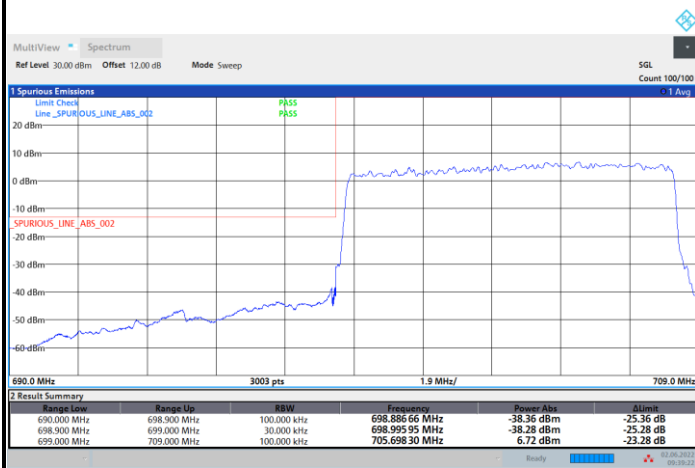


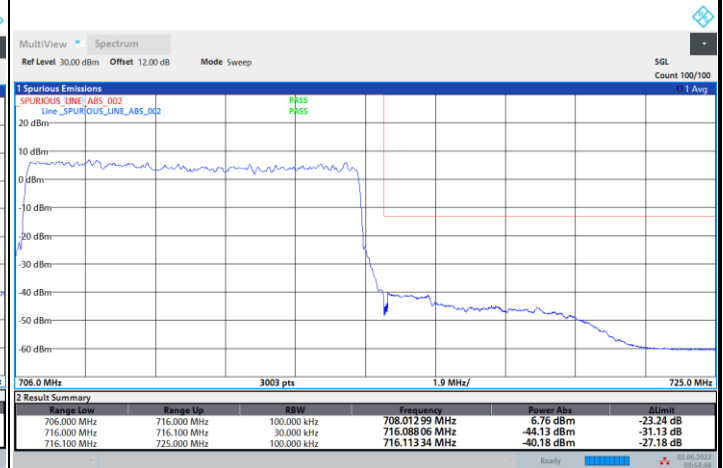


FR1 n12 / 10MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

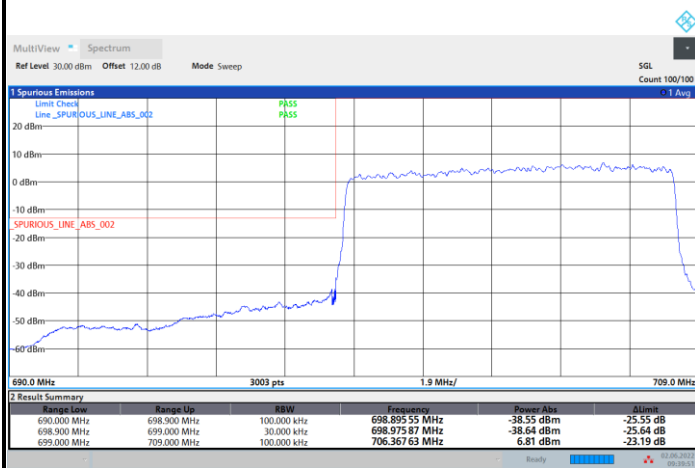


Highest Band Edge

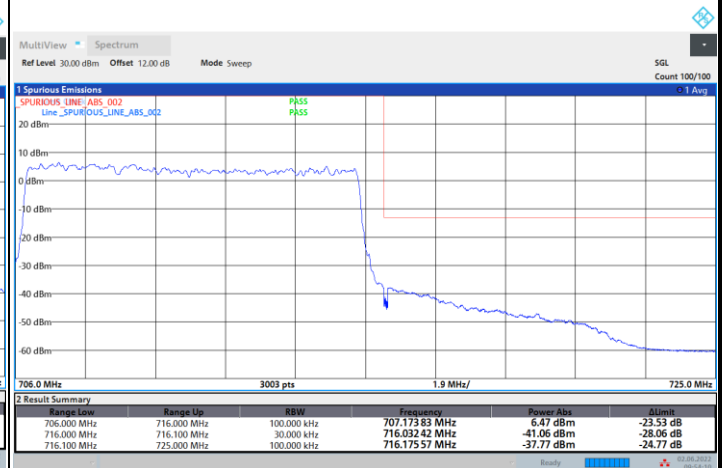


FR1 n12 / 10MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge



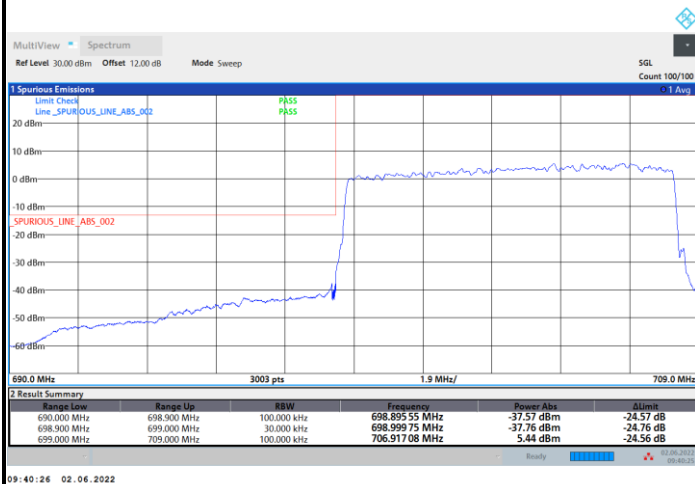
Highest Band Edge





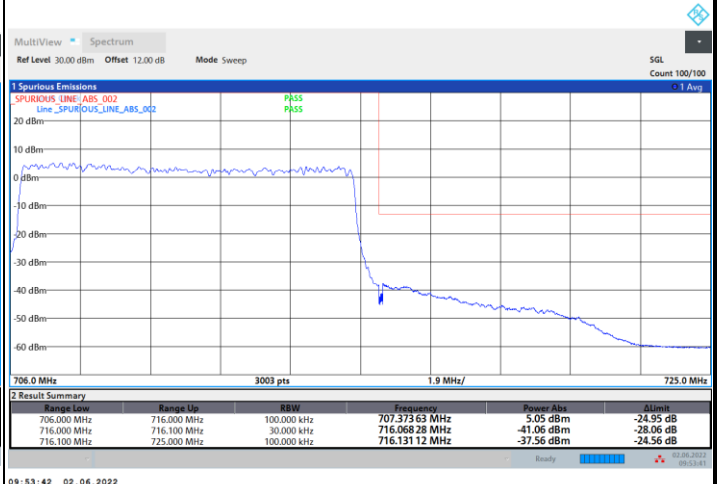
FR1 n12 / 10MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge



09:40:26 02.06.2022

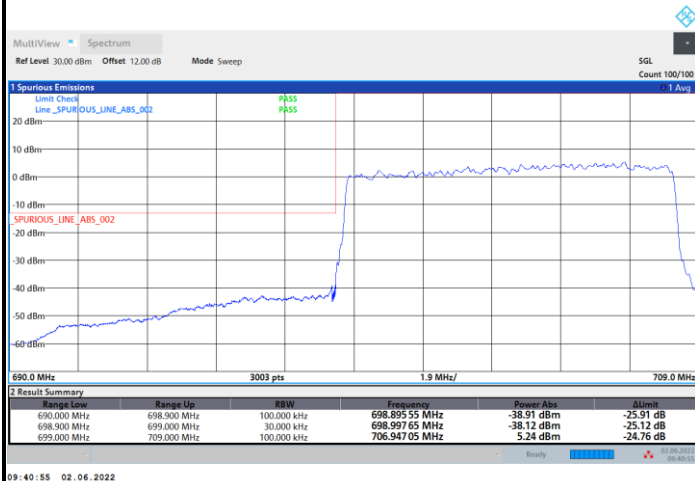
Highest Band Edge



09:53:42 02.06.2022

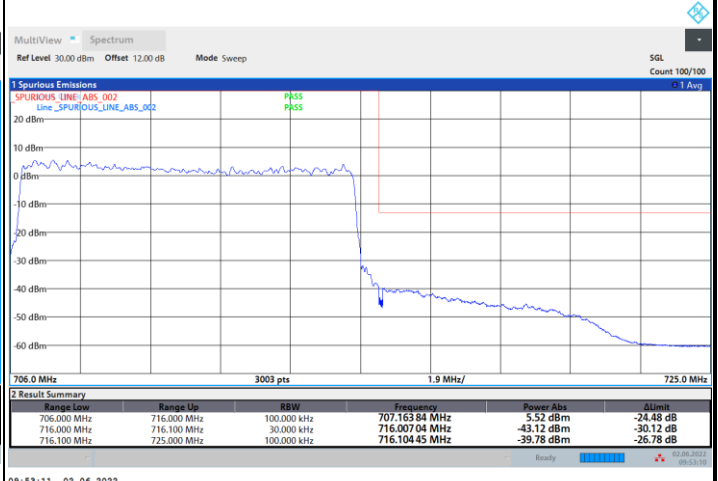
FR1 n12 / 10MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge



09:40:55 02.06.2022

Highest Band Edge

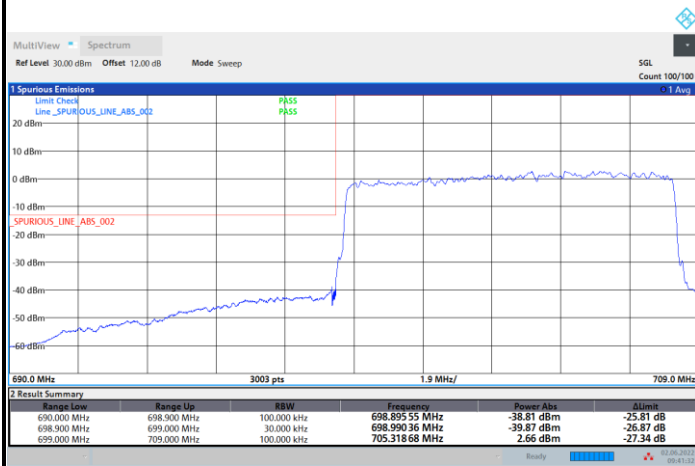


09:53:18 02.06.2022



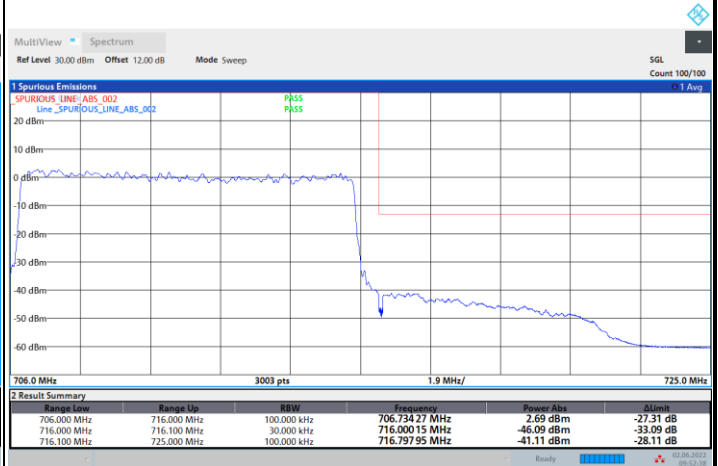
FR1 n12 / 10MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge



