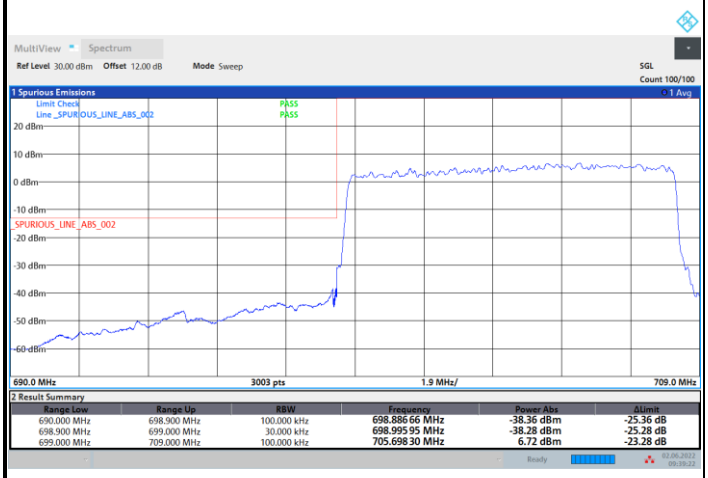
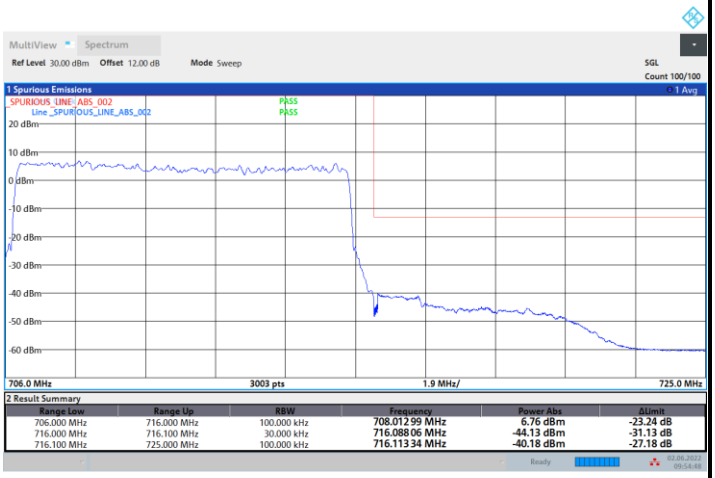
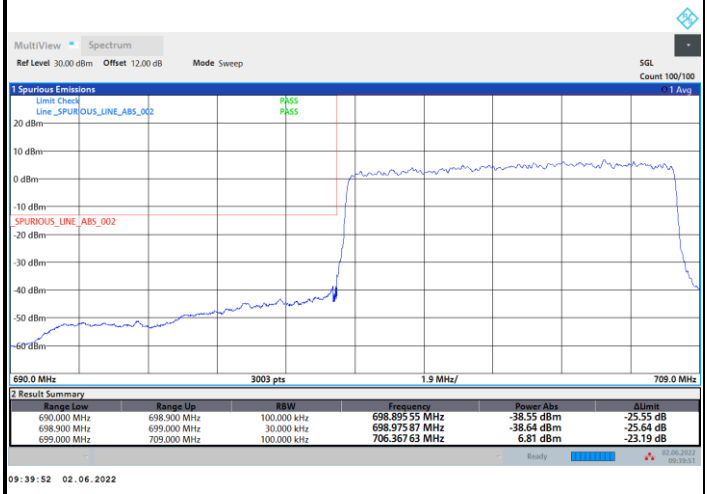
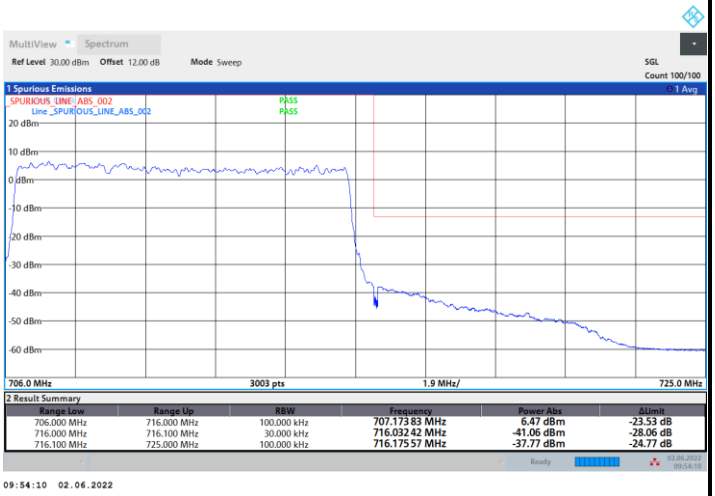
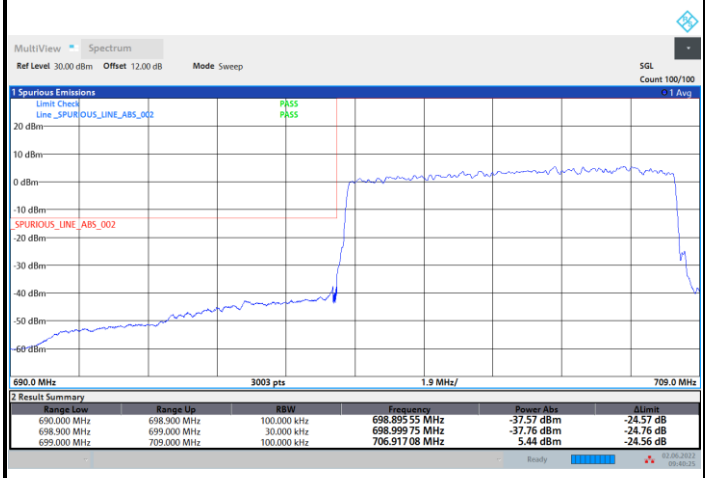
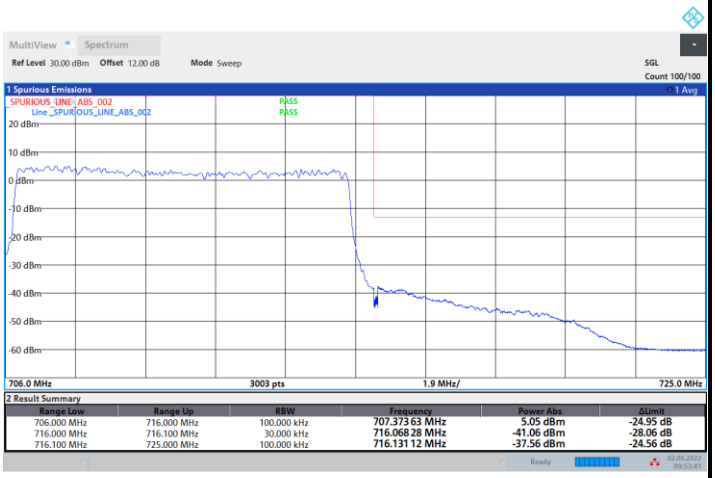
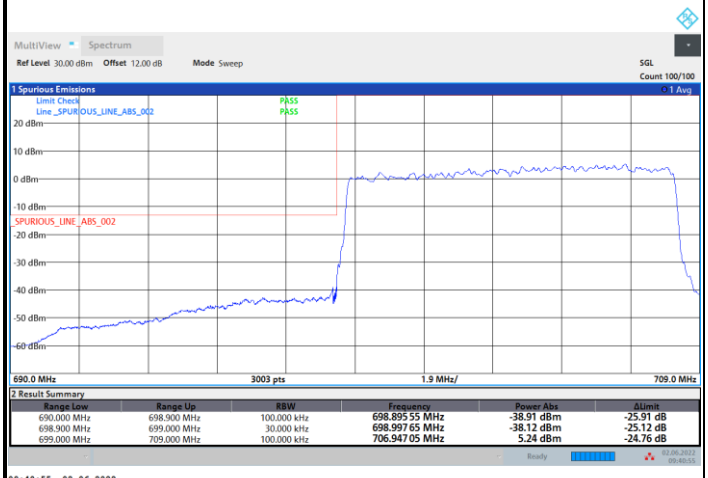
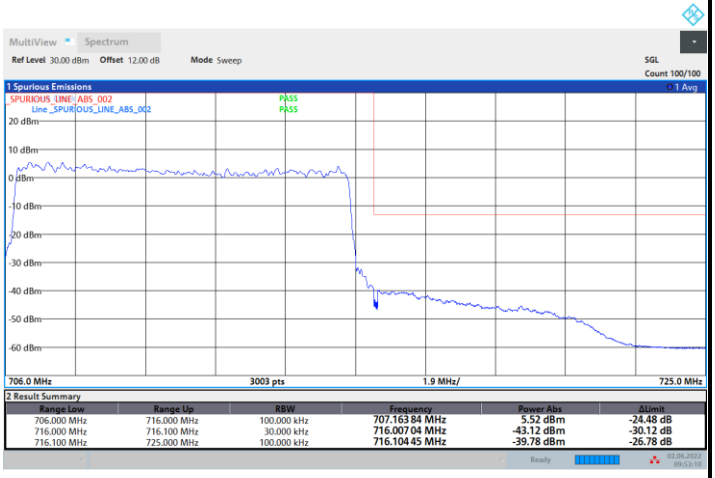
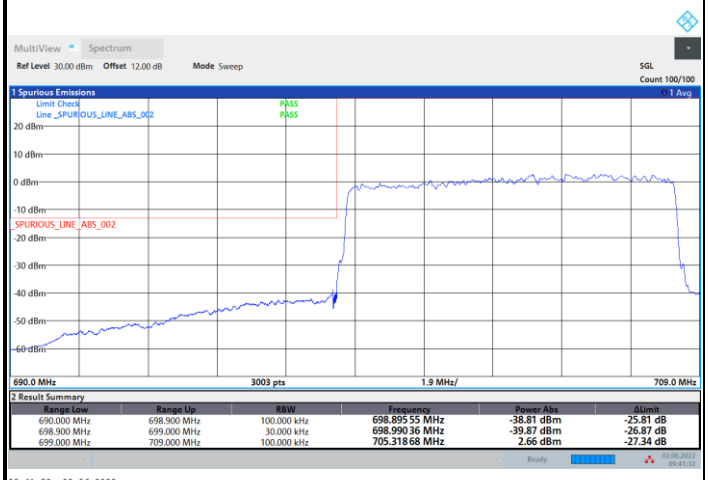
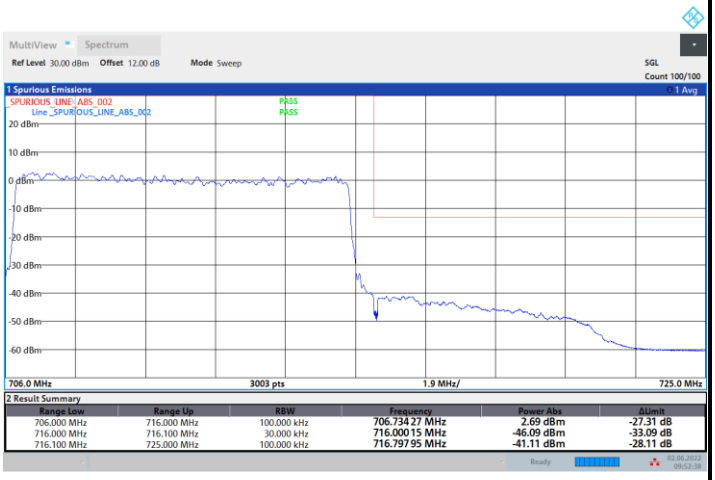
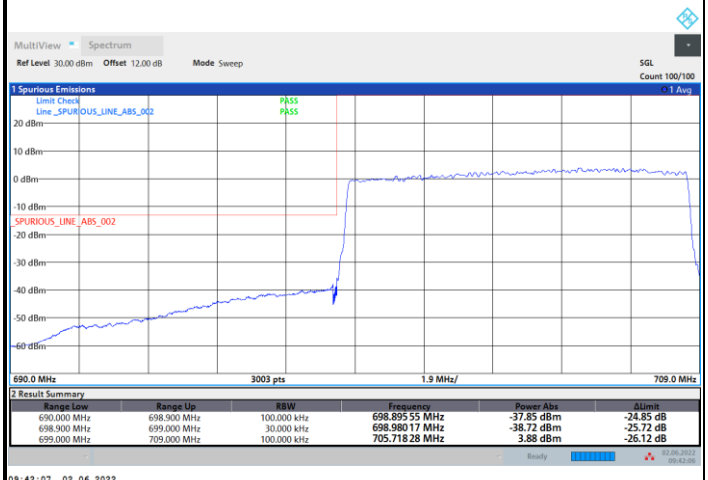
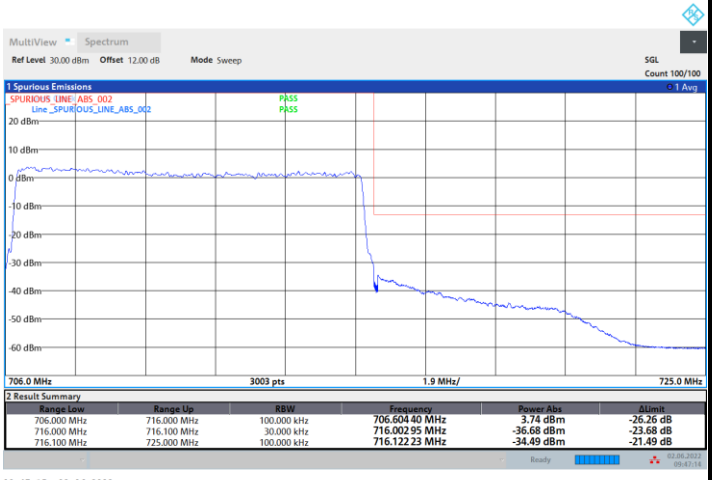
FR1 n12 / 10MHz / DFT-s-OFDM / PI/2 BPSK / Full RB	
Lowest Band Edge	Highest Band Edge
	

