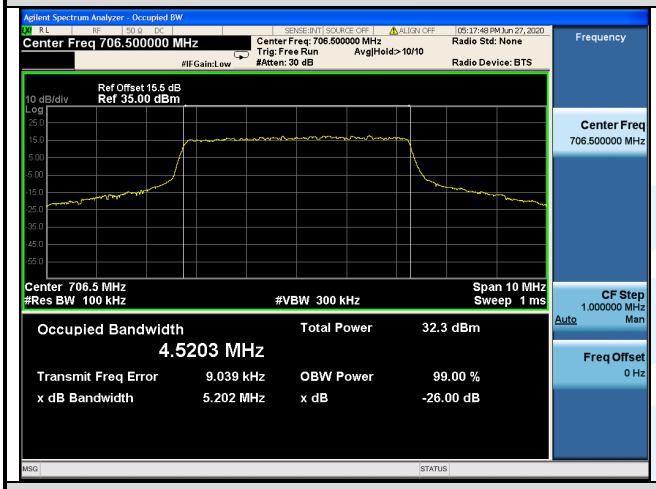
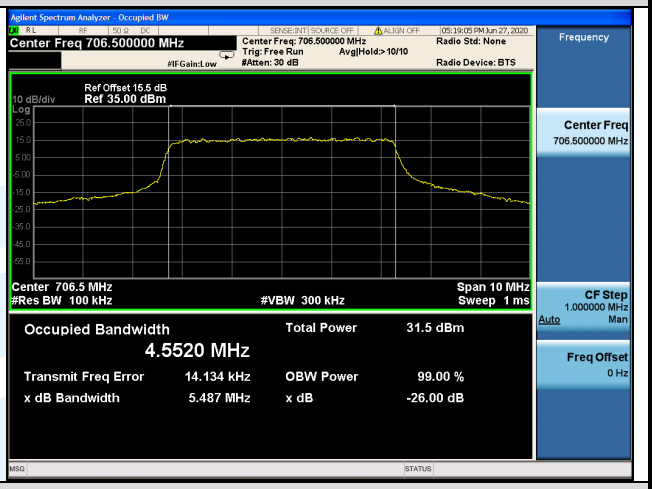
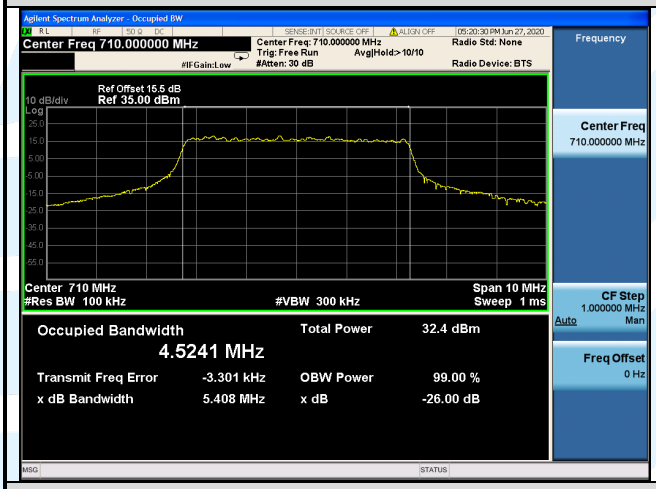
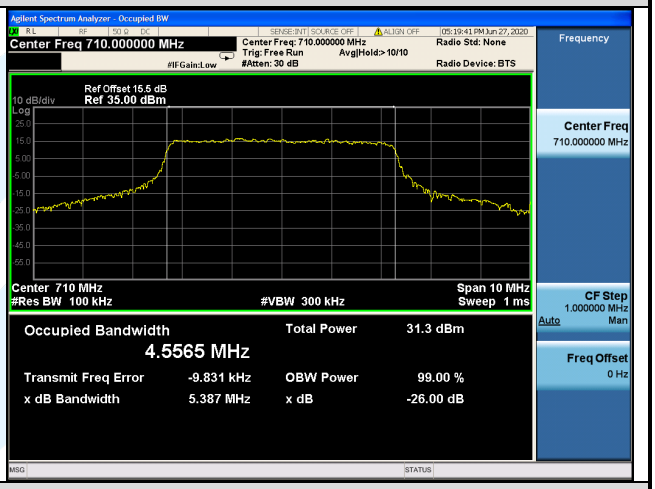