09:41:32 02.06.2022

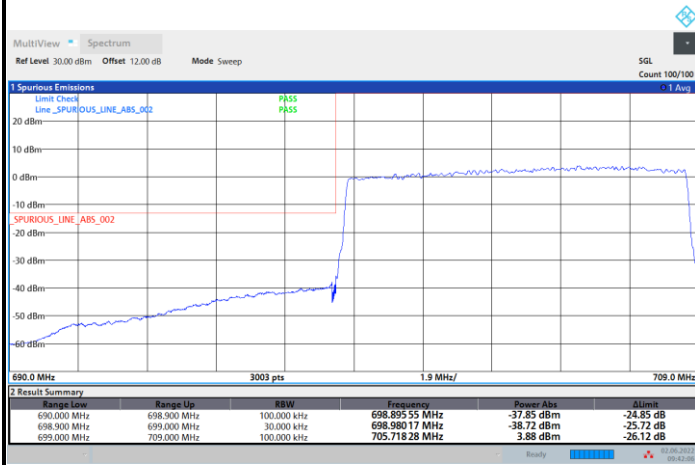
Highest Band Edge



09:52:38 02.06.2022

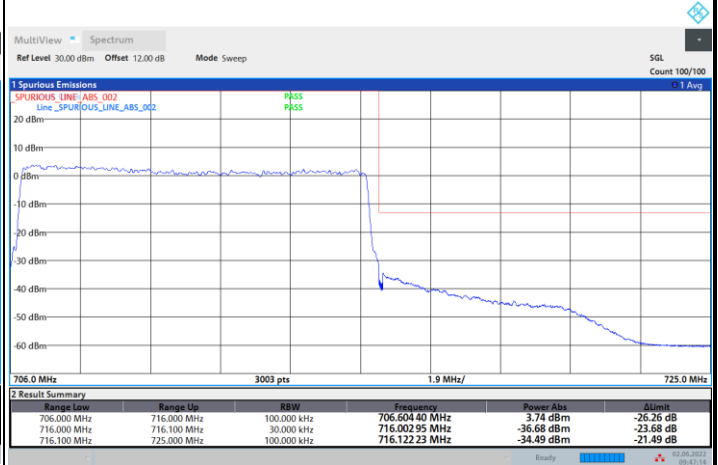
FR1 n12 / 10MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



09:42:07 02.06.2022

Highest Band Edge

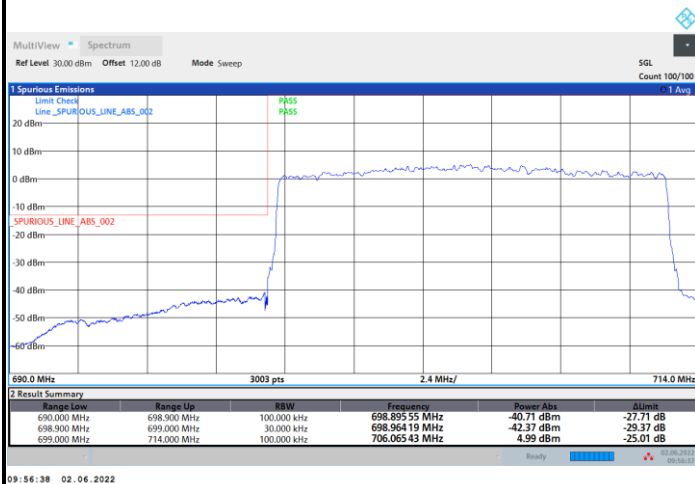


09:47:15 02.06.2022



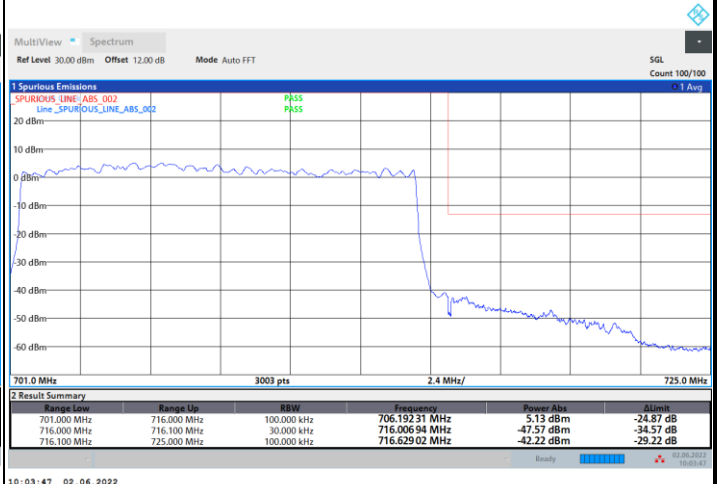
FR1 n12 / 15MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge



09:56:38 02.06.2022

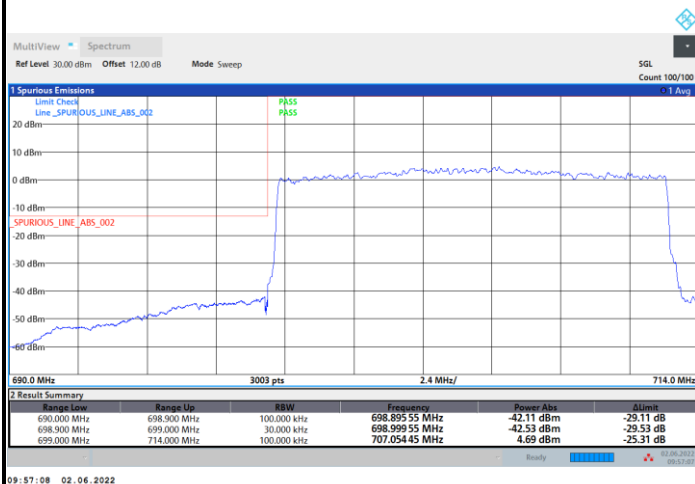
Highest Band Edge



10:03:47 02.06.2022

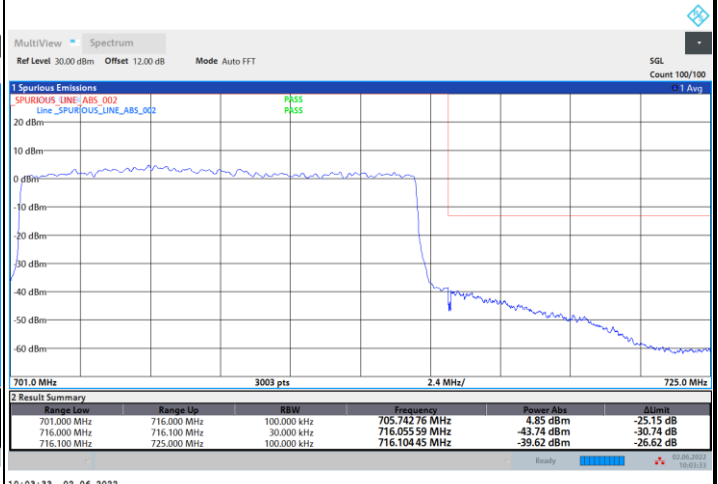
FR1 n12 / 15MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge



09:57:08 02.06.2022

Highest Band Edge

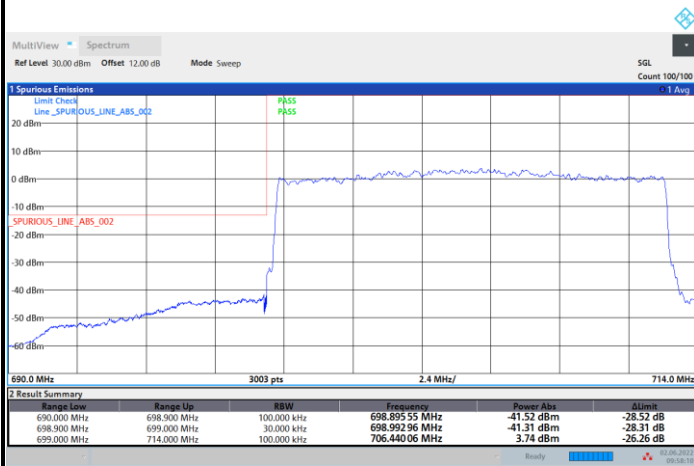


10:03:33 02.06.2022



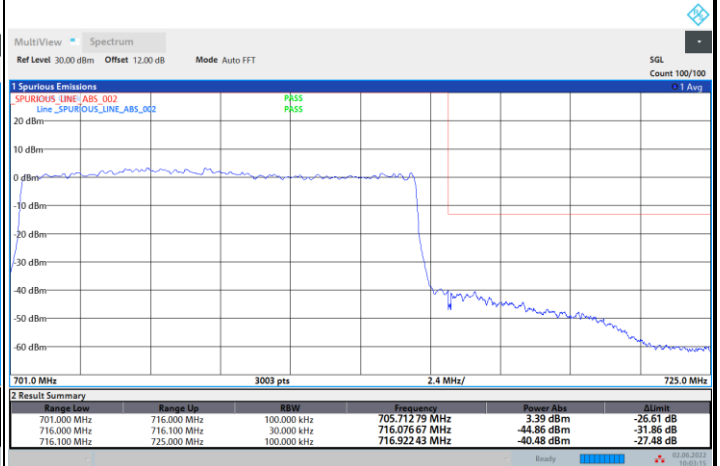
FR1 n12 / 15MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge



09:58:11 02.06.2022

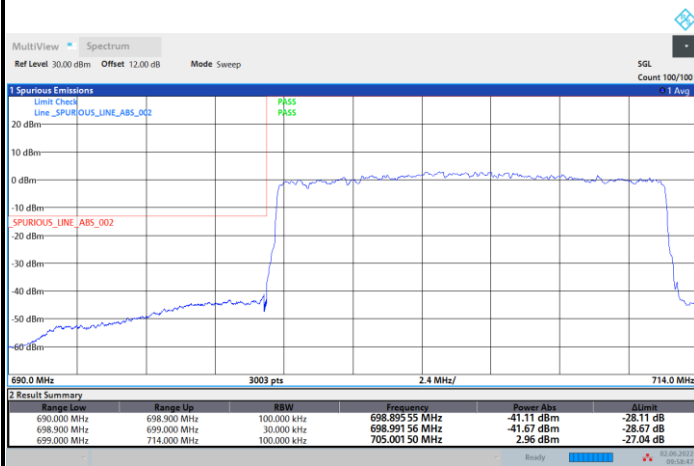
Highest Band Edge



10:03:15 02.06.2022

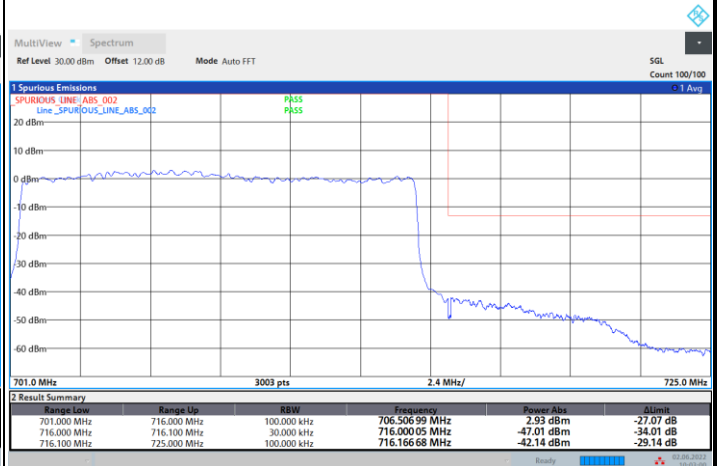
FR1 n12 / 15MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge



09:58:47 02.06.2022

Highest Band Edge

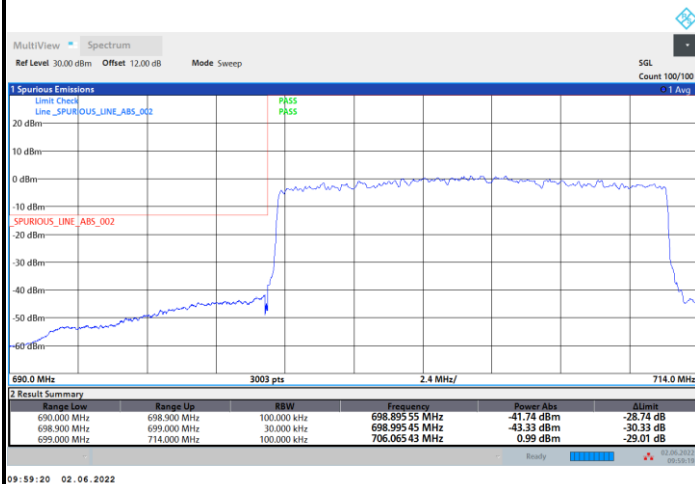


10:03:01 02.06.2022



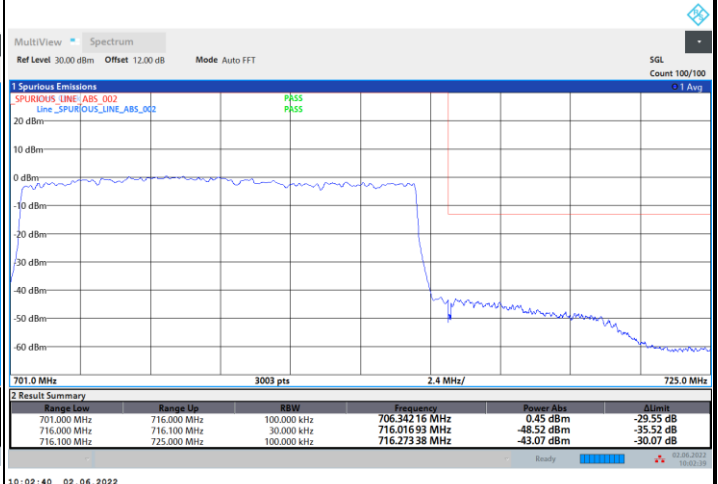
FR1 n12 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge



09:59:20 02.06.2022

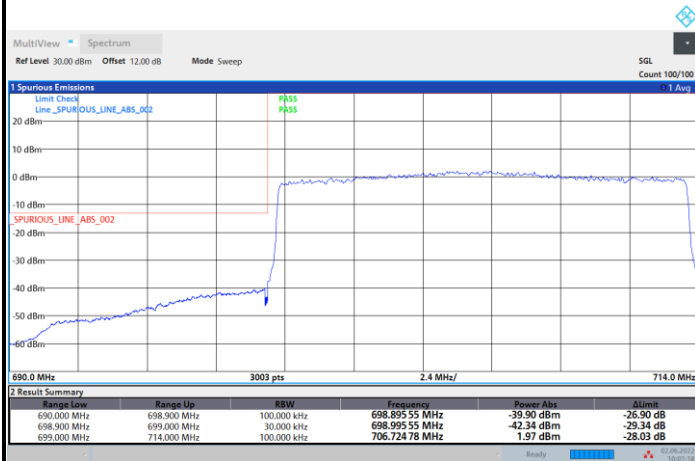
Highest Band Edge



10:02:40 02.06.2022

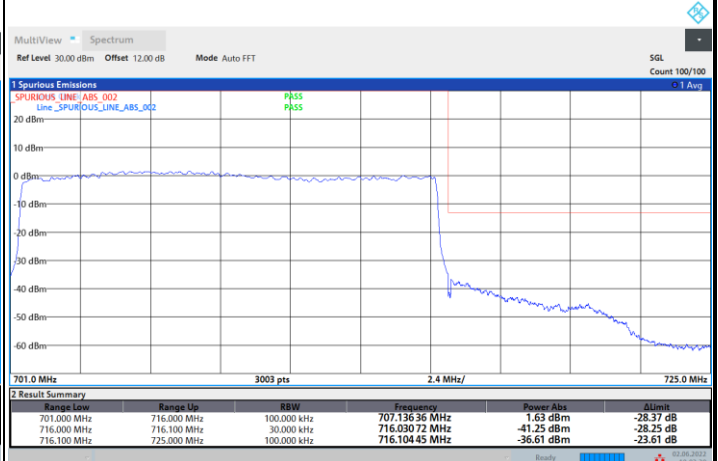
FR1 n12 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



10:01:18 02.06.2022

Highest Band Edge



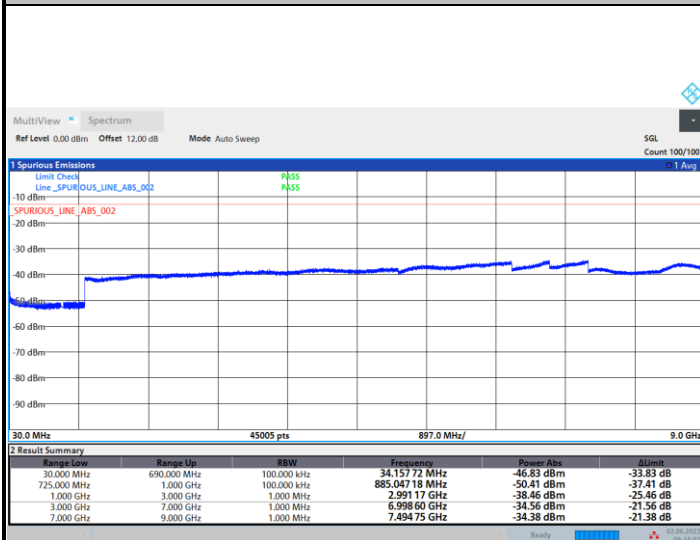
10:02:21 02.06.2022



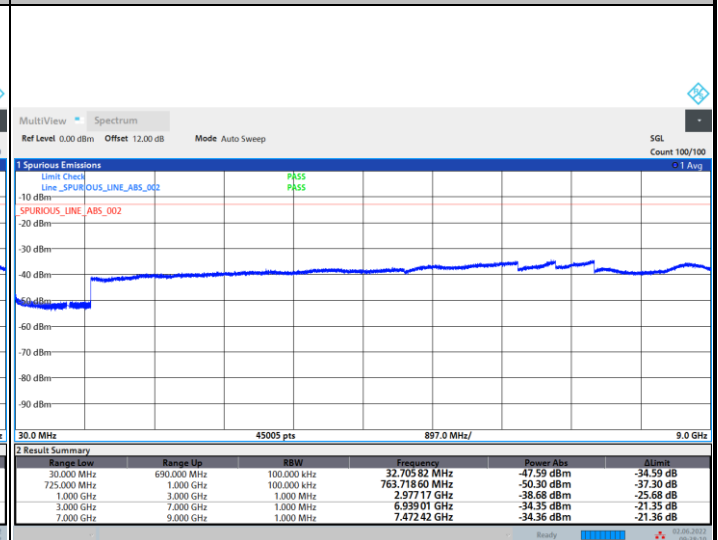
Conducted Spurious Emission

FR1 n12 / 5MHz / DFT-S OFDM / QPSK / 1RB1

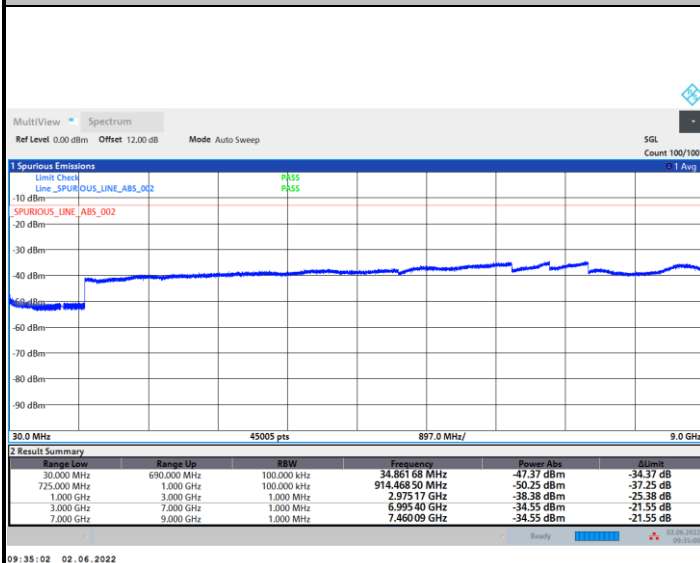
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

