50              |
|                     | HIGH            |           | 64QAM      | 17.89      | 18.12 | 17.15 | 18.50              |                    |
|                     | 12              | LOW       | 64QAM      | 16.23      | 16.70 | 16.27 | 17.50              |                    |
|                     |                 | MID       | 64QAM      | 15.84      | 15.99 | 15.93 | 17.50              |                    |
|                     |                 | HIGH      | 64QAM      | 16.12      | 16.18 | 15.87 | 17.50              |                    |
|                     | 25              | LOW       | 64QAM      | 15.70      | 16.50 | 16.05 | 17.50              |                    |



| LTE B2-State4-Ant.3 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 18650      | 18900 | 19150 | Tune-up power(dBm) |                    |
| 10                  | 1               | LOW       | QPSK       | 18.74      | 20.26 | 19.12 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 18.66      | 18.86 | 19.09 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 19.41      | 19.40 | 18.68 | 20.50              |                    |
|                     | 25              | LOW       | QPSK       | 17.77      | 18.93 | 18.29 | 19.50              |                    |
|                     |                 | MID       | QPSK       | 17.81      | 18.10 | 17.85 | 19.50              |                    |
|                     |                 | HIGH      | QPSK       | 18.11      | 18.27 | 17.99 | 19.50              |                    |
|                     | 50              | LOW       | QPSK       | 17.82      | 18.51 | 18.20 | 19.50              |                    |
|                     | 10              | 1         | LOW        | Q16        | 17.69 | 19.01 | 18.71              | 19.50              |
|                     |                 |           | MID        | Q16        | 18.15 | 18.63 | 18.32              | 19.50              |
| HIGH                |                 |           | Q16        | 18.77      | 18.86 | 18.30 | 19.50              |                    |
| 25                  |                 | LOW       | Q16        | 17.16      | 17.67 | 17.18 | 18.50              |                    |
|                     |                 | MID       | Q16        | 16.97      | 16.98 | 17.16 | 18.50              |                    |
|                     |                 | HIGH      | Q16        | 17.05      | 17.22 | 17.10 | 18.50              |                    |
| 50                  |                 | LOW       | Q16        | 16.73      | 17.27 | 17.29 | 18.50              |                    |
| 10                  |                 | 1         | LOW        | 64QAM      | 16.69 | 18.01 | 17.71              | 18.50              |
|                     |                 |           | MID        | 64QAM      | 17.15 | 17.63 | 17.32              | 18.50              |
|                     | HIGH            |           | 64QAM      | 17.77      | 17.86 | 17.30 | 18.50              |                    |
|                     | 25              | LOW       | 64QAM      | 16.16      | 16.67 | 16.18 | 17.50              |                    |
|                     |                 | MID       | 64QAM      | 15.97      | 15.98 | 16.16 | 17.50              |                    |
|                     |                 | HIGH      | 64QAM      | 16.05      | 16.22 | 16.10 | 17.50              |                    |
|                     | 50              | LOW       | 64QAM      | 15.73      | 16.27 | 16.29 | 17.50              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 18675 | 18900 | 19125              | Tune-up power(dBm) |
|                     | 15              | 1         | LOW        | QPSK       | 18.68 | 20.15 | 19.13              | 20.50              |
| MID                 |                 |           | QPSK       | 18.71      | 19.00 | 18.94 | 20.50              |                    |
| HIGH                |                 |           | QPSK       | 19.59      | 19.48 | 18.66 | 20.50              |                    |
| 36                  |                 | LOW       | QPSK       | 17.79      | 18.89 | 18.18 | 19.50              |                    |
|                     |                 | MID       | QPSK       | 17.76      | 18.07 | 18.04 | 19.50              |                    |
|                     |                 | HIGH      | QPSK       | 18.14      | 18.15 | 17.92 | 19.50              |                    |
| 75                  |                 | LOW       | QPSK       | 17.72      | 18.48 | 18.15 | 19.50              |                    |
| 15                  |                 | 1         | LOW        | Q16        | 17.68 | 19.01 | 18.69              | 19.50              |
|                     |                 |           | MID        | Q16        | 17.95 | 18.44 | 18.14              | 19.50              |
|                     | HIGH            |           | Q16        | 18.93      | 19.12 | 18.23 | 19.50              |                    |
|                     | 36              | LOW       | Q16        | 17.28      | 17.79 | 17.38 | 18.50              |                    |
|                     |                 | MID       | Q16        | 16.98      | 17.07 | 16.87 | 18.50              |                    |
|                     |                 | HIGH      | Q16        | 17.16      | 17.17 | 17.00 | 18.50              |                    |
|                     | 75              | LOW       | Q16        | 16.59      | 17.45 | 17.16 | 18.50              |                    |
|                     | 15              | 1         | LOW        | 64QAM      | 16.68 | 18.01 | 17.69              | 18.50              |
|                     |                 |           | MID        | 64QAM      | 16.95 | 17.44 | 17.14              | 18.50              |
| HIGH                |                 |           | 64QAM      | 17.93      | 18.12 | 17.23 | 18.50              |                    |
| 36                  |                 | LOW       | 64QAM      | 16.28      | 16.79 | 16.38 | 17.50              |                    |
|                     |                 | MID       | 64QAM      | 15.98      | 16.07 | 15.87 | 17.50              |                    |
|                     |                 | HIGH      | 64QAM      | 16.16      | 16.17 | 16.00 | 17.50              |                    |
| 75                  |                 | LOW       | 64QAM      | 15.59      | 16.45 | 16.16 | 17.50              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 18700 | 18900 | 19100              | Tune-up power(dBm) |
| 20                  |                 | 1         | LOW        | QPSK       | 18.82 | 19.19 | 20.11              | 20.50              |
|                     | MID             |           | QPSK       | 18.60      | 18.97 | 18.96 | 20.50              |                    |
|                     | HIGH            |           | QPSK       | 19.48      | 19.53 | 18.58 | 20.50              |                    |
|                     | 50              | LOW       | QPSK       | 17.85      | 18.26 | 18.88 | 19.50              |                    |
|                     |                 | MID       | QPSK       | 17.71      | 18.18 | 17.95 | 19.50              |                    |
|                     |                 | HIGH      | QPSK       | 18.18      | 18.17 | 17.88 | 19.50              |                    |
|                     | 100             | LOW       | QPSK       | 17.81      | 18.51 | 18.05 | 19.50              |                    |
|                     | 20              | 1         | LOW        | Q16        | 17.68 | 19.09 | 18.80              | 19.50              |
|                     |                 |           | MID        | Q16        | 18.08 | 18.51 | 18.27              | 19.50              |
| HIGH                |                 |           | Q16        | 18.87      | 18.97 | 18.24 | 19.50              |                    |
| 50                  |                 | LOW       | Q16        | 17.27      | 17.69 | 17.26 | 18.50              |                    |
|                     |                 | MID       | Q16        | 16.88      | 17.06 | 17.01 | 18.50              |                    |
|                     |                 | HIGH      | Q16        | 17.05      | 17.07 | 16.96 | 18.50              |                    |
| 100                 |                 | LOW       | Q16        | 16.69      | 17.40 | 17.16 | 18.50              |                    |
| 20                  |                 | 1         | LOW        | 64QAM      | 16.81 | 18.02 | 17.74              | 18.50              |
|                     |                 |           | MID        | 64QAM      | 17.03 | 17.60 | 17.23              | 18.50              |
|                     | HIGH            |           | 64QAM      | 17.87      | 17.94 | 17.39 | 18.50              |                    |
|                     | 50              | LOW       | 64QAM      | 16.24      | 16.64 | 16.21 | 17.50              |                    |
|                     |                 | MID       | 64QAM      | 15.84      | 16.17 | 15.96 | 17.50              |                    |
|                     |                 | HIGH      | 64QAM      | 15.90      | 16.14 | 16.09 | 17.50              |                    |
|                     | 100             | LOW       | 64QAM      | 15.60      | 16.43 | 16.02 | 17.50              |                    |

### 8.3.2 LTE Band4 Output Power

| LTE B4-Full Power -Ant.2 |                 |           |            |            |       |       |                    |                    |
|--------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)          | RB Size         | RB offset | Modulation | 19957      | 20175 | 20393 | Tune-up power(dBm) |                    |
| 1.4                      | 1               | LOW       | QPSK       | 23.02      | 22.98 | 23.05 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 22.93      | 22.91 | 22.98 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.95      | 22.92 | 23.01 | 23.50              |                    |
|                          | 3               | LOW       | QPSK       | 22.93      | 22.79 | 22.86 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 22.88      | 22.86 | 22.91 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.95      | 22.80 | 22.86 | 23.50              |                    |
|                          | 6               | LOW       | QPSK       | 21.94      | 21.85 | 21.90 | 22.50              |                    |
|                          | 1.4             | 1         | LOW        | Q16        | 22.44 | 22.18 | 22.48              | 22.50              |
|                          |                 |           | MID        | Q16        | 22.50 | 22.11 | 22.17              | 22.50              |
| HIGH                     |                 |           | Q16        | 22.46      | 22.08 | 22.48 | 22.50              |                    |
| 3                        |                 | LOW       | Q16        | 22.02      | 21.71 | 22.31 | 22.50              |                    |
|                          |                 | MID       | Q16        | 22.02      | 21.77 | 22.25 | 22.50              |                    |
|                          |                 | HIGH      | Q16        | 22.01      | 21.73 | 22.18 | 22.50              |                    |
| 6                        |                 | LOW       | Q16        | 20.52      | 20.78 | 20.54 | 21.50              |                    |
| 1.4                      |                 | 1         | LOW        | 64QAM      | 21.16 | 21.30 | 21.15              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 21.37 | 21.07 | 21.18              | 21.50              |
|                          | HIGH            |           | 64QAM      | 21.48      | 21.10 | 21.47 | 21.50              |                    |
|                          | 3               | LOW       | 64QAM      | 20.95      | 20.60 | 21.28 | 21.50              |                    |
|                          |                 | MID       | 64QAM      | 20.99      | 20.66 | 21.34 | 21.50              |                    |
|                          |                 | HIGH      | 64QAM      | 20.99      | 20.73 | 21.32 | 21.50              |                    |
|                          | 6               | LOW       | 64QAM      | 19.40      | 19.73 | 19.40 | 20.50              |                    |
|                          | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 19965 | 20175 | 20385              | Tune-up power(dBm) |
|                          | 3               | 1         | LOW        | QPSK       | 22.93 | 23.10 | 22.92              | 23.50              |
| MID                      |                 |           | QPSK       | 22.81      | 22.87 | 22.90 | 23.50              |                    |
| HIGH                     |                 |           | QPSK       | 22.98      | 23.12 | 22.83 | 23.50              |                    |
| 8                        |                 | LOW       | QPSK       | 21.76      | 22.00 | 21.84 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.71      | 21.91 | 21.88 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 21.95      | 21.81 | 22.00 | 22.50              |                    |
| 15                       |                 | LOW       | QPSK       | 21.92      | 21.85 | 21.85 | 22.50              |                    |
| 3                        |                 | 1         | LOW        | Q16        | 21.91 | 22.10 | 22.12              | 22.50              |
|                          |                 |           | MID        | Q16        | 21.63 | 22.27 | 22.20              | 22.50              |
|                          | HIGH            |           | Q16        | 21.86      | 22.33 | 22.47 | 22.50              |                    |
|                          | 8               | LOW       | Q16        | 20.56      | 20.59 | 20.39 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.77      | 20.93 | 20.28 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.61      | 20.60 | 20.29 | 21.50              |                    |
|                          | 15              | LOW       | Q16        | 20.92      | 20.73 | 20.45 | 21.50              |                    |
|                          | 3               | 1         | LOW        | 64QAM      | 20.76 | 20.97 | 21.45              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 20.76 | 21.29 | 21.15              | 21.50              |
| HIGH                     |                 |           | 64QAM      | 20.70      | 21.11 | 21.43 | 21.50              |                    |
| 8                        |                 | LOW       | 64QAM      | 19.47      | 19.53 | 19.11 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.79      | 20.09 | 19.27 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.46      | 19.55 | 19.41 | 20.50              |                    |
| 15                       |                 | LOW       | 64QAM      | 19.72      | 19.78 | 19.21 | 20.50              |                    |
| Bandwidth (MHz)          |                 | RB Size   | RB offset  | Modulation | 19975 | 20175 | 20375              | Tune-up power(dBm) |
| 5                        |                 | 1         | LOW        | QPSK       | 22.96 | 22.93 | 23.12              | 23.50              |
|                          | MID             |           | QPSK       | 22.85      | 22.93 | 22.81 | 23.50              |                    |
|                          | HIGH            |           | QPSK       | 22.95      | 23.06 | 23.09 | 23.50              |                    |
|                          | 12              | LOW       | QPSK       | 21.87      | 21.95 | 21.88 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.62      | 21.93 | 21.78 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.07      | 22.03 | 22.05 | 22.50              |                    |
|                          | 25              | LOW       | QPSK       | 21.71      | 21.94 | 21.81 | 22.50              |                    |
|                          | 5               | 1         | LOW        | Q16        | 21.83 | 22.08 | 22.37              | 22.50              |
|                          |                 |           | MID        | Q16        | 21.87 | 22.31 | 22.22              | 22.50              |
| HIGH                     |                 |           | Q16        | 21.66      | 22.43 | 22.25 | 22.50              |                    |
| 12                       |                 | LOW       | Q16        | 20.57      | 20.44 | 20.35 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.86      | 21.07 | 20.47 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.49      | 20.48 | 20.34 | 21.50              |                    |
| 25                       |                 | LOW       | Q16        | 20.98      | 20.85 | 20.39 | 21.50              |                    |
| 5                        |                 | 1         | LOW        | 64QAM      | 20.87 | 21.02 | 21.46              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 20.69 | 21.32 | 21.00              | 21.50              |
|                          | HIGH            |           | 64QAM      | 20.56      | 21.39 | 21.40 | 21.50              |                    |
|                          | 12              | LOW       | 64QAM      | 19.39      | 19.46 | 19.32 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 20.00      | 19.99 | 19.53 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.60      | 19.57 | 19.46 | 20.50              |                    |
|                          | 25              | LOW       | 64QAM      | 19.76      | 19.65 | 19.24 | 20.50              |                    |

| LTE B4-Full Power -Ant.2 |                 |           |            |            |       |       |                    |                    |
|--------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)          | RB Size         | RB offset | Modulation | 20000      | 20175 | 20350 | Tune-up power(dBm) |                    |
| 10                       | 1               | LOW       | QPSK       | 22.98      | 22.95 | 23.11 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 22.68      | 23.13 | 22.92 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.68      | 22.93 | 22.92 | 23.50              |                    |
|                          | 25              | LOW       | QPSK       | 21.90      | 22.03 | 21.82 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.88      | 22.01 | 21.79 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 21.82      | 21.98 | 21.99 | 22.50              |                    |
|                          | 50              | LOW       | QPSK       | 21.91      | 21.91 | 21.68 | 22.50              |                    |
|                          | 10              | 1         | LOW        | Q16        | 21.87 | 22.33 | 22.27              | 22.50              |
|                          |                 |           | MID        | Q16        | 21.64 | 22.32 | 22.09              | 22.50              |
| HIGH                     |                 |           | Q16        | 21.75      | 22.37 | 22.42 | 22.50              |                    |
| 25                       |                 | LOW       | Q16        | 20.55      | 20.43 | 20.52 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.98      | 20.94 | 20.40 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.41      | 20.62 | 20.36 | 21.50              |                    |
| 50                       |                 | LOW       | Q16        | 20.90      | 20.94 | 20.38 | 21.50              |                    |
| 10                       |                 | 1         | LOW        | 64QAM      | 20.94 | 21.00 | 21.34              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 20.74 | 21.11 | 21.00              | 21.50              |
|                          | HIGH            |           | 64QAM      | 20.77      | 21.48 | 21.37 | 21.50              |                    |
|                          | 25              | LOW       | 64QAM      | 19.48      | 19.40 | 19.40 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.85      | 20.08 | 19.56 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.56      | 19.33 | 19.49 | 20.50              |                    |
|                          | 50              | LOW       | 64QAM      | 19.91      | 19.79 | 19.31 | 20.50              |                    |
|                          | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20025 | 20175 | 20325              | Tune-up power(dBm) |
|                          | 15              | 1         | LOW        | QPSK       | 22.97 | 22.96 | 23.14              | 23.50              |
| MID                      |                 |           | QPSK       | 22.81      | 22.83 | 22.85 | 23.50              |                    |
| HIGH                     |                 |           | QPSK       | 22.84      | 22.95 | 22.99 | 23.50              |                    |
| 36                       |                 | LOW       | QPSK       | 21.83      | 21.92 | 21.98 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.75      | 22.09 | 21.89 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 21.88      | 21.99 | 21.81 | 22.50              |                    |
| 75                       |                 | LOW       | QPSK       | 21.77      | 21.79 | 21.81 | 22.50              |                    |
| 15                       |                 | 1         | LOW        | Q16        | 21.72 | 22.20 | 22.35              | 22.50              |
|                          |                 |           | MID        | Q16        | 21.84 | 22.32 | 22.14              | 22.50              |
|                          | HIGH            |           | Q16        | 21.71      | 22.43 | 22.35 | 22.50              |                    |
|                          | 36              | LOW       | Q16        | 20.33      | 20.51 | 20.31 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.81      | 20.85 | 20.47 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.45      | 20.51 | 20.43 | 21.50              |                    |
|                          | 75              | LOW       | Q16        | 20.77      | 20.70 | 20.25 | 21.50              |                    |
|                          | 15              | 1         | LOW        | 64QAM      | 20.69 | 21.13 | 21.43              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 20.82 | 21.31 | 20.95              | 21.50              |
| HIGH                     |                 |           | 64QAM      | 20.76      | 21.41 | 21.25 | 21.50              |                    |
| 36                       |                 | LOW       | 64QAM      | 19.35      | 19.59 | 19.28 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.97      | 19.90 | 19.52 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.55      | 19.40 | 19.56 | 20.50              |                    |
| 75                       |                 | LOW       | 64QAM      | 19.84      | 19.84 | 19.36 | 20.50              |                    |
| Bandwidth (MHz)          |                 | RB Size   | RB offset  | Modulation | 20050 | 20175 | 20300              | Tune-up power(dBm) |
| 20                       |                 | 1         | LOW        | QPSK       | 22.91 | 22.99 | 22.99              | 23.50              |
|                          | MID             |           | QPSK       | 22.79      | 22.98 | 22.93 | 23.50              |                    |
|                          | HIGH            |           | QPSK       | 22.83      | 23.03 | 22.97 | 23.50              |                    |
|                          | 50              | LOW       | QPSK       | 21.90      | 21.88 | 21.86 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.77      | 21.94 | 21.84 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 21.93      | 21.91 | 21.90 | 22.50              |                    |
|                          | 100             | LOW       | QPSK       | 21.85      | 21.87 | 21.79 | 22.50              |                    |
|                          | 20              | 1         | LOW        | Q16        | 21.85 | 22.18 | 22.24              | 22.50              |
|                          |                 |           | MID        | Q16        | 21.72 | 22.21 | 22.20              | 22.50              |
| HIGH                     |                 |           | Q16        | 21.78      | 22.37 | 22.34 | 22.50              |                    |
| 50                       |                 | LOW       | Q16        | 20.46      | 20.49 | 20.41 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.86      | 20.93 | 20.33 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.49      | 20.49 | 20.40 | 21.50              |                    |
| 100                      |                 | LOW       | Q16        | 20.88      | 20.80 | 20.34 | 21.50              |                    |
| 20                       |                 | 1         | LOW        | 64QAM      | 20.82 | 21.10 | 21.34              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 20.70 | 21.22 | 21.06              | 21.50              |
|                          | HIGH            |           | 64QAM      | 20.71      | 21.37 | 21.39 | 21.50              |                    |
|                          | 50              | LOW       | 64QAM      | 19.47      | 19.53 | 19.26 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.94      | 19.94 | 19.41 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.58      | 19.44 | 19.45 | 20.50              |                    |
|                          | 100             | LOW       | 64QAM      | 19.85      | 19.73 | 19.24 | 20.50              |                    |

| LTE B4-State1-Ant.2 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 19957      | 20175 | 20393 | Tune-up power(dBm) |                    |
| 1.4                 | 1               | LOW       | QPSK       | 17.60      | 18.03 | 17.41 | 18.50              |                    |
|                     |                 | MID       | QPSK       | 17.90      | 18.19 | 17.59 | 18.50              |                    |
|                     |                 | HIGH      | QPSK       | 17.70      | 18.01 | 17.38 | 18.50              |                    |
|                     | 3               | LOW       | QPSK       | 17.80      | 18.10 | 17.58 | 18.50              |                    |
|                     |                 | MID       | QPSK       | 17.85      | 18.17 | 17.67 | 18.50              |                    |
|                     |                 | HIGH      | QPSK       | 17.78      | 18.09 | 17.64 | 18.50              |                    |
|                     | 6               | LOW       | QPSK       | 16.84      | 17.13 | 16.66 | 17.50              |                    |
|                     | 1.4             | 1         | LOW        | Q16        | 16.87 | 17.43 | 16.63              | 17.50              |
|                     |                 |           | MID        | Q16        | 17.07 | 17.22 | 16.83              | 17.50              |
| HIGH                |                 |           | Q16        | 16.89      | 17.42 | 16.65 | 17.50              |                    |
| 3                   |                 | LOW       | Q16        | 16.92      | 17.36 | 16.92 | 17.50              |                    |
|                     |                 | MID       | Q16        | 16.98      | 17.44 | 16.98 | 17.50              |                    |
|                     |                 | HIGH      | Q16        | 16.92      | 17.37 | 16.92 | 17.50              |                    |
| 6                   |                 | LOW       | Q16        | 15.57      | 15.66 | 15.49 | 16.50              |                    |
| 1.4                 |                 | 1         | LOW        | 64QAM      | 15.78 | 16.32 | 15.74              | 16.50              |
|                     |                 |           | MID        | 64QAM      | 16.07 | 16.15 | 15.73              | 16.50              |
|                     | HIGH            |           | 64QAM      | 16.03      | 16.41 | 15.57 | 16.50              |                    |
|                     | 3               | LOW       | 64QAM      | 15.78      | 16.11 | 15.87 | 16.50              |                    |
|                     |                 | MID       | 64QAM      | 16.02      | 16.18 | 15.99 | 16.50              |                    |
|                     |                 | HIGH      | 64QAM      | 15.84      | 16.39 | 15.86 | 16.50              |                    |
|                     | 6               | LOW       | 64QAM      | 14.52      | 14.52 | 14.62 | 15.50              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 19965 | 20175 | 20385              | Tune-up power(dBm) |
|                     | 3               | 1         | LOW        | QPSK       | 18.11 | 18.32 | 18.19              | 18.50              |
| MID                 |                 |           | QPSK       | 17.56      | 17.86 | 17.52 | 18.50              |                    |
| HIGH                |                 |           | QPSK       | 18.18      | 18.24 | 18.34 | 18.50              |                    |
| 8                   |                 | LOW       | QPSK       | 17.45      | 17.42 | 17.19 | 17.50              |                    |
|                     |                 | MID       | QPSK       | 17.15      | 17.17 | 16.84 | 17.50              |                    |
|                     |                 | HIGH      | QPSK       | 17.34      | 17.14 | 17.21 | 17.50              |                    |
| 15                  |                 | LOW       | QPSK       | 17.46      | 17.48 | 17.15 | 17.50              |                    |
| 3                   |                 | 1         | LOW        | Q16        | 17.31 | 17.40 | 17.04              | 17.50              |
|                     |                 |           | MID        | Q16        | 16.95 | 16.74 | 16.28              | 17.50              |
|                     | HIGH            |           | Q16        | 17.23      | 17.12 | 17.13 | 17.50              |                    |
|                     | 8               | LOW       | Q16        | 15.88      | 15.99 | 15.68 | 16.50              |                    |
|                     |                 | MID       | Q16        | 15.64      | 15.75 | 15.53 | 16.50              |                    |
|                     |                 | HIGH      | Q16        | 15.90      | 16.19 | 15.72 | 16.50              |                    |
|                     | 15              | LOW       | Q16        | 16.10      | 16.06 | 16.00 | 16.50              |                    |
|                     | 3               | 1         | LOW        | 64QAM      | 16.25 | 16.48 | 16.07              | 16.50              |
|                     |                 |           | MID        | 64QAM      | 15.73 | 15.84 | 15.36              | 16.50              |
| HIGH                |                 |           | 64QAM      | 16.38      | 16.44 | 16.15 | 16.50              |                    |
| 8                   |                 | LOW       | 64QAM      | 15.09      | 15.01 | 14.85 | 15.50              |                    |
|                     |                 | MID       | 64QAM      | 14.68      | 15.08 | 14.45 | 15.50              |                    |
|                     |                 | HIGH      | 64QAM      | 14.79      | 15.36 | 15.03 | 15.50              |                    |
| 15                  |                 | LOW       | 64QAM      | 14.73      | 14.97 | 14.91 | 15.50              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 19975 | 20175 | 20375              | Tune-up power(dBm) |
| 5                   |                 | 1         | LOW        | QPSK       | 18.29 | 18.46 | 18.01              | 18.50              |
|                     | MID             |           | QPSK       | 17.57      | 17.76 | 17.46 | 18.50              |                    |
|                     | HIGH            |           | QPSK       | 18.25      | 18.40 | 18.26 | 18.50              |                    |
|                     | 12              | LOW       | QPSK       | 17.34      | 17.42 | 17.35 | 17.50              |                    |
|                     |                 | MID       | QPSK       | 17.28      | 17.18 | 17.01 | 17.50              |                    |
|                     |                 | HIGH      | QPSK       | 17.47      | 17.21 | 17.12 | 17.50              |                    |
|                     | 25              | LOW       | QPSK       | 17.40      | 17.36 | 17.07 | 17.50              |                    |
|                     | 5               | 1         | LOW        | Q16        | 17.31 | 17.38 | 17.11              | 17.50              |
|                     |                 |           | MID        | Q16        | 16.69 | 16.84 | 16.34              | 17.50              |
| HIGH                |                 |           | Q16        | 17.49      | 17.31 | 17.25 | 17.50              |                    |
| 12                  |                 | LOW       | Q16        | 15.82      | 16.14 | 15.70 | 16.50              |                    |
|                     |                 | MID       | Q16        | 15.85      | 15.89 | 15.71 | 16.50              |                    |
|                     |                 | HIGH      | Q16        | 15.92      | 15.93 | 15.71 | 16.50              |                    |
| 25                  |                 | LOW       | Q16        | 16.02      | 16.06 | 15.77 | 16.50              |                    |
| 5                   |                 | 1         | LOW        | 64QAM      | 16.11 | 16.14 | 16.22              | 16.50              |
|                     |                 |           | MID        | 64QAM      | 15.71 | 15.81 | 15.42              | 16.50              |
|                     | HIGH            |           | 64QAM      | 16.36      | 16.42 | 15.99 | 16.50              |                    |
|                     | 12              | LOW       | 64QAM      | 14.99      | 14.84 | 14.81 | 15.50              |                    |
|                     |                 | MID       | 64QAM      | 14.96      | 14.93 | 14.48 | 15.50              |                    |
|                     |                 | HIGH      | 64QAM      | 14.96      | 15.24 | 14.98 | 15.50              |                    |
|                     | 25              | LOW       | 64QAM      | 14.73      | 15.00 | 14.85 | 15.50              |                    |

| LTE B4-State1-Ant.2 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 20000      | 20175 | 20350 | Tune-up power(dBm) |                    |
| 10                  | 1               | LOW       | QPSK       | 18.22      | 18.20 | 17.98 | 18.50              |                    |
|                     |                 | MID       | QPSK       | 17.72      | 17.76 | 17.43 | 18.50              |                    |
|                     |                 | HIGH      | QPSK       | 18.10      | 18.19 | 18.20 | 18.50              |                    |
|                     | 25              | LOW       | QPSK       | 17.36      | 17.13 | 17.16 | 17.50              |                    |
|                     |                 | MID       | QPSK       | 17.22      | 17.28 | 17.09 | 17.50              |                    |
|                     |                 | HIGH      | QPSK       | 17.47      | 17.46 | 17.29 | 17.50              |                    |
|                     | 50              | LOW       | QPSK       | 17.32      | 17.36 | 17.31 | 17.50              |                    |
|                     | 10              | 1         | LOW        | Q16        | 17.16 | 17.23 | 17.30              | 17.50              |
|                     |                 |           | MID        | Q16        | 16.81 | 16.85 | 16.44              | 17.50              |
| HIGH                |                 |           | Q16        | 17.26      | 17.38 | 17.11 | 17.50              |                    |
| 25                  |                 | LOW       | Q16        | 16.09      | 15.97 | 15.96 | 16.50              |                    |
|                     |                 | MID       | Q16        | 15.93      | 16.01 | 15.72 | 16.50              |                    |
|                     |                 | HIGH      | Q16        | 16.05      | 16.05 | 15.70 | 16.50              |                    |
| 50                  |                 | LOW       | Q16        | 16.05      | 15.96 | 15.90 | 16.50              |                    |
| 10                  |                 | 1         | LOW        | 64QAM      | 16.22 | 16.27 | 16.27              | 16.50              |
|                     |                 |           | MID        | 64QAM      | 15.69 | 15.84 | 15.49              | 16.50              |
|                     | HIGH            |           | 64QAM      | 16.30      | 16.13 | 16.22 | 16.50              |                    |
|                     | 25              | LOW       | 64QAM      | 14.91      | 15.05 | 15.02 | 15.50              |                    |
|                     |                 | MID       | 64QAM      | 14.86      | 15.17 | 14.54 | 15.50              |                    |
|                     |                 | HIGH      | 64QAM      | 14.75      | 15.17 | 15.00 | 15.50              |                    |
|                     | 50              | LOW       | 64QAM      | 14.75      | 14.85 | 14.88 | 15.50              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20025 | 20175 | 20325              | Tune-up power(dBm) |
|                     | 15              | 1         | LOW        | QPSK       | 18.17 | 18.47 | 18.20              | 18.50              |
| MID                 |                 |           | QPSK       | 17.56      | 17.61 | 17.32 | 18.50              |                    |
| HIGH                |                 |           | QPSK       | 18.17      | 18.19 | 18.26 | 18.50              |                    |
| 36                  |                 | LOW       | QPSK       | 17.39      | 17.36 | 17.27 | 17.50              |                    |
|                     |                 | MID       | QPSK       | 17.14      | 17.37 | 17.06 | 17.50              |                    |
|                     |                 | HIGH      | QPSK       | 17.14      | 17.39 | 17.30 | 17.50              |                    |
| 75                  |                 | LOW       | QPSK       | 17.40      | 17.43 | 17.31 | 17.50              |                    |
| 15                  |                 | 1         | LOW        | Q16        | 17.33 | 17.50 | 17.09              | 17.50              |
|                     |                 |           | MID        | Q16        | 16.80 | 16.80 | 16.43              | 17.50              |
|                     | HIGH            |           | Q16        | 17.32      | 17.14 | 17.21 | 17.50              |                    |
|                     | 36              | LOW       | Q16        | 16.08      | 16.14 | 15.79 | 16.50              |                    |
|                     |                 | MID       | Q16        | 15.68      | 15.90 | 15.72 | 16.50              |                    |
|                     |                 | HIGH      | Q16        | 15.88      | 15.98 | 15.90 | 16.50              |                    |
|                     | 75              | LOW       | Q16        | 16.09      | 16.11 | 15.95 | 16.50              |                    |
|                     | 15              | 1         | LOW        | 64QAM      | 16.17 | 16.24 | 16.17              | 16.50              |
|                     |                 |           | MID        | 64QAM      | 15.87 | 15.86 | 15.61              | 16.50              |
| HIGH                |                 |           | 64QAM      | 16.22      | 16.50 | 16.07 | 16.50              |                    |
| 36                  |                 | LOW       | 64QAM      | 15.02      | 14.94 | 15.06 | 15.50              |                    |
|                     |                 | MID       | 64QAM      | 14.72      | 15.01 | 14.59 | 15.50              |                    |
|                     |                 | HIGH      | 64QAM      | 14.77      | 15.26 | 15.02 | 15.50              |                    |
| 75                  |                 | LOW       | 64QAM      | 14.79      | 14.94 | 15.05 | 15.50              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 20050 | 20175 | 20300              | Tune-up power(dBm) |
| 20                  |                 | 1         | LOW        | QPSK       | 18.18 | 18.32 | 18.07              | 18.50              |
|                     | MID             |           | QPSK       | 17.63      | 17.76 | 17.38 | 18.50              |                    |
|                     | HIGH            |           | QPSK       | 18.23      | 18.34 | 18.19 | 18.50              |                    |
|                     | 50              | LOW       | QPSK       | 17.45      | 17.46 | 17.24 | 17.50              |                    |
|                     |                 | MID       | QPSK       | 17.24      | 17.27 | 16.95 | 17.50              |                    |
|                     |                 | HIGH      | QPSK       | 17.43      | 17.48 | 17.23 | 17.50              |                    |
|                     | 100             | LOW       | QPSK       | 17.42      | 17.45 | 17.21 | 17.50              |                    |
|                     | 20              | 1         | LOW        | Q16        | 17.28 | 17.37 | 17.17              | 17.50              |
|                     |                 |           | MID        | Q16        | 16.83 | 16.89 | 16.42              | 17.50              |
| HIGH                |                 |           | Q16        | 17.35      | 17.44 | 17.20 | 17.50              |                    |
| 50                  |                 | LOW       | Q16        | 15.96      | 16.01 | 15.83 | 16.50              |                    |
|                     |                 | MID       | Q16        | 15.79      | 15.89 | 15.58 | 16.50              |                    |
|                     |                 | HIGH      | Q16        | 15.97      | 16.07 | 15.84 | 16.50              |                    |
| 100                 |                 | LOW       | Q16        | 15.96      | 16.02 | 15.85 | 16.50              |                    |
| 20                  |                 | 1         | LOW        | 64QAM      | 16.17 | 16.12 | 16.19              | 16.50              |
|                     |                 |           | MID        | 64QAM      | 15.73 | 15.77 | 15.48              | 16.50              |
|                     | HIGH            |           | 64QAM      | 16.28      | 16.45 | 16.09 | 16.50              |                    |
|                     | 50              | LOW       | 64QAM      | 14.96      | 14.92 | 14.95 | 15.50              |                    |
|                     |                 | MID       | 64QAM      | 14.83      | 15.03 | 14.54 | 15.50              |                    |
|                     |                 | HIGH      | 64QAM      | 14.86      | 15.21 | 14.90 | 15.50              |                    |
|                     | 100             | LOW       | 64QAM      | 14.81      | 14.92 | 14.94 | 15.50              |                    |

| LTE B4-State2-Ant.2 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 19957      | 20175 | 20393 | Tune-up power(dBm) |                    |
| 1.4                 | 1               | LOW       | QPSK       | 16.76      | 17.16 | 16.92 | 18.00              |                    |
|                     |                 | MID       | QPSK       | 16.95      | 17.35 | 17.12 | 18.00              |                    |
|                     |                 | HIGH      | QPSK       | 16.77      | 17.16 | 16.90 | 18.00              |                    |
|                     | 3               | LOW       | QPSK       | 16.90      | 17.24 | 17.04 | 18.00              |                    |
|                     |                 | MID       | QPSK       | 17.03      | 17.33 | 17.11 | 18.00              |                    |
|                     |                 | HIGH      | QPSK       | 16.98      | 17.26 | 17.05 | 18.00              |                    |
|                     | 6               | LOW       | QPSK       | 16.13      | 16.37 | 16.19 | 17.00              |                    |
|                     | 1.4             | 1         | LOW        | Q16        | 16.15 | 16.64 | 16.13              | 17.50              |
|                     |                 |           | MID        | Q16        | 16.37 | 16.86 | 16.33              | 17.50              |
| HIGH                |                 |           | Q16        | 16.20      | 16.67 | 16.13 | 17.50              |                    |
| 3                   |                 | LOW       | Q16        | 16.21      | 16.60 | 16.41 | 17.50              |                    |
|                     |                 | MID       | Q16        | 16.27      | 16.69 | 16.48 | 17.50              |                    |
|                     |                 | HIGH      | Q16        | 16.21      | 16.63 | 16.42 | 17.50              |                    |
| 6                   |                 | LOW       | Q16        | 14.87      | 14.77 | 14.68 | 16.50              |                    |
| 1.4                 |                 | 1         | LOW        | 64QAM      | 16.11 | 16.00 | 15.96              | 16.50              |
|                     |                 |           | MID        | 64QAM      | 15.79 | 15.91 | 15.81              | 16.50              |
|                     | HIGH            |           | 64QAM      | 16.39      | 16.50 | 16.36 | 16.50              |                    |
|                     | 3               | LOW       | 64QAM      | 15.93      | 16.21 | 15.83 | 16.50              |                    |
|                     |                 | MID       | 64QAM      | 15.85      | 15.98 | 15.64 | 16.50              |                    |
|                     |                 | HIGH      | 64QAM      | 16.45      | 16.35 | 16.48 | 16.50              |                    |
|                     | 6               | LOW       | 64QAM      | 13.97      | 13.99 | 13.67 | 15.50              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 19965 | 20175 | 20385              | Tune-up power(dBm) |
|                     | 3               | 1         | LOW        | QPSK       | 17.56 | 17.48 | 17.23              | 18.00              |
| MID                 |                 |           | QPSK       | 16.97      | 17.36 | 17.06 | 18.00              |                    |
| HIGH                |                 |           | QPSK       | 17.52      | 17.94 | 17.63 | 18.00              |                    |
| 8                   |                 | LOW       | QPSK       | 16.47      | 16.60 | 16.37 | 17.00              |                    |
|                     |                 | MID       | QPSK       | 16.33      | 16.60 | 16.45 | 17.00              |                    |
|                     |                 | HIGH      | QPSK       | 16.59      | 16.89 | 16.87 | 17.00              |                    |
| 15                  |                 | LOW       | QPSK       | 16.39      | 16.75 | 16.63 | 17.00              |                    |
| 3                   |                 | 1         | LOW        | Q16        | 17.05 | 17.02 | 17.09              | 17.50              |
|                     |                 |           | MID        | Q16        | 16.66 | 17.09 | 16.80              | 17.50              |
|                     | HIGH            |           | Q16        | 17.39      | 17.45 | 17.39 | 17.50              |                    |
|                     | 8               | LOW       | Q16        | 14.94      | 14.81 | 14.68 | 16.50              |                    |
|                     |                 | MID       | Q16        | 14.77      | 14.84 | 14.63 | 16.50              |                    |
|                     |                 | HIGH      | Q16        | 15.13      | 15.25 | 14.94 | 16.50              |                    |
|                     | 15              | LOW       | Q16        | 15.15      | 15.08 | 14.77 | 16.50              |                    |
|                     | 3               | 1         | LOW        | 64QAM      | 16.05 | 16.02 | 16.09              | 16.50              |
|                     |                 |           | MID        | 64QAM      | 15.66 | 16.09 | 15.80              | 16.50              |
| HIGH                |                 |           | 64QAM      | 16.39      | 16.45 | 16.39 | 16.50              |                    |
| 8                   |                 | LOW       | 64QAM      | 13.94      | 13.81 | 13.68 | 15.50              |                    |
|                     |                 | MID       | 64QAM      | 13.77      | 13.84 | 13.63 | 15.50              |                    |
|                     |                 | HIGH      | 64QAM      | 14.13      | 14.25 | 13.94 | 15.50              |                    |
| 15                  |                 | LOW       | 64QAM      | 14.15      | 14.08 | 13.77 | 15.50              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 19975 | 20175 | 20375              | Tune-up power(dBm) |
| 5                   |                 | 1         | LOW        | QPSK       | 17.33 | 17.49 | 17.41              | 18.00              |
|                     | MID             |           | QPSK       | 17.16      | 17.48 | 17.15 | 18.00              |                    |
|                     | HIGH            |           | QPSK       | 17.58      | 17.72 | 17.73 | 18.00              |                    |
|                     | 12              | LOW       | QPSK       | 16.51      | 16.50 | 16.46 | 17.00              |                    |
|                     |                 | MID       | QPSK       | 16.51      | 16.37 | 16.40 | 17.00              |                    |
|                     |                 | HIGH      | QPSK       | 16.52      | 16.93 | 16.72 | 17.00              |                    |
|                     | 25              | LOW       | QPSK       | 16.36      | 16.66 | 16.53 | 17.00              |                    |
|                     | 5               | 1         | LOW        | Q16        | 17.12 | 16.92 | 16.86              | 17.50              |
|                     |                 |           | MID        | Q16        | 16.85 | 16.94 | 16.71              | 17.50              |
| HIGH                |                 |           | Q16        | 17.40      | 17.39 | 17.34 | 17.50              |                    |
| 12                  |                 | LOW       | Q16        | 14.92      | 15.09 | 14.86 | 16.50              |                    |
|                     |                 | MID       | Q16        | 14.73      | 14.90 | 14.64 | 16.50              |                    |
|                     |                 | HIGH      | Q16        | 15.05      | 15.47 | 15.07 | 16.50              |                    |
| 25                  |                 | LOW       | Q16        | 15.18      | 15.02 | 14.90 | 16.50              |                    |
| 5                   |                 | 1         | LOW        | 64QAM      | 16.12 | 15.92 | 15.86              | 16.50              |
|                     |                 |           | MID        | 64QAM      | 15.85 | 15.94 | 15.71              | 16.50              |
|                     | HIGH            |           | 64QAM      | 16.40      | 16.39 | 16.47 | 16.50              |                    |
|                     | 12              | LOW       | 64QAM      | 13.92      | 14.09 | 13.86 | 15.50              |                    |
|                     |                 | MID       | 64QAM      | 13.73      | 13.90 | 13.64 | 15.50              |                    |
|                     |                 | HIGH      | 64QAM      | 14.05      | 14.47 | 14.07 | 15.50              |                    |
|                     | 25              | LOW       | 64QAM      | 14.18      | 14.02 | 13.90 | 15.50              |                    |

| LTE B4-State2-Ant.2 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 20000      | 20175 | 20350 | Tune-up power(dBm) |                    |
| 10                  | 1               | LOW       | QPSK       | 17.34      | 17.60 | 17.45 | 18.00              |                    |
|                     |                 | MID       | QPSK       | 16.95      | 17.28 | 17.03 | 18.00              |                    |
|                     |                 | HIGH      | QPSK       | 17.56      | 17.96 | 17.66 | 18.00              |                    |
|                     | 25              | LOW       | QPSK       | 16.62      | 16.62 | 16.57 | 17.00              |                    |
|                     |                 | MID       | QPSK       | 16.25      | 16.41 | 16.44 | 17.00              |                    |
|                     |                 | HIGH      | QPSK       | 16.53      | 16.87 | 16.84 | 17.00              |                    |
|                     | 50              | LOW       | QPSK       | 16.57      | 16.49 | 16.76 | 17.00              |                    |
|                     | 10              | 1         | LOW        | Q16        | 16.95 | 17.06 | 16.90              | 17.50              |
|                     |                 |           | MID        | Q16        | 16.82 | 16.96 | 16.88              | 17.50              |
| HIGH                |                 |           | Q16        | 17.28      | 17.39 | 17.29 | 17.50              |                    |
| 25                  |                 | LOW       | Q16        | 14.86      | 14.88 | 14.89 | 16.50              |                    |
|                     |                 | MID       | Q16        | 14.90      | 14.86 | 14.83 | 16.50              |                    |
|                     |                 | HIGH      | Q16        | 15.24      | 15.27 | 15.03 | 16.50              |                    |
| 50                  |                 | LOW       | Q16        | 14.97      | 15.00 | 15.00 | 16.50              |                    |
| 10                  |                 | 1         | LOW        | 64QAM      | 15.95 | 16.06 | 15.90              | 16.50              |
|                     |                 |           | MID        | 64QAM      | 15.82 | 15.96 | 15.88              | 16.50              |
|                     | HIGH            |           | 64QAM      | 16.28      | 16.29 | 16.31 | 16.50              |                    |
|                     | 25              | LOW       | 64QAM      | 13.86      | 13.88 | 13.89 | 15.50              |                    |
|                     |                 | MID       | 64QAM      | 13.90      | 13.86 | 13.83 | 15.50              |                    |
|                     |                 | HIGH      | 64QAM      | 14.24      | 14.27 | 14.03 | 15.50              |                    |
|                     | 50              | LOW       | 64QAM      | 13.97      | 14.00 | 14.00 | 15.50              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20025 | 20175 | 20325              | Tune-up power(dBm) |
|                     | 15              | 1         | LOW        | QPSK       | 17.29 | 17.52 | 17.33              | 18.00              |
| MID                 |                 |           | QPSK       | 17.03      | 17.43 | 17.04 | 18.00              |                    |
| HIGH                |                 |           | QPSK       | 17.68      | 17.92 | 17.75 | 18.00              |                    |
| 36                  |                 | LOW       | QPSK       | 16.52      | 16.45 | 16.33 | 17.00              |                    |
|                     |                 | MID       | QPSK       | 16.40      | 16.54 | 16.37 | 17.00              |                    |
|                     |                 | HIGH      | QPSK       | 16.48      | 16.83 | 16.62 | 17.00              |                    |
| 75                  |                 | LOW       | QPSK       | 16.58      | 16.62 | 16.47 | 17.00              |                    |
| 15                  |                 | 1         | LOW        | Q16        | 17.16 | 16.97 | 17.07              | 17.50              |
|                     |                 |           | MID        | Q16        | 16.75 | 17.07 | 16.74              | 17.50              |
|                     | HIGH            |           | Q16        | 17.42      | 17.50 | 17.46 | 17.50              |                    |
|                     | 36              | LOW       | Q16        | 15.00      | 14.85 | 14.69 | 16.50              |                    |
|                     |                 | MID       | Q16        | 14.79      | 14.85 | 14.77 | 16.50              |                    |
|                     |                 | HIGH      | Q16        | 15.02      | 15.37 | 14.94 | 16.50              |                    |
|                     | 75              | LOW       | Q16        | 15.12      | 15.19 | 14.89 | 16.50              |                    |
|                     | 15              | 1         | LOW        | 64QAM      | 16.16 | 15.97 | 16.07              | 16.50              |
|                     |                 |           | MID        | 64QAM      | 15.75 | 16.07 | 15.74              | 16.50              |
| HIGH                |                 |           | 64QAM      | 16.42      | 16.50 | 16.46 | 16.50              |                    |
| 36                  |                 | LOW       | 64QAM      | 14.00      | 13.85 | 13.69 | 15.50              |                    |
|                     |                 | MID       | 64QAM      | 13.79      | 13.85 | 13.77 | 15.50              |                    |
|                     |                 | HIGH      | 64QAM      | 14.02      | 14.37 | 13.94 | 15.50              |                    |
| 75                  |                 | LOW       | 64QAM      | 14.12      | 14.19 | 13.89 | 15.50              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 20050 | 20175 | 20300              | Tune-up power(dBm) |
| 20                  |                 | 1         | LOW        | QPSK       | 17.42 | 17.47 | 17.30              | 18.00              |
|                     | MID             |           | QPSK       | 17.09      | 17.33 | 17.12 | 18.00              |                    |
|                     | HIGH            |           | QPSK       | 17.67      | 17.92 | 17.74 | 18.00              |                    |
|                     | 50              | LOW       | QPSK       | 16.47      | 16.49 | 16.44 | 17.00              |                    |
|                     |                 | MID       | QPSK       | 16.36      | 16.48 | 16.42 | 17.00              |                    |
|                     |                 | HIGH      | QPSK       | 16.59      | 16.83 | 16.74 | 17.00              |                    |
|                     | 100             | LOW       | QPSK       | 16.51      | 16.64 | 16.62 | 17.00              |                    |
|                     | 20              | 1         | LOW        | Q16        | 17.03 | 17.07 | 16.96              | 17.50              |
|                     |                 |           | MID        | Q16        | 16.75 | 16.96 | 16.79              | 17.50              |
| HIGH                |                 |           | Q16        | 17.30      | 17.45 | 17.48 | 17.50              |                    |
| 50                  |                 | LOW       | Q16        | 14.98      | 14.95 | 14.79 | 16.50              |                    |
|                     |                 | MID       | Q16        | 14.88      | 14.99 | 14.73 | 16.50              |                    |
|                     |                 | HIGH      | Q16        | 15.12      | 15.33 | 15.05 | 16.50              |                    |
| 100                 |                 | LOW       | Q16        | 15.05      | 15.12 | 14.92 | 16.50              |                    |
| 20                  |                 | 1         | LOW        | 64QAM      | 16.15 | 16.09 | 15.89              | 16.50              |
|                     |                 |           | MID        | 64QAM      | 15.67 | 16.07 | 15.69              | 16.50              |
|                     | HIGH            |           | 64QAM      | 16.45      | 16.44 | 16.37 | 16.50              |                    |
|                     | 50              | LOW       | 64QAM      | 13.95      | 14.07 | 13.86 | 15.50              |                    |
|                     |                 | MID       | 64QAM      | 13.79      | 13.88 | 13.63 | 15.50              |                    |
|                     |                 | HIGH      | 64QAM      | 14.06      | 14.34 | 13.96 | 15.50              |                    |
|                     | 100             | LOW       | 64QAM      | 14.20      | 14.08 | 13.89 | 15.50              |                    |



| LTE B4-State3-Ant.2 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 19957      | 20175 | 20393 | Tune-up power(dBm) |                    |
| 1.4                 | 1               | LOW       | QPSK       | 20.66      | 20.93 | 20.75 | 21.00              |                    |
|                     |                 | MID       | QPSK       | 20.71      | 20.96 | 20.77 | 21.00              |                    |
|                     |                 | HIGH      | QPSK       | 20.70      | 20.97 | 20.74 | 21.00              |                    |
|                     | 3               | LOW       | QPSK       | 20.72      | 20.94 | 20.64 | 21.00              |                    |
|                     |                 | MID       | QPSK       | 20.79      | 20.91 | 20.72 | 21.00              |                    |
|                     |                 | HIGH      | QPSK       | 20.73      | 20.93 | 20.79 | 21.00              |                    |
|                     | 6               | LOW       | QPSK       | 19.68      | 20.10 | 19.62 | 20.50              |                    |
|                     | 1.4             | 1         | LOW        | Q16        | 19.76 | 20.49 | 19.89              | 20.50              |
|                     |                 |           | MID        | Q16        | 19.96 | 20.26 | 20.08              | 20.50              |
| HIGH                |                 |           | Q16        | 19.81      | 20.47 | 19.91 | 20.50              |                    |
| 3                   |                 | LOW       | Q16        | 19.81      | 20.41 | 20.15 | 20.50              |                    |
|                     |                 | MID       | Q16        | 19.88      | 20.48 | 20.22 | 20.50              |                    |
|                     |                 | HIGH      | Q16        | 19.83      | 20.42 | 20.17 | 20.50              |                    |
| 6                   |                 | LOW       | Q16        | 18.70      | 18.56 | 18.57 | 19.50              |                    |
| 1.4                 |                 | 1         | LOW        | 64QAM      | 18.69 | 19.48 | 18.75              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 18.90 | 19.36 | 19.02              | 19.50              |
|                     | HIGH            |           | 64QAM      | 18.67      | 19.41 | 18.97 | 19.50              |                    |
|                     | 3               | LOW       | 64QAM      | 18.90      | 19.35 | 19.27 | 19.50              |                    |
|                     |                 | MID       | 64QAM      | 18.96      | 19.44 | 19.29 | 19.50              |                    |
|                     |                 | HIGH      | 64QAM      | 18.92      | 19.17 | 19.31 | 19.50              |                    |
|                     | 6               | LOW       | 64QAM      | 17.73      | 17.53 | 17.53 | 18.50              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 19965 | 20175 | 20385              | Tune-up power(dBm) |
|                     | 3               | 1         | LOW        | QPSK       | 20.58 | 20.57 | 20.83              | 21.00              |
| MID                 |                 |           | QPSK       | 20.93      | 20.91 | 20.67 | 21.00              |                    |
| HIGH                |                 |           | QPSK       | 20.68      | 20.87 | 20.65 | 21.00              |                    |
| 8                   |                 | LOW       | QPSK       | 19.88      | 19.51 | 19.27 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 19.58      | 19.42 | 19.01 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 19.76      | 19.50 | 19.29 | 20.50              |                    |
| 15                  |                 | LOW       | QPSK       | 19.74      | 19.45 | 19.17 | 20.50              |                    |
| 3                   |                 | 1         | LOW        | Q16        | 20.05 | 19.91 | 20.00              | 20.50              |
|                     |                 |           | MID        | Q16        | 19.83 | 19.61 | 19.50              | 20.50              |
|                     | HIGH            |           | Q16        | 19.97      | 20.03 | 20.28 | 20.50              |                    |
|                     | 8               | LOW       | Q16        | 19.04      | 19.06 | 18.85 | 19.50              |                    |
|                     |                 | MID       | Q16        | 18.96      | 18.96 | 18.56 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 19.23      | 19.10 | 18.75 | 19.50              |                    |
|                     | 15              | LOW       | Q16        | 19.27      | 19.11 | 18.72 | 19.50              |                    |
|                     | 3               | 1         | LOW        | 64QAM      | 18.88 | 19.11 | 18.99              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 18.71 | 18.88 | 18.49              | 19.50              |
| HIGH                |                 |           | 64QAM      | 18.75      | 19.07 | 19.14 | 19.50              |                    |
| 8                   |                 | LOW       | 64QAM      | 18.21      | 18.08 | 17.62 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 18.09      | 17.79 | 17.34 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 18.18      | 18.02 | 17.92 | 18.50              |                    |
| 15                  |                 | LOW       | 64QAM      | 18.22      | 18.31 | 17.61 | 18.50              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 19975 | 20175 | 20375              | Tune-up power(dBm) |
| 5                   |                 | 1         | LOW        | QPSK       | 20.64 | 20.78 | 20.66              | 21.00              |
|                     | MID             |           | QPSK       | 20.86      | 20.88 | 20.63 | 21.00              |                    |
|                     | HIGH            |           | QPSK       | 20.76      | 20.71 | 20.62 | 21.00              |                    |
|                     | 12              | LOW       | QPSK       | 19.87      | 19.70 | 19.28 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 19.51      | 19.28 | 19.14 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 19.69      | 19.47 | 19.47 | 20.50              |                    |
|                     | 25              | LOW       | QPSK       | 19.73      | 19.53 | 19.38 | 20.50              |                    |
|                     | 5               | 1         | LOW        | Q16        | 20.15 | 19.93 | 20.06              | 20.50              |
|                     |                 |           | MID        | Q16        | 19.79 | 19.80 | 19.61              | 20.50              |
| HIGH                |                 |           | Q16        | 19.91      | 20.18 | 20.21 | 20.50              |                    |
| 12                  |                 | LOW       | Q16        | 19.30      | 19.14 | 18.57 | 19.50              |                    |
|                     |                 | MID       | Q16        | 19.03      | 18.74 | 18.56 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 19.19      | 18.96 | 18.91 | 19.50              |                    |
| 25                  |                 | LOW       | Q16        | 19.21      | 19.16 | 18.69 | 19.50              |                    |
| 5                   |                 | 1         | LOW        | 64QAM      | 19.02 | 19.06 | 19.10              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 18.83 | 18.96 | 18.61              | 19.50              |
|                     | HIGH            |           | 64QAM      | 18.83      | 19.17 | 19.19 | 19.50              |                    |
|                     | 12              | LOW       | 64QAM      | 18.41      | 18.03 | 17.66 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 17.80      | 17.97 | 17.42 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 17.97      | 18.05 | 17.81 | 18.50              |                    |
|                     | 25              | LOW       | 64QAM      | 18.11      | 18.16 | 17.67 | 18.50              |                    |



| LTE B4-State3-Ant.2 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 20000      | 20175 | 20350 | Tune-up power(dBm) |                    |
| 10                  | 1               | LOW       | QPSK       | 20.52      | 20.78 | 20.74 | 21.00              |                    |
|                     |                 | MID       | QPSK       | 20.91      | 20.91 | 20.71 | 21.00              |                    |
|                     |                 | HIGH      | QPSK       | 20.67      | 20.70 | 20.66 | 21.00              |                    |
|                     | 25              | LOW       | QPSK       | 19.91      | 19.56 | 19.17 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 19.75      | 19.40 | 19.10 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 19.71      | 19.41 | 19.38 | 20.50              |                    |
|                     | 50              | LOW       | QPSK       | 19.84      | 19.51 | 19.21 | 20.50              |                    |
|                     | 10              | 1         | LOW        | Q16        | 19.93 | 20.00 | 20.07              | 20.50              |
|                     |                 |           | MID        | Q16        | 19.84 | 19.77 | 19.73              | 20.50              |
| HIGH                |                 |           | Q16        | 19.87      | 19.90 | 20.33 | 20.50              |                    |
| 25                  |                 | LOW       | Q16        | 19.24      | 19.17 | 18.77 | 19.50              |                    |
|                     |                 | MID       | Q16        | 18.78      | 18.77 | 18.35 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 19.07      | 18.97 | 18.88 | 19.50              |                    |
| 50                  |                 | LOW       | Q16        | 19.16      | 19.01 | 18.75 | 19.50              |                    |
| 10                  |                 | 1         | LOW        | 64QAM      | 18.83 | 19.00 | 18.91              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 18.81 | 18.93 | 18.61              | 19.50              |
|                     | HIGH            |           | 64QAM      | 18.74      | 19.06 | 19.15 | 19.50              |                    |
|                     | 25              | LOW       | 64QAM      | 18.33      | 18.02 | 17.71 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 17.85      | 17.88 | 17.21 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 18.05      | 18.06 | 17.76 | 18.50              |                    |
|                     | 50              | LOW       | 64QAM      | 18.25      | 18.08 | 17.84 | 18.50              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20025 | 20175 | 20325              | Tune-up power(dBm) |
|                     | 15              | 1         | LOW        | QPSK       | 20.64 | 20.53 | 20.76              | 21.00              |
| MID                 |                 |           | QPSK       | 20.83      | 20.86 | 20.55 | 21.00              |                    |
| HIGH                |                 |           | QPSK       | 20.62      | 20.71 | 20.91 | 21.00              |                    |
| 36                  |                 | LOW       | QPSK       | 19.97      | 19.75 | 19.00 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 19.77      | 19.53 | 19.18 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 19.82      | 19.48 | 19.26 | 20.50              |                    |
| 75                  |                 | LOW       | QPSK       | 19.88      | 19.55 | 19.25 | 20.50              |                    |
| 15                  |                 | 1         | LOW        | Q16        | 20.03 | 20.18 | 19.91              | 20.50              |
|                     |                 |           | MID        | Q16        | 19.76 | 19.73 | 19.60              | 20.50              |
|                     | HIGH            |           | Q16        | 19.99      | 19.93 | 20.48 | 20.50              |                    |
|                     | 36              | LOW       | Q16        | 19.17      | 19.11 | 18.56 | 19.50              |                    |
|                     |                 | MID       | Q16        | 19.06      | 18.91 | 18.42 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 19.19      | 19.19 | 19.01 | 19.50              |                    |
|                     | 75              | LOW       | Q16        | 19.04      | 19.09 | 18.78 | 19.50              |                    |
|                     | 15              | 1         | LOW        | 64QAM      | 18.92 | 19.00 | 19.03              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 18.80 | 18.99 | 18.50              | 19.50              |
| HIGH                |                 |           | 64QAM      | 18.67      | 19.19 | 19.29 | 19.50              |                    |
| 36                  |                 | LOW       | 64QAM      | 18.46      | 18.04 | 17.43 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 17.87      | 18.00 | 17.28 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 18.07      | 18.01 | 17.92 | 18.50              |                    |
| 75                  |                 | LOW       | 64QAM      | 18.04      | 18.27 | 17.61 | 18.50              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 20050 | 20175 | 20300              | Tune-up power(dBm) |
| 20                  |                 | 1         | LOW        | QPSK       | 20.67 | 20.63 | 20.75              | 21.00              |
|                     | MID             |           | QPSK       | 20.94      | 20.98 | 20.65 | 21.00              |                    |
|                     | HIGH            |           | QPSK       | 20.67      | 20.75 | 20.76 | 21.00              |                    |
|                     | 50              | LOW       | QPSK       | 19.61      | 19.82 | 19.15 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 19.62      | 19.42 | 19.03 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 19.70      | 19.56 | 19.33 | 20.50              |                    |
|                     | 100             | LOW       | QPSK       | 19.73      | 19.56 | 19.23 | 20.50              |                    |
|                     | 20              | 1         | LOW        | Q16        | 20.02 | 20.06 | 20.00              | 20.50              |
|                     |                 |           | MID        | Q16        | 19.74 | 19.69 | 19.60              | 20.50              |
| HIGH                |                 |           | Q16        | 19.94      | 20.04 | 20.33 | 20.50              |                    |
| 50                  |                 | LOW       | Q16        | 19.18      | 19.07 | 18.70 | 19.50              |                    |
|                     |                 | MID       | Q16        | 18.93      | 18.85 | 18.49 | 19.50              |                    |
|                     |                 | HIGH      | Q16        | 19.09      | 19.08 | 18.89 | 19.50              |                    |
| 100                 |                 | LOW       | Q16        | 19.13      | 19.05 | 18.81 | 19.50              |                    |
| 20                  |                 | 1         | LOW        | 64QAM      | 18.97 | 19.15 | 19.00              | 19.50              |
|                     |                 |           | MID        | 64QAM      | 18.74 | 18.84 | 18.60              | 19.50              |
|                     | HIGH            |           | 64QAM      | 18.82      | 19.12 | 19.25 | 19.50              |                    |
|                     | 50              | LOW       | 64QAM      | 18.33      | 18.11 | 17.57 | 18.50              |                    |
|                     |                 | MID       | 64QAM      | 17.94      | 17.94 | 17.35 | 18.50              |                    |
|                     |                 | HIGH      | 64QAM      | 18.05      | 18.02 | 17.87 | 18.50              |                    |
|                     | 100             | LOW       | 64QAM      | 18.15      | 18.20 | 17.69 | 18.50              |                    |

| LTE B4-State4-Ant.3 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 19957      | 20175 | 20393 | Tune-up power(dBm) |                    |
| 1.4                 | 1               | LOW       | QPSK       | 20.13      | 20.19 | 20.13 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 20.32      | 20.37 | 20.32 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 20.12      | 20.20 | 20.10 | 20.50              |                    |
|                     | 3               | LOW       | QPSK       | 20.18      | 20.25 | 20.24 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 20.25      | 20.33 | 20.31 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 20.18      | 20.25 | 20.23 | 20.50              |                    |
|                     | 6               | LOW       | QPSK       | 18.45      | 18.60 | 18.55 | 19.50              |                    |
|                     | 1.4             | 1         | LOW        | Q16        | 18.48 | 18.89 | 18.51              | 20.00              |
|                     |                 |           | MID        | Q16        | 18.71 | 19.11 | 18.71              | 20.00              |
| HIGH                |                 |           | Q16        | 18.54      | 18.93 | 18.52 | 20.00              |                    |
| 3                   |                 | LOW       | Q16        | 18.54      | 18.84 | 18.80 | 20.00              |                    |
|                     |                 | MID       | Q16        | 18.61      | 18.93 | 18.87 | 20.00              |                    |
|                     |                 | HIGH      | Q16        | 18.55      | 18.88 | 18.81 | 20.00              |                    |
| 6                   |                 | LOW       | Q16        | 17.11      | 17.20 | 17.35 | 19.00              |                    |
| 1.4                 |                 | 1         | LOW        | 64QAM      | 18.31 | 18.47 | 18.23              | 19.00              |
|                     |                 |           | MID        | 64QAM      | 18.00 | 18.19 | 17.93              | 19.00              |
|                     | HIGH            |           | 64QAM      | 18.76      | 18.95 | 18.94 | 19.00              |                    |
|                     | 3               | LOW       | 64QAM      | 18.32      | 18.56 | 18.29 | 19.00              |                    |
|                     |                 | MID       | 64QAM      | 17.89      | 18.24 | 18.05 | 19.00              |                    |
|                     |                 | HIGH      | 64QAM      | 18.75      | 18.98 | 18.74 | 19.00              |                    |
|                     | 6               | LOW       | 64QAM      | 16.44      | 16.41 | 16.44 | 18.00              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 19965 | 20175 | 20385              | Tune-up power(dBm) |
|                     | 3               | 1         | LOW        | QPSK       | 20.37 | 20.30 | 20.46              | 20.50              |
| MID                 |                 |           | QPSK       | 20.28      | 20.40 | 20.35 | 20.50              |                    |
| HIGH                |                 |           | QPSK       | 20.37      | 20.41 | 20.33 | 20.50              |                    |
| 8                   |                 | LOW       | QPSK       | 18.68      | 18.88 | 18.79 | 19.50              |                    |
|                     |                 | MID       | QPSK       | 18.56      | 18.63 | 18.71 | 19.50              |                    |
|                     |                 | HIGH      | QPSK       | 18.94      | 18.99 | 19.23 | 19.50              |                    |
| 15                  |                 | LOW       | QPSK       | 18.65      | 19.09 | 18.83 | 19.50              |                    |
| 3                   |                 | 1         | LOW        | Q16        | 19.30 | 19.41 | 19.34              | 20.00              |
|                     |                 |           | MID        | Q16        | 18.86 | 19.24 | 18.88              | 20.00              |
|                     | HIGH            |           | Q16        | 19.53      | 19.90 | 19.90 | 20.00              |                    |
|                     | 8               | LOW       | Q16        | 17.23      | 17.37 | 17.42 | 19.00              |                    |
|                     |                 | MID       | Q16        | 17.38      | 17.51 | 17.25 | 19.00              |                    |
|                     |                 | HIGH      | Q16        | 17.42      | 17.68 | 17.65 | 19.00              |                    |
|                     | 15              | LOW       | Q16        | 17.54      | 17.55 | 17.61 | 19.00              |                    |
|                     | 3               | 1         | LOW        | 64QAM      | 18.30 | 18.41 | 18.34              | 19.00              |
|                     |                 |           | MID        | 64QAM      | 17.86 | 18.24 | 17.88              | 19.00              |
| HIGH                |                 |           | 64QAM      | 18.53      | 18.80 | 18.90 | 19.00              |                    |
| 8                   |                 | LOW       | 64QAM      | 16.23      | 16.37 | 16.42 | 18.00              |                    |
|                     |                 | MID       | 64QAM      | 16.38      | 16.51 | 16.25 | 18.00              |                    |
|                     |                 | HIGH      | 64QAM      | 16.42      | 16.68 | 16.65 | 18.00              |                    |
| 15                  |                 | LOW       | 64QAM      | 16.54      | 16.55 | 16.61 | 18.00              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 19975 | 20175 | 20375              | Tune-up power(dBm) |
| 5                   |                 | 1         | LOW        | QPSK       | 20.44 | 20.41 | 20.21              | 20.50              |
|                     | MID             |           | QPSK       | 20.13      | 20.26 | 20.30 | 20.50              |                    |
|                     | HIGH            |           | QPSK       | 20.25      | 20.23 | 20.43 | 20.50              |                    |
|                     | 12              | LOW       | QPSK       | 18.86      | 18.70 | 18.70 | 19.50              |                    |
|                     |                 | MID       | QPSK       | 18.57      | 18.69 | 18.84 | 19.50              |                    |
|                     |                 | HIGH      | QPSK       | 18.74      | 19.10 | 18.96 | 19.50              |                    |
|                     | 25              | LOW       | QPSK       | 18.80      | 18.88 | 19.08 | 19.50              |                    |
|                     | 5               | 1         | LOW        | Q16        | 19.30 | 19.36 | 19.30              | 20.00              |
|                     |                 |           | MID        | Q16        | 19.00 | 19.13 | 19.17              | 20.00              |
| HIGH                |                 |           | Q16        | 19.66      | 19.96 | 19.95 | 20.00              |                    |
| 12                  |                 | LOW       | Q16        | 17.48      | 17.35 | 17.34 | 19.00              |                    |
|                     |                 | MID       | Q16        | 17.30      | 17.29 | 17.47 | 19.00              |                    |
|                     |                 | HIGH      | Q16        | 17.47      | 17.79 | 17.64 | 19.00              |                    |
| 25                  |                 | LOW       | Q16        | 17.38      | 17.60 | 17.70 | 19.00              |                    |
| 5                   |                 | 1         | LOW        | 64QAM      | 18.30 | 18.36 | 18.30              | 19.00              |
|                     |                 |           | MID        | 64QAM      | 18.00 | 18.13 | 18.17              | 19.00              |
|                     | HIGH            |           | 64QAM      | 18.66      | 18.86 | 18.95 | 19.00              |                    |
|                     | 12              | LOW       | 64QAM      | 16.48      | 16.35 | 16.34 | 18.00              |                    |
|                     |                 | MID       | 64QAM      | 16.30      | 16.29 | 16.47 | 18.00              |                    |
|                     |                 | HIGH      | 64QAM      | 16.47      | 16.79 | 16.64 | 18.00              |                    |
|                     | 25              | LOW       | 64QAM      | 16.38      | 16.60 | 16.70 | 18.00              |                    |

