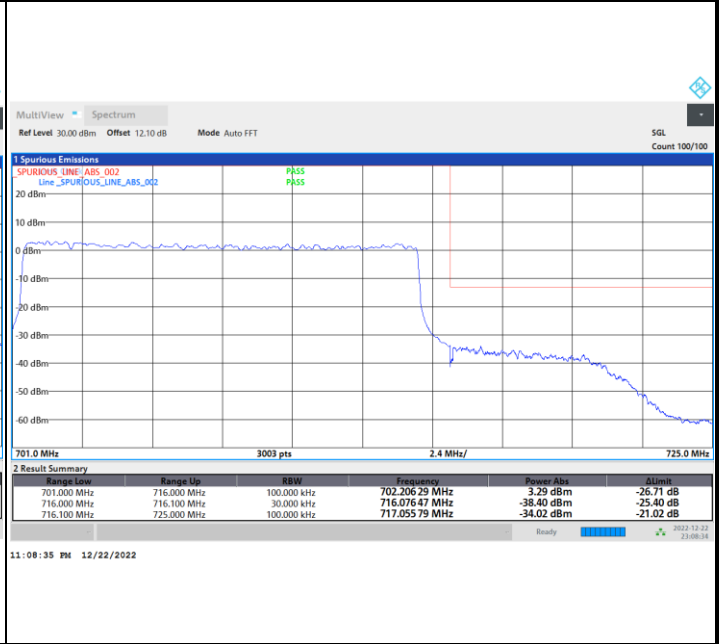
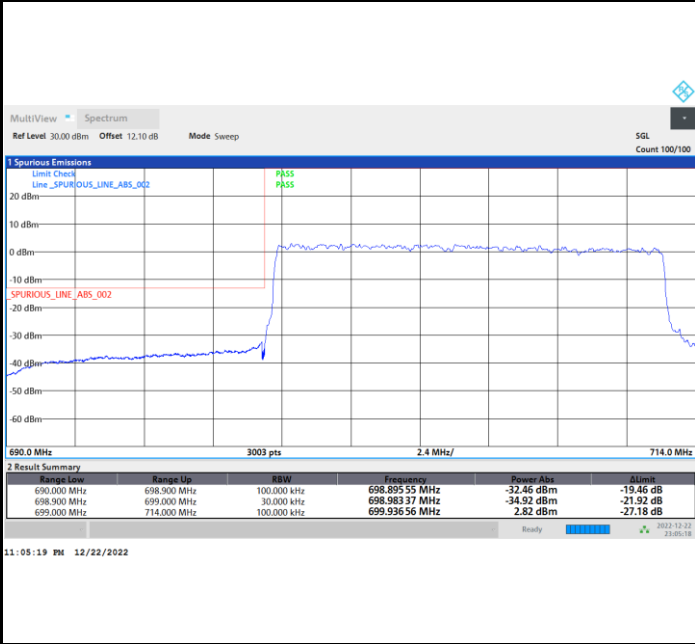




FR1 n12 / 15MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

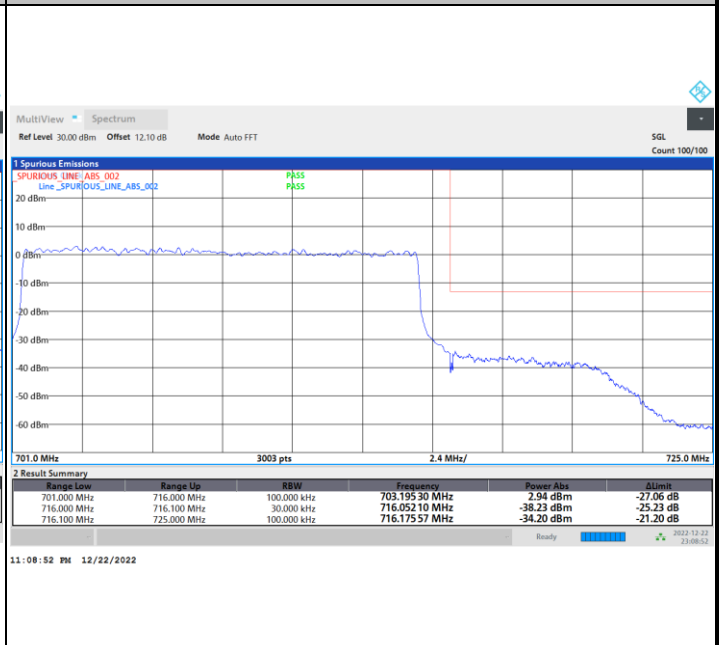
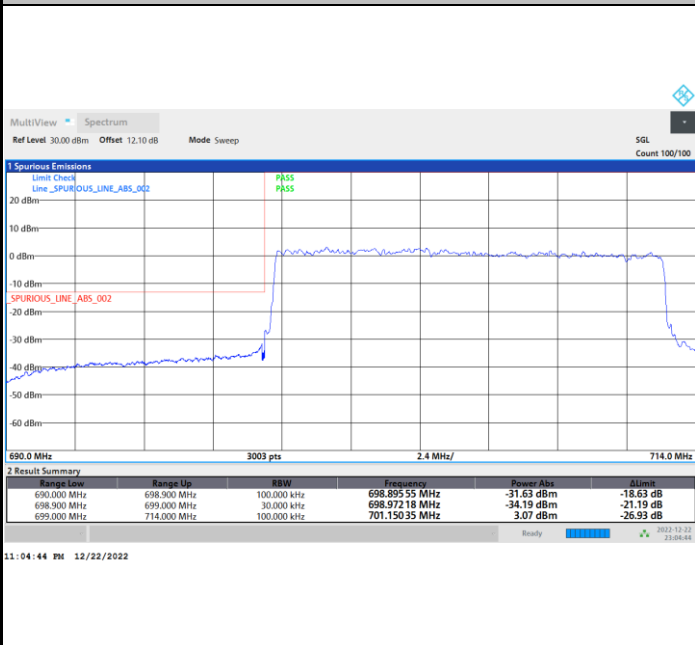
Highest Band Edge



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

Lowest Band Edge

Highest Band Edge

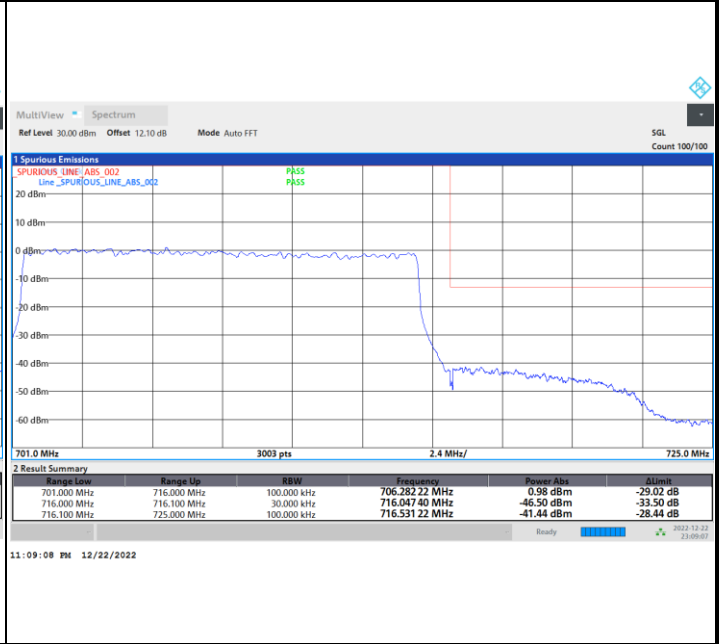
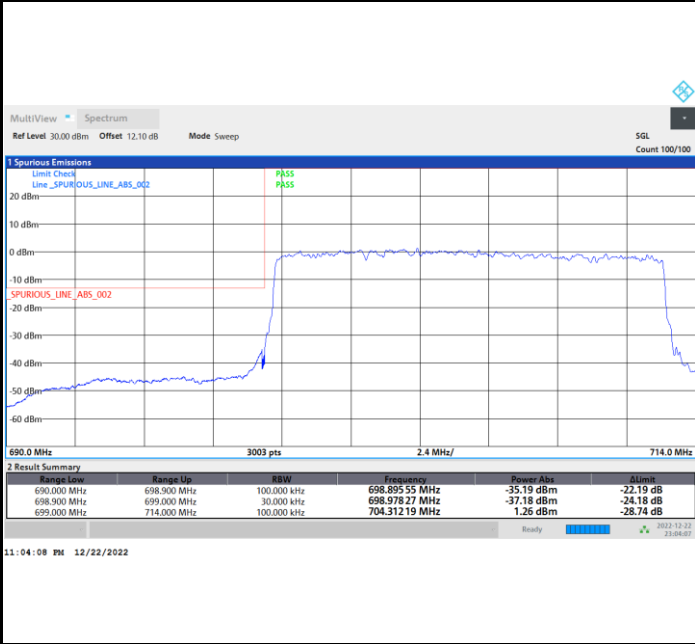




FR1 n12 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

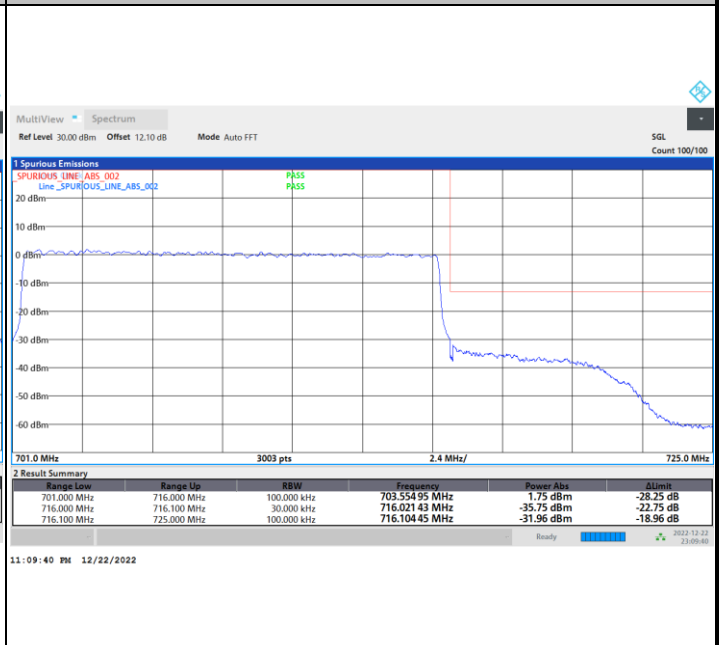
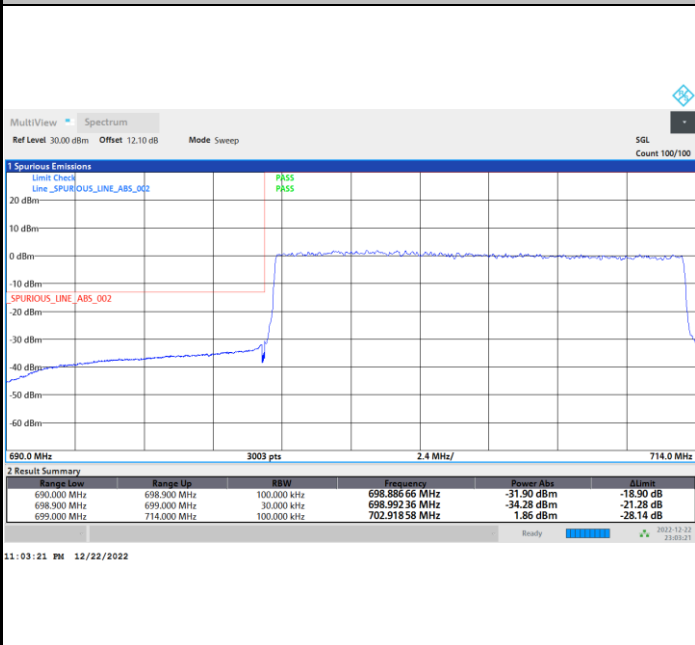
Highest Band Edge