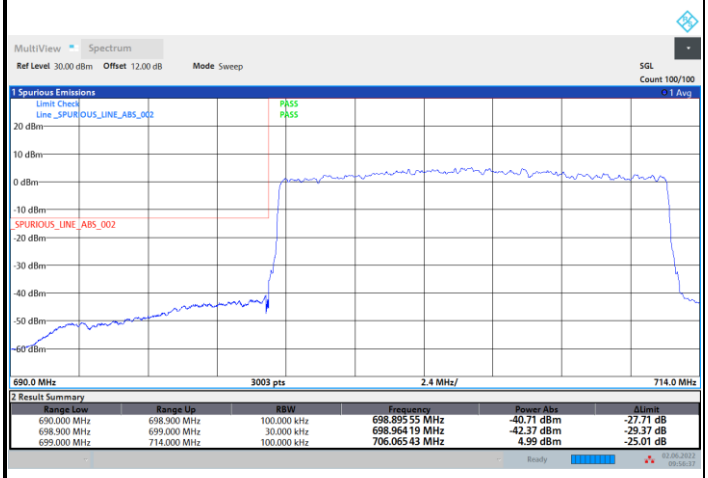
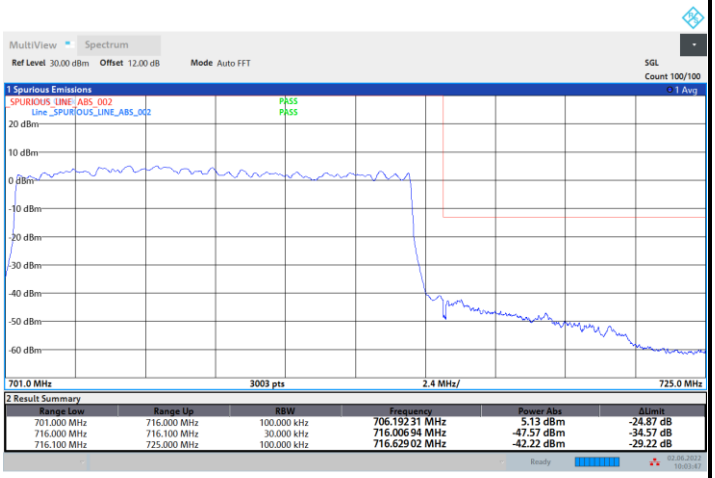
FR1 n12 / 10MHz / DFT-s-OFDM / QPSK / Full RB	
Lowest Band Edge	Highest Band Edge
	

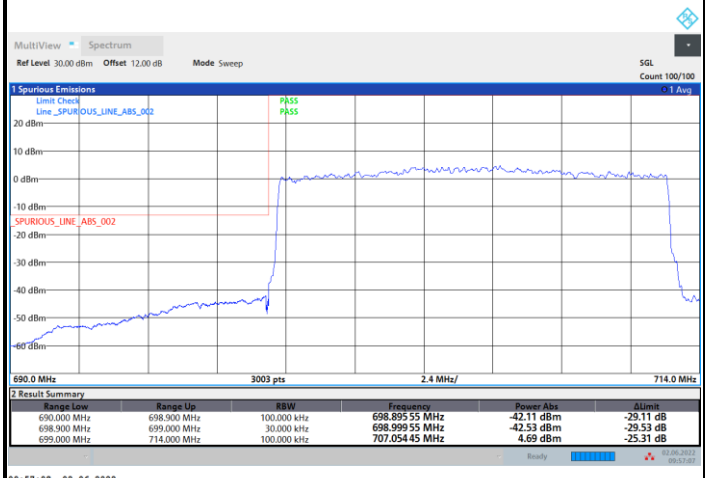
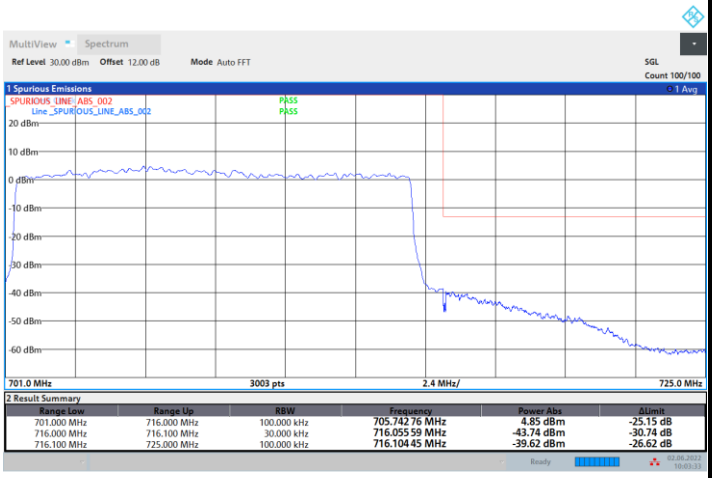
FR1 n12 / 10MHz / DFT-s-OFDM / 16QAM / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

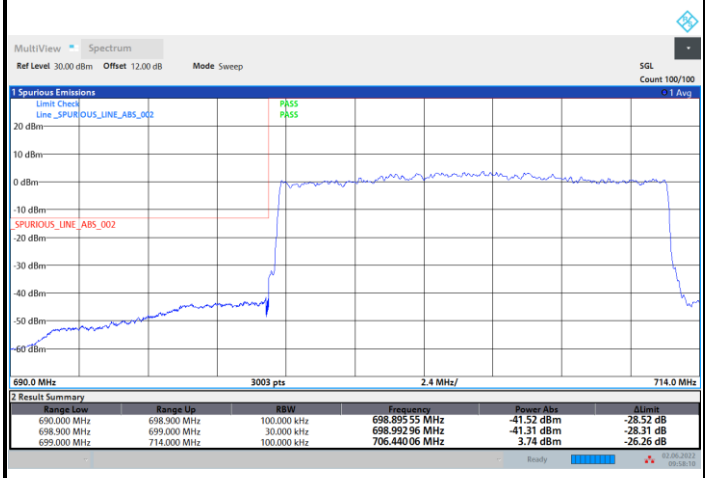
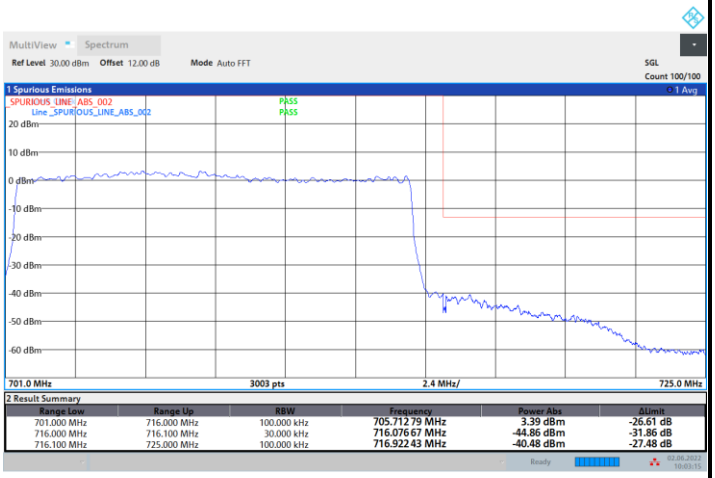
FR1 n12 / 10MHz / DFT-s-OFDM / 64QAM / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

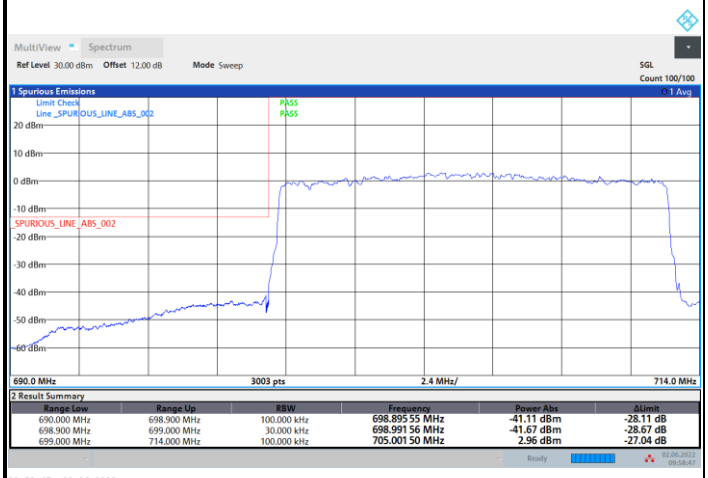
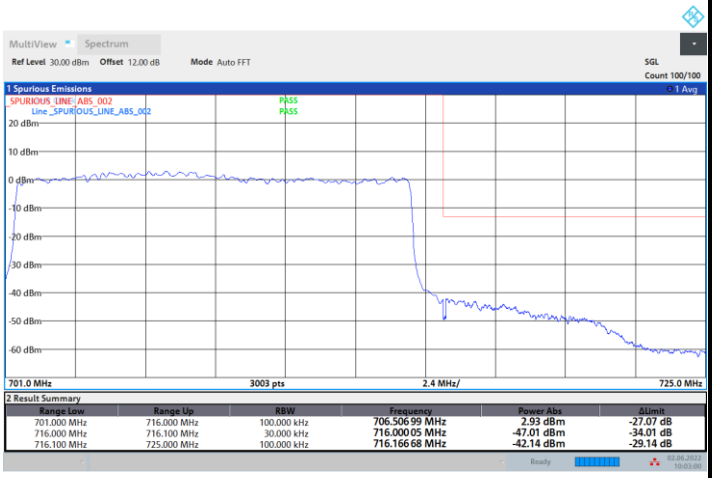
FR1 n12 / 10MHz / DFT-s-OFDM / 256QAM / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

