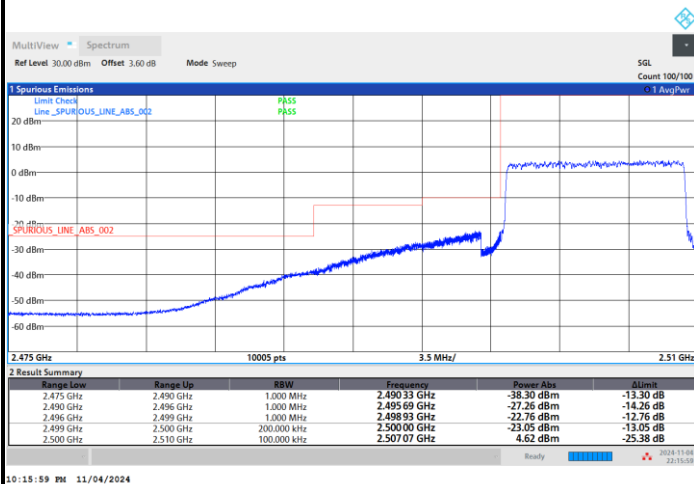


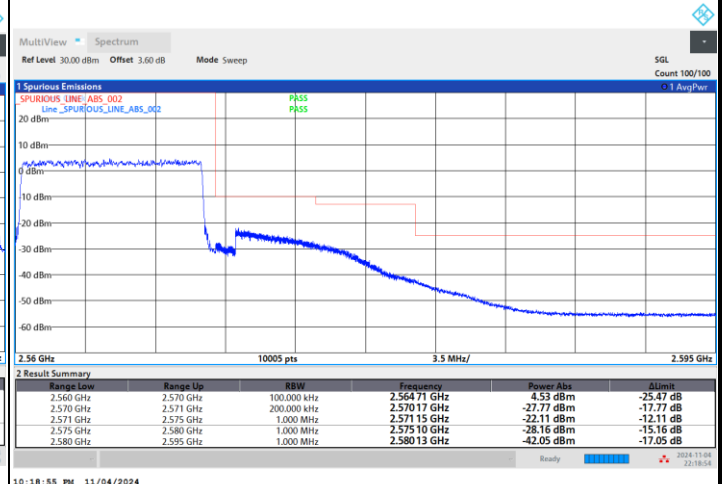


FR1 n7 / 10MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

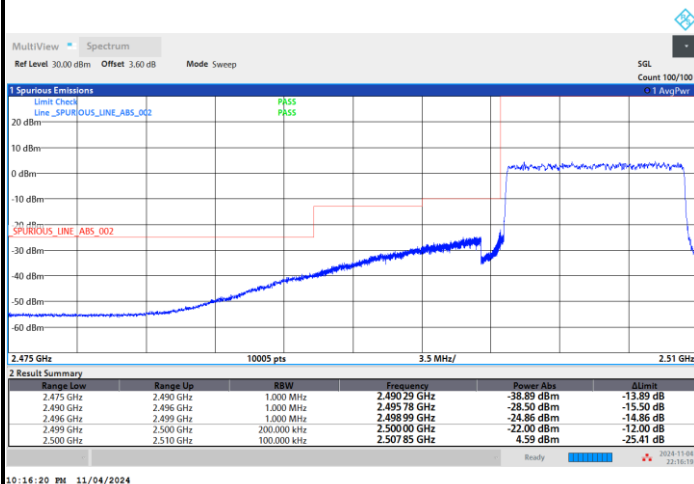


Highest Band Edge

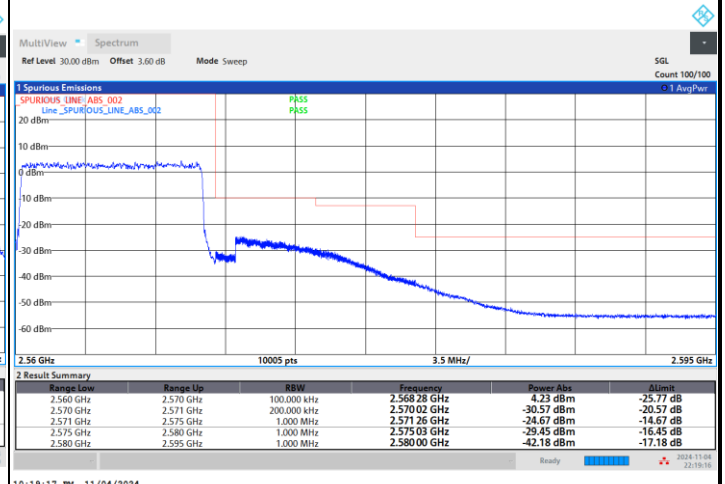