| LTE B4-State4-Ant.3 |                 |           |            |            |       |       |                    |                    |
|---------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)     | RB Size         | RB offset | Modulation | 20000      | 20175 | 20350 | Tune-up power(dBm) |                    |
| 10                  | 1               | LOW       | QPSK       | 20.44      | 20.36 | 20.37 | 20.50              |                    |
|                     |                 | MID       | QPSK       | 20.11      | 20.42 | 20.15 | 20.50              |                    |
|                     |                 | HIGH      | QPSK       | 20.40      | 20.30 | 20.42 | 20.50              |                    |
|                     | 25              | LOW       | QPSK       | 18.64      | 18.86 | 18.88 | 19.50              |                    |
|                     |                 | MID       | QPSK       | 18.56      | 18.87 | 18.73 | 19.50              |                    |
|                     |                 | HIGH      | QPSK       | 18.93      | 19.12 | 19.14 | 19.50              |                    |
|                     | 50              | LOW       | QPSK       | 18.84      | 18.89 | 18.84 | 19.50              |                    |
|                     | 10              | 1         | LOW        | Q16        | 19.33 | 19.36 | 19.46              | 20.00              |
|                     |                 |           | MID        | Q16        | 18.97 | 19.35 | 19.05              | 20.00              |
| HIGH                |                 |           | Q16        | 19.77      | 19.82 | 19.86 | 20.00              |                    |
| 25                  |                 | LOW       | Q16        | 17.30      | 17.55 | 17.26 | 19.00              |                    |
|                     |                 | MID       | Q16        | 17.13      | 17.50 | 17.31 | 19.00              |                    |
|                     |                 | HIGH      | Q16        | 17.43      | 17.70 | 17.74 | 19.00              |                    |
| 50                  |                 | LOW       | Q16        | 17.50      | 17.59 | 17.54 | 19.00              |                    |
| 10                  |                 | 1         | LOW        | 64QAM      | 18.33 | 18.36 | 18.46              | 19.00              |
|                     |                 |           | MID        | 64QAM      | 17.97 | 18.35 | 18.05              | 19.00              |
|                     | HIGH            |           | 64QAM      | 18.77      | 18.82 | 18.86 | 19.00              |                    |
|                     | 25              | LOW       | 64QAM      | 16.30      | 16.55 | 16.26 | 18.00              |                    |
|                     |                 | MID       | 64QAM      | 16.13      | 16.50 | 16.31 | 18.00              |                    |
|                     |                 | HIGH      | 64QAM      | 16.43      | 16.70 | 16.74 | 18.00              |                    |
|                     | 50              | LOW       | 64QAM      | 16.50      | 16.59 | 16.54 | 18.00              |                    |
|                     | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20025 | 20175 | 20325              | Tune-up power(dBm) |
|                     | 15              | 1         | LOW        | QPSK       | 20.29 | 20.42 | 20.38              | 20.50              |
| MID                 |                 |           | QPSK       | 20.33      | 20.33 | 20.41 | 20.50              |                    |
| HIGH                |                 |           | QPSK       | 20.30      | 20.24 | 20.39 | 20.50              |                    |
| 36                  |                 | LOW       | QPSK       | 18.58      | 18.69 | 18.79 | 19.50              |                    |
|                     |                 | MID       | QPSK       | 18.66      | 18.86 | 18.73 | 19.50              |                    |
|                     |                 | HIGH      | QPSK       | 18.84      | 19.19 | 19.20 | 19.50              |                    |
| 75                  |                 | LOW       | QPSK       | 18.86      | 19.06 | 19.00 | 19.50              |                    |
| 15                  |                 | 1         | LOW        | Q16        | 19.45 | 19.48 | 19.41              | 20.00              |
|                     |                 |           | MID        | Q16        | 18.98 | 19.30 | 19.07              | 20.00              |
|                     | HIGH            |           | Q16        | 19.52      | 19.90 | 19.99 | 20.00              |                    |
|                     | 36              | LOW       | Q16        | 17.20      | 17.56 | 17.26 | 19.00              |                    |
|                     |                 | MID       | Q16        | 17.17      | 17.45 | 17.31 | 19.00              |                    |
|                     |                 | HIGH      | Q16        | 17.45      | 17.88 | 17.67 | 19.00              |                    |
|                     | 75              | LOW       | Q16        | 17.52      | 17.54 | 17.64 | 19.00              |                    |
|                     | 15              | 1         | LOW        | 64QAM      | 18.45 | 18.48 | 18.41              | 19.00              |
|                     |                 |           | MID        | 64QAM      | 17.98 | 18.30 | 18.07              | 19.00              |
| HIGH                |                 |           | 64QAM      | 18.52      | 18.90 | 18.99 | 19.00              |                    |
| 36                  |                 | LOW       | 64QAM      | 16.20      | 16.56 | 16.26 | 18.00              |                    |
|                     |                 | MID       | 64QAM      | 16.17      | 16.45 | 16.31 | 18.00              |                    |
|                     |                 | HIGH      | 64QAM      | 16.45      | 16.88 | 16.67 | 18.00              |                    |
| 75                  |                 | LOW       | 64QAM      | 16.52      | 16.54 | 16.64 | 18.00              |                    |
| Bandwidth (MHz)     |                 | RB Size   | RB offset  | Modulation | 20050 | 20175 | 20300              | Tune-up power(dBm) |
| 20                  |                 | 1         | LOW        | QPSK       | 20.42 | 20.44 | 20.33              | 20.50              |
|                     | MID             |           | QPSK       | 20.19      | 20.34 | 20.27 | 20.50              |                    |
|                     | HIGH            |           | QPSK       | 20.38      | 20.36 | 20.35 | 20.50              |                    |
|                     | 50              | LOW       | QPSK       | 18.73      | 18.78 | 18.79 | 19.50              |                    |
|                     |                 | MID       | QPSK       | 18.60      | 18.74 | 18.72 | 19.50              |                    |
|                     |                 | HIGH      | QPSK       | 18.86      | 19.12 | 19.10 | 19.50              |                    |
|                     | 100             | LOW       | QPSK       | 18.78      | 18.94 | 18.94 | 19.50              |                    |
|                     | 20              | 1         | LOW        | Q16        | 19.35 | 19.45 | 19.37              | 20.00              |
|                     |                 |           | MID        | Q16        | 18.98 | 19.21 | 19.02              | 20.00              |
| HIGH                |                 |           | Q16        | 19.62      | 19.98 | 19.85 | 20.00              |                    |
| 50                  |                 | LOW       | Q16        | 17.35      | 17.43 | 17.38 | 19.00              |                    |
|                     |                 | MID       | Q16        | 17.25      | 17.43 | 17.38 | 19.00              |                    |
|                     |                 | HIGH      | Q16        | 17.50      | 17.81 | 17.71 | 19.00              |                    |
| 100                 |                 | LOW       | Q16        | 17.43      | 17.60 | 17.57 | 19.00              |                    |
| 20                  |                 | 1         | LOW        | 64QAM      | 18.24 | 18.57 | 18.28              | 19.00              |
|                     |                 |           | MID        | 64QAM      | 18.05 | 18.25 | 17.95              | 19.00              |
|                     | HIGH            |           | 64QAM      | 18.77      | 18.85 | 18.77 | 19.00              |                    |
|                     | 50              | LOW       | 64QAM      | 16.42      | 16.43 | 16.40 | 18.00              |                    |
|                     |                 | MID       | 64QAM      | 16.23      | 16.40 | 16.38 | 18.00              |                    |
|                     |                 | HIGH      | 64QAM      | 16.65      | 16.77 | 16.60 | 18.00              |                    |
|                     | 100             | LOW       | 64QAM      | 16.37      | 16.67 | 16.56 | 18.00              |                    |

| LTE B4-Full Power -Ant.3 |                 |           |            |            |       |       |                    |                    |
|--------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)          | RB Size         | RB offset | Modulation | 19957      | 20175 | 20393 | Tune-up power(dBm) |                    |
| 1.4                      | 1               | LOW       | QPSK       | 22.74      | 22.84 | 22.82 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 22.83      | 22.73 | 22.80 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.77      | 22.77 | 22.81 | 23.50              |                    |
|                          | 3               | LOW       | QPSK       | 22.71      | 22.60 | 22.64 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 22.78      | 22.67 | 22.70 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.73      | 22.63 | 22.64 | 23.50              |                    |
|                          | 6               | LOW       | QPSK       | 21.79      | 21.63 | 21.67 | 22.50              |                    |
|                          | 1.4             | 1         | LOW        | Q16        | 22.80 | 22.37 | 21.96              | 23.00              |
|                          |                 |           | MID        | Q16        | 22.87 | 22.32 | 21.97              | 23.00              |
| HIGH                     |                 |           | Q16        | 22.91      | 22.32 | 21.98 | 23.00              |                    |
| 3                        |                 | LOW       | Q16        | 21.77      | 21.58 | 21.69 | 23.00              |                    |
|                          |                 | MID       | Q16        | 21.81      | 21.56 | 21.55 | 23.00              |                    |
|                          |                 | HIGH      | Q16        | 21.78      | 21.53 | 21.76 | 23.00              |                    |
| 6                        |                 | LOW       | Q16        | 20.41      | 20.61 | 20.37 | 21.50              |                    |
| 1.4                      |                 | 1         | LOW        | 64QAM      | 21.89 | 21.51 | 21.01              | 22.00              |
|                          |                 |           | MID        | 64QAM      | 21.90 | 21.45 | 20.99              | 22.00              |
|                          | HIGH            |           | 64QAM      | 21.96      | 21.33 | 20.91 | 22.00              |                    |
|                          | 3               | LOW       | 64QAM      | 20.73      | 20.43 | 20.60 | 22.00              |                    |
|                          |                 | MID       | 64QAM      | 20.67      | 20.70 | 20.44 | 22.00              |                    |
|                          |                 | HIGH      | 64QAM      | 20.65      | 20.44 | 20.67 | 22.00              |                    |
|                          | 6               | LOW       | 64QAM      | 19.38      | 19.56 | 19.49 | 20.50              |                    |
|                          | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 19965 | 20175 | 20385              | Tune-up power(dBm) |
|                          | 3               | 1         | LOW        | QPSK       | 22.78 | 22.84 | 22.87              | 23.50              |
| MID                      |                 |           | QPSK       | 22.59      | 22.78 | 22.76 | 23.50              |                    |
| HIGH                     |                 |           | QPSK       | 22.62      | 22.77 | 22.89 | 23.50              |                    |
| 8                        |                 | LOW       | QPSK       | 21.74      | 21.65 | 21.66 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.52      | 21.64 | 21.68 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 21.71      | 21.65 | 21.79 | 22.50              |                    |
| 15                       |                 | LOW       | QPSK       | 21.68      | 21.56 | 21.75 | 22.50              |                    |
| 3                        |                 | 1         | LOW        | Q16        | 22.03 | 22.51 | 22.65              | 23.00              |
|                          |                 |           | MID        | Q16        | 21.79 | 22.47 | 22.81              | 23.00              |
|                          | HIGH            |           | Q16        | 22.14      | 22.65 | 22.70 | 23.00              |                    |
|                          | 8               | LOW       | Q16        | 20.31      | 20.44 | 20.18 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.73      | 20.85 | 20.03 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.31      | 20.29 | 20.36 | 21.50              |                    |
|                          | 15              | LOW       | Q16        | 20.75      | 20.79 | 20.16 | 21.50              |                    |
|                          | 3               | 1         | LOW        | 64QAM      | 20.82 | 21.47 | 21.81              | 22.00              |
|                          |                 |           | MID        | 64QAM      | 20.79 | 21.45 | 21.66              | 22.00              |
| HIGH                     |                 |           | 64QAM      | 21.36      | 21.36 | 21.81 | 22.00              |                    |
| 8                        |                 | LOW       | 64QAM      | 19.35      | 19.28 | 19.41 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.81      | 19.92 | 19.20 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.33      | 19.17 | 19.17 | 20.50              |                    |
| 15                       |                 | LOW       | 64QAM      | 19.70      | 19.76 | 19.22 | 20.50              |                    |
| Bandwidth (MHz)          |                 | RB Size   | RB offset  | Modulation | 19975 | 20175 | 20375              | Tune-up power(dBm) |
| 5                        |                 | 1         | LOW        | QPSK       | 22.62 | 22.69 | 22.67              | 23.50              |
|                          | MID             |           | QPSK       | 22.52      | 22.90 | 22.68 | 23.50              |                    |
|                          | HIGH            |           | QPSK       | 22.59      | 22.86 | 22.68 | 23.50              |                    |
|                          | 12              | LOW       | QPSK       | 21.76      | 21.75 | 21.72 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.48      | 21.62 | 21.52 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 21.82      | 21.85 | 21.70 | 22.50              |                    |
|                          | 25              | LOW       | QPSK       | 21.52      | 21.70 | 21.61 | 22.50              |                    |
|                          | 5               | 1         | LOW        | Q16        | 22.22 | 22.45 | 22.79              | 23.00              |
|                          |                 |           | MID        | Q16        | 21.91 | 22.49 | 22.79              | 23.00              |
| HIGH                     |                 |           | Q16        | 22.03      | 22.48 | 22.63 | 23.00              |                    |
| 12                       |                 | LOW       | Q16        | 20.42      | 20.32 | 20.18 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.76      | 20.57 | 20.06 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.34      | 20.35 | 20.37 | 21.50              |                    |
| 25                       |                 | LOW       | Q16        | 20.61      | 20.63 | 20.28 | 21.50              |                    |
| 5                        |                 | 1         | LOW        | 64QAM      | 21.02 | 21.54 | 21.66              | 22.00              |
|                          |                 |           | MID        | 64QAM      | 21.09 | 21.42 | 21.75              | 22.00              |
|                          | HIGH            |           | 64QAM      | 21.34      | 21.43 | 21.81 | 22.00              |                    |
|                          | 12              | LOW       | 64QAM      | 19.36      | 19.38 | 19.24 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.90      | 19.66 | 19.04 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.15      | 19.19 | 19.20 | 20.50              |                    |
|                          | 25              | LOW       | 64QAM      | 19.84      | 19.96 | 19.20 | 20.50              |                    |

| LTE B4-Full Power -Ant.3 |                 |           |            |            |       |       |                    |                    |
|--------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)          | RB Size         | RB offset | Modulation | 20000      | 20175 | 20350 | Tune-up power(dBm) |                    |
| 10                       | 1               | LOW       | QPSK       | 22.65      | 22.69 | 22.60 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 22.50      | 22.74 | 22.81 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.54      | 22.91 | 22.71 | 23.50              |                    |
|                          | 25              | LOW       | QPSK       | 21.78      | 21.70 | 21.88 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.68      | 21.70 | 21.73 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 21.56      | 21.86 | 21.73 | 22.50              |                    |
|                          | 50              | LOW       | QPSK       | 21.69      | 21.53 | 21.62 | 22.50              |                    |
|                          | 10              | 1         | LOW        | Q16        | 22.22 | 22.52 | 22.65              | 23.00              |
|                          |                 |           | MID        | Q16        | 22.01 | 22.61 | 22.70              | 23.00              |
| HIGH                     |                 |           | Q16        | 22.01      | 22.54 | 22.72 | 23.00              |                    |
| 25                       |                 | LOW       | Q16        | 20.25      | 20.32 | 20.22 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.87      | 20.70 | 20.31 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.33      | 20.22 | 20.15 | 21.50              |                    |
| 50                       |                 | LOW       | Q16        | 20.56      | 20.59 | 20.38 | 21.50              |                    |
| 10                       |                 | 1         | LOW        | 64QAM      | 20.90 | 21.57 | 21.81              | 22.00              |
|                          |                 |           | MID        | 64QAM      | 21.07 | 21.51 | 21.90              | 22.00              |
|                          | HIGH            |           | 64QAM      | 21.15      | 21.44 | 21.81 | 22.00              |                    |
|                          | 25              | LOW       | 64QAM      | 19.52      | 19.25 | 19.33 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.80      | 19.81 | 19.09 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.22      | 19.42 | 19.22 | 20.50              |                    |
|                          | 50              | LOW       | 64QAM      | 19.67      | 19.72 | 19.16 | 20.50              |                    |
|                          | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20025 | 20175 | 20325              | Tune-up power(dBm) |
|                          | 15              | 1         | LOW        | QPSK       | 22.69 | 22.80 | 22.87              | 23.50              |
| MID                      |                 |           | QPSK       | 22.56      | 22.68 | 22.62 | 23.50              |                    |
| HIGH                     |                 |           | QPSK       | 22.61      | 23.01 | 22.86 | 23.50              |                    |
| 36                       |                 | LOW       | QPSK       | 21.69      | 21.58 | 21.79 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.75      | 21.71 | 21.56 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 21.78      | 21.72 | 21.70 | 22.50              |                    |
| 75                       |                 | LOW       | QPSK       | 21.72      | 21.64 | 21.88 | 22.50              |                    |
| 15                       |                 | 1         | LOW        | Q16        | 22.05 | 22.48 | 22.77              | 23.00              |
|                          |                 |           | MID        | Q16        | 22.01 | 22.42 | 22.86              | 23.00              |
|                          | HIGH            |           | Q16        | 21.95      | 22.44 | 22.74 | 23.00              |                    |
|                          | 36              | LOW       | Q16        | 20.38      | 20.35 | 20.39 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.72      | 20.67 | 20.22 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.42      | 20.21 | 20.17 | 21.50              |                    |
|                          | 75              | LOW       | Q16        | 20.71      | 20.85 | 20.40 | 21.50              |                    |
|                          | 15              | 1         | LOW        | 64QAM      | 20.88 | 21.55 | 21.68              | 22.00              |
|                          |                 |           | MID        | 64QAM      | 21.06 | 21.59 | 21.67              | 22.00              |
| HIGH                     |                 |           | 64QAM      | 21.30      | 21.49 | 21.78 | 22.00              |                    |
| 36                       |                 | LOW       | 64QAM      | 19.39      | 19.42 | 19.36 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.75      | 19.69 | 18.98 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.15      | 19.41 | 19.08 | 20.50              |                    |
| 75                       |                 | LOW       | 64QAM      | 19.69      | 19.87 | 19.14 | 20.50              |                    |
| Bandwidth (MHz)          |                 | RB Size   | RB offset  | Modulation | 20050 | 20175 | 20300              | Tune-up power(dBm) |
| 20                       |                 | 1         | LOW        | QPSK       | 22.71 | 22.80 | 22.72              | 23.50              |
|                          | MID             |           | QPSK       | 22.59      | 22.81 | 22.72 | 23.50              |                    |
|                          | HIGH            |           | QPSK       | 22.63      | 22.89 | 22.77 | 23.50              |                    |
|                          | 50              | LOW       | QPSK       | 21.68      | 21.73 | 21.75 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.60      | 21.61 | 21.60 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 21.70      | 21.79 | 21.78 | 22.50              |                    |
|                          | 100             | LOW       | QPSK       | 21.57      | 21.61 | 21.73 | 22.50              |                    |
|                          | 20              | 1         | LOW        | Q16        | 22.07 | 22.38 | 22.77              | 23.00              |
|                          |                 |           | MID        | Q16        | 21.94 | 22.51 | 22.71              | 23.00              |
| HIGH                     |                 |           | Q16        | 22.07      | 22.51 | 22.77 | 23.00              |                    |
| 50                       |                 | LOW       | Q16        | 20.34      | 20.30 | 20.32 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.73      | 20.70 | 20.18 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.28      | 20.35 | 20.25 | 21.50              |                    |
| 100                      |                 | LOW       | Q16        | 20.63      | 20.73 | 20.28 | 21.50              |                    |
| 20                       |                 | 1         | LOW        | 64QAM      | 20.95 | 21.46 | 21.73              | 22.00              |
|                          |                 |           | MID        | 64QAM      | 20.94 | 21.50 | 21.75              | 22.00              |
|                          | HIGH            |           | 64QAM      | 21.21      | 21.40 | 21.79 | 22.00              |                    |
|                          | 50              | LOW       | 64QAM      | 19.40      | 19.33 | 19.28 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.75      | 19.80 | 19.09 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.22      | 19.27 | 19.18 | 20.50              |                    |
|                          | 100             | LOW       | 64QAM      | 19.72      | 19.81 | 19.14 | 20.50              |                    |

| LTE B4-State1&2 -Ant.3 |                 |           |            |            |       |       |                    |                    |
|------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)        | RB Size         | RB offset | Modulation | 19957      | 20175 | 20393 | Tune-up power(dBm) |                    |
| 1.4                    | 1               | LOW       | QPSK       | 22.74      | 22.84 | 22.82 | 23.50              |                    |
|                        |                 | MID       | QPSK       | 22.83      | 22.73 | 22.80 | 23.50              |                    |
|                        |                 | HIGH      | QPSK       | 22.77      | 22.77 | 22.81 | 23.50              |                    |
|                        | 3               | LOW       | QPSK       | 22.71      | 22.60 | 22.64 | 23.50              |                    |
|                        |                 | MID       | QPSK       | 22.78      | 22.67 | 22.70 | 23.50              |                    |
|                        |                 | HIGH      | QPSK       | 22.73      | 22.63 | 22.64 | 23.50              |                    |
|                        | 6               | LOW       | QPSK       | 21.79      | 21.63 | 21.67 | 22.50              |                    |
|                        | 1.4             | 1         | LOW        | Q16        | 22.80 | 22.37 | 21.96              | 23.00              |
|                        |                 |           | MID        | Q16        | 22.87 | 22.32 | 21.97              | 23.00              |
| HIGH                   |                 |           | Q16        | 22.91      | 22.32 | 21.98 | 23.00              |                    |
| 3                      |                 | LOW       | Q16        | 21.77      | 21.58 | 21.69 | 23.00              |                    |
|                        |                 | MID       | Q16        | 21.81      | 21.56 | 21.55 | 23.00              |                    |
|                        |                 | HIGH      | Q16        | 21.78      | 21.53 | 21.76 | 23.00              |                    |
| 6                      |                 | LOW       | Q16        | 20.41      | 20.61 | 20.37 | 21.50              |                    |
| 1.4                    |                 | 1         | LOW        | 64QAM      | 21.89 | 21.51 | 21.01              | 22.00              |
|                        |                 |           | MID        | 64QAM      | 21.90 | 21.45 | 20.99              | 22.00              |
|                        | HIGH            |           | 64QAM      | 21.96      | 21.33 | 20.91 | 22.00              |                    |
|                        | 3               | LOW       | 64QAM      | 20.73      | 20.43 | 20.60 | 22.00              |                    |
|                        |                 | MID       | 64QAM      | 20.67      | 20.70 | 20.44 | 22.00              |                    |
|                        |                 | HIGH      | 64QAM      | 20.65      | 20.44 | 20.67 | 22.00              |                    |
|                        | 6               | LOW       | 64QAM      | 19.38      | 19.56 | 19.49 | 20.50              |                    |
|                        | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 19965 | 20175 | 20385              | Tune-up power(dBm) |
|                        | 3               | 1         | LOW        | QPSK       | 22.78 | 22.84 | 22.87              | 23.50              |
| MID                    |                 |           | QPSK       | 22.59      | 22.78 | 22.76 | 23.50              |                    |
| HIGH                   |                 |           | QPSK       | 22.62      | 22.77 | 22.89 | 23.50              |                    |
| 8                      |                 | LOW       | QPSK       | 21.74      | 21.65 | 21.66 | 22.50              |                    |
|                        |                 | MID       | QPSK       | 21.52      | 21.64 | 21.68 | 22.50              |                    |
|                        |                 | HIGH      | QPSK       | 21.71      | 21.65 | 21.79 | 22.50              |                    |
| 15                     |                 | LOW       | QPSK       | 21.68      | 21.56 | 21.75 | 22.50              |                    |
| 3                      |                 | 1         | LOW        | Q16        | 22.03 | 22.51 | 22.65              | 23.00              |
|                        |                 |           | MID        | Q16        | 21.79 | 22.47 | 22.81              | 23.00              |
|                        | HIGH            |           | Q16        | 22.14      | 22.65 | 22.70 | 23.00              |                    |
|                        | 8               | LOW       | Q16        | 20.31      | 20.44 | 20.18 | 21.50              |                    |
|                        |                 | MID       | Q16        | 20.73      | 20.85 | 20.03 | 21.50              |                    |
|                        |                 | HIGH      | Q16        | 20.31      | 20.29 | 20.36 | 21.50              |                    |
|                        | 15              | LOW       | Q16        | 20.75      | 20.79 | 20.16 | 21.50              |                    |
|                        | 3               | 1         | LOW        | 64QAM      | 20.82 | 21.47 | 21.81              | 22.00              |
|                        |                 |           | MID        | 64QAM      | 20.79 | 21.45 | 21.66              | 22.00              |
| HIGH                   |                 |           | 64QAM      | 21.36      | 21.36 | 21.81 | 22.00              |                    |
| 8                      |                 | LOW       | 64QAM      | 19.35      | 19.28 | 19.41 | 20.50              |                    |
|                        |                 | MID       | 64QAM      | 19.81      | 19.92 | 19.20 | 20.50              |                    |
|                        |                 | HIGH      | 64QAM      | 19.33      | 19.17 | 19.17 | 20.50              |                    |
| 15                     |                 | LOW       | 64QAM      | 19.70      | 19.76 | 19.22 | 20.50              |                    |
| Bandwidth (MHz)        |                 | RB Size   | RB offset  | Modulation | 19975 | 20175 | 20375              | Tune-up power(dBm) |
| 5                      |                 | 1         | LOW        | QPSK       | 22.62 | 22.69 | 22.67              | 23.50              |
|                        | MID             |           | QPSK       | 22.52      | 22.90 | 22.68 | 23.50              |                    |
|                        | HIGH            |           | QPSK       | 22.59      | 22.86 | 22.68 | 23.50              |                    |
|                        | 12              | LOW       | QPSK       | 21.76      | 21.75 | 21.72 | 22.50              |                    |
|                        |                 | MID       | QPSK       | 21.48      | 21.62 | 21.52 | 22.50              |                    |
|                        |                 | HIGH      | QPSK       | 21.82      | 21.85 | 21.70 | 22.50              |                    |
|                        | 25              | LOW       | QPSK       | 21.52      | 21.70 | 21.61 | 22.50              |                    |
|                        | 5               | 1         | LOW        | Q16        | 22.22 | 22.45 | 22.79              | 23.00              |
|                        |                 |           | MID        | Q16        | 21.91 | 22.49 | 22.79              | 23.00              |
| HIGH                   |                 |           | Q16        | 22.03      | 22.48 | 22.63 | 23.00              |                    |
| 12                     |                 | LOW       | Q16        | 20.42      | 20.32 | 20.18 | 21.50              |                    |
|                        |                 | MID       | Q16        | 20.76      | 20.57 | 20.06 | 21.50              |                    |
|                        |                 | HIGH      | Q16        | 20.34      | 20.35 | 20.37 | 21.50              |                    |
| 25                     |                 | LOW       | Q16        | 20.61      | 20.63 | 20.28 | 21.50              |                    |
| 5                      |                 | 1         | LOW        | 64QAM      | 21.02 | 21.54 | 21.66              | 22.00              |
|                        |                 |           | MID        | 64QAM      | 21.09 | 21.42 | 21.75              | 22.00              |
|                        | HIGH            |           | 64QAM      | 21.34      | 21.43 | 21.81 | 22.00              |                    |
|                        | 12              | LOW       | 64QAM      | 19.36      | 19.38 | 19.24 | 20.50              |                    |
|                        |                 | MID       | 64QAM      | 19.90      | 19.66 | 19.04 | 20.50              |                    |
|                        |                 | HIGH      | 64QAM      | 19.15      | 19.19 | 19.20 | 20.50              |                    |
|                        | 25              | LOW       | 64QAM      | 19.84      | 19.96 | 19.20 | 20.50              |                    |

| LTE B4-State1&2 -Ant.3 |                 |           |            |            |       |       |                    |                    |
|------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)        | RB Size         | RB offset | Modulation | 20000      | 20175 | 20350 | Tune-up power(dBm) |                    |
| 10                     | 1               | LOW       | QPSK       | 22.65      | 22.69 | 22.60 | 23.50              |                    |
|                        |                 | MID       | QPSK       | 22.50      | 22.74 | 22.81 | 23.50              |                    |
|                        |                 | HIGH      | QPSK       | 22.54      | 22.91 | 22.71 | 23.50              |                    |
|                        | 25              | LOW       | QPSK       | 21.78      | 21.70 | 21.88 | 22.50              |                    |
|                        |                 | MID       | QPSK       | 21.68      | 21.70 | 21.73 | 22.50              |                    |
|                        |                 | HIGH      | QPSK       | 21.56      | 21.86 | 21.73 | 22.50              |                    |
|                        | 50              | LOW       | QPSK       | 21.69      | 21.53 | 21.62 | 22.50              |                    |
|                        | 10              | 1         | LOW        | Q16        | 22.22 | 22.52 | 22.65              | 23.00              |
|                        |                 |           | MID        | Q16        | 22.01 | 22.61 | 22.70              | 23.00              |
| HIGH                   |                 |           | Q16        | 22.01      | 22.54 | 22.72 | 23.00              |                    |
| 25                     |                 | LOW       | Q16        | 20.25      | 20.32 | 20.22 | 21.50              |                    |
|                        |                 | MID       | Q16        | 20.87      | 20.70 | 20.31 | 21.50              |                    |
|                        |                 | HIGH      | Q16        | 20.33      | 20.22 | 20.15 | 21.50              |                    |
| 50                     |                 | LOW       | Q16        | 20.56      | 20.59 | 20.38 | 21.50              |                    |
| 10                     |                 | 1         | LOW        | 64QAM      | 20.90 | 21.57 | 21.81              | 22.00              |
|                        |                 |           | MID        | 64QAM      | 21.07 | 21.51 | 21.90              | 22.00              |
|                        | HIGH            |           | 64QAM      | 21.15      | 21.44 | 21.81 | 22.00              |                    |
|                        | 25              | LOW       | 64QAM      | 19.52      | 19.25 | 19.33 | 20.50              |                    |
|                        |                 | MID       | 64QAM      | 19.80      | 19.81 | 19.09 | 20.50              |                    |
|                        |                 | HIGH      | 64QAM      | 19.22      | 19.42 | 19.22 | 20.50              |                    |
|                        | 50              | LOW       | 64QAM      | 19.67      | 19.72 | 19.16 | 20.50              |                    |
|                        | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20025 | 20175 | 20325              | Tune-up power(dBm) |
|                        | 15              | 1         | LOW        | QPSK       | 22.69 | 22.80 | 22.87              | 23.50              |
| MID                    |                 |           | QPSK       | 22.56      | 22.68 | 22.62 | 23.50              |                    |
| HIGH                   |                 |           | QPSK       | 22.61      | 23.01 | 22.86 | 23.50              |                    |
| 36                     |                 | LOW       | QPSK       | 21.69      | 21.58 | 21.79 | 22.50              |                    |
|                        |                 | MID       | QPSK       | 21.75      | 21.71 | 21.56 | 22.50              |                    |
|                        |                 | HIGH      | QPSK       | 21.78      | 21.72 | 21.70 | 22.50              |                    |
| 75                     |                 | LOW       | QPSK       | 21.72      | 21.64 | 21.88 | 22.50              |                    |
| 15                     |                 | 1         | LOW        | Q16        | 22.05 | 22.48 | 22.77              | 23.00              |
|                        |                 |           | MID        | Q16        | 22.01 | 22.42 | 22.86              | 23.00              |
|                        | HIGH            |           | Q16        | 21.95      | 22.44 | 22.74 | 23.00              |                    |
|                        | 36              | LOW       | Q16        | 20.38      | 20.35 | 20.39 | 21.50              |                    |
|                        |                 | MID       | Q16        | 20.72      | 20.67 | 20.22 | 21.50              |                    |
|                        |                 | HIGH      | Q16        | 20.42      | 20.21 | 20.17 | 21.50              |                    |
|                        | 75              | LOW       | Q16        | 20.71      | 20.85 | 20.40 | 21.50              |                    |
|                        | 15              | 1         | LOW        | 64QAM      | 20.88 | 21.55 | 21.68              | 22.00              |
|                        |                 |           | MID        | 64QAM      | 21.06 | 21.59 | 21.67              | 22.00              |
| HIGH                   |                 |           | 64QAM      | 21.30      | 21.49 | 21.78 | 22.00              |                    |
| 36                     |                 | LOW       | 64QAM      | 19.39      | 19.42 | 19.36 | 20.50              |                    |
|                        |                 | MID       | 64QAM      | 19.75      | 19.69 | 18.98 | 20.50              |                    |
|                        |                 | HIGH      | 64QAM      | 19.15      | 19.41 | 19.08 | 20.50              |                    |
| 75                     |                 | LOW       | 64QAM      | 19.69      | 19.87 | 19.14 | 20.50              |                    |
| Bandwidth (MHz)        |                 | RB Size   | RB offset  | Modulation | 20050 | 20175 | 20300              | Tune-up power(dBm) |
| 20                     |                 | 1         | LOW        | QPSK       | 22.71 | 22.80 | 22.72              | 23.50              |
|                        | MID             |           | QPSK       | 22.59      | 22.81 | 22.72 | 23.50              |                    |
|                        | HIGH            |           | QPSK       | 22.63      | 22.89 | 22.77 | 23.50              |                    |
|                        | 50              | LOW       | QPSK       | 21.68      | 21.73 | 21.75 | 22.50              |                    |
|                        |                 | MID       | QPSK       | 21.60      | 21.61 | 21.60 | 22.50              |                    |
|                        |                 | HIGH      | QPSK       | 21.70      | 21.79 | 21.78 | 22.50              |                    |
|                        | 100             | LOW       | QPSK       | 21.57      | 21.61 | 21.73 | 22.50              |                    |
|                        | 20              | 1         | LOW        | Q16        | 22.07 | 22.38 | 22.77              | 23.00              |
|                        |                 |           | MID        | Q16        | 21.94 | 22.51 | 22.71              | 23.00              |
| HIGH                   |                 |           | Q16        | 22.07      | 22.51 | 22.77 | 23.00              |                    |
| 50                     |                 | LOW       | Q16        | 20.34      | 20.30 | 20.32 | 21.50              |                    |
|                        |                 | MID       | Q16        | 20.73      | 20.70 | 20.18 | 21.50              |                    |
|                        |                 | HIGH      | Q16        | 20.28      | 20.35 | 20.25 | 21.50              |                    |
| 100                    |                 | LOW       | Q16        | 20.63      | 20.73 | 20.28 | 21.50              |                    |
| 20                     |                 | 1         | LOW        | 64QAM      | 20.95 | 21.46 | 21.73              | 22.00              |
|                        |                 |           | MID        | 64QAM      | 20.94 | 21.50 | 21.75              | 22.00              |
|                        | HIGH            |           | 64QAM      | 21.21      | 21.40 | 21.79 | 22.00              |                    |
|                        | 50              | LOW       | 64QAM      | 19.40      | 19.33 | 19.28 | 20.50              |                    |
|                        |                 | MID       | 64QAM      | 19.75      | 19.80 | 19.09 | 20.50              |                    |
|                        |                 | HIGH      | 64QAM      | 19.22      | 19.27 | 19.18 | 20.50              |                    |
|                        | 100             | LOW       | 64QAM      | 19.72      | 19.81 | 19.14 | 20.50              |                    |



| LTE B4-State3 -Ant.3 |                 |           |            |            |       |       |                    |                    |
|----------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)      | RB Size         | RB offset | Modulation | 19957      | 20175 | 20393 | Tune-up power(dBm) |                    |
| 1.4                  | 1               | LOW       | QPSK       | 20.06      | 20.42 | 19.96 | 21.00              |                    |
|                      |                 | MID       | QPSK       | 20.11      | 20.36 | 19.95 | 21.00              |                    |
|                      |                 | HIGH      | QPSK       | 20.04      | 20.36 | 19.96 | 21.00              |                    |
|                      | 3               | LOW       | QPSK       | 20.09      | 20.22 | 19.87 | 21.00              |                    |
|                      |                 | MID       | QPSK       | 20.16      | 20.31 | 19.93 | 21.00              |                    |
|                      |                 | HIGH      | QPSK       | 20.06      | 20.23 | 19.88 | 21.00              |                    |
|                      | 6               | LOW       | QPSK       | 19.12      | 19.21 | 18.91 | 20.00              |                    |
|                      | 1.4             | 1         | LOW        | Q16        | 19.26 | 19.89 | 19.15              | 20.00              |
|                      |                 |           | MID        | Q16        | 19.49 | 19.81 | 19.36              | 20.00              |
| HIGH                 |                 |           | Q16        | 19.30      | 19.91 | 19.17 | 20.00              |                    |
| 3                    |                 | LOW       | Q16        | 19.31      | 19.83 | 19.43 | 20.00              |                    |
|                      |                 | MID       | Q16        | 19.38      | 19.92 | 19.50 | 20.00              |                    |
|                      |                 | HIGH      | Q16        | 19.32      | 19.85 | 19.44 | 20.00              |                    |
| 6                    |                 | LOW       | Q16        | 17.85      | 17.45 | 18.09 | 19.00              |                    |
| 1.4                  |                 | 1         | LOW        | 64QAM      | 18.88 | 18.67 | 18.96              | 19.00              |
|                      |                 |           | MID        | 64QAM      | 18.34 | 18.49 | 18.68              | 19.00              |
|                      | HIGH            |           | 64QAM      | 18.87      | 18.23 | 18.50 | 19.00              |                    |
|                      | 3               | LOW       | 64QAM      | 18.86      | 18.71 | 18.89 | 19.00              |                    |
|                      |                 | MID       | 64QAM      | 18.17      | 18.30 | 18.44 | 19.00              |                    |
|                      |                 | HIGH      | 64QAM      | 18.75      | 18.18 | 18.53 | 19.00              |                    |
|                      | 6               | LOW       | 64QAM      | 16.92      | 16.81 | 16.74 | 18.00              |                    |
|                      | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 19965 | 20175 | 20385              | Tune-up power(dBm) |
|                      | 3               | 1         | LOW        | QPSK       | 19.98 | 20.03 | 20.26              | 21.00              |
| MID                  |                 |           | QPSK       | 20.09      | 20.18 | 20.42 | 21.00              |                    |
| HIGH                 |                 |           | QPSK       | 19.83      | 20.28 | 20.06 | 21.00              |                    |
| 8                    |                 | LOW       | QPSK       | 18.94      | 18.95 | 18.11 | 20.00              |                    |
|                      |                 | MID       | QPSK       | 18.85      | 18.87 | 18.20 | 20.00              |                    |
|                      |                 | HIGH      | QPSK       | 19.08      | 19.21 | 18.60 | 20.00              |                    |
| 15                   |                 | LOW       | QPSK       | 18.82      | 19.03 | 18.34 | 20.00              |                    |
| 3                    |                 | 1         | LOW        | Q16        | 19.90 | 19.65 | 19.90              | 20.00              |
|                      |                 |           | MID        | Q16        | 19.29 | 19.55 | 19.52              | 20.00              |
|                      | HIGH            |           | Q16        | 19.79      | 19.12 | 19.40 | 20.00              |                    |
|                      | 8               | LOW       | Q16        | 17.87      | 17.70 | 17.99 | 19.00              |                    |
|                      |                 | MID       | Q16        | 17.81      | 17.74 | 17.99 | 19.00              |                    |
|                      |                 | HIGH      | Q16        | 17.84      | 17.98 | 18.32 | 19.00              |                    |
|                      | 15              | LOW       | Q16        | 17.92      | 17.85 | 18.22 | 19.00              |                    |
|                      | 3               | 1         | LOW        | 64QAM      | 18.90 | 18.65 | 18.90              | 19.00              |
|                      |                 |           | MID        | 64QAM      | 18.29 | 18.55 | 18.52              | 19.00              |
| HIGH                 |                 |           | 64QAM      | 18.79      | 18.12 | 18.40 | 19.00              |                    |
| 8                    |                 | LOW       | 64QAM      | 16.87      | 16.70 | 16.99 | 18.00              |                    |
|                      |                 | MID       | 64QAM      | 16.81      | 16.74 | 16.99 | 18.00              |                    |
|                      |                 | HIGH      | 64QAM      | 16.84      | 16.98 | 17.32 | 18.00              |                    |
| 15                   |                 | LOW       | 64QAM      | 16.92      | 16.85 | 17.22 | 18.00              |                    |
| Bandwidth (MHz)      |                 | RB Size   | RB offset  | Modulation | 19975 | 20175 | 20375              | Tune-up power(dBm) |
| 5                    |                 | 1         | LOW        | QPSK       | 20.02 | 19.94 | 20.40              | 21.00              |
|                      | MID             |           | QPSK       | 20.26      | 20.30 | 20.47 | 21.00              |                    |
|                      | HIGH            |           | QPSK       | 20.09      | 20.46 | 20.01 | 21.00              |                    |
|                      | 12              | LOW       | QPSK       | 19.16      | 18.95 | 18.09 | 20.00              |                    |
|                      |                 | MID       | QPSK       | 18.69      | 18.81 | 18.21 | 20.00              |                    |
|                      |                 | HIGH      | QPSK       | 18.96      | 19.47 | 18.73 | 20.00              |                    |
|                      | 25              | LOW       | QPSK       | 19.01      | 19.28 | 18.47 | 20.00              |                    |
|                      | 5               | 1         | LOW        | Q16        | 19.70 | 19.75 | 19.84              | 20.00              |
|                      |                 |           | MID        | Q16        | 19.23 | 19.28 | 19.44              | 20.00              |
| HIGH                 |                 |           | Q16        | 19.81      | 19.25 | 19.49 | 20.00              |                    |
| 12                   |                 | LOW       | Q16        | 17.98      | 17.83 | 17.72 | 19.00              |                    |
|                      |                 | MID       | Q16        | 17.86      | 17.68 | 17.81 | 19.00              |                    |
|                      |                 | HIGH      | Q16        | 18.07      | 18.04 | 18.24 | 19.00              |                    |
| 25                   |                 | LOW       | Q16        | 17.86      | 17.77 | 18.09 | 19.00              |                    |
| 5                    |                 | 1         | LOW        | 64QAM      | 18.70 | 18.75 | 18.84              | 19.00              |
|                      |                 |           | MID        | 64QAM      | 18.23 | 18.28 | 18.44              | 19.00              |
|                      | HIGH            |           | 64QAM      | 18.81      | 18.25 | 18.49 | 19.00              |                    |
|                      | 12              | LOW       | 64QAM      | 16.98      | 16.83 | 16.72 | 18.00              |                    |
|                      |                 | MID       | 64QAM      | 16.86      | 16.68 | 16.81 | 18.00              |                    |
|                      |                 | HIGH      | 64QAM      | 17.07      | 17.04 | 17.24 | 18.00              |                    |
|                      | 25              | LOW       | 64QAM      | 16.86      | 16.77 | 17.09 | 18.00              |                    |



| LTE B4-State3 -Ant.3 |                 |           |            |            |       |       |                    |                    |
|----------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)      | RB Size         | RB offset | Modulation | 20000      | 20175 | 20350 | Tune-up power(dBm) |                    |
| 10                   | 1               | LOW       | QPSK       | 19.99      | 19.76 | 20.47 | 21.00              |                    |
|                      |                 | MID       | QPSK       | 20.10      | 20.38 | 20.29 | 21.00              |                    |
|                      |                 | HIGH      | QPSK       | 19.92      | 20.44 | 20.13 | 21.00              |                    |
|                      | 25              | LOW       | QPSK       | 18.97      | 18.89 | 18.24 | 20.00              |                    |
|                      |                 | MID       | QPSK       | 18.82      | 18.93 | 18.11 | 20.00              |                    |
|                      |                 | HIGH      | QPSK       | 18.95      | 19.39 | 18.75 | 20.00              |                    |
|                      | 50              | LOW       | QPSK       | 19.00      | 19.32 | 18.39 | 20.00              |                    |
|                      | 10              | 1         | LOW        | Q16        | 19.96 | 19.72 | 19.89              | 20.00              |
|                      |                 |           | MID        | Q16        | 19.23 | 19.30 | 19.50              | 20.00              |
| HIGH                 |                 |           | Q16        | 19.63      | 19.27 | 19.47 | 20.00              |                    |
| 25                   |                 | LOW       | Q16        | 17.93      | 17.66 | 17.76 | 19.00              |                    |
|                      |                 | MID       | Q16        | 17.67      | 17.60 | 17.76 | 19.00              |                    |
|                      |                 | HIGH      | Q16        | 17.99      | 18.11 | 18.22 | 19.00              |                    |
| 50                   |                 | LOW       | Q16        | 18.03      | 17.86 | 17.99 | 19.00              |                    |
| 10                   |                 | 1         | LOW        | 64QAM      | 18.96 | 18.72 | 18.89              | 19.00              |
|                      |                 |           | MID        | 64QAM      | 18.23 | 18.30 | 18.50              | 19.00              |
|                      | HIGH            |           | 64QAM      | 18.63      | 18.27 | 18.47 | 19.00              |                    |
|                      | 25              | LOW       | 64QAM      | 16.93      | 16.66 | 16.76 | 18.00              |                    |
|                      |                 | MID       | 64QAM      | 16.67      | 16.60 | 16.76 | 18.00              |                    |
|                      |                 | HIGH      | 64QAM      | 16.99      | 17.11 | 17.22 | 18.00              |                    |
|                      | 50              | LOW       | 64QAM      | 17.03      | 16.86 | 16.99 | 18.00              |                    |
|                      | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20025 | 20175 | 20325              | Tune-up power(dBm) |
|                      | 15              | 1         | LOW        | QPSK       | 19.98 | 20.00 | 20.37              | 21.00              |
| MID                  |                 |           | QPSK       | 20.31      | 20.20 | 20.23 | 21.00              |                    |
| HIGH                 |                 |           | QPSK       | 19.96      | 20.41 | 20.14 | 21.00              |                    |
| 36                   |                 | LOW       | QPSK       | 19.07      | 18.90 | 18.37 | 20.00              |                    |
|                      |                 | MID       | QPSK       | 18.84      | 19.09 | 18.19 | 20.00              |                    |
|                      |                 | HIGH      | QPSK       | 18.79      | 19.43 | 18.78 | 20.00              |                    |
| 75                   |                 | LOW       | QPSK       | 19.07      | 19.25 | 18.47 | 20.00              |                    |
| 15                   |                 | 1         | LOW        | Q16        | 19.75 | 19.72 | 19.74              | 20.00              |
|                      |                 |           | MID        | Q16        | 19.29 | 19.47 | 19.48              | 20.00              |
|                      | HIGH            |           | Q16        | 19.64      | 19.37 | 19.60 | 20.00              |                    |
|                      | 36              | LOW       | Q16        | 18.07      | 17.88 | 17.97 | 19.00              |                    |
|                      |                 | MID       | Q16        | 17.85      | 17.70 | 17.97 | 19.00              |                    |
|                      |                 | HIGH      | Q16        | 17.99      | 18.21 | 18.43 | 19.00              |                    |
|                      | 75              | LOW       | Q16        | 18.04      | 17.99 | 18.05 | 19.00              |                    |
|                      | 15              | 1         | LOW        | 64QAM      | 18.75 | 18.72 | 18.74              | 19.00              |
|                      |                 |           | MID        | 64QAM      | 18.29 | 18.47 | 18.48              | 19.00              |
| HIGH                 |                 |           | 64QAM      | 18.64      | 18.37 | 18.60 | 19.00              |                    |
| 36                   |                 | LOW       | 64QAM      | 17.07      | 16.88 | 16.97 | 18.00              |                    |
|                      |                 | MID       | 64QAM      | 16.85      | 16.70 | 16.97 | 18.00              |                    |
|                      |                 | HIGH      | 64QAM      | 16.99      | 17.21 | 17.43 | 18.00              |                    |
| 75                   |                 | LOW       | 64QAM      | 17.04      | 16.99 | 17.05 | 18.00              |                    |
| Bandwidth (MHz)      |                 | RB Size   | RB offset  | Modulation | 20050 | 20175 | 20300              | Tune-up power(dBm) |
| 20                   |                 | 1         | LOW        | QPSK       | 20.03 | 19.91 | 20.35              | 21.00              |
|                      | MID             |           | QPSK       | 20.23      | 20.30 | 20.38 | 21.00              |                    |
|                      | HIGH            |           | QPSK       | 19.96      | 20.39 | 20.10 | 21.00              |                    |
|                      | 50              | LOW       | QPSK       | 19.03      | 19.04 | 18.22 | 20.00              |                    |
|                      |                 | MID       | QPSK       | 18.78      | 18.96 | 18.24 | 20.00              |                    |
|                      |                 | HIGH      | QPSK       | 18.94      | 19.35 | 18.69 | 20.00              |                    |
|                      | 100             | LOW       | QPSK       | 18.96      | 19.17 | 18.45 | 20.00              |                    |
|                      | 20              | 1         | LOW        | Q16        | 19.84 | 19.75 | 19.81              | 20.00              |
|                      |                 |           | MID        | Q16        | 19.28 | 19.41 | 19.59              | 20.00              |
| HIGH                 |                 |           | Q16        | 19.77      | 19.22 | 19.55 | 20.00              |                    |
| 50                   |                 | LOW       | Q16        | 18.00      | 17.74 | 17.86 | 19.00              |                    |
|                      |                 | MID       | Q16        | 17.79      | 17.70 | 17.91 | 19.00              |                    |
|                      |                 | HIGH      | Q16        | 17.95      | 18.11 | 18.36 | 19.00              |                    |
| 100                  |                 | LOW       | Q16        | 17.97      | 17.91 | 18.13 | 19.00              |                    |
| 20                   |                 | 1         | LOW        | 64QAM      | 18.88 | 18.60 | 18.83              | 19.00              |
|                      |                 |           | MID        | 64QAM      | 18.18 | 18.35 | 18.63              | 19.00              |
|                      | HIGH            |           | 64QAM      | 18.71      | 18.28 | 18.41 | 19.00              |                    |
|                      | 50              | LOW       | 64QAM      | 17.03      | 16.67 | 16.82 | 18.00              |                    |
|                      |                 | MID       | 64QAM      | 16.88      | 16.55 | 16.85 | 18.00              |                    |
|                      |                 | HIGH      | 64QAM      | 16.88      | 17.19 | 17.32 | 18.00              |                    |
|                      | 100             | LOW       | 64QAM      | 16.96      | 16.82 | 17.26 | 18.00              |                    |

| LTE B4-State4 -Ant.3 |                 |           |            |            |       |       |                    |                    |
|----------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)      | RB Size         | RB offset | Modulation | 19957      | 20175 | 20393 | Tune-up power(dBm) |                    |
| 1.4                  | 1               | LOW       | QPSK       | 18.53      | 18.69 | 18.74 | 20.50              |                    |
|                      |                 | MID       | QPSK       | 18.81      | 18.58 | 18.68 | 20.50              |                    |
|                      |                 | HIGH      | QPSK       | 18.63      | 18.89 | 18.59 | 20.50              |                    |
|                      | 3               | LOW       | QPSK       | 18.68      | 18.54 | 18.59 | 20.50              |                    |
|                      |                 | MID       | QPSK       | 18.75      | 18.54 | 18.68 | 20.50              |                    |
|                      |                 | HIGH      | QPSK       | 18.69      | 18.56 | 18.65 | 20.50              |                    |
|                      | 6               | LOW       | QPSK       | 17.63      | 17.54 | 17.77 | 19.50              |                    |
|                      | 1.4             | 1         | LOW        | Q16        | 17.66 | 17.82 | 17.71              | 19.50              |
|                      |                 |           | MID        | Q16        | 17.90 | 18.06 | 17.93              | 19.50              |
| HIGH                 |                 |           | Q16        | 17.73      | 17.87 | 17.75 | 19.50              |                    |
| 3                    |                 | LOW       | Q16        | 17.73      | 17.79 | 18.01 | 19.50              |                    |
|                      |                 | MID       | Q16        | 17.80      | 17.88 | 18.09 | 19.50              |                    |
|                      |                 | HIGH      | Q16        | 17.75      | 17.83 | 18.03 | 19.50              |                    |
| 6                    |                 | LOW       | Q16        | 16.53      | 16.54 | 16.55 | 18.50              |                    |
| 1.4                  |                 | 1         | LOW        | 64QAM      | 17.55 | 17.54 | 17.29              | 18.50              |
|                      |                 |           | MID        | 64QAM      | 17.21 | 17.00 | 17.16              | 18.50              |
|                      | HIGH            |           | 64QAM      | 17.47      | 18.04 | 18.00 | 18.50              |                    |
|                      | 3               | LOW       | 64QAM      | 17.77      | 17.33 | 17.49 | 18.50              |                    |
|                      |                 | MID       | 64QAM      | 17.07      | 17.17 | 17.25 | 18.50              |                    |
|                      |                 | HIGH      | 64QAM      | 17.65      | 17.90 | 18.19 | 18.50              |                    |
|                      | 6               | LOW       | 64QAM      | 15.83      | 15.97 | 15.98 | 17.50              |                    |
|                      | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 19965 | 20175 | 20385              | Tune-up power(dBm) |
|                      | 3               | 1         | LOW        | QPSK       | 19.19 | 18.92 | 18.75              | 20.50              |
| MID                  |                 |           | QPSK       | 18.72      | 18.82 | 18.82 | 20.50              |                    |
| HIGH                 |                 |           | QPSK       | 18.89      | 19.46 | 19.49 | 20.50              |                    |
| 8                    |                 | LOW       | QPSK       | 17.88      | 17.82 | 17.78 | 19.50              |                    |
|                      |                 | MID       | QPSK       | 17.84      | 17.63 | 18.00 | 19.50              |                    |
|                      |                 | HIGH      | QPSK       | 17.92      | 18.20 | 18.39 | 19.50              |                    |
| 15                   |                 | LOW       | QPSK       | 17.89      | 17.93 | 18.27 | 19.50              |                    |
| 3                    |                 | 1         | LOW        | Q16        | 18.48 | 18.48 | 18.52              | 19.50              |
|                      |                 |           | MID        | Q16        | 18.21 | 18.14 | 18.19              | 19.50              |
|                      | HIGH            |           | Q16        | 18.58      | 19.02 | 19.27 | 19.50              |                    |
|                      | 8               | LOW       | Q16        | 16.91      | 16.81 | 16.84 | 18.50              |                    |
|                      |                 | MID       | Q16        | 16.80      | 16.74 | 16.66 | 18.50              |                    |
|                      |                 | HIGH      | Q16        | 16.75      | 16.74 | 16.79 | 18.50              |                    |
|                      | 15              | LOW       | Q16        | 16.65      | 16.74 | 16.71 | 18.50              |                    |
|                      | 3               | 1         | LOW        | 64QAM      | 17.48 | 17.48 | 17.52              | 18.50              |
|                      |                 |           | MID        | 64QAM      | 17.21 | 17.14 | 17.19              | 18.50              |
| HIGH                 |                 |           | 64QAM      | 17.58      | 18.02 | 18.27 | 18.50              |                    |
| 8                    |                 | LOW       | 64QAM      | 15.91      | 15.81 | 15.84 | 17.50              |                    |
|                      |                 | MID       | 64QAM      | 15.80      | 15.74 | 15.66 | 17.50              |                    |
|                      |                 | HIGH      | 64QAM      | 15.75      | 15.74 | 15.79 | 17.50              |                    |
| 15                   |                 | LOW       | 64QAM      | 15.65      | 15.74 | 15.71 | 17.50              |                    |
| Bandwidth (MHz)      |                 | RB Size   | RB offset  | Modulation | 19975 | 20175 | 20375              | Tune-up power(dBm) |
| 5                    |                 | 1         | LOW        | QPSK       | 19.03 | 19.07 | 18.61              | 20.50              |
|                      | MID             |           | QPSK       | 18.56      | 18.67 | 18.62 | 20.50              |                    |
|                      | HIGH            |           | QPSK       | 18.95      | 19.46 | 19.50 | 20.50              |                    |
|                      | 12              | LOW       | QPSK       | 17.84      | 17.81 | 17.98 | 19.50              |                    |
|                      |                 | MID       | QPSK       | 17.85      | 17.55 | 17.86 | 19.50              |                    |
|                      |                 | HIGH      | QPSK       | 17.90      | 18.10 | 18.48 | 19.50              |                    |
|                      | 25              | LOW       | QPSK       | 17.83      | 18.01 | 18.26 | 19.50              |                    |
|                      | 5               | 1         | LOW        | Q16        | 18.70 | 18.53 | 18.24              | 19.50              |
|                      |                 |           | MID        | Q16        | 18.11 | 18.00 | 18.23              | 19.50              |
| HIGH                 |                 |           | Q16        | 18.70      | 19.07 | 19.10 | 19.50              |                    |
| 12                   |                 | LOW       | Q16        | 16.94      | 16.90 | 16.94 | 18.50              |                    |
|                      |                 | MID       | Q16        | 16.89      | 16.81 | 16.72 | 18.50              |                    |
|                      |                 | HIGH      | Q16        | 16.96      | 16.77 | 16.89 | 18.50              |                    |
| 25                   |                 | LOW       | Q16        | 16.84      | 16.90 | 16.56 | 18.50              |                    |
| 5                    |                 | 1         | LOW        | 64QAM      | 17.70 | 17.53 | 17.24              | 18.50              |
|                      |                 |           | MID        | 64QAM      | 17.11 | 17.00 | 17.23              | 18.50              |
|                      | HIGH            |           | 64QAM      | 17.70      | 18.07 | 18.10 | 18.50              |                    |
|                      | 12              | LOW       | 64QAM      | 15.94      | 15.90 | 15.94 | 17.50              |                    |
|                      |                 | MID       | 64QAM      | 15.89      | 15.81 | 15.72 | 17.50              |                    |
|                      |                 | HIGH      | 64QAM      | 15.96      | 15.77 | 15.89 | 17.50              |                    |
|                      | 25              | LOW       | 64QAM      | 15.84      | 15.90 | 15.56 | 17.50              |                    |

| LTE B4-State4 -Ant.3 |                 |           |            |            |       |       |                    |                    |
|----------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)      | RB Size         | RB offset | Modulation | 20000      | 20175 | 20350 | Tune-up power(dBm) |                    |
| 10                   | 1               | LOW       | QPSK       | 19.09      | 18.80 | 18.78 | 20.50              |                    |
|                      |                 | MID       | QPSK       | 18.70      | 18.84 | 18.70 | 20.50              |                    |
|                      |                 | HIGH      | QPSK       | 18.95      | 19.46 | 19.53 | 20.50              |                    |
|                      | 25              | LOW       | QPSK       | 17.83      | 17.67 | 17.75 | 19.50              |                    |
|                      |                 | MID       | QPSK       | 17.84      | 17.54 | 17.93 | 19.50              |                    |
|                      |                 | HIGH      | QPSK       | 17.77      | 17.96 | 18.35 | 19.50              |                    |
|                      | 50              | LOW       | QPSK       | 18.02      | 17.86 | 18.09 | 19.50              |                    |
|                      | 10              | 1         | LOW        | Q16        | 18.51 | 18.42 | 18.38              | 19.50              |
|                      |                 |           | MID        | Q16        | 18.28 | 18.06 | 18.31              | 19.50              |
| HIGH                 |                 |           | Q16        | 18.67      | 19.06 | 19.25 | 19.50              |                    |
| 25                   |                 | LOW       | Q16        | 16.86      | 16.88 | 16.96 | 18.50              |                    |
|                      |                 | MID       | Q16        | 16.92      | 16.98 | 16.81 | 18.50              |                    |
|                      |                 | HIGH      | Q16        | 16.97      | 16.85 | 16.83 | 18.50              |                    |
| 50                   |                 | LOW       | Q16        | 16.80      | 16.80 | 16.80 | 18.50              |                    |
| 10                   |                 | 1         | LOW        | 64QAM      | 17.51 | 17.42 | 17.38              | 18.50              |
|                      |                 |           | MID        | 64QAM      | 17.28 | 17.06 | 17.31              | 18.50              |
|                      | HIGH            |           | 64QAM      | 17.67      | 18.06 | 18.25 | 18.50              |                    |
|                      | 25              | LOW       | 64QAM      | 15.86      | 15.88 | 15.96 | 17.50              |                    |
|                      |                 | MID       | 64QAM      | 15.92      | 15.98 | 15.81 | 17.50              |                    |
|                      |                 | HIGH      | 64QAM      | 15.97      | 15.85 | 15.83 | 17.50              |                    |
|                      | 50              | LOW       | 64QAM      | 15.80      | 15.80 | 15.80 | 17.50              |                    |
|                      | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20025 | 20175 | 20325              | Tune-up power(dBm) |
|                      | 15              | 1         | LOW        | QPSK       | 19.18 | 18.84 | 18.57              | 20.50              |
| MID                  |                 |           | QPSK       | 18.63      | 18.89 | 18.83 | 20.50              |                    |
| HIGH                 |                 |           | QPSK       | 19.03      | 19.44 | 19.47 | 20.50              |                    |
| 36                   |                 | LOW       | QPSK       | 18.05      | 17.74 | 17.85 | 19.50              |                    |
|                      |                 | MID       | QPSK       | 17.70      | 17.71 | 17.92 | 19.50              |                    |
|                      |                 | HIGH      | QPSK       | 18.03      | 18.07 | 18.45 | 19.50              |                    |
| 75                   |                 | LOW       | QPSK       | 17.81      | 17.98 | 18.20 | 19.50              |                    |
| 15                   |                 | 1         | LOW        | Q16        | 18.72 | 18.56 | 18.52              | 19.50              |
|                      |                 |           | MID        | Q16        | 18.03 | 18.23 | 18.24              | 19.50              |
|                      | HIGH            |           | Q16        | 18.63      | 18.93 | 18.97 | 19.50              |                    |
|                      | 36              | LOW       | Q16        | 16.80      | 16.89 | 16.82 | 18.50              |                    |
|                      |                 | MID       | Q16        | 16.77      | 16.95 | 16.69 | 18.50              |                    |
|                      |                 | HIGH      | Q16        | 16.92      | 16.78 | 16.91 | 18.50              |                    |
|                      | 75              | LOW       | Q16        | 16.91      | 16.92 | 16.72 | 18.50              |                    |
|                      | 15              | 1         | LOW        | 64QAM      | 17.72 | 17.56 | 17.52              | 18.50              |
|                      |                 |           | MID        | 64QAM      | 17.03 | 17.23 | 17.24              | 18.50              |
| HIGH                 |                 |           | 64QAM      | 17.63      | 17.93 | 17.97 | 18.50              |                    |
| 36                   |                 | LOW       | 64QAM      | 15.80      | 15.89 | 15.82 | 17.50              |                    |
|                      |                 | MID       | 64QAM      | 15.77      | 15.95 | 15.69 | 17.50              |                    |
|                      |                 | HIGH      | 64QAM      | 15.92      | 15.78 | 15.91 | 17.50              |                    |
| 75                   |                 | LOW       | 64QAM      | 15.91      | 15.92 | 15.72 | 17.50              |                    |
| Bandwidth (MHz)      |                 | RB Size   | RB offset  | Modulation | 20050 | 20175 | 20300              | Tune-up power(dBm) |
| 20                   |                 | 1         | LOW        | QPSK       | 19.08 | 18.93 | 18.69              | 20.50              |
|                      | MID             |           | QPSK       | 18.69      | 18.74 | 18.73 | 20.50              |                    |
|                      | HIGH            |           | QPSK       | 18.97      | 19.49 | 19.38 | 20.50              |                    |
|                      | 50              | LOW       | QPSK       | 17.97      | 17.73 | 17.89 | 19.50              |                    |
|                      |                 | MID       | QPSK       | 17.75      | 17.67 | 17.94 | 19.50              |                    |
|                      |                 | HIGH      | QPSK       | 17.90      | 18.38 | 18.07 | 19.50              |                    |
|                      | 100             | LOW       | QPSK       | 17.92      | 17.89 | 18.13 | 19.50              |                    |
|                      | 20              | 1         | LOW        | Q16        | 18.63 | 18.44 | 18.37              | 19.50              |
|                      |                 |           | MID        | Q16        | 18.13 | 18.15 | 18.23              | 19.50              |
| HIGH                 |                 |           | Q16        | 18.56      | 18.95 | 19.12 | 19.50              |                    |
| 50                   |                 | LOW       | Q16        | 16.83      | 16.84 | 16.88 | 18.50              |                    |
|                      |                 | MID       | Q16        | 16.82      | 16.84 | 16.81 | 18.50              |                    |
|                      |                 | HIGH      | Q16        | 16.85      | 16.89 | 16.93 | 18.50              |                    |
| 100                  |                 | LOW       | Q16        | 16.78      | 16.79 | 16.70 | 18.50              |                    |
| 20                   |                 | 1         | LOW        | 64QAM      | 17.56 | 17.36 | 17.36              | 18.50              |
|                      |                 |           | MID        | 64QAM      | 17.28 | 17.14 | 17.10              | 18.50              |
|                      | HIGH            |           | 64QAM      | 17.66      | 17.82 | 18.03 | 18.50              |                    |
|                      | 50              | LOW       | 64QAM      | 15.84      | 15.76 | 15.77 | 17.50              |                    |
|                      |                 | MID       | 64QAM      | 15.75      | 15.95 | 15.88 | 17.50              |                    |
|                      |                 | HIGH      | 64QAM      | 15.87      | 15.81 | 15.84 | 17.50              |                    |
|                      | 100             | LOW       | 64QAM      | 15.93      | 15.86 | 15.66 | 17.50              |                    |