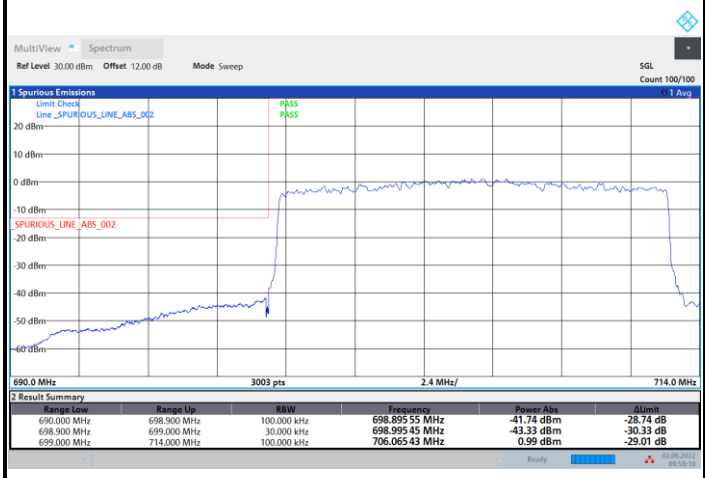
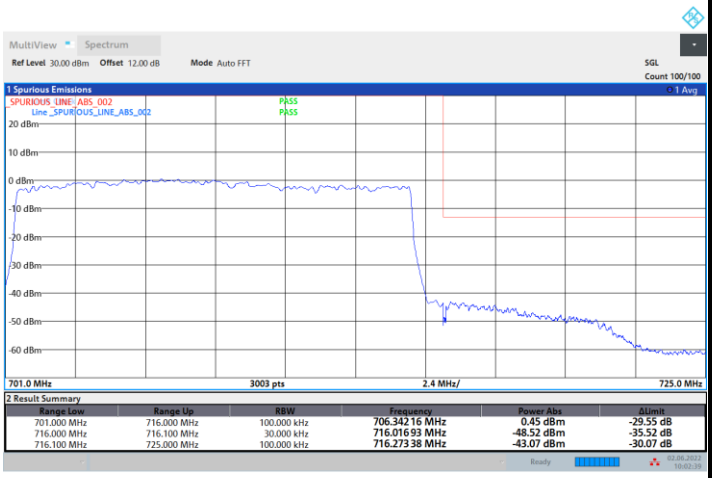
FR1 n12 / 10MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

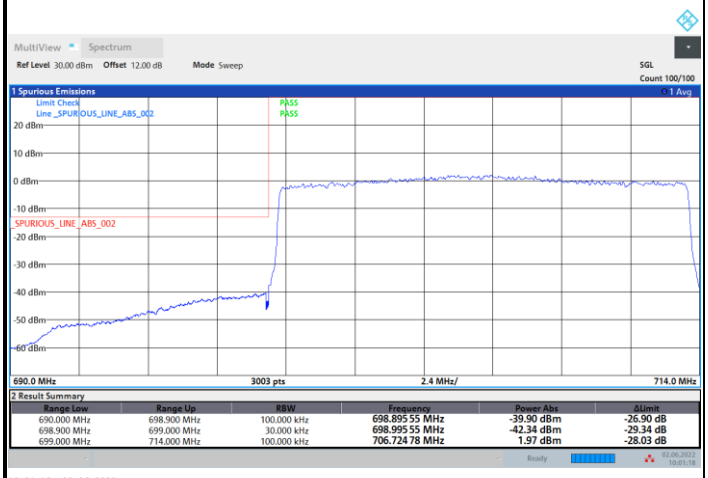
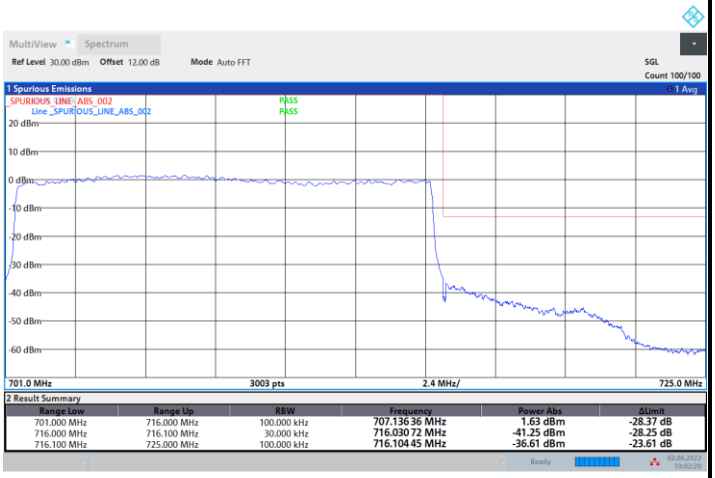
FR1 n12 / 15MHz / DFT-s-OFDM / PI/2 BPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

FR1 n12 / 15MHz / DFT-s-OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

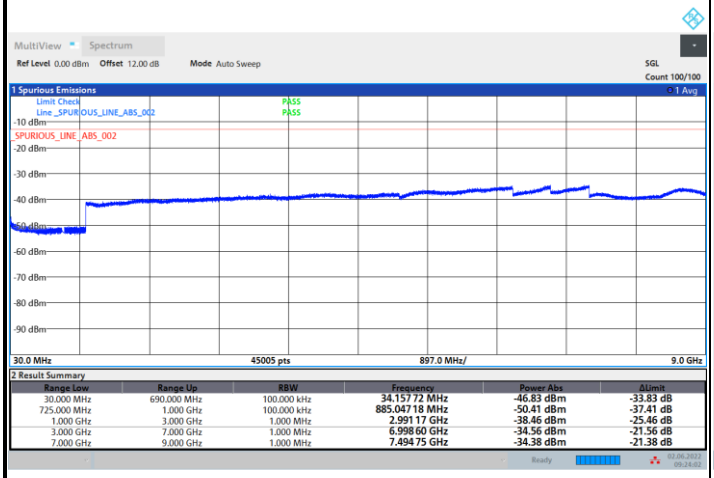
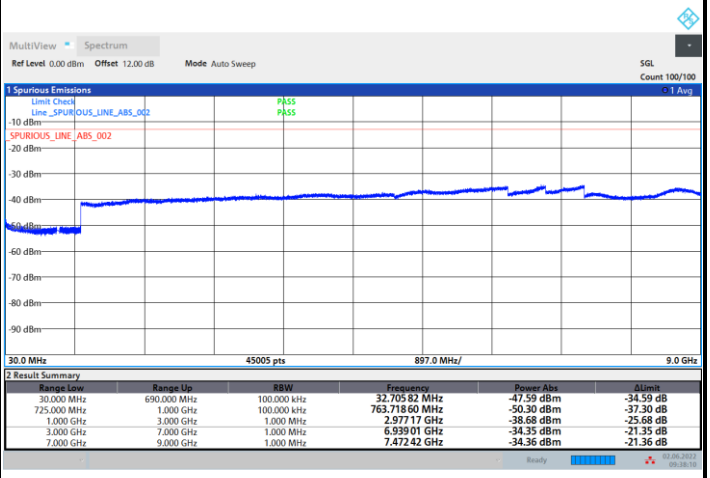
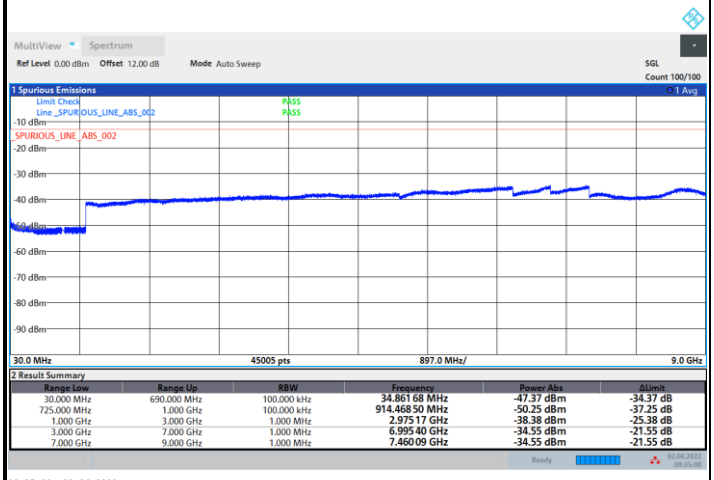
FR1 n12 / 15MHz / DFT-s-OFDM / 16QAM / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

FR1 n12 / 15MHz / DFT-s-OFDM / 64QAM / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

FR1 n12 / 15MHz / DFT-s-OFDM / 256QAM / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

FR1 n12 / 15MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

Conducted Spurious Emission

FR1 n12 / 5MHz / DFT-S OFDM / QPSK / 1RB1	
Lowest Channel	**Middle Channel**
	
Highest Channel	
	

Frequency Stability

Test Conditions		FR1 n12 (PI/2 BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0066	PASS
40	Normal Voltage	0.0073	
30	Normal Voltage	0.0023	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0071	
0	Normal Voltage	0.0160	
-10	Normal Voltage	0.0088	
-20	Normal Voltage	0.0081	
-30	Normal Voltage	0.0059	
20	Maximum Voltage	0.0044	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0161	

