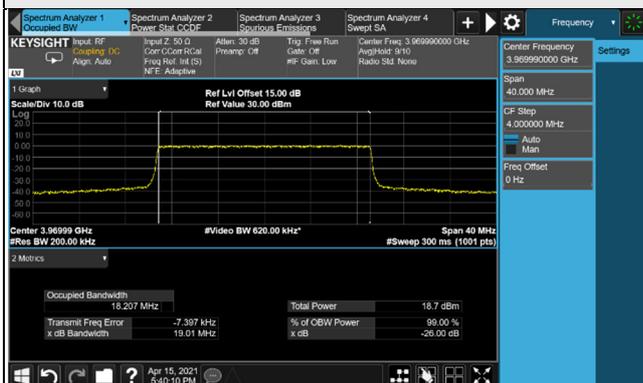
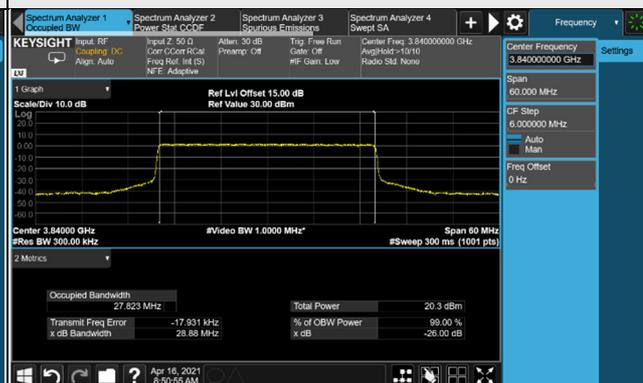


