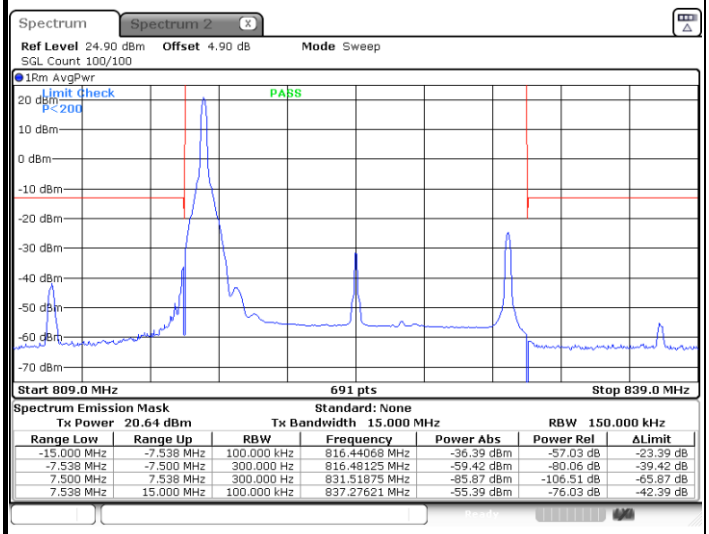
## LTE Band 26 / 15MHz / 64QAM

### Highest Band Edge / 1 RB

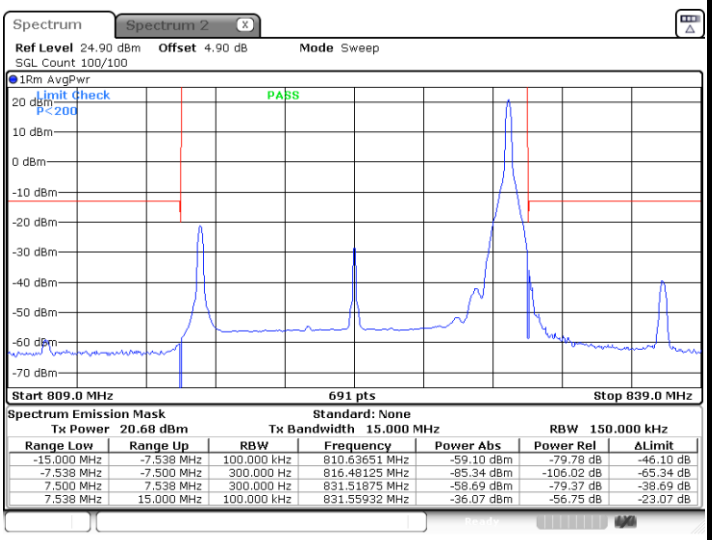



Spectrum Emission Mask Standard: None
Tx Power 20.64 dBm Tx Bandwidth 15.000 MHz RBW 150.000 kHz

| Range Low | Range Up | RBW | Frequency | Power Abs | Power Rel | ΔLimit |
|---|---|---|---|---|---|---|
| -15.000 MHz | -7.538 MHz | 100.000 kHz | 816.44068 MHz | -36.39 dBm | -57.03 dB | -23.39 dB |
| -7.538 MHz | -7.500 MHz | 300.000 Hz | 816.48125 MHz | -59.42 dBm | -80.06 dB | -39.42 dB |
| 7.500 MHz | 7.538 MHz | 300.000 Hz | 831.51875 MHz | -85.87 dBm | -106.51 dB | -65.87 dB |
| 7.538 MHz | 15.000 MHz | 100.000 kHz | 837.27621 MHz | -55.39 dBm | -76.03 dB | -42.39 dB |

