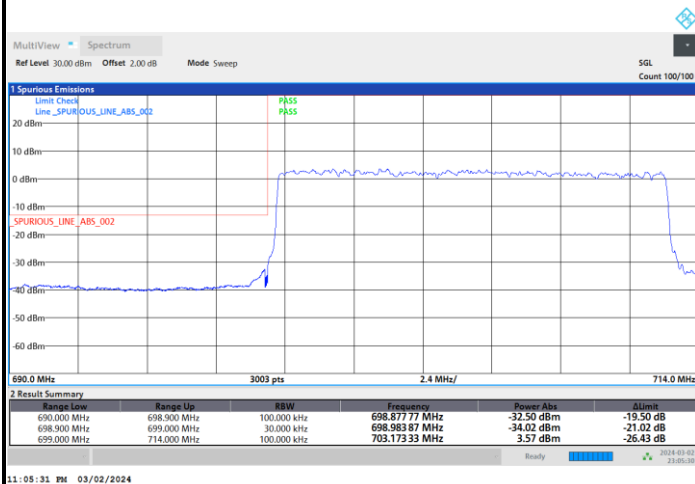


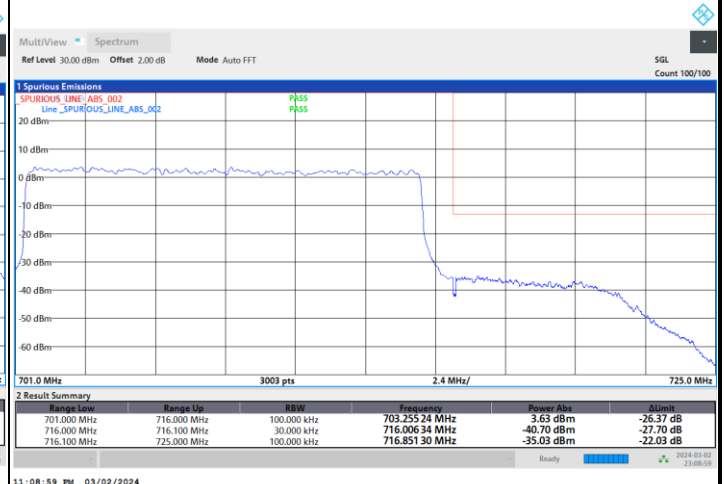


FR1 n12 / 15MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

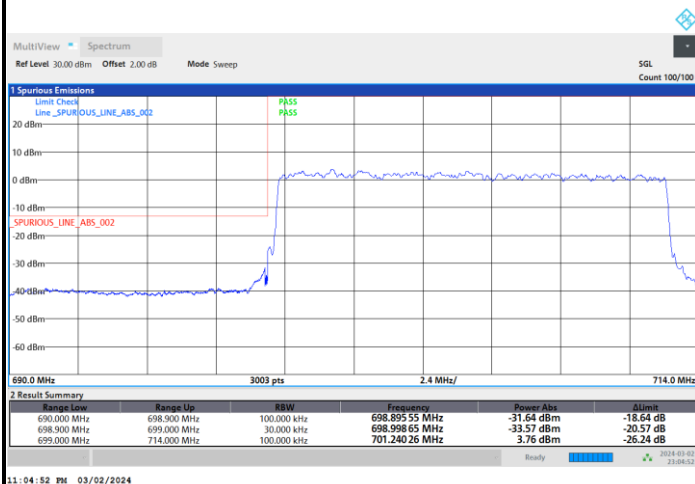


Highest Band Edge

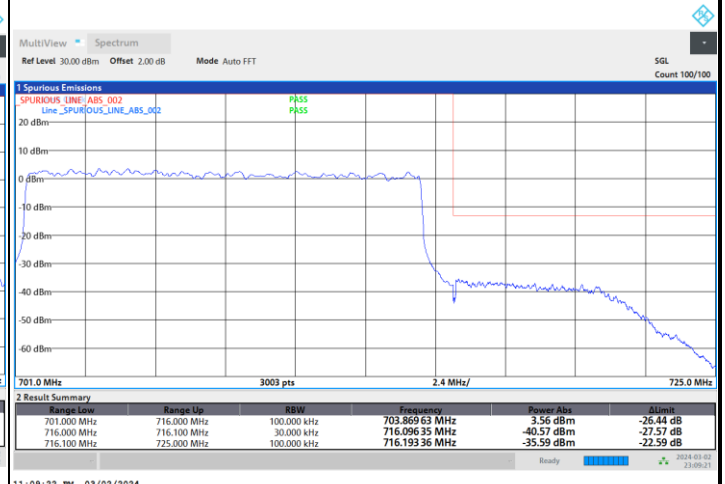


FR1 n12 / 15MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge



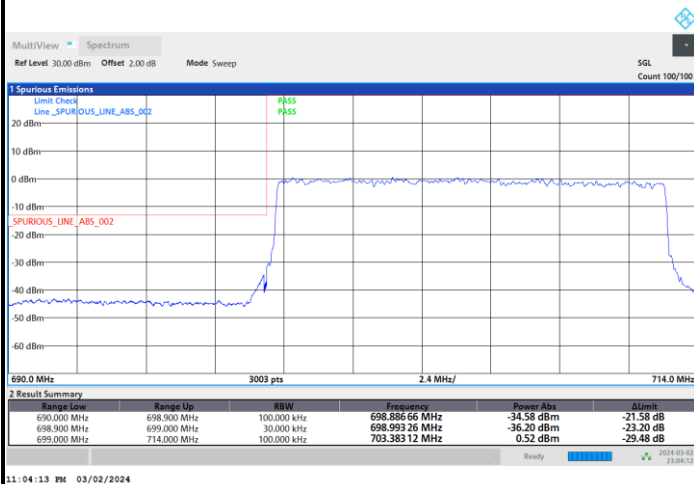
Highest Band Edge



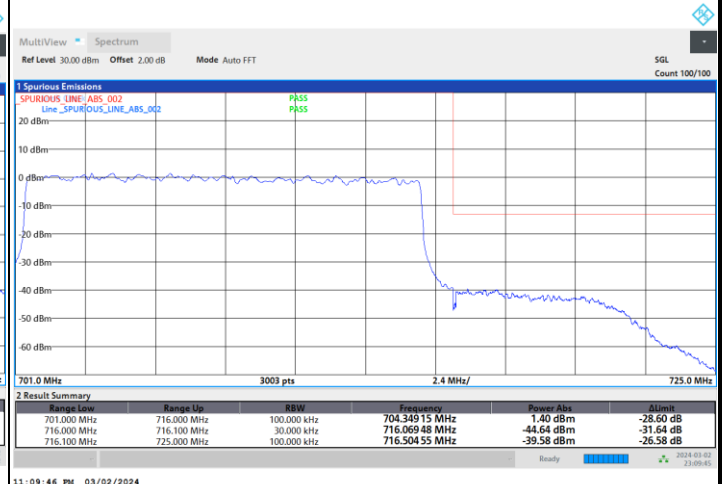


FR1 n12 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

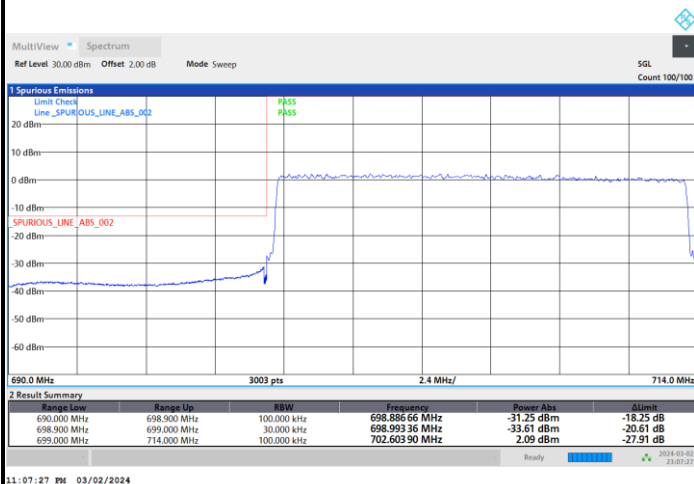


Highest Band Edge

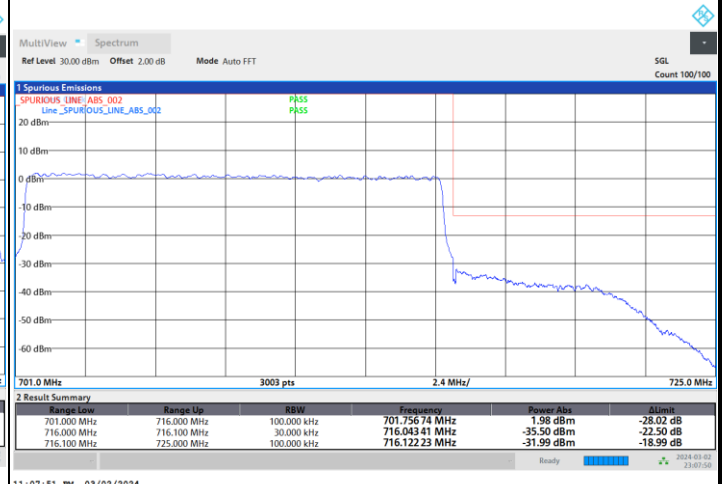


FR1 n12 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



Highest Band Edge

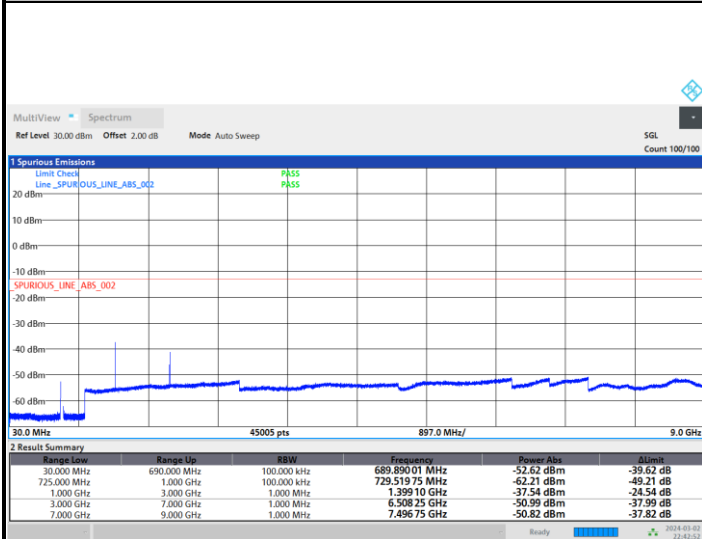




Conducted Spurious Emission

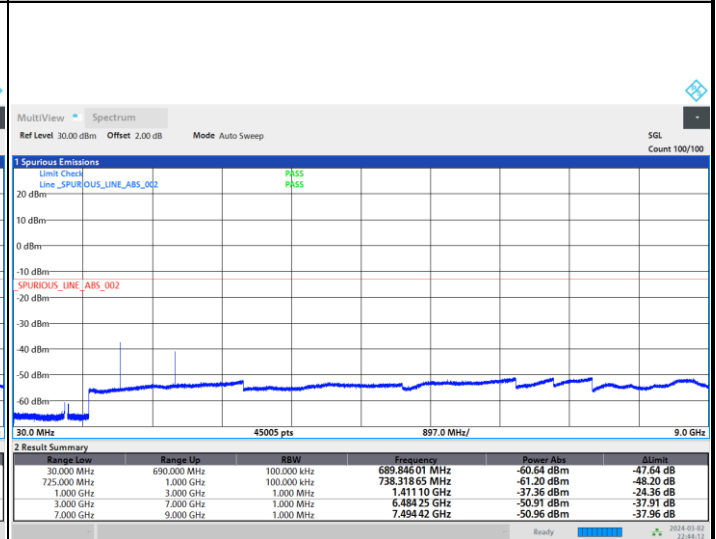
FR1 n12 / 5MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel