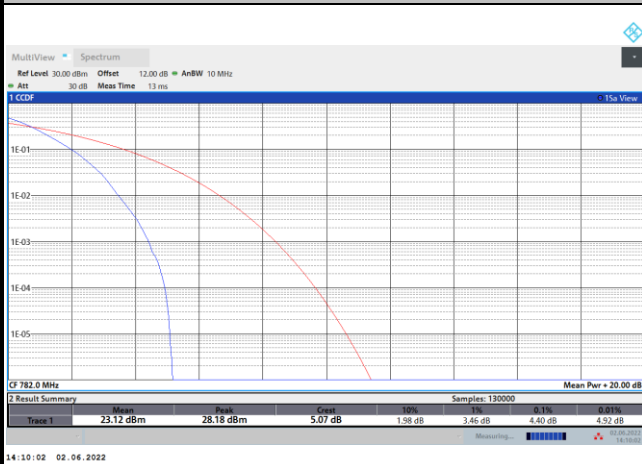
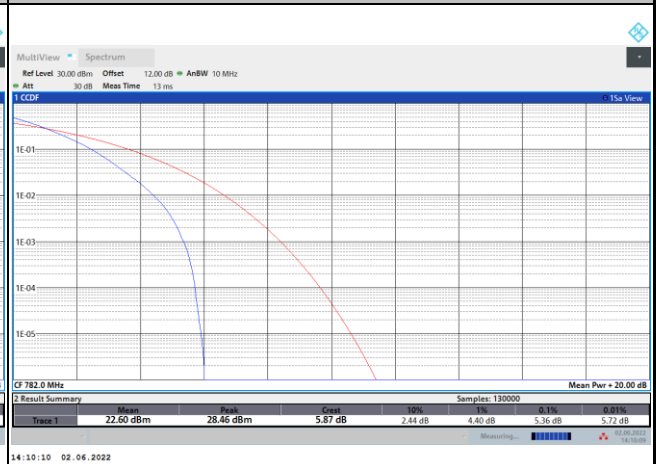
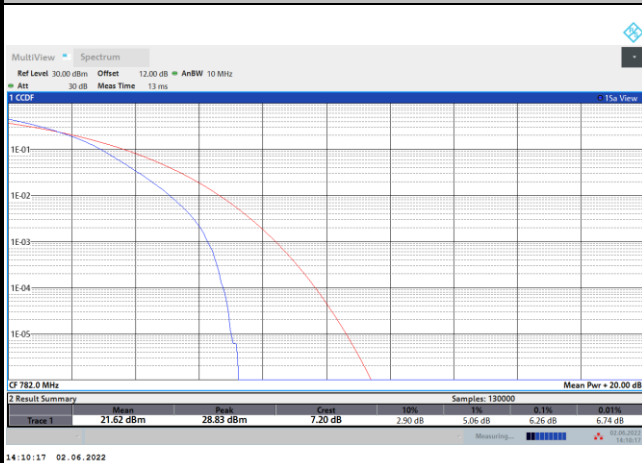
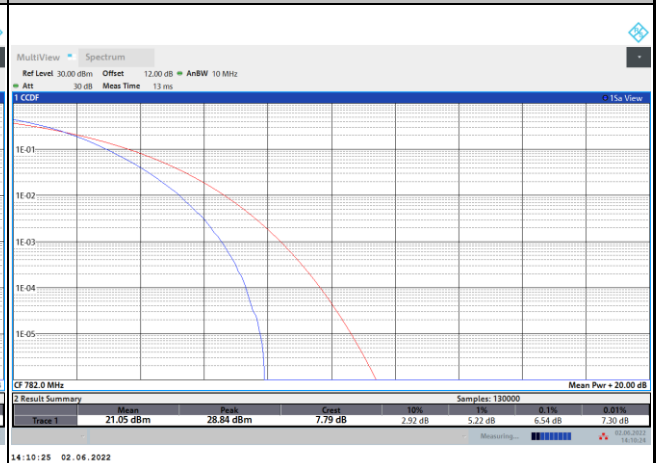
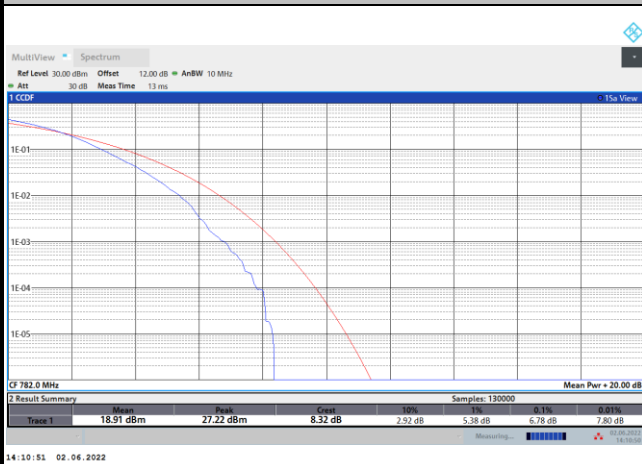
Test Conditions		FR1 n12 (PI/2 BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0066	PASS
40	Normal Voltage	0.0073	
30	Normal Voltage	0.0023	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0071	
0	Normal Voltage	0.0160	
-10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


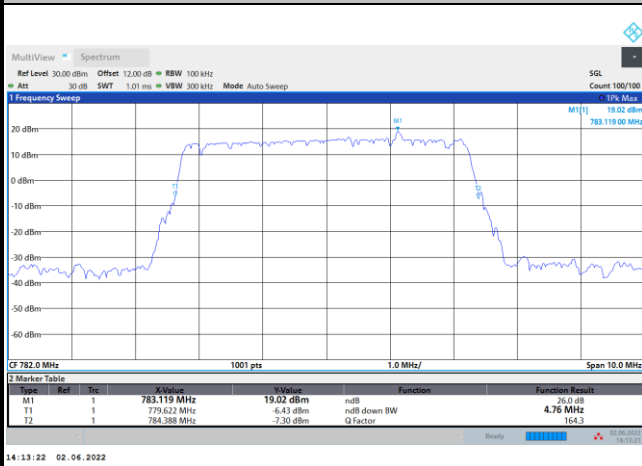
**26dB Bandwidth**

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				

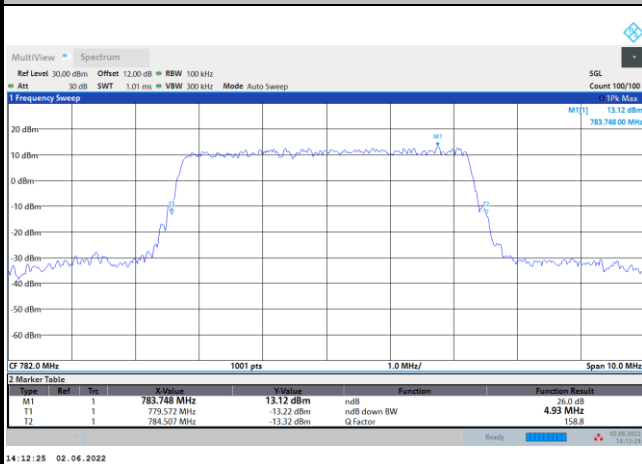
FR1 n13 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

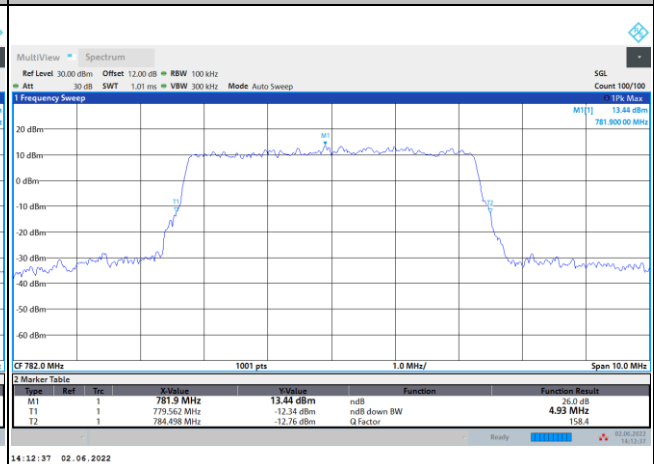


FR1 n13 / 5MHz / CP OFDM / Middle Channel / Full RB

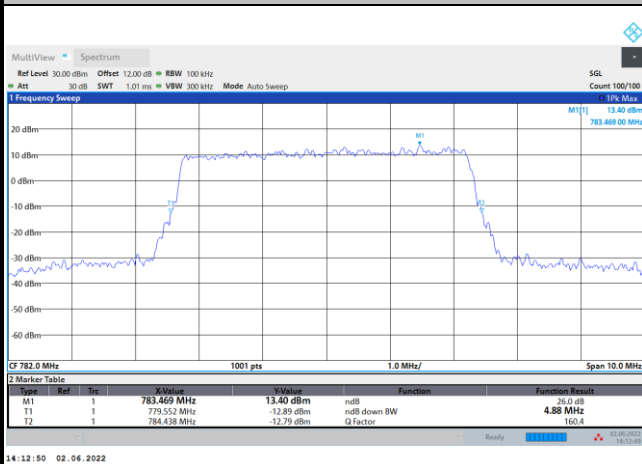
QPSK



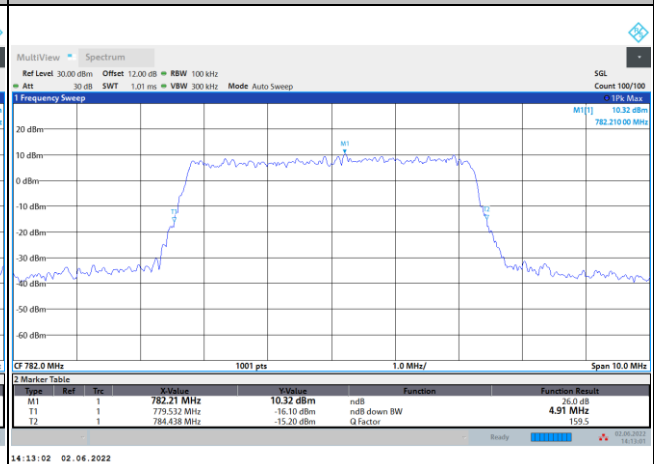
16QAM



64QAM

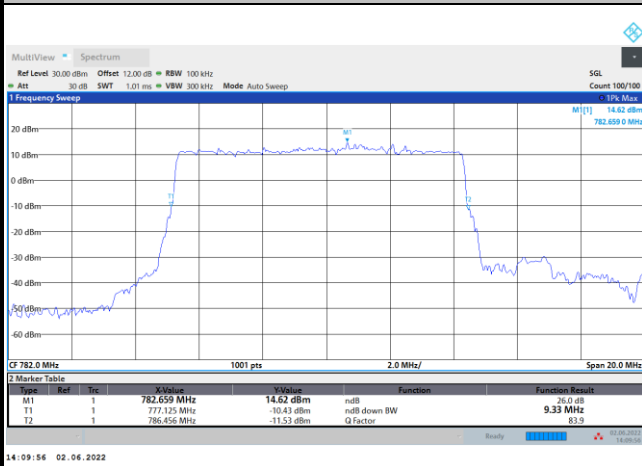


256QAM



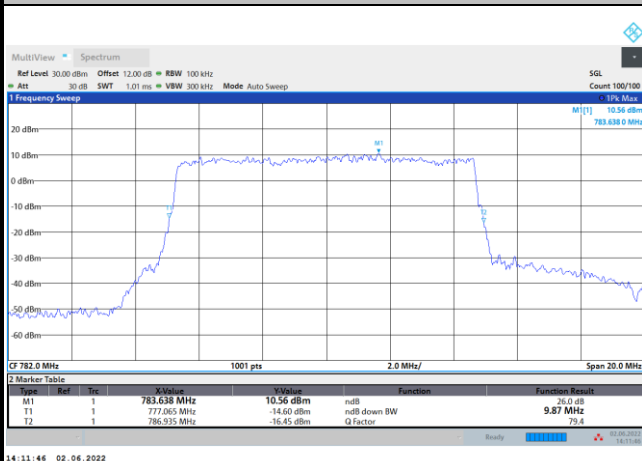
FR1 n13 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

