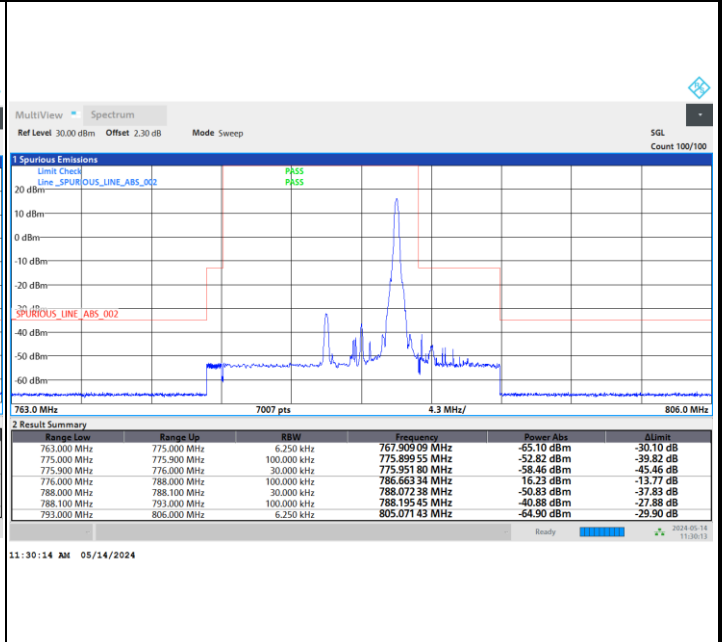
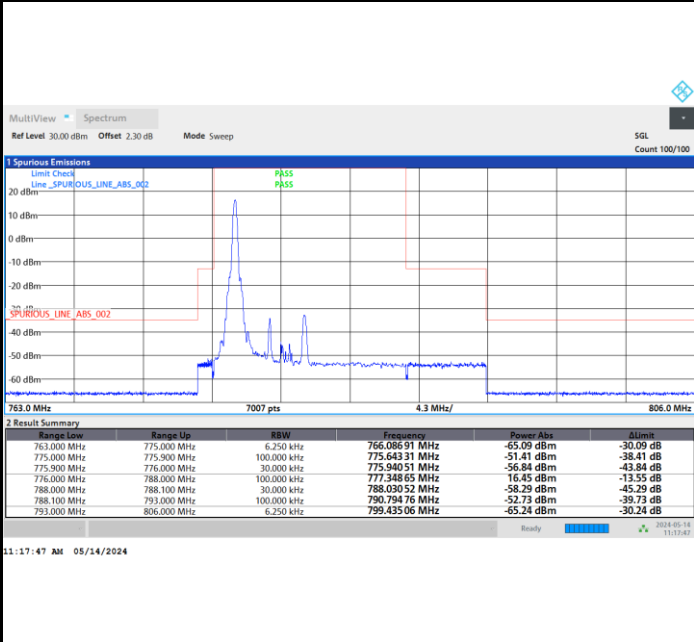




FR1 n13 / 5MHz / DFT-S OFDM / 256QAM

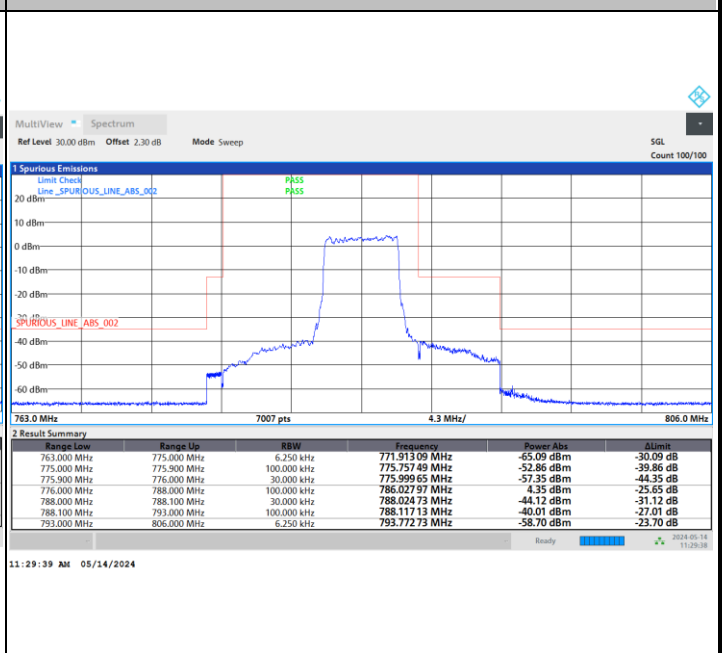
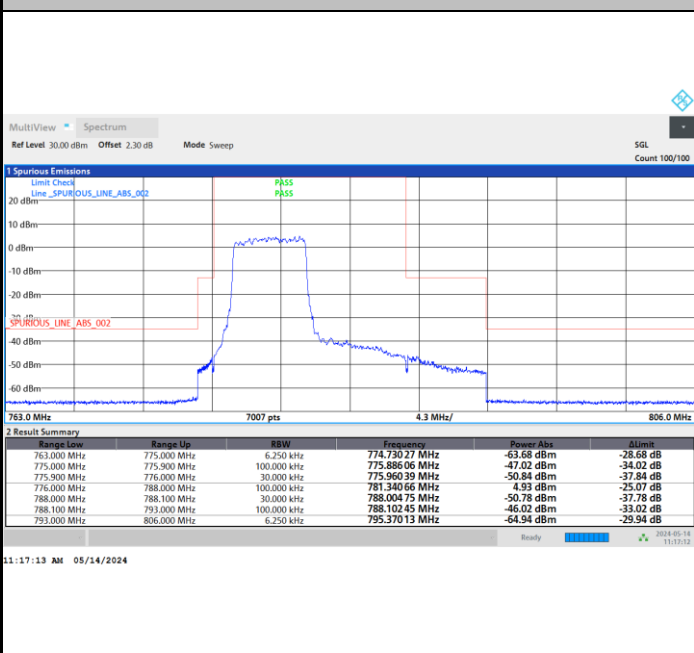
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

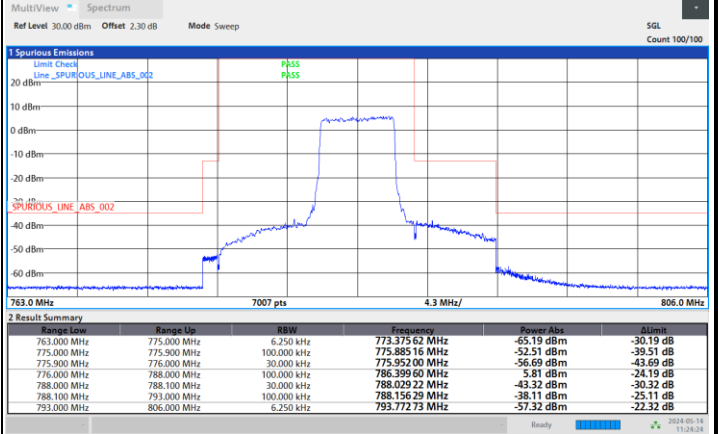
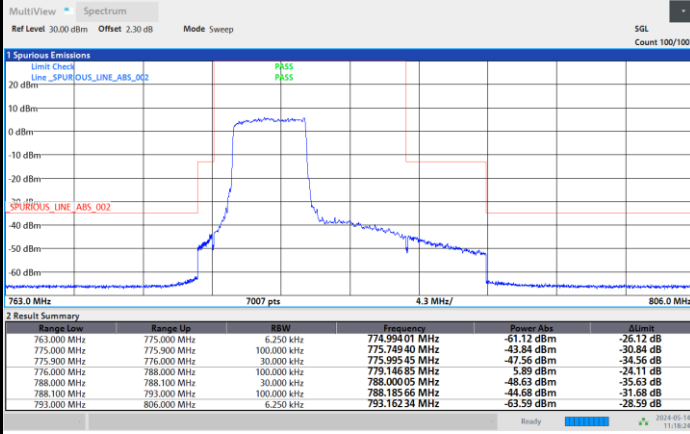




FR1 n13 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

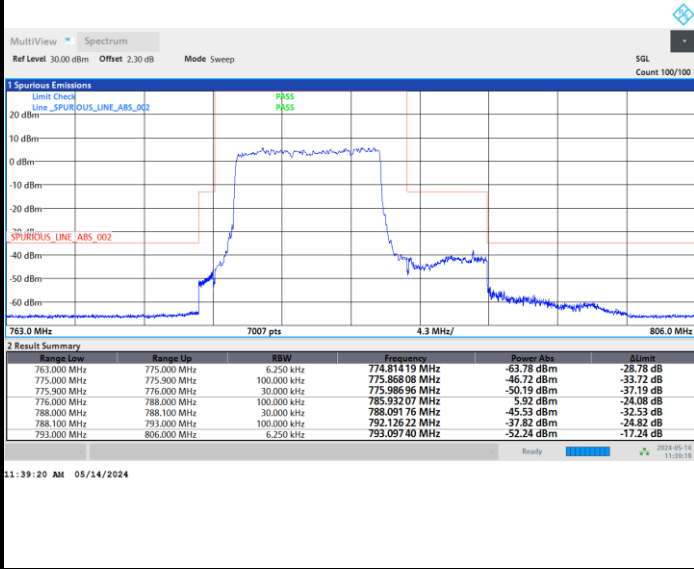
Highest Band Edge





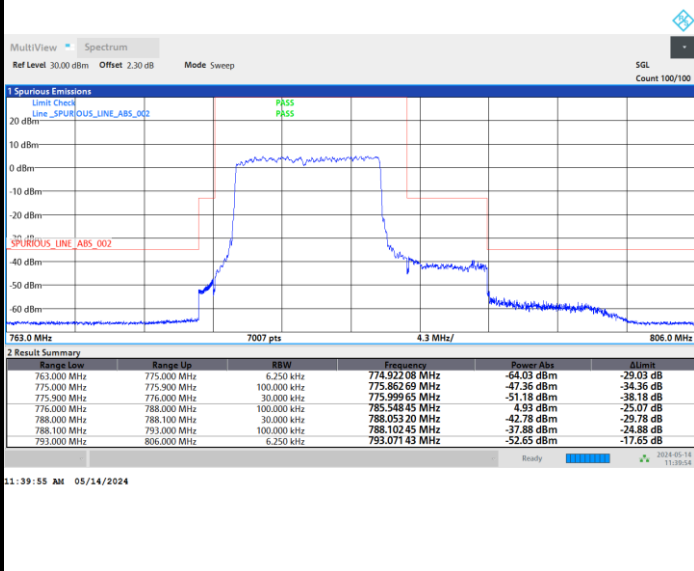
FR1 n13 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Middle Band Edge / Full RB