### 8.3.3 LTE Band5 Output Power

| LTE B5-Full Power -Ant.2 |           |           |            |            |       |       |                    |                    |
|--------------------------|-----------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth                | RB Size   | RB offset | Modulation | 20407      | 20525 | 20643 | Tune-up power(dBm) |                    |
| 1.4                      | 1         | LOW       | QPSK       | 23.92      | 23.83 | 23.88 | 24.50              |                    |
|                          |           | MID       | QPSK       | 23.88      | 23.91 | 23.95 | 24.50              |                    |
|                          |           | HIGH      | QPSK       | 23.90      | 23.87 | 23.92 | 24.50              |                    |
|                          | 3         | LOW       | QPSK       | 23.97      | 23.94 | 23.98 | 24.50              |                    |
|                          |           | MID       | QPSK       | 23.94      | 23.99 | 23.97 | 24.50              |                    |
|                          |           | HIGH      | QPSK       | 23.93      | 23.91 | 23.89 | 24.50              |                    |
|                          | 6         | LOW       | QPSK       | 22.89      | 22.96 | 22.96 | 23.50              |                    |
|                          | 1.4       | 1         | LOW        | Q16        | 23.28 | 23.34 | 23.39              | 23.50              |
|                          |           |           | MID        | Q16        | 23.24 | 23.31 | 23.43              | 23.50              |
| HIGH                     |           |           | Q16        | 23.31      | 23.29 | 23.42 | 23.50              |                    |
| 3                        |           | LOW       | Q16        | 23.01      | 22.85 | 23.15 | 23.50              |                    |
|                          |           | MID       | Q16        | 22.99      | 22.92 | 23.18 | 23.50              |                    |
|                          |           | HIGH      | Q16        | 23.09      | 22.88 | 23.18 | 23.50              |                    |
| 6                        |           | LOW       | Q16        | 22.06      | 21.97 | 22.09 | 22.50              |                    |
| 1.4                      |           | 1         | LOW        | 64QAM      | 22.37 | 22.27 | 22.42              | 22.50              |
|                          |           |           | MID        | 64QAM      | 22.12 | 22.40 | 22.04              | 22.50              |
|                          | HIGH      |           | 64QAM      | 22.17      | 22.33 | 22.42 | 22.50              |                    |
|                          | 3         | LOW       | 64QAM      | 22.01      | 21.85 | 22.16 | 22.50              |                    |
|                          |           | MID       | 64QAM      | 22.07      | 22.01 | 22.06 | 22.50              |                    |
|                          |           | HIGH      | 64QAM      | 22.24      | 21.99 | 22.20 | 22.50              |                    |
|                          | 6         | LOW       | 64QAM      | 21.14      | 20.82 | 21.19 | 21.50              |                    |
|                          | Bandwidth | RB Size   | RB offset  | Modulation | 20415 | 20525 | 20635              | Tune-up power(dBm) |
|                          | 3         | 1         | LOW        | QPSK       | 23.65 | 24.02 | 23.95              | 24.50              |
| MID                      |           |           | QPSK       | 23.92      | 23.87 | 23.91 | 24.50              |                    |
| HIGH                     |           |           | QPSK       | 23.73      | 23.99 | 23.88 | 24.50              |                    |
| 8                        |           | LOW       | QPSK       | 22.74      | 22.86 | 22.96 | 23.50              |                    |
|                          |           | MID       | QPSK       | 23.37      | 22.98 | 22.75 | 23.50              |                    |
|                          |           | HIGH      | QPSK       | 22.83      | 23.10 | 23.03 | 23.50              |                    |
| 15                       |           | LOW       | QPSK       | 23.09      | 22.89 | 22.91 | 23.50              |                    |
| 3                        |           | 1         | LOW        | Q16        | 23.34 | 23.20 | 22.52              | 23.50              |
|                          |           |           | MID        | Q16        | 23.18 | 23.09 | 22.59              | 23.50              |
|                          | HIGH      |           | Q16        | 23.10      | 22.92 | 23.41 | 23.50              |                    |
|                          | 8         | LOW       | Q16        | 21.88      | 22.10 | 22.00 | 22.50              |                    |
|                          |           | MID       | Q16        | 22.20      | 22.39 | 21.94 | 22.50              |                    |
|                          |           | HIGH      | Q16        | 21.82      | 21.90 | 21.97 | 22.50              |                    |
|                          | 15        | LOW       | Q16        | 22.36      | 22.31 | 21.80 | 22.50              |                    |
|                          | 3         | 1         | LOW        | 64QAM      | 22.43 | 21.90 | 22.43              | 22.50              |
|                          |           |           | MID        | 64QAM      | 22.25 | 22.09 | 21.72              | 22.50              |
| HIGH                     |           |           | 64QAM      | 22.00      | 21.94 | 21.54 | 22.50              |                    |
| 8                        |           | LOW       | 64QAM      | 21.09      | 21.20 | 20.88 | 21.50              |                    |
|                          |           | MID       | 64QAM      | 21.26      | 21.31 | 21.18 | 21.50              |                    |
|                          |           | HIGH      | 64QAM      | 20.76      | 21.01 | 21.01 | 21.50              |                    |
| 15                       |           | LOW       | 64QAM      | 21.27      | 21.32 | 20.97 | 21.50              |                    |

| LTE B5-Full Power -Ant.2 |           |           |            |            |       |       |                    |                    |
|--------------------------|-----------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth                | RB Size   | RB offset | Modulation | 20425      | 20525 | 20625 | Tune-up power(dBm) |                    |
| 5                        | 1         | LOW       | QPSK       | 23.83      | 24.10 | 23.98 | 24.50              |                    |
|                          |           | MID       | QPSK       | 23.69      | 23.93 | 23.83 | 24.50              |                    |
|                          |           | HIGH      | QPSK       | 23.77      | 23.95 | 23.80 | 24.50              |                    |
|                          | 12        | LOW       | QPSK       | 22.70      | 22.98 | 22.89 | 23.50              |                    |
|                          |           | MID       | QPSK       | 23.15      | 22.84 | 22.97 | 23.50              |                    |
|                          |           | HIGH      | QPSK       | 23.06      | 23.06 | 23.10 | 23.50              |                    |
|                          | 25        | LOW       | QPSK       | 23.25      | 22.88 | 22.92 | 23.50              |                    |
|                          | 5         | 1         | LOW        | Q16        | 23.49 | 23.11 | 23.31              | 23.50              |
|                          |           |           | MID        | Q16        | 23.41 | 23.09 | 23.33              | 23.50              |
| HIGH                     |           |           | Q16        | 23.01      | 23.15 | 23.04 | 23.50              |                    |
| 12                       |           | LOW       | Q16        | 22.11      | 22.12 | 21.91 | 22.50              |                    |
|                          |           | MID       | Q16        | 22.20      | 22.44 | 21.82 | 22.50              |                    |
|                          |           | HIGH      | Q16        | 21.90      | 22.07 | 21.95 | 22.50              |                    |
| 25                       |           | LOW       | Q16        | 22.15      | 22.46 | 21.86 | 22.50              |                    |
| 5                        |           | 1         | LOW        | 64QAM      | 22.35 | 21.81 | 22.26              | 22.50              |
|                          |           |           | MID        | 64QAM      | 22.46 | 21.98 | 22.50              | 22.50              |
|                          | HIGH      |           | 64QAM      | 22.25      | 21.94 | 22.47 | 22.50              |                    |
|                          | 12        | LOW       | 64QAM      | 21.10      | 21.28 | 20.85 | 21.50              |                    |
|                          |           | MID       | 64QAM      | 21.19      | 21.37 | 20.95 | 21.50              |                    |
|                          |           | HIGH      | 64QAM      | 20.88      | 20.94 | 21.07 | 21.50              |                    |
|                          | 25        | LOW       | 64QAM      | 21.34      | 21.21 | 20.85 | 21.50              |                    |
|                          | Bandwidth | RB Size   | RB offset  | Modulation | 20450 | 20525 | 20600              | Tune-up power(dBm) |
|                          | 10        | 1         | LOW        | QPSK       | 23.77 | 24.01 | 23.95              | 24.50              |
| MID                      |           |           | QPSK       | 23.77      | 24.00 | 23.90 | 24.50              |                    |
| HIGH                     |           |           | QPSK       | 23.82      | 23.98 | 23.84 | 24.50              |                    |
| 25                       |           | LOW       | QPSK       | 22.84      | 22.91 | 22.85 | 23.50              |                    |
|                          |           | MID       | QPSK       | 23.29      | 22.90 | 22.87 | 23.50              |                    |
|                          |           | HIGH      | QPSK       | 22.97      | 23.01 | 22.99 | 23.50              |                    |
| 50                       |           | LOW       | QPSK       | 23.17      | 22.83 | 22.87 | 23.50              |                    |
| 10                       |           | 1         | LOW        | Q16        | 23.45 | 23.06 | 23.45              | 23.50              |
|                          |           |           | MID        | Q16        | 23.31 | 23.09 | 23.45              | 23.50              |
|                          | HIGH      |           | Q16        | 23.03      | 23.05 | 23.50 | 23.50              |                    |
|                          | 25        | LOW       | Q16        | 21.96      | 22.00 | 22.06 | 22.50              |                    |
|                          |           | MID       | Q16        | 22.30      | 22.35 | 21.96 | 22.50              |                    |
|                          |           | HIGH      | Q16        | 21.94      | 22.05 | 21.97 | 22.50              |                    |
|                          | 50        | LOW       | Q16        | 22.25      | 22.37 | 21.90 | 22.50              |                    |
|                          | 10        | 1         | LOW        | 64QAM      | 22.45 | 21.91 | 22.39              | 22.50              |
|                          |           |           | MID        | 64QAM      | 22.33 | 21.97 | 22.08              | 22.50              |
| HIGH                     |           |           | 64QAM      | 22.13      | 22.00 | 22.07 | 22.50              |                    |
| 25                       |           | LOW       | 64QAM      | 20.95      | 21.15 | 20.99 | 21.50              |                    |
|                          |           | MID       | 64QAM      | 21.29      | 21.29 | 21.04 | 21.50              |                    |
|                          |           | HIGH      | 64QAM      | 20.83      | 21.08 | 20.93 | 21.50              |                    |
| 50                       |           | LOW       | 64QAM      | 21.29      | 21.33 | 20.88 | 21.50              |                    |

| LTE B5-State1&2 -Ant.2 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth              | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 21.98 | 22.18 | 22.07 | 23.00              |
|                        |         | MID       | QPSK       | 21.98 | 22.12 | 22.15 | 23.00              |
|                        |         | HIGH      | QPSK       | 22.08 | 22.14 | 22.14 | 23.00              |
|                        | 3       | LOW       | QPSK       | 22.02 | 22.05 | 22.11 | 23.00              |
|                        |         | MID       | QPSK       | 22.00 | 21.97 | 22.12 | 23.00              |
|                        |         | HIGH      | QPSK       | 21.95 | 22.13 | 22.15 | 23.00              |
| 6                      | LOW     | QPSK      | 21.09      | 21.11 | 21.14 | 22.00 |                    |
| 1.4                    | 1       | LOW       | Q16        | 22.34 | 21.83 | 21.88 | 22.50              |
|                        |         | MID       | Q16        | 22.31 | 21.80 | 21.88 | 22.50              |
|                        |         | HIGH      | Q16        | 22.30 | 21.76 | 21.87 | 22.50              |
|                        | 3       | LOW       | Q16        | 21.09 | 21.02 | 20.96 | 22.50              |
|                        |         | MID       | Q16        | 21.06 | 20.95 | 20.98 | 22.50              |
|                        |         | HIGH      | Q16        | 21.02 | 21.01 | 21.19 | 22.50              |
| 6                      | LOW     | Q16       | 19.99      | 19.86 | 20.14 | 21.50 |                    |
| 1.4                    | 1       | LOW       | 64QAM      | 21.09 | 21.21 | 20.66 | 22.00              |
|                        |         | MID       | 64QAM      | 21.13 | 21.27 | 21.26 | 22.00              |
|                        |         | HIGH      | 64QAM      | 21.11 | 21.49 | 20.94 | 22.00              |
|                        | 3       | LOW       | 64QAM      | 20.97 | 21.37 | 20.91 | 22.00              |
|                        |         | MID       | 64QAM      | 21.11 | 21.16 | 21.16 | 22.00              |
|                        |         | HIGH      | 64QAM      | 21.09 | 21.54 | 20.98 | 22.00              |
| 6                      | LOW     | 64QAM     | 19.08      | 19.30 | 19.21 | 20.00 |                    |
| Bandwidth              | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 21.90 | 22.00 | 22.00 | 23.00              |
|                        |         | MID       | QPSK       | 21.94 | 21.84 | 21.93 | 23.00              |
|                        |         | HIGH      | QPSK       | 21.82 | 21.97 | 22.07 | 23.00              |
|                        | 8       | LOW       | QPSK       | 20.98 | 21.33 | 21.20 | 22.00              |
|                        |         | MID       | QPSK       | 20.97 | 20.85 | 21.42 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.11 | 20.93 | 21.03 | 22.00              |
| 15                     | LOW     | QPSK      | 21.09      | 20.99 | 21.29 | 22.00 |                    |
| 3                      | 1       | LOW       | Q16        | 22.06 | 22.39 | 21.90 | 22.50              |
|                        |         | MID       | Q16        | 22.03 | 22.16 | 22.15 | 22.50              |
|                        |         | HIGH      | Q16        | 22.03 | 22.30 | 21.90 | 22.50              |
|                        | 8       | LOW       | Q16        | 19.95 | 20.20 | 20.16 | 21.50              |
|                        |         | MID       | Q16        | 20.17 | 20.10 | 20.66 | 21.50              |
|                        |         | HIGH      | Q16        | 20.03 | 20.19 | 20.38 | 21.50              |
| 15                     | LOW     | Q16       | 20.21      | 20.12 | 20.57 | 21.50 |                    |
| 3                      | 1       | LOW       | 64QAM      | 21.06 | 21.39 | 20.90 | 22.00              |
|                        |         | MID       | 64QAM      | 21.03 | 21.16 | 21.15 | 22.00              |
|                        |         | HIGH      | 64QAM      | 21.03 | 21.30 | 20.90 | 22.00              |
|                        | 8       | LOW       | 64QAM      | 18.95 | 19.20 | 19.16 | 20.00              |
|                        |         | MID       | 64QAM      | 19.17 | 19.10 | 19.66 | 20.00              |
|                        |         | HIGH      | 64QAM      | 19.03 | 19.19 | 19.38 | 20.00              |
| 15                     | LOW     | 64QAM     | 19.21      | 19.12 | 19.57 | 20.00 |                    |

| LTE B5-State1&2 -Ant.2 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth              | RB Size | RB offset | Modulation | 20425 | 20525 | 20625 | Tune-up power(dBm) |
| 5                      | 1       | LOW       | QPSK       | 21.74 | 21.91 | 22.03 | 23.00              |
|                        |         | MID       | QPSK       | 21.85 | 21.90 | 21.93 | 23.00              |
|                        |         | HIGH      | QPSK       | 22.10 | 22.14 | 22.17 | 23.00              |
|                        | 12      | LOW       | QPSK       | 20.95 | 21.29 | 21.33 | 22.00              |
|                        |         | MID       | QPSK       | 21.27 | 20.99 | 21.41 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.05 | 21.07 | 20.99 | 22.00              |
| 25                     | LOW     | QPSK      | 21.16      | 20.92 | 21.31 | 22.00 |                    |
| 5                      | 1       | LOW       | Q16        | 22.00 | 22.26 | 21.81 | 22.50              |
|                        |         | MID       | Q16        | 21.98 | 22.45 | 22.16 | 22.50              |
|                        |         | HIGH      | Q16        | 22.02 | 22.27 | 21.88 | 22.50              |
|                        | 12      | LOW       | Q16        | 19.84 | 20.32 | 20.31 | 21.50              |
|                        |         | MID       | Q16        | 20.19 | 20.15 | 20.74 | 21.50              |
|                        |         | HIGH      | Q16        | 19.97 | 19.96 | 20.35 | 21.50              |
| 25                     | LOW     | Q16       | 20.10      | 20.11 | 20.45 | 21.50 |                    |
| 5                      | 1       | LOW       | 64QAM      | 21.00 | 21.26 | 20.81 | 22.00              |
|                        |         | MID       | 64QAM      | 20.98 | 21.45 | 21.16 | 22.00              |
|                        |         | HIGH      | 64QAM      | 21.02 | 21.27 | 20.88 | 22.00              |
|                        | 12      | LOW       | 64QAM      | 18.84 | 19.32 | 19.31 | 20.00              |
|                        |         | MID       | 64QAM      | 19.19 | 19.15 | 19.74 | 20.00              |
|                        |         | HIGH      | 64QAM      | 18.97 | 18.96 | 19.35 | 20.00              |
| 25                     | LOW     | 64QAM     | 19.10      | 19.11 | 19.45 | 20.00 |                    |
| Bandwidth              | RB Size | RB offset | Modulation | 20450 | 20525 | 20600 | Tune-up power(dBm) |
| 10                     | 1       | LOW       | QPSK       | 21.89 | 21.95 | 21.92 | 23.00              |
|                        |         | MID       | QPSK       | 21.96 | 21.97 | 21.90 | 23.00              |
|                        |         | HIGH      | QPSK       | 21.96 | 22.09 | 22.09 | 23.00              |
|                        | 25      | LOW       | QPSK       | 21.03 | 21.46 | 21.19 | 22.00              |
|                        |         | MID       | QPSK       | 21.12 | 20.94 | 21.08 | 22.00              |
|                        |         | HIGH      | QPSK       | 21.11 | 21.08 | 20.97 | 22.00              |
| 50                     | LOW     | QPSK      | 21.07      | 20.99 | 21.44 | 22.00 |                    |
| 10                     | 1       | LOW       | Q16        | 21.97 | 22.30 | 21.80 | 22.50              |
|                        |         | MID       | Q16        | 22.11 | 22.31 | 22.26 | 22.50              |
|                        |         | HIGH      | Q16        | 22.07 | 22.40 | 21.90 | 22.50              |
|                        | 25      | LOW       | Q16        | 19.98 | 20.21 | 20.21 | 21.50              |
|                        |         | MID       | Q16        | 20.12 | 20.12 | 20.64 | 21.50              |
|                        |         | HIGH      | Q16        | 20.08 | 20.11 | 20.24 | 21.50              |
| 50                     | LOW     | Q16       | 20.06      | 19.97 | 20.42 | 21.50 |                    |
| 10                     | 1       | LOW       | 64QAM      | 21.07 | 21.25 | 20.79 | 22.00              |
|                        |         | MID       | 64QAM      | 21.12 | 21.42 | 21.11 | 22.00              |
|                        |         | HIGH      | 64QAM      | 21.11 | 21.50 | 20.89 | 22.00              |
|                        | 25      | LOW       | 64QAM      | 18.92 | 19.35 | 19.15 | 20.00              |
|                        |         | MID       | 64QAM      | 19.05 | 19.25 | 19.75 | 20.00              |
|                        |         | HIGH      | 64QAM      | 19.14 | 18.98 | 19.17 | 20.00              |
| 50                     | LOW     | 64QAM     | 19.21      | 18.88 | 19.50 | 20.00 |                    |

| LTE B5-State3&4 -Ant.2 |         |           |            |       |       |       |                    |
|------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth              | RB Size | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1.4                    | 1       | LOW       | QPSK       | 23.92 | 23.83 | 23.88 | 24.50              |
|                        |         | MID       | QPSK       | 23.88 | 23.91 | 23.95 | 24.50              |
|                        |         | HIGH      | QPSK       | 23.90 | 23.87 | 23.92 | 24.50              |
|                        | 3       | LOW       | QPSK       | 23.97 | 23.94 | 23.98 | 24.50              |
|                        |         | MID       | QPSK       | 23.94 | 23.99 | 23.97 | 24.50              |
|                        |         | HIGH      | QPSK       | 23.93 | 23.91 | 23.89 | 24.50              |
| 6                      | LOW     | QPSK      | 22.89      | 22.96 | 22.96 | 23.50 |                    |
| 1.4                    | 1       | LOW       | Q16        | 23.28 | 23.34 | 23.39 | 23.50              |
|                        |         | MID       | Q16        | 23.24 | 23.31 | 23.43 | 23.50              |
|                        |         | HIGH      | Q16        | 23.31 | 23.29 | 23.42 | 23.50              |
|                        | 3       | LOW       | Q16        | 23.01 | 22.85 | 23.15 | 23.50              |
|                        |         | MID       | Q16        | 22.99 | 22.92 | 23.18 | 23.50              |
|                        |         | HIGH      | Q16        | 23.09 | 22.88 | 23.18 | 23.50              |
| 6                      | LOW     | Q16       | 22.06      | 21.97 | 22.09 | 22.50 |                    |
| 1.4                    | 1       | LOW       | 64QAM      | 22.37 | 22.27 | 22.42 | 22.50              |
|                        |         | MID       | 64QAM      | 22.12 | 22.40 | 22.04 | 22.50              |
|                        |         | HIGH      | 64QAM      | 22.17 | 22.33 | 22.42 | 22.50              |
|                        | 3       | LOW       | 64QAM      | 22.01 | 21.85 | 22.16 | 22.50              |
|                        |         | MID       | 64QAM      | 22.07 | 22.01 | 22.06 | 22.50              |
|                        |         | HIGH      | 64QAM      | 22.24 | 21.99 | 22.20 | 22.50              |
| 6                      | LOW     | 64QAM     | 21.14      | 20.82 | 21.19 | 21.50 |                    |
| Bandwidth              | RB Size | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 3                      | 1       | LOW       | QPSK       | 23.65 | 24.02 | 23.95 | 24.50              |
|                        |         | MID       | QPSK       | 23.92 | 23.87 | 23.91 | 24.50              |
|                        |         | HIGH      | QPSK       | 23.73 | 23.99 | 23.88 | 24.50              |
|                        | 8       | LOW       | QPSK       | 22.74 | 22.86 | 22.96 | 23.50              |
|                        |         | MID       | QPSK       | 23.37 | 22.98 | 22.75 | 23.50              |
|                        |         | HIGH      | QPSK       | 22.83 | 23.10 | 23.03 | 23.50              |
| 15                     | LOW     | QPSK      | 23.09      | 22.89 | 22.91 | 23.50 |                    |
| 3                      | 1       | LOW       | Q16        | 23.34 | 23.20 | 22.52 | 23.50              |
|                        |         | MID       | Q16        | 23.18 | 23.09 | 22.59 | 23.50              |
|                        |         | HIGH      | Q16        | 23.10 | 22.92 | 23.41 | 23.50              |
|                        | 8       | LOW       | Q16        | 21.88 | 22.10 | 22.00 | 22.50              |
|                        |         | MID       | Q16        | 22.20 | 22.39 | 21.94 | 22.50              |
|                        |         | HIGH      | Q16        | 21.82 | 21.90 | 21.97 | 22.50              |
| 15                     | LOW     | Q16       | 22.36      | 22.31 | 21.80 | 22.50 |                    |
| 3                      | 1       | LOW       | 64QAM      | 22.43 | 21.90 | 22.43 | 22.50              |
|                        |         | MID       | 64QAM      | 22.25 | 22.09 | 21.72 | 22.50              |
|                        |         | HIGH      | 64QAM      | 22.00 | 21.94 | 21.54 | 22.50              |
|                        | 8       | LOW       | 64QAM      | 21.09 | 21.20 | 20.88 | 21.50              |
|                        |         | MID       | 64QAM      | 21.26 | 21.31 | 21.18 | 21.50              |
|                        |         | HIGH      | 64QAM      | 20.76 | 21.01 | 21.01 | 21.50              |
| 15                     | LOW     | 64QAM     | 21.27      | 21.32 | 20.97 | 21.50 |                    |



| LTE B5-State3&4 -Ant.2 |           |           |            |            |       |       |                    |                    |
|------------------------|-----------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth              | RB Size   | RB offset | Modulation | 20425      | 20525 | 20625 | Tune-up power(dBm) |                    |
| 5                      | 1         | LOW       | QPSK       | 23.83      | 24.10 | 23.98 | 24.50              |                    |
|                        |           | MID       | QPSK       | 23.69      | 23.93 | 23.83 | 24.50              |                    |
|                        |           | HIGH      | QPSK       | 23.77      | 23.95 | 23.80 | 24.50              |                    |
|                        | 12        | LOW       | QPSK       | 22.70      | 22.98 | 22.89 | 23.50              |                    |
|                        |           | MID       | QPSK       | 23.15      | 22.84 | 22.97 | 23.50              |                    |
|                        |           | HIGH      | QPSK       | 23.06      | 23.06 | 23.10 | 23.50              |                    |
|                        | 25        | LOW       | QPSK       | 23.25      | 22.88 | 22.92 | 23.50              |                    |
|                        | 5         | 1         | LOW        | Q16        | 23.49 | 23.11 | 23.31              | 23.50              |
|                        |           |           | MID        | Q16        | 23.41 | 23.09 | 23.33              | 23.50              |
| HIGH                   |           |           | Q16        | 23.01      | 23.15 | 23.04 | 23.50              |                    |
| 12                     |           | LOW       | Q16        | 22.11      | 22.12 | 21.91 | 22.50              |                    |
|                        |           | MID       | Q16        | 22.20      | 22.44 | 21.82 | 22.50              |                    |
|                        |           | HIGH      | Q16        | 21.90      | 22.07 | 21.95 | 22.50              |                    |
| 25                     |           | LOW       | Q16        | 22.15      | 22.46 | 21.86 | 22.50              |                    |
| 5                      |           | 1         | LOW        | 64QAM      | 22.35 | 21.81 | 22.26              | 22.50              |
|                        |           |           | MID        | 64QAM      | 22.46 | 21.98 | 22.50              | 22.50              |
|                        | HIGH      |           | 64QAM      | 22.25      | 21.94 | 22.47 | 22.50              |                    |
|                        | 12        | LOW       | 64QAM      | 21.10      | 21.28 | 20.85 | 21.50              |                    |
|                        |           | MID       | 64QAM      | 21.19      | 21.37 | 20.95 | 21.50              |                    |
|                        |           | HIGH      | 64QAM      | 20.88      | 20.94 | 21.07 | 21.50              |                    |
|                        | 25        | LOW       | 64QAM      | 21.34      | 21.21 | 20.85 | 21.50              |                    |
|                        | Bandwidth | RB Size   | RB offset  | Modulation | 20450 | 20525 | 20600              | Tune-up power(dBm) |
|                        | 10        | 1         | LOW        | QPSK       | 24.01 | 24.01 | 23.95              | 24.50              |
| MID                    |           |           | QPSK       | 23.77      | 24.00 | 23.90 | 24.50              |                    |
| HIGH                   |           |           | QPSK       | 23.82      | 23.98 | 23.84 | 24.50              |                    |
| 25                     |           | LOW       | QPSK       | 22.84      | 22.91 | 22.85 | 23.50              |                    |
|                        |           | MID       | QPSK       | 23.29      | 22.90 | 22.87 | 23.50              |                    |
|                        |           | HIGH      | QPSK       | 22.97      | 23.01 | 22.99 | 23.50              |                    |
| 50                     |           | LOW       | QPSK       | 23.17      | 22.83 | 22.87 | 23.50              |                    |
| 10                     |           | 1         | LOW        | Q16        | 23.45 | 23.06 | 23.45              | 23.50              |
|                        |           |           | MID        | Q16        | 23.31 | 23.09 | 23.45              | 23.50              |
|                        | HIGH      |           | Q16        | 23.03      | 23.05 | 23.50 | 23.50              |                    |
|                        | 25        | LOW       | Q16        | 21.96      | 22.00 | 22.06 | 22.50              |                    |
|                        |           | MID       | Q16        | 22.30      | 22.35 | 21.96 | 22.50              |                    |
|                        |           | HIGH      | Q16        | 21.94      | 22.05 | 21.97 | 22.50              |                    |
|                        | 50        | LOW       | Q16        | 22.25      | 22.37 | 21.90 | 22.50              |                    |
|                        | 10        | 1         | LOW        | 64QAM      | 22.45 | 21.91 | 22.39              | 22.50              |
|                        |           |           | MID        | 64QAM      | 22.33 | 21.97 | 22.08              | 22.50              |
| HIGH                   |           |           | 64QAM      | 22.13      | 22.00 | 22.07 | 22.50              |                    |
| 25                     |           | LOW       | 64QAM      | 20.95      | 21.15 | 20.99 | 21.50              |                    |
|                        |           | MID       | 64QAM      | 21.29      | 21.29 | 21.04 | 21.50              |                    |
|                        |           | HIGH      | 64QAM      | 20.83      | 21.08 | 20.93 | 21.50              |                    |
| 50                     |           | LOW       | 64QAM      | 21.29      | 21.33 | 20.88 | 21.50              |                    |

### 8.3.3 LTE Band5 Output Power

| LTE B5-Full Power -Ant.3 |                 |           |            |            |       |       |                    |                    |
|--------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)          | RB Size         | RB offset | Modulation | 20407      | 20525 | 20643 | Tune-up power(dBm) |                    |
| 1.4                      | 1               | LOW       | QPSK       | 23.67      | 23.65 | 23.70 | 24.50              |                    |
|                          |                 | MID       | QPSK       | 23.62      | 23.72 | 23.74 | 24.50              |                    |
|                          |                 | HIGH      | QPSK       | 23.63      | 23.69 | 23.72 | 24.50              |                    |
|                          | 3               | LOW       | QPSK       | 23.73      | 23.66 | 23.68 | 24.50              |                    |
|                          |                 | MID       | QPSK       | 23.72      | 23.71 | 23.69 | 24.50              |                    |
|                          |                 | HIGH      | QPSK       | 23.72      | 23.78 | 23.75 | 24.50              |                    |
|                          | 6               | LOW       | QPSK       | 22.74      | 22.75 | 22.76 | 23.50              |                    |
|                          | 1.4             | 1         | LOW        | Q16        | 23.43 | 23.26 | 23.42              | 23.50              |
|                          |                 |           | MID        | Q16        | 23.12 | 23.24 | 23.37              | 23.50              |
| HIGH                     |                 |           | Q16        | 23.47      | 23.33 | 23.35 | 23.50              |                    |
| 3                        |                 | LOW       | Q16        | 22.94      | 22.65 | 22.95 | 23.50              |                    |
|                          |                 | MID       | Q16        | 22.93      | 22.70 | 22.94 | 23.50              |                    |
|                          |                 | HIGH      | Q16        | 22.97      | 22.68 | 23.03 | 23.50              |                    |
| 6                        |                 | LOW       | Q16        | 21.96      | 21.85 | 21.86 | 22.50              |                    |
| 1.4                      |                 | 1         | LOW        | 64QAM      | 22.37 | 22.35 | 22.36              | 22.50              |
|                          |                 |           | MID        | 64QAM      | 22.46 | 22.33 | 22.27              | 22.50              |
|                          | HIGH            |           | 64QAM      | 22.13      | 22.35 | 22.33 | 22.50              |                    |
|                          | 3               | LOW       | 64QAM      | 21.94      | 21.61 | 21.80 | 22.50              |                    |
|                          |                 | MID       | 64QAM      | 22.05      | 21.81 | 21.85 | 22.50              |                    |
|                          |                 | HIGH      | 64QAM      | 22.11      | 21.79 | 22.09 | 22.50              |                    |
|                          | 6               | LOW       | 64QAM      | 20.96      | 20.98 | 21.01 | 21.50              |                    |
|                          | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20415 | 20525 | 20635              | Tune-up power(dBm) |
|                          | 3               | 1         | LOW        | QPSK       | 23.69 | 23.90 | 23.76              | 24.50              |
| MID                      |                 |           | QPSK       | 23.61      | 23.94 | 23.66 | 24.50              |                    |
| HIGH                     |                 |           | QPSK       | 23.58      | 23.82 | 23.71 | 24.50              |                    |
| 8                        |                 | LOW       | QPSK       | 22.98      | 22.77 | 22.63 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 23.15      | 22.59 | 22.73 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.94      | 22.85 | 22.66 | 23.50              |                    |
| 15                       | LOW             | QPSK      | 23.02      | 22.88      | 22.58 | 23.50 |                    |                    |
| 3                        | 1               | LOW       | Q16        | 23.21      | 23.47 | 23.40 | 23.50              |                    |
|                          |                 | MID       | Q16        | 23.06      | 23.35 | 23.33 | 23.50              |                    |
|                          |                 | HIGH      | Q16        | 23.33      | 23.35 | 23.26 | 23.50              |                    |
|                          | 8               | LOW       | Q16        | 21.69      | 21.74 | 21.78 | 22.50              |                    |
|                          |                 | MID       | Q16        | 22.08      | 22.07 | 21.63 | 22.50              |                    |
|                          |                 | HIGH      | Q16        | 21.70      | 21.90 | 21.82 | 22.50              |                    |
|                          | 15              | LOW       | Q16        | 22.00      | 22.28 | 21.78 | 22.50              |                    |
|                          | 3               | 1         | LOW        | 64QAM      | 22.38 | 22.47 | 22.30              | 22.50              |
|                          |                 |           | MID        | 64QAM      | 22.37 | 22.44 | 22.35              | 22.50              |
| HIGH                     |                 |           | 64QAM      | 22.21      | 22.40 | 22.19 | 22.50              |                    |
| 8                        |                 | LOW       | 64QAM      | 20.53      | 20.88 | 20.76 | 21.50              |                    |
|                          |                 | MID       | 64QAM      | 21.15      | 21.14 | 20.58 | 21.50              |                    |
|                          |                 | HIGH      | 64QAM      | 20.71      | 20.91 | 20.80 | 21.50              |                    |
| 15                       |                 | LOW       | 64QAM      | 21.10      | 21.22 | 20.66 | 21.50              |                    |

| LTE B5-Full Power -Ant.3 |                 |           |            |            |       |       |                    |                    |
|--------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)          | RB Size         | RB offset | Modulation | 20425      | 20525 | 20625 | Tune-up power(dBm) |                    |
| 5                        | 1               | LOW       | QPSK       | 23.54      | 23.68 | 23.70 | 24.50              |                    |
|                          |                 | MID       | QPSK       | 23.65      | 23.73 | 23.75 | 24.50              |                    |
|                          |                 | HIGH      | QPSK       | 23.70      | 23.75 | 23.76 | 24.50              |                    |
|                          | 12              | LOW       | QPSK       | 22.82      | 22.71 | 22.82 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 22.93      | 22.62 | 22.90 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.88      | 22.89 | 22.72 | 23.50              |                    |
|                          | 25              | LOW       | QPSK       | 23.18      | 22.64 | 22.77 | 23.50              |                    |
|                          | 5               | 1         | LOW        | Q16        | 23.29 | 23.25 | 23.24              | 23.50              |
|                          |                 |           | MID        | Q16        | 23.15 | 23.12 | 23.33              | 23.50              |
| HIGH                     |                 |           | Q16        | 23.37      | 23.26 | 23.17 | 23.50              |                    |
| 12                       |                 | LOW       | Q16        | 21.80      | 21.90 | 21.87 | 22.50              |                    |
|                          |                 | MID       | Q16        | 21.96      | 22.13 | 21.87 | 22.50              |                    |
|                          |                 | HIGH      | Q16        | 21.51      | 21.82 | 21.79 | 22.50              |                    |
| 25                       |                 | LOW       | Q16        | 22.10      | 22.37 | 21.56 | 22.50              |                    |
| 5                        |                 | 1         | LOW        | 64QAM      | 22.37 | 22.40 | 22.18              | 22.50              |
|                          |                 |           | MID        | 64QAM      | 22.14 | 22.49 | 22.40              | 22.50              |
|                          | HIGH            |           | 64QAM      | 22.36      | 22.15 | 22.22 | 22.50              |                    |
|                          | 12              | LOW       | 64QAM      | 20.74      | 20.88 | 20.78 | 21.50              |                    |
|                          |                 | MID       | 64QAM      | 21.13      | 21.20 | 20.61 | 21.50              |                    |
|                          |                 | HIGH      | 64QAM      | 20.66      | 20.94 | 20.68 | 21.50              |                    |
|                          | 25              | LOW       | 64QAM      | 21.11      | 21.16 | 20.67 | 21.50              |                    |
|                          | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20450 | 20525 | 20600              | Tune-up power(dBm) |
|                          | 10              | 1         | LOW        | QPSK       | 23.65 | 23.75 | 23.66              | 24.50              |
| MID                      |                 |           | QPSK       | 23.68      | 23.80 | 23.62 | 24.50              |                    |
| HIGH                     |                 |           | QPSK       | 23.80      | 23.80 | 23.67 | 24.50              |                    |
| 25                       |                 | LOW       | QPSK       | 22.86      | 22.71 | 22.68 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 22.74      | 23.03 | 22.75 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.84      | 22.79 | 22.77 | 23.50              |                    |
| 50                       | LOW             | QPSK      | 23.11      | 22.78      | 22.67 | 23.50 |                    |                    |
| 10                       | 1               | LOW       | Q16        | 23.35      | 23.33 | 23.29 | 23.50              |                    |
|                          |                 | MID       | Q16        | 23.15      | 23.37 | 23.30 | 23.50              |                    |
|                          |                 | HIGH      | Q16        | 23.33      | 23.38 | 23.31 | 23.50              |                    |
|                          | 25              | LOW       | Q16        | 21.67      | 21.78 | 21.83 | 22.50              |                    |
|                          |                 | MID       | Q16        | 22.06      | 22.19 | 21.77 | 22.50              |                    |
|                          |                 | HIGH      | Q16        | 21.61      | 21.86 | 21.86 | 22.50              |                    |
|                          | 50              | LOW       | Q16        | 22.06      | 22.24 | 21.71 | 22.50              |                    |
|                          | 10              | 1         | LOW        | 64QAM      | 22.32 | 22.48 | 22.29              | 22.50              |
|                          |                 |           | MID        | 64QAM      | 22.22 | 22.39 | 22.43              | 22.50              |
| HIGH                     |                 |           | 64QAM      | 22.24      | 22.26 | 22.29 | 22.50              |                    |
| 25                       |                 | LOW       | 64QAM      | 20.59      | 20.91 | 20.70 | 21.50              |                    |
|                          |                 | MID       | 64QAM      | 21.06      | 21.15 | 20.72 | 21.50              |                    |
|                          |                 | HIGH      | 64QAM      | 20.65      | 20.90 | 20.77 | 21.50              |                    |
| 50                       |                 | LOW       | 64QAM      | 21.16      | 21.11 | 20.71 | 21.50              |                    |

| LTE B5-State1&2&3 -Ant.3 |             |           |            |            |       |       |                    |                    |
|--------------------------|-------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (              | RB Size     | RB offset | Modulation | 20407      | 20525 | 20643 | Tune-up power(dBm) |                    |
| 1.4                      | 1           | LOW       | QPSK       | 23.67      | 23.65 | 23.70 | 24.50              |                    |
|                          |             | MID       | QPSK       | 23.62      | 23.72 | 23.74 | 24.50              |                    |
|                          |             | HIGH      | QPSK       | 23.63      | 23.69 | 23.72 | 24.50              |                    |
|                          | 3           | LOW       | QPSK       | 23.73      | 23.66 | 23.68 | 24.50              |                    |
|                          |             | MID       | QPSK       | 23.72      | 23.71 | 23.69 | 24.50              |                    |
|                          |             | HIGH      | QPSK       | 23.72      | 23.78 | 23.75 | 24.50              |                    |
|                          | 6           | LOW       | QPSK       | 22.74      | 22.75 | 22.76 | 23.50              |                    |
|                          | 1.4         | 1         | LOW        | Q16        | 23.43 | 23.26 | 23.42              | 23.50              |
|                          |             |           | MID        | Q16        | 23.12 | 23.24 | 23.37              | 23.50              |
| HIGH                     |             |           | Q16        | 23.47      | 23.33 | 23.35 | 23.50              |                    |
| 3                        |             | LOW       | Q16        | 22.94      | 22.65 | 22.95 | 23.50              |                    |
|                          |             | MID       | Q16        | 22.93      | 22.70 | 22.94 | 23.50              |                    |
|                          |             | HIGH      | Q16        | 22.97      | 22.68 | 23.03 | 23.50              |                    |
| 6                        |             | LOW       | Q16        | 21.96      | 21.85 | 21.86 | 22.50              |                    |
| 1.4                      |             | 1         | LOW        | 64QAM      | 22.37 | 22.35 | 22.36              | 22.50              |
|                          |             |           | MID        | 64QAM      | 22.46 | 22.33 | 22.27              | 22.50              |
|                          | HIGH        |           | 64QAM      | 22.13      | 22.35 | 22.33 | 22.50              |                    |
|                          | 3           | LOW       | 64QAM      | 21.94      | 21.61 | 21.80 | 22.50              |                    |
|                          |             | MID       | 64QAM      | 22.05      | 21.81 | 21.85 | 22.50              |                    |
|                          |             | HIGH      | 64QAM      | 22.11      | 21.79 | 22.09 | 22.50              |                    |
|                          | 6           | LOW       | 64QAM      | 20.96      | 20.98 | 21.01 | 21.50              |                    |
|                          | Bandwidth ( | RB Size   | RB offset  | Modulation | 20415 | 20525 | 20635              | Tune-up power(dBm) |
|                          | 3           | 1         | LOW        | QPSK       | 23.69 | 23.90 | 23.76              | 24.50              |
| MID                      |             |           | QPSK       | 23.61      | 23.94 | 23.66 | 24.50              |                    |
| HIGH                     |             |           | QPSK       | 23.58      | 23.82 | 23.71 | 24.50              |                    |
| 8                        |             | LOW       | QPSK       | 22.98      | 22.77 | 22.63 | 23.50              |                    |
|                          |             | MID       | QPSK       | 23.15      | 22.59 | 22.73 | 23.50              |                    |
|                          |             | HIGH      | QPSK       | 22.94      | 22.85 | 22.66 | 23.50              |                    |
| 15                       |             | LOW       | QPSK       | 23.02      | 22.88 | 22.58 | 23.50              |                    |
| 3                        |             | 1         | LOW        | Q16        | 23.21 | 23.47 | 23.40              | 23.50              |
|                          |             |           | MID        | Q16        | 23.06 | 23.35 | 23.33              | 23.50              |
|                          | HIGH        |           | Q16        | 23.33      | 23.35 | 23.26 | 23.50              |                    |
|                          | 8           | LOW       | Q16        | 21.69      | 21.74 | 21.78 | 22.50              |                    |
|                          |             | MID       | Q16        | 22.08      | 22.07 | 21.63 | 22.50              |                    |
|                          |             | HIGH      | Q16        | 21.70      | 21.90 | 21.82 | 22.50              |                    |
|                          | 15          | LOW       | Q16        | 22.00      | 22.28 | 21.78 | 22.50              |                    |
|                          | 3           | 1         | LOW        | 64QAM      | 22.38 | 22.47 | 22.30              | 22.50              |
|                          |             |           | MID        | 64QAM      | 22.37 | 22.44 | 22.35              | 22.50              |
| HIGH                     |             |           | 64QAM      | 22.21      | 22.40 | 22.19 | 22.50              |                    |
| 8                        |             | LOW       | 64QAM      | 20.53      | 20.88 | 20.76 | 21.50              |                    |
|                          |             | MID       | 64QAM      | 21.15      | 21.14 | 20.58 | 21.50              |                    |
|                          |             | HIGH      | 64QAM      | 20.71      | 20.91 | 20.80 | 21.50              |                    |
| 15                       |             | LOW       | 64QAM      | 21.10      | 21.22 | 20.66 | 21.50              |                    |

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| Bandwidth ( |
| 1.4         |
| 1.4         |
| 1.4         |
| Bandwidth ( |
| 3           |
| 3           |
| 3           |

| LTE B5-State1&2&3 -Ant.3 |         |           |            |       |       |       |                    |
|--------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (              | RB Size | RB offset | Modulation | 20425 | 20525 | 20625 | Tune-up power(dBm) |
| 5                        | 1       | LOW       | QPSK       | 23.54 | 23.68 | 23.70 | 24.50              |
|                          |         | MID       | QPSK       | 23.65 | 23.73 | 23.75 | 24.50              |
|                          |         | HIGH      | QPSK       | 23.70 | 23.75 | 23.76 | 24.50              |
|                          | 12      | LOW       | QPSK       | 22.82 | 22.71 | 22.82 | 23.50              |
|                          |         | MID       | QPSK       | 22.93 | 22.62 | 22.90 | 23.50              |
|                          |         | HIGH      | QPSK       | 22.88 | 22.89 | 22.72 | 23.50              |
| 25                       | LOW     | QPSK      | 23.18      | 22.64 | 22.77 | 23.50 |                    |
| 5                        | 1       | LOW       | Q16        | 23.29 | 23.25 | 23.24 | 23.50              |
|                          |         | MID       | Q16        | 23.15 | 23.12 | 23.33 | 23.50              |
|                          |         | HIGH      | Q16        | 23.37 | 23.26 | 23.17 | 23.50              |
|                          | 12      | LOW       | Q16        | 21.80 | 21.90 | 21.87 | 22.50              |
|                          |         | MID       | Q16        | 21.96 | 22.13 | 21.87 | 22.50              |
|                          |         | HIGH      | Q16        | 21.51 | 21.82 | 21.79 | 22.50              |
| 25                       | LOW     | Q16       | 22.10      | 22.37 | 21.56 | 22.50 |                    |
| 5                        | 1       | LOW       | 64QAM      | 22.37 | 22.40 | 22.18 | 22.50              |
|                          |         | MID       | 64QAM      | 22.14 | 22.49 | 22.40 | 22.50              |
|                          |         | HIGH      | 64QAM      | 22.36 | 22.15 | 22.22 | 22.50              |
|                          | 12      | LOW       | 64QAM      | 20.74 | 20.88 | 20.78 | 21.50              |
|                          |         | MID       | 64QAM      | 21.13 | 21.20 | 20.61 | 21.50              |
|                          |         | HIGH      | 64QAM      | 20.66 | 20.94 | 20.68 | 21.50              |
| 25                       | LOW     | 64QAM     | 21.11      | 21.16 | 20.67 | 21.50 |                    |
| Bandwidth (              | RB Size | RB offset | Modulation | 20450 | 20525 | 20600 | Tune-up power(dBm) |
| 10                       | 1       | LOW       | QPSK       | 23.65 | 23.75 | 23.66 | 24.50              |
|                          |         | MID       | QPSK       | 23.68 | 23.80 | 23.62 | 24.50              |
|                          |         | HIGH      | QPSK       | 23.80 | 23.80 | 23.67 | 24.50              |
|                          | 25      | LOW       | QPSK       | 22.86 | 22.71 | 22.68 | 23.50              |
|                          |         | MID       | QPSK       | 22.74 | 23.03 | 22.75 | 23.50              |
|                          |         | HIGH      | QPSK       | 22.84 | 22.79 | 22.77 | 23.50              |
| 50                       | LOW     | QPSK      | 23.11      | 22.78 | 22.67 | 23.50 |                    |
| 10                       | 1       | LOW       | Q16        | 23.35 | 23.33 | 23.29 | 23.50              |
|                          |         | MID       | Q16        | 23.15 | 23.37 | 23.30 | 23.50              |
|                          |         | HIGH      | Q16        | 23.33 | 23.38 | 23.31 | 23.50              |
|                          | 25      | LOW       | Q16        | 21.67 | 21.78 | 21.83 | 22.50              |
|                          |         | MID       | Q16        | 22.06 | 22.19 | 21.77 | 22.50              |
|                          |         | HIGH      | Q16        | 21.61 | 21.86 | 21.86 | 22.50              |
| 50                       | LOW     | Q16       | 22.06      | 22.24 | 21.71 | 22.50 |                    |
| 10                       | 1       | LOW       | 64QAM      | 22.32 | 22.48 | 22.29 | 22.50              |
|                          |         | MID       | 64QAM      | 22.22 | 22.39 | 22.43 | 22.50              |
|                          |         | HIGH      | 64QAM      | 22.24 | 22.26 | 22.29 | 22.50              |
|                          | 25      | LOW       | 64QAM      | 20.59 | 20.91 | 20.70 | 21.50              |
|                          |         | MID       | 64QAM      | 21.06 | 21.15 | 20.72 | 21.50              |
|                          |         | HIGH      | 64QAM      | 20.65 | 20.90 | 20.77 | 21.50              |
| 50                       | LOW     | 64QAM     | 21.16      | 21.11 | 20.71 | 21.50 |                    |

|             |
|-------------|
| Bandwidth ( |
| 5           |
| 5           |
| 5           |
| Bandwidth ( |
| 10          |
| 10          |
| 10          |

| LTE B5-State4 -Ant.3 |           |            |       |       |       |                    |
|----------------------|-----------|------------|-------|-------|-------|--------------------|
| RB Size              | RB offset | Modulation | 20407 | 20525 | 20643 | Tune-up power(dBm) |
| 1                    | LOW       | QPSK       | 22.95 | 23.08 | 23.15 | 24.00              |
|                      | MID       | QPSK       | 22.99 | 23.49 | 23.07 | 24.00              |
|                      | HIGH      | QPSK       | 23.02 | 23.45 | 23.01 | 24.00              |
| 3                    | LOW       | QPSK       | 22.16 | 22.44 | 22.21 | 24.00              |
|                      | MID       | QPSK       | 22.78 | 22.15 | 22.20 | 24.00              |
|                      | HIGH      | QPSK       | 22.30 | 22.51 | 22.23 | 24.00              |
| 6                    | LOW       | QPSK       | 22.34 | 22.22 | 22.17 | 23.00              |
| 1                    | LOW       | Q16        | 22.00 | 22.84 | 22.84 | 23.00              |
|                      | MID       | Q16        | 22.06 | 22.88 | 22.69 | 23.00              |
|                      | HIGH      | Q16        | 22.01 | 22.93 | 22.64 | 23.00              |
| 3                    | LOW       | Q16        | 21.25 | 21.76 | 21.28 | 23.00              |
|                      | MID       | Q16        | 21.52 | 21.69 | 21.78 | 23.00              |
|                      | HIGH      | Q16        | 21.41 | 21.67 | 21.18 | 23.00              |
| 6                    | LOW       | Q16        | 21.56 | 21.69 | 21.59 | 22.00              |
| 1                    | LOW       | 64QAM      | 20.92 | 21.97 | 21.89 | 22.00              |
|                      | MID       | 64QAM      | 20.96 | 21.84 | 21.68 | 22.00              |
|                      | HIGH      | 64QAM      | 20.92 | 21.64 | 21.66 | 22.00              |
| 3                    | LOW       | 64QAM      | 20.26 | 20.61 | 20.15 | 22.00              |
|                      | MID       | 64QAM      | 20.58 | 20.83 | 20.79 | 22.00              |
|                      | HIGH      | 64QAM      | 20.56 | 20.78 | 20.18 | 22.00              |
| 6                    | LOW       | 64QAM      | 20.54 | 20.64 | 20.66 | 21.00              |
| RB Size              | RB offset | Modulation | 20415 | 20525 | 20635 | Tune-up power(dBm) |
| 1                    | LOW       | QPSK       | 23.30 | 23.36 | 23.16 | 24.00              |
|                      | MID       | QPSK       | 23.06 | 23.47 | 23.17 | 24.00              |
|                      | HIGH      | QPSK       | 23.11 | 23.17 | 23.26 | 24.00              |
| 8                    | LOW       | QPSK       | 22.17 | 22.18 | 22.16 | 23.00              |
|                      | MID       | QPSK       | 22.72 | 22.14 | 22.33 | 23.00              |
|                      | HIGH      | QPSK       | 22.19 | 22.26 | 22.35 | 23.00              |
| 15                   | LOW       | QPSK       | 22.58 | 22.18 | 22.19 | 23.00              |
| 1                    | LOW       | Q16        | 23.00 | 22.88 | 22.60 | 23.00              |
|                      | MID       | Q16        | 22.83 | 22.69 | 22.60 | 23.00              |
|                      | HIGH      | Q16        | 22.90 | 22.79 | 22.77 | 23.00              |
| 8                    | LOW       | Q16        | 20.99 | 21.83 | 21.18 | 22.00              |
|                      | MID       | Q16        | 21.41 | 21.61 | 21.82 | 22.00              |
|                      | HIGH      | Q16        | 21.40 | 21.66 | 21.41 | 22.00              |
| 15                   | LOW       | Q16        | 21.51 | 21.62 | 21.66 | 22.00              |
| 1                    | LOW       | 64QAM      | 21.83 | 21.79 | 21.74 | 22.00              |
|                      | MID       | 64QAM      | 21.79 | 21.83 | 21.77 | 22.00              |
|                      | HIGH      | 64QAM      | 21.99 | 21.98 | 21.80 | 22.00              |
| 8                    | LOW       | 64QAM      | 20.17 | 20.66 | 20.31 | 21.00              |
|                      | MID       | 64QAM      | 20.54 | 20.79 | 20.80 | 21.00              |
|                      | HIGH      | 64QAM      | 20.48 | 20.68 | 20.34 | 21.00              |
| 15                   | LOW       | 64QAM      | 20.55 | 20.75 | 20.65 | 21.00              |

| LTE B5-State4 -Ant.3 |           |            |       |       |       |                    |
|----------------------|-----------|------------|-------|-------|-------|--------------------|
| RB Size              | RB offset | Modulation | 20425 | 20525 | 20625 | Tune-up power(dBm) |
| 1                    | LOW       | QPSK       | 23.09 | 23.16 | 23.16 | 24.00              |
|                      | MID       | QPSK       | 23.07 | 23.49 | 23.12 | 24.00              |
|                      | HIGH      | QPSK       | 23.11 | 23.37 | 23.07 | 24.00              |
| 12                   | LOW       | QPSK       | 22.28 | 22.33 | 22.17 | 23.00              |
|                      | MID       | QPSK       | 22.72 | 22.16 | 22.29 | 23.00              |
|                      | HIGH      | QPSK       | 22.25 | 22.36 | 22.31 | 23.00              |
| 25                   | LOW       | QPSK       | 22.42 | 22.19 | 22.14 | 23.00              |
| 1                    | LOW       | Q16        | 22.09 | 22.79 | 22.77 | 23.00              |
|                      | MID       | Q16        | 22.16 | 22.99 | 22.82 | 23.00              |
|                      | HIGH      | Q16        | 22.09 | 22.82 | 22.68 | 23.00              |
| 12                   | LOW       | Q16        | 21.20 | 21.80 | 21.36 | 22.00              |
|                      | MID       | Q16        | 21.66 | 21.68 | 21.64 | 22.00              |
|                      | HIGH      | Q16        | 21.48 | 21.53 | 21.25 | 22.00              |
| 25                   | LOW       | Q16        | 21.42 | 21.73 | 21.56 | 22.00              |
| 1                    | LOW       | 64QAM      | 20.95 | 21.76 | 21.71 | 22.00              |
|                      | MID       | 64QAM      | 21.08 | 21.88 | 21.66 | 22.00              |
|                      | HIGH      | 64QAM      | 21.05 | 21.91 | 21.62 | 22.00              |
| 12                   | LOW       | 64QAM      | 20.33 | 20.71 | 20.52 | 21.00              |
|                      | MID       | 64QAM      | 20.60 | 20.60 | 20.76 | 21.00              |
|                      | HIGH      | 64QAM      | 20.36 | 20.86 | 20.23 | 21.00              |
| 25                   | LOW       | 64QAM      | 20.49 | 20.68 | 20.81 | 21.00              |
| RB Size              | RB offset | Modulation | 20450 | 20525 | 20600 | Tune-up power(dBm) |
| 1                    | LOW       | QPSK       | 23.23 | 23.29 | 23.18 | 24.00              |
|                      | MID       | QPSK       | 23.16 | 23.34 | 23.16 | 24.00              |
|                      | HIGH      | QPSK       | 23.23 | 23.32 | 23.20 | 24.00              |
| 25                   | LOW       | QPSK       | 22.18 | 22.20 | 22.15 | 23.00              |
|                      | MID       | QPSK       | 22.24 | 22.57 | 22.21 | 23.00              |
|                      | HIGH      | QPSK       | 22.29 | 22.25 | 22.29 | 23.00              |
| 50                   | LOW       | QPSK       | 22.56 | 22.16 | 22.10 | 23.00              |
| 1                    | LOW       | Q16        | 22.86 | 22.84 | 22.71 | 23.00              |
|                      | MID       | Q16        | 22.81 | 22.84 | 22.72 | 23.00              |
|                      | HIGH      | Q16        | 22.92 | 22.85 | 22.79 | 23.00              |
| 25                   | LOW       | Q16        | 21.10 | 21.70 | 21.31 | 22.00              |
|                      | MID       | Q16        | 21.51 | 21.62 | 21.69 | 22.00              |
|                      | HIGH      | Q16        | 21.50 | 21.65 | 21.31 | 22.00              |
| 50                   | LOW       | Q16        | 21.53 | 21.69 | 21.59 | 22.00              |
| 1                    | LOW       | 64QAM      | 21.73 | 21.88 | 21.85 | 22.00              |
|                      | MID       | 64QAM      | 21.82 | 21.73 | 21.70 | 22.00              |
|                      | HIGH      | 64QAM      | 21.97 | 21.87 | 21.75 | 22.00              |
| 25                   | LOW       | 64QAM      | 20.20 | 20.73 | 20.41 | 21.00              |
|                      | MID       | 64QAM      | 20.45 | 20.70 | 20.75 | 21.00              |
|                      | HIGH      | 64QAM      | 20.36 | 20.78 | 20.28 | 21.00              |
| 50                   | LOW       | 64QAM      | 20.50 | 20.79 | 20.66 | 21.00              |

### 8.3.4 LTE Band7 Output Power

| LTE B7-Full Power -Ant.2 |                 |           |            |            |       |       |                    |                    |
|--------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)          | RB Size         | RB offset | Modulation | 20775      | 21100 | 21425 | Tune-up power(dBm) |                    |
| 5                        | 1               | LOW       | QPSK       | 22.99      | 23.23 | 22.75 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 22.55      | 23.28 | 22.79 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.55      | 23.11 | 23.09 | 23.50              |                    |
|                          | 12              | LOW       | QPSK       | 21.76      | 21.86 | 21.67 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.84      | 21.89 | 21.62 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 21.86      | 21.78 | 21.94 | 22.50              |                    |
|                          | 25              | LOW       | QPSK       | 21.72      | 21.73 | 21.85 | 22.50              |                    |
|                          | 5               | 1         | LOW        | Q16        | 21.97 | 21.55 | 22.19              | 22.50              |
|                          |                 |           | MID        | Q16        | 22.47 | 21.85 | 21.96              | 22.50              |
| HIGH                     |                 |           | Q16        | 22.22      | 21.72 | 22.06 | 22.50              |                    |
| 12                       |                 | LOW       | Q16        | 20.72      | 20.68 | 20.42 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.52      | 20.60 | 20.58 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.40      | 20.63 | 20.54 | 21.50              |                    |
| 25                       |                 | LOW       | Q16        | 20.44      | 20.77 | 20.27 | 21.50              |                    |
| 5                        |                 | 1         | LOW        | 64QAM      | 20.95 | 20.52 | 21.18              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 21.35 | 20.96 | 21.04              | 21.50              |
|                          | HIGH            |           | 64QAM      | 21.08      | 20.81 | 20.98 | 21.50              |                    |
|                          | 12              | LOW       | 64QAM      | 19.81      | 19.70 | 19.57 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.61      | 19.53 | 19.51 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.44      | 19.62 | 19.45 | 20.50              |                    |
|                          | 25              | LOW       | 64QAM      | 19.41      | 19.92 | 19.13 | 20.50              |                    |
|                          | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20800 | 21100 | 21400              | Tune-up power(dBm) |
|                          | 10              | 1         | LOW        | QPSK       | 22.72 | 23.35 | 22.72              | 23.50              |
| MID                      |                 |           | QPSK       | 22.88      | 23.31 | 22.95 | 23.50              |                    |
| HIGH                     |                 |           | QPSK       | 22.93      | 23.16 | 22.91 | 23.50              |                    |
| 25                       |                 | LOW       | QPSK       | 21.96      | 21.79 | 21.85 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.99      | 22.06 | 21.84 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.05      | 21.93 | 22.02 | 22.50              |                    |
| 50                       | LOW             | QPSK      | 21.84      | 21.97      | 21.81 | 22.50 |                    |                    |
| 10                       | 1               | LOW       | Q16        | 22.31      | 21.68 | 21.99 | 22.50              |                    |
|                          |                 | MID       | Q16        | 22.07      | 21.79 | 21.99 | 22.50              |                    |
|                          |                 | HIGH      | Q16        | 22.13      | 21.76 | 22.14 | 22.50              |                    |
|                          | 25              | LOW       | Q16        | 20.71      | 20.54 | 20.34 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.60      | 20.71 | 20.34 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.48      | 20.52 | 20.54 | 21.50              |                    |
| 50                       | LOW             | Q16       | 20.50      | 20.42      | 20.38 | 21.50 |                    |                    |
| 10                       | 1               | LOW       | 64QAM      | 21.25      | 20.55 | 21.27 | 21.50              |                    |
|                          |                 | MID       | 64QAM      | 21.37      | 20.55 | 21.11 | 21.50              |                    |
|                          |                 | HIGH      | 64QAM      | 21.48      | 20.60 | 21.16 | 21.50              |                    |
|                          | 25              | LOW       | 64QAM      | 19.44      | 19.50 | 19.26 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.53      | 19.71 | 19.49 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.31      | 19.50 | 19.34 | 20.50              |                    |
| 50                       | LOW             | 64QAM     | 19.58      | 19.66      | 19.40 | 20.50 |                    |                    |



| LTE B7-Full Power -Ant.2 |                 |           |            |            |       |       |                    |                    |
|--------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)          | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
| 15                       | 1               | LOW       | QPSK       | 22.87      | 23.13 | 22.85 | 23.50              |                    |
|                          |                 | MID       | QPSK       | 22.69      | 23.19 | 22.94 | 23.50              |                    |
|                          |                 | HIGH      | QPSK       | 22.68      | 23.20 | 22.98 | 23.50              |                    |
|                          | 36              | LOW       | QPSK       | 21.80      | 21.95 | 21.69 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.93      | 21.94 | 21.76 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 21.84      | 21.78 | 21.93 | 22.50              |                    |
|                          | 75              | LOW       | QPSK       | 21.76      | 21.86 | 21.95 | 22.50              |                    |
|                          | 15              | 1         | LOW        | Q16        | 22.07 | 21.69 | 22.24              | 22.50              |
|                          |                 |           | MID        | Q16        | 22.35 | 21.87 | 21.96              | 22.50              |
| HIGH                     |                 |           | Q16        | 22.31      | 21.86 | 22.10 | 22.50              |                    |
| 36                       |                 | LOW       | Q16        | 20.72      | 20.65 | 20.46 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.60      | 20.56 | 20.48 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.34      | 20.55 | 20.49 | 21.50              |                    |
| 75                       |                 | LOW       | Q16        | 20.34      | 20.64 | 20.42 | 21.50              |                    |
| 15                       |                 | 1         | LOW        | 64QAM      | 21.29 | 20.76 | 21.24              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 21.12 | 20.60 | 21.14              | 21.50              |
|                          | HIGH            |           | 64QAM      | 21.49      | 20.59 | 21.24 | 21.50              |                    |
|                          | 36              | LOW       | 64QAM      | 19.57      | 19.54 | 19.27 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.64      | 19.73 | 19.39 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.43      | 19.42 | 19.60 | 20.50              |                    |
|                          | 75              | LOW       | 64QAM      | 19.65      | 19.65 | 19.26 | 20.50              |                    |
|                          | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                          | 20              | 1         | LOW        | QPSK       | 22.84 | 23.26 | 22.82              | 23.50              |
| MID                      |                 |           | QPSK       | 22.83      | 23.23 | 22.93 | 23.50              |                    |
| HIGH                     |                 |           | QPSK       | 22.82      | 23.18 | 22.86 | 23.50              |                    |
| 50                       |                 | LOW       | QPSK       | 21.90      | 21.88 | 21.79 | 22.50              |                    |
|                          |                 | MID       | QPSK       | 21.90      | 21.99 | 21.86 | 22.50              |                    |
|                          |                 | HIGH      | QPSK       | 21.91      | 21.92 | 21.97 | 22.50              |                    |
| 100                      |                 | LOW       | QPSK       | 21.88      | 21.82 | 21.82 | 22.50              |                    |
| 20                       |                 | 1         | LOW        | Q16        | 22.20 | 21.80 | 22.14              | 22.50              |
|                          |                 |           | MID        | Q16        | 22.21 | 21.79 | 22.07              | 22.50              |
|                          | HIGH            |           | Q16        | 22.26      | 21.73 | 22.05 | 22.50              |                    |
|                          | 50              | LOW       | Q16        | 20.64      | 20.52 | 20.36 | 21.50              |                    |
|                          |                 | MID       | Q16        | 20.47      | 20.58 | 20.43 | 21.50              |                    |
|                          |                 | HIGH      | Q16        | 20.47      | 20.54 | 20.41 | 21.50              |                    |
|                          | 100             | LOW       | Q16        | 20.45      | 20.52 | 20.45 | 21.50              |                    |
|                          | 20              | 1         | LOW        | 64QAM      | 21.21 | 20.67 | 21.23              | 21.50              |
|                          |                 |           | MID        | 64QAM      | 21.23 | 20.68 | 20.99              | 21.50              |
| HIGH                     |                 |           | 64QAM      | 21.41      | 20.74 | 21.11 | 21.50              |                    |
| 50                       |                 | LOW       | 64QAM      | 19.58      | 19.60 | 19.23 | 20.50              |                    |
|                          |                 | MID       | 64QAM      | 19.55      | 19.73 | 19.37 | 20.50              |                    |
|                          |                 | HIGH      | 64QAM      | 19.40      | 19.41 | 19.49 | 20.50              |                    |
| 100                      |                 | LOW       | 64QAM      | 19.51      | 19.52 | 19.40 | 20.50              |                    |