FR1 n7 / 10MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge



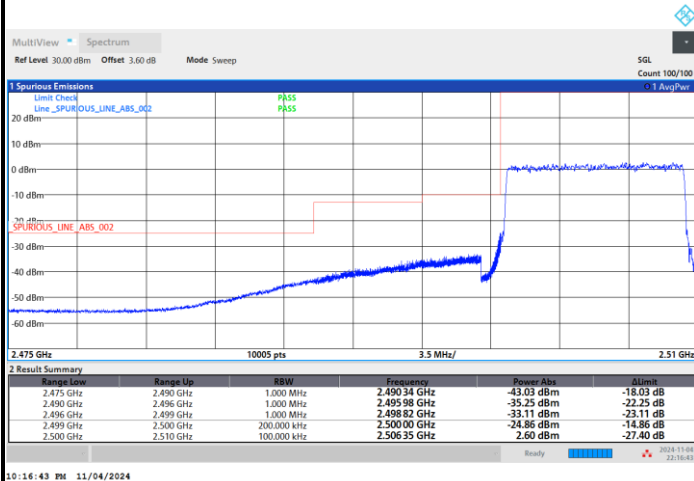
Highest Band Edge



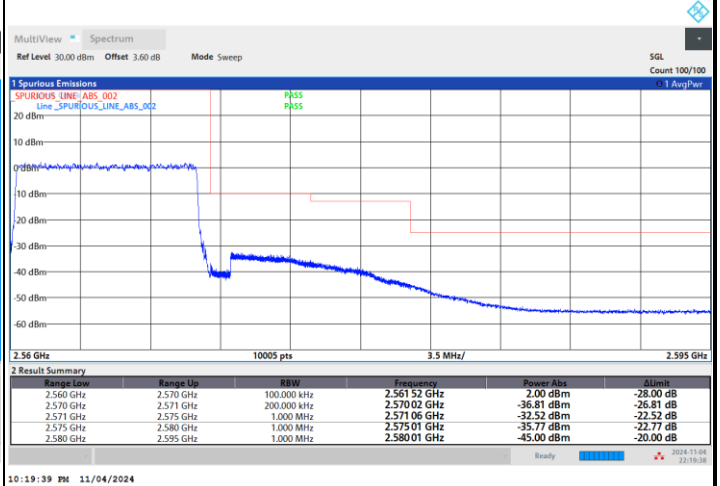


FR1 n7 / 10MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