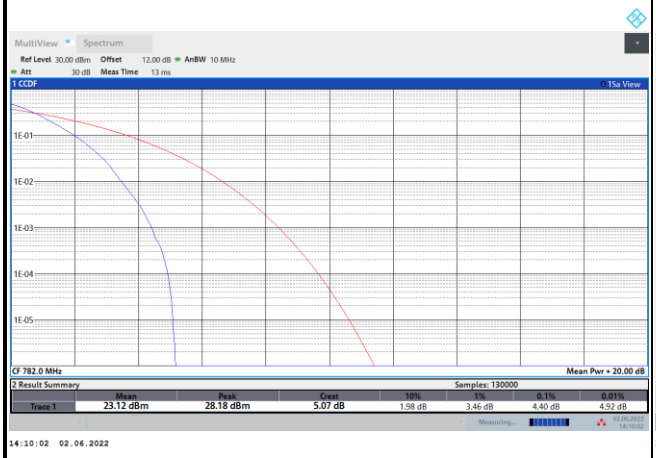
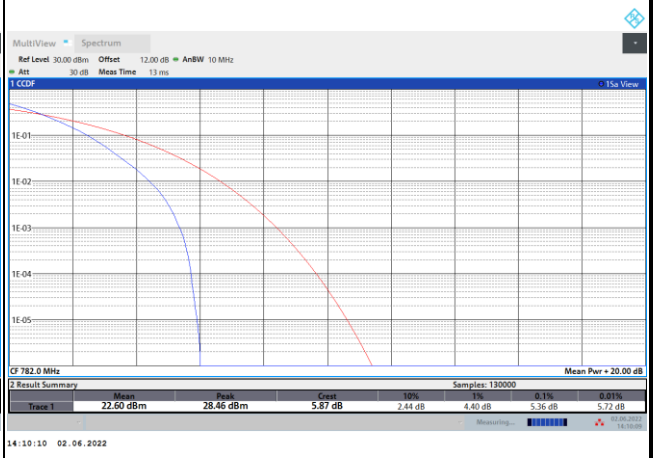
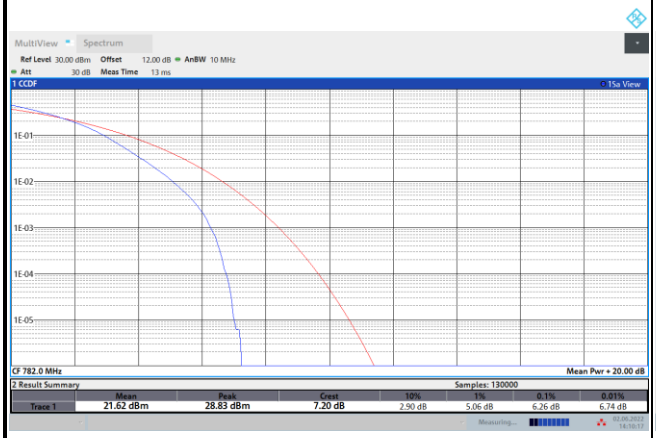
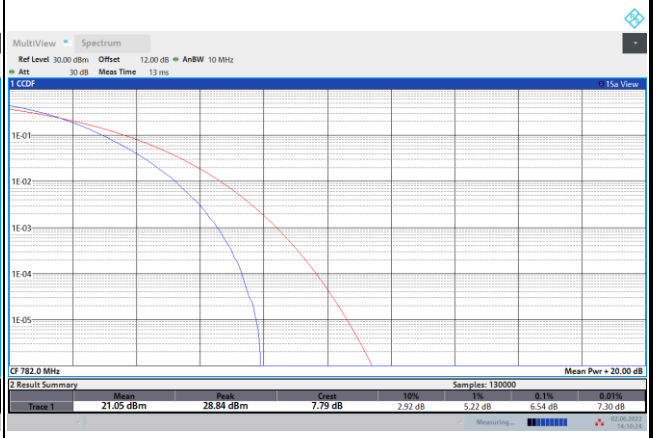
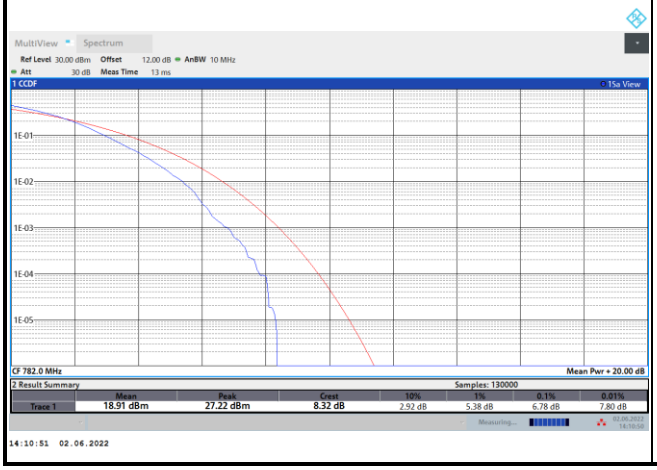
Note:

1. Normal Voltage = 4.05 V.；Battery End Point (BEP) = 3.85 V.；Maximum Voltage = 4.35 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

FR1 n13

Peak-to-Average Ratio

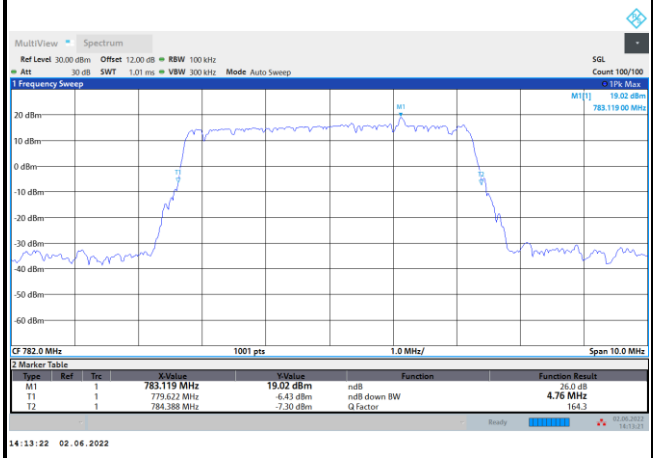
Mode	FR1 n13 / 10MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.40	5.36	6.26	6.54	PASS
Mode	FR1 n13 / 10MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.78				PASS

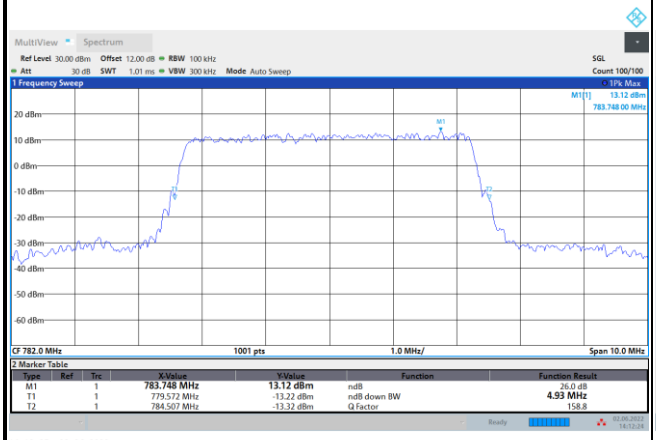
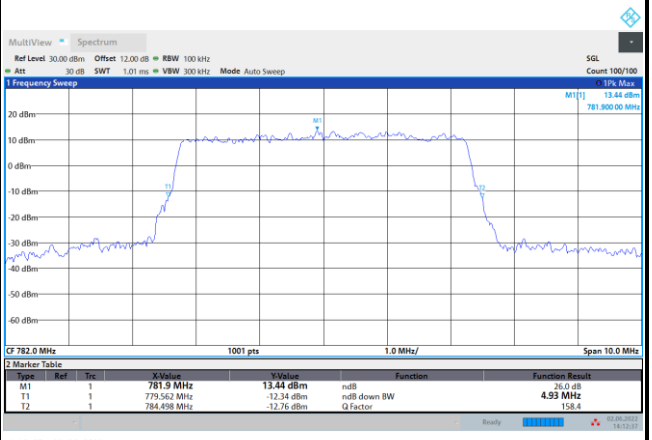
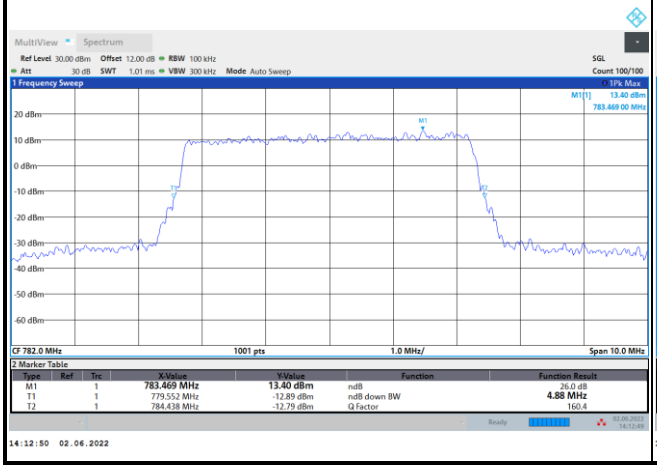
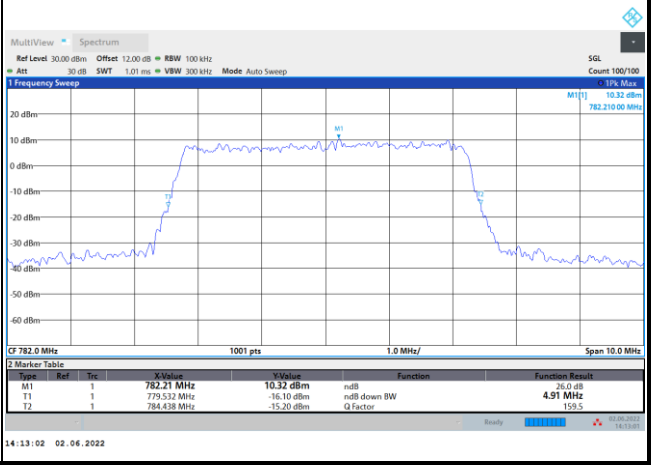
FR1 n13 / 10MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	QPSK
	