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

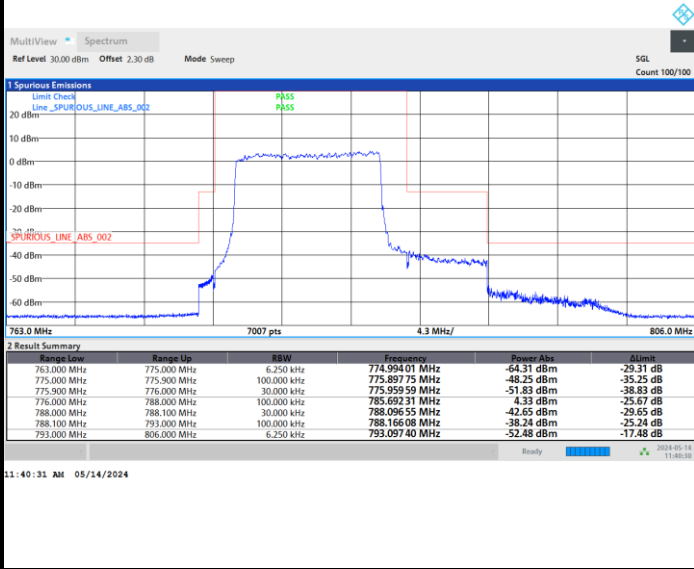
Middle Band Edge / Full RB





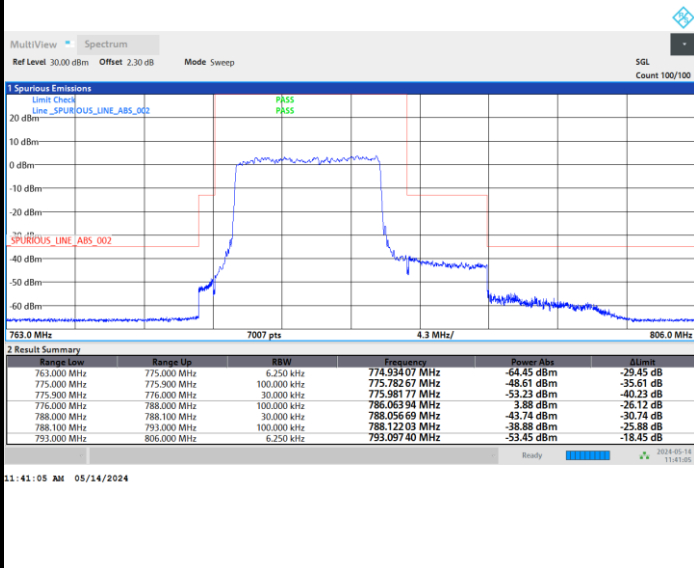
FR1 n13 / 10MHz / DFT-s-OFDM / 16QAM

Middle Band Edge / Full RB



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

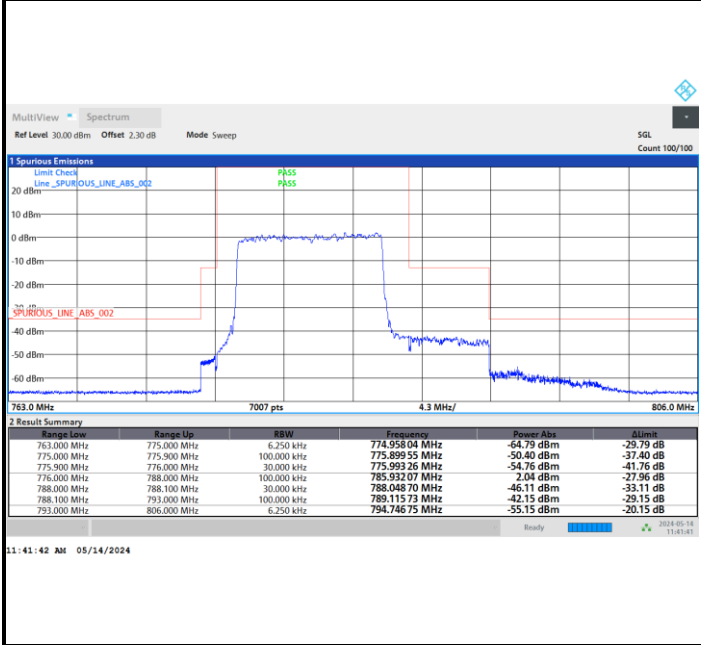
Middle Band Edge / Full RB





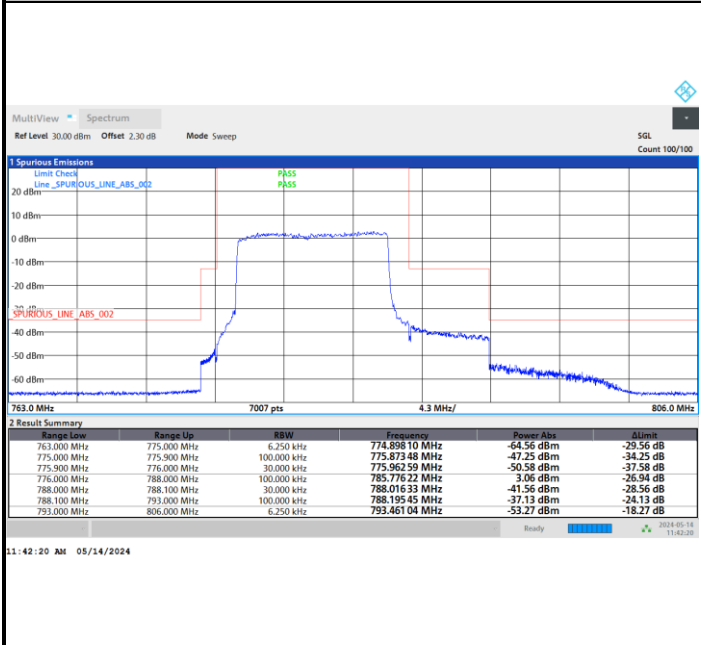
FR1 n13 / 10MHz / DFT-s-OFDM / 256QAM

Middle Band Edge / Full RB



FR1 n13 / 10MHz / CP OFDM / QPSK / Full RB

Middle Band Edge / Full RB





# Conducted Spurious Emission

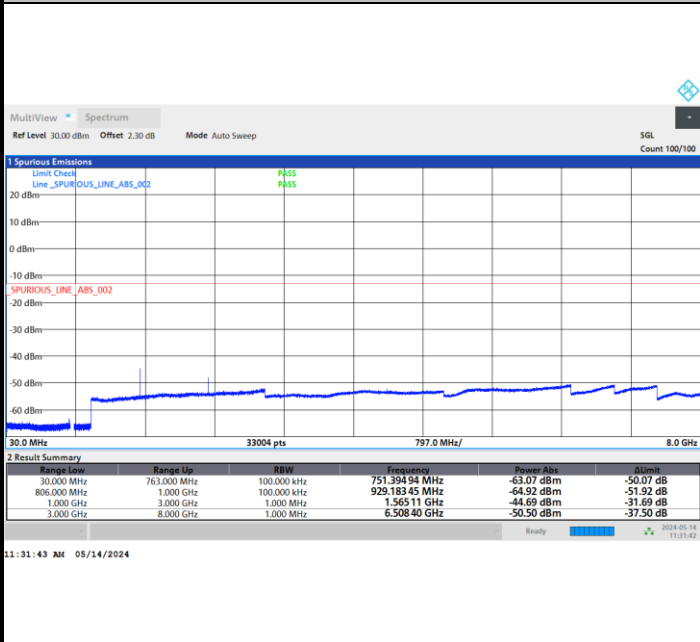
FR1 n13 / 5MHz / DFT-S OFDM / QPSK / 1RB1

## Lowest Channel

## Middle Channel



## Highest Channel





### Frequency Stability

Test Conditions		FR1 n13 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0017	PASS
40	Normal Voltage	0.0013	
30	Normal Voltage	0.0027	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0027	
0	Normal Voltage	0.0034	
-10	Normal Voltage	0.0003	
-20	Normal Voltage	0.0011	
20	Maximum Voltage	0.0013	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0013	

**Note:**

- 1. Normal Voltage = 3.86 V. ; Battery End Point (BEP) = 3.5 V. ; Maximum Voltage = 4.4 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



# FR1 n14

## Peak-to-Average Ratio

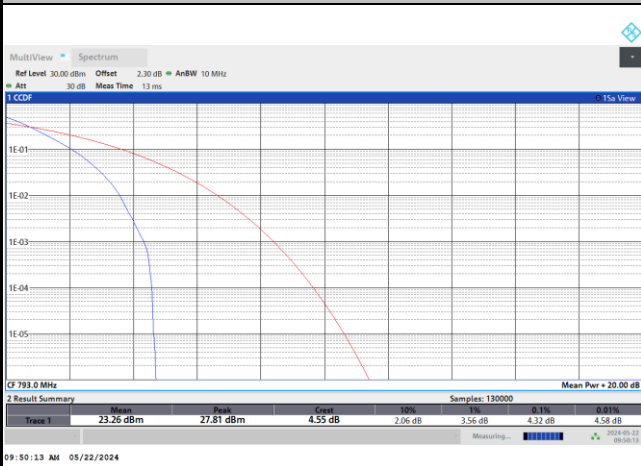
Mode	FR1 n14 / 10MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.32	5.04	6.14	6.28	PASS
Mode	FR1 n14 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.64				PASS



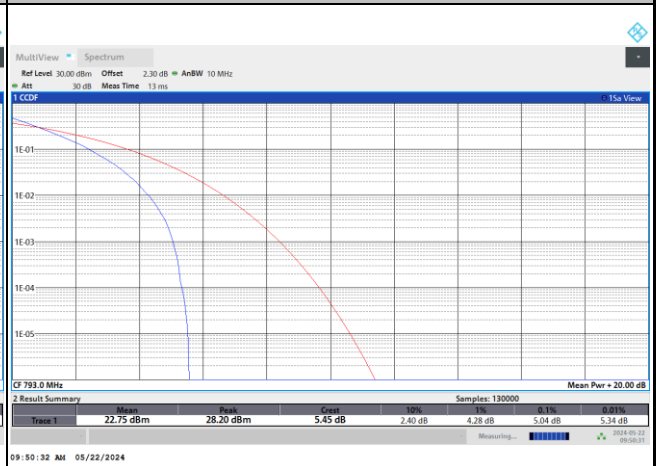


FR1 n14 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

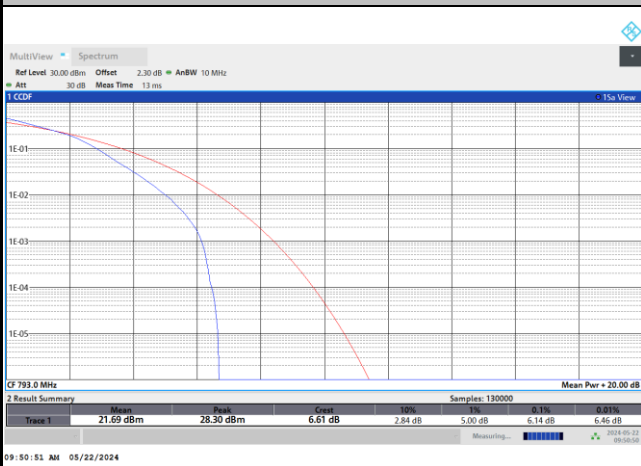
PI/2 BPSK



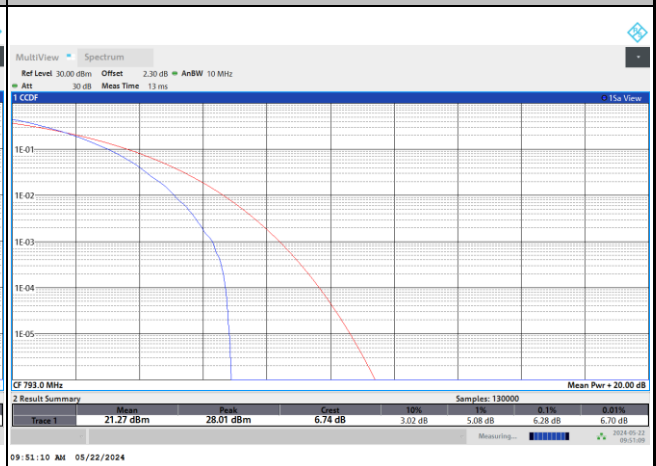
QPSK



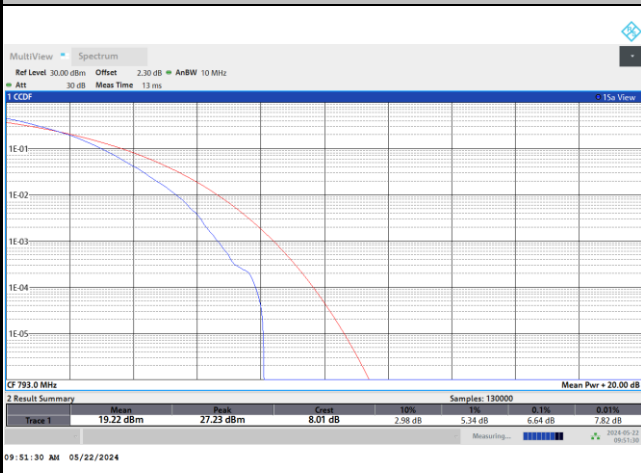
16QAM



64QAM



256QAM





**26dB Bandwidth**

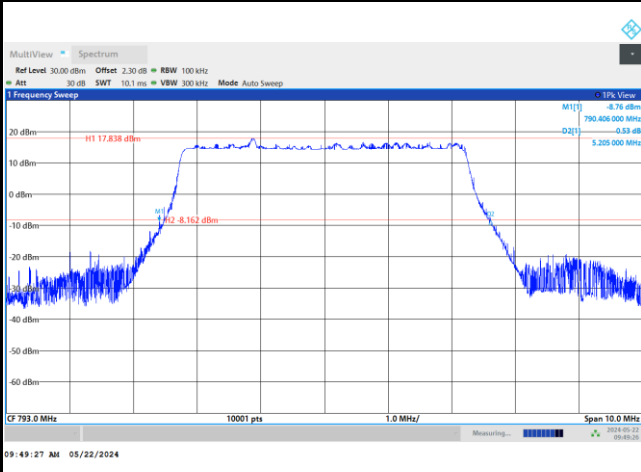
Mode	FR1 n14 : 26dB BW(MHz) / DFT-S OFDM						
BW	5MHz		10MHz				
Mod.	PI/2 BPSK		PI/2 BPSK				
Middle CH	5.20		9.82				