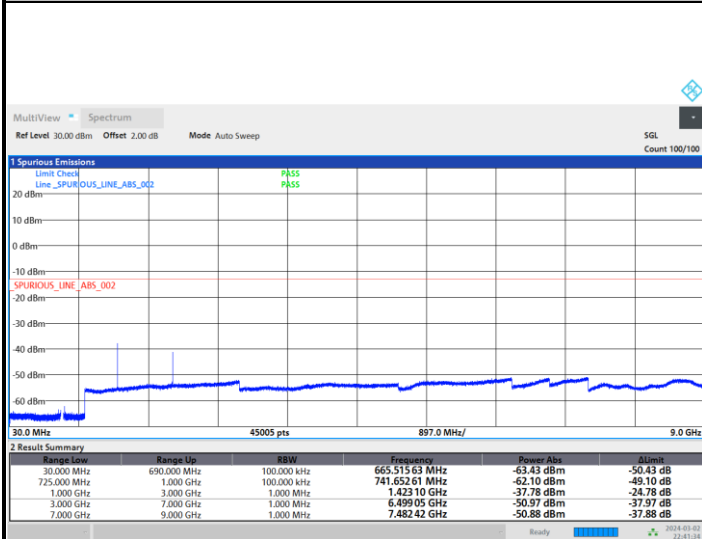
10:42:54 PM 03/02/2024

Middle Channel



10:44:12 PM 03/02/2024

Highest Channel



10:41:38 PM 03/02/2024

Frequency Stability

Test Conditions		FR1 n12 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0033	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0030	
-20	Normal Voltage	0.0039	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0022	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0022	

Note:

1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.5 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

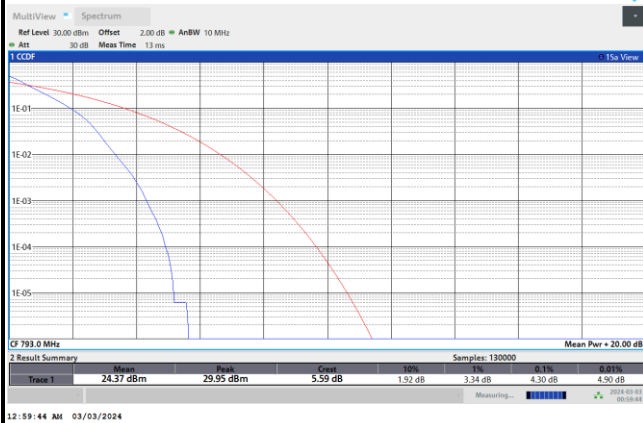
**FR1 n14****Peak-to-Average Ratio**

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	4.30	5.24	6.02	6.16	PASS
Mode	FR1 n14 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.34				PASS

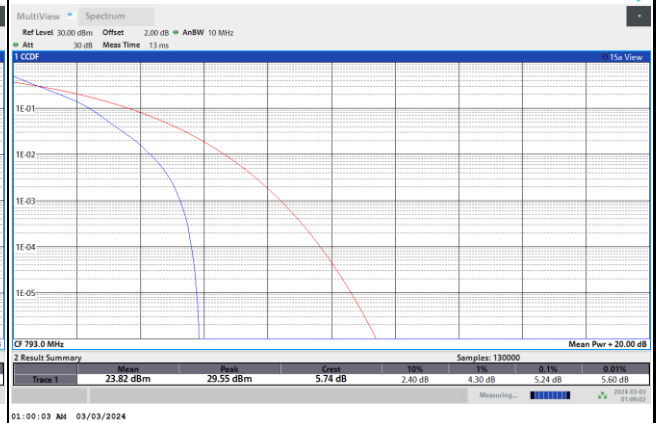


FR1 n14 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

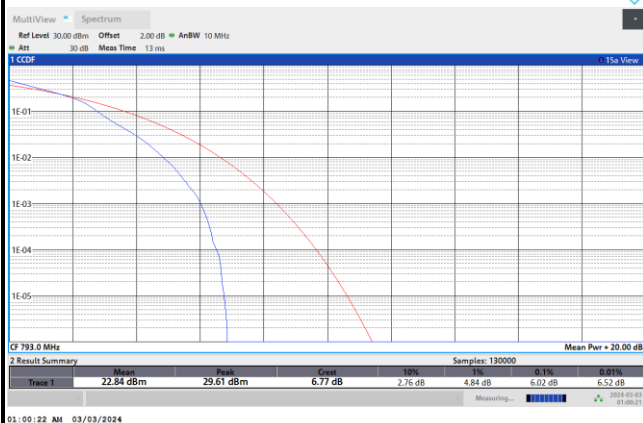
PI/2 BPSK



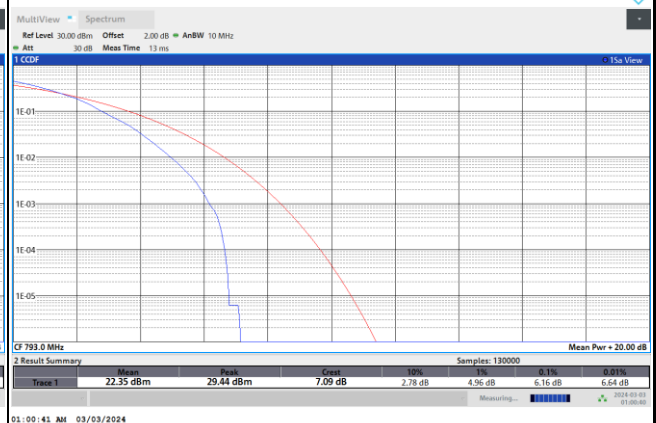
QPSK



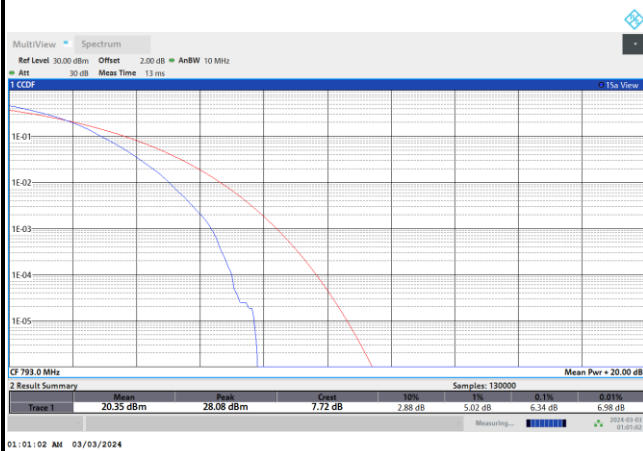
16QAM



64QAM



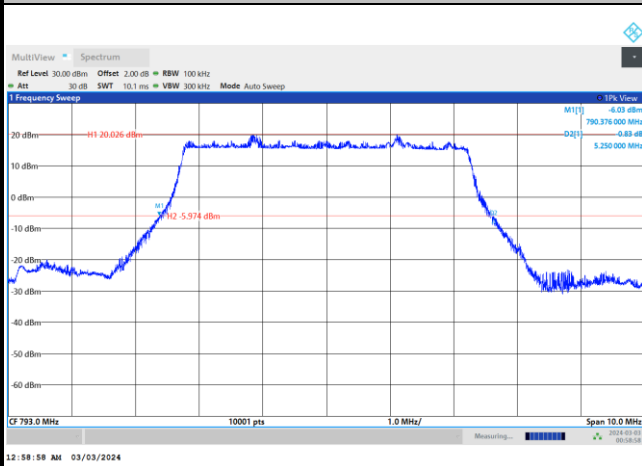
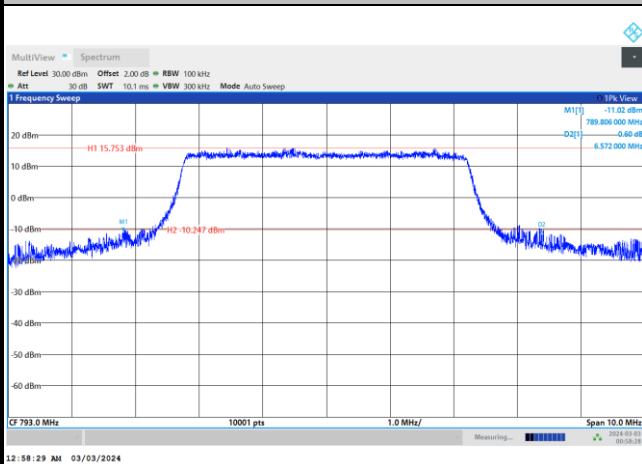
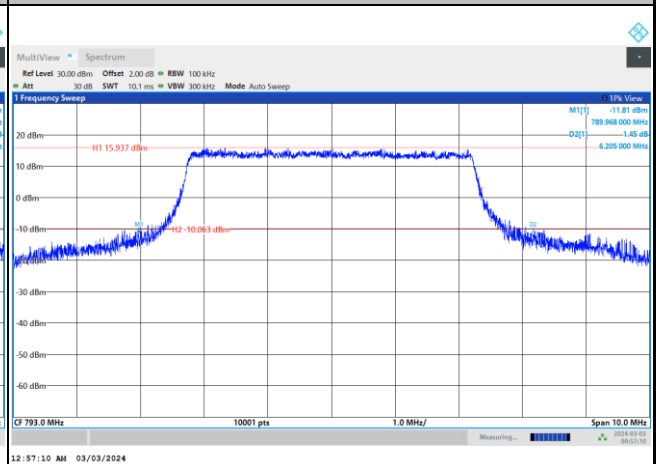
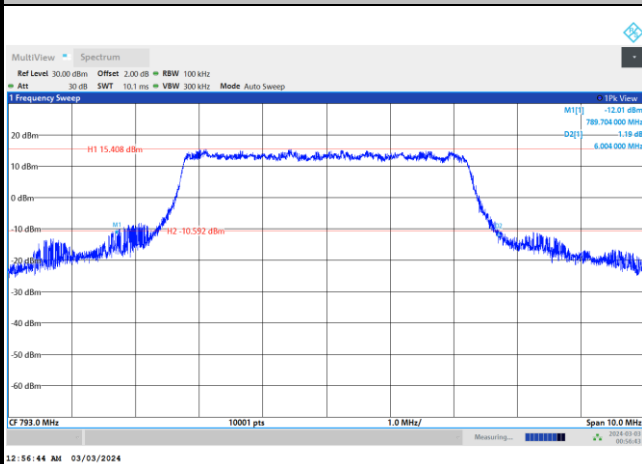
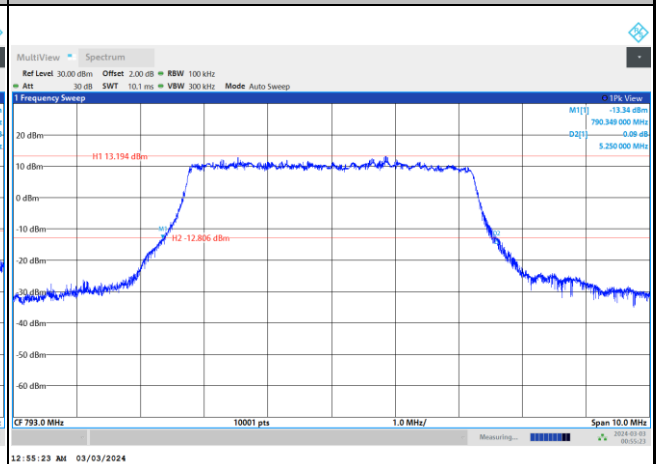
256QAM