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

Lowest Band Edge

Highest Band Edge



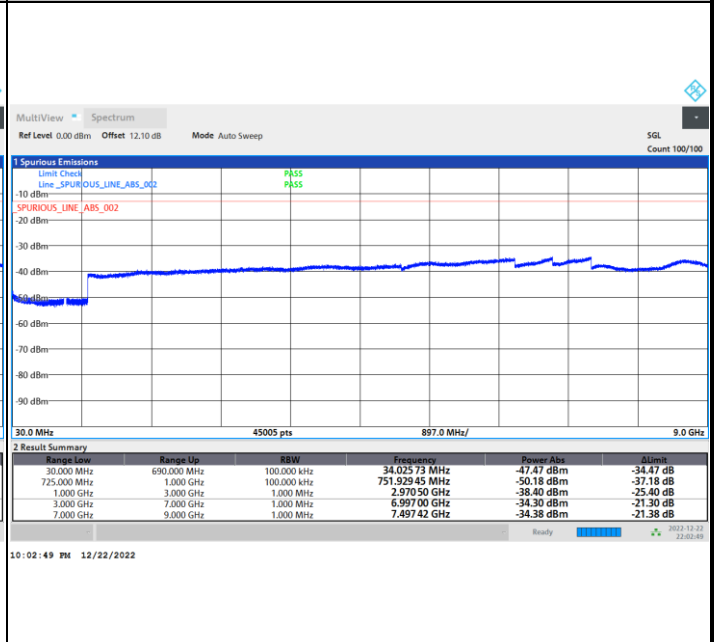
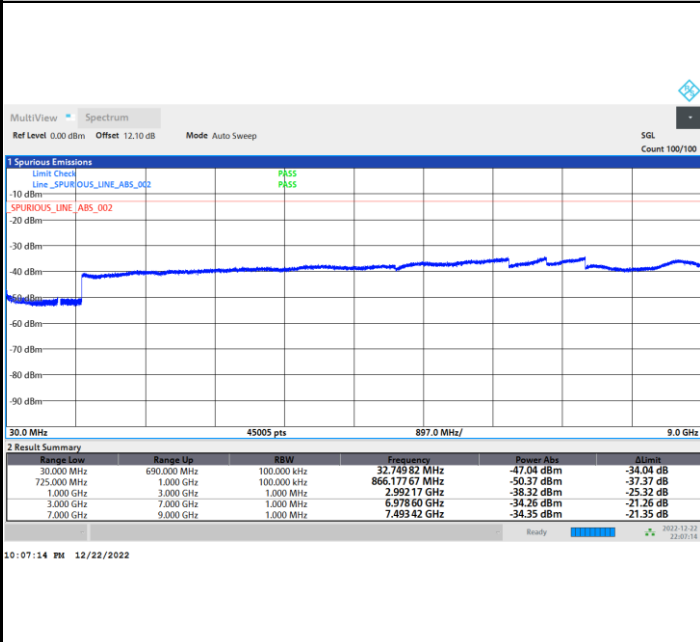


# Conducted Spurious Emission

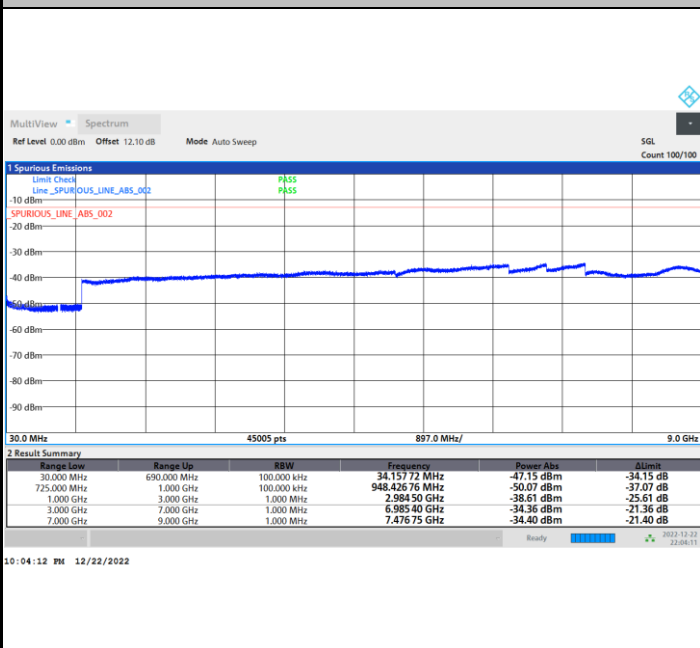
FR1 n12 / 5MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel

Middle Channel



Highest Channel





### Frequency Stability

Test Conditions		FR1 n12 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0139	PASS
40	Normal Voltage	0.0006	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0031	
0	Normal Voltage	0.0004	
-10	Normal Voltage	0.0160	
-20	Normal Voltage	0.0031	
-30	Normal Voltage	0.0085	
20	Maximum Voltage	0.0177	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0045	

**Note:**

- 1. Normal Voltage = 3.88 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.4 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



# FR1 n14

## Peak-to-Average Ratio

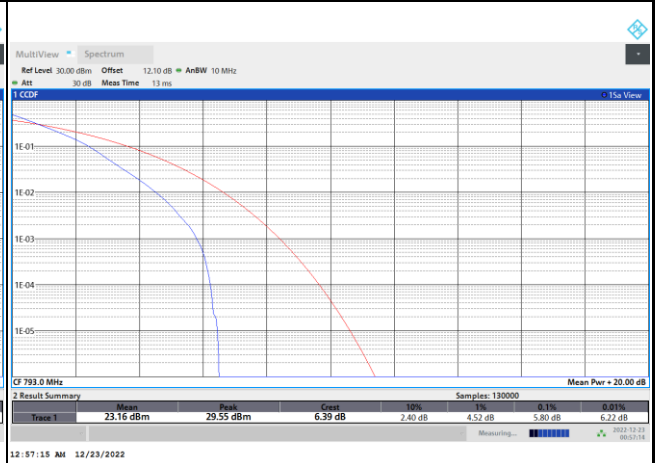
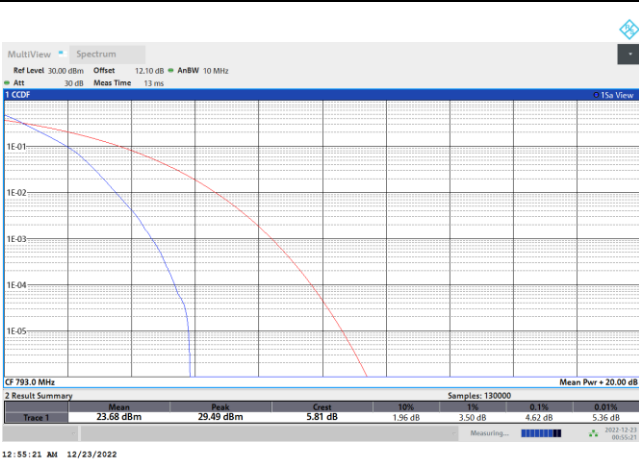
Mode	FR1 n14 / 10MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.62	5.80	6.24	6.36	PASS
Mode	FR1 n14 / 10MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.54				PASS



FR1 n14 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

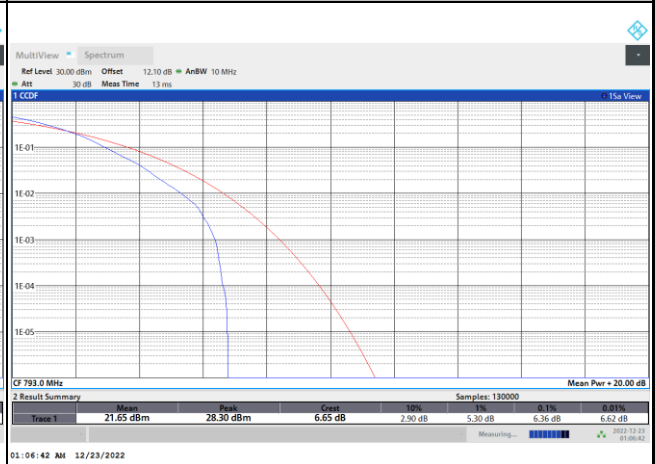
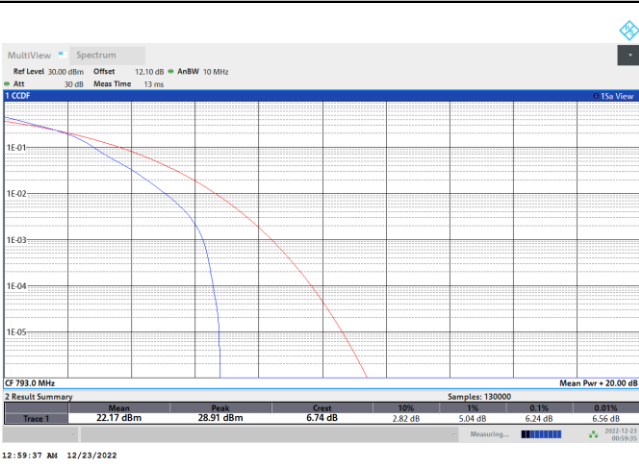
PI/2 BPSK

QPSK

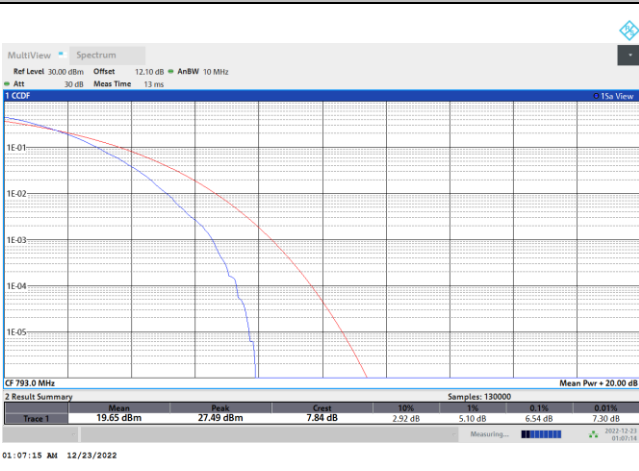


16QAM

64QAM



256QAM





**26dB Bandwidth**

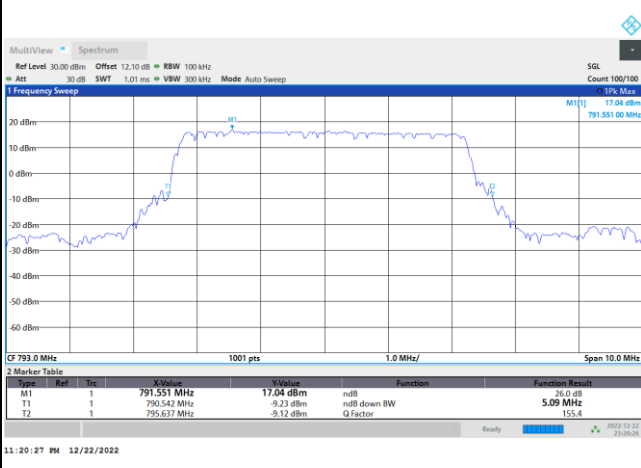
Mode	FR1 n14 : 26dB BW(MHz) / DFT-S OFDM						
BW	5MHz		10MHz				
Mod.	PI/2 BPSK		PI/2 BPSK				
Middle CH	5.10		9.61				

Mode	FR1 n14 : 26dB BW(MHz) / CP OFDM						
BW	5MHz		10MHz				
Mod.	QPSK	16QAM	QPSK	16QAM			
Middle CH	5.09	5.07	9.79	9.97			
Mod.	64QAM	256QAM	64QAM	256QAM			
Middle CH	5.26	5.04	9.91	9.85			