Mode	FR1 n14 : 26dB BW(MHz) / CP OFDM						
BW	5MHz		10MHz				
Mod.	QPSK	16QAM	QPSK	16QAM			
Middle CH	5.34	5.33	10.38	10.32			
Mod.	64QAM	256QAM	64QAM	256QAM			
Middle CH	5.22	5.31	10.26	10.32			



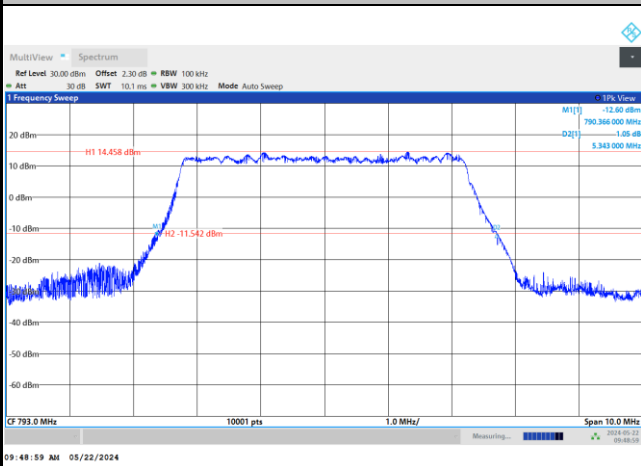
FR1 n14 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

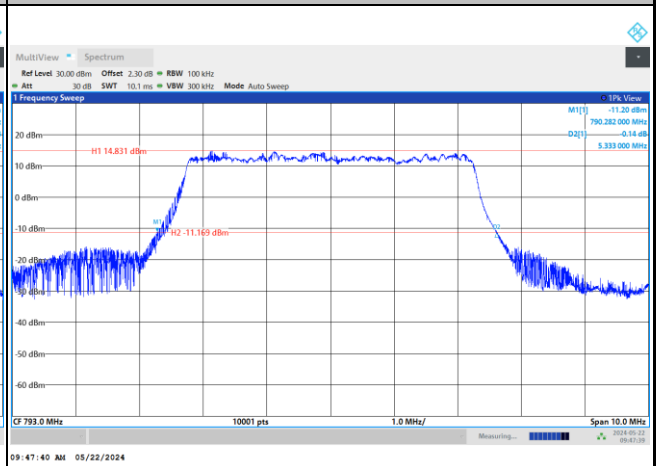


FR1 n14 / 5MHz / CP OFDM / Middle Channel / Full RB

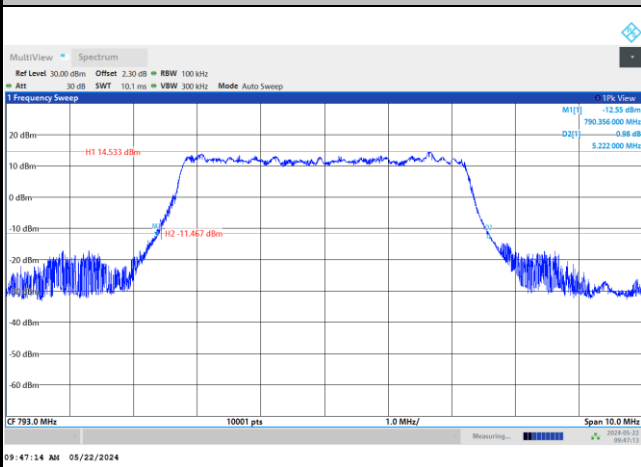
QPSK



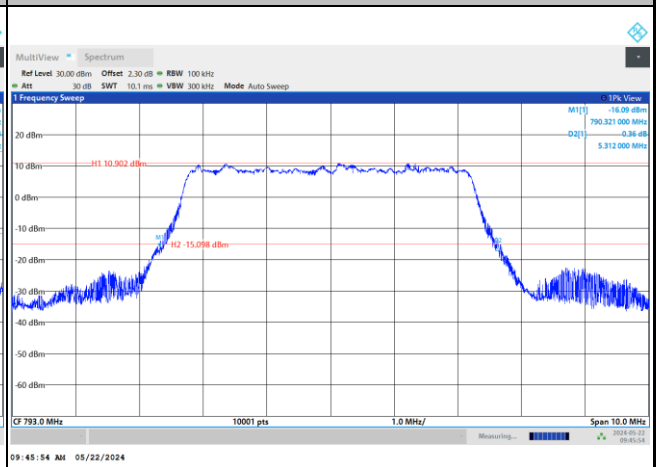
16QAM



64QAM



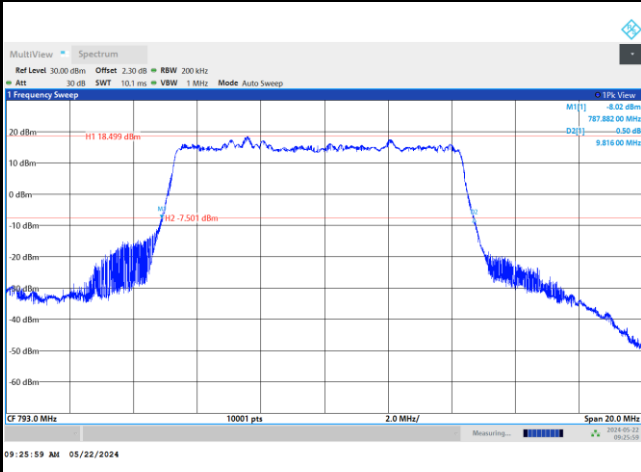
256QAM





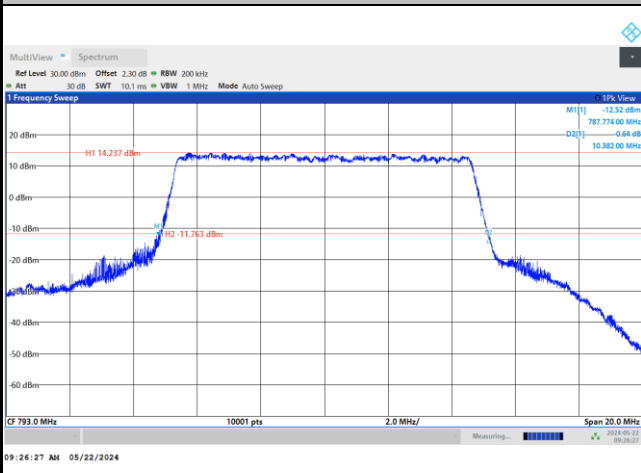
FR1 n14 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

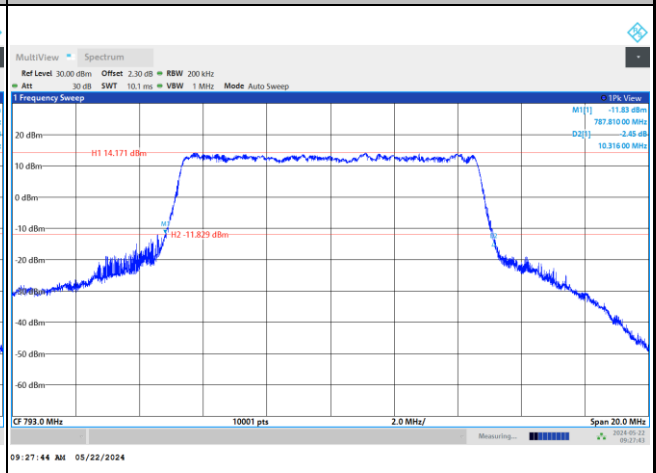


FR1 n14 / 10MHz / CP OFDM / Middle Channel / Full RB

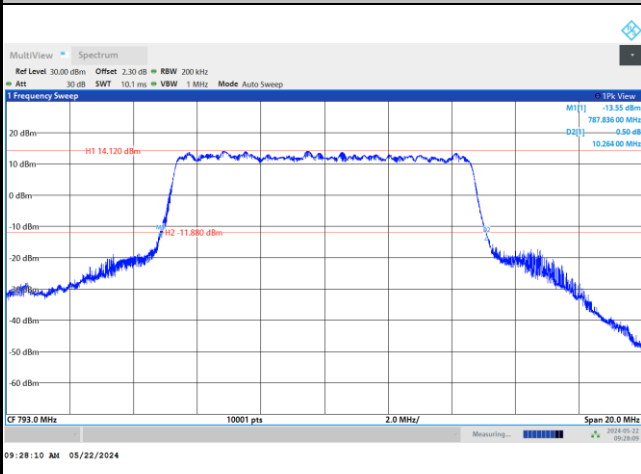
QPSK



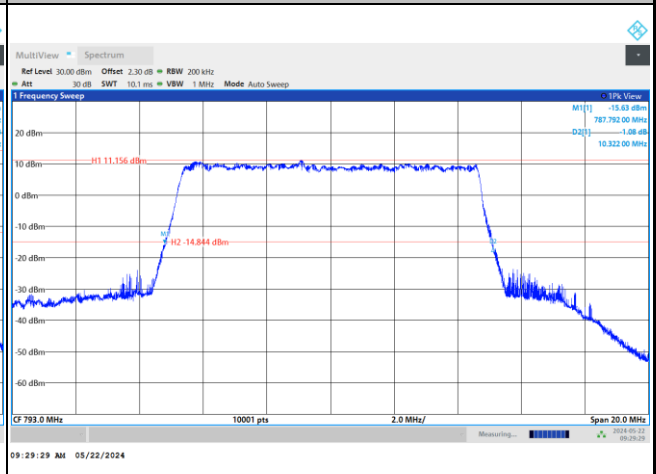
16QAM



64QAM



256QAM





Occupied Bandwidth

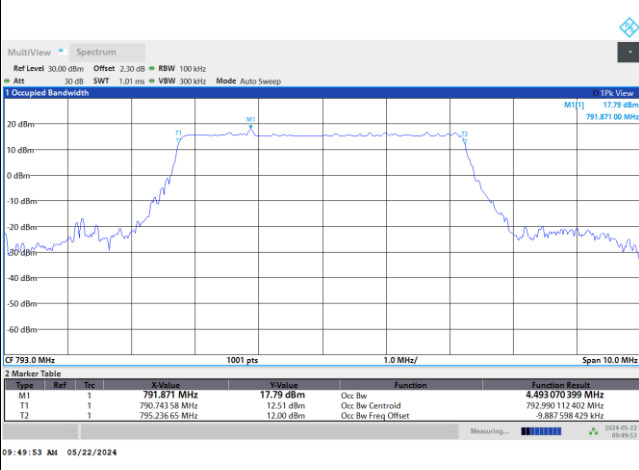
Mode	FR1 n14 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz					
Mod.	PI/2 BPSK		PI/2 BPSK					
Middle CH	4.49		8.97					

Mode	FR1 n14 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM				
Middle CH	4.53	4.55	9.34	9.33				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	4.52	4.53	9.31	9.36				