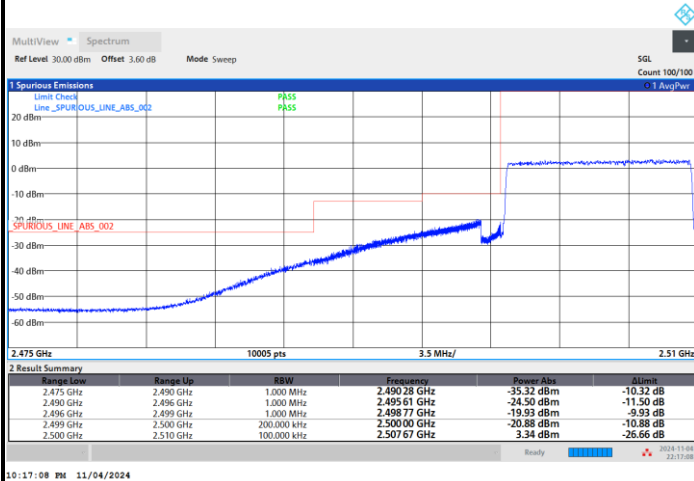


Highest Band Edge

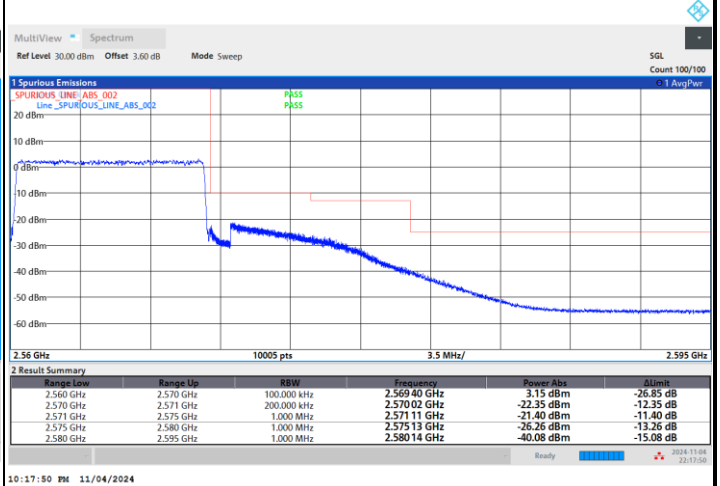


FR1 n7 / 10MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



Highest Band Edge

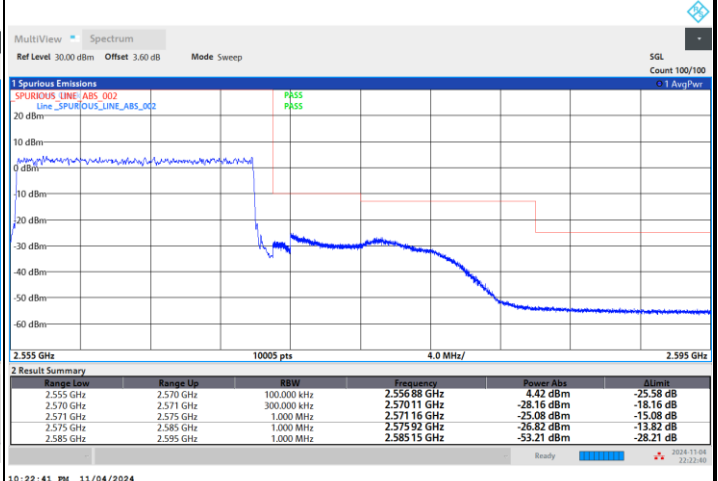
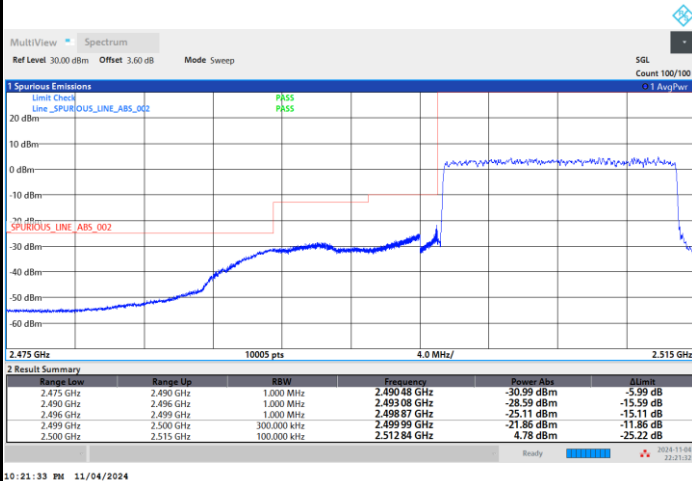