| LTE B7-State1&2 -Ant.2 |                 |           |            |            |       |       |                    |                    |
|------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)        | RB Size         | RB offset | Modulation | 20775      | 21100 | 21425 | Tune-up power(dBm) |                    |
| 5                      | 1               | LOW       | QPSK       | 16.15      | 17.43 | 17.12 | 17.50              |                    |
|                        |                 | MID       | QPSK       | 16.32      | 16.38 | 16.88 | 17.50              |                    |
|                        |                 | HIGH      | QPSK       | 16.91      | 16.50 | 16.25 | 17.50              |                    |
|                        | 12              | LOW       | QPSK       | 15.36      | 15.86 | 15.98 | 16.50              |                    |
|                        |                 | MID       | QPSK       | 15.55      | 15.58 | 15.80 | 16.50              |                    |
|                        |                 | HIGH      | QPSK       | 15.92      | 15.48 | 15.58 | 16.50              |                    |
|                        | 25              | LOW       | QPSK       | 15.50      | 15.66 | 15.83 | 16.50              |                    |
|                        | 5               | 1         | LOW        | Q16        | 15.95 | 16.93 | 16.38              | 17.00              |
|                        |                 |           | MID        | Q16        | 16.09 | 15.76 | 16.22              | 17.00              |
| HIGH                   |                 |           | Q16        | 16.36      | 15.79 | 15.36 | 17.00              |                    |
| 12                     |                 | LOW       | Q16        | 14.20      | 14.69 | 15.07 | 16.00              |                    |
|                        |                 | MID       | Q16        | 14.29      | 14.44 | 14.76 | 16.00              |                    |
|                        |                 | HIGH      | Q16        | 14.31      | 14.26 | 14.69 | 16.00              |                    |
| 25                     |                 | LOW       | Q16        | 14.16      | 14.50 | 14.69 | 16.00              |                    |
| 5                      |                 | 1         | LOW        | 64QAM      | 14.95 | 15.93 | 15.38              | 16.00              |
|                        |                 |           | MID        | 64QAM      | 15.09 | 14.76 | 15.22              | 16.00              |
|                        | HIGH            |           | 64QAM      | 15.36      | 14.79 | 14.36 | 16.00              |                    |
|                        | 12              | LOW       | 64QAM      | 13.20      | 13.69 | 14.07 | 15.00              |                    |
|                        |                 | MID       | 64QAM      | 13.29      | 13.44 | 13.76 | 15.00              |                    |
|                        |                 | HIGH      | 64QAM      | 13.31      | 13.26 | 13.69 | 15.00              |                    |
|                        | 25              | LOW       | 64QAM      | 13.16      | 13.50 | 13.69 | 15.00              |                    |
|                        | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20800 | 21100 | 21400              | Tune-up power(dBm) |
|                        | 10              | 1         | LOW        | QPSK       | 16.17 | 17.20 | 17.13              | 17.50              |
| MID                    |                 |           | QPSK       | 16.45      | 16.49 | 16.88 | 17.50              |                    |
| HIGH                   |                 |           | QPSK       | 16.82      | 16.47 | 16.27 | 17.50              |                    |
| 25                     |                 | LOW       | QPSK       | 15.39      | 16.04 | 15.93 | 16.50              |                    |
|                        |                 | MID       | QPSK       | 15.68      | 15.55 | 15.98 | 16.50              |                    |
|                        |                 | HIGH      | QPSK       | 15.89      | 15.49 | 15.57 | 16.50              |                    |
| 50                     |                 | LOW       | QPSK       | 15.53      | 15.61 | 15.86 | 16.50              |                    |
| 10                     |                 | 1         | LOW        | Q16        | 15.94 | 16.84 | 16.44              | 17.00              |
|                        |                 |           | MID        | Q16        | 15.89 | 16.03 | 16.20              | 17.00              |
|                        | HIGH            |           | Q16        | 16.55      | 15.85 | 15.51 | 17.00              |                    |
|                        | 25              | LOW       | Q16        | 14.05      | 14.73 | 15.15 | 16.00              |                    |
|                        |                 | MID       | Q16        | 14.28      | 14.40 | 14.83 | 16.00              |                    |
|                        |                 | HIGH      | Q16        | 14.37      | 14.24 | 14.67 | 16.00              |                    |
|                        | 50              | LOW       | Q16        | 14.28      | 14.24 | 14.87 | 16.00              |                    |
|                        | 10              | 1         | LOW        | 64QAM      | 14.94 | 15.84 | 15.44              | 16.00              |
|                        |                 |           | MID        | 64QAM      | 14.89 | 15.03 | 15.20              | 16.00              |
| HIGH                   |                 |           | 64QAM      | 15.55      | 14.85 | 14.51 | 16.00              |                    |
| 25                     |                 | LOW       | 64QAM      | 13.05      | 13.73 | 14.15 | 15.00              |                    |
|                        |                 | MID       | 64QAM      | 13.28      | 13.40 | 13.83 | 15.00              |                    |
|                        |                 | HIGH      | 64QAM      | 13.37      | 13.24 | 13.67 | 15.00              |                    |
| 50                     |                 | LOW       | 64QAM      | 13.28      | 13.24 | 13.87 | 15.00              |                    |

| LTE B7-State1&2 -Ant.2 |                 |           |            |            |       |       |                    |                    |
|------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)        | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
| 15                     | 1               | LOW       | QPSK       | 16.29      | 17.38 | 17.17 | 17.50              |                    |
|                        |                 | MID       | QPSK       | 16.30      | 16.39 | 16.90 | 17.50              |                    |
|                        |                 | HIGH      | QPSK       | 16.92      | 16.22 | 16.22 | 17.50              |                    |
|                        | 36              | LOW       | QPSK       | 15.38      | 15.92 | 15.95 | 16.50              |                    |
|                        |                 | MID       | QPSK       | 15.61      | 15.62 | 15.80 | 16.50              |                    |
|                        |                 | HIGH      | QPSK       | 15.86      | 15.41 | 15.63 | 16.50              |                    |
|                        | 75              | LOW       | QPSK       | 15.73      | 15.75 | 15.91 | 16.50              |                    |
|                        | 15              | 1         | LOW        | Q16        | 15.89 | 16.79 | 16.39              | 17.00              |
|                        |                 |           | MID        | Q16        | 15.83 | 15.87 | 16.40              | 17.00              |
| HIGH                   |                 |           | Q16        | 16.37      | 15.85 | 15.33 | 17.00              |                    |
| 36                     |                 | LOW       | Q16        | 14.14      | 14.69 | 14.95 | 16.00              |                    |
|                        |                 | MID       | Q16        | 14.16      | 14.48 | 14.97 | 16.00              |                    |
|                        |                 | HIGH      | Q16        | 14.43      | 14.23 | 14.71 | 16.00              |                    |
| 75                     |                 | LOW       | Q16        | 14.33      | 14.25 | 14.91 | 16.00              |                    |
| 15                     |                 | 1         | LOW        | 64QAM      | 14.89 | 15.79 | 15.39              | 16.00              |
|                        |                 |           | MID        | 64QAM      | 14.83 | 14.87 | 15.40              | 16.00              |
|                        | HIGH            |           | 64QAM      | 15.37      | 14.85 | 14.33 | 16.00              |                    |
|                        | 36              | LOW       | 64QAM      | 13.14      | 13.69 | 13.95 | 15.00              |                    |
|                        |                 | MID       | 64QAM      | 13.16      | 13.48 | 13.97 | 15.00              |                    |
|                        |                 | HIGH      | 64QAM      | 13.43      | 13.23 | 13.71 | 15.00              |                    |
|                        | 75              | LOW       | 64QAM      | 13.33      | 13.25 | 13.91 | 15.00              |                    |
|                        | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                        | 20              | 1         | LOW        | QPSK       | 16.24 | 17.32 | 17.23              | 17.50              |
| MID                    |                 |           | QPSK       | 16.38      | 16.44 | 16.93 | 17.50              |                    |
| HIGH                   |                 |           | QPSK       | 16.85      | 16.36 | 16.13 | 17.50              |                    |
| 50                     |                 | LOW       | QPSK       | 15.49      | 16.07 | 15.98 | 16.50              |                    |
|                        |                 | MID       | QPSK       | 15.54      | 15.50 | 15.89 | 16.50              |                    |
|                        |                 | HIGH      | QPSK       | 15.82      | 15.35 | 15.59 | 16.50              |                    |
| 100                    | LOW             | QPSK      | 15.64      | 15.66      | 15.82 | 16.50 |                    |                    |
| 20                     | 1               | LOW       | Q16        | 15.84      | 16.84 | 16.41 | 17.00              |                    |
|                        |                 | MID       | Q16        | 15.94      | 15.88 | 16.27 | 17.00              |                    |
|                        |                 | HIGH      | Q16        | 16.40      | 15.78 | 15.37 | 17.00              |                    |
|                        | 50              | LOW       | Q16        | 14.12      | 14.83 | 15.05 | 16.00              |                    |
|                        |                 | MID       | Q16        | 14.23      | 14.35 | 14.85 | 16.00              |                    |
|                        |                 | HIGH      | Q16        | 14.45      | 14.12 | 14.58 | 16.00              |                    |
| 100                    | LOW             | Q16       | 14.23      | 14.35      | 14.84 | 16.00 |                    |                    |
| 20                     | 1               | LOW       | 64QAM      | 14.75      | 15.87 | 15.40 | 16.00              |                    |
|                        |                 | MID       | 64QAM      | 14.87      | 14.94 | 15.13 | 16.00              |                    |
|                        |                 | HIGH      | 64QAM      | 15.28      | 14.63 | 14.51 | 16.00              |                    |
|                        | 50              | LOW       | 64QAM      | 13.22      | 13.86 | 14.12 | 15.00              |                    |
|                        |                 | MID       | 64QAM      | 13.27      | 13.35 | 13.71 | 15.00              |                    |
|                        |                 | HIGH      | 64QAM      | 13.38      | 13.21 | 13.66 | 15.00              |                    |
| 100                    | LOW             | 64QAM     | 13.24      | 13.31      | 13.70 | 15.00 |                    |                    |

| LTE B7-State3&4 -Ant.2 |                 |           |            |            |       |       |                    |                    |
|------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)        | RB Size         | RB offset | Modulation | 20775      | 21100 | 21425 | Tune-up power(dBm) |                    |
| 5                      | 1               | LOW       | QPSK       | 18.56      | 18.27 | 18.40 | 20.00              |                    |
|                        |                 | MID       | QPSK       | 18.34      | 18.56 | 18.52 | 20.00              |                    |
|                        |                 | HIGH      | QPSK       | 18.70      | 18.63 | 18.43 | 20.00              |                    |
|                        | 12              | LOW       | QPSK       | 17.93      | 18.27 | 18.29 | 19.00              |                    |
|                        |                 | MID       | QPSK       | 18.15      | 18.33 | 18.25 | 19.00              |                    |
|                        |                 | HIGH      | QPSK       | 18.06      | 18.09 | 17.93 | 19.00              |                    |
|                        | 25              | LOW       | QPSK       | 18.01      | 18.21 | 18.12 | 19.00              |                    |
|                        | 5               | 1         | LOW        | Q16        | 17.78 | 18.57 | 18.28              | 19.00              |
|                        |                 |           | MID        | Q16        | 18.42 | 18.91 | 18.43              | 19.00              |
| HIGH                   |                 |           | Q16        | 18.03      | 18.22 | 17.57 | 19.00              |                    |
| 12                     |                 | LOW       | Q16        | 16.48      | 16.91 | 16.95 | 18.00              |                    |
|                        |                 | MID       | Q16        | 16.70      | 16.97 | 16.92 | 18.00              |                    |
|                        |                 | HIGH      | Q16        | 16.61      | 16.73 | 16.60 | 18.00              |                    |
| 25                     |                 | LOW       | Q16        | 16.50      | 16.77 | 16.70 | 18.00              |                    |
| 5                      |                 | 1         | LOW        | 64QAM      | 16.92 | 17.44 | 17.23              | 18.00              |
|                        |                 |           | MID        | 64QAM      | 17.30 | 17.89 | 17.39              | 18.00              |
|                        | HIGH            |           | 64QAM      | 17.13      | 17.35 | 16.42 | 18.00              |                    |
|                        | 12              | LOW       | 64QAM      | 15.42      | 16.00 | 15.91 | 17.00              |                    |
|                        |                 | MID       | 64QAM      | 15.85      | 16.11 | 15.92 | 17.00              |                    |
|                        |                 | HIGH      | 64QAM      | 15.56      | 15.73 | 15.53 | 17.00              |                    |
|                        | 25              | LOW       | 64QAM      | 15.62      | 15.63 | 15.79 | 17.00              |                    |
|                        | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20800 | 21100 | 21400              | Tune-up power(dBm) |
|                        | 10              | 1         | LOW        | QPSK       | 18.73 | 19.54 | 18.78              | 20.00              |
| MID                    |                 |           | QPSK       | 18.06      | 18.53 | 18.52 | 20.00              |                    |
| HIGH                   |                 |           | QPSK       | 19.10      | 18.27 | 18.04 | 20.00              |                    |
| 25                     |                 | LOW       | QPSK       | 18.07      | 18.28 | 18.41 | 19.00              |                    |
|                        |                 | MID       | QPSK       | 18.33      | 18.40 | 18.41 | 19.00              |                    |
|                        |                 | HIGH      | QPSK       | 18.77      | 18.38 | 18.49 | 19.00              |                    |
| 50                     |                 | LOW       | QPSK       | 18.33      | 18.49 | 18.41 | 19.00              |                    |
| 10                     |                 | 1         | LOW        | Q16        | 18.54 | 18.18 | 18.28              | 19.00              |
|                        |                 |           | MID        | Q16        | 18.75 | 18.92 | 18.89              | 19.00              |
|                        | HIGH            |           | Q16        | 18.55      | 18.89 | 18.49 | 19.00              |                    |
|                        | 25              | LOW       | Q16        | 16.68      | 17.46 | 17.19 | 18.00              |                    |
|                        |                 | MID       | Q16        | 16.78      | 16.97 | 17.01 | 18.00              |                    |
|                        |                 | HIGH      | Q16        | 17.11      | 16.76 | 17.27 | 18.00              |                    |
|                        | 50              | LOW       | Q16        | 16.86      | 17.02 | 17.10 | 18.00              |                    |
|                        | 10              | 1         | LOW        | 64QAM      | 17.50 | 17.35 | 17.55              | 18.00              |
|                        |                 |           | MID        | 64QAM      | 17.68 | 17.75 | 17.75              | 18.00              |
| HIGH                   |                 |           | 64QAM      | 17.57      | 17.72 | 17.56 | 18.00              |                    |
| 25                     |                 | LOW       | 64QAM      | 15.51      | 16.43 | 16.33 | 17.00              |                    |
|                        |                 | MID       | 64QAM      | 15.76      | 15.90 | 15.96 | 17.00              |                    |
|                        |                 | HIGH      | 64QAM      | 16.17      | 15.88 | 16.18 | 17.00              |                    |
| 50                     |                 | LOW       | 64QAM      | 16.05      | 16.05 | 16.35 | 17.00              |                    |

| LTE B7-State3&4 -Ant.2 |                 |           |            |            |       |       |                    |                    |
|------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)        | RB Size         | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
| 15                     | 1               | LOW       | QPSK       | 18.11      | 19.53 | 18.61 | 20.00              |                    |
|                        |                 | MID       | QPSK       | 18.22      | 18.43 | 18.61 | 20.00              |                    |
|                        |                 | HIGH      | QPSK       | 18.97      | 18.47 | 18.31 | 20.00              |                    |
|                        | 36              | LOW       | QPSK       | 18.17      | 18.24 | 18.53 | 19.00              |                    |
|                        |                 | MID       | QPSK       | 18.06      | 18.29 | 18.42 | 19.00              |                    |
|                        |                 | HIGH      | QPSK       | 18.76      | 18.33 | 18.49 | 19.00              |                    |
|                        | 75              | LOW       | QPSK       | 18.43      | 18.79 | 18.65 | 19.00              |                    |
|                        | 15              | 1         | LOW        | Q16        | 18.33 | 18.35 | 18.40              | 19.00              |
|                        |                 |           | MID        | Q16        | 18.47 | 18.71 | 18.96              | 19.00              |
| HIGH                   |                 |           | Q16        | 18.68      | 18.81 | 18.75 | 19.00              |                    |
| 36                     |                 | LOW       | Q16        | 16.79      | 17.58 | 17.32 | 18.00              |                    |
|                        |                 | MID       | Q16        | 16.91      | 17.09 | 17.01 | 18.00              |                    |
|                        |                 | HIGH      | Q16        | 17.18      | 16.74 | 17.35 | 18.00              |                    |
| 75                     |                 | LOW       | Q16        | 17.05      | 17.20 | 17.12 | 18.00              |                    |
| 15                     |                 | 1         | LOW        | 64QAM      | 17.63 | 17.30 | 17.56              | 18.00              |
|                        |                 |           | MID        | 64QAM      | 17.79 | 17.62 | 17.95              | 18.00              |
|                        | HIGH            |           | 64QAM      | 17.67      | 17.51 | 17.62 | 18.00              |                    |
|                        | 36              | LOW       | 64QAM      | 15.62      | 16.45 | 16.07 | 17.00              |                    |
|                        |                 | MID       | 64QAM      | 15.72      | 15.84 | 16.09 | 17.00              |                    |
|                        |                 | HIGH      | 64QAM      | 16.15      | 15.95 | 16.12 | 17.00              |                    |
|                        | 75              | LOW       | 64QAM      | 15.95      | 15.95 | 16.37 | 17.00              |                    |
|                        | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                        | 20              | 1         | LOW        | QPSK       | 18.04 | 19.68 | 18.75              | 20.00              |
| MID                    |                 |           | QPSK       | 18.18      | 18.50 | 18.47 | 20.00              |                    |
| HIGH                   |                 |           | QPSK       | 19.03      | 18.35 | 18.19 | 20.00              |                    |
| 50                     |                 | LOW       | QPSK       | 18.06      | 19.00 | 18.56 | 19.00              |                    |
|                        |                 | MID       | QPSK       | 18.21      | 18.44 | 18.51 | 19.00              |                    |
|                        |                 | HIGH      | QPSK       | 18.67      | 18.28 | 18.57 | 19.00              |                    |
| 100                    |                 | LOW       | QPSK       | 18.37      | 18.64 | 18.56 | 19.00              |                    |
| 20                     |                 | 1         | LOW        | Q16        | 18.46 | 18.31 | 18.35              | 19.00              |
|                        |                 |           | MID        | Q16        | 18.62 | 18.81 | 18.91              | 19.00              |
|                        | HIGH            |           | Q16        | 18.66      | 18.78 | 18.61 | 19.00              |                    |
|                        | 50              | LOW       | Q16        | 16.64      | 17.46 | 17.22 | 18.00              |                    |
|                        |                 | MID       | Q16        | 16.80      | 16.94 | 17.16 | 18.00              |                    |
|                        |                 | HIGH      | Q16        | 17.26      | 16.74 | 17.25 | 18.00              |                    |
|                        | 100             | LOW       | Q16        | 16.95      | 17.10 | 17.24 | 18.00              |                    |
|                        | 20              | 1         | LOW        | 64QAM      | 17.59 | 17.21 | 17.44              | 18.00              |
|                        |                 |           | MID        | 64QAM      | 17.65 | 17.67 | 17.88              | 18.00              |
| HIGH                   |                 |           | 64QAM      | 17.56      | 17.66 | 17.52 | 18.00              |                    |
| 50                     |                 | LOW       | 64QAM      | 15.58      | 16.44 | 16.20 | 17.00              |                    |
|                        |                 | MID       | 64QAM      | 15.65      | 15.94 | 16.04 | 17.00              |                    |
|                        |                 | HIGH      | 64QAM      | 16.17      | 15.84 | 16.20 | 17.00              |                    |
| 100                    |                 | LOW       | 64QAM      | 15.92      | 16.04 | 16.33 | 17.00              |                    |

| LTE B7-Full Power -Ant.3 |           |           |            |            |       |       |                    |                    |
|--------------------------|-----------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth                | RB Size   | RB offset | Modulation | 20775      | 21100 | 21425 | Tune-up power(dBm) |                    |
| 5                        | 1         | LOW       | QPSK       | 22.47      | 23.03 | 22.48 | 23.50              |                    |
|                          |           | MID       | QPSK       | 22.50      | 23.12 | 22.70 | 23.50              |                    |
|                          |           | HIGH      | QPSK       | 22.45      | 22.91 | 22.65 | 23.50              |                    |
|                          | 12        | LOW       | QPSK       | 21.60      | 21.79 | 21.59 | 22.50              |                    |
|                          |           | MID       | QPSK       | 21.72      | 21.85 | 21.60 | 22.50              |                    |
|                          |           | HIGH      | QPSK       | 22.00      | 21.58 | 21.62 | 22.50              |                    |
|                          | 25        | LOW       | QPSK       | 21.62      | 21.67 | 21.74 | 22.50              |                    |
|                          | 5         | 1         | LOW        | Q16        | 21.84 | 22.47 | 21.96              | 22.50              |
|                          |           |           | MID        | Q16        | 22.08 | 22.46 | 21.88              | 22.50              |
| HIGH                     |           |           | Q16        | 22.05      | 22.39 | 21.94 | 22.50              |                    |
| 12                       |           | LOW       | Q16        | 20.57      | 20.51 | 20.04 | 21.50              |                    |
|                          |           | MID       | Q16        | 20.33      | 20.31 | 20.27 | 21.50              |                    |
|                          |           | HIGH      | Q16        | 20.37      | 20.18 | 20.19 | 21.50              |                    |
| 25                       |           | LOW       | Q16        | 20.22      | 20.33 | 20.30 | 21.50              |                    |
| 5                        |           | 1         | LOW        | 64QAM      | 20.84 | 21.35 | 20.90              | 21.50              |
|                          |           |           | MID        | 64QAM      | 21.13 | 20.83 | 20.76              | 21.50              |
|                          | HIGH      |           | 64QAM      | 21.05      | 21.45 | 20.79 | 21.50              |                    |
|                          | 12        | LOW       | 64QAM      | 19.62      | 19.61 | 19.19 | 20.50              |                    |
|                          |           | MID       | 64QAM      | 19.40      | 19.39 | 19.37 | 20.50              |                    |
|                          |           | HIGH      | 64QAM      | 19.40      | 19.10 | 19.23 | 20.50              |                    |
|                          | 25        | LOW       | 64QAM      | 19.09      | 19.32 | 19.38 | 20.50              |                    |
|                          | Bandwidth | RB Size   | RB offset  | Modulation | 20800 | 21100 | 21400              | Tune-up power(dBm) |
|                          | 10        | 1         | LOW        | QPSK       | 22.52 | 22.97 | 22.41              | 23.50              |
| MID                      |           |           | QPSK       | 22.45      | 23.15 | 22.59 | 23.50              |                    |
| HIGH                     |           |           | QPSK       | 22.53      | 22.99 | 22.68 | 23.50              |                    |
| 25                       |           | LOW       | QPSK       | 21.70      | 21.83 | 21.65 | 22.50              |                    |
|                          |           | MID       | QPSK       | 21.72      | 21.59 | 21.69 | 22.50              |                    |
|                          |           | HIGH      | QPSK       | 21.70      | 21.66 | 21.76 | 22.50              |                    |
| 50                       | LOW       | QPSK      | 21.79      | 21.88      | 21.52 | 22.50 |                    |                    |
| 10                       | 1         | LOW       | Q16        | 21.97      | 22.46 | 21.93 | 22.50              |                    |
|                          |           | MID       | Q16        | 22.07      | 22.25 | 21.85 | 22.50              |                    |
|                          |           | HIGH      | Q16        | 21.95      | 22.50 | 21.96 | 22.50              |                    |
|                          | 25        | LOW       | Q16        | 20.31      | 20.37 | 19.99 | 21.50              |                    |
|                          |           | MID       | Q16        | 20.24      | 20.16 | 20.18 | 21.50              |                    |
|                          |           | HIGH      | Q16        | 20.42      | 20.18 | 20.17 | 21.50              |                    |
| 50                       | LOW       | Q16       | 20.26      | 20.19      | 20.36 | 21.50 |                    |                    |
| 10                       | 1         | LOW       | 64QAM      | 21.09      | 20.84 | 20.79 | 21.50              |                    |
|                          |           | MID       | 64QAM      | 20.88      | 21.34 | 21.08 | 21.50              |                    |
|                          |           | HIGH      | 64QAM      | 20.99      | 21.08 | 21.00 | 21.50              |                    |
|                          | 25        | LOW       | 64QAM      | 19.42      | 19.11 | 19.02 | 20.50              |                    |
|                          |           | MID       | 64QAM      | 19.41      | 19.29 | 19.23 | 20.50              |                    |
|                          |           | HIGH      | 64QAM      | 19.50      | 19.24 | 19.02 | 20.50              |                    |
| 50                       | LOW       | 64QAM     | 19.22      | 19.38      | 19.46 | 20.50 |                    |                    |

| LTE B7-Full Power -Ant.3 |           |           |            |            |       |       |                    |                    |
|--------------------------|-----------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth                | RB Size   | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
| 15                       | 1         | LOW       | QPSK       | 22.42      | 23.07 | 22.47 | 23.50              |                    |
|                          |           | MID       | QPSK       | 22.51      | 23.02 | 22.81 | 23.50              |                    |
|                          |           | HIGH      | QPSK       | 22.59      | 23.04 | 22.74 | 23.50              |                    |
|                          | 36        | LOW       | QPSK       | 21.59      | 21.85 | 21.70 | 22.50              |                    |
|                          |           | MID       | QPSK       | 21.69      | 21.81 | 21.59 | 22.50              |                    |
|                          |           | HIGH      | QPSK       | 21.90      | 21.60 | 21.68 | 22.50              |                    |
|                          | 75        | LOW       | QPSK       | 21.57      | 21.66 | 21.70 | 22.50              |                    |
|                          | 15        | 1         | LOW        | Q16        | 21.92 | 22.50 | 21.92              | 22.50              |
|                          |           |           | MID        | Q16        | 22.01 | 22.35 | 21.89              | 22.50              |
| HIGH                     |           |           | Q16        | 21.90      | 22.43 | 21.79 | 22.50              |                    |
| 36                       |           | LOW       | Q16        | 20.52      | 20.40 | 20.14 | 21.50              |                    |
|                          |           | MID       | Q16        | 20.20      | 20.42 | 20.37 | 21.50              |                    |
|                          |           | HIGH      | Q16        | 20.26      | 20.21 | 20.26 | 21.50              |                    |
| 75                       |           | LOW       | Q16        | 20.15      | 20.46 | 20.39 | 21.50              |                    |
| 15                       |           | 1         | LOW        | 64QAM      | 21.05 | 21.50 | 20.72              | 21.50              |
|                          |           |           | MID        | 64QAM      | 20.95 | 21.40 | 21.08              | 21.50              |
|                          | HIGH      |           | 64QAM      | 21.17      | 21.31 | 20.88 | 21.50              |                    |
|                          | 36        | LOW       | 64QAM      | 19.41      | 19.21 | 19.16 | 20.50              |                    |
|                          |           | MID       | 64QAM      | 19.27      | 19.25 | 19.12 | 20.50              |                    |
|                          |           | HIGH      | 64QAM      | 19.49      | 19.30 | 19.13 | 20.50              |                    |
|                          | 75        | LOW       | 64QAM      | 19.18      | 19.33 | 19.48 | 20.50              |                    |
|                          | Bandwidth | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                          | 20        | 1         | LOW        | QPSK       | 22.54 | 23.03 | 22.55              | 23.50              |
| MID                      |           |           | QPSK       | 22.57      | 23.02 | 22.66 | 23.50              |                    |
| HIGH                     |           |           | QPSK       | 22.60      | 23.00 | 22.60 | 23.50              |                    |
| 50                       |           | LOW       | QPSK       | 21.62      | 21.72 | 21.62 | 22.50              |                    |
|                          |           | MID       | QPSK       | 21.72      | 21.72 | 21.57 | 22.50              |                    |
|                          |           | HIGH      | QPSK       | 21.81      | 21.65 | 21.61 | 22.50              |                    |
| 100                      | LOW       | QPSK      | 21.69      | 21.76      | 21.58 | 22.50 |                    |                    |
| 20                       | 1         | LOW       | Q16        | 21.94      | 22.35 | 21.92 | 22.50              |                    |
|                          |           | MID       | Q16        | 21.93      | 22.37 | 21.91 | 22.50              |                    |
|                          |           | HIGH      | Q16        | 21.97      | 22.36 | 21.93 | 22.50              |                    |
|                          | 50        | LOW       | Q16        | 20.38      | 20.33 | 20.09 | 21.50              |                    |
|                          |           | MID       | Q16        | 20.24      | 20.31 | 20.22 | 21.50              |                    |
|                          |           | HIGH      | Q16        | 20.32      | 20.31 | 20.24 | 21.50              |                    |
| 100                      | LOW       | Q16       | 20.14      | 20.32      | 20.27 | 21.50 |                    |                    |
| 20                       | 1         | LOW       | 64QAM      | 20.96      | 21.41 | 20.80 | 21.50              |                    |
|                          |           | MID       | 64QAM      | 20.97      | 21.39 | 20.98 | 21.50              |                    |
|                          |           | HIGH      | 64QAM      | 21.03      | 21.22 | 21.01 | 21.50              |                    |
|                          | 50        | LOW       | 64QAM      | 19.51      | 19.26 | 19.07 | 20.50              |                    |
|                          |           | MID       | 64QAM      | 19.30      | 19.28 | 19.23 | 20.50              |                    |
|                          |           | HIGH      | 64QAM      | 19.38      | 19.36 | 19.15 | 20.50              |                    |
| 100                      | LOW       | 64QAM     | 19.26      | 19.47      | 19.42 | 20.50 |                    |                    |

| LTE B7-State1&2-Ant.3 |           |           |            |            |       |       |                    |                    |
|-----------------------|-----------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth             | RB Size   | RB offset | Modulation | 20775      | 21100 | 21425 | Tune-up power(dBm) |                    |
| 5                     | 1         | LOW       | QPSK       | 22.47      | 23.03 | 22.48 | 23.50              |                    |
|                       |           | MID       | QPSK       | 22.50      | 23.12 | 22.70 | 23.50              |                    |
|                       |           | HIGH      | QPSK       | 22.45      | 22.91 | 22.65 | 23.50              |                    |
|                       | 12        | LOW       | QPSK       | 21.60      | 21.79 | 21.59 | 22.50              |                    |
|                       |           | MID       | QPSK       | 21.72      | 21.85 | 21.60 | 22.50              |                    |
|                       |           | HIGH      | QPSK       | 22.00      | 21.58 | 21.62 | 22.50              |                    |
|                       | 25        | LOW       | QPSK       | 21.62      | 21.67 | 21.74 | 22.50              |                    |
|                       | 5         | 1         | LOW        | Q16        | 21.84 | 22.47 | 21.96              | 22.50              |
|                       |           |           | MID        | Q16        | 22.08 | 22.46 | 21.88              | 22.50              |
| HIGH                  |           |           | Q16        | 22.05      | 22.39 | 21.94 | 22.50              |                    |
| 12                    |           | LOW       | Q16        | 20.57      | 20.51 | 20.04 | 21.50              |                    |
|                       |           | MID       | Q16        | 20.33      | 20.31 | 20.27 | 21.50              |                    |
|                       |           | HIGH      | Q16        | 20.37      | 20.18 | 20.19 | 21.50              |                    |
| 25                    |           | LOW       | Q16        | 20.22      | 20.33 | 20.30 | 21.50              |                    |
| 5                     |           | 1         | LOW        | 64QAM      | 20.84 | 21.35 | 20.90              | 21.50              |
|                       |           |           | MID        | 64QAM      | 21.13 | 20.83 | 20.76              | 21.50              |
|                       | HIGH      |           | 64QAM      | 21.05      | 21.45 | 20.79 | 21.50              |                    |
|                       | 12        | LOW       | 64QAM      | 19.62      | 19.61 | 19.19 | 20.50              |                    |
|                       |           | MID       | 64QAM      | 19.40      | 19.39 | 19.37 | 20.50              |                    |
|                       |           | HIGH      | 64QAM      | 19.40      | 19.10 | 19.23 | 20.50              |                    |
|                       | 25        | LOW       | 64QAM      | 19.09      | 19.32 | 19.38 | 20.50              |                    |
|                       | Bandwidth | RB Size   | RB offset  | Modulation | 20800 | 21100 | 21400              | Tune-up power(dBm) |
|                       | 10        | 1         | LOW        | QPSK       | 22.52 | 22.97 | 22.41              | 23.50              |
| MID                   |           |           | QPSK       | 22.45      | 23.15 | 22.59 | 23.50              |                    |
| HIGH                  |           |           | QPSK       | 22.53      | 22.99 | 22.68 | 23.50              |                    |
| 25                    |           | LOW       | QPSK       | 21.70      | 21.83 | 21.65 | 22.50              |                    |
|                       |           | MID       | QPSK       | 21.72      | 21.59 | 21.69 | 22.50              |                    |
|                       |           | HIGH      | QPSK       | 21.70      | 21.66 | 21.76 | 22.50              |                    |
| 50                    | LOW       | QPSK      | 21.79      | 21.88      | 21.52 | 22.50 |                    |                    |
| 10                    | 1         | LOW       | Q16        | 21.97      | 22.46 | 21.93 | 22.50              |                    |
|                       |           | MID       | Q16        | 22.07      | 22.25 | 21.85 | 22.50              |                    |
|                       |           | HIGH      | Q16        | 21.95      | 22.50 | 21.96 | 22.50              |                    |
|                       | 25        | LOW       | Q16        | 20.31      | 20.37 | 19.99 | 21.50              |                    |
|                       |           | MID       | Q16        | 20.24      | 20.16 | 20.18 | 21.50              |                    |
|                       |           | HIGH      | Q16        | 20.42      | 20.18 | 20.17 | 21.50              |                    |
| 50                    | LOW       | Q16       | 20.26      | 20.19      | 20.36 | 21.50 |                    |                    |
| 10                    | 1         | LOW       | 64QAM      | 21.09      | 20.84 | 20.79 | 21.50              |                    |
|                       |           | MID       | 64QAM      | 20.88      | 21.34 | 21.08 | 21.50              |                    |
|                       |           | HIGH      | 64QAM      | 20.99      | 21.08 | 21.00 | 21.50              |                    |
|                       | 25        | LOW       | 64QAM      | 19.42      | 19.11 | 19.02 | 20.50              |                    |
|                       |           | MID       | 64QAM      | 19.41      | 19.29 | 19.23 | 20.50              |                    |
|                       |           | HIGH      | 64QAM      | 19.50      | 19.24 | 19.02 | 20.50              |                    |
| 50                    | LOW       | 64QAM     | 19.22      | 19.38      | 19.46 | 20.50 |                    |                    |



| LTE B7-State1&2-Ant.3 |           |           |            |            |       |       |                    |                    |
|-----------------------|-----------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth             | RB Size   | RB offset | Modulation | 20825      | 21100 | 21375 | Tune-up power(dBm) |                    |
| 15                    | 1         | LOW       | QPSK       | 22.42      | 23.07 | 22.47 | 23.50              |                    |
|                       |           | MID       | QPSK       | 22.51      | 23.02 | 22.81 | 23.50              |                    |
|                       |           | HIGH      | QPSK       | 22.59      | 23.04 | 22.74 | 23.50              |                    |
|                       | 36        | LOW       | QPSK       | 21.59      | 21.85 | 21.70 | 22.50              |                    |
|                       |           | MID       | QPSK       | 21.69      | 21.81 | 21.59 | 22.50              |                    |
|                       |           | HIGH      | QPSK       | 21.90      | 21.60 | 21.68 | 22.50              |                    |
|                       | 75        | LOW       | QPSK       | 21.57      | 21.66 | 21.70 | 22.50              |                    |
|                       | 15        | 1         | LOW        | Q16        | 21.92 | 22.50 | 21.92              | 22.50              |
|                       |           |           | MID        | Q16        | 22.01 | 22.35 | 21.89              | 22.50              |
| HIGH                  |           |           | Q16        | 21.90      | 22.43 | 21.79 | 22.50              |                    |
| 36                    |           | LOW       | Q16        | 20.52      | 20.40 | 20.14 | 21.50              |                    |
|                       |           | MID       | Q16        | 20.20      | 20.42 | 20.37 | 21.50              |                    |
|                       |           | HIGH      | Q16        | 20.26      | 20.21 | 20.26 | 21.50              |                    |
| 75                    |           | LOW       | Q16        | 20.15      | 20.46 | 20.39 | 21.50              |                    |
| 15                    |           | 1         | LOW        | 64QAM      | 21.05 | 21.50 | 20.72              | 21.50              |
|                       |           |           | MID        | 64QAM      | 20.95 | 21.40 | 21.08              | 21.50              |
|                       | HIGH      |           | 64QAM      | 21.17      | 21.31 | 20.88 | 21.50              |                    |
|                       | 36        | LOW       | 64QAM      | 19.41      | 19.21 | 19.16 | 20.50              |                    |
|                       |           | MID       | 64QAM      | 19.27      | 19.25 | 19.12 | 20.50              |                    |
|                       |           | HIGH      | 64QAM      | 19.49      | 19.30 | 19.13 | 20.50              |                    |
|                       | 75        | LOW       | 64QAM      | 19.18      | 19.33 | 19.48 | 20.50              |                    |
|                       | Bandwidth | RB Size   | RB offset  | Modulation | 20850 | 21100 | 21350              | Tune-up power(dBm) |
|                       | 20        | 1         | LOW        | QPSK       | 22.54 | 23.03 | 22.55              | 23.50              |
| MID                   |           |           | QPSK       | 22.57      | 23.02 | 22.66 | 23.50              |                    |
| HIGH                  |           |           | QPSK       | 22.60      | 23.00 | 22.60 | 23.50              |                    |
| 50                    |           | LOW       | QPSK       | 21.62      | 21.81 | 21.62 | 22.50              |                    |
|                       |           | MID       | QPSK       | 21.72      | 21.72 | 21.57 | 22.50              |                    |
|                       |           | HIGH      | QPSK       | 21.71      | 21.65 | 21.61 | 22.50              |                    |
| 100                   | LOW       | QPSK      | 21.69      | 21.76      | 21.58 | 22.50 |                    |                    |
| 20                    | 1         | LOW       | Q16        | 21.94      | 22.35 | 21.92 | 22.50              |                    |
|                       |           | MID       | Q16        | 21.93      | 22.37 | 21.91 | 22.50              |                    |
|                       |           | HIGH      | Q16        | 21.97      | 22.36 | 21.93 | 22.50              |                    |
|                       | 50        | LOW       | Q16        | 20.38      | 20.33 | 20.09 | 21.50              |                    |
|                       |           | MID       | Q16        | 20.24      | 20.31 | 20.22 | 21.50              |                    |
|                       |           | HIGH      | Q16        | 20.32      | 20.31 | 20.24 | 21.50              |                    |
| 100                   | LOW       | Q16       | 20.14      | 20.32      | 20.27 | 21.50 |                    |                    |
| 20                    | 1         | LOW       | 64QAM      | 20.96      | 21.41 | 20.80 | 21.50              |                    |
|                       |           | MID       | 64QAM      | 20.97      | 21.39 | 20.98 | 21.50              |                    |
|                       |           | HIGH      | 64QAM      | 21.03      | 21.22 | 21.01 | 21.50              |                    |
|                       | 50        | LOW       | 64QAM      | 19.51      | 19.26 | 19.07 | 20.50              |                    |
|                       |           | MID       | 64QAM      | 19.30      | 19.28 | 19.23 | 20.50              |                    |
|                       |           | HIGH      | 64QAM      | 19.38      | 19.36 | 19.15 | 20.50              |                    |
| 100                   | LOW       | 64QAM     | 19.26      | 19.47      | 19.42 | 20.50 |                    |                    |

| LTE B7-State3&4-Ant.3 |           |           |            |            |       |       |                    |                    |
|-----------------------|-----------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth             | RB Size   | RB offset | Modulation | 20775      | 21100 | 21425 | Tune-up power(dBm) |                    |
| 5                     | 1         | LOW       | QPSK       | 18.72      | 18.77 | 19.10 | 20.50              |                    |
|                       |           | MID       | QPSK       | 19.28      | 19.14 | 19.12 | 20.50              |                    |
|                       |           | HIGH      | QPSK       | 18.87      | 19.18 | 19.35 | 20.50              |                    |
|                       | 12        | LOW       | QPSK       | 18.59      | 18.48 | 18.13 | 19.50              |                    |
|                       |           | MID       | QPSK       | 18.71      | 18.68 | 18.21 | 19.50              |                    |
|                       |           | HIGH      | QPSK       | 18.36      | 18.53 | 17.90 | 19.50              |                    |
|                       | 25        | LOW       | QPSK       | 18.44      | 18.62 | 18.07 | 19.50              |                    |
|                       | 5         | 1         | LOW        | Q16        | 18.15 | 19.14 | 17.94              | 19.50              |
|                       |           |           | MID        | Q16        | 18.91 | 19.30 | 18.25              | 19.50              |
| HIGH                  |           |           | Q16        | 18.63      | 18.93 | 18.08 | 19.50              |                    |
| 12                    |           | LOW       | Q16        | 17.45      | 17.45 | 16.86 | 18.50              |                    |
|                       |           | MID       | Q16        | 17.62      | 17.50 | 16.94 | 18.50              |                    |
|                       |           | HIGH      | Q16        | 17.57      | 17.37 | 16.84 | 18.50              |                    |
| 25                    |           | LOW       | Q16        | 17.34      | 17.40 | 16.69 | 18.50              |                    |
| 5                     |           | 1         | LOW        | 64QAM      | 17.22 | 18.07 | 16.89              | 18.50              |
|                       |           |           | MID        | 64QAM      | 17.97 | 18.33 | 17.27              | 18.50              |
|                       | HIGH      |           | 64QAM      | 17.55      | 17.99 | 17.21 | 18.50              |                    |
|                       | 12        | LOW       | 64QAM      | 16.41      | 16.55 | 15.90 | 17.50              |                    |
|                       |           | MID       | 64QAM      | 16.72      | 16.45 | 15.91 | 17.50              |                    |
|                       |           | HIGH      | 64QAM      | 16.50      | 16.49 | 15.80 | 17.50              |                    |
|                       | 25        | LOW       | 64QAM      | 16.38      | 16.54 | 15.70 | 17.50              |                    |
|                       | Bandwidth | RB Size   | RB offset  | Modulation | 20800 | 21100 | 21400              | Tune-up power(dBm) |
|                       | 10        | 1         | LOW        | QPSK       | 18.57 | 18.75 | 19.19              | 20.50              |
| MID                   |           |           | QPSK       | 19.31      | 19.36 | 18.68 | 20.50              |                    |
| HIGH                  |           |           | QPSK       | 18.67      | 18.53 | 19.09 | 20.50              |                    |
| 25                    |           | LOW       | QPSK       | 18.43      | 18.54 | 18.09 | 19.50              |                    |
|                       |           | MID       | QPSK       | 18.56      | 18.89 | 17.87 | 19.50              |                    |
|                       |           | HIGH      | QPSK       | 18.66      | 18.58 | 17.68 | 19.50              |                    |
| 50                    | LOW       | QPSK      | 18.64      | 18.46      | 17.82 | 19.50 |                    |                    |
| 10                    | 1         | LOW       | Q16        | 18.28      | 18.84 | 17.99 | 19.50              |                    |
|                       |           | MID       | Q16        | 18.98      | 19.48 | 18.20 | 19.50              |                    |
|                       |           | HIGH      | Q16        | 18.69      | 18.68 | 18.15 | 19.50              |                    |
|                       | 25        | LOW       | Q16        | 17.29      | 17.56 | 17.06 | 18.50              |                    |
|                       |           | MID       | Q16        | 17.75      | 17.77 | 17.14 | 18.50              |                    |
|                       |           | HIGH      | Q16        | 17.62      | 17.42 | 16.59 | 18.50              |                    |
| 50                    | LOW       | Q16       | 17.56      | 17.61      | 16.77 | 18.50 |                    |                    |
| 10                    | 1         | LOW       | 64QAM      | 17.36      | 18.11 | 16.98 | 18.50              |                    |
|                       |           | MID       | 64QAM      | 17.95      | 18.39 | 17.06 | 18.50              |                    |
|                       |           | HIGH      | 64QAM      | 17.72      | 17.82 | 16.93 | 18.50              |                    |
|                       | 25        | LOW       | 64QAM      | 16.28      | 16.65 | 15.95 | 17.50              |                    |
|                       |           | MID       | 64QAM      | 16.52      | 16.64 | 16.04 | 17.50              |                    |
|                       |           | HIGH      | 64QAM      | 16.57      | 16.59 | 15.76 | 17.50              |                    |
| 50                    | LOW       | 64QAM     | 16.47      | 16.54      | 15.75 | 17.50 |                    |                    |

| LTE B7-State3&4-Ant.3 |         |           |            |       |       |       |                    |       |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| Bandwidth             | RB Size | RB offset | Modulation | 20825 | 21100 | 21375 | Tune-up power(dBm) |       |
| 15                    | 1       | LOW       | QPSK       | 18.78 | 18.87 | 19.20 | 20.50              |       |
|                       |         | MID       | QPSK       | 19.33 | 19.21 | 19.19 | 20.50              |       |
|                       |         | HIGH      | QPSK       | 18.89 | 18.54 | 19.20 | 20.50              |       |
|                       | 36      | LOW       | QPSK       | 18.55 | 18.52 | 18.02 | 19.50              |       |
|                       |         | MID       | QPSK       | 18.68 | 18.63 | 18.11 | 19.50              |       |
|                       |         | HIGH      | QPSK       | 18.48 | 18.40 | 17.79 | 19.50              |       |
|                       | 75      | LOW       | QPSK       | 18.38 | 18.47 | 17.95 | 19.50              |       |
|                       |         | 1         | LOW        | Q16   | 18.21 | 19.02 | 17.85              | 19.50 |
|                       |         |           | MID        | Q16   | 18.87 | 19.29 | 18.31              | 19.50 |
| HIGH                  | Q16     |           | 18.62      | 18.82 | 18.23 | 19.50 |                    |       |
| 15                    | 36      | LOW       | Q16        | 17.33 | 17.51 | 16.98 | 18.50              |       |
|                       |         | MID       | Q16        | 17.54 | 17.63 | 17.06 | 18.50              |       |
|                       |         | HIGH      | Q16        | 17.71 | 17.48 | 16.86 | 18.50              |       |
|                       | 75      | LOW       | Q16        | 17.35 | 17.46 | 16.79 | 18.50              |       |
|                       |         | LOW       | 64QAM      | 17.39 | 17.85 | 17.04 | 18.50              |       |
|                       |         | MID       | 64QAM      | 17.93 | 18.39 | 17.13 | 18.50              |       |
| 15                    | 1       | HIGH      | 64QAM      | 17.69 | 17.92 | 16.99 | 18.50              |       |
|                       |         | LOW       | 64QAM      | 16.18 | 16.60 | 15.90 | 17.50              |       |
|                       |         | MID       | 64QAM      | 16.43 | 16.63 | 16.18 | 17.50              |       |
|                       | 36      | HIGH      | 64QAM      | 16.61 | 16.44 | 15.63 | 17.50              |       |
|                       |         | LOW       | 64QAM      | 16.70 | 16.34 | 15.85 | 17.50              |       |
|                       |         | LOW       | 64QAM      | 16.70 | 16.34 | 15.85 | 17.50              |       |
| Bandwidth             | RB Size | RB offset | Modulation | 20850 | 21100 | 21350 | Tune-up power(dBm) |       |
| 20                    | 1       | LOW       | QPSK       | 18.64 | 18.84 | 19.13 | 20.50              |       |
|                       |         | MID       | QPSK       | 19.20 | 19.23 | 18.57 | 20.50              |       |
|                       |         | HIGH      | QPSK       | 18.80 | 18.58 | 19.17 | 20.50              |       |
|                       | 50      | LOW       | QPSK       | 18.46 | 18.66 | 18.02 | 19.50              |       |
|                       |         | MID       | QPSK       | 18.68 | 18.75 | 18.00 | 19.50              |       |
|                       |         | HIGH      | QPSK       | 18.60 | 18.53 | 17.70 | 19.50              |       |
|                       | 100     | LOW       | QPSK       | 18.53 | 18.60 | 17.85 | 19.50              |       |
|                       |         | 1         | LOW        | Q16   | 18.28 | 18.91 | 18.00              | 19.50 |
|                       |         |           | MID        | Q16   | 18.93 | 19.33 | 18.18              | 19.50 |
| HIGH                  | Q16     |           | 18.56      | 18.70 | 18.11 | 19.50 |                    |       |
| 20                    | 50      | LOW       | Q16        | 17.42 | 17.64 | 16.99 | 18.50              |       |
|                       |         | MID       | Q16        | 17.67 | 17.75 | 17.00 | 18.50              |       |
|                       |         | HIGH      | Q16        | 17.59 | 17.54 | 16.72 | 18.50              |       |
|                       | 100     | LOW       | Q16        | 17.47 | 17.54 | 16.80 | 18.50              |       |
|                       |         | LOW       | 64QAM      | 17.29 | 17.99 | 17.12 | 18.50              |       |
|                       |         | MID       | 64QAM      | 17.99 | 18.46 | 17.04 | 18.50              |       |
| 20                    | 1       | HIGH      | 64QAM      | 17.60 | 17.77 | 16.99 | 18.50              |       |
|                       |         | LOW       | 64QAM      | 16.28 | 16.71 | 16.04 | 17.50              |       |
|                       |         | MID       | 64QAM      | 16.58 | 16.63 | 16.14 | 17.50              |       |
|                       | 50      | HIGH      | 64QAM      | 16.70 | 16.55 | 15.65 | 17.50              |       |
|                       |         | LOW       | 64QAM      | 16.59 | 16.40 | 15.85 | 17.50              |       |
|                       |         | LOW       | 64QAM      | 16.59 | 16.40 | 15.85 | 17.50              |       |

### 8.3.5 LTE Band13 Output Power

| LTE B13-Full Power -Ant.2 |         |           |            |       |       |       |                    |
|---------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)           | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                       | 1       | LOW       | QPSK       | 23.53 | 23.79 | 23.67 | 24.50              |
|                           |         | MID       | QPSK       | 23.53 | 23.49 | 23.57 | 24.50              |
|                           |         | HIGH      | QPSK       | 23.83 | 23.65 | 23.98 | 24.50              |
|                           | 3       | LOW       | QPSK       | 23.66 | 23.85 | 23.83 | 24.50              |
|                           |         | MID       | QPSK       | 23.72 | 23.81 | 23.45 | 24.50              |
|                           |         | HIGH      | QPSK       | 23.72 | 23.92 | 23.75 | 24.50              |
| 6                         | LOW     | QPSK      | 22.81      | 22.62 | 22.78 | 23.50 |                    |
| 1.4                       | 1       | LOW       | Q16        | 22.92 | 22.74 | 22.60 | 23.50              |
|                           |         | MID       | Q16        | 22.93 | 22.86 | 22.72 | 23.50              |
|                           |         | HIGH      | Q16        | 23.11 | 22.95 | 22.67 | 23.50              |
|                           | 3       | LOW       | Q16        | 22.84 | 22.68 | 22.71 | 23.50              |
|                           |         | MID       | Q16        | 22.98 | 22.74 | 22.60 | 23.50              |
|                           |         | HIGH      | Q16        | 22.91 | 22.82 | 22.66 | 23.50              |
| 6                         | LOW     | Q16       | 21.60      | 21.91 | 21.59 | 22.50 |                    |
| 1.4                       | 1       | LOW       | 64QAM      | 21.68 | 21.90 | 21.72 | 22.50              |
|                           |         | MID       | 64QAM      | 21.62 | 21.85 | 21.67 | 22.50              |
|                           |         | HIGH      | 64QAM      | 21.92 | 22.01 | 21.81 | 22.50              |
|                           | 3       | LOW       | 64QAM      | 21.97 | 21.89 | 21.76 | 22.50              |
|                           |         | MID       | 64QAM      | 21.62 | 21.75 | 21.59 | 22.50              |
|                           |         | HIGH      | 64QAM      | 21.88 | 21.75 | 21.92 | 22.50              |
| 6                         | LOW     | 64QAM     | 21.20      | 21.17 | 21.14 | 21.50 |                    |
| Bandwidth (MHz)           | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                         | 1       | LOW       | QPSK       | 23.64 | 23.69 | 23.88 | 24.50              |
|                           |         | MID       | QPSK       | 23.47 | 23.81 | 23.61 | 24.50              |
|                           |         | HIGH      | QPSK       | 23.63 | 23.83 | 23.58 | 24.50              |
|                           | 8       | LOW       | QPSK       | 22.70 | 22.75 | 22.44 | 23.50              |
|                           |         | MID       | QPSK       | 22.81 | 22.89 | 22.65 | 23.50              |
|                           |         | HIGH      | QPSK       | 22.65 | 22.88 | 22.84 | 23.50              |
| 15                        | LOW     | QPSK      | 22.89      | 22.87 | 22.62 | 23.50 |                    |
| 3                         | 1       | LOW       | Q16        | 22.76 | 23.02 | 22.72 | 23.50              |
|                           |         | MID       | Q16        | 22.68 | 22.95 | 22.59 | 23.50              |
|                           |         | HIGH      | Q16        | 22.92 | 22.79 | 22.74 | 23.50              |
|                           | 8       | LOW       | Q16        | 22.12 | 22.27 | 22.08 | 22.50              |
|                           |         | MID       | Q16        | 21.97 | 22.39 | 22.07 | 22.50              |
|                           |         | HIGH      | Q16        | 22.40 | 22.38 | 22.48 | 22.50              |
| 15                        | LOW     | Q16       | 21.90      | 22.20 | 22.13 | 22.50 |                    |
| 3                         | 1       | LOW       | 64QAM      | 21.76 | 22.02 | 21.72 | 22.50              |
|                           |         | MID       | 64QAM      | 21.68 | 21.95 | 21.59 | 22.50              |
|                           |         | HIGH      | 64QAM      | 21.92 | 21.79 | 21.74 | 22.50              |
|                           | 8       | LOW       | 64QAM      | 21.12 | 21.27 | 21.08 | 21.50              |
|                           |         | MID       | 64QAM      | 20.97 | 21.39 | 21.07 | 21.50              |
|                           |         | HIGH      | 64QAM      | 21.40 | 21.38 | 21.48 | 21.50              |
| 15                        | LOW     | 64QAM     | 20.90      | 21.20 | 21.13 | 21.50 |                    |

| LTE B13-Full Power -Ant.2 |         |           |            |       |       |       |                    |
|---------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (               | RB Size | RB offset | Modulation | 23035 | 23095 | 23155 | Tune-up power(dBm) |
| 5                         | 1       | LOW       | QPSK       | 23.80 | 23.73 | 23.74 | 24.50              |
|                           |         | MID       | QPSK       | 23.48 | 23.70 | 23.41 | 24.50              |
|                           |         | HIGH      | QPSK       | 23.56 | 23.90 | 23.56 | 24.50              |
|                           | 12      | LOW       | QPSK       | 22.65 | 22.72 | 22.67 | 23.50              |
|                           |         | MID       | QPSK       | 22.65 | 22.75 | 22.57 | 23.50              |
|                           |         | HIGH      | QPSK       | 22.84 | 23.08 | 22.58 | 23.50              |
| 25                        | LOW     | QPSK      | 22.81      | 22.77 | 22.72 | 23.50 |                    |
| 5                         | 1       | LOW       | Q16        | 22.71 | 22.82 | 22.60 | 23.50              |
|                           |         | MID       | Q16        | 22.73 | 22.92 | 22.79 | 23.50              |
|                           |         | HIGH      | Q16        | 22.73 | 22.96 | 22.83 | 23.50              |
|                           | 12      | LOW       | Q16        | 22.00 | 22.47 | 22.24 | 22.50              |
|                           |         | MID       | Q16        | 22.24 | 22.42 | 22.02 | 22.50              |
|                           |         | HIGH      | Q16        | 22.29 | 22.31 | 22.39 | 22.50              |
| 25                        | LOW     | Q16       | 22.07      | 22.22 | 22.06 | 22.50 |                    |
| 5                         | 1       | LOW       | 64QAM      | 21.71 | 21.82 | 21.60 | 22.50              |
|                           |         | MID       | 64QAM      | 21.73 | 21.92 | 21.79 | 22.50              |
|                           |         | HIGH      | 64QAM      | 21.73 | 21.96 | 21.83 | 22.50              |
|                           | 12      | LOW       | 64QAM      | 21.00 | 21.47 | 21.24 | 21.50              |
|                           |         | MID       | 64QAM      | 21.24 | 21.42 | 21.02 | 21.50              |
|                           |         | HIGH      | 64QAM      | 21.29 | 21.31 | 21.39 | 21.50              |
| 25                        | LOW     | 64QAM     | 21.07      | 21.22 | 21.06 | 21.50 |                    |
| Bandwidth (               | RB Size | RB offset | Modulation | /     | 23230 | /     | Tune-up power(dBm) |
| 10                        | 1       | LOW       | QPSK       | /     | 23.83 | /     | 24.50              |
|                           |         | MID       | QPSK       | /     | 23.75 | /     | 24.50              |
|                           |         | HIGH      | QPSK       | /     | 23.82 | /     | 24.50              |
|                           | 25      | LOW       | QPSK       | /     | 22.80 | /     | 23.50              |
|                           |         | MID       | QPSK       | /     | 22.80 | /     | 23.50              |
|                           |         | HIGH      | QPSK       | /     | 22.93 | /     | 23.50              |
| 50                        | LOW     | QPSK      | /          | 22.75 | /     | 23.50 |                    |
| 10                        | 1       | LOW       | Q16        | /     | 22.92 | /     | 23.50              |
|                           |         | MID       | Q16        | /     | 22.87 | /     | 23.50              |
|                           |         | HIGH      | Q16        | /     | 22.90 | /     | 23.50              |
|                           | 25      | LOW       | Q16        | /     | 22.38 | /     | 22.50              |
|                           |         | MID       | Q16        | /     | 22.32 | /     | 22.50              |
|                           |         | HIGH      | Q16        | /     | 22.32 | /     | 22.50              |
| 50                        | LOW     | Q16       | /          | 22.31 | /     | 22.50 |                    |
| 10                        | 1       | LOW       | 64QAM      | /     | 21.84 | /     | 22.50              |
|                           |         | MID       | 64QAM      | /     | 21.92 | /     | 22.50              |
|                           |         | HIGH      | 64QAM      | /     | 22.04 | /     | 22.50              |
|                           | 25      | LOW       | 64QAM      | /     | 21.44 | /     | 21.50              |
|                           |         | MID       | 64QAM      | /     | 21.27 | /     | 21.50              |
|                           |         | HIGH      | 64QAM      | /     | 21.34 | /     | 21.50              |
| 50                        | LOW     | 64QAM     | /          | 21.42 | /     | 21.50 |                    |

| LTE B13-State1&2&3&4 -Ant.2 |         |           |            |       |       |       |                    |
|-----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (                 | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                         | 1       | LOW       | QPSK       | 23.53 | 23.79 | 23.67 | 24.50              |
|                             |         | MID       | QPSK       | 23.53 | 23.49 | 23.57 | 24.50              |
|                             |         | HIGH      | QPSK       | 23.83 | 23.65 | 23.98 | 24.50              |
|                             | 3       | LOW       | QPSK       | 23.66 | 23.85 | 23.83 | 24.50              |
|                             |         | MID       | QPSK       | 23.72 | 23.81 | 23.45 | 24.50              |
|                             |         | HIGH      | QPSK       | 23.72 | 23.92 | 23.75 | 24.50              |
| 6                           | LOW     | QPSK      | 22.81      | 22.62 | 22.78 | 23.50 |                    |
| 1.4                         | 1       | LOW       | Q16        | 22.92 | 22.74 | 22.60 | 23.50              |
|                             |         | MID       | Q16        | 22.93 | 22.86 | 22.72 | 23.50              |
|                             |         | HIGH      | Q16        | 23.11 | 22.95 | 22.67 | 23.50              |
|                             | 3       | LOW       | Q16        | 22.84 | 22.68 | 22.71 | 23.50              |
|                             |         | MID       | Q16        | 22.98 | 22.74 | 22.60 | 23.50              |
|                             |         | HIGH      | Q16        | 22.91 | 22.82 | 22.66 | 23.50              |
| 6                           | LOW     | Q16       | 21.60      | 21.91 | 21.59 | 22.50 |                    |
| 1.4                         | 1       | LOW       | 64QAM      | 21.68 | 21.90 | 21.72 | 22.50              |
|                             |         | MID       | 64QAM      | 21.62 | 21.85 | 21.67 | 22.50              |
|                             |         | HIGH      | 64QAM      | 21.92 | 22.01 | 21.81 | 22.50              |
|                             | 3       | LOW       | 64QAM      | 21.97 | 21.89 | 21.76 | 22.50              |
|                             |         | MID       | 64QAM      | 21.62 | 21.75 | 21.59 | 22.50              |
|                             |         | HIGH      | 64QAM      | 21.88 | 21.75 | 21.92 | 22.50              |
| 6                           | LOW     | 64QAM     | 21.20      | 21.17 | 21.14 | 21.50 |                    |
| Bandwidth (                 | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                           | 1       | LOW       | QPSK       | 23.64 | 23.69 | 23.88 | 24.50              |
|                             |         | MID       | QPSK       | 23.47 | 23.81 | 23.61 | 24.50              |
|                             |         | HIGH      | QPSK       | 23.63 | 23.83 | 23.58 | 24.50              |
|                             | 8       | LOW       | QPSK       | 22.70 | 22.75 | 22.44 | 23.50              |
|                             |         | MID       | QPSK       | 22.81 | 22.89 | 22.65 | 23.50              |
|                             |         | HIGH      | QPSK       | 22.65 | 22.88 | 22.84 | 23.50              |
| 15                          | LOW     | QPSK      | 22.89      | 22.87 | 22.62 | 23.50 |                    |
| 3                           | 1       | LOW       | Q16        | 22.76 | 23.02 | 22.72 | 23.50              |
|                             |         | MID       | Q16        | 22.68 | 22.95 | 22.59 | 23.50              |
|                             |         | HIGH      | Q16        | 22.92 | 22.79 | 22.74 | 23.50              |
|                             | 8       | LOW       | Q16        | 22.12 | 22.27 | 22.08 | 22.50              |
|                             |         | MID       | Q16        | 21.97 | 22.39 | 22.07 | 22.50              |
|                             |         | HIGH      | Q16        | 22.40 | 22.38 | 22.48 | 22.50              |
| 15                          | LOW     | Q16       | 21.90      | 22.20 | 22.13 | 22.50 |                    |
| 3                           | 1       | LOW       | 64QAM      | 21.76 | 22.02 | 21.72 | 22.50              |
|                             |         | MID       | 64QAM      | 21.68 | 21.95 | 21.59 | 22.50              |
|                             |         | HIGH      | 64QAM      | 21.92 | 21.79 | 21.74 | 22.50              |
|                             | 8       | LOW       | 64QAM      | 21.12 | 21.27 | 21.08 | 21.50              |
|                             |         | MID       | 64QAM      | 20.97 | 21.39 | 21.07 | 21.50              |
|                             |         | HIGH      | 64QAM      | 21.40 | 21.38 | 21.48 | 21.50              |
| 15                          | LOW     | 64QAM     | 20.90      | 21.20 | 21.13 | 21.50 |                    |

| LTE B13-State1&2&3&4 -Ant.2 |         |           |            |       |       |       |                    |
|-----------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (                 | RB Size | RB offset | Modulation | 23035 | 23095 | 23155 | Tune-up power(dBm) |
| 5                           | 1       | LOW       | QPSK       | 23.80 | 23.73 | 23.74 | 24.50              |
|                             |         | MID       | QPSK       | 23.48 | 23.70 | 23.41 | 24.50              |
|                             |         | HIGH      | QPSK       | 23.56 | 23.90 | 23.56 | 24.50              |
|                             | 12      | LOW       | QPSK       | 22.65 | 22.72 | 22.67 | 23.50              |
|                             |         | MID       | QPSK       | 22.65 | 22.75 | 22.57 | 23.50              |
|                             |         | HIGH      | QPSK       | 22.84 | 23.08 | 22.58 | 23.50              |
| 25                          | LOW     | QPSK      | 22.81      | 22.77 | 22.72 | 23.50 |                    |
| 5                           | 1       | LOW       | Q16        | 22.71 | 22.82 | 22.60 | 23.50              |
|                             |         | MID       | Q16        | 22.73 | 22.92 | 22.79 | 23.50              |
|                             |         | HIGH      | Q16        | 22.73 | 22.96 | 22.83 | 23.50              |
|                             | 12      | LOW       | Q16        | 22.00 | 22.47 | 22.24 | 22.50              |
|                             |         | MID       | Q16        | 22.24 | 22.42 | 22.02 | 22.50              |
|                             |         | HIGH      | Q16        | 22.29 | 22.31 | 22.39 | 22.50              |
| 25                          | LOW     | Q16       | 22.07      | 22.22 | 22.06 | 22.50 |                    |
| 5                           | 1       | LOW       | 64QAM      | 21.71 | 21.82 | 21.60 | 22.50              |
|                             |         | MID       | 64QAM      | 21.73 | 21.92 | 21.79 | 22.50              |
|                             |         | HIGH      | 64QAM      | 21.73 | 21.96 | 21.83 | 22.50              |
|                             | 12      | LOW       | 64QAM      | 21.00 | 21.47 | 21.24 | 21.50              |
|                             |         | MID       | 64QAM      | 21.24 | 21.42 | 21.02 | 21.50              |
|                             |         | HIGH      | 64QAM      | 21.29 | 21.31 | 21.39 | 21.50              |
| 25                          | LOW     | 64QAM     | 21.07      | 21.22 | 21.06 | 21.50 |                    |
| Bandwidth (                 | RB Size | RB offset | Modulation | /     | 23230 | /     | Tune-up power(dBm) |
| 10                          | 1       | LOW       | QPSK       | /     | 23.83 | /     | 24.50              |
|                             |         | MID       | QPSK       | /     | 23.75 | /     | 24.50              |
|                             |         | HIGH      | QPSK       | /     | 23.82 | /     | 24.50              |
|                             | 25      | LOW       | QPSK       | /     | 22.80 | /     | 23.50              |
|                             |         | MID       | QPSK       | /     | 22.80 | /     | 23.50              |
|                             |         | HIGH      | QPSK       | /     | 22.93 | /     | 23.50              |
| 50                          | LOW     | QPSK      | /          | 22.75 | /     | 23.50 |                    |
| 10                          | 1       | LOW       | Q16        | /     | 22.92 | /     | 23.50              |
|                             |         | MID       | Q16        | /     | 22.87 | /     | 23.50              |
|                             |         | HIGH      | Q16        | /     | 22.90 | /     | 23.50              |
|                             | 25      | LOW       | Q16        | /     | 22.38 | /     | 22.50              |
|                             |         | MID       | Q16        | /     | 22.32 | /     | 22.50              |
|                             |         | HIGH      | Q16        | /     | 22.32 | /     | 22.50              |
| 50                          | LOW     | Q16       | /          | 22.31 | /     | 22.50 |                    |
| 10                          | 1       | LOW       | 64QAM      | /     | 21.84 | /     | 22.50              |
|                             |         | MID       | 64QAM      | /     | 21.92 | /     | 22.50              |
|                             |         | HIGH      | 64QAM      | /     | 22.04 | /     | 22.50              |
|                             | 25      | LOW       | 64QAM      | /     | 21.44 | /     | 21.50              |
|                             |         | MID       | 64QAM      | /     | 21.27 | /     | 21.50              |
|                             |         | HIGH      | 64QAM      | /     | 21.34 | /     | 21.50              |
| 50                          | LOW     | 64QAM     | /          | 21.42 | /     | 21.50 |                    |