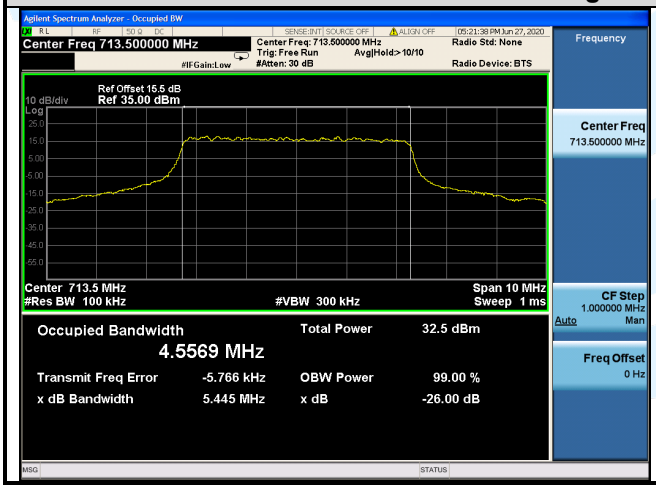
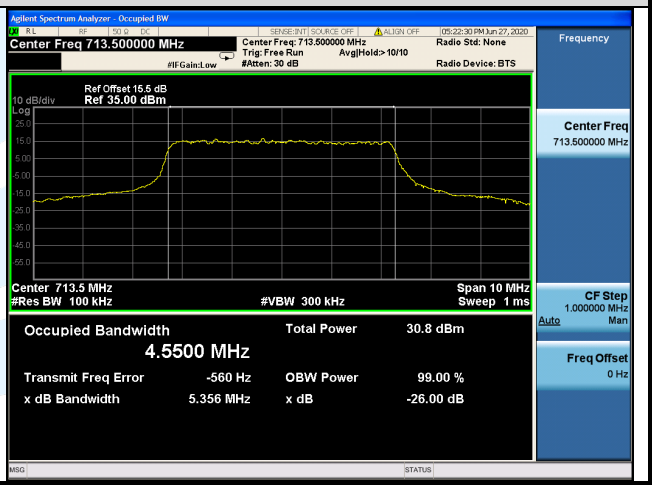
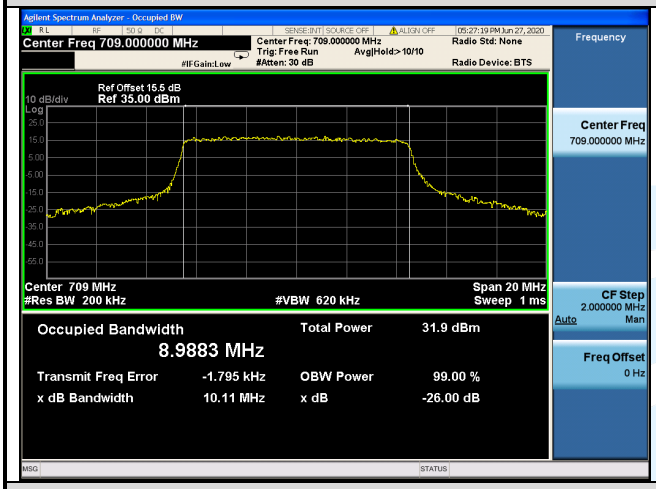
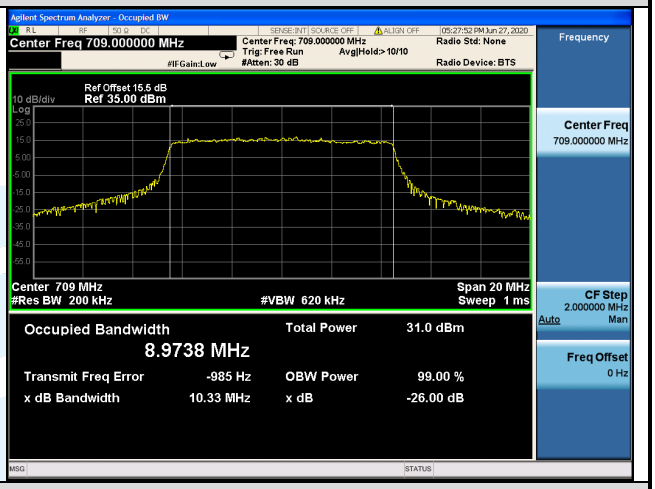