16QAM	64QAM
	
256QAM	
	

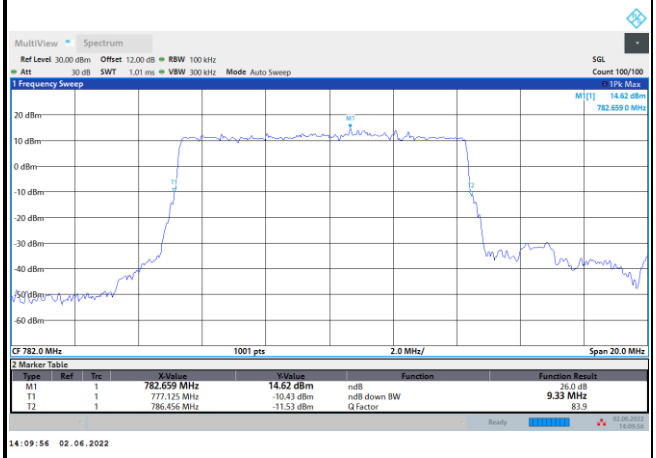
26dB Bandwidth

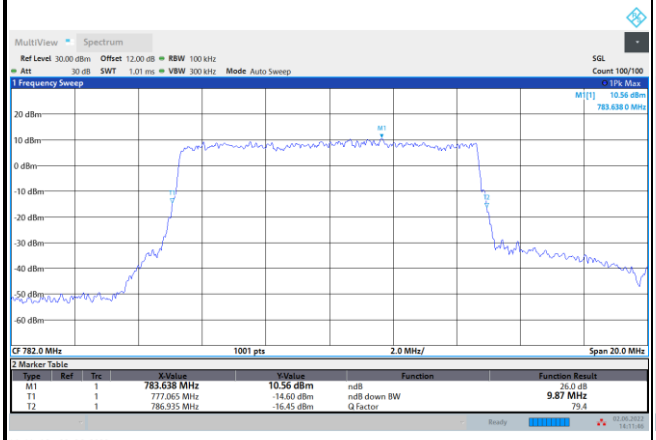
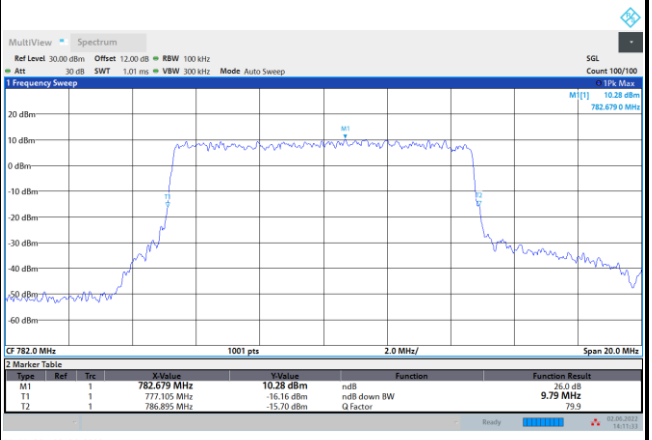
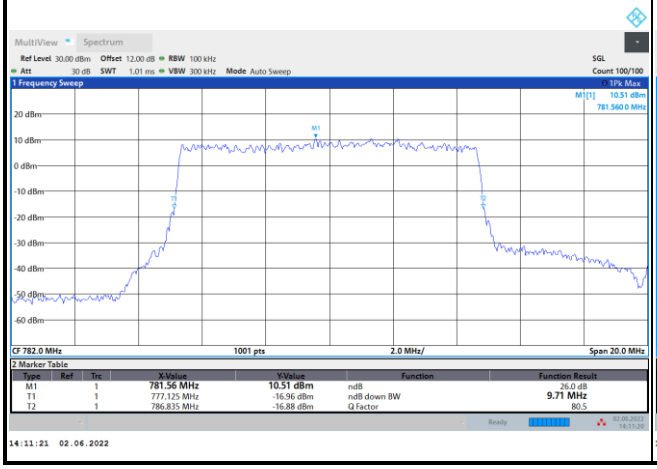
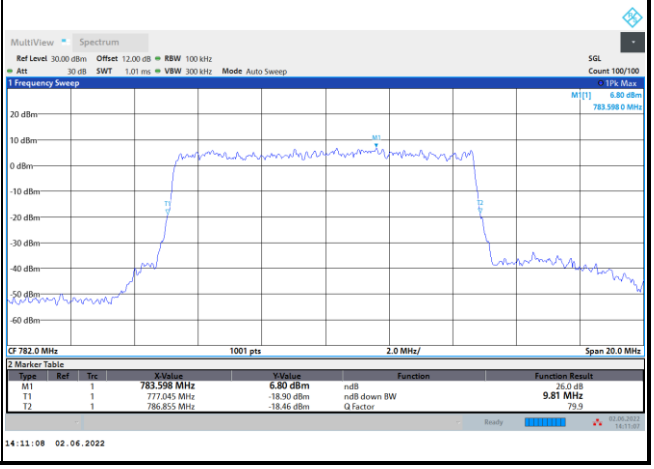
Mode	FR1 n13 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz					
Mod.	PI/2 BPSK		PI/2 BPSK					
Middle CH	4.76		9.33					

Mode	FR1 n13 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM				
Middle CH	4.93	4.93	9.87	9.79				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	4.89	4.91	9.71	9.81				

FR1 n13 / 5MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

FR1 n13 / 5MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

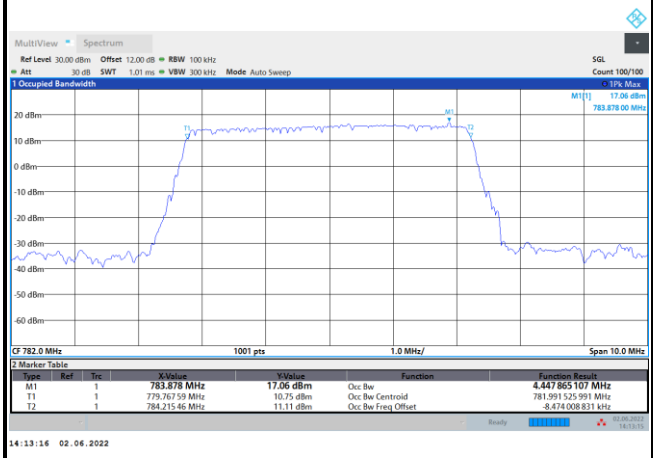
FR1 n13 / 10MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

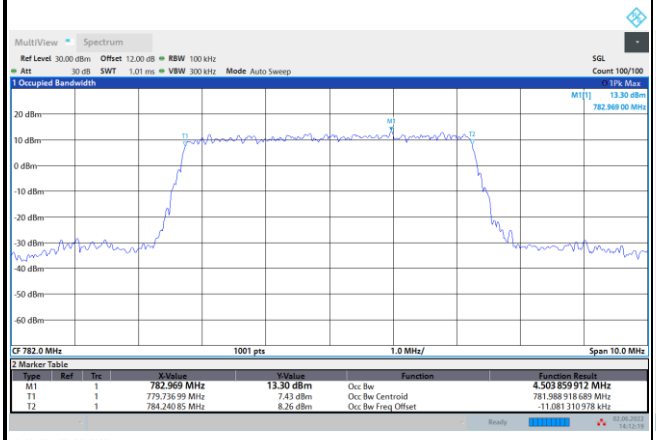
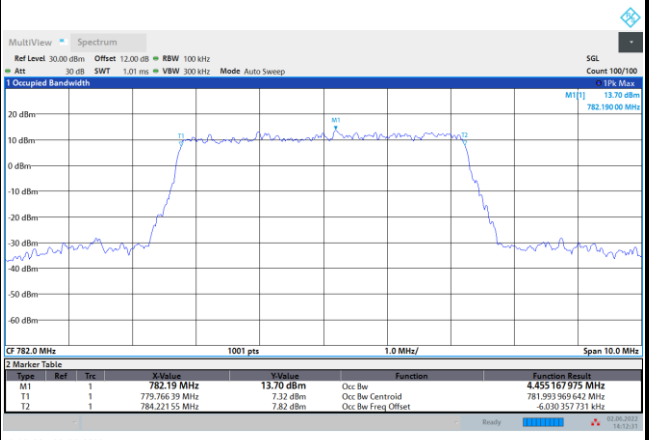
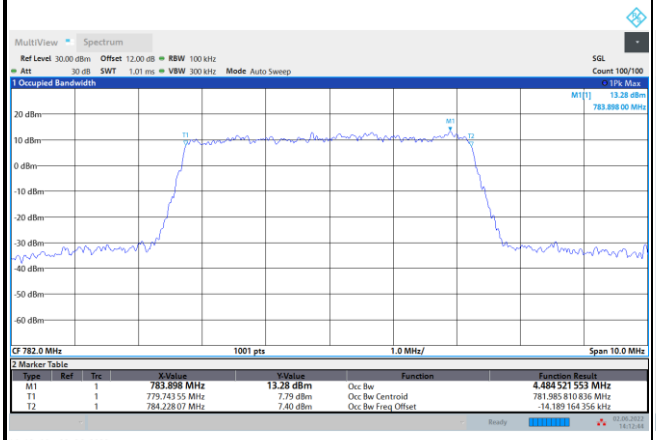
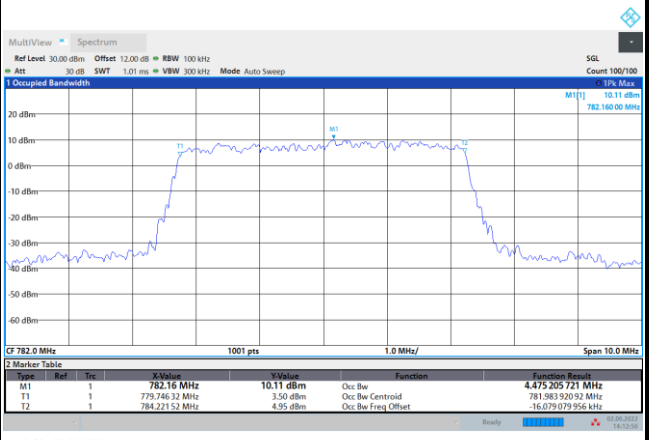
FR1 n13 / 10MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

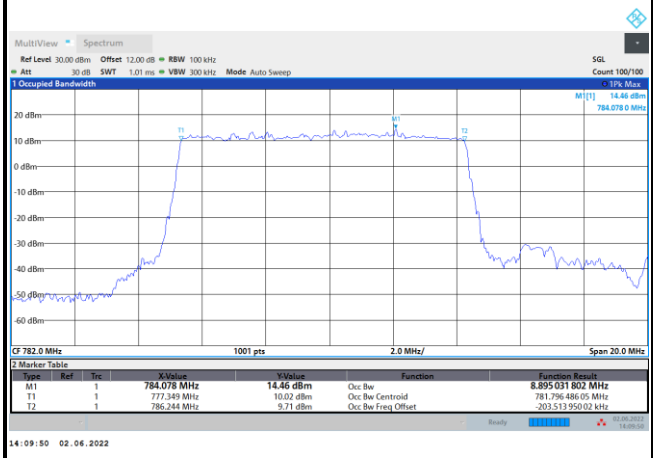
Occupied Bandwidth

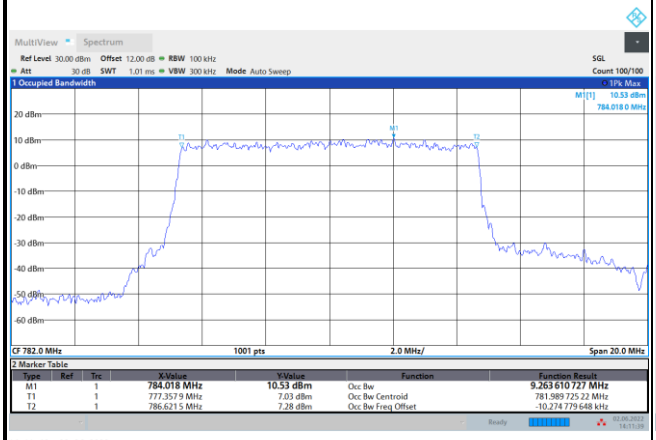
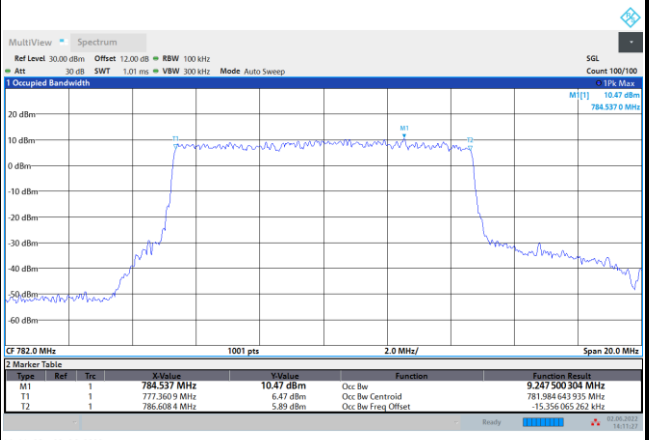
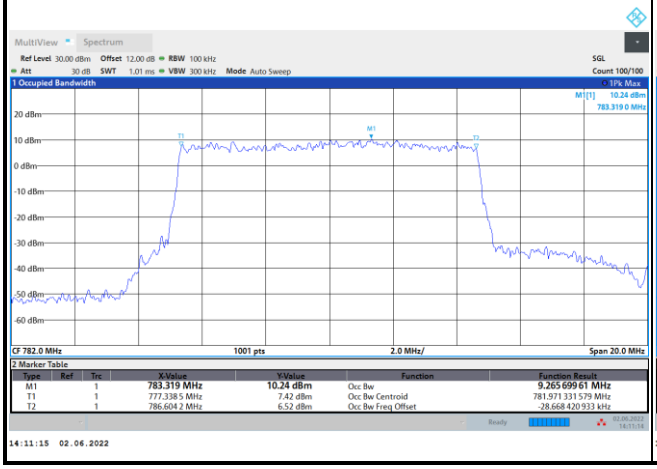
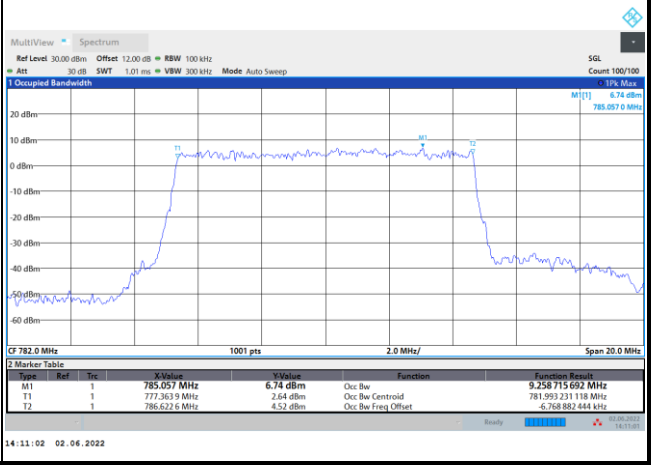
Mode	FR1 n13 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz					
Mod.	PI/2 BPSK		PI/2 BPSK					
Middle CH	4.44		8.89					