Date: 3.OCT.2023 15:31:13

### Highest Band Edge / 1 RB max

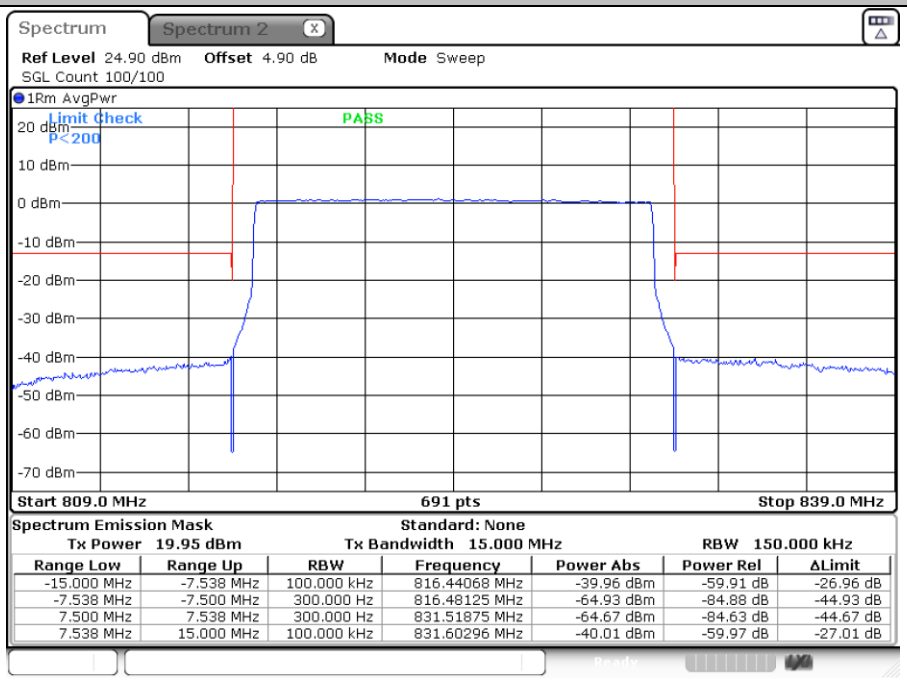



Spectrum Emission Mask Standard: None
Tx Power 20.68 dBm Tx Bandwidth 15.000 MHz RBW 150.000 kHz

| Range Low | Range Up | RBW | Frequency | Power Abs | Power Rel | ΔLimit |
|---|---|---|---|---|---|---|
| -15.000 MHz | -7.538 MHz | 100.000 kHz | 810.63651 MHz | -59.10 dBm | -79.78 dB | -46.10 dB |
| -7.538 MHz | -7.500 MHz | 300.000 Hz | 816.48125 MHz | -85.34 dBm | -106.02 dB | -65.34 dB |
| 7.500 MHz | 7.538 MHz | 300.000 Hz | 831.51875 MHz | -58.69 dBm | -79.37 dB | -38.69 dB |
| 7.538 MHz | 15.000 MHz | 100.000 kHz | 831.55932 MHz | -36.07 dBm | -56.75 dB | -23.07 dB |

Date: 3.OCT.2023 15:34:33

### Band Edge / Full RB



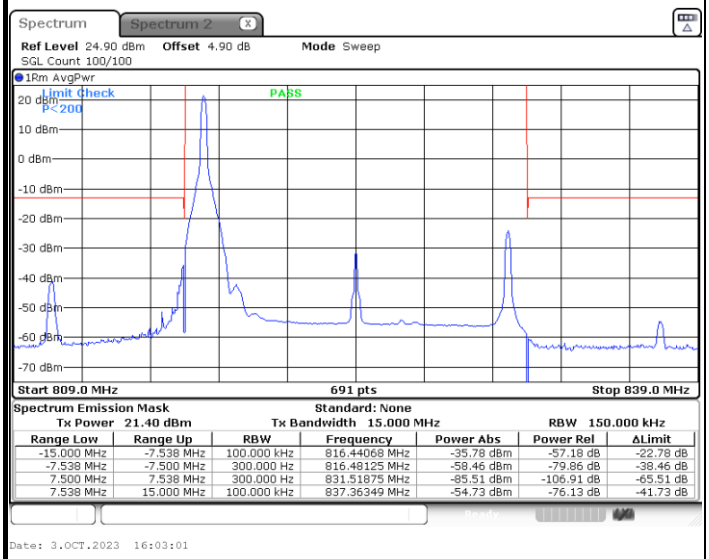

Spectrum Emission Mask Standard: None
Tx Power 19.95 dBm Tx Bandwidth 15.000 MHz RBW 150.000 kHz

| Range Low | Range Up | RBW | Frequency | Power Abs | Power Rel | ΔLimit |
|---|---|---|---|---|---|---|
| -15.000 MHz | -7.538 MHz | 100.000 kHz | 816.44068 MHz | -39.96 dBm | -59.91 dB | -26.96 dB |
| -7.538 MHz | -7.500 MHz | 300.000 Hz | 816.48125 MHz | -64.93 dBm | -84.88 dB | -44.93 dB |
| 7.500 MHz | 7.538 MHz | 300.000 Hz | 831.51875 MHz | -64.67 dBm | -84.63 dB | -44.67 dB |
| 7.538 MHz | 15.000 MHz | 100.000 kHz | 831.60296 MHz | -40.01 dBm | -59.97 dB | -27.01 dB |