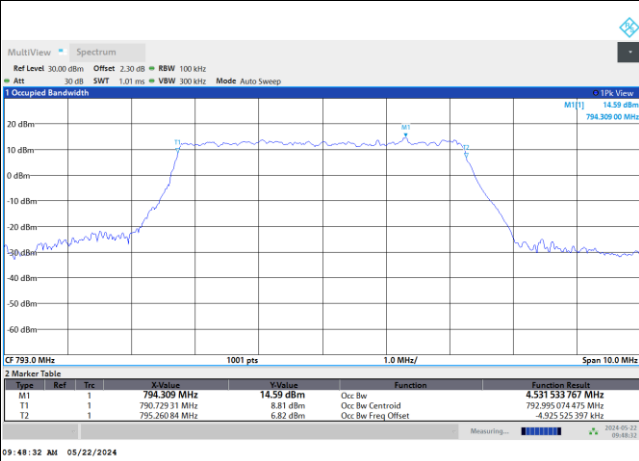
FR1 n14 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

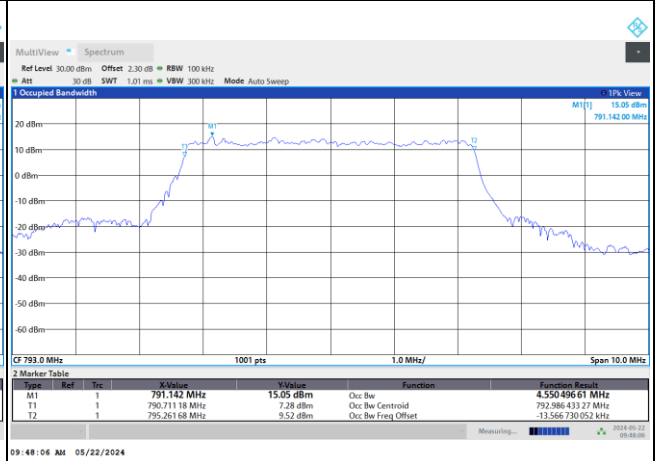


FR1 n14 / 5MHz / CP OFDM / Middle Channel / Full RB

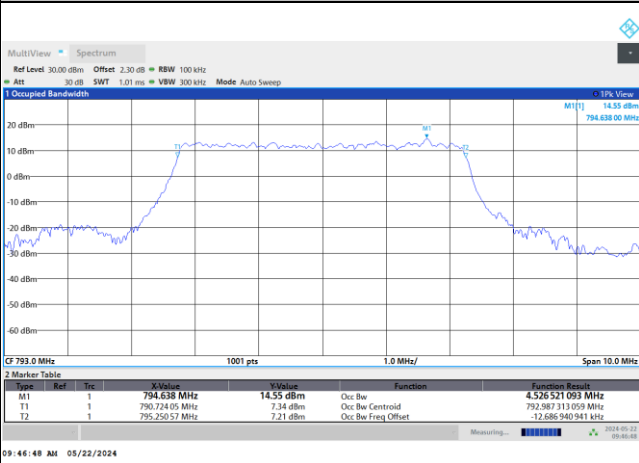
QPSK



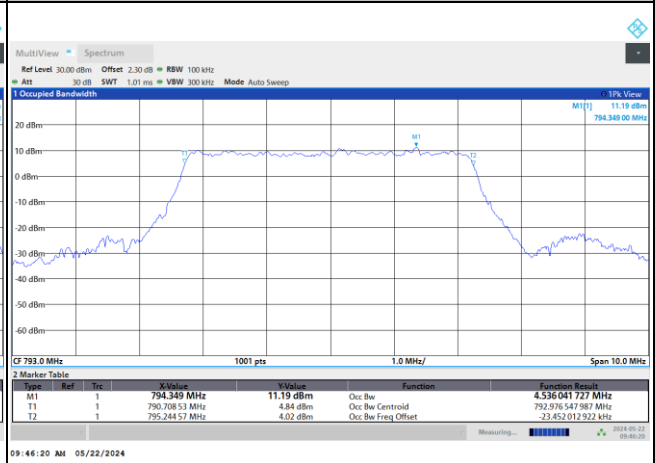
16QAM



64QAM



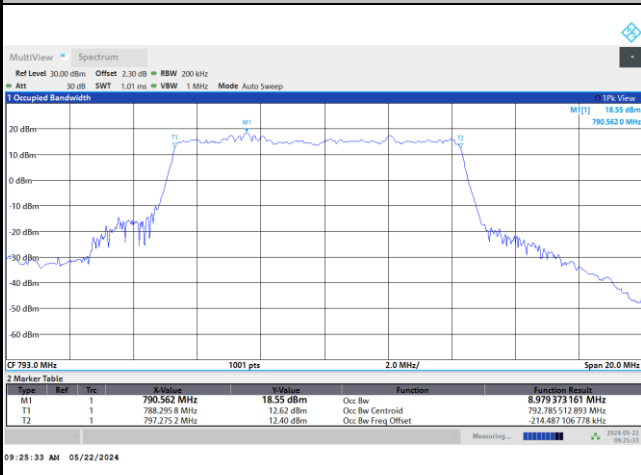
256QAM





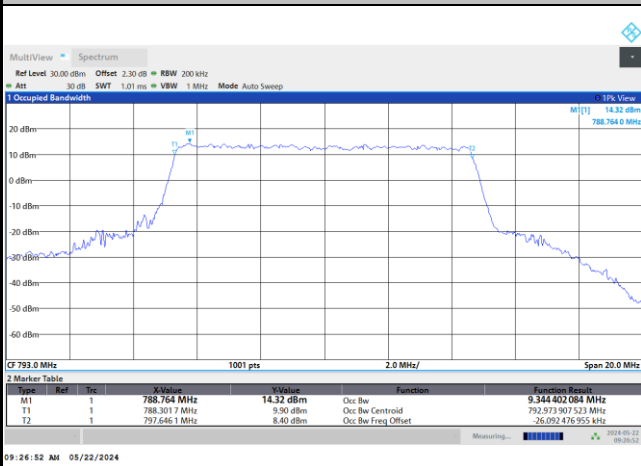
FR1 n14 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