**26dB Bandwidth**

Mode	FR1 n14 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz					
Mod.	PI/2 BPSK		PI/2 BPSK					
Middle CH	5.25		9.90					

Mode	FR1 n14 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM				
Middle CH	6.57	6.21	10.57	10.71				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	6.00	5.25	10.54	10.39				

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




MultiView Spectrum

Ref Level 30.00 dBm Offset 2.00 dB RBW 200 kHz

Att 30 dB SWT 10.1 ms VBW 1 MHz Mode Auto Sweep

1 Frequency Sweep

10% View

M1[1] -4.21 dBm
787.834 00 MHz
D2[1] -0.71 dBm
9.904 00 MHz

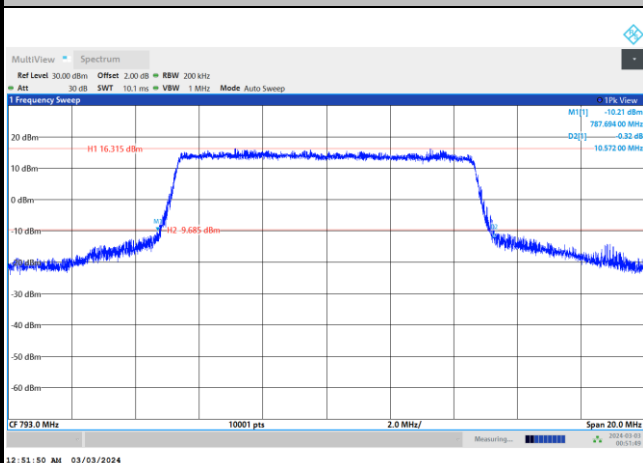
H1 20.855 dBm
H2 -5.145 dBm

CF 793.0 MHz 10001 pts 2.0 MHz/ Span 20.0 MHz

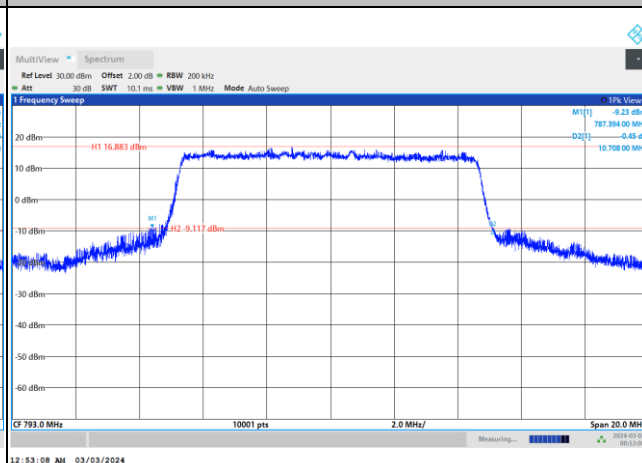
Measuring...

2018-01-31 08:03:20

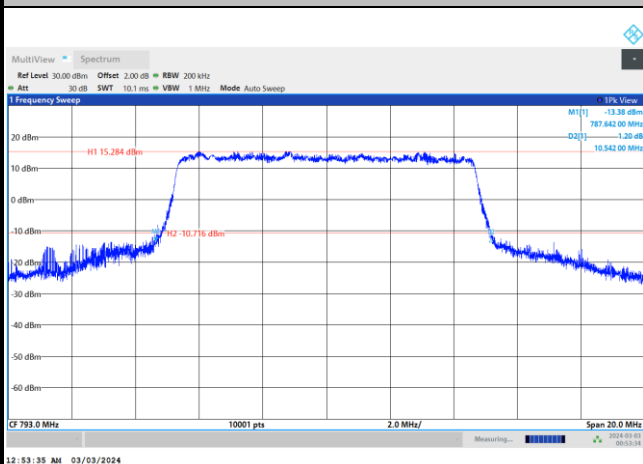
QPSK



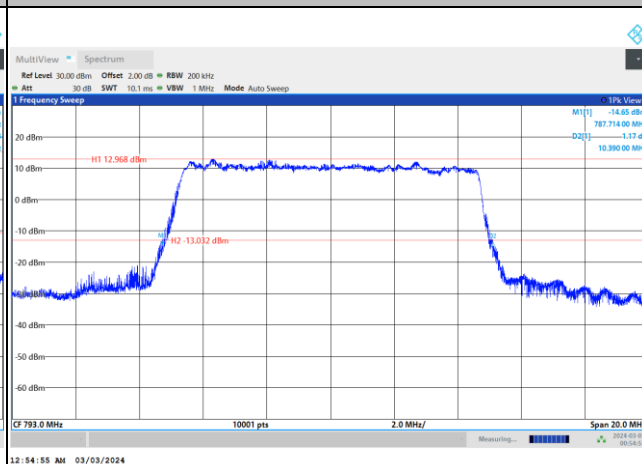
16QAM



64QAM



256QAM



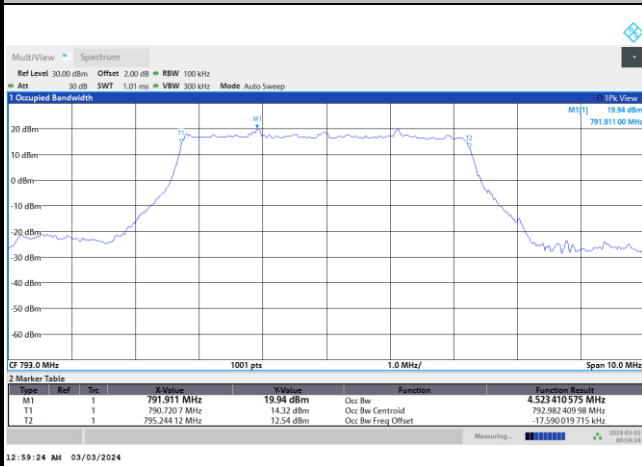
**Occupied Bandwidth**

Mode	FR1 n14 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz					
Mod.	PI/2 BPSK		PI/2 BPSK					
Middle CH	4.52		9.02					

Mode	FR1 n14 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM				
Middle CH	4.53	4.53	9.41	9.36				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	4.54	4.50	9.35	9.36				

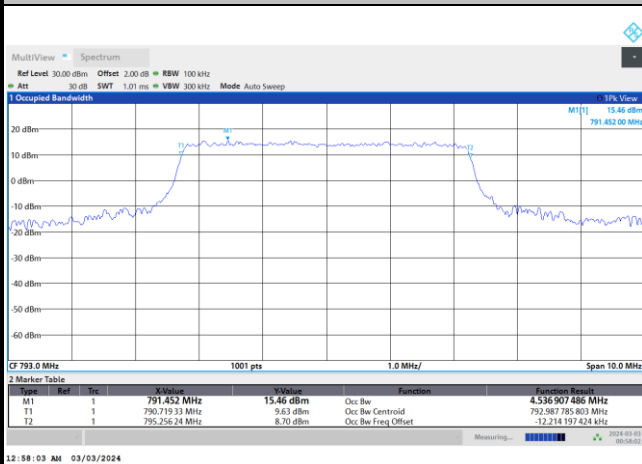
FR1 n14 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