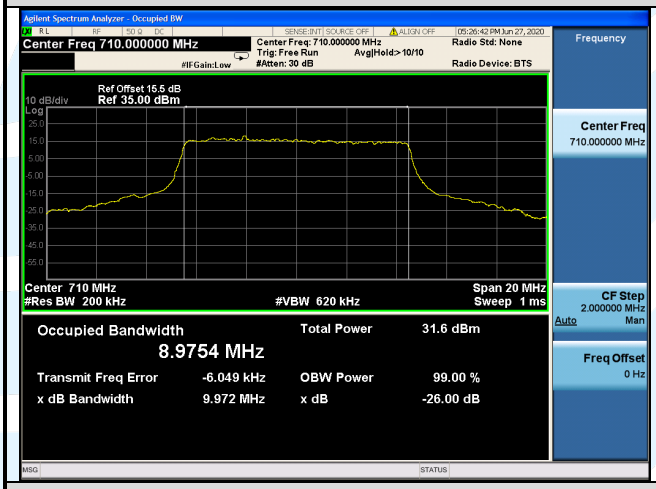
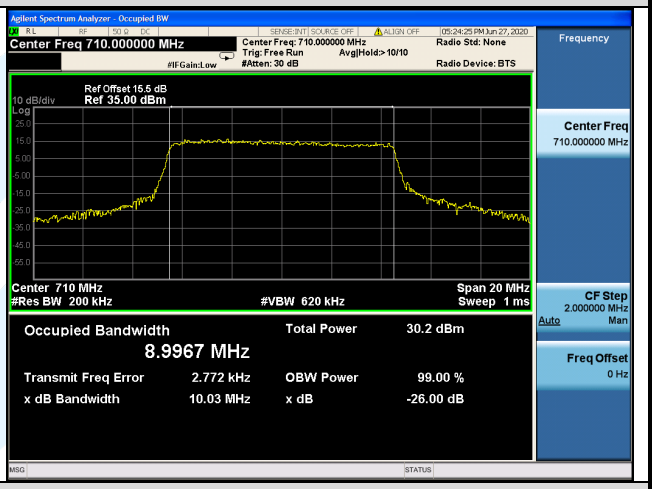
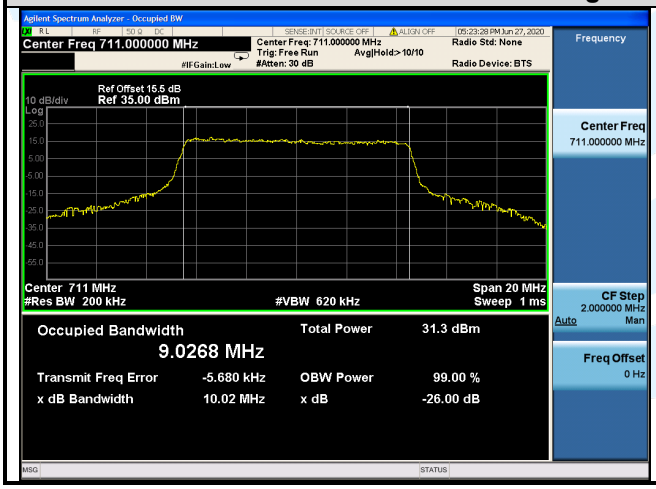
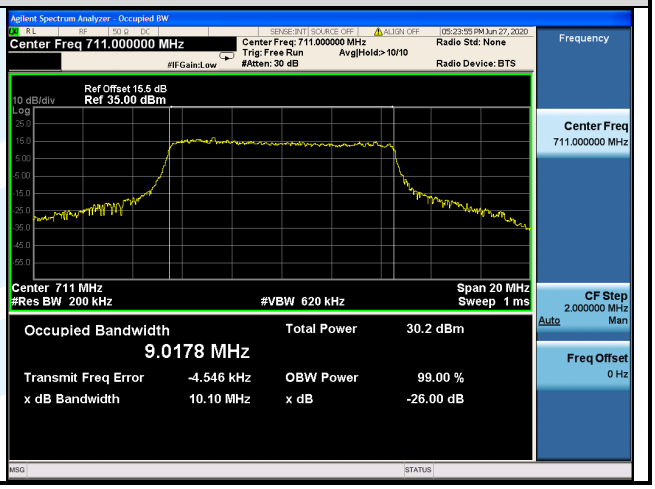
5.5.6 LTE Band 17

