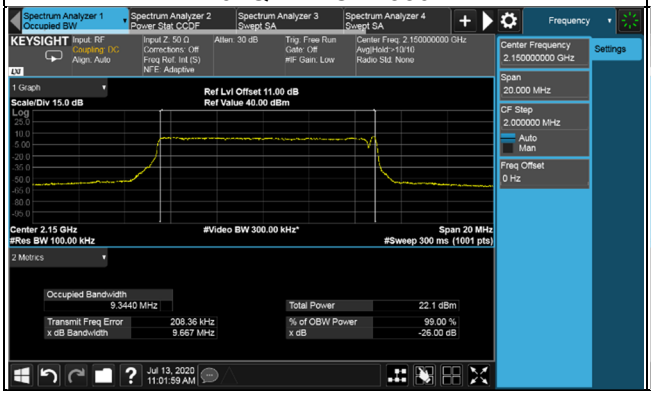
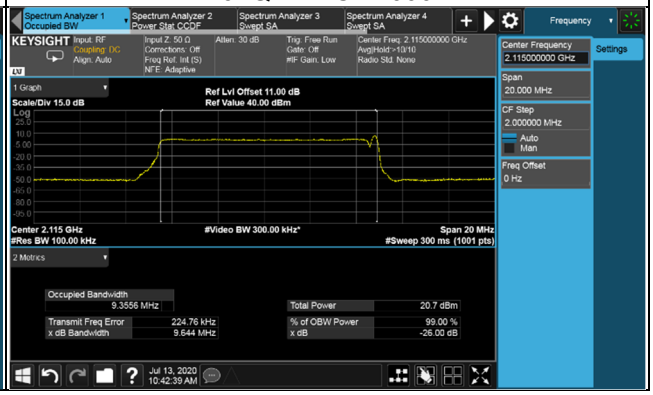
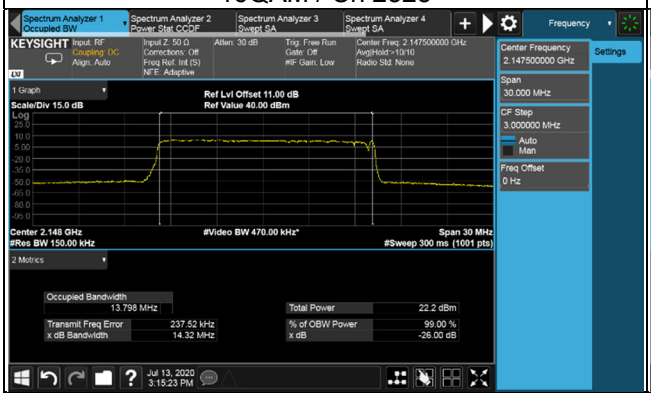
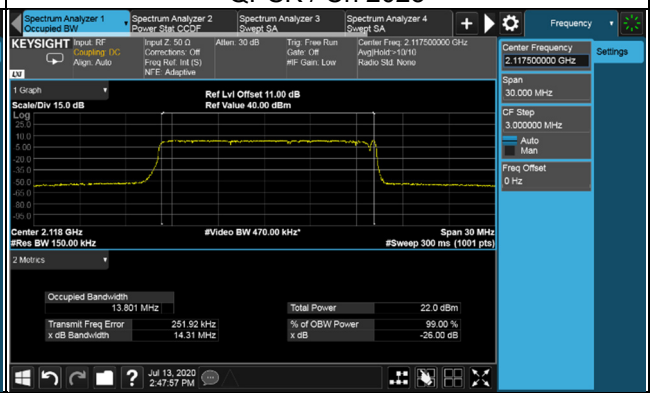
Signal at upper