| LTE B13-Full Power -Ant.3 |         |           |            |       |       |       |                    |
|---------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)           | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                       | 1       | LOW       | QPSK       | 23.66 | 23.65 | 23.91 | 24.50              |
|                           |         | MID       | QPSK       | 23.64 | 23.59 | 23.72 | 24.50              |
|                           |         | HIGH      | QPSK       | 23.76 | 23.70 | 23.76 | 24.50              |
|                           | 3       | LOW       | QPSK       | 23.83 | 23.72 | 23.90 | 24.50              |
|                           |         | MID       | QPSK       | 23.73 | 23.69 | 23.70 | 24.50              |
|                           |         | HIGH      | QPSK       | 23.85 | 23.66 | 23.73 | 24.50              |
| 6                         | LOW     | QPSK      | 22.84      | 22.63 | 22.47 | 23.50 |                    |
| 1.4                       | 1       | LOW       | Q16        | 22.77 | 22.66 | 22.45 | 23.50              |
|                           |         | MID       | Q16        | 22.81 | 22.67 | 22.64 | 23.50              |
|                           |         | HIGH      | Q16        | 22.77 | 22.91 | 22.67 | 23.50              |
|                           | 3       | LOW       | Q16        | 22.68 | 22.63 | 22.60 | 23.50              |
|                           |         | MID       | Q16        | 22.61 | 22.78 | 22.43 | 23.50              |
|                           |         | HIGH      | Q16        | 22.73 | 22.87 | 22.75 | 23.50              |
| 6                         | LOW     | Q16       | 21.99      | 22.15 | 22.38 | 22.50 |                    |
| 1.4                       | 1       | LOW       | 64QAM      | 21.85 | 21.58 | 21.46 | 22.50              |
|                           |         | MID       | 64QAM      | 21.80 | 21.58 | 21.73 | 22.50              |
|                           |         | HIGH      | 64QAM      | 21.83 | 22.05 | 21.68 | 22.50              |
|                           | 3       | LOW       | 64QAM      | 21.77 | 21.51 | 21.48 | 22.50              |
|                           |         | MID       | 64QAM      | 21.74 | 21.68 | 21.33 | 22.50              |
|                           |         | HIGH      | 64QAM      | 21.65 | 22.01 | 21.71 | 22.50              |
| 6                         | LOW     | 64QAM     | 21.12      | 21.15 | 21.31 | 21.50 |                    |
| Bandwidth (MHz)           | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                         | 1       | LOW       | QPSK       | 23.70 | 23.75 | 23.89 | 24.50              |
|                           |         | MID       | QPSK       | 23.57 | 23.67 | 23.63 | 24.50              |
|                           |         | HIGH      | QPSK       | 23.66 | 23.84 | 23.91 | 24.50              |
|                           | 8       | LOW       | QPSK       | 22.61 | 22.77 | 22.63 | 23.50              |
|                           |         | MID       | QPSK       | 22.80 | 22.78 | 22.54 | 23.50              |
|                           |         | HIGH      | QPSK       | 22.54 | 22.73 | 22.86 | 23.50              |
| 15                        | LOW     | QPSK      | 22.73      | 22.67 | 22.59 | 23.50 |                    |
| 3                         | 1       | LOW       | Q16        | 22.77 | 22.82 | 22.77 | 23.50              |
|                           |         | MID       | Q16        | 22.38 | 22.56 | 22.82 | 23.50              |
|                           |         | HIGH      | Q16        | 22.75 | 22.73 | 22.85 | 23.50              |
|                           | 8       | LOW       | Q16        | 22.25 | 22.09 | 22.23 | 22.50              |
|                           |         | MID       | Q16        | 22.16 | 22.23 | 22.29 | 22.50              |
|                           |         | HIGH      | Q16        | 22.02 | 22.34 | 22.09 | 22.50              |
| 15                        | LOW     | Q16       | 22.03      | 22.14 | 22.09 | 22.50 |                    |
| 3                         | 1       | LOW       | 64QAM      | 21.66 | 21.62 | 21.71 | 22.50              |
|                           |         | MID       | 64QAM      | 21.49 | 21.53 | 21.55 | 22.50              |
|                           |         | HIGH      | 64QAM      | 21.95 | 21.67 | 21.65 | 22.50              |
|                           | 8       | LOW       | 64QAM      | 21.12 | 21.30 | 21.26 | 21.50              |
|                           |         | MID       | 64QAM      | 21.14 | 21.27 | 21.19 | 21.50              |
|                           |         | HIGH      | 64QAM      | 21.04 | 21.27 | 20.93 | 21.50              |
| 15                        | LOW     | 64QAM     | 20.74      | 20.84 | 21.06 | 21.50 |                    |



| LTE B12-Full Power -Ant.3 |         |           |            |       |       |       |                    |
|---------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (               | RB Size | RB offset | Modulation | 23035 | 23095 | 23155 | Tune-up power(dBm) |
| 5                         | 1       | LOW       | QPSK       | 23.73 | 23.73 | 23.88 | 24.50              |
|                           |         | MID       | QPSK       | 23.66 | 23.63 | 23.68 | 24.50              |
|                           |         | HIGH      | QPSK       | 23.78 | 23.81 | 23.86 | 24.50              |
|                           | 12      | LOW       | QPSK       | 22.75 | 22.71 | 22.63 | 23.50              |
|                           |         | MID       | QPSK       | 22.82 | 22.60 | 22.60 | 23.50              |
|                           |         | HIGH      | QPSK       | 22.77 | 22.71 | 22.76 | 23.50              |
| 25                        | LOW     | QPSK      | 22.64      | 22.64 | 22.66 | 23.50 |                    |
| 5                         | 1       | LOW       | Q16        | 22.61 | 22.66 | 22.81 | 23.50              |
|                           |         | MID       | Q16        | 22.58 | 22.62 | 22.61 | 23.50              |
|                           |         | HIGH      | Q16        | 22.80 | 22.73 | 22.92 | 23.50              |
|                           | 12      | LOW       | Q16        | 22.21 | 22.31 | 22.22 | 22.50              |
|                           |         | MID       | Q16        | 22.00 | 22.08 | 22.17 | 22.50              |
|                           |         | HIGH      | Q16        | 22.18 | 22.35 | 22.11 | 22.50              |
| 25                        | LOW     | Q16       | 21.88      | 22.09 | 21.89 | 22.50 |                    |
| 5                         | 1       | LOW       | 64QAM      | 21.52 | 21.69 | 21.69 | 22.50              |
|                           |         | MID       | 64QAM      | 21.52 | 21.40 | 21.54 | 22.50              |
|                           |         | HIGH      | 64QAM      | 22.03 | 21.85 | 21.73 | 22.50              |
|                           | 12      | LOW       | 64QAM      | 21.10 | 21.33 | 21.09 | 21.50              |
|                           |         | MID       | 64QAM      | 21.29 | 21.33 | 21.14 | 21.50              |
|                           |         | HIGH      | 64QAM      | 21.19 | 21.37 | 21.01 | 21.50              |
| 25                        | LOW     | 64QAM     | 20.95      | 20.92 | 21.09 | 21.50 |                    |
| Bandwidth (               | RB Size | RB offset | Modulation | /     | 23230 | /     | Tune-up power(dBm) |
| 10                        | 1       | LOW       | QPSK       | /     | 23.69 | /     | 24.50              |
|                           |         | MID       | QPSK       | /     | 23.60 | /     | 24.50              |
|                           |         | HIGH      | QPSK       | /     | 23.76 | /     | 24.50              |
|                           | 25      | LOW       | QPSK       | /     | 22.62 | /     | 23.50              |
|                           |         | MID       | QPSK       | /     | 22.65 | /     | 23.50              |
|                           |         | HIGH      | QPSK       | /     | 22.78 | /     | 23.50              |
| 50                        | LOW     | QPSK      | /          | 22.68 | /     | 23.50 |                    |
| 10                        | 1       | LOW       | Q16        | /     | 22.72 | /     | 23.50              |
|                           |         | MID       | Q16        | /     | 22.67 | /     | 23.50              |
|                           |         | HIGH      | Q16        | /     | 22.74 | /     | 23.50              |
|                           | 25      | LOW       | Q16        | /     | 22.19 | /     | 22.50              |
|                           |         | MID       | Q16        | /     | 22.15 | /     | 22.50              |
|                           |         | HIGH      | Q16        | /     | 22.21 | /     | 22.50              |
| 50                        | LOW     | Q16       | /          | 22.11 | /     | 22.50 |                    |
| 10                        | 1       | LOW       | 64QAM      | /     | 21.70 | /     | 22.50              |
|                           |         | MID       | 64QAM      | /     | 21.73 | /     | 22.50              |
|                           |         | HIGH      | 64QAM      | /     | 21.76 | /     | 22.50              |
|                           | 25      | LOW       | 64QAM      | /     | 21.04 | /     | 21.50              |
|                           |         | MID       | 64QAM      | /     | 21.16 | /     | 21.50              |
|                           |         | HIGH      | 64QAM      | /     | 21.21 | /     | 21.50              |
| 50                        | LOW     | 64QAM     | /          | 21.10 | /     | 21.50 |                    |

| LTE B13-State1&2&3 -Ant.3 |                 |           |            |            |       |       |                    |                    |
|---------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)           | RB Size         | RB offset | Modulation | 23017      | 23095 | 23173 | Tune-up power(dBm) |                    |
| 1.4                       | 1               | LOW       | QPSK       | 23.66      | 23.65 | 23.91 | 24.50              |                    |
|                           |                 | MID       | QPSK       | 23.64      | 23.59 | 23.72 | 24.50              |                    |
|                           |                 | HIGH      | QPSK       | 23.76      | 23.70 | 23.76 | 24.50              |                    |
|                           | 3               | LOW       | QPSK       | 23.83      | 23.72 | 23.90 | 24.50              |                    |
|                           |                 | MID       | QPSK       | 23.73      | 23.69 | 23.70 | 24.50              |                    |
|                           |                 | HIGH      | QPSK       | 23.85      | 23.66 | 23.73 | 24.50              |                    |
|                           | 6               | LOW       | QPSK       | 22.84      | 22.63 | 22.47 | 23.50              |                    |
|                           | 1.4             | 1         | LOW        | Q16        | 22.77 | 22.66 | 22.45              | 23.50              |
|                           |                 |           | MID        | Q16        | 22.81 | 22.67 | 22.64              | 23.50              |
| HIGH                      |                 |           | Q16        | 22.77      | 22.91 | 22.67 | 23.50              |                    |
| 3                         |                 | LOW       | Q16        | 22.68      | 22.63 | 22.60 | 23.50              |                    |
|                           |                 | MID       | Q16        | 22.61      | 22.78 | 22.43 | 23.50              |                    |
|                           |                 | HIGH      | Q16        | 22.73      | 22.87 | 22.75 | 23.50              |                    |
| 6                         |                 | LOW       | Q16        | 21.99      | 22.15 | 22.38 | 22.50              |                    |
| 1.4                       |                 | 1         | LOW        | 64QAM      | 21.85 | 21.58 | 21.46              | 22.50              |
|                           |                 |           | MID        | 64QAM      | 21.80 | 21.58 | 21.73              | 22.50              |
|                           | HIGH            |           | 64QAM      | 21.83      | 22.05 | 21.68 | 22.50              |                    |
|                           | 3               | LOW       | 64QAM      | 21.77      | 21.51 | 21.48 | 22.50              |                    |
|                           |                 | MID       | 64QAM      | 21.74      | 21.68 | 21.33 | 22.50              |                    |
|                           |                 | HIGH      | 64QAM      | 21.65      | 22.01 | 21.71 | 22.50              |                    |
|                           | 6               | LOW       | 64QAM      | 21.12      | 21.15 | 21.31 | 21.50              |                    |
|                           | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 23025 | 23095 | 23165              | Tune-up power(dBm) |
|                           | 3               | 1         | LOW        | QPSK       | 23.70 | 23.75 | 23.89              | 24.50              |
| MID                       |                 |           | QPSK       | 23.57      | 23.67 | 23.63 | 24.50              |                    |
| HIGH                      |                 |           | QPSK       | 23.66      | 23.84 | 23.91 | 24.50              |                    |
| 8                         |                 | LOW       | QPSK       | 22.61      | 22.77 | 22.63 | 23.50              |                    |
|                           |                 | MID       | QPSK       | 22.80      | 22.78 | 22.54 | 23.50              |                    |
|                           |                 | HIGH      | QPSK       | 22.54      | 22.73 | 22.86 | 23.50              |                    |
| 15                        | LOW             | QPSK      | 22.73      | 22.67      | 22.59 | 23.50 |                    |                    |
| 3                         | 1               | LOW       | Q16        | 22.77      | 22.82 | 22.77 | 23.50              |                    |
|                           |                 | MID       | Q16        | 22.38      | 22.56 | 22.82 | 23.50              |                    |
|                           |                 | HIGH      | Q16        | 22.75      | 22.73 | 22.85 | 23.50              |                    |
|                           | 8               | LOW       | Q16        | 22.25      | 22.09 | 22.23 | 22.50              |                    |
|                           |                 | MID       | Q16        | 22.16      | 22.23 | 22.29 | 22.50              |                    |
|                           |                 | HIGH      | Q16        | 22.02      | 22.34 | 22.09 | 22.50              |                    |
|                           | 15              | LOW       | Q16        | 22.03      | 22.14 | 22.09 | 22.50              |                    |
|                           | 3               | 1         | LOW        | 64QAM      | 21.66 | 21.62 | 21.71              | 22.50              |
|                           |                 |           | MID        | 64QAM      | 21.49 | 21.53 | 21.55              | 22.50              |
| HIGH                      |                 |           | 64QAM      | 21.95      | 21.67 | 21.65 | 22.50              |                    |
| 8                         |                 | LOW       | 64QAM      | 21.12      | 21.30 | 21.26 | 21.50              |                    |
|                           |                 | MID       | 64QAM      | 21.14      | 21.27 | 21.19 | 21.50              |                    |
|                           |                 | HIGH      | 64QAM      | 21.04      | 21.27 | 20.93 | 21.50              |                    |
| 15                        |                 | LOW       | 64QAM      | 20.74      | 20.84 | 21.06 | 21.50              |                    |

| LTE B13-State1&2&3 -Ant.3 |             |           |            |            |       |       |                    |                    |
|---------------------------|-------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (               | RB Size     | RB offset | Modulation | 23035      | 23095 | 23155 | Tune-up power(dBm) |                    |
| 5                         | 1           | LOW       | QPSK       | 23.73      | 23.73 | 23.88 | 24.50              |                    |
|                           |             | MID       | QPSK       | 23.66      | 23.63 | 23.68 | 24.50              |                    |
|                           |             | HIGH      | QPSK       | 23.78      | 23.81 | 23.86 | 24.50              |                    |
|                           | 12          | LOW       | QPSK       | 22.75      | 22.71 | 22.63 | 23.50              |                    |
|                           |             | MID       | QPSK       | 22.82      | 22.60 | 22.60 | 23.50              |                    |
|                           |             | HIGH      | QPSK       | 22.77      | 22.71 | 22.76 | 23.50              |                    |
|                           | 25          | LOW       | QPSK       | 22.64      | 22.64 | 22.66 | 23.50              |                    |
|                           | 5           | 1         | LOW        | Q16        | 22.61 | 22.66 | 22.81              | 23.50              |
|                           |             |           | MID        | Q16        | 22.58 | 22.62 | 22.61              | 23.50              |
| HIGH                      |             |           | Q16        | 22.80      | 22.73 | 22.92 | 23.50              |                    |
| 12                        |             | LOW       | Q16        | 22.21      | 22.31 | 22.22 | 22.50              |                    |
|                           |             | MID       | Q16        | 22.00      | 22.08 | 22.17 | 22.50              |                    |
|                           |             | HIGH      | Q16        | 22.18      | 22.35 | 22.11 | 22.50              |                    |
| 25                        |             | LOW       | Q16        | 21.88      | 22.09 | 21.89 | 22.50              |                    |
| 5                         |             | 1         | LOW        | 64QAM      | 21.52 | 21.69 | 21.69              | 22.50              |
|                           |             |           | MID        | 64QAM      | 21.52 | 21.40 | 21.54              | 22.50              |
|                           | HIGH        |           | 64QAM      | 22.03      | 21.85 | 21.73 | 22.50              |                    |
|                           | 12          | LOW       | 64QAM      | 21.10      | 21.33 | 21.09 | 21.50              |                    |
|                           |             | MID       | 64QAM      | 21.29      | 21.33 | 21.14 | 21.50              |                    |
|                           |             | HIGH      | 64QAM      | 21.19      | 21.37 | 21.01 | 21.50              |                    |
|                           | 25          | LOW       | 64QAM      | 20.95      | 20.92 | 21.09 | 21.50              |                    |
|                           | Bandwidth ( | RB Size   | RB offset  | Modulation | /     | 23230 | /                  | Tune-up power(dBm) |
|                           | 10          | 1         | LOW        | QPSK       | /     | 23.69 | /                  | 24.50              |
| MID                       |             |           | QPSK       | /          | 23.60 | /     | 24.50              |                    |
| HIGH                      |             |           | QPSK       | /          | 23.76 | /     | 24.50              |                    |
| 25                        |             | LOW       | QPSK       | /          | 22.62 | /     | 23.50              |                    |
|                           |             | MID       | QPSK       | /          | 22.65 | /     | 23.50              |                    |
| 50                        |             | LOW       | QPSK       | /          | 22.78 | /     | 23.50              |                    |
| 10                        | 1           | LOW       | Q16        | /          | 22.72 | /     | 23.50              |                    |
|                           |             | MID       | Q16        | /          | 22.67 | /     | 23.50              |                    |
|                           |             | HIGH      | Q16        | /          | 22.74 | /     | 23.50              |                    |
|                           | 25          | LOW       | Q16        | /          | 22.19 | /     | 22.50              |                    |
|                           |             | MID       | Q16        | /          | 22.15 | /     | 22.50              |                    |
|                           |             | HIGH      | Q16        | /          | 22.21 | /     | 22.50              |                    |
|                           | 50          | LOW       | Q16        | /          | 22.11 | /     | 22.50              |                    |
|                           | 10          | 1         | LOW        | 64QAM      | /     | 21.68 | /                  | 22.50              |
|                           |             |           | MID        | 64QAM      | /     | 21.52 | /                  | 22.50              |
| HIGH                      |             |           | 64QAM      | /          | 21.74 | /     | 22.50              |                    |
| 25                        |             | LOW       | 64QAM      | /          | 21.32 | /     | 21.50              |                    |
|                           |             | MID       | 64QAM      | /          | 21.24 | /     | 21.50              |                    |
|                           |             | HIGH      | 64QAM      | /          | 21.22 | /     | 21.50              |                    |
| 50                        |             | LOW       | 64QAM      | /          | 20.97 | /     | 21.50              |                    |

| LTE B13-State4 -Ant.3 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth             | RB Size | RB offset | Modulation | 23017 | 23095 | 23173 | Tune-up power(dBm) |
| 1.4                   | 1       | LOW       | QPSK       | 23.09 | 22.98 | 22.92 | 24.00              |
|                       |         | MID       | QPSK       | 23.13 | 22.92 | 22.78 | 24.00              |
|                       |         | HIGH      | QPSK       | 23.00 | 23.10 | 23.39 | 24.00              |
|                       | 3       | LOW       | QPSK       | 23.09 | 23.05 | 22.84 | 24.00              |
|                       |         | MID       | QPSK       | 23.00 | 22.92 | 22.89 | 24.00              |
|                       |         | HIGH      | QPSK       | 22.88 | 23.20 | 23.31 | 24.00              |
| 6                     | LOW     | QPSK      | 21.78      | 22.02 | 22.21 | 23.00 |                    |
| 1.4                   | 1       | LOW       | Q16        | 21.76 | 21.84 | 22.03 | 23.00              |
|                       |         | MID       | Q16        | 21.94 | 22.02 | 21.84 | 23.00              |
|                       |         | HIGH      | Q16        | 22.17 | 22.20 | 22.16 | 23.00              |
|                       | 3       | LOW       | Q16        | 21.81 | 21.95 | 22.21 | 23.00              |
|                       |         | MID       | Q16        | 21.94 | 22.19 | 22.08 | 23.00              |
|                       |         | HIGH      | Q16        | 22.17 | 22.08 | 22.15 | 23.00              |
| 6                     | LOW     | Q16       | 21.76      | 21.88 | 21.88 | 22.00 |                    |
| 1.4                   | 1       | LOW       | 64QAM      | 20.70 | 20.69 | 21.16 | 22.00              |
|                       |         | MID       | 64QAM      | 21.04 | 21.16 | 20.97 | 22.00              |
|                       |         | HIGH      | 64QAM      | 21.28 | 21.21 | 21.19 | 22.00              |
|                       | 3       | LOW       | 64QAM      | 20.71 | 20.88 | 21.18 | 22.00              |
|                       |         | MID       | 64QAM      | 20.95 | 21.09 | 21.03 | 22.00              |
|                       |         | HIGH      | 64QAM      | 21.22 | 20.93 | 21.03 | 22.00              |
| 6                     | LOW     | 64QAM     | 20.64      | 20.80 | 20.78 | 21.00 |                    |
| Bandwidth             | RB Size | RB offset | Modulation | 23025 | 23095 | 23165 | Tune-up power(dBm) |
| 3                     | 1       | LOW       | QPSK       | 22.95 | 22.87 | 22.89 | 24.00              |
|                       |         | MID       | QPSK       | 23.07 | 23.03 | 22.74 | 24.00              |
|                       |         | HIGH      | QPSK       | 23.03 | 23.08 | 23.33 | 24.00              |
|                       | 8       | LOW       | QPSK       | 21.95 | 21.86 | 22.19 | 23.00              |
|                       |         | MID       | QPSK       | 22.04 | 22.18 | 22.06 | 23.00              |
|                       |         | HIGH      | QPSK       | 22.14 | 22.08 | 22.06 | 23.00              |
| 15                    | LOW     | QPSK      | 22.00      | 21.87 | 21.67 | 23.00 |                    |
| 3                     | 1       | LOW       | Q16        | 22.38 | 22.54 | 22.44 | 23.00              |
|                       |         | MID       | Q16        | 22.48 | 22.63 | 22.59 | 23.00              |
|                       |         | HIGH      | Q16        | 22.72 | 22.61 | 22.50 | 23.00              |
|                       | 8       | LOW       | Q16        | 21.00 | 21.31 | 21.36 | 22.00              |
|                       |         | MID       | Q16        | 21.18 | 21.30 | 21.27 | 22.00              |
|                       |         | HIGH      | Q16        | 21.39 | 21.48 | 21.52 | 22.00              |
| 15                    | LOW     | Q16       | 21.24      | 21.23 | 21.38 | 22.00 |                    |
| 3                     | 1       | LOW       | 64QAM      | 21.34 | 21.37 | 21.44 | 22.00              |
|                       |         | MID       | 64QAM      | 21.73 | 21.61 | 21.39 | 22.00              |
|                       |         | HIGH      | 64QAM      | 21.92 | 21.52 | 21.65 | 22.00              |
|                       | 8       | LOW       | 64QAM      | 19.91 | 20.23 | 20.45 | 21.00              |
|                       |         | MID       | 64QAM      | 20.41 | 20.28 | 20.27 | 21.00              |
|                       |         | HIGH      | 64QAM      | 20.20 | 20.39 | 20.52 | 21.00              |
| 15                    | LOW     | 64QAM     | 20.49      | 20.43 | 20.21 | 21.00 |                    |

| LTE B13-State4 -Ant.3 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth             | RB Size | RB offset | Modulation | 23035 | 23095 | 23155 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 23.01 | 22.88 | 22.80 | 24.00              |
|                       |         | MID       | QPSK       | 23.15 | 22.87 | 22.77 | 24.00              |
|                       |         | HIGH      | QPSK       | 23.14 | 23.22 | 23.13 | 24.00              |
|                       | 12      | LOW       | QPSK       | 21.85 | 21.95 | 22.06 | 23.00              |
|                       |         | MID       | QPSK       | 22.17 | 21.99 | 21.94 | 23.00              |
|                       |         | HIGH      | QPSK       | 22.28 | 22.15 | 22.10 | 23.00              |
| 25                    | LOW     | QPSK      | 21.99      | 21.89 | 21.82 | 23.00 |                    |
| 5                     | 1       | LOW       | Q16        | 22.49 | 22.53 | 22.47 | 23.00              |
|                       |         | MID       | Q16        | 22.45 | 22.48 | 22.34 | 23.00              |
|                       |         | HIGH      | Q16        | 22.86 | 22.46 | 22.68 | 23.00              |
|                       | 12      | LOW       | Q16        | 21.01 | 21.29 | 21.28 | 22.00              |
|                       |         | MID       | Q16        | 21.20 | 21.46 | 21.14 | 22.00              |
|                       |         | HIGH      | Q16        | 21.32 | 21.29 | 21.46 | 22.00              |
| 25                    | LOW     | Q16       | 21.30      | 21.32 | 21.37 | 22.00 |                    |
| 5                     | 1       | LOW       | 64QAM      | 21.28 | 21.40 | 21.34 | 22.00              |
|                       |         | MID       | 64QAM      | 21.58 | 21.64 | 21.61 | 22.00              |
|                       |         | HIGH      | 64QAM      | 21.80 | 21.48 | 21.68 | 22.00              |
|                       | 12      | LOW       | 64QAM      | 19.94 | 20.35 | 20.30 | 21.00              |
|                       |         | MID       | 64QAM      | 20.44 | 20.24 | 20.22 | 21.00              |
|                       |         | HIGH      | 64QAM      | 20.47 | 20.59 | 20.36 | 21.00              |
| 25                    | LOW     | 64QAM     | 20.47      | 20.47 | 20.14 | 21.00 |                    |
| Bandwidth             | RB Size | RB offset | Modulation | /     | 23230 | /     | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | /     | 22.90 | /     | 24.00              |
|                       |         | MID       | QPSK       | /     | 22.98 | /     | 24.00              |
|                       |         | HIGH      | QPSK       | /     | 23.09 | /     | 24.00              |
|                       | 25      | LOW       | QPSK       | /     | 21.98 | /     | 23.00              |
|                       |         | MID       | QPSK       | /     | 22.08 | /     | 23.00              |
|                       |         | HIGH      | QPSK       | /     | 22.16 | /     | 23.00              |
| 50                    | LOW     | QPSK      | /          | 21.94 | /     | 23.00 |                    |
| 10                    | 1       | LOW       | Q16        | /     | 22.54 | /     | 23.00              |
|                       |         | MID       | Q16        | /     | 22.53 | /     | 23.00              |
|                       |         | HIGH      | Q16        | /     | 22.59 | /     | 23.00              |
|                       | 25      | LOW       | Q16        | /     | 21.25 | /     | 22.00              |
|                       |         | MID       | Q16        | /     | 21.38 | /     | 22.00              |
|                       |         | HIGH      | Q16        | /     | 21.33 | /     | 22.00              |
| 50                    | LOW     | Q16       | /          | 21.32 | /     | 22.00 |                    |
| 10                    | 1       | LOW       | 64QAM      | /     | 21.47 | /     | 22.00              |
|                       |         | MID       | 64QAM      | /     | 21.50 | /     | 22.00              |
|                       |         | HIGH      | 64QAM      | /     | 21.46 | /     | 22.00              |
|                       | 25      | LOW       | 64QAM      | /     | 20.32 | /     | 21.00              |
|                       |         | MID       | 64QAM      | /     | 20.30 | /     | 21.00              |
|                       |         | HIGH      | 64QAM      | /     | 20.48 | /     | 21.00              |
| 50                    | LOW     | 64QAM     | /          | 20.35 | /     | 21.00 |                    |

### 8.3.6 LTE Band66 Output Power

| LTE B66-Full Power -Ant.2 |                 |           |            |            |        |        |                    |                    |
|---------------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)           | RB Size         | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                       | 1               | LOW       | QPSK       | 23.86      | 23.79  | 23.78  | 24.00              |                    |
|                           |                 | MID       | QPSK       | 23.88      | 23.77  | 23.86  | 24.00              |                    |
|                           |                 | HIGH      | QPSK       | 23.88      | 23.74  | 23.86  | 24.00              |                    |
|                           | 3               | LOW       | QPSK       | 23.92      | 23.89  | 23.90  | 24.00              |                    |
|                           |                 | MID       | QPSK       | 23.83      | 23.95  | 23.92  | 24.00              |                    |
|                           |                 | HIGH      | QPSK       | 23.86      | 23.88  | 23.85  | 24.00              |                    |
|                           | 6               | LOW       | QPSK       | 22.79      | 22.90  | 22.87  | 23.00              |                    |
|                           | 1.4             | 1         | LOW        | Q16        | 22.77  | 22.87  | 22.99              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.96  | 22.83  | 22.96              | 23.00              |
| HIGH                      |                 |           | Q16        | 22.16      | 22.87  | 22.83  | 23.00              |                    |
| 3                         |                 | LOW       | Q16        | 22.90      | 22.60  | 22.85  | 23.00              |                    |
|                           |                 | MID       | Q16        | 22.89      | 22.62  | 22.82  | 23.00              |                    |
|                           |                 | HIGH      | Q16        | 22.88      | 22.65  | 22.85  | 23.00              |                    |
| 6                         |                 | LOW       | Q16        | 21.37      | 21.29  | 21.44  | 22.00              |                    |
| 1.4                       |                 | 1         | LOW        | 64QAM      | 21.89  | 21.89  | 21.91              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 22.00  | 21.90  | 21.95              | 22.00              |
|                           | HIGH            |           | 64QAM      | 21.01      | 21.96  | 21.78  | 22.00              |                    |
|                           | 3               | LOW       | 64QAM      | 21.75      | 21.74  | 21.74  | 22.00              |                    |
|                           |                 | MID       | 64QAM      | 21.88      | 21.51  | 21.94  | 22.00              |                    |
|                           |                 | HIGH      | 64QAM      | 21.73      | 21.71  | 21.85  | 22.00              |                    |
|                           | 6               | LOW       | 64QAM      | 20.31      | 20.25  | 20.30  | 21.00              |                    |
|                           | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
|                           | 3               | 1         | LOW        | QPSK       | 23.78  | 23.87  | 23.75              | 24.00              |
| MID                       |                 |           | QPSK       | 23.69      | 23.90  | 23.79  | 24.00              |                    |
| HIGH                      |                 |           | QPSK       | 23.98      | 23.90  | 23.73  | 24.00              |                    |
| 8                         |                 | LOW       | QPSK       | 22.60      | 22.79  | 22.82  | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.85      | 22.98  | 22.89  | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.88      | 22.78  | 22.99  | 23.00              |                    |
| 15                        |                 | LOW       | QPSK       | 22.70      | 22.80  | 22.82  | 23.00              |                    |
| 3                         |                 | 1         | LOW        | Q16        | 22.57  | 22.42  | 22.75              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.47  | 22.64  | 22.94              | 23.00              |
|                           | HIGH            |           | Q16        | 22.66      | 22.72  | 22.90  | 23.00              |                    |
|                           | 8               | LOW       | Q16        | 21.34      | 21.31  | 21.39  | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.71      | 21.28  | 21.59  | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.55      | 21.51  | 21.34  | 22.00              |                    |
|                           | 15              | LOW       | Q16        | 21.65      | 21.46  | 21.50  | 22.00              |                    |
|                           | 3               | 1         | LOW        | 64QAM      | 21.71  | 21.62  | 21.68              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.51  | 21.59  | 21.57              | 22.00              |
| HIGH                      |                 |           | 64QAM      | 21.64      | 21.63  | 21.75  | 22.00              |                    |
| 8                         |                 | LOW       | 64QAM      | 20.18      | 20.39  | 20.40  | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.79      | 20.62  | 20.49  | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.35      | 20.53  | 20.60  | 21.00              |                    |
| 15                        |                 | LOW       | 64QAM      | 20.91      | 20.35  | 20.70  | 21.00              |                    |
| Bandwidth (MHz)           |                 | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                         |                 | 1         | LOW        | QPSK       | 23.89  | 23.94  | 23.90              | 24.00              |
|                           | MID             |           | QPSK       | 23.73      | 23.94  | 23.82  | 24.00              |                    |
|                           | HIGH            |           | QPSK       | 23.64      | 23.97  | 23.77  | 24.00              |                    |
|                           | 12              | LOW       | QPSK       | 22.61      | 22.98  | 22.79  | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.74      | 22.84  | 22.86  | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.89      | 22.92  | 22.96  | 23.00              |                    |
|                           | 25              | LOW       | QPSK       | 22.88      | 22.77  | 22.81  | 23.00              |                    |
|                           | 5               | 1         | LOW        | Q16        | 22.50  | 22.57  | 22.94              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.75  | 22.67  | 22.66              | 23.00              |
| HIGH                      |                 |           | Q16        | 22.81      | 22.68  | 22.89  | 23.00              |                    |
| 12                        |                 | LOW       | Q16        | 21.35      | 21.55  | 21.29  | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.59      | 21.36  | 21.54  | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.56      | 21.46  | 21.42  | 22.00              |                    |
| 25                        |                 | LOW       | Q16        | 21.79      | 21.35  | 21.56  | 22.00              |                    |
| 5                         |                 | 1         | LOW        | 64QAM      | 21.63  | 21.56  | 21.63              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.47  | 21.64  | 21.53              | 22.00              |
|                           | HIGH            |           | 64QAM      | 21.73      | 21.82  | 21.97  | 22.00              |                    |
|                           | 12              | LOW       | 64QAM      | 20.37      | 20.37  | 20.44  | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.89      | 20.49  | 20.78  | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.32      | 20.41  | 20.52  | 21.00              |                    |
|                           | 25              | LOW       | 64QAM      | 20.96      | 20.38  | 20.64  | 21.00              |                    |

| LTE B66-Full Power -Ant.2 |                 |           |            |            |        |        |                    |                    |
|---------------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)           | RB Size         | RB offset | Modulation | 132022     | 132322 | 132622 | Tune-up power(dBm) |                    |
| 10                        | 1               | LOW       | QPSK       | 23.88      | 23.92  | 23.99  | 24.00              |                    |
|                           |                 | MID       | QPSK       | 23.77      | 23.94  | 23.78  | 24.00              |                    |
|                           |                 | HIGH      | QPSK       | 23.76      | 23.82  | 23.93  | 24.00              |                    |
|                           | 25              | LOW       | QPSK       | 22.81      | 22.72  | 22.96  | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.93      | 22.85  | 22.65  | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.79      | 22.69  | 22.93  | 23.00              |                    |
|                           | 50              | LOW       | QPSK       | 22.87      | 22.98  | 22.80  | 23.00              |                    |
|                           | 10              | 1         | LOW        | Q16        | 22.69  | 22.60  | 22.83              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.52  | 22.51  | 22.65              | 23.00              |
| HIGH                      |                 |           | Q16        | 22.71      | 22.77  | 22.92  | 23.00              |                    |
| 25                        |                 | LOW       | Q16        | 21.26      | 21.49  | 21.26  | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.66      | 21.35  | 21.58  | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.60      | 21.38  | 21.48  | 22.00              |                    |
| 50                        |                 | LOW       | Q16        | 21.73      | 21.34  | 21.47  | 22.00              |                    |
| 10                        |                 | 1         | LOW        | 64QAM      | 21.68  | 21.65  | 21.32              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.58  | 21.63  | 21.75              | 22.00              |
|                           | HIGH            |           | 64QAM      | 21.86      | 21.81  | 21.95  | 22.00              |                    |
|                           | 25              | LOW       | 64QAM      | 20.20      | 20.20  | 20.50  | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.71      | 20.56  | 20.65  | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.35      | 20.57  | 20.64  | 21.00              |                    |
|                           | 50              | LOW       | 64QAM      | 20.74      | 20.31  | 20.56  | 21.00              |                    |
|                           | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 132047 | 132322 | 132597             | Tune-up power(dBm) |
|                           | 15              | 1         | LOW        | QPSK       | 23.81  | 24.00  | 23.79              | 24.00              |
| MID                       |                 |           | QPSK       | 23.67      | 23.88  | 23.86  | 24.00              |                    |
| HIGH                      |                 |           | QPSK       | 23.88      | 23.83  | 23.50  | 24.00              |                    |
| 36                        |                 | LOW       | QPSK       | 22.55      | 22.74  | 22.75  | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.84      | 22.72  | 22.80  | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.81      | 22.78  | 22.73  | 23.00              |                    |
| 75                        |                 | LOW       | QPSK       | 22.77      | 22.79  | 22.85  | 23.00              |                    |
| 15                        |                 | 1         | LOW        | Q16        | 22.59  | 22.53  | 22.76              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.66  | 22.67  | 22.93              | 23.00              |
|                           | HIGH            |           | Q16        | 22.63      | 22.77  | 22.92  | 23.00              |                    |
|                           | 36              | LOW       | Q16        | 21.48      | 21.33  | 21.33  | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.68      | 21.37  | 21.65  | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.56      | 21.52  | 21.22  | 22.00              |                    |
|                           | 75              | LOW       | Q16        | 21.85      | 21.57  | 21.75  | 22.00              |                    |
|                           | 15              | 1         | LOW        | 64QAM      | 21.76  | 21.60  | 21.72              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.72  | 21.75  | 21.63              | 22.00              |
| HIGH                      |                 |           | 64QAM      | 21.68      | 21.76  | 21.93  | 22.00              |                    |
| 36                        |                 | LOW       | 64QAM      | 20.21      | 20.45  | 20.45  | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.77      | 20.66  | 20.65  | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.39      | 20.64  | 20.55  | 21.00              |                    |
| 75                        |                 | LOW       | 64QAM      | 20.83      | 20.29  | 20.74  | 21.00              |                    |
| Bandwidth (MHz)           |                 | RB Size   | RB offset  | Modulation | 132072 | 132322 | 132572             | Tune-up power(dBm) |
| 20                        |                 | 1         | LOW        | QPSK       | 23.78  | 23.92  | 23.87              | 24.00              |
|                           | MID             |           | QPSK       | 23.76      | 23.87  | 23.79  | 24.00              |                    |
|                           | HIGH            |           | QPSK       | 23.90      | 23.97  | 23.87  | 24.00              |                    |
|                           | 50              | LOW       | QPSK       | 22.66      | 22.84  | 22.84  | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.82      | 22.83  | 22.80  | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.95      | 22.89  | 22.85  | 23.00              |                    |
|                           | 100             | LOW       | QPSK       | 22.85      | 22.84  | 22.77  | 23.00              |                    |
|                           | 20              | 1         | LOW        | Q16        | 22.63  | 22.51  | 22.87              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.61  | 22.59  | 22.97              | 23.00              |
| HIGH                      |                 |           | Q16        | 22.76      | 22.62  | 22.78  | 23.00              |                    |
| 50                        |                 | LOW       | Q16        | 21.33      | 21.41  | 21.32  | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.73      | 21.40  | 21.60  | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.46      | 21.44  | 21.37  | 22.00              |                    |
| 100                       |                 | LOW       | Q16        | 21.71      | 21.42  | 21.60  | 22.00              |                    |
| 20                        |                 | 1         | LOW        | 64QAM      | 21.72  | 21.64  | 21.62              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.62  | 21.63  | 21.66              | 22.00              |
|                           | HIGH            |           | 64QAM      | 21.77      | 21.74  | 21.92  | 22.00              |                    |
|                           | 50              | LOW       | 64QAM      | 20.33      | 20.33  | 20.46  | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.80      | 20.54  | 20.63  | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.39      | 20.51  | 20.52  | 21.00              |                    |
|                           | 100             | LOW       | 64QAM      | 20.84      | 20.33  | 20.70  | 21.00              |                    |

| LTE B66-State1&2 -Ant.2 |                 |           |            |            |        |        |                    |                    |
|-------------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)         | RB Size         | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                     | 1               | LOW       | QPSK       | 16.16      | 16.26  | 16.13  | 18.00              |                    |
|                         |                 | MID       | QPSK       | 16.43      | 16.46  | 16.29  | 18.00              |                    |
|                         |                 | HIGH      | QPSK       | 16.26      | 16.28  | 16.10  | 18.00              |                    |
|                         | 3               | LOW       | QPSK       | 16.34      | 16.35  | 16.37  | 18.00              |                    |
|                         |                 | MID       | QPSK       | 16.42      | 16.44  | 16.41  | 18.00              |                    |
|                         |                 | HIGH      | QPSK       | 16.36      | 16.37  | 16.33  | 18.00              |                    |
|                         | 6               | LOW       | QPSK       | 15.24      | 15.36  | 15.37  | 17.00              |                    |
|                         | 1.4             | 1         | LOW        | Q16        | 15.26  | 15.62  | 15.38              | 17.00              |
|                         |                 |           | MID        | Q16        | 15.47  | 15.83  | 15.50              | 17.00              |
| HIGH                    |                 |           | Q16        | 15.29      | 15.64  | 15.26  | 17.00              |                    |
| 3                       |                 | LOW       | Q16        | 15.32      | 15.56  | 15.61  | 17.00              |                    |
|                         |                 | MID       | Q16        | 15.38      | 15.65  | 15.65  | 17.00              |                    |
|                         |                 | HIGH      | Q16        | 15.31      | 15.60  | 15.57  | 17.00              |                    |
| 6                       |                 | LOW       | Q16        | 14.12      | 14.25  | 14.02  | 16.00              |                    |
| 1.4                     |                 | 1         | LOW        | 64QAM      | 15.27  | 15.26  | 15.40              | 16.00              |
|                         |                 |           | MID        | 64QAM      | 15.13  | 14.93  | 14.73              | 16.00              |
|                         | HIGH            |           | 64QAM      | 15.39      | 15.58  | 15.14  | 16.00              |                    |
|                         | 3               | LOW       | 64QAM      | 15.19      | 15.09  | 15.24  | 16.00              |                    |
|                         |                 | MID       | 64QAM      | 14.98      | 14.86  | 14.74  | 16.00              |                    |
|                         |                 | HIGH      | 64QAM      | 15.41      | 15.64  | 15.13  | 16.00              |                    |
|                         | 6               | LOW       | 64QAM      | 13.22      | 13.21  | 13.28  | 15.00              |                    |
|                         | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
|                         | 3               | 1         | LOW        | QPSK       | 16.84  | 16.75  | 16.66              | 18.00              |
| MID                     |                 |           | QPSK       | 16.64      | 16.32  | 16.45  | 18.00              |                    |
| HIGH                    |                 |           | QPSK       | 17.17      | 17.07  | 16.73  | 18.00              |                    |
| 8                       |                 | LOW       | QPSK       | 15.89      | 15.61  | 15.73  | 17.00              |                    |
|                         |                 | MID       | QPSK       | 15.75      | 15.37  | 15.62  | 17.00              |                    |
|                         |                 | HIGH      | QPSK       | 15.93      | 15.92  | 15.73  | 17.00              |                    |
| 15                      |                 | LOW       | QPSK       | 15.79      | 15.60  | 15.85  | 17.00              |                    |
| 3                       |                 | 1         | LOW        | Q16        | 16.15  | 16.10  | 16.17              | 17.00              |
|                         |                 |           | MID        | Q16        | 15.87  | 15.92  | 16.01              | 17.00              |
|                         | HIGH            |           | Q16        | 16.65      | 16.44  | 16.28  | 17.00              |                    |
|                         | 8               | LOW       | Q16        | 14.18      | 14.07  | 14.07  | 16.00              |                    |
|                         |                 | MID       | Q16        | 14.33      | 14.24  | 14.15  | 16.00              |                    |
|                         |                 | HIGH      | Q16        | 14.20      | 14.25  | 14.12  | 16.00              |                    |
|                         | 15              | LOW       | Q16        | 14.24      | 14.17  | 14.29  | 16.00              |                    |
|                         | 3               | 1         | LOW        | 64QAM      | 15.15  | 15.10  | 15.17              | 16.00              |
|                         |                 |           | MID        | 64QAM      | 14.87  | 14.92  | 15.01              | 16.00              |
| HIGH                    |                 |           | 64QAM      | 15.65      | 15.44  | 15.28  | 16.00              |                    |
| 8                       |                 | LOW       | 64QAM      | 13.18      | 13.07  | 13.07  | 15.00              |                    |
|                         |                 | MID       | 64QAM      | 13.33      | 13.24  | 13.15  | 15.00              |                    |
|                         |                 | HIGH      | 64QAM      | 13.20      | 13.25  | 13.12  | 15.00              |                    |
| 15                      |                 | LOW       | 64QAM      | 13.24      | 13.17  | 13.29  | 15.00              |                    |
| Bandwidth (MHz)         |                 | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                       |                 | 1         | LOW        | QPSK       | 16.77  | 16.78  | 16.70              | 18.00              |
|                         | MID             |           | QPSK       | 16.50      | 16.40  | 16.35  | 18.00              |                    |
|                         | HIGH            |           | QPSK       | 16.99      | 17.22  | 16.55  | 18.00              |                    |
|                         | 12              | LOW       | QPSK       | 15.76      | 15.65  | 15.65  | 17.00              |                    |
|                         |                 | MID       | QPSK       | 15.57      | 15.62  | 15.64  | 17.00              |                    |
|                         |                 | HIGH      | QPSK       | 15.75      | 15.67  | 15.80  | 17.00              |                    |
|                         | 25              | LOW       | QPSK       | 15.84      | 15.61  | 15.66  | 17.00              |                    |
|                         | 5               | 1         | LOW        | Q16        | 16.37  | 16.14  | 16.36              | 17.00              |
|                         |                 |           | MID        | Q16        | 16.12  | 15.74  | 15.78              | 17.00              |
| HIGH                    |                 |           | Q16        | 16.46      | 16.62  | 16.15  | 17.00              |                    |
| 12                      |                 | LOW       | Q16        | 14.36      | 14.08  | 14.23  | 16.00              |                    |
|                         |                 | MID       | Q16        | 14.09      | 14.27  | 14.28  | 16.00              |                    |
|                         |                 | HIGH      | Q16        | 14.26      | 14.24  | 14.06  | 16.00              |                    |
| 25                      |                 | LOW       | Q16        | 14.19      | 14.22  | 14.03  | 16.00              |                    |
| 5                       |                 | 1         | LOW        | 64QAM      | 15.37  | 15.14  | 15.36              | 16.00              |
|                         |                 |           | MID        | 64QAM      | 15.12  | 14.74  | 14.78              | 16.00              |
|                         | HIGH            |           | 64QAM      | 15.46      | 15.62  | 15.15  | 16.00              |                    |
|                         | 12              | LOW       | 64QAM      | 13.36      | 13.08  | 13.23  | 15.00              |                    |
|                         |                 | MID       | 64QAM      | 13.09      | 13.27  | 13.28  | 15.00              |                    |
|                         |                 | HIGH      | 64QAM      | 13.26      | 13.24  | 13.06  | 15.00              |                    |
|                         | 25              | LOW       | 64QAM      | 13.19      | 13.22  | 13.03  | 15.00              |                    |



| LTE B66-State1&2 -Ant.2 |                 |           |            |            |        |        |                    |                    |
|-------------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)         | RB Size         | RB offset | Modulation | 132022     | 132322 | 132622 | Tune-up power(dBm) |                    |
| 10                      | 1               | LOW       | QPSK       | 16.69      | 16.76  | 16.77  | 18.00              |                    |
|                         |                 | MID       | QPSK       | 16.52      | 16.23  | 16.30  | 18.00              |                    |
|                         |                 | HIGH      | QPSK       | 17.18      | 17.06  | 16.60  | 18.00              |                    |
|                         | 25              | LOW       | QPSK       | 15.71      | 15.44  | 15.68  | 17.00              |                    |
|                         |                 | MID       | QPSK       | 15.48      | 15.62  | 15.52  | 17.00              |                    |
|                         |                 | HIGH      | QPSK       | 15.80      | 15.73  | 15.85  | 17.00              |                    |
|                         | 50              | LOW       | QPSK       | 15.90      | 15.79  | 15.83  | 17.00              |                    |
|                         | 10              | 1         | LOW        | Q16        | 16.21  | 16.06  | 16.28              | 17.00              |
|                         |                 |           | MID        | Q16        | 16.10  | 15.84  | 15.91              | 17.00              |
| HIGH                    |                 |           | Q16        | 16.55      | 16.43  | 16.13  | 17.00              |                    |
| 25                      |                 | LOW       | Q16        | 14.12      | 14.16  | 14.16  | 16.00              |                    |
|                         |                 | MID       | Q16        | 14.24      | 14.14  | 14.35  | 16.00              |                    |
|                         |                 | HIGH      | Q16        | 14.23      | 14.44  | 14.16  | 16.00              |                    |
| 50                      |                 | LOW       | Q16        | 14.30      | 14.31  | 14.21  | 16.00              |                    |
| 10                      |                 | 1         | LOW        | 64QAM      | 15.21  | 15.06  | 15.28              | 16.00              |
|                         |                 |           | MID        | 64QAM      | 15.10  | 14.84  | 14.91              | 16.00              |
|                         | HIGH            |           | 64QAM      | 15.55      | 15.43  | 15.13  | 16.00              |                    |
|                         | 25              | LOW       | 64QAM      | 13.12      | 13.16  | 13.16  | 15.00              |                    |
|                         |                 | MID       | 64QAM      | 13.24      | 13.14  | 13.35  | 15.00              |                    |
|                         |                 | HIGH      | 64QAM      | 13.23      | 13.44  | 13.16  | 15.00              |                    |
|                         | 50              | LOW       | 64QAM      | 13.30      | 13.31  | 13.21  | 15.00              |                    |
|                         | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 132047 | 132322 | 132597             | Tune-up power(dBm) |
|                         | 15              | 1         | LOW        | QPSK       | 16.75  | 16.57  | 16.62              | 18.00              |
| MID                     |                 |           | QPSK       | 16.55      | 16.25  | 16.27  | 18.00              |                    |
| HIGH                    |                 |           | QPSK       | 17.03      | 17.18  | 16.61  | 18.00              |                    |
| 36                      |                 | LOW       | QPSK       | 15.63      | 15.52  | 15.73  | 17.00              |                    |
|                         |                 | MID       | QPSK       | 15.71      | 15.35  | 15.43  | 17.00              |                    |
|                         |                 | HIGH      | QPSK       | 15.79      | 15.72  | 15.85  | 17.00              |                    |
| 75                      |                 | LOW       | QPSK       | 15.77      | 15.55  | 15.71  | 17.00              |                    |
| 15                      |                 | 1         | LOW        | Q16        | 16.44  | 15.97  | 16.23              | 17.00              |
|                         |                 |           | MID        | Q16        | 16.09  | 15.81  | 15.77              | 17.00              |
|                         | HIGH            |           | Q16        | 16.63      | 16.47  | 16.13  | 17.00              |                    |
|                         | 36              | LOW       | Q16        | 14.36      | 14.28  | 14.08  | 16.00              |                    |
|                         |                 | MID       | Q16        | 14.25      | 14.35  | 14.34  | 16.00              |                    |
|                         |                 | HIGH      | Q16        | 14.40      | 14.34  | 14.11  | 16.00              |                    |
|                         | 75              | LOW       | Q16        | 14.31      | 14.18  | 14.26  | 16.00              |                    |
|                         | 15              | 1         | LOW        | 64QAM      | 15.44  | 14.97  | 15.23              | 16.00              |
|                         |                 |           | MID        | 64QAM      | 15.09  | 14.81  | 14.77              | 16.00              |
| HIGH                    |                 |           | 64QAM      | 15.63      | 15.47  | 15.13  | 16.00              |                    |
| 36                      |                 | LOW       | 64QAM      | 13.36      | 13.28  | 13.08  | 15.00              |                    |
|                         |                 | MID       | 64QAM      | 13.25      | 13.35  | 13.34  | 15.00              |                    |
|                         |                 | HIGH      | 64QAM      | 13.40      | 13.34  | 13.11  | 15.00              |                    |
| 75                      |                 | LOW       | 64QAM      | 13.31      | 13.18  | 13.26  | 15.00              |                    |
| Bandwidth (MHz)         |                 | RB Size   | RB offset  | Modulation | 132072 | 132322 | 132572             | Tune-up power(dBm) |
| 20                      |                 | 1         | LOW        | QPSK       | 16.82  | 16.64  | 16.67              | 18.00              |
|                         | MID             |           | QPSK       | 16.51      | 16.38  | 16.37  | 18.00              |                    |
|                         | HIGH            |           | QPSK       | 17.10      | 17.11  | 16.66  | 18.00              |                    |
|                         | 50              | LOW       | QPSK       | 15.74      | 15.51  | 15.73  | 17.00              |                    |
|                         |                 | MID       | QPSK       | 15.63      | 15.47  | 15.58  | 17.00              |                    |
|                         |                 | HIGH      | QPSK       | 15.79      | 15.87  | 15.77  | 17.00              |                    |
|                         | 100             | LOW       | QPSK       | 15.79      | 15.64  | 15.73  | 17.00              |                    |
|                         | 20              | 1         | LOW        | Q16        | 16.30  | 16.12  | 16.26              | 17.00              |
|                         |                 |           | MID        | Q16        | 16.00  | 15.88  | 15.86              | 17.00              |
| HIGH                    |                 |           | Q16        | 16.54      | 16.57  | 16.25  | 17.00              |                    |
| 50                      |                 | LOW       | Q16        | 14.23      | 14.21  | 14.16  | 16.00              |                    |
|                         |                 | MID       | Q16        | 14.22      | 14.28  | 14.24  | 16.00              |                    |
|                         |                 | HIGH      | Q16        | 14.35      | 14.30  | 14.19  | 16.00              |                    |
| 100                     |                 | LOW       | Q16        | 14.27      | 14.23  | 14.18  | 16.00              |                    |
| 20                      |                 | 1         | LOW        | 64QAM      | 15.34  | 15.05  | 15.25              | 16.00              |
|                         |                 |           | MID        | 64QAM      | 15.10  | 14.77  | 14.76              | 16.00              |
|                         | HIGH            |           | 64QAM      | 15.40      | 15.45  | 15.40  | 16.00              |                    |
|                         | 50              | LOW       | 64QAM      | 13.31      | 13.16  | 13.21  | 15.00              |                    |
|                         |                 | MID       | 64QAM      | 13.20      | 13.23  | 13.39  | 15.00              |                    |
|                         |                 | HIGH      | 64QAM      | 13.30      | 13.32  | 13.15  | 15.00              |                    |
|                         | 100             | LOW       | 64QAM      | 13.35      | 13.34  | 13.17  | 15.00              |                    |

| LTE B66-State3 -Ant.2 |                 |           |            |            |        |        |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                   | 1               | LOW       | QPSK       | 20.82      | 20.85  | 21.06  | 21.50              |                    |
|                       |                 | MID       | QPSK       | 20.79      | 20.82  | 21.03  | 21.50              |                    |
|                       |                 | HIGH      | QPSK       | 20.80      | 20.85  | 21.10  | 21.50              |                    |
|                       | 3               | LOW       | QPSK       | 20.73      | 20.78  | 21.22  | 21.50              |                    |
|                       |                 | MID       | QPSK       | 20.79      | 20.87  | 21.24  | 21.50              |                    |
|                       |                 | HIGH      | QPSK       | 20.86      | 20.93  | 21.17  | 21.50              |                    |
|                       | 6               | LOW       | QPSK       | 19.82      | 19.96  | 20.18  | 20.50              |                    |
|                       | 1.4             | 1         | LOW        | Q16        | 20.06  | 20.25  | 20.18              | 21.00              |
|                       |                 |           | MID        | Q16        | 20.34  | 20.45  | 20.32              | 21.00              |
| HIGH                  |                 |           | Q16        | 20.08      | 20.27  | 20.10  | 21.00              |                    |
| 3                     |                 | LOW       | Q16        | 20.07      | 20.18  | 20.44  | 21.00              |                    |
|                       |                 | MID       | Q16        | 20.14      | 20.27  | 20.47  | 21.00              |                    |
|                       |                 | HIGH      | Q16        | 20.09      | 20.21  | 20.39  | 21.00              |                    |
| 6                     |                 | LOW       | Q16        | 17.67      | 17.65  | 17.84  | 19.50              |                    |
| 1.4                   |                 | 1         | LOW        | 64QAM      | 19.28  | 19.87  | 19.59              | 20.00              |
|                       |                 |           | MID        | 64QAM      | 19.06  | 19.49  | 19.13              | 20.00              |
|                       | HIGH            |           | 64QAM      | 19.45      | 19.83  | 19.61  | 20.00              |                    |
|                       | 3               | LOW       | 64QAM      | 19.11      | 19.99  | 19.72  | 20.00              |                    |
|                       |                 | MID       | 64QAM      | 19.21      | 19.65  | 19.11  | 20.00              |                    |
|                       |                 | HIGH      | 64QAM      | 19.58      | 19.72  | 19.78  | 20.00              |                    |
|                       | 6               | LOW       | 64QAM      | 16.70      | 16.75  | 16.75  | 18.50              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
|                       | 3               | 1         | LOW        | QPSK       | 20.81  | 20.86  | 20.73              | 21.50              |
| MID                   |                 |           | QPSK       | 21.10      | 21.06  | 20.87  | 21.50              |                    |
| HIGH                  |                 |           | QPSK       | 21.12      | 21.26  | 21.17  | 21.50              |                    |
| 8                     |                 | LOW       | QPSK       | 19.52      | 20.16  | 20.41  | 20.50              |                    |
|                       |                 | MID       | QPSK       | 19.51      | 20.00  | 20.41  | 20.50              |                    |
|                       |                 | HIGH      | QPSK       | 19.68      | 20.44  | 20.21  | 20.50              |                    |
| 15                    |                 | LOW       | QPSK       | 19.78      | 20.06  | 20.35  | 20.50              |                    |
| 3                     |                 | 1         | LOW        | Q16        | 20.25  | 20.72  | 20.73              | 21.00              |
|                       |                 |           | MID        | Q16        | 20.23  | 20.55  | 20.27              | 21.00              |
|                       | HIGH            |           | Q16        | 20.33      | 20.77  | 20.60  | 21.00              |                    |
|                       | 8               | LOW       | Q16        | 17.77      | 17.93  | 17.67  | 19.50              |                    |
|                       |                 | MID       | Q16        | 17.78      | 17.79  | 17.96  | 19.50              |                    |
|                       |                 | HIGH      | Q16        | 17.84      | 17.83  | 17.88  | 19.50              |                    |
|                       | 15              | LOW       | Q16        | 17.67      | 17.55  | 17.77  | 19.50              |                    |
|                       | 3               | 1         | LOW        | 64QAM      | 19.25  | 19.72  | 19.73              | 20.00              |
|                       |                 |           | MID        | 64QAM      | 19.23  | 19.55  | 19.27              | 20.00              |
| HIGH                  |                 |           | 64QAM      | 19.33      | 19.77  | 19.60  | 20.00              |                    |
| 8                     |                 | LOW       | 64QAM      | 16.77      | 16.93  | 16.67  | 18.50              |                    |
|                       |                 | MID       | 64QAM      | 16.78      | 16.79  | 16.96  | 18.50              |                    |
|                       |                 | HIGH      | 64QAM      | 16.84      | 16.83  | 16.88  | 18.50              |                    |
| 15                    |                 | LOW       | 64QAM      | 16.67      | 16.55  | 16.77  | 18.50              |                    |
| Bandwidth (MHz)       |                 | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                     |                 | 1         | LOW        | QPSK       | 20.76  | 20.87  | 20.84              | 21.50              |
|                       | MID             |           | QPSK       | 21.20      | 21.20  | 20.98  | 21.50              |                    |
|                       | HIGH            |           | QPSK       | 20.98      | 21.33  | 21.20  | 21.50              |                    |
|                       | 12              | LOW       | QPSK       | 19.69      | 19.93  | 20.28  | 20.50              |                    |
|                       |                 | MID       | QPSK       | 19.48      | 19.84  | 20.20  | 20.50              |                    |
|                       |                 | HIGH      | QPSK       | 19.74      | 20.36  | 20.37  | 20.50              |                    |
|                       | 25              | LOW       | QPSK       | 19.81      | 20.15  | 20.29  | 20.50              |                    |
|                       | 5               | 1         | LOW        | Q16        | 20.04  | 20.84  | 20.83              | 21.00              |
|                       |                 |           | MID        | Q16        | 20.24  | 20.35  | 20.22              | 21.00              |
| HIGH                  |                 |           | Q16        | 20.53      | 20.72  | 20.69  | 21.00              |                    |
| 12                    |                 | LOW       | Q16        | 17.63      | 17.80  | 17.67  | 19.50              |                    |
|                       |                 | MID       | Q16        | 17.77      | 18.00  | 17.72  | 19.50              |                    |
|                       |                 | HIGH      | Q16        | 17.89      | 17.80  | 17.87  | 19.50              |                    |
| 25                    |                 | LOW       | Q16        | 17.87      | 17.52  | 17.70  | 19.50              |                    |
| 5                     |                 | 1         | LOW        | 64QAM      | 19.04  | 19.84  | 19.83              | 20.00              |
|                       |                 |           | MID        | 64QAM      | 19.24  | 19.35  | 19.22              | 20.00              |
|                       | HIGH            |           | 64QAM      | 19.53      | 19.72  | 19.69  | 20.00              |                    |
|                       | 12              | LOW       | 64QAM      | 16.63      | 16.80  | 16.67  | 18.50              |                    |
|                       |                 | MID       | 64QAM      | 16.77      | 17.00  | 16.72  | 18.50              |                    |
|                       |                 | HIGH      | 64QAM      | 16.89      | 16.80  | 16.87  | 18.50              |                    |
|                       | 25              | LOW       | 64QAM      | 16.87      | 16.52  | 16.70  | 18.50              |                    |

| LTE B66-State3 -Ant.2 |                 |           |            |            |        |        |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 132022     | 132322 | 132622 | Tune-up power(dBm) |                    |
| 10                    | 1               | LOW       | QPSK       | 20.76      | 20.86  | 20.73  | 21.50              |                    |
|                       |                 | MID       | QPSK       | 21.11      | 21.07  | 21.02  | 21.50              |                    |
|                       |                 | HIGH      | QPSK       | 20.99      | 21.30  | 21.17  | 21.50              |                    |
|                       | 25              | LOW       | QPSK       | 19.74      | 20.18  | 20.26  | 20.50              |                    |
|                       |                 | MID       | QPSK       | 19.48      | 19.87  | 20.24  | 20.50              |                    |
|                       |                 | HIGH      | QPSK       | 19.88      | 20.39  | 20.30  | 20.50              |                    |
|                       | 50              | LOW       | QPSK       | 19.76      | 20.22  | 20.36  | 20.50              |                    |
|                       | 10              | 1         | LOW        | Q16        | 20.23  | 20.96  | 20.71              | 21.00              |
|                       |                 |           | MID        | Q16        | 19.98  | 20.52  | 20.23              | 21.00              |
| HIGH                  |                 |           | Q16        | 20.28      | 20.83  | 20.66  | 21.00              |                    |
| 25                    |                 | LOW       | Q16        | 17.91      | 17.84  | 17.55  | 19.50              |                    |
|                       |                 | MID       | Q16        | 17.66      | 17.91  | 17.74  | 19.50              |                    |
|                       |                 | HIGH      | Q16        | 17.79      | 17.97  | 17.71  | 19.50              |                    |
| 50                    |                 | LOW       | Q16        | 17.63      | 17.69  | 17.85  | 19.50              |                    |
| 10                    |                 | 1         | LOW        | 64QAM      | 19.23  | 19.96  | 19.71              | 20.00              |
|                       |                 |           | MID        | 64QAM      | 18.98  | 19.52  | 19.23              | 20.00              |
|                       | HIGH            |           | 64QAM      | 19.28      | 19.83  | 19.66  | 20.00              |                    |
|                       | 25              | LOW       | 64QAM      | 16.91      | 16.84  | 16.55  | 18.50              |                    |
|                       |                 | MID       | 64QAM      | 16.66      | 16.91  | 16.74  | 18.50              |                    |
|                       |                 | HIGH      | 64QAM      | 16.79      | 16.97  | 16.71  | 18.50              |                    |
|                       | 50              | LOW       | 64QAM      | 16.63      | 16.69  | 16.85  | 18.50              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 132047 | 132322 | 132597             | Tune-up power(dBm) |
|                       | 15              | 1         | LOW        | QPSK       | 20.85  | 20.99  | 20.89              | 21.50              |
| MID                   |                 |           | QPSK       | 21.23      | 20.96  | 20.77  | 21.50              |                    |
| HIGH                  |                 |           | QPSK       | 20.90      | 21.42  | 21.15  | 21.50              |                    |
| 36                    |                 | LOW       | QPSK       | 19.65      | 20.03  | 20.26  | 20.50              |                    |
|                       |                 | MID       | QPSK       | 19.71      | 19.96  | 20.27  | 20.50              |                    |
|                       |                 | HIGH      | QPSK       | 19.65      | 20.44  | 20.48  | 20.50              |                    |
| 75                    |                 | LOW       | QPSK       | 19.68      | 20.14  | 20.42  | 20.50              |                    |
| 15                    |                 | 1         | LOW        | Q16        | 20.08  | 20.72  | 20.85              | 21.00              |
|                       |                 |           | MID        | Q16        | 19.98  | 20.56  | 20.14              | 21.00              |
|                       | HIGH            |           | Q16        | 20.44      | 20.80  | 20.58  | 21.00              |                    |
|                       | 36              | LOW       | Q16        | 17.63      | 17.96  | 17.54  | 19.50              |                    |
|                       |                 | MID       | Q16        | 17.68      | 17.78  | 17.71  | 19.50              |                    |
|                       |                 | HIGH      | Q16        | 17.73      | 17.68  | 17.87  | 19.50              |                    |
|                       | 75              | LOW       | Q16        | 17.82      | 17.57  | 17.86  | 19.50              |                    |
|                       | 15              | 1         | LOW        | 64QAM      | 19.08  | 19.72  | 19.85              | 20.00              |
|                       |                 |           | MID        | 64QAM      | 18.98  | 19.56  | 19.14              | 20.00              |
| HIGH                  |                 |           | 64QAM      | 19.44      | 19.80  | 19.58  | 20.00              |                    |
| 36                    |                 | LOW       | 64QAM      | 16.63      | 16.96  | 16.54  | 18.50              |                    |
|                       |                 | MID       | 64QAM      | 16.68      | 16.78  | 16.71  | 18.50              |                    |
|                       |                 | HIGH      | 64QAM      | 16.73      | 16.68  | 16.87  | 18.50              |                    |
| 75                    |                 | LOW       | 64QAM      | 16.82      | 16.57  | 16.86  | 18.50              |                    |
| Bandwidth (MHz)       |                 | RB Size   | RB offset  | Modulation | 132072 | 132322 | 132572             | Tune-up power(dBm) |
| 20                    |                 | 1         | LOW        | QPSK       | 20.81  | 20.95  | 20.85              | 21.50              |
|                       | MID             |           | QPSK       | 21.17      | 21.08  | 20.91  | 21.50              |                    |
|                       | HIGH            |           | QPSK       | 20.97      | 21.37  | 21.17  | 21.50              |                    |
|                       | 50              | LOW       | QPSK       | 19.64      | 20.07  | 20.34  | 20.50              |                    |
|                       |                 | MID       | QPSK       | 19.59      | 19.98  | 20.26  | 20.50              |                    |
|                       |                 | HIGH      | QPSK       | 19.75      | 20.36  | 20.36  | 20.50              |                    |
|                       | 100             | LOW       | QPSK       | 19.66      | 20.20  | 20.32  | 20.50              |                    |
|                       | 20              | 1         | LOW        | Q16        | 20.15  | 20.85  | 20.74              | 21.00              |
|                       |                 |           | MID        | Q16        | 20.09  | 20.50  | 20.22              | 21.00              |
| HIGH                  |                 |           | Q16        | 20.43      | 20.85  | 20.70  | 21.00              |                    |
| 50                    |                 | LOW       | Q16        | 17.78      | 17.84  | 17.65  | 19.50              |                    |
|                       |                 | MID       | Q16        | 17.74      | 17.85  | 17.81  | 19.50              |                    |
|                       |                 | HIGH      | Q16        | 17.82      | 17.83  | 17.74  | 19.50              |                    |
| 100                   |                 | LOW       | Q16        | 17.74      | 17.66  | 17.73  | 19.50              |                    |
| 20                    |                 | 1         | LOW        | 64QAM      | 19.24  | 19.95  | 19.77              | 20.00              |
|                       |                 |           | MID        | 64QAM      | 19.02  | 19.62  | 19.30              | 20.00              |
|                       | HIGH            |           | 64QAM      | 19.42      | 19.47  | 19.64  | 20.00              |                    |
|                       | 50              | LOW       | 64QAM      | 16.78      | 16.73  | 16.75  | 18.50              |                    |
|                       |                 | MID       | 64QAM      | 16.83      | 16.69  | 16.71  | 18.50              |                    |
|                       |                 | HIGH      | 64QAM      | 16.84      | 16.70  | 16.89  | 18.50              |                    |
|                       | 100             | LOW       | 64QAM      | 16.69      | 16.70  | 16.73  | 18.50              |                    |

