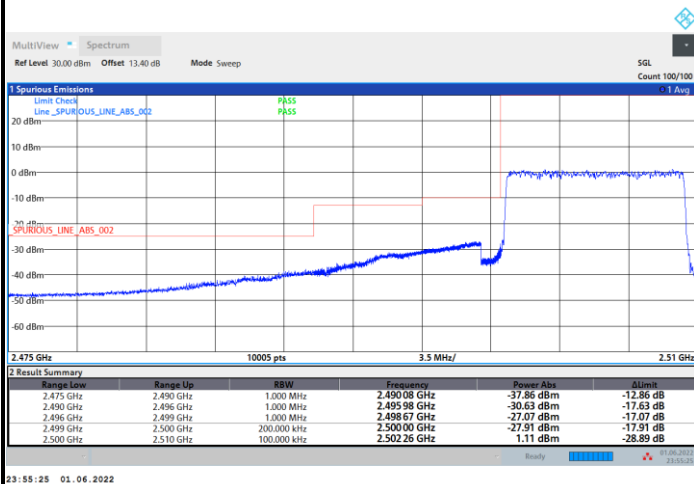




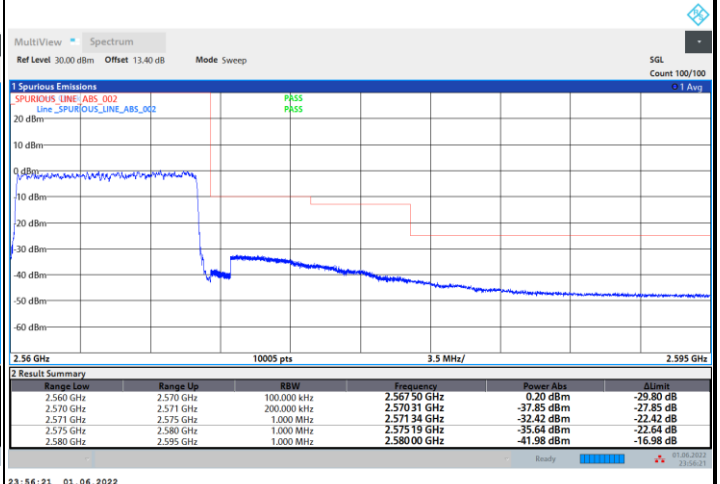
FR1 n7 / 10MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge



23:55:25 01.06.2022

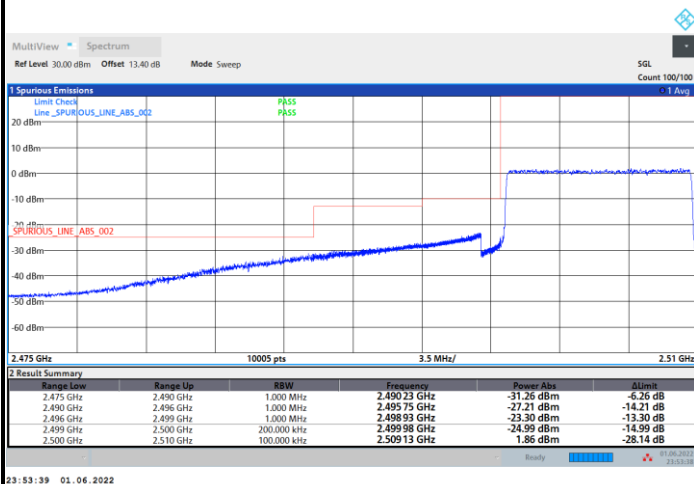
Highest Band Edge



23:56:21 01.06.2022

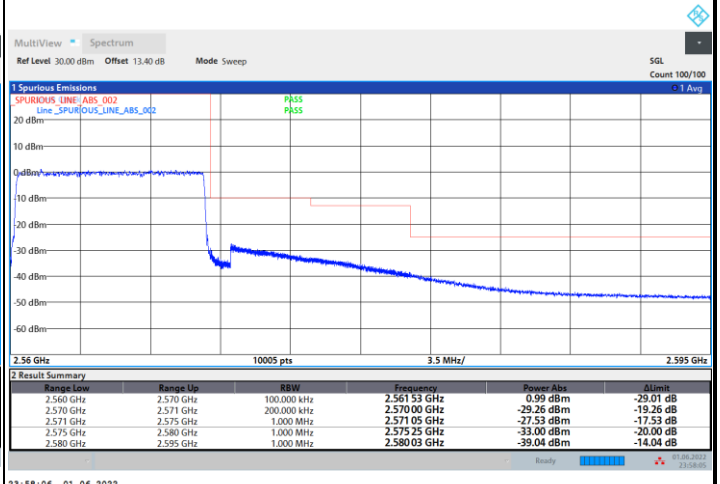
FR1 n7 / 10MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



23:53:39 01.06.2022

Highest Band Edge

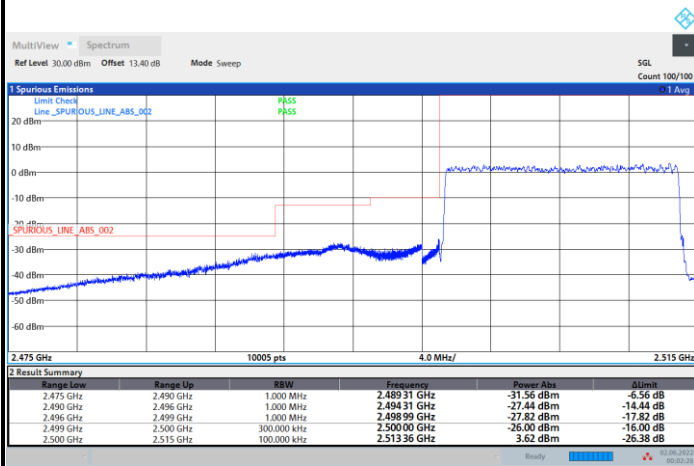


23:58:06 01.06.2022



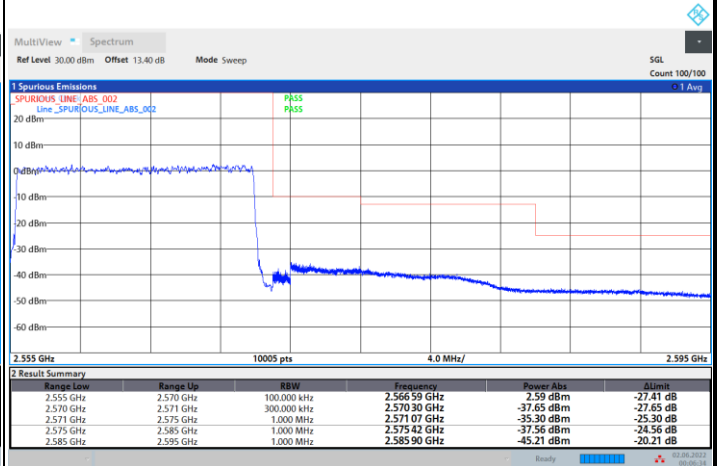
FR1 n7 / 15MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge



00:02:26 02.06.2022

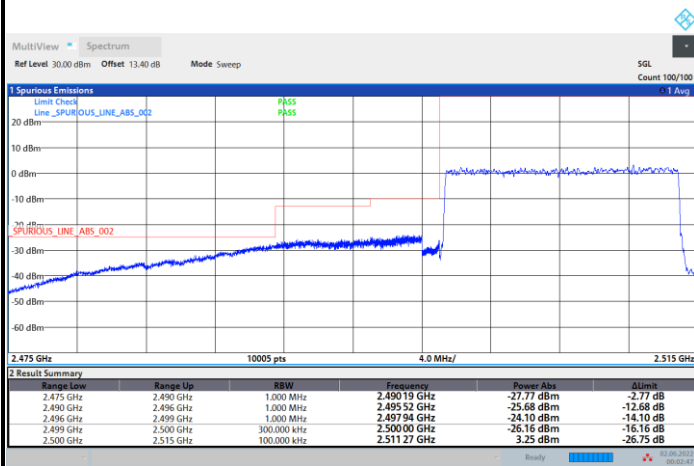
Highest Band Edge



00:06:34 02.06.2022

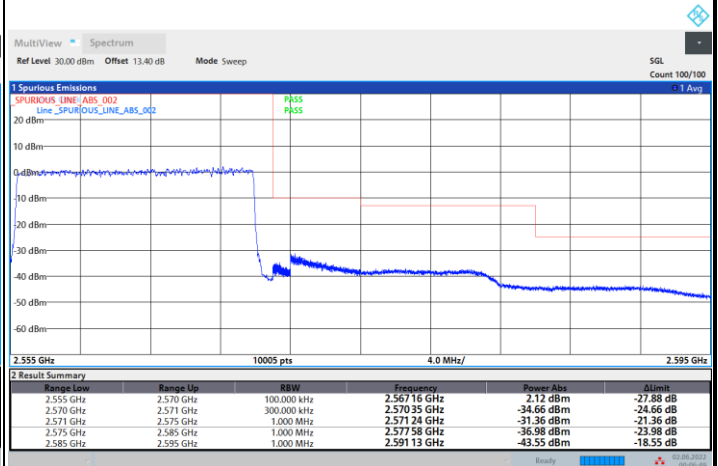
FR1 n7 / 15MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge



00:02:48 02.06.2022

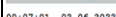
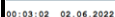
Highest Band Edge



00:06:49 02.06.2022

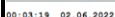


Highest Band Edge



FR1 n7 / 15MHz / DFT-s-OFDM / 64QAM / Full RB

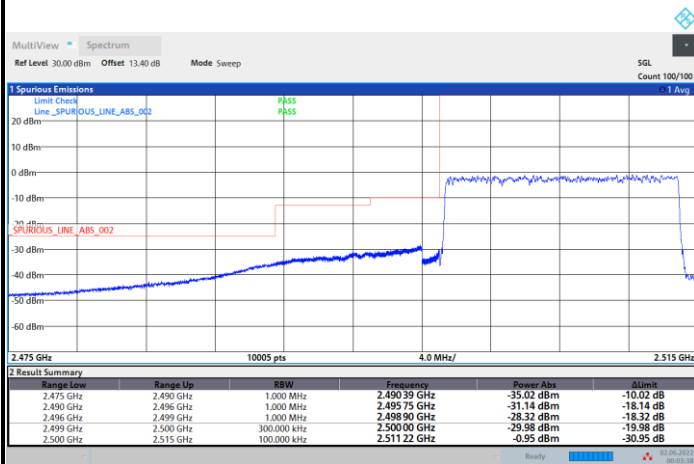
Highest Band Edge





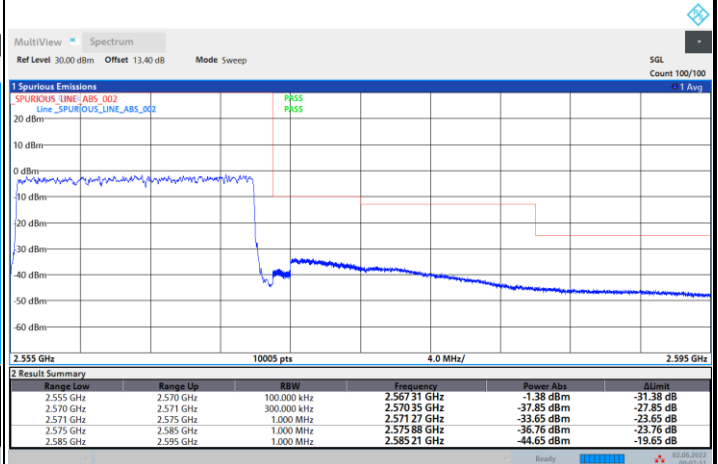
FR1 n7 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge