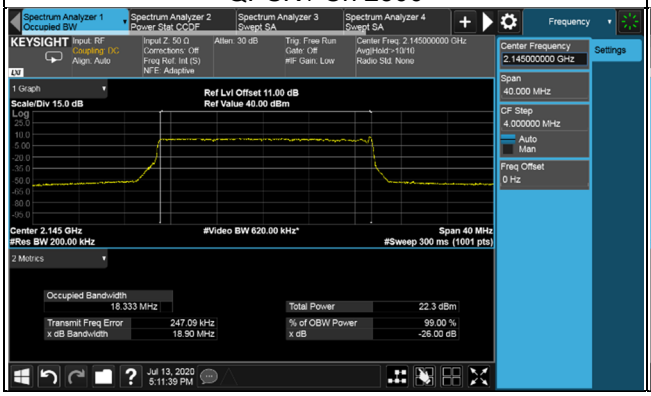
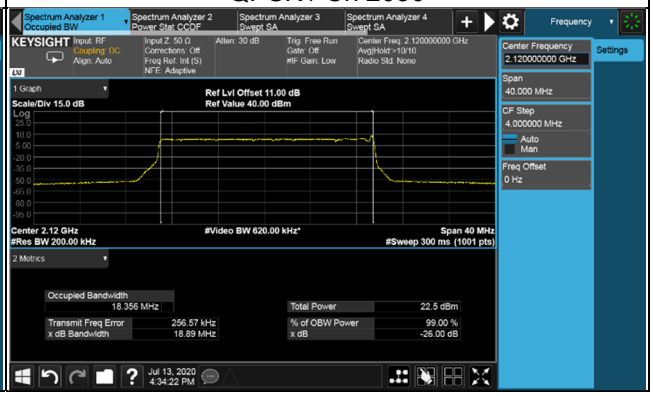
Channel Bandwidth: 10MHz							
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			Occupied Bandwidth (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2000	2115.0	9.65	9.66	9.64	9.33	9.34	9.36
2175	2132.5	9.65	9.63	9.64	9.33	9.33	9.33
2350	2150.0	9.67	9.66	9.67	9.35	9.34	9.34

Spectrum Plot of Worst Value	
26dBc Bandwidth	Occupied Bandwidth
64QAM / Ch 2350	64QAM / Ch 2000
	

Channel Bandwidth: 15MHz							
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			Occupied Bandwidth (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2025	2117.5	14.31	14.31	14.31	13.80	13.80	13.80
2175	2132.5	14.30	14.32	14.31	13.79	13.79	13.79
2325	2147.5	14.30	14.32	14.31	13.80	13.79	13.79

Spectrum Plot of Worst Value	
26dBc Bandwidth	Occupied Bandwidth
16QAM / Ch 2325	QPSK / Ch 2025
	

Channel Bandwidth: 20MHz							
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)			Occupied Bandwidth (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
2050	2120.0	18.89	18.88	18.89	18.36	18.36	18.35
2175	2132.5	18.88	18.88	18.88	18.34	18.34	18.33
2300	2145.0	18.90	18.90	18.90	18.33	18.34	18.33

Spectrum Plot of Worst Value	
26dBc Bandwidth	Occupied Bandwidth
QPSK / Ch 2300	QPSK / Ch 2050
	

4.5 Channel Edge Measurement

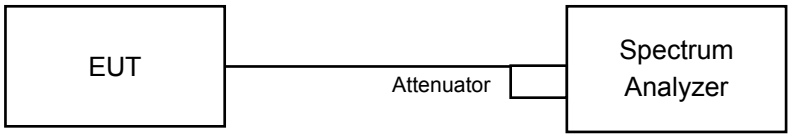
4.5.1 Limits of Band Edge Measurement

According to FCC 27.53(h) specified the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least 43 + 10 log10 (P) dB. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

Note:

This device can be impalement MIMO function, so the limit of spurious emissions needs to be reduced by 10log($Numbers_{Ant}$) according to FCC KDB 662911 D01 guidance.

