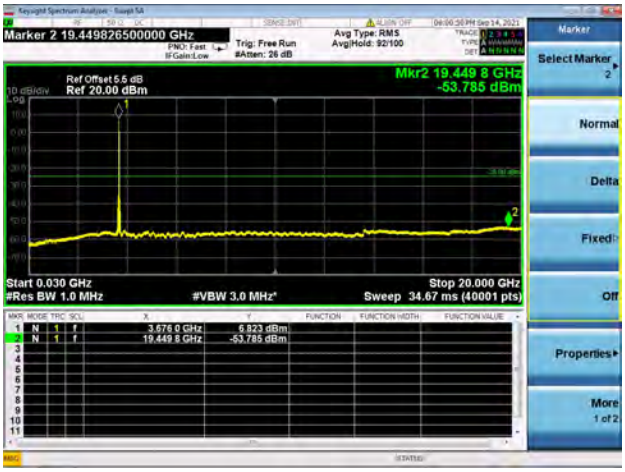
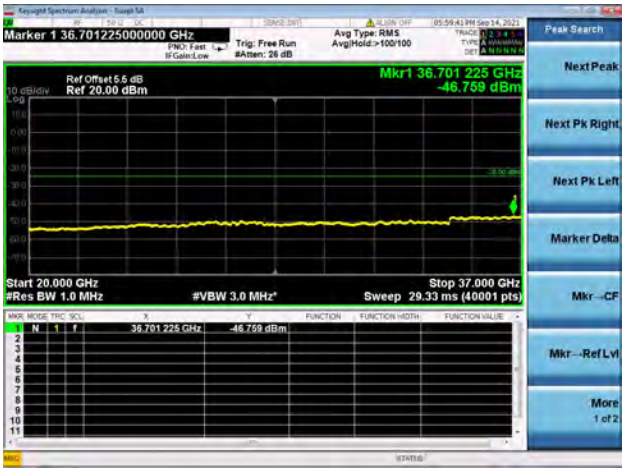
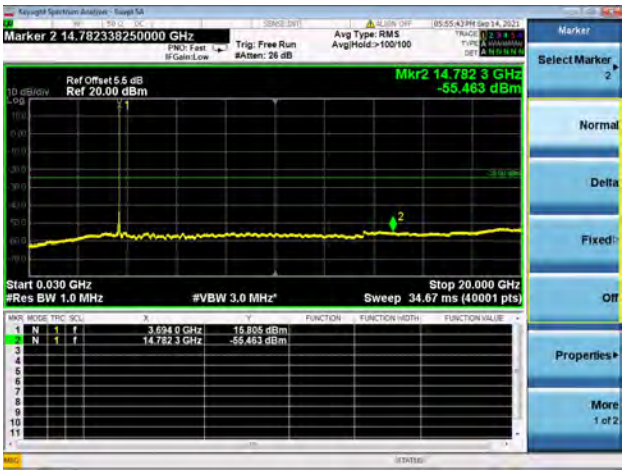
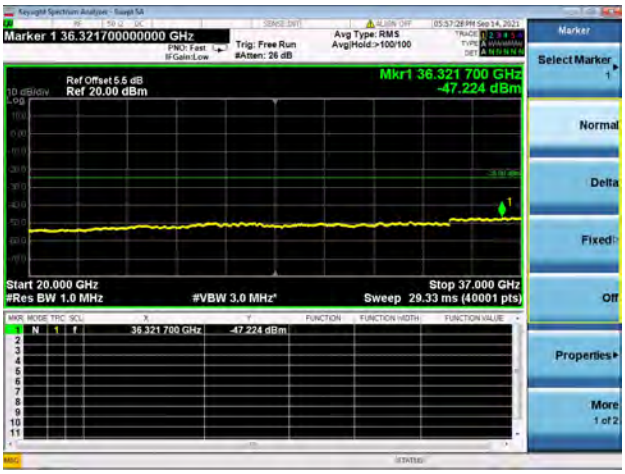
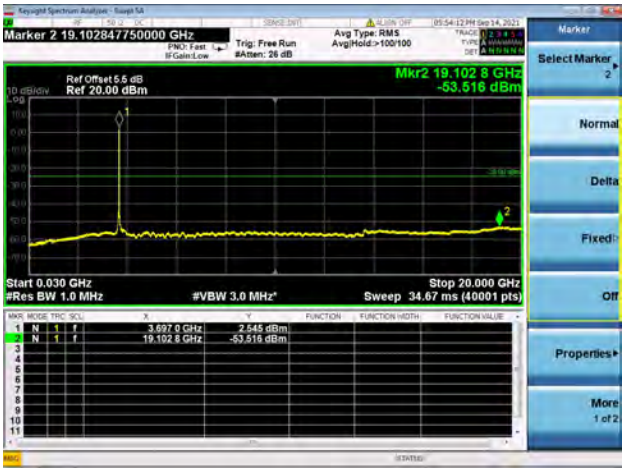
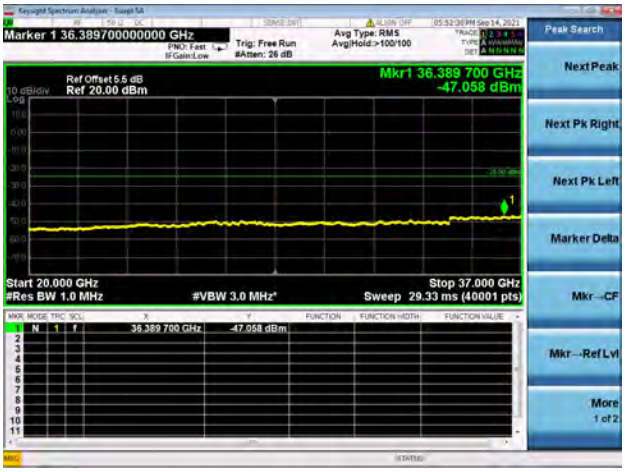
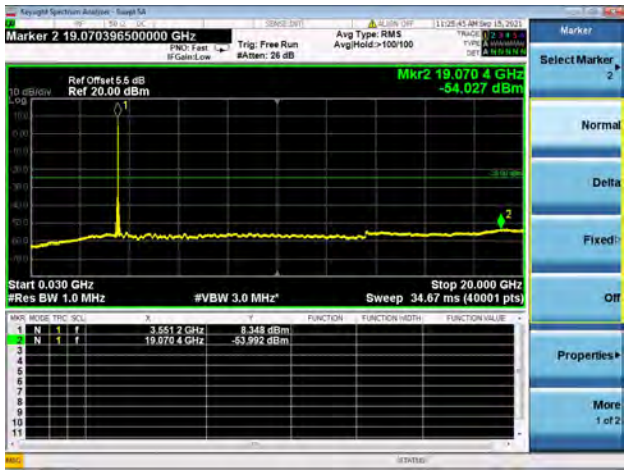
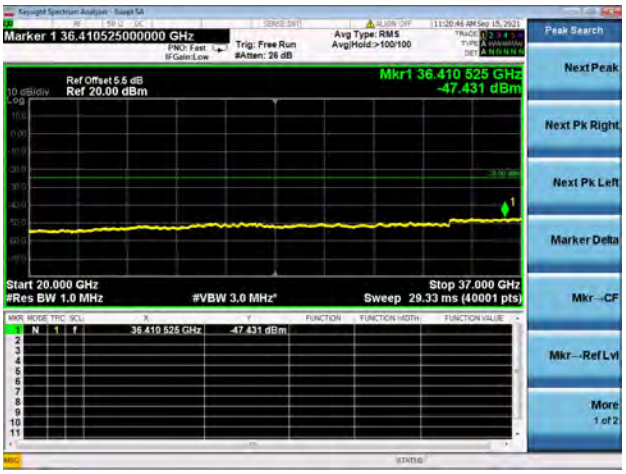
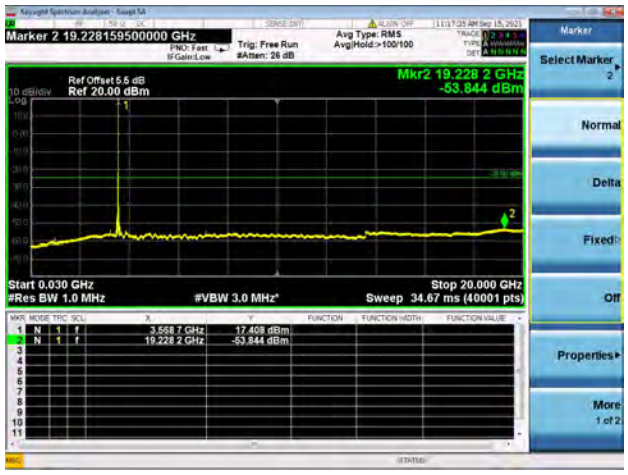
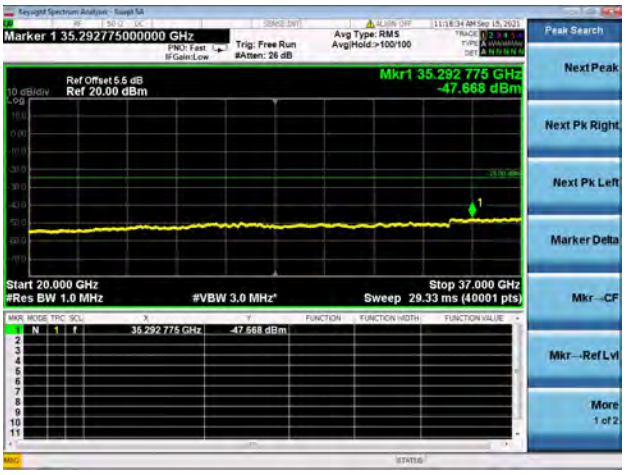
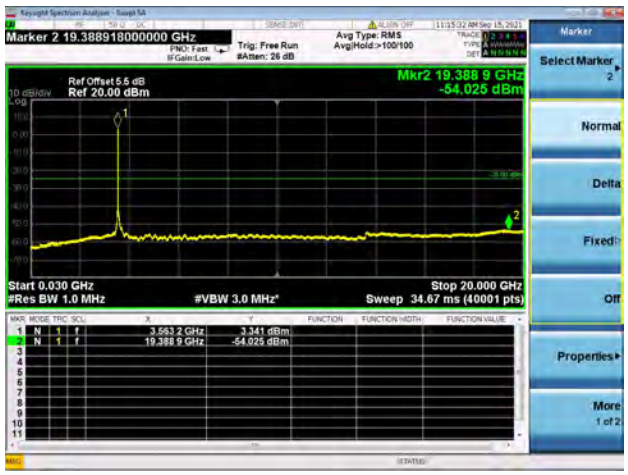
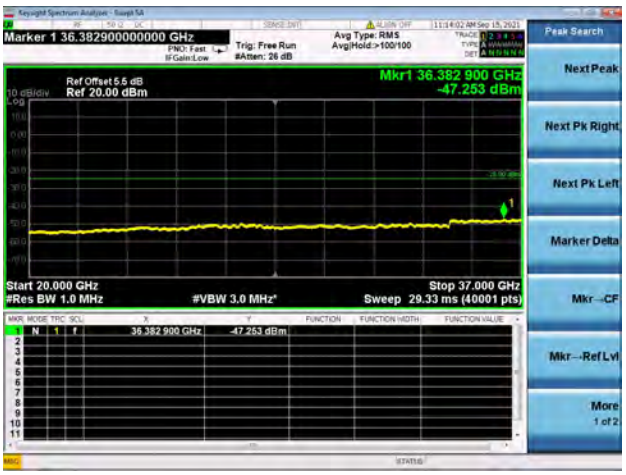
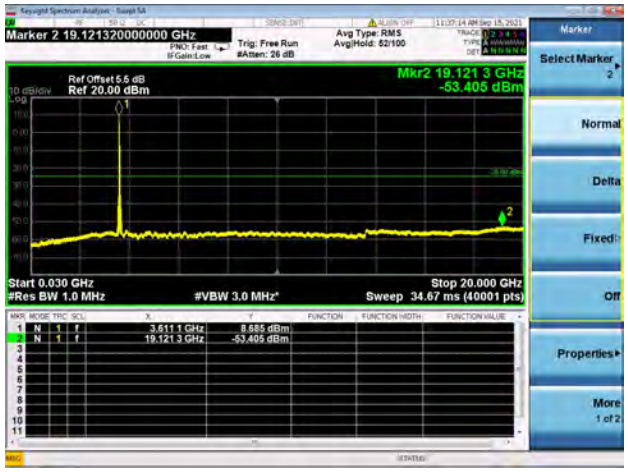
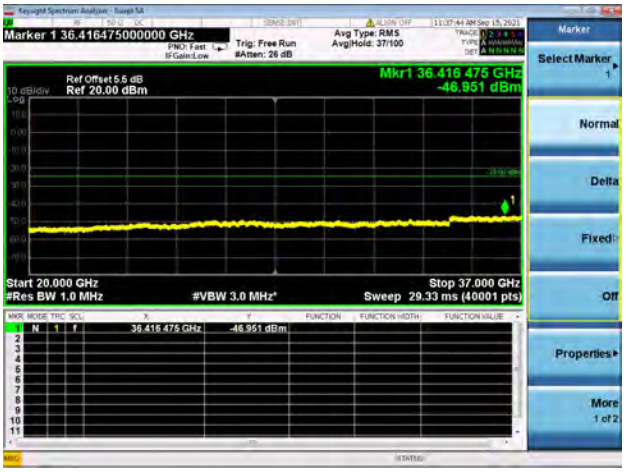
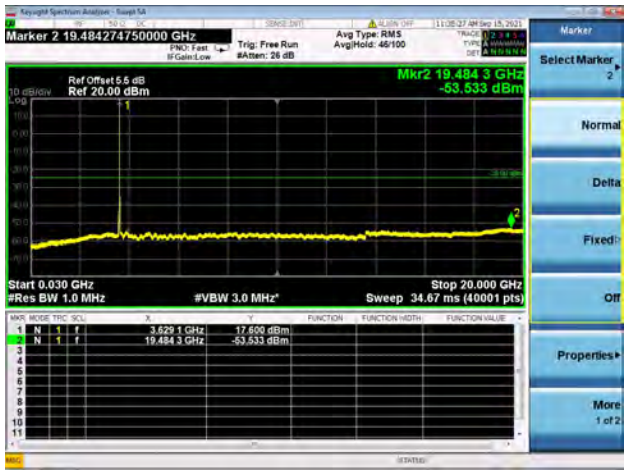
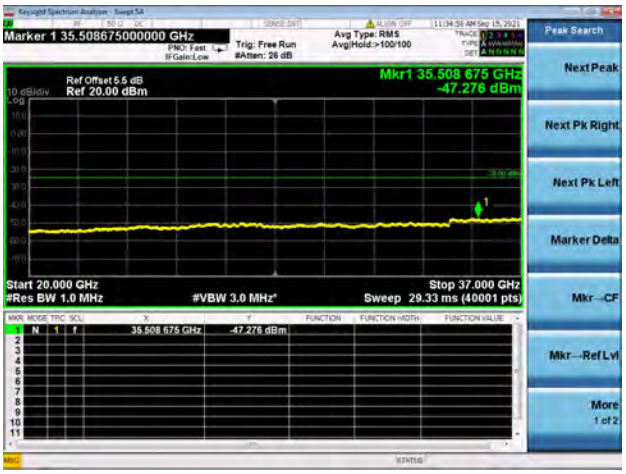
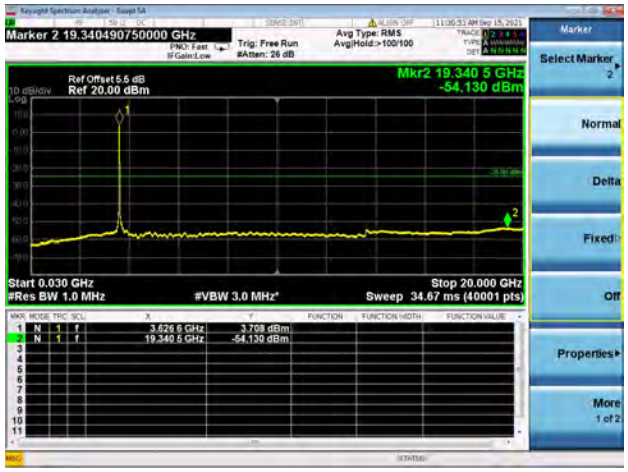
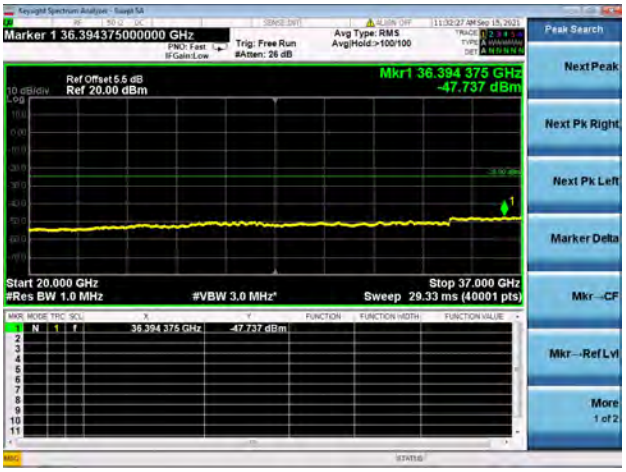
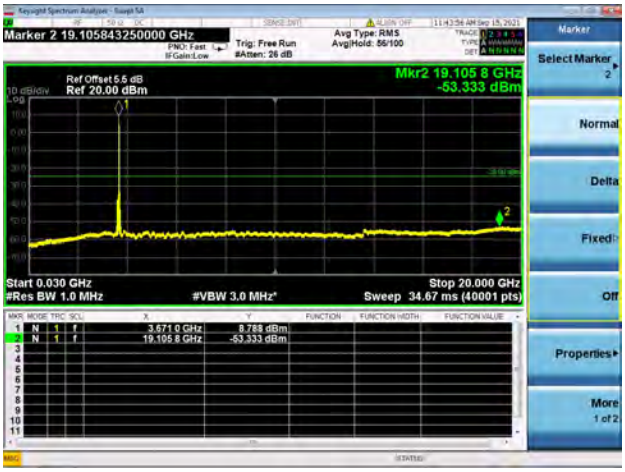