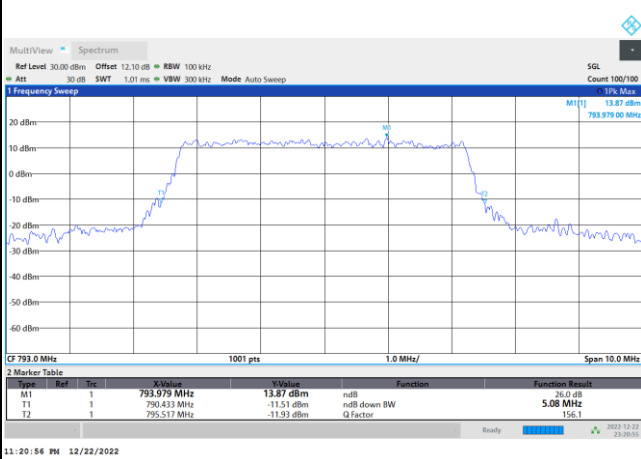
FR1 n14 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

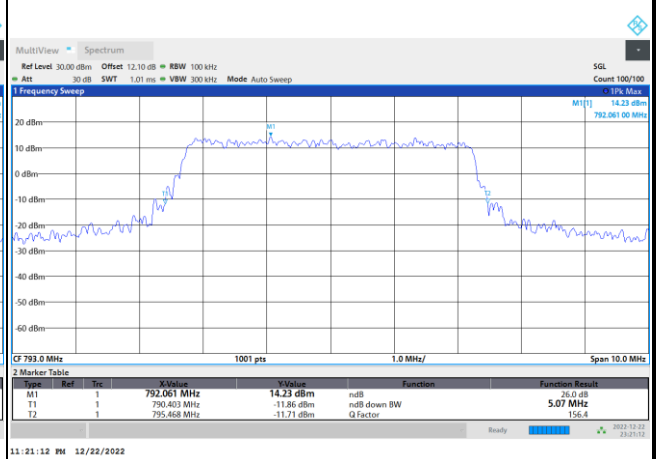


FR1 n14 / 5MHz / CP OFDM / Middle Channel / Full RB

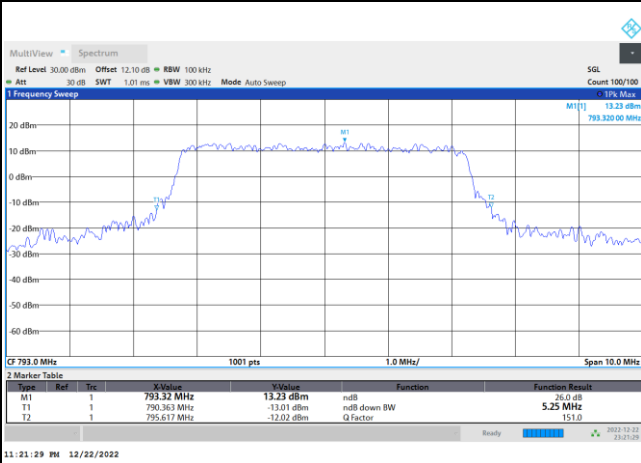
QPSK



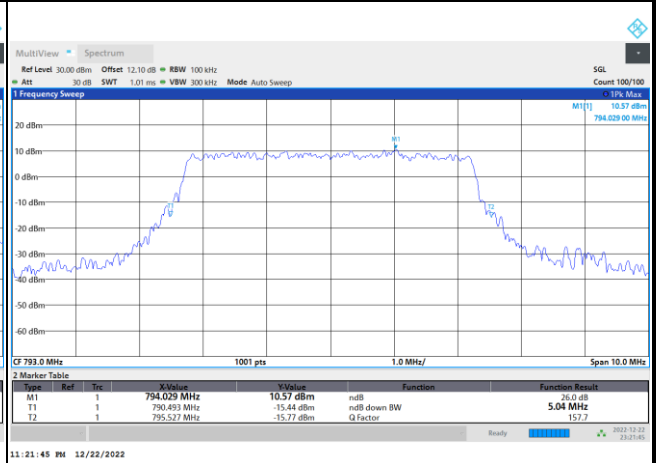
16QAM



64QAM



256QAM

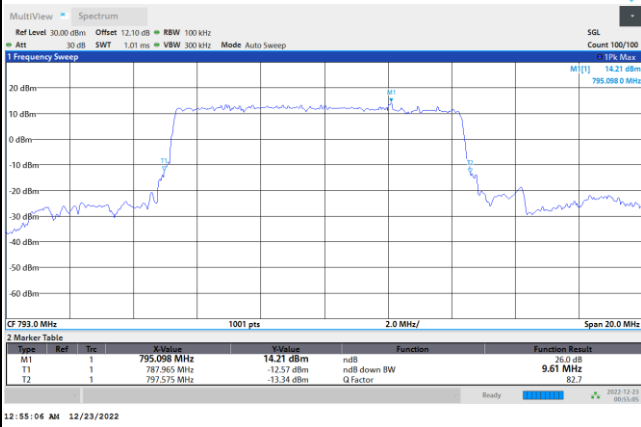






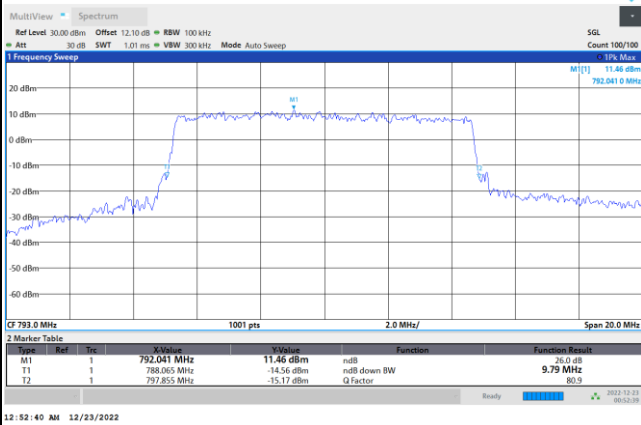
FR1 n14 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

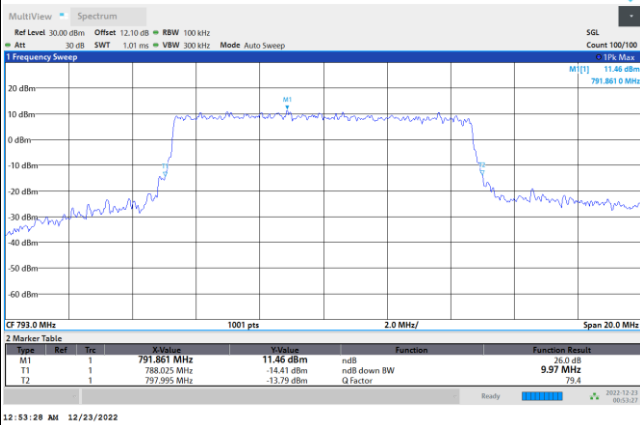


FR1 n14 / 10MHz / CP OFDM / Middle Channel / Full RB

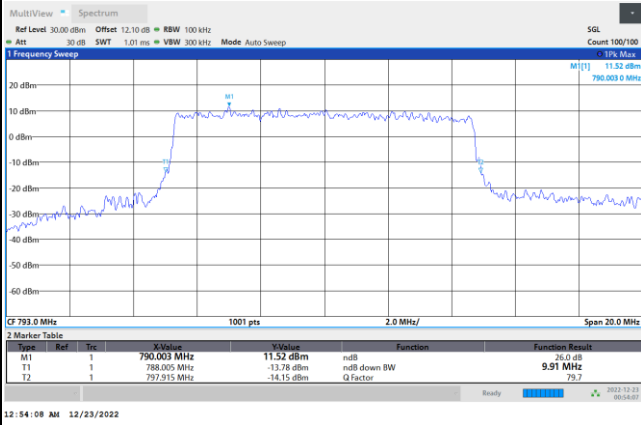
QPSK



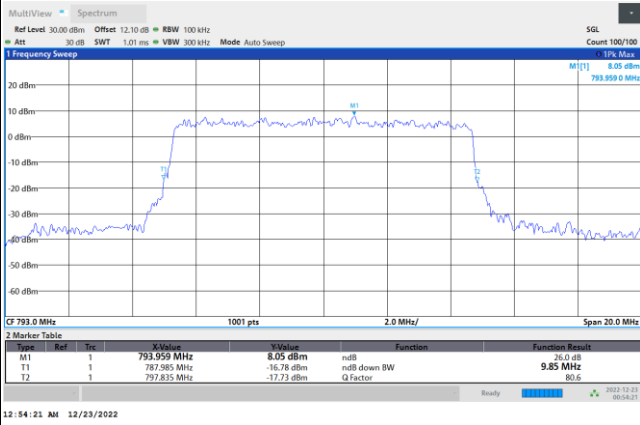
16QAM



64QAM



256QAM





## Occupied Bandwidth

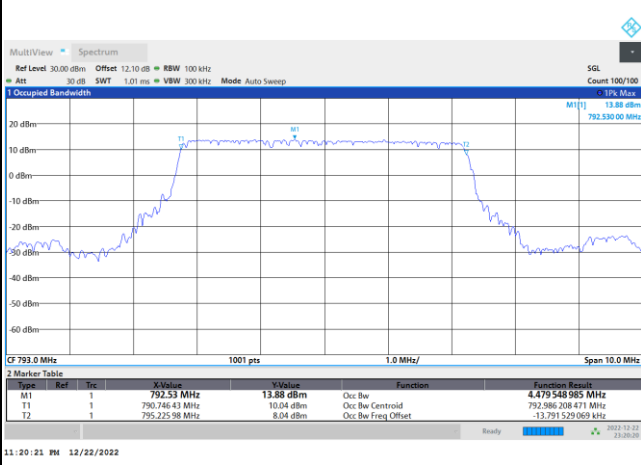
Mode	FR1 n14 : 99%OBW(MHz) / DFT-S OFDM						
BW	5MHz		10MHz				
Mod.	PI/2 BPSK		PI/2 BPSK				
Middle CH	4.47		8.92				

Mode	FR1 n14 : 99%OBW (MHz) / CP OFDM						
BW	5MHz		10MHz				
Mod.	QPSK	16QAM	QPSK	16QAM			
Middle CH	4.50	4.51	9.27	9.25			
Mod.	64QAM	256QAM	64QAM	256QAM			
Middle CH	4.50	4.48	9.28	9.24			



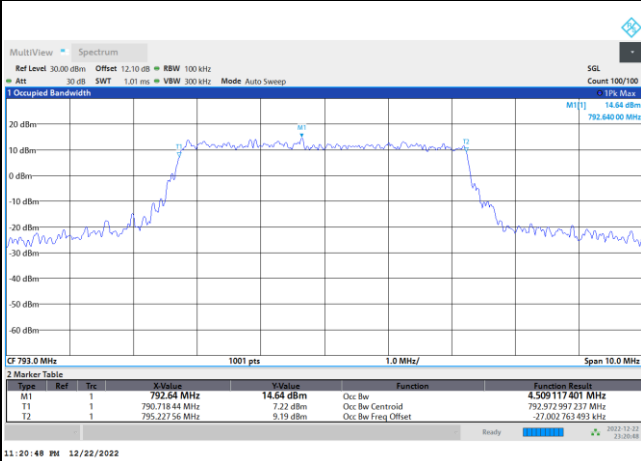
FR1 n14 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