00:03:39 02.06.2022

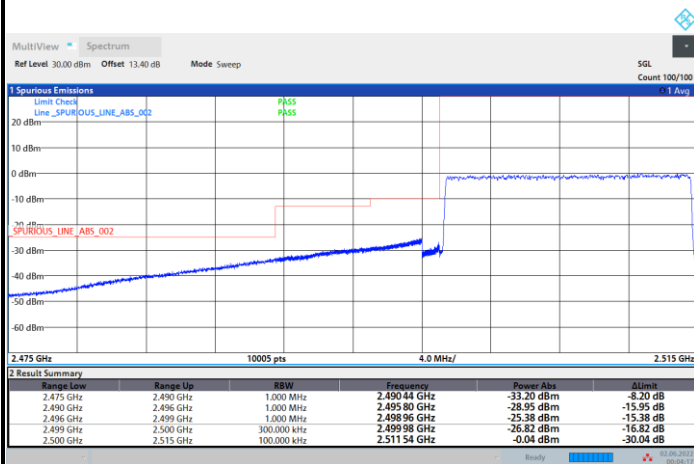
Highest Band Edge



00:07:32 02.06.2022

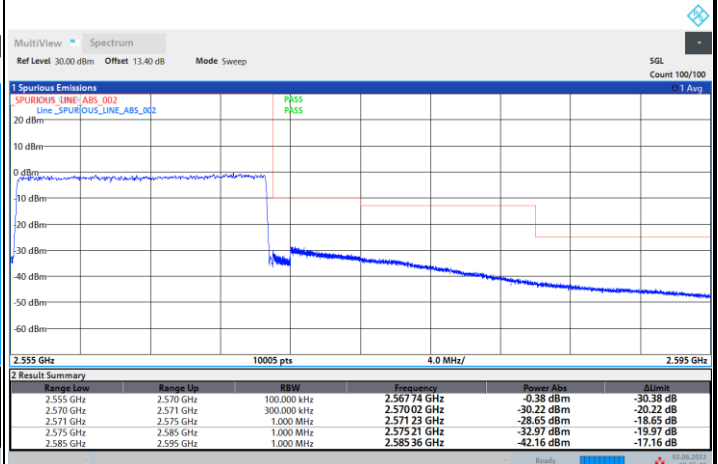
FR1 n7 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



00:04:17 02.06.2022

Highest Band Edge

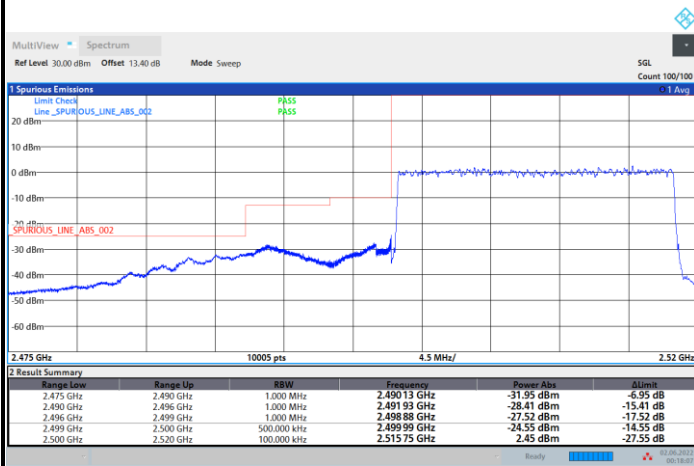


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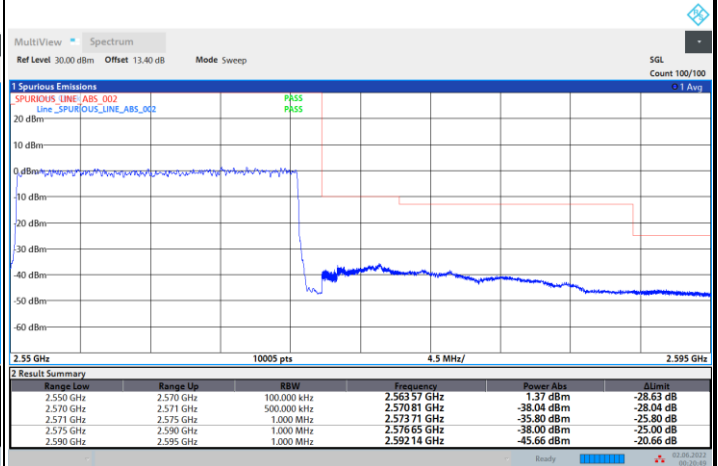
FR1 n7 / 20MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge



00:18:08 02.06.2022

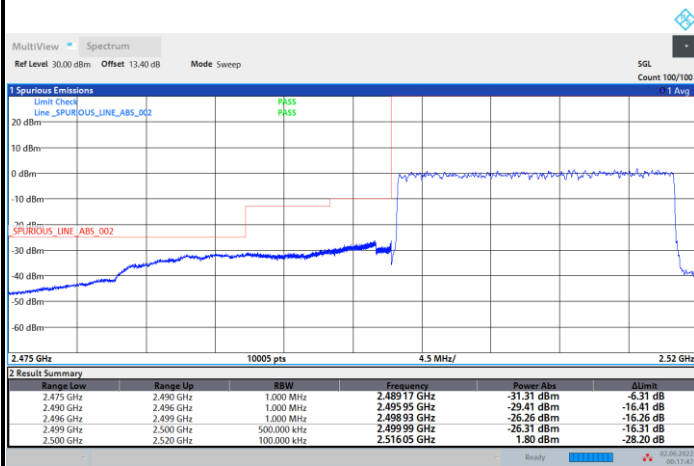
Highest Band Edge



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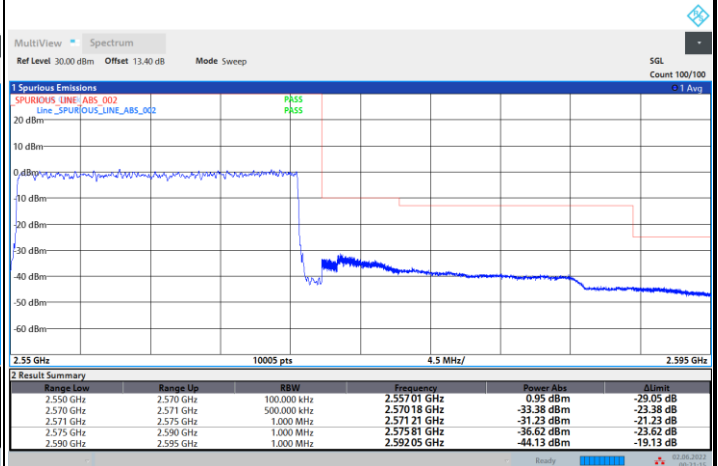
FR1 n7 / 20MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge



00:17:48 02.06.2022

Highest Band Edge

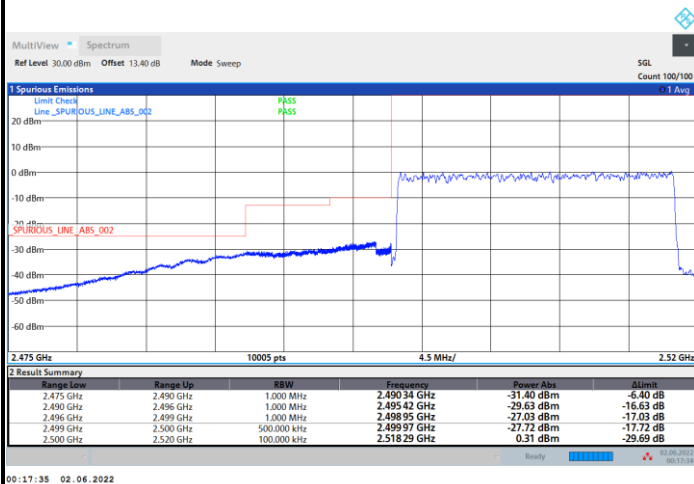


00:21:16 02.06.2022



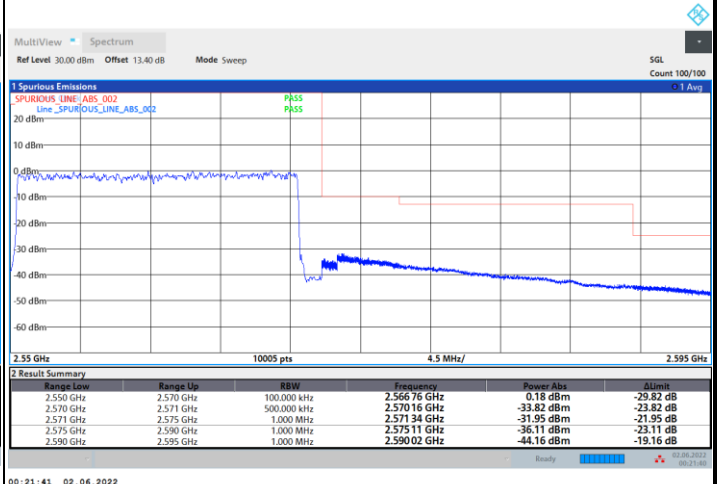
FR1 n7 / 20MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge



00:17:35 02.06.2022

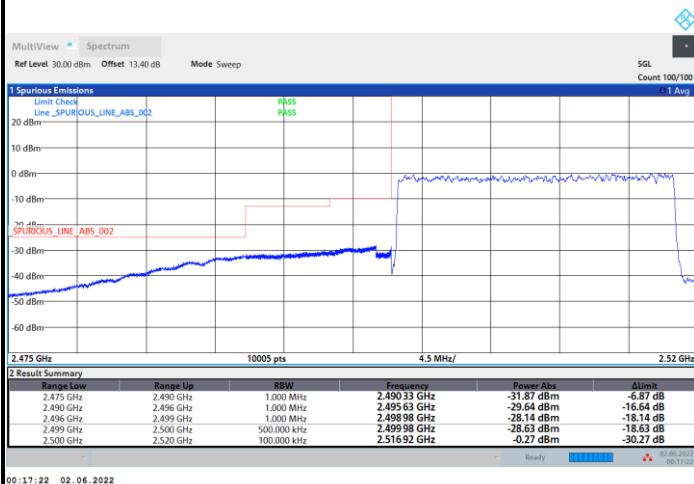
Highest Band Edge



00:21:41 02.06.2022

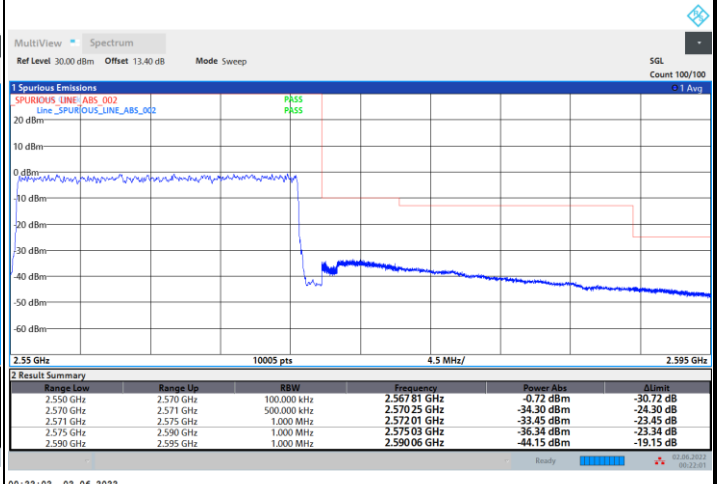
FR1 n7 / 20MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge



00:17:22 02.06.2022

Highest Band Edge

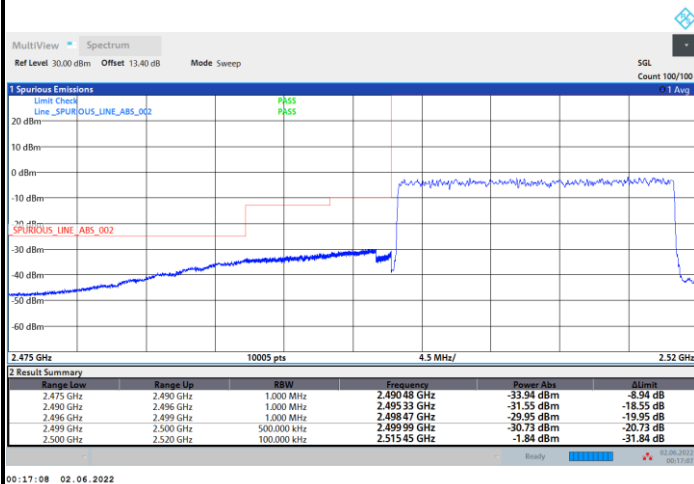


00:22:02 02.06.2022



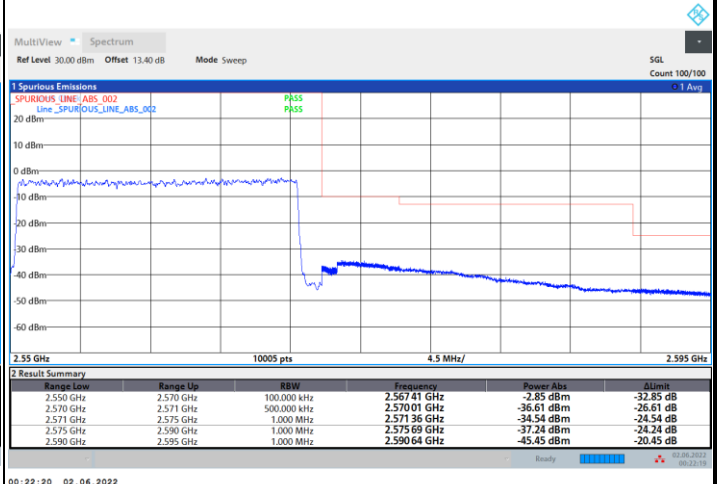
FR1 n7 / 20MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge



00:17:08 02.06.2022

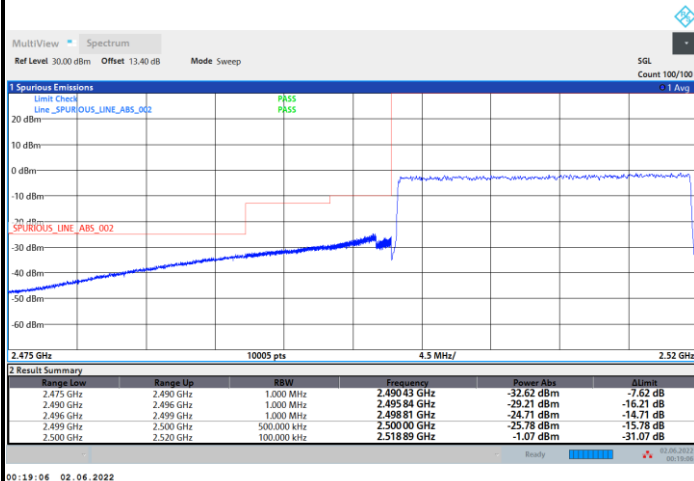
Highest Band Edge



00:22:20 02.06.2022

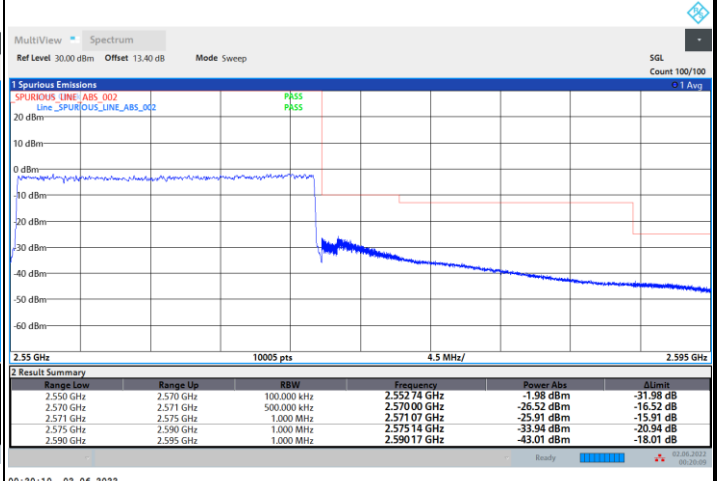
FR1 n7 / 20MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



00:19:06 02.06.2022

Highest Band Edge



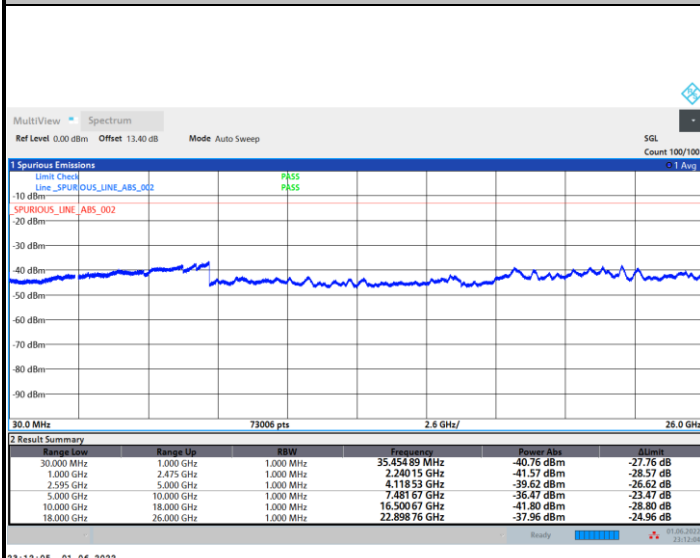
00:20:10 02.06.2022



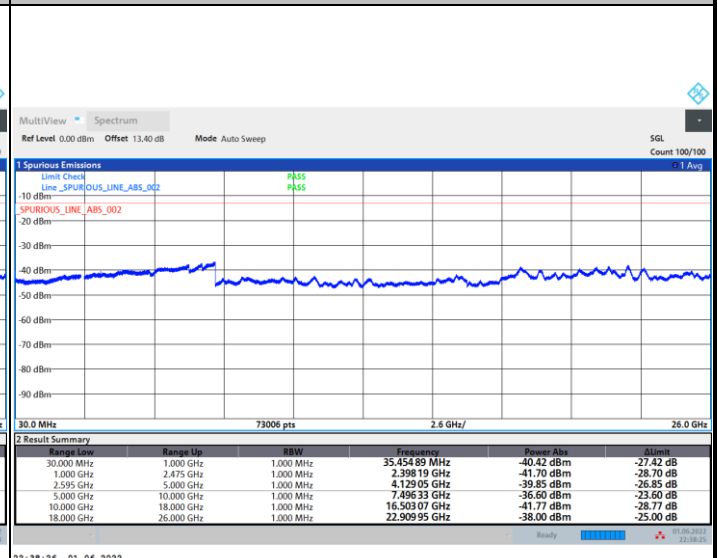
Conducted Spurious Emission

FR1 n7 / 5MHz / DFT-S OFDM / QPSK / 1RB1

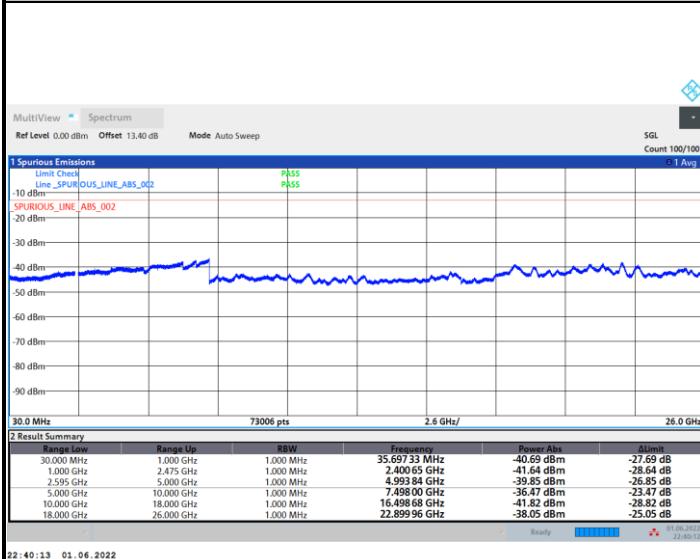
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n7 (PI/2 BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 5MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0019	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0005	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0044	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0034	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0001	
20	Maximum Voltage	0.0033	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0015	

Note:

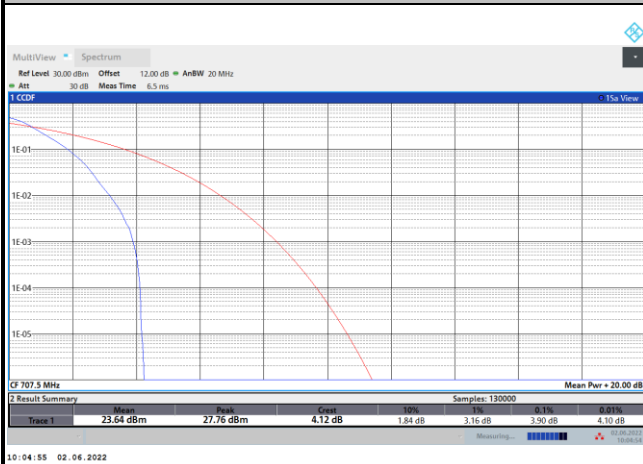
1. Normal Voltage = 4.05 V. ; Battery End Point (BEP) = 3.85 V. ; Maximum Voltage = 4.35 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

**FR1 n12****Peak-to-Average Ratio**

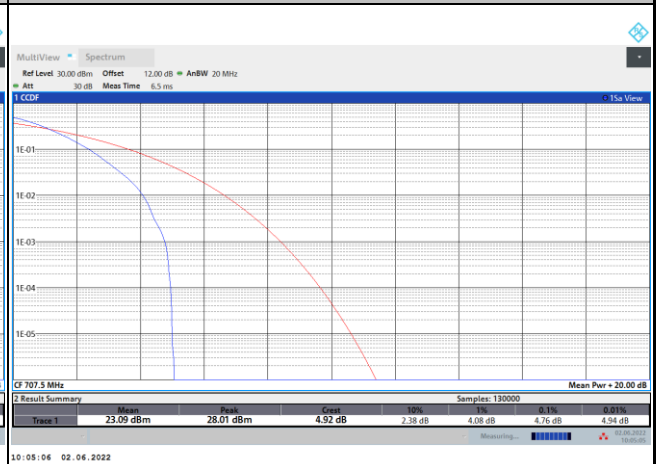
Mode	FR1 n12 / 15MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	3.90	4.76	5.64	5.94	PASS
Mode	FR1 n12 / 15MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.62				PASS

FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

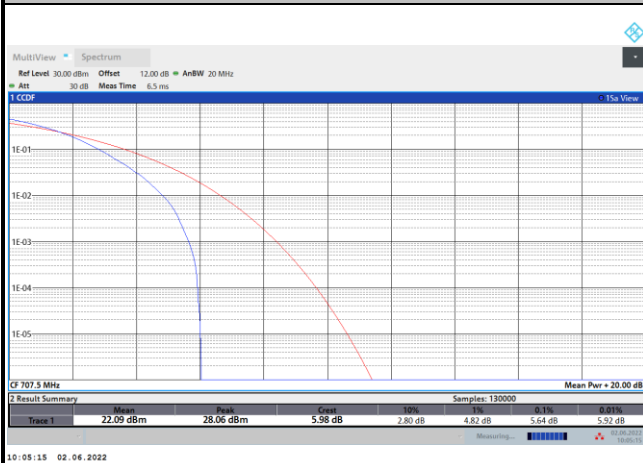
PI/2 BPSK



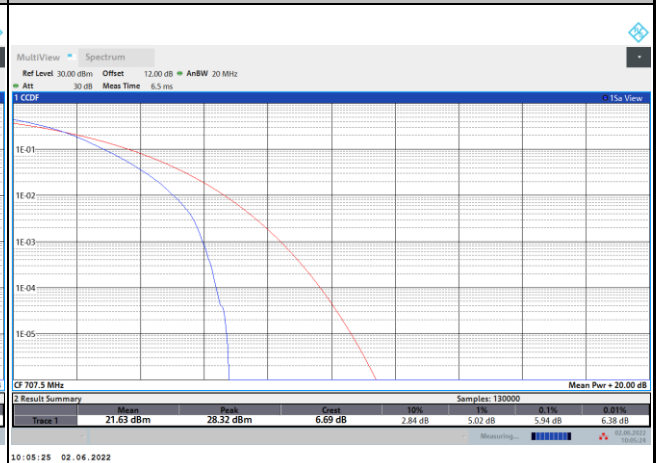
QPSK



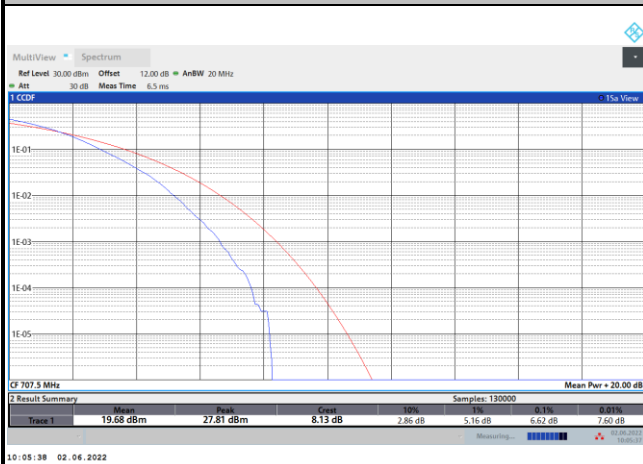
16QAM



64QAM



256QAM



**26dB Bandwidth**

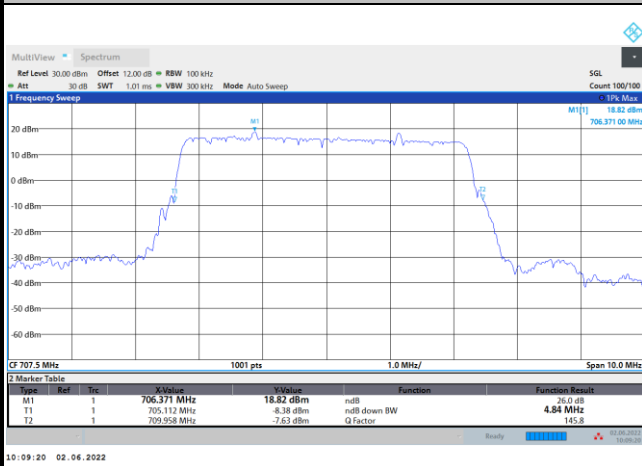
Mode	FR1 n12 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK			
Middle CH	4.85		9.35		14.21			

Mode	FR1 n12 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	4.91	4.79	9.73	9.73	14.93	14.84		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	4.84	4.91	9.85	9.81	14.96	14.84		



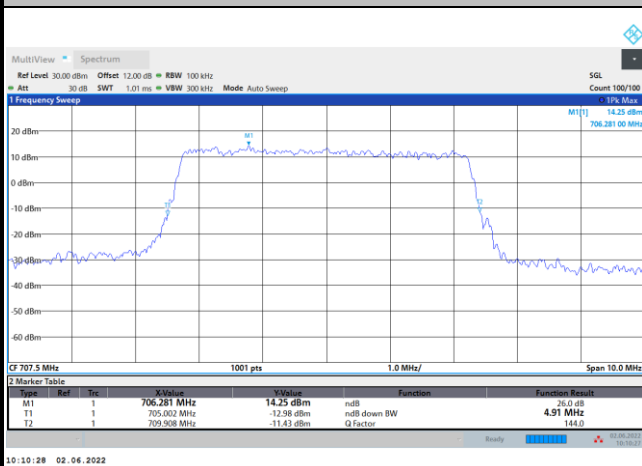
FR1 n12 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

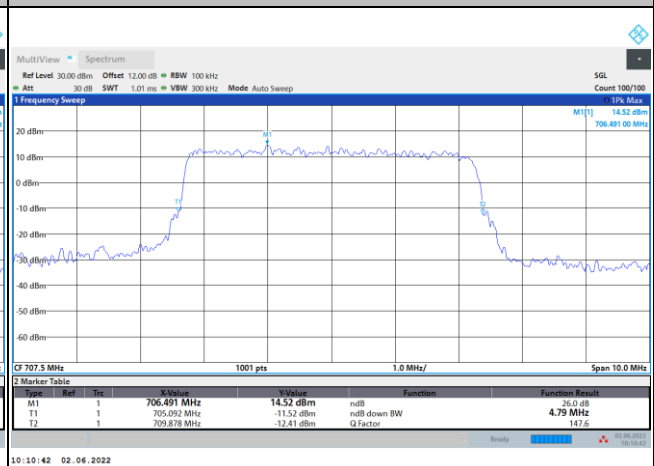


FR1 n12 / 5MHz / CP OFDM / Middle Channel / Full RB

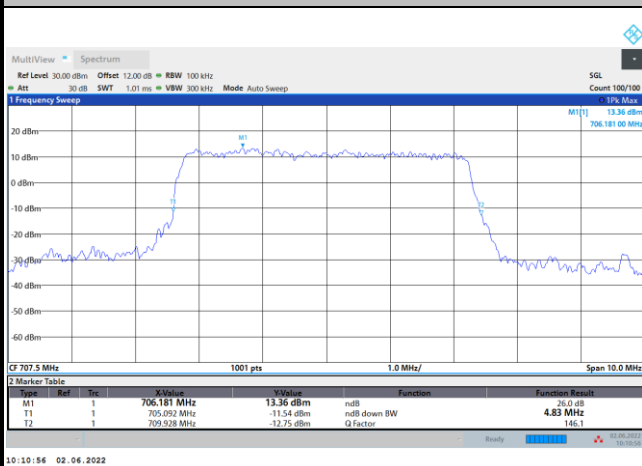
QPSK



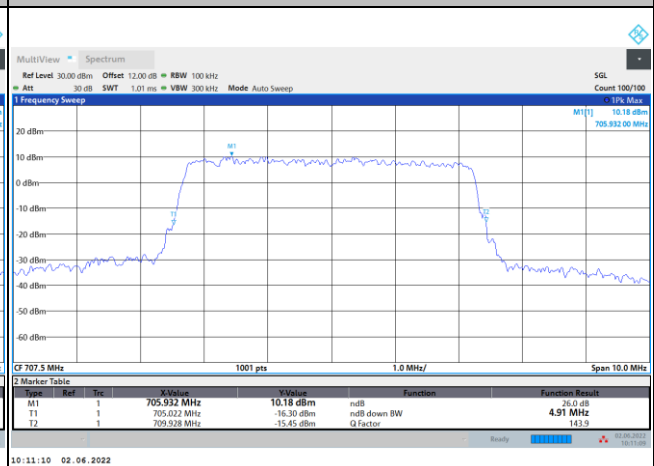
16QAM

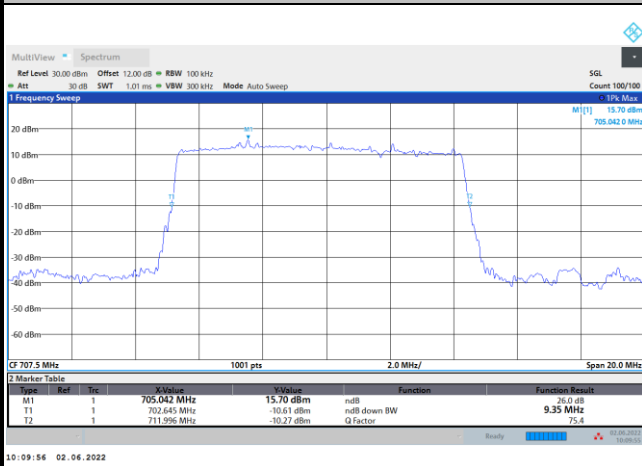
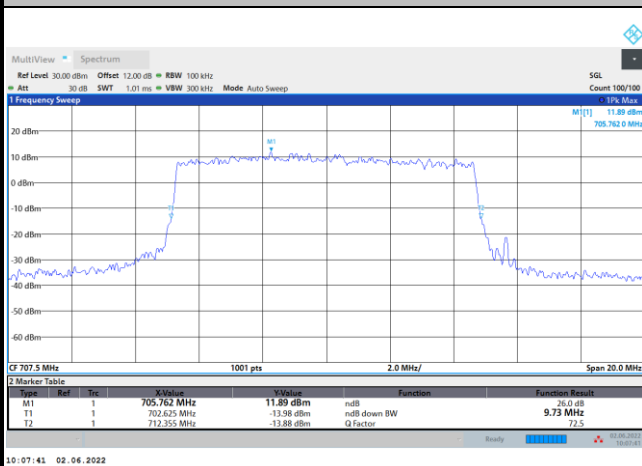
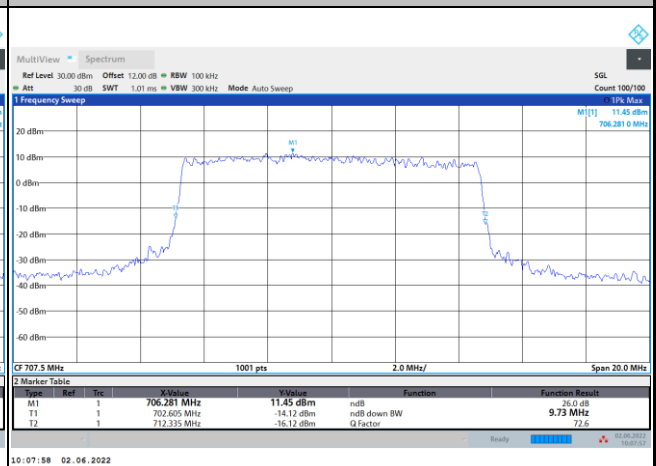
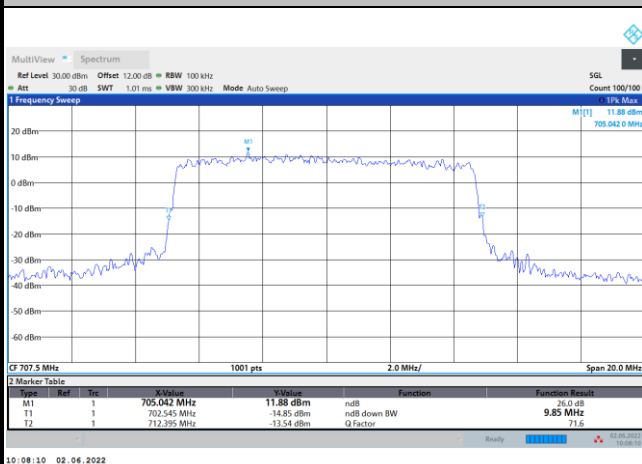
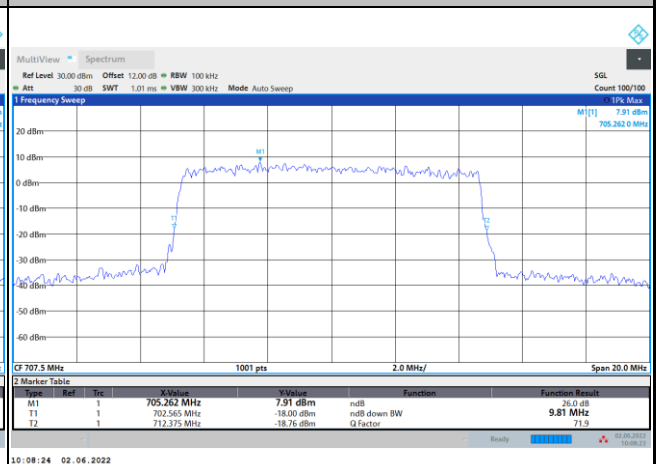


