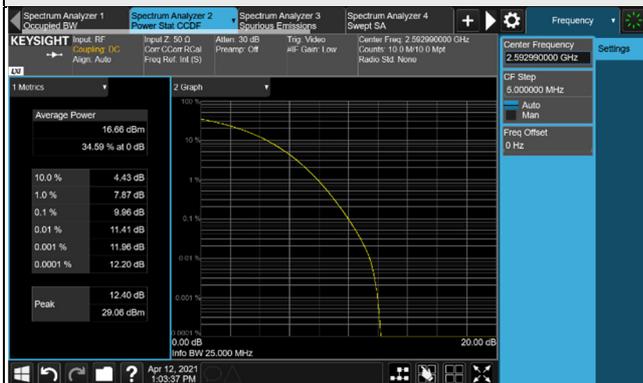


Spectrum Plot of Worst Value

20MHz / 256QAM



30MHz / 256QAM



40MHz / 256QAM



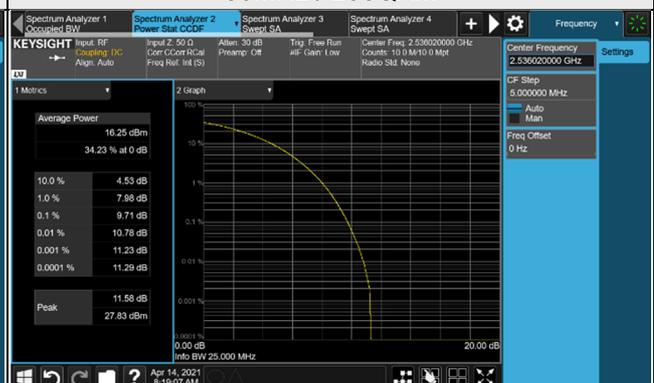
50MHz / 256QAM



60MHz / 256QAM



80MHz / 256QAM



90MHz / 256QAM



100MHz / 256QAM



n77, Chain 0

| n77, Channel Bandwidth 20MHz | | | | | |
|------------------------------|-----------------|----------------------------|-------|-------|--------|
| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 647334 | 3710.01 | 7.51 | 8.25 | 9.27 | 9.34 |
| 656000 | 3840.00 | 7.27 | 8.18 | 9.41 | 9.27 |
| 664666 | 3969.99 | 8.75 | 8.10 | 8.12 | 9.15 |
| n77, Channel Bandwidth 30MHz | | | | | |
| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 647668 | 3715.02 | 10.83 | 10.02 | 9.06 | 9.02 |
| 656000 | 3840.00 | 11.21 | 10.10 | 8.88 | 9.29 |
| 664332 | 3964.98 | 9.11 | 10.65 | 8.88 | 9.27 |
| n77, Channel Bandwidth 40MHz | | | | | |
| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 648000 | 3720.00 | 7.73 | 8.30 | 9.20 | 9.22 |
| 656000 | 3840.00 | 7.42 | 7.92 | 8.72 | 9.21 |
| 664000 | 3960.00 | 8.62 | 7.32 | 8.79 | 9.15 |
| n77, Channel Bandwidth 50MHz | | | | | |
| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 648334 | 3725.01 | 7.63 | 8.32 | 9.26 | 9.08 |
| 656000 | 3840.00 | 7.15 | 7.89 | 8.34 | 9.13 |
| 663666 | 3954.99 | 8.22 | 8.74 | 8.11 | 9.28 |
| n77, Channel Bandwidth 60MHz | | | | | |
| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 648668 | 3730.02 | 7.39 | 8.09 | 9.34 | 9.30 |
| 656000 | 3840.00 | 7.30 | 8.03 | 8.49 | 9.19 |
| 663332 | 3949.98 | 7.45 | 8.05 | 9.16 | 9.43 |

n77, Channel Bandwidth 70MHz

| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
|---------|-----------------|----------------------------|-------|-------|--------|
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 649000 | 3735.00 | 8.50 | 8.93 | 8.23 | 9.16 |
| 656000 | 3840.00 | 7.00 | 7.63 | 9.05 | 8.93 |
| 663000 | 3945.00 | 8.23 | 8.55 | 9.30 | 9.34 |