4.5.2 Test Setup



4.5.3 Test Procedures

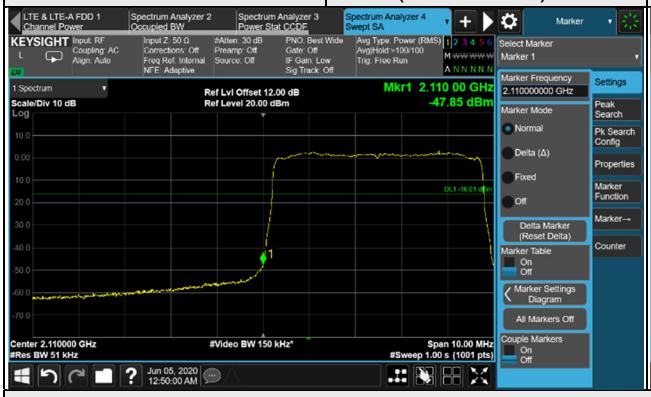
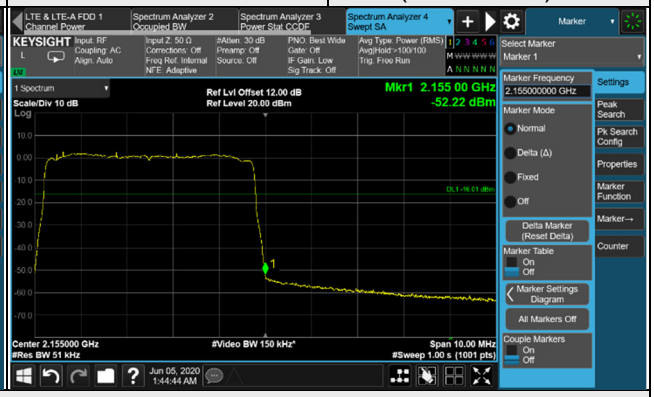
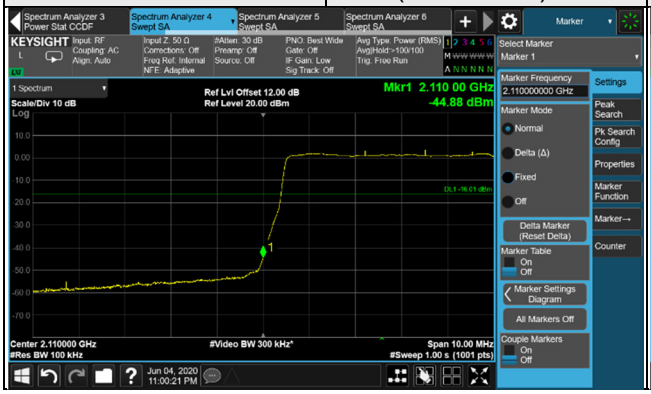
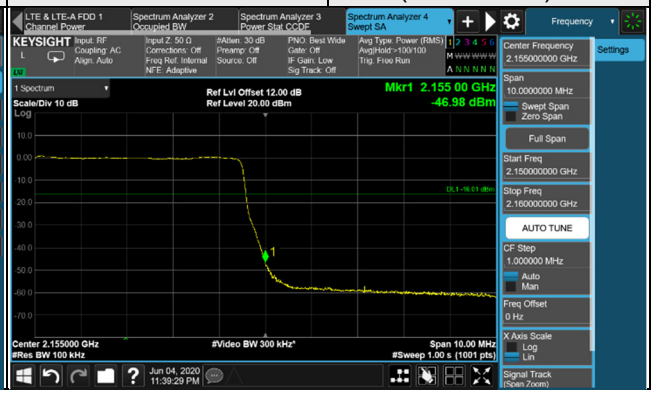
a. The EUT was set up for the rated peak power. The power was measured with Spectrum Analyzer. All measurements were done at 2 channels: low and high operational frequency range.