Spectrum Plot of Worst Value

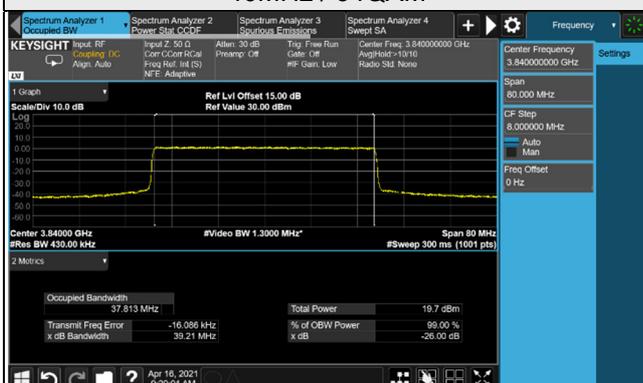
20MHz / 16QAM



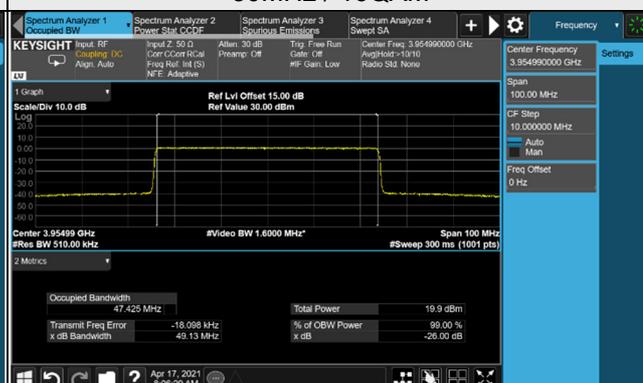
30MHz / QPSK



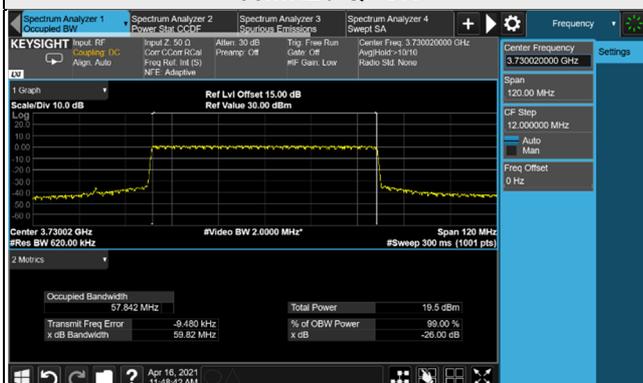
40MHz / 64QAM



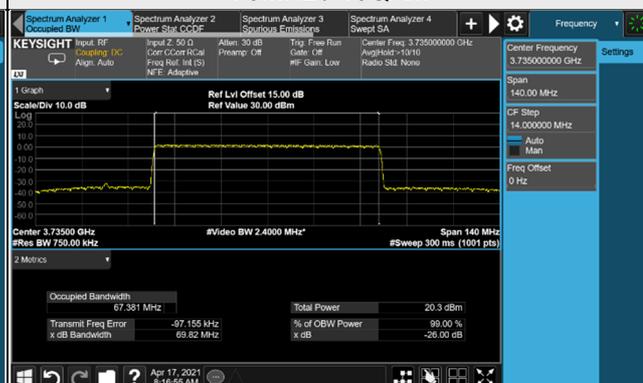
50MHz / 16QAM



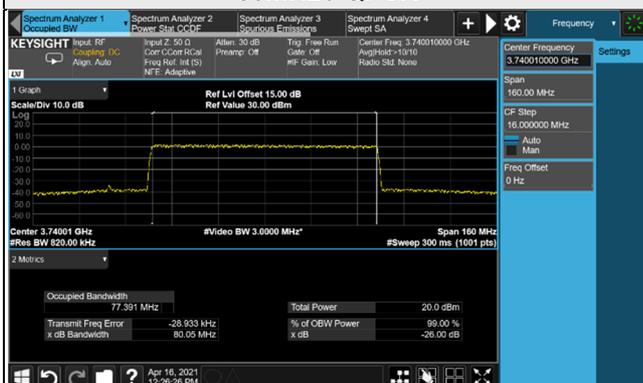
60MHz / QPSK



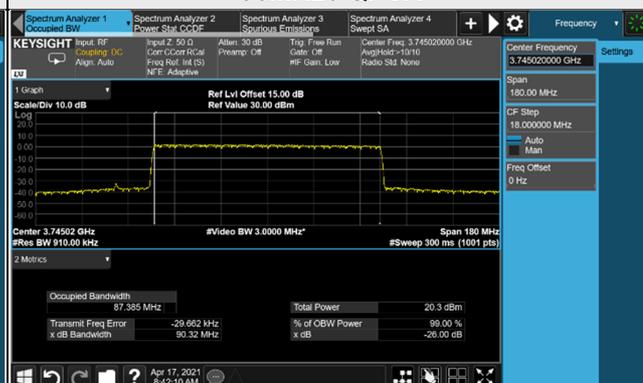
70MHz / 16QAM

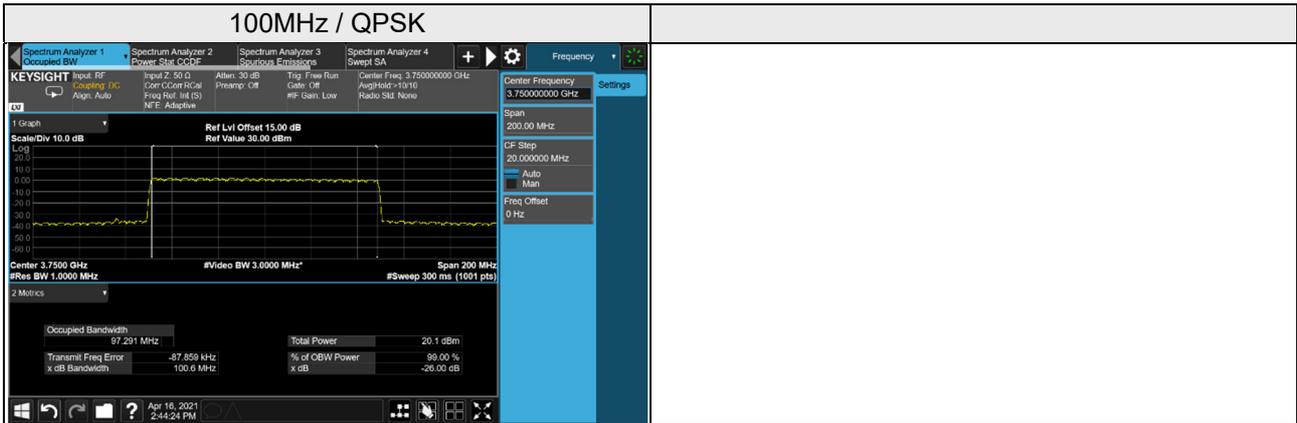


80MHz / QPSK



90MHz / QPSK





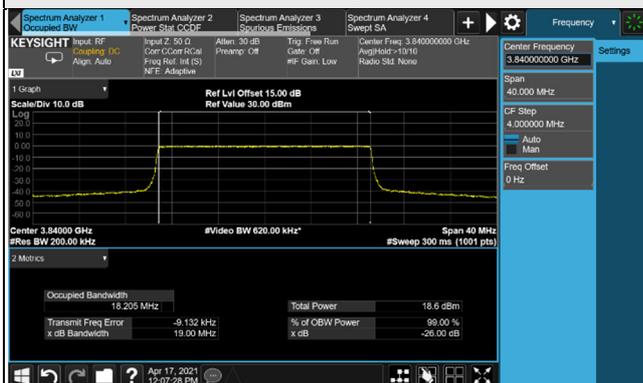
n77, Chain 1

n77, Channel Bandwidth 20MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
647334	3710.01	18.99	18.98	19.00	18.96
656000	3840.00	19.00	19.00	18.97	18.98
664666	3969.99	18.96	18.98	18.94	18.94
n77, Channel Bandwidth 30MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
647668	3715.02	28.87	28.86	28.88	28.85
656000	3840.00	28.85	28.86	28.86	28.84
664332	3964.98	28.88	28.86	28.87	28.83
n77, Channel Bandwidth 40MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
648000	3720.00	39.20	39.22	39.19	39.19
656000	3840.00	39.21	39.22	39.19	39.19
664000	3960.00	39.22	39.20	39.19	39.21
n77, Channel Bandwidth 50MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