| LTE B66-State4 -Ant.2 |                 |           |            |            |        |        |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                   | 1               | LOW       | QPSK       | 19.06      | 19.44  | 19.12  | 20.50              |                    |
|                       |                 | MID       | QPSK       | 19.24      | 19.60  | 19.25  | 20.50              |                    |
|                       |                 | HIGH      | QPSK       | 19.18      | 19.42  | 18.99  | 20.50              |                    |
|                       | 3               | LOW       | QPSK       | 19.24      | 19.48  | 19.30  | 20.50              |                    |
|                       |                 | MID       | QPSK       | 19.31      | 19.56  | 19.34  | 20.50              |                    |
|                       |                 | HIGH      | QPSK       | 19.25      | 19.48  | 19.26  | 20.50              |                    |
|                       | 6               | LOW       | QPSK       | 17.69      | 17.72  | 17.80  | 19.50              |                    |
|                       | 1.4             | 1         | LOW        | Q16        | 17.74  | 17.99  | 17.72              | 19.50              |
|                       |                 |           | MID        | Q16        | 17.98  | 18.24  | 17.81              | 19.50              |
| HIGH                  |                 |           | Q16        | 17.81      | 18.07  | 17.59  | 19.50              |                    |
| 3                     |                 | LOW       | Q16        | 17.82      | 17.99  | 17.94  | 19.50              |                    |
|                       |                 | MID       | Q16        | 17.87      | 18.09  | 17.99  | 19.50              |                    |
|                       |                 | HIGH      | Q16        | 17.76      | 18.03  | 17.90  | 19.50              |                    |
| 6                     |                 | LOW       | Q16        | 16.64      | 16.78  | 16.66  | 18.50              |                    |
| 1.4                   |                 | 1         | LOW        | 64QAM      | 17.71  | 17.69  | 17.65              | 18.50              |
|                       |                 |           | MID        | 64QAM      | 17.32  | 17.48  | 17.15              | 18.50              |
|                       | HIGH            |           | 64QAM      | 17.92      | 18.00  | 17.66  | 18.50              |                    |
|                       | 3               | LOW       | 64QAM      | 17.74      | 17.62  | 17.69  | 18.50              |                    |
|                       |                 | MID       | 64QAM      | 17.20      | 17.29  | 17.27  | 18.50              |                    |
|                       |                 | HIGH      | 64QAM      | 17.87      | 18.01  | 17.72  | 18.50              |                    |
|                       | 6               | LOW       | 64QAM      | 15.69      | 15.92  | 15.78  | 17.50              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
|                       | 3               | 1         | LOW        | QPSK       | 19.39  | 19.88  | 19.95              | 20.50              |
| MID                   |                 |           | QPSK       | 19.23      | 19.71  | 19.26  | 20.50              |                    |
| HIGH                  |                 |           | QPSK       | 19.85      | 20.26  | 19.68  | 20.50              |                    |
| 8                     |                 | LOW       | QPSK       | 18.01      | 18.00  | 18.04  | 19.50              |                    |
|                       |                 | MID       | QPSK       | 17.99      | 17.86  | 17.76  | 19.50              |                    |
|                       |                 | HIGH      | QPSK       | 18.08      | 18.29  | 18.15  | 19.50              |                    |
| 15                    |                 | LOW       | QPSK       | 18.11      | 18.17  | 18.16  | 19.50              |                    |
| 3                     |                 | 1         | LOW        | Q16        | 18.59  | 18.51  | 18.58              | 19.50              |
|                       |                 |           | MID        | Q16        | 18.16  | 18.45  | 18.21              | 19.50              |
|                       | HIGH            |           | Q16        | 18.82      | 19.19  | 18.45  | 19.50              |                    |
|                       | 8               | LOW       | Q16        | 16.90      | 16.76  | 16.76  | 18.50              |                    |
|                       |                 | MID       | Q16        | 16.59      | 16.64  | 16.77  | 18.50              |                    |
|                       |                 | HIGH      | Q16        | 16.79      | 17.07  | 16.56  | 18.50              |                    |
|                       | 15              | LOW       | Q16        | 16.74      | 16.72  | 16.62  | 18.50              |                    |
|                       | 3               | 1         | LOW        | 64QAM      | 17.59  | 17.51  | 17.58              | 18.50              |
|                       |                 |           | MID        | 64QAM      | 17.16  | 17.45  | 17.21              | 18.50              |
| HIGH                  |                 |           | 64QAM      | 17.82      | 18.19  | 17.45  | 18.50              |                    |
| 8                     |                 | LOW       | 64QAM      | 15.90      | 15.76  | 15.76  | 17.50              |                    |
|                       |                 | MID       | 64QAM      | 15.59      | 15.64  | 15.77  | 17.50              |                    |
|                       |                 | HIGH      | 64QAM      | 15.79      | 16.07  | 15.56  | 17.50              |                    |
| 15                    |                 | LOW       | 64QAM      | 15.74      | 15.72  | 15.62  | 17.50              |                    |
| Bandwidth (MHz)       |                 | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                     |                 | 1         | LOW        | QPSK       | 19.24  | 19.91  | 19.91              | 20.50              |
|                       | MID             |           | QPSK       | 19.44      | 19.47  | 19.22  | 20.50              |                    |
|                       | HIGH            |           | QPSK       | 19.76      | 20.47  | 19.65  | 20.50              |                    |
|                       | 12              | LOW       | QPSK       | 18.25      | 18.05  | 17.98  | 19.50              |                    |
|                       |                 | MID       | QPSK       | 18.10      | 18.01  | 18.02  | 19.50              |                    |
|                       |                 | HIGH      | QPSK       | 18.10      | 18.47  | 17.98  | 19.50              |                    |
|                       | 25              | LOW       | QPSK       | 17.96      | 18.14  | 18.07  | 19.50              |                    |
|                       | 5               | 1         | LOW        | Q16        | 18.64  | 18.54  | 18.54              | 19.50              |
|                       |                 |           | MID        | Q16        | 18.14  | 18.26  | 18.16              | 19.50              |
| HIGH                  |                 |           | Q16        | 18.81      | 19.04  | 18.52  | 19.50              |                    |
| 12                    |                 | LOW       | Q16        | 16.71      | 16.88  | 16.83  | 18.50              |                    |
|                       |                 | MID       | Q16        | 16.73      | 16.74  | 16.83  | 18.50              |                    |
|                       |                 | HIGH      | Q16        | 16.86      | 17.06  | 16.76  | 18.50              |                    |
| 25                    |                 | LOW       | Q16        | 16.75      | 16.84  | 16.61  | 18.50              |                    |
| 5                     |                 | 1         | LOW        | 64QAM      | 17.64  | 17.54  | 17.54              | 18.50              |
|                       |                 |           | MID        | 64QAM      | 17.14  | 17.26  | 17.16              | 18.50              |
|                       | HIGH            |           | 64QAM      | 17.81      | 18.04  | 17.52  | 18.50              |                    |
|                       | 12              | LOW       | 64QAM      | 15.71      | 15.88  | 15.83  | 17.50              |                    |
|                       |                 | MID       | 64QAM      | 15.73      | 15.74  | 15.83  | 17.50              |                    |
|                       |                 | HIGH      | 64QAM      | 15.86      | 16.06  | 15.76  | 17.50              |                    |
|                       | 25              | LOW       | 64QAM      | 15.75      | 15.84  | 15.61  | 17.50              |                    |

| LTE B66-State4 -Ant.2 |         |           |            |        |        |        |                    |       |
|-----------------------|---------|-----------|------------|--------|--------|--------|--------------------|-------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 132022 | 132322 | 132622 | Tune-up power(dBm) |       |
| 10                    | 1       | LOW       | QPSK       | 19.31  | 19.96  | 19.98  | 20.50              |       |
|                       |         | MID       | QPSK       | 19.42  | 19.67  | 19.33  | 20.50              |       |
|                       |         | HIGH      | QPSK       | 19.64  | 20.35  | 19.90  | 20.50              |       |
|                       | 25      | LOW       | QPSK       | 18.09  | 18.00  | 18.17  | 19.50              |       |
|                       |         | MID       | QPSK       | 18.06  | 17.96  | 17.92  | 19.50              |       |
|                       |         | HIGH      | QPSK       | 18.13  | 18.45  | 18.12  | 19.50              |       |
|                       | 50      | LOW       | QPSK       | 18.03  | 18.05  | 18.20  | 19.50              |       |
|                       | 10      | 1         | LOW        | Q16    | 18.76  | 18.53  | 18.58              | 19.50 |
|                       |         |           | MID        | Q16    | 18.37  | 18.34  | 18.33              | 19.50 |
| HIGH                  |         |           | Q16        | 18.87  | 19.22  | 18.64  | 19.50              |       |
| 25                    |         | LOW       | Q16        | 16.69  | 16.79  | 16.90  | 18.50              |       |
|                       |         | MID       | Q16        | 16.71  | 16.85  | 16.80  | 18.50              |       |
|                       |         | HIGH      | Q16        | 16.79  | 16.78  | 16.60  | 18.50              |       |
| 50                    |         | LOW       | Q16        | 16.82  | 16.82  | 16.78  | 18.50              |       |
| 10                    |         | 1         | LOW        | 64QAM  | 17.76  | 17.53  | 17.58              | 18.50 |
|                       |         |           | MID        | 64QAM  | 17.37  | 17.34  | 17.33              | 18.50 |
|                       | HIGH    |           | 64QAM      | 17.87  | 18.22  | 17.64  | 18.50              |       |
|                       | 25      | LOW       | 64QAM      | 15.69  | 15.79  | 15.90  | 17.50              |       |
|                       |         | MID       | 64QAM      | 15.71  | 15.85  | 15.80  | 17.50              |       |
|                       |         | HIGH      | 64QAM      | 15.79  | 15.78  | 15.60  | 17.50              |       |
|                       | 50      | LOW       | 64QAM      | 15.82  | 15.82  | 15.78  | 17.50              |       |
|                       | 15      | 1         | LOW        | QPSK   | 19.40  | 20.09  | 19.82              | 20.50 |
|                       |         |           | MID        | QPSK   | 19.40  | 19.59  | 19.37              | 20.50 |
| HIGH                  |         |           | QPSK       | 19.75  | 20.35  | 19.83  | 20.50              |       |
| 36                    |         | LOW       | QPSK       | 18.25  | 17.96  | 18.11  | 19.50              |       |
|                       |         | MID       | QPSK       | 18.03  | 18.07  | 17.98  | 19.50              |       |
|                       |         | HIGH      | QPSK       | 18.19  | 18.37  | 18.18  | 19.50              |       |
| 75                    |         | LOW       | QPSK       | 18.24  | 18.20  | 18.21  | 19.50              |       |
| 15                    |         | 1         | LOW        | Q16    | 18.74  | 18.62  | 18.64              | 19.50 |
|                       |         |           | MID        | Q16    | 18.36  | 18.32  | 18.19              | 19.50 |
|                       |         |           | HIGH       | Q16    | 18.86  | 19.20  | 18.43              | 19.50 |
|                       |         | 36        | LOW        | Q16    | 16.89  | 16.85  | 16.91              | 18.50 |
|                       |         |           | MID        | Q16    | 16.62  | 16.74  | 16.85              | 18.50 |
|                       |         |           | HIGH       | Q16    | 17.00  | 16.78  | 16.52              | 18.50 |
|                       |         | 75        | LOW        | Q16    | 16.79  | 16.67  | 16.68              | 18.50 |
|                       |         | 15        | 1          | LOW    | 64QAM  | 17.74  | 17.62              | 17.64 |
|                       | MID     |           |            | 64QAM  | 17.36  | 17.32  | 17.19              | 18.50 |
| HIGH                  | 64QAM   |           |            | 17.86  | 18.20  | 17.43  | 18.50              |       |
| 36                    | LOW     |           | 64QAM      | 15.89  | 15.85  | 15.91  | 17.50              |       |
|                       | MID     |           | 64QAM      | 15.62  | 15.74  | 15.85  | 17.50              |       |
|                       | HIGH    |           | 64QAM      | 16.00  | 15.78  | 15.52  | 17.50              |       |
| 75                    | LOW     |           | 64QAM      | 15.79  | 15.67  | 15.68  | 17.50              |       |
| 20                    | 1       |           | LOW        | QPSK   | 19.34  | 19.95  | 19.86              | 20.50 |
|                       |         |           | MID        | QPSK   | 19.29  | 19.58  | 19.36              | 20.50 |
|                       |         | HIGH      | QPSK       | 19.74  | 20.38  | 19.79  | 20.50              |       |
|                       | 50      | LOW       | QPSK       | 18.15  | 18.00  | 18.09  | 19.50              |       |
|                       |         | MID       | QPSK       | 17.98  | 17.95  | 17.91  | 19.50              |       |
|                       |         | HIGH      | QPSK       | 18.19  | 18.32  | 18.11  | 19.50              |       |
|                       | 100     | LOW       | QPSK       | 18.10  | 18.17  | 18.08  | 19.50              |       |
|                       | 20      | 1         | LOW        | Q16    | 18.65  | 18.66  | 18.57              | 19.50 |
|                       |         |           | MID        | Q16    | 18.29  | 18.33  | 18.20              | 19.50 |
|                       |         |           | HIGH       | Q16    | 18.96  | 19.11  | 18.58              | 19.50 |
|                       |         | 50        | LOW        | Q16    | 16.77  | 16.81  | 16.82              | 18.50 |
|                       |         |           | MID        | Q16    | 16.66  | 16.75  | 16.74              | 18.50 |
|                       |         |           | HIGH       | Q16    | 16.91  | 16.92  | 16.67              | 18.50 |
|                       |         | 100       | LOW        | Q16    | 16.83  | 16.73  | 16.65              | 18.50 |
|                       |         | 20        | 1          | LOW    | 64QAM  | 17.56  | 17.79              | 17.53 |
| MID                   |         |           |            | 64QAM  | 17.28  | 17.30  | 17.26              | 18.50 |
| HIGH                  | 64QAM   |           |            | 18.04  | 18.16  | 17.55  | 18.50              |       |
| 50                    | LOW     |           | 64QAM      | 15.70  | 15.95  | 15.89  | 17.50              |       |
|                       | MID     |           | 64QAM      | 15.71  | 15.80  | 15.71  | 17.50              |       |
|                       | HIGH    |           | 64QAM      | 16.05  | 15.82  | 15.70  | 17.50              |       |
| 100                   | LOW     |           | 64QAM      | 15.79  | 15.88  | 15.73  | 17.50              |       |

| LTE B66-Full Power -Ant.3 |                 |           |            |            |        |        |                    |                    |
|---------------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)           | RB Size         | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                       | 1               | LOW       | QPSK       | 23.59      | 23.54  | 23.69  | 24.00              |                    |
|                           |                 | MID       | QPSK       | 23.63      | 23.64  | 23.70  | 24.00              |                    |
|                           |                 | HIGH      | QPSK       | 23.67      | 23.61  | 23.72  | 24.00              |                    |
|                           | 3               | LOW       | QPSK       | 23.59      | 23.55  | 23.70  | 24.00              |                    |
|                           |                 | MID       | QPSK       | 23.66      | 23.62  | 23.73  | 24.00              |                    |
|                           |                 | HIGH      | QPSK       | 23.59      | 23.66  | 23.71  | 24.00              |                    |
|                           | 6               | LOW       | QPSK       | 22.55      | 22.63  | 22.70  | 23.00              |                    |
|                           | 1.4             | 1         | LOW        | Q16        | 22.95  | 22.93  | 22.81              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.94  | 22.94  | 22.80              | 23.00              |
| HIGH                      |                 |           | Q16        | 22.90      | 22.91  | 22.87  | 23.00              |                    |
| 3                         |                 | LOW       | Q16        | 22.71      | 22.43  | 22.70  | 23.00              |                    |
|                           |                 | MID       | Q16        | 22.68      | 22.42  | 22.74  | 23.00              |                    |
|                           |                 | HIGH      | Q16        | 22.69      | 22.49  | 22.70  | 23.00              |                    |
| 6                         |                 | LOW       | Q16        | 21.32      | 21.11  | 21.28  | 22.00              |                    |
| 1.4                       |                 | 1         | LOW        | 64QAM      | 21.94  | 22.00  | 21.83              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.82  | 21.99  | 21.84              | 22.00              |
|                           | HIGH            |           | 64QAM      | 21.76      | 21.76  | 21.86  | 22.00              |                    |
|                           | 3               | LOW       | 64QAM      | 21.84      | 21.34  | 21.67  | 22.00              |                    |
|                           |                 | MID       | 64QAM      | 21.68      | 21.45  | 21.83  | 22.00              |                    |
|                           |                 | HIGH      | 64QAM      | 21.68      | 21.51  | 21.77  | 22.00              |                    |
|                           | 6               | LOW       | 64QAM      | 20.43      | 20.01  | 20.34  | 21.00              |                    |
|                           | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
|                           | 3               | 1         | LOW        | QPSK       | 23.66  | 23.76  | 23.68              | 24.00              |
| MID                       |                 |           | QPSK       | 23.74      | 23.89  | 23.60  | 24.00              |                    |
| HIGH                      |                 |           | QPSK       | 23.68      | 23.95  | 23.87  | 24.00              |                    |
| 8                         |                 | LOW       | QPSK       | 22.70      | 22.58  | 22.68  | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.51      | 22.72  | 22.57  | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.83      | 22.59  | 22.73  | 23.00              |                    |
| 15                        |                 | LOW       | QPSK       | 22.55      | 22.60  | 22.61  | 23.00              |                    |
| 3                         |                 | 1         | LOW        | Q16        | 22.76  | 22.44  | 22.99              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.78  | 22.26  | 22.83              | 23.00              |
|                           | HIGH            |           | Q16        | 22.63      | 22.48  | 22.96  | 23.00              |                    |
|                           | 8               | LOW       | Q16        | 21.04      | 21.37  | 21.14  | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.47      | 21.13  | 21.49  | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.37      | 21.15  | 21.10  | 22.00              |                    |
|                           | 15              | LOW       | Q16        | 21.50      | 21.26  | 21.57  | 22.00              |                    |
|                           | 3               | 1         | LOW        | 64QAM      | 21.96  | 21.43  | 21.94              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.82  | 21.67  | 21.93              | 22.00              |
| HIGH                      |                 |           | 64QAM      | 21.77      | 21.19  | 21.98  | 22.00              |                    |
| 8                         |                 | LOW       | 64QAM      | 20.06      | 20.30  | 19.95  | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.30      | 20.28  | 20.26  | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.26      | 20.13  | 20.20  | 21.00              |                    |
| 15                        |                 | LOW       | 64QAM      | 20.44      | 20.41  | 20.45  | 21.00              |                    |
| Bandwidth (MHz)           |                 | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                         |                 | 1         | LOW        | QPSK       | 23.80  | 23.97  | 23.67              | 24.00              |
|                           | MID             |           | QPSK       | 23.59      | 23.68  | 23.75  | 24.00              |                    |
|                           | HIGH            |           | QPSK       | 23.71      | 23.95  | 23.64  | 24.00              |                    |
|                           | 12              | LOW       | QPSK       | 22.48      | 22.79  | 22.77  | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.63      | 22.83  | 22.56  | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.90      | 22.65  | 22.68  | 23.00              |                    |
|                           | 25              | LOW       | QPSK       | 22.50      | 22.72  | 22.66  | 23.00              |                    |
|                           | 5               | 1         | LOW        | Q16        | 22.89  | 22.41  | 22.88              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.99  | 22.46  | 22.73              | 23.00              |
| HIGH                      |                 |           | Q16        | 22.89      | 22.53  | 22.81  | 23.00              |                    |
| 12                        |                 | LOW       | Q16        | 21.06      | 21.34  | 21.13  | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.41      | 21.20  | 21.36  | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.36      | 21.07  | 21.26  | 22.00              |                    |
| 25                        |                 | LOW       | Q16        | 21.53      | 21.36  | 21.41  | 22.00              |                    |
| 5                         |                 | 1         | LOW        | 64QAM      | 21.88  | 21.41  | 21.85              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.80  | 21.47  | 21.91              | 22.00              |
|                           | HIGH            |           | 64QAM      | 21.84      | 21.22  | 21.81  | 22.00              |                    |
|                           | 12              | LOW       | 64QAM      | 19.94      | 20.27  | 20.15  | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.45      | 20.24  | 20.24  | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.13      | 20.21  | 20.25  | 21.00              |                    |
|                           | 25              | LOW       | 64QAM      | 20.35      | 20.52  | 20.40  | 21.00              |                    |

| LTE B66-Full Power -Ant.3 |                 |           |            |            |        |        |                    |                    |
|---------------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)           | RB Size         | RB offset | Modulation | 132022     | 132322 | 132622 | Tune-up power(dBm) |                    |
| 10                        | 1               | LOW       | QPSK       | 23.79      | 24.00  | 23.63  | 24.00              |                    |
|                           |                 | MID       | QPSK       | 23.85      | 23.90  | 23.58  | 24.00              |                    |
|                           |                 | HIGH      | QPSK       | 23.69      | 23.81  | 23.91  | 24.00              |                    |
|                           | 25              | LOW       | QPSK       | 22.66      | 22.67  | 22.49  | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.56      | 22.76  | 22.54  | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.76      | 22.64  | 22.57  | 23.00              |                    |
|                           | 50              | LOW       | QPSK       | 22.55      | 22.87  | 22.71  | 23.00              |                    |
|                           | 10              | 1         | LOW        | Q16        | 22.93  | 22.38  | 22.99              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.99  | 22.27  | 22.66              | 23.00              |
| HIGH                      |                 |           | Q16        | 22.67      | 22.31  | 22.90  | 23.00              |                    |
| 25                        |                 | LOW       | Q16        | 21.27      | 21.12  | 21.17  | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.46      | 21.33  | 21.52  | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.39      | 21.23  | 21.02  | 22.00              |                    |
| 50                        |                 | LOW       | Q16        | 21.62      | 21.37  | 21.41  | 22.00              |                    |
| 10                        |                 | 1         | LOW        | 64QAM      | 21.85  | 21.50  | 21.68              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.95  | 21.45  | 21.81              | 22.00              |
|                           | HIGH            |           | 64QAM      | 22.00      | 21.19  | 21.22  | 22.00              |                    |
|                           | 25              | LOW       | 64QAM      | 20.05      | 20.20  | 20.10  | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.32      | 20.33  | 20.26  | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.15      | 20.03  | 20.27  | 21.00              |                    |
|                           | 50              | LOW       | 64QAM      | 20.47      | 20.40  | 20.43  | 21.00              |                    |
|                           | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 132047 | 132322 | 132597             | Tune-up power(dBm) |
|                           | 15              | 1         | LOW        | QPSK       | 23.63  | 24.00  | 23.71              | 24.00              |
| MID                       |                 |           | QPSK       | 23.73      | 23.79  | 23.59  | 24.00              |                    |
| HIGH                      |                 |           | QPSK       | 23.81      | 23.80  | 23.87  | 24.00              |                    |
| 36                        |                 | LOW       | QPSK       | 22.45      | 22.65  | 22.49  | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.46      | 22.91  | 22.67  | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.78      | 22.69  | 22.69  | 23.00              |                    |
| 75                        |                 | LOW       | QPSK       | 22.69      | 22.65  | 22.65  | 23.00              |                    |
| 15                        |                 | 1         | LOW        | Q16        | 22.74  | 22.47  | 22.77              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.75  | 22.27  | 22.85              | 23.00              |
|                           | HIGH            |           | Q16        | 22.72      | 22.33  | 22.81  | 23.00              |                    |
|                           | 36              | LOW       | Q16        | 21.20      | 21.14  | 21.18  | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.43      | 21.37  | 21.54  | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.35      | 21.29  | 21.10  | 22.00              |                    |
|                           | 75              | LOW       | Q16        | 21.39      | 21.23  | 21.39  | 22.00              |                    |
|                           | 15              | 1         | LOW        | 64QAM      | 21.78  | 21.25  | 21.85              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.97  | 21.53  | 21.92              | 22.00              |
| HIGH                      |                 |           | 64QAM      | 21.97      | 21.34  | 21.68  | 22.00              |                    |
| 36                        |                 | LOW       | 64QAM      | 20.19      | 20.25  | 20.15  | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.36      | 20.22  | 20.47  | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.06      | 20.01  | 20.17  | 21.00              |                    |
| 75                        |                 | LOW       | 64QAM      | 20.31      | 20.49  | 20.60  | 21.00              |                    |
| Bandwidth (MHz)           |                 | RB Size   | RB offset  | Modulation | 132072 | 132322 | 132572             | Tune-up power(dBm) |
| 20                        |                 | 1         | LOW        | QPSK       | 23.69  | 23.91  | 23.66              | 24.00              |
|                           | MID             |           | QPSK       | 23.71      | 23.91  | 23.70  | 24.00              |                    |
|                           | HIGH            |           | QPSK       | 23.83      | 23.90  | 23.78  | 24.00              |                    |
|                           | 50              | LOW       | QPSK       | 22.59      | 22.64  | 22.63  | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.58      | 22.78  | 22.64  | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.76      | 22.66  | 22.69  | 23.00              |                    |
|                           | 100             | LOW       | QPSK       | 22.61      | 22.72  | 22.63  | 23.00              |                    |
|                           | 20              | 1         | LOW        | Q16        | 22.81  | 22.38  | 22.91              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.90  | 22.41  | 22.80              | 23.00              |
| HIGH                      |                 |           | Q16        | 23.00      | 22.44  | 22.90  | 23.00              |                    |
| 50                        |                 | LOW       | Q16        | 21.13      | 21.26  | 21.18  | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.50      | 21.24  | 21.43  | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.26      | 21.22  | 21.17  | 22.00              |                    |
| 100                       |                 | LOW       | Q16        | 21.51      | 21.30  | 21.47  | 22.00              |                    |
| 20                        |                 | 1         | LOW        | 64QAM      | 21.88  | 21.37  | 21.79              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.94  | 21.55  | 21.79              | 22.00              |
|                           | HIGH            |           | 64QAM      | 21.86      | 21.33  | 21.96  | 22.00              |                    |
|                           | 50              | LOW       | 64QAM      | 20.08      | 20.32  | 20.07  | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.45      | 20.30  | 20.34  | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.15      | 20.13  | 20.31  | 21.00              |                    |
|                           | 100             | LOW       | 64QAM      | 20.41      | 20.39  | 20.54  | 21.00              |                    |



| LTE B66-State1&2 -Ant.3 |                 |           |            |            |        |        |                    |                    |
|-------------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)         | RB Size         | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                     | 1               | LOW       | QPSK       | 23.59      | 23.54  | 23.69  | 24.00              |                    |
|                         |                 | MID       | QPSK       | 23.63      | 23.64  | 23.70  | 24.00              |                    |
|                         |                 | HIGH      | QPSK       | 23.67      | 23.61  | 23.72  | 24.00              |                    |
|                         | 3               | LOW       | QPSK       | 23.59      | 23.55  | 23.70  | 24.00              |                    |
|                         |                 | MID       | QPSK       | 23.66      | 23.62  | 23.73  | 24.00              |                    |
|                         |                 | HIGH      | QPSK       | 23.59      | 23.66  | 23.71  | 24.00              |                    |
|                         | 6               | LOW       | QPSK       | 22.55      | 22.63  | 22.70  | 23.00              |                    |
|                         | 1.4             | 1         | LOW        | Q16        | 22.95  | 22.93  | 22.81              | 23.00              |
|                         |                 |           | MID        | Q16        | 22.94  | 22.94  | 22.80              | 23.00              |
| HIGH                    |                 |           | Q16        | 22.90      | 22.91  | 22.87  | 23.00              |                    |
| 3                       |                 | LOW       | Q16        | 22.71      | 22.43  | 22.70  | 23.00              |                    |
|                         |                 | MID       | Q16        | 22.68      | 22.42  | 22.74  | 23.00              |                    |
|                         |                 | HIGH      | Q16        | 22.69      | 22.49  | 22.70  | 23.00              |                    |
| 6                       |                 | LOW       | Q16        | 21.32      | 21.11  | 21.28  | 22.00              |                    |
| 1.4                     |                 | 1         | LOW        | 64QAM      | 21.94  | 22.00  | 21.83              | 22.00              |
|                         |                 |           | MID        | 64QAM      | 21.82  | 21.99  | 21.84              | 22.00              |
|                         | HIGH            |           | 64QAM      | 21.76      | 21.76  | 21.86  | 22.00              |                    |
|                         | 3               | LOW       | 64QAM      | 21.84      | 21.34  | 21.67  | 22.00              |                    |
|                         |                 | MID       | 64QAM      | 21.68      | 21.45  | 21.83  | 22.00              |                    |
|                         |                 | HIGH      | 64QAM      | 21.68      | 21.51  | 21.77  | 22.00              |                    |
|                         | 6               | LOW       | 64QAM      | 20.43      | 20.01  | 20.34  | 21.00              |                    |
|                         | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
|                         | 3               | 1         | LOW        | QPSK       | 23.66  | 23.76  | 23.68              | 24.00              |
| MID                     |                 |           | QPSK       | 23.74      | 23.89  | 23.60  | 24.00              |                    |
| HIGH                    |                 |           | QPSK       | 23.68      | 23.95  | 23.87  | 24.00              |                    |
| 8                       |                 | LOW       | QPSK       | 22.70      | 22.58  | 22.68  | 23.00              |                    |
|                         |                 | MID       | QPSK       | 22.51      | 22.72  | 22.57  | 23.00              |                    |
|                         |                 | HIGH      | QPSK       | 22.83      | 22.59  | 22.73  | 23.00              |                    |
| 15                      |                 | LOW       | QPSK       | 22.55      | 22.60  | 22.61  | 23.00              |                    |
| 3                       |                 | 1         | LOW        | Q16        | 22.76  | 22.44  | 22.99              | 23.00              |
|                         |                 |           | MID        | Q16        | 22.78  | 22.26  | 22.83              | 23.00              |
|                         | HIGH            |           | Q16        | 22.63      | 22.48  | 22.96  | 23.00              |                    |
|                         | 8               | LOW       | Q16        | 21.04      | 21.37  | 21.14  | 22.00              |                    |
|                         |                 | MID       | Q16        | 21.47      | 21.13  | 21.49  | 22.00              |                    |
|                         |                 | HIGH      | Q16        | 21.37      | 21.15  | 21.10  | 22.00              |                    |
|                         | 15              | LOW       | Q16        | 21.50      | 21.26  | 21.57  | 22.00              |                    |
|                         | 3               | 1         | LOW        | 64QAM      | 21.96  | 21.43  | 21.94              | 22.00              |
|                         |                 |           | MID        | 64QAM      | 21.82  | 21.67  | 21.93              | 22.00              |
| HIGH                    |                 |           | 64QAM      | 21.77      | 21.19  | 21.98  | 22.00              |                    |
| 8                       |                 | LOW       | 64QAM      | 20.06      | 20.30  | 19.95  | 21.00              |                    |
|                         |                 | MID       | 64QAM      | 20.30      | 20.28  | 20.26  | 21.00              |                    |
|                         |                 | HIGH      | 64QAM      | 20.26      | 20.13  | 20.20  | 21.00              |                    |
| 15                      |                 | LOW       | 64QAM      | 20.44      | 20.41  | 20.45  | 21.00              |                    |
| Bandwidth (MHz)         |                 | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                       |                 | 1         | LOW        | QPSK       | 23.80  | 23.97  | 23.67              | 24.00              |
|                         | MID             |           | QPSK       | 23.59      | 23.68  | 23.75  | 24.00              |                    |
|                         | HIGH            |           | QPSK       | 23.71      | 23.95  | 23.64  | 24.00              |                    |
|                         | 12              | LOW       | QPSK       | 22.48      | 22.79  | 22.77  | 23.00              |                    |
|                         |                 | MID       | QPSK       | 22.63      | 22.83  | 22.56  | 23.00              |                    |
|                         |                 | HIGH      | QPSK       | 22.90      | 22.65  | 22.68  | 23.00              |                    |
|                         | 25              | LOW       | QPSK       | 22.50      | 22.72  | 22.66  | 23.00              |                    |
|                         | 5               | 1         | LOW        | Q16        | 22.89  | 22.41  | 22.88              | 23.00              |
|                         |                 |           | MID        | Q16        | 22.99  | 22.46  | 22.73              | 23.00              |
| HIGH                    |                 |           | Q16        | 22.89      | 22.53  | 22.81  | 23.00              |                    |
| 12                      |                 | LOW       | Q16        | 21.06      | 21.34  | 21.13  | 22.00              |                    |
|                         |                 | MID       | Q16        | 21.41      | 21.20  | 21.36  | 22.00              |                    |
|                         |                 | HIGH      | Q16        | 21.36      | 21.07  | 21.26  | 22.00              |                    |
| 25                      |                 | LOW       | Q16        | 21.53      | 21.36  | 21.41  | 22.00              |                    |
| 5                       |                 | 1         | LOW        | 64QAM      | 21.88  | 21.41  | 21.85              | 22.00              |
|                         |                 |           | MID        | 64QAM      | 21.80  | 21.47  | 21.91              | 22.00              |
|                         | HIGH            |           | 64QAM      | 21.84      | 21.22  | 21.81  | 22.00              |                    |
|                         | 12              | LOW       | 64QAM      | 19.94      | 20.27  | 20.15  | 21.00              |                    |
|                         |                 | MID       | 64QAM      | 20.45      | 20.24  | 20.24  | 21.00              |                    |
|                         |                 | HIGH      | 64QAM      | 20.13      | 20.21  | 20.25  | 21.00              |                    |
|                         | 25              | LOW       | 64QAM      | 20.35      | 20.52  | 20.40  | 21.00              |                    |



| LTE B66-State1&2 -Ant.3 |                 |           |            |            |        |        |                    |                    |
|-------------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)         | RB Size         | RB offset | Modulation | 132022     | 132322 | 132622 | Tune-up power(dBm) |                    |
| 10                      | 1               | LOW       | QPSK       | 23.79      | 24.00  | 23.63  | 24.00              |                    |
|                         |                 | MID       | QPSK       | 23.85      | 23.90  | 23.58  | 24.00              |                    |
|                         |                 | HIGH      | QPSK       | 23.69      | 23.81  | 23.91  | 24.00              |                    |
|                         | 25              | LOW       | QPSK       | 22.66      | 22.67  | 22.49  | 23.00              |                    |
|                         |                 | MID       | QPSK       | 22.56      | 22.76  | 22.54  | 23.00              |                    |
|                         |                 | HIGH      | QPSK       | 22.76      | 22.64  | 22.57  | 23.00              |                    |
|                         | 50              | LOW       | QPSK       | 22.55      | 22.87  | 22.71  | 23.00              |                    |
|                         | 10              | 1         | LOW        | Q16        | 22.93  | 22.38  | 22.99              | 23.00              |
|                         |                 |           | MID        | Q16        | 22.99  | 22.27  | 22.66              | 23.00              |
| HIGH                    |                 |           | Q16        | 22.67      | 22.31  | 22.90  | 23.00              |                    |
| 25                      |                 | LOW       | Q16        | 21.27      | 21.12  | 21.17  | 22.00              |                    |
|                         |                 | MID       | Q16        | 21.46      | 21.33  | 21.52  | 22.00              |                    |
|                         |                 | HIGH      | Q16        | 21.39      | 21.23  | 21.02  | 22.00              |                    |
| 50                      |                 | LOW       | Q16        | 21.62      | 21.37  | 21.41  | 22.00              |                    |
| 10                      |                 | 1         | LOW        | 64QAM      | 21.85  | 21.50  | 21.68              | 22.00              |
|                         |                 |           | MID        | 64QAM      | 21.95  | 21.45  | 21.81              | 22.00              |
|                         | HIGH            |           | 64QAM      | 22.00      | 21.19  | 21.22  | 22.00              |                    |
|                         | 25              | LOW       | 64QAM      | 20.05      | 20.20  | 20.10  | 21.00              |                    |
|                         |                 | MID       | 64QAM      | 20.32      | 20.33  | 20.26  | 21.00              |                    |
|                         |                 | HIGH      | 64QAM      | 20.15      | 20.03  | 20.27  | 21.00              |                    |
|                         | 50              | LOW       | 64QAM      | 20.47      | 20.40  | 20.43  | 21.00              |                    |
|                         | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 132047 | 132322 | 132597             | Tune-up power(dBm) |
|                         | 15              | 1         | LOW        | QPSK       | 23.63  | 24.00  | 23.71              | 24.00              |
| MID                     |                 |           | QPSK       | 23.73      | 23.79  | 23.59  | 24.00              |                    |
| HIGH                    |                 |           | QPSK       | 23.81      | 23.80  | 23.87  | 24.00              |                    |
| 36                      |                 | LOW       | QPSK       | 22.45      | 22.65  | 22.49  | 23.00              |                    |
|                         |                 | MID       | QPSK       | 22.46      | 22.91  | 22.67  | 23.00              |                    |
|                         |                 | HIGH      | QPSK       | 22.78      | 22.69  | 22.69  | 23.00              |                    |
| 75                      |                 | LOW       | QPSK       | 22.69      | 22.65  | 22.65  | 23.00              |                    |
| 15                      |                 | 1         | LOW        | Q16        | 22.74  | 22.47  | 22.77              | 23.00              |
|                         |                 |           | MID        | Q16        | 22.75  | 22.27  | 22.85              | 23.00              |
|                         | HIGH            |           | Q16        | 22.72      | 22.33  | 22.81  | 23.00              |                    |
|                         | 36              | LOW       | Q16        | 21.20      | 21.14  | 21.18  | 22.00              |                    |
|                         |                 | MID       | Q16        | 21.43      | 21.37  | 21.54  | 22.00              |                    |
|                         |                 | HIGH      | Q16        | 21.35      | 21.29  | 21.10  | 22.00              |                    |
|                         | 75              | LOW       | Q16        | 21.39      | 21.23  | 21.39  | 22.00              |                    |
|                         | 15              | 1         | LOW        | 64QAM      | 21.78  | 21.25  | 21.85              | 22.00              |
|                         |                 |           | MID        | 64QAM      | 21.97  | 21.53  | 21.92              | 22.00              |
| HIGH                    |                 |           | 64QAM      | 21.97      | 21.34  | 21.68  | 22.00              |                    |
| 36                      |                 | LOW       | 64QAM      | 20.19      | 20.25  | 20.15  | 21.00              |                    |
|                         |                 | MID       | 64QAM      | 20.36      | 20.22  | 20.47  | 21.00              |                    |
|                         |                 | HIGH      | 64QAM      | 20.06      | 20.01  | 20.17  | 21.00              |                    |
| 75                      |                 | LOW       | 64QAM      | 20.31      | 20.49  | 20.60  | 21.00              |                    |
| Bandwidth (MHz)         |                 | RB Size   | RB offset  | Modulation | 132072 | 132322 | 132572             | Tune-up power(dBm) |
| 20                      |                 | 1         | LOW        | QPSK       | 23.69  | 23.91  | 23.66              | 24.00              |
|                         | MID             |           | QPSK       | 23.71      | 23.91  | 23.70  | 24.00              |                    |
|                         | HIGH            |           | QPSK       | 23.83      | 23.90  | 23.78  | 24.00              |                    |
|                         | 50              | LOW       | QPSK       | 22.59      | 22.64  | 22.63  | 23.00              |                    |
|                         |                 | MID       | QPSK       | 22.58      | 22.78  | 22.64  | 23.00              |                    |
|                         |                 | HIGH      | QPSK       | 22.76      | 22.66  | 22.69  | 23.00              |                    |
|                         | 100             | LOW       | QPSK       | 22.61      | 22.72  | 22.63  | 23.00              |                    |
|                         | 20              | 1         | LOW        | Q16        | 22.81  | 22.38  | 22.91              | 23.00              |
|                         |                 |           | MID        | Q16        | 22.90  | 22.41  | 22.80              | 23.00              |
| HIGH                    |                 |           | Q16        | 23.00      | 22.44  | 22.90  | 23.00              |                    |
| 50                      |                 | LOW       | Q16        | 21.13      | 21.26  | 21.18  | 22.00              |                    |
|                         |                 | MID       | Q16        | 21.50      | 21.24  | 21.43  | 22.00              |                    |
|                         |                 | HIGH      | Q16        | 21.26      | 21.22  | 21.17  | 22.00              |                    |
| 100                     |                 | LOW       | Q16        | 21.51      | 21.30  | 21.47  | 22.00              |                    |
| 20                      |                 | 1         | LOW        | 64QAM      | 21.88  | 21.37  | 21.79              | 22.00              |
|                         |                 |           | MID        | 64QAM      | 21.94  | 21.55  | 21.79              | 22.00              |
|                         | HIGH            |           | 64QAM      | 21.86      | 21.33  | 21.96  | 22.00              |                    |
|                         | 50              | LOW       | 64QAM      | 20.08      | 20.32  | 20.07  | 21.00              |                    |
|                         |                 | MID       | 64QAM      | 20.45      | 20.30  | 20.34  | 21.00              |                    |
|                         |                 | HIGH      | 64QAM      | 20.15      | 20.13  | 20.31  | 21.00              |                    |
|                         | 100             | LOW       | 64QAM      | 20.41      | 20.39  | 20.54  | 21.00              |                    |

| LTE B66-State3 -Ant.3 |                 |           |            |            |        |        |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                   | 1               | LOW       | QPSK       | 20.84      | 20.79  | 20.61  | 21.50              |                    |
|                       |                 | MID       | QPSK       | 21.02      | 20.98  | 20.73  | 21.50              |                    |
|                       |                 | HIGH      | QPSK       | 20.82      | 20.80  | 20.49  | 21.50              |                    |
|                       | 3               | LOW       | QPSK       | 20.89      | 20.95  | 20.66  | 21.50              |                    |
|                       |                 | MID       | QPSK       | 20.96      | 21.06  | 20.69  | 21.50              |                    |
|                       |                 | HIGH      | QPSK       | 20.90      | 20.99  | 20.61  | 21.50              |                    |
|                       | 6               | LOW       | QPSK       | 18.68      | 18.70  | 18.74  | 20.50              |                    |
|                       | 1.4             | 1         | LOW        | Q16        | 18.95  | 18.74  | 19.08              | 20.50              |
|                       |                 |           | MID        | Q16        | 18.72  | 18.95  | 18.92              | 20.50              |
| HIGH                  |                 |           | Q16        | 18.82      | 19.40  | 18.85  | 20.50              |                    |
| 3                     |                 | LOW       | Q16        | 19.08      | 18.87  | 19.08  | 20.50              |                    |
|                       |                 | MID       | Q16        | 18.73      | 18.74  | 18.96  | 20.50              |                    |
|                       |                 | HIGH      | Q16        | 18.79      | 19.39  | 18.95  | 20.50              |                    |
| 6                     |                 | LOW       | Q16        | 17.98      | 17.69  | 18.15  | 19.50              |                    |
| 1.4                   |                 | 1         | LOW        | 64QAM      | 17.81  | 17.90  | 18.04              | 19.50              |
|                       |                 |           | MID        | 64QAM      | 17.98  | 17.92  | 18.25              | 19.50              |
|                       | HIGH            |           | 64QAM      | 17.88      | 17.96  | 18.27  | 19.50              |                    |
|                       | 3               | LOW       | 64QAM      | 17.96      | 17.94  | 18.18  | 19.50              |                    |
|                       |                 | MID       | 64QAM      | 17.73      | 17.83  | 18.16  | 19.50              |                    |
|                       |                 | HIGH      | 64QAM      | 17.76      | 17.99  | 18.17  | 19.50              |                    |
|                       | 6               | LOW       | 64QAM      | 16.76      | 16.60  | 16.57  | 18.50              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
|                       | 3               | 1         | LOW        | QPSK       | 21.40  | 20.92  | 21.30              | 21.50              |
| MID                   |                 |           | QPSK       | 20.79      | 21.04  | 20.82  | 21.50              |                    |
| HIGH                  |                 |           | QPSK       | 21.13      | 21.13  | 21.01  | 21.50              |                    |
| 8                     |                 | LOW       | QPSK       | 18.83      | 18.69  | 19.14  | 20.50              |                    |
|                       |                 | MID       | QPSK       | 18.62      | 18.93  | 18.71  | 20.50              |                    |
|                       |                 | HIGH      | QPSK       | 18.76      | 19.43  | 19.10  | 20.50              |                    |
| 15                    |                 | LOW       | QPSK       | 18.90      | 19.00  | 19.10  | 20.50              |                    |
| 3                     |                 | 1         | LOW        | Q16        | 19.21  | 19.17  | 19.01              | 20.50              |
|                       |                 |           | MID        | Q16        | 18.52  | 18.92  | 18.61              | 20.50              |
|                       | HIGH            |           | Q16        | 19.01      | 19.67  | 19.02  | 20.50              |                    |
|                       | 8               | LOW       | Q16        | 17.90      | 17.90  | 18.19  | 19.50              |                    |
|                       |                 | MID       | Q16        | 17.73      | 18.01  | 17.82  | 19.50              |                    |
|                       |                 | HIGH      | Q16        | 17.84      | 17.80  | 17.75  | 19.50              |                    |
|                       | 15              | LOW       | Q16        | 17.93      | 17.68  | 17.57  | 19.50              |                    |
|                       | 3               | 1         | LOW        | 64QAM      | 18.21  | 18.17  | 18.01              | 19.50              |
|                       |                 |           | MID        | 64QAM      | 17.52  | 17.92  | 17.61              | 19.50              |
| HIGH                  |                 |           | 64QAM      | 18.01      | 18.67  | 18.02  | 19.50              |                    |
| 8                     |                 | LOW       | 64QAM      | 16.90      | 16.90  | 17.19  | 18.50              |                    |
|                       |                 | MID       | 64QAM      | 16.73      | 17.01  | 16.82  | 18.50              |                    |
|                       |                 | HIGH      | 64QAM      | 16.84      | 16.80  | 16.75  | 18.50              |                    |
| 15                    |                 | LOW       | 64QAM      | 16.93      | 16.68  | 16.57  | 18.50              |                    |
| Bandwidth (MHz)       |                 | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                     |                 | 1         | LOW        | QPSK       | 21.34  | 20.87  | 21.30              | 21.50              |
|                       | MID             |           | QPSK       | 20.78      | 20.98  | 20.97  | 21.50              |                    |
|                       | HIGH            |           | QPSK       | 21.35      | 21.41  | 21.02  | 21.50              |                    |
|                       | 12              | LOW       | QPSK       | 18.80      | 18.72  | 19.01  | 20.50              |                    |
|                       |                 | MID       | QPSK       | 18.75      | 18.79  | 18.70  | 20.50              |                    |
|                       |                 | HIGH      | QPSK       | 18.81      | 19.41  | 19.05  | 20.50              |                    |
|                       | 25              | LOW       | QPSK       | 18.76      | 19.02  | 18.99  | 20.50              |                    |
|                       | 5               | 1         | LOW        | Q16        | 19.00  | 18.93  | 19.15              | 20.50              |
|                       |                 |           | MID        | Q16        | 18.65  | 18.95  | 18.58              | 20.50              |
| HIGH                  |                 |           | Q16        | 19.20      | 19.65  | 19.13  | 20.50              |                    |
| 12                    |                 | LOW       | Q16        | 17.75      | 17.85  | 18.13  | 19.50              |                    |
|                       |                 | MID       | Q16        | 17.74      | 17.76  | 17.82  | 19.50              |                    |
|                       |                 | HIGH      | Q16        | 17.92      | 17.73  | 17.70  | 19.50              |                    |
| 25                    |                 | LOW       | Q16        | 17.74      | 17.73  | 17.70  | 19.50              |                    |
| 5                     |                 | 1         | LOW        | 64QAM      | 18.00  | 17.93  | 18.15              | 19.50              |
|                       |                 |           | MID        | 64QAM      | 17.84  | 17.95  | 17.58              | 19.50              |
|                       | HIGH            |           | 64QAM      | 18.20      | 18.65  | 18.13  | 19.50              |                    |
|                       | 12              | LOW       | 64QAM      | 16.75      | 16.85  | 17.13  | 18.50              |                    |
|                       |                 | MID       | 64QAM      | 16.74      | 16.76  | 16.82  | 18.50              |                    |
|                       |                 | HIGH      | 64QAM      | 16.92      | 16.73  | 16.70  | 18.50              |                    |
|                       | 25              | LOW       | 64QAM      | 16.74      | 16.73  | 16.70  | 18.50              |                    |

| LTE B66-State4 -Ant.3 |                 |           |            |            |        |        |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 132022     | 132322 | 132622 | Tune-up power(dBm) |                    |
| 10                    | 1               | LOW       | QPSK       | 21.40      | 21.04  | 21.40  | 21.50              |                    |
|                       |                 | MID       | QPSK       | 20.94      | 21.05  | 21.07  | 21.50              |                    |
|                       |                 | HIGH      | QPSK       | 21.11      | 21.42  | 21.12  | 21.50              |                    |
|                       | 25              | LOW       | QPSK       | 18.89      | 18.80  | 19.15  | 20.50              |                    |
|                       |                 | MID       | QPSK       | 18.71      | 18.68  | 18.98  | 20.50              |                    |
|                       |                 | HIGH      | QPSK       | 19.01      | 19.37  | 19.02  | 20.50              |                    |
|                       | 50              | LOW       | QPSK       | 19.03      | 19.03  | 19.06  | 20.50              |                    |
|                       | 10              | 1         | LOW        | Q16        | 19.20  | 18.97  | 19.02              | 20.50              |
|                       |                 |           | MID        | Q16        | 18.69  | 18.83  | 18.71              | 20.50              |
| HIGH                  |                 |           | Q16        | 19.16      | 19.72  | 19.07  | 20.50              |                    |
| 25                    |                 | LOW       | Q16        | 17.79      | 17.80  | 18.23  | 19.50              |                    |
|                       |                 | MID       | Q16        | 17.62      | 18.04  | 17.96  | 19.50              |                    |
|                       |                 | HIGH      | Q16        | 17.86      | 17.70  | 17.68  | 19.50              |                    |
| 50                    |                 | LOW       | Q16        | 17.70      | 17.51  | 17.51  | 19.50              |                    |
| 10                    |                 | 1         | LOW        | 64QAM      | 18.20  | 17.97  | 18.02              | 19.50              |
|                       |                 |           | MID        | 64QAM      | 17.69  | 17.83  | 17.71              | 19.50              |
|                       | HIGH            |           | 64QAM      | 18.16      | 18.72  | 18.07  | 19.50              |                    |
|                       | 25              | LOW       | 64QAM      | 16.79      | 16.80  | 17.23  | 18.50              |                    |
|                       |                 | MID       | 64QAM      | 16.62      | 17.04  | 16.96  | 18.50              |                    |
|                       |                 | HIGH      | 64QAM      | 16.86      | 16.70  | 16.67  | 18.50              |                    |
|                       | 50              | LOW       | 64QAM      | 16.70      | 16.51  | 16.51  | 18.50              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 132047 | 132322 | 132597             | Tune-up power(dBm) |
|                       | 15              | 1         | LOW        | QPSK       | 21.29  | 20.89  | 21.29              | 21.50              |
| MID                   |                 |           | QPSK       | 20.86      | 21.04  | 20.78  | 21.50              |                    |
| HIGH                  |                 |           | QPSK       | 21.16      | 21.36  | 21.19  | 21.50              |                    |
| 36                    |                 | LOW       | QPSK       | 19.03      | 18.68  | 19.00  | 20.50              |                    |
|                       |                 | MID       | QPSK       | 18.74      | 18.70  | 18.80  | 20.50              |                    |
|                       |                 | HIGH      | QPSK       | 18.89      | 19.34  | 18.99  | 20.50              |                    |
| 75                    |                 | LOW       | QPSK       | 18.81      | 19.13  | 19.04  | 20.50              |                    |
| 15                    |                 | 1         | LOW        | Q16        | 19.01  | 18.95  | 19.13              | 20.50              |
|                       |                 |           | MID        | Q16        | 18.66  | 18.90  | 18.69              | 20.50              |
|                       | HIGH            |           | Q16        | 19.17      | 19.70  | 18.83  | 20.50              |                    |
|                       | 36              | LOW       | Q16        | 17.73      | 17.93  | 18.12  | 19.50              |                    |
|                       |                 | MID       | Q16        | 17.51      | 17.94  | 18.09  | 19.50              |                    |
|                       |                 | HIGH      | Q16        | 17.95      | 17.77  | 17.64  | 19.50              |                    |
|                       | 75              | LOW       | Q16        | 17.81      | 17.68  | 17.80  | 19.50              |                    |
|                       | 15              | 1         | LOW        | 64QAM      | 18.01  | 17.95  | 18.13              | 19.50              |
|                       |                 |           | MID        | 64QAM      | 17.66  | 17.90  | 17.69              | 19.50              |
| HIGH                  |                 |           | 64QAM      | 18.17      | 18.70  | 17.83  | 19.50              |                    |
| 36                    |                 | LOW       | 64QAM      | 16.73      | 16.93  | 17.12  | 18.50              |                    |
|                       |                 | MID       | 64QAM      | 16.51      | 16.94  | 17.09  | 18.50              |                    |
|                       |                 | HIGH      | 64QAM      | 16.95      | 16.77  | 16.64  | 18.50              |                    |
| 75                    |                 | LOW       | 64QAM      | 16.81      | 16.68  | 16.80  | 18.50              |                    |
| Bandwidth (MHz)       |                 | RB Size   | RB offset  | Modulation | 132072 | 132322 | 132572             | Tune-up power(dBm) |
| 20                    |                 | 1         | LOW        | QPSK       | 21.28  | 21.00  | 21.32              | 21.50              |
|                       | MID             |           | QPSK       | 20.90      | 20.95  | 20.92  | 21.50              |                    |
|                       | HIGH            |           | QPSK       | 21.20      | 21.34  | 21.07  | 21.50              |                    |
|                       | 50              | LOW       | QPSK       | 18.95      | 18.75  | 19.06  | 20.50              |                    |
|                       |                 | MID       | QPSK       | 18.70      | 18.80  | 18.84  | 20.50              |                    |
|                       |                 | HIGH      | QPSK       | 18.86      | 19.30  | 18.98  | 20.50              |                    |
|                       | 100             | LOW       | QPSK       | 18.89      | 19.05  | 19.01  | 20.50              |                    |
|                       | 20              | 1         | LOW        | Q16        | 19.14  | 19.16  | 19.04              | 20.50              |
|                       |                 |           | MID        | Q16        | 18.58  | 18.87  | 18.64              | 20.50              |
| HIGH                  |                 |           | Q16        | 19.08      | 19.79  | 18.98  | 20.50              |                    |
| 50                    |                 | LOW       | Q16        | 17.83      | 17.84  | 18.13  | 19.50              |                    |
|                       |                 | MID       | Q16        | 17.64      | 17.91  | 17.95  | 19.50              |                    |
|                       |                 | HIGH      | Q16        | 17.80      | 17.85  | 17.60  | 19.50              |                    |
| 100                   |                 | LOW       | Q16        | 17.83      | 17.59  | 17.65  | 19.50              |                    |
| 20                    |                 | 1         | LOW        | 64QAM      | 18.21  | 18.18  | 18.09              | 19.50              |
|                       |                 |           | MID        | 64QAM      | 17.55  | 17.87  | 17.61              | 19.50              |
|                       | HIGH            |           | 64QAM      | 18.08      | 18.76  | 18.12  | 19.50              |                    |
|                       | 50              | LOW       | 64QAM      | 16.86      | 16.99  | 17.05  | 18.50              |                    |
|                       |                 | MID       | 64QAM      | 16.59      | 17.01  | 16.98  | 18.50              |                    |
|                       |                 | HIGH      | 64QAM      | 16.67      | 16.92  | 16.67  | 18.50              |                    |
|                       | 100             | LOW       | 64QAM      | 16.70      | 16.70  | 16.80  | 18.50              |                    |

| LTE B66-State4 -Ant.3 |                 |           |            |            |        |        |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 131979     | 132322 | 132665 | Tune-up power(dBm) |                    |
| 1.4                   | 1               | LOW       | QPSK       | 19.34      | 19.66  | 19.94  | 21.00              |                    |
|                       |                 | MID       | QPSK       | 19.05      | 19.21  | 19.19  | 21.00              |                    |
|                       |                 | HIGH      | QPSK       | 19.24      | 20.19  | 19.60  | 21.00              |                    |
|                       | 3               | LOW       | QPSK       | 19.34      | 19.66  | 19.94  | 21.00              |                    |
|                       |                 | MID       | QPSK       | 19.05      | 19.21  | 19.19  | 21.00              |                    |
|                       |                 | HIGH      | QPSK       | 19.24      | 20.19  | 19.60  | 21.00              |                    |
|                       | 6               | LOW       | QPSK       | 18.11      | 18.16  | 18.26  | 20.00              |                    |
|                       | 1.4             | 1         | LOW        | Q16        | 18.42  | 18.42  | 18.35              | 20.00              |
|                       |                 |           | MID        | Q16        | 18.37  | 18.20  | 18.27              | 20.00              |
| HIGH                  |                 |           | Q16        | 18.27      | 18.68  | 18.35  | 20.00              |                    |
| 3                     |                 | LOW       | Q16        | 18.42      | 18.42  | 18.35  | 20.00              |                    |
|                       |                 | MID       | Q16        | 18.37      | 18.20  | 18.27  | 20.00              |                    |
|                       |                 | HIGH      | Q16        | 18.27      | 18.68  | 18.35  | 20.00              |                    |
| 6                     |                 | LOW       | Q16        | 17.18      | 17.25  | 17.22  | 19.00              |                    |
| 1.4                   |                 | 1         | LOW        | 64QAM      | 17.31  | 17.15  | 17.23              | 19.00              |
|                       |                 |           | MID        | 64QAM      | 17.24  | 17.35  | 17.22              | 19.00              |
|                       | HIGH            |           | 64QAM      | 17.41      | 17.49  | 17.17  | 19.00              |                    |
|                       | 3               | LOW       | 64QAM      | 17.31      | 17.15  | 17.23  | 19.00              |                    |
|                       |                 | MID       | 64QAM      | 17.24      | 17.35  | 17.22  | 19.00              |                    |
|                       |                 | HIGH      | 64QAM      | 17.41      | 17.49  | 17.17  | 19.00              |                    |
|                       | 6               | LOW       | 64QAM      | 16.23      | 16.02  | 16.20  | 18.00              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 131987 | 132322 | 132657             | Tune-up power(dBm) |
|                       | 3               | 1         | LOW        | QPSK       | 19.34  | 19.66  | 19.94              | 21.00              |
| MID                   |                 |           | QPSK       | 19.05      | 19.21  | 19.19  | 21.00              |                    |
| HIGH                  |                 |           | QPSK       | 19.24      | 20.19  | 19.60  | 21.00              |                    |
| 8                     |                 | LOW       | QPSK       | 18.42      | 18.42  | 18.35  | 20.00              |                    |
|                       |                 | MID       | QPSK       | 18.37      | 18.20  | 18.27  | 20.00              |                    |
|                       |                 | HIGH      | QPSK       | 18.27      | 18.68  | 18.35  | 20.00              |                    |
| 15                    |                 | LOW       | QPSK       | 18.56      | 18.54  | 18.52  | 20.00              |                    |
| 3                     |                 | 1         | LOW        | Q16        | 19.17  | 18.93  | 19.04              | 20.00              |
|                       |                 |           | MID        | Q16        | 18.65  | 18.65  | 18.62              | 20.00              |
|                       | HIGH            |           | Q16        | 19.08      | 19.74  | 19.12  | 20.00              |                    |
|                       | 8               | LOW       | Q16        | 17.31      | 17.15  | 17.23  | 19.00              |                    |
|                       |                 | MID       | Q16        | 17.24      | 17.35  | 17.22  | 19.00              |                    |
|                       |                 | HIGH      | Q16        | 17.41      | 17.49  | 17.17  | 19.00              |                    |
|                       | 15              | LOW       | Q16        | 17.23      | 17.02  | 17.20  | 19.00              |                    |
|                       | 3               | 1         | LOW        | 64QAM      | 18.17  | 17.93  | 18.04              | 19.00              |
|                       |                 |           | MID        | 64QAM      | 17.65  | 17.65  | 17.62              | 19.00              |
| HIGH                  |                 |           | 64QAM      | 18.08      | 18.74  | 18.12  | 19.00              |                    |
| 8                     |                 | LOW       | 64QAM      | 16.31      | 16.15  | 16.23  | 18.00              |                    |
|                       |                 | MID       | 64QAM      | 16.24      | 16.35  | 16.22  | 18.00              |                    |
|                       |                 | HIGH      | 64QAM      | 16.41      | 16.49  | 16.17  | 18.00              |                    |
| 15                    |                 | LOW       | 64QAM      | 16.23      | 16.02  | 16.20  | 18.00              |                    |
| Bandwidth (MHz)       |                 | RB Size   | RB offset  | Modulation | 131997 | 132322 | 132647             | Tune-up power(dBm) |
| 5                     |                 | 1         | LOW        | QPSK       | 19.34  | 19.66  | 19.94              | 21.00              |
|                       | MID             |           | QPSK       | 19.05      | 19.21  | 19.19  | 21.00              |                    |
|                       | HIGH            |           | QPSK       | 19.24      | 20.19  | 19.60  | 21.00              |                    |
|                       | 12              | LOW       | QPSK       | 18.42      | 18.42  | 18.35  | 20.00              |                    |
|                       |                 | MID       | QPSK       | 18.37      | 18.20  | 18.27  | 20.00              |                    |
|                       |                 | HIGH      | QPSK       | 18.27      | 18.68  | 18.35  | 20.00              |                    |
|                       | 25              | LOW       | QPSK       | 18.56      | 18.54  | 18.52  | 20.00              |                    |
|                       | 5               | 1         | LOW        | Q16        | 19.17  | 18.93  | 19.04              | 20.00              |
|                       |                 |           | MID        | Q16        | 18.65  | 18.65  | 18.62              | 20.00              |
| HIGH                  |                 |           | Q16        | 19.08      | 19.74  | 19.12  | 20.00              |                    |
| 12                    |                 | LOW       | Q16        | 17.31      | 17.15  | 17.23  | 19.00              |                    |
|                       |                 | MID       | Q16        | 17.24      | 17.35  | 17.22  | 19.00              |                    |
|                       |                 | HIGH      | Q16        | 17.41      | 17.49  | 17.17  | 19.00              |                    |
| 25                    |                 | LOW       | Q16        | 17.23      | 17.02  | 17.20  | 19.00              |                    |
| 5                     |                 | 1         | LOW        | 64QAM      | 18.17  | 17.93  | 18.04              | 19.00              |
|                       |                 |           | MID        | 64QAM      | 17.65  | 17.65  | 17.62              | 19.00              |
|                       | HIGH            |           | 64QAM      | 18.08      | 18.74  | 18.12  | 19.00              |                    |
|                       | 12              | LOW       | 64QAM      | 16.31      | 16.15  | 16.23  | 18.00              |                    |
|                       |                 | MID       | 64QAM      | 16.24      | 16.35  | 16.22  | 18.00              |                    |
|                       |                 | HIGH      | 64QAM      | 16.41      | 16.49  | 16.17  | 18.00              |                    |
|                       | 25              | LOW       | 64QAM      | 16.23      | 16.02  | 16.20  | 18.00              |                    |

| LTE B66-State3 -Ant.3 |                 |           |            |            |        |        |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|--------|--------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 132022     | 132322 | 132622 | Tune-up power(dBm) |                    |
| 10                    | 1               | LOW       | QPSK       | 19.34      | 19.66  | 19.94  | 21.00              |                    |
|                       |                 | MID       | QPSK       | 19.05      | 19.21  | 19.19  | 21.00              |                    |
|                       |                 | HIGH      | QPSK       | 19.24      | 20.19  | 19.60  | 21.00              |                    |
|                       | 25              | LOW       | QPSK       | 18.42      | 18.42  | 18.35  | 20.00              |                    |
|                       |                 | MID       | QPSK       | 18.37      | 18.20  | 18.27  | 20.00              |                    |
|                       |                 | HIGH      | QPSK       | 18.27      | 18.68  | 18.35  | 20.00              |                    |
|                       | 50              | LOW       | QPSK       | 18.56      | 18.54  | 18.52  | 20.00              |                    |
|                       | 10              | 1         | LOW        | Q16        | 19.17  | 18.93  | 19.04              | 20.00              |
|                       |                 |           | MID        | Q16        | 18.65  | 18.65  | 18.62              | 20.00              |
| HIGH                  |                 |           | Q16        | 19.08      | 19.74  | 19.12  | 20.00              |                    |
| 25                    |                 | LOW       | Q16        | 17.31      | 17.15  | 17.23  | 19.00              |                    |
|                       |                 | MID       | Q16        | 17.24      | 17.35  | 17.22  | 19.00              |                    |
|                       |                 | HIGH      | Q16        | 17.41      | 17.49  | 17.17  | 19.00              |                    |
| 50                    |                 | LOW       | Q16        | 17.23      | 17.02  | 17.20  | 19.00              |                    |
| 10                    |                 | 1         | LOW        | 64QAM      | 18.17  | 17.93  | 18.04              | 19.00              |
|                       |                 |           | MID        | 64QAM      | 17.65  | 17.65  | 17.62              | 19.00              |
|                       | HIGH            |           | 64QAM      | 18.08      | 18.74  | 18.12  | 19.00              |                    |
|                       | 25              | LOW       | 64QAM      | 16.31      | 16.15  | 16.23  | 18.00              |                    |
|                       |                 | MID       | 64QAM      | 16.24      | 16.35  | 16.22  | 18.00              |                    |
|                       |                 | HIGH      | 64QAM      | 16.41      | 16.49  | 16.17  | 18.00              |                    |
|                       | 50              | LOW       | 64QAM      | 16.23      | 16.02  | 16.20  | 18.00              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 132047 | 132322 | 132597             | Tune-up power(dBm) |
|                       | 15              | 1         | LOW        | QPSK       | 19.34  | 19.66  | 19.94              | 21.00              |
| MID                   |                 |           | QPSK       | 19.05      | 19.21  | 19.19  | 21.00              |                    |
| HIGH                  |                 |           | QPSK       | 19.24      | 20.19  | 19.60  | 21.00              |                    |
| 36                    |                 | LOW       | QPSK       | 18.42      | 18.42  | 18.35  | 20.00              |                    |
|                       |                 | MID       | QPSK       | 18.37      | 18.20  | 18.27  | 20.00              |                    |
|                       |                 | HIGH      | QPSK       | 18.27      | 18.68  | 18.35  | 20.00              |                    |
| 75                    |                 | LOW       | QPSK       | 18.56      | 18.54  | 18.52  | 20.00              |                    |
| 15                    |                 | 1         | LOW        | Q16        | 19.17  | 18.93  | 19.04              | 20.00              |
|                       |                 |           | MID        | Q16        | 18.65  | 18.65  | 18.62              | 20.00              |
|                       | HIGH            |           | Q16        | 19.08      | 19.74  | 19.12  | 20.00              |                    |
|                       | 36              | LOW       | Q16        | 17.31      | 17.15  | 17.23  | 19.00              |                    |
|                       |                 | MID       | Q16        | 17.24      | 17.35  | 17.22  | 19.00              |                    |
|                       |                 | HIGH      | Q16        | 17.41      | 17.49  | 17.17  | 19.00              |                    |
|                       | 75              | LOW       | Q16        | 17.23      | 17.02  | 17.20  | 19.00              |                    |
|                       | 15              | 1         | LOW        | 64QAM      | 18.17  | 17.93  | 18.04              | 19.00              |
|                       |                 |           | MID        | 64QAM      | 17.65  | 17.65  | 17.62              | 19.00              |
| HIGH                  |                 |           | 64QAM      | 18.08      | 18.74  | 18.12  | 19.00              |                    |
| 36                    |                 | LOW       | 64QAM      | 16.31      | 16.15  | 16.23  | 18.00              |                    |
|                       |                 | MID       | 64QAM      | 16.24      | 16.35  | 16.22  | 18.00              |                    |
|                       |                 | HIGH      | 64QAM      | 16.41      | 16.49  | 16.17  | 18.00              |                    |
| 75                    |                 | LOW       | 64QAM      | 16.23      | 16.02  | 16.20  | 18.00              |                    |
| Bandwidth (MHz)       |                 | RB Size   | RB offset  | Modulation | 132072 | 132322 | 132572             | Tune-up power(dBm) |
| 20                    |                 | 1         | LOW        | QPSK       | 19.35  | 19.60  | 19.81              | 21.00              |
|                       | MID             |           | QPSK       | 19.12      | 19.32  | 19.17  | 21.00              |                    |
|                       | HIGH            |           | QPSK       | 19.25      | 20.32  | 19.62  | 21.00              |                    |
|                       | 50              | LOW       | QPSK       | 18.36      | 18.28  | 18.49  | 20.00              |                    |
|                       |                 | MID       | QPSK       | 18.23      | 18.32  | 18.34  | 20.00              |                    |
|                       |                 | HIGH      | QPSK       | 18.41      | 18.74  | 18.49  | 20.00              |                    |
|                       | 100             | LOW       | QPSK       | 18.43      | 18.50  | 18.55  | 20.00              |                    |
|                       | 20              | 1         | LOW        | Q16        | 19.18  | 18.82  | 19.17              | 20.00              |
|                       |                 |           | MID        | Q16        | 18.57  | 18.74  | 18.68              | 20.00              |
| HIGH                  |                 |           | Q16        | 19.10      | 19.60  | 19.02  | 20.00              |                    |
| 50                    |                 | LOW       | Q16        | 17.36      | 17.17  | 17.17  | 19.00              |                    |
|                       |                 | MID       | Q16        | 17.17      | 17.24  | 17.21  | 19.00              |                    |
|                       |                 | HIGH      | Q16        | 17.33      | 17.38  | 17.04  | 19.00              |                    |
| 100                   |                 | LOW       | Q16        | 17.30      | 17.13  | 17.09  | 19.00              |                    |
| 20                    |                 | 1         | LOW        | 64QAM      | 18.17  | 17.93  | 18.04              | 19.00              |
|                       |                 |           | MID        | 64QAM      | 17.65  | 17.65  | 17.62              | 19.00              |
|                       | HIGH            |           | 64QAM      | 18.08      | 18.74  | 18.12  | 19.00              |                    |
|                       | 50              | LOW       | 64QAM      | 16.31      | 16.15  | 16.23  | 18.00              |                    |
|                       |                 | MID       | 64QAM      | 16.24      | 16.35  | 16.22  | 18.00              |                    |
|                       |                 | HIGH      | 64QAM      | 16.41      | 16.49  | 16.17  | 18.00              |                    |
|                       | 100             | LOW       | 64QAM      | 16.23      | 16.22  | 16.20  | 18.00              |                    |

