







































Occupied Bandwidth

| Mode | LTE Band 2 : 99%OBW(MHz) | | | | | | | | | | | | | |
|------------|--------------------------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | BW | | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 1.10 | 1.08 | 2.70 | 2.72 | 4.48 | 4.48 | 9.13 | 9.07 | 13.52 | 13.52 | 18.38 | 18.38 | | |
| Middle CH | 1.09 | 1.09 | 2.70 | 2.72 | 4.47 | 4.46 | 9.05 | 9.05 | 13.46 | 13.46 | 18.46 | 18.42 | | |
| Highest CH | 1.09 | 1.09 | 2.71 | 2.72 | 4.47 | 4.49 | 9.01 | 9.01 | 13.46 | 13.49 | 18.34 | 18.38 | | |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | | | |
| Mod. | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | | | |
| Lowest CH | 1.09 | | 2.72 | | 4.50 | | 9.03 | | 13.46 | | 18.46 | | | |
| Middle CH | 1.10 | | 2.72 | | 4.49 | | 9.05 | | 13.40 | | 18.34 | | | |
| Highest CH | 1.09 | | 2.70 | | 4.49 | | 9.01 | | 13.49 | | 18.34 | | | |

| Mode | LTE Band 4 : 99%OBW(MHz) | | | | | | | | | | | | | |
|------------|--------------------------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | BW | | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 1.08 | 1.09 | 2.70 | 2.69 | 4.47 | 4.49 | 9.03 | 9.05 | 13.49 | 13.40 | 18.34 | 18.38 | | |
| Middle CH | 1.09 | 1.09 | 2.70 | 2.70 | 4.49 | 4.50 | 9.01 | 9.05 | 13.46 | 13.49 | 18.38 | 18.34 | | |
| Highest CH | 1.09 | 1.10 | 2.70 | 2.70 | 4.48 | 4.50 | 9.01 | 8.99 | 13.49 | 13.49 | 18.42 | 18.38 | | |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | | | |
| Mod. | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | | | |
| Lowest CH | 1.08 | | 2.73 | | 4.49 | | 9.07 | | 13.46 | | 18.34 | | | |
| Middle CH | 1.09 | | 2.70 | | 4.49 | | 9.07 | | 13.46 | | 18.42 | | | |
| Highest CH | 1.09 | | 2.71 | | 4.47 | | 8.99 | | 13.40 | | 18.38 | | | |

| Mode | LTE Band 5 : 99%OBW(MHz) | | | | | | | | | | | | |
|------------|--------------------------|-------|--------|-------|------|-------|------|-------|-------|-------|--------|-------|-------|
| | BW | | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 1.4MHz | 3MHz | 5MHz |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | 64QAM | 64QAM | 64QAM | 64QAM | 64QAM |
| Lowest CH | 1.09 | 1.09 | 2.73 | 2.69 | 4.49 | 4.49 | 9.07 | 9.03 | 1.09 | 2.72 | 4.49 | 9.07 | |
| Middle CH | 1.09 | 1.09 | 2.72 | 2.72 | 4.47 | 4.50 | 9.05 | 9.01 | 1.09 | 2.73 | 4.48 | 8.99 | |
| Highest CH | 1.09 | 1.09 | 2.70 | 2.72 | 4.49 | 4.49 | 9.05 | 9.03 | 1.09 | 2.71 | 4.48 | 9.03 | |



| Mode | LTE Band 7 : 99%OBW(MHz) | | | | | | | | | | | |
|------------|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | - | - | - | - | 4.49 | 4.50 | 9.15 | 9.07 | 13.52 | 13.46 | 18.42 | 18.46 |
| Middle CH | - | - | - | - | 4.48 | 4.47 | 9.07 | 9.01 | 13.43 | 13.46 | 18.38 | 18.42 |
| Highest CH | - | - | - | - | 4.50 | 4.50 | 9.03 | 9.03 | 13.49 | 13.40 | 18.38 | 18.34 |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | |
| Lowest CH | - | - | - | - | 4.47 | - | 9.07 | - | 13.46 | - | 18.38 | - |
| Middle CH | - | - | - | - | 4.51 | - | 9.07 | - | 13.43 | - | 18.34 | - |
| Highest CH | - | - | - | - | 4.50 | - | 9.01 | - | 13.40 | - | 18.38 | - |

