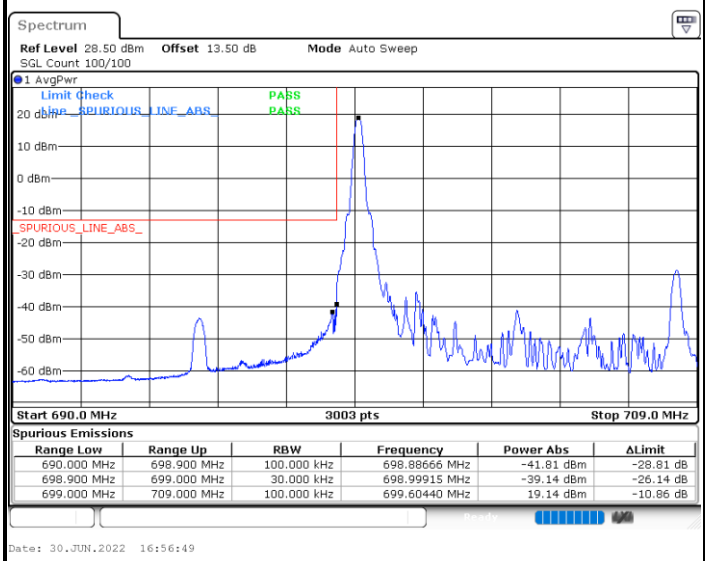
## LTE Band 12 / 10MHz / 16QAM

### Lowest Band Edge / 1 RB

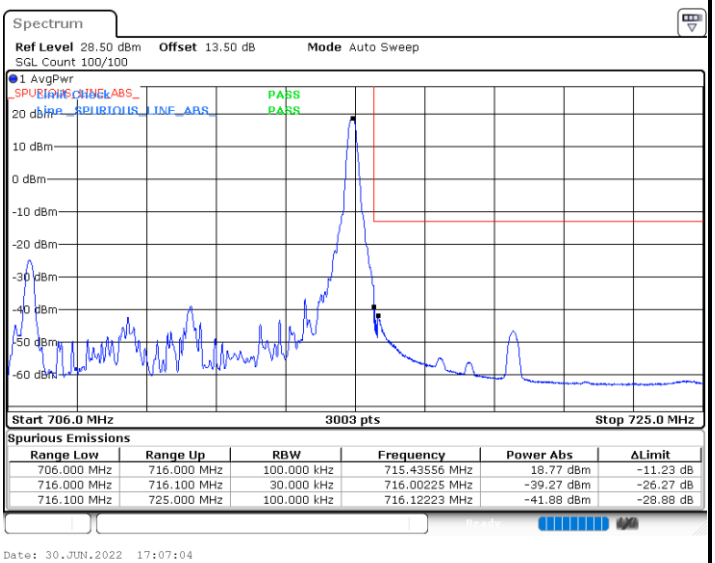



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 690.000 MHz | 698.900 MHz | 100.000 kHz | 698.88666 MHz | -41.81 dBm | -28.81 dB |
| 698.900 MHz | 699.000 MHz | 30.000 kHz | 698.99915 MHz | -39.14 dBm | -26.14 dB |
| 699.000 MHz | 709.000 MHz | 100.000 kHz | 699.60440 MHz | 19.14 dBm | -10.86 dB |

Date: 30.JUN.2022 16:56:49

### Highest Band Edge / 1 RB

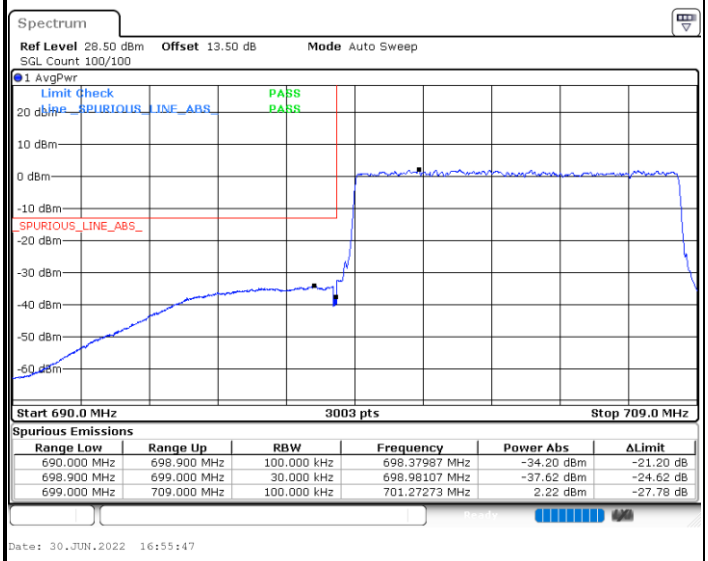



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 706.000 MHz | 716.000 MHz | 100.000 kHz | 715.43556 MHz | 18.77 dBm | -11.23 dB |
| 716.000 MHz | 716.100 MHz | 30.000 kHz | 716.00225 MHz | -39.27 dBm | -26.27 dB |
| 716.100 MHz | 725.000 MHz | 100.000 kHz | 716.12223 MHz | -41.88 dBm | -28.88 dB |

Date: 30.JUN.2022 17:07:04

### Lowest Band Edge / Full RB

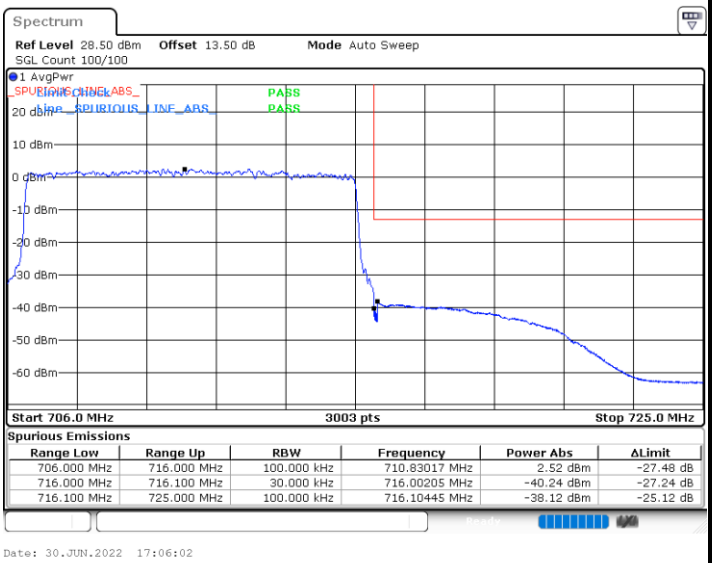



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 690.000 MHz | 698.900 MHz | 100.000 kHz | 698.37987 MHz | -34.20 dBm | -21.20 dB |
| 698.900 MHz | 699.000 MHz | 30.000 kHz | 698.98107 MHz | -37.62 dBm | -24.62 dB |
| 699.000 MHz | 709.000 MHz | 100.000 kHz | 701.27273 MHz | 2.22 dBm | -27.78 dB |

Date: 30.JUN.2022 16:55:47

### Highest Band Edge / Full RB




Spurious Emissions

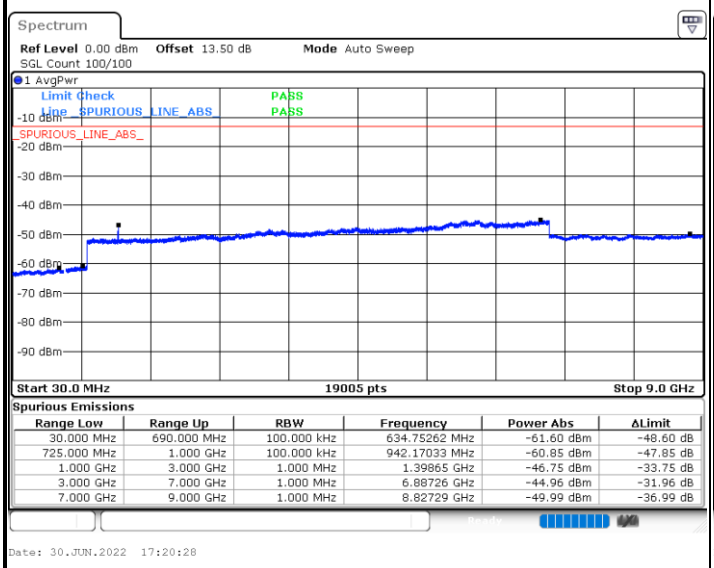
| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 706.000 MHz | 716.000 MHz | 100.000 kHz | 710.83017 MHz | 2.52 dBm | -27.48 dB |
| 716.000 MHz | 716.100 MHz | 30.000 kHz | 716.00205 MHz | -40.24 dBm | -27.24 dB |
| 716.100 MHz | 725.000 MHz | 100.000 kHz | 716.10445 MHz | -38.12 dBm | -25.12 dB |

Date: 30.JUN.2022 17:06:02

# Conducted Spurious Emission

## LTE Band 12 / 1.4MHz

### Lowest Channel / QPSK

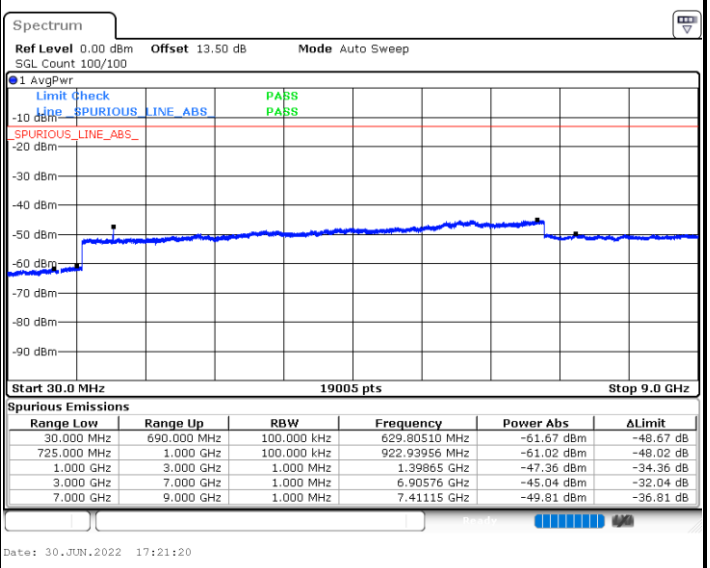



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 634.75262 MHz | -61.60 dBm | -48.60 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 942.17033 MHz | -60.85 dBm | -47.85 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.39865 GHz | -46.75 dBm | -33.75 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.88726 GHz | -44.96 dBm | -31.96 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.82729 GHz | -49.99 dBm | -36.99 dB |

Date: 30.JUN.2022 17:20:28

### Lowest Channel / 16QAM

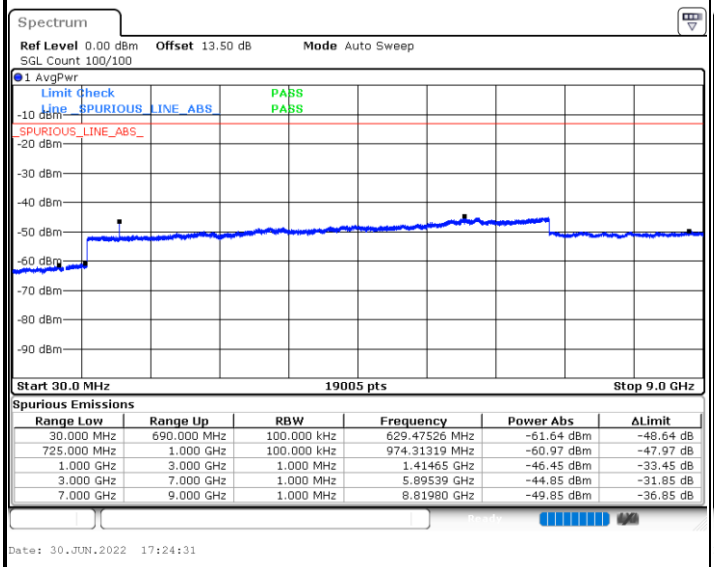



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 629.80510 MHz | -61.67 dBm | -48.67 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 922.93956 MHz | -61.02 dBm | -48.02 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.39865 GHz | -47.36 dBm | -34.36 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.90576 GHz | -45.04 dBm | -32.04 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.41115 GHz | -49.81 dBm | -36.81 dB |

Date: 30.JUN.2022 17:21:20

### Middle Channel / QPSK

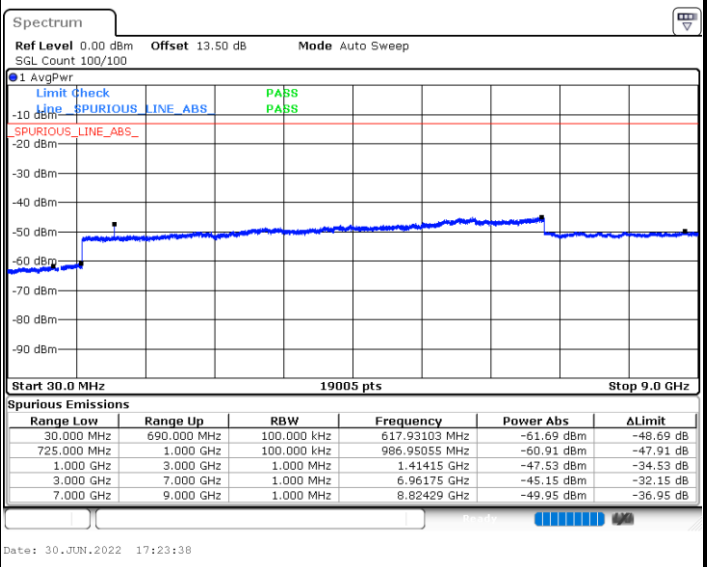



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 629.47526 MHz | -61.64 dBm | -48.64 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 974.31319 MHz | -60.97 dBm | -47.97 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.41465 GHz | -46.45 dBm | -33.45 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 5.89539 GHz | -44.85 dBm | -31.85 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.81980 GHz | -49.85 dBm | -36.85 dB |

Date: 30.JUN.2022 17:24:31

### Middle Channel / 16QAM



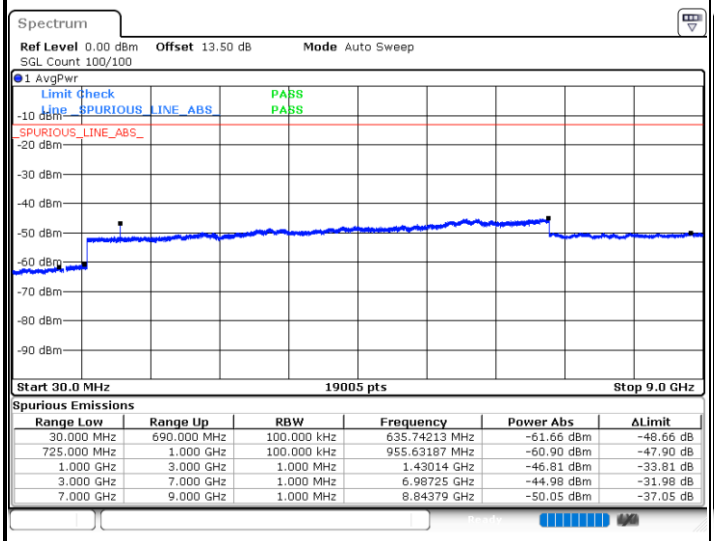

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 617.93103 MHz | -61.69 dBm | -48.69 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 986.95055 MHz | -60.91 dBm | -47.91 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.41415 GHz | -47.53 dBm | -34.53 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.96175 GHz | -45.15 dBm | -32.15 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.82429 GHz | -49.95 dBm | -36.95 dB |