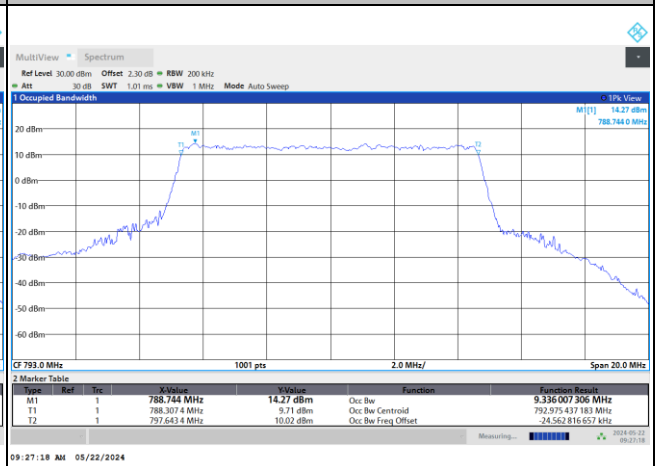


FR1 n14 / 10MHz / CP OFDM / Middle Channel / Full RB

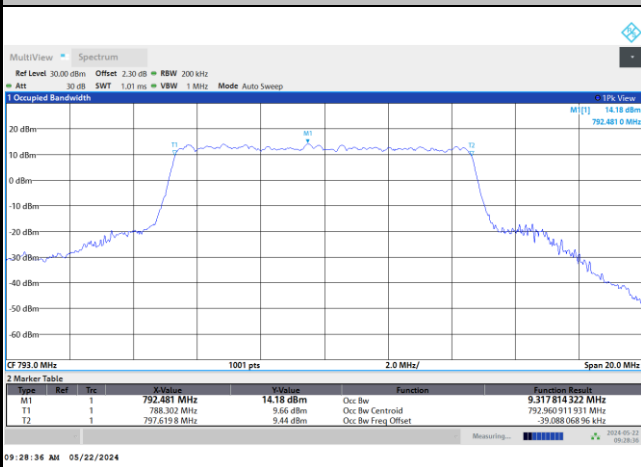
QPSK



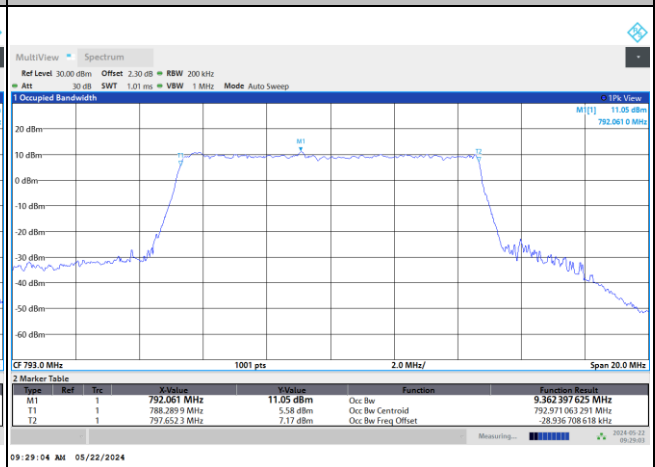
16QAM



64QAM



256QAM



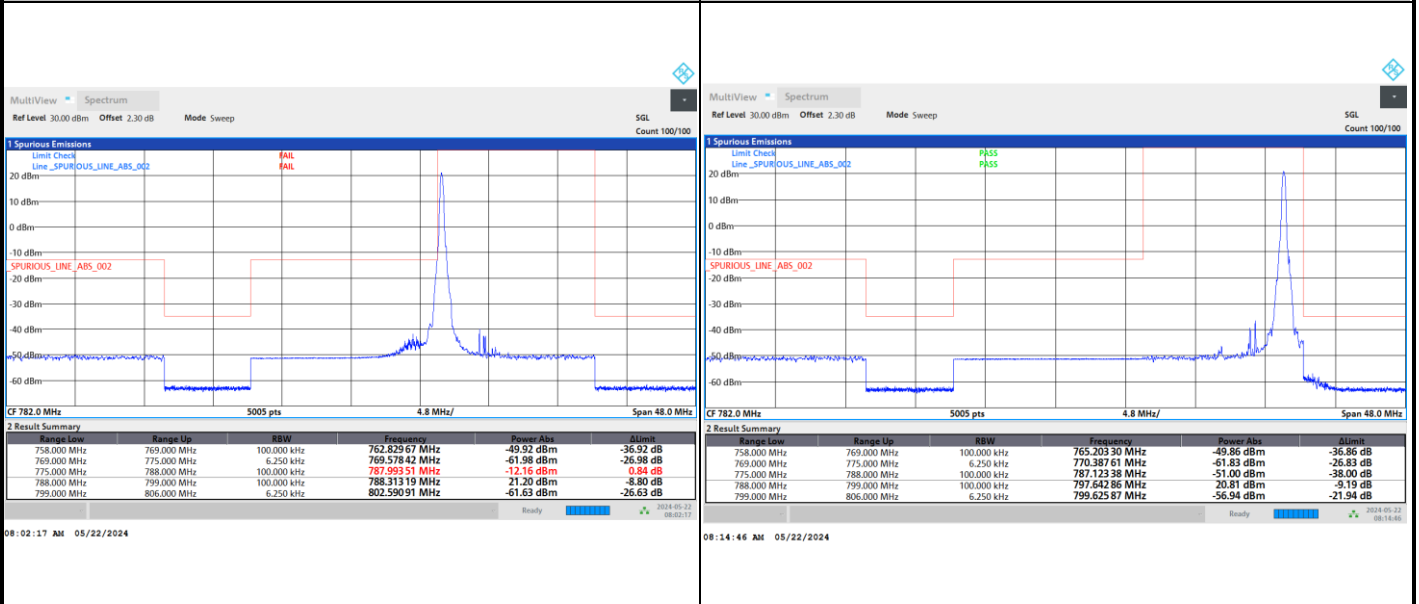


# Conducted Band Edge

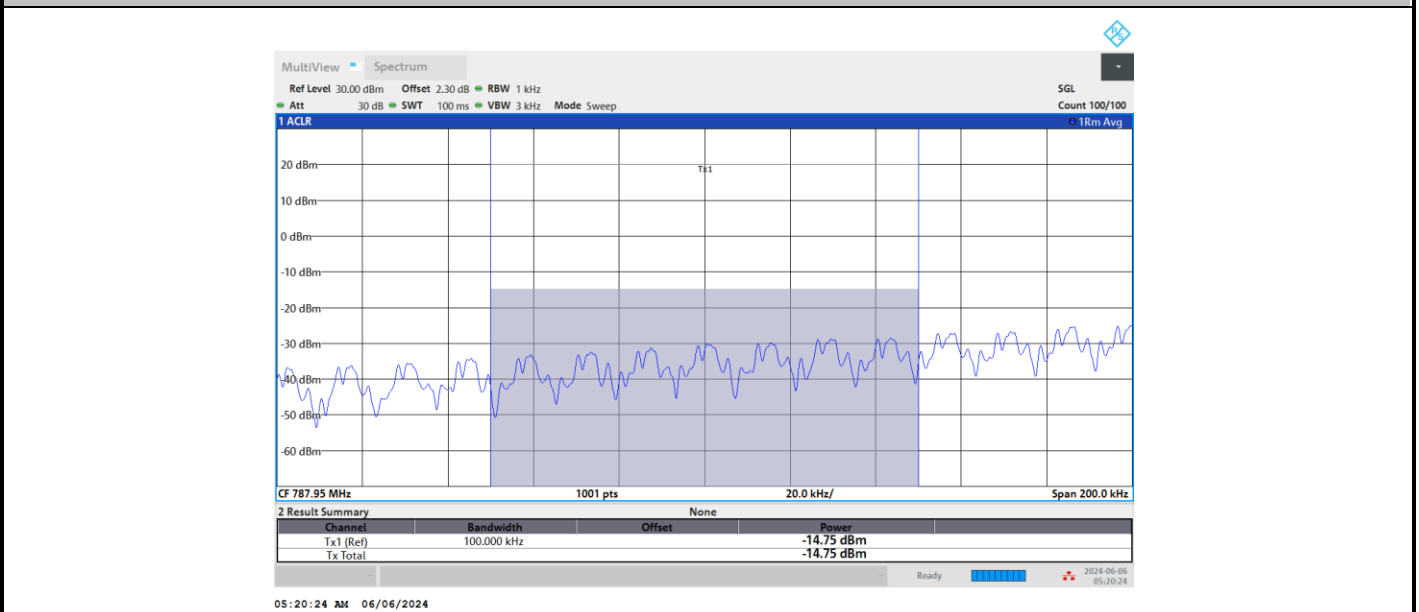
FR1 n14 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / 1RB0

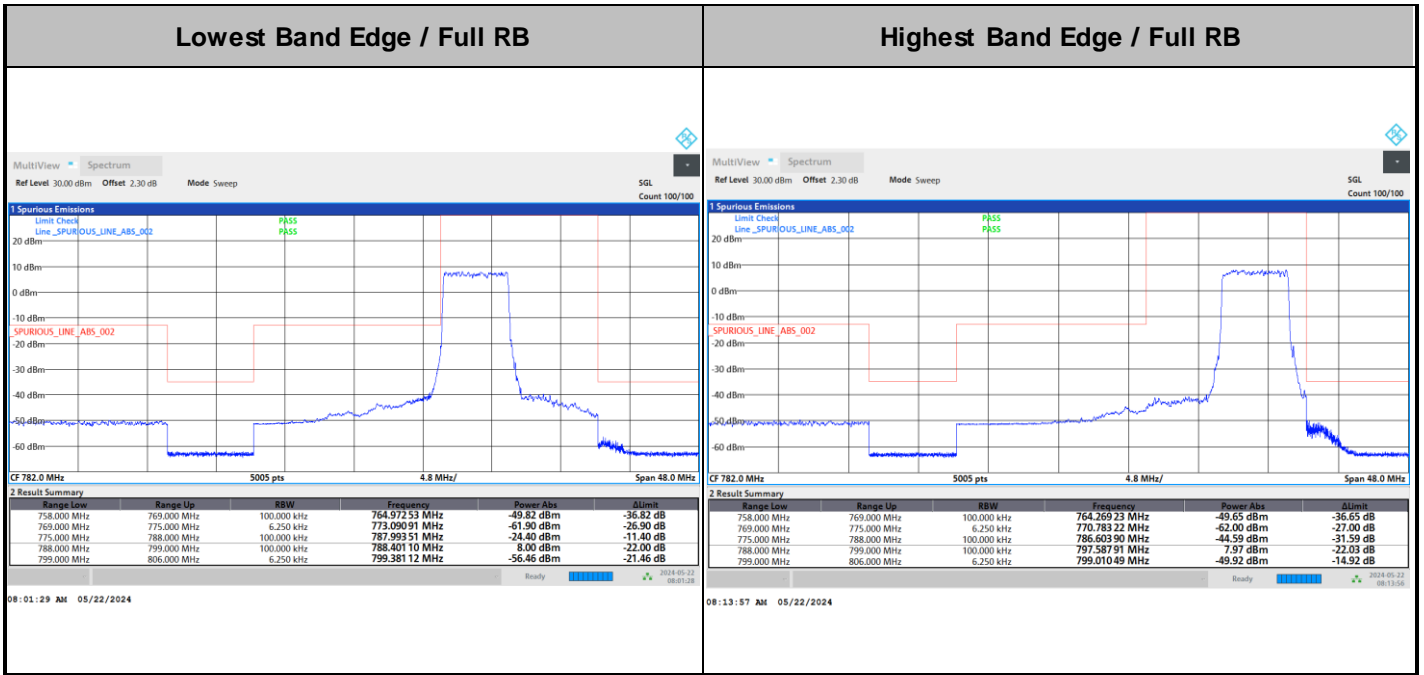
Highest Band Edge / 1RBmax



n14\_BE\_5M\_CH158100\_15k\_DFT\_1#0\_BPSK\_L\_CH\_Under\_1.75





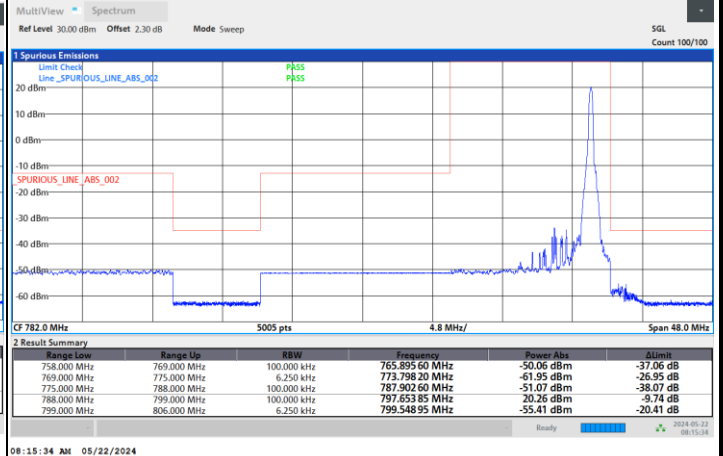
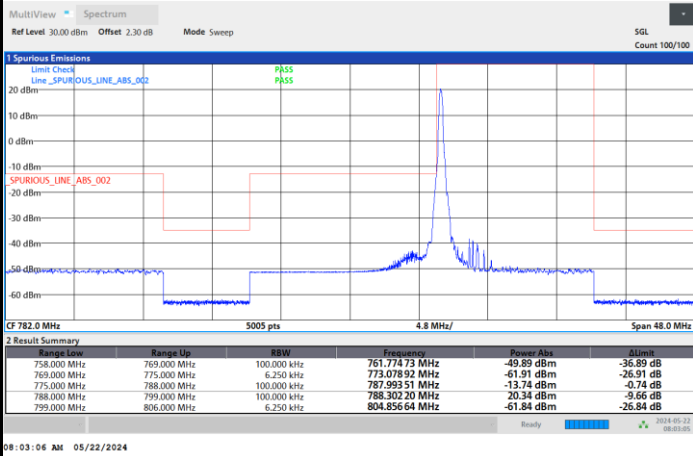




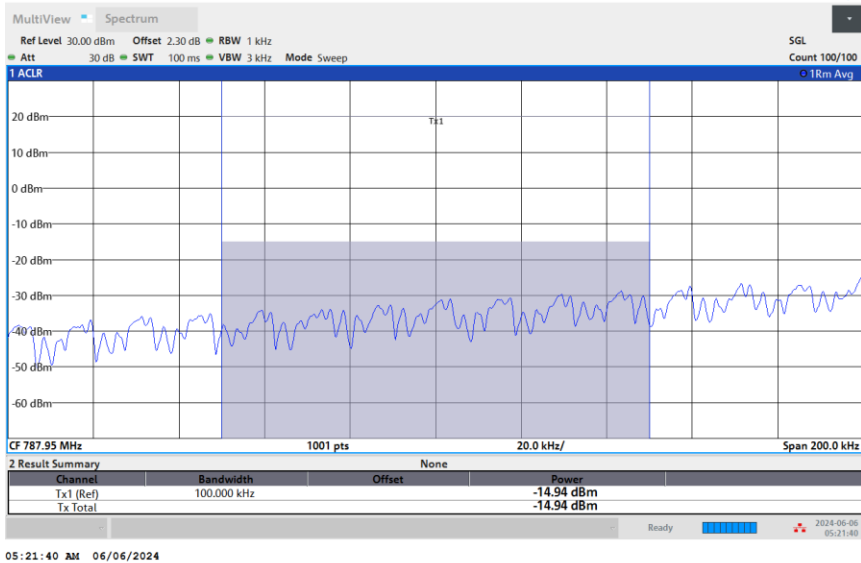
FR1 n14 / 5MHz / DFT-S OFDM / QPSK

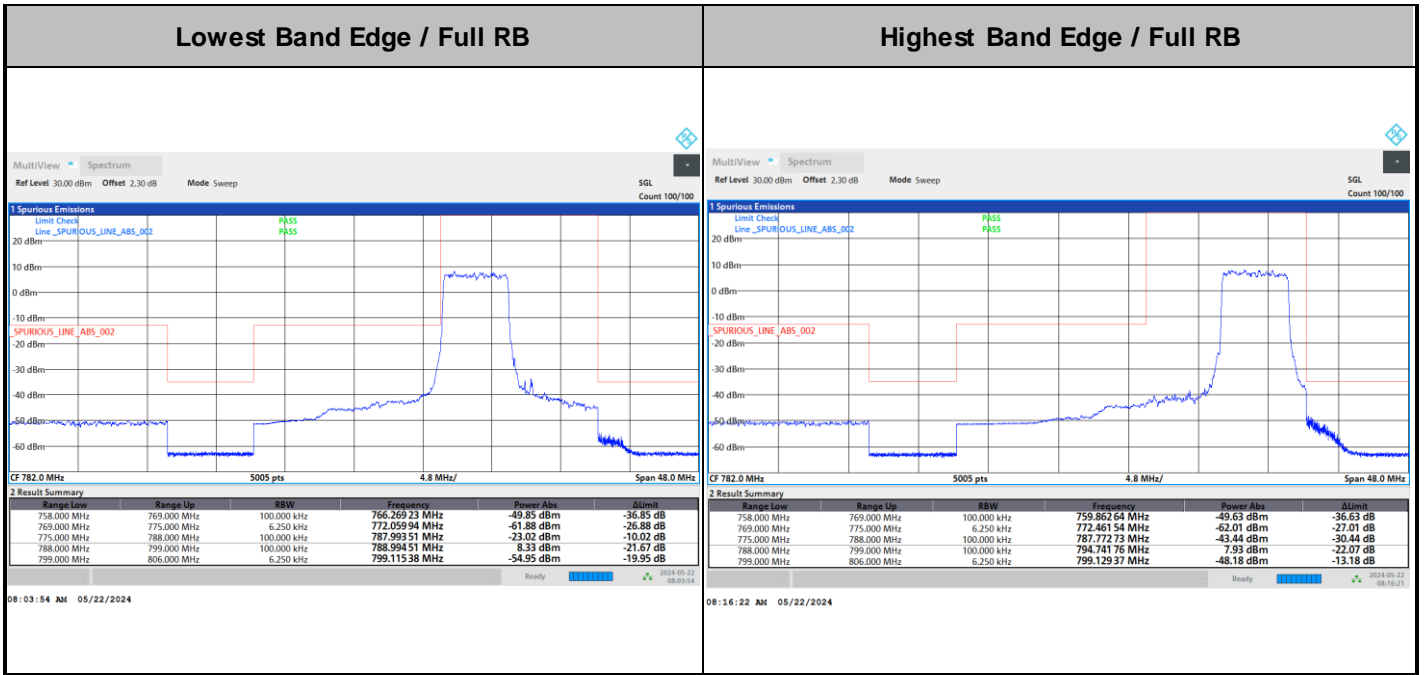
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