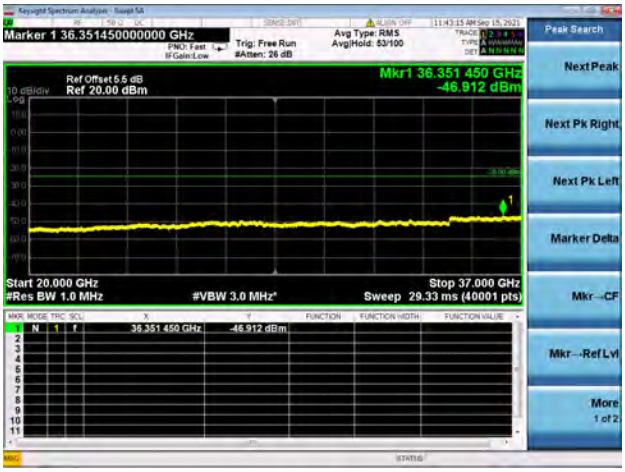
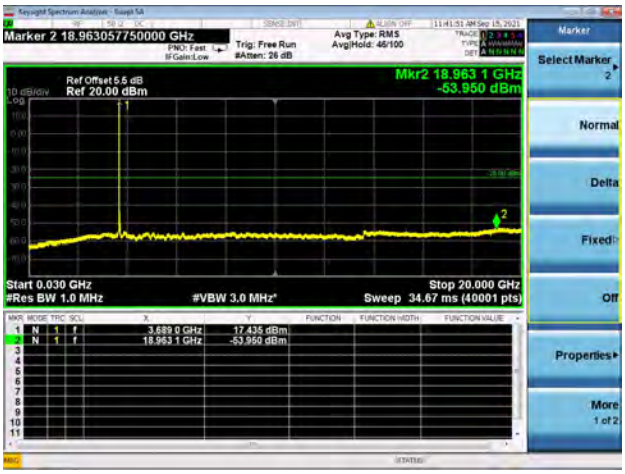
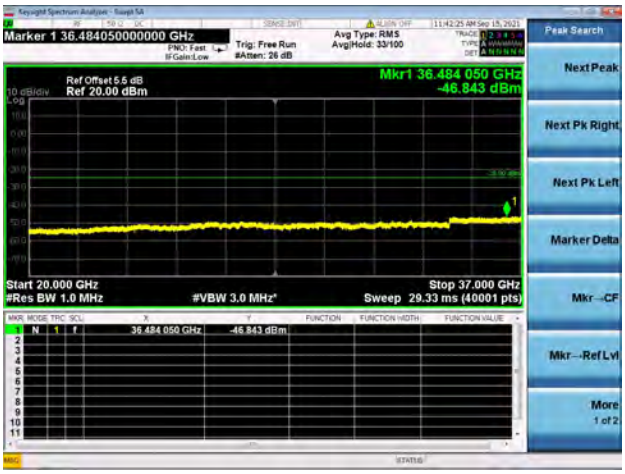
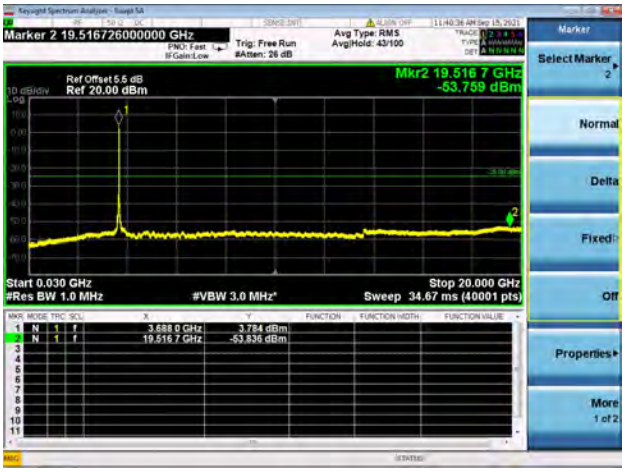
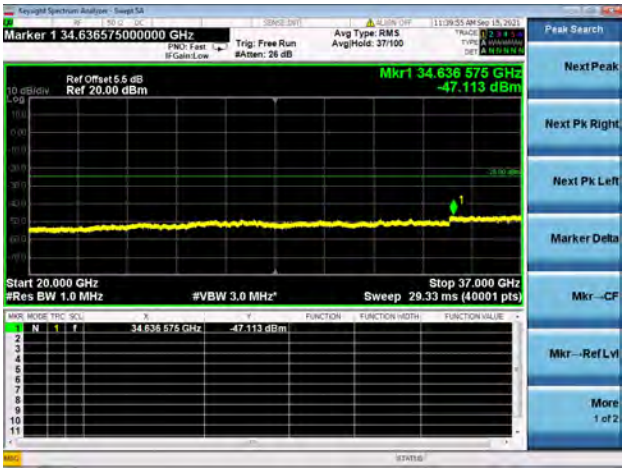
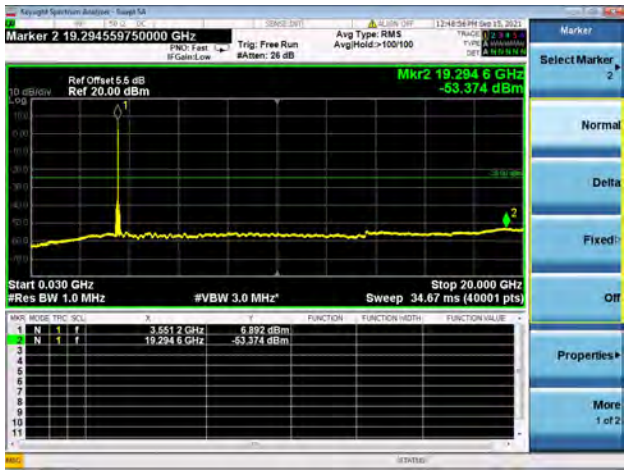
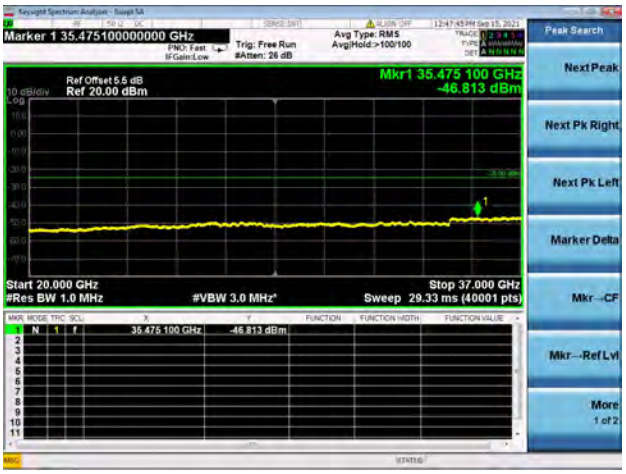
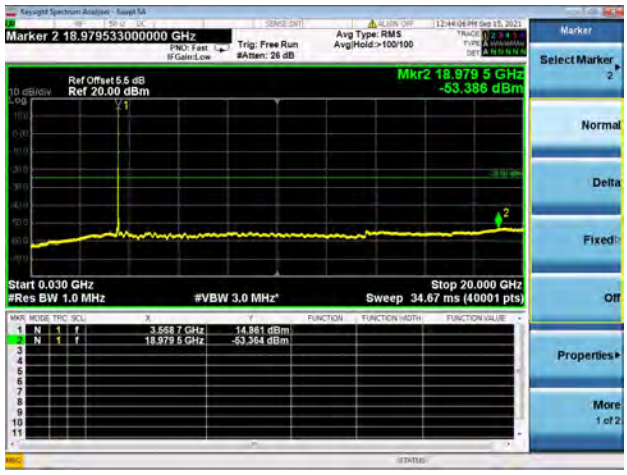
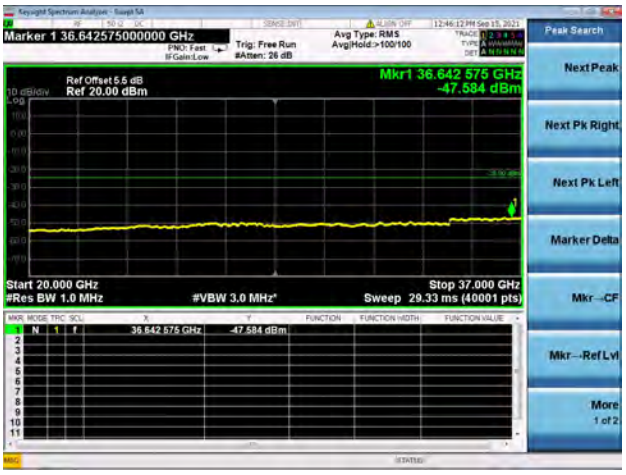
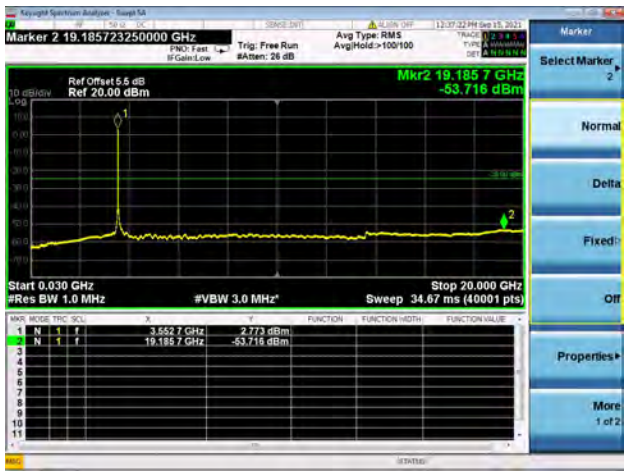
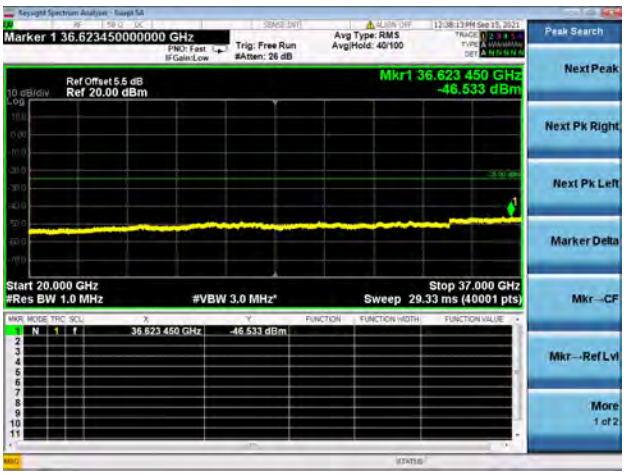
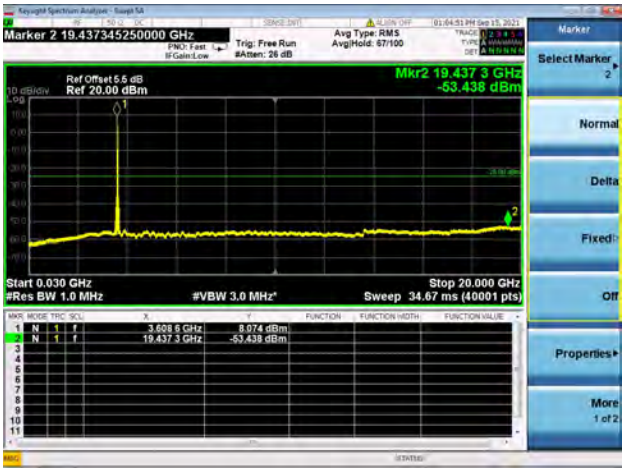
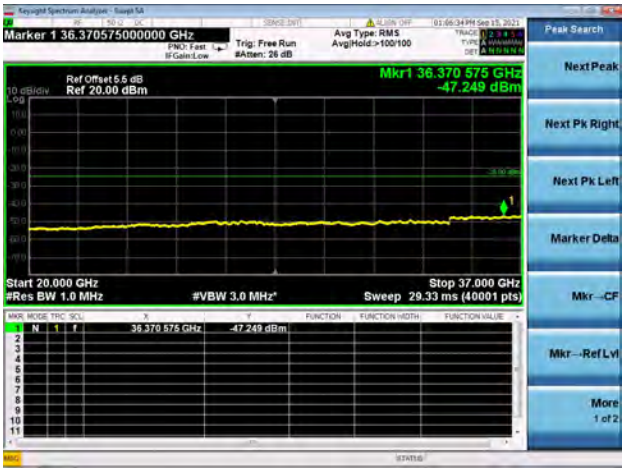
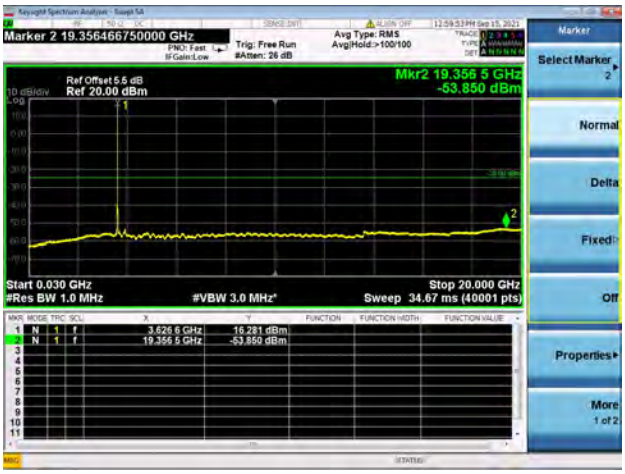
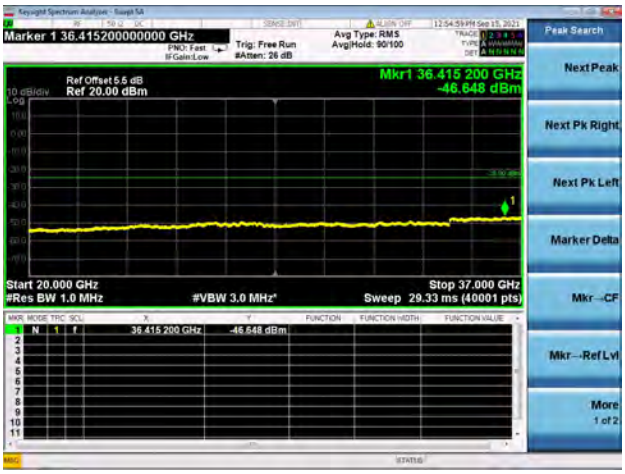
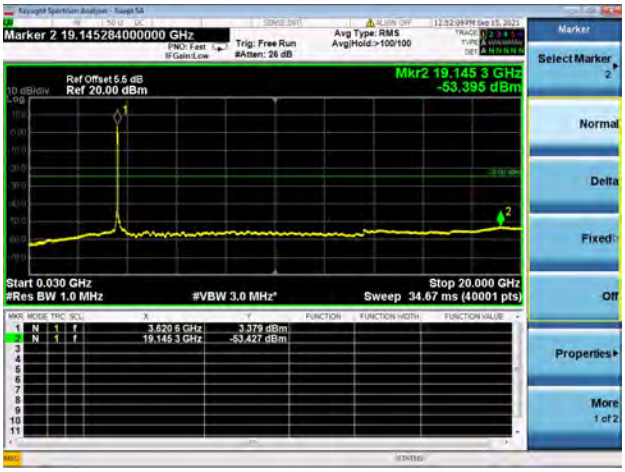
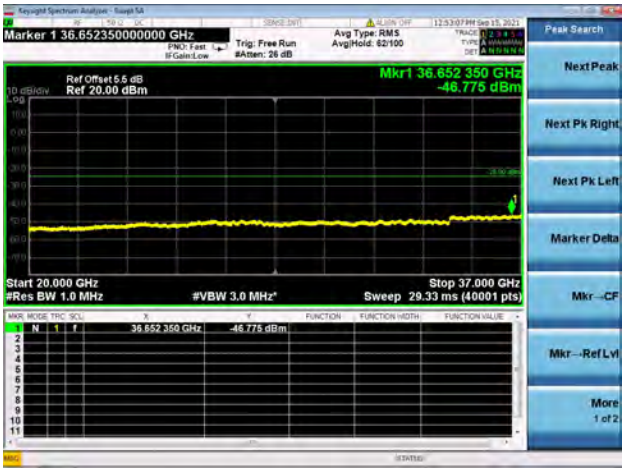
High CH/QPSK/1RB0 and 1RB24	High CH/QPSK/1RB0 and 1RB24
	