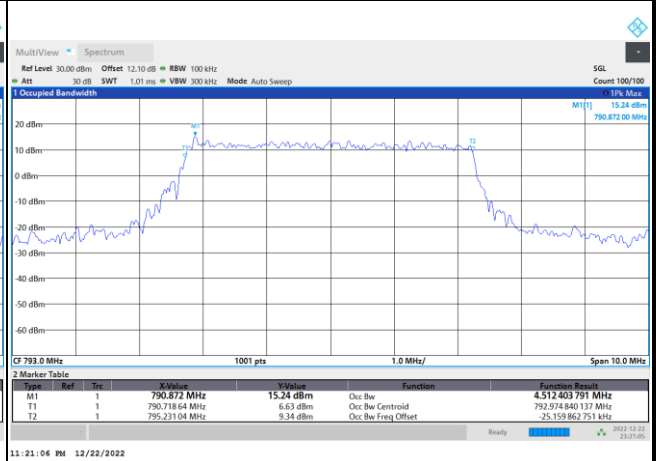


FR1 n14 / 5MHz / CP OFDM / Middle Channel / Full RB

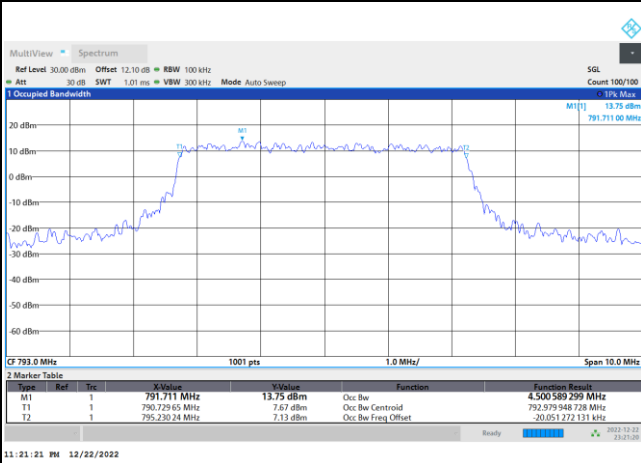
QPSK



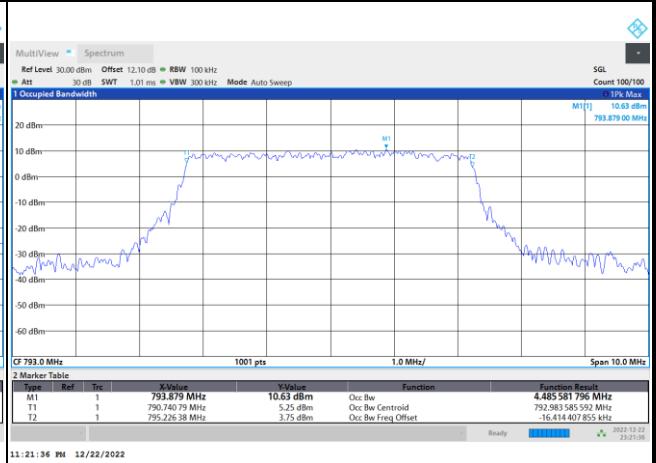
16QAM



64QAM



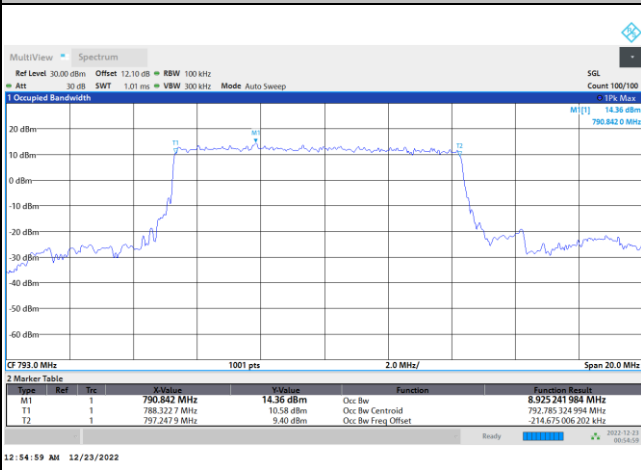
256QAM





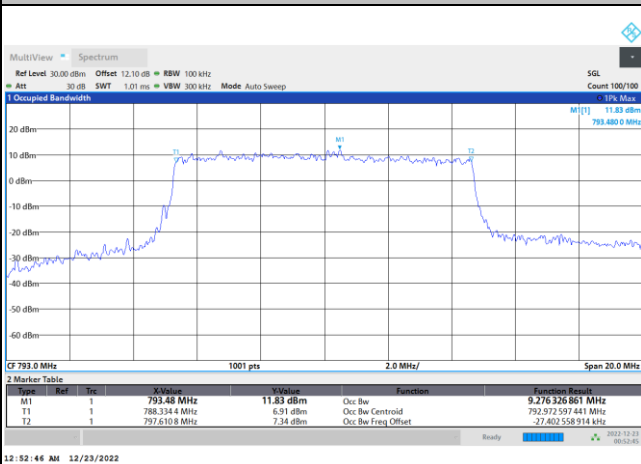
FR1 n14 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

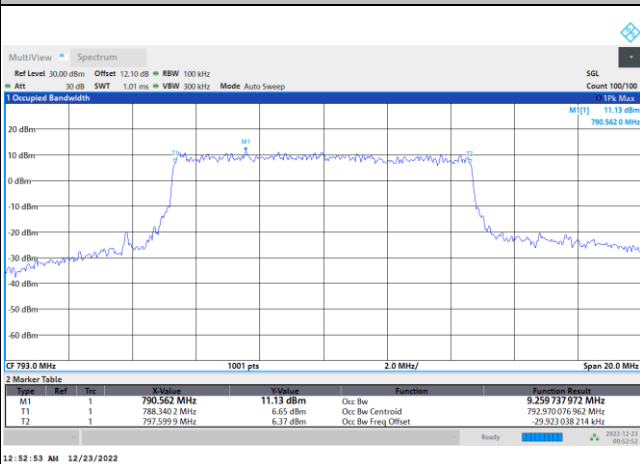


FR1 n14 / 10MHz / CP OFDM / Middle Channel / Full RB

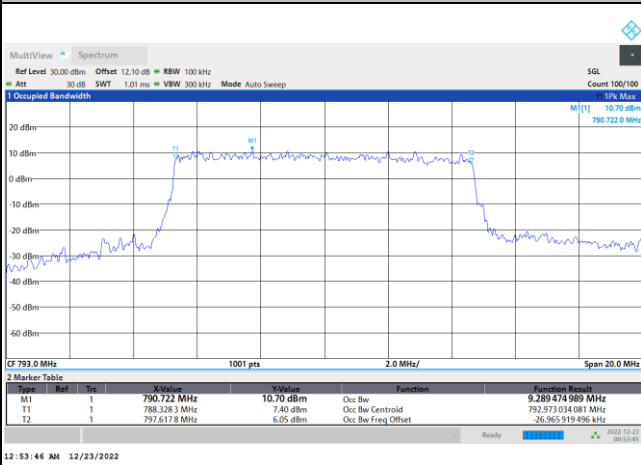
QPSK



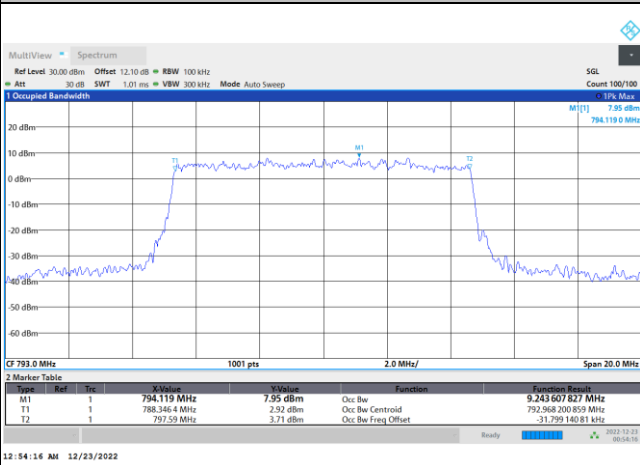
16QAM



64QAM



256QAM



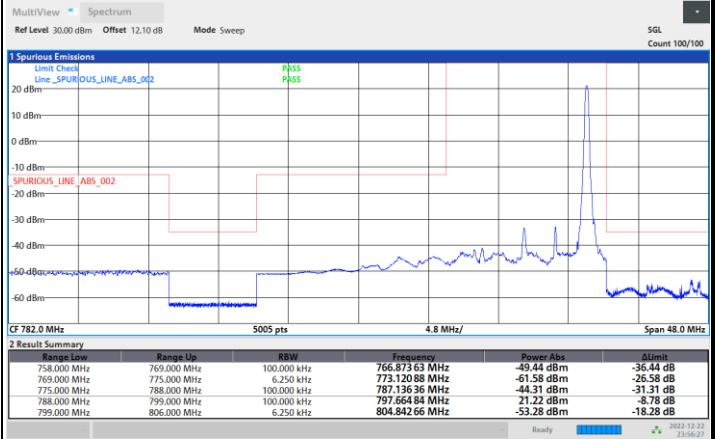
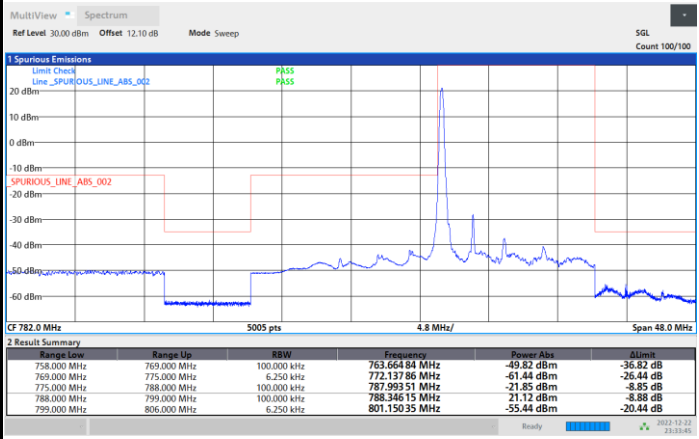


# Conducted Band Edge

## FR1 n14 / 5MHz / DFT-S OFDM / PI/2 BPSK

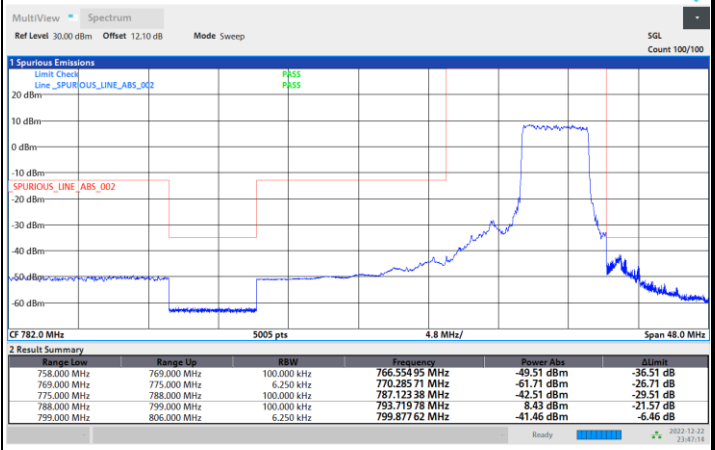
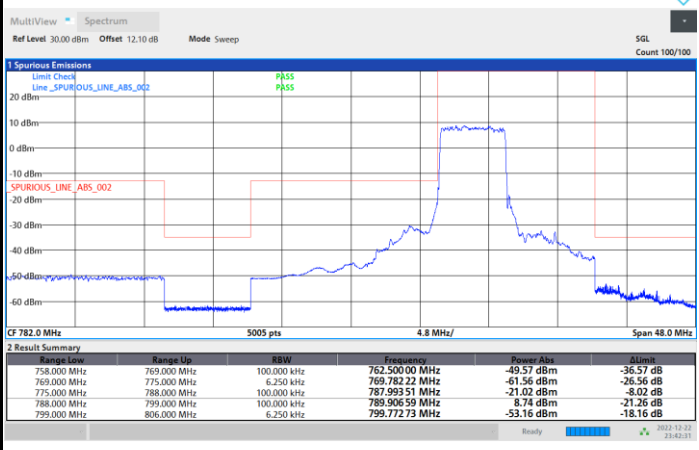
### Lowest Band Edge / 1RB0