n14\_BE\_5M\_CH158100\_15k\_DFT\_1#0\_QPSK\_L\_CH\_Under\_1.94



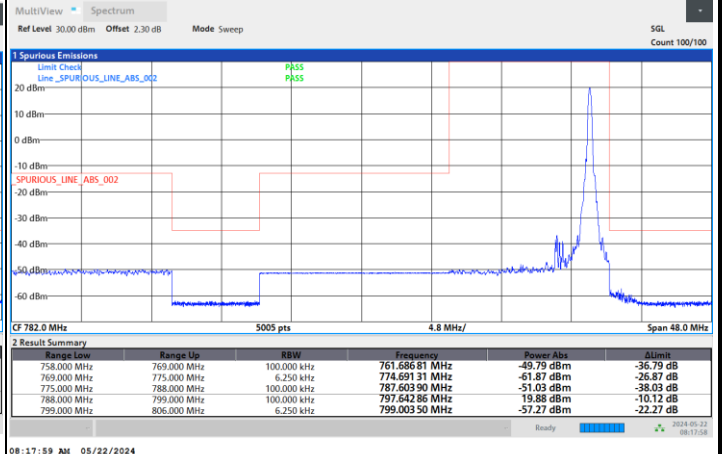
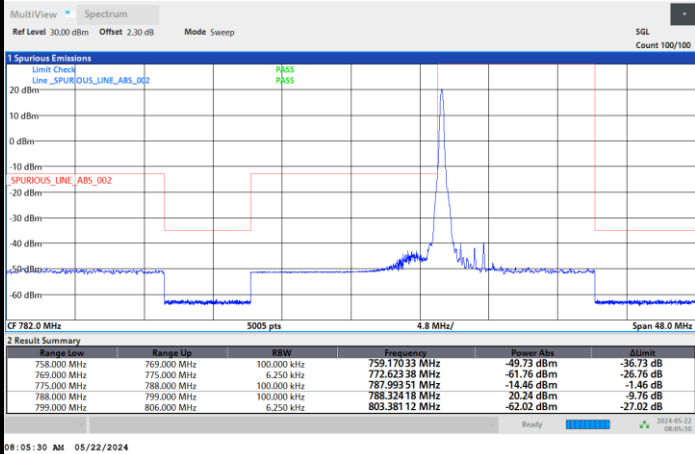




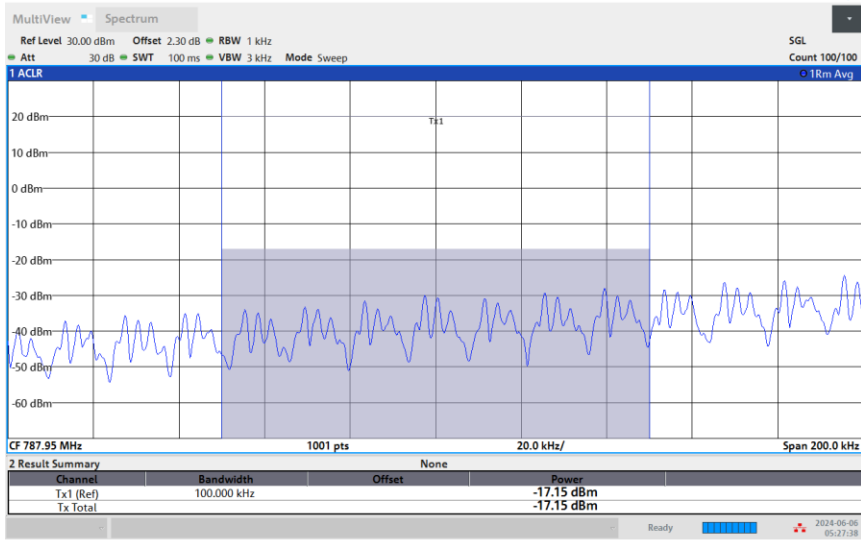
FR1 n14 / 5MHz / DFT-S OFDM / 16QAM

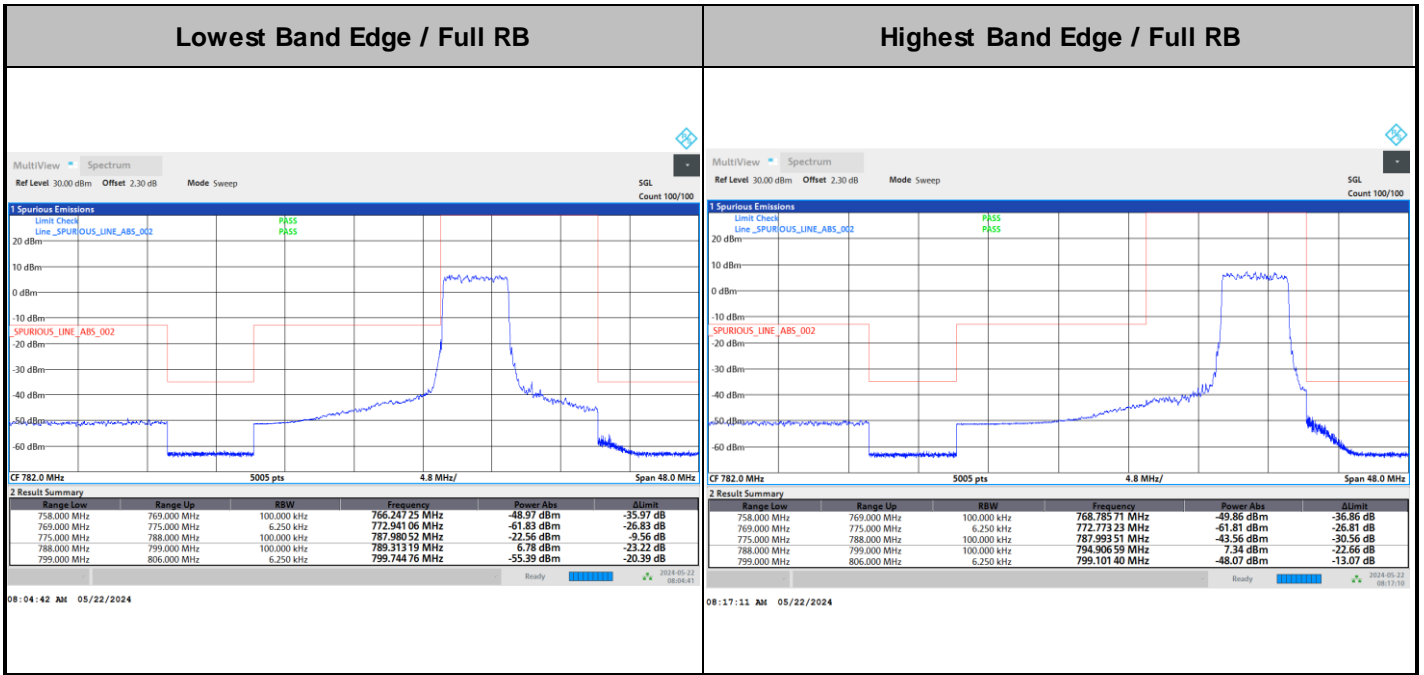
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



n14\_BE\_5M\_CH158100\_15k\_DFT\_1#0\_16QAM\_L\_CH\_Under 4.15



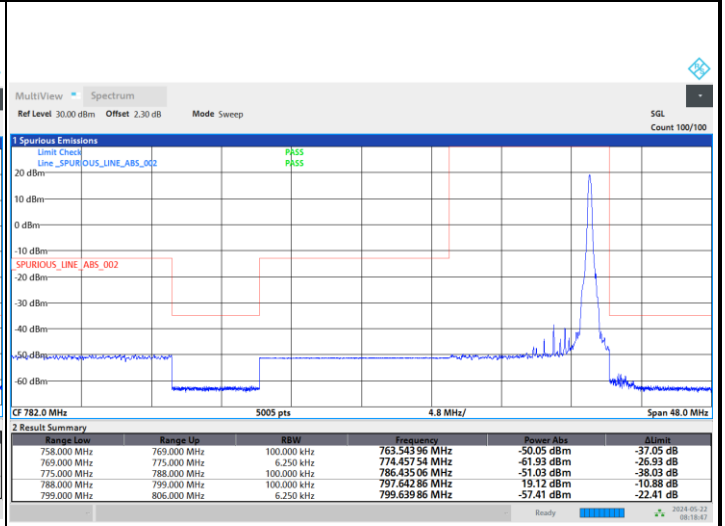
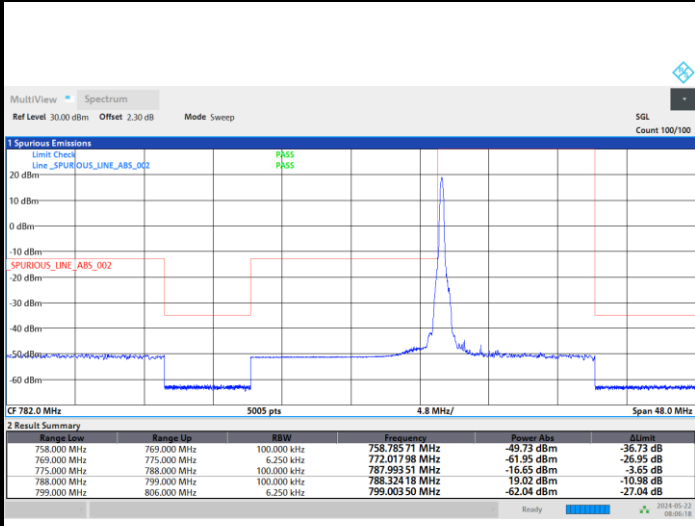




FR1 n14 / 5MHz / DFT-S OFDM / 64QAM

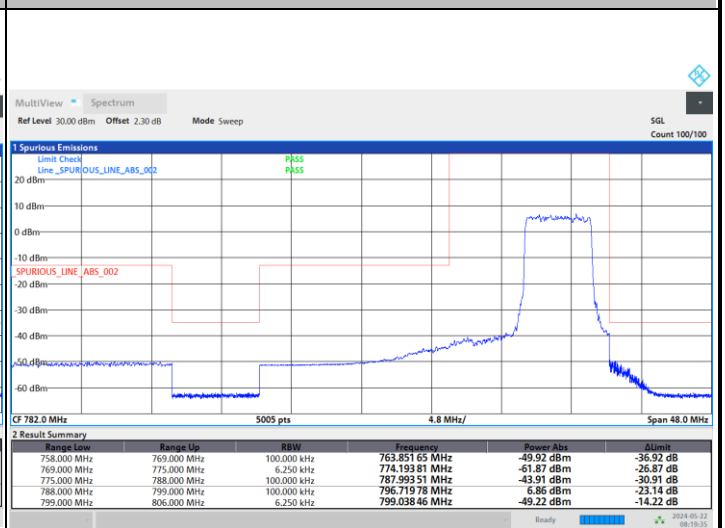
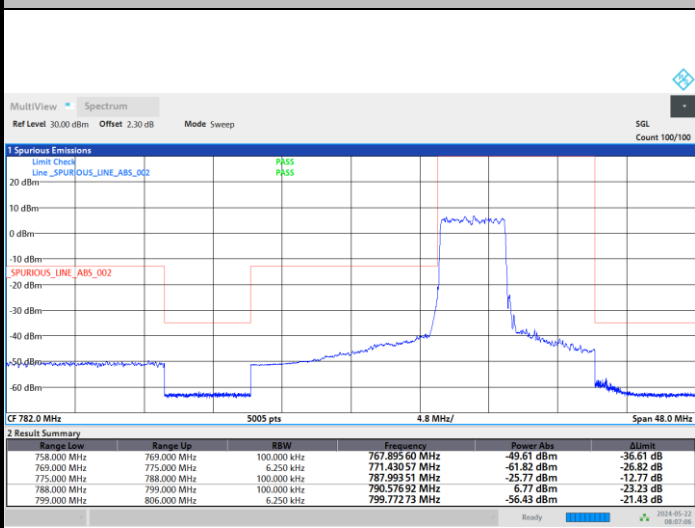
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