LTE Band 17								
Channel	RB Configuration		26 dB BW (MHz)			99% BW (MHz)		
	Size	Offset	QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
Channel Bandwidth: 5 MHz								
Lowest	25	0	5.202	5.487	/	4.5203	4.5520	/
Middle	25	0	5.408	5.387	/	4.5241	4.5565	/
Highest	25	0	5.445	5.356	/	4.5569	4.5500	/
Channel Bandwidth: 10 MHz								
Lowest	50	0	10.11	10.33	/	8.9883	8.9738	/
Middle	50	0	9.972	10.03	/	8.9754	8.9967	/
Highest	50	0	10.02	10.10	/	9.0268	9.0178	/

LTE Band 17_ Channel Bandwidth: 5 MHz	
QPSK	16QAM
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

LTE Band 17_ Channel Bandwidth: 10 MHz	
QPSK	16QAM
Lowest Channel	
	
Middle Channel	
	
Highest Channel	
	

5.6 BAND EDGE AT ANTENNA TERMINALS

Test Requirement: **LTE Band 2 & LTE Band 25:** FCC 47 CFR Part 24.238(a)
LTE Band 4 & LTE Band 66: FCC 47 CFR Part 27.53(h)(1)
LTE Band 5 & LTE Band 26: FCC 47 CFR Part 22.917(a)
LTE Band 7 & Band 38 & Band 41: FCC 47 CFR Part 27.53(m)(4)
LTE Band 12 & Band 17: FCC 47 CFR Part 27.53(g)
LTE Band 13: FCC 47 CFR Part 27.53(c)(2)

Test Method: ANSI C63.26-2015 & KDB 971168 D01v03r01

Limit:

FCC 47 CFR Part 24.238(a), 27.53(h)(1), 22.917(a) :
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to -13 dBm.

FCC 47 CFR Part 27.53(m)(4):
For mobile digital stations, the attenuation 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 as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

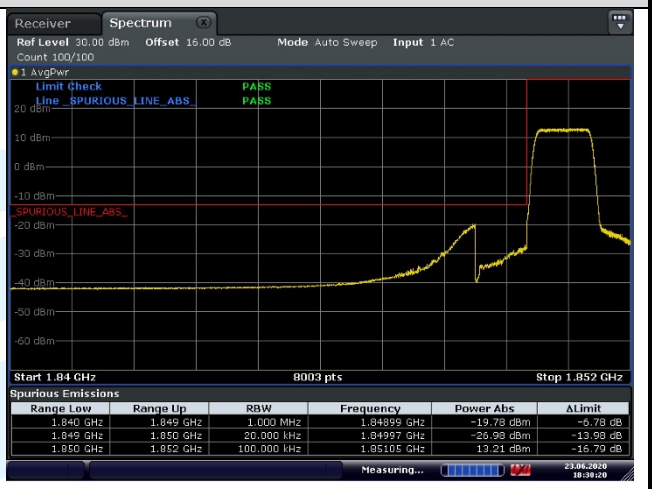
FCC 47 CFR Part 27.53(g):
For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

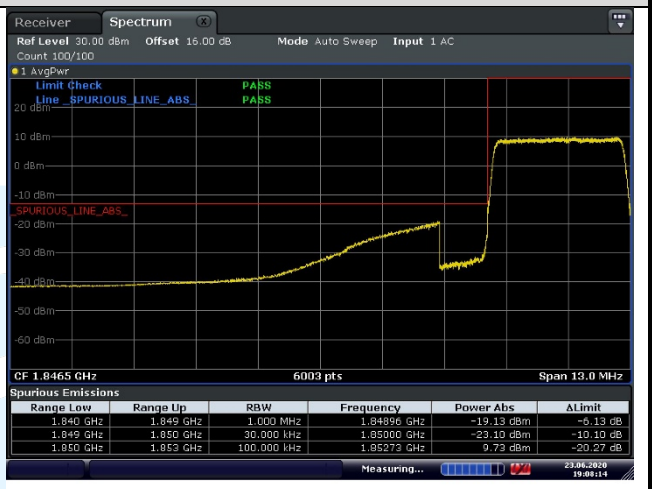
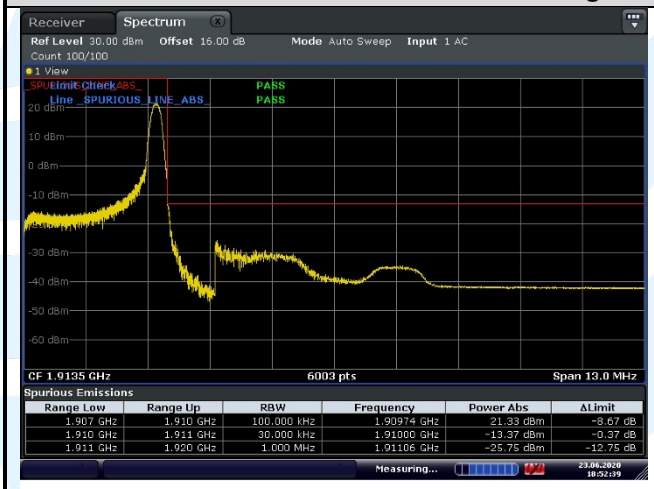
Test Procedure:
The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer.
For each band edge measurement:
1) Set the spectrum analyzer span to include the block edge frequency.
2) Set a marker to point the corresponding band edge frequency in each test case.
3) Set display line at -13 dBm
4) Set resolution bandwidth to at least 1% of emission bandwidth.
5) Set spectrum analyzer with RMS detector.
6) Record the max trace plot into the test report