Date: 30.JUN.2022 17:23:38

## LTE Band 12 / 1.4MHz

### Highest Channel / QPSK

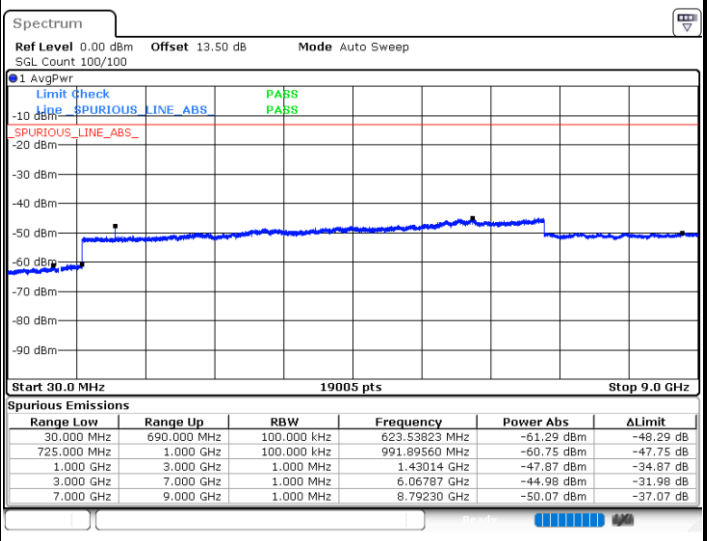



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 635.74213 MHz | -61.66 dBm | -48.66 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 955.63187 MHz | -60.90 dBm | -47.90 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.43014 GHz | -46.81 dBm | -33.81 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.98725 GHz | -44.98 dBm | -31.98 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.84379 GHz | -50.05 dBm | -37.05 dB |

Date: 30.JUN.2022 17:30:53

### Highest Channel / 16QAM



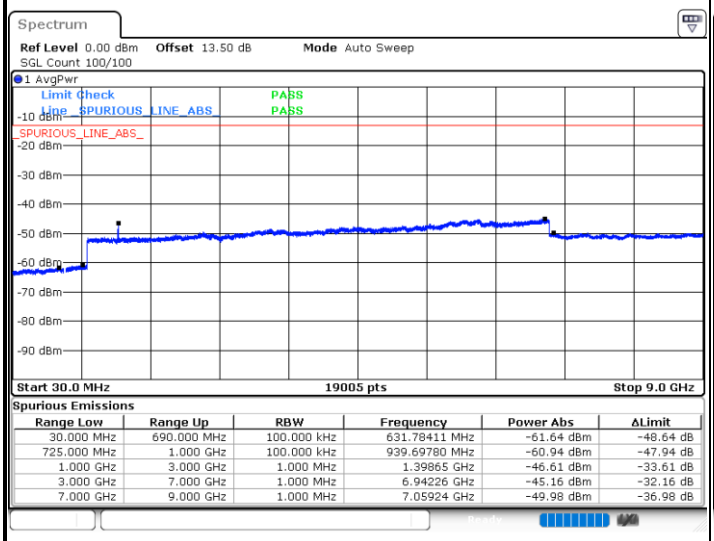

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 623.53823 MHz | -61.29 dBm | -48.29 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 991.89560 MHz | -60.75 dBm | -47.75 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.43014 GHz | -47.87 dBm | -34.87 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.06787 GHz | -44.98 dBm | -31.98 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.79230 GHz | -50.07 dBm | -37.07 dB |

Date: 30.JUN.2022 17:31:46

## LTE Band 12 / 3MHz

### Lowest Channel / QPSK

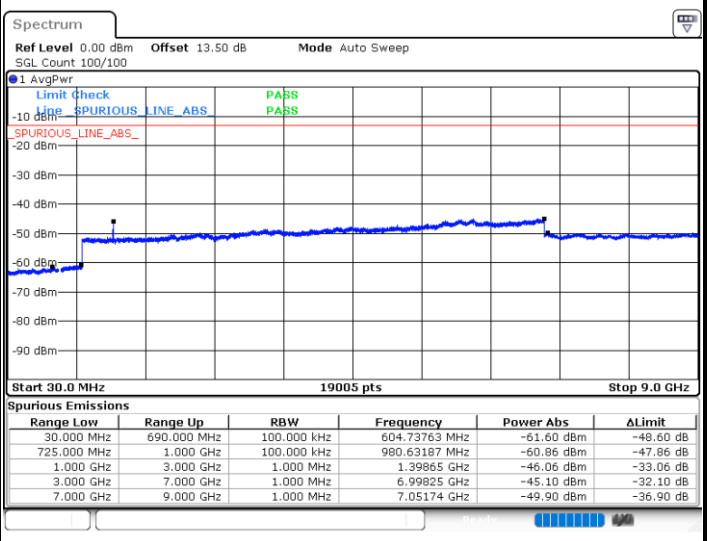



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 631.78411 MHz | -61.64 dBm | -48.64 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 939.69780 MHz | -60.94 dBm | -47.94 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.39865 GHz | -46.61 dBm | -33.61 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.94226 GHz | -45.16 dBm | -32.16 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.05924 GHz | -49.98 dBm | -36.98 dB |

Date: 30.JUN.2022 16:23:36

### Lowest Channel / 16QAM



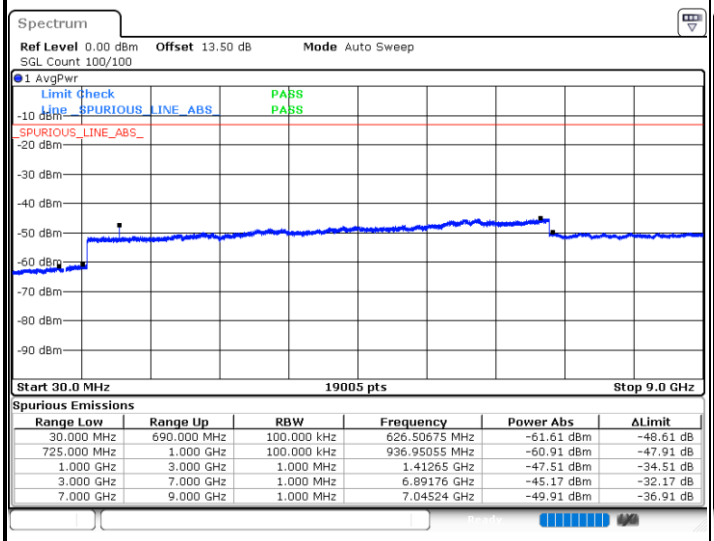

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 604.73763 MHz | -61.60 dBm | -48.60 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 980.63187 MHz | -60.86 dBm | -47.86 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.39865 GHz | -46.06 dBm | -33.06 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.99825 GHz | -45.10 dBm | -32.10 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.05174 GHz | -49.90 dBm | -36.90 dB |

Date: 30.JUN.2022 16:24:29

## LTE Band 12 / 3MHz

### Middle Channel / QPSK

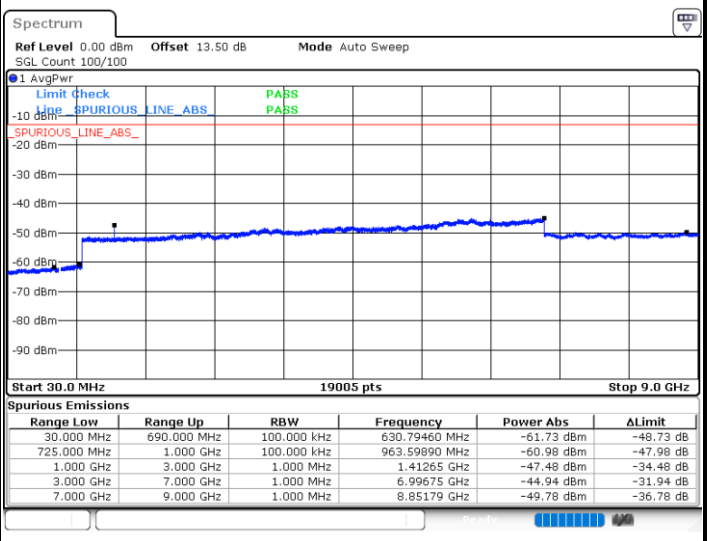



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 626.50675 MHz | -61.61 dBm | -48.61 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 936.95055 MHz | -60.91 dBm | -47.91 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.41265 GHz | -47.51 dBm | -34.51 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.89176 GHz | -45.17 dBm | -32.17 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.04524 GHz | -49.91 dBm | -36.91 dB |

Date: 30.JUN.2022 16:27:38

### Middle Channel / 16QAM

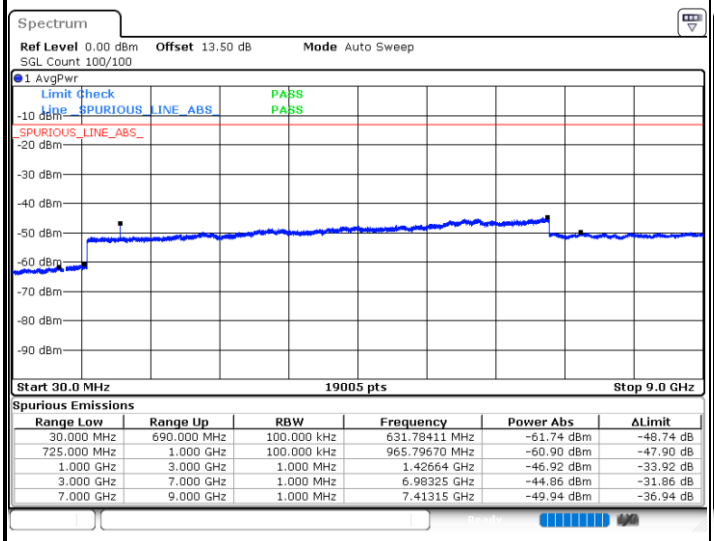



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 630.79460 MHz | -61.73 dBm | -48.73 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 963.59890 MHz | -60.98 dBm | -47.98 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.41265 GHz | -47.48 dBm | -34.48 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.99675 GHz | -44.94 dBm | -31.94 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.85179 GHz | -49.78 dBm | -36.78 dB |

Date: 30.JUN.2022 16:26:46

### Highest Channel / QPSK

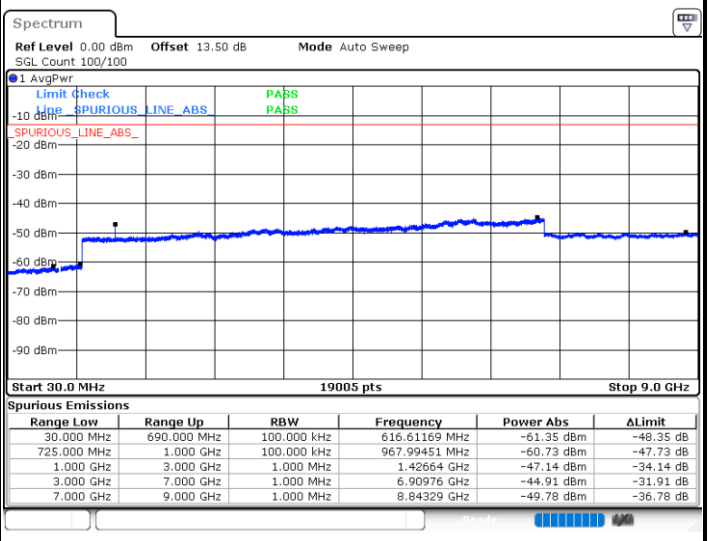



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 631.78411 MHz | -61.74 dBm | -48.74 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 965.79670 MHz | -60.90 dBm | -47.90 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.42664 GHz | -46.92 dBm | -33.92 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.98325 GHz | -44.86 dBm | -31.86 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.41315 GHz | -49.94 dBm | -36.94 dB |

Date: 30.JUN.2022 16:34:00

### Highest Channel / 16QAM



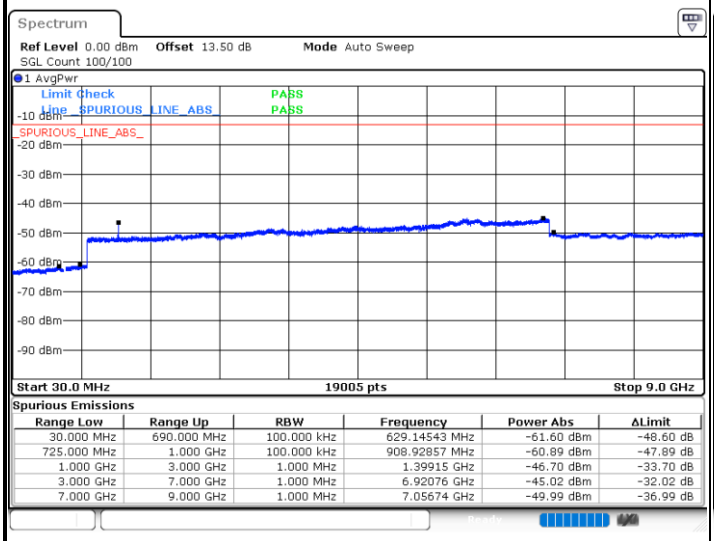

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 616.61169 MHz | -61.35 dBm | -48.35 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 967.99451 MHz | -60.73 dBm | -47.73 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.42664 GHz | -47.14 dBm | -34.14 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.90976 GHz | -44.91 dBm | -31.91 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.84329 GHz | -49.78 dBm | -36.78 dB |

Date: 30.JUN.2022 16:34:53

## LTE Band 12 / 5MHz

### Lowest Channel / QPSK

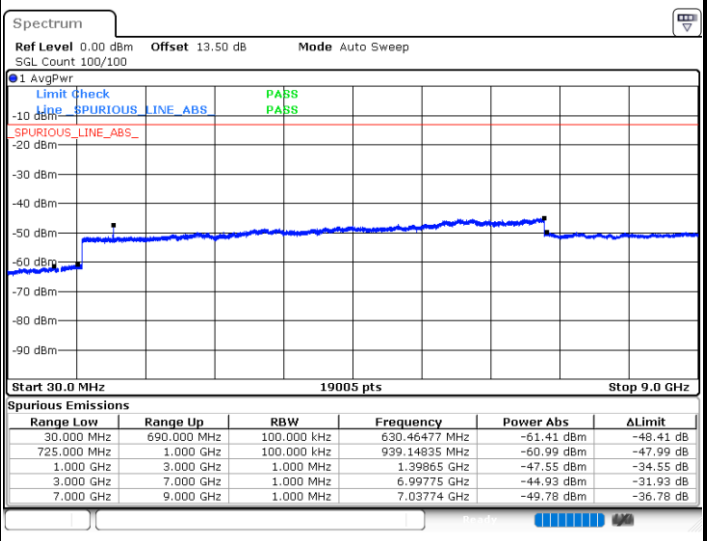



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 629.14543 MHz | -61.60 dBm | -48.60 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 908.92857 MHz | -60.89 dBm | -47.89 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.39915 GHz | -46.70 dBm | -33.70 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.92076 GHz | -45.02 dBm | -32.02 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.05674 GHz | -49.99 dBm | -36.99 dB |