Date: 3.OCT.2023 15:37:55

## LTE Band 26 / 15MHz / 256QAM

### Highest Band Edge / 1 RB

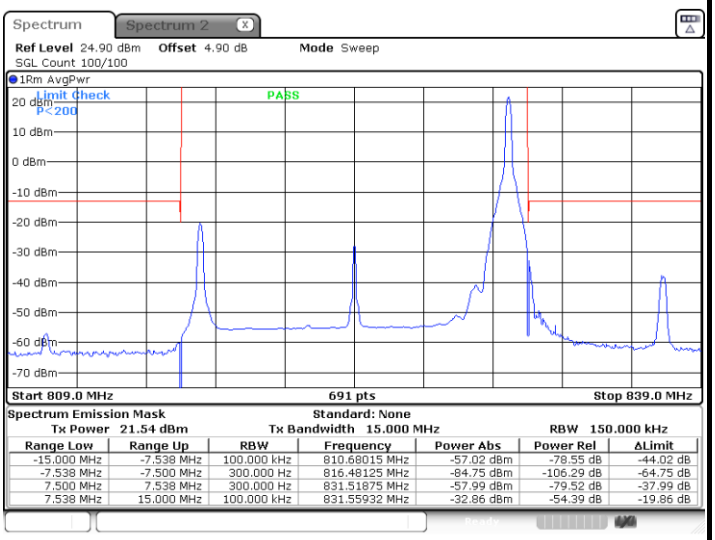



Spectrum Emission Mask Standard: None
Tx Power 21.40 dBm Tx Bandwidth 15.000 MHz RBW 150.000 kHz

| Range Low | Range Up | RBW | Frequency | Power Abs | Power Rel | ΔLimit |
|---|---|---|---|---|---|---|
| -15.000 MHz | -7.538 MHz | 100.000 kHz | 816.44068 MHz | -35.78 dBm | -57.18 dB | -22.78 dB |
| -7.538 MHz | -7.500 MHz | 300.000 Hz | 816.48125 MHz | -58.46 dBm | -79.86 dB | -38.46 dB |
| 7.500 MHz | 7.538 MHz | 300.000 Hz | 831.51875 MHz | -85.51 dBm | -106.91 dB | -65.51 dB |
| 7.538 MHz | 15.000 MHz | 100.000 kHz | 837.36349 MHz | -54.73 dBm | -76.13 dB | -41.73 dB |

Date: 3.OCT.2023 16:03:01

### Highest Band Edge / 1 RB max

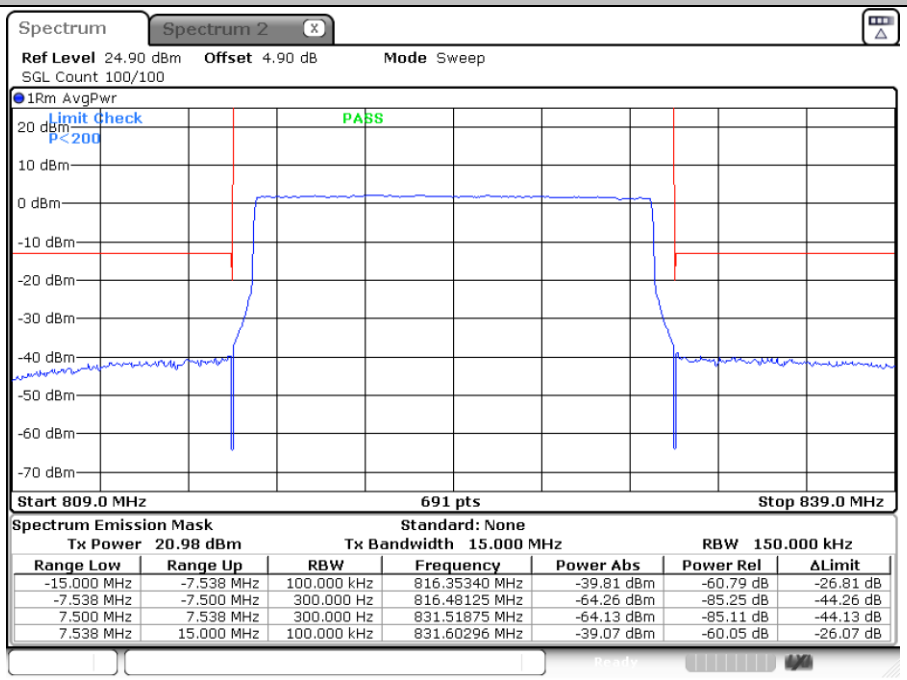



Spectrum Emission Mask Standard: None
Tx Power 21.54 dBm Tx Bandwidth 15.000 MHz RBW 150.000 kHz

| Range Low | Range Up | RBW | Frequency | Power Abs | Power Rel | ΔLimit |
|---|---|---|---|---|---|---|
| -15.000 MHz | -7.538 MHz | 100.000 kHz | 810.68015 MHz | -57.02 dBm | -78.55 dB | -44.02 dB |
| -7.538 MHz | -7.500 MHz | 300.000 Hz | 816.48125 MHz | -84.75 dBm | -106.29 dB | -64.75 dB |
| 7.500 MHz | 7.538 MHz | 300.000 Hz | 831.51875 MHz | -57.99 dBm | -79.52 dB | -37.99 dB |
| 7.538 MHz | 15.000 MHz | 100.000 kHz | 831.55932 MHz | -32.86 dBm | -54.39 dB | -19.86 dB |