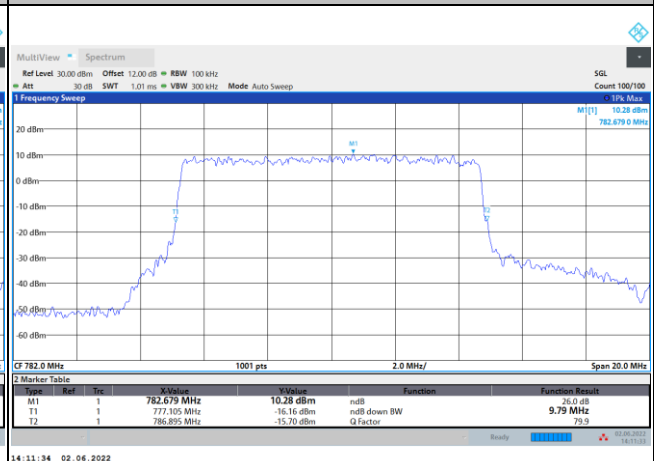


FR1 n13 / 10MHz / CP OFDM / Middle Channel / Full RB

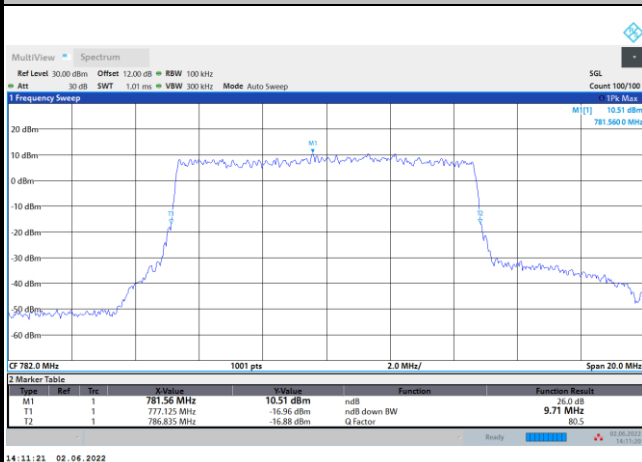
QPSK



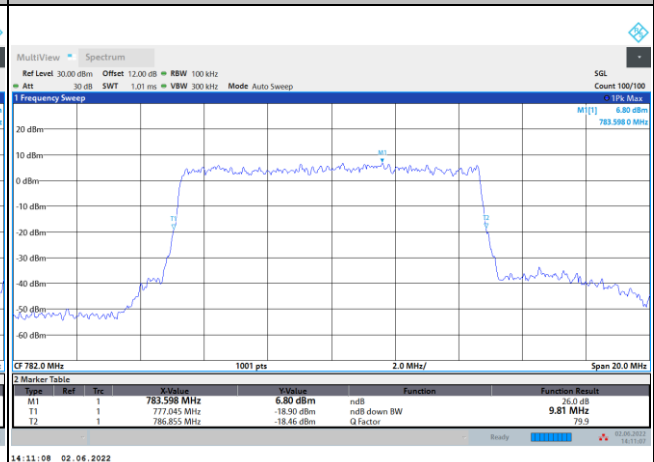
16QAM



64QAM



256QAM



**Occupied Bandwidth**

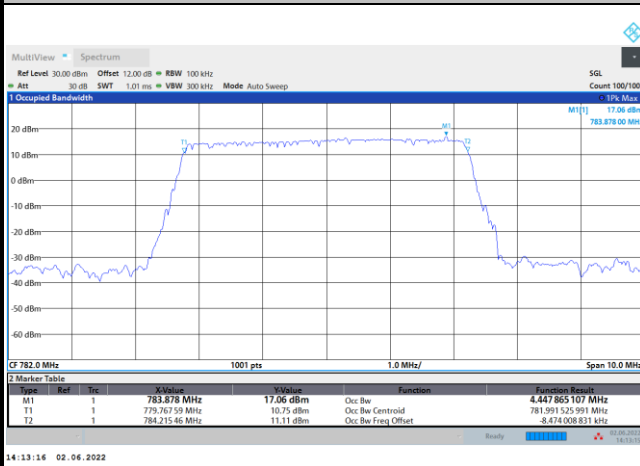
Mode	FR1 n13 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz					
Mod.	PI/2 BPSK		PI/2 BPSK					
Middle CH	4.44		8.89					

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				



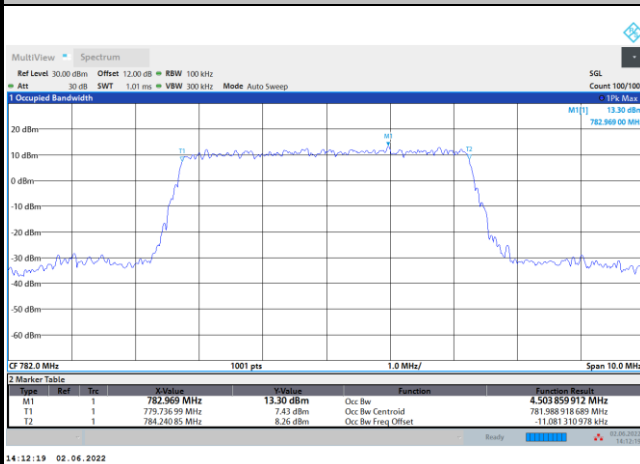
FR1 n13 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

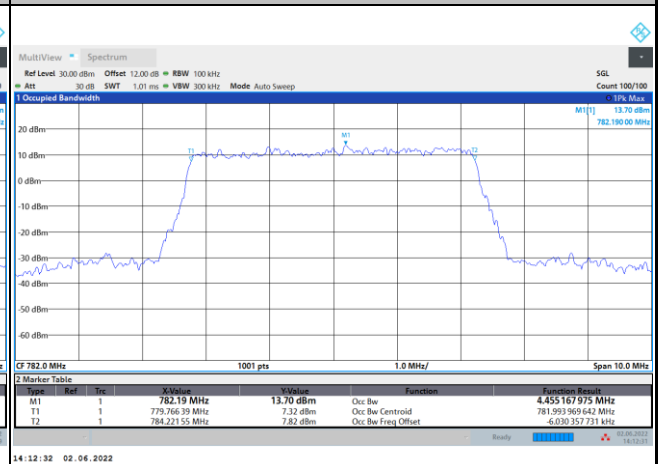


FR1 n13 / 5MHz / CP OFDM / Middle Channel / Full RB

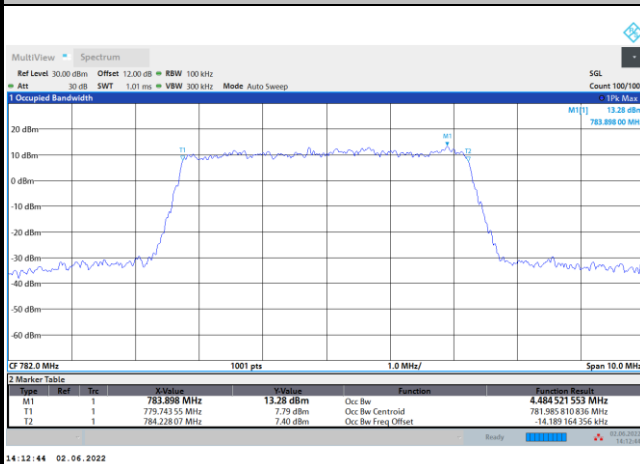
QPSK



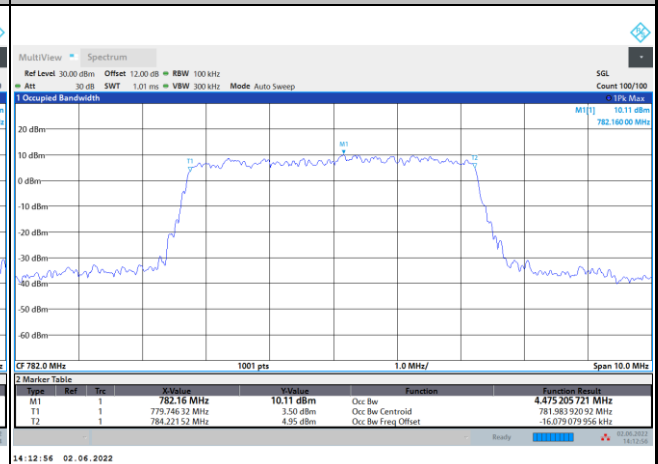
16QAM



64QAM

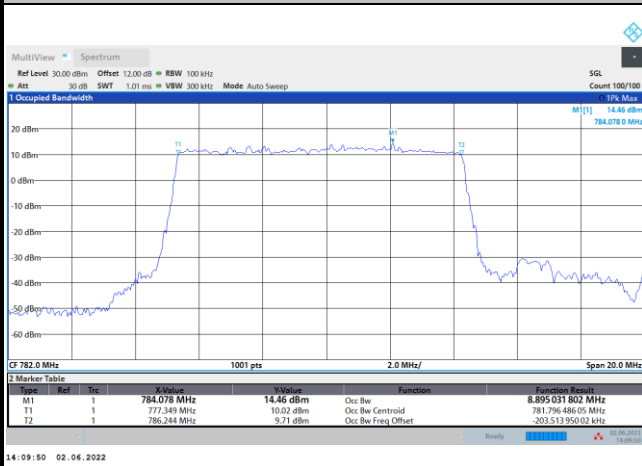


256QAM



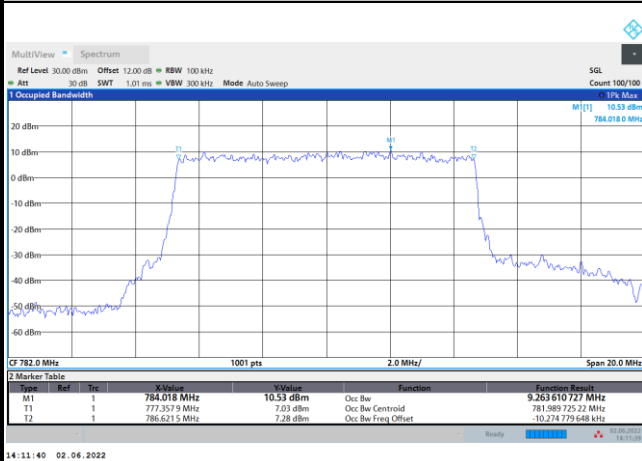
FR1 n13 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