648334	3725.01	49.10	49.12	49.06	49.12
656000	3840.00	49.11	49.11	49.12	49.10
663666	3954.99	49.12	49.12	49.12	49.11
n77, Channel Bandwidth 60MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
648668	3730.02	59.79	59.76	59.79	59.75
656000	3840.00	59.79	59.77	59.77	59.79
663332	3949.98	59.77	59.76	59.77	59.75

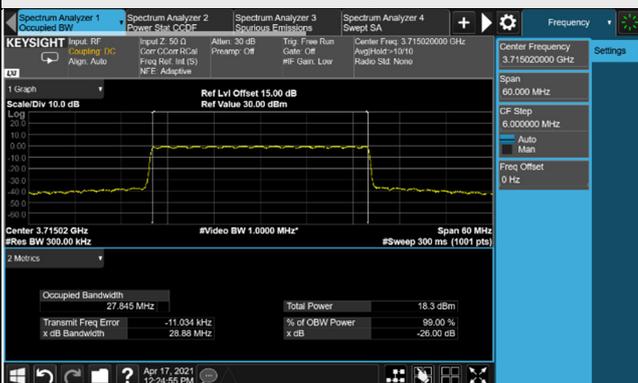
n77, Channel Bandwidth 70MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
649000	3735.00	69.83	69.74	69.82	69.78
656000	3840.00	69.80	69.82	69.80	69.76
663000	3945.00	69.81	69.82	69.83	69.80
n77, Channel Bandwidth 80MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
649334	3740.01	80.00	80.00	80.06	79.96
656000	3840.00	79.96	80.01	80.06	80.03
662666	3939.99	80.05	79.99	80.04	80.05
n77, Channel Bandwidth 90MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
649558	3745.02	90.31	90.31	90.29	90.30
656000	3840.00	90.31	90.29	90.28	90.32
662332	3934.98	90.33	90.32	90.30	90.32
n77, Channel Bandwidth 100MHz					
Channel	Frequency (MHz)	26dB Bandwidth (MHz)			
		QPSK	16QAM	64QAM	256QAM
650000	3750.00	100.60	100.60	100.60	100.60
656000	3840.00	100.50	100.50	100.60	100.60
662000	3930.00	100.60	100.70	100.60	100.70