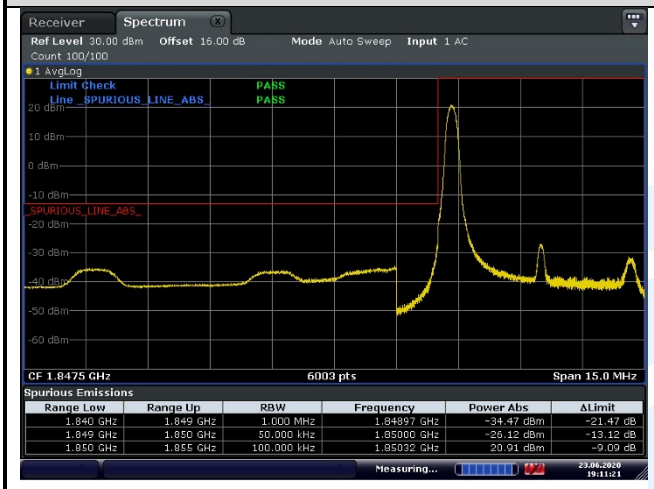
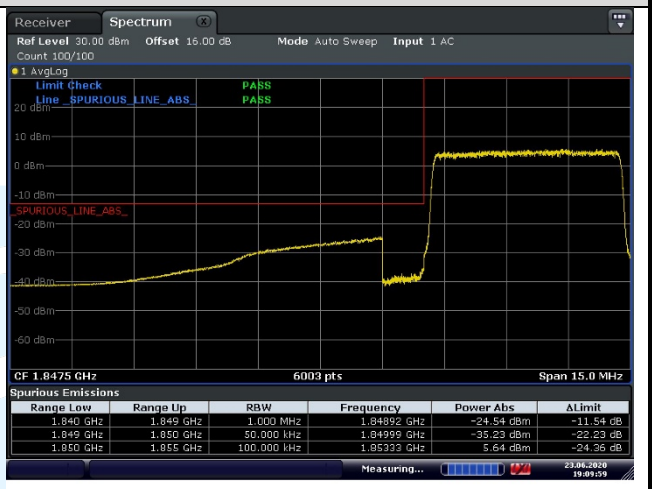
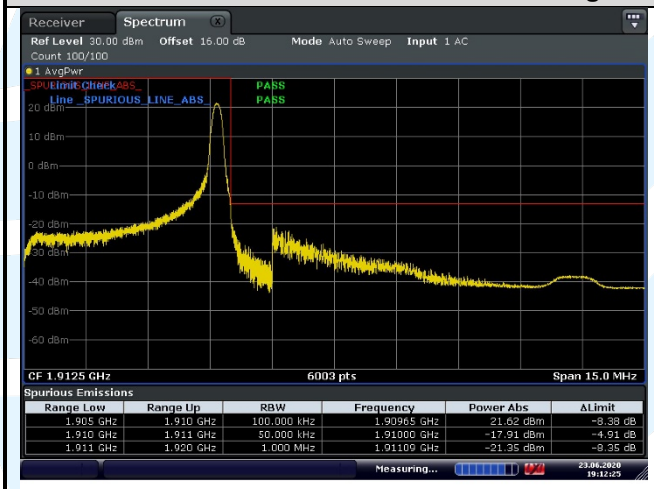
Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