Date: 3.OCT.2023 16:04:19

### Band Edge / Full RB




Spectrum Emission Mask Standard: None
Tx Power 20.98 dBm Tx Bandwidth 15.000 MHz RBW 150.000 kHz

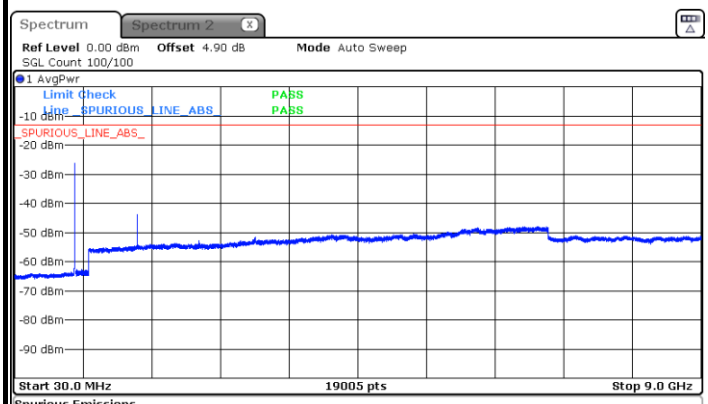
| Range Low | Range Up | RBW | Frequency | Power Abs | Power Rel | ΔLimit |
|---|---|---|---|---|---|---|
| -15.000 MHz | -7.538 MHz | 100.000 kHz | 816.35340 MHz | -39.81 dBm | -60.79 dB | -26.81 dB |
| -7.538 MHz | -7.500 MHz | 300.000 Hz | 816.48125 MHz | -64.26 dBm | -85.25 dB | -44.26 dB |
| 7.500 MHz | 7.538 MHz | 300.000 Hz | 831.51875 MHz | -64.13 dBm | -85.11 dB | -44.13 dB |
| 7.538 MHz | 15.000 MHz | 100.000 kHz | 831.60296 MHz | -39.07 dBm | -60.05 dB | -26.07 dB |

Date: 3.OCT.2023 16:01:57

# Conducted Spurious Emission

## LTE Band 26 / 1.4MHz

### Lowest Channel / QPSK

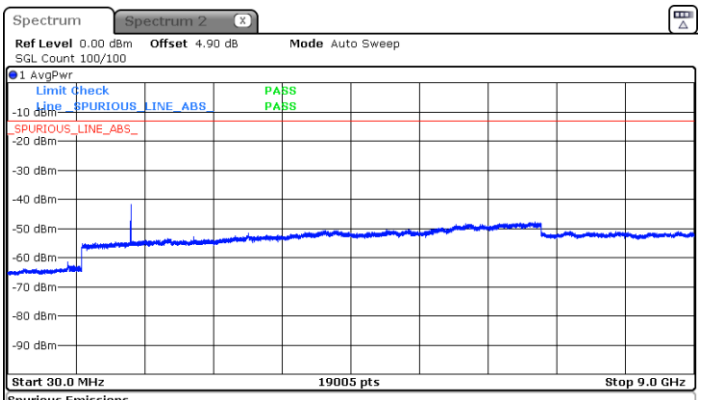



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 814.000 MHz | 100.000 kHz | 813.80410 MHz | -26.13 dBm | -13.13 dB |
| 829.000 MHz | 1.000 GHz | 100.000 kHz | 908.69181 MHz | -62.74 dBm | -49.74 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.62859 GHz | -43.76 dBm | -30.76 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.84877 GHz | -47.99 dBm | -34.99 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.36716 GHz | -50.94 dBm | -37.94 dB |