n77, Channel Bandwidth 80MHz

| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
|---------|-----------------|----------------------------|-------|-------|--------|
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 649334 | 3740.01 | 7.88 | 8.33 | 9.42 | 9.30 |
| 656000 | 3840.00 | 7.60 | 8.19 | 8.45 | 9.19 |
| 662666 | 3939.99 | 7.57 | 8.09 | 9.24 | 9.28 |

n77, Channel Bandwidth 90MHz

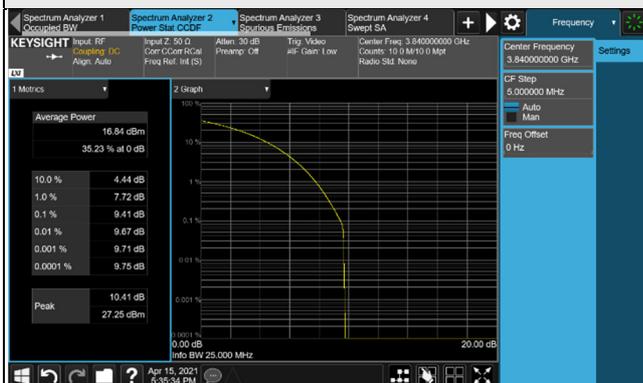
| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
|---------|-----------------|----------------------------|-------|-------|--------|
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 649558 | 3745.02 | 8.06 | 8.52 | 9.27 | 9.42 |
| 656000 | 3840.00 | 7.52 | 8.00 | 8.75 | 9.15 |
| 662332 | 3934.98 | 7.55 | 8.13 | 9.22 | 9.27 |

n77, Channel Bandwidth 100MHz

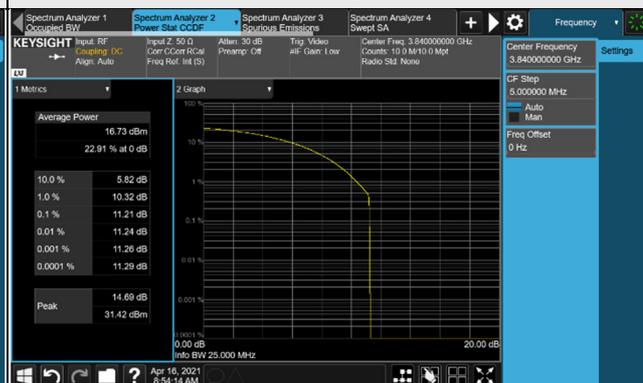
| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
|---------|-----------------|----------------------------|-------|-------|--------|
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 650000 | 3750.00 | 7.45 | 8.23 | 9.39 | 9.23 |
| 656000 | 3840.00 | 7.38 | 8.18 | 8.73 | 9.22 |
| 662000 | 3930.00 | 7.32 | 7.99 | 9.21 | 9.46 |