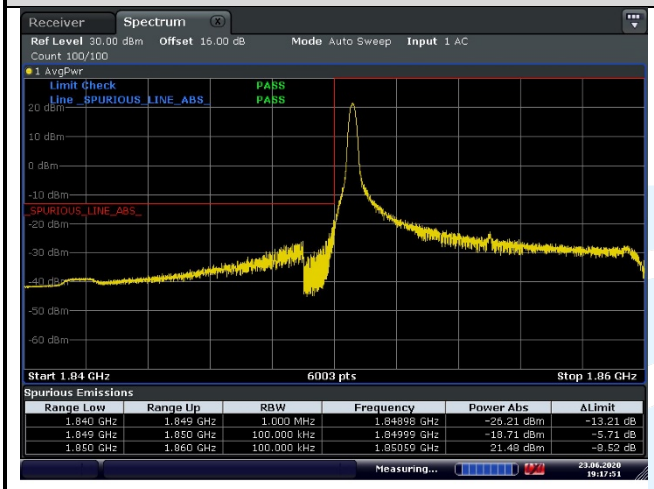
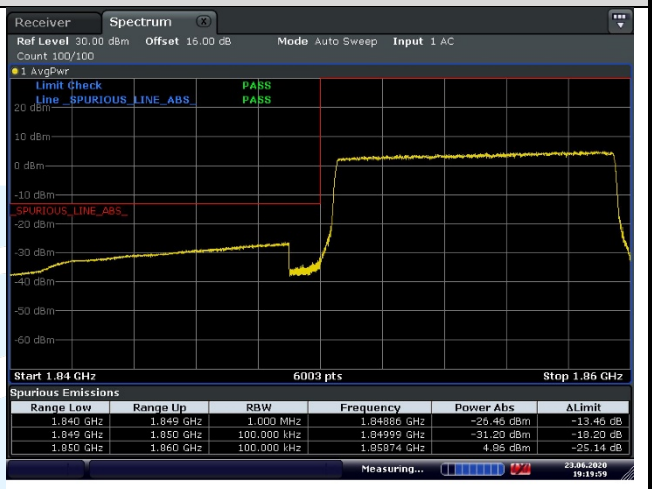
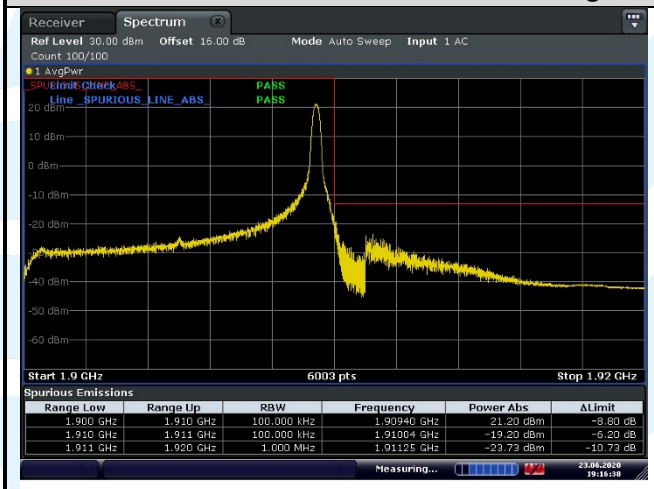
Test Setup: Refer to section 4.2.2 for details.
Instruments Used: Refer to section 3 for details
Test Mode: Link mode
Test Results: Pass