High CH/QPSK/1RB99 and 1RB0	**High CH/QPSK/1RB99 and 1RB0**
	
High CH/QPSK/FULL RB	**High CH/QPSK/FULL RB**
	

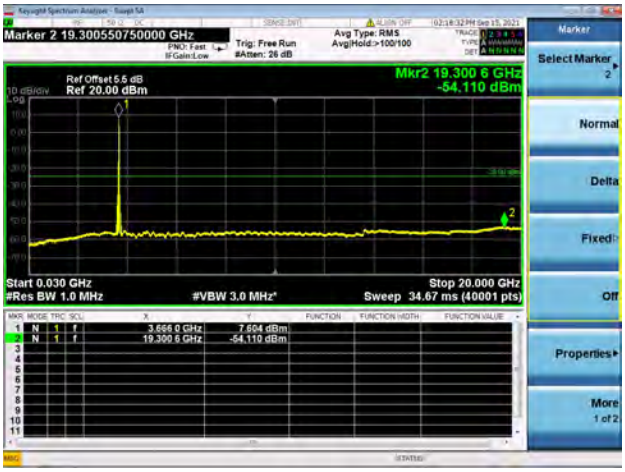
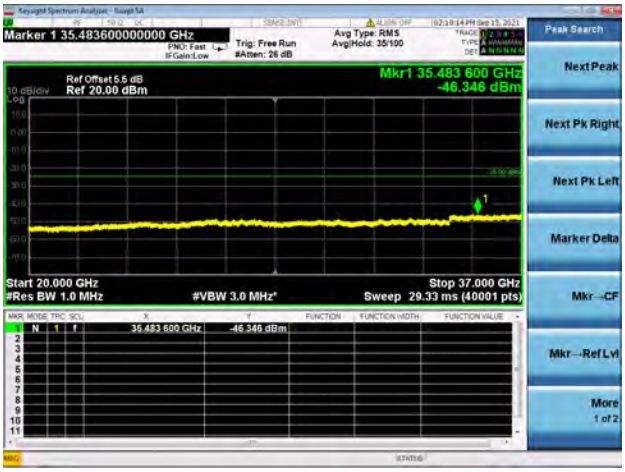
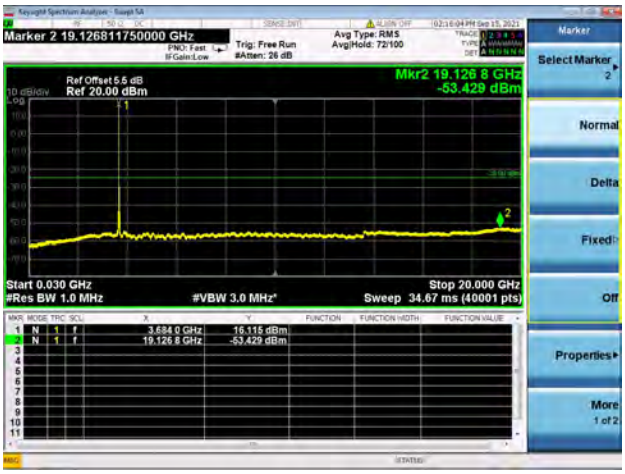
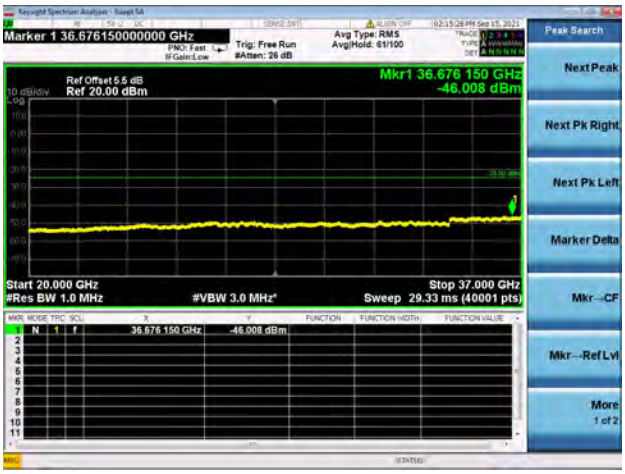
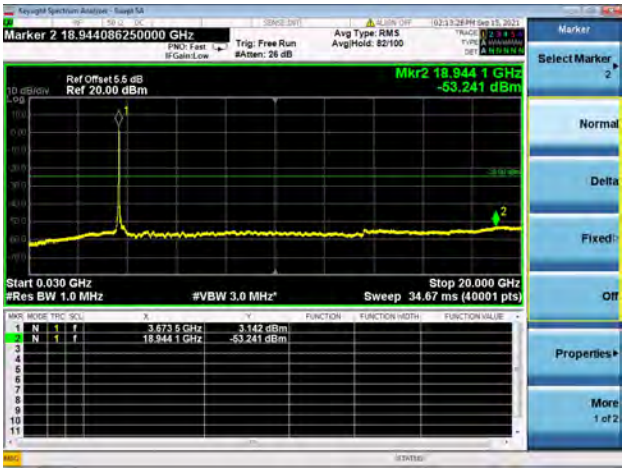
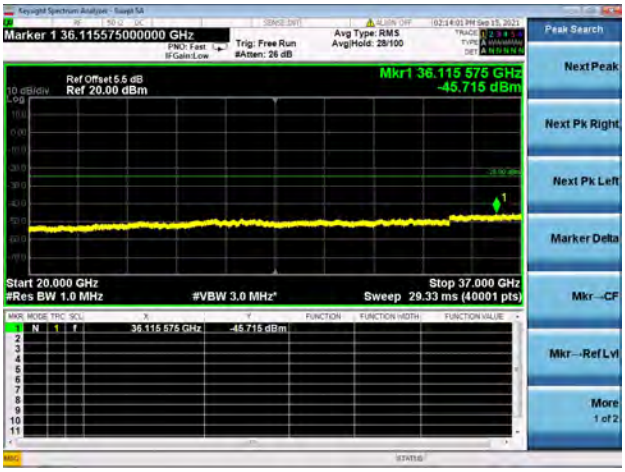
LTE Band 48C CSE	
Channel Bandwidth: 20MHz+10MHz	
LOW CH/QPSK/1RB0 and 1RB49	LOW CH/QPSK/1RB0 and 1RB49
	
LOW CH/QPSK/1RB99 and 1RB0	LOW CH/QPSK/1RB99 and 1RB0
	
LOW CH/QPSK/FULL RB	LOW CH/QPSK/FULL RB
	

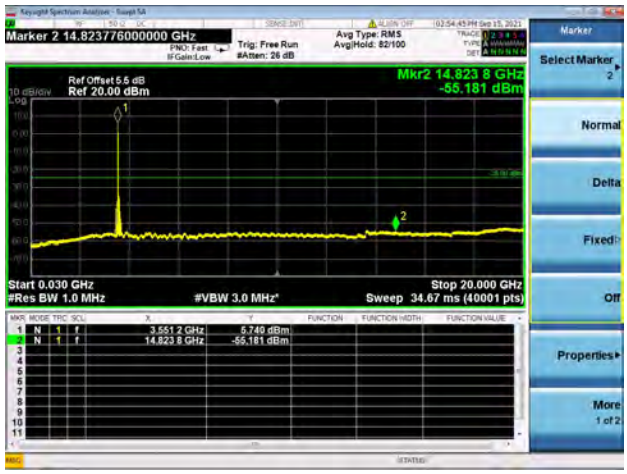
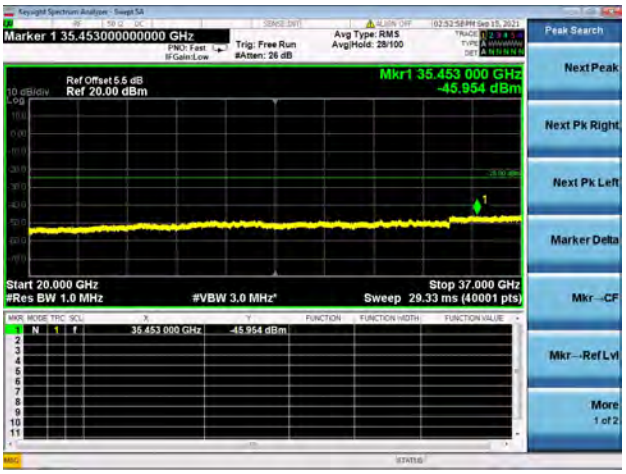
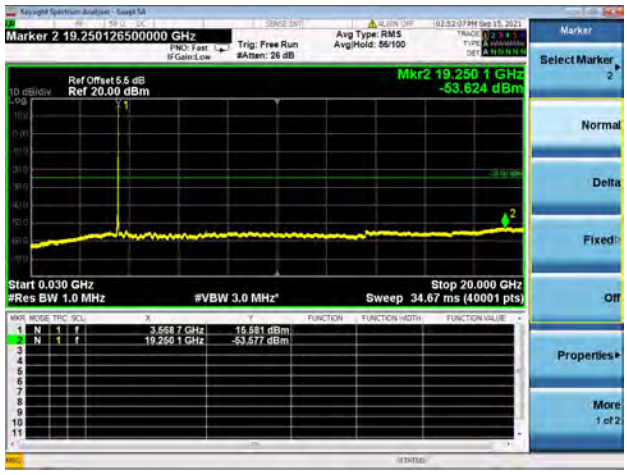
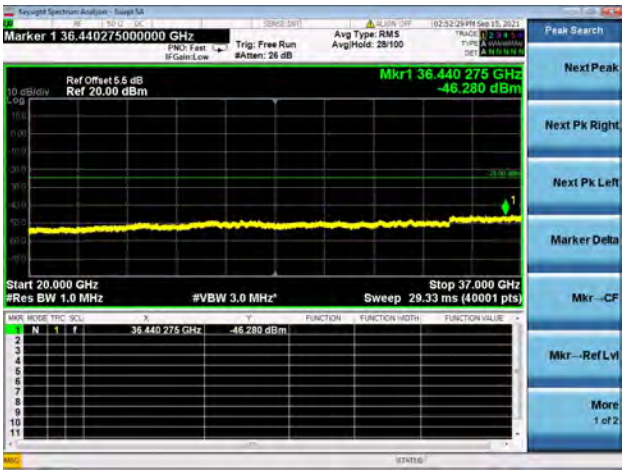
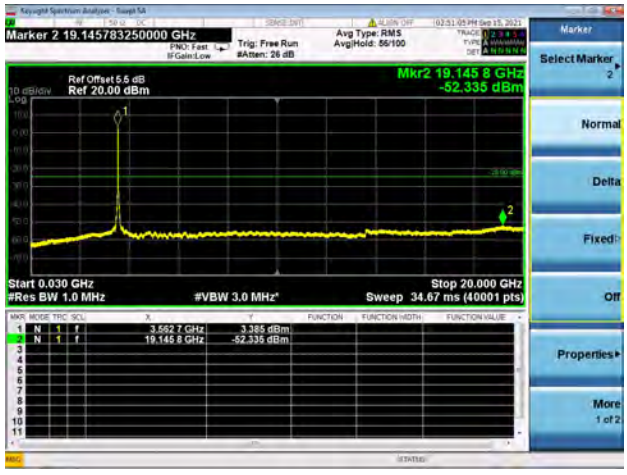
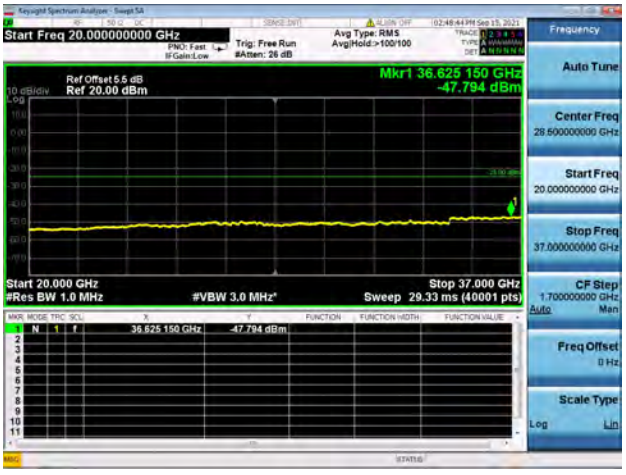
Mid CH/QPSK/1RB0 and 1RB49	Mid CH/QPSK/1RB0 and 1RB49
	
Mid CH/QPSK/1RB99 and 1RB0	**Mid CH/QPSK/1RB99 and 1RB0**
	
Mid CH/QPSK/FULL RB	**Mid CH/QPSK/FULL RB**
	

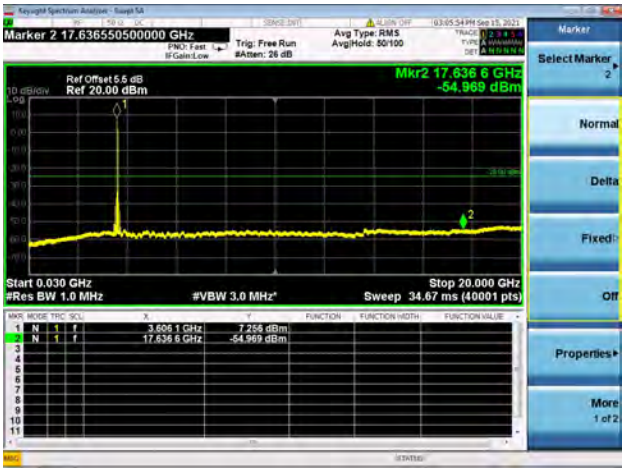
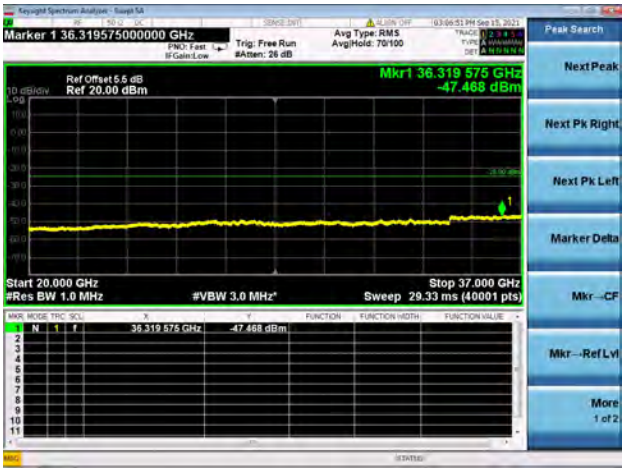
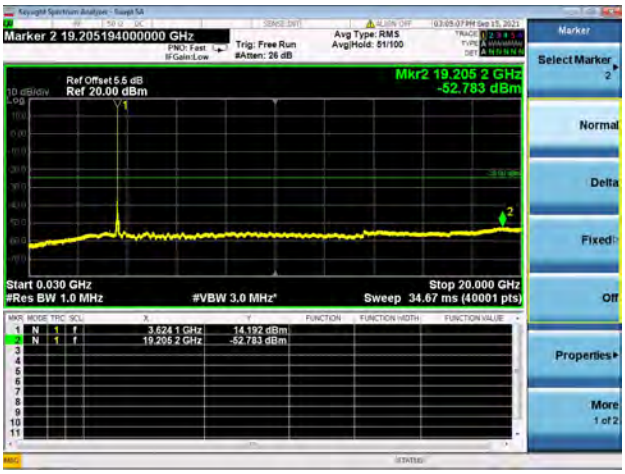
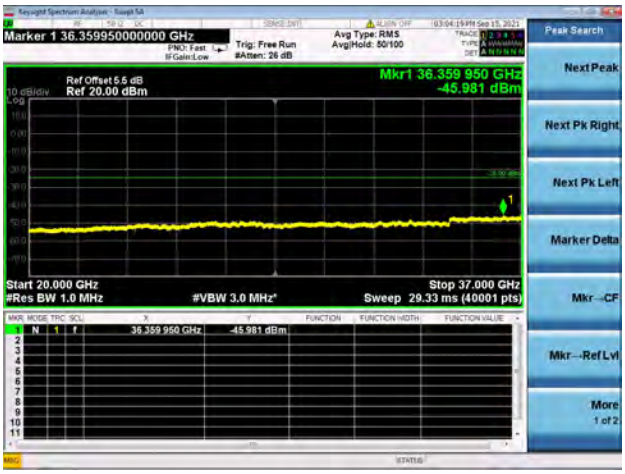
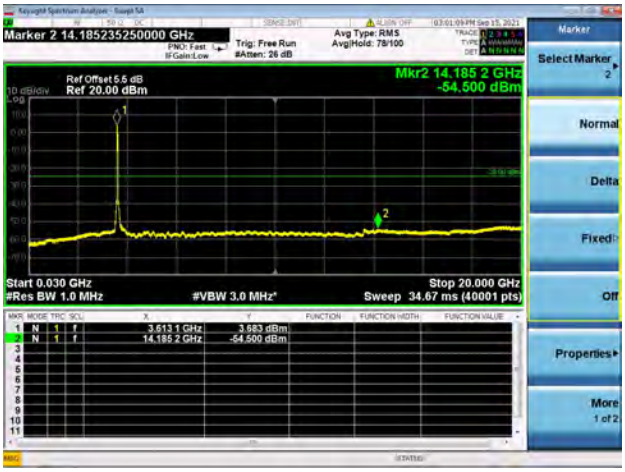
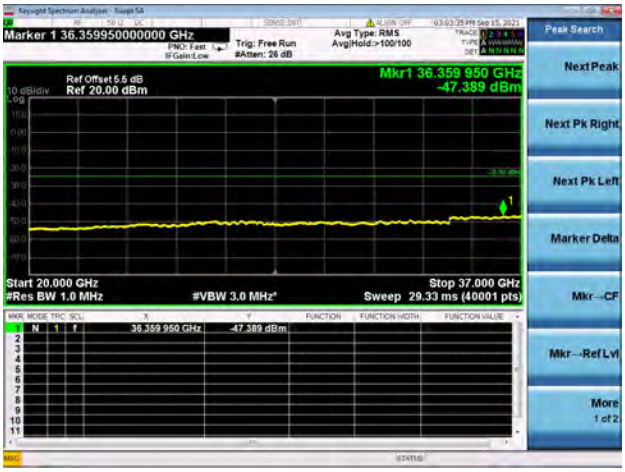
High CH/QPSK/1RB0 and 1RB49	High CH/QPSK/1RB0 and 1RB49
	
High CH/QPSK/1RB99 and 1RB0	**High CH/QPSK/1RB99 and 1RB0**
	
High CH/QPSK/FULL RB	**High CH/QPSK/FULL RB**
	

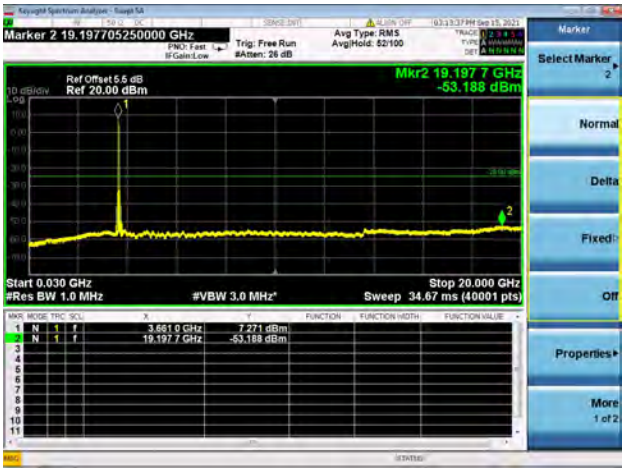
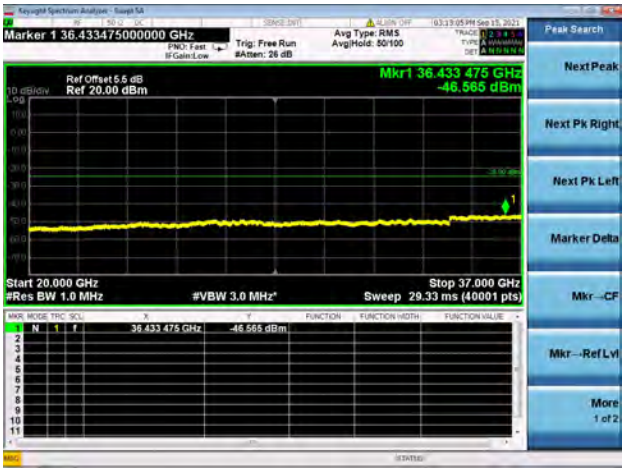
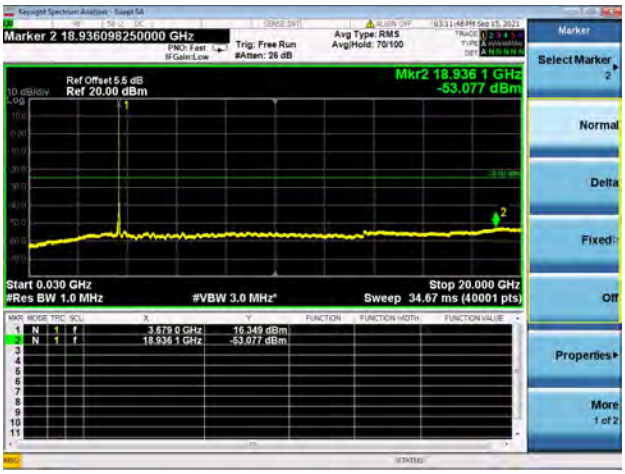
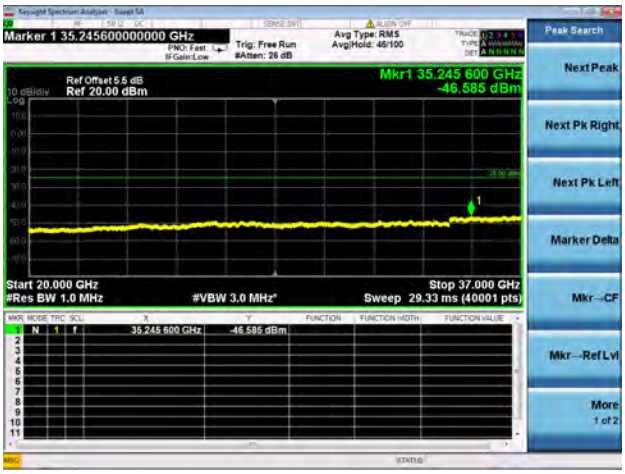
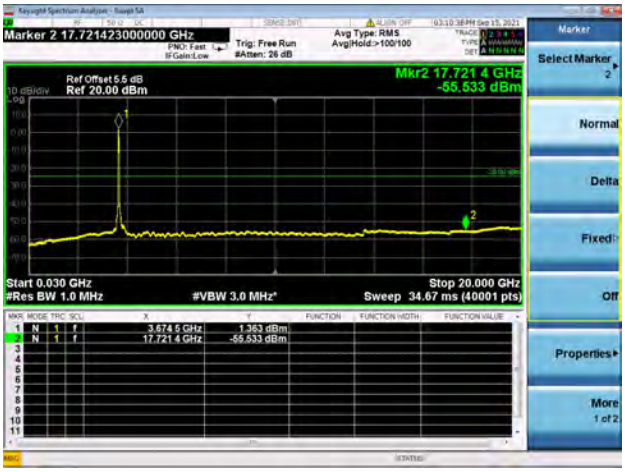
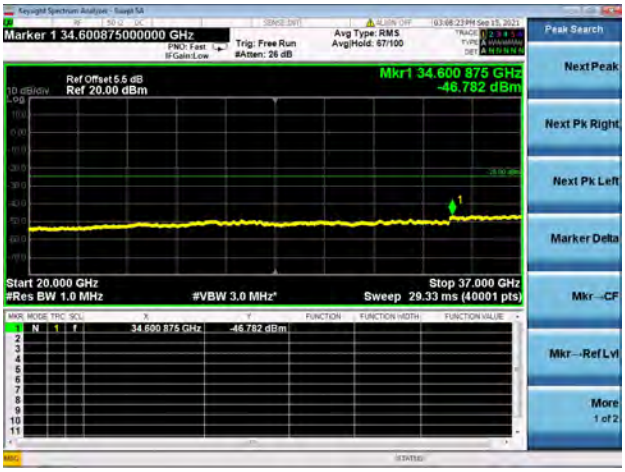
LTE Band 48C CSE	
Channel Bandwidth: 20MHz+15MHz	
LOW CH/QPSK/1RB0 and 1RB74	LOW CH/QPSK/1RB0 and 1RB74
	