Date: 30.JUN.2022 16:41:06

### Lowest Channel / 16QAM

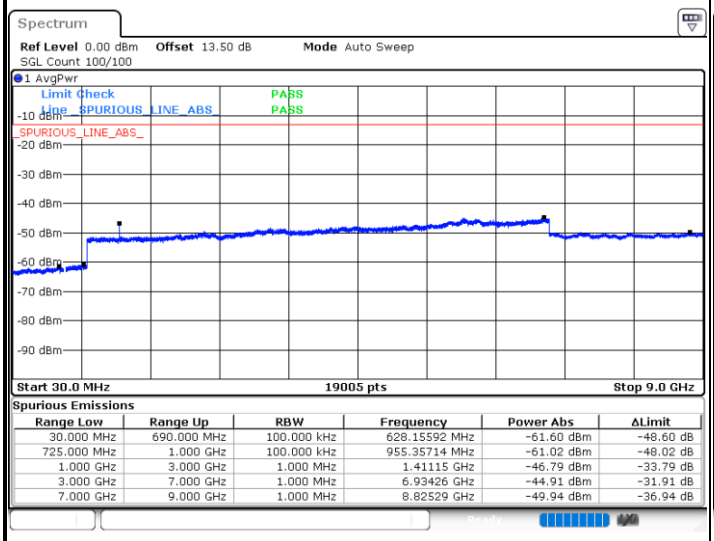



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 630.46477 MHz | -61.41 dBm | -48.41 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 939.14835 MHz | -60.99 dBm | -47.99 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.39865 GHz | -47.55 dBm | -34.55 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.99775 GHz | -44.93 dBm | -31.93 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.03774 GHz | -49.78 dBm | -36.78 dB |

Date: 30.JUN.2022 16:41:59

### Middle Channel / QPSK

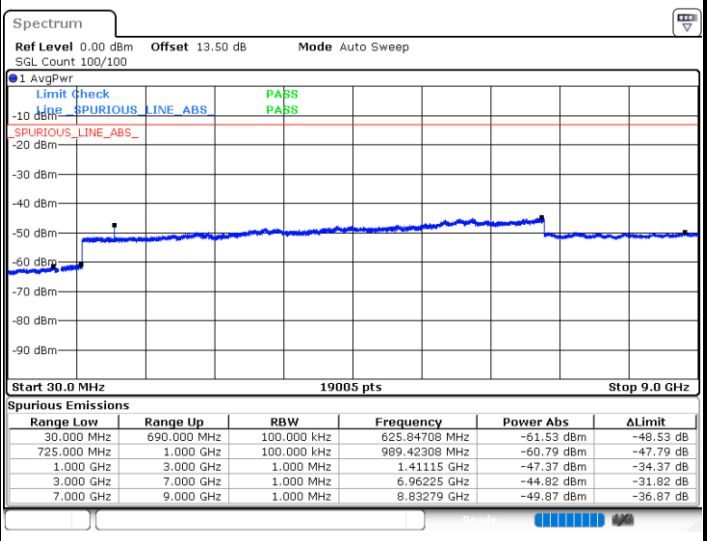



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 628.15592 MHz | -61.60 dBm | -48.60 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 955.35714 MHz | -61.02 dBm | -48.02 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.41115 GHz | -46.79 dBm | -33.79 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.93426 GHz | -44.91 dBm | -31.91 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.82529 GHz | -49.94 dBm | -36.94 dB |

Date: 30.JUN.2022 16:45:09

### Middle Channel / 16QAM



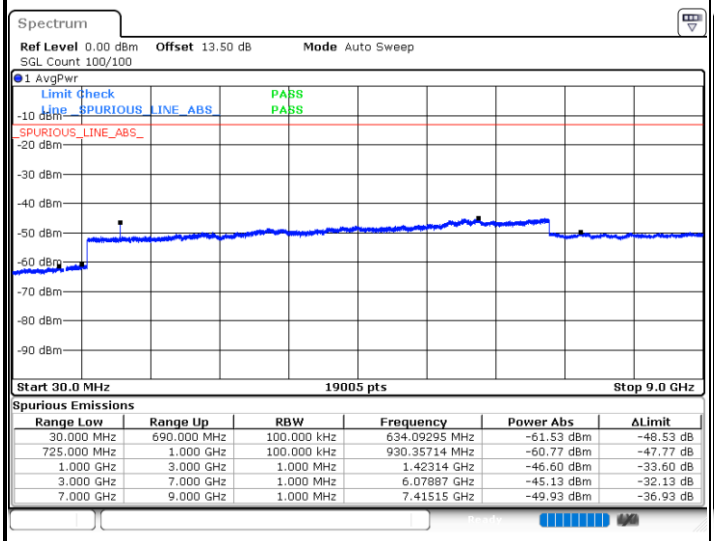

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 625.84708 MHz | -61.53 dBm | -48.53 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 989.42308 MHz | -60.79 dBm | -47.79 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.41115 GHz | -47.37 dBm | -34.37 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.96225 GHz | -44.82 dBm | -31.82 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.83279 GHz | -49.87 dBm | -36.87 dB |

Date: 30.JUN.2022 16:44:17

## LTE Band 12 / 5MHz

### Highest Channel / QPSK

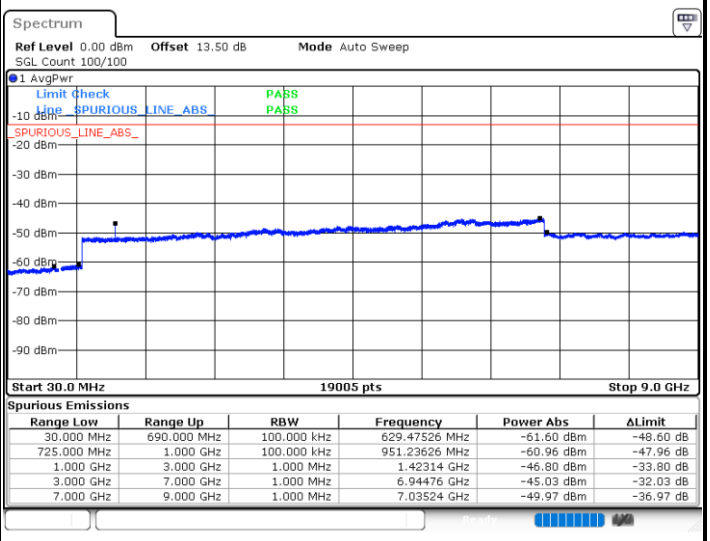



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 634.09295 MHz | -61.53 dBm | -48.53 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 930.35714 MHz | -60.77 dBm | -47.77 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.42314 GHz | -46.60 dBm | -33.60 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.07887 GHz | -45.13 dBm | -32.13 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.41515 GHz | -49.93 dBm | -36.93 dB |

Date: 30.JUN.2022 16:52:23

### Highest Channel / 16QAM



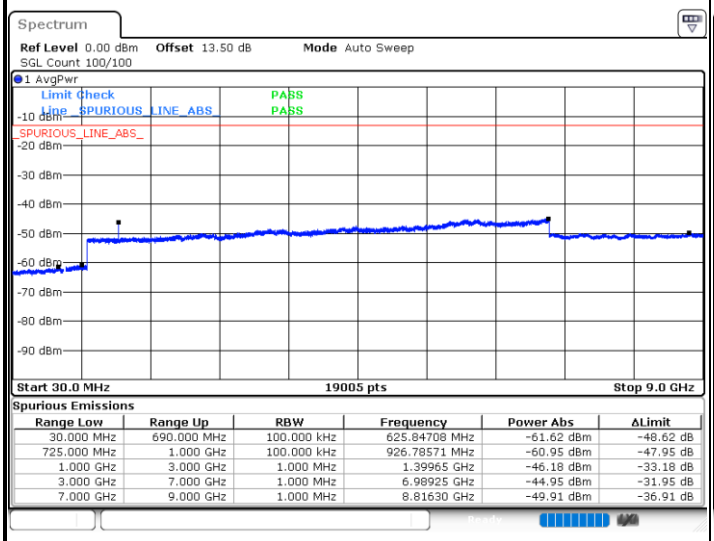

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 629.47526 MHz | -61.60 dBm | -48.60 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 951.23626 MHz | -60.96 dBm | -47.96 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.42314 GHz | -46.80 dBm | -33.80 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.94476 GHz | -45.03 dBm | -32.03 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.03524 GHz | -49.97 dBm | -36.97 dB |

Date: 30.JUN.2022 16:51:30

## LTE Band 12 / 10MHz

### Lowest Channel / QPSK




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 625.84708 MHz | -61.62 dBm | -48.62 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 926.78571 MHz | -60.95 dBm | -47.95 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.39965 GHz | -46.18 dBm | -33.18 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.98925 GHz | -44.95 dBm | -31.95 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.81630 GHz | -49.91 dBm | -36.91 dB |

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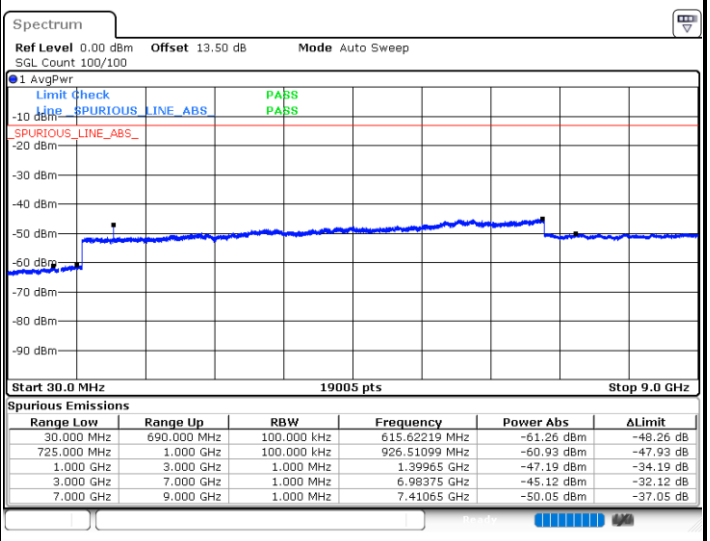
### Lowest Channel / 16QAM




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 615.62219 MHz | -61.26 dBm | -48.26 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 926.51099 MHz | -60.93 dBm | -47.93 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.39965 GHz | -47.19 dBm | -34.19 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.98375 GHz | -45.12 dBm | -32.12 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.41065 GHz | -50.05 dBm | -37.05 dB |

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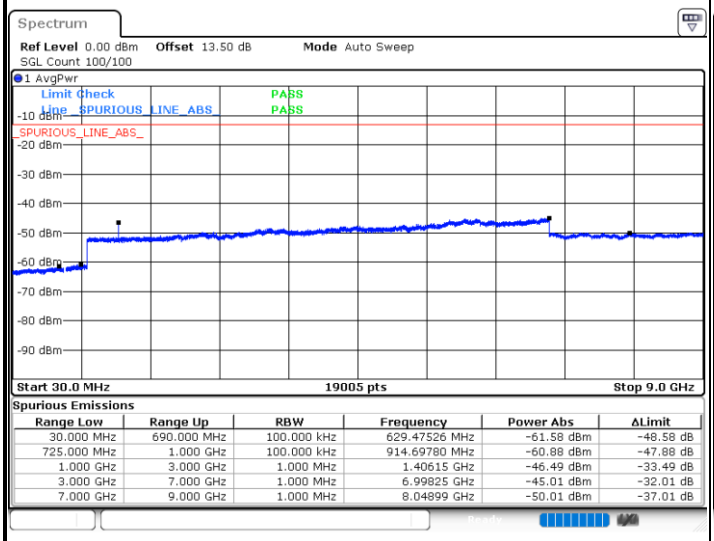
## LTE Band 12 / 10MHz

### Middle Channel / QPSK




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 629.47526 MHz | -61.58 dBm | -48.58 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 914.69780 MHz | -60.88 dBm | -47.88 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.40615 GHz | -46.49 dBm | -33.49 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.99825 GHz | -45.01 dBm | -32.01 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.04899 GHz | -50.01 dBm | -37.01 dB |

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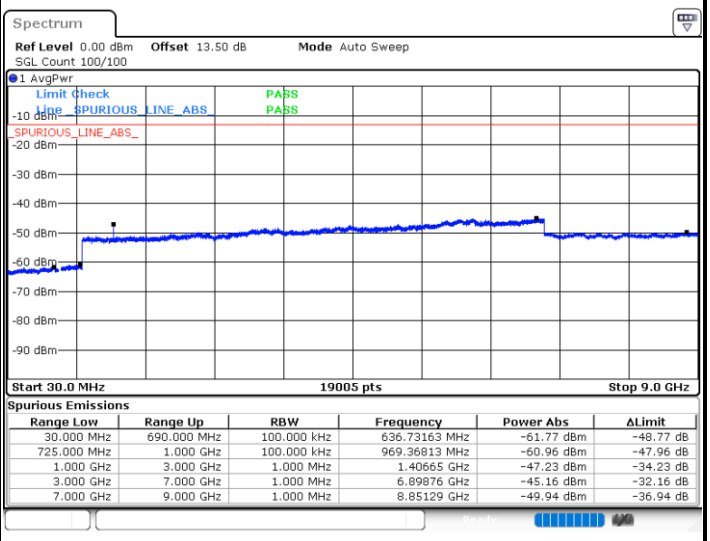
### Middle Channel / 16QAM




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 636.73163 MHz | -61.77 dBm | -48.77 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 969.36813 MHz | -60.96 dBm | -47.96 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.40665 GHz | -47.23 dBm | -34.23 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.89876 GHz | -45.16 dBm | -32.16 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.85129 GHz | -49.94 dBm | -36.94 dB |

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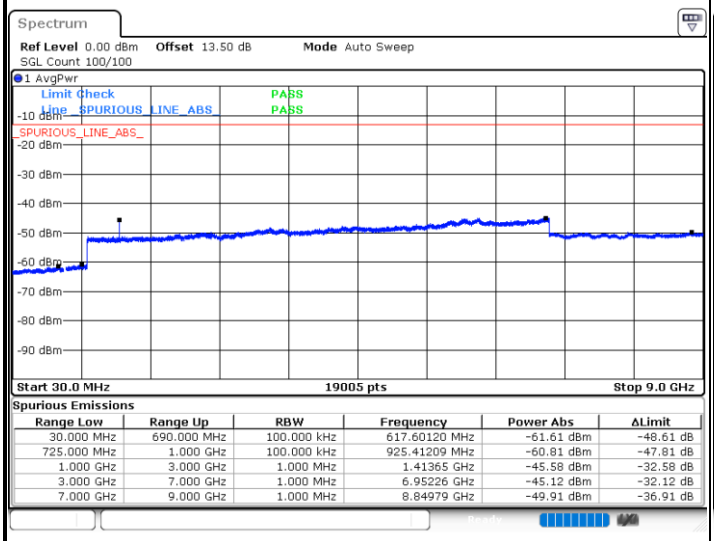
### Highest Channel / QPSK




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 617.60120 MHz | -61.61 dBm | -48.61 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 925.41209 MHz | -60.81 dBm | -47.81 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.41365 GHz | -45.58 dBm | -32.58 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.95226 GHz | -45.12 dBm | -32.12 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 8.84979 GHz | -49.91 dBm | -36.91 dB |

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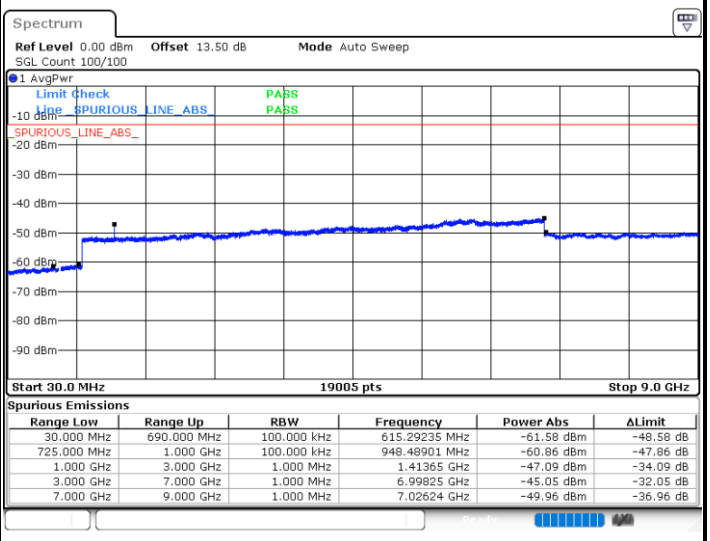
### Highest Channel / 16QAM