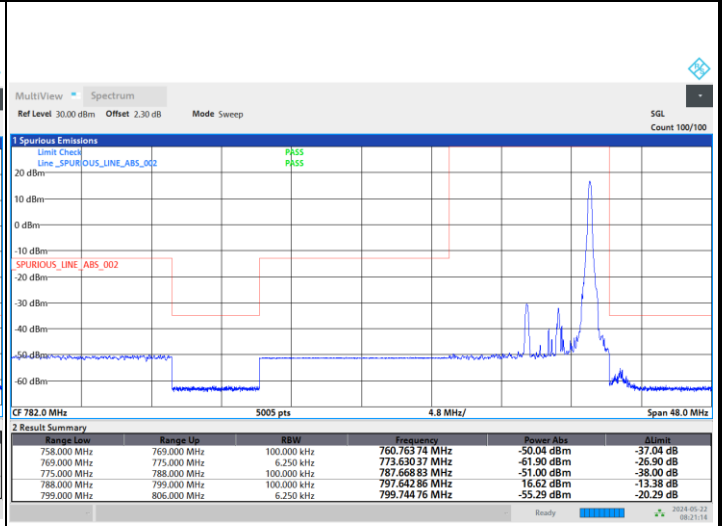
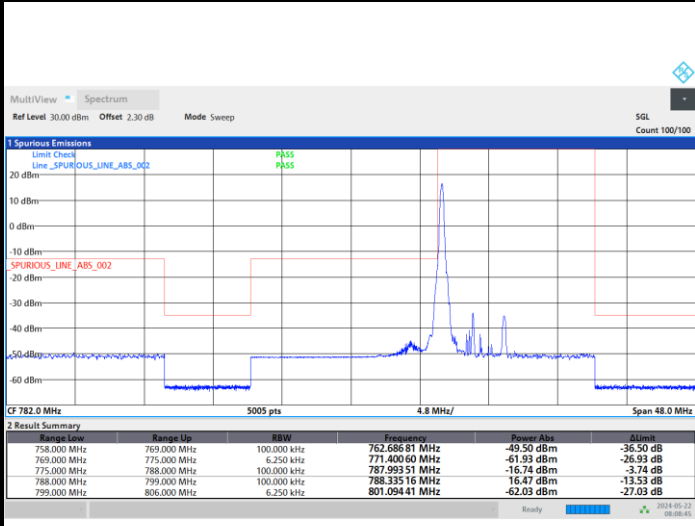




FR1 n14 / 5MHz / DFT-S OFDM / 256QAM

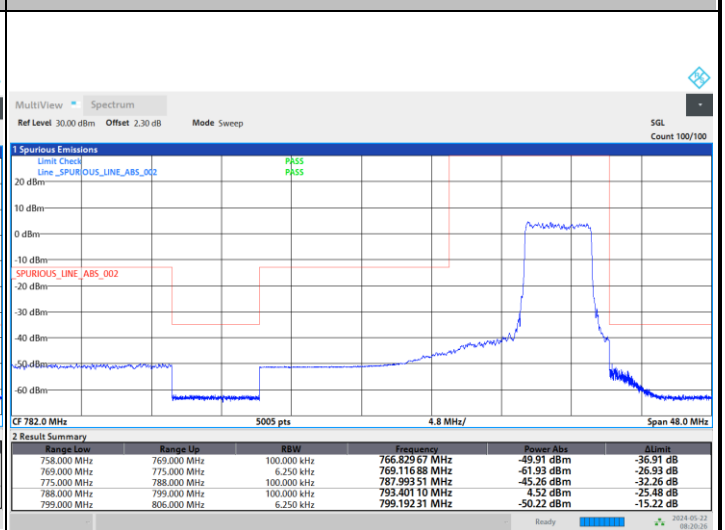
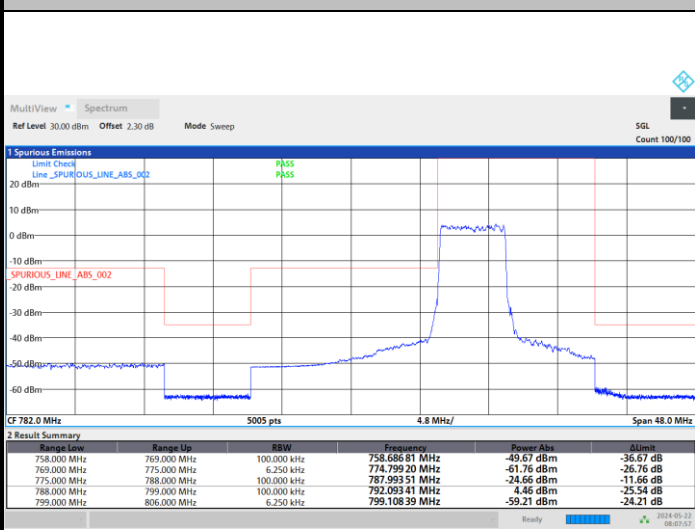
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Swept Band Edge / Full RB

Highest Band Edge / Full RB

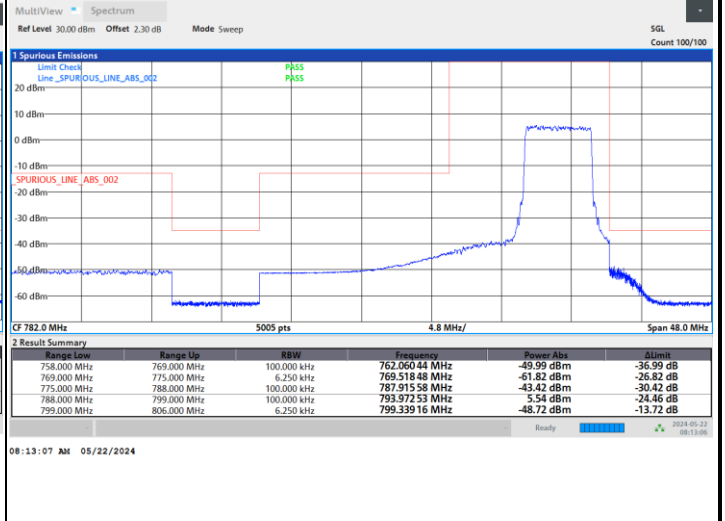
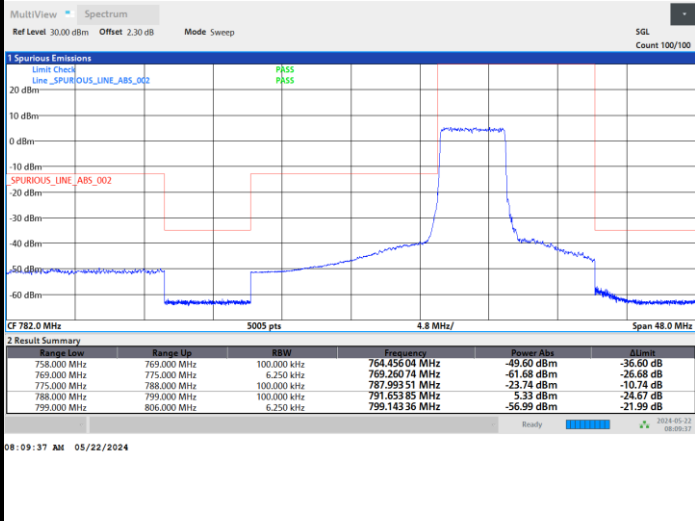




FR1 n14 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

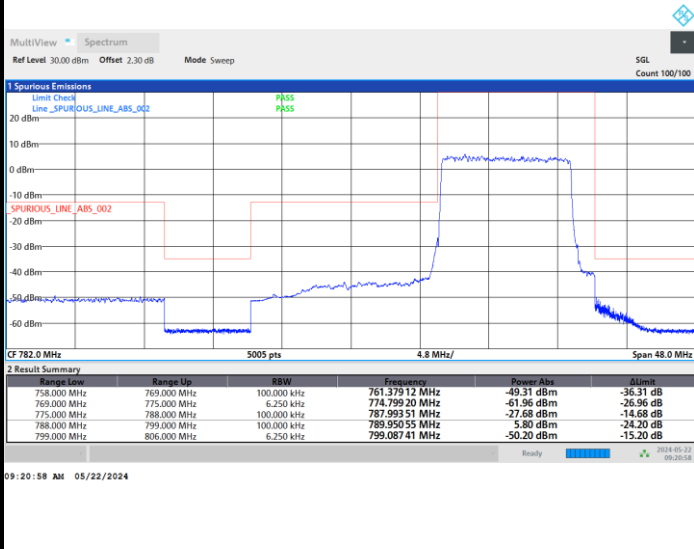






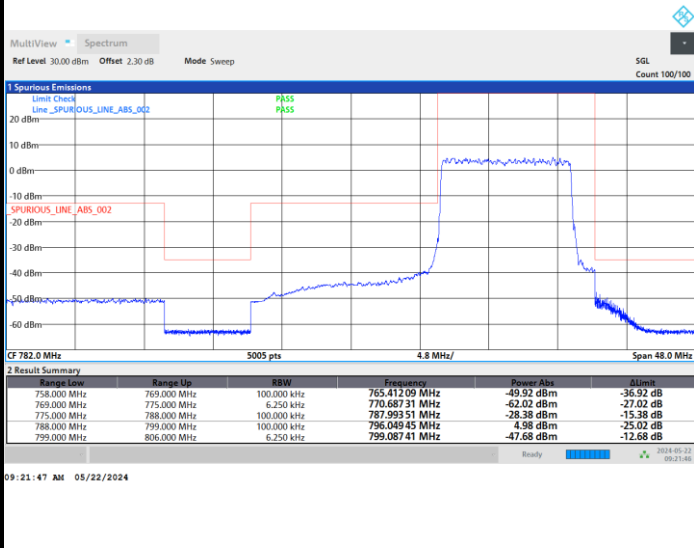
FR1 n14 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Middle Band Edge / Full RB