Spectrum Plot of Worst Value

20MHz / 64QAM



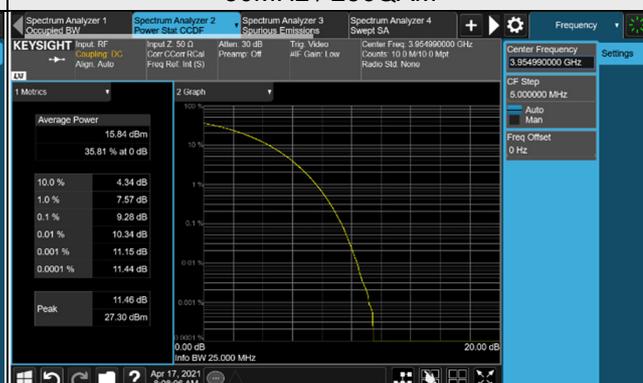
30MHz / QPSK



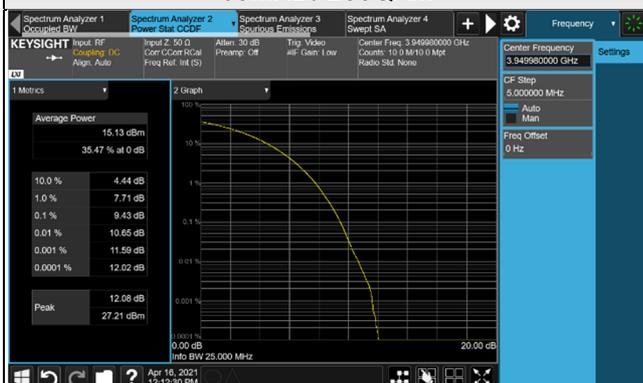
40MHz / 256QAM



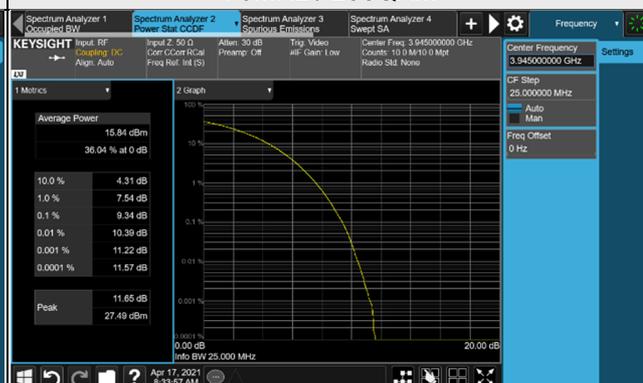
50MHz / 256QAM



60MHz / 256QAM



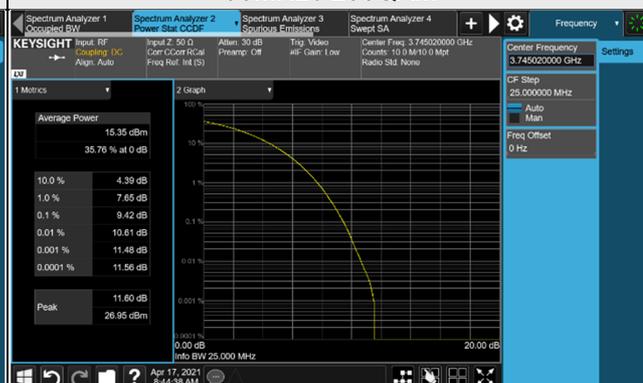
70MHz / 256QAM

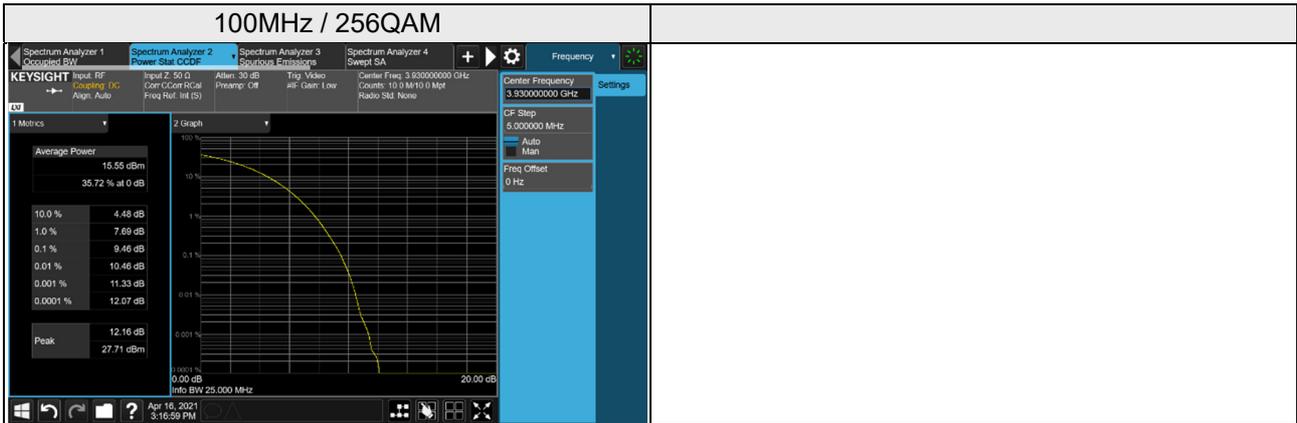


80MHz / 64QAM



90MHz / 256QAM





n77, Chain 1

| n77, Channel Bandwidth 20MHz | | | | | |
|------------------------------|-----------------|----------------------------|-------|-------|--------|
| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 647334 | 3710.01 | 7.55 | 9.18 | 9.33 | 9.36 |
| 656000 | 3840.00 | 7.40 | 8.16 | 9.20 | 9.29 |
| 664666 | 3969.99 | 7.78 | 8.05 | 8.17 | 9.13 |
| n77, Channel Bandwidth 30MHz | | | | | |
| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 647668 | 3715.02 | 7.88 | 8.52 | 9.16 | 9.13 |
| 656000 | 3840.00 | 7.88 | 8.51 | 9.17 | 9.26 |
| 664332 | 3964.98 | 7.71 | 8.01 | 8.46 | 9.07 |
| n77, Channel Bandwidth 40MHz | | | | | |
| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 648000 | 3720.00 | 7.62 | 8.30 | 9.00 | 8.92 |
| 656000 | 3840.00 | 7.54 | 8.33 | 9.12 | 9.10 |
| 664000 | 3960.00 | 7.46 | 7.26 | 8.47 | 9.01 |
| n77, Channel Bandwidth 50MHz | | | | | |
| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 648334 | 3725.01 | 7.41 | 8.08 | 9.19 | 9.11 |
| 656000 | 3840.00 | 7.57 | 8.18 | 9.29 | 9.32 |
| 663666 | 3954.99 | 6.69 | 7.15 | 8.53 | 9.35 |
| n77, Channel Bandwidth 60MHz | | | | | |
| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 648668 | 3730.02 | 7.48 | 8.28 | 9.12 | 9.15 |