Date: 3.OCT.2023 15:09:31

### Middle Channel / QPSK

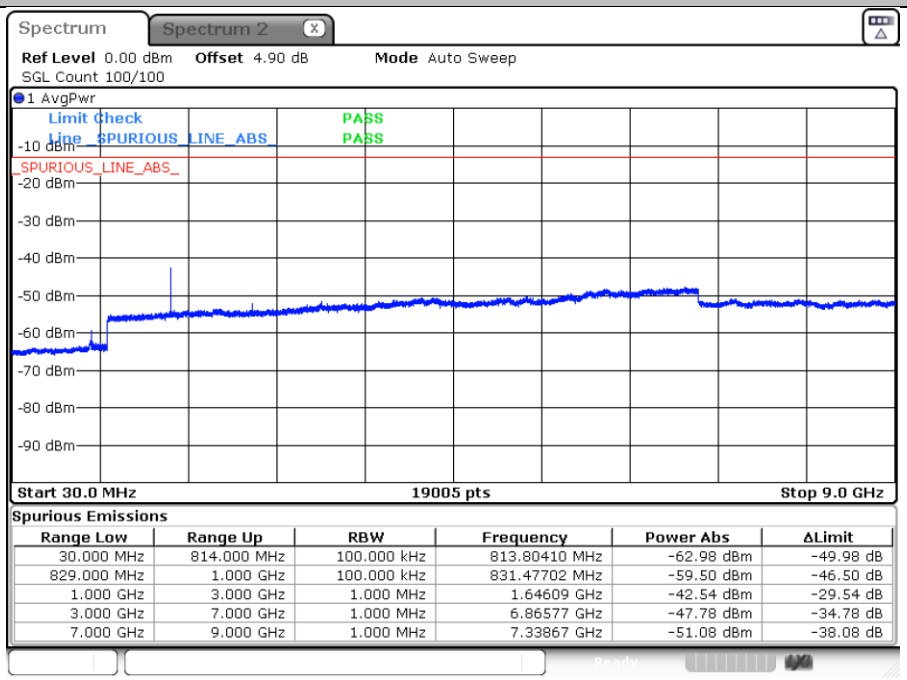



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 814.000 MHz | 100.000 kHz | 813.80410 MHz | -61.53 dBm | -48.53 dB |
| 829.000 MHz | 1.000 GHz | 100.000 kHz | 829.25624 MHz | -62.77 dBm | -49.77 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.63759 GHz | -41.78 dBm | -28.78 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.92576 GHz | -47.83 dBm | -34.83 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.38365 GHz | -50.93 dBm | -37.93 dB |

Date: 3.OCT.2023 15:10:56

### Highest Channel / QPSK



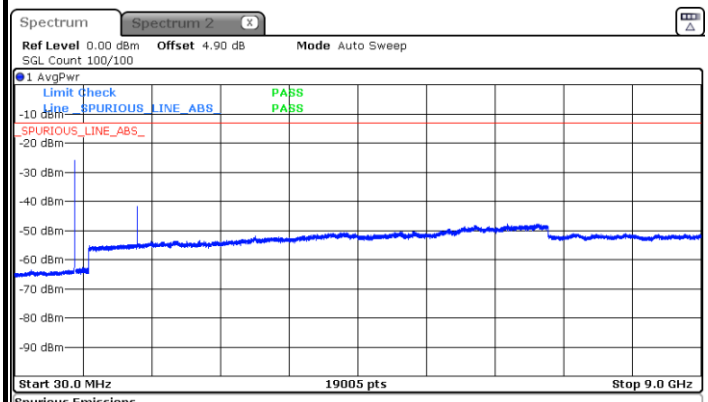

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 814.000 MHz | 100.000 kHz | 813.80410 MHz | -62.98 dBm | -49.98 dB |
| 829.000 MHz | 1.000 GHz | 100.000 kHz | 831.47702 MHz | -59.50 dBm | -46.50 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.64609 GHz | -42.54 dBm | -29.54 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.86577 GHz | -47.78 dBm | -34.78 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.33867 GHz | -51.08 dBm | -38.08 dB |

Date: 3.OCT.2023 15:12:21

## LTE Band 26 / 3MHz

### Lowest Channel / QPSK

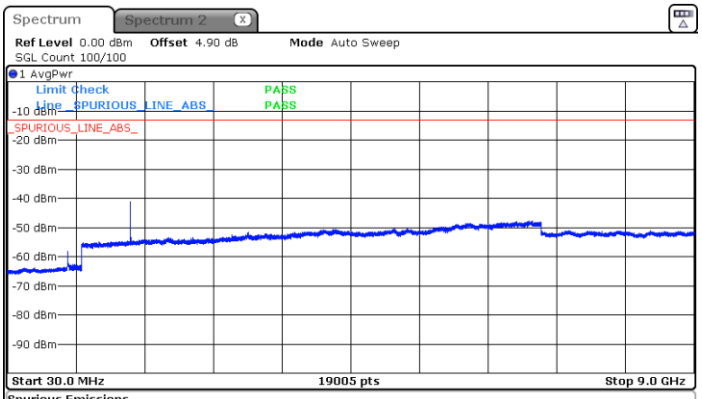



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 814.000 MHz | 100.000 kHz | 813.80410 MHz | -25.89 dBm | -12.89 dB |
| 829.000 MHz | 1.000 GHz | 100.000 kHz | 912.79171 MHz | -62.66 dBm | -49.66 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.62859 GHz | -41.87 dBm | -28.87 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.87177 GHz | -47.71 dBm | -34.71 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.01650 GHz | -51.16 dBm | -38.16 dB |