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

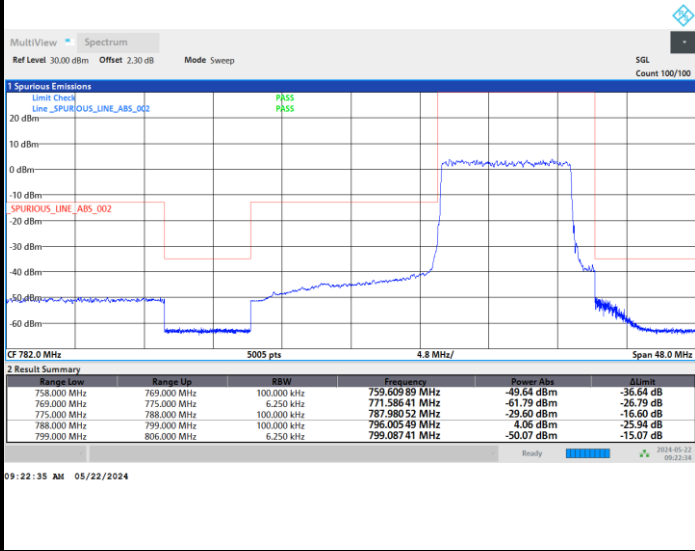
Middle Band Edge / Full RB





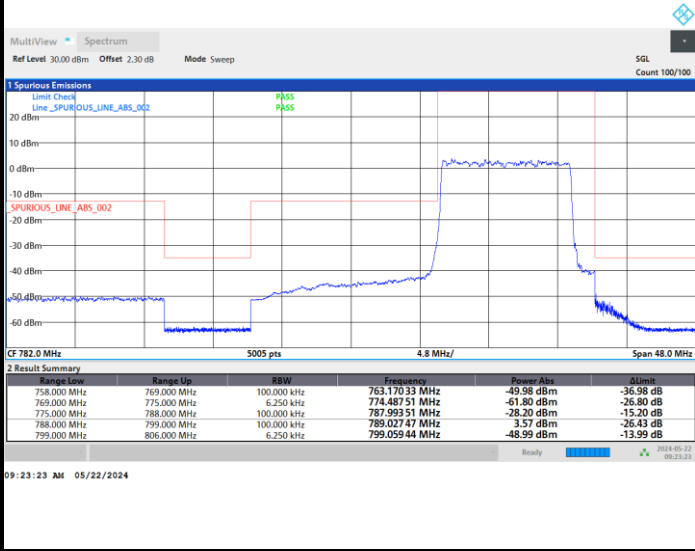
FR1 n14 / 10MHz / DFT-s-OFDM / 16QAM

Middle Band Edge / Full RB



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

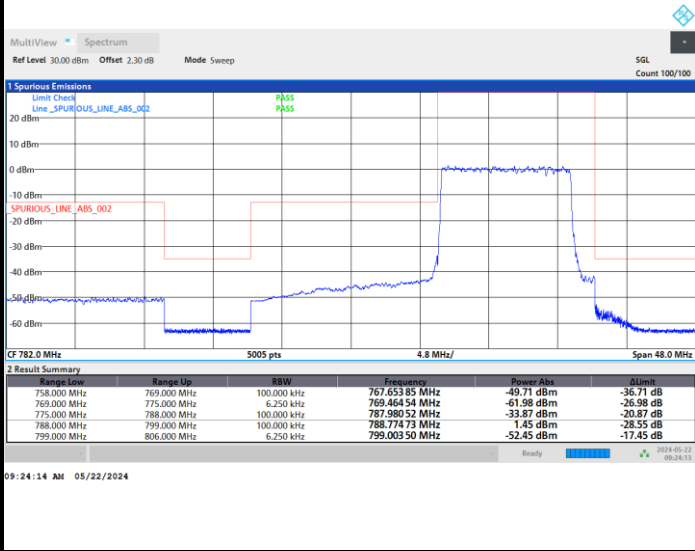
Middle Band Edge / Full RB





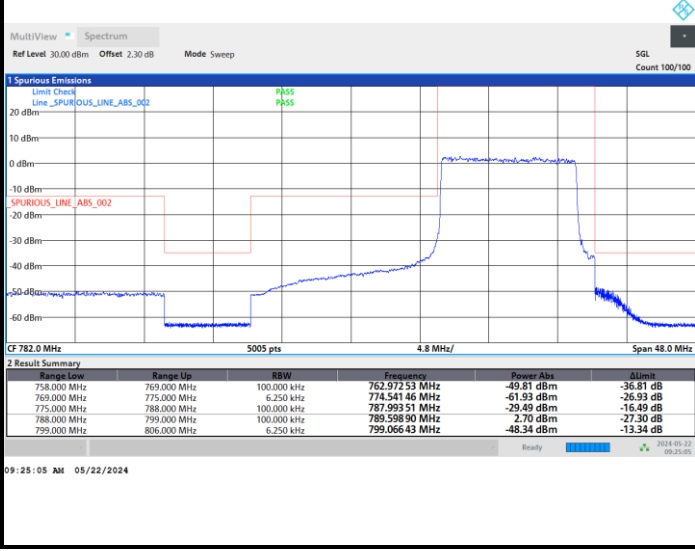
FR1 n14 / 10MHz / DFT-s-OFDM / 256QAM

Middle Band Edge / Full RB



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

Middle Band Edge / Full RB





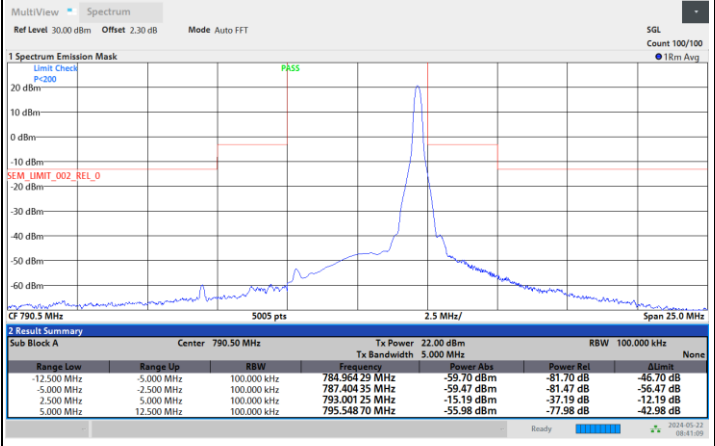
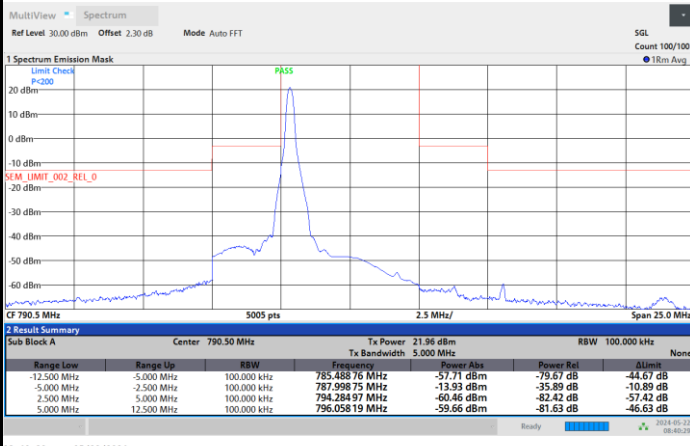
# Unwanted Emission (MASK)

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

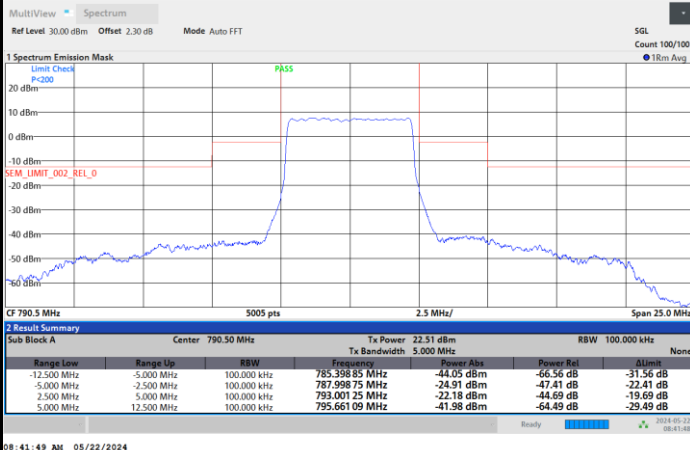
Lowest Channel

1RB0

1RBmax



Full RB



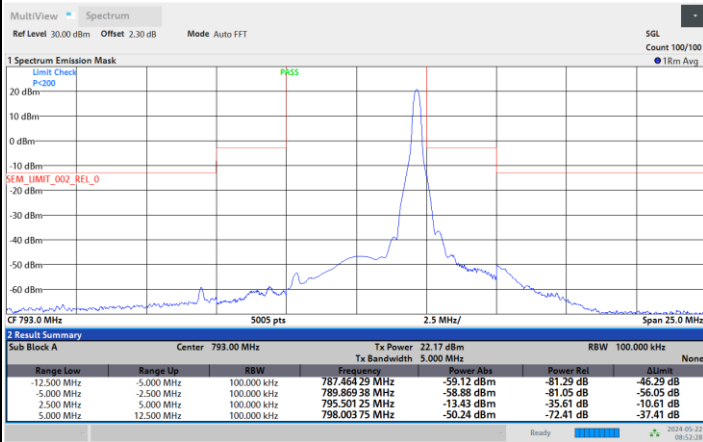
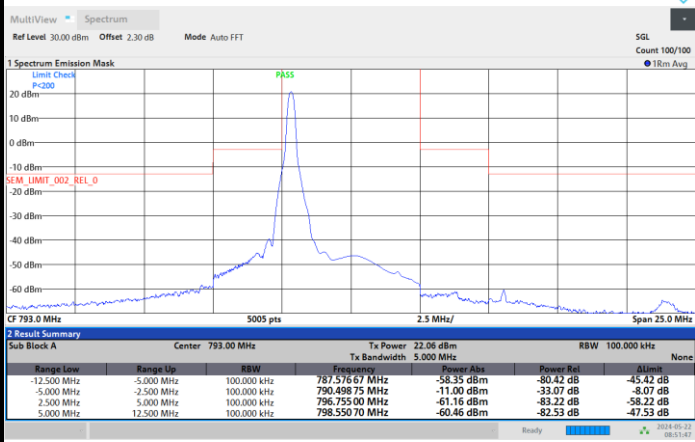


FR1 n14 / 5MHz / DFT-S OFDM / PI/2 BPSK

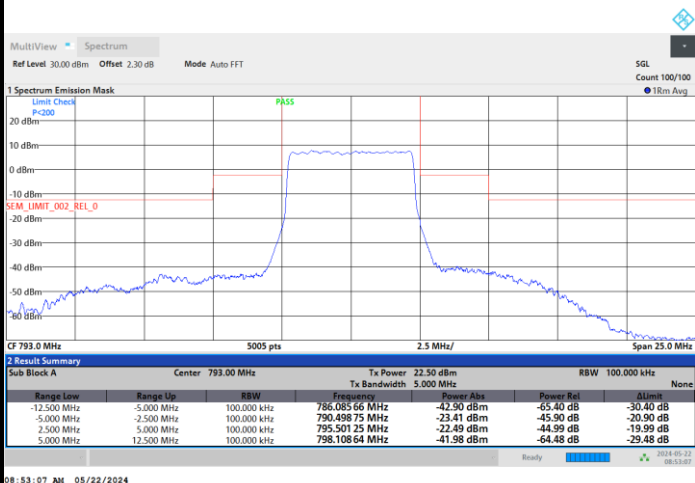
Middle Channel

1RB0

1RBmax



Full RB



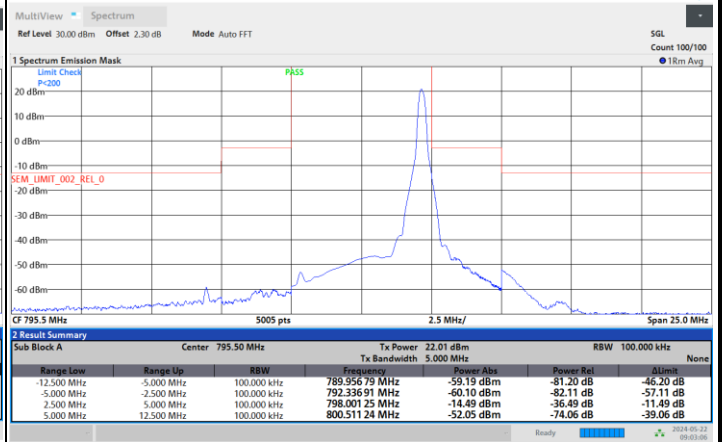
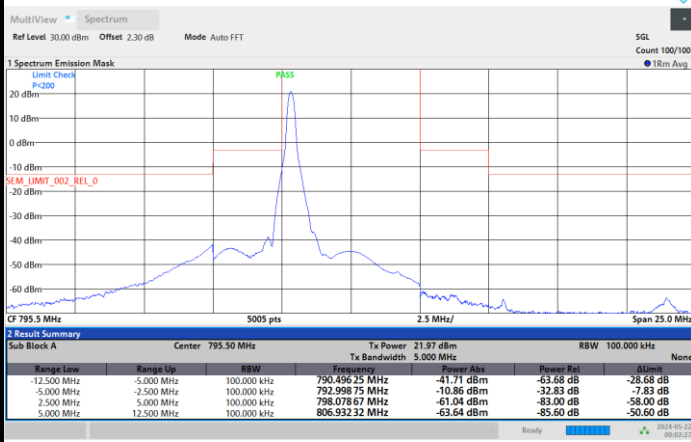


FR1 n14 / 5MHz / DFT-S OFDM / PI/2 BPSK

Highest Channel

1RB0

1RBmax



Full RB