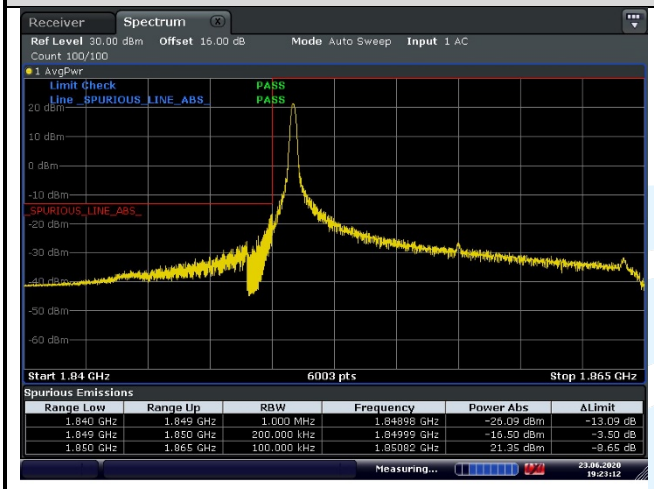
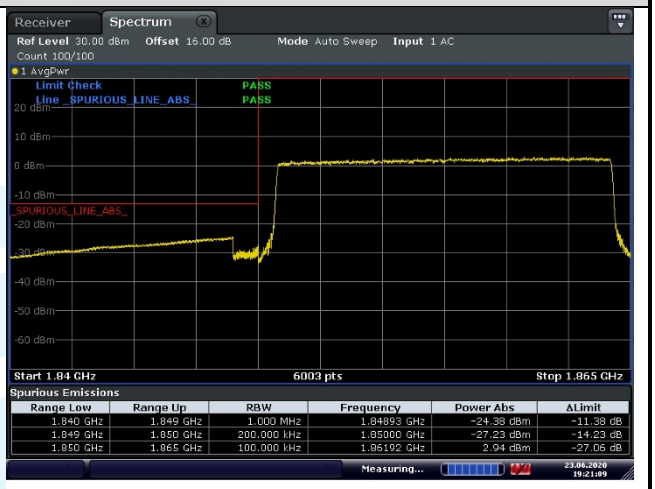
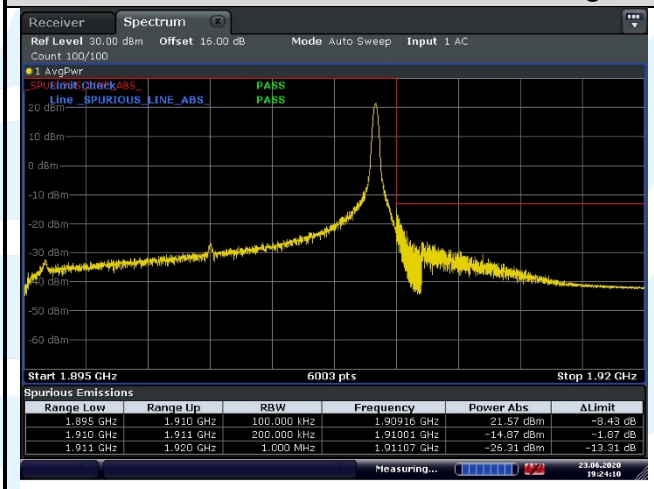
5.6.1 LTE Band 2

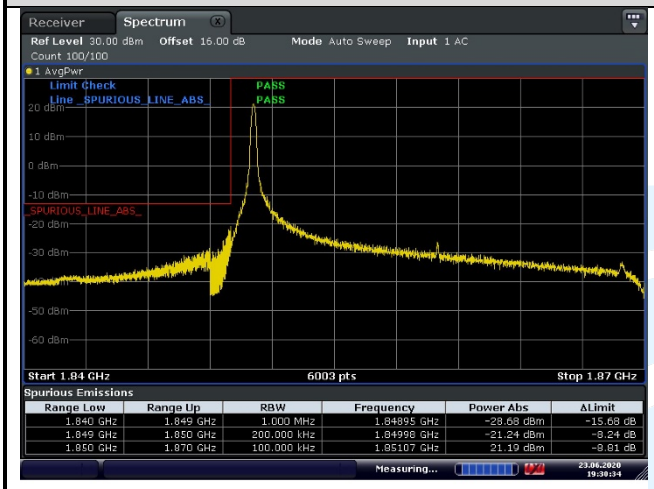
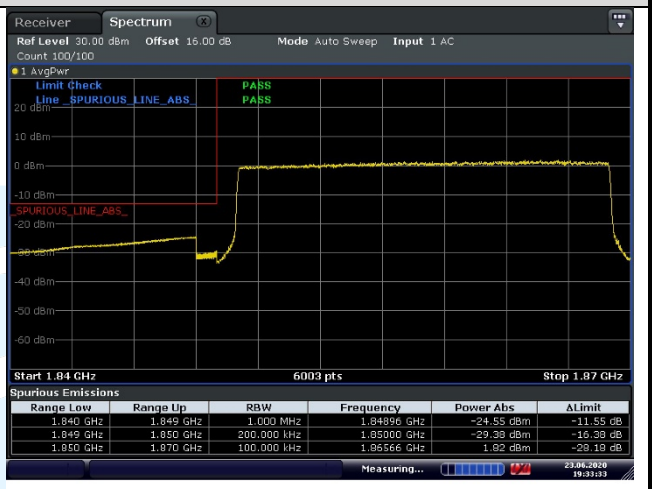
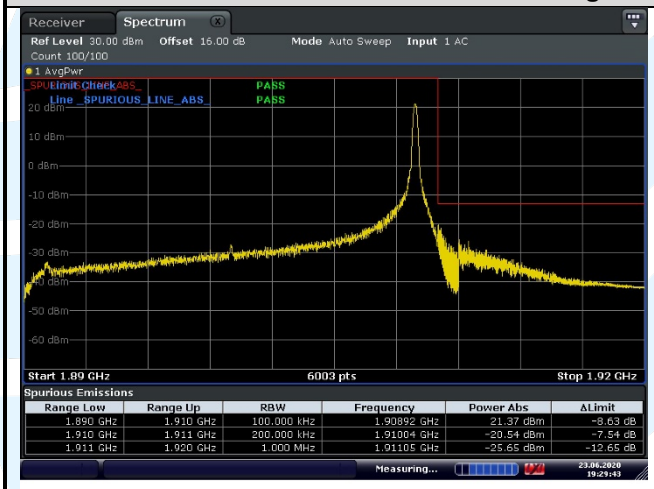
LTE Band 2 / 1.4 MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Highest Channel	
	