LOW CH/QPSK/1RB99 and 1RB0	LOW CH/QPSK/1RB99 and 1RB0
	
LOW CH/QPSK/FULL RB	LOW CH/QPSK/FULL RB
	

Mid CH/QPSK/1RB0 and 1RB74	Mid CH/QPSK/1RB0 and 1RB74
	
Mid CH/QPSK/1RB99 and 1RB0	**Mid CH/QPSK/1RB99 and 1RB0**
	
Mid CH/QPSK/FULL RB	**Mid CH/QPSK/FULL RB**
	

High CH/QPSK/1RB0 and 1RB74	High CH/QPSK/1RB0 and 1RB74
	
High CH/QPSK/1RB9 and 1RB0	**High CH/QPSK/1RB99 and 1RB0**
	
High CH/QPSK/FULL RB	**High CH/QPSK/FULL RB**
	

LTE Band 48C CSE	
Channel Bandwidth: 20MHz+20MHz	
LOW CH/QPSK/1RB0 and 1RB99	LOW CH/QPSK/1RB0 and 1RB99
	
LOW CH/QPSK/1RB99 and 1RB0	LOW CH/QPSK/1RB99 and 1RB0
	
LOW CH/QPSK/FULL RB	LOW CH/QPSK/FULL RB
	

Mid CH/QPSK/1RB0 and 1RB99	Mid CH/QPSK/1RB0 and 1RB99
	
Mid CH/QPSK/1RB99 and 1RB0	**Mid CH/QPSK/1RB99 and 1RB0**
	
Mid CH/QPSK/FULL RB	**Mid CH/QPSK/FULL RB**
	

High CH/QPSK/1RB0 and 1RB99	High CH/QPSK/1RB0 and 1RB99
	
High CH/QPSK/1RB99 and 1RB0	**High CH/QPSK/1RB99 and 1RB0**
	
High CH/QPSK/FULL RB	**High CH/QPSK/FULL RB**
	

2.4. Band Edge

2.4.1. Requirement

According to FCC section 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.

According to FCC section 24.238, 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.

According to FCC section 27.53(c), For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the 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, in accordance with the following:

(1) On any frequency outside the 746-758 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

(3) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;

(4) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

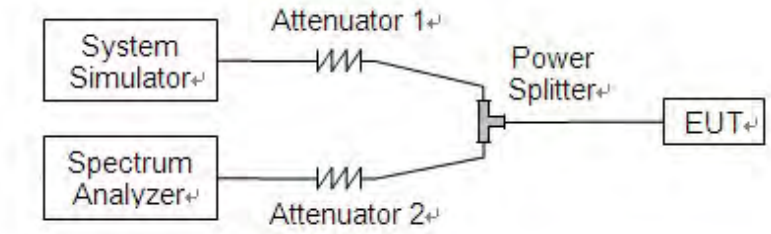
(5) Compliance with the provisions of paragraphs (c)(3) and (c)(4) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

According to FCC section 27.53(h), Except as otherwise specified below, for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz, 1915-1920 MHz, 1995-2000 MHz, 2000-2020 MHz, 2110-2155 MHz, 2155-2180 MHz, and 2180-2200 bands, 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.

According to FCC section 96.41(e), for channel and frequency assignments made by the SAS to CBSDs, the conducted power of any CBSD emission outside the fundamental emission bandwidth of this section (whether the emission is inside or outside of the authorized band) shall not exceed −13 dBm/MHz within 0-10 megahertz above the upper SAS-assigned channel edge and within 0-10 megahertz below the lower SAS-assigned channel edge. At all frequencies greater than 10 megahertz above the upper SAS assigned channel edge and less than 10 MHz below the lower SAS assigned channel edge, the conducted power of any CBSD emission shall not exceed −25 dBm/MHz.

The conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed −25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed −40 dBm/MHz.

2.4.2. Test Description



The EUTis coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

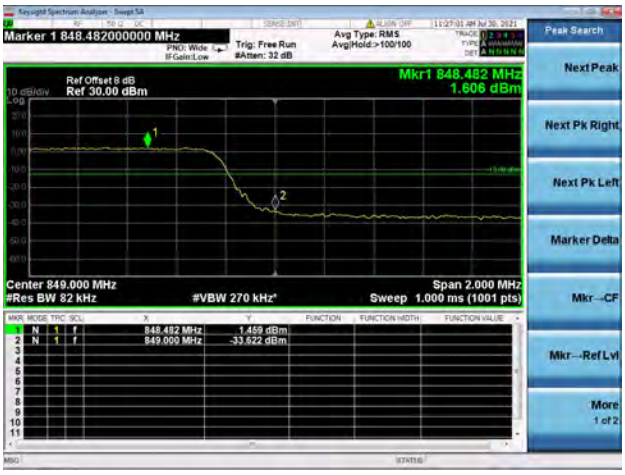
2.4.3. Test procedure

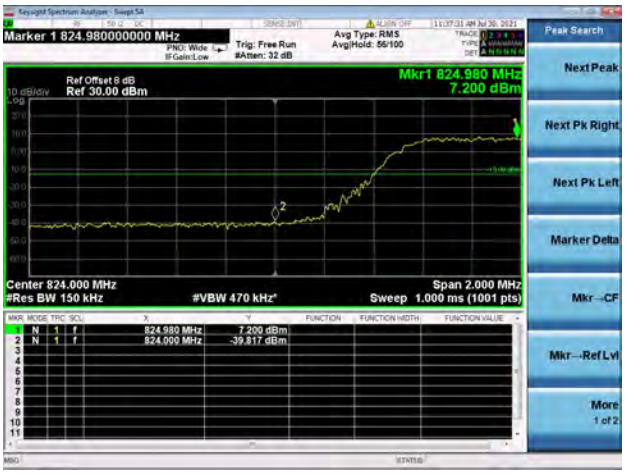
KDB 971168 D01v03 Section 6.0 and ANSI/TIA-603-E-2016.

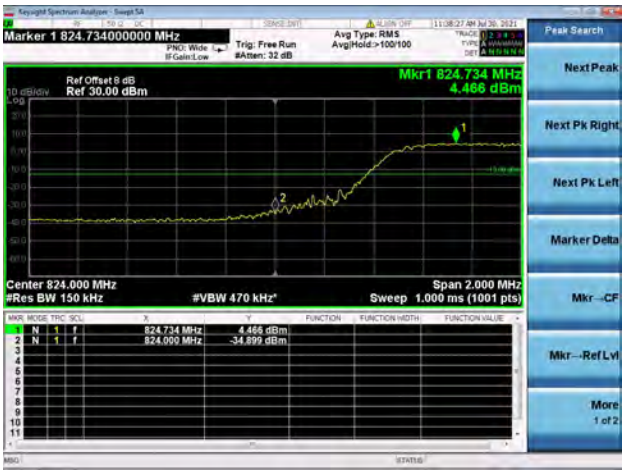
2.4.4. Test Result

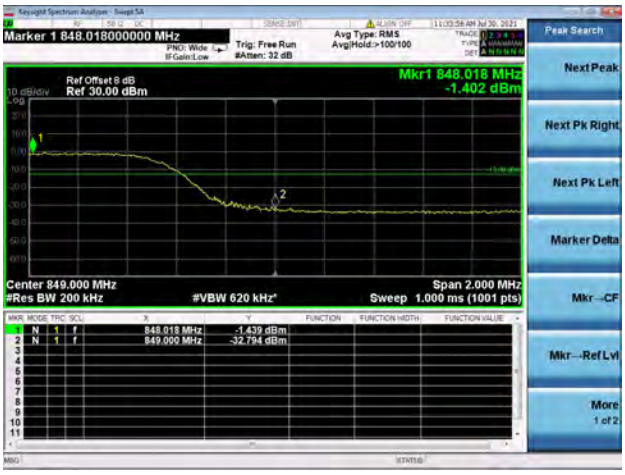
The center frequency of spectrum is the band edge frequency and span is 2MHz, Record the max trace into the test report.

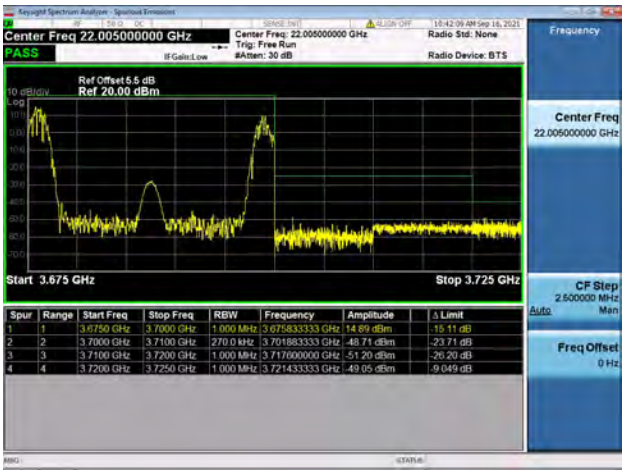
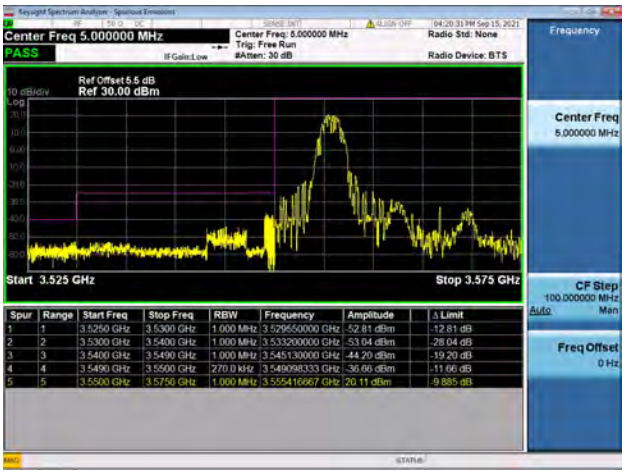
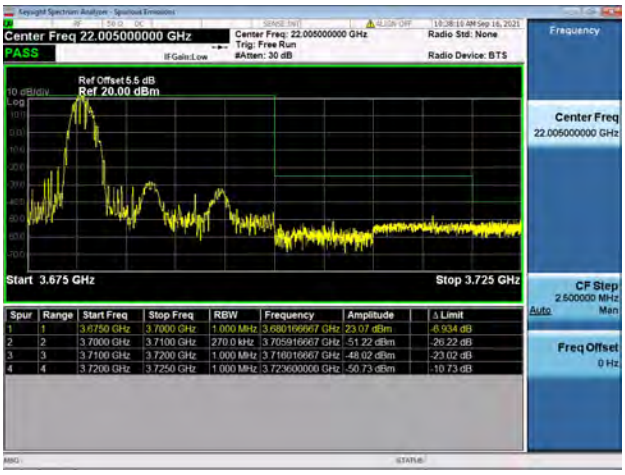
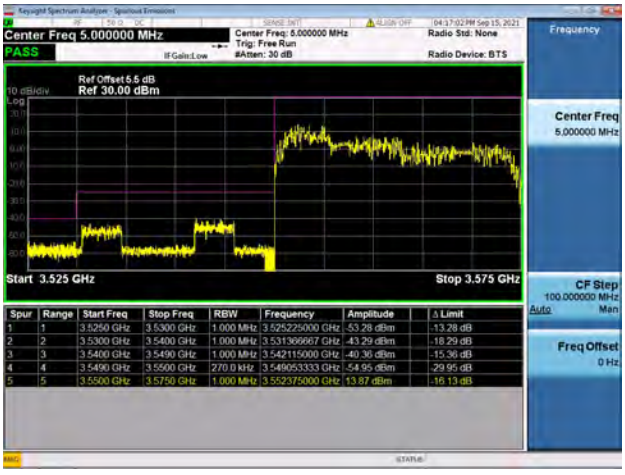
LTE Band 5B	
Channel Bandwidth: 3MHz+5MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

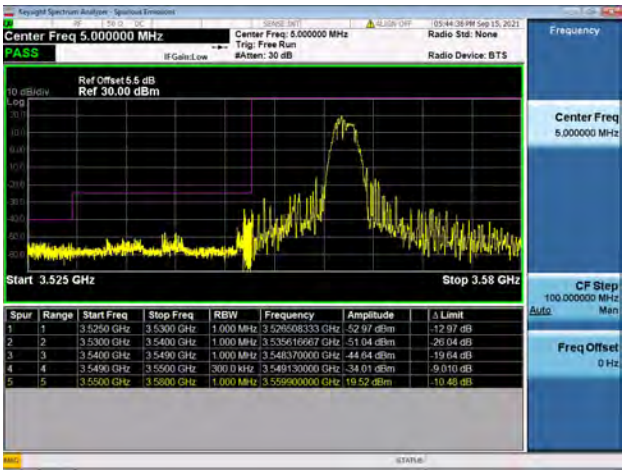
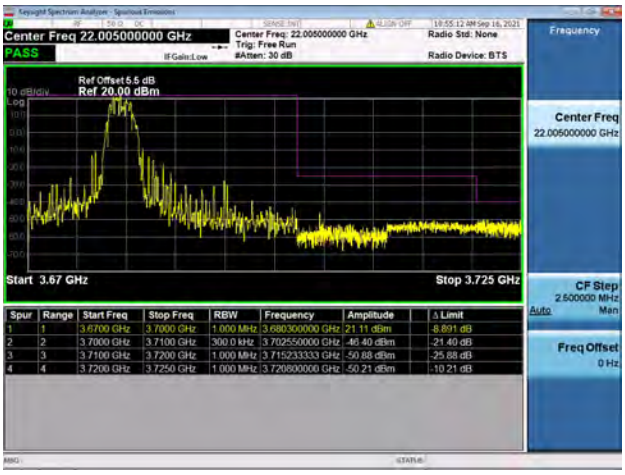
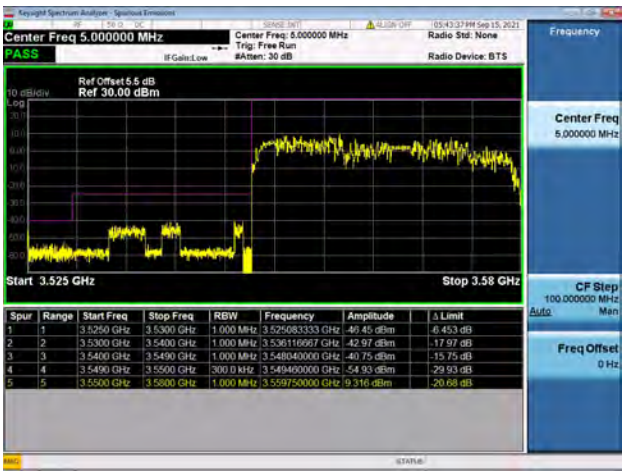
LTE Band B5	
Channel Bandwidth: 5MHz+3MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

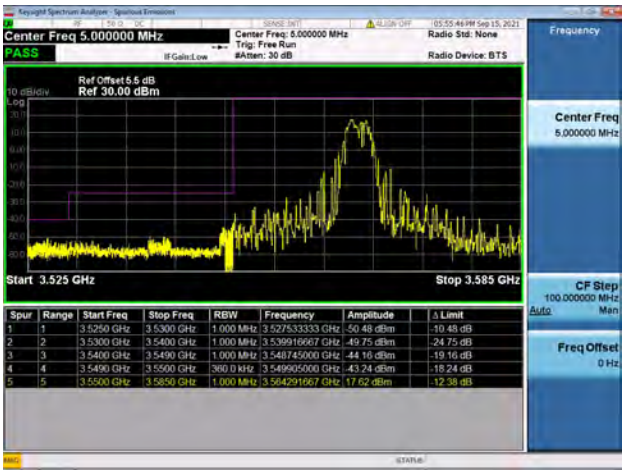
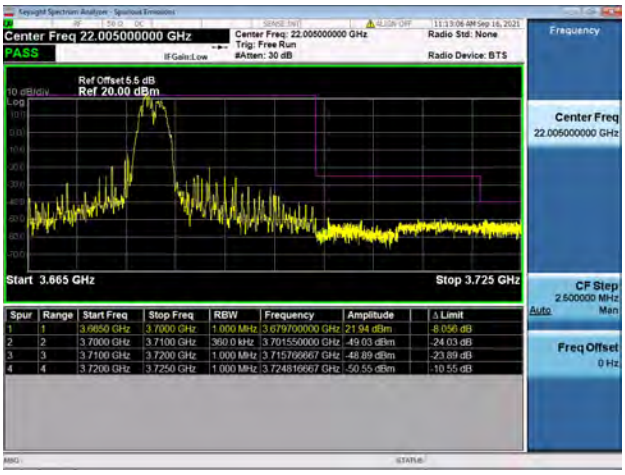
LTE Band 5B	
Channel Bandwidth: 5MHz+10MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