Date: 3.OCT.2023 15:13:47

### Middle Channel / QPSK

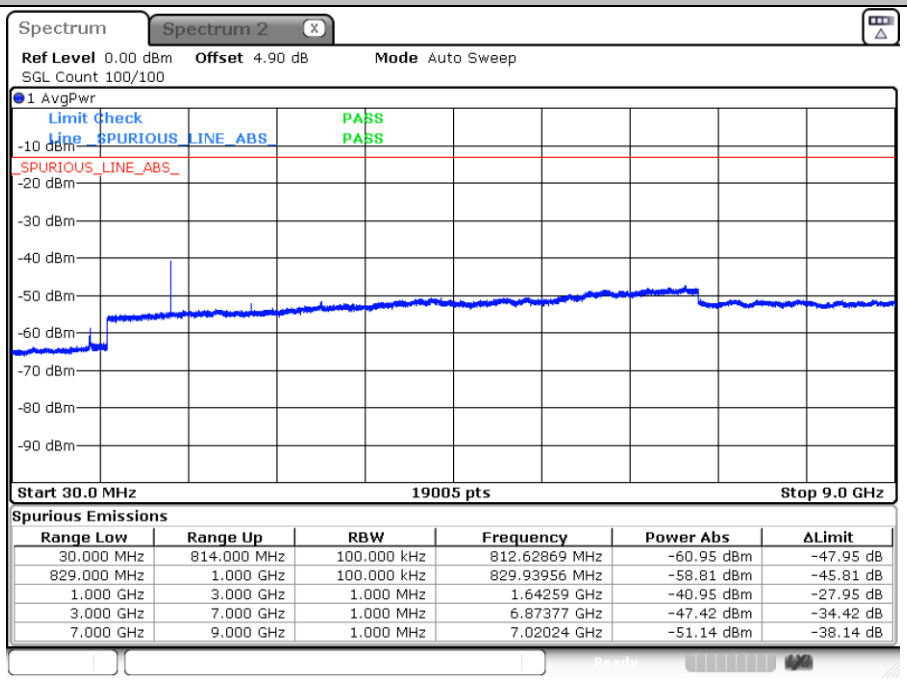



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 814.000 MHz | 100.000 kHz | 812.62869 MHz | -58.14 dBm | -45.14 dB |
| 829.000 MHz | 1.000 GHz | 100.000 kHz | 829.08541 MHz | -62.35 dBm | -49.35 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.63559 GHz | -41.10 dBm | -28.10 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.88276 GHz | -47.83 dBm | -34.83 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.36416 GHz | -50.98 dBm | -37.98 dB |

Date: 3.OCT.2023 15:15:12

### Highest Channel / QPSK



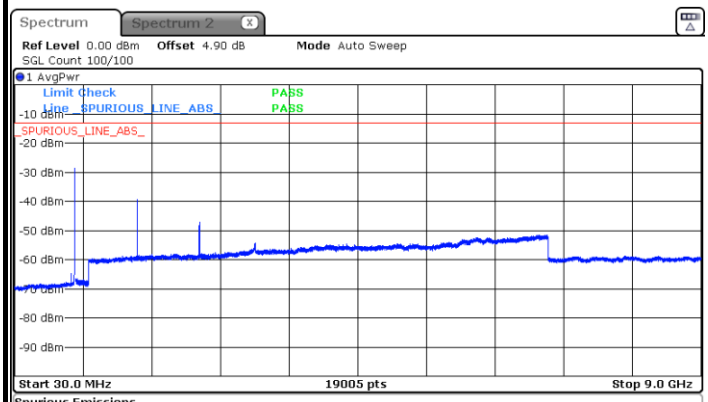

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 814.000 MHz | 100.000 kHz | 812.62869 MHz | -60.95 dBm | -47.95 dB |
| 829.000 MHz | 1.000 GHz | 100.000 kHz | 829.93956 MHz | -58.81 dBm | -45.81 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.64259 GHz | -40.95 dBm | -27.95 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.87377 GHz | -47.42 dBm | -34.42 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.02024 GHz | -51.14 dBm | -38.14 dB |

Date: 3.OCT.2023 15:16:37

## LTE Band 26 / 5MHz

### Lowest Channel / QPSK

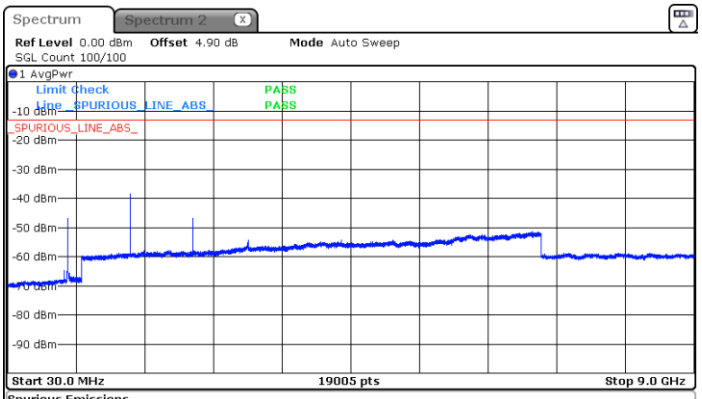



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 814.000 MHz | 100.000 kHz | 813.80410 MHz | -28.51 dBm | -15.51 dB |
| 829.000 MHz | 1.000 GHz | 100.000 kHz | 829.42707 MHz | -66.50 dBm | -53.50 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.62909 GHz | -39.51 dBm | -26.51 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.85277 GHz | -51.55 dBm | -38.55 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.01300 GHz | -58.72 dBm | -45.72 dB |