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 690.000 MHz | 100.000 kHz | 615.29235 MHz | -61.58 dBm | -48.58 dB |
| 725.000 MHz | 1.000 GHz | 100.000 kHz | 948.48901 MHz | -60.86 dBm | -47.86 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.41365 GHz | -47.09 dBm | -34.09 dB |
| 3.000 GHz | 7.000 GHz | 1.000 MHz | 6.99825 GHz | -45.05 dBm | -32.05 dB |
| 7.000 GHz | 9.000 GHz | 1.000 MHz | 7.02624 GHz | -49.96 dBm | -36.96 dB |

Date: 30.JUN.2022 17:14:11

# Frequency Stability

| Test Conditions | | LTE Band 12 (QPSK) / Middle Channel | Limit |
|---|---|---|---|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 70 | Normal Voltage | 0.0004 | PASS |
| 60 | Normal Voltage | 0.0015 | |
| 50 | Normal Voltage | 0.0027 | |
| 40 | Normal Voltage | 0.0017 | |
| 30 | Normal Voltage | 0.0015 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0004 | |
| 0 | Normal Voltage | 0.0004 | |
| -10 | Normal Voltage | 0.0015 | |
| -20 | Normal Voltage | 0.0023 | |
| -30 | Normal Voltage | 0.0026 | |
| 20 | Maximum Voltage | 0.0004 | |
| 20 | Normal Voltage | 0.0000 | |
| 20 | Minimum Voltage | 0.0017 | |

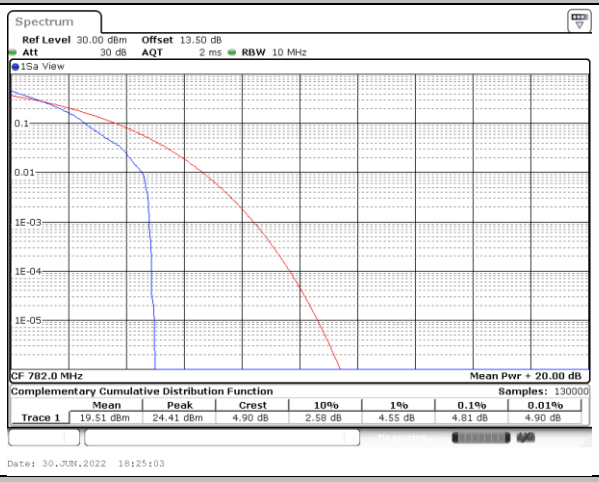
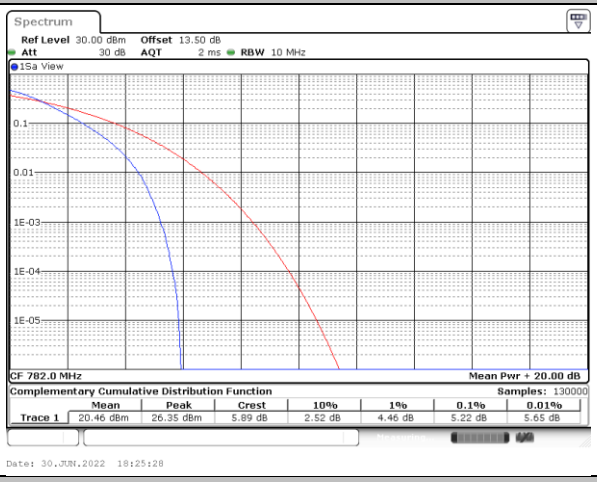
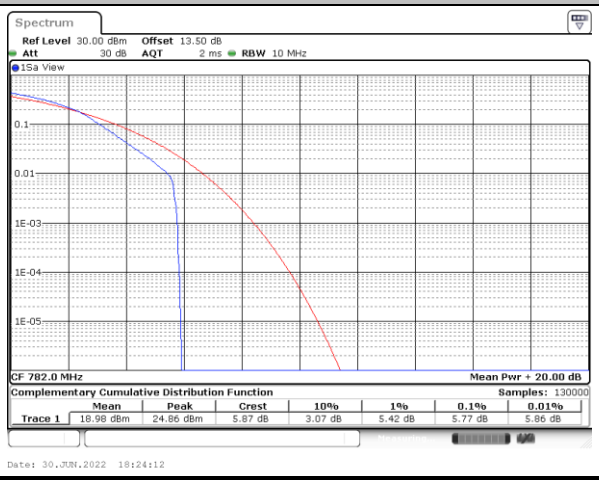
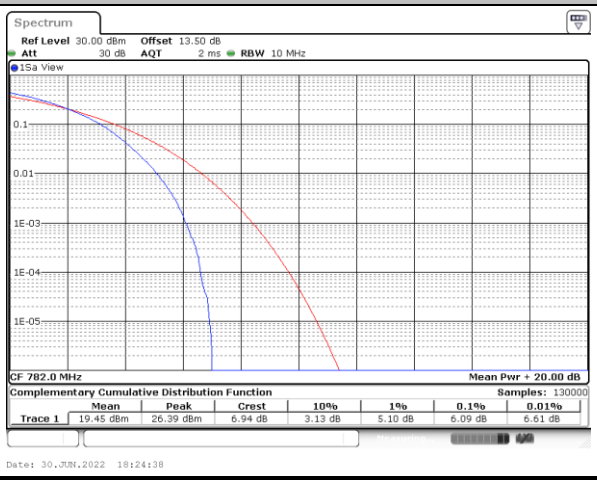
**Note:**

1. Normal Voltage =3.7 V. ; Minimum Voltage =3.4 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

# LTE Band 13

## Peak-to-Average Ratio

| Mode | LTE Band 13 / 10MHz | | | | |
|---|---|---|---|---|---|
| Mod. | QPSK | | 16QAM | | Limit: 13dB |
| RB Size | 1RB | Full RB | 1RB | Full RB | Result |
| Lowest CH | - | - | - | - | PASS |
| Middle CH | 4.81 | 5.22 | 5.77 | 6.09 | |
| Highest CH | - | - | - | - | |

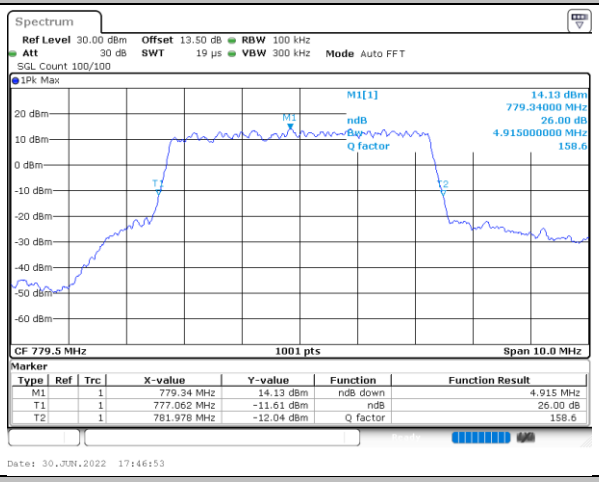
| LTE Band 13 / 10MHz / QPSK | |
|---|---|
| **Middle Channel/ 1RB** | **Middle Channel / Full RB** |
|  |  |
| **LTE Band 13 / 10MHz / 16QAM** | |
| **Middle Channel/ 1RB** | **Middle Channel / Full RB** |
|  |  |

# 26dB Bandwidth

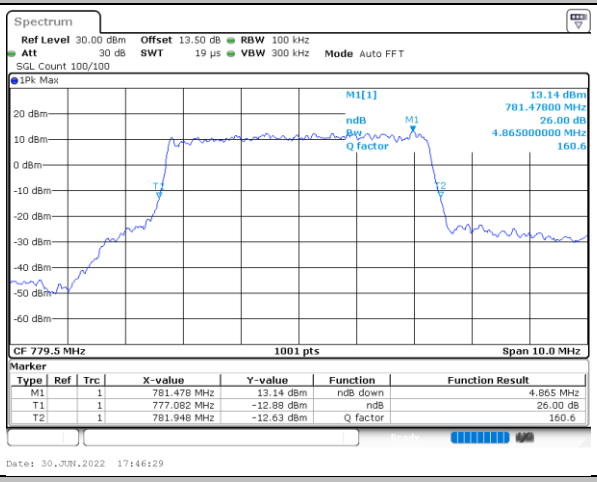
| Mode | LTE Band 13 : 26dB BW(MHz) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | - | - | - | - | 4.92 | 4.87 | - | - | - | - | - | - |
| Middle CH | - | - | - | - | 4.96 | 4.94 | 9.79 | 9.81 | - | - | - | - |
| Highest CH | - | - | - | - | 4.94 | 4.92 | - | - | - | - | - | - |

## LTE Band 13

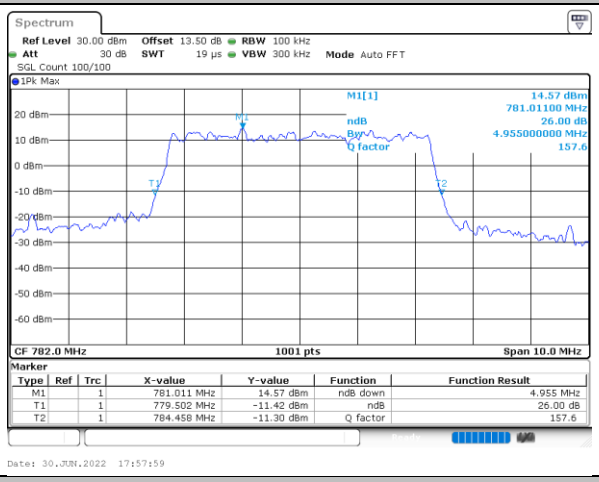
### Lowest Channel / 5MHz / QPSK



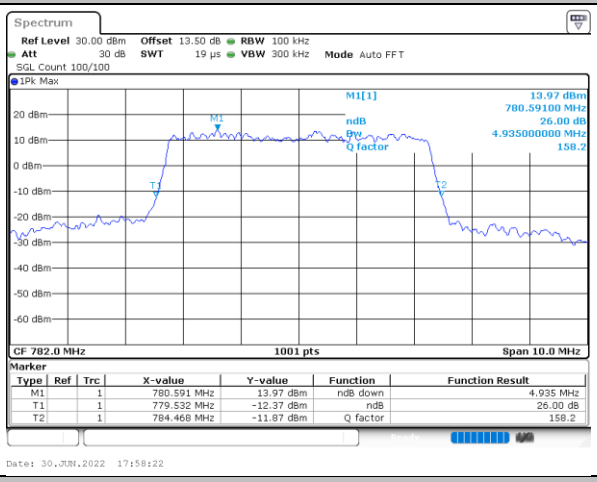

### Lowest Channel / 5MHz / 16QAM



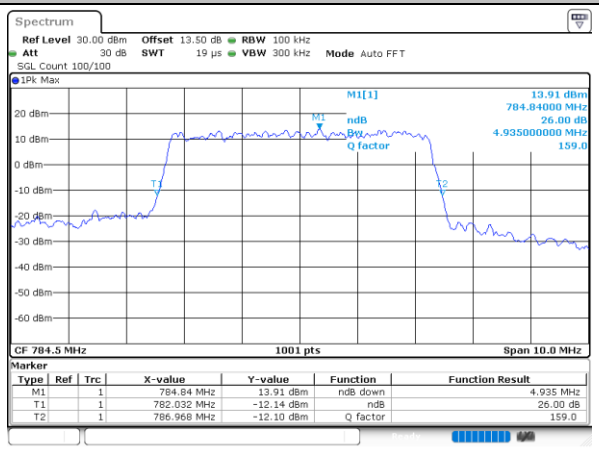

### Middle Channel / 5MHz / QPSK



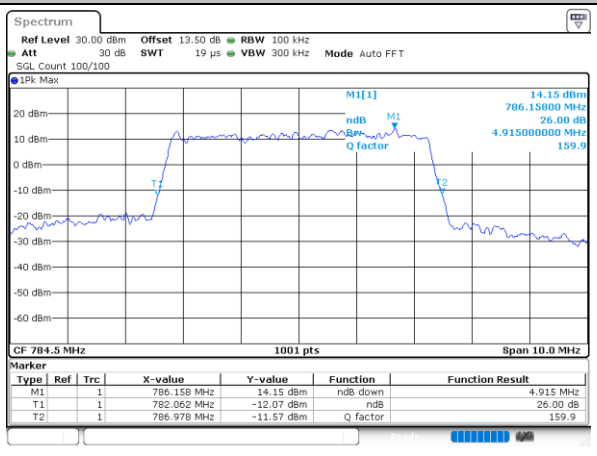

### Middle Channel / 5MHz / 16QAM

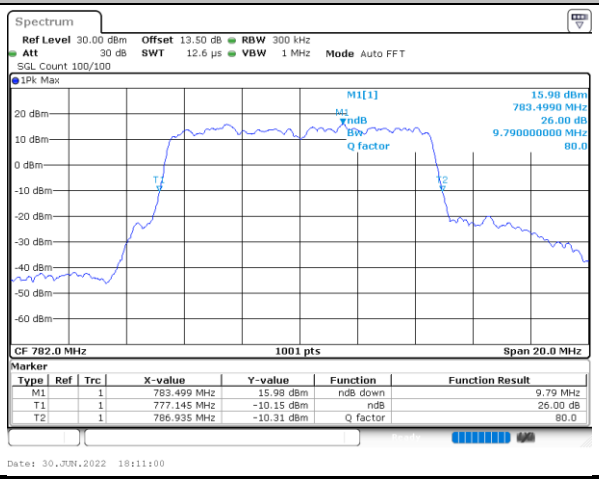
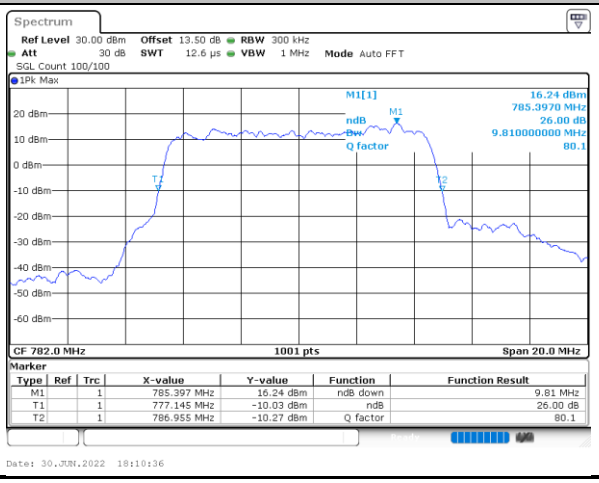



### Highest Channel / 5MHz / QPSK




### Highest Channel / 5MHz / 16QAM



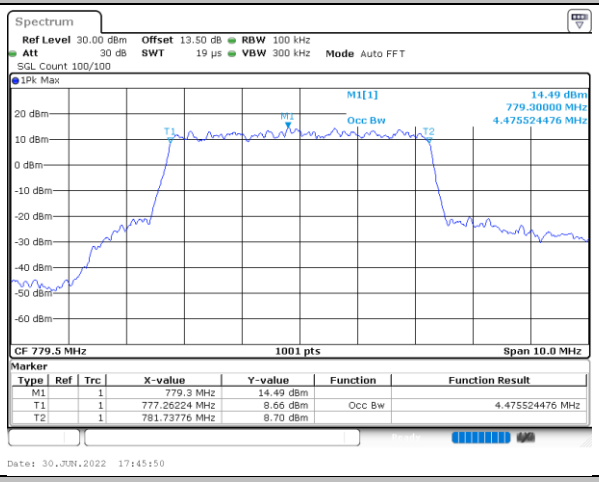
| LTE Band 13 | |
|---|---|
| **Middle Channel / 10MHz / QPSK** | **Middle Channel / 10MHz / 16QAM** |
|  |  |