Mode	FR1 n13 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM				
Middle CH	4.50	4.45	9.26	9.24				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	4.48	4.47	9.26	9.25				

FR1 n13 / 5MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

FR1 n13 / 5MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

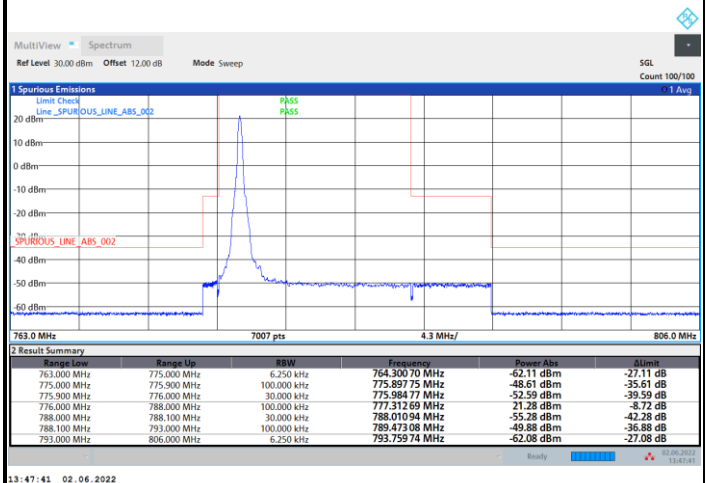
FR1 n13 / 10MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

FR1 n13 / 10MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

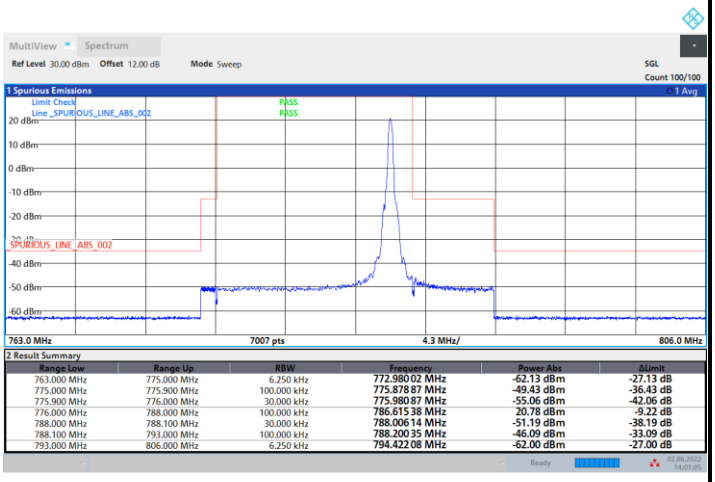
Conducted Band Edge

FR1 n13 / 5MHz / DFT-S OFDM / PI/2 BPSK

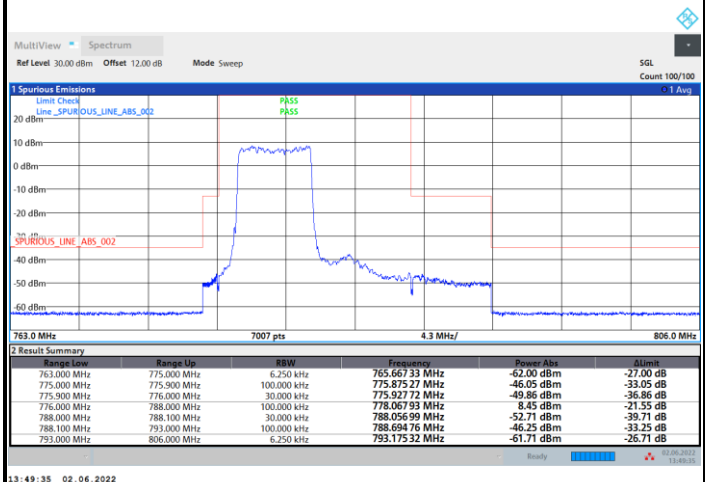
Lowest Band Edge / 1RB0



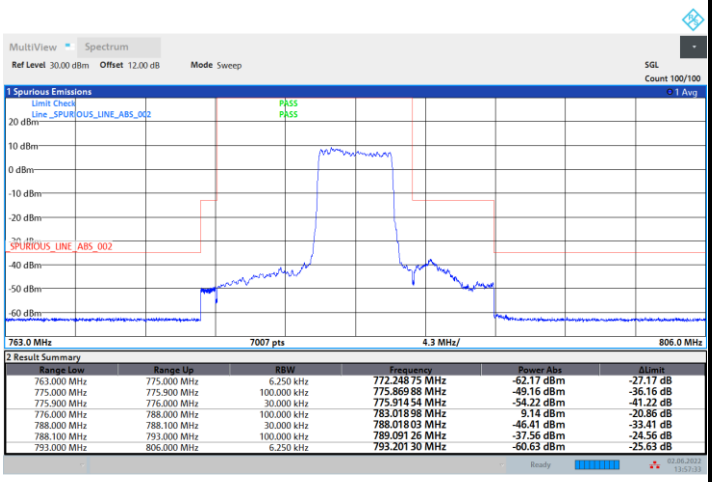
Highest Band Edge / 1RBmax

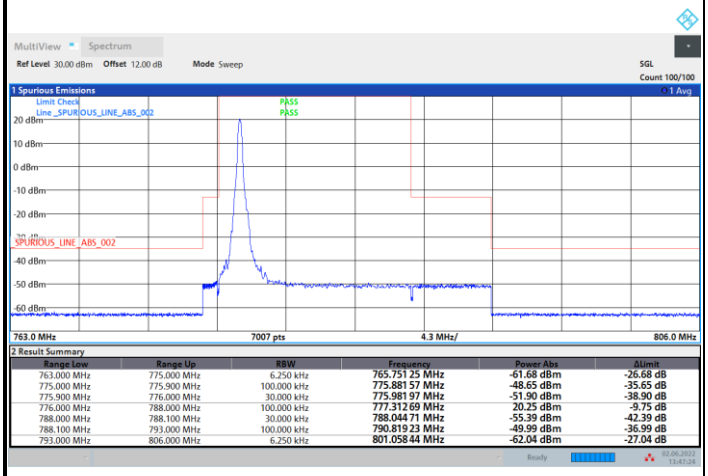
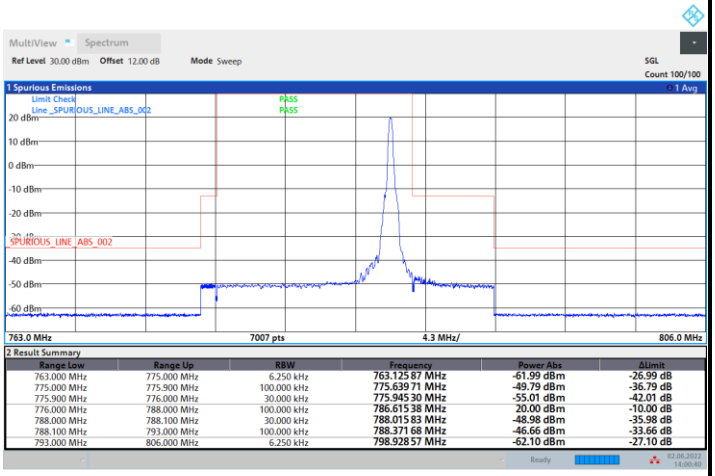
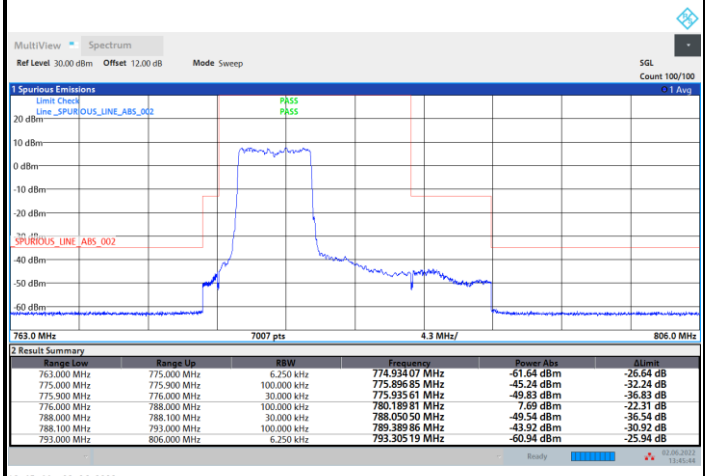
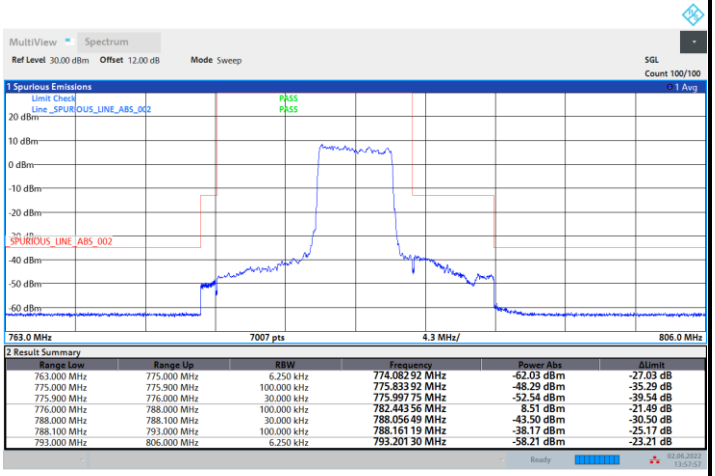