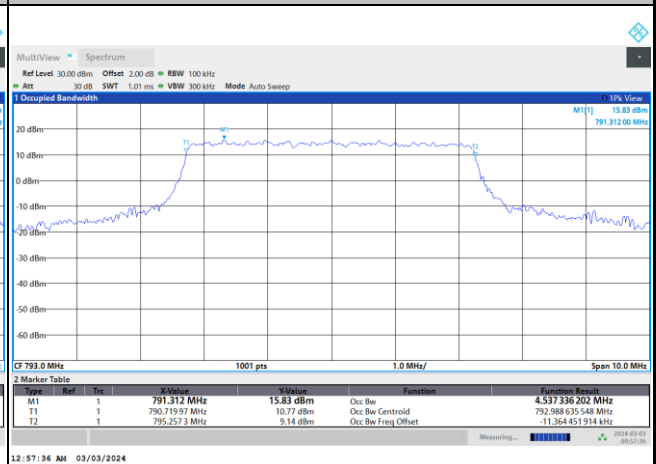


FR1 n14 / 5MHz / CP OFDM / Middle Channel / Full RB

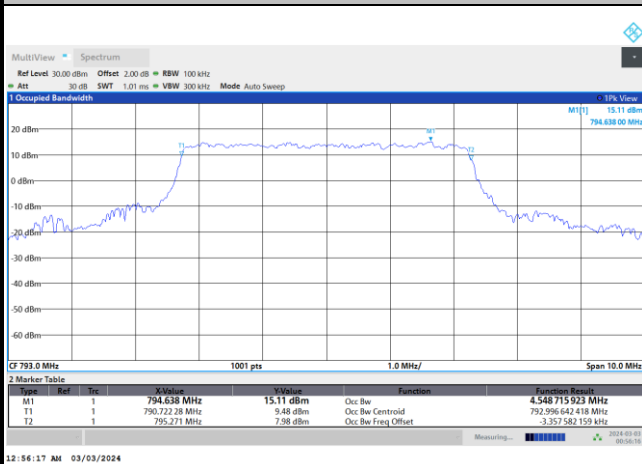
QPSK



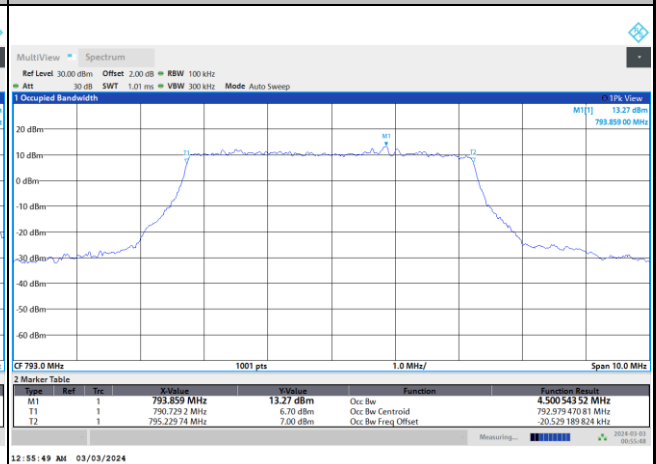
16QAM



64QAM

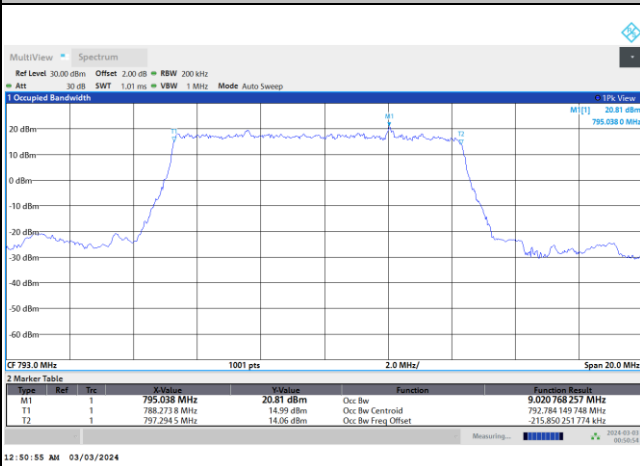


256QAM



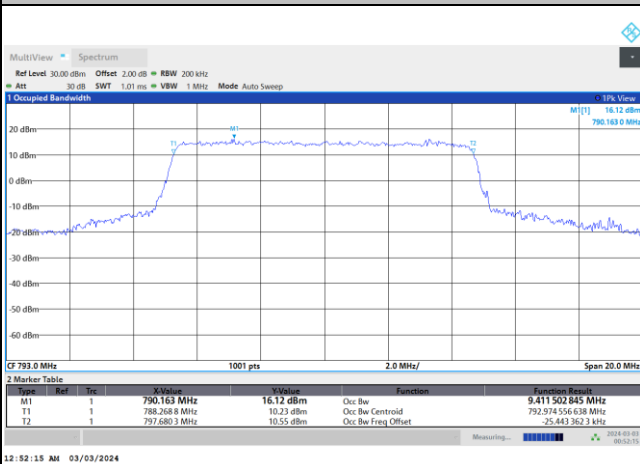
FR1 n14 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

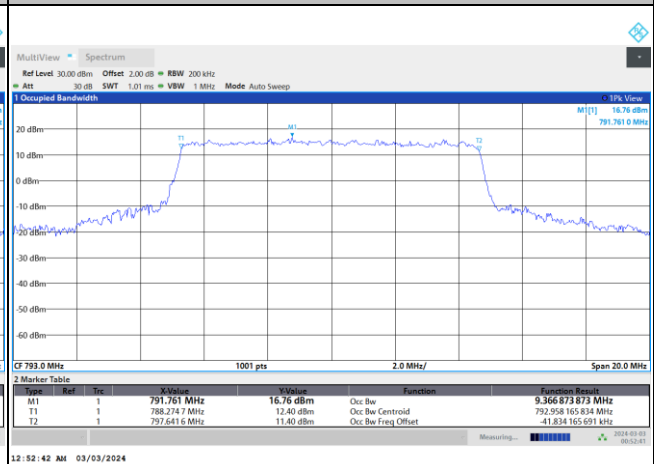


FR1 n14 / 10MHz / CP OFDM / Middle Channel / Full RB

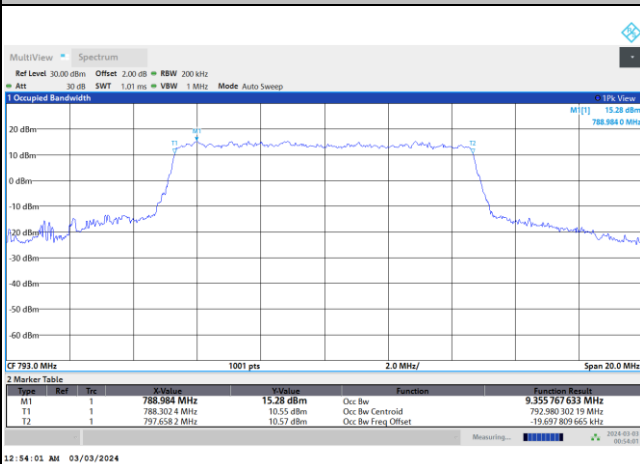
QPSK



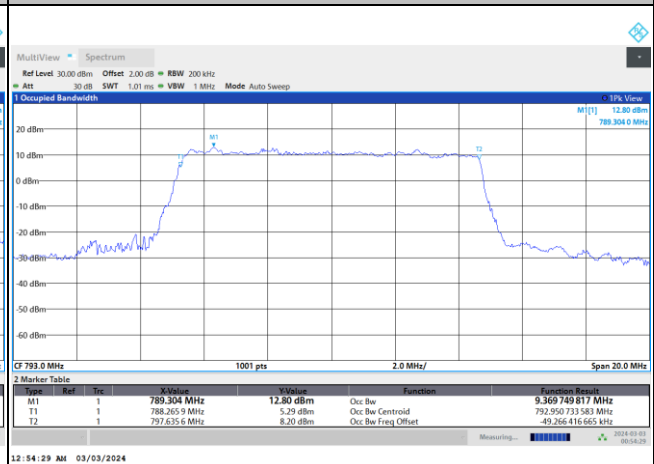
16QAM



64QAM



256QAM



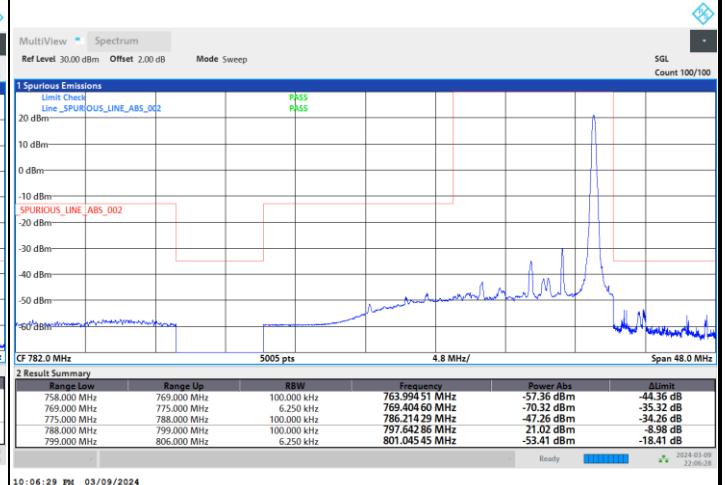
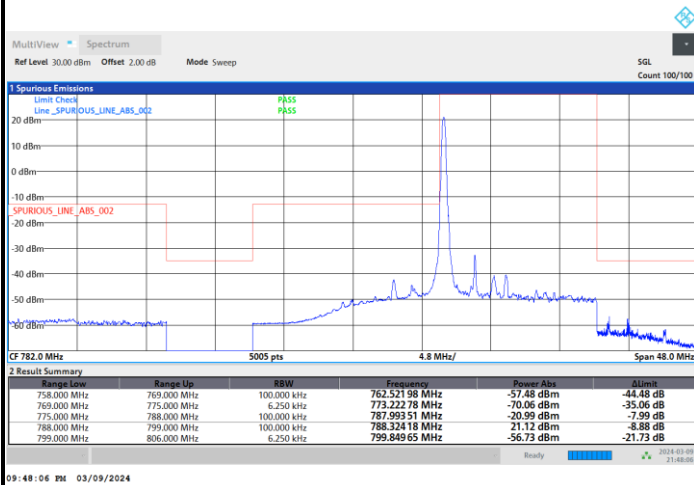


Conducted Band Edge

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

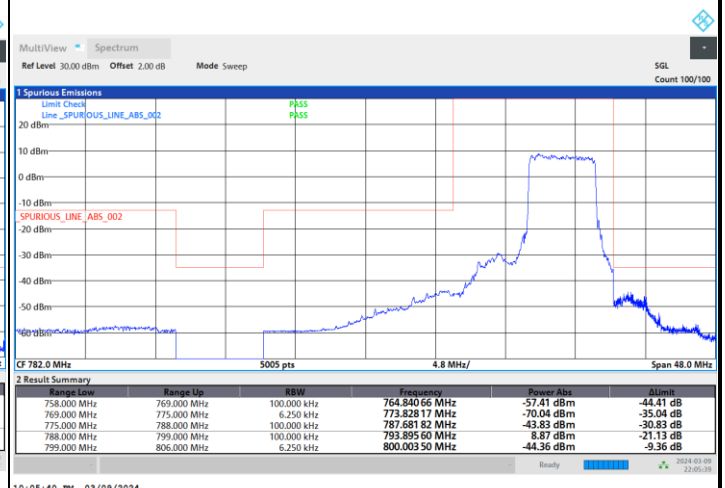
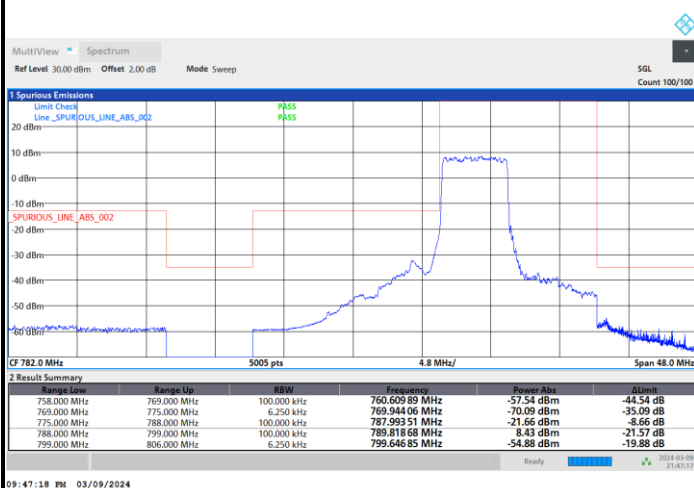
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