| 656000 | 3840.00 | 7.55 | 8.09 | 9.25 | 9.27 |
| 663332 | 3949.98 | 7.76 | 8.21 | 9.06 | 9.33 |

n77, Channel Bandwidth 70MHz

| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
|---------|-----------------|----------------------------|-------|-------|--------|
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 649000 | 3735.00 | 8.09 | 8.67 | 9.25 | 9.15 |
| 656000 | 3840.00 | 8.32 | 8.88 | 9.39 | 9.28 |
| 663000 | 3945.00 | 8.41 | 8.74 | 9.00 | 9.29 |

n77, Channel Bandwidth 80MHz

| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
|---------|-----------------|----------------------------|-------|-------|--------|
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 649334 | 3740.01 | 7.75 | 8.18 | 9.18 | 9.02 |
| 656000 | 3840.00 | 7.88 | 8.18 | 9.31 | 9.17 |
| 662666 | 3939.99 | 8.04 | 8.36 | 9.14 | 9.31 |

n77, Channel Bandwidth 90MHz

| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
|---------|-----------------|----------------------------|-------|-------|--------|
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 649558 | 3745.02 | 6.99 | 7.88 | 9.28 | 9.18 |
| 656000 | 3840.00 | 7.69 | 8.18 | 9.25 | 9.30 |
| 662332 | 3934.98 | 7.74 | 8.31 | 9.07 | 9.37 |

n77, Channel Bandwidth 100MHz

| Channel | Frequency (MHz) | Peak To Average Ratio (dB) | | | |
|---------|-----------------|----------------------------|-------|-------|--------|
| | | QPSK | 16QAM | 64QAM | 256QAM |
| 650000 | 3750.00 | 7.25 | 7.98 | 9.15 | 9.16 |
| 656000 | 3840.00 | 7.67 | 8.09 | 9.27 | 9.22 |
| 662000 | 3930.00 | 7.62 | 8.33 | 9.14 | 9.49 |