Lowest Band Edge / Full RB



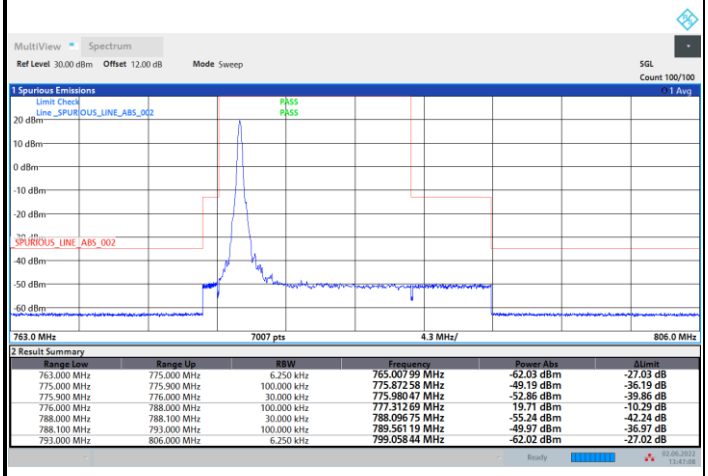
Highest Band Edge / Full RB



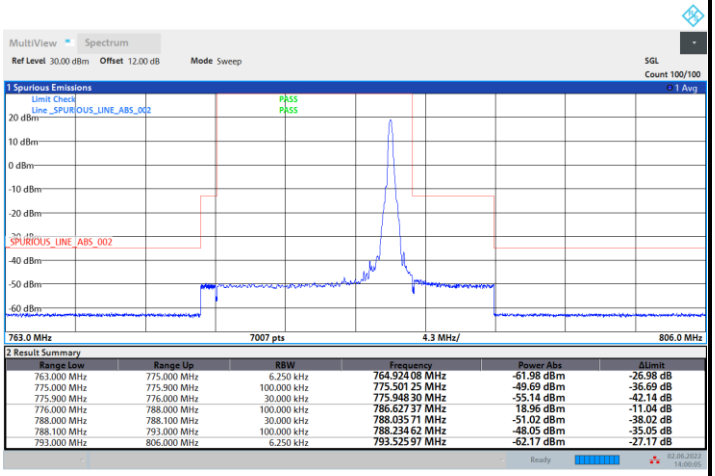
FR1 n13 / 5MHz / DFT-S OFDM / QPSK	
Lowest Band Edge / 1RB0	**Highest Band Edge / 1RBmax**
	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n13 / 5MHz / DFT-S OFDM / 16QAM

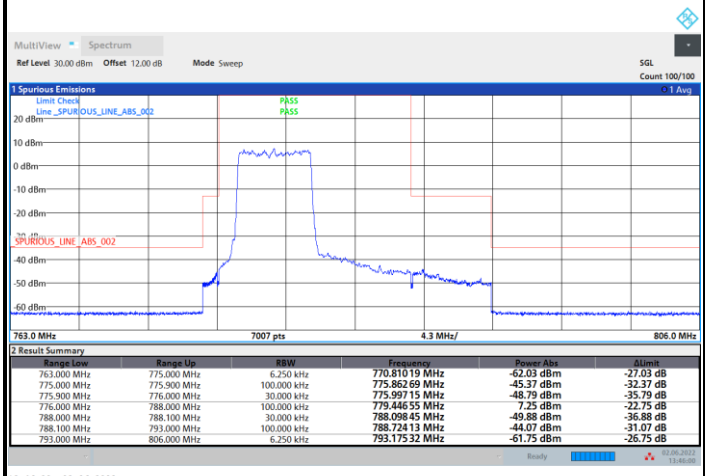
Lowest Band Edge / 1RB0



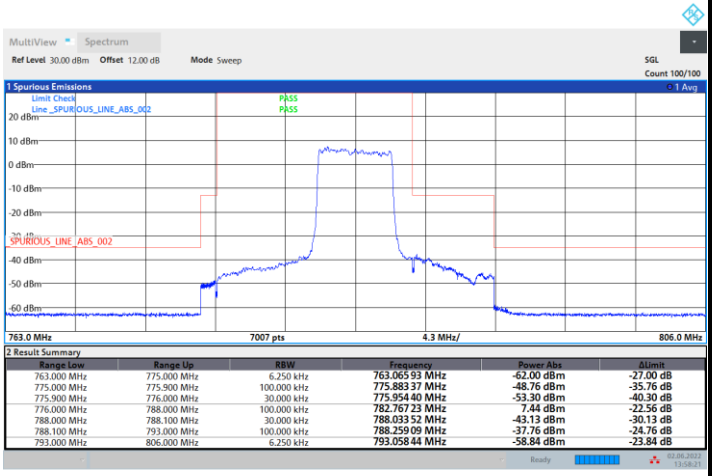
Highest Band Edge / 1RBmax

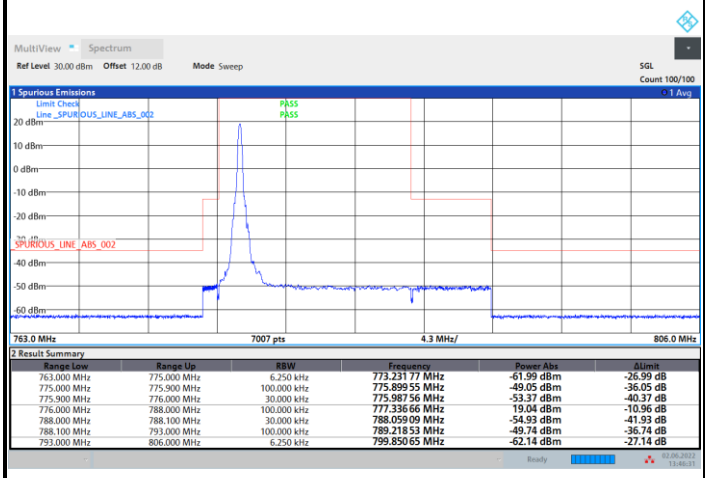
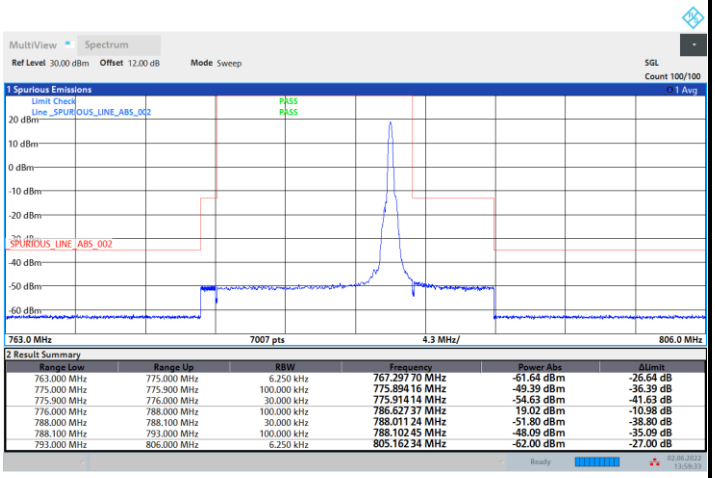
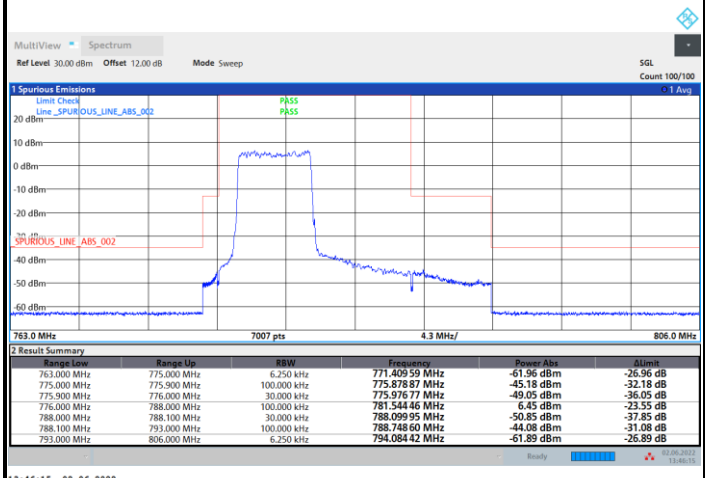
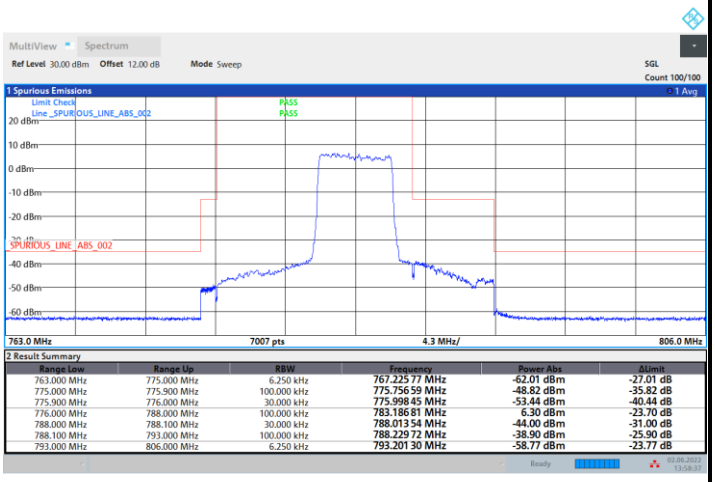


Lowest Band Edge / Full RB



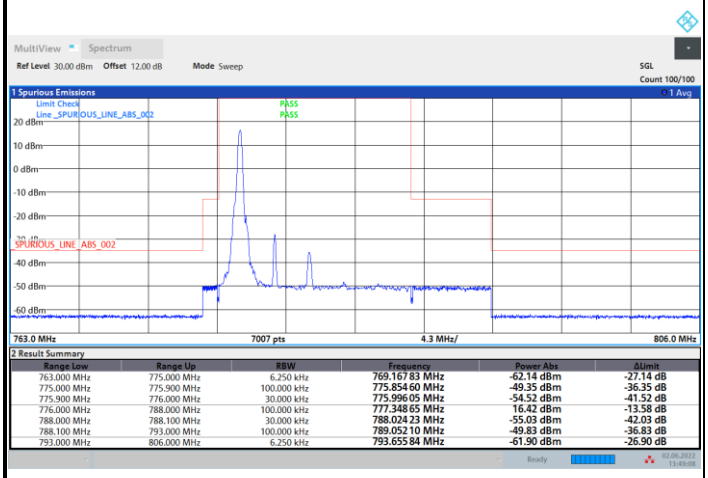
Highest Band Edge / Full RB



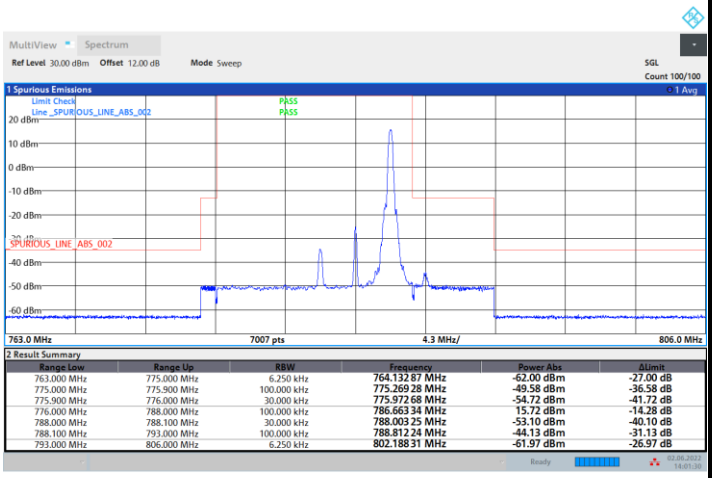
FR1 n13 / 5MHz / DFT-S OFDM / 64QAM	
Lowest Band Edge / 1RB0	**Highest Band Edge / 1RBmax**
	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n13 / 5MHz / DFT-S OFDM / 256QAM