| Mode | LTE Band 12 : 99%OBW(MHz) | | | | | | | | | | | |
|------------|---------------------------|-------|------|-------|------|-------|-------|-------|--------|-------|-------|-------|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 1.4MHz | 3MHz | 5MHz | 10MHz |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | 64QAM | 64QAM | 64QAM | 64QAM |
| Lowest CH | 1.09 | 1.10 | 2.72 | 2.72 | 4.49 | 4.51 | 9.07 | 8.99 | 1.09 | 2.72 | 4.50 | 9.01 |
| Middle CH | 1.10 | 1.09 | 2.73 | 2.71 | 4.53 | 4.51 | 9.03 | 9.07 | 1.09 | 2.70 | 4.50 | 9.07 |
| Highest CH | 1.09 | 1.10 | 2.70 | 2.71 | 4.50 | 4.49 | 9.05 | 9.01 | 1.09 | 2.71 | 4.49 | 9.06 |

| Mode | LTE Band 13 : 99%OBW(MHz) | | | | | | | | | | | |
|------------|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | - | - | - | - | 4.51 | 4.49 | - | - | - | - | - | - |
| Middle CH | - | - | - | - | 4.51 | 4.50 | 9.07 | 9.01 | - | - | - | - |
| Highest CH | - | - | - | - | 4.49 | 4.51 | - | - | - | - | - | - |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | |
| Lowest CH | - | - | - | - | 4.49 | - | - | - | - | - | - | - |
| Middle CH | - | - | - | - | 4.50 | - | 9.11 | - | - | - | - | - |
| Highest CH | - | - | - | - | 4.50 | - | - | - | - | - | - | - |



| Mode | LTE Band 17 : 99%OBW(MHz) | | | | | | | | | | | |
|------------|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | - | - | - | - | 4.52 | 4.50 | 9.11 | 9.11 | - | - | - | - |
| Middle CH | - | - | - | - | 4.52 | 4.51 | 9.11 | 9.03 | - | - | - | - |
| Highest CH | - | - | - | - | 4.53 | 4.50 | 9.11 | 9.09 | - | - | - | - |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | |
| Lowest CH | - | | - | | 4.51 | | 9.11 | | - | | - | |
| Middle CH | - | | - | | 4.49 | | 9.07 | | - | | - | |
| Highest CH | - | | - | | 4.50 | | 9.07 | | - | | - | |

| Mode | LTE Band 66 : 99%OBW(MHz) | | | | | | | | | | | |
|------------|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | 1.09 | 1.09 | 2.71 | 2.71 | 4.50 | 4.51 | 9.07 | 8.99 | 13.43 | 13.52 | 18.34 | 18.34 |
| Middle CH | 1.09 | 1.09 | 2.71 | 2.70 | 4.51 | 4.50 | 9.07 | 9.05 | 13.43 | 13.49 | 18.38 | 18.43 |
| Highest CH | 1.09 | 1.08 | 2.71 | 2.73 | 4.50 | 4.50 | 9.07 | 9.07 | 13.49 | 13.46 | 18.38 | 18.34 |
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | | 64QAM | |
| Lowest CH | 1.09 | | 2.69 | | 4.50 | | 9.03 | | 13.49 | | 18.38 | |
| Middle CH | 1.09 | | 2.71 | | 4.50 | | 9.05 | | 13.43 | | 18.42 | |
| Highest CH | 1.09 | | 2.70 | | 4.48 | | 9.01 | | 13.49 | | 18.42 | |