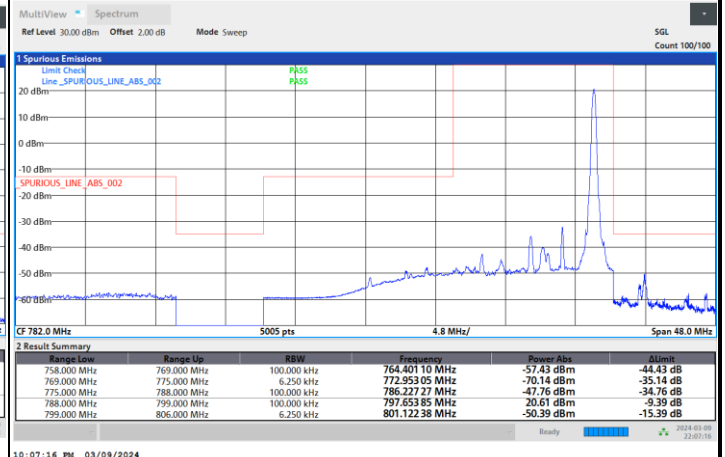
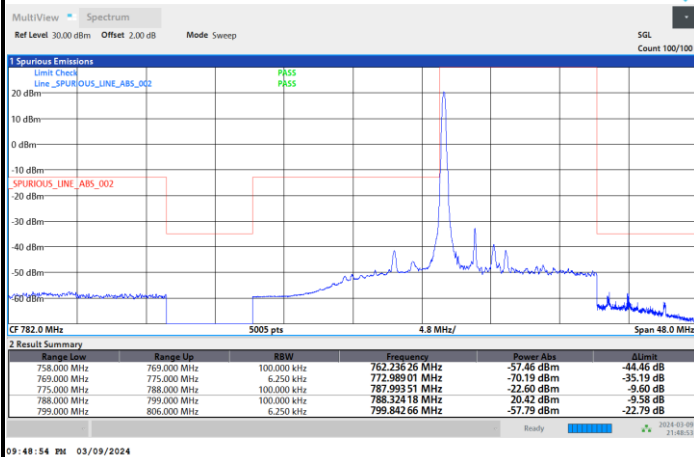




FR1 n14 / 5MHz / DFT-S OFDM / QPSK

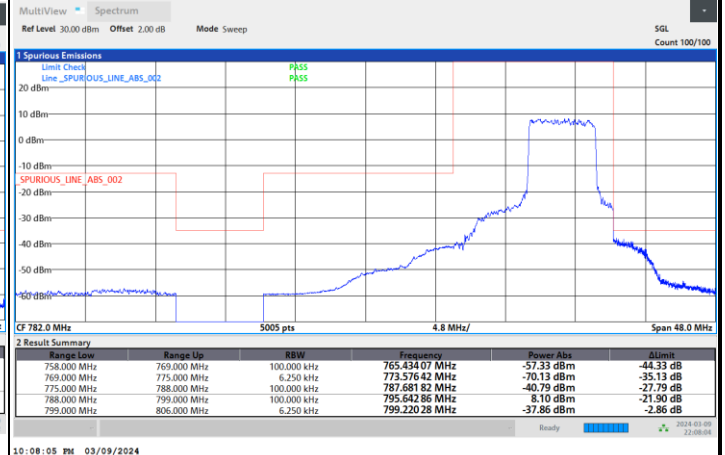
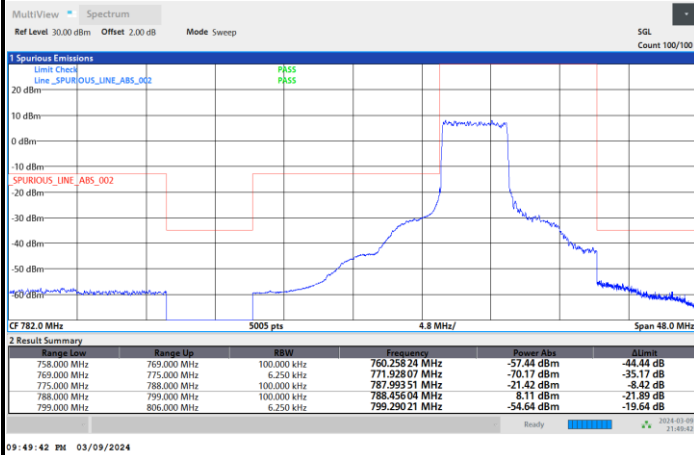
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

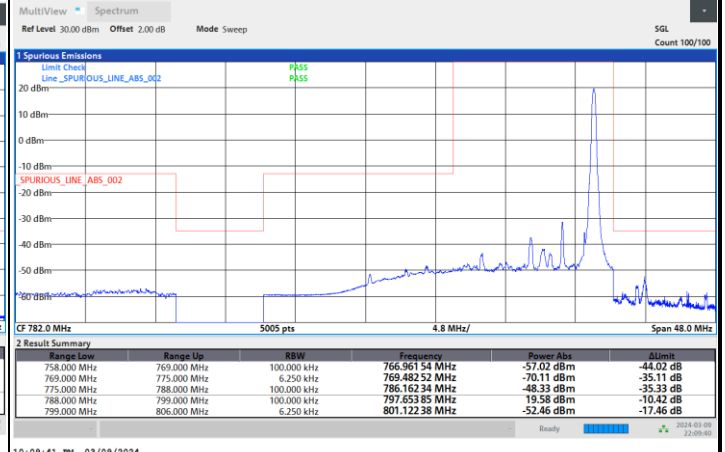
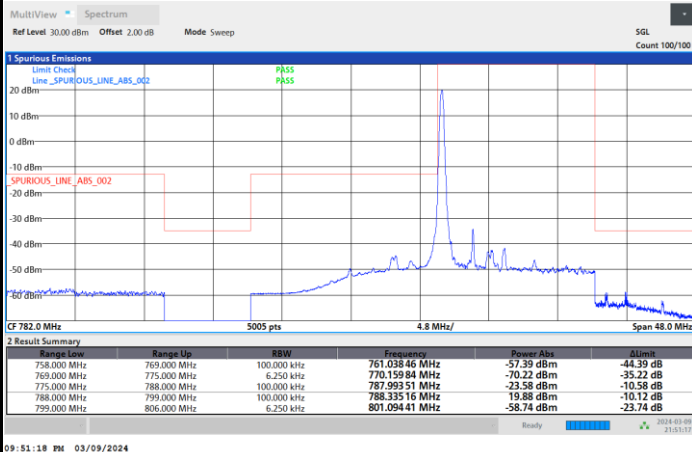




FR1 n14 / 5MHz / DFT-S OFDM / 16QAM

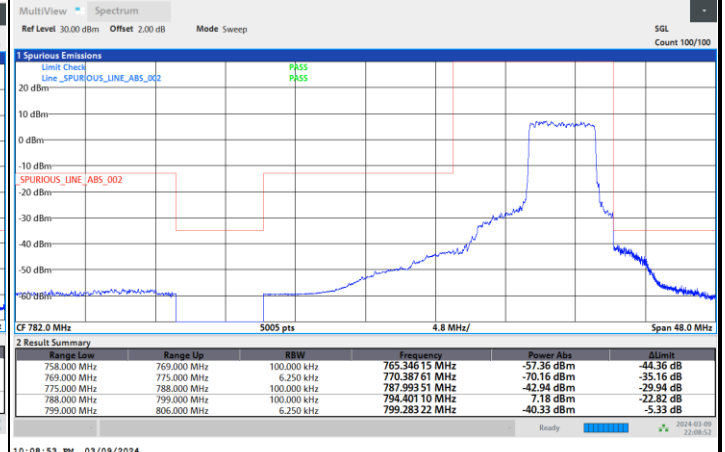
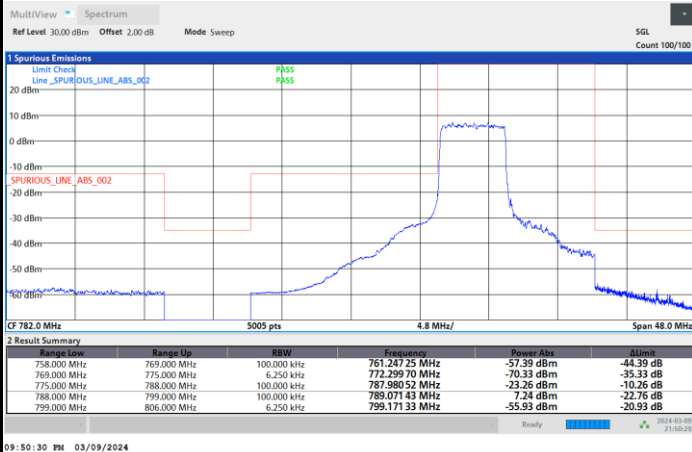
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

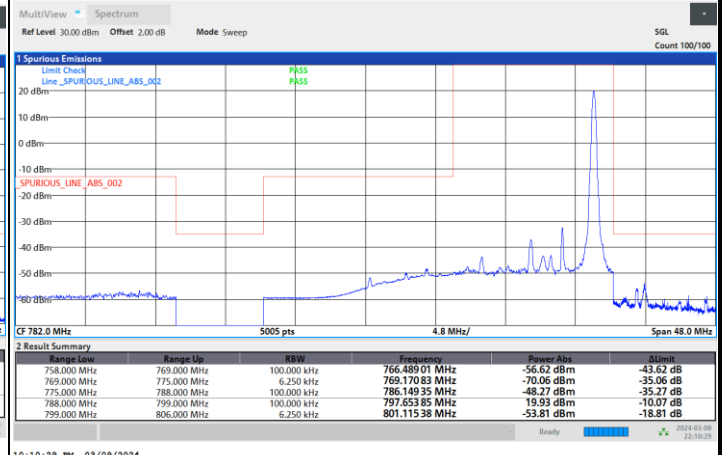
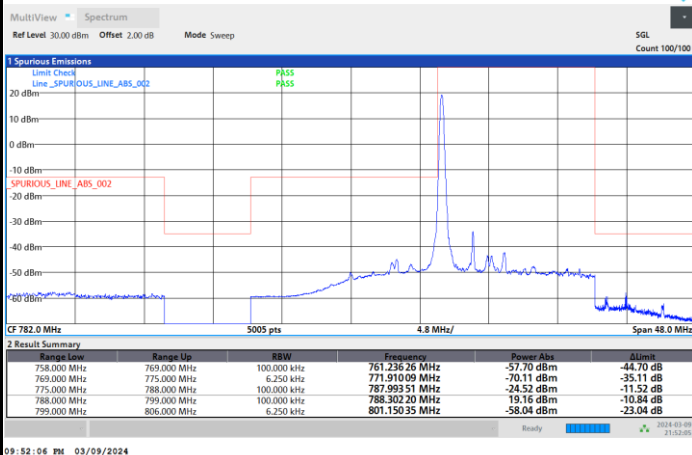