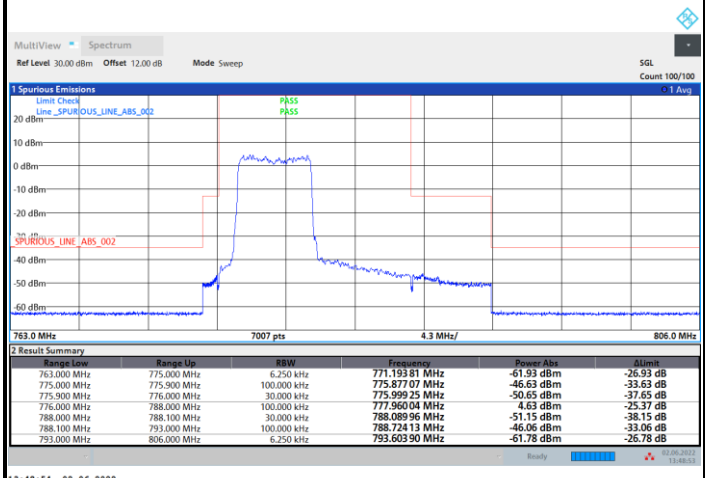
Lowest Band Edge / 1RB0



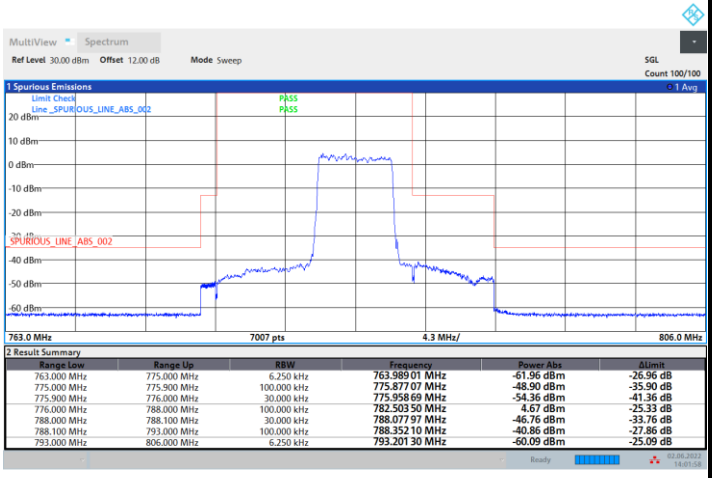
Highest Band Edge / 1RBmax

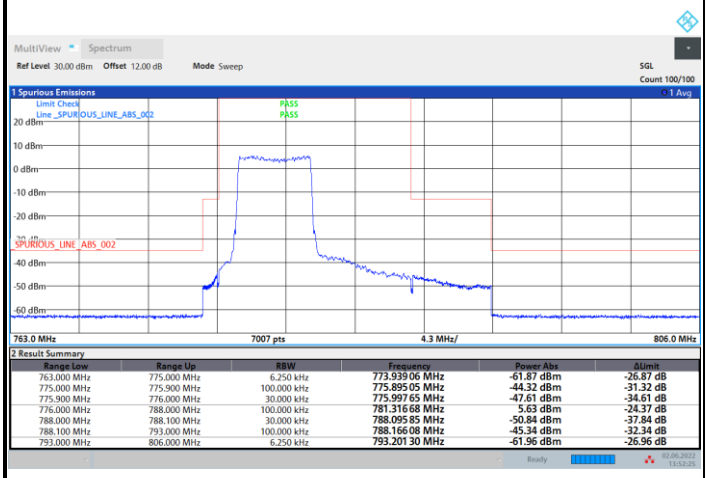
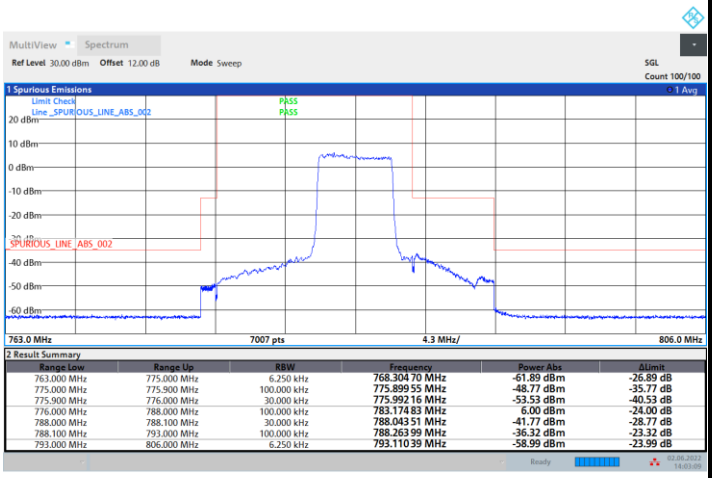


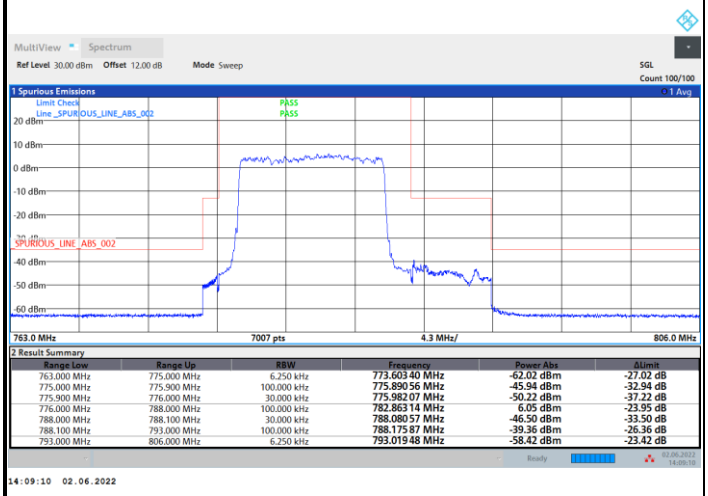
Lowest Band Edge / Full RB

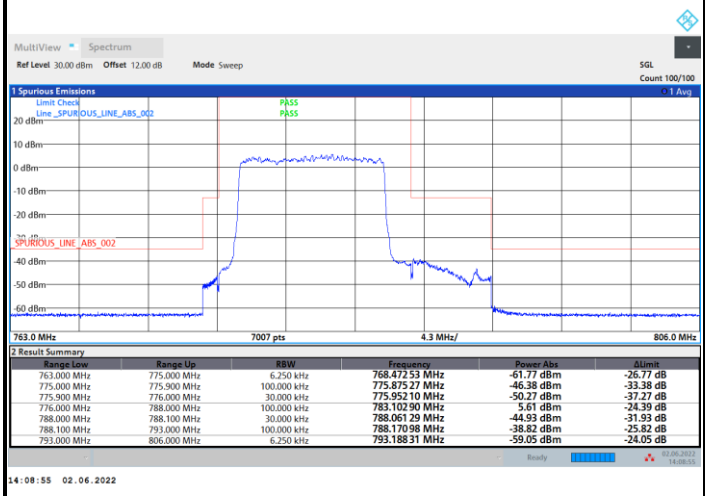


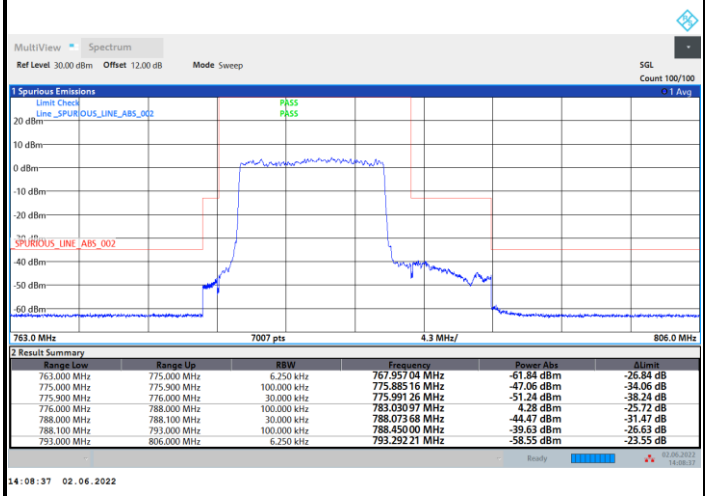
Highest Band Edge / Full RB

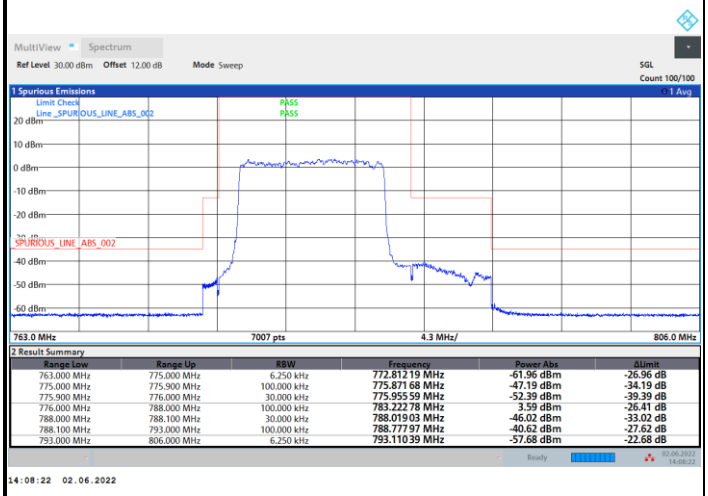


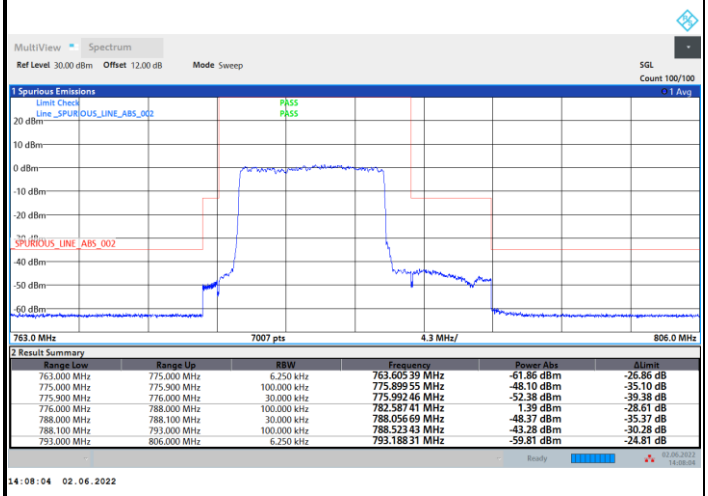
FR1 n13 / 5MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

FR1 n13 / 10MHz / DFT-s-OFDM / PI/2 BPSK	
Middle Band Edge / Full RB	
	

FR1 n13 / 10MHz / DFT-s-OFDM / QPSK	
Middle Band Edge / Full RB	
	

FR1 n13 / 10MHz / DFT-s-OFDM / 16QAM	
Middle Band Edge / Full RB	
	

FR1 n13 / 10MHz / DFT-s-OFDM / 64QAM	
Middle Band Edge / Full RB	
	

FR1 n13 / 10MHz / DFT-s-OFDM / 256QAM	
Middle Band Edge / Full RB	
	

FR1 n13 / 10MHz / CP OFDM / QPSK / Full RB	
Middle Band Edge / Full RB