Date: 3.OCT.2023 15:18:03

### Middle Channel / QPSK

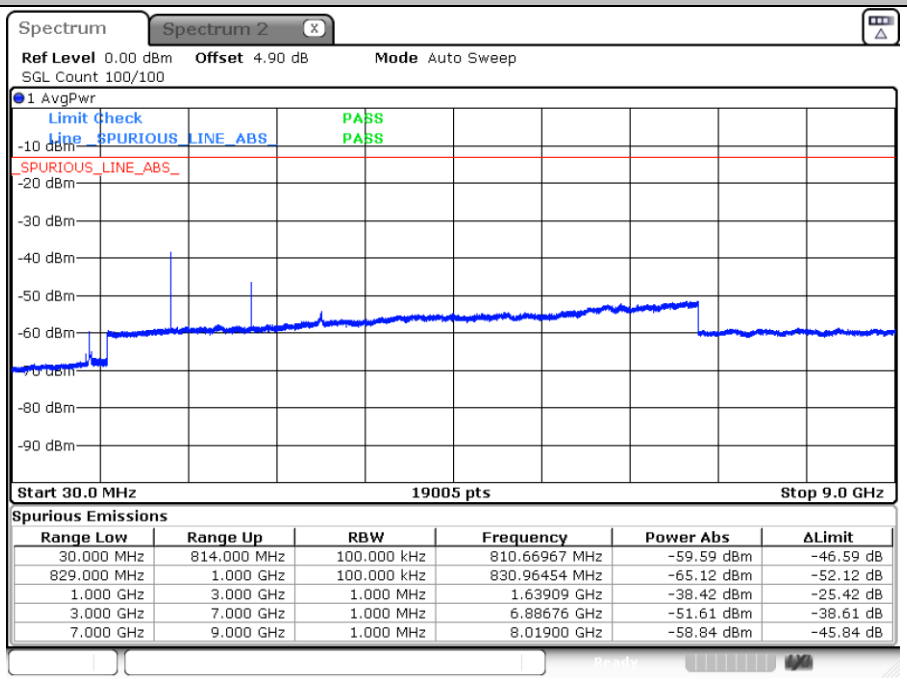



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 814.000 MHz | 100.000 kHz | 812.62869 MHz | -46.90 dBm | -33.90 dB |
| 829.000 MHz | 1.000 GHz | 100.000 kHz | 829.42707 MHz | -65.65 dBm | -52.65 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.63409 GHz | -38.41 dBm | -25.41 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.88276 GHz | -51.37 dBm | -38.37 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.42289 GHz | -58.66 dBm | -45.66 dB |

Date: 3.OCT.2023 15:19:28

### Highest Channel / QPSK



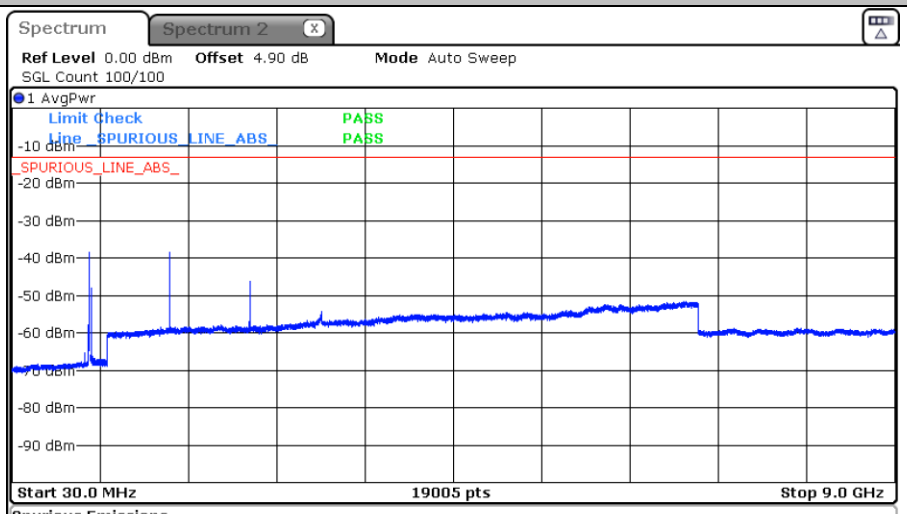

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 814.000 MHz | 100.000 kHz | 810.66967 MHz | -59.59 dBm | -46.59 dB |
| 829.000 MHz | 1.000 GHz | 100.000 kHz | 830.96454 MHz | -65.12 dBm | -52.12 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.63909 GHz | -38.42 dBm | -25.42 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.88676 GHz | -51.61 dBm | -38.61 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.01900 GHz | -58.84 dBm | -45.84 dB |