FR1 n14 / 5MHz / DFT-S OFDM / 64QAM

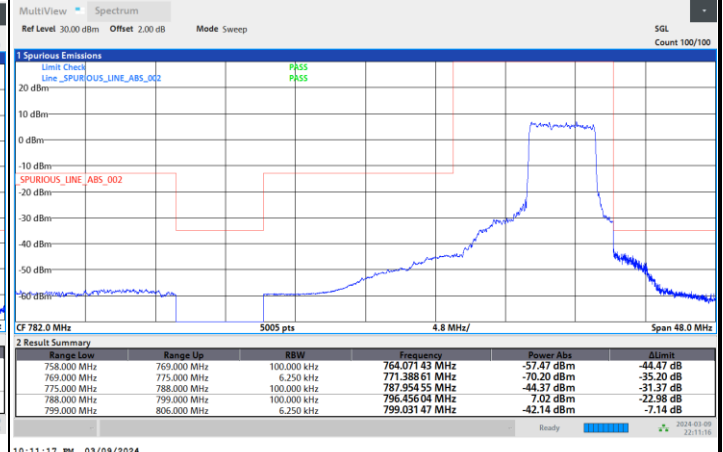
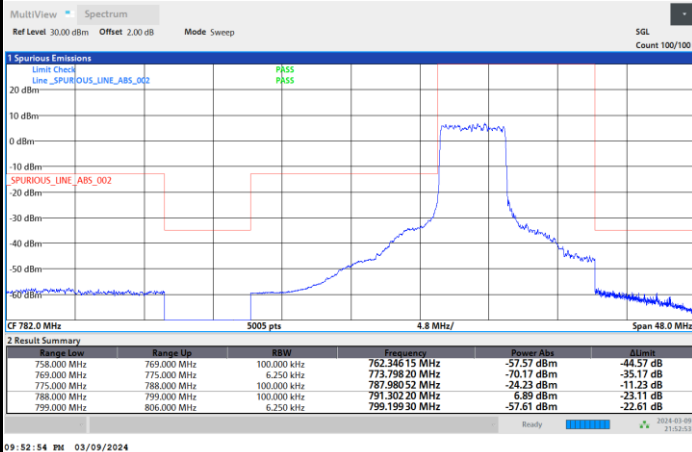
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

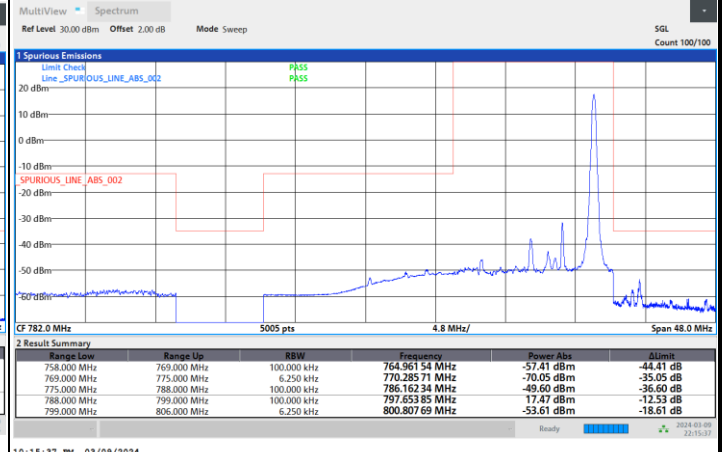
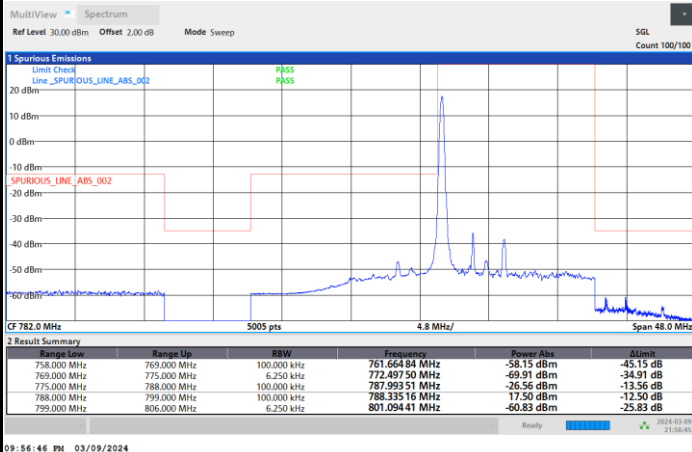




FR1 n14 / 5MHz / DFT-S OFDM / 256QAM

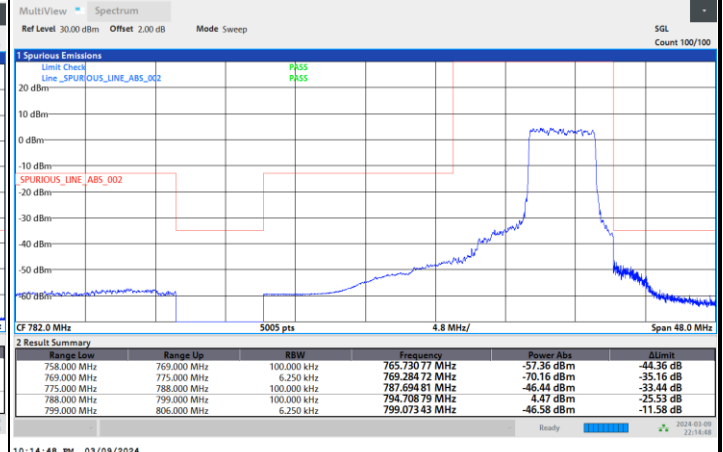
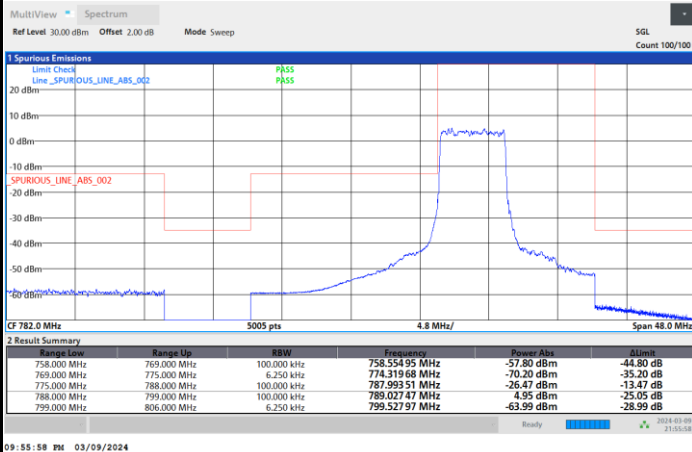
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

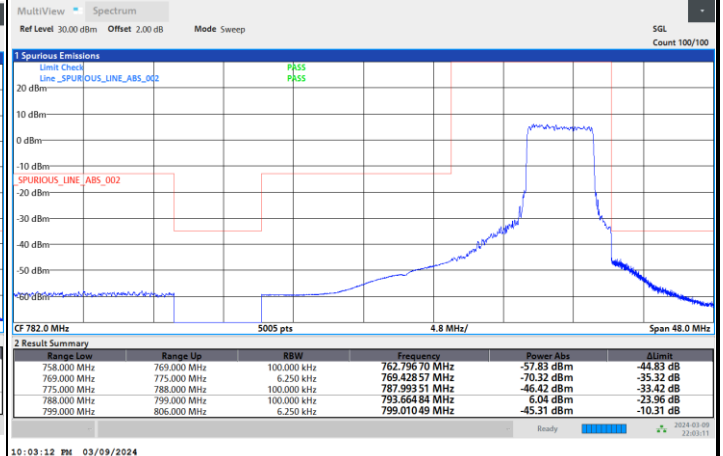
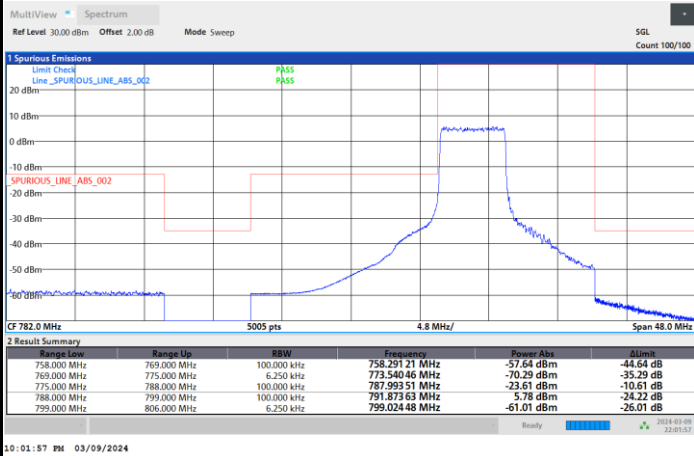