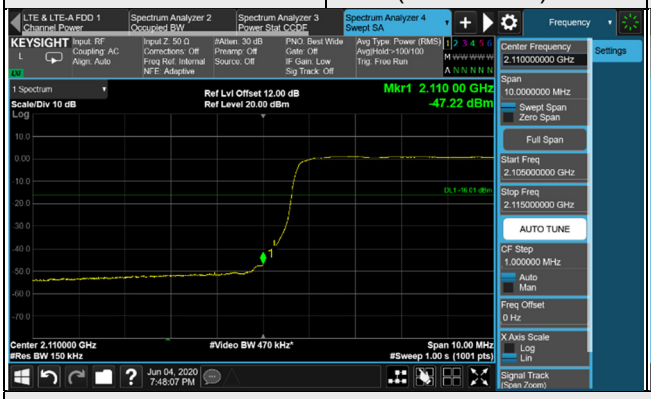
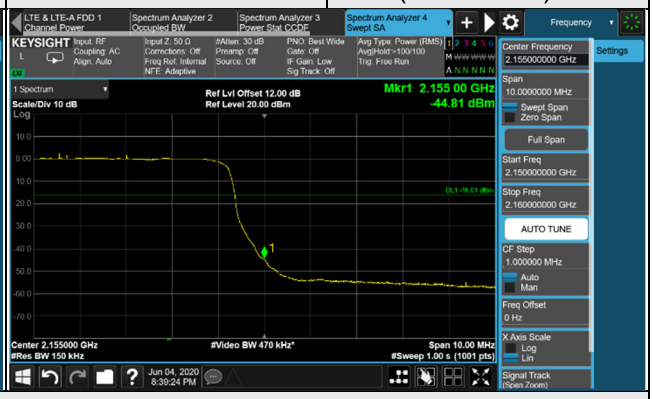
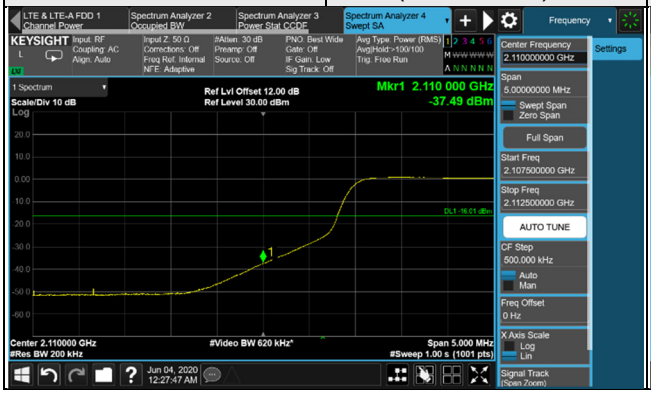
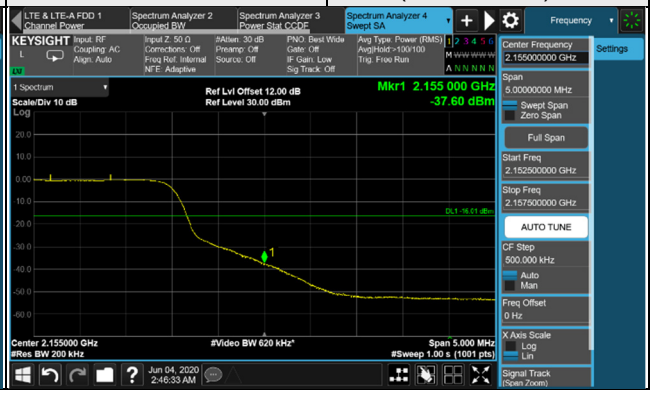
b. Record the max trace plot into the test report.

4.5.4 Test Results

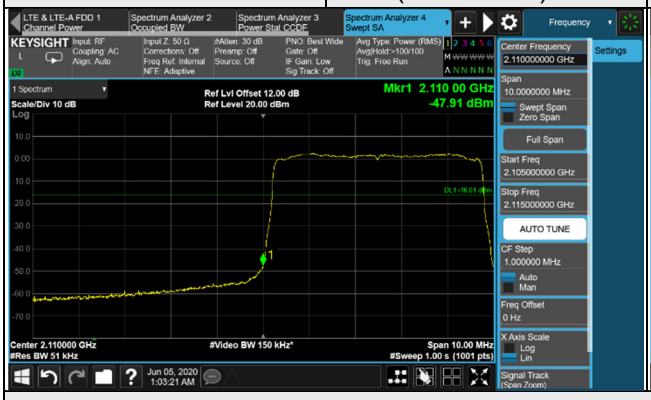
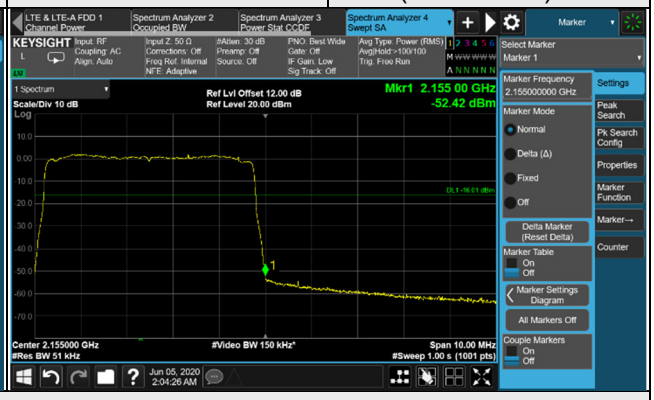
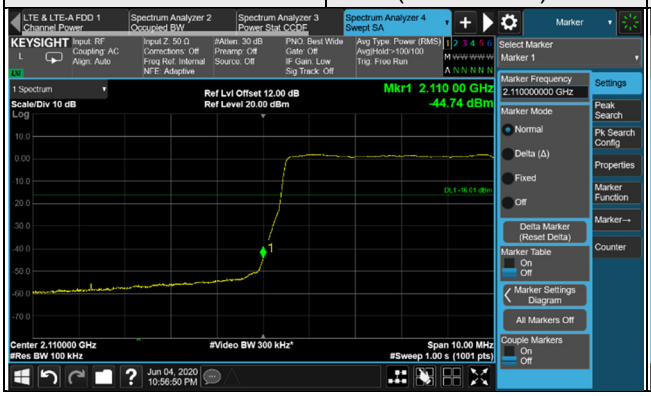
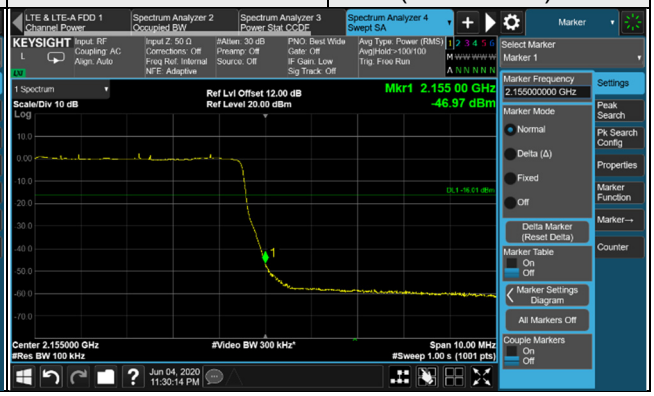
LTE Band 4