Spectrum Plot of Worst Value

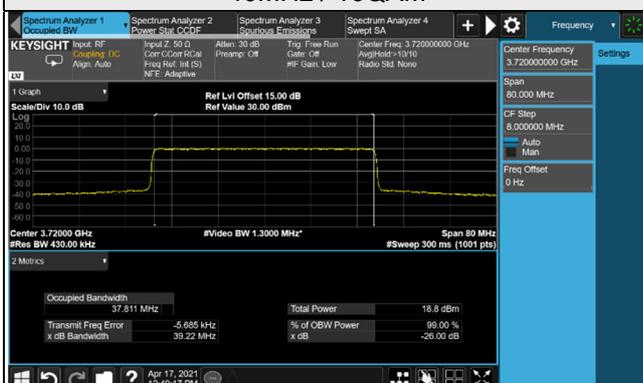
20MHz / QPSK



30MHz / 64QAM



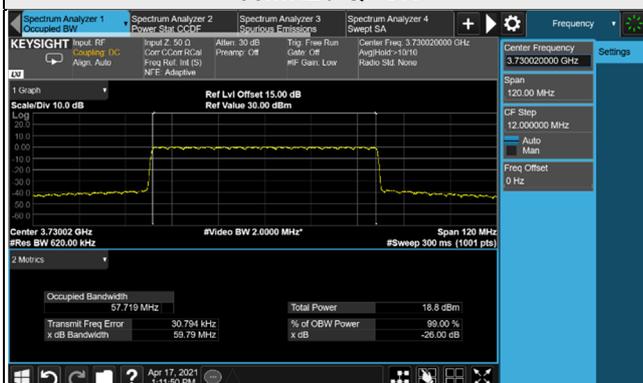
40MHz / 16QAM



50MHz / 16QAM



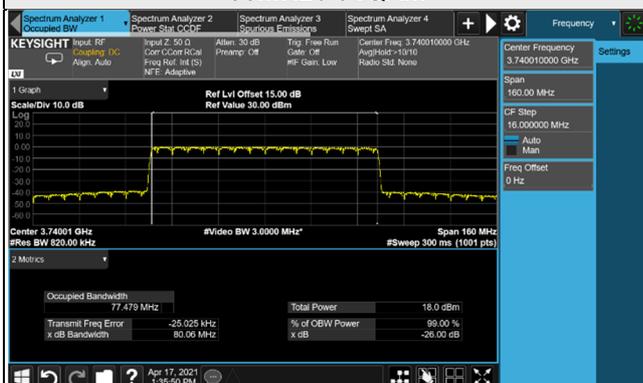
60MHz / QPSK



70MHz / QPSK

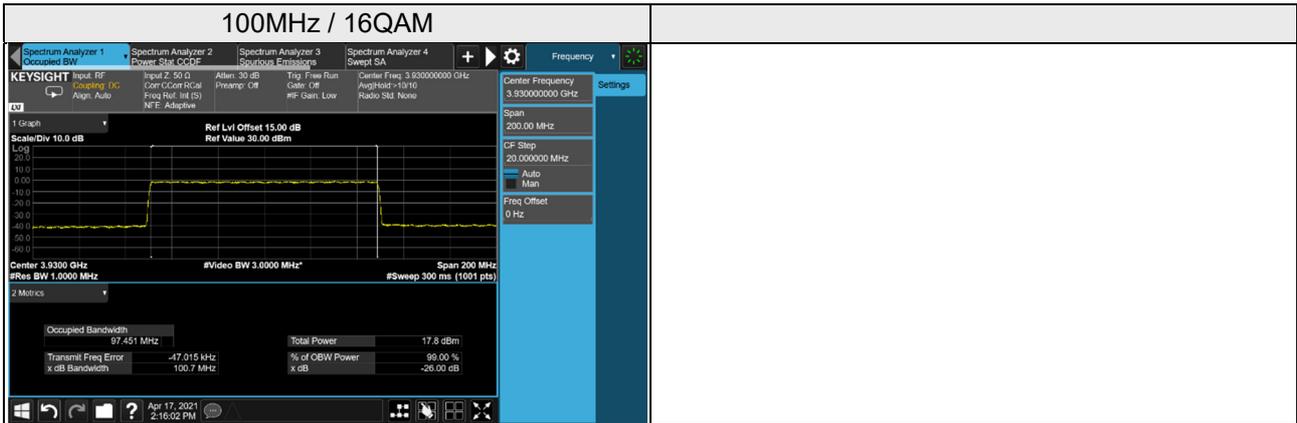


80MHz / 64QAM



90MHz / QPSK





4.5 Out-of-Band Emissions Measurement

4.5.1 Limits of Band Edge / Out-of-Band Emissions Measurement

For n41:

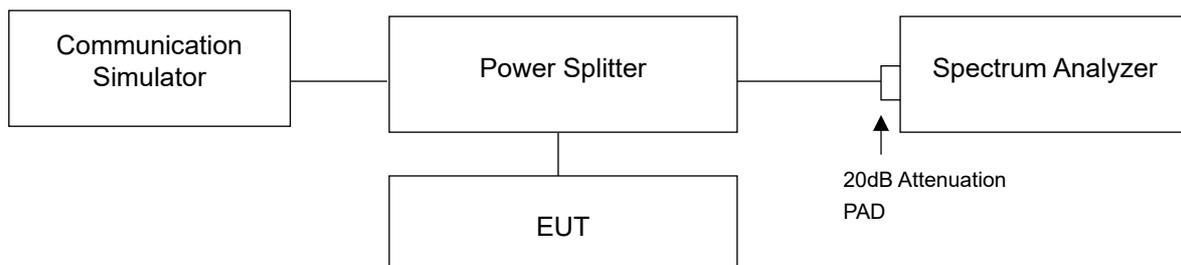
According to FCC 27.53(m)(4) specified that power of any emission outside of the channel edge must be attenuated below the transmitting power (P) by a factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth. In addition, the attenuation factor shall not be less that $43 + 10 \log (P)$ dB on all frequencies between 2490.5MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5MHz. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least two percent may be employed, except when the 1 megahertz band is 2495-2496 MHz, in which case a resolution bandwidth of at least one percent may be employed.