# Occupied Bandwidth

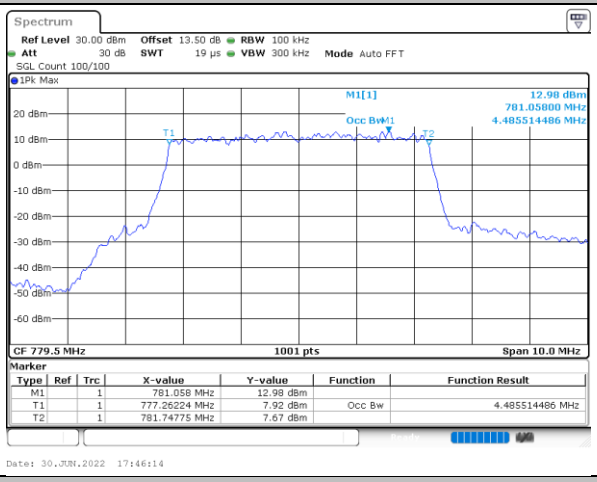
| Mode | LTE Band 13 : 99%OBW(MHz) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BW | 1.4MHz | | 3MHz | | 5MHz | | 10MHz | | 15MHz | | 20MHz | |
| Mod. | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM | QPSK | 16QAM |
| Lowest CH | - | - | - | - | 4.48 | 4.49 | - | - | - | - | - | - |
| Middle CH | - | - | - | - | 4.50 | 4.48 | 9.01 | 9.03 | - | - | - | - |
| Highest CH | - | - | - | - | 4.49 | 4.51 | - | - | - | - | - | - |

## LTE Band 13

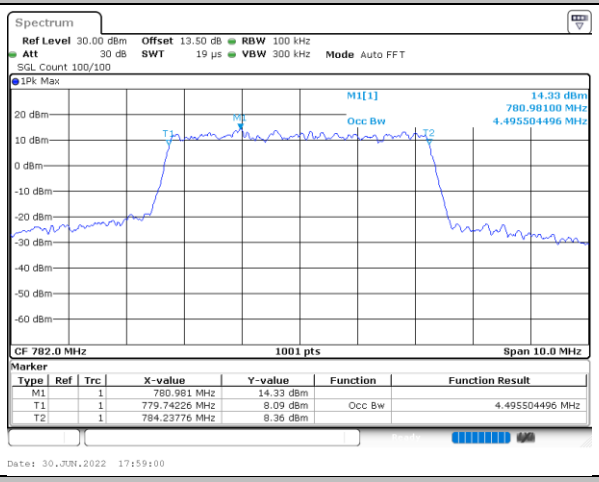
### Lowest Channel / 5MHz / QPSK



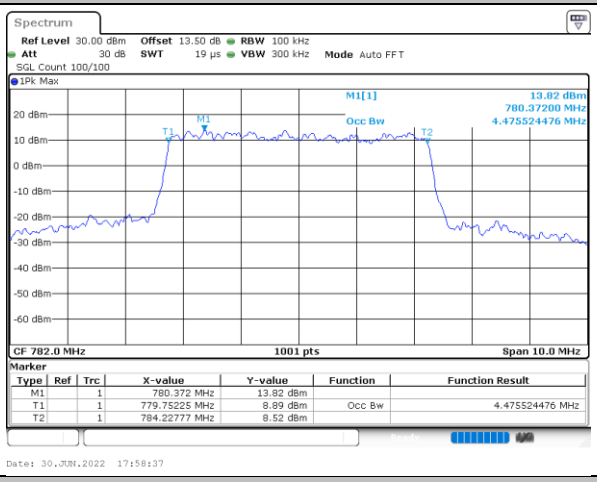

### Lowest Channel / 5MHz / 16QAM



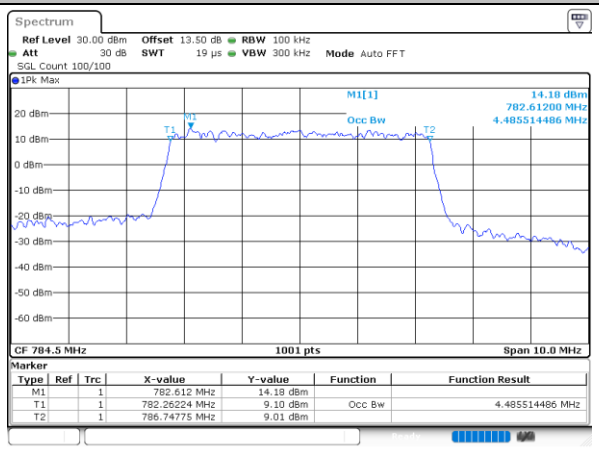

### Middle Channel / 5MHz / QPSK



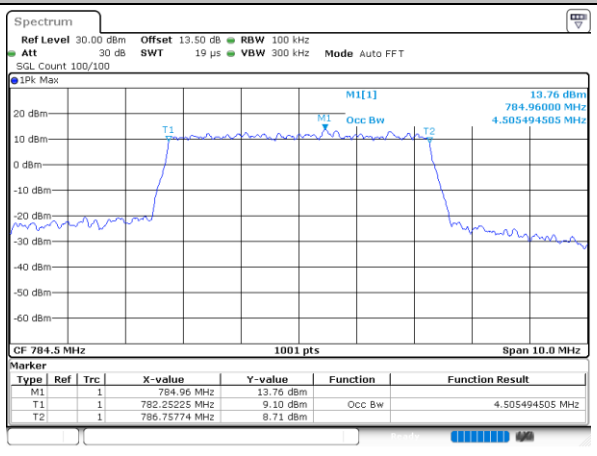

### Middle Channel / 5MHz / 16QAM

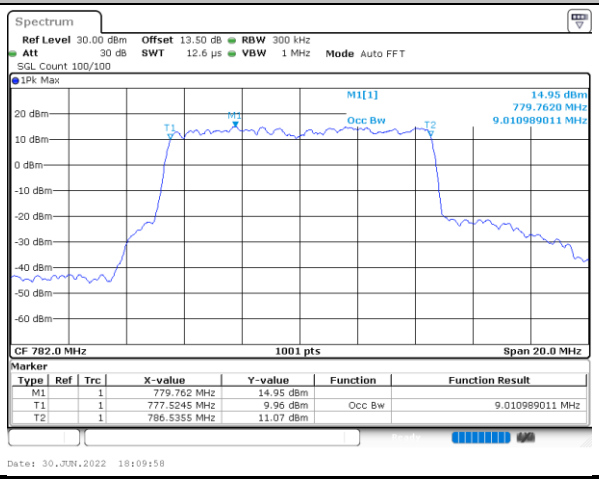
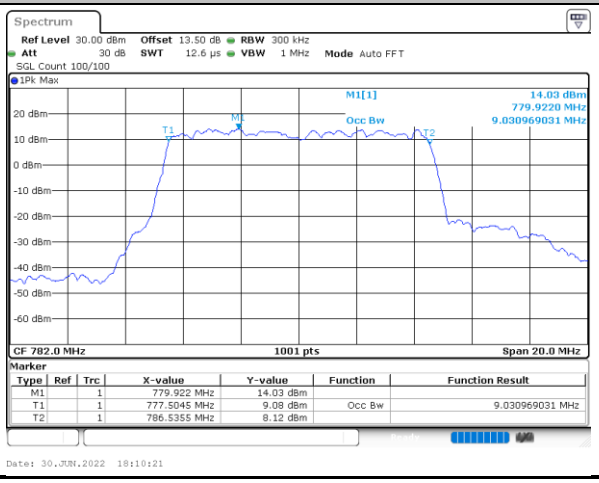



### Highest Channel / 5MHz / QPSK




### Highest Channel / 5MHz / 16QAM

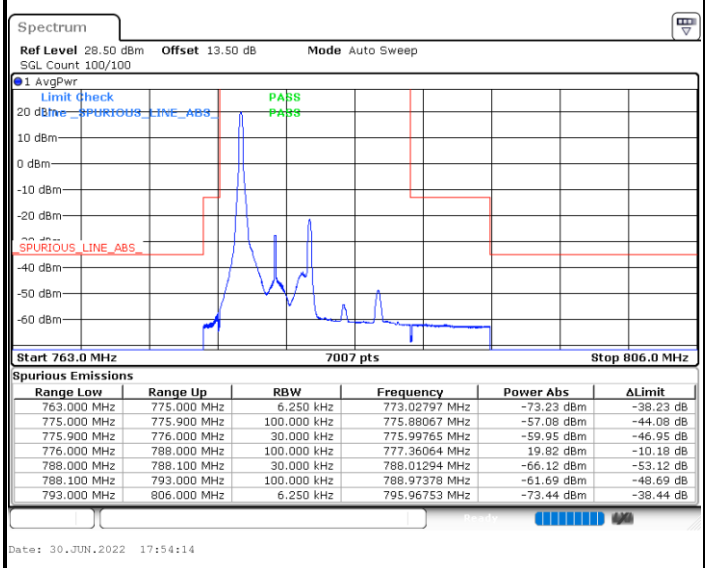


| LTE Band 13 | |
|---|---|
| **Middle Channel / 10MHz / QPSK** | **Middle Channel / 10MHz / 16QAM** |
|  |  |

# Conducted Band Edge

## LTE Band 13 / 5MHz / QPSK

### Lowest Band Edge / 1 RB




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 773.02797 MHz | -73.23 dBm | -38.23 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.88067 MHz | -57.08 dBm | -44.08 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.99765 MHz | -59.95 dBm | -46.95 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 777.36064 MHz | 19.82 dBm | -10.18 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.01294 MHz | -66.12 dBm | -53.12 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.97378 MHz | -61.69 dBm | -48.69 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 795.96753 MHz | -73.44 dBm | -38.44 dB |

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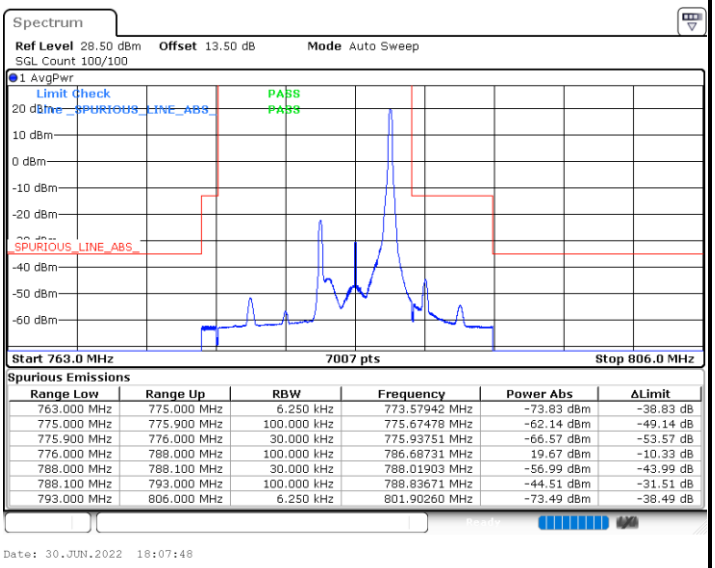
### Highest Band Edge / 1 RB




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 773.57942 MHz | -73.83 dBm | -38.83 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.67478 MHz | -62.14 dBm | -49.14 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.93751 MHz | -66.57 dBm | -53.57 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 786.68731 MHz | 19.67 dBm | -10.33 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.01903 MHz | -56.99 dBm | -43.99 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.83671 MHz | -44.51 dBm | -31.51 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 801.90260 MHz | -73.49 dBm | -38.49 dB |

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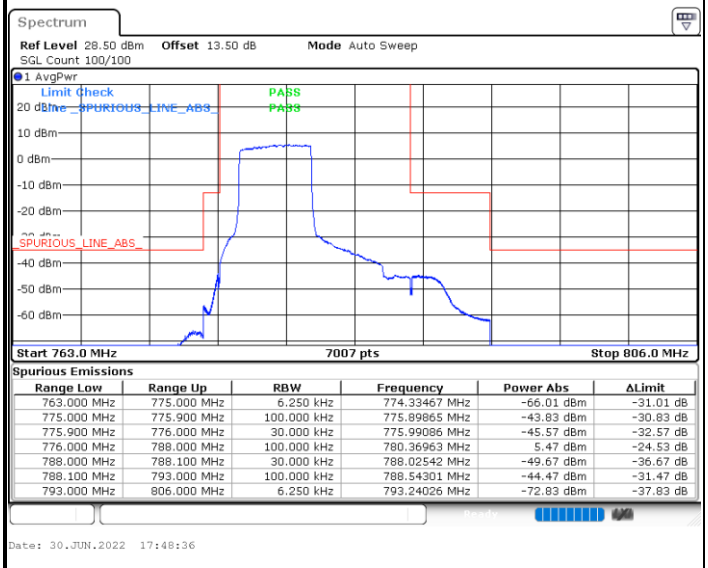
### Lowest Band Edge / Full RB

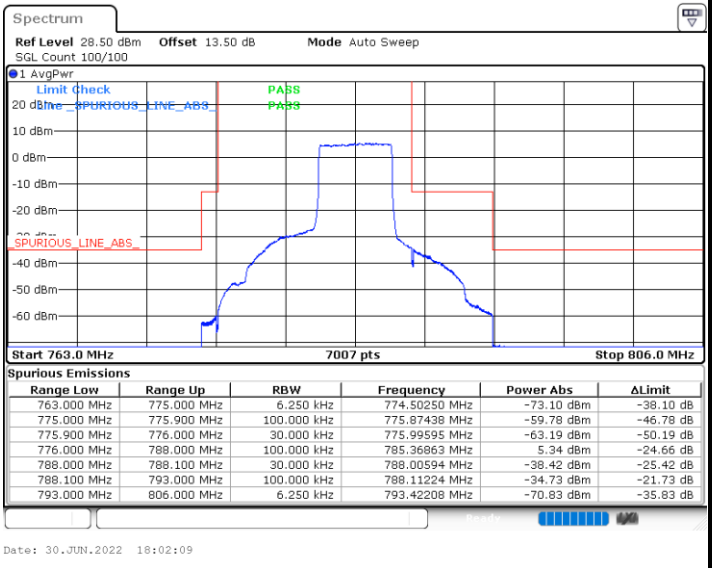



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 774.33467 MHz | -66.01 dBm | -31.01 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.89865 MHz | -43.83 dBm | -30.83 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.99086 MHz | -45.57 dBm | -32.57 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 780.36963 MHz | 5.47 dBm | -24.53 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.02542 MHz | -49.67 dBm | -36.67 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.54301 MHz | -44.47 dBm | -31.47 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 793.24026 MHz | -72.83 dBm | -37.83 dB |

Date: 30.JUN.2022 17:48:36

### Highest Band Edge / Full RB



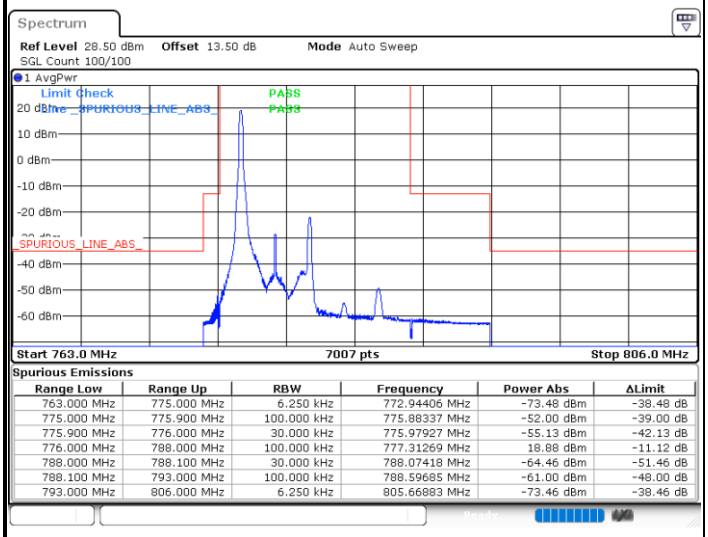

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 774.50250 MHz | -73.10 dBm | -38.10 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.87438 MHz | -59.78 dBm | -46.78 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.99595 MHz | -63.19 dBm | -50.19 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 785.36863 MHz | 5.34 dBm | -24.66 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.00594 MHz | -38.42 dBm | -25.42 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.11224 MHz | -34.73 dBm | -21.73 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 793.42208 MHz | -70.83 dBm | -35.83 dB |