Date: 3.OCT.2023 15:20:54

## LTE Band 26 / 10MHz

### Middle Channel / QPSK



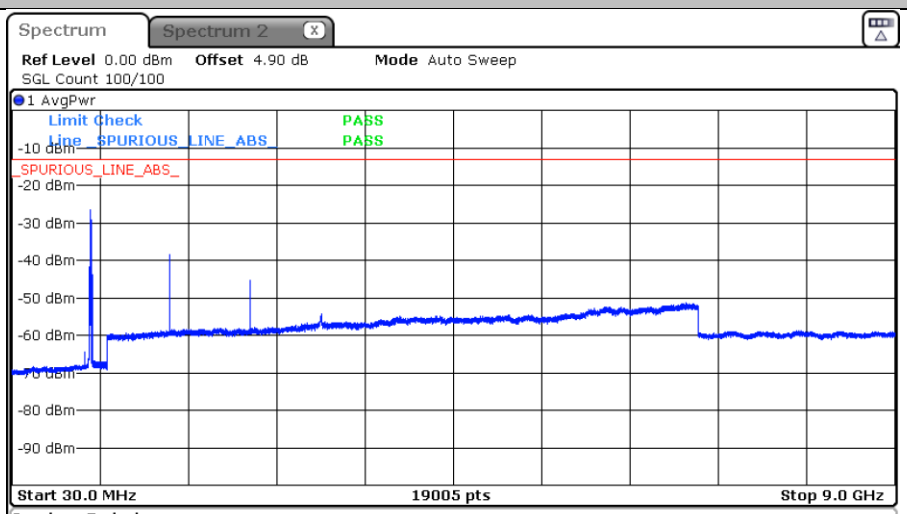

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 814.000 MHz | 100.000 kHz | 813.80410 MHz | -38.59 dBm | -25.59 dB |
| 829.000 MHz | 1.000 GHz | 100.000 kHz | 832.33117 MHz | -48.16 dBm | -35.16 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.62959 GHz | -38.60 dBm | -25.60 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.85577 GHz | -51.71 dBm | -38.71 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.01450 GHz | -58.77 dBm | -45.77 dB |

Date: 3.OCT.2023 15:22:19

## LTE Band 26 / 15MHz

### Highest Channel / QPSK




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 814.000 MHz | 100.000 kHz | 810.66967 MHz | -41.67 dBm | -28.67 dB |
| 829.000 MHz | 1.000 GHz | 100.000 kHz | 830.62288 MHz | -26.42 dBm | -13.42 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.63509 GHz | -38.41 dBm | -25.41 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.87977 GHz | -51.22 dBm | -38.22 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.02399 GHz | -58.84 dBm | -45.84 dB |

Date: 3.OCT.2023 15:25:13

# Frequency Stability

| Test Conditions | | LTE Band 26 (QPSK) / Middle Channel | Limit |
|---|---|---|---|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | 2.5ppm |
| | | Deviation (ppm) | Result |
| 50 | Normal Voltage | 0.0037 | PASS |
| 40 | Normal Voltage | 0.0044 | |
| 30 | Normal Voltage | 0.0023 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0009 | |
| 0 | Normal Voltage | 0.0016 | |
| -10 | Normal Voltage | 0.0012 | |
| -20 | Normal Voltage | 0.0048 | |
| -30 | Normal Voltage | 0.0053 | |
| 20 | Maximum Voltage | 0.0005 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | End Point | 0.0051 | |

**Note:** Normal Voltage =3.8 V. ; End Point (BEP) =3.5 V. ; Maximum Voltage =4.35 V.

# Appendix B. Test Results of Radiated Test

## Radiated Spurious Emission

| | | | |
|---|---|---|---|
| **Test Engineer :** | Chris Chen | **Temperature :** | 23~25℃ |
| | | **Relative Humidity :** | 41~42% |

| LTE Band 26 / 10MHz / QPSK/16 QAM/64 QAM/256QAM | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Channel** | **Frequency ( MHz )** | **ERP ( dBm )** | **Limit ( dBm )** | **Over Limit ( dB )** | **S.G. Power ( dBm )** | **TX Cable loss ( dB )** | **TX Antenna Gain (dBi)** | **Polarization (H/V)** |
| Middle | 1632 | -57.89 | -13 | -44.89 | -64.86 | 1.58 | 10.70 | H |
| | 2440 | -59.78 | -13 | -46.78 | -68.03 | 2.102 | 12.50 | H |
| | 3256 | -56.31 | -13 | -43.31 | -65.20 | 2.856 | 13.90 | H |
| | 1632 | -56.88 | -13 | -43.88 | -63.85 | 1.58 | 10.70 | V |
| | 2440 | -58.79 | -13 | -45.79 | -67.04 | 2.10 | 12.50 | V |
| | 3256 | -55.38 | -13 | -42.38 | -64.27 | 2.86 | 13.90 | V |

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.