### 8.3.7 LTE Band38 Output Power

| LTE B38-Full Power -Ant.2 |                 |           |            |            |       |       |                    |                    |
|---------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)           | RB Size         | RB offset | Modulation | 37775      | 38000 | 38225 | Tune-up power(dBm) |                    |
| 5                         | 1               | LOW       | QPSK       | 23.42      | 23.52 | 23.98 | 24.00              |                    |
|                           |                 | MID       | QPSK       | 23.51      | 23.69 | 23.69 | 24.00              |                    |
|                           |                 | HIGH      | QPSK       | 23.27      | 23.25 | 23.69 | 24.00              |                    |
|                           | 12              | LOW       | QPSK       | 22.43      | 22.40 | 22.26 | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.37      | 22.16 | 22.41 | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.62      | 22.40 | 22.33 | 23.00              |                    |
|                           | 25              | LOW       | QPSK       | 21.82      | 22.07 | 22.01 | 23.00              |                    |
|                           | 5               | 1         | LOW        | Q16        | 22.47 | 22.74 | 22.86              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.60 | 22.73 | 22.85              | 23.00              |
| HIGH                      |                 |           | Q16        | 22.72      | 22.51 | 22.91 | 23.00              |                    |
| 12                        |                 | LOW       | Q16        | 21.34      | 21.18 | 21.48 | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.55      | 21.45 | 21.36 | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.58      | 21.41 | 21.40 | 22.00              |                    |
| 25                        |                 | LOW       | Q16        | 21.45      | 21.31 | 21.42 | 22.00              |                    |
| 5                         |                 | 1         | LOW        | 64QAM      | 21.54 | 21.68 | 21.84              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.57 | 21.84 | 21.90              | 22.00              |
|                           | HIGH            |           | 64QAM      | 21.66      | 21.53 | 21.82 | 22.00              |                    |
|                           | 12              | LOW       | 64QAM      | 20.44      | 20.05 | 20.51 | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.60      | 20.52 | 20.35 | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.55      | 20.26 | 20.47 | 21.00              |                    |
|                           | 25              | LOW       | 64QAM      | 20.47      | 20.41 | 20.32 | 21.00              |                    |
|                           | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37800 | 38000 | 38200              | Tune-up power(dBm) |
|                           | 10              | 1         | LOW        | QPSK       | 23.24 | 23.42 | 23.67              | 24.00              |
| MID                       |                 |           | QPSK       | 23.37      | 23.40 | 23.81 | 24.00              |                    |
| HIGH                      |                 |           | QPSK       | 23.27      | 23.58 | 23.55 | 24.00              |                    |
| 25                        |                 | LOW       | QPSK       | 22.40      | 22.35 | 22.51 | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.30      | 22.27 | 22.34 | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.54      | 22.36 | 22.34 | 23.00              |                    |
| 50                        |                 | LOW       | QPSK       | 22.13      | 21.97 | 21.98 | 23.00              |                    |
| 10                        |                 | 1         | LOW        | Q16        | 22.47 | 22.83 | 22.92              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.77 | 22.68 | 22.67              | 23.00              |
|                           | HIGH            |           | Q16        | 22.73      | 22.54 | 22.89 | 23.00              |                    |
|                           | 25              | LOW       | Q16        | 21.52      | 21.33 | 21.46 | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.58      | 21.41 | 21.53 | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.70      | 21.53 | 21.40 | 22.00              |                    |
|                           | 50              | LOW       | Q16        | 21.33      | 21.44 | 21.57 | 22.00              |                    |
|                           | 10              | 1         | LOW        | 64QAM      | 21.44 | 21.98 | 21.95              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.68 | 21.78 | 21.82              | 22.00              |
| HIGH                      |                 |           | 64QAM      | 21.56      | 21.56 | 21.60 | 22.00              |                    |
| 25                        |                 | LOW       | 64QAM      | 20.71      | 20.58 | 20.33 | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.67      | 20.49 | 20.26 | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.78      | 20.32 | 20.28 | 21.00              |                    |
| 50                        |                 | LOW       | 64QAM      | 20.22      | 20.01 | 20.48 | 21.00              |                    |

| LTE B38-Full Power -Ant.2 |                 |           |            |            |       |       |                    |                    |
|---------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)           | RB Size         | RB offset | Modulation | 37825      | 38000 | 38175 | Tune-up power(dBm) |                    |
| 15                        | 1               | LOW       | QPSK       | 23.44      | 23.42 | 23.88 | 24.00              |                    |
|                           |                 | MID       | QPSK       | 23.39      | 23.56 | 23.81 | 24.00              |                    |
|                           |                 | HIGH      | QPSK       | 23.32      | 23.38 | 23.68 | 24.00              |                    |
|                           | 36              | LOW       | QPSK       | 22.55      | 22.33 | 22.35 | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.42      | 22.19 | 22.39 | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.59      | 22.31 | 22.36 | 23.00              |                    |
|                           | 75              | LOW       | QPSK       | 21.97      | 21.98 | 21.98 | 23.00              |                    |
|                           | 15              | 1         | LOW        | Q16        | 22.45 | 22.78 | 23.00              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.53 | 22.72 | 22.88              | 23.00              |
| HIGH                      |                 |           | Q16        | 22.68      | 22.86 | 22.76 | 23.00              |                    |
| 36                        |                 | LOW       | Q16        | 21.48      | 21.33 | 21.44 | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.67      | 21.57 | 21.32 | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.67      | 21.35 | 21.43 | 22.00              |                    |
| 75                        |                 | LOW       | Q16        | 21.45      | 21.36 | 21.47 | 22.00              |                    |
| 15                        |                 | 1         | LOW        | 64QAM      | 21.56 | 21.97 | 22.00              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.81 | 21.51 | 21.74              | 22.00              |
|                           | HIGH            |           | 64QAM      | 21.44      | 21.54 | 21.55 | 22.00              |                    |
|                           | 36              | LOW       | 64QAM      | 20.63      | 20.31 | 20.35 | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.62      | 20.57 | 20.21 | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.65      | 20.53 | 20.34 | 21.00              |                    |
|                           | 75              | LOW       | 64QAM      | 20.29      | 20.14 | 20.48 | 21.00              |                    |
|                           | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37850 | 38000 | 38150              | Tune-up power(dBm) |
|                           | 20              | 1         | LOW        | QPSK       | 23.39 | 23.36 | 23.75              | 24.00              |
| MID                       |                 |           | QPSK       | 23.38      | 23.51 | 23.81 | 24.00              |                    |
| HIGH                      |                 |           | QPSK       | 23.40      | 23.50 | 23.68 | 24.00              |                    |
| 50                        |                 | LOW       | QPSK       | 22.41      | 22.32 | 22.49 | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.36      | 22.32 | 22.38 | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.51      | 22.38 | 22.41 | 23.00              |                    |
| 100                       |                 | LOW       | QPSK       | 22.07      | 22.00 | 22.02 | 23.00              |                    |
| 20                        |                 | 1         | LOW        | Q16        | 22.54 | 22.89 | 22.87              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.63 | 22.82 | 22.82              | 23.00              |
|                           | HIGH            |           | Q16        | 22.60      | 22.91 | 22.91 | 23.00              |                    |
|                           | 50              | LOW       | Q16        | 21.54      | 21.44 | 21.43 | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.55      | 21.53 | 21.40 | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.63      | 21.50 | 21.36 | 22.00              |                    |
|                           | 100             | LOW       | Q16        | 21.47      | 21.29 | 21.43 | 22.00              |                    |
|                           | 20              | 1         | LOW        | 64QAM      | 21.43 | 21.95 | 21.51              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.69 | 21.91 | 21.83              | 22.00              |
| HIGH                      |                 |           | 64QAM      | 21.48      | 21.93 | 21.54 | 22.00              |                    |
| 50                        |                 | LOW       | 64QAM      | 20.67      | 20.44 | 20.45 | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.58      | 20.62 | 20.25 | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.66      | 20.47 | 20.34 | 21.00              |                    |
| 100                       |                 | LOW       | 64QAM      | 20.36      | 20.15 | 20.51 | 21.00              |                    |

| LTE B38-State1&2 -Ant.2 |                 |           |            |            |       |       |                    |                    |
|-------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)         | RB Size         | RB offset | Modulation | 37775      | 38000 | 38225 | Tune-up power(dBm) |                    |
| 5                       | 1               | LOW       | QPSK       | 18.44      | 18.82 | 19.36 | 20.00              |                    |
|                         |                 | MID       | QPSK       | 18.08      | 18.46 | 18.83 | 20.00              |                    |
|                         |                 | HIGH      | QPSK       | 18.34      | 19.24 | 19.19 | 20.00              |                    |
|                         | 12              | LOW       | QPSK       | 17.45      | 17.91 | 18.20 | 19.00              |                    |
|                         |                 | MID       | QPSK       | 17.34      | 17.70 | 18.01 | 19.00              |                    |
|                         |                 | HIGH      | QPSK       | 17.47      | 17.75 | 18.02 | 19.00              |                    |
|                         | 25              | LOW       | QPSK       | 17.44      | 17.97 | 18.09 | 19.00              |                    |
|                         | 5               | 1         | LOW        | Q16        | 17.92 | 18.18 | 18.83              | 19.00              |
|                         |                 |           | MID        | Q16        | 17.60 | 17.75 | 18.13              | 19.00              |
| HIGH                    |                 |           | Q16        | 17.93      | 18.31 | 18.76 | 19.00              |                    |
| 12                      |                 | LOW       | Q16        | 16.43      | 16.96 | 17.23 | 18.00              |                    |
|                         |                 | MID       | Q16        | 16.45      | 16.61 | 16.86 | 18.00              |                    |
|                         |                 | HIGH      | Q16        | 16.43      | 17.07 | 17.13 | 18.00              |                    |
| 25                      |                 | LOW       | Q16        | 16.57      | 16.76 | 17.05 | 18.00              |                    |
| 5                       |                 | 1         | LOW        | 64QAM      | 16.92 | 17.18 | 17.83              | 18.00              |
|                         |                 |           | MID        | 64QAM      | 16.60 | 16.75 | 17.13              | 18.00              |
|                         | HIGH            |           | 64QAM      | 16.93      | 17.31 | 17.76 | 18.00              |                    |
|                         | 12              | LOW       | 64QAM      | 15.43      | 15.96 | 16.23 | 17.00              |                    |
|                         |                 | MID       | 64QAM      | 15.45      | 15.61 | 15.86 | 17.00              |                    |
|                         |                 | HIGH      | 64QAM      | 15.43      | 16.07 | 16.13 | 17.00              |                    |
|                         | 25              | LOW       | 64QAM      | 15.57      | 15.76 | 16.05 | 17.00              |                    |
|                         | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37800 | 38000 | 38200              | Tune-up power(dBm) |
|                         | 10              | 1         | LOW        | QPSK       | 18.48 | 19.12 | 19.38              | 20.00              |
| MID                     |                 |           | QPSK       | 18.22      | 18.33 | 18.78 | 20.00              |                    |
| HIGH                    |                 |           | QPSK       | 18.55      | 19.14 | 19.41 | 20.00              |                    |
| 25                      |                 | LOW       | QPSK       | 17.51      | 17.84 | 18.31 | 19.00              |                    |
|                         |                 | MID       | QPSK       | 17.52      | 17.59 | 18.06 | 19.00              |                    |
|                         |                 | HIGH      | QPSK       | 17.58      | 17.80 | 18.16 | 19.00              |                    |
| 50                      |                 | LOW       | QPSK       | 17.60      | 17.69 | 18.11 | 19.00              |                    |
| 10                      |                 | 1         | LOW        | Q16        | 17.86 | 18.09 | 18.84              | 19.00              |
|                         |                 |           | MID        | Q16        | 17.58 | 17.62 | 18.40              | 19.00              |
|                         | HIGH            |           | Q16        | 18.00      | 18.22 | 18.76 | 19.00              |                    |
|                         | 25              | LOW       | Q16        | 16.31      | 16.71 | 17.09 | 18.00              |                    |
|                         |                 | MID       | Q16        | 16.38      | 16.69 | 16.93 | 18.00              |                    |
|                         |                 | HIGH      | Q16        | 16.51      | 16.78 | 17.02 | 18.00              |                    |
|                         | 50              | LOW       | Q16        | 16.35      | 16.95 | 16.99 | 18.00              |                    |
|                         | 10              | 1         | LOW        | 64QAM      | 16.86 | 17.09 | 17.84              | 18.00              |
|                         |                 |           | MID        | 64QAM      | 16.58 | 16.62 | 17.40              | 18.00              |
| HIGH                    |                 |           | 64QAM      | 17.00      | 17.22 | 17.76 | 18.00              |                    |
| 25                      |                 | LOW       | 64QAM      | 15.31      | 15.71 | 16.09 | 17.00              |                    |
|                         |                 | MID       | 64QAM      | 15.38      | 15.69 | 15.93 | 17.00              |                    |
|                         |                 | HIGH      | 64QAM      | 15.51      | 15.78 | 16.02 | 17.00              |                    |
| 50                      |                 | LOW       | 64QAM      | 15.35      | 15.95 | 15.99 | 17.00              |                    |



| LTE B38-State1&2 -Ant.2 |         |           |            |       |       |       |                    |       |       |
|-------------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|-------|
| Bandwidth (MHz)         | RB Size | RB offset | Modulation | 37825 | 38000 | 38175 | Tune-up power(dBm) |       |       |
| 15                      | 1       | LOW       | QPSK       | 18.42 | 19.05 | 19.47 | 20.00              |       |       |
|                         |         | MID       | QPSK       | 18.19 | 18.46 | 18.74 | 20.00              |       |       |
|                         |         | HIGH      | QPSK       | 18.53 | 19.07 | 19.30 | 20.00              |       |       |
|                         | 36      | LOW       | QPSK       | 17.63 | 17.93 | 18.21 | 19.00              |       |       |
|                         |         | MID       | QPSK       | 17.30 | 17.56 | 17.85 | 19.00              |       |       |
|                         |         | HIGH      | QPSK       | 17.45 | 17.92 | 18.03 | 19.00              |       |       |
|                         | 75      | LOW       | QPSK       | 17.64 | 17.83 | 18.02 | 19.00              |       |       |
|                         | 15      | 1         | LOW        | Q16   | 18.03 | 18.13 | 18.93              | 19.00 |       |
|                         |         |           | MID        | Q16   | 17.75 | 17.71 | 18.29              | 19.00 |       |
| HIGH                    |         |           | Q16        | 18.00 | 18.39 | 18.60 | 19.00              |       |       |
| 36                      |         | LOW       | Q16        | 16.59 | 16.94 | 17.34 | 18.00              |       |       |
|                         |         | MID       | Q16        | 16.32 | 16.75 | 16.96 | 18.00              |       |       |
|                         |         | HIGH      | Q16        | 16.41 | 16.83 | 17.04 | 18.00              |       |       |
| 75                      |         | LOW       | Q16        | 16.31 | 16.89 | 17.19 | 18.00              |       |       |
| 15                      |         | 1         | LOW        | 64QAM | 17.03 | 17.13 | 17.93              | 18.00 |       |
|                         |         |           | MID        | 64QAM | 16.75 | 16.71 | 17.29              | 18.00 |       |
|                         | HIGH    |           | 64QAM      | 17.00 | 17.39 | 17.60 | 18.00              |       |       |
|                         | 36      | LOW       | 64QAM      | 15.59 | 15.94 | 16.34 | 17.00              |       |       |
|                         |         | MID       | 64QAM      | 15.32 | 15.75 | 15.96 | 17.00              |       |       |
|                         |         | HIGH      | 64QAM      | 15.41 | 15.83 | 16.04 | 17.00              |       |       |
|                         | 75      | LOW       | 64QAM      | 15.31 | 15.89 | 16.19 | 17.00              |       |       |
|                         | 20      | 20        | 1          | LOW   | QPSK  | 18.38 | 18.97              | 19.18 | 20.00 |
|                         |         |           |            | MID   | QPSK  | 18.11 | 18.45              | 18.78 | 20.00 |
| HIGH                    |         |           |            | QPSK  | 18.41 | 19.41 | 19.29              | 20.00 |       |
| 50                      |         |           | LOW        | QPSK  | 17.50 | 17.79 | 17.90              | 19.00 |       |
|                         |         |           | MID        | QPSK  | 17.39 | 17.66 | 17.97              | 19.00 |       |
|                         |         |           | HIGH       | QPSK  | 17.56 | 18.20 | 18.13              | 19.00 |       |
| 100                     |         |           | LOW        | QPSK  | 17.52 | 17.84 | 18.15              | 19.00 |       |
| 20                      |         |           | 1          | LOW   | Q16   | 17.89 | 18.11              | 18.83 | 19.00 |
|                         |         |           |            | MID   | Q16   | 17.62 | 17.76              | 18.27 | 19.00 |
|                         |         | HIGH      |            | Q16   | 17.95 | 18.35 | 18.72              | 19.00 |       |
|                         |         | 50        | LOW        | Q16   | 16.44 | 16.82 | 17.19              | 18.00 |       |
|                         |         |           | MID        | Q16   | 16.33 | 16.67 | 16.98              | 18.00 |       |
|                         |         |           | HIGH       | Q16   | 16.49 | 16.92 | 17.13              | 18.00 |       |
| 100                     |         | LOW       | Q16        | 16.46 | 16.85 | 17.10 | 18.00              |       |       |
| 20                      |         | 1         | LOW        | 64QAM | 16.79 | 17.17 | 17.98              | 18.00 |       |
|                         |         |           | MID        | 64QAM | 16.73 | 16.90 | 17.27              | 18.00 |       |
|                         |         |           | HIGH       | 64QAM | 16.98 | 17.34 | 17.73              | 18.00 |       |
|                         |         | 50        | LOW        | 64QAM | 15.55 | 15.82 | 16.07              | 17.00 |       |
|                         | MID     |           | 64QAM      | 15.40 | 15.72 | 15.86 | 17.00              |       |       |
|                         | HIGH    |           | 64QAM      | 15.34 | 16.05 | 16.26 | 17.00              |       |       |
|                         | 100     | LOW       | 64QAM      | 15.56 | 15.97 | 16.20 | 17.00              |       |       |

| LTE B38-State3&4 -Ant.2 |                 |           |            |            |       |       |                    |                    |
|-------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)         | RB Size         | RB offset | Modulation | 37775      | 38000 | 38225 | Tune-up power(dBm) |                    |
| 5                       | 1               | LOW       | QPSK       | 21.90      | 21.75 | 22.08 | 23.00              |                    |
|                         |                 | MID       | QPSK       | 21.79      | 21.59 | 21.90 | 23.00              |                    |
|                         |                 | HIGH      | QPSK       | 21.82      | 21.78 | 21.79 | 23.00              |                    |
|                         | 12              | LOW       | QPSK       | 20.79      | 20.90 | 20.87 | 22.00              |                    |
|                         |                 | MID       | QPSK       | 20.88      | 20.75 | 20.84 | 22.00              |                    |
|                         |                 | HIGH      | QPSK       | 21.12      | 21.11 | 20.98 | 22.00              |                    |
|                         | 25              | LOW       | QPSK       | 20.54      | 20.54 | 20.64 | 22.00              |                    |
|                         | 5               | 1         | LOW        | Q16        | 21.56 | 21.67 | 21.90              | 22.00              |
|                         |                 |           | MID        | Q16        | 21.63 | 21.54 | 21.29              | 22.00              |
| HIGH                    |                 |           | Q16        | 21.78      | 21.91 | 21.76 | 22.00              |                    |
| 12                      |                 | LOW       | Q16        | 20.05      | 19.83 | 19.83 | 21.00              |                    |
|                         |                 | MID       | Q16        | 20.33      | 20.23 | 19.98 | 21.00              |                    |
|                         |                 | HIGH      | Q16        | 20.06      | 19.90 | 20.13 | 21.00              |                    |
| 25                      |                 | LOW       | Q16        | 19.85      | 20.07 | 19.88 | 21.00              |                    |
| 5                       |                 | 1         | LOW        | 64QAM      | 20.60 | 20.71 | 20.91              | 21.00              |
|                         |                 |           | MID        | 64QAM      | 20.71 | 20.39 | 20.28              | 21.00              |
|                         | HIGH            |           | 64QAM      | 20.73      | 20.81 | 20.79 | 21.00              |                    |
|                         | 12              | LOW       | 64QAM      | 18.93      | 18.81 | 18.95 | 20.00              |                    |
|                         |                 | MID       | 64QAM      | 19.32      | 19.17 | 18.89 | 20.00              |                    |
|                         |                 | HIGH      | 64QAM      | 19.09      | 18.80 | 19.03 | 20.00              |                    |
|                         | 25              | LOW       | 64QAM      | 18.90      | 19.04 | 18.93 | 20.00              |                    |
|                         | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37800 | 38000 | 38200              | Tune-up power(dBm) |
|                         | 10              | 1         | LOW        | QPSK       | 21.86 | 21.48 | 22.05              | 23.00              |
| MID                     |                 |           | QPSK       | 21.98      | 21.64 | 21.87 | 23.00              |                    |
| HIGH                    |                 |           | QPSK       | 21.93      | 21.73 | 22.04 | 23.00              |                    |
| 25                      |                 | LOW       | QPSK       | 20.93      | 20.82 | 20.97 | 22.00              |                    |
|                         |                 | MID       | QPSK       | 20.96      | 20.96 | 20.86 | 22.00              |                    |
|                         |                 | HIGH      | QPSK       | 21.04      | 20.88 | 20.82 | 22.00              |                    |
| 50                      |                 | LOW       | QPSK       | 20.53      | 20.50 | 20.70 | 22.00              |                    |
| 10                      |                 | 1         | LOW        | Q16        | 21.59 | 21.69 | 21.55              | 22.00              |
|                         |                 |           | MID        | Q16        | 21.48 | 21.60 | 21.26              | 22.00              |
|                         | HIGH            |           | Q16        | 21.49      | 21.98 | 21.93 | 22.00              |                    |
|                         | 25              | LOW       | Q16        | 20.12      | 19.90 | 19.98 | 21.00              |                    |
|                         |                 | MID       | Q16        | 20.14      | 20.00 | 19.87 | 21.00              |                    |
|                         |                 | HIGH      | Q16        | 20.06      | 19.77 | 19.87 | 21.00              |                    |
|                         | 50              | LOW       | Q16        | 19.96      | 20.06 | 20.00 | 21.00              |                    |
|                         | 10              | 1         | LOW        | 64QAM      | 20.61 | 20.64 | 20.69              | 21.00              |
|                         |                 |           | MID        | 64QAM      | 20.59 | 20.60 | 20.28              | 21.00              |
| HIGH                    |                 |           | 64QAM      | 20.67      | 20.53 | 20.82 | 21.00              |                    |
| 25                      |                 | LOW       | 64QAM      | 18.99      | 18.74 | 19.15 | 20.00              |                    |
|                         |                 | MID       | 64QAM      | 19.20      | 18.98 | 18.80 | 20.00              |                    |
|                         |                 | HIGH      | 64QAM      | 19.07      | 18.83 | 19.17 | 20.00              |                    |
| 50                      |                 | LOW       | 64QAM      | 18.77      | 19.03 | 18.96 | 20.00              |                    |

| LTE B38-State3&4 -Ant.2 |         |           |            |       |       |       |                    |       |       |
|-------------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|-------|
| Bandwidth (MHz)         | RB Size | RB offset | Modulation | 37825 | 38000 | 38175 | Tune-up power(dBm) |       |       |
| 15                      | 1       | LOW       | QPSK       | 21.78 | 21.65 | 22.05 | 23.00              |       |       |
|                         |         | MID       | QPSK       | 21.84 | 21.68 | 21.85 | 23.00              |       |       |
|                         |         | HIGH      | QPSK       | 21.87 | 21.73 | 21.90 | 23.00              |       |       |
|                         | 36      | LOW       | QPSK       | 20.91 | 20.92 | 20.96 | 22.00              |       |       |
|                         |         | MID       | QPSK       | 20.73 | 20.80 | 20.84 | 22.00              |       |       |
|                         |         | HIGH      | QPSK       | 21.14 | 21.01 | 21.03 | 22.00              |       |       |
|                         | 75      | LOW       | QPSK       | 20.56 | 20.47 | 20.70 | 22.00              |       |       |
|                         | 15      | 1         | LOW        | Q16   | 21.56 | 21.57 | 21.75              | 22.00 |       |
|                         |         |           | MID        | Q16   | 21.54 | 21.63 | 21.21              | 22.00 |       |
| HIGH                    |         |           | Q16        | 21.72 | 21.56 | 21.80 | 22.00              |       |       |
| 36                      |         | LOW       | Q16        | 20.06 | 19.86 | 19.90 | 21.00              |       |       |
|                         |         | MID       | Q16        | 20.23 | 20.08 | 19.90 | 21.00              |       |       |
|                         |         | HIGH      | Q16        | 20.02 | 19.98 | 20.14 | 21.00              |       |       |
| 75                      |         | LOW       | Q16        | 19.81 | 19.98 | 19.97 | 21.00              |       |       |
| 15                      |         | 1         | LOW        | 64QAM | 20.52 | 20.73 | 20.67              | 21.00 |       |
|                         |         |           | MID        | 64QAM | 20.46 | 20.64 | 20.50              | 21.00 |       |
|                         | HIGH    |           | 64QAM      | 20.71 | 20.68 | 20.74 | 21.00              |       |       |
|                         | 36      | LOW       | 64QAM      | 18.95 | 18.78 | 18.90 | 20.00              |       |       |
|                         |         | MID       | 64QAM      | 19.12 | 18.94 | 18.96 | 20.00              |       |       |
|                         |         | HIGH      | 64QAM      | 19.13 | 18.71 | 18.91 | 20.00              |       |       |
|                         | 75      | LOW       | 64QAM      | 18.83 | 19.08 | 18.97 | 20.00              |       |       |
|                         | 20      | 1         | LOW        | QPSK  | 21.89 | 21.59 | 21.90              | 23.00 |       |
|                         |         |           | MID        | QPSK  | 21.94 | 22.02 | 21.90              | 23.00 |       |
| HIGH                    |         |           | QPSK       | 21.74 | 21.64 | 21.94 | 23.00              |       |       |
| 50                      |         | LOW       | QPSK       | 20.89 | 20.89 | 20.94 | 22.00              |       |       |
|                         |         | MID       | QPSK       | 20.85 | 20.83 | 20.82 | 22.00              |       |       |
|                         |         | HIGH      | QPSK       | 21.00 | 21.02 | 20.93 | 22.00              |       |       |
| 100                     |         | LOW       | QPSK       | 20.59 | 20.58 | 20.56 | 22.00              |       |       |
| 20                      |         | 1         | LOW        | Q16   | 21.53 | 21.65 | 21.90              | 22.00 |       |
|                         |         |           | MID        | Q16   | 21.53 | 21.54 | 21.29              | 22.00 |       |
|                         |         |           | HIGH       | Q16   | 21.58 | 21.96 | 21.93              | 22.00 |       |
|                         |         | 50        | LOW        | Q16   | 19.99 | 19.98 | 20.04              | 21.00 |       |
|                         |         |           | MID        | Q16   | 20.14 | 19.93 | 19.98              | 21.00 |       |
|                         |         |           | HIGH       | Q16   | 20.10 | 19.91 | 20.00              | 21.00 |       |
|                         |         | 100       | LOW        | Q16   | 19.85 | 19.98 | 19.99              | 21.00 |       |
|                         |         | 20        | 1          | LOW   | 64QAM | 20.60 | 20.72              | 20.76 | 21.00 |
|                         |         |           |            | MID   | 64QAM | 20.54 | 20.65              | 20.43 | 21.00 |
| HIGH                    |         |           |            | 64QAM | 20.63 | 20.61 | 20.82              | 21.00 |       |
| 50                      |         |           | LOW        | 64QAM | 18.85 | 18.86 | 19.01              | 20.00 |       |
|                         | MID     |           | 64QAM      | 19.22 | 18.95 | 18.94 | 20.00              |       |       |
|                         | HIGH    |           | 64QAM      | 19.09 | 18.78 | 19.05 | 20.00              |       |       |
| 100                     | LOW     |           | 64QAM      | 18.90 | 19.06 | 18.89 | 20.00              |       |       |

| LTE B38-Full Power -Ant.3 |                 |           |            |            |       |       |                    |                    |
|---------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)           | RB Size         | RB offset | Modulation | 37775      | 38000 | 38225 | Tune-up power(dBm) |                    |
| 5                         | 1               | LOW       | QPSK       | 23.06      | 22.75 | 23.23 | 24.00              |                    |
|                           |                 | MID       | QPSK       | 23.48      | 23.02 | 23.04 | 24.00              |                    |
|                           |                 | HIGH      | QPSK       | 23.14      | 22.99 | 23.35 | 24.00              |                    |
|                           | 12              | LOW       | QPSK       | 22.23      | 22.20 | 22.36 | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.38      | 22.03 | 22.15 | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.51      | 22.38 | 22.07 | 23.00              |                    |
|                           | 25              | LOW       | QPSK       | 21.66      | 22.10 | 21.74 | 23.00              |                    |
|                           | 5               | 1         | LOW        | Q16        | 22.18 | 22.54 | 21.73              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.16 | 22.20 | 22.77              | 23.00              |
| HIGH                      |                 |           | Q16        | 22.05      | 22.34 | 22.64 | 23.00              |                    |
| 12                        |                 | LOW       | Q16        | 20.72      | 20.57 | 20.85 | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.31      | 21.19 | 21.35 | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.40      | 21.26 | 21.36 | 22.00              |                    |
| 25                        |                 | LOW       | Q16        | 21.48      | 21.07 | 21.06 | 22.00              |                    |
| 5                         |                 | 1         | LOW        | 64QAM      | 21.08 | 21.65 | 20.75              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.19 | 21.25 | 21.81              | 22.00              |
|                           | HIGH            |           | 64QAM      | 21.13      | 21.43 | 21.60 | 22.00              |                    |
|                           | 12              | LOW       | 64QAM      | 19.69      | 19.52 | 19.98 | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.18      | 20.07 | 20.24 | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.37      | 20.24 | 20.51 | 21.00              |                    |
|                           | 25              | LOW       | 64QAM      | 20.57      | 20.18 | 20.21 | 21.00              |                    |
|                           | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37800 | 38000 | 38200              | Tune-up power(dBm) |
|                           | 10              | 1         | LOW        | QPSK       | 23.10 | 22.99 | 23.10              | 24.00              |
| MID                       |                 |           | QPSK       | 23.27      | 22.90 | 23.29 | 24.00              |                    |
| HIGH                      |                 |           | QPSK       | 23.17      | 23.05 | 23.18 | 24.00              |                    |
| 25                        |                 | LOW       | QPSK       | 22.30      | 22.23 | 22.24 | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.07      | 22.21 | 22.20 | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.20      | 22.33 | 22.17 | 23.00              |                    |
| 50                        |                 | LOW       | QPSK       | 21.95      | 21.95 | 22.00 | 23.00              |                    |
| 10                        |                 | 1         | LOW        | Q16        | 22.13 | 22.54 | 22.12              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.10 | 22.36 | 22.79              | 23.00              |
|                           | HIGH            |           | Q16        | 22.38      | 22.20 | 22.90 | 23.00              |                    |
|                           | 25              | LOW       | Q16        | 20.53      | 20.72 | 20.68 | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.51      | 21.30 | 21.32 | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.48      | 21.25 | 21.28 | 22.00              |                    |
|                           | 50              | LOW       | Q16        | 21.28      | 21.30 | 21.29 | 22.00              |                    |
|                           | 10              | 1         | LOW        | 64QAM      | 21.22 | 21.46 | 20.96              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.16 | 21.48 | 21.77              | 22.00              |
| HIGH                      |                 |           | 64QAM      | 21.44      | 21.24 | 21.62 | 22.00              |                    |
| 25                        |                 | LOW       | 64QAM      | 19.42      | 19.48 | 19.62 | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.61      | 20.21 | 20.02 | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.53      | 20.15 | 20.18 | 21.00              |                    |
| 50                        |                 | LOW       | 64QAM      | 20.31      | 20.51 | 20.42 | 21.00              |                    |

| LTE B38-Full Power -Ant.3 |                 |           |            |            |       |       |                    |                    |
|---------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)           | RB Size         | RB offset | Modulation | 37825      | 38000 | 38175 | Tune-up power(dBm) |                    |
| 15                        | 1               | LOW       | QPSK       | 23.19      | 22.84 | 23.10 | 24.00              |                    |
|                           |                 | MID       | QPSK       | 23.44      | 22.99 | 23.13 | 24.00              |                    |
|                           |                 | HIGH      | QPSK       | 23.23      | 23.07 | 23.33 | 24.00              |                    |
|                           | 36              | LOW       | QPSK       | 22.15      | 22.34 | 22.29 | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.30      | 22.04 | 22.22 | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.36      | 22.42 | 22.04 | 23.00              |                    |
|                           | 75              | LOW       | QPSK       | 21.78      | 22.00 | 21.72 | 23.00              |                    |
|                           | 15              | 1         | LOW        | Q16        | 22.22 | 22.59 | 21.88              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.19 | 22.33 | 22.86              | 23.00              |
| HIGH                      |                 |           | Q16        | 22.14      | 22.27 | 22.77 | 23.00              |                    |
| 36                        |                 | LOW       | Q16        | 20.63      | 20.62 | 20.73 | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.37      | 21.07 | 21.30 | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.55      | 21.17 | 21.26 | 22.00              |                    |
| 75                        |                 | LOW       | Q16        | 21.41      | 21.19 | 21.21 | 22.00              |                    |
| 15                        |                 | 1         | LOW        | 64QAM      | 20.99 | 21.28 | 20.87              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.23 | 21.32 | 21.86              | 22.00              |
|                           | HIGH            |           | 64QAM      | 21.35      | 21.44 | 21.66 | 22.00              |                    |
|                           | 36              | LOW       | 64QAM      | 19.46      | 19.42 | 19.63 | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.62      | 19.94 | 20.13 | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.35      | 20.24 | 20.29 | 21.00              |                    |
|                           | 75              | LOW       | 64QAM      | 20.39      | 20.54 | 20.33 | 21.00              |                    |
|                           | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37850 | 38000 | 38150              | Tune-up power(dBm) |
|                           | 20              | 1         | LOW        | QPSK       | 23.15 | 22.93 | 23.21              | 24.00              |
| MID                       |                 |           | QPSK       | 23.31      | 22.91 | 23.27 | 24.00              |                    |
| HIGH                      |                 |           | QPSK       | 23.22      | 23.33 | 23.31 | 24.00              |                    |
| 50                        |                 | LOW       | QPSK       | 22.22      | 22.20 | 22.29 | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.16      | 22.19 | 22.13 | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.26      | 22.30 | 22.16 | 23.00              |                    |
| 100                       |                 | LOW       | QPSK       | 21.85      | 21.90 | 21.85 | 23.00              |                    |
| 20                        |                 | 1         | LOW        | Q16        | 22.13 | 22.54 | 22.03              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.21 | 22.35 | 22.71              | 23.00              |
|                           | HIGH            |           | Q16        | 22.23      | 22.25 | 22.78 | 23.00              |                    |
|                           | 50              | LOW       | Q16        | 20.64      | 20.57 | 20.66 | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.36      | 21.20 | 21.17 | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.40      | 21.27 | 21.29 | 22.00              |                    |
|                           | 100             | LOW       | Q16        | 21.27      | 21.33 | 21.32 | 22.00              |                    |
|                           | 20              | 1         | LOW        | 64QAM      | 21.12 | 21.42 | 20.98              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.19 | 21.44 | 21.77              | 22.00              |
| HIGH                      |                 |           | 64QAM      | 21.38      | 21.36 | 21.70 | 22.00              |                    |
| 50                        |                 | LOW       | 64QAM      | 19.56      | 19.54 | 19.51 | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.48      | 20.08 | 20.04 | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.48      | 20.20 | 20.20 | 21.00              |                    |
| 100                       |                 | LOW       | 64QAM      | 20.31      | 20.46 | 20.33 | 21.00              |                    |

| LTE B38-State1&2&4 -Ant.3 |                 |           |            |            |       |       |                    |                    |
|---------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)           | RB Size         | RB offset | Modulation | 37775      | 38000 | 38225 | Tune-up power(dBm) |                    |
| 5                         | 1               | LOW       | QPSK       | 23.06      | 22.75 | 23.23 | 24.00              |                    |
|                           |                 | MID       | QPSK       | 23.48      | 23.02 | 23.04 | 24.00              |                    |
|                           |                 | HIGH      | QPSK       | 23.14      | 22.99 | 23.35 | 24.00              |                    |
|                           | 12              | LOW       | QPSK       | 22.23      | 22.20 | 22.36 | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.38      | 22.03 | 22.15 | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.51      | 22.38 | 22.07 | 23.00              |                    |
|                           | 25              | LOW       | QPSK       | 21.66      | 22.10 | 21.74 | 23.00              |                    |
|                           | 5               | 1         | LOW        | Q16        | 22.18 | 22.54 | 21.73              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.16 | 22.20 | 22.77              | 23.00              |
| HIGH                      |                 |           | Q16        | 22.05      | 22.34 | 22.64 | 23.00              |                    |
| 12                        |                 | LOW       | Q16        | 20.72      | 20.57 | 20.85 | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.31      | 21.19 | 21.35 | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.40      | 21.26 | 21.36 | 22.00              |                    |
| 25                        |                 | LOW       | Q16        | 21.48      | 21.07 | 21.06 | 22.00              |                    |
| 5                         |                 | 1         | LOW        | 64QAM      | 21.08 | 21.65 | 20.75              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.19 | 21.25 | 21.81              | 22.00              |
|                           | HIGH            |           | 64QAM      | 21.13      | 21.43 | 21.60 | 22.00              |                    |
|                           | 12              | LOW       | 64QAM      | 19.69      | 19.52 | 19.98 | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.18      | 20.07 | 20.24 | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.37      | 20.24 | 20.51 | 21.00              |                    |
|                           | 25              | LOW       | 64QAM      | 20.57      | 20.18 | 20.21 | 21.00              |                    |
|                           | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37800 | 38000 | 38200              | Tune-up power(dBm) |
|                           | 10              | 1         | LOW        | QPSK       | 23.10 | 22.99 | 23.10              | 24.00              |
| MID                       |                 |           | QPSK       | 23.27      | 22.90 | 23.29 | 24.00              |                    |
| HIGH                      |                 |           | QPSK       | 23.17      | 23.05 | 23.18 | 24.00              |                    |
| 25                        |                 | LOW       | QPSK       | 22.30      | 22.23 | 22.24 | 23.00              |                    |
|                           |                 | MID       | QPSK       | 22.07      | 22.21 | 22.20 | 23.00              |                    |
|                           |                 | HIGH      | QPSK       | 22.20      | 22.33 | 22.17 | 23.00              |                    |
| 50                        |                 | LOW       | QPSK       | 21.95      | 21.95 | 22.00 | 23.00              |                    |
| 10                        |                 | 1         | LOW        | Q16        | 22.13 | 22.54 | 22.12              | 23.00              |
|                           |                 |           | MID        | Q16        | 22.10 | 22.36 | 22.79              | 23.00              |
|                           | HIGH            |           | Q16        | 22.38      | 22.20 | 22.90 | 23.00              |                    |
|                           | 25              | LOW       | Q16        | 20.53      | 20.72 | 20.68 | 22.00              |                    |
|                           |                 | MID       | Q16        | 21.51      | 21.30 | 21.32 | 22.00              |                    |
|                           |                 | HIGH      | Q16        | 21.48      | 21.25 | 21.28 | 22.00              |                    |
|                           | 50              | LOW       | Q16        | 21.28      | 21.30 | 21.29 | 22.00              |                    |
|                           | 10              | 1         | LOW        | 64QAM      | 21.22 | 21.46 | 20.96              | 22.00              |
|                           |                 |           | MID        | 64QAM      | 21.16 | 21.48 | 21.77              | 22.00              |
| HIGH                      |                 |           | 64QAM      | 21.44      | 21.24 | 21.62 | 22.00              |                    |
| 25                        |                 | LOW       | 64QAM      | 19.42      | 19.48 | 19.62 | 21.00              |                    |
|                           |                 | MID       | 64QAM      | 20.61      | 20.21 | 20.02 | 21.00              |                    |
|                           |                 | HIGH      | 64QAM      | 20.53      | 20.15 | 20.18 | 21.00              |                    |
| 50                        |                 | LOW       | 64QAM      | 20.31      | 20.51 | 20.42 | 21.00              |                    |

| LTE B38-State1&2 -Ant.3 |                 |           |            |            |       |       |                    |                    |
|-------------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)         | RB Size         | RB offset | Modulation | 37825      | 38000 | 38175 | Tune-up power(dBm) |                    |
| 15                      | 1               | LOW       | QPSK       | 23.19      | 22.84 | 23.10 | 24.00              |                    |
|                         |                 | MID       | QPSK       | 23.44      | 22.99 | 23.13 | 24.00              |                    |
|                         |                 | HIGH      | QPSK       | 23.23      | 23.07 | 23.33 | 24.00              |                    |
|                         | 36              | LOW       | QPSK       | 22.15      | 22.34 | 22.29 | 23.00              |                    |
|                         |                 | MID       | QPSK       | 22.30      | 22.04 | 22.22 | 23.00              |                    |
|                         |                 | HIGH      | QPSK       | 22.36      | 22.42 | 22.04 | 23.00              |                    |
|                         | 75              | LOW       | QPSK       | 21.78      | 22.00 | 21.72 | 23.00              |                    |
|                         | 15              | 1         | LOW        | Q16        | 22.22 | 22.59 | 21.88              | 23.00              |
|                         |                 |           | MID        | Q16        | 22.19 | 22.33 | 22.86              | 23.00              |
| HIGH                    |                 |           | Q16        | 22.14      | 22.27 | 22.77 | 23.00              |                    |
| 36                      |                 | LOW       | Q16        | 20.63      | 20.62 | 20.73 | 22.00              |                    |
|                         |                 | MID       | Q16        | 21.37      | 21.07 | 21.30 | 22.00              |                    |
|                         |                 | HIGH      | Q16        | 21.55      | 21.17 | 21.26 | 22.00              |                    |
| 75                      |                 | LOW       | Q16        | 21.41      | 21.19 | 21.21 | 22.00              |                    |
| 15                      |                 | 1         | LOW        | 64QAM      | 20.99 | 21.28 | 20.87              | 22.00              |
|                         |                 |           | MID        | 64QAM      | 21.23 | 21.32 | 21.86              | 22.00              |
|                         | HIGH            |           | 64QAM      | 21.35      | 21.44 | 21.66 | 22.00              |                    |
|                         | 36              | LOW       | 64QAM      | 19.46      | 19.42 | 19.63 | 21.00              |                    |
|                         |                 | MID       | 64QAM      | 20.62      | 19.94 | 20.13 | 21.00              |                    |
|                         |                 | HIGH      | 64QAM      | 20.35      | 20.24 | 20.29 | 21.00              |                    |
|                         | 75              | LOW       | 64QAM      | 20.39      | 20.54 | 20.33 | 21.00              |                    |
|                         | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37850 | 38000 | 38150              | Tune-up power(dBm) |
|                         | 20              | 1         | LOW        | QPSK       | 23.15 | 22.93 | 23.21              | 24.00              |
| MID                     |                 |           | QPSK       | 23.31      | 22.91 | 23.27 | 24.00              |                    |
| HIGH                    |                 |           | QPSK       | 23.22      | 23.33 | 23.31 | 24.00              |                    |
| 50                      |                 | LOW       | QPSK       | 22.22      | 22.20 | 22.29 | 23.00              |                    |
|                         |                 | MID       | QPSK       | 22.16      | 22.19 | 22.13 | 23.00              |                    |
|                         |                 | HIGH      | QPSK       | 22.26      | 22.30 | 22.16 | 23.00              |                    |
| 100                     |                 | LOW       | QPSK       | 21.85      | 21.90 | 21.85 | 23.00              |                    |
| 20                      |                 | 1         | LOW        | Q16        | 22.13 | 22.54 | 22.03              | 23.00              |
|                         |                 |           | MID        | Q16        | 22.21 | 22.35 | 22.71              | 23.00              |
|                         | HIGH            |           | Q16        | 22.23      | 22.25 | 22.78 | 23.00              |                    |
|                         | 50              | LOW       | Q16        | 20.64      | 20.57 | 20.66 | 22.00              |                    |
|                         |                 | MID       | Q16        | 21.36      | 21.20 | 21.17 | 22.00              |                    |
|                         |                 | HIGH      | Q16        | 21.40      | 21.27 | 21.29 | 22.00              |                    |
|                         | 100             | LOW       | Q16        | 21.27      | 21.33 | 21.32 | 22.00              |                    |
|                         | 20              | 1         | LOW        | 64QAM      | 21.12 | 21.42 | 20.98              | 22.00              |
|                         |                 |           | MID        | 64QAM      | 21.19 | 21.44 | 21.77              | 22.00              |
| HIGH                    |                 |           | 64QAM      | 21.38      | 21.36 | 21.70 | 22.00              |                    |
| 50                      |                 | LOW       | 64QAM      | 19.56      | 19.54 | 19.51 | 21.00              |                    |
|                         |                 | MID       | 64QAM      | 20.48      | 20.08 | 20.04 | 21.00              |                    |
|                         |                 | HIGH      | 64QAM      | 20.48      | 20.20 | 20.20 | 21.00              |                    |
| 100                     |                 | LOW       | 64QAM      | 20.31      | 20.46 | 20.33 | 21.00              |                    |

| LTE B38-State3 -Ant.3 |         |           |            |       |       |       |                    |       |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 37775 | 38000 | 38225 | Tune-up power(dBm) |       |
| 5                     | 1       | LOW       | QPSK       | 22.33 | 21.76 | 22.25 | 23.00              |       |
|                       |         | MID       | QPSK       | 22.40 | 22.05 | 22.13 | 23.00              |       |
|                       |         | HIGH      | QPSK       | 22.40 | 22.10 | 22.48 | 23.00              |       |
|                       | 12      | LOW       | QPSK       | 21.29 | 21.05 | 21.16 | 22.00              |       |
|                       |         | MID       | QPSK       | 21.25 | 21.14 | 21.01 | 22.00              |       |
|                       |         | HIGH      | QPSK       | 21.40 | 21.11 | 21.10 | 22.00              |       |
|                       | 25      | LOW       | QPSK       | 20.83 | 21.07 | 20.92 | 22.00              |       |
|                       | 5       | 1         | LOW        | Q16   | 21.80 | 21.58 | 21.37              | 22.00 |
|                       |         |           | MID        | Q16   | 21.76 | 21.75 | 21.41              | 22.00 |
| HIGH                  |         |           | Q16        | 21.70 | 21.60 | 21.75 | 22.00              |       |
| 12                    |         | LOW       | Q16        | 20.02 | 20.25 | 20.32 | 21.00              |       |
|                       |         | MID       | Q16        | 20.48 | 20.05 | 20.17 | 21.00              |       |
|                       |         | HIGH      | Q16        | 20.28 | 20.05 | 20.25 | 21.00              |       |
| 25                    |         | LOW       | Q16        | 20.49 | 20.09 | 20.11 | 21.00              |       |
| 5                     |         | 1         | LOW        | 64QAM | 20.78 | 20.59 | 20.52              | 21.00 |
|                       |         |           | MID        | 64QAM | 20.88 | 20.90 | 20.49              | 21.00 |
|                       | HIGH    |           | 64QAM      | 20.61 | 20.73 | 20.85 | 21.00              |       |
|                       | 12      | LOW       | 64QAM      | 19.07 | 19.18 | 19.29 | 20.00              |       |
|                       |         | MID       | 64QAM      | 19.45 | 18.95 | 19.24 | 20.00              |       |
|                       |         | HIGH      | 64QAM      | 19.21 | 19.11 | 19.19 | 20.00              |       |
|                       | 25      | LOW       | 64QAM      | 19.49 | 19.05 | 19.25 | 20.00              |       |
|                       | 10      | 1         | LOW        | QPSK  | 22.25 | 22.00 | 22.35              | 23.00 |
|                       |         |           | MID        | QPSK  | 22.21 | 22.01 | 22.15              | 23.00 |
| HIGH                  |         |           | QPSK       | 22.40 | 22.08 | 22.40 | 23.00              |       |
| LOW                   |         |           | QPSK       | 21.11 | 21.09 | 21.35 | 22.00              |       |
| MID                   |         |           | QPSK       | 21.19 | 21.25 | 21.01 | 22.00              |       |
| HIGH                  |         |           | QPSK       | 21.23 | 21.18 | 21.20 | 22.00              |       |
| 25                    |         | LOW       | QPSK       | 20.77 | 21.03 | 20.92 | 22.00              |       |
|                       |         | MID       | Q16        | 21.98 | 21.55 | 21.46 | 22.00              |       |
|                       |         | HIGH      | Q16        | 21.65 | 21.68 | 21.56 | 22.00              |       |
| 50                    |         | LOW       | Q16        | 21.67 | 21.82 | 21.51 | 22.00              |       |
|                       |         | MID       | Q16        | 20.25 | 20.28 | 20.25 | 21.00              |       |
|                       |         | HIGH      | Q16        | 20.16 | 20.27 | 20.19 | 21.00              |       |
| 10                    |         | 1         | LOW        | 64QAM | 20.61 | 20.54 | 20.39              | 21.00 |
|                       |         |           | MID        | 64QAM | 20.65 | 20.96 | 20.56              | 21.00 |
|                       |         |           | HIGH       | 64QAM | 20.90 | 20.52 | 20.89              | 21.00 |
|                       | 25      | LOW       | 64QAM      | 19.10 | 19.26 | 19.50 | 20.00              |       |
|                       |         | MID       | 64QAM      | 19.35 | 19.31 | 19.30 | 20.00              |       |
|                       |         | HIGH      | 64QAM      | 19.10 | 19.11 | 19.14 | 20.00              |       |
|                       | 50      | LOW       | 64QAM      | 19.59 | 19.28 | 19.40 | 20.00              |       |



| LTE B38-State3 -Ant.3 |                 |           |            |            |       |       |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 37825      | 38000 | 38175 | Tune-up power(dBm) |                    |
| 15                    | 1               | LOW       | QPSK       | 22.32      | 21.74 | 22.37 | 23.00              |                    |
|                       |                 | MID       | QPSK       | 22.26      | 21.95 | 22.24 | 23.00              |                    |
|                       |                 | HIGH      | QPSK       | 22.42      | 21.98 | 22.34 | 23.00              |                    |
|                       | 36              | LOW       | QPSK       | 21.28      | 21.03 | 21.16 | 22.00              |                    |
|                       |                 | MID       | QPSK       | 21.35      | 21.24 | 21.15 | 22.00              |                    |
|                       |                 | HIGH      | QPSK       | 21.30      | 21.02 | 21.19 | 22.00              |                    |
|                       | 75              | LOW       | QPSK       | 20.76      | 21.00 | 20.86 | 22.00              |                    |
|                       | 15              | 1         | LOW        | Q16        | 21.69 | 21.58 | 21.38              | 22.00              |
|                       |                 |           | MID        | Q16        | 21.78 | 21.78 | 21.55              | 22.00              |
| HIGH                  |                 |           | Q16        | 21.66      | 21.75 | 21.78 | 22.00              |                    |
| 36                    |                 | LOW       | Q16        | 20.16      | 20.25 | 20.25 | 21.00              |                    |
|                       |                 | MID       | Q16        | 20.35      | 20.00 | 20.06 | 21.00              |                    |
|                       |                 | HIGH      | Q16        | 20.30      | 20.16 | 20.19 | 21.00              |                    |
| 75                    |                 | LOW       | Q16        | 20.39      | 20.05 | 20.18 | 21.00              |                    |
| 15                    |                 | 1         | LOW        | 64QAM      | 20.63 | 20.51 | 20.33              | 21.00              |
|                       |                 |           | MID        | 64QAM      | 20.63 | 20.83 | 20.68              | 21.00              |
|                       | HIGH            |           | 64QAM      | 20.53      | 20.78 | 20.97 | 21.00              |                    |
|                       | 36              | LOW       | 64QAM      | 19.04      | 19.14 | 19.34 | 20.00              |                    |
|                       |                 | MID       | 64QAM      | 19.24      | 19.08 | 19.28 | 20.00              |                    |
|                       |                 | HIGH      | 64QAM      | 19.35      | 19.23 | 19.24 | 20.00              |                    |
|                       | 75              | LOW       | 64QAM      | 19.43      | 19.29 | 19.41 | 20.00              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37850 | 38000 | 38150              | Tune-up power(dBm) |
|                       | 20              | 1         | LOW        | QPSK       | 22.18 | 21.85 | 22.26              | 23.00              |
| MID                   |                 |           | QPSK       | 22.16      | 21.96 | 22.19 | 23.00              |                    |
| HIGH                  |                 |           | QPSK       | 21.98      | 22.30 | 22.28 | 23.00              |                    |
| 50                    |                 | LOW       | QPSK       | 21.17      | 21.17 | 21.17 | 22.00              |                    |
|                       |                 | MID       | QPSK       | 21.20      | 21.16 | 21.16 | 22.00              |                    |
|                       |                 | HIGH      | QPSK       | 21.22      | 21.30 | 21.26 | 22.00              |                    |
| 100                   |                 | LOW       | QPSK       | 20.86      | 20.91 | 20.80 | 22.00              |                    |
| 20                    |                 | 1         | LOW        | Q16        | 21.84 | 21.55 | 21.52              | 22.00              |
|                       |                 |           | MID        | Q16        | 21.76 | 21.81 | 21.60              | 22.00              |
|                       | HIGH            |           | Q16        | 21.80      | 21.90 | 21.86 | 22.00              |                    |
|                       | 50              | LOW       | Q16        | 20.29      | 20.29 | 20.29 | 21.00              |                    |
|                       |                 | MID       | Q16        | 20.27      | 20.14 | 20.20 | 21.00              |                    |
|                       |                 | HIGH      | Q16        | 20.34      | 20.15 | 20.30 | 21.00              |                    |
|                       | 100             | LOW       | Q16        | 20.31      | 20.20 | 20.26 | 21.00              |                    |
|                       | 20              | 1         | LOW        | 64QAM      | 20.70 | 20.44 | 20.41              | 21.00              |
|                       |                 |           | MID        | 64QAM      | 20.65 | 20.84 | 20.60              | 21.00              |
| HIGH                  |                 |           | 64QAM      | 20.94      | 20.92 | 20.85 | 21.00              |                    |
| 50                    |                 | LOW       | 64QAM      | 19.17      | 19.18 | 19.44 | 20.00              |                    |
|                       |                 | MID       | 64QAM      | 19.36      | 19.22 | 19.32 | 20.00              |                    |
|                       |                 | HIGH      | 64QAM      | 19.22      | 19.25 | 19.19 | 20.00              |                    |
| 100                   |                 | LOW       | 64QAM      | 19.46      | 19.19 | 19.32 | 20.00              |                    |

| LTE B38-State4 -Ant.3 |                 |           |            |            |       |       |                    |                    |
|-----------------------|-----------------|-----------|------------|------------|-------|-------|--------------------|--------------------|
| Bandwidth (MHz)       | RB Size         | RB offset | Modulation | 37775      | 38000 | 38225 | Tune-up power(dBm) |                    |
| 5                     | 1               | LOW       | QPSK       | 21.42      | 21.11 | 21.29 | 22.50              |                    |
|                       |                 | MID       | QPSK       | 21.52      | 21.08 | 21.41 | 22.50              |                    |
|                       |                 | HIGH      | QPSK       | 21.52      | 21.37 | 21.60 | 22.50              |                    |
|                       | 12              | LOW       | QPSK       | 20.55      | 20.36 | 20.34 | 21.50              |                    |
|                       |                 | MID       | QPSK       | 20.31      | 20.37 | 20.37 | 21.50              |                    |
|                       |                 | HIGH      | QPSK       | 20.24      | 20.22 | 20.34 | 21.50              |                    |
|                       | 25              | LOW       | QPSK       | 19.86      | 20.08 | 19.92 | 21.50              |                    |
|                       | 5               | 1         | LOW        | Q16        | 20.90 | 20.73 | 21.62              | 22.00              |
|                       |                 |           | MID        | Q16        | 21.00 | 20.78 | 21.30              | 22.00              |
| HIGH                  |                 |           | Q16        | 20.90      | 20.60 | 21.34 | 22.00              |                    |
| 12                    |                 | LOW       | Q16        | 19.55      | 19.76 | 20.95 | 21.00              |                    |
|                       |                 | MID       | Q16        | 19.44      | 19.56 | 20.49 | 21.00              |                    |
|                       |                 | HIGH      | Q16        | 19.81      | 19.68 | 20.63 | 21.00              |                    |
| 25                    |                 | LOW       | Q16        | 19.84      | 19.71 | 20.80 | 21.00              |                    |
| 5                     |                 | 1         | LOW        | 64QAM      | 19.90 | 19.73 | 20.62              | 21.50              |
|                       |                 |           | MID        | 64QAM      | 20.00 | 19.78 | 20.30              | 21.50              |
|                       | HIGH            |           | 64QAM      | 19.90      | 19.60 | 20.34 | 21.50              |                    |
|                       | 12              | LOW       | 64QAM      | 18.55      | 18.76 | 19.95 | 20.50              |                    |
|                       |                 | MID       | 64QAM      | 18.69      | 18.56 | 19.49 | 20.50              |                    |
|                       |                 | HIGH      | 64QAM      | 18.81      | 18.68 | 19.63 | 20.50              |                    |
|                       | 25              | LOW       | 64QAM      | 18.84      | 18.71 | 19.80 | 20.50              |                    |
|                       | Bandwidth (MHz) | RB Size   | RB offset  | Modulation | 37800 | 38000 | 38200              | Tune-up power(dBm) |
|                       | 10              | 1         | LOW        | QPSK       | 21.56 | 21.11 | 21.28              | 22.50              |
| MID                   |                 |           | QPSK       | 21.34      | 21.21 | 21.36 | 22.50              |                    |
| HIGH                  |                 |           | QPSK       | 21.40      | 21.21 | 21.48 | 22.50              |                    |
| 25                    |                 | LOW       | QPSK       | 20.54      | 20.38 | 20.37 | 21.50              |                    |
|                       |                 | MID       | QPSK       | 20.27      | 20.37 | 20.38 | 21.50              |                    |
|                       |                 | HIGH      | QPSK       | 20.44      | 20.16 | 20.42 | 21.50              |                    |
| 50                    |                 | LOW       | QPSK       | 19.91      | 20.17 | 19.88 | 21.50              |                    |
| 10                    |                 | 1         | LOW        | Q16        | 20.92 | 20.82 | 21.61              | 22.00              |
|                       |                 |           | MID        | Q16        | 21.09 | 20.84 | 21.16              | 22.00              |
|                       | HIGH            |           | Q16        | 21.13      | 20.68 | 21.42 | 22.00              |                    |
|                       | 25              | LOW       | Q16        | 19.54      | 19.63 | 20.98 | 21.00              |                    |
|                       |                 | MID       | Q16        | 19.51      | 19.32 | 20.45 | 21.00              |                    |
|                       |                 | HIGH      | Q16        | 19.78      | 19.50 | 20.56 | 21.00              |                    |
|                       | 50              | LOW       | Q16        | 19.66      | 19.48 | 20.76 | 21.00              |                    |
|                       | 10              | 1         | LOW        | 64QAM      | 19.92 | 19.82 | 20.61              | 21.50              |
|                       |                 |           | MID        | 64QAM      | 20.09 | 19.84 | 20.16              | 21.50              |
| HIGH                  |                 |           | 64QAM      | 20.13      | 19.68 | 20.42 | 21.50              |                    |
| 25                    |                 | LOW       | 64QAM      | 18.54      | 18.63 | 19.98 | 20.50              |                    |
|                       |                 | MID       | 64QAM      | 18.51      | 18.63 | 19.45 | 20.50              |                    |
|                       |                 | HIGH      | 64QAM      | 18.78      | 18.50 | 19.56 | 20.50              |                    |
| 50                    |                 | LOW       | 64QAM      | 18.66      | 18.68 | 19.76 | 20.50              |                    |

| LTE B38-State4 -Ant.3 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 37825 | 38000 | 38175 | Tune-up power(dBm) |
| 15                    | 1       | LOW       | QPSK       | 21.46 | 21.18 | 21.32 | 22.50              |
|                       |         | MID       | QPSK       | 21.48 | 21.28 | 21.48 | 22.50              |
|                       |         | HIGH      | QPSK       | 21.60 | 21.20 | 21.51 | 22.50              |
|                       | 36      | LOW       | QPSK       | 20.45 | 20.50 | 20.39 | 21.50              |
|                       |         | MID       | QPSK       | 20.50 | 20.52 | 20.26 | 21.50              |
|                       |         | HIGH      | QPSK       | 20.46 | 20.33 | 20.52 | 21.50              |
| 75                    | LOW     | QPSK      | 19.97      | 20.07 | 19.87 | 21.50 |                    |
| 15                    | 1       | LOW       | Q16        | 20.88 | 20.58 | 21.64 | 22.00              |
|                       |         | MID       | Q16        | 20.96 | 20.73 | 21.18 | 22.00              |
|                       |         | HIGH      | Q16        | 20.99 | 20.80 | 21.37 | 22.00              |
|                       | 36      | LOW       | Q16        | 19.63 | 19.73 | 20.69 | 21.00              |
|                       |         | MID       | Q16        | 19.46 | 19.28 | 20.59 | 21.00              |
|                       |         | HIGH      | Q16        | 19.78 | 19.74 | 20.82 | 21.00              |
| 75                    | LOW     | Q16       | 19.85      | 19.63 | 20.82 | 21.00 |                    |
| 15                    | 1       | LOW       | 64QAM      | 19.88 | 19.58 | 20.64 | 21.50              |
|                       |         | MID       | 64QAM      | 19.96 | 19.73 | 20.18 | 21.50              |
|                       |         | HIGH      | 64QAM      | 19.99 | 19.80 | 20.37 | 21.50              |
|                       | 36      | LOW       | 64QAM      | 18.63 | 18.73 | 20.07 | 20.50              |
|                       |         | MID       | 64QAM      | 18.64 | 18.62 | 19.59 | 20.50              |
|                       |         | HIGH      | 64QAM      | 18.78 | 18.74 | 19.82 | 20.50              |
| 75                    | LOW     | 64QAM     | 18.85      | 18.63 | 19.82 | 20.50 |                    |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 37850 | 38000 | 38150 | Tune-up power(dBm) |
| 20                    | 1       | LOW       | QPSK       | 21.43 | 21.16 | 21.38 | 22.50              |
|                       |         | MID       | QPSK       | 21.42 | 21.19 | 21.44 | 22.50              |
|                       |         | HIGH      | QPSK       | 21.23 | 21.48 | 21.46 | 22.50              |
|                       | 50      | LOW       | QPSK       | 20.42 | 20.38 | 20.44 | 21.50              |
|                       |         | MID       | QPSK       | 20.35 | 20.46 | 20.37 | 21.50              |
|                       |         | HIGH      | QPSK       | 20.38 | 20.29 | 20.38 | 21.50              |
| 100                   | LOW     | QPSK      | 19.99      | 20.02 | 19.99 | 21.50 |                    |
| 20                    | 1       | LOW       | Q16        | 20.97 | 20.73 | 21.60 | 22.00              |
|                       |         | MID       | Q16        | 21.09 | 20.76 | 21.28 | 22.00              |
|                       |         | HIGH      | Q16        | 20.99 | 20.73 | 21.46 | 22.00              |
|                       | 50      | LOW       | Q16        | 19.67 | 19.68 | 20.92 | 21.00              |
|                       |         | MID       | Q16        | 19.59 | 19.42 | 20.56 | 21.00              |
|                       |         | HIGH      | Q16        | 19.80 | 19.60 | 20.68 | 21.00              |
| 100                   | LOW     | Q16       | 19.72      | 19.61 | 20.74 | 21.00 |                    |
| 20                    | 1       | LOW       | 64QAM      | 20.10 | 19.82 | 20.47 | 21.50              |
|                       |         | MID       | 64QAM      | 20.08 | 19.63 | 20.41 | 21.50              |
|                       |         | HIGH      | 64QAM      | 20.06 | 19.75 | 20.56 | 21.50              |
|                       | 50      | LOW       | 64QAM      | 18.65 | 18.69 | 20.02 | 20.50              |
|                       |         | MID       | 64QAM      | 18.71 | 18.55 | 19.47 | 20.50              |
|                       |         | HIGH      | 64QAM      | 18.70 | 18.66 | 19.61 | 20.50              |
| 100                   | LOW     | 64QAM     | 18.84      | 18.52 | 19.71 | 20.50 |                    |