Date: 30.JUN.2022 18:02:09

## LTE Band 13 / 5MHz / 16QAM

### Lowest Band Edge /1 RB

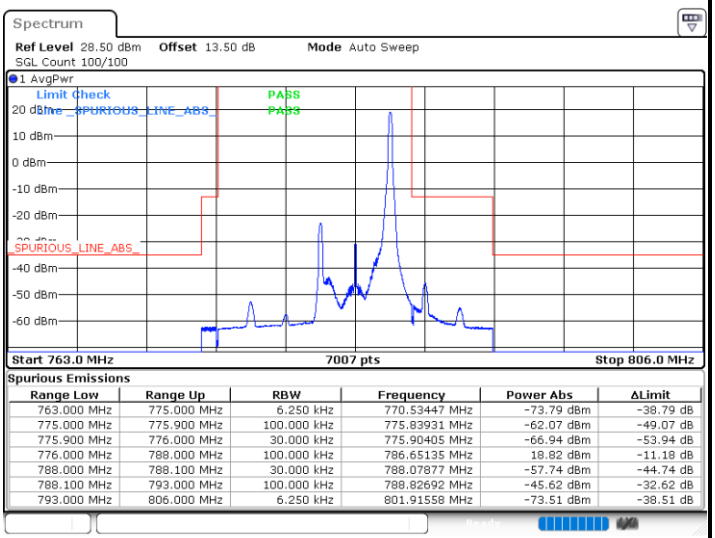



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 772.94406 MHz | -73.48 dBm | -38.48 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.88337 MHz | -52.00 dBm | -39.00 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.97927 MHz | -55.13 dBm | -42.13 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 777.31269 MHz | 18.88 dBm | -11.12 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.07418 MHz | -64.46 dBm | -51.46 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.59685 MHz | -61.00 dBm | -48.00 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 805.66883 MHz | -73.46 dBm | -38.46 dB |

Date: 30.JUN.2022 17:52:21

### Highest Band Edge / 1 RB

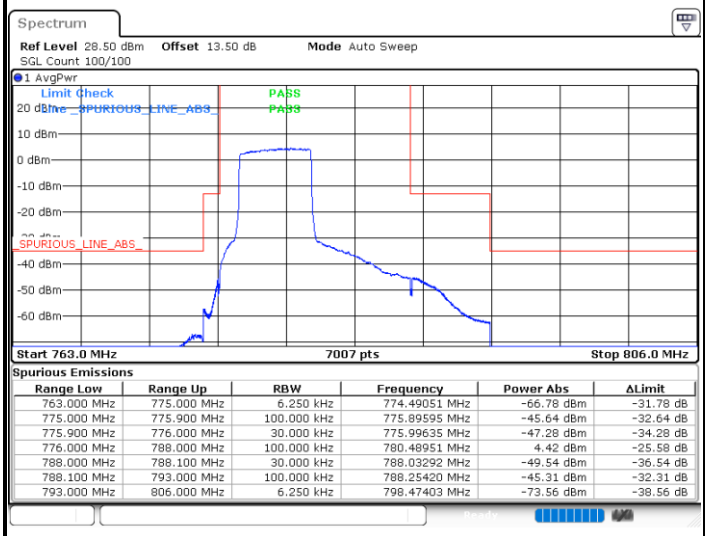



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 770.53447 MHz | -73.79 dBm | -38.79 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.83931 MHz | -62.07 dBm | -49.07 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.90405 MHz | -66.94 dBm | -53.94 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 786.65135 MHz | 18.82 dBm | -11.18 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.07877 MHz | -57.74 dBm | -44.74 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.82692 MHz | -45.62 dBm | -32.62 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 801.91558 MHz | -73.51 dBm | -38.51 dB |

Date: 30.JUN.2022 18:05:55

### Lowest Band Edge / Full RB

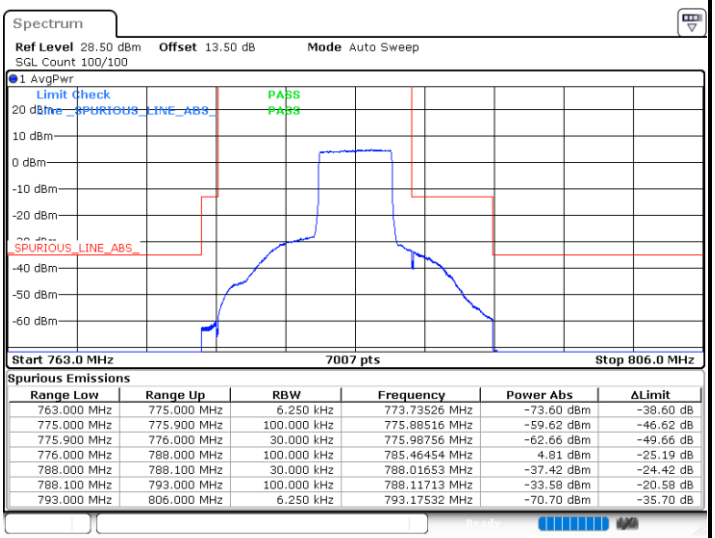



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 774.49051 MHz | -66.78 dBm | -31.78 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.89595 MHz | -45.64 dBm | -32.64 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.99635 MHz | -47.28 dBm | -34.28 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 780.48951 MHz | 4.42 dBm | -25.58 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.03292 MHz | -49.54 dBm | -36.54 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.25420 MHz | -45.31 dBm | -32.31 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 798.47403 MHz | -73.56 dBm | -38.56 dB |

Date: 30.JUN.2022 17:50:29

### Highest Band Edge / Full RB



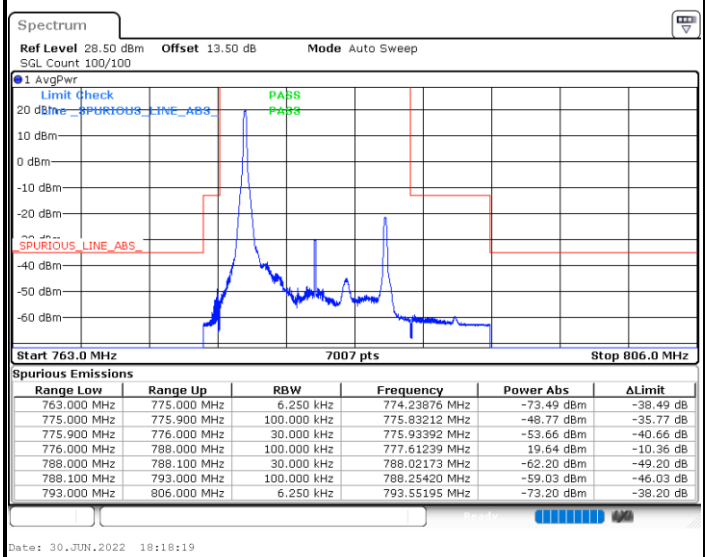

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 773.73526 MHz | -73.60 dBm | -38.60 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.88516 MHz | -59.62 dBm | -46.62 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.98756 MHz | -62.66 dBm | -49.66 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 785.46454 MHz | 4.81 dBm | -25.19 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.01653 MHz | -37.42 dBm | -24.42 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.11713 MHz | -33.58 dBm | -20.58 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 793.17532 MHz | -70.70 dBm | -35.70 dB |

Date: 30.JUN.2022 18:04:02

## LTE Band 13 / 10MHz / QPSK

### Lowest Band Edge / 1 RB

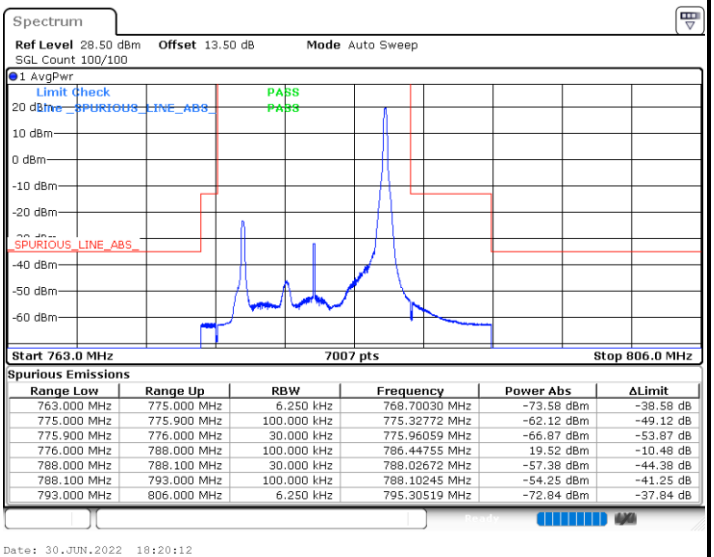



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 774.23876 MHz | -73.49 dBm | -38.49 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.83212 MHz | -48.77 dBm | -35.77 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.93392 MHz | -53.66 dBm | -40.66 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 777.61239 MHz | 19.64 dBm | -10.36 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.02173 MHz | -62.20 dBm | -49.20 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.25420 MHz | -59.03 dBm | -46.03 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 793.55195 MHz | -73.20 dBm | -38.20 dB |

Date: 30.JUN.2022 18:18:19

### Highest Band Edge / 1 RB

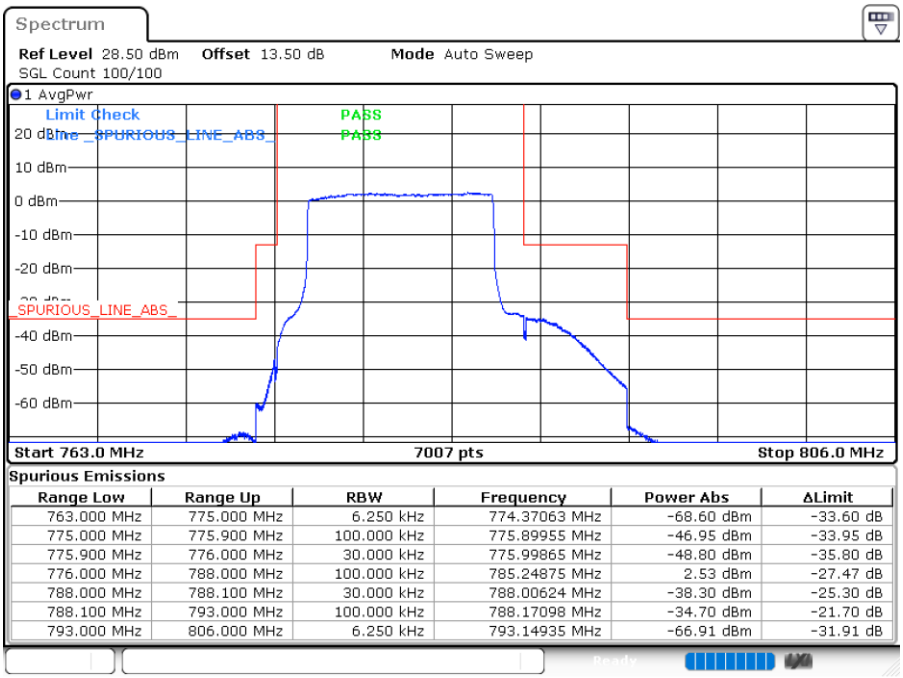



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 768.70030 MHz | -73.58 dBm | -38.58 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.32772 MHz | -62.12 dBm | -49.12 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.96059 MHz | -66.87 dBm | -53.87 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 786.44755 MHz | 19.52 dBm | -10.48 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.02672 MHz | -57.38 dBm | -44.38 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.10245 MHz | -54.25 dBm | -41.25 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 795.30519 MHz | -72.84 dBm | -37.84 dB |

Date: 30.JUN.2022 18:20:12

### Band Edge / Full RB



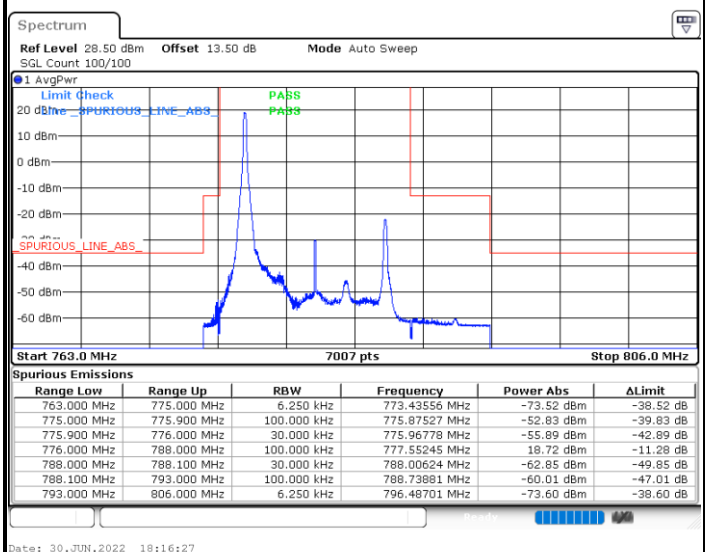

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 774.37063 MHz | -68.60 dBm | -33.60 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.89955 MHz | -46.95 dBm | -33.95 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.99865 MHz | -48.80 dBm | -35.80 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 785.24875 MHz | 2.53 dBm | -27.47 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.00624 MHz | -38.30 dBm | -25.30 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.17098 MHz | -34.70 dBm | -21.70 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 793.14935 MHz | -66.91 dBm | -31.91 dB |

Date: 30.JUN.2022 18:12:43

## LTE Band 13 / 10MHz / 16QAM

### Lowest Band Edge / 1 RB

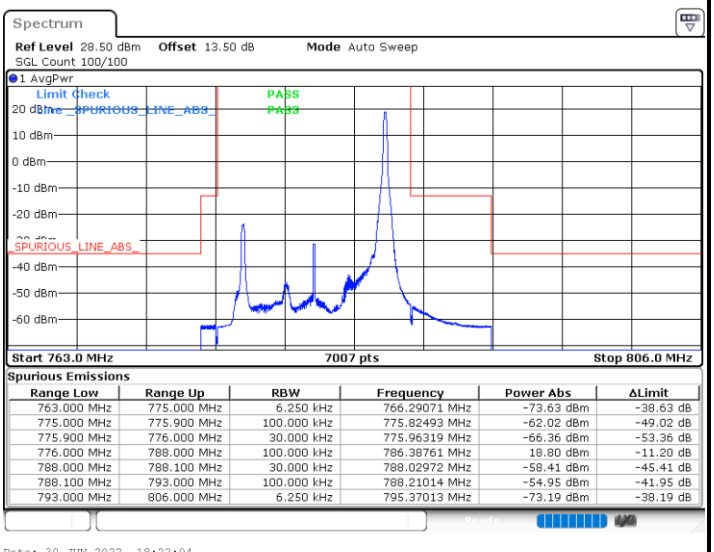



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 773.43556 MHz | -73.52 dBm | -38.52 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.87527 MHz | -52.83 dBm | -39.83 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.96778 MHz | -55.89 dBm | -42.89 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 777.55245 MHz | 18.72 dBm | -11.28 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.00624 MHz | -62.85 dBm | -49.85 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.73881 MHz | -60.01 dBm | -47.01 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 796.48701 MHz | -73.60 dBm | -38.60 dB |