### Highest Band Edge / 1RBmax



### Lowest Band Edge / Full RB

### Highest Band Edge / Full RB

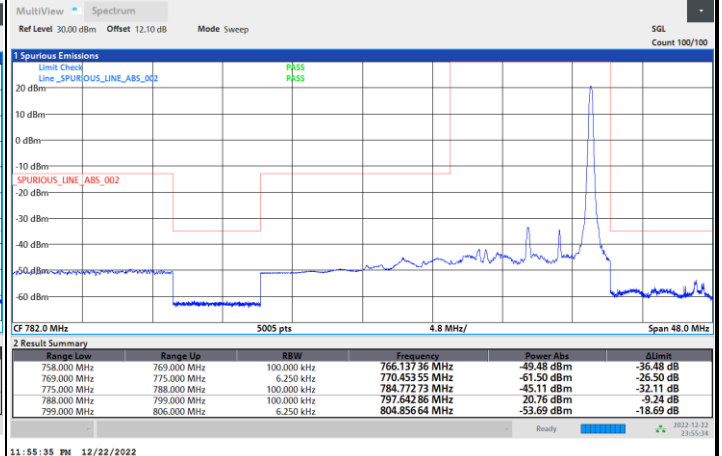
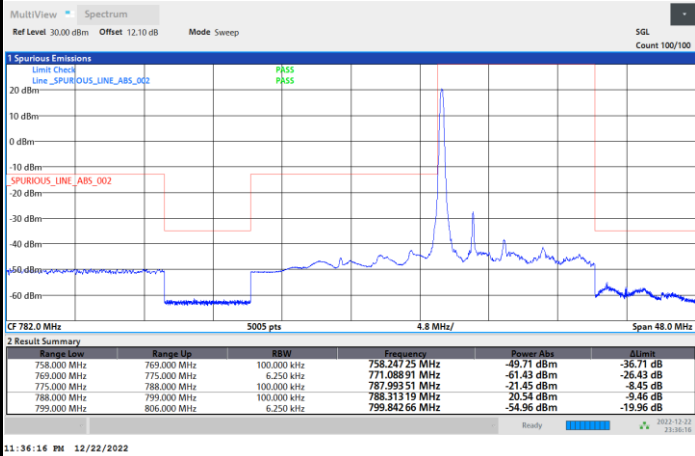




FR1 n14 / 5MHz / DFT-S OFDM / QPSK

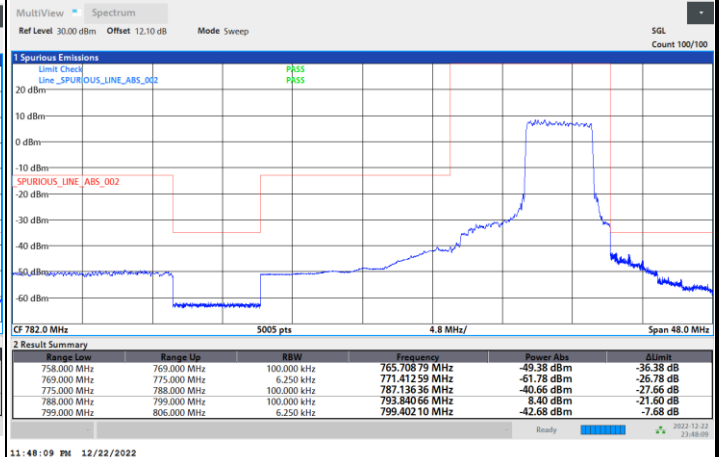
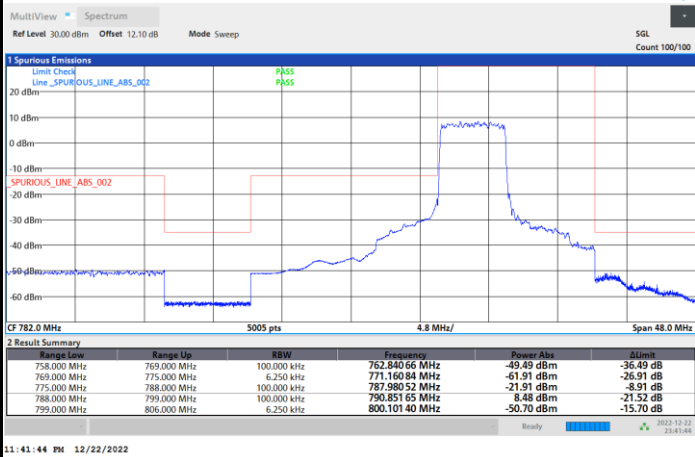
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

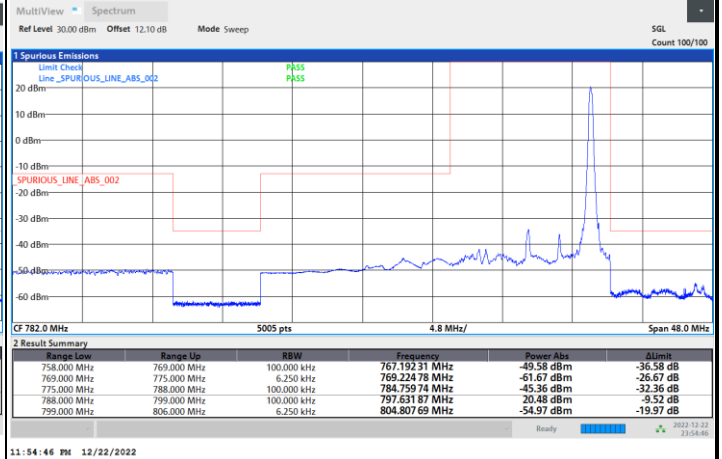
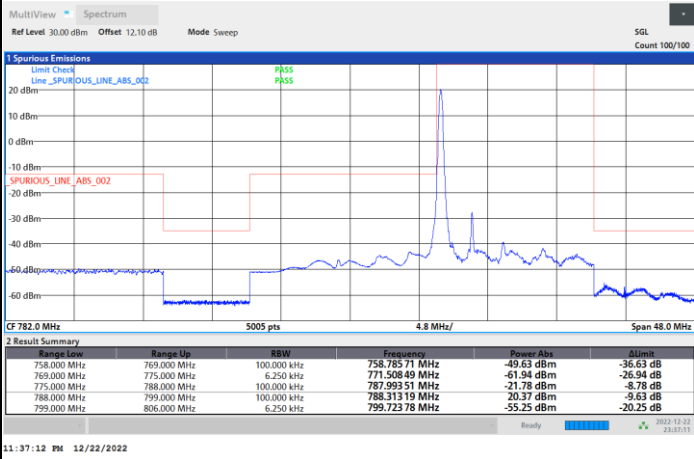




FR1 n14 / 5MHz / DFT-S OFDM / 16QAM

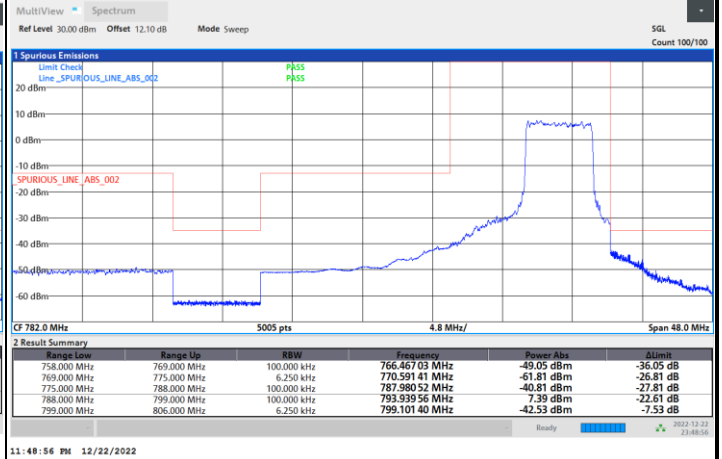
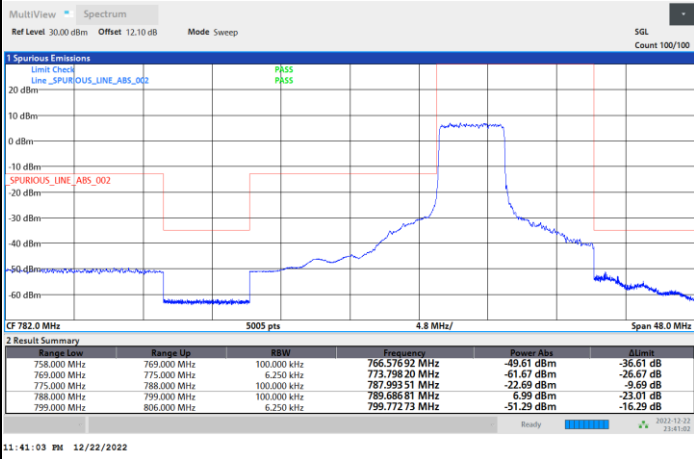
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

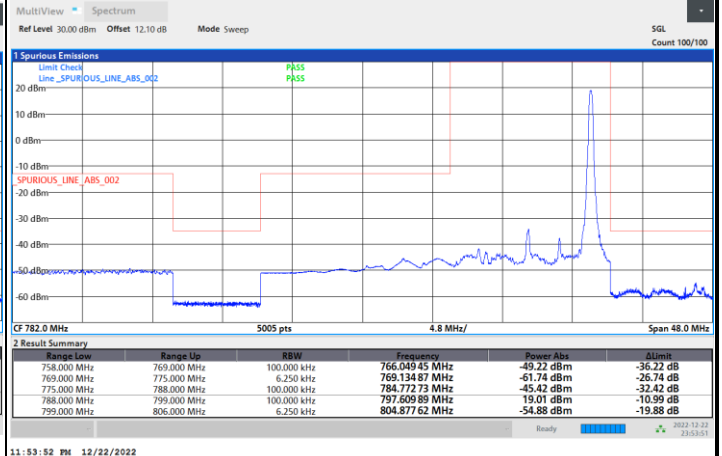
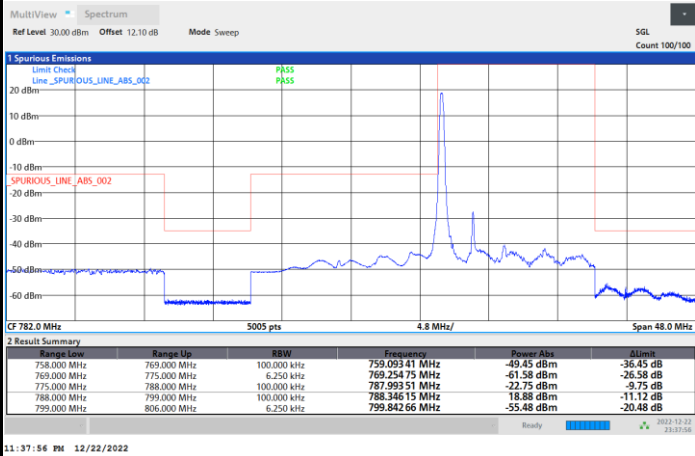