Spectrum Plot of Worst Value

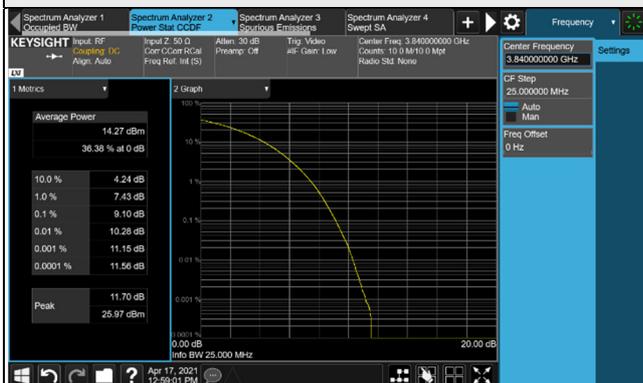
20MHz / 256QAM



30MHz / 256QAM



40MHz / 256QAM



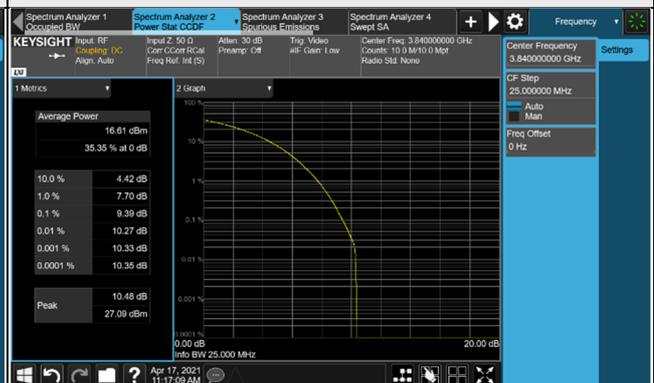
50MHz / 256QAM



60MHz / 256QAM



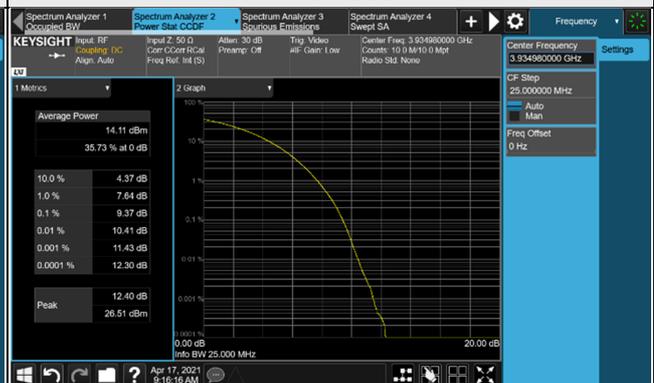
70MHz / 64QAM

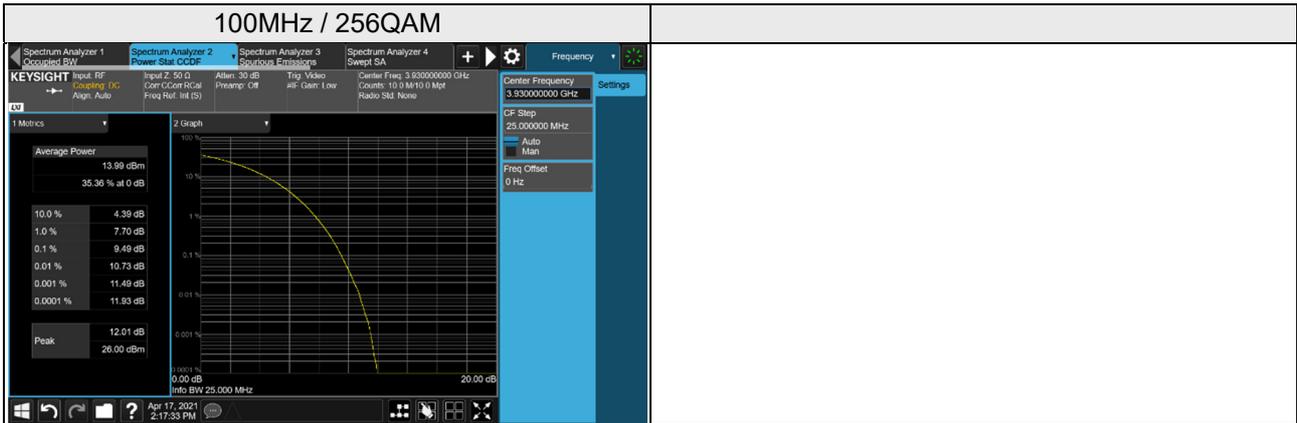


80MHz / 256QAM



90MHz / 256QAM





4.7 Conducted Spurious Emissions

4.7.1 Limits of Conducted Spurious Emissions Measurement

For n41:

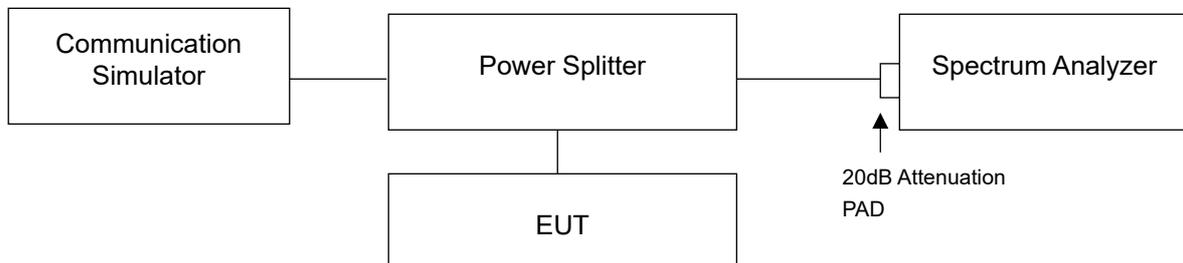
In the FCC 27.53(m)(4), On any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least $55 + 10 \log (P)$ dB. The emission limit equal to -25dBm .

For n77:

According to FCC 27.53(l) for mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz . Compliance with this paragraph (l)(2) is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