Date: 30.JUN.2022 18:16:27

### Highest Band Edge / 1 RB

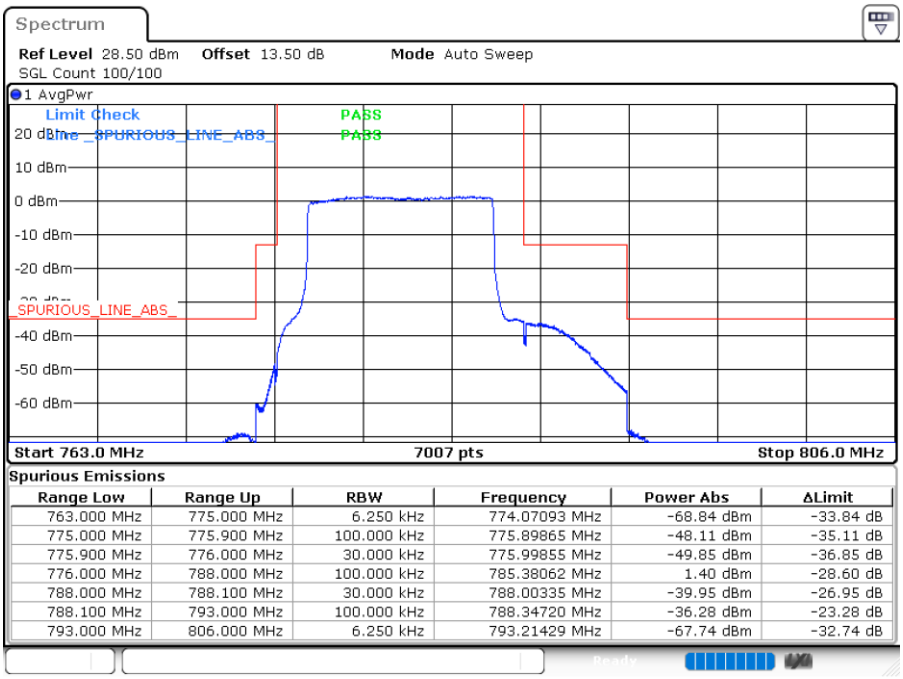



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 766.29071 MHz | -73.63 dBm | -38.63 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.82493 MHz | -62.02 dBm | -49.02 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.96319 MHz | -66.36 dBm | -53.36 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 786.38761 MHz | 18.80 dBm | -11.20 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.02972 MHz | -58.41 dBm | -45.41 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.21014 MHz | -54.95 dBm | -41.95 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 795.37013 MHz | -73.19 dBm | -38.19 dB |

Date: 30.JUN.2022 18:22:04

### Band Edge / Full RB




Spurious Emissions

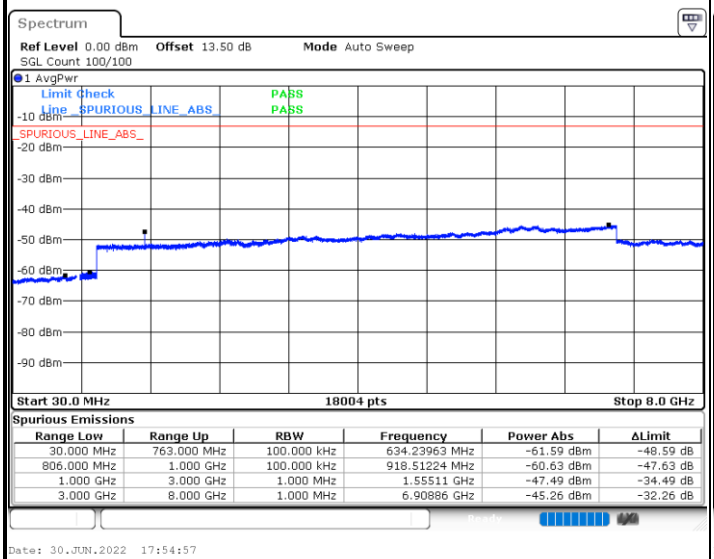
| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 763.000 MHz | 775.000 MHz | 6.250 kHz | 774.07093 MHz | -68.84 dBm | -33.84 dB |
| 775.000 MHz | 775.900 MHz | 100.000 kHz | 775.89865 MHz | -48.11 dBm | -35.11 dB |
| 775.900 MHz | 776.000 MHz | 30.000 kHz | 775.99855 MHz | -49.85 dBm | -36.85 dB |
| 776.000 MHz | 788.000 MHz | 100.000 kHz | 785.38062 MHz | 1.40 dBm | -28.60 dB |
| 788.000 MHz | 788.100 MHz | 30.000 kHz | 788.00335 MHz | -39.95 dBm | -26.95 dB |
| 788.100 MHz | 793.000 MHz | 100.000 kHz | 788.34720 MHz | -36.28 dBm | -23.28 dB |
| 793.000 MHz | 806.000 MHz | 6.250 kHz | 793.21429 MHz | -67.74 dBm | -32.74 dB |

Date: 30.JUN.2022 18:14:35

# Conducted Spurious Emission

## LTE Band 13 / 5MHz

### Lowest Channel / QPSK

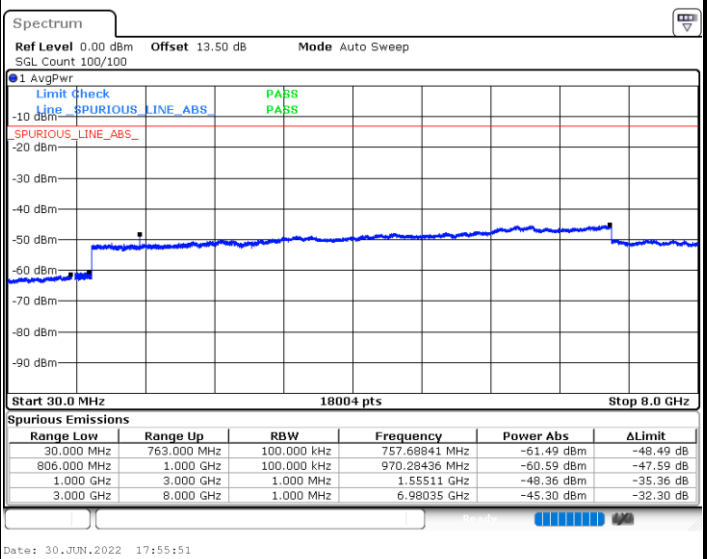



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 634.23963 MHz | -61.59 dBm | -48.59 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 918.51224 MHz | -60.63 dBm | -47.63 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.55511 GHz | -47.49 dBm | -34.49 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.90886 GHz | -45.26 dBm | -32.26 dB |

Date: 30.JUN.2022 17:54:57

### Lowest Channel / 16QAM

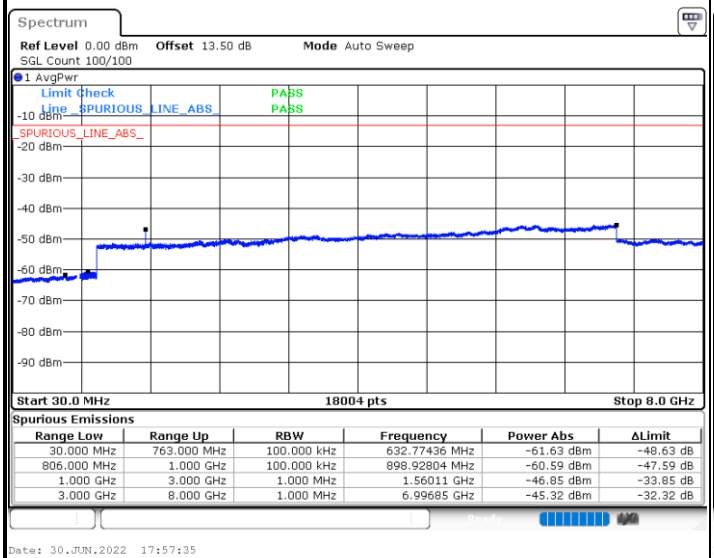



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 757.68841 MHz | -61.49 dBm | -48.49 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 970.28436 MHz | -60.59 dBm | -47.59 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.55511 GHz | -48.36 dBm | -35.36 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.98035 GHz | -45.30 dBm | -32.30 dB |

Date: 30.JUN.2022 17:55:51

### Middle Channel / QPSK

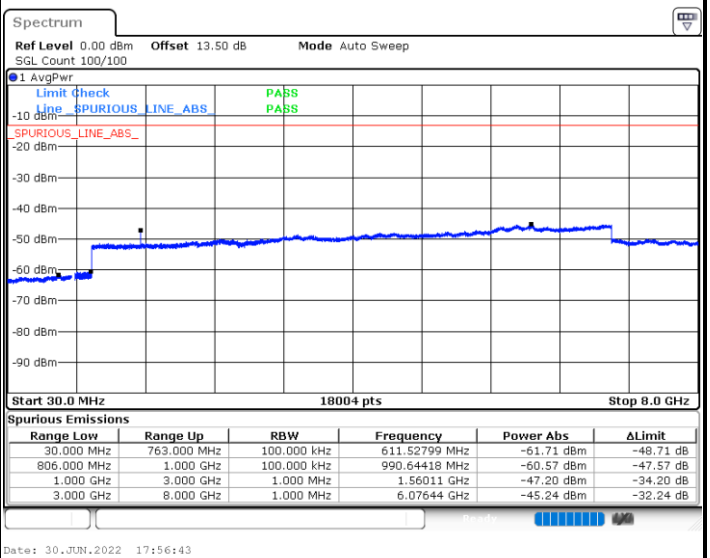



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 632.77436 MHz | -61.63 dBm | -48.63 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 898.92804 MHz | -60.59 dBm | -47.59 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.56011 GHz | -46.85 dBm | -33.85 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.99685 GHz | -45.32 dBm | -32.32 dB |

Date: 30.JUN.2022 17:57:35

### Middle Channel / 16QAM



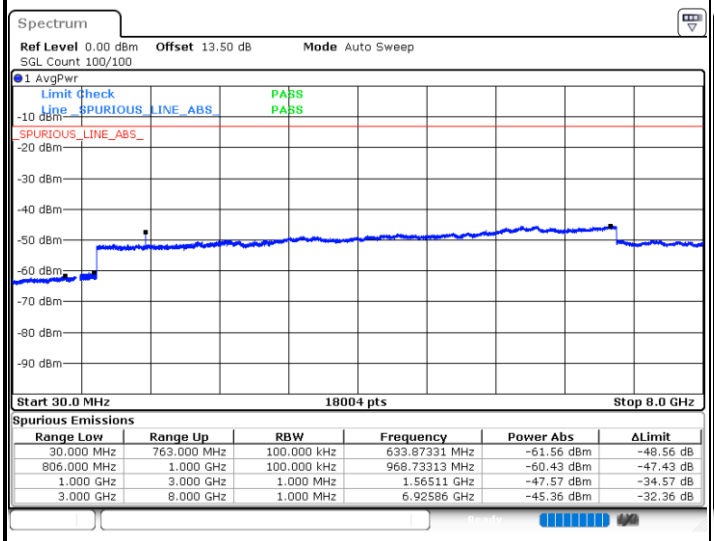

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 611.52799 MHz | -61.71 dBm | -48.71 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 990.64418 MHz | -60.57 dBm | -47.57 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.56011 GHz | -47.20 dBm | -34.20 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.07644 GHz | -45.24 dBm | -32.24 dB |

Date: 30.JUN.2022 17:56:43

## LTE Band 13 / 5MHz

### Highest Channel / QPSK

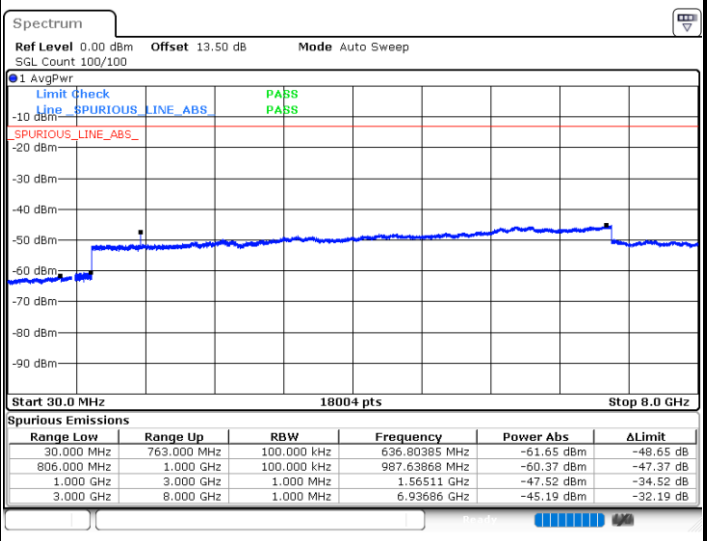



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 633.87331 MHz | -61.56 dBm | -48.56 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 968.73313 MHz | -60.43 dBm | -47.43 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.56511 GHz | -47.57 dBm | -34.57 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.92586 GHz | -45.36 dBm | -32.36 dB |

Date: 30.JUN.2022 18:08:41

### Highest Channel / 16QAM



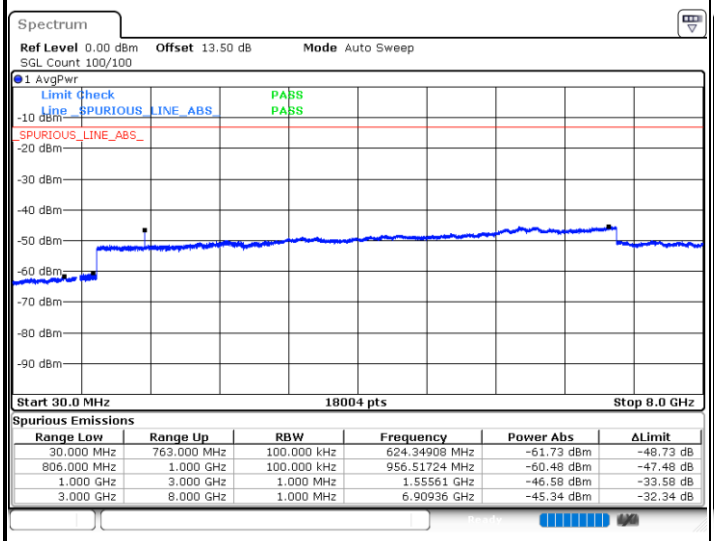

Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 636.80385 MHz | -61.65 dBm | -48.65 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 987.63868 MHz | -60.37 dBm | -47.37 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.56511 GHz | -47.52 dBm | -34.52 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.93686 GHz | -45.19 dBm | -32.19 dB |

Date: 30.JUN.2022 18:09:33

## LTE Band 13 / 10MHz

### Middle Channel / QPSK

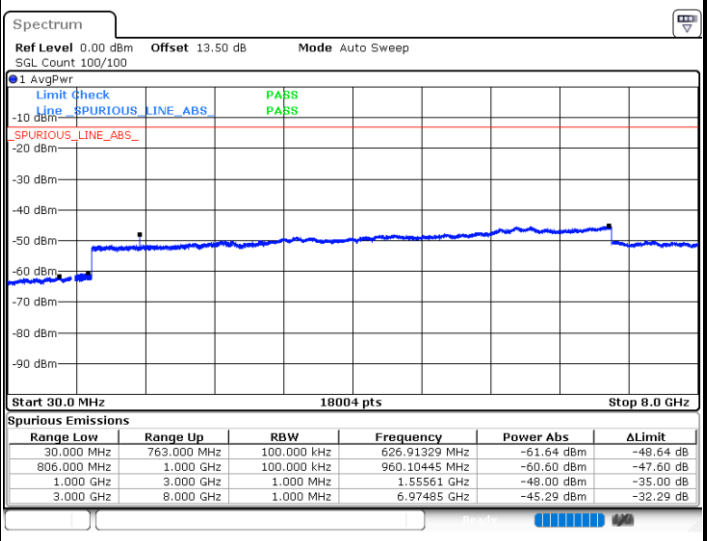



Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 624.34908 MHz | -61.73 dBm | -48.73 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 956.51724 MHz | -60.48 dBm | -47.48 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.55561 GHz | -46.58 dBm | -33.58 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.90936 GHz | -45.34 dBm | -32.34 dB |