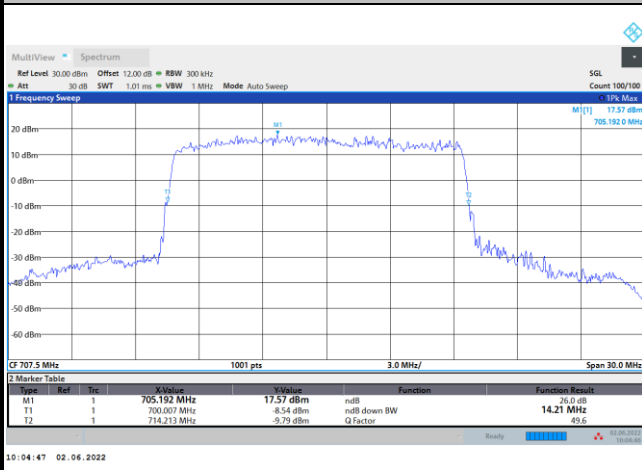
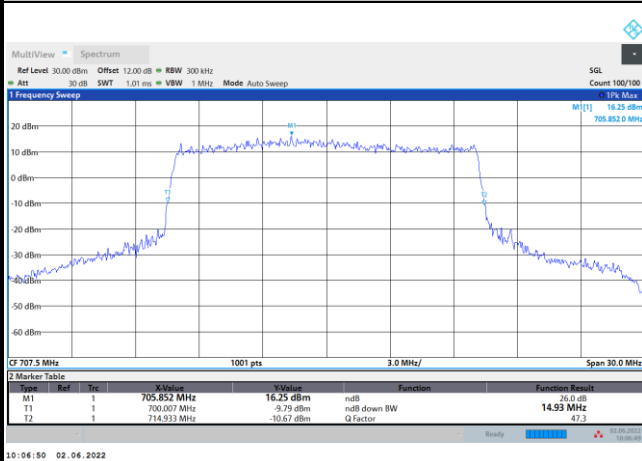
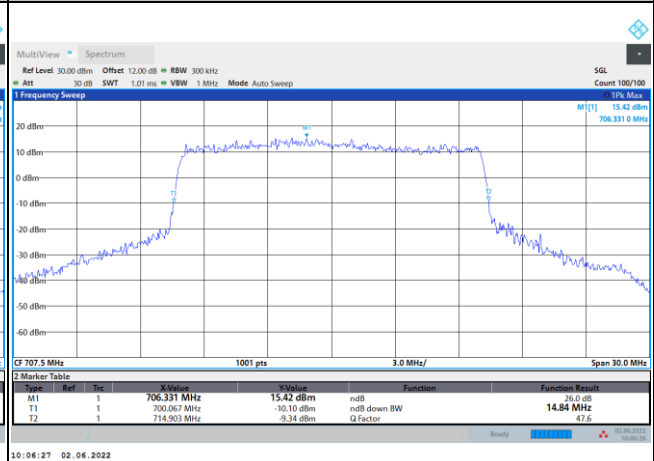
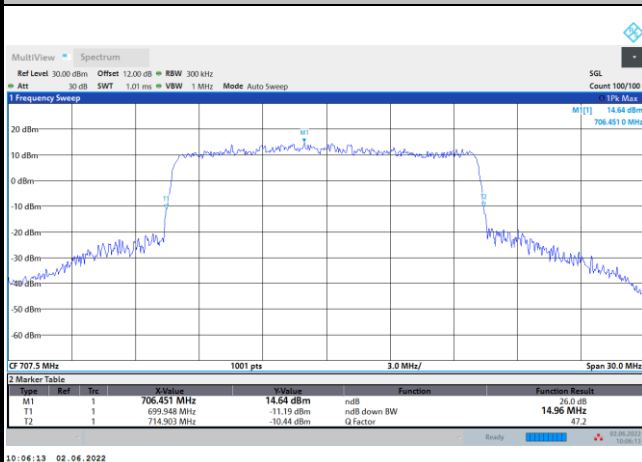
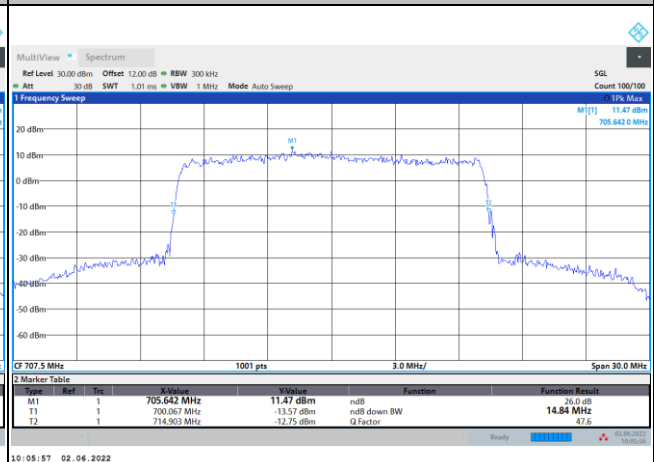
64QAM



256QAM



FR1 n12 / 10MHz / DFT-S OFDM / Middle Channel / Full RB
PI/2 BPSK

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

16QAM

64QAM

256QAM


FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB
PI/2 BPSK

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

16QAM

64QAM

256QAM


**Occupied Bandwidth**

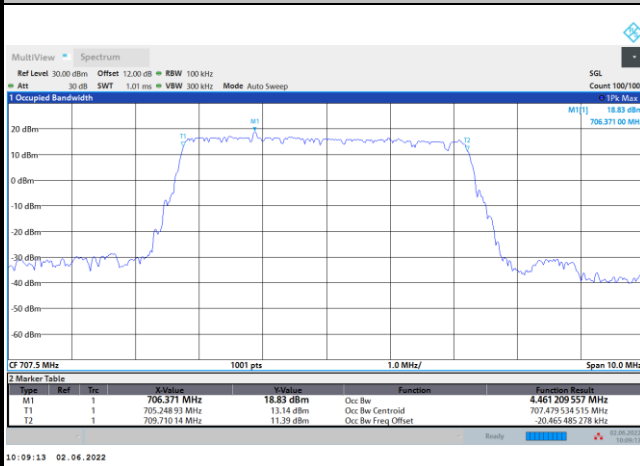
Mode	FR1 n12 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK			
Middle CH	4.46		8.86		13.40			

Mode	FR1 n12 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	4.48	4.49	9.25	9.25	14.04	14.06		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	4.48	4.48	9.23	9.25	14.08	14.04		



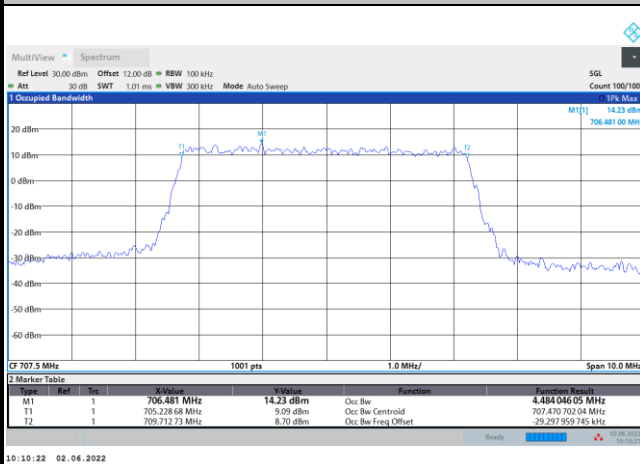
FR1 n12 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