### 8.3.8 LTE Band41 Output Power

| LTE B41-Full Power -Ant.2 |         |           |            |       |       |       |                    |       |
|---------------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| Bandwidth (MHz)           | RB Size | RB offset | Modulation | 40065 | 40765 | 41215 | Tune-up power(dBm) |       |
| 5                         | 1       | LOW       | QPSK       | 23.29 | 23.58 | 23.27 | 24.00              |       |
|                           |         | MID       | QPSK       | 23.62 | 23.65 | 23.61 | 24.00              |       |
|                           |         | HIGH      | QPSK       | 23.26 | 23.44 | 23.53 | 24.00              |       |
|                           | 12      | LOW       | QPSK       | 22.10 | 22.58 | 22.37 | 23.00              |       |
|                           |         | MID       | QPSK       | 22.08 | 22.47 | 22.46 | 23.00              |       |
|                           |         | HIGH      | QPSK       | 22.73 | 22.43 | 22.34 | 23.00              |       |
| 25                        | LOW     | QPSK      | 22.06      | 22.12 | 21.88 | 23.00 |                    |       |
| 5                         | 1       | LOW       | Q16        | 22.84 | 22.72 | 22.98 | 23.00              |       |
|                           |         | MID       | Q16        | 22.62 | 22.30 | 22.65 | 23.00              |       |
|                           |         | HIGH      | Q16        | 22.54 | 22.52 | 22.70 | 23.00              |       |
|                           | 12      | LOW       | Q16        | 21.51 | 21.49 | 21.39 | 22.00              |       |
|                           |         | MID       | Q16        | 21.19 | 21.54 | 21.36 | 22.00              |       |
|                           |         | HIGH      | Q16        | 21.50 | 21.59 | 21.55 | 22.00              |       |
|                           | 25      | LOW       | Q16        | 21.23 | 21.74 | 21.44 | 22.00              |       |
|                           | 5       | 1         | LOW        | 64QAM | 21.74 | 21.86 | 21.61              | 22.00 |
|                           |         |           | MID        | 64QAM | 21.52 | 21.27 | 21.54              | 22.00 |
| HIGH                      |         |           | 64QAM      | 21.62 | 21.40 | 21.77 | 22.00              |       |
| 12                        |         | LOW       | 64QAM      | 20.56 | 20.43 | 20.47 | 21.00              |       |
|                           |         | MID       | 64QAM      | 20.12 | 20.57 | 20.46 | 21.00              |       |
|                           |         | HIGH      | 64QAM      | 20.37 | 20.70 | 20.51 | 21.00              |       |
| 25                        | LOW     | 64QAM     | 20.38      | 20.70 | 20.31 | 21.00 |                    |       |
| Bandwidth (MHz)           | RB Size | RB offset | Modulation | 40090 | 40765 | 41190 | Tune-up power(dBm) |       |
| 10                        | 1       | LOW       | QPSK       | 23.40 | 23.58 | 23.52 | 24.00              |       |
|                           |         | MID       | QPSK       | 23.59 | 23.47 | 23.33 | 24.00              |       |
|                           |         | HIGH      | QPSK       | 23.32 | 23.54 | 23.49 | 24.00              |       |
|                           | 25      | LOW       | QPSK       | 22.43 | 22.40 | 22.32 | 23.00              |       |
|                           |         | MID       | QPSK       | 22.18 | 22.36 | 22.49 | 23.00              |       |
|                           |         | HIGH      | QPSK       | 22.53 | 22.43 | 22.42 | 23.00              |       |
| 50                        | LOW     | QPSK      | 22.09      | 21.90 | 22.10 | 23.00 |                    |       |
| 10                        | 1       | LOW       | Q16        | 22.84 | 22.98 | 22.94 | 23.00              |       |
|                           |         | MID       | Q16        | 22.68 | 22.28 | 22.79 | 23.00              |       |
|                           |         | HIGH      | Q16        | 22.78 | 22.66 | 22.70 | 23.00              |       |
|                           | 25      | LOW       | Q16        | 21.62 | 21.58 | 21.63 | 22.00              |       |
|                           |         | MID       | Q16        | 21.33 | 21.41 | 21.29 | 22.00              |       |
|                           |         | HIGH      | Q16        | 21.40 | 21.67 | 21.38 | 22.00              |       |
| 50                        | LOW     | Q16       | 21.53      | 21.62 | 21.67 | 22.00 |                    |       |
| 10                        | 1       | LOW       | 64QAM      | 21.72 | 21.89 | 21.99 | 22.00              |       |
|                           |         | MID       | 64QAM      | 21.68 | 21.27 | 21.82 | 22.00              |       |
|                           |         | HIGH      | 64QAM      | 21.62 | 21.86 | 21.74 | 22.00              |       |
|                           | 25      | LOW       | 64QAM      | 20.37 | 20.60 | 20.29 | 21.00              |       |
|                           |         | MID       | 64QAM      | 20.50 | 20.49 | 20.28 | 21.00              |       |
|                           |         | HIGH      | 64QAM      | 20.34 | 20.54 | 20.67 | 21.00              |       |
| 50                        | LOW     | 64QAM     | 20.39      | 20.49 | 20.38 | 21.00 |                    |       |

| LTE B41-Full Power -Ant.2 |         |           |            |       |       |       |                    |       |
|---------------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| Bandwidth (MHz)           | RB Size | RB offset | Modulation | 40115 | 40765 | 41165 | Tune-up power(dBm) |       |
| 15                        | 1       | LOW       | QPSK       | 23.42 | 23.57 | 23.28 | 24.00              |       |
|                           |         | MID       | QPSK       | 23.52 | 23.76 | 23.54 | 24.00              |       |
|                           |         | HIGH      | QPSK       | 23.32 | 23.48 | 23.56 | 24.00              |       |
|                           | 36      | LOW       | QPSK       | 22.24 | 22.58 | 22.38 | 23.00              |       |
|                           |         | MID       | QPSK       | 22.22 | 22.35 | 22.58 | 23.00              |       |
|                           |         | HIGH      | QPSK       | 22.61 | 22.33 | 22.26 | 23.00              |       |
| 75                        | LOW     | QPSK      | 22.02      | 22.04 | 21.96 | 23.00 |                    |       |
| 15                        | 1       | LOW       | Q16        | 22.82 | 22.79 | 22.96 | 23.00              |       |
|                           |         | MID       | Q16        | 22.62 | 22.43 | 22.76 | 23.00              |       |
|                           |         | HIGH      | Q16        | 22.61 | 22.66 | 22.77 | 23.00              |       |
|                           | 36      | LOW       | Q16        | 21.37 | 21.58 | 21.45 | 22.00              |       |
|                           |         | MID       | Q16        | 21.22 | 21.60 | 21.49 | 22.00              |       |
|                           |         | HIGH      | Q16        | 21.57 | 21.72 | 21.49 | 22.00              |       |
|                           | 75      | LOW       | Q16        | 21.33 | 21.64 | 21.52 | 22.00              |       |
|                           | 15      | 1         | LOW        | 64QAM | 21.54 | 21.96 | 21.74              | 22.00 |
|                           |         |           | MID        | 64QAM | 21.72 | 21.18 | 21.68              | 22.00 |
| HIGH                      |         |           | 64QAM      | 21.66 | 21.67 | 21.89 | 22.00              |       |
| 36                        |         | LOW       | 64QAM      | 20.33 | 20.55 | 20.42 | 21.00              |       |
|                           |         | MID       | 64QAM      | 20.48 | 20.31 | 20.34 | 21.00              |       |
|                           |         | HIGH      | 64QAM      | 20.33 | 20.42 | 20.61 | 21.00              |       |
| 75                        | LOW     | 64QAM     | 20.24      | 20.66 | 20.32 | 21.00 |                    |       |
| Bandwidth (MHz)           | RB Size | RB offset | Modulation | 40140 | 40765 | 41140 | Tune-up power(dBm) |       |
| 20                        | 1       | LOW       | QPSK       | 23.33 | 23.62 | 23.38 | 24.00              |       |
|                           |         | MID       | QPSK       | 23.44 | 23.61 | 23.40 | 24.00              |       |
|                           |         | HIGH      | QPSK       | 23.37 | 23.63 | 23.56 | 24.00              |       |
|                           | 50      | LOW       | QPSK       | 22.39 | 22.44 | 22.41 | 23.00              |       |
|                           |         | MID       | QPSK       | 22.33 | 22.36 | 22.44 | 23.00              |       |
|                           |         | HIGH      | QPSK       | 22.48 | 22.47 | 22.41 | 23.00              |       |
| 100                       | LOW     | QPSK      | 22.00      | 22.03 | 22.11 | 23.00 |                    |       |
| 20                        | 1       | LOW       | Q16        | 22.73 | 22.83 | 23.00 | 23.00              |       |
|                           |         | MID       | Q16        | 22.63 | 22.35 | 22.70 | 23.00              |       |
|                           |         | HIGH      | Q16        | 22.65 | 22.64 | 22.77 | 23.00              |       |
|                           | 50      | LOW       | Q16        | 21.47 | 21.52 | 21.52 | 22.00              |       |
|                           |         | MID       | Q16        | 21.37 | 21.54 | 21.42 | 22.00              |       |
|                           |         | HIGH      | Q16        | 21.48 | 21.58 | 21.49 | 22.00              |       |
| 100                       | LOW     | Q16       | 21.42      | 21.49 | 21.55 | 22.00 |                    |       |
| 20                        | 1       | LOW       | 64QAM      | 21.59 | 21.87 | 21.70 | 22.00              |       |
|                           |         | MID       | 64QAM      | 21.67 | 21.21 | 21.68 | 22.00              |       |
|                           |         | HIGH      | 64QAM      | 21.71 | 21.73 | 21.79 | 22.00              |       |
|                           | 50      | LOW       | 64QAM      | 20.40 | 20.63 | 20.38 | 21.00              |       |
|                           |         | MID       | 64QAM      | 20.43 | 20.41 | 20.31 | 21.00              |       |
|                           |         | HIGH      | 64QAM      | 20.44 | 20.56 | 20.55 | 21.00              |       |
| 100                       | LOW     | 64QAM     | 20.28      | 20.60 | 20.47 | 21.00 |                    |       |

| LTE B41-State1&2 -Ant.2 |         |           |            |       |       |       |                    |
|-------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)         | RB Size | RB offset | Modulation | 40065 | 40765 | 41215 | Tune-up power(dBm) |
| 5                       | 1       | LOW       | QPSK       | 18.80 | 19.01 | 19.75 | 20.00              |
|                         |         | MID       | QPSK       | 18.81 | 18.60 | 18.77 | 20.00              |
|                         |         | HIGH      | QPSK       | 19.45 | 18.97 | 18.66 | 20.00              |
|                         | 12      | LOW       | QPSK       | 17.39 | 17.86 | 18.01 | 19.00              |
|                         |         | MID       | QPSK       | 17.81 | 17.96 | 17.59 | 19.00              |
|                         |         | HIGH      | QPSK       | 18.21 | 17.89 | 17.55 | 19.00              |
| 25                      | LOW     | QPSK      | 17.66      | 17.85 | 17.80 | 19.00 |                    |
| 5                       | 1       | LOW       | Q16        | 17.47 | 18.10 | 18.71 | 19.00              |
|                         |         | MID       | Q16        | 17.95 | 17.98 | 17.87 | 19.00              |
|                         |         | HIGH      | Q16        | 18.65 | 18.01 | 17.87 | 19.00              |
|                         | 12      | LOW       | Q16        | 16.46 | 17.04 | 17.02 | 18.00              |
|                         |         | MID       | Q16        | 16.88 | 16.98 | 16.91 | 18.00              |
|                         |         | HIGH      | Q16        | 17.25 | 16.90 | 16.79 | 18.00              |
| 25                      | LOW     | Q16       | 16.86      | 17.00 | 16.90 | 18.00 |                    |
| 5                       | 1       | LOW       | 64QAM      | 16.47 | 17.10 | 17.71 | 18.00              |
|                         |         | MID       | 64QAM      | 16.95 | 16.98 | 16.87 | 18.00              |
|                         |         | HIGH      | 64QAM      | 17.65 | 17.01 | 16.87 | 18.00              |
|                         | 12      | LOW       | 64QAM      | 15.46 | 16.04 | 16.02 | 17.00              |
|                         |         | MID       | 64QAM      | 15.88 | 15.98 | 15.91 | 17.00              |
|                         |         | HIGH      | 64QAM      | 16.25 | 15.90 | 15.79 | 17.00              |
| 25                      | LOW     | 64QAM     | 15.86      | 16.00 | 15.90 | 17.00 |                    |
| Bandwidth (MHz)         | RB Size | RB offset | Modulation | 40090 | 40765 | 41190 | Tune-up power(dBm) |
| 10                      | 1       | LOW       | QPSK       | 18.66 | 19.00 | 19.78 | 20.00              |
|                         |         | MID       | QPSK       | 18.66 | 18.83 | 18.88 | 20.00              |
|                         |         | HIGH      | QPSK       | 19.49 | 18.93 | 18.68 | 20.00              |
|                         | 25      | LOW       | QPSK       | 17.20 | 17.91 | 17.92 | 19.00              |
|                         |         | MID       | QPSK       | 17.69 | 17.94 | 17.80 | 19.00              |
|                         |         | HIGH      | QPSK       | 18.17 | 17.91 | 17.47 | 19.00              |
| 50                      | LOW     | QPSK      | 17.74      | 17.93 | 17.88 | 19.00 |                    |
| 10                      | 1       | LOW       | Q16        | 17.29 | 18.06 | 18.74 | 19.00              |
|                         |         | MID       | Q16        | 17.96 | 18.13 | 18.00 | 19.00              |
|                         |         | HIGH      | Q16        | 18.48 | 18.17 | 17.97 | 19.00              |
|                         | 25      | LOW       | Q16        | 16.43 | 17.00 | 17.28 | 18.00              |
|                         |         | MID       | Q16        | 16.67 | 16.95 | 16.90 | 18.00              |
|                         |         | HIGH      | Q16        | 17.32 | 17.00 | 16.76 | 18.00              |
| 50                      | LOW     | Q16       | 16.72      | 17.02 | 16.91 | 18.00 |                    |
| 10                      | 1       | LOW       | 64QAM      | 16.29 | 17.06 | 17.74 | 18.00              |
|                         |         | MID       | 64QAM      | 16.96 | 17.13 | 17.00 | 18.00              |
|                         |         | HIGH      | 64QAM      | 17.48 | 17.17 | 16.97 | 18.00              |
|                         | 25      | LOW       | 64QAM      | 15.43 | 16.00 | 16.28 | 17.00              |
|                         |         | MID       | 64QAM      | 15.67 | 15.95 | 15.90 | 17.00              |
|                         |         | HIGH      | 64QAM      | 16.32 | 16.00 | 15.76 | 17.00              |
| 50                      | LOW     | 64QAM     | 15.72      | 16.02 | 15.91 | 17.00 |                    |

| LTE B41-State1&2 -Ant.2 |         |           |            |       |       |       |                    |
|-------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)         | RB Size | RB offset | Modulation | 40115 | 40765 | 41165 | Tune-up power(dBm) |
| 15                      | 1       | LOW       | QPSK       | 18.70 | 19.00 | 19.79 | 20.00              |
|                         |         | MID       | QPSK       | 18.55 | 18.67 | 18.93 | 20.00              |
|                         |         | HIGH      | QPSK       | 19.48 | 19.00 | 18.67 | 20.00              |
|                         | 36      | LOW       | QPSK       | 17.26 | 18.04 | 18.16 | 19.00              |
|                         |         | MID       | QPSK       | 17.79 | 17.69 | 17.61 | 19.00              |
|                         |         | HIGH      | QPSK       | 18.26 | 18.02 | 17.45 | 19.00              |
| 75                      | LOW     | QPSK      | 17.80      | 17.77 | 17.88 | 19.00 |                    |
| 15                      | 1       | LOW       | Q16        | 17.28 | 18.11 | 18.67 | 19.00              |
|                         |         | MID       | Q16        | 18.12 | 18.06 | 18.01 | 19.00              |
|                         |         | HIGH      | Q16        | 18.47 | 17.97 | 17.80 | 19.00              |
|                         | 36      | LOW       | Q16        | 16.29 | 17.10 | 17.31 | 18.00              |
|                         |         | MID       | Q16        | 16.90 | 16.99 | 16.93 | 18.00              |
|                         |         | HIGH      | Q16        | 17.24 | 17.05 | 16.55 | 18.00              |
| 75                      | LOW     | Q16       | 16.67      | 16.87 | 16.83 | 18.00 |                    |
| 15                      | 1       | LOW       | 64QAM      | 16.28 | 17.11 | 17.67 | 18.00              |
|                         |         | MID       | 64QAM      | 17.12 | 17.06 | 17.01 | 18.00              |
|                         |         | HIGH      | 64QAM      | 17.47 | 16.97 | 16.80 | 18.00              |
|                         | 36      | LOW       | 64QAM      | 15.29 | 16.10 | 16.31 | 17.00              |
|                         |         | MID       | 64QAM      | 15.90 | 15.99 | 15.93 | 17.00              |
|                         |         | HIGH      | 64QAM      | 16.24 | 16.05 | 15.55 | 17.00              |
| 75                      | LOW     | 64QAM     | 15.67      | 15.87 | 15.83 | 17.00 |                    |
| Bandwidth (MHz)         | RB Size | RB offset | Modulation | 40140 | 40765 | 41140 | Tune-up power(dBm) |
| 20                      | 1       | LOW       | QPSK       | 18.66 | 19.64 | 19.00 | 20.00              |
|                         |         | MID       | QPSK       | 18.69 | 18.71 | 18.87 | 20.00              |
|                         |         | HIGH      | QPSK       | 19.45 | 18.97 | 18.69 | 20.00              |
|                         | 50      | LOW       | QPSK       | 17.29 | 17.93 | 18.06 | 19.00              |
|                         |         | MID       | QPSK       | 17.72 | 17.83 | 17.70 | 19.00              |
|                         |         | HIGH      | QPSK       | 17.91 | 18.15 | 17.58 | 19.00              |
| 100                     | LOW     | QPSK      | 17.73      | 17.91 | 17.82 | 19.00 |                    |
| 20                      | 1       | LOW       | Q16        | 17.36 | 18.10 | 18.74 | 19.00              |
|                         |         | MID       | Q16        | 17.97 | 17.98 | 18.00 | 19.00              |
|                         |         | HIGH      | Q16        | 18.60 | 18.07 | 17.84 | 19.00              |
|                         | 50      | LOW       | Q16        | 16.34 | 17.00 | 17.16 | 18.00              |
|                         |         | MID       | Q16        | 16.76 | 16.88 | 16.81 | 18.00              |
|                         |         | HIGH      | Q16        | 17.21 | 16.98 | 16.68 | 18.00              |
| 100                     | LOW     | Q16       | 16.79      | 16.97 | 16.87 | 18.00 |                    |
| 20                      | 1       | LOW       | 64QAM      | 16.30 | 17.11 | 17.82 | 18.00              |
|                         |         | MID       | 64QAM      | 16.87 | 16.83 | 17.10 | 18.00              |
|                         |         | HIGH      | 64QAM      | 17.68 | 17.00 | 16.81 | 18.00              |
|                         | 50      | LOW       | 64QAM      | 15.22 | 16.05 | 16.14 | 17.00              |
|                         |         | MID       | 64QAM      | 15.70 | 15.91 | 15.82 | 17.00              |
|                         |         | HIGH      | 64QAM      | 16.10 | 15.84 | 15.80 | 17.00              |
| 100                     | LOW     | 64QAM     | 15.87      | 15.87 | 15.76 | 17.00 |                    |

| LTE B41-State3&4 -Ant.2 |         |           |            |       |       |       |                    |
|-------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (             | RB Size | RB offest | Modulation | 40065 | 40765 | 41215 | Tune-up power(dBm) |
| 5                       | 1       | LOW       | QPSK       | 22.00 | 21.69 | 22.13 | 23.00              |
|                         |         | MID       | QPSK       | 22.18 | 21.94 | 21.93 | 23.00              |
|                         |         | HIGH      | QPSK       | 22.03 | 22.07 | 22.16 | 23.00              |
|                         | 12      | LOW       | QPSK       | 20.89 | 20.77 | 20.82 | 22.00              |
|                         |         | MID       | QPSK       | 20.90 | 21.04 | 21.21 | 22.00              |
|                         |         | HIGH      | QPSK       | 20.86 | 20.94 | 20.75 | 22.00              |
| 25                      | LOW     | QPSK      | 20.51      | 20.73 | 20.65 | 22.00 |                    |
| 5                       | 1       | LOW       | Q16        | 21.06 | 21.20 | 21.71 | 22.00              |
|                         |         | MID       | Q16        | 21.25 | 21.09 | 20.78 | 22.00              |
|                         |         | HIGH      | Q16        | 21.14 | 21.50 | 21.72 | 22.00              |
|                         | 12      | LOW       | Q16        | 19.87 | 19.73 | 20.01 | 21.00              |
|                         |         | MID       | Q16        | 20.00 | 20.09 | 20.04 | 21.00              |
|                         |         | HIGH      | Q16        | 20.00 | 20.04 | 19.94 | 21.00              |
| 25                      | LOW     | Q16       | 19.73      | 20.29 | 19.78 | 21.00 |                    |
| 5                       | 1       | LOW       | 64QAM      | 20.21 | 20.27 | 20.71 | 21.00              |
|                         |         | MID       | 64QAM      | 20.22 | 20.05 | 19.68 | 21.00              |
|                         |         | HIGH      | 64QAM      | 20.00 | 20.54 | 20.82 | 21.00              |
|                         | 12      | LOW       | 64QAM      | 18.91 | 18.79 | 19.16 | 20.00              |
|                         |         | MID       | 64QAM      | 19.06 | 19.22 | 19.04 | 20.00              |
|                         |         | HIGH      | 64QAM      | 19.15 | 19.09 | 18.82 | 20.00              |
| 25                      | LOW     | 64QAM     | 18.69      | 19.29 | 18.78 | 20.00 |                    |
| Bandwidth (             | RB Size | RB offest | Modulation | 40090 | 40765 | 41190 | Tune-up power(dBm) |
| 10                      | 1       | LOW       | QPSK       | 21.94 | 21.95 | 21.99 | 23.00              |
|                         |         | MID       | QPSK       | 22.01 | 22.04 | 22.18 | 23.00              |
|                         |         | HIGH      | QPSK       | 21.83 | 22.05 | 22.02 | 23.00              |
|                         | 25      | LOW       | QPSK       | 20.95 | 20.80 | 20.83 | 22.00              |
|                         |         | MID       | QPSK       | 20.81 | 20.91 | 21.03 | 22.00              |
|                         |         | HIGH      | QPSK       | 21.05 | 20.79 | 20.78 | 22.00              |
| 50                      | LOW     | QPSK      | 20.48      | 20.50 | 20.59 | 22.00 |                    |
| 10                      | 1       | LOW       | Q16        | 21.24 | 21.06 | 21.83 | 22.00              |
|                         |         | MID       | Q16        | 21.36 | 21.08 | 20.86 | 22.00              |
|                         |         | HIGH      | Q16        | 21.38 | 21.15 | 21.73 | 22.00              |
|                         | 25      | LOW       | Q16        | 20.06 | 19.95 | 20.13 | 21.00              |
|                         |         | MID       | Q16        | 20.02 | 19.92 | 19.96 | 21.00              |
|                         |         | HIGH      | Q16        | 20.29 | 19.84 | 19.99 | 21.00              |
| 50                      | LOW     | Q16       | 19.97      | 20.18 | 19.90 | 21.00 |                    |
| 10                      | 1       | LOW       | 64QAM      | 20.53 | 20.07 | 20.88 | 21.00              |
|                         |         | MID       | 64QAM      | 20.47 | 19.78 | 19.84 | 21.00              |
|                         |         | HIGH      | 64QAM      | 20.23 | 20.25 | 20.89 | 21.00              |
|                         | 25      | LOW       | 64QAM      | 18.98 | 18.73 | 19.00 | 20.00              |
|                         |         | MID       | 64QAM      | 19.24 | 18.99 | 19.14 | 20.00              |
|                         |         | HIGH      | 64QAM      | 19.36 | 19.07 | 18.91 | 20.00              |
| 50                      | LOW     | 64QAM     | 19.04      | 18.82 | 18.84 | 20.00 |                    |



| LTE B41-State3&4 -Ant.2 |         |           |            |       |       |       |                    |       |
|-------------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| Bandwidth (             | RB Size | RB offest | Modulation | 40115 | 40765 | 41165 | Tune-up power(dBm) |       |
| 15                      | 1       | LOW       | QPSK       | 22.03 | 21.78 | 22.04 | 23.00              |       |
|                         |         | MID       | QPSK       | 22.06 | 21.88 | 21.97 | 23.00              |       |
|                         |         | HIGH      | QPSK       | 21.90 | 22.07 | 22.28 | 23.00              |       |
|                         | 36      | LOW       | QPSK       | 20.89 | 20.79 | 20.85 | 22.00              |       |
|                         |         | MID       | QPSK       | 20.84 | 21.11 | 21.10 | 22.00              |       |
|                         |         | HIGH      | QPSK       | 20.85 | 20.89 | 20.90 | 22.00              |       |
| 75                      | LOW     | QPSK      | 20.60      | 20.69 | 20.53 | 22.00 |                    |       |
| 15                      | 1       | LOW       | Q16        | 21.21 | 21.15 | 21.83 | 22.00              |       |
|                         |         | MID       | Q16        | 21.16 | 21.07 | 20.85 | 22.00              |       |
|                         |         | HIGH      | Q16        | 21.26 | 21.41 | 21.71 | 22.00              |       |
|                         | 36      | LOW       | Q16        | 19.89 | 19.85 | 20.14 | 21.00              |       |
|                         |         | MID       | Q16        | 19.99 | 19.98 | 19.98 | 21.00              |       |
|                         |         | HIGH      | Q16        | 20.08 | 20.01 | 19.90 | 21.00              |       |
|                         | 75      | LOW       | Q16        | 19.84 | 20.20 | 19.83 | 21.00              |       |
|                         | 15      | 1         | LOW        | 64QAM | 20.48 | 20.19 | 20.87              | 21.00 |
|                         |         |           | MID        | 64QAM | 20.40 | 19.97 | 19.92              | 21.00 |
| HIGH                    |         |           | 64QAM      | 20.21 | 20.28 | 20.86 | 21.00              |       |
| 36                      |         | LOW       | 64QAM      | 19.06 | 18.96 | 19.17 | 20.00              |       |
|                         |         | MID       | 64QAM      | 19.06 | 18.78 | 19.17 | 20.00              |       |
|                         |         | HIGH      | 64QAM      | 19.27 | 18.82 | 18.95 | 20.00              |       |
| 75                      | LOW     | 64QAM     | 19.03      | 19.09 | 18.88 | 20.00 |                    |       |
| Bandwidth (             | RB Size | RB offest | Modulation | 40140 | 40765 | 41140 | Tune-up power(dBm) |       |
| 20                      | 1       | LOW       | QPSK       | 22.00 | 21.90 | 21.97 | 23.00              |       |
|                         |         | MID       | QPSK       | 21.91 | 21.94 | 22.07 | 23.00              |       |
|                         |         | HIGH      | QPSK       | 21.97 | 22.16 | 22.03 | 23.00              |       |
|                         | 50      | LOW       | QPSK       | 20.91 | 20.89 | 20.93 | 22.00              |       |
|                         |         | MID       | QPSK       | 20.95 | 21.00 | 20.98 | 22.00              |       |
|                         |         | HIGH      | QPSK       | 20.90 | 20.84 | 20.82 | 22.00              |       |
| 100                     | LOW     | QPSK      | 20.58      | 20.59 | 20.63 | 22.00 |                    |       |
| 20                      | 1       | LOW       | Q16        | 21.30 | 21.04 | 21.78 | 22.00              |       |
|                         |         | MID       | Q16        | 21.27 | 21.02 | 20.81 | 22.00              |       |
|                         |         | HIGH      | Q16        | 21.28 | 21.27 | 21.70 | 22.00              |       |
|                         | 50      | LOW       | Q16        | 20.01 | 19.91 | 20.09 | 21.00              |       |
|                         |         | MID       | Q16        | 20.05 | 19.99 | 20.09 | 21.00              |       |
|                         |         | HIGH      | Q16        | 20.14 | 19.92 | 20.00 | 21.00              |       |
| 100                     | LOW     | Q16       | 19.99      | 20.09 | 19.97 | 21.00 |                    |       |
| 20                      | 1       | LOW       | 64QAM      | 20.44 | 20.12 | 20.77 | 21.00              |       |
|                         |         | MID       | 64QAM      | 20.38 | 19.87 | 19.77 | 21.00              |       |
|                         |         | HIGH      | 64QAM      | 20.21 | 20.31 | 20.85 | 21.00              |       |
|                         | 50      | LOW       | 64QAM      | 19.08 | 18.84 | 19.03 | 20.00              |       |
|                         |         | MID       | 64QAM      | 19.17 | 18.88 | 19.19 | 20.00              |       |
|                         |         | HIGH      | 64QAM      | 19.26 | 18.97 | 18.92 | 20.00              |       |
| 100                     | LOW     | 64QAM     | 18.91      | 18.97 | 18.91 | 20.00 |                    |       |

| LTE B41-Full Power -Ant.3 |         |           |            |       |       |       |                    |
|---------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)           | RB Size | RB offset | Modulation | 40065 | 40765 | 41215 | Tune-up power(dBm) |
| 5                         | 1       | LOW       | QPSK       | 23.13 | 23.29 | 23.34 | 24.00              |
|                           |         | MID       | QPSK       | 23.28 | 23.19 | 23.21 | 24.00              |
|                           |         | HIGH      | QPSK       | 23.48 | 23.25 | 23.30 | 24.00              |
|                           | 12      | LOW       | QPSK       | 22.12 | 22.38 | 22.03 | 23.00              |
|                           |         | MID       | QPSK       | 22.13 | 22.23 | 22.41 | 23.00              |
|                           |         | HIGH      | QPSK       | 22.34 | 22.19 | 21.99 | 23.00              |
| 25                        | LOW     | QPSK      | 21.89      | 21.98 | 22.14 | 23.00 |                    |
| 5                         | 1       | LOW       | Q16        | 22.56 | 22.41 | 22.70 | 23.00              |
|                           |         | MID       | Q16        | 22.36 | 22.50 | 22.78 | 23.00              |
|                           |         | HIGH      | Q16        | 22.54 | 22.62 | 22.78 | 23.00              |
|                           | 12      | LOW       | Q16        | 21.29 | 21.33 | 21.30 | 22.00              |
|                           |         | MID       | Q16        | 21.38 | 21.35 | 21.28 | 22.00              |
|                           |         | HIGH      | Q16        | 21.63 | 21.32 | 21.28 | 22.00              |
| 25                        | LOW     | Q16       | 21.29      | 21.25 | 21.22 | 22.00 |                    |
| 5                         | 1       | LOW       | 64QAM      | 21.67 | 21.32 | 21.81 | 22.00              |
|                           |         | MID       | 64QAM      | 21.34 | 21.63 | 21.84 | 22.00              |
|                           |         | HIGH      | 64QAM      | 21.57 | 21.71 | 21.77 | 22.00              |
|                           | 12      | LOW       | 64QAM      | 20.44 | 20.48 | 20.24 | 21.00              |
|                           |         | MID       | 64QAM      | 20.44 | 20.25 | 20.13 | 21.00              |
|                           |         | HIGH      | 64QAM      | 20.66 | 20.33 | 20.40 | 21.00              |
| 25                        | LOW     | 64QAM     | 20.15      | 20.17 | 20.07 | 21.00 |                    |
| Bandwidth (MHz)           | RB Size | RB offset | Modulation | 40090 | 40765 | 41190 | Tune-up power(dBm) |
| 10                        | 1       | LOW       | QPSK       | 23.26 | 23.11 | 23.45 | 24.00              |
|                           |         | MID       | QPSK       | 23.28 | 23.13 | 23.31 | 24.00              |
|                           |         | HIGH      | QPSK       | 23.19 | 23.35 | 23.27 | 24.00              |
|                           | 25      | LOW       | QPSK       | 22.28 | 22.23 | 22.15 | 23.00              |
|                           |         | MID       | QPSK       | 22.16 | 22.03 | 22.13 | 23.00              |
|                           |         | HIGH      | QPSK       | 22.16 | 22.21 | 22.19 | 23.00              |
| 50                        | LOW     | QPSK      | 21.87      | 21.86 | 22.03 | 23.00 |                    |
| 10                        | 1       | LOW       | Q16        | 22.48 | 22.45 | 22.63 | 23.00              |
|                           |         | MID       | Q16        | 22.70 | 22.57 | 22.66 | 23.00              |
|                           |         | HIGH      | Q16        | 22.53 | 22.59 | 22.77 | 23.00              |
|                           | 25      | LOW       | Q16        | 21.31 | 21.35 | 21.33 | 22.00              |
|                           |         | MID       | Q16        | 21.42 | 21.11 | 21.27 | 22.00              |
|                           |         | HIGH      | Q16        | 21.36 | 21.26 | 21.19 | 22.00              |
| 50                        | LOW     | Q16       | 21.38      | 21.23 | 21.33 | 22.00 |                    |
| 10                        | 1       | LOW       | 64QAM      | 21.41 | 21.62 | 21.75 | 22.00              |
|                           |         | MID       | 64QAM      | 21.66 | 21.63 | 21.84 | 22.00              |
|                           |         | HIGH      | 64QAM      | 21.66 | 21.33 | 21.89 | 22.00              |
|                           | 25      | LOW       | 64QAM      | 20.33 | 20.36 | 20.24 | 21.00              |
|                           |         | MID       | 64QAM      | 20.40 | 20.26 | 20.36 | 21.00              |
|                           |         | HIGH      | 64QAM      | 20.33 | 20.24 | 20.16 | 21.00              |
| 50                        | LOW     | 64QAM     | 20.55      | 20.35 | 20.30 | 21.00 |                    |

| LTE B41-Full Power -Ant.3 |         |           |            |       |       |       |                    |       |
|---------------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| Bandwidth (MHz)           | RB Size | RB offset | Modulation | 40115 | 40765 | 41165 | Tune-up power(dBm) |       |
| 15                        | 1       | LOW       | QPSK       | 23.22 | 23.29 | 23.25 | 24.00              |       |
|                           |         | MID       | QPSK       | 23.20 | 23.10 | 23.36 | 24.00              |       |
|                           |         | HIGH      | QPSK       | 23.36 | 23.30 | 23.29 | 24.00              |       |
|                           | 36      | LOW       | QPSK       | 22.27 | 22.46 | 22.12 | 23.00              |       |
|                           |         | MID       | QPSK       | 22.11 | 22.21 | 22.31 | 23.00              |       |
|                           |         | HIGH      | QPSK       | 22.21 | 22.19 | 22.13 | 23.00              |       |
| 75                        | LOW     | QPSK      | 21.96      | 21.95 | 22.07 | 23.00 |                    |       |
| 15                        | 1       | LOW       | Q16        | 22.64 | 22.54 | 22.74 | 23.00              |       |
|                           |         | MID       | Q16        | 22.47 | 22.45 | 22.72 | 23.00              |       |
|                           |         | HIGH      | Q16        | 22.51 | 22.56 | 22.93 | 23.00              |       |
|                           | 36      | LOW       | Q16        | 21.35 | 21.19 | 21.39 | 22.00              |       |
|                           |         | MID       | Q16        | 21.43 | 21.20 | 21.27 | 22.00              |       |
|                           |         | HIGH      | Q16        | 21.50 | 21.22 | 21.24 | 22.00              |       |
|                           | 75      | LOW       | Q16        | 21.27 | 21.29 | 21.27 | 22.00              |       |
|                           | 15      | 1         | LOW        | 64QAM | 21.57 | 21.63 | 21.82              | 22.00 |
|                           |         |           | MID        | 64QAM | 21.69 | 21.66 | 21.85              | 22.00 |
| HIGH                      |         |           | 64QAM      | 21.75 | 21.39 | 21.62 | 22.00              |       |
| 36                        |         | LOW       | 64QAM      | 20.35 | 20.51 | 20.23 | 21.00              |       |
|                           |         | MID       | 64QAM      | 20.62 | 20.23 | 20.36 | 21.00              |       |
|                           |         | HIGH      | 64QAM      | 20.27 | 20.17 | 20.25 | 21.00              |       |
| 75                        | LOW     | 64QAM     | 20.34      | 20.19 | 20.45 | 21.00 |                    |       |
| Bandwidth (MHz)           | RB Size | RB offset | Modulation | 40140 | 40765 | 41140 | Tune-up power(dBm) |       |
| 20                        | 1       | LOW       | QPSK       | 23.29 | 23.25 | 23.34 | 24.00              |       |
|                           |         | MID       | QPSK       | 23.23 | 23.22 | 23.34 | 24.00              |       |
|                           |         | HIGH      | QPSK       | 23.26 | 23.27 | 23.36 | 24.00              |       |
|                           | 50      | LOW       | QPSK       | 22.20 | 22.31 | 22.18 | 23.00              |       |
|                           |         | MID       | QPSK       | 22.26 | 22.18 | 22.21 | 23.00              |       |
|                           |         | HIGH      | QPSK       | 22.23 | 22.29 | 22.08 | 23.00              |       |
| 100                       | LOW     | QPSK      | 21.81      | 21.93 | 21.92 | 23.00 |                    |       |
| 20                        | 1       | LOW       | Q16        | 22.53 | 22.60 | 22.89 | 23.00              |       |
|                           |         | MID       | Q16        | 22.56 | 22.45 | 23.00 | 23.00              |       |
|                           |         | HIGH      | Q16        | 22.60 | 22.44 | 22.65 | 23.00              |       |
|                           | 50      | LOW       | Q16        | 21.41 | 21.31 | 21.33 | 22.00              |       |
|                           |         | MID       | Q16        | 21.39 | 21.26 | 21.38 | 22.00              |       |
|                           |         | HIGH      | Q16        | 21.48 | 21.28 | 21.26 | 22.00              |       |
| 100                       | LOW     | Q16       | 21.35      | 21.38 | 21.28 | 22.00 |                    |       |
| 20                        | 1       | LOW       | 64QAM      | 21.48 | 21.57 | 21.75 | 22.00              |       |
|                           |         | MID       | 64QAM      | 21.68 | 21.52 | 21.96 | 22.00              |       |
|                           |         | HIGH      | 64QAM      | 21.60 | 21.35 | 21.64 | 22.00              |       |
|                           | 50      | LOW       | 64QAM      | 20.42 | 20.40 | 20.23 | 21.00              |       |
|                           |         | MID       | 64QAM      | 20.54 | 20.19 | 20.43 | 21.00              |       |
|                           |         | HIGH      | 64QAM      | 20.41 | 20.13 | 20.17 | 21.00              |       |
| 100                       | LOW     | 64QAM     | 20.48      | 20.34 | 20.37 | 21.00 |                    |       |

| LTE B41-State1&2 -Ant.3 |         |           |            |       |       |       |                    |
|-------------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (             | RB Size | RB offest | Modulation | 40065 | 40765 | 41215 | Tune-up power(dBm) |
| 5                       | 1       | LOW       | QPSK       | 23.13 | 23.29 | 23.34 | 24.00              |
|                         |         | MID       | QPSK       | 23.28 | 23.19 | 23.21 | 24.00              |
|                         |         | HIGH      | QPSK       | 23.48 | 23.25 | 23.30 | 24.00              |
|                         | 12      | LOW       | QPSK       | 22.12 | 22.38 | 22.03 | 23.00              |
|                         |         | MID       | QPSK       | 22.13 | 22.23 | 22.41 | 23.00              |
|                         |         | HIGH      | QPSK       | 22.34 | 22.19 | 21.99 | 23.00              |
| 25                      | LOW     | QPSK      | 21.89      | 21.98 | 22.14 | 23.00 |                    |
| 5                       | 1       | LOW       | Q16        | 22.56 | 22.41 | 22.70 | 23.00              |
|                         |         | MID       | Q16        | 22.36 | 22.50 | 22.78 | 23.00              |
|                         |         | HIGH      | Q16        | 22.54 | 22.62 | 22.78 | 23.00              |
|                         | 12      | LOW       | Q16        | 21.29 | 21.33 | 21.30 | 22.00              |
|                         |         | MID       | Q16        | 21.38 | 21.35 | 21.28 | 22.00              |
|                         |         | HIGH      | Q16        | 21.63 | 21.32 | 21.28 | 22.00              |
| 25                      | LOW     | Q16       | 21.29      | 21.25 | 21.22 | 22.00 |                    |
| 5                       | 1       | LOW       | 64QAM      | 21.67 | 21.32 | 21.81 | 22.00              |
|                         |         | MID       | 64QAM      | 21.34 | 21.63 | 21.84 | 22.00              |
|                         |         | HIGH      | 64QAM      | 21.57 | 21.71 | 21.77 | 22.00              |
|                         | 12      | LOW       | 64QAM      | 20.44 | 20.48 | 20.24 | 21.00              |
|                         |         | MID       | 64QAM      | 20.44 | 20.25 | 20.13 | 21.00              |
|                         |         | HIGH      | 64QAM      | 20.66 | 20.33 | 20.40 | 21.00              |
| 25                      | LOW     | 64QAM     | 20.15      | 20.17 | 20.07 | 21.00 |                    |
| Bandwidth (             | RB Size | RB offest | Modulation | 40090 | 40765 | 41190 | Tune-up power(dBm) |
| 10                      | 1       | LOW       | QPSK       | 23.26 | 23.11 | 23.45 | 24.00              |
|                         |         | MID       | QPSK       | 23.28 | 23.13 | 23.31 | 24.00              |
|                         |         | HIGH      | QPSK       | 23.19 | 23.35 | 23.27 | 24.00              |
|                         | 25      | LOW       | QPSK       | 22.28 | 22.23 | 22.15 | 23.00              |
|                         |         | MID       | QPSK       | 22.16 | 22.03 | 22.13 | 23.00              |
|                         |         | HIGH      | QPSK       | 22.16 | 22.21 | 22.19 | 23.00              |
| 50                      | LOW     | QPSK      | 21.87      | 21.86 | 22.03 | 23.00 |                    |
| 10                      | 1       | LOW       | Q16        | 22.48 | 22.45 | 22.63 | 23.00              |
|                         |         | MID       | Q16        | 22.70 | 22.57 | 22.66 | 23.00              |
|                         |         | HIGH      | Q16        | 22.53 | 22.59 | 22.77 | 23.00              |
|                         | 25      | LOW       | Q16        | 21.31 | 21.35 | 21.33 | 22.00              |
|                         |         | MID       | Q16        | 21.42 | 21.11 | 21.27 | 22.00              |
|                         |         | HIGH      | Q16        | 21.36 | 21.26 | 21.19 | 22.00              |
| 50                      | LOW     | Q16       | 21.38      | 21.23 | 21.33 | 22.00 |                    |
| 10                      | 1       | LOW       | 64QAM      | 21.41 | 21.62 | 21.75 | 22.00              |
|                         |         | MID       | 64QAM      | 21.66 | 21.63 | 21.84 | 22.00              |
|                         |         | HIGH      | 64QAM      | 21.66 | 21.33 | 21.89 | 22.00              |
|                         | 25      | LOW       | 64QAM      | 20.33 | 20.36 | 20.24 | 21.00              |
|                         |         | MID       | 64QAM      | 20.40 | 20.26 | 20.36 | 21.00              |
|                         |         | HIGH      | 64QAM      | 20.33 | 20.24 | 20.16 | 21.00              |
| 50                      | LOW     | 64QAM     | 20.55      | 20.35 | 20.30 | 21.00 |                    |

| LTE B41-State1&2 -Ant.3 |         |           |            |       |       |       |                    |       |
|-------------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| Bandwidth (MHz)         | RB Size | RB offset | Modulation | 40115 | 40765 | 41165 | Tune-up power(dBm) |       |
| 15                      | 1       | LOW       | QPSK       | 23.22 | 23.29 | 23.25 | 24.00              |       |
|                         |         | MID       | QPSK       | 23.20 | 23.10 | 23.36 | 24.00              |       |
|                         |         | HIGH      | QPSK       | 23.36 | 23.30 | 23.29 | 24.00              |       |
|                         | 36      | LOW       | QPSK       | 22.27 | 22.46 | 22.12 | 23.00              |       |
|                         |         | MID       | QPSK       | 22.11 | 22.21 | 22.31 | 23.00              |       |
|                         |         | HIGH      | QPSK       | 22.21 | 22.19 | 22.13 | 23.00              |       |
| 75                      | LOW     | QPSK      | 21.96      | 21.95 | 22.07 | 23.00 |                    |       |
| 15                      | 1       | LOW       | Q16        | 22.64 | 22.54 | 22.74 | 23.00              |       |
|                         |         | MID       | Q16        | 22.47 | 22.45 | 22.72 | 23.00              |       |
|                         |         | HIGH      | Q16        | 22.51 | 22.56 | 22.93 | 23.00              |       |
|                         | 36      | LOW       | Q16        | 21.35 | 21.19 | 21.39 | 22.00              |       |
|                         |         | MID       | Q16        | 21.43 | 21.20 | 21.27 | 22.00              |       |
|                         |         | HIGH      | Q16        | 21.50 | 21.22 | 21.24 | 22.00              |       |
|                         | 75      | LOW       | Q16        | 21.27 | 21.29 | 21.27 | 22.00              |       |
|                         | 15      | 1         | LOW        | 64QAM | 21.57 | 21.63 | 21.82              | 22.00 |
|                         |         |           | MID        | 64QAM | 21.69 | 21.66 | 21.85              | 22.00 |
| HIGH                    |         |           | 64QAM      | 21.75 | 21.39 | 21.62 | 22.00              |       |
| 36                      |         | LOW       | 64QAM      | 20.35 | 20.51 | 20.23 | 21.00              |       |
|                         |         | MID       | 64QAM      | 20.62 | 20.23 | 20.36 | 21.00              |       |
|                         |         | HIGH      | 64QAM      | 20.27 | 20.17 | 20.25 | 21.00              |       |
| 75                      | LOW     | 64QAM     | 20.34      | 20.19 | 20.45 | 21.00 |                    |       |
| Bandwidth (MHz)         | RB Size | RB offset | Modulation | 40140 | 40765 | 41140 | Tune-up power(dBm) |       |
| 20                      | 1       | LOW       | QPSK       | 23.29 | 23.25 | 23.34 | 24.00              |       |
|                         |         | MID       | QPSK       | 23.23 | 23.22 | 23.34 | 24.00              |       |
|                         |         | HIGH      | QPSK       | 23.26 | 23.36 | 23.27 | 24.00              |       |
|                         | 50      | LOW       | QPSK       | 22.20 | 22.31 | 22.18 | 23.00              |       |
|                         |         | MID       | QPSK       | 22.26 | 22.18 | 22.21 | 23.00              |       |
|                         |         | HIGH      | QPSK       | 22.23 | 22.29 | 22.08 | 23.00              |       |
| 100                     | LOW     | QPSK      | 21.81      | 21.93 | 21.92 | 23.00 |                    |       |
| 20                      | 1       | LOW       | Q16        | 22.53 | 22.60 | 22.89 | 23.00              |       |
|                         |         | MID       | Q16        | 22.56 | 22.45 | 23.00 | 23.00              |       |
|                         |         | HIGH      | Q16        | 22.60 | 22.44 | 22.65 | 23.00              |       |
|                         | 50      | LOW       | Q16        | 21.41 | 21.31 | 21.33 | 22.00              |       |
|                         |         | MID       | Q16        | 21.39 | 21.26 | 21.38 | 22.00              |       |
|                         |         | HIGH      | Q16        | 21.48 | 21.28 | 21.26 | 22.00              |       |
| 100                     | LOW     | Q16       | 21.35      | 21.38 | 21.28 | 22.00 |                    |       |
| 20                      | 1       | LOW       | 64QAM      | 21.48 | 21.57 | 21.75 | 22.00              |       |
|                         |         | MID       | 64QAM      | 21.68 | 21.52 | 21.96 | 22.00              |       |
|                         |         | HIGH      | 64QAM      | 21.60 | 21.35 | 21.64 | 22.00              |       |
|                         | 50      | LOW       | 64QAM      | 20.42 | 20.40 | 20.23 | 21.00              |       |
|                         |         | MID       | 64QAM      | 20.54 | 20.19 | 20.43 | 21.00              |       |
|                         |         | HIGH      | 64QAM      | 20.41 | 20.13 | 20.17 | 21.00              |       |
| 100                     | LOW     | 64QAM     | 20.48      | 20.34 | 20.37 | 21.00 |                    |       |

| LTE B41-State3 -Ant.3 |         |           |            |       |       |       |                    |       |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 40065 | 40765 | 41215 | Tune-up power(dBm) |       |
| 5                     | 1       | LOW       | QPSK       | 22.54 | 22.22 | 21.97 | 23.00              |       |
|                       |         | MID       | QPSK       | 22.54 | 22.40 | 22.38 | 23.00              |       |
|                       |         | HIGH      | QPSK       | 22.34 | 22.25 | 22.01 | 23.00              |       |
|                       | 12      | LOW       | QPSK       | 21.11 | 21.14 | 21.22 | 22.00              |       |
|                       |         | MID       | QPSK       | 21.34 | 21.30 | 21.38 | 22.00              |       |
|                       |         | HIGH      | QPSK       | 21.12 | 21.13 | 21.08 | 22.00              |       |
| 25                    | LOW     | QPSK      | 21.23      | 21.14 | 21.16 | 22.00 |                    |       |
| 5                     | 1       | LOW       | Q16        | 21.39 | 21.68 | 21.42 | 22.00              |       |
|                       |         | MID       | Q16        | 21.61 | 21.53 | 21.52 | 22.00              |       |
|                       |         | HIGH      | Q16        | 21.20 | 21.65 | 21.52 | 22.00              |       |
|                       | 12      | LOW       | Q16        | 20.31 | 20.47 | 20.18 | 21.00              |       |
|                       |         | MID       | Q16        | 20.45 | 20.46 | 20.18 | 21.00              |       |
|                       |         | HIGH      | Q16        | 20.26 | 20.40 | 20.20 | 21.00              |       |
|                       | 25      | LOW       | Q16        | 20.23 | 20.14 | 20.38 | 21.00              |       |
|                       | 5       | 1         | LOW        | 64QAM | 20.32 | 20.67 | 20.36              | 21.00 |
|                       |         |           | MID        | 64QAM | 20.52 | 20.61 | 20.41              | 21.00 |
| HIGH                  |         |           | 64QAM      | 20.20 | 20.74 | 20.57 | 21.00              |       |
| 12                    |         | LOW       | 64QAM      | 19.19 | 19.48 | 19.16 | 20.00              |       |
|                       |         | MID       | 64QAM      | 19.53 | 19.58 | 19.27 | 20.00              |       |
|                       |         | HIGH      | 64QAM      | 19.17 | 19.45 | 19.08 | 20.00              |       |
| 25                    | LOW     | 64QAM     | 19.08      | 19.06 | 19.50 | 20.00 |                    |       |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 40090 | 40765 | 41190 | Tune-up power(dBm) |       |
| 10                    | 1       | LOW       | QPSK       | 22.40 | 22.18 | 22.25 | 23.00              |       |
|                       |         | MID       | QPSK       | 22.31 | 22.41 | 22.42 | 23.00              |       |
|                       |         | HIGH      | QPSK       | 22.49 | 22.33 | 22.00 | 23.00              |       |
|                       | 25      | LOW       | QPSK       | 21.07 | 21.19 | 21.15 | 22.00              |       |
|                       |         | MID       | QPSK       | 21.20 | 21.20 | 21.38 | 22.00              |       |
|                       |         | HIGH      | QPSK       | 21.24 | 21.30 | 21.10 | 22.00              |       |
| 50                    | LOW     | QPSK      | 21.31      | 21.17 | 21.19 | 22.00 |                    |       |
| 10                    | 1       | LOW       | Q16        | 21.51 | 21.62 | 21.33 | 22.00              |       |
|                       |         | MID       | Q16        | 21.32 | 21.43 | 21.51 | 22.00              |       |
|                       |         | HIGH      | Q16        | 21.09 | 21.43 | 21.50 | 22.00              |       |
|                       | 25      | LOW       | Q16        | 20.53 | 20.42 | 20.27 | 21.00              |       |
|                       |         | MID       | Q16        | 20.47 | 20.45 | 20.18 | 21.00              |       |
|                       |         | HIGH      | Q16        | 20.51 | 20.34 | 20.25 | 21.00              |       |
| 50                    | LOW     | Q16       | 20.06      | 20.29 | 20.16 | 21.00 |                    |       |
| 10                    | 1       | LOW       | 64QAM      | 20.38 | 20.62 | 20.37 | 21.00              |       |
|                       |         | MID       | 64QAM      | 20.23 | 20.40 | 20.50 | 21.00              |       |
|                       |         | HIGH      | 64QAM      | 20.41 | 20.59 | 20.77 | 21.00              |       |
|                       | 25      | LOW       | 64QAM      | 19.36 | 19.30 | 19.37 | 20.00              |       |
|                       |         | MID       | 64QAM      | 19.52 | 19.60 | 19.23 | 20.00              |       |
|                       |         | HIGH      | 64QAM      | 19.39 | 19.30 | 19.35 | 20.00              |       |
| 50                    | LOW     | 64QAM     | 19.39      | 19.27 | 19.33 | 20.00 |                    |       |

| LTE B41-State3 -Ant.3 |         |           |            |       |       |       |                    |       |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| Bandwidth (           | RB Size | RB offset | Modulation | 40115 | 40765 | 41165 | Tune-up power(dBm) |       |
| 15                    | 1       | LOW       | QPSK       | 22.41 | 22.30 | 22.07 | 23.00              |       |
|                       |         | MID       | QPSK       | 22.44 | 22.29 | 22.26 | 23.00              |       |
|                       |         | HIGH      | QPSK       | 22.31 | 22.12 | 22.13 | 23.00              |       |
|                       | 36      | LOW       | QPSK       | 21.08 | 21.12 | 21.12 | 22.00              |       |
|                       |         | MID       | QPSK       | 21.27 | 21.21 | 21.10 | 22.00              |       |
|                       |         | HIGH      | QPSK       | 21.07 | 21.21 | 21.21 | 22.00              |       |
| 75                    | LOW     | QPSK      | 21.19      | 21.12 | 21.05 | 22.00 |                    |       |
| 15                    | 1       | LOW       | Q16        | 21.47 | 21.57 | 21.32 | 22.00              |       |
|                       |         | MID       | Q16        | 21.46 | 21.63 | 21.38 | 22.00              |       |
|                       |         | HIGH      | Q16        | 21.18 | 21.52 | 21.66 | 22.00              |       |
|                       | 36      | LOW       | Q16        | 20.39 | 20.37 | 20.25 | 21.00              |       |
|                       |         | MID       | Q16        | 20.42 | 20.47 | 20.11 | 21.00              |       |
|                       |         | HIGH      | Q16        | 20.41 | 20.33 | 20.20 | 21.00              |       |
|                       | 75      | LOW       | Q16        | 20.13 | 20.17 | 20.31 | 21.00              |       |
|                       | 15      | 1         | LOW        | 64QAM | 20.37 | 20.42 | 20.37              | 21.00 |
|                       |         |           | MID        | 64QAM | 20.39 | 20.60 | 20.37              | 21.00 |
| HIGH                  |         |           | 64QAM      | 20.29 | 20.75 | 20.78 | 21.00              |       |
| 36                    |         | LOW       | 64QAM      | 19.39 | 19.10 | 19.32 | 20.00              |       |
|                       |         | MID       | 64QAM      | 19.46 | 19.50 | 19.20 | 20.00              |       |
|                       |         | HIGH      | 64QAM      | 19.31 | 19.18 | 19.24 | 20.00              |       |
| 75                    | LOW     | 64QAM     | 19.16      | 19.31 | 19.26 | 20.00 |                    |       |
| Bandwidth (           | RB Size | RB offset | Modulation | 40140 | 40765 | 41140 | Tune-up power(dBm) |       |
| 20                    | 1       | LOW       | QPSK       | 22.17 | 22.43 | 22.15 | 23.00              |       |
|                       |         | MID       | QPSK       | 22.35 | 22.27 | 22.27 | 23.00              |       |
|                       |         | HIGH      | QPSK       | 22.41 | 22.21 | 22.15 | 23.00              |       |
|                       | 50      | LOW       | QPSK       | 21.22 | 21.20 | 21.22 | 22.00              |       |
|                       |         | MID       | QPSK       | 21.21 | 21.14 | 21.10 | 22.00              |       |
|                       |         | HIGH      | QPSK       | 21.17 | 21.23 | 21.13 | 22.00              |       |
| 100                   | LOW     | QPSK      | 21.16      | 21.21 | 21.16 | 22.00 |                    |       |
| 20                    | 1       | LOW       | Q16        | 21.55 | 21.50 | 21.39 | 22.00              |       |
|                       |         | MID       | Q16        | 21.35 | 21.58 | 21.49 | 22.00              |       |
|                       |         | HIGH      | Q16        | 21.20 | 21.53 | 21.52 | 22.00              |       |
|                       | 50      | LOW       | Q16        | 20.41 | 20.34 | 20.25 | 21.00              |       |
|                       |         | MID       | Q16        | 20.32 | 20.38 | 20.20 | 21.00              |       |
|                       |         | HIGH      | Q16        | 20.37 | 20.33 | 20.23 | 21.00              |       |
| 100                   | LOW     | Q16       | 20.19      | 20.21 | 20.29 | 21.00 |                    |       |
| 20                    | 1       | LOW       | 64QAM      | 20.40 | 20.47 | 20.44 | 21.00              |       |
|                       |         | MID       | 64QAM      | 20.31 | 20.47 | 20.46 | 21.00              |       |
|                       |         | HIGH      | 64QAM      | 20.29 | 20.61 | 20.67 | 21.00              |       |
|                       | 50      | LOW       | 64QAM      | 19.44 | 19.25 | 19.28 | 20.00              |       |
|                       |         | MID       | 64QAM      | 19.47 | 19.45 | 19.12 | 20.00              |       |
|                       |         | HIGH      | 64QAM      | 19.39 | 19.18 | 19.38 | 20.00              |       |
| 100                   | LOW     | 64QAM     | 19.29      | 19.18 | 19.28 | 20.00 |                    |       |

| LTE B41-State4 -Ant.3 |         |           |            |       |       |       |                    |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 40065 | 40765 | 41215 | Tune-up power(dBm) |
| 5                     | 1       | LOW       | QPSK       | 21.45 | 21.46 | 21.58 | 22.50              |
|                       |         | MID       | QPSK       | 21.37 | 21.52 | 21.73 | 22.50              |
|                       |         | HIGH      | QPSK       | 21.44 | 21.62 | 21.59 | 22.50              |
|                       | 12      | LOW       | QPSK       | 20.39 | 20.42 | 20.60 | 21.50              |
|                       |         | MID       | QPSK       | 20.36 | 20.22 | 20.36 | 21.50              |
|                       |         | HIGH      | QPSK       | 20.47 | 20.42 | 20.49 | 21.50              |
| 25                    | LOW     | QPSK      | 20.18      | 19.94 | 20.27 | 21.50 |                    |
| 5                     | 1       | LOW       | Q16        | 20.80 | 20.61 | 21.62 | 22.00              |
|                       |         | MID       | Q16        | 20.65 | 20.58 | 21.95 | 22.00              |
|                       |         | HIGH      | Q16        | 20.67 | 20.50 | 21.65 | 22.00              |
|                       | 12      | LOW       | Q16        | 19.95 | 19.95 | 20.99 | 21.00              |
|                       |         | MID       | Q16        | 19.24 | 19.70 | 20.62 | 21.00              |
|                       |         | HIGH      | Q16        | 19.54 | 19.75 | 20.74 | 21.00              |
| 25                    | LOW     | Q16       | 19.19      | 19.92 | 20.63 | 21.00 |                    |
| 5                     | 1       | LOW       | 64QAM      | 19.80 | 19.61 | 20.62 | 21.00              |
|                       |         | MID       | 64QAM      | 19.65 | 19.58 | 20.95 | 21.00              |
|                       |         | HIGH      | 64QAM      | 19.67 | 19.50 | 20.65 | 21.00              |
|                       | 12      | LOW       | 64QAM      | 18.95 | 18.95 | 19.99 | 20.00              |
|                       |         | MID       | 64QAM      | 18.24 | 18.70 | 19.62 | 20.00              |
|                       |         | HIGH      | 64QAM      | 18.54 | 18.75 | 19.74 | 20.00              |
| 25                    | LOW     | 64QAM     | 18.19      | 18.92 | 19.63 | 20.00 |                    |
| Bandwidth (MHz)       | RB Size | RB offset | Modulation | 40090 | 40765 | 41190 | Tune-up power(dBm) |
| 10                    | 1       | LOW       | QPSK       | 21.34 | 21.30 | 21.61 | 22.50              |
|                       |         | MID       | QPSK       | 21.44 | 21.55 | 21.73 | 22.50              |
|                       |         | HIGH      | QPSK       | 21.40 | 21.52 | 21.78 | 22.50              |
|                       | 25      | LOW       | QPSK       | 20.29 | 20.23 | 20.64 | 21.50              |
|                       |         | MID       | QPSK       | 20.48 | 20.30 | 20.51 | 21.50              |
|                       |         | HIGH      | QPSK       | 20.45 | 20.28 | 20.25 | 21.50              |
| 50                    | LOW     | QPSK      | 20.01      | 19.98 | 20.01 | 21.50 |                    |
| 10                    | 1       | LOW       | Q16        | 20.70 | 20.72 | 21.77 | 22.00              |
|                       |         | MID       | Q16        | 20.68 | 20.52 | 21.80 | 22.00              |
|                       |         | HIGH      | Q16        | 20.88 | 20.70 | 21.86 | 22.00              |
|                       | 25      | LOW       | Q16        | 20.09 | 19.81 | 20.84 | 21.00              |
|                       |         | MID       | Q16        | 19.31 | 19.82 | 20.68 | 21.00              |
|                       |         | HIGH      | Q16        | 19.41 | 19.83 | 20.69 | 21.00              |
| 50                    | LOW     | Q16       | 19.28      | 19.87 | 20.71 | 21.00 |                    |
| 10                    | 1       | LOW       | 64QAM      | 19.70 | 19.72 | 20.77 | 21.00              |
|                       |         | MID       | 64QAM      | 19.68 | 19.52 | 20.80 | 21.00              |
|                       |         | HIGH      | 64QAM      | 19.88 | 19.70 | 20.86 | 21.00              |
|                       | 25      | LOW       | 64QAM      | 19.09 | 18.81 | 19.84 | 20.00              |
|                       |         | MID       | 64QAM      | 18.31 | 18.82 | 19.68 | 20.00              |
|                       |         | HIGH      | 64QAM      | 18.41 | 18.83 | 19.69 | 20.00              |
| 50                    | LOW     | 64QAM     | 18.28      | 18.87 | 19.71 | 20.00 |                    |



| LTE B41-State4 -Ant.3 |         |           |            |       |       |       |                    |       |
|-----------------------|---------|-----------|------------|-------|-------|-------|--------------------|-------|
| Bandwidth (           | RB Size | RB offset | Modulation | 40115 | 40765 | 41165 | Tune-up power(dBm) |       |
| 15                    | 1       | LOW       | QPSK       | 21.52 | 21.23 | 21.67 | 22.50              |       |
|                       |         | MID       | QPSK       | 21.47 | 21.40 | 21.60 | 22.50              |       |
|                       |         | HIGH      | QPSK       | 21.45 | 21.44 | 21.62 | 22.50              |       |
|                       | 36      | LOW       | QPSK       | 20.39 | 20.23 | 20.67 | 21.50              |       |
|                       |         | MID       | QPSK       | 20.45 | 20.28 | 20.39 | 21.50              |       |
|                       |         | HIGH      | QPSK       | 20.51 | 20.25 | 20.35 | 21.50              |       |
| 75                    | LOW     | QPSK      | 20.01      | 20.03 | 20.02 | 21.50 |                    |       |
| 15                    | 1       | LOW       | Q16        | 20.58 | 20.55 | 21.52 | 22.00              |       |
|                       |         | MID       | Q16        | 20.77 | 20.53 | 21.82 | 22.00              |       |
|                       |         | HIGH      | Q16        | 20.89 | 20.64 | 21.91 | 22.00              |       |
|                       | 36      | LOW       | Q16        | 19.86 | 19.81 | 20.96 | 21.00              |       |
|                       |         | MID       | Q16        | 19.51 | 19.81 | 20.86 | 21.00              |       |
|                       |         | HIGH      | Q16        | 19.51 | 19.54 | 20.52 | 21.00              |       |
|                       | 75      | LOW       | Q16        | 19.30 | 19.69 | 20.61 | 21.00              |       |
|                       | 15      | 1         | LOW        | 64QAM | 19.58 | 19.55 | 20.52              | 21.00 |
|                       |         |           | MID        | 64QAM | 19.77 | 19.53 | 20.82              | 21.00 |
| HIGH                  |         |           | 64QAM      | 19.89 | 19.64 | 20.91 | 21.00              |       |
| 36                    |         | LOW       | 64QAM      | 18.86 | 18.81 | 19.96 | 20.00              |       |
|                       |         | MID       | 64QAM      | 18.51 | 18.81 | 19.86 | 20.00              |       |
|                       |         | HIGH      | 64QAM      | 18.51 | 18.54 | 19.52 | 20.00              |       |
| 75                    | LOW     | 64QAM     | 18.30      | 18.69 | 19.61 | 20.00 |                    |       |
| Bandwidth (           | RB Size | RB offset | Modulation | 40140 | 40765 | 41140 | Tune-up power(dBm) |       |
| 20                    | 1       | LOW       | QPSK       | 21.43 | 21.33 | 21.57 | 22.50              |       |
|                       |         | MID       | QPSK       | 21.43 | 21.44 | 21.47 | 22.50              |       |
|                       |         | HIGH      | QPSK       | 21.47 | 21.68 | 21.64 | 22.50              |       |
|                       | 50      | LOW       | QPSK       | 20.35 | 20.36 | 20.41 | 21.50              |       |
|                       |         | MID       | QPSK       | 20.39 | 20.36 | 20.40 | 21.50              |       |
|                       |         | HIGH      | QPSK       | 20.36 | 20.57 | 20.39 | 21.50              |       |
| 100                   | LOW     | QPSK      | 20.05      | 20.07 | 20.16 | 21.50 |                    |       |
| 20                    | 1       | LOW       | Q16        | 20.68 | 20.63 | 21.64 | 22.00              |       |
|                       |         | MID       | Q16        | 20.76 | 20.55 | 21.80 | 22.00              |       |
|                       |         | HIGH      | Q16        | 20.76 | 20.59 | 21.77 | 22.00              |       |
|                       | 50      | LOW       | Q16        | 19.95 | 19.91 | 20.91 | 21.00              |       |
|                       |         | MID       | Q16        | 19.36 | 19.68 | 20.72 | 21.00              |       |
|                       |         | HIGH      | Q16        | 19.51 | 19.69 | 20.65 | 21.00              |       |
| 100                   | LOW     | Q16       | 19.21      | 19.78 | 20.72 | 21.00 |                    |       |
| 20                    | 1       | LOW       | 64QAM      | 19.58 | 19.49 | 20.75 | 21.00              |       |
|                       |         | MID       | 64QAM      | 19.79 | 19.64 | 20.87 | 21.00              |       |
|                       |         | HIGH      | 64QAM      | 19.66 | 19.61 | 20.74 | 21.00              |       |
|                       | 50      | LOW       | 64QAM      | 18.86 | 18.91 | 19.84 | 20.00              |       |
|                       |         | MID       | 64QAM      | 18.34 | 18.72 | 19.78 | 20.00              |       |
|                       |         | HIGH      | 64QAM      | 18.38 | 18.58 | 19.60 | 20.00              |       |
| 100                   | LOW     | 64QAM     | 18.13      | 18.81 | 19.69 | 20.00 |                    |       |