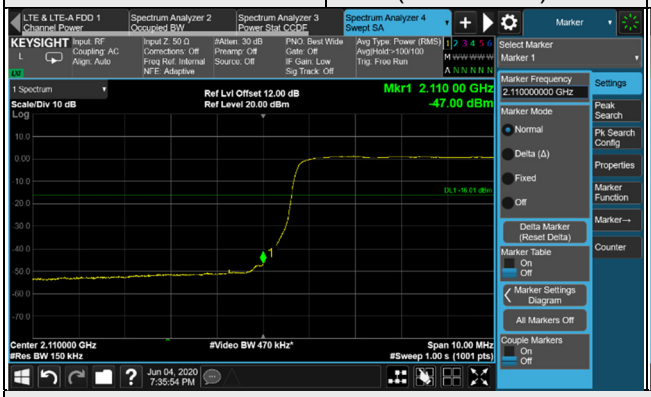
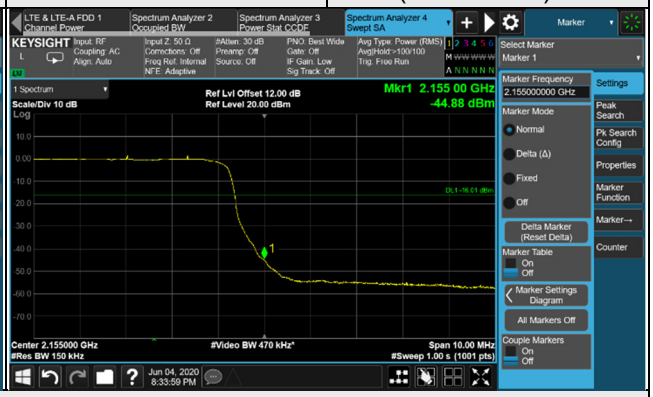
LTE Band 4 / Chain 0

Channel Bandwidth: 5MHz			
Channel	1975 (2112.5MHz)	Channel	2375 (2152.5MHz)
			
Channel Bandwidth: 10MHz			
Channel	2000 (2115.0MHz)	Channel	2350 (2150.0MHz)
			

Channel Bandwidth: 15MHz			
Channel	2025 (2117.5MHz)	Channel	2325 (2147.5MHz)
			
Channel Bandwidth: 20MHz			
Channel	2050 (2120.0MHz)	Channel	2300 (2145.0MHz)
			