FR1 n14 / 5MHz / DFT-S OFDM / 64QAM

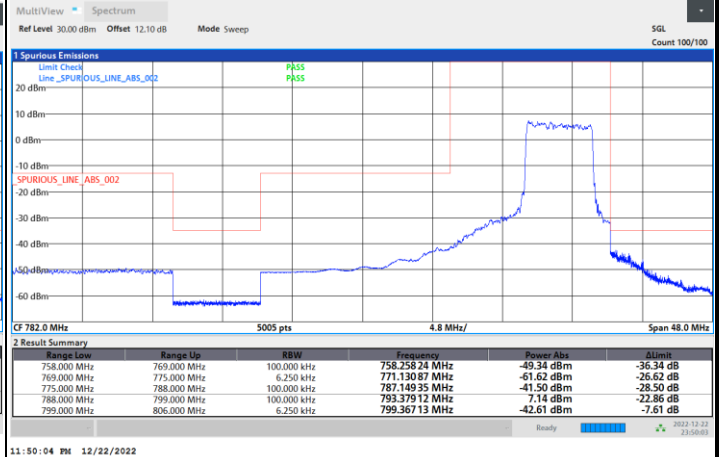
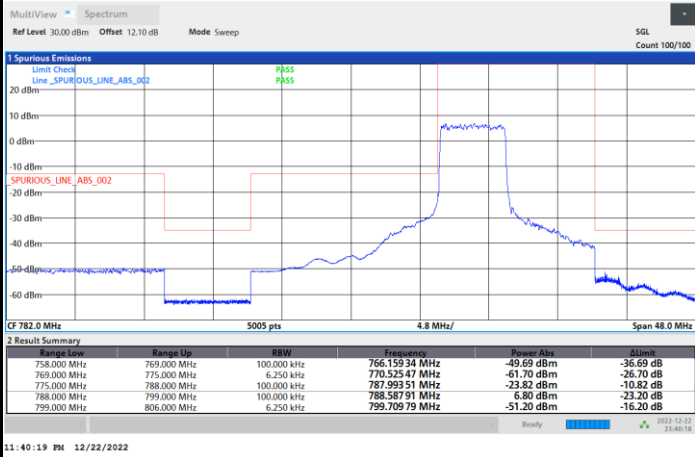
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB



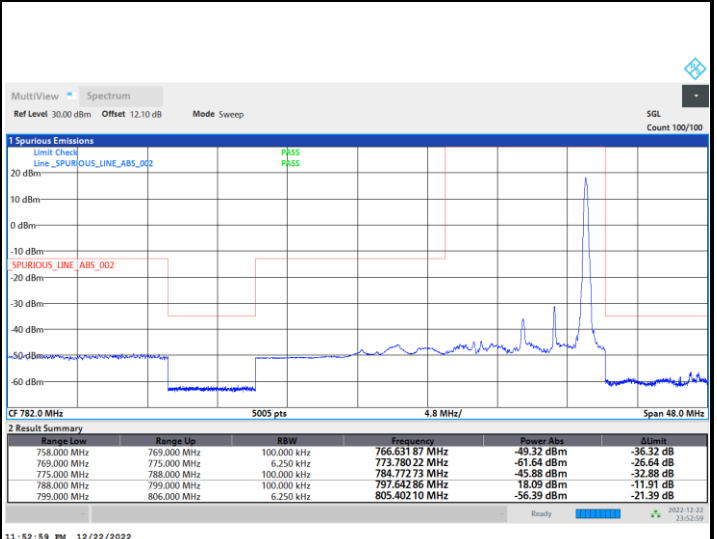
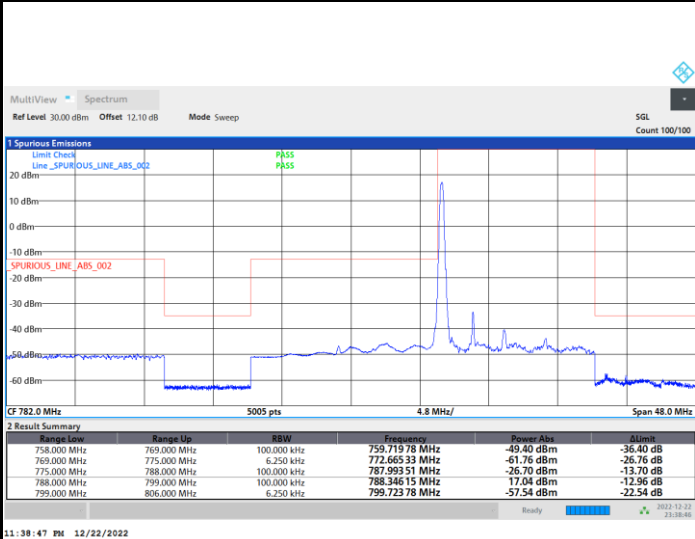




FR1 n14 / 5MHz / DFT-S OFDM / 256QAM

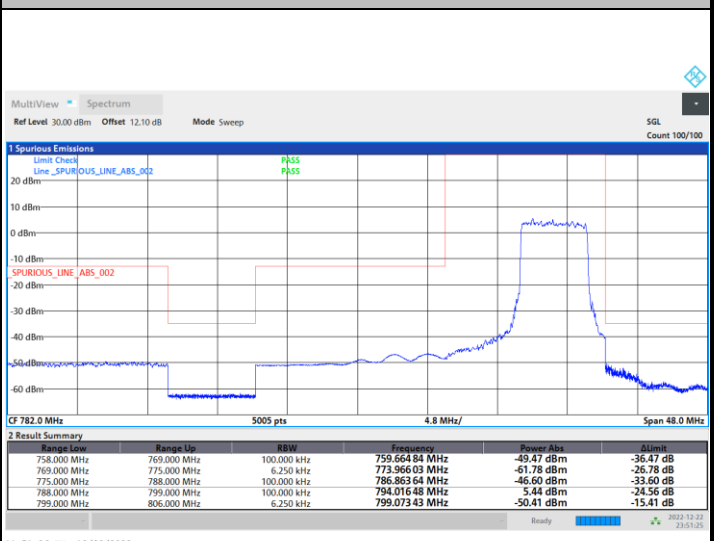
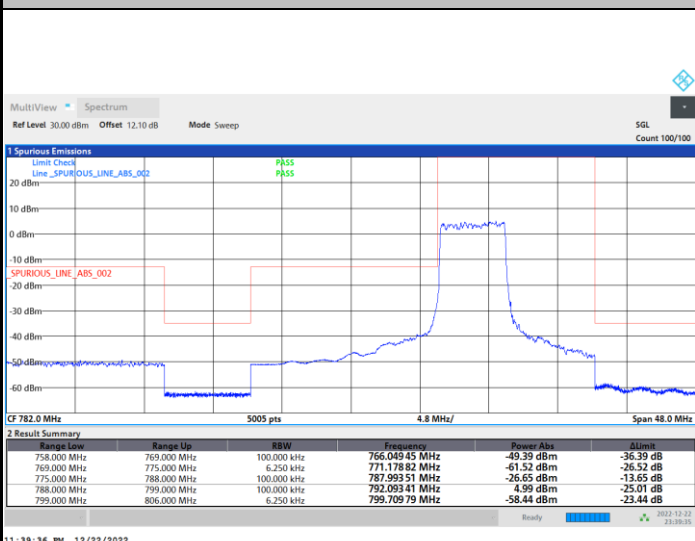
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

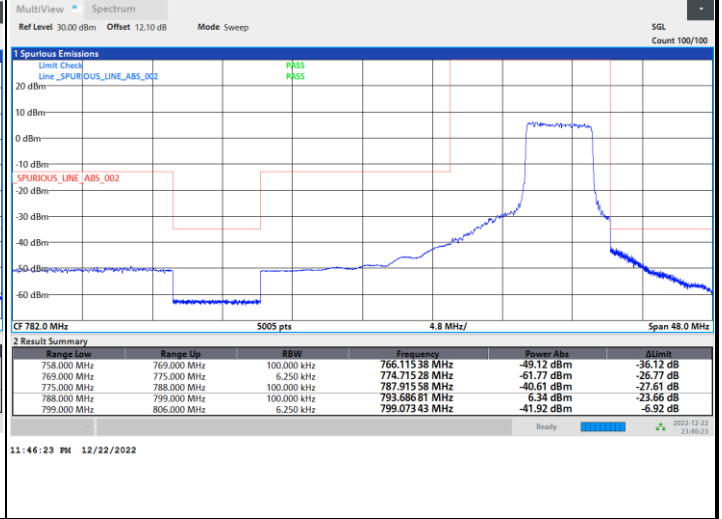
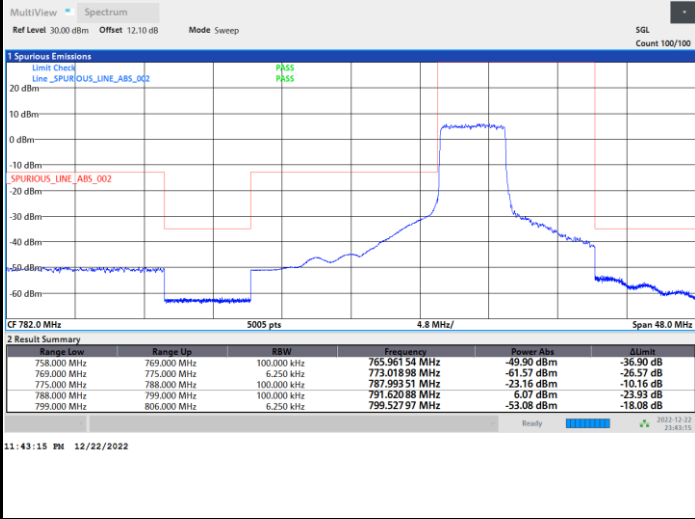