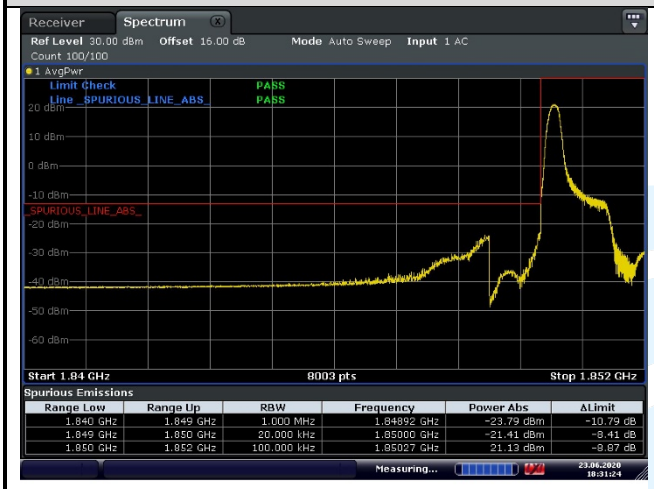
LTE Band 2 / 3 MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Highest Channel	
	

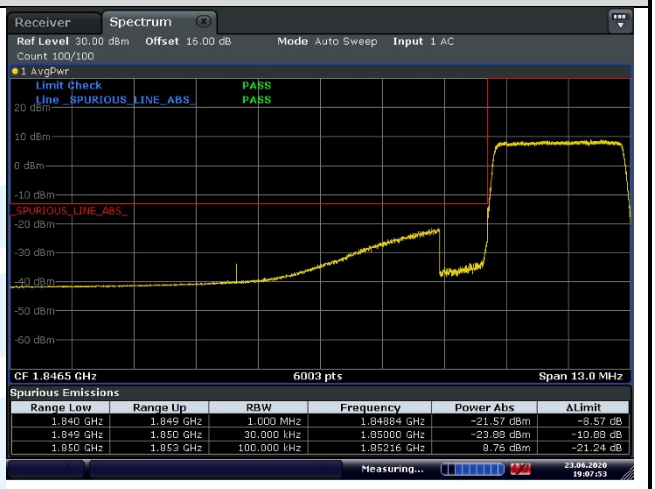
LTE Band 2 / 5 MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Highest Channel	
	

LTE Band 2 / 10 MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Highest Channel	
	

LTE Band 2 / 15 MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Highest Channel	
	

LTE Band 2 / 20 MHz / QPSK	
1 RB	Full RB
Lowest Channel	
	
Highest Channel	
	

LTE Band 2 / 1.4 MHz / 16QAM	
1 RB	Full RB
Lowest Channel	
	
Highest Channel	
	

LTE Band 2 / 3 MHz / 16QAM	
1 RB	Full RB
Lowest Channel	
	
Highest Channel