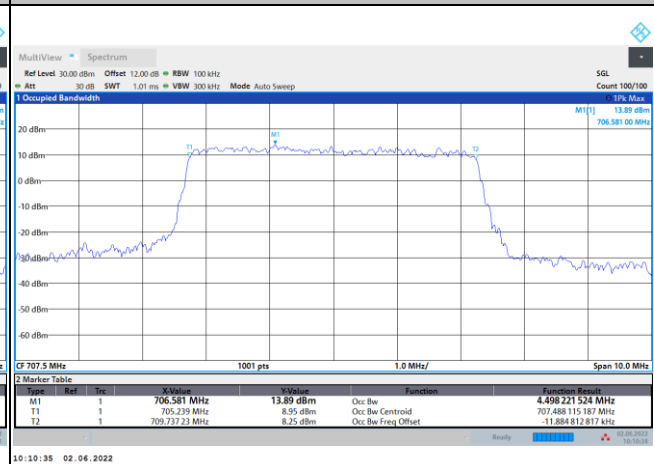


FR1 n12 / 5MHz / CP OFDM / Middle Channel / Full RB

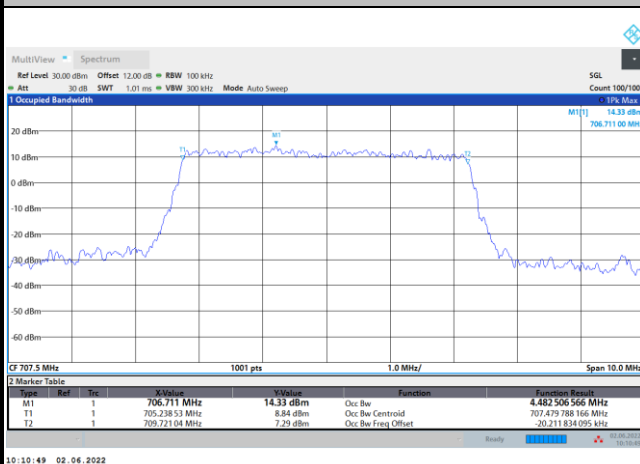
QPSK



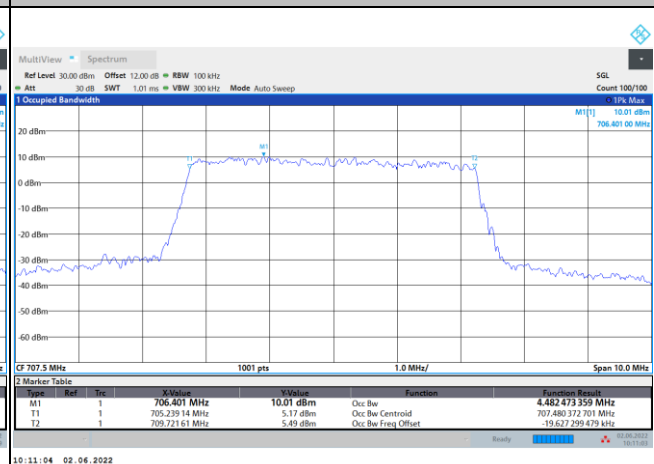
16QAM



64QAM

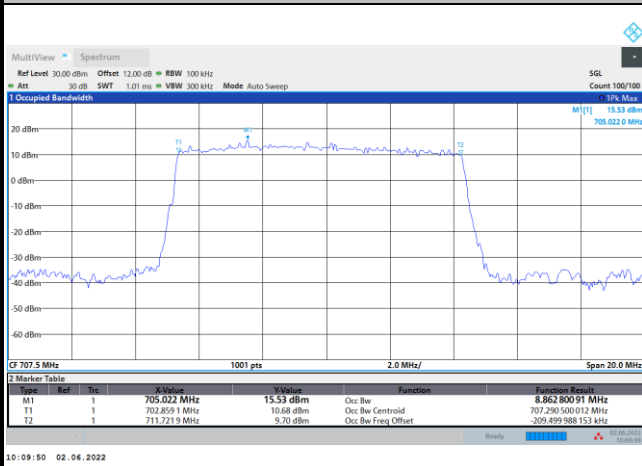


256QAM



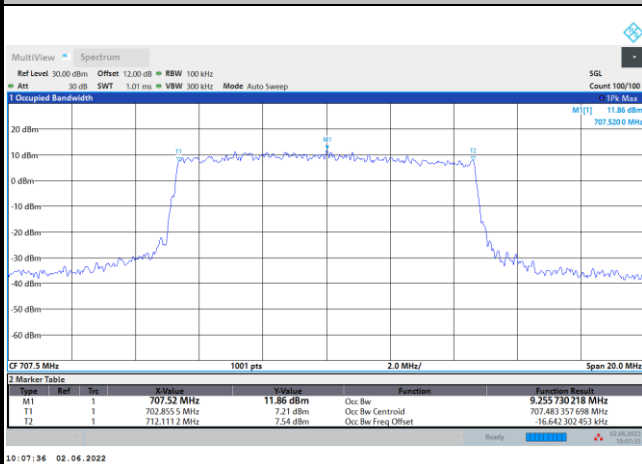
FR1 n12 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

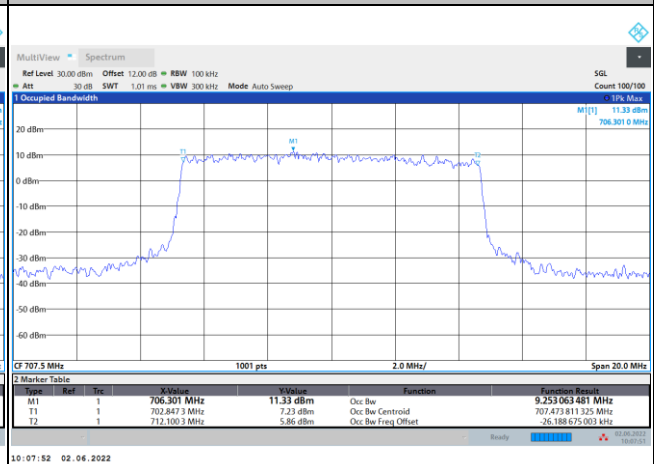


FR1 n12 / 10MHz / CP OFDM / Middle Channel / Full RB

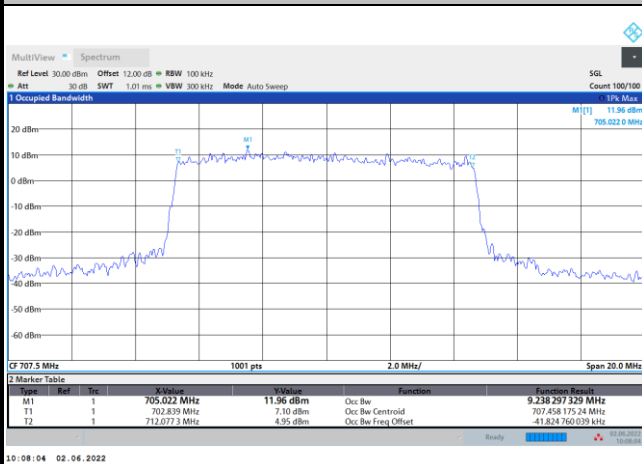
QPSK



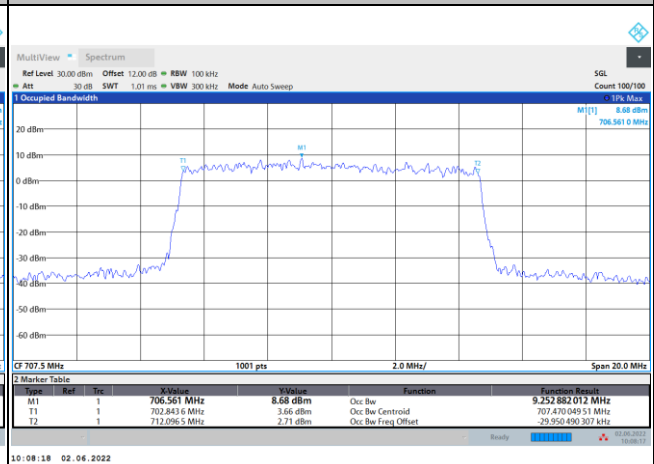
16QAM



64QAM

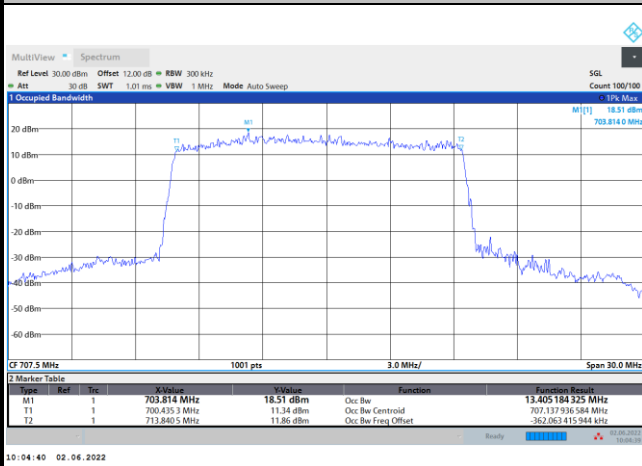


256QAM



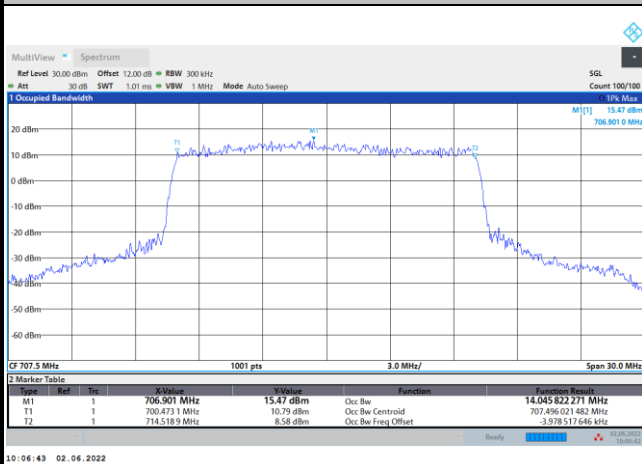
FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

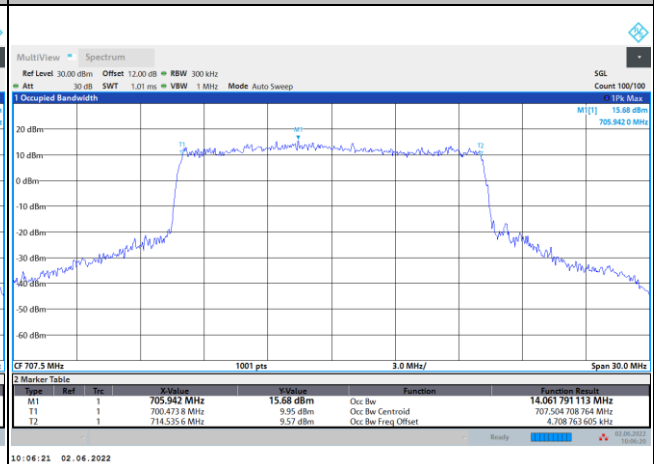


FR1 n12 / 15MHz / CP OFDM / Middle Channel / Full RB

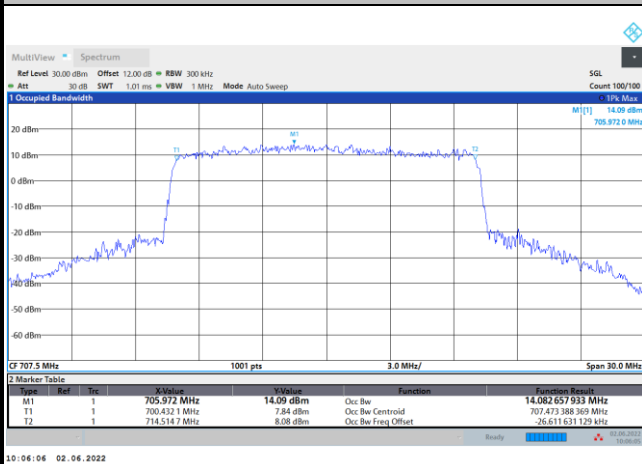
QPSK



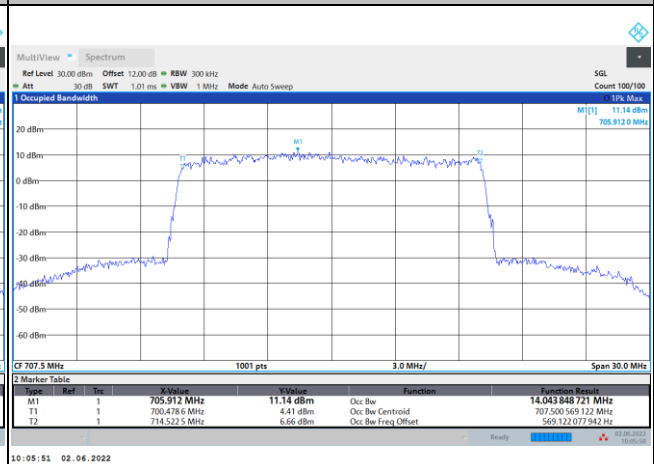
16QAM



64QAM



256QAM



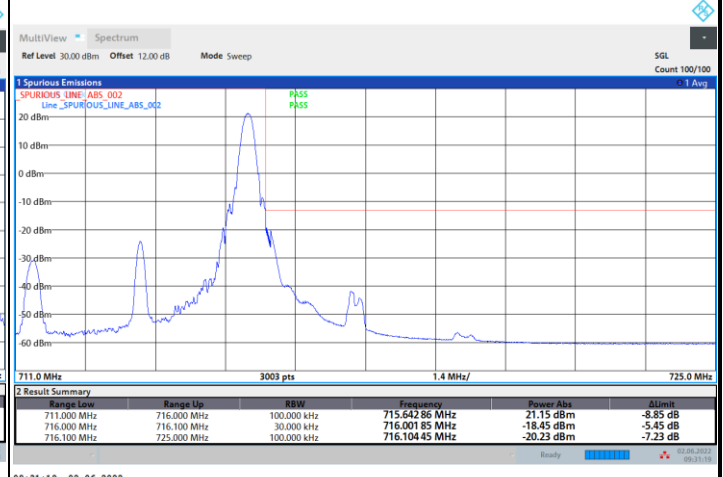
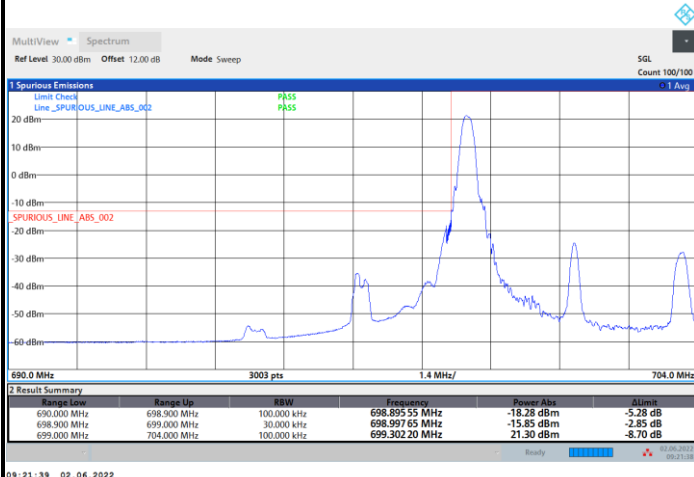