Note: This device can be implement MIMO function, so the limit of spurious emissions needs to be reduced by $10\log(\text{NumbersAnt})$ according to FCC KDB 662911 D01 guidance.

4.7.2 Test Setup



4.7.3 Test Procedure

- All measurements were done at low and high channels operational frequency range.
- Measuring frequency range is from 9kHz to 10GHz / 26.5GHz / 30GHz / 40GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz are used for conducted emission measurement

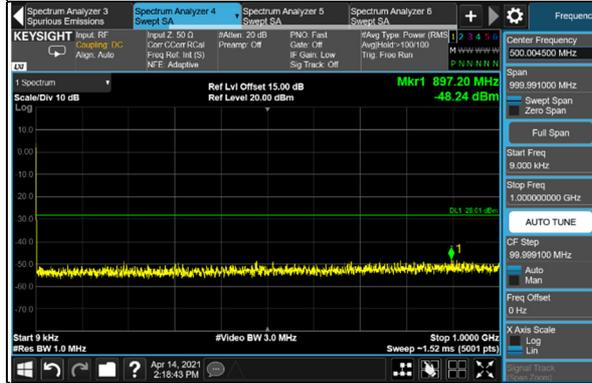
4.7.4 Test Results

n41, Chain 0

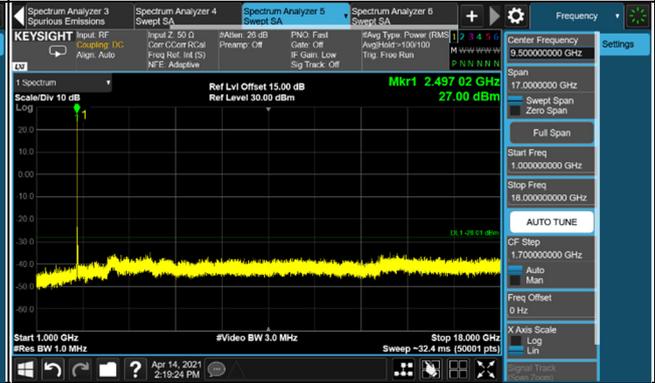
n41, Channel Bandwidth 20MHz

Channel 501204 (2506.02MHz)