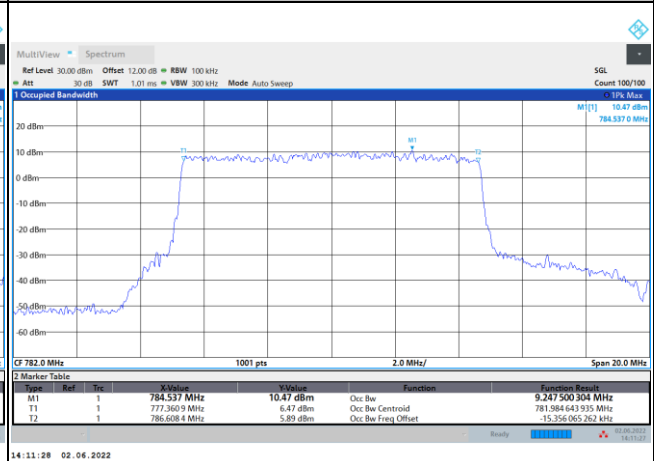


FR1 n13 / 10MHz / CP OFDM / Middle Channel / Full RB

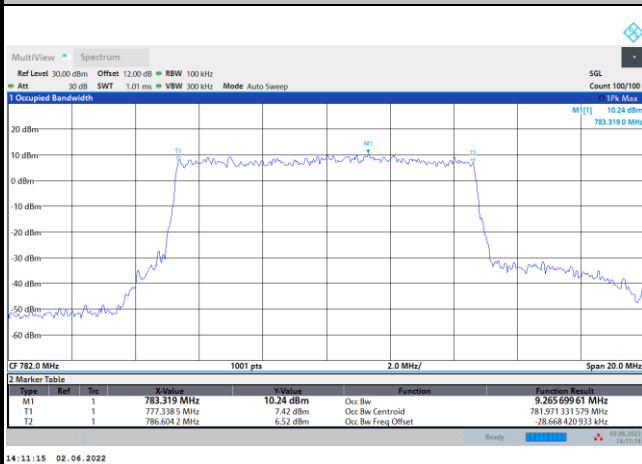
QPSK



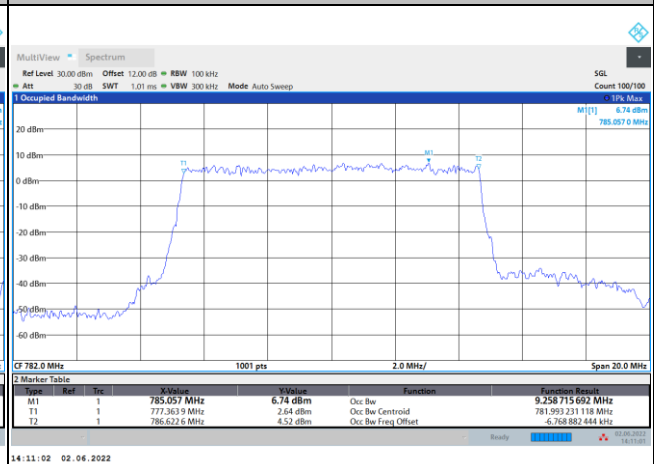
16QAM



64QAM



256QAM

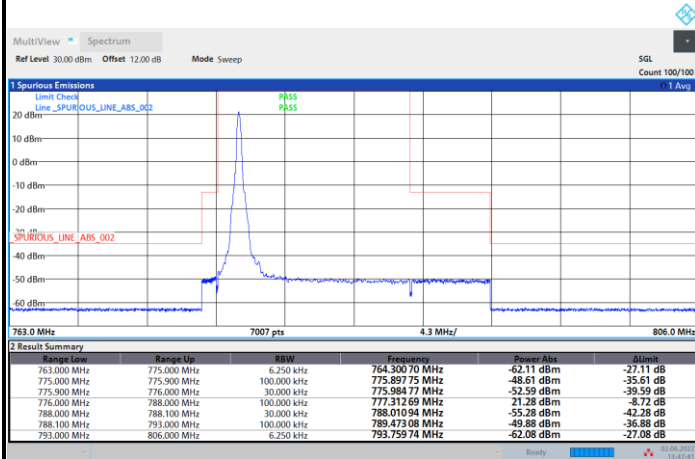




Conducted Band Edge

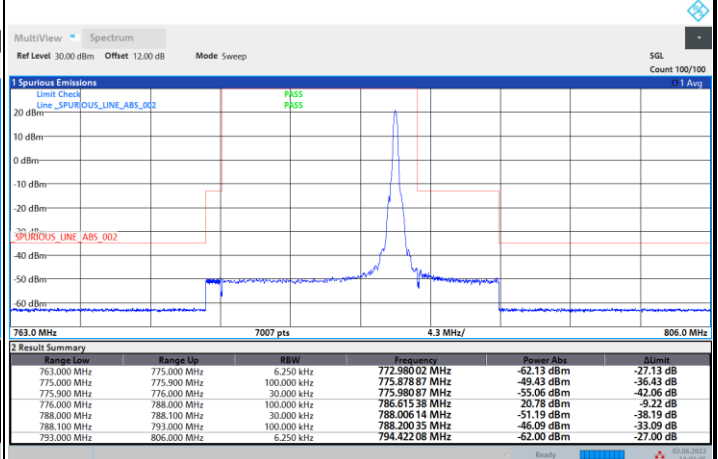
FR1 n13 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0



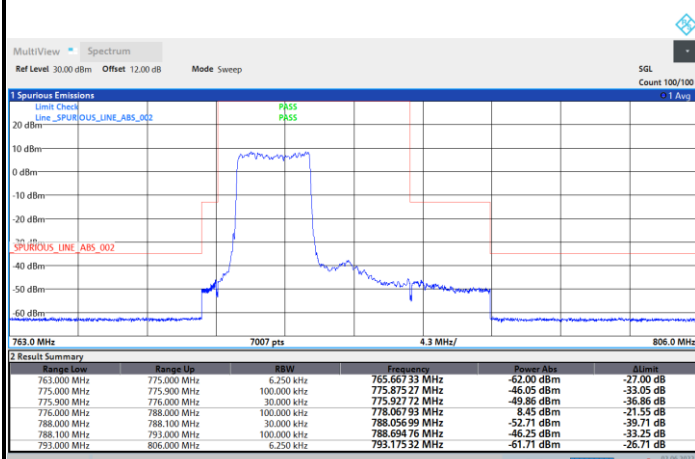
13:47:41 02.06.2022

Highest Band Edge / 1RBmax



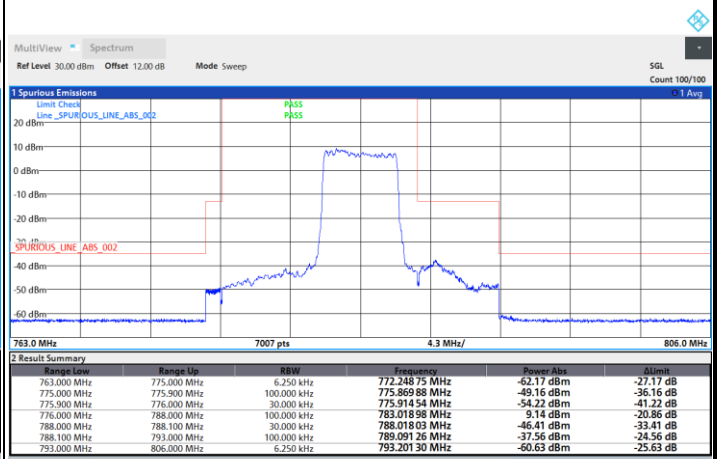
14:01:05 02.06.2022

Lowest Band Edge / Full RB



13:49:35 02.06.2022

Highest Band Edge / Full RB



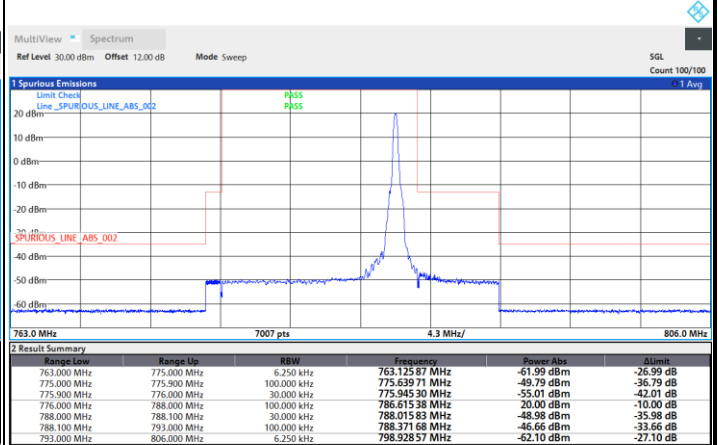
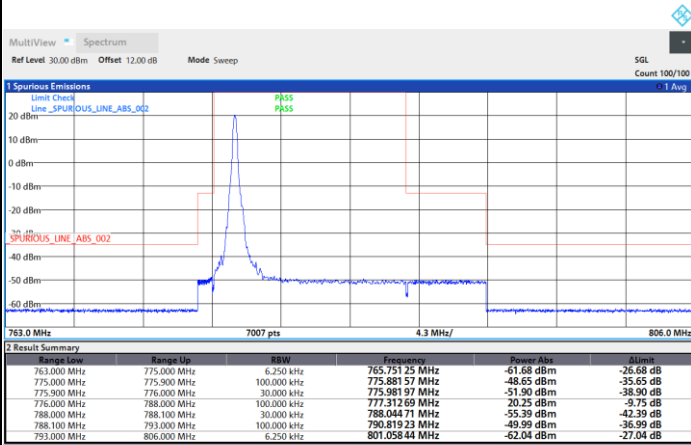
13:57:33 02.06.2022



FR1 n13 / 5MHz / DFT-S OFDM / QPSK

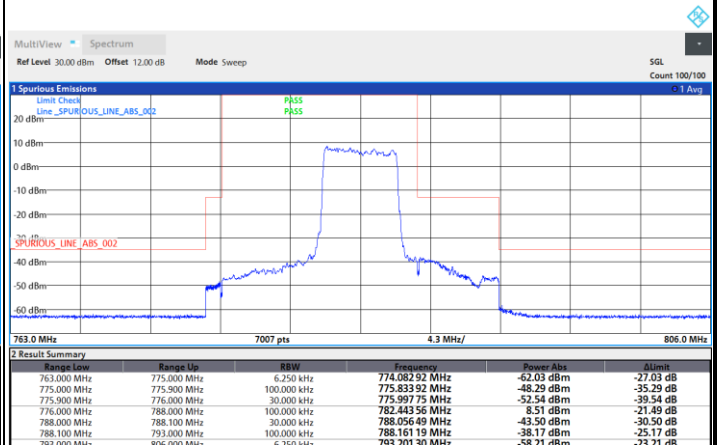
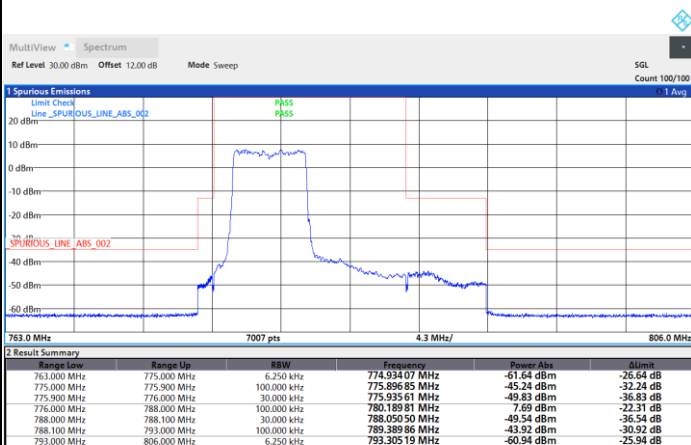
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