Conducted Band Edge

FR1 n12 / 5MHz / DFT-S OFDM / PI/2 BPSK

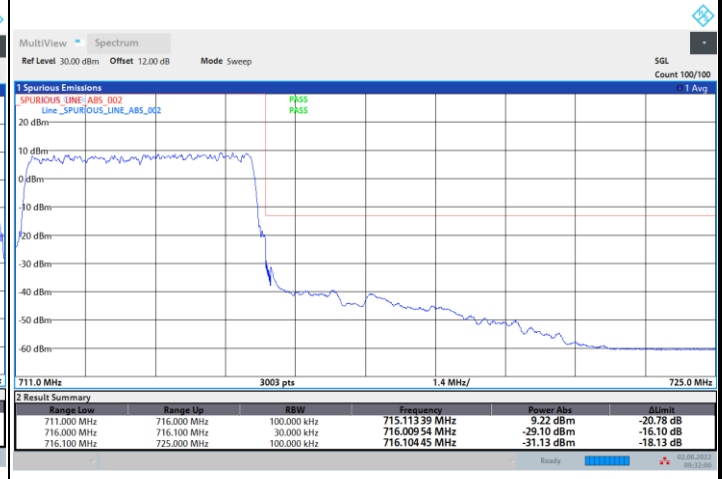
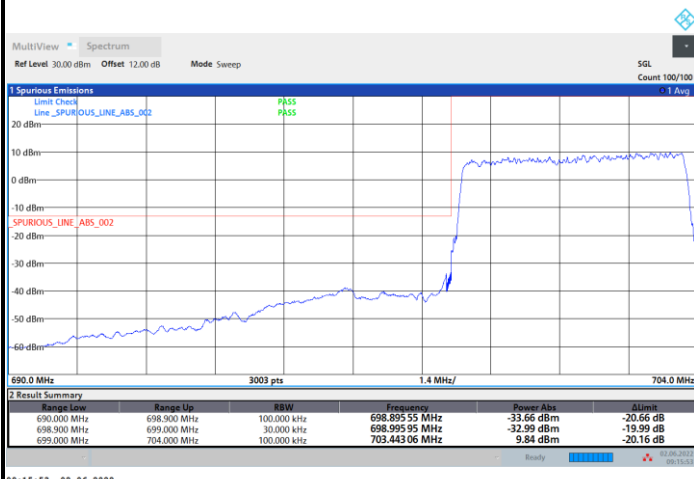
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

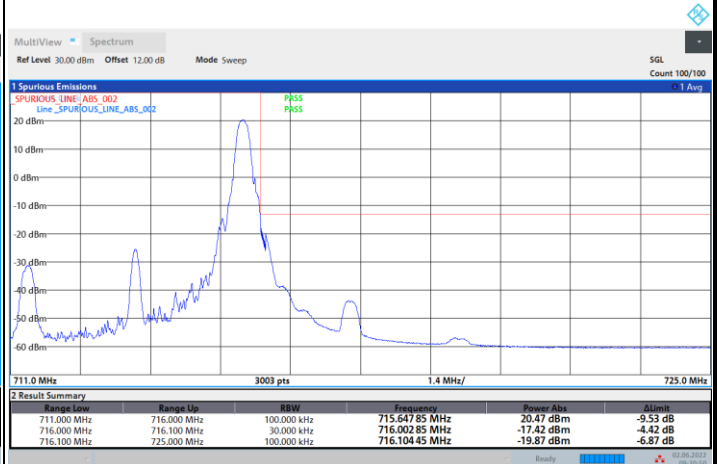
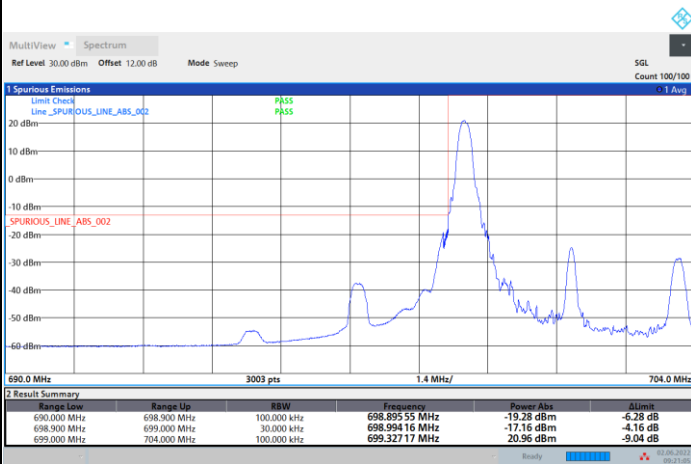




FR1 n12 / 5MHz / DFT-S OFDM / QPSK

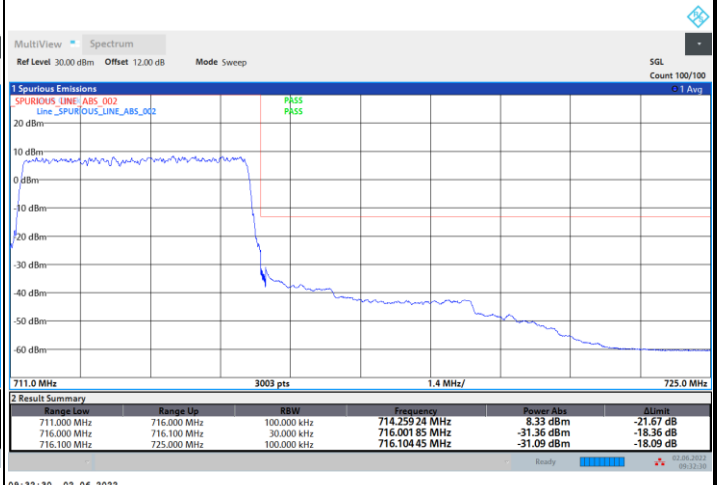
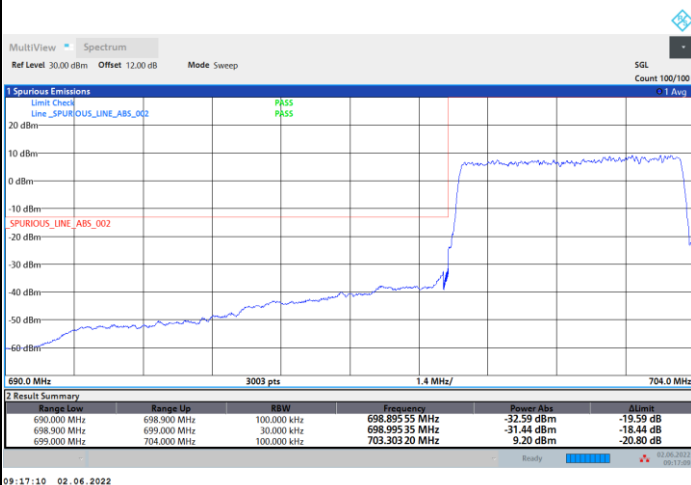
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

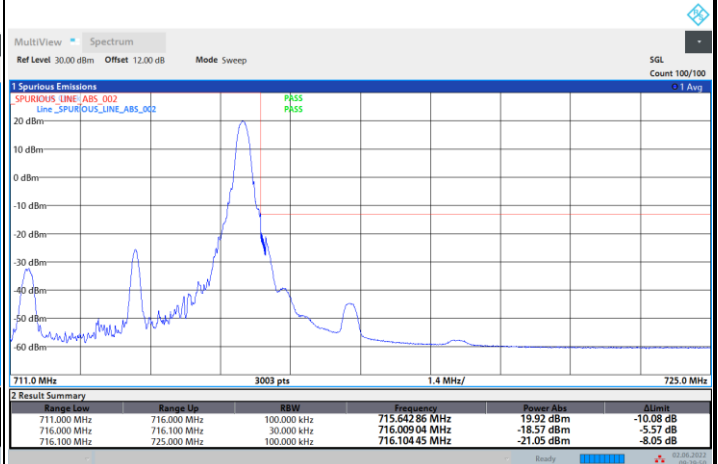
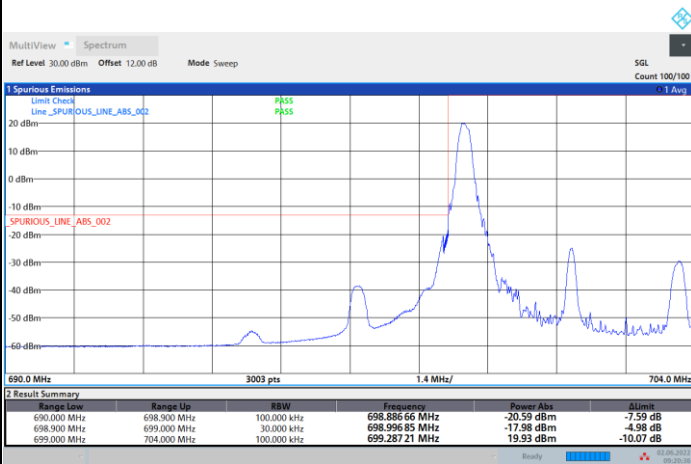