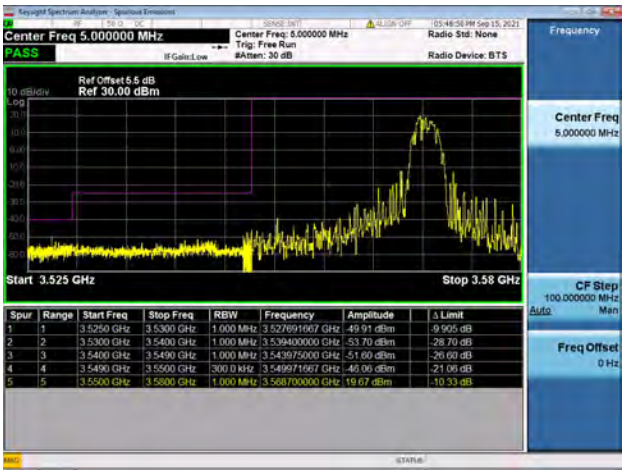
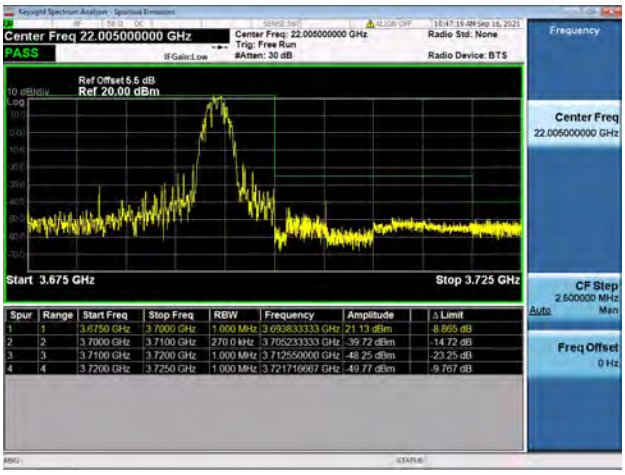
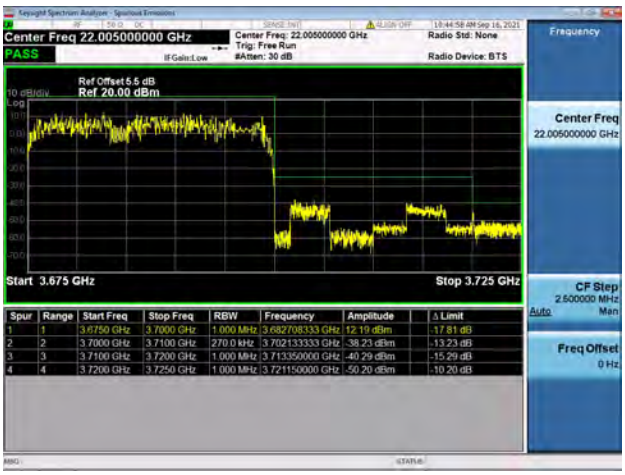
LTE Band 5B	
Channel Bandwidth: 10MHz+5MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

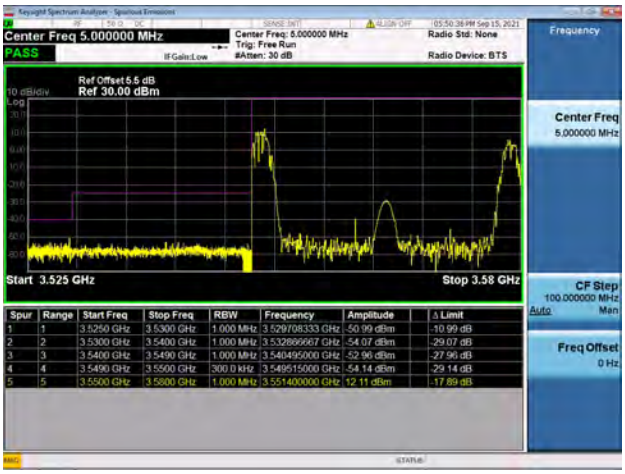
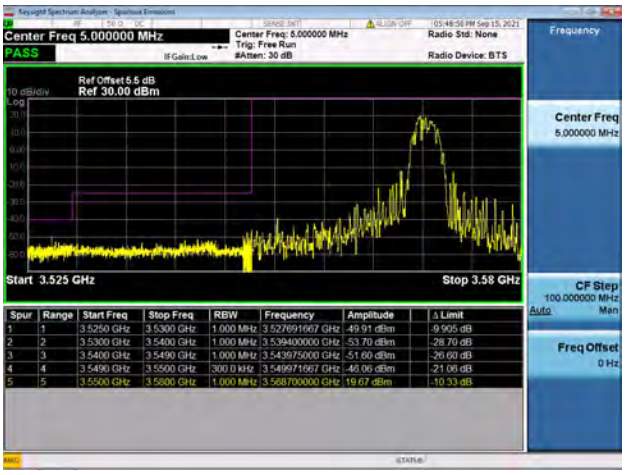
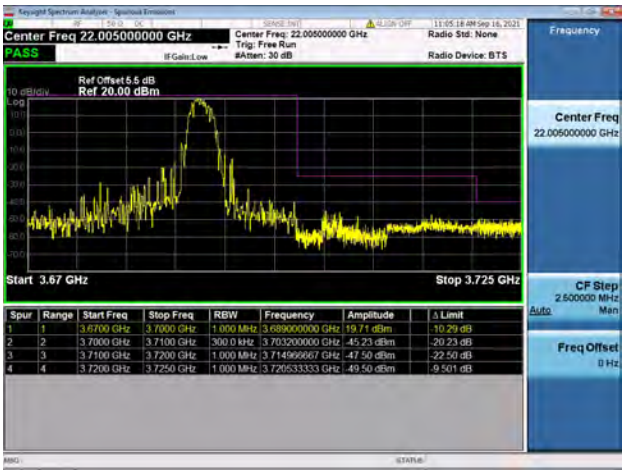
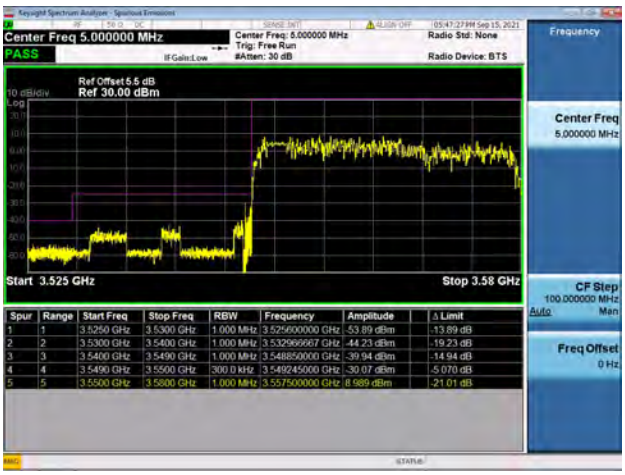
LTE Band 5B	
Channel Bandwidth: 10MHz+10MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

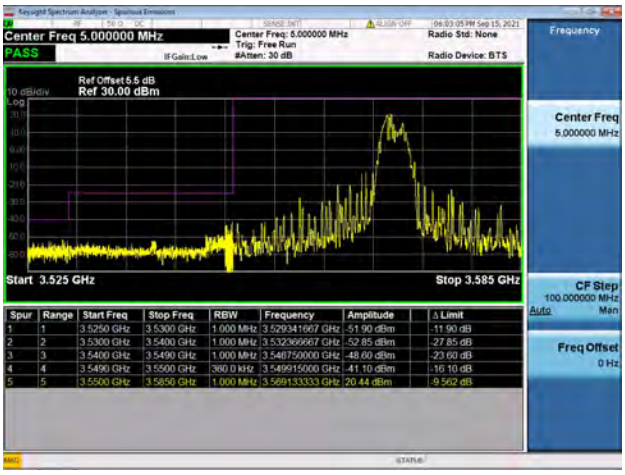
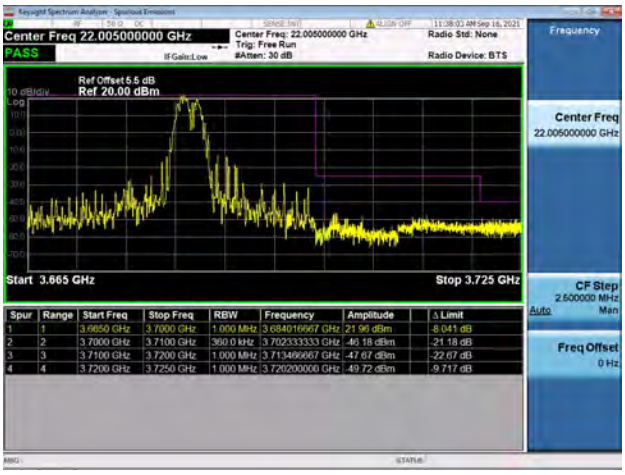
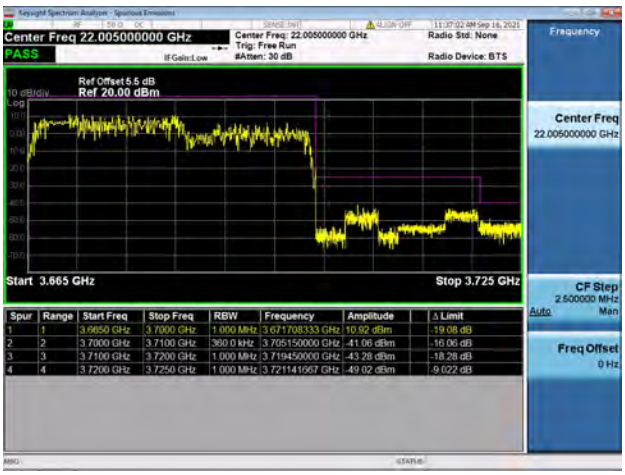
LTE Band 48C	
Channel Bandwidth: 5MHz+20MHz	
Low 1RB0 and 1RB99	High 1RB0 and 1RB99
	
Low 1RB24 and 1RB0	High 1RB24 and 1RB0
	
Low FULL RB	High FULL RB
	

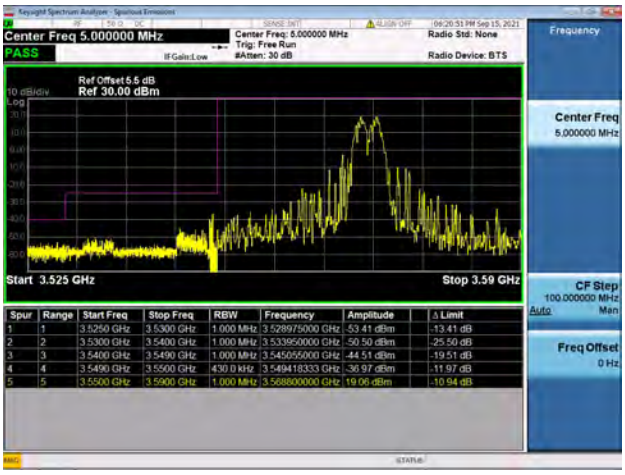
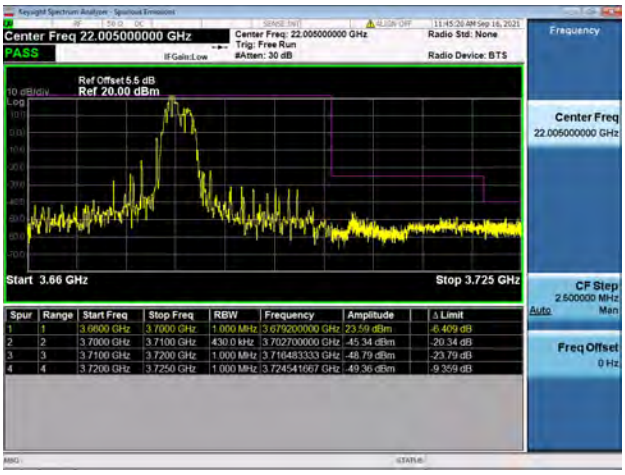
LTE Band 48C	
Channel Bandwidth: 10MHz+20MHz	
Low 1RB0 and 1RB99	High 1RB0 and 1RB99
	
Low 1RB49 and 1RB0	High 1RB49 and 1RB0
	
Low FULL RB	High FULL RB
	

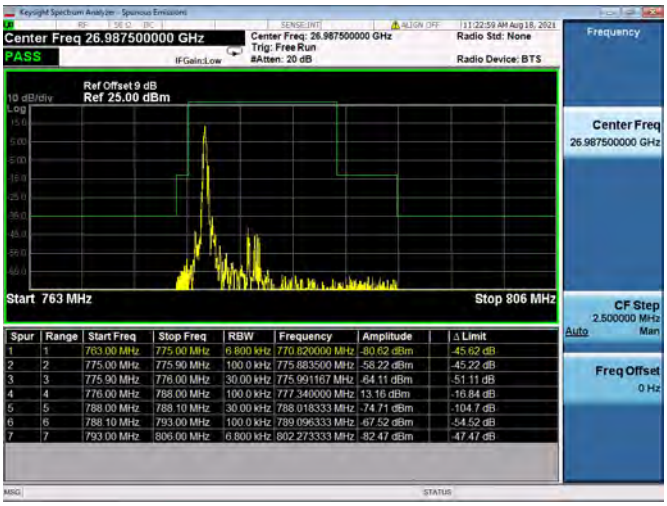
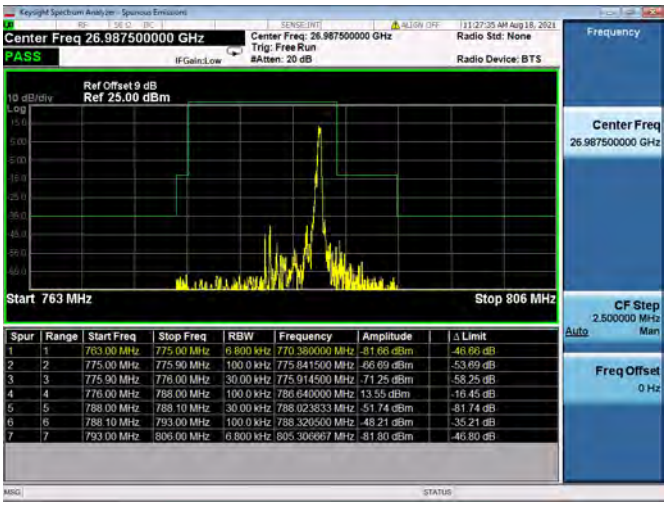
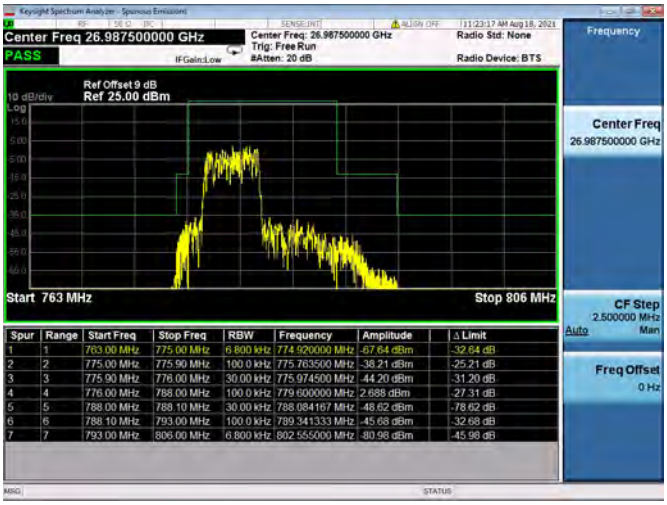
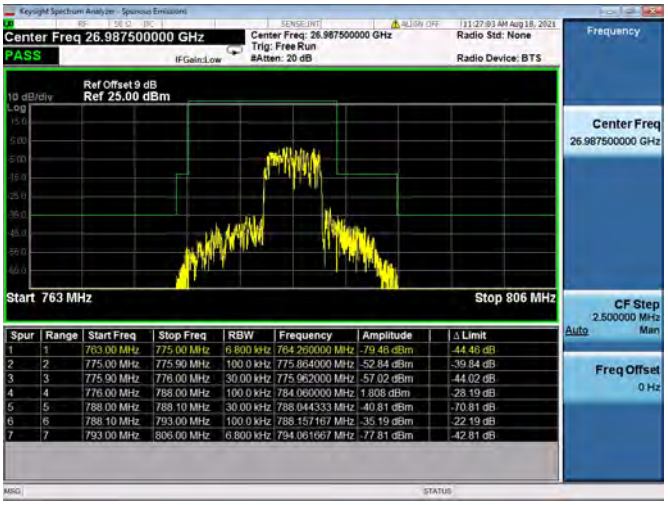
LTE Band 48C	
Channel Bandwidth: 15MHz+20MHz	
Low 1RB0 and 1RB99	High 1RB0 and 1RB99
	