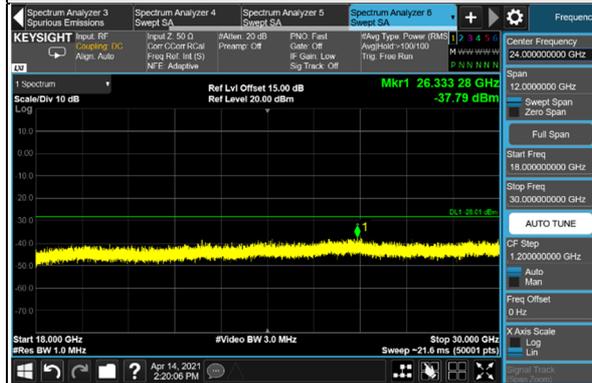
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz

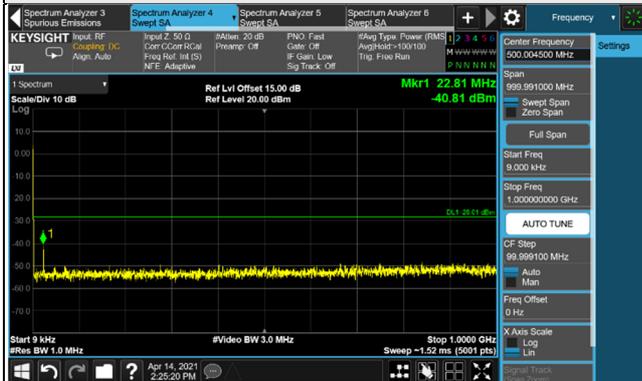


*The 9kHz signal over the limit is from Spectrum.

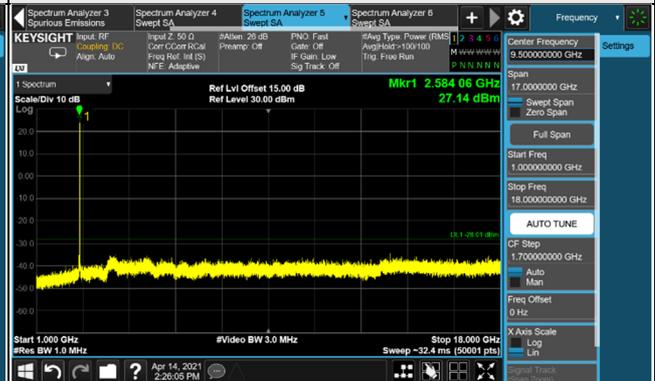
n41, Channel Bandwidth 20MHz

Channel 518598 (2592.99MHz)

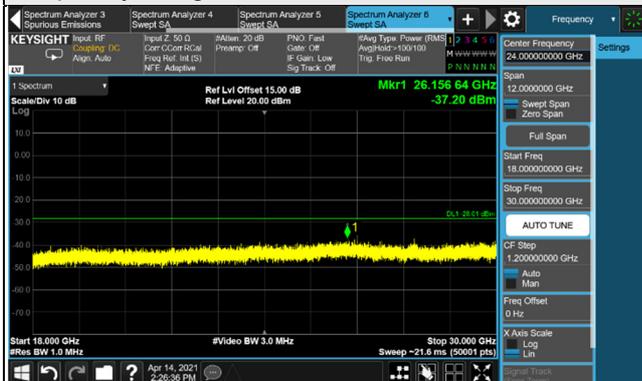
Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 18GHz



Frequency Range : 18GHz ~ 30GHz



*The 9kHz signal over the limit is from Spectrum.