FR1 n14 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

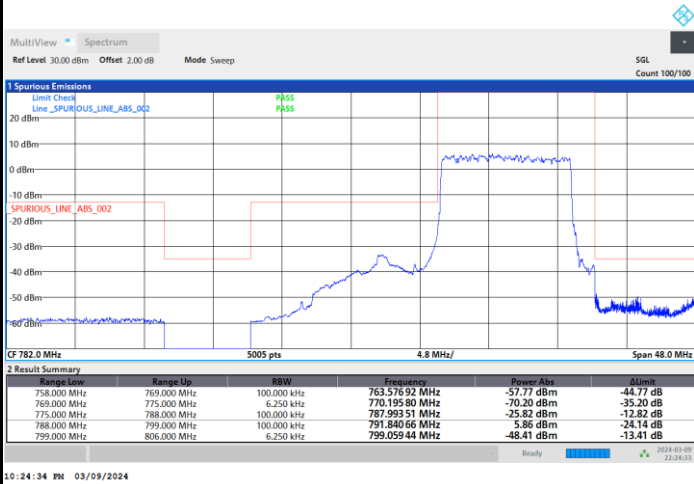
Highest Band Edge





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

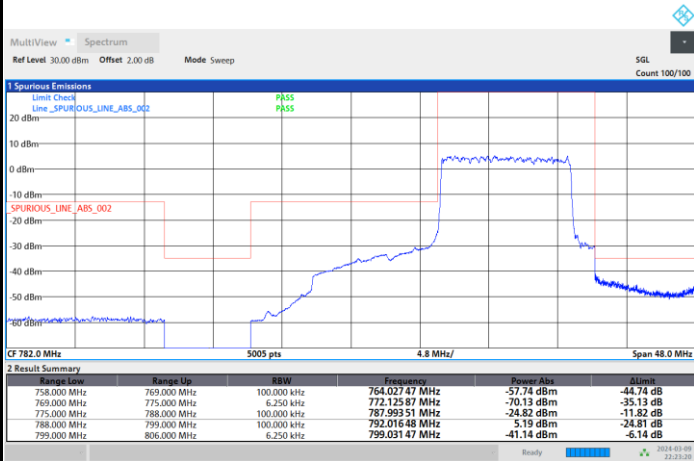
Middle Band Edge / Full RB



10:24:34 PM 03/09/2024

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

Middle Band Edge / Full RB

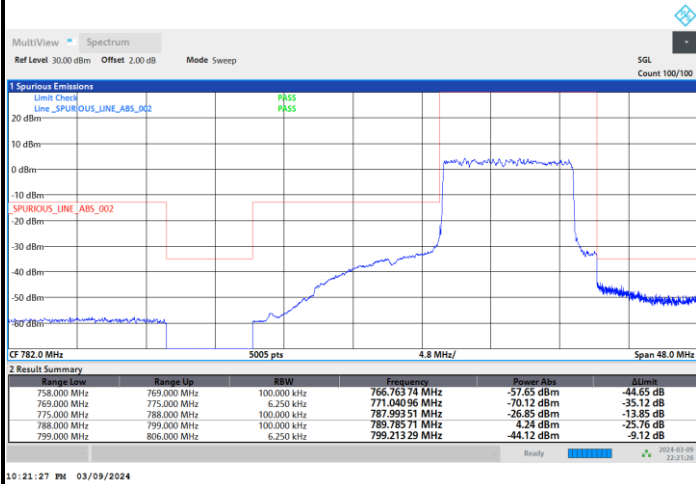


10:23:20 PM 03/09/2024



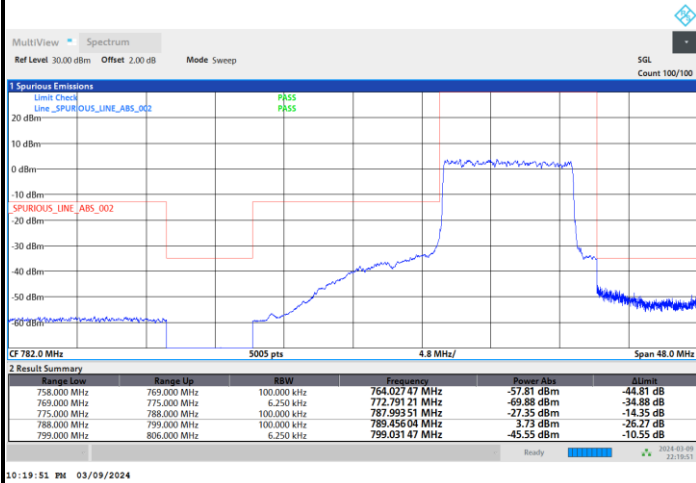
FR1 n14 / 10MHz / DFT-s-OFDM / 16QAM

Middle Band Edge / Full RB



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

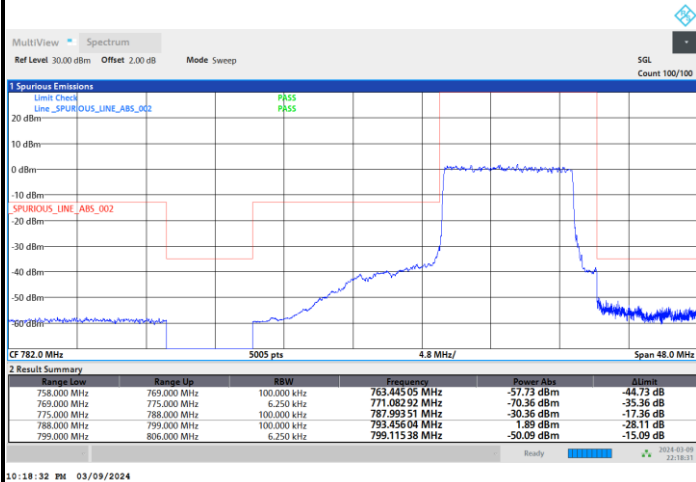
Middle Band Edge / Full RB





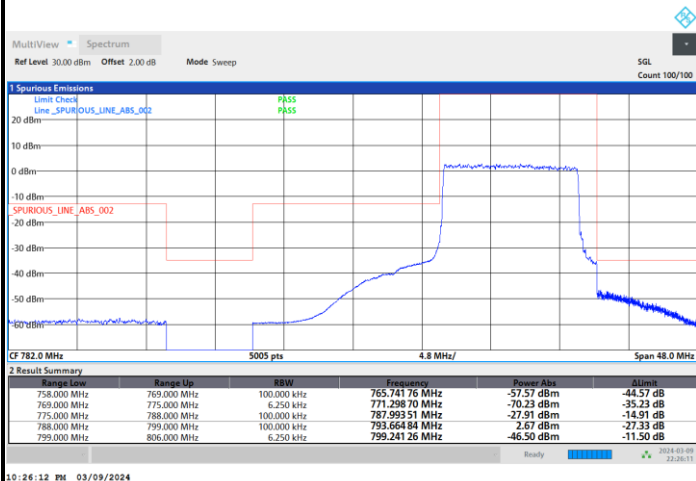
FR1 n14 / 10MHz / DFT-s-OFDM / 256QAM

Middle Band Edge / Full RB



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

Middle Band Edge / Full RB



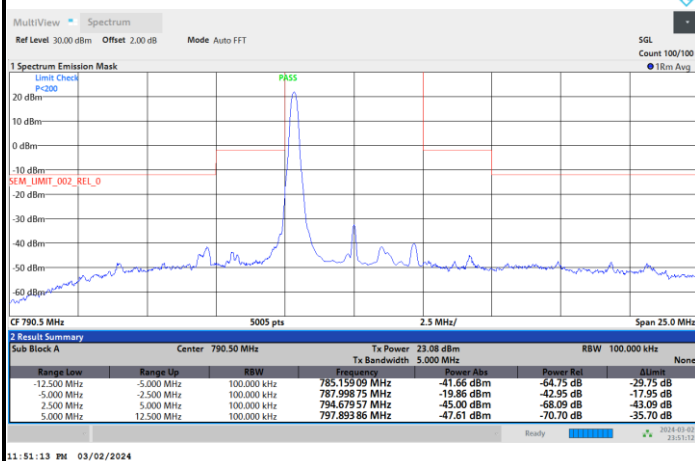


Unwanted Emission (MASK)