Low 1RB74 and 1RB0	High 1RB74 and 1RB0
	
Low FULL RB	High FULL RB
	

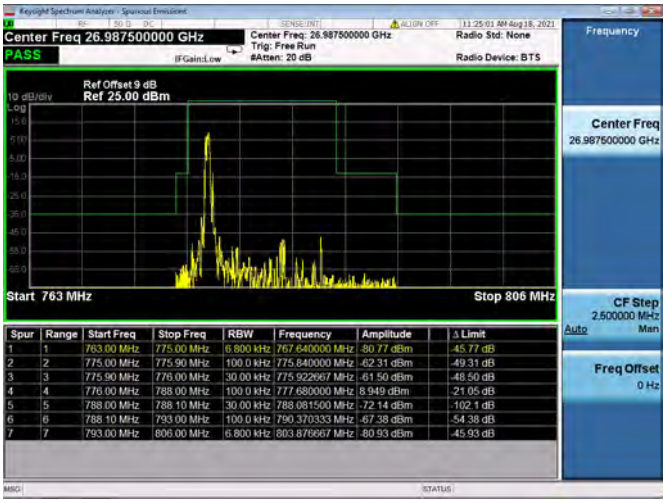
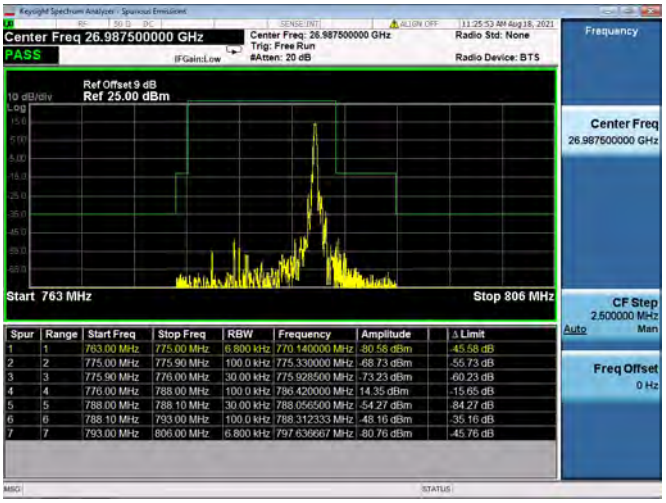
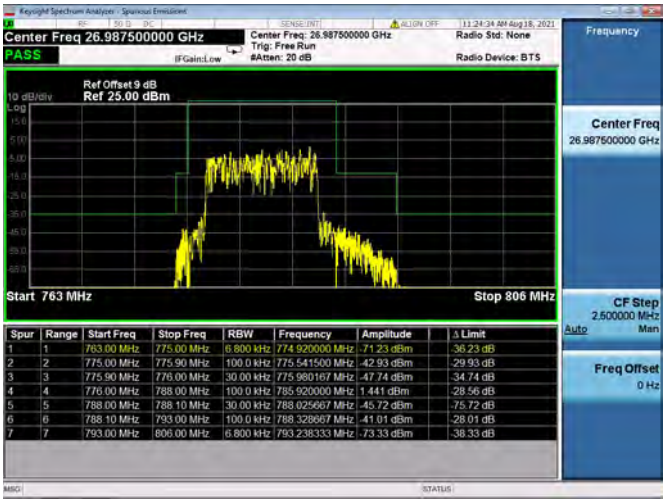
LTE Band 48C	
Channel Bandwidth: 20MHz+5MHz	
Low 1RB0 and 1RB24	High 1RB0 and 1RB24
	
Low 1RB99 and 1RB0	Low 1RB99 and 1RB0
	
Low FULL RB	High FULL RB
	

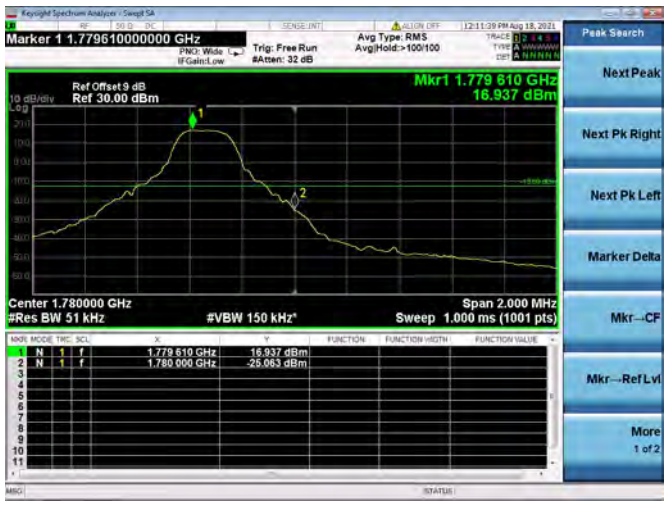
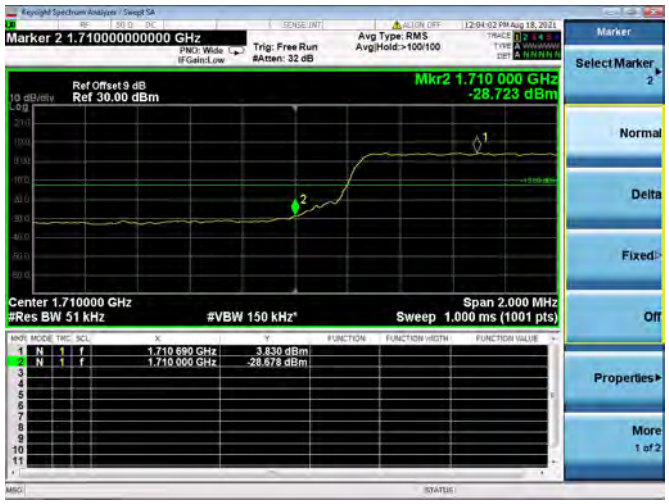
LTE Band 48C	
Channel Bandwidth: 20MHz+10MHz	
Low 1RB0 and 1RB49	High 1RB0 and 1RB49
	
Low 1RB99 and 1RB0	High 1RB99 and 1RB0
	
Low FULL RB	High FULL RB
	

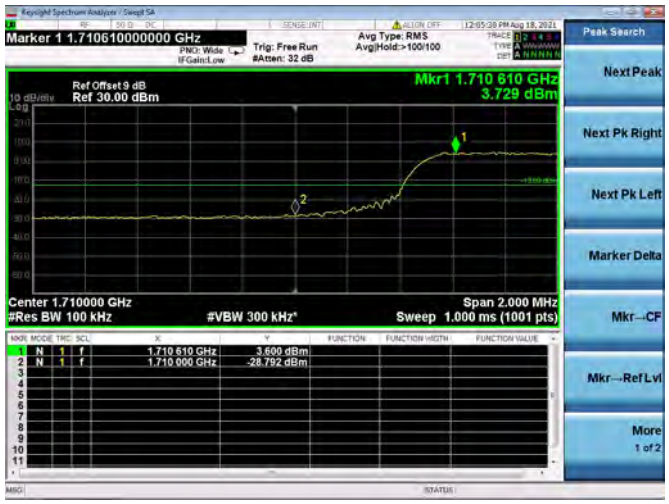
LTE Band 48C	
Channel Bandwidth: 20MHz+15MHz	
Low 1RB0 and 1RB74	High 1RB0 and 1RB74
	
Low 1RB99 and 1RB0	High 1RB99 and 1RB0
	
Low FULL RB	High FULL RB
	

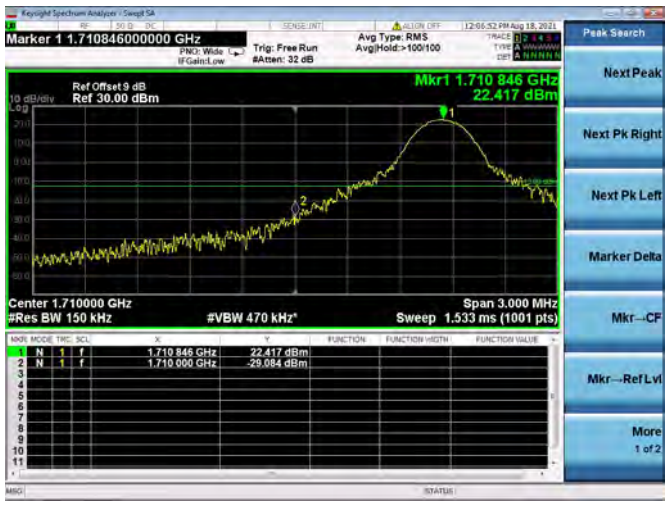
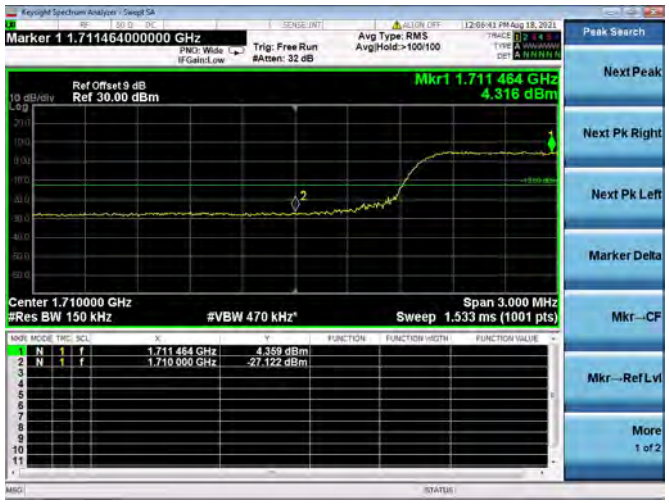
LTE Band 48C	
Channel Bandwidth: 20MHz+20MHz	
Low 1RB0 and 1RB99	High 1RB0 and 1RB99
	
Low 1RB99 and 1RB0	High 1RB99 and 1RB0
	
Low FULL RB	High FULL RB
	

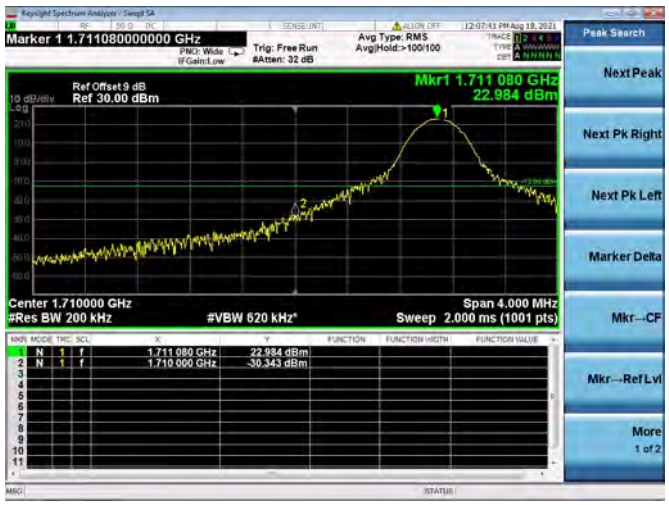
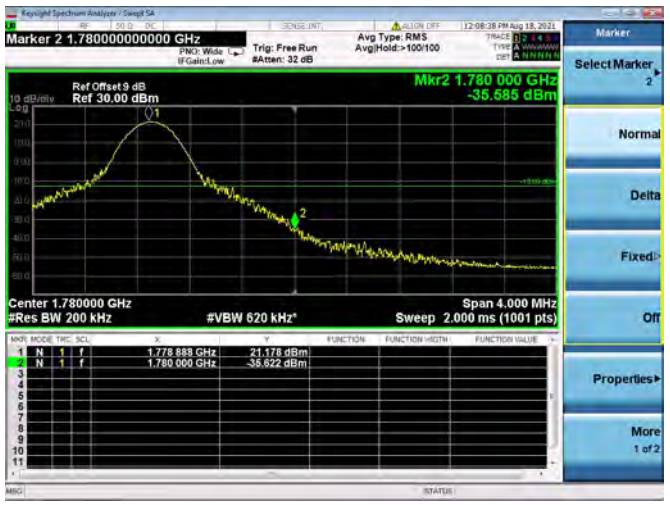
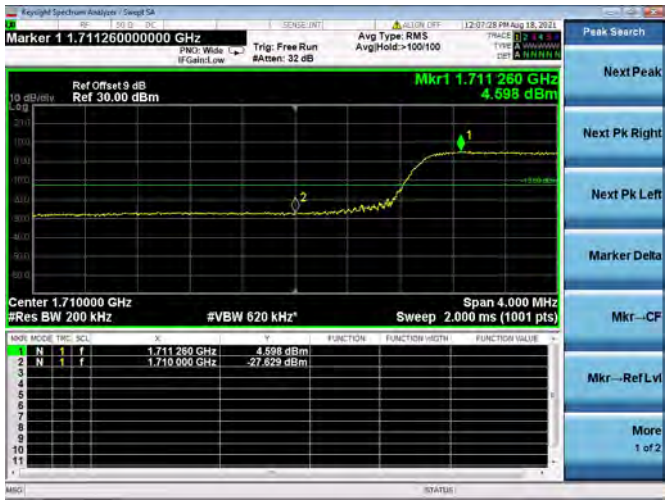
LTE ULCA_13A-66A PCC(13A)	
Channel Bandwidth: 5 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

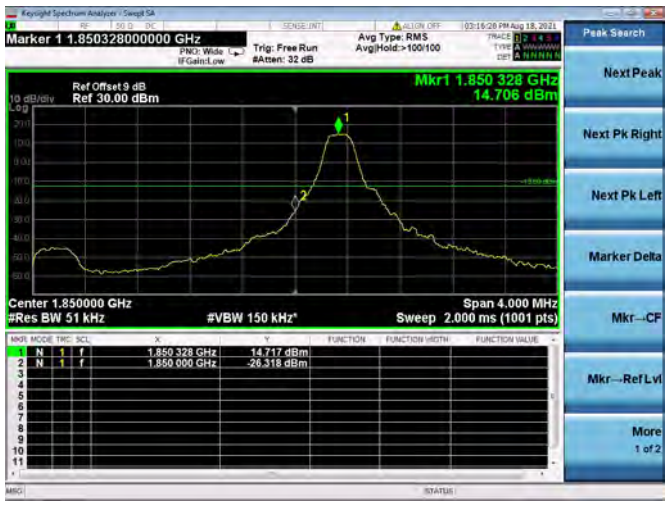
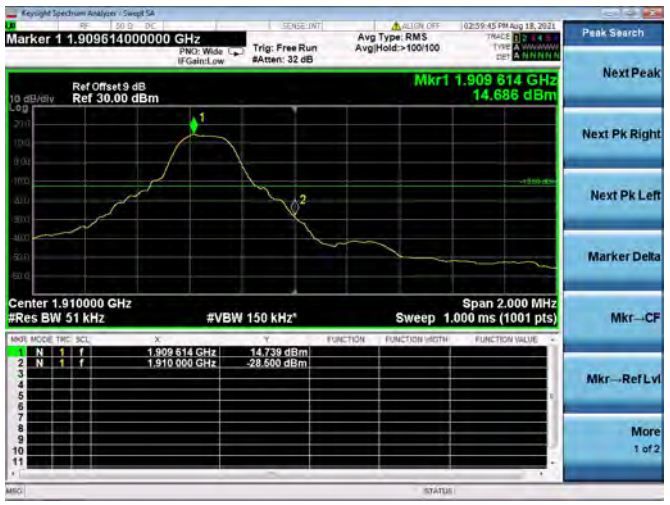
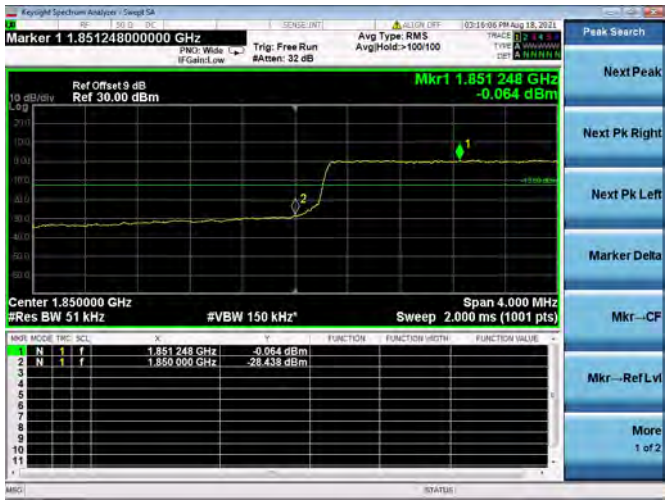
LTE ULCA_13A-66A PCC(13A)	
Channel Bandwidth: 10 MHz	
Low 1RB	High 1RB
	
FULL RB	
	N/A

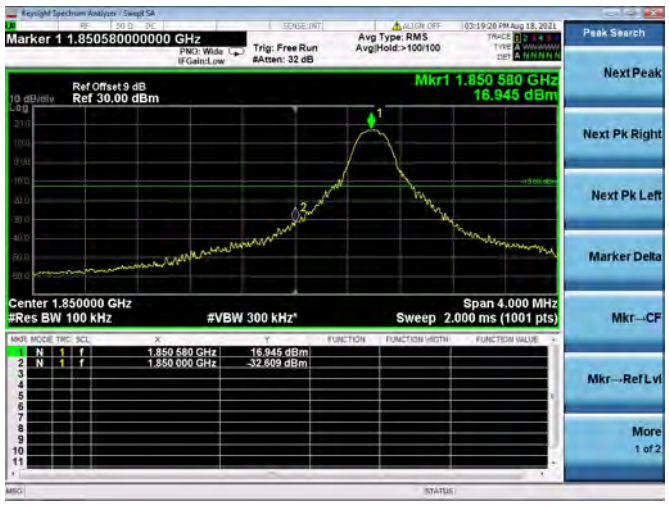
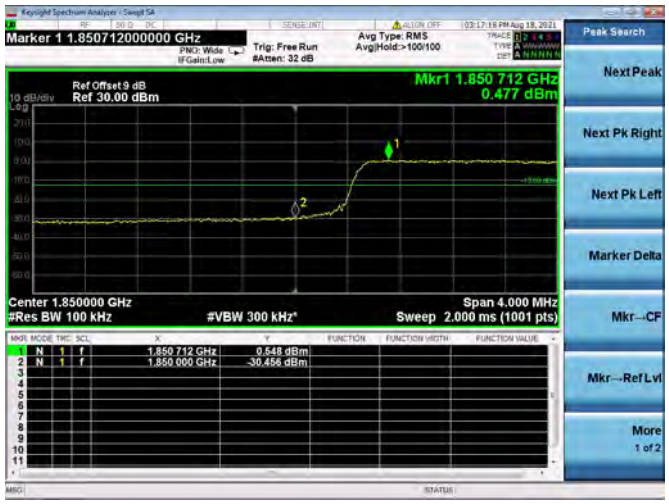
LTE ULCA_13A-66A SCC(66A)	
Channel Bandwidth: 5 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