Date: 30.JUN.2022 18:23:48

### Middle Channel / 16QAM




Spurious Emissions

| Range Low | Range Up | RBW | Frequency | Power Abs | ΔLimit |
|---|---|---|---|---|---|
| 30.000 MHz | 763.000 MHz | 100.000 kHz | 626.91329 MHz | -61.64 dBm | -48.64 dB |
| 806.000 MHz | 1.000 GHz | 100.000 kHz | 960.10445 MHz | -60.60 dBm | -47.60 dB |
| 1.000 GHz | 3.000 GHz | 1.000 MHz | 1.55561 GHz | -48.00 dBm | -35.00 dB |
| 3.000 GHz | 8.000 GHz | 1.000 MHz | 6.97485 GHz | -45.29 dBm | -32.29 dB |

Date: 30.JUN.2022 18:22:56

# Frequency Stability

| Test Conditions | | LTE Band 13 (QPSK) / Middle Channel | Limit |
|---|---|---|---|
| Temperature (°C) | Voltage (Volt) | BW 10MHz | Note 2. |
| | | Deviation (ppm) | Result |
| 70 | Normal Voltage | 0.0033 | PASS |
| 60 | Normal Voltage | 0.0017 | |
| 50 | Normal Voltage | 0.0006 | |
| 40 | Normal Voltage | 0.0023 | |
| 30 | Normal Voltage | 0.0008 | |
| 20(Ref.) | Normal Voltage | 0.0000 | |
| 10 | Normal Voltage | 0.0006 | |
| 0 | Normal Voltage | 0.0004 | |
| -10 | Normal Voltage | 0.0017 | |
| -20 | Normal Voltage | 0.0020 | |
| -30 | Normal Voltage | 0.0023 | |
| 20 | Maximum Voltage | 0.0008 | |
| 20 | Normal Voltage | 0.0011 | |
| 20 | Minimum Voltage | 0.0013 | |

**Note:**

1. Normal Voltage =3.7 V. ; Minimum Voltage =3.4 V. ; Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

# Appendix B. Test Results of Radiated Test

## Radiated Spurious Emission

| Test Engineer : | Shun ping You | Temperature : | 22~25℃ |
|---|---|---|---|
| | | Relative Humidity : | 48~52% |

| LTE Band 2 / 20MHz / QPSK | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest | 3702.18 | -61.36 | -13 | -48.36 | -79.48 | -68.12 | 5.82 | 12.58 | H |
| | 5553.27 | -58.89 | -13 | -45.89 | -80.99 | -64.61 | 7.28 | 13.00 | H |
| | 7404.36 | -53.40 | -13 | -40.40 | -80.08 | -56.56 | 8.32 | 11.48 | H |
| | 3702.18 | -61.80 | -13 | -48.80 | -79.82 | -68.56 | 5.82 | 12.58 | V |
| | 5553.27 | -57.70 | -13 | -44.70 | -79.98 | -63.42 | 7.28 | 13.00 | V |
| | 7404.36 | -53.34 | -13 | -40.34 | -80.04 | -56.50 | 8.32 | 11.48 | V |
| Middle | 3742.18 | -61.18 | -13 | -48.18 | -79.05 | -67.93 | 5.85 | 12.60 | H |
| | 5613.27 | -57.51 | -13 | -44.51 | -79.77 | -63.31 | 7.30 | 13.10 | H |
| | 7484.36 | -53.21 | -13 | -40.21 | -79.54 | -56.36 | 8.35 | 11.50 | H |
| | 3742.18 | -61.03 | -13 | -48.03 | -78.82 | -67.78 | 5.85 | 12.60 | V |
| | 5613.27 | -57.25 | -13 | -44.25 | -79.7 | -63.05 | 7.30 | 13.10 | V |
| | 7484.36 | -53.02 | -13 | -40.02 | -79.34 | -56.17 | 8.35 | 11.50 | V |
| Highest | 3782.18 | -61.89 | -13 | -48.89 | -79.69 | -68.63 | 5.88 | 12.62 | H |
| | 5673.27 | -57.00 | -13 | -44.00 | -80.12 | -62.81 | 7.32 | 13.13 | H |
| | 7564.36 | -53.81 | -13 | -40.81 | -79.92 | -56.97 | 8.38 | 11.54 | H |
| | 3782.18 | -62.00 | -13 | -49.00 | -79.77 | -68.74 | 5.88 | 12.62 | V |
| | 5673.27 | -56.44 | -13 | -43.44 | -79.04 | -62.25 | 7.32 | 13.13 | V |
| | 7564.36 | -53.84 | -13 | -40.84 | -79.92 | -57.00 | 8.38 | 11.54 | V |

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

| LTE Band 4 / 20MHz / QPSK | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest | 3422.18 | -62.85 | -13 | -49.85 | -79.48 | -69.73 | 5.60 | 12.48 | H |
| | 5133.27 | -58.70 | -13 | -45.70 | -80.47 | -64.38 | 7.10 | 12.78 | H |
| | 6844.36 | -55.41 | -13 | -42.41 | -80.67 | -58.80 | 8.38 | 11.77 | H |
| | 3422.18 | -62.17 | -13 | -49.17 | -78.89 | -69.05 | 5.60 | 12.48 | V |
| | 5133.27 | -58.87 | -13 | -45.87 | -80.86 | -64.55 | 7.10 | 12.78 | V |
| | 6844.36 | -55.04 | -13 | -42.04 | -80.8 | -58.43 | 8.38 | 11.77 | V |
| Middle | 3447.18 | -62.85 | -13 | -49.85 | -79.71 | -69.70 | 5.65 | 12.50 | H |
| | 5170.77 | -59.06 | -13 | -46.06 | -80.66 | -64.73 | 7.13 | 12.80 | H |
| | 6894.36 | -55.06 | -13 | -42.06 | -80.69 | -58.46 | 8.40 | 11.80 | H |
| | 3447.18 | -62.70 | -13 | -49.70 | -79.6 | -69.55 | 5.65 | 12.50 | V |
| | 5170.77 | -58.84 | -13 | -45.84 | -80.71 | -64.51 | 7.13 | 12.80 | V |
| | 6894.36 | -54.35 | -13 | -41.35 | -80.46 | -57.75 | 8.40 | 11.80 | V |
| Highest | 3472.18 | -62.75 | -13 | -49.75 | -79.69 | -69.59 | 5.68 | 12.52 | H |
| | 5208.27 | -59.46 | -13 | -46.46 | -80.89 | -65.13 | 7.15 | 12.82 | H |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 6944.36 | -54.35 | -13 | -41.35 | -80.27 | -57.78 | 8.42 | 11.85 | H |
| | 3472.18 | -62.97 | -13 | -49.97 | -79.93 | -69.81 | 5.68 | 12.52 | V |
| | 5208.27 | -58.93 | -13 | -45.93 | -80.61 | -64.60 | 7.15 | 12.82 | V |
| | 6944.36 | -54.28 | -13 | -41.28 | -80.67 | -57.71 | 8.42 | 11.85 | V |

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

| LTE Band 5 / 10MHz / QPSK | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest | 1649.18 | -67.00 | -13 | -54.00 | -76.39 | -70.23 | 3.98 | 9.36 | H |
| | 2473.77 | -63.88 | -13 | -50.88 | -78.04 | -67.43 | 4.85 | 10.55 | H |
| | 3298.36 | -62.64 | -13 | -49.64 | -79.14 | -67.57 | 5.50 | 12.58 | H |
| | 1649.18 | -67.00 | -13 | -54.00 | -76.13 | -70.23 | 3.98 | 9.36 | V |
| | 2473.77 | -63.73 | -13 | -50.73 | -77.86 | -67.28 | 4.85 | 10.55 | V |
| | 3298.36 | -63.01 | -13 | -50.01 | -79.32 | -67.94 | 5.50 | 12.58 | V |
| Middle | 1664.18 | -66.62 | -13 | -53.62 | -76.12 | -69.87 | 4.00 | 9.40 | H |
| | 2496.27 | -63.90 | -13 | -50.90 | -78.10 | -67.47 | 4.88 | 10.60 | H |
| | 3328.36 | -63.05 | -13 | -50.05 | -79.26 | -67.98 | 5.52 | 12.60 | H |
| | 1664.18 | -67.13 | -13 | -54.13 | -76.23 | -70.38 | 4.00 | 9.40 | V |
| | 2496.27 | -63.88 | -13 | -50.88 | -78.04 | -67.45 | 4.88 | 10.60 | V |
| | 3328.36 | -63.15 | -13 | -50.15 | -79.12 | -68.08 | 5.52 | 12.60 | V |
| Highest | 1679.18 | -66.45 | -13 | -53.45 | -76.07 | -69.62 | 4.10 | 9.42 | H |
| | 2518.77 | -63.84 | -13 | -50.84 | -77.94 | -67.42 | 4.90 | 10.63 | H |
| | 3358.36 | -63.28 | -13 | -50.28 | -79.49 | -68.20 | 5.55 | 12.62 | H |
| | 1679.18 | -67.02 | -13 | -54.02 | -76.09 | -70.19 | 4.10 | 9.42 | V |
| | 2518.77 | -63.96 | -13 | -50.96 | -78.02 | -67.54 | 4.90 | 10.63 | V |
| | 3358.36 | -63.21 | -13 | -50.21 | -79.28 | -68.13 | 5.55 | 12.62 | V |

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

| LTE Band 12 / 10MHz / QPSK | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest | 1399 | -65.64 | -13 | -52.64 | -75.63 | -68.87 | 3.98 | 9.36 | H |
| | 2098.5 | -64.84 | -13 | -51.84 | -77.50 | -68.39 | 4.85 | 10.55 | H |
| | 2798 | -62.77 | -13 | -49.77 | -78.65 | -67.70 | 5.50 | 12.58 | H |
| | 1399 | -66.19 | -13 | -53.19 | -75.88 | -69.42 | 3.98 | 9.36 | V |
| | 2098.5 | -64.45 | -13 | -51.45 | -77.60 | -68.00 | 4.85 | 10.55 | V |
| | 2798 | -62.82 | -13 | -49.82 | -78.40 | -67.75 | 5.50 | 12.58 | V |
| Middle | 1406 | -65.85 | -13 | -52.85 | -75.97 | -69.10 | 4.00 | 9.40 | H |
| | 2109 | -64.43 | -13 | -51.43 | -77.09 | -68.00 | 4.88 | 10.60 | H |
| | 2812 | -62.63 | -13 | -49.63 | -78.54 | -67.56 | 5.52 | 12.60 | H |
| | 1406 | -66.52 | -13 | -53.52 | -76.29 | -69.77 | 4.00 | 9.40 | V |
| | 2109 | -64.20 | -13 | -51.20 | -77.35 | -67.77 | 4.88 | 10.60 | V |
| | 2812 | -62.99 | -13 | -49.99 | -78.62 | -67.92 | 5.52 | 12.60 | V |
| Highest | 1413 | -66.03 | -13 | -53.03 | -76.15 | -69.20 | 4.10 | 9.42 | H |
| | 2119.5 | -64.48 | -13 | -51.48 | -77.49 | -68.06 | 4.90 | 10.63 | H |
| | 2826 | -62.33 | -13 | -49.33 | -78.28 | -67.25 | 5.55 | 12.62 | H |
| | 1413 | -66.22 | -13 | -53.22 | -75.99 | -69.39 | 4.10 | 9.42 | V |
| | 2119.5 | -63.69 | -13 | -50.69 | -77.09 | -67.27 | 4.90 | 10.63 | V |
| | 2826 | -62.85 | -13 | -49.85 | -78.52 | -67.77 | 5.55 | 12.62 | V |

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

| LTE Band 13 / 5MHz / QPSK | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Lowest | 1554.5 | -65.43 | -13 | -52.43 | -74.90 | -68.66 | 3.98 | 9.36 | H |
| | 2331.75 | -55.92 | -13 | -42.92 | -70.29 | -59.47 | 4.85 | 10.55 | H |
| | 3109 | -60.14 | -13 | -47.14 | -77.61 | -65.07 | 5.50 | 12.58 | H |
| | 1554.5 | -63.60 | -13 | -50.60 | -73.15 | -66.83 | 3.98 | 9.36 | V |
| | 2331.75 | -60.02 | -13 | -47.02 | -74.39 | -63.57 | 4.85 | 10.55 | V |
| | 3109 | -59.83 | -13 | -46.83 | -77.36 | -64.76 | 5.50 | 12.58 | V |
| Middle | 1559.5 | -65.21 | -42.15 | -23.06 | -74.68 | -68.46 | 4.00 | 9.40 | H |
| | 2339.25 | -50.32 | -13 | -37.32 | -64.64 | -53.89 | 4.88 | 10.60 | H |
| | 3119 | -60.16 | -13 | -47.16 | -77.73 | -65.09 | 5.52 | 12.60 | H |
| | 1559.5 | -59.54 | -42.15 | -17.39 | -69.09 | -62.79 | 4.00 | 9.40 | V |
| | 2339.25 | -60.76 | -13 | -47.76 | -75.08 | -64.33 | 4.88 | 10.60 | V |
| | 3119 | -60.17 | -13 | -47.17 | -77.78 | -65.10 | 5.52 | 12.60 | V |
| Highest | 1564.5 | -64.79 | -42.15 | -22.64 | -74.26 | -67.96 | 4.10 | 9.42 | H |
| | 2346.75 | -58.82 | -13 | -45.82 | -73.14 | -62.40 | 4.90 | 10.63 | H |
| | 3129 | -60.48 | -13 | -47.48 | -78.05 | -65.40 | 5.55 | 12.62 | H |
| | 1564.5 | -65.81 | -42.15 | -23.66 | -75.36 | -68.98 | 4.10 | 9.42 | V |
| | 2346.75 | -57.73 | -13 | -44.73 | -72.05 | -61.31 | 4.90 | 10.63 | V |
| | 3129 | -60.20 | -13 | -47.20 | -77.81 | -65.12 | 5.55 | 12.62 | V |

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

| LTE Band 13 / 10MHz / QPSK | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Channel | Frequency ( MHz ) | EIRP ( dBm ) | Limit ( dBm ) | Over Limit ( dB ) | SPA Reading (dBm) | S.G. Power ( dBm ) | TX Cable loss ( dB ) | TX Antenna Gain (dBi) | Polarization (H/V) |
| Middle | 1559.5 | -66.23 | -42.15 | -24.08 | -75.70 | -69.48 | 4.00 | 9.40 | H |
| | 2339.25 | -58.18 | -13 | -45.18 | -72.50 | -61.75 | 4.88 | 10.60 | H |
| | 3119 | -60.77 | -13 | -47.77 | -78.34 | -65.70 | 5.52 | 12.60 | H |
| | 1559.5 | -66.19 | -42.15 | -24.04 | -75.74 | -69.44 | 4.00 | 9.40 | V |
| | 2339.25 | -57.07 | -13 | -44.07 | -71.39 | -60.64 | 4.88 | 10.60 | V |
| | 3119 | -60.60 | -13 | -47.60 | -78.21 | -65.53 | 5.52 | 12.60 | V |

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