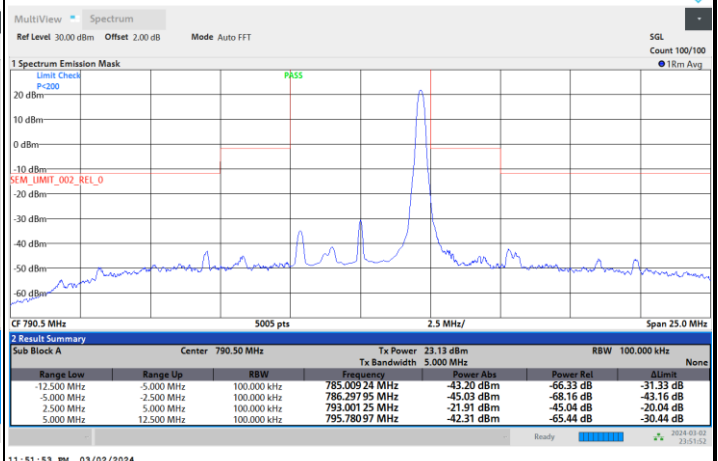
FR1 n14 / 5MHz / DFT-S OFDM / PI/2 BPSK

Lowest Channel

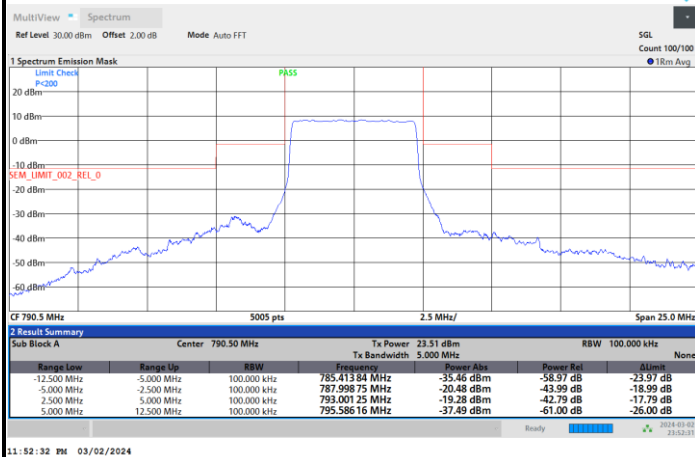
1RB0



1RBmax



Full RB

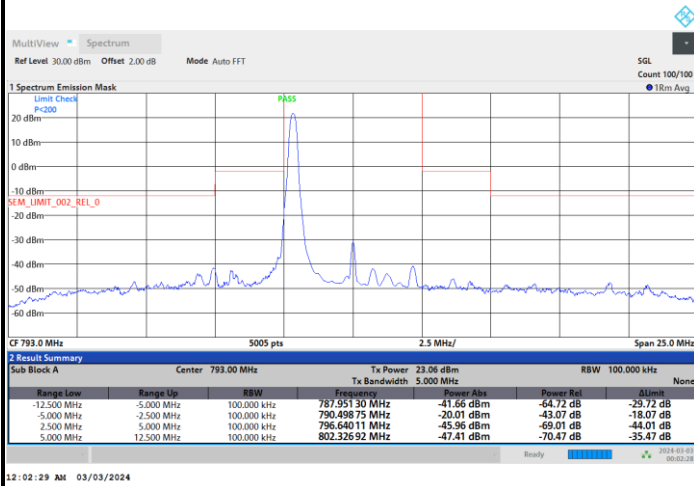




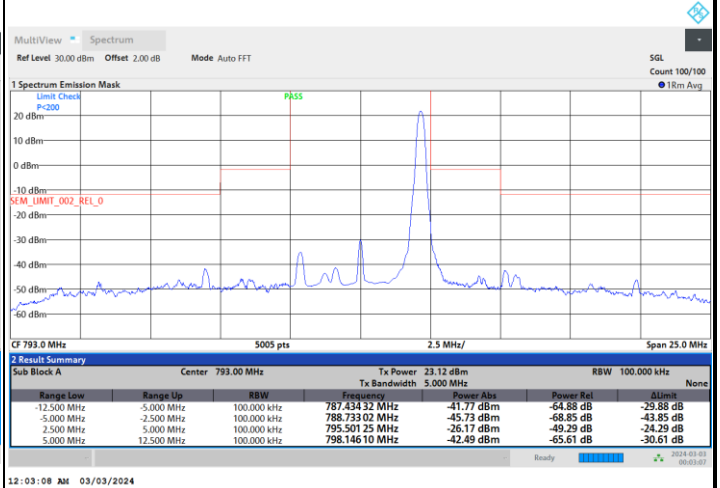
FR1 n14 / 5MHz / DFT-S OFDM / PI/2 BPSK

Middle Channel

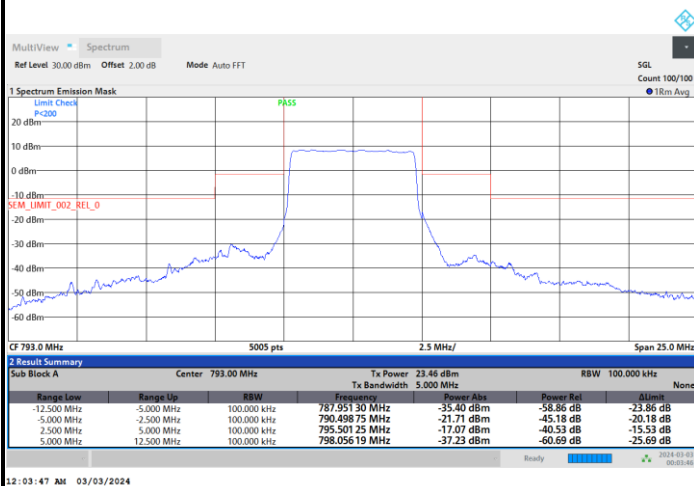
1RB0



1RBmax



Full RB

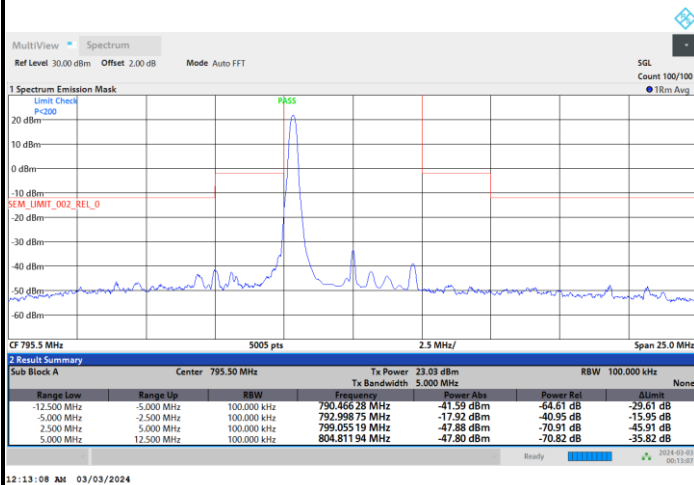




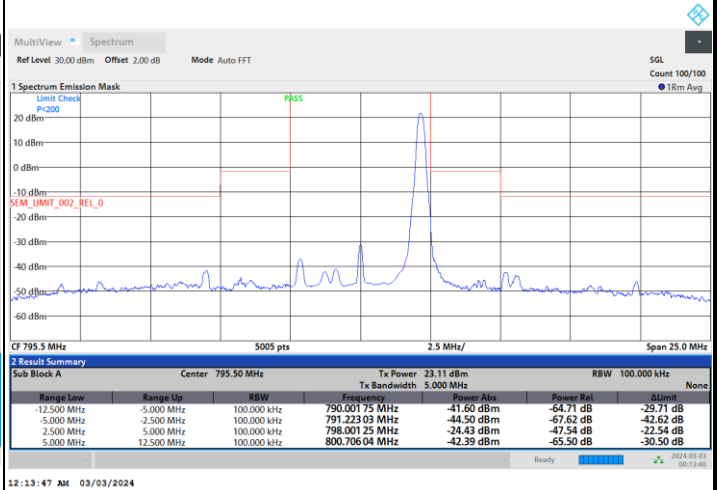
FR1 n14 / 5MHz / DFT-S OFDM / PI/2 BPSK

Highest Channel

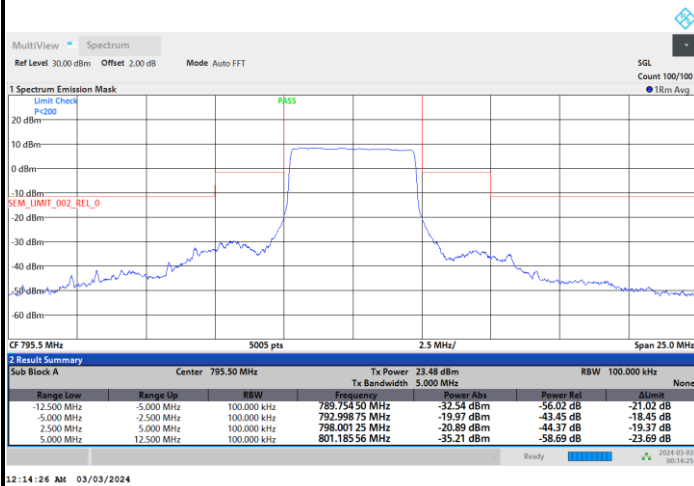
1RB0



1RBmax



Full RB

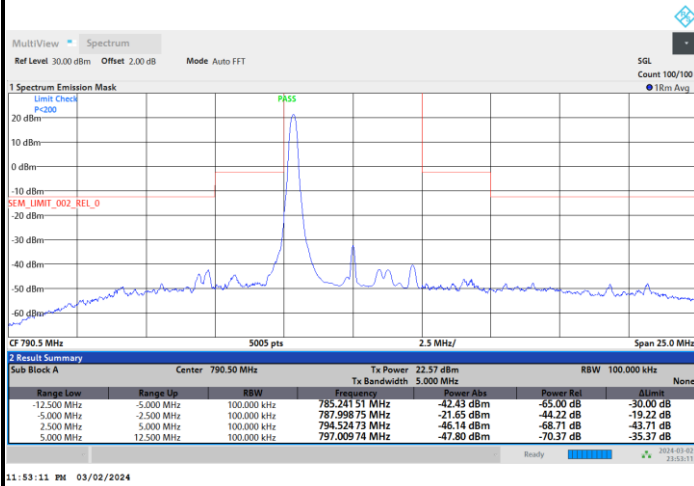




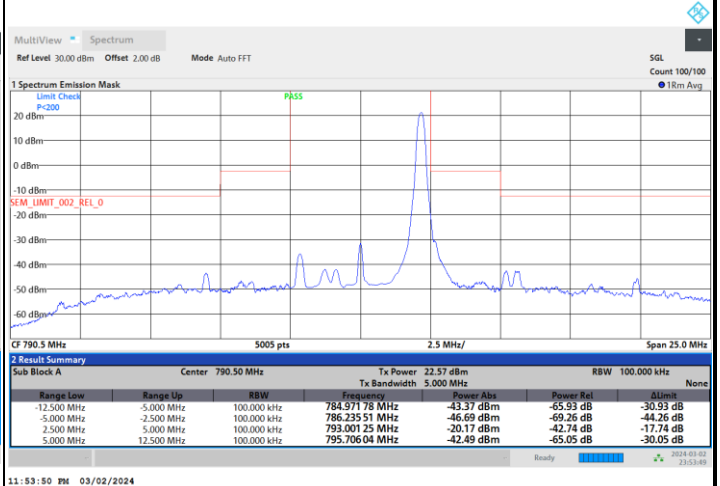
FR1 n14 / 5MHz / DFT-S OFDM / QPSK

Lowest Channel

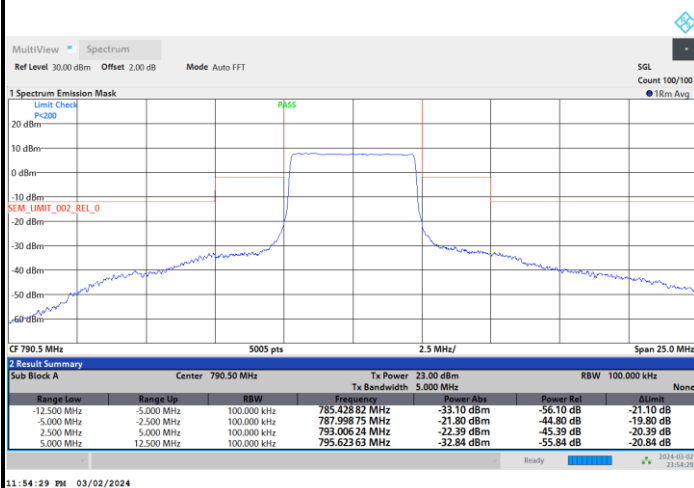
1RB0



1RBmax



Full RB

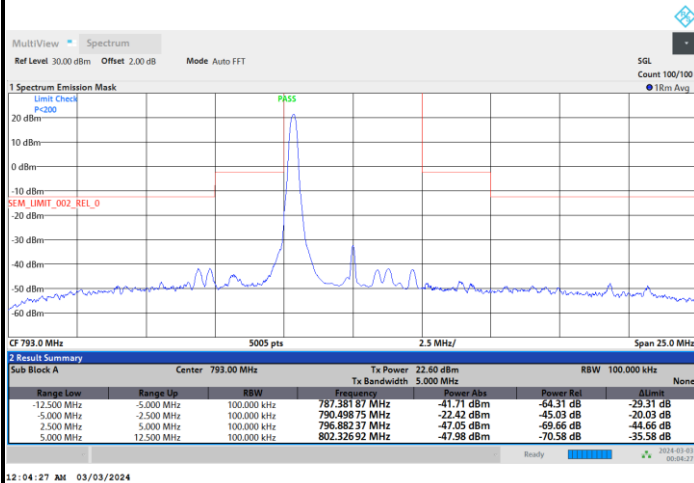




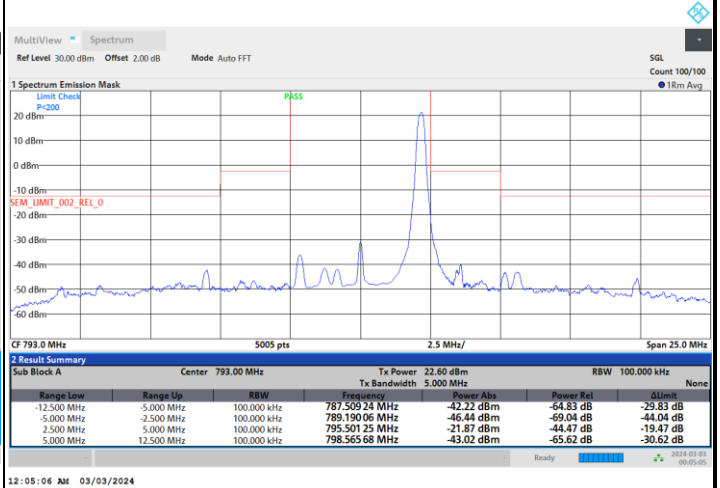
FR1 n14 / 5MHz / DFT-S OFDM / QPSK

Middle Channel

1RB0



1RBmax



Full RB