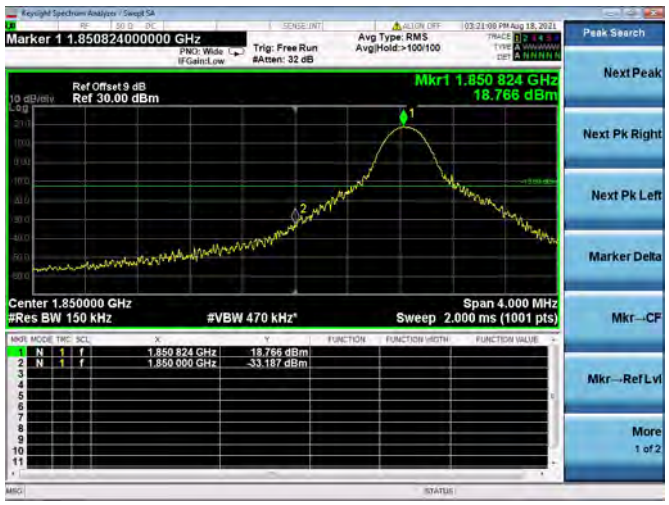
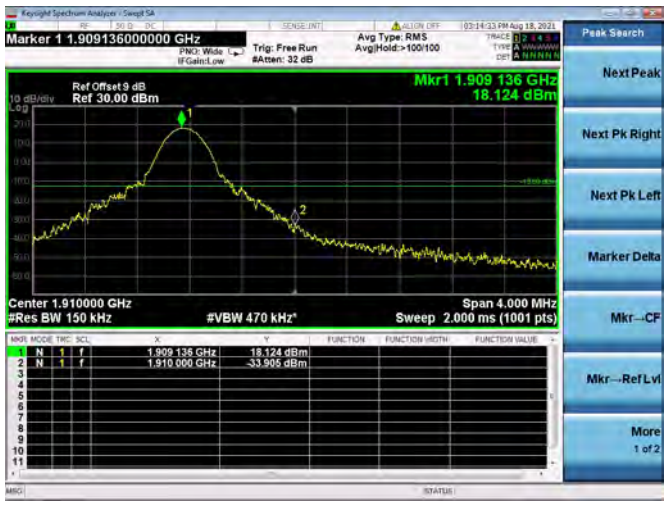
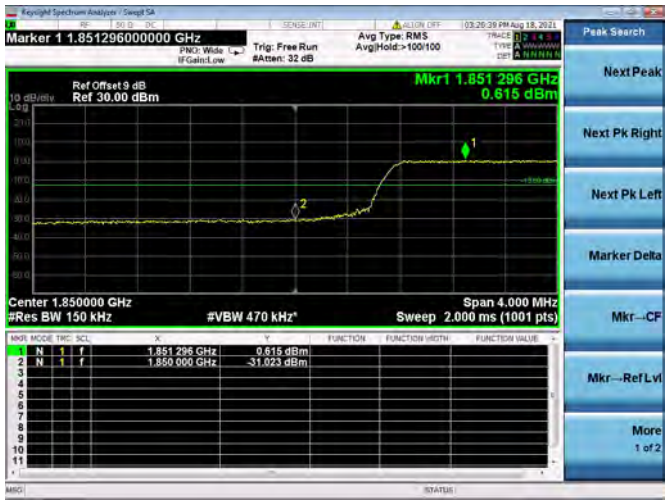
LTE ULCA_13A-66A SCC(66A)	
Channel Bandwidth:10 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

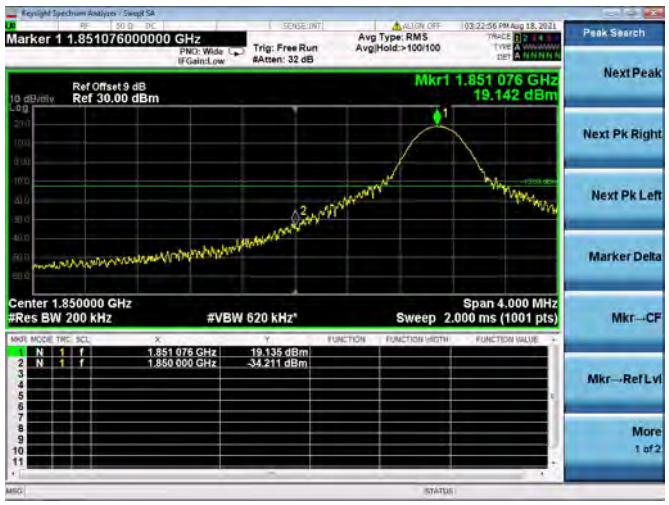
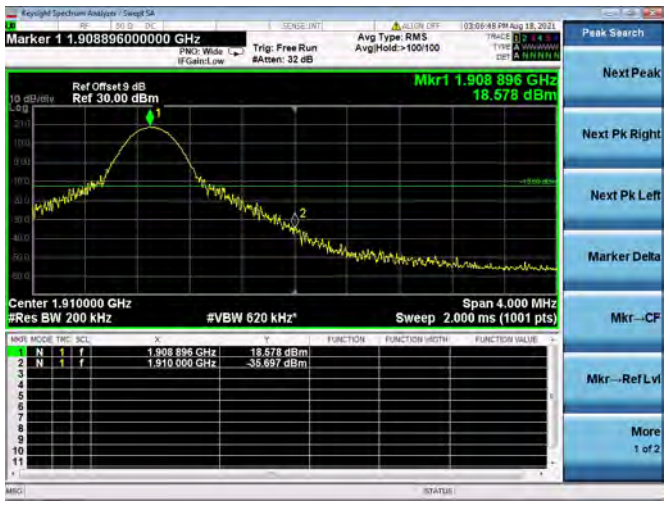
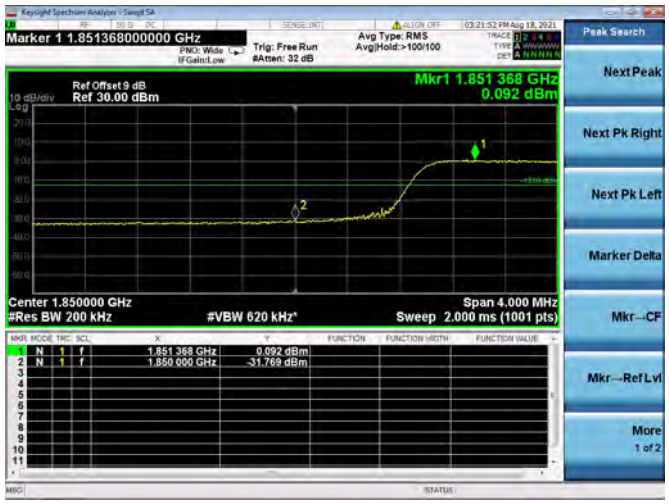
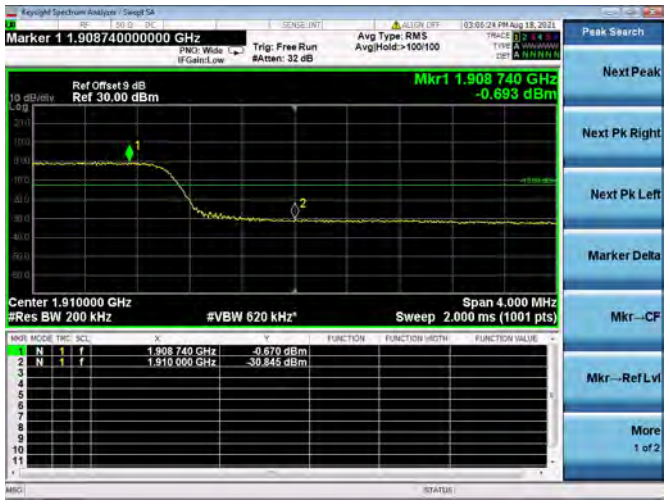
LTE ULCA_13A-66A SCC(66A)	
Channel Bandwidth: 15 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

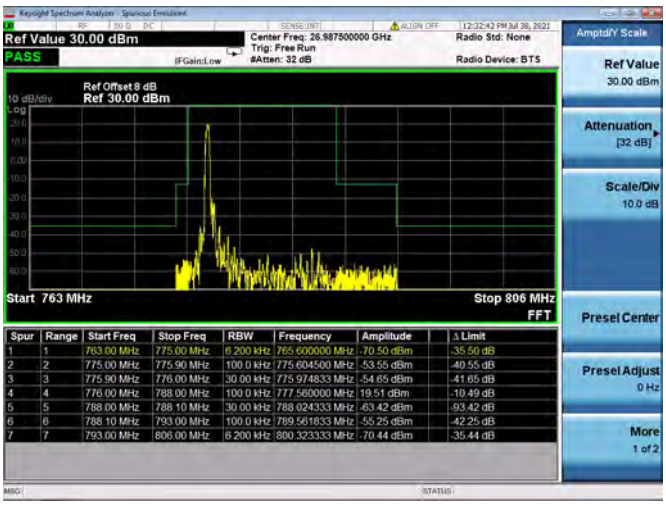
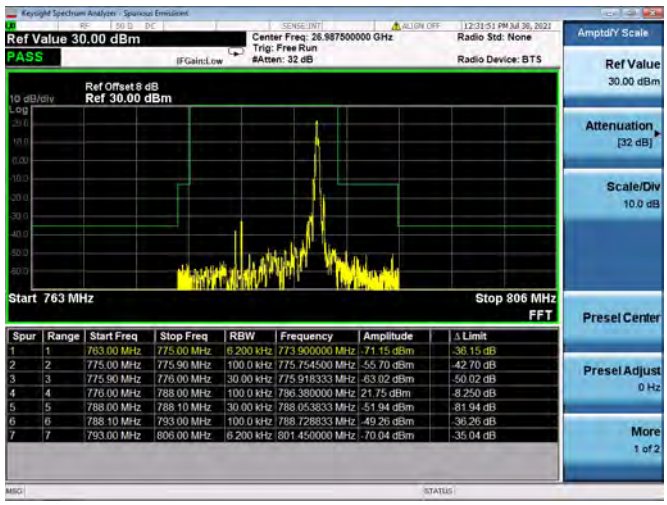
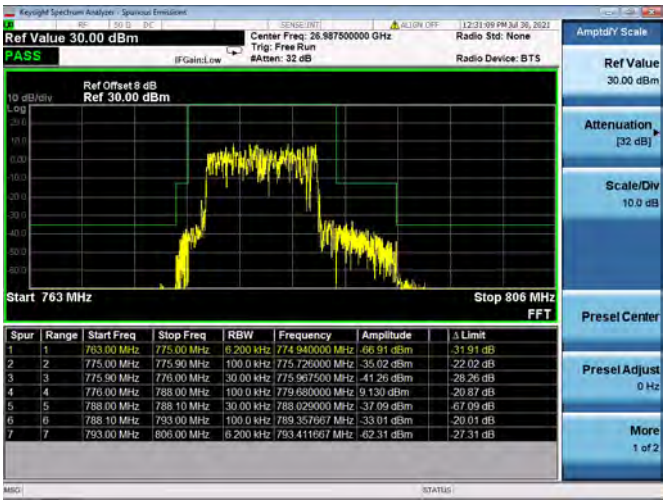
LTE ULCA_13A-66A SCC(66A)	
Channel Bandwidth: 20 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

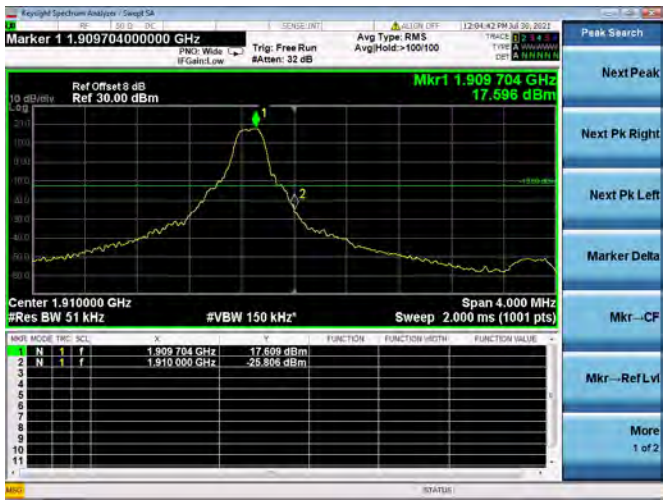
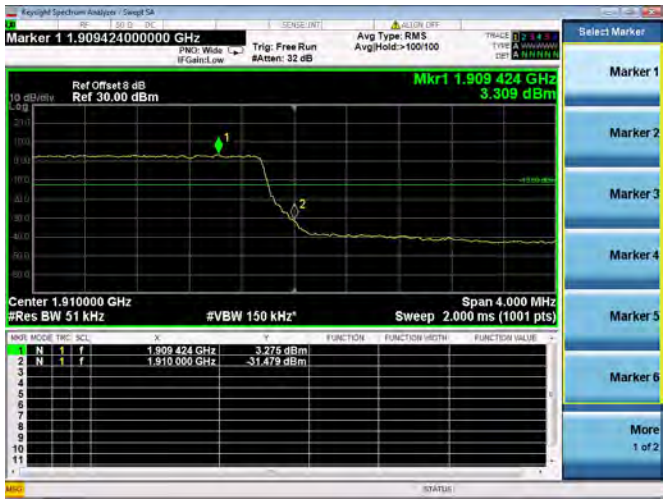
LTE ULCA_2A-13A PCC(2A)	
Channel Bandwidth: 5 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

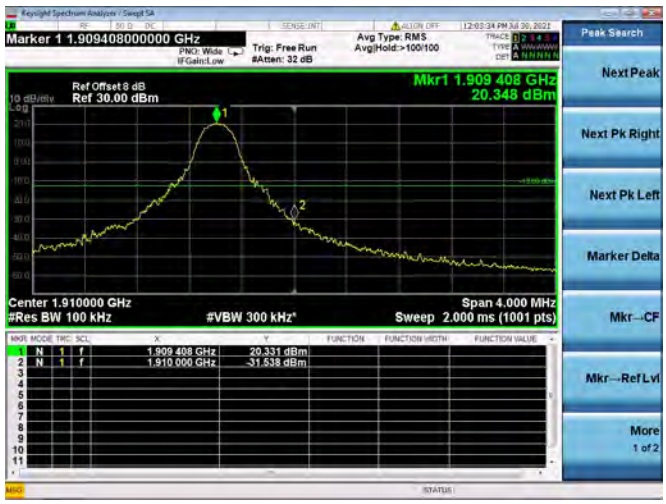
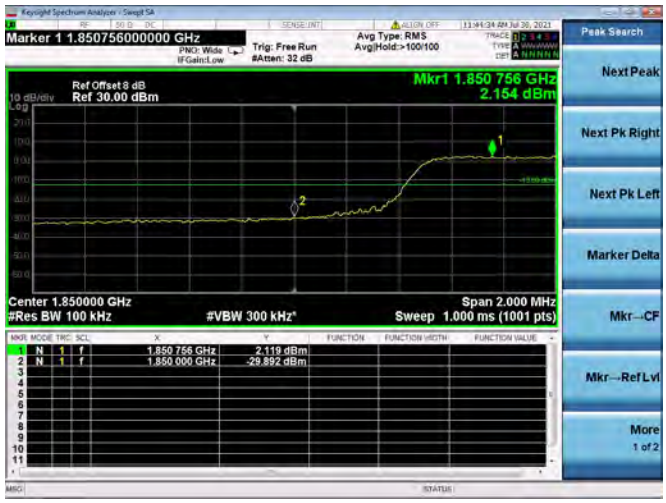
LTE ULCA_2A-13A PCC(2A)	
Channel Bandwidth: 10 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

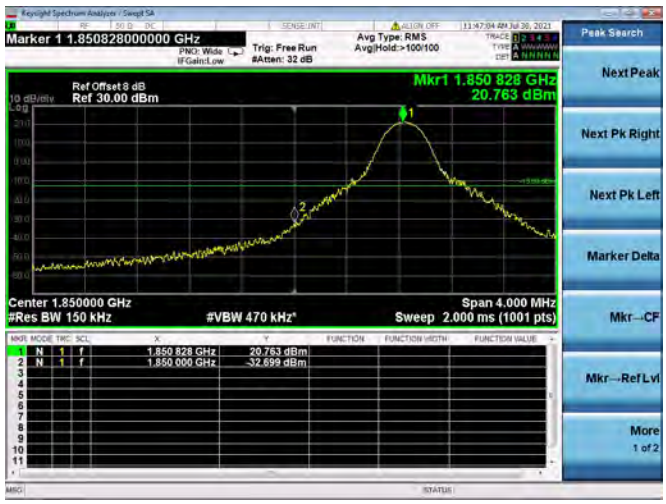
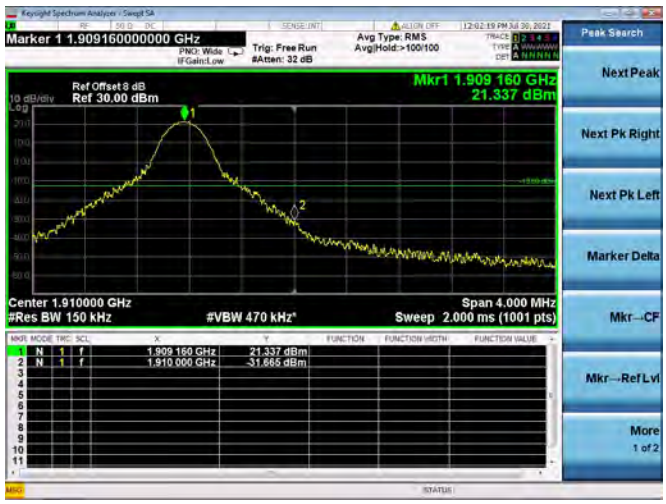
LTE ULCA_2A-13A PCC(2A)	
Channel Bandwidth: 15 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

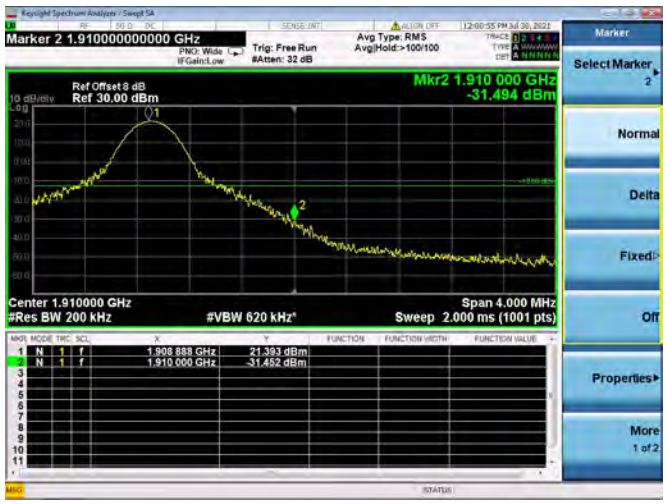
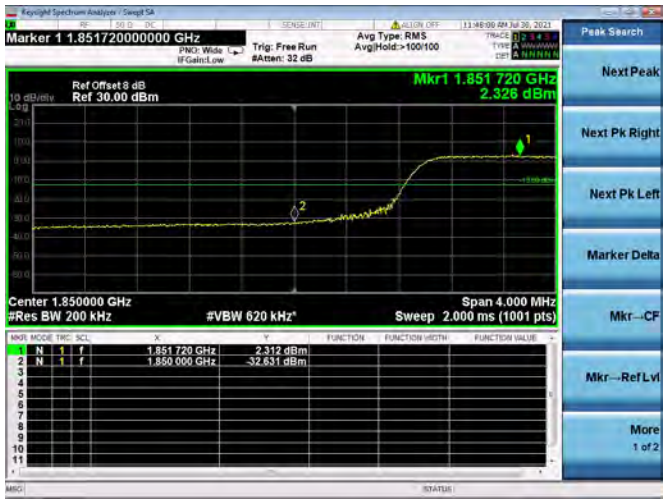
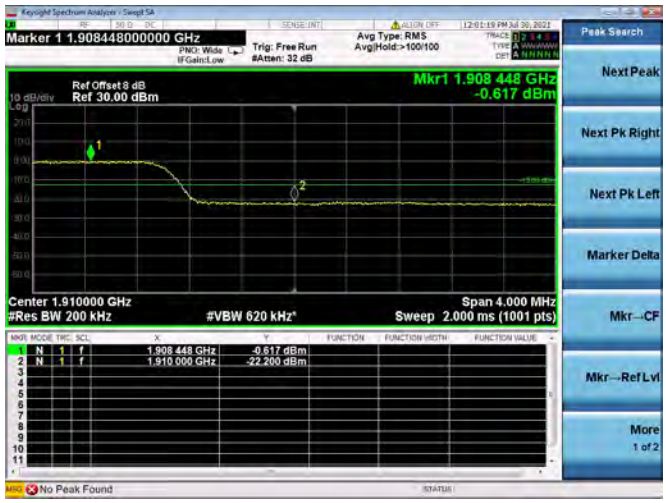
LTE ULCA_2A-13A PCC(2A)	
Channel Bandwidth: 20 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