FR1 n12 / 5MHz / DFT-S OFDM / 16QAM

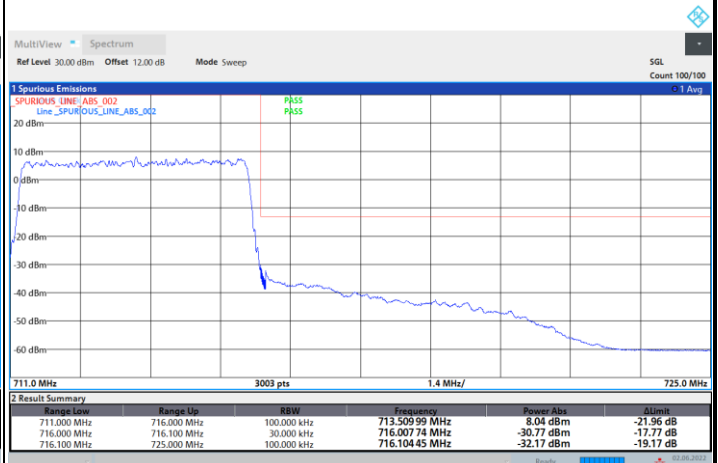
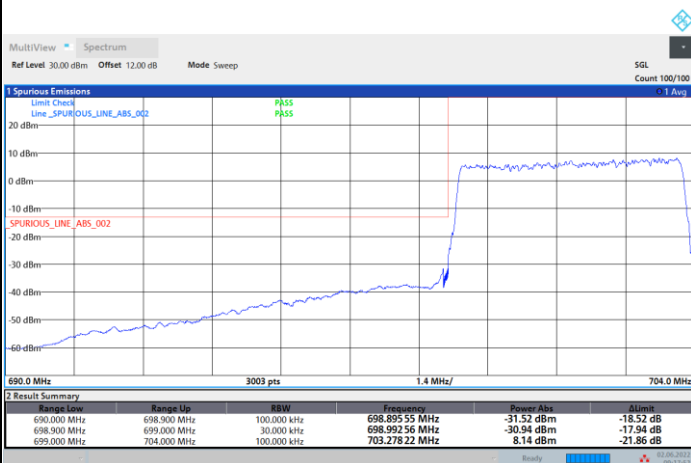
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

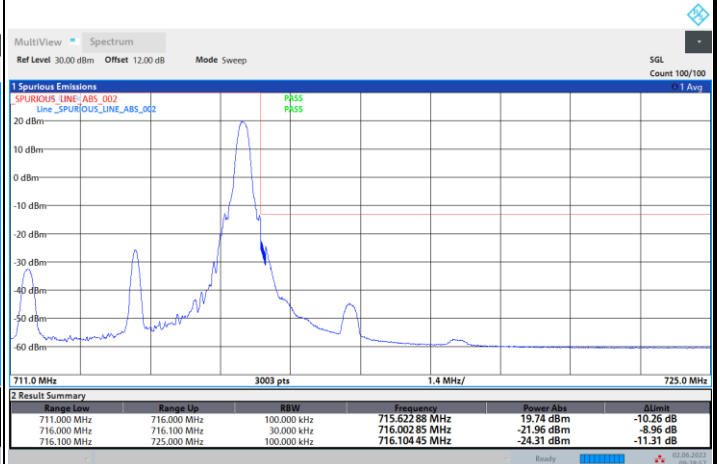
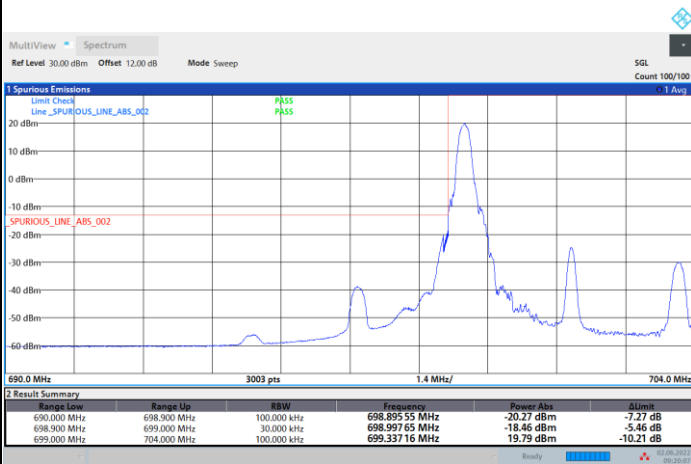




FR1 n12 / 5MHz / DFT-S OFDM / 64QAM

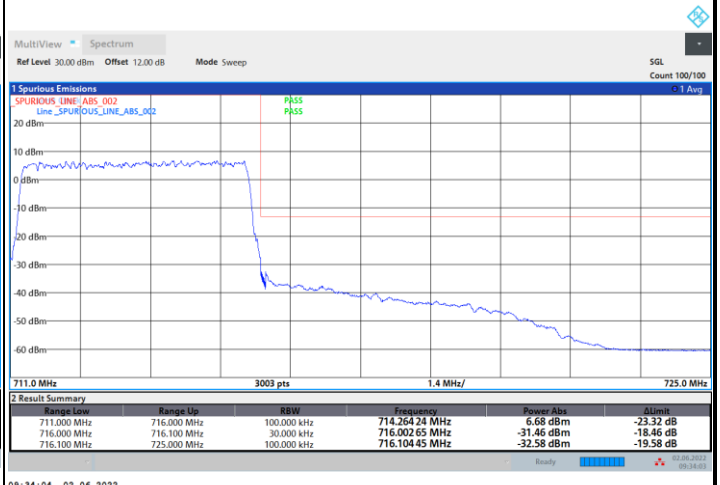
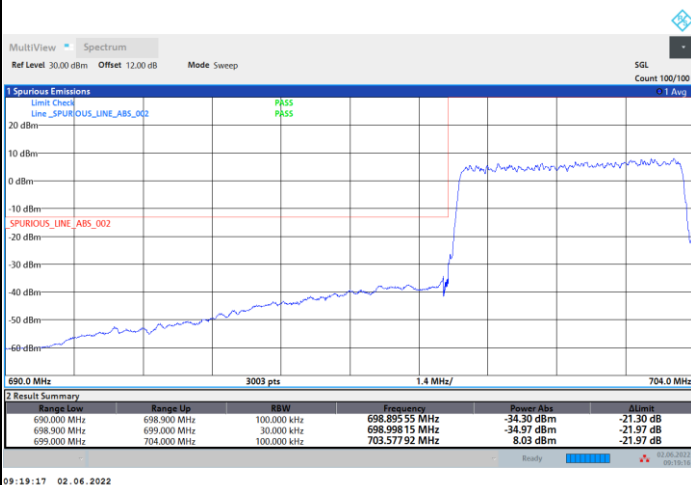
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

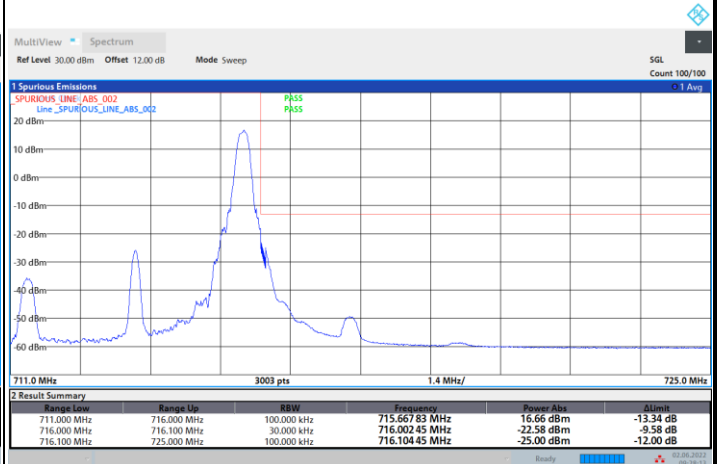
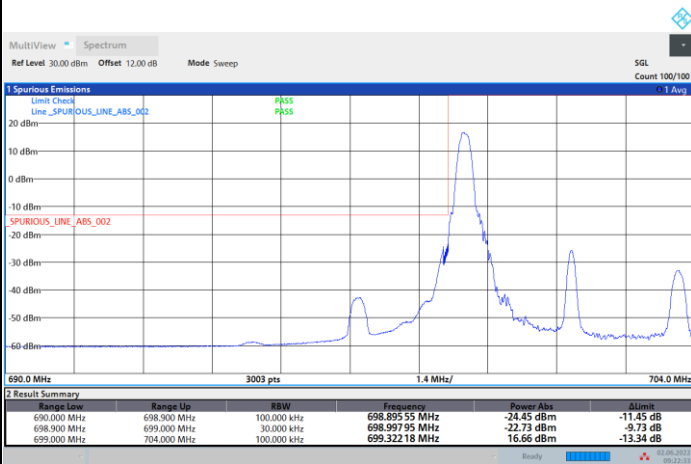




FR1 n12 / 5MHz / DFT-S OFDM / 256QAM

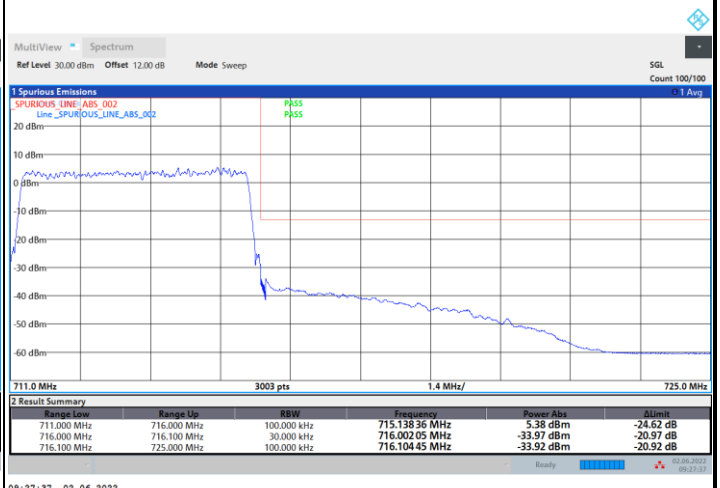
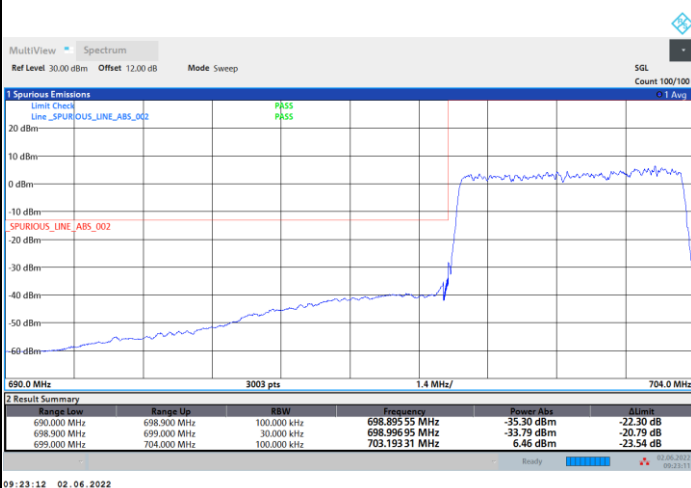
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

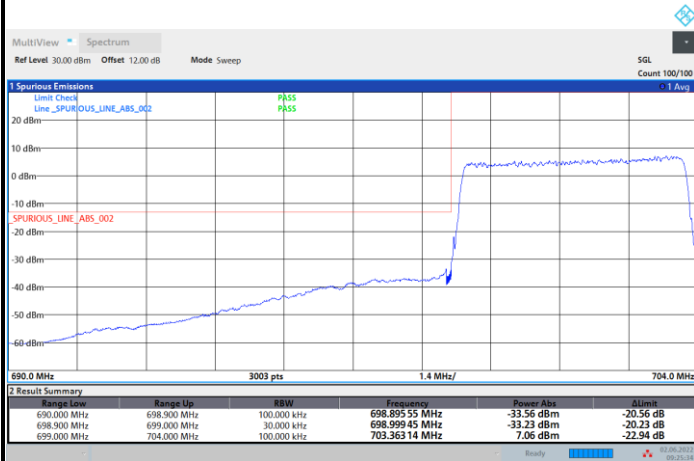
Highest Band Edge / Full RB





FR1 n12 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



Highest Band Edge