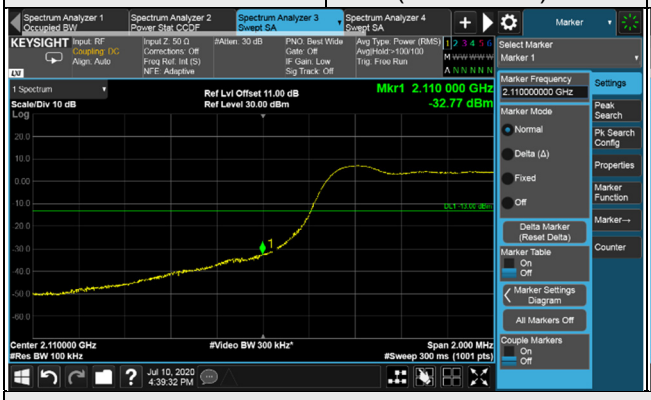
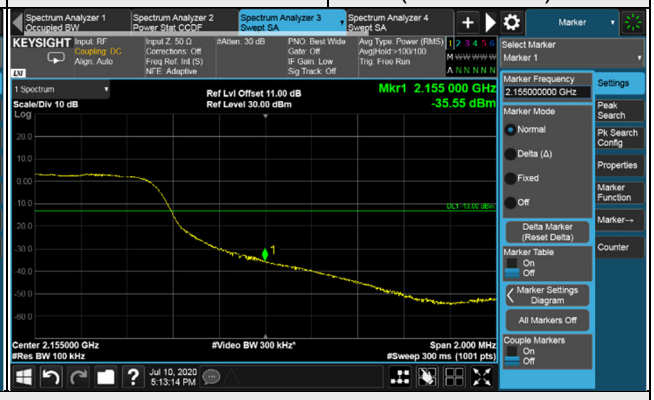
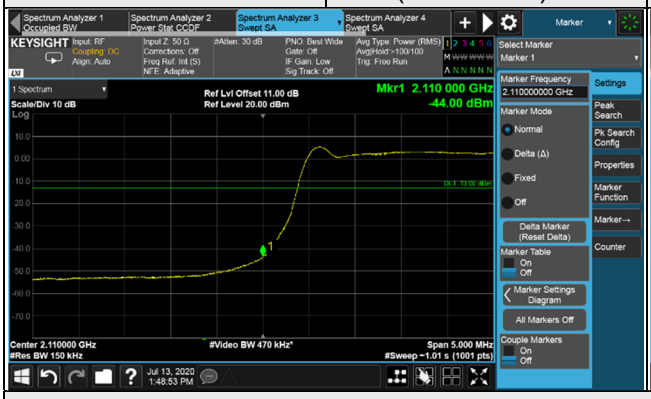
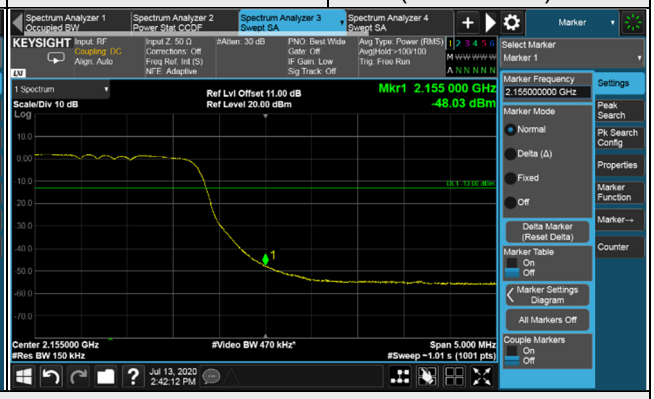
LTE Band 4 / Chain 1

Channel Bandwidth: 5MHz			
Channel	1975 (2112.5MHz)	Channel	2375 (2152.5MHz)
			
Channel Bandwidth: 10MHz			
Channel	2000 (2115.0MHz)	Channel	2350 (2150.0MHz)
			

Channel Bandwidth: 15MHz			
Channel	2025 (2117.5MHz)	Channel	2325 (2147.5MHz)
			
Channel Bandwidth: 20MHz			
Channel	2050 (2120.0MHz)	Channel	2300 (2145.0MHz)
			

LTE Band 4 NB-IoT Guard band

Signal at lower (Fixed on chain 0)

Channel Bandwidth: 10MHz			
Channel	2000 (2115.0MHz)	Channel	2350 (2150.0MHz)
			
Channel Bandwidth: 15MHz			
Channel	2025 (2117.5MHz)	Channel	2325 (2147.5MHz)
			
Channel Bandwidth: 20MHz			
Channel	2050 (2120.0MHz)	Channel	2300 (2145.0MHz)