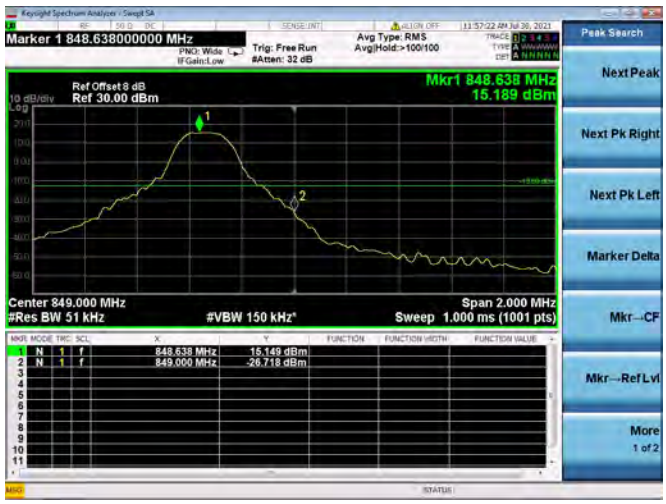
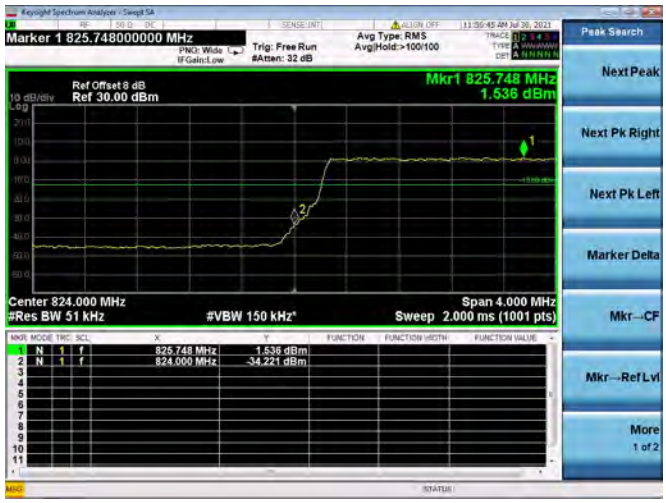
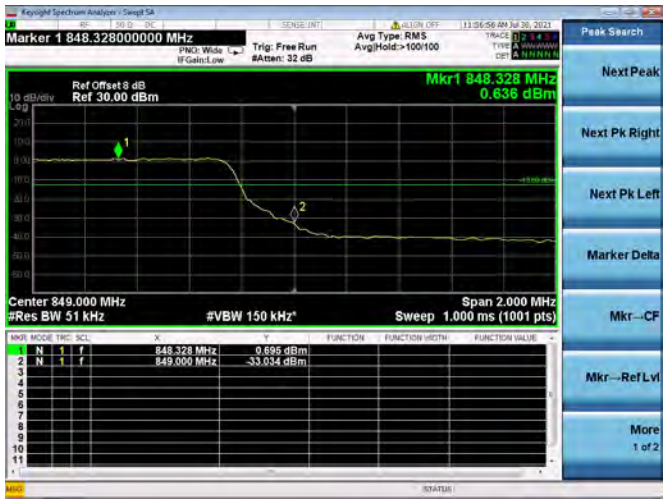
LTE ULCA_2A-13A SCC(13A)	
Channel Bandwidth: 10 MHz	
Low 1RB	High 1RB
	
FULL RB	
	N/A

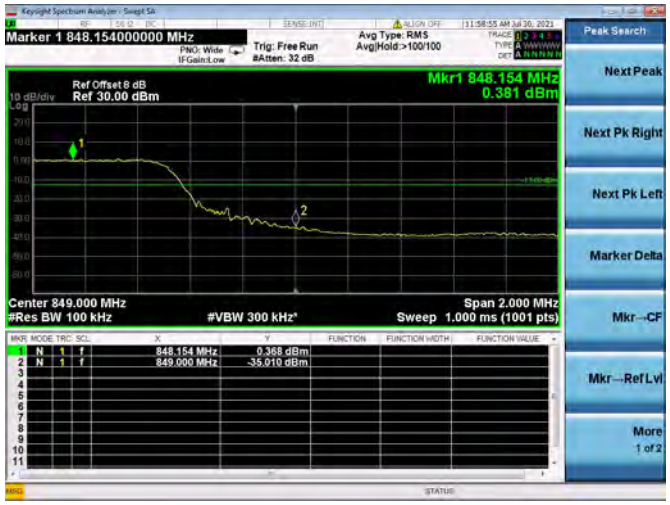
LTE ULCA_2A-5A PCC(2A)	
Channel Bandwidth: 5 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

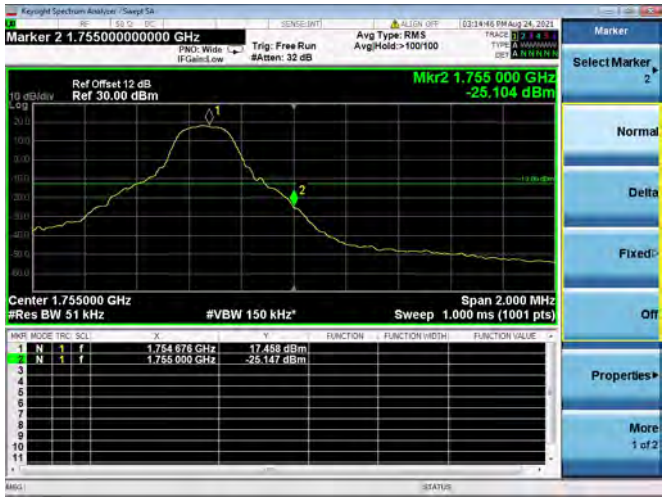
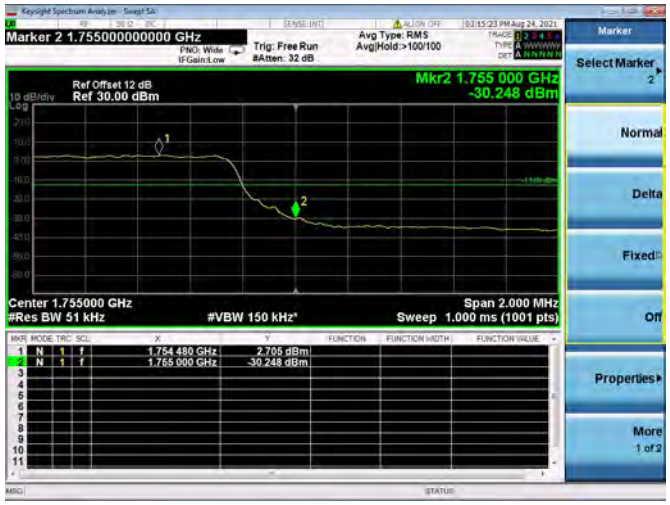
LTE ULCA_2A-5A PCC(2A)	
Channel Bandwidth: 10 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

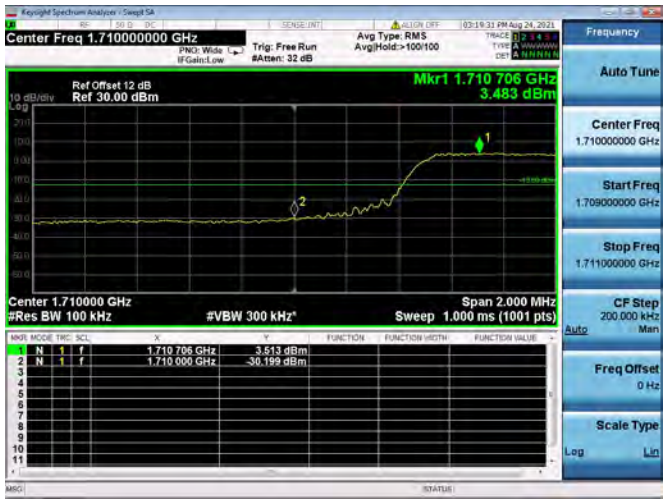
LTE ULCA_2A-5A PCC(2A)	
Channel Bandwidth: 15 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

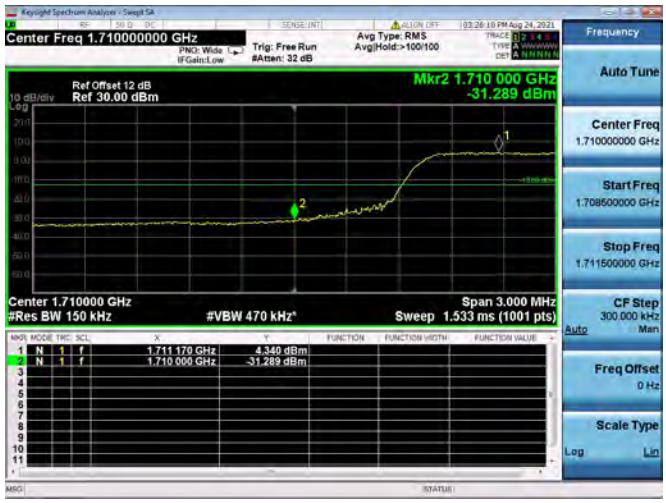
LTE ULCA_2A-5A PCC(2A)	
Channel Bandwidth: 20 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

LTE ULCA_2A-5A SCC(5A)	
Channel Bandwidth: 5 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

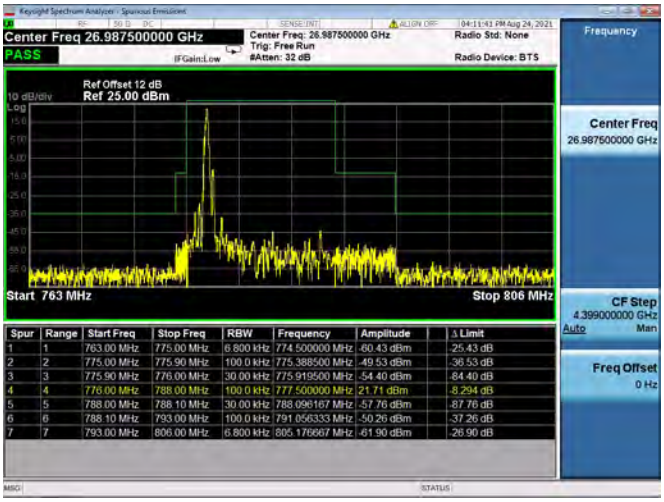
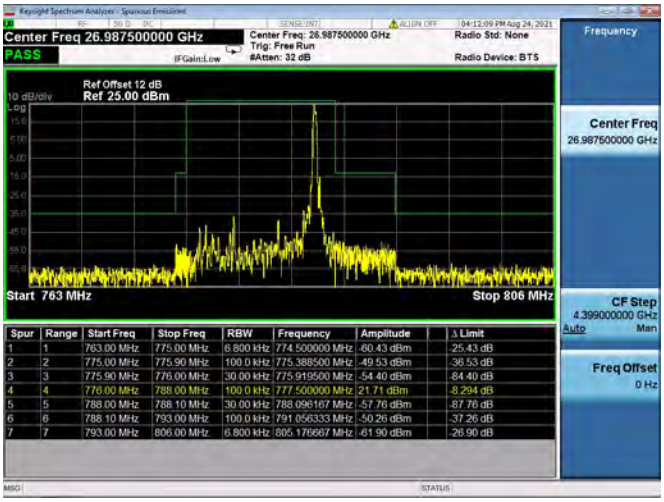
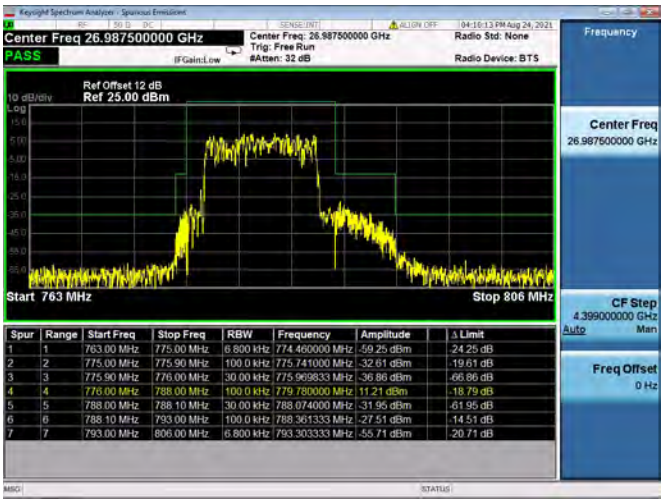
LTE ULCA_2A-5A SCC(5A)	
Channel Bandwidth: 10 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

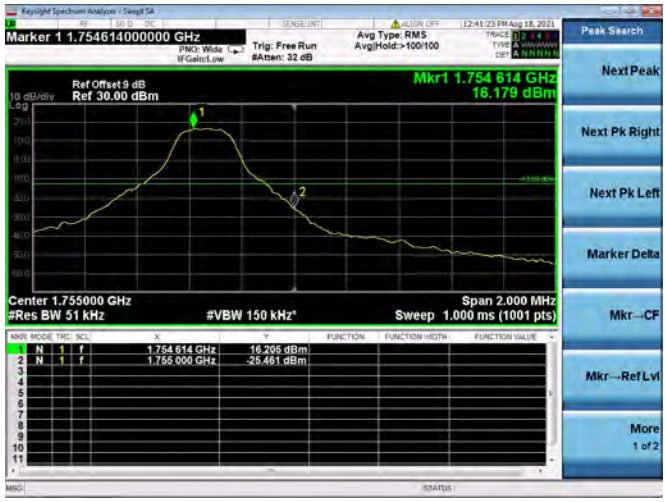
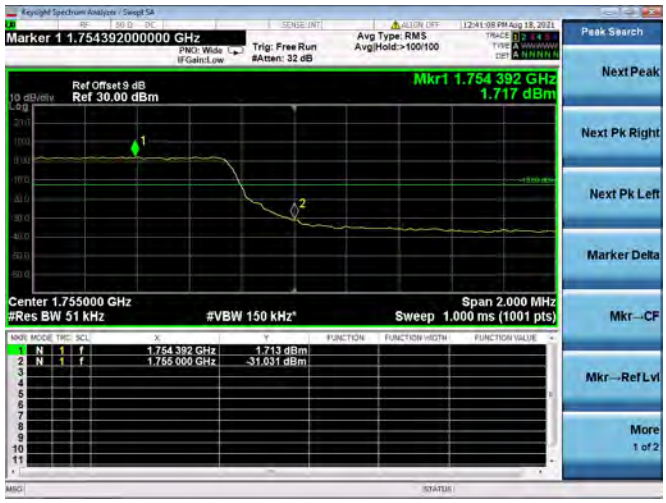
LTE ULCA_4A-13A PCC(4A)	
Channel Bandwidth: 5 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

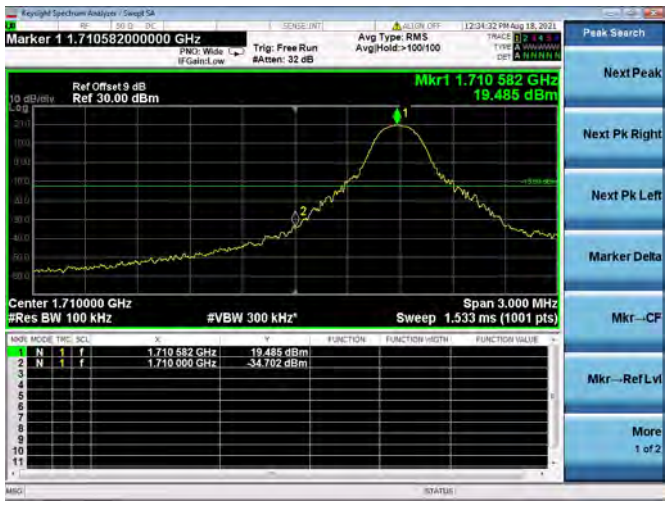
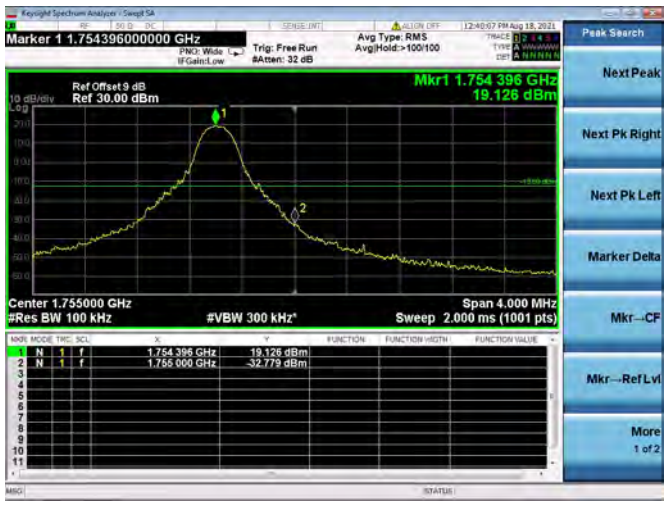
LTE ULCA_4A-13A PCC(4A)	
Channel Bandwidth: 10 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

LTE ULCA_4A-13A PCC(4A)	
Channel Bandwidth: 15 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

LTE ULCA_4A-13A PCC(4A)	
Channel Bandwidth: 20 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB
	

LTE ULCA_4A-13A SCC(13A)	
Channel Bandwidth: 10 MHz	
Low 1RB	High 1RB
	
FULL RB	
	N/A

LTE ULCA_4A-5A PCC(4A)	
Channel Bandwidth: 5 MHz	
Low 1RB	High 1RB
	
FULL RB	High FULL RB
	

LTE ULCA_4A-5A PCC(4A)	
Channel Bandwidth: 10 MHz	
Low 1RB	High 1RB
	
Low FULL RB	High FULL RB