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

4.5.2 Test Setup



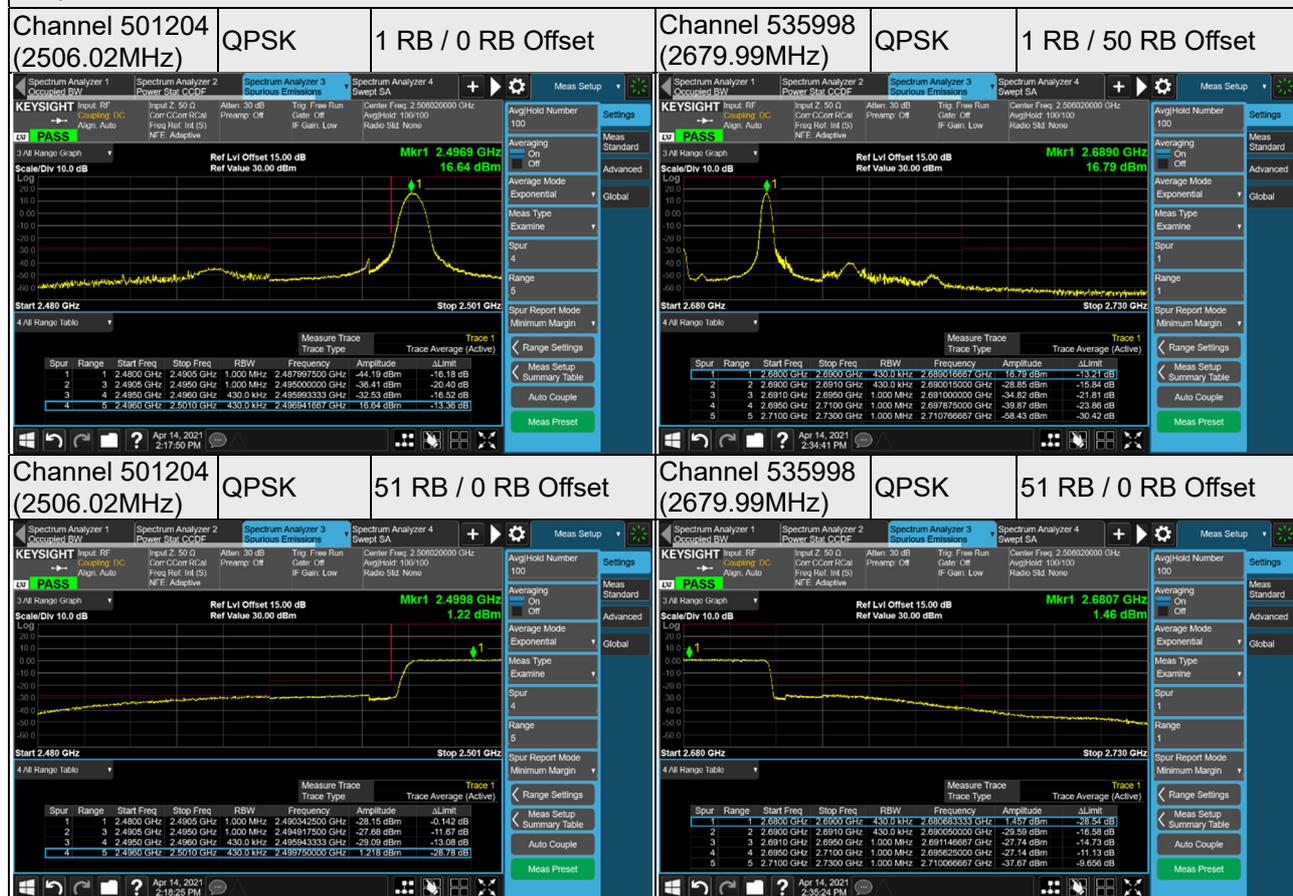
4.5.3 Test Procedures

- The testing follows ANSI C63.26 section 5.7
- The EUT was connected to spectrum analyzer and system simulator via a power divider.
- The band edges of low and high channels for the highest RF powers were measured.
- Set RBW $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
- Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
- Set spectrum analyzer with RMS detector.
- Checked that all the results comply with the emission limit line.

4.5.4 Test Results

n41, Chain 0

n41, Channel Bandwidth 20MHz



n41, Channel Bandwidth 30MHz

Channel 502200
(2511.00MHz)

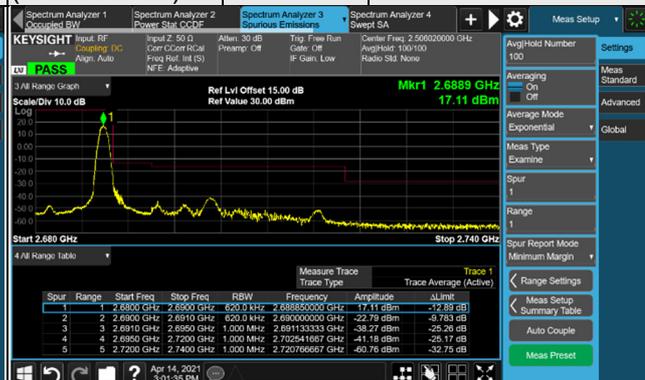
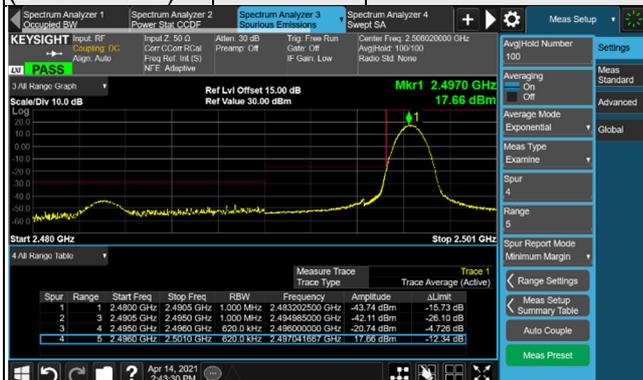
QPSK

1 RB / 0 RB Offset

Channel 534996
(2674.98MHz)

QPSK

1 RB / 77 RB Offset



Channel 502200
(2511.00MHz)

QPSK

78 RB / 0 RB Offset

Channel 534996
(2674.98MHz)

QPSK

78 RB / 0 RB Offset