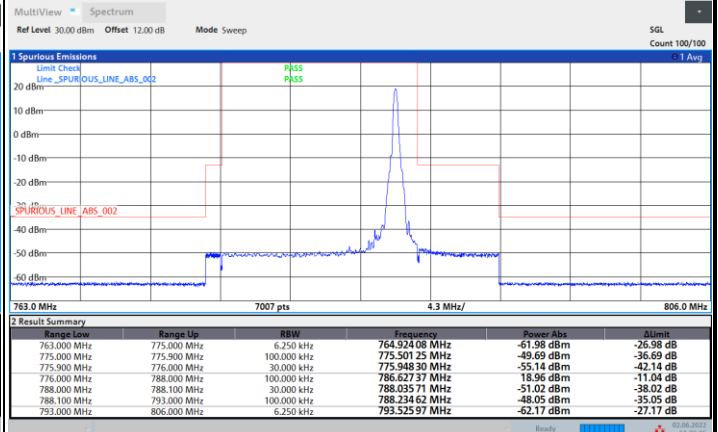
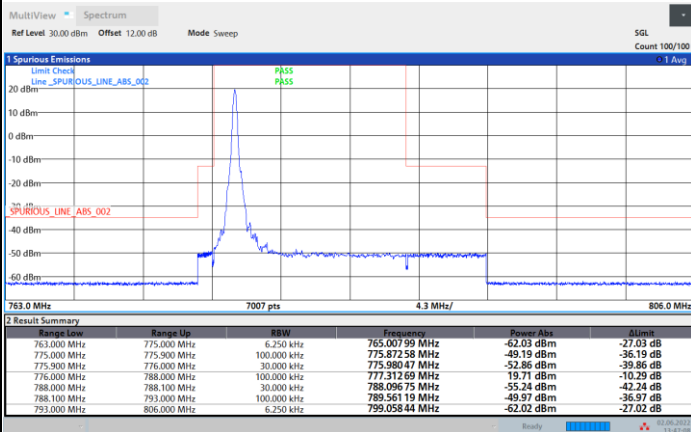




FR1 n13 / 5MHz / DFT-S OFDM / 16QAM

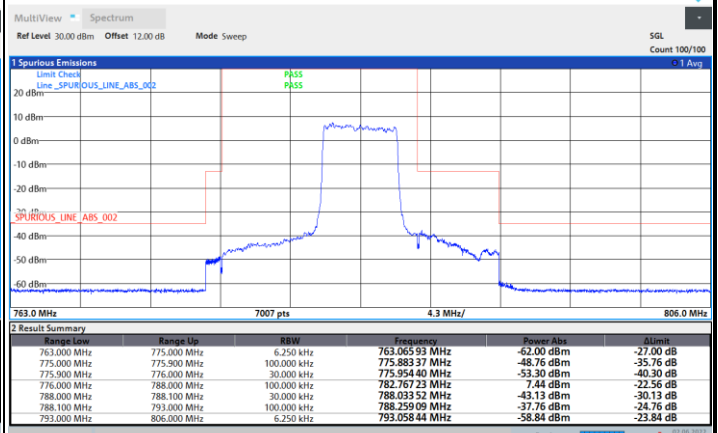
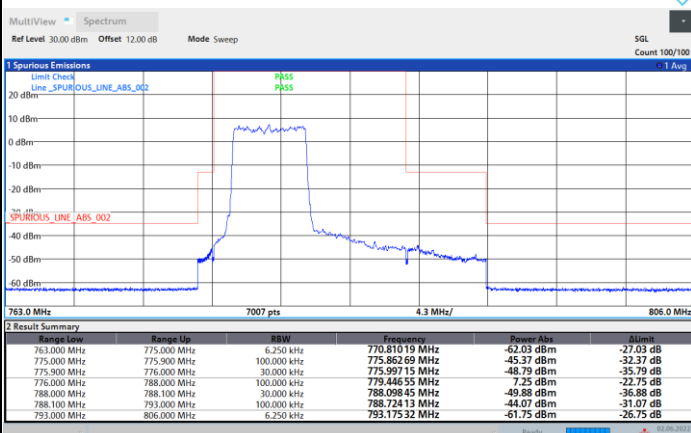
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

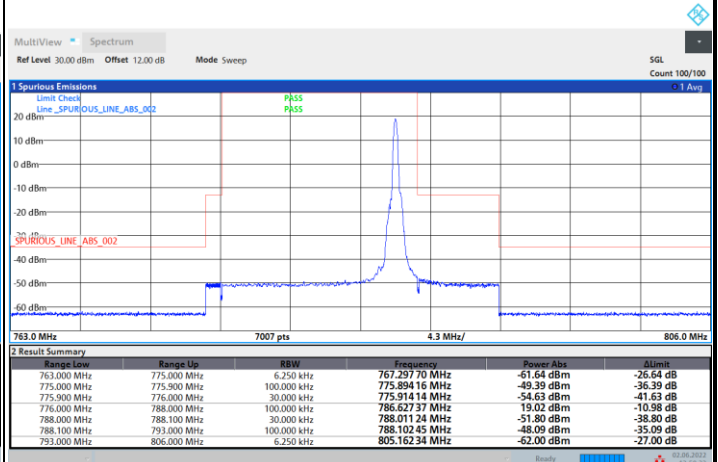
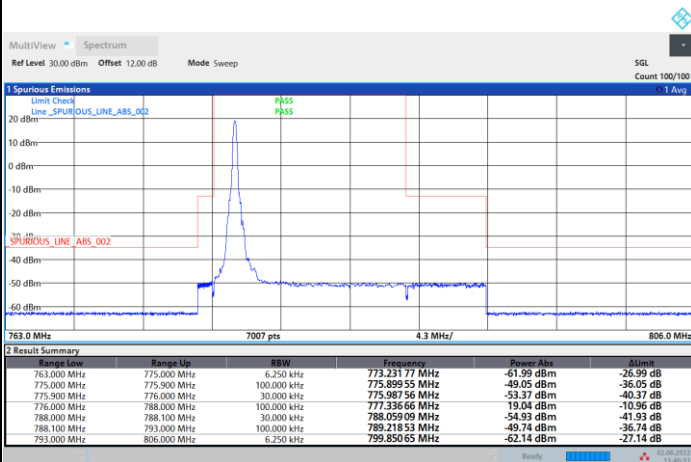




FR1 n13 / 5MHz / DFT-S OFDM / 64QAM

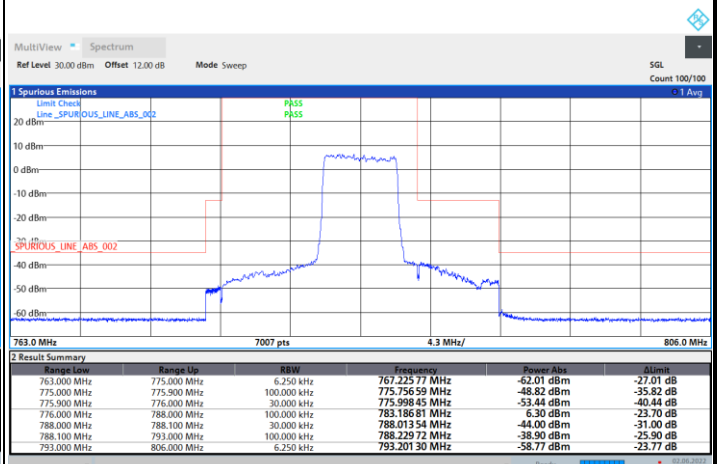
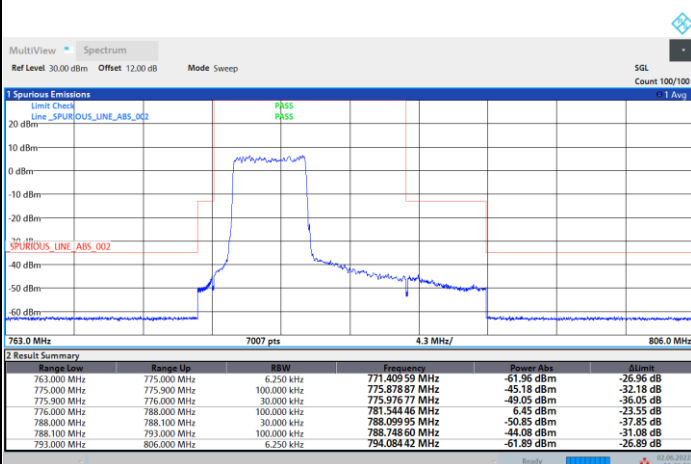
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

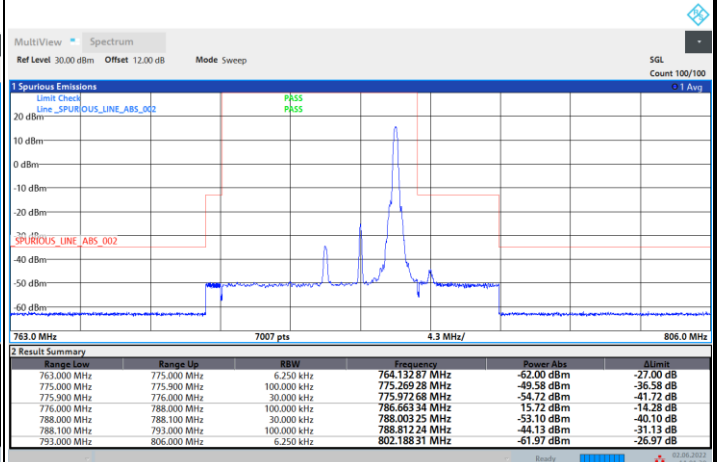
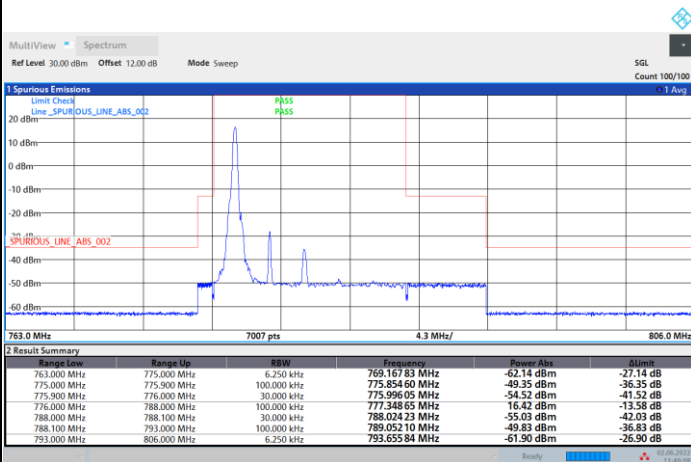