FR1 n14 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

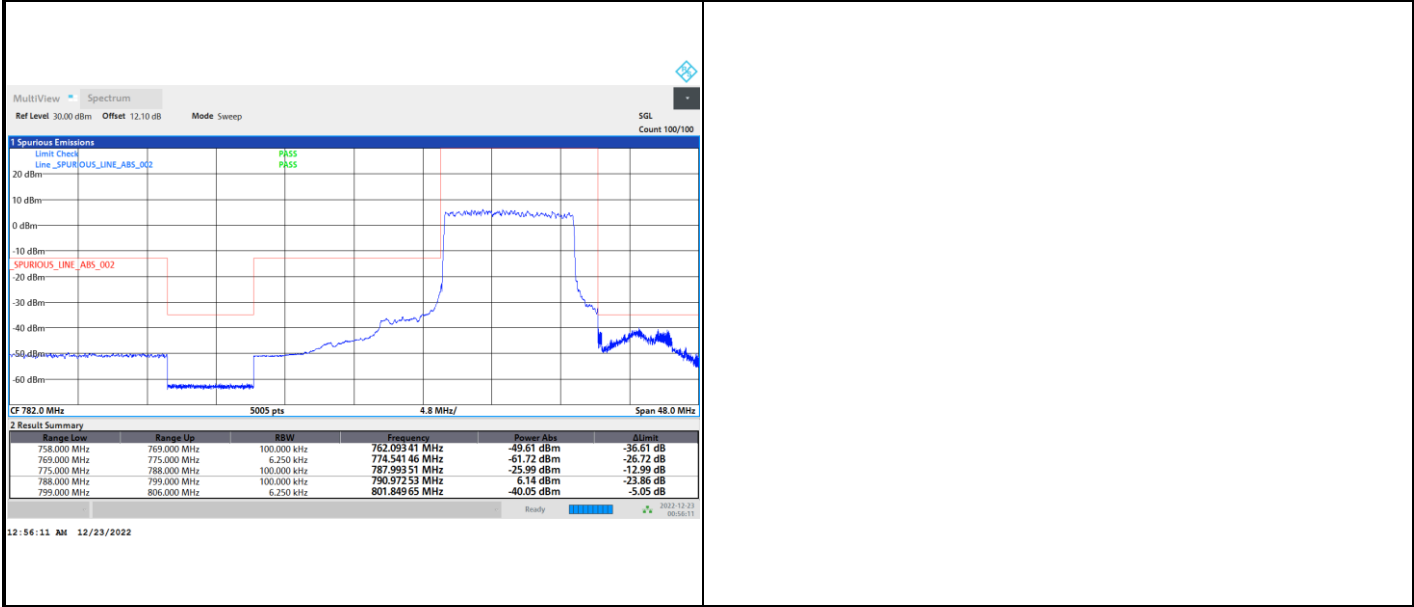
Highest Band Edge





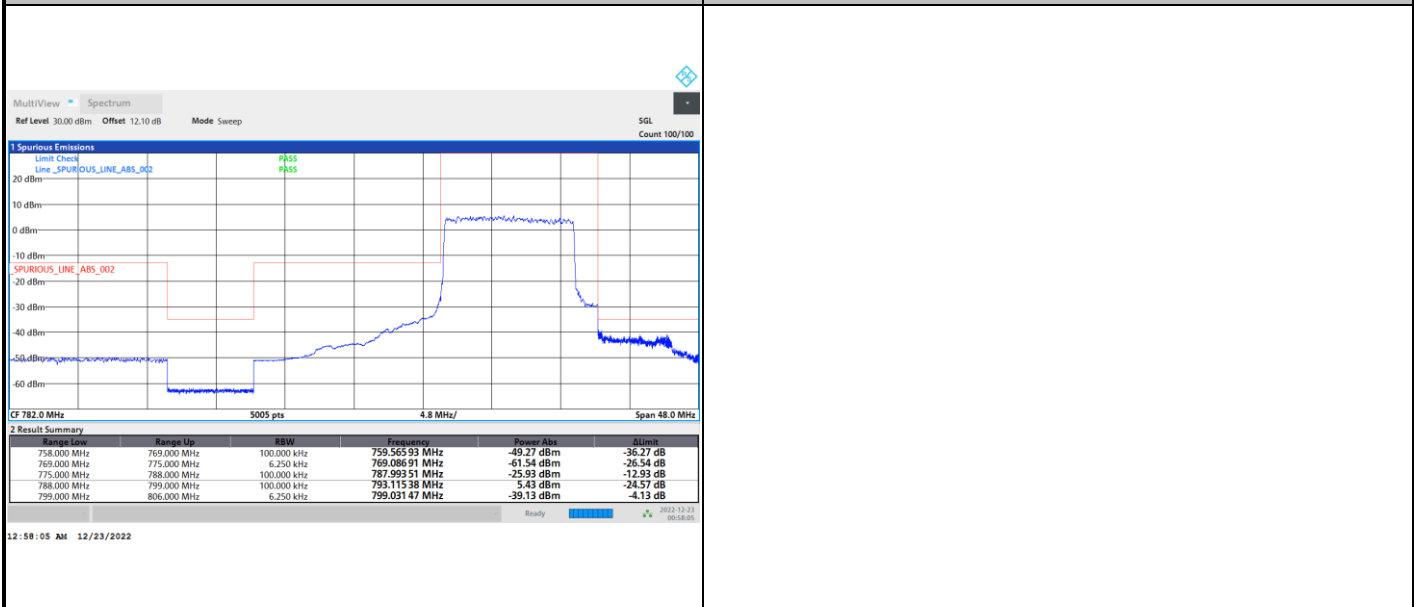
FR1 n14 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Middle Band Edge / Full RB



FR1 n14 / 10MHz / DFT-s-OFDM / QPSK

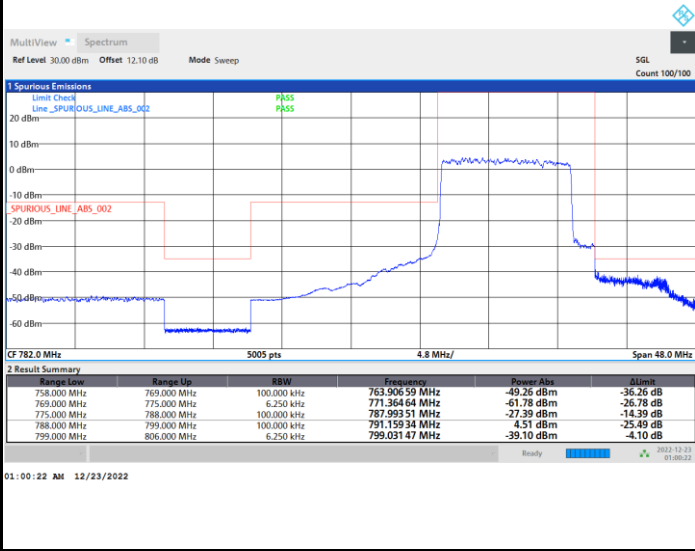
Middle Band Edge / Full RB





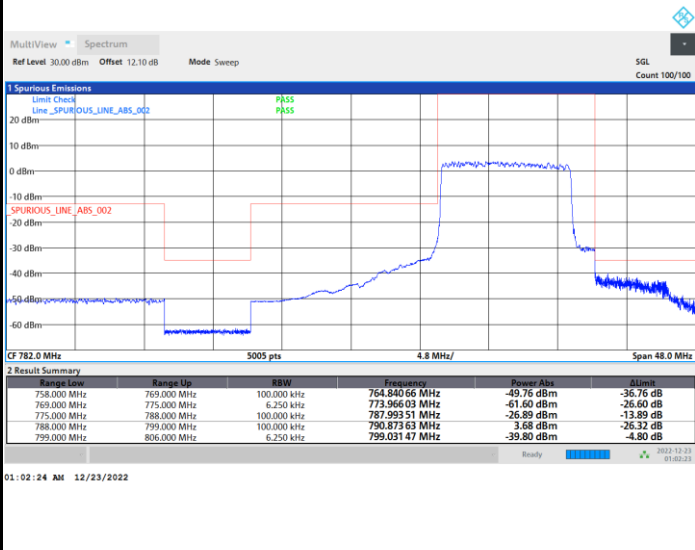
FR1 n14 / 10MHz / DFT-s-OFDM / 16QAM

Middle Band Edge / Full RB



FR1 n14 / 10MHz / DFT-s-OFDM / 64QAM

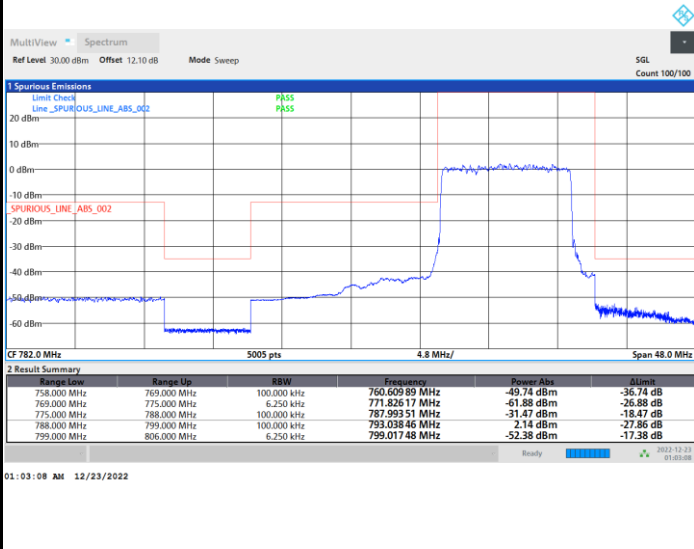
Middle Band Edge / Full RB





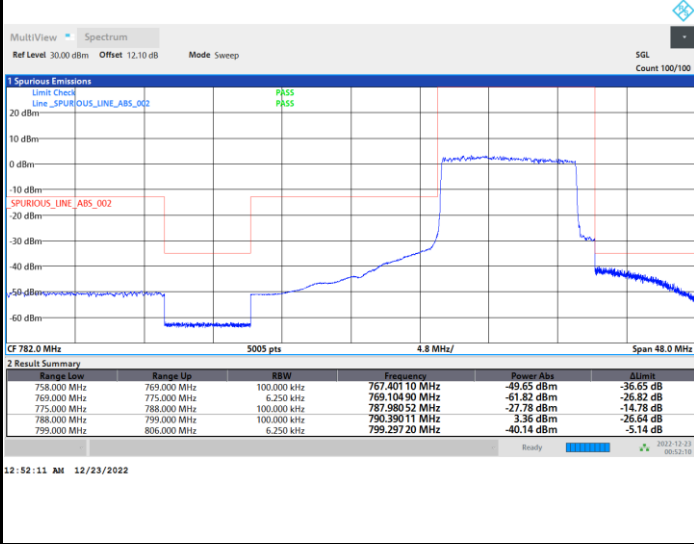
FR1 n14 / 10MHz / DFT-s-OFDM / 256QAM

Middle Band Edge / Full RB



FR1 n14 / 10MHz / CP OFDM / QPSK / Full RB

Middle Band Edge / Full RB





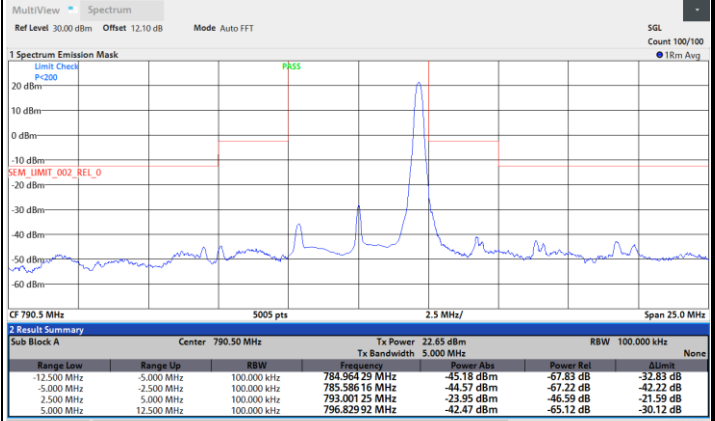
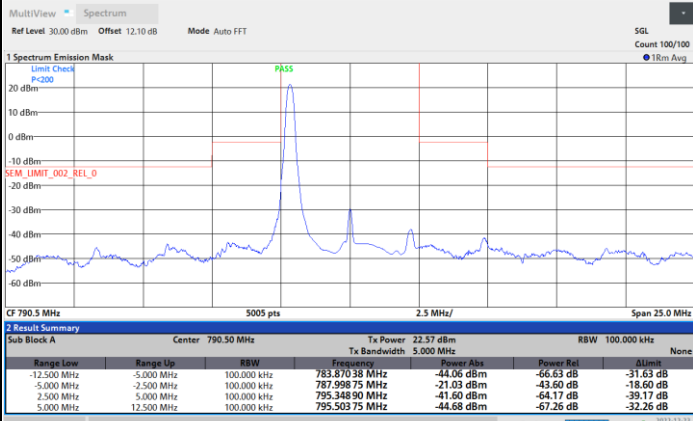
# Unwanted Emission (MASK)

FR1 n14 / 5MHz / DFT-S OFDM / PI/2 BPSK

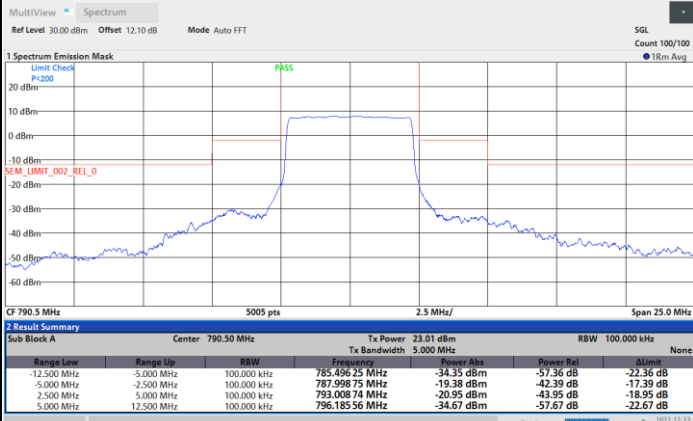
Lowest Channel

1RB0

1RBmax



Full RB



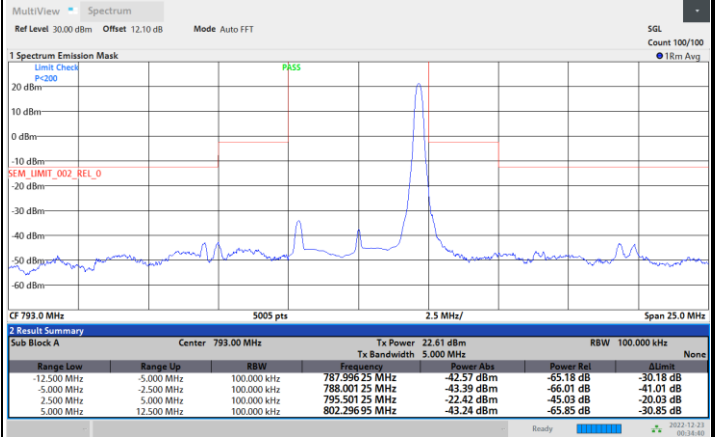
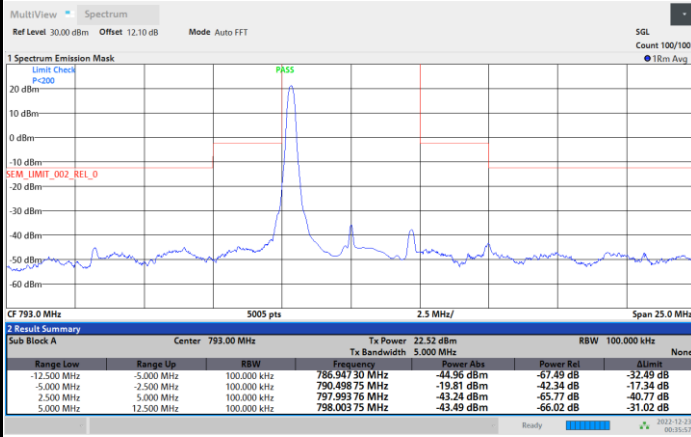


FR1 n14 / 5MHz / DFT-S OFDM / PI/2 BPSK

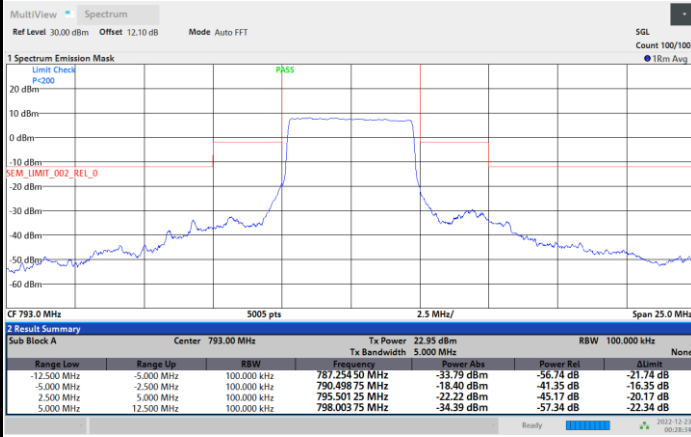
Middle Channel

1RB0

1RBmax



Full RB



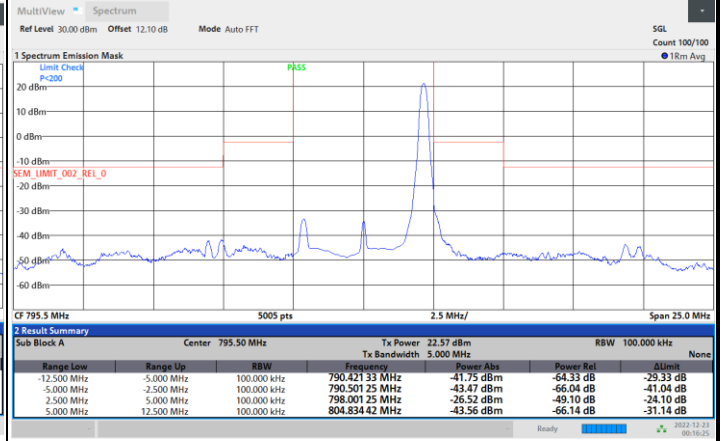
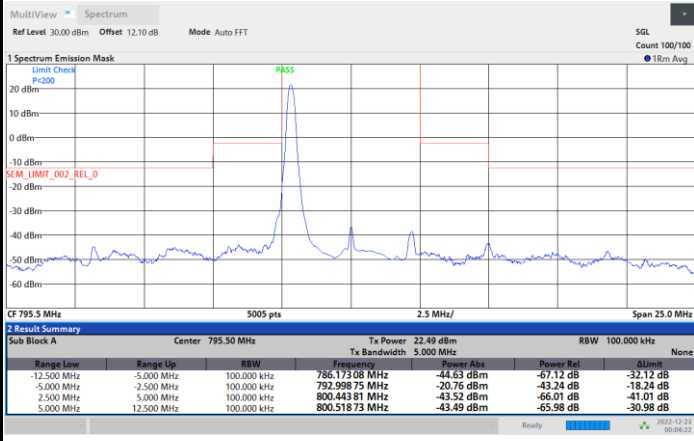


FR1 n14 / 5MHz / DFT-S OFDM / PI/2 BPSK

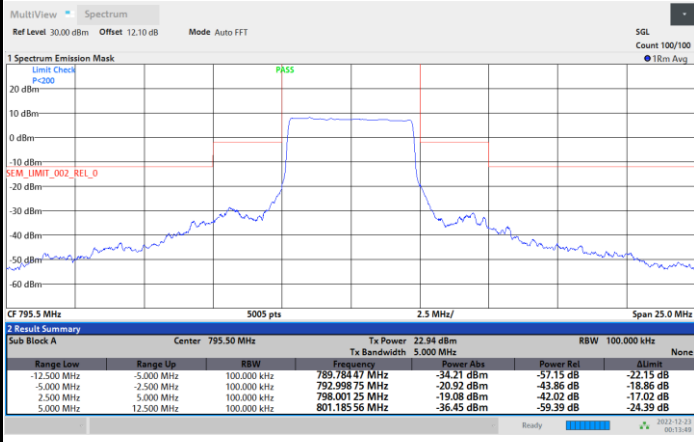
Highest Channel

1RB0

1RBmax



Full RB





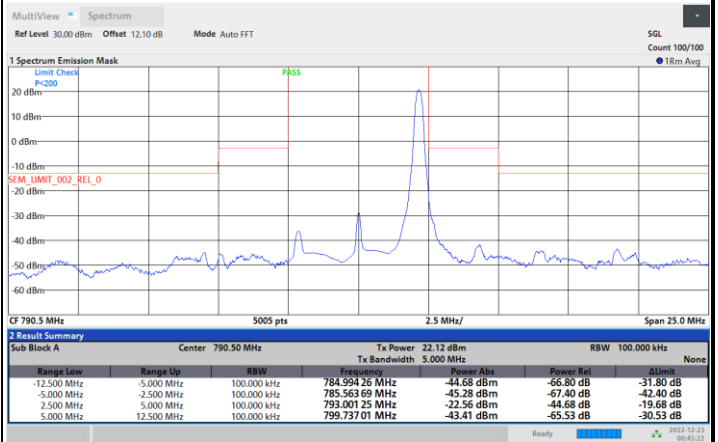
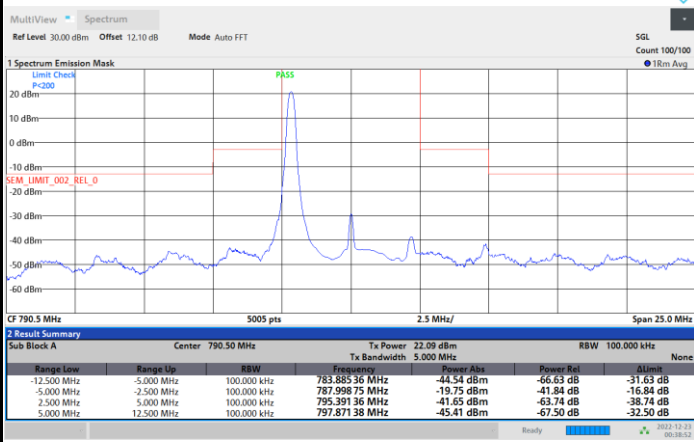


FR1 n14 / 5MHz / DFT-S OFDM / QPSK

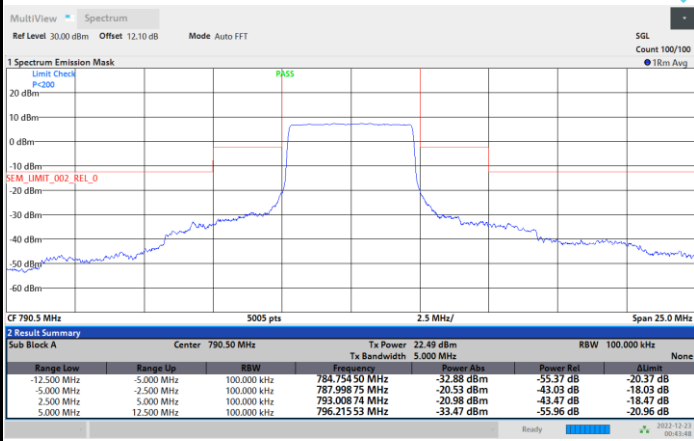
Lowest Channel

1RB0

1RBmax



Full RB



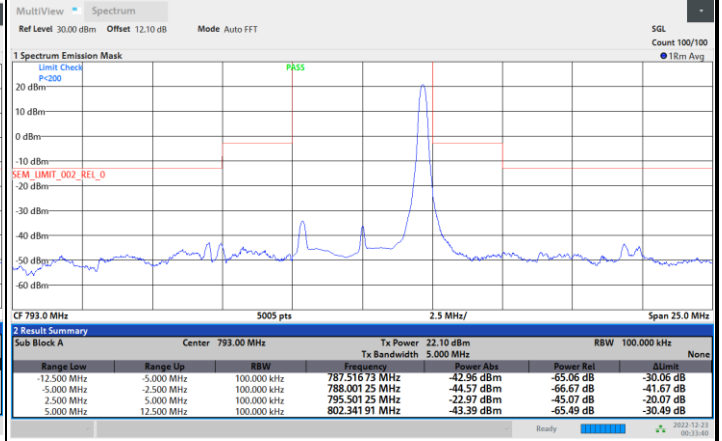
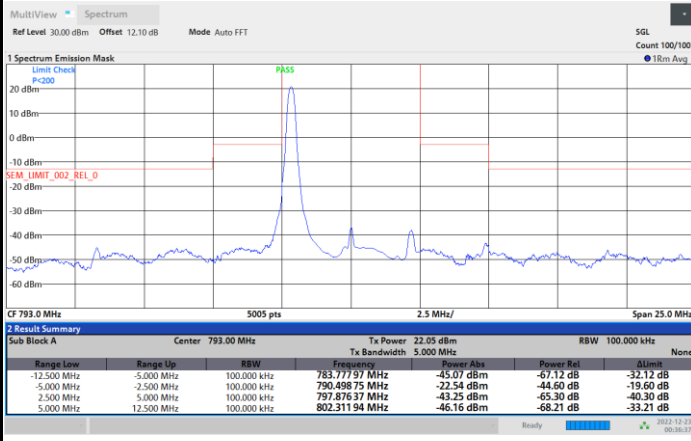


FR1 n14 / 5MHz / DFT-S OFDM / QPSK

Middle Channel

1RB0

1RBmax



Full RB