FR1 n13 / 5MHz / DFT-S OFDM / 256QAM

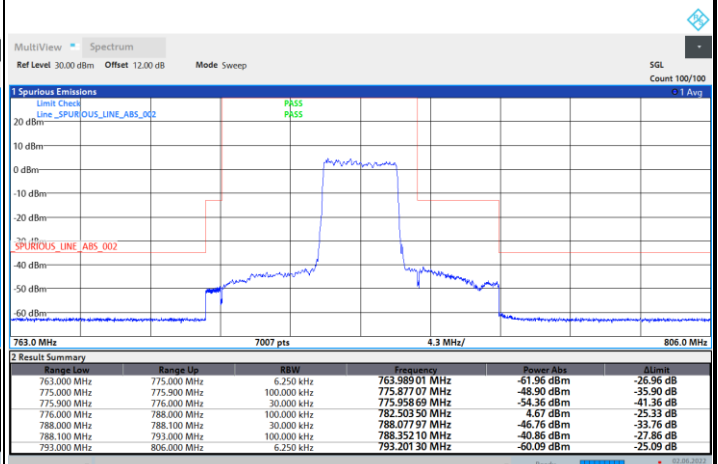
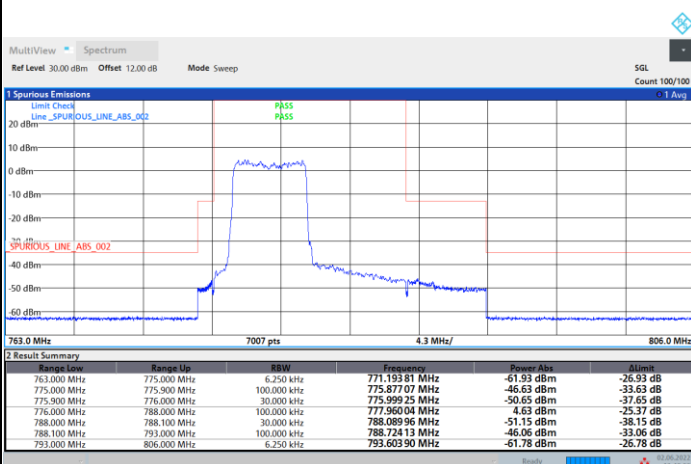
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

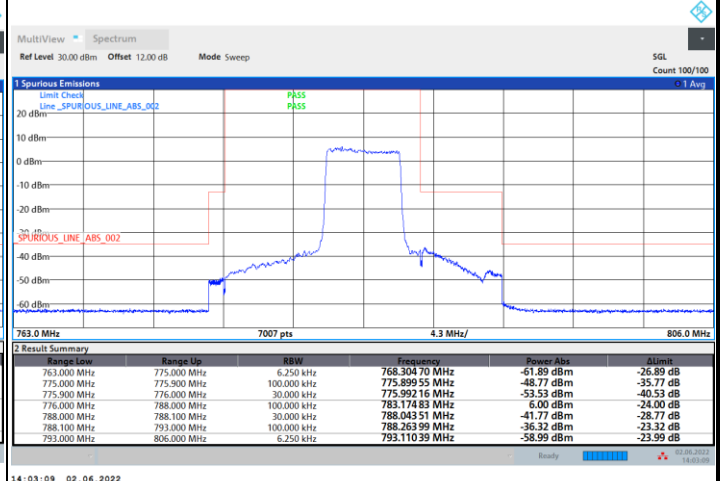
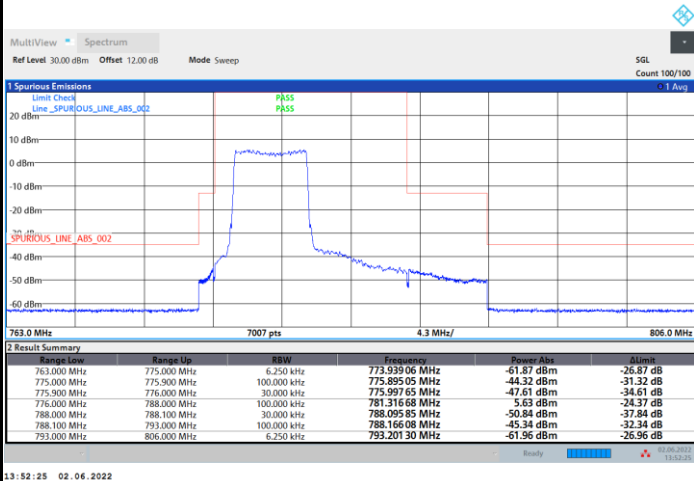




FR1 n13 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

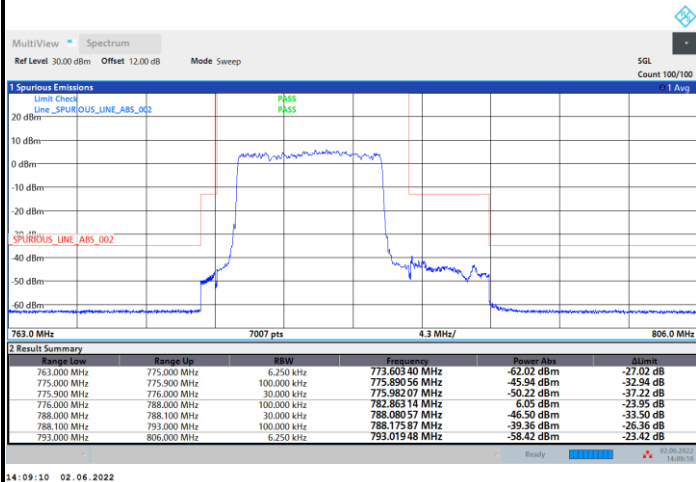
Highest Band Edge





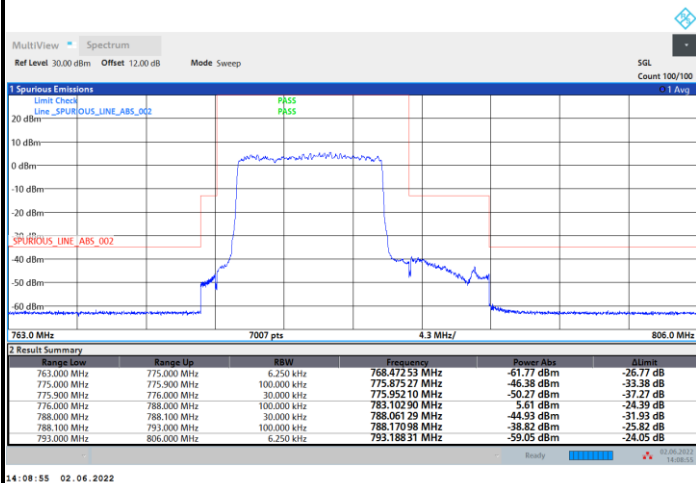
FR1 n13 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Middle Band Edge / Full RB



FR1 n13 / 10MHz / DFT-s-OFDM / QPSK

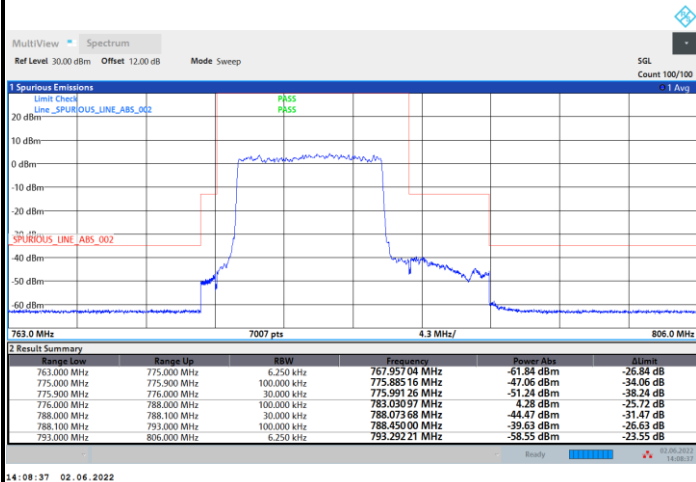
Middle Band Edge / Full RB





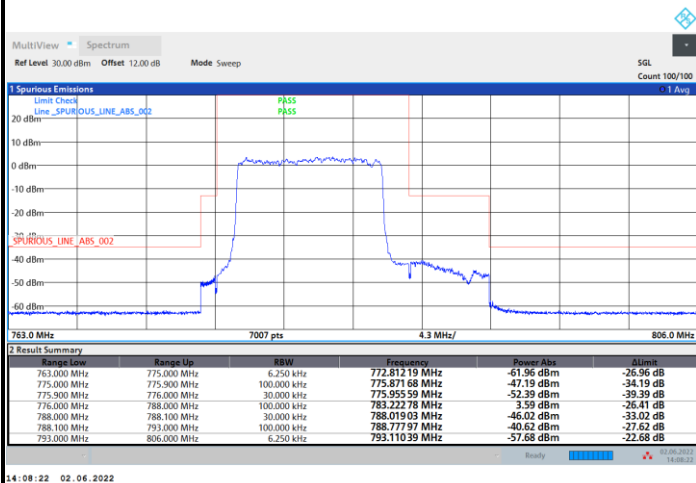
FR1 n13 / 10MHz / DFT-s-OFDM / 16QAM

Middle Band Edge / Full RB



FR1 n13 / 10MHz / DFT-s-OFDM / 64QAM

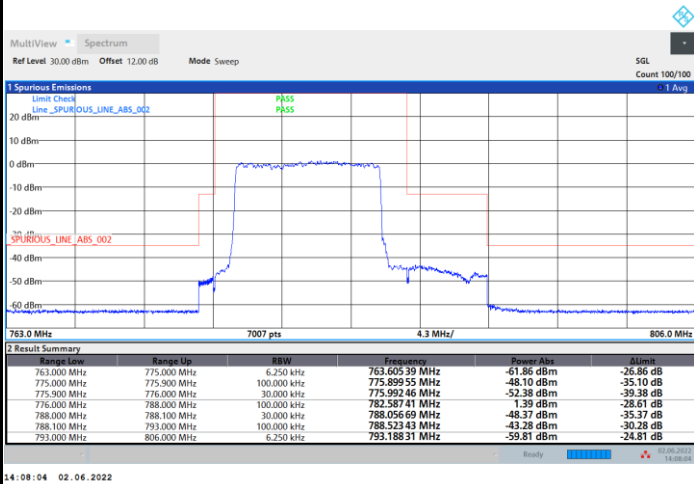
Middle Band Edge / Full RB





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