FR1 n7 / 15MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

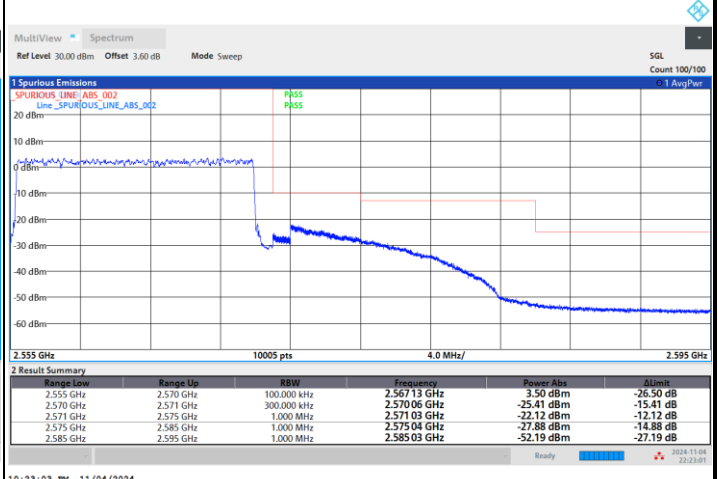
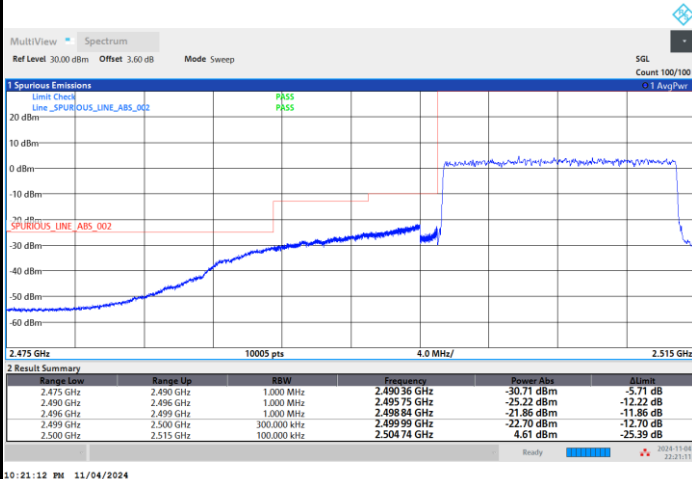
Highest Band Edge



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

Lowest Band Edge

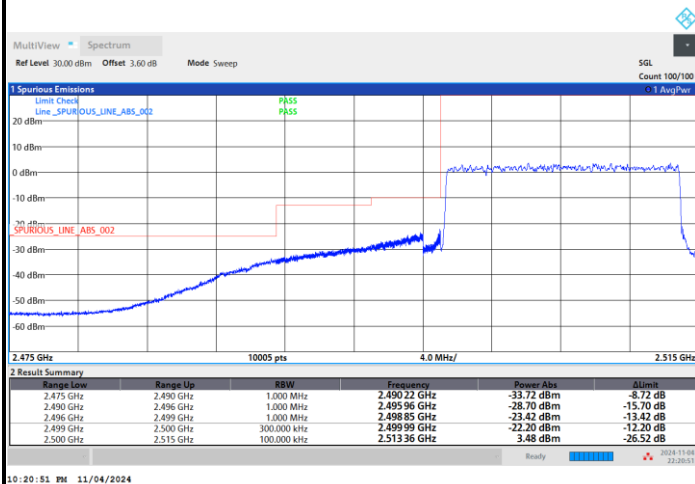
Highest Band Edge



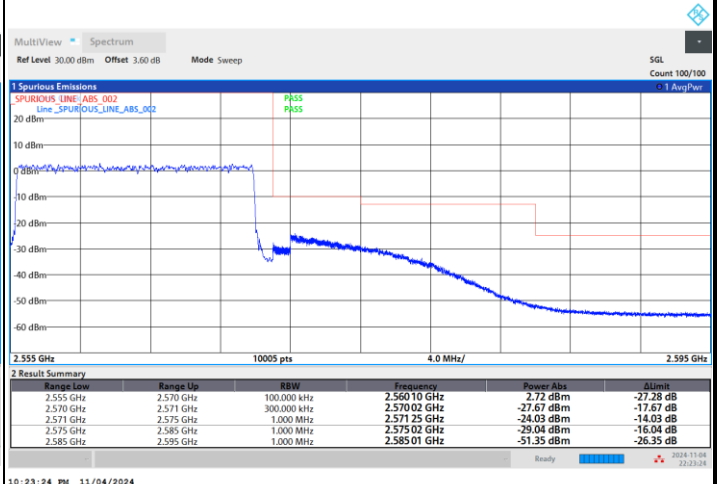


FR1 n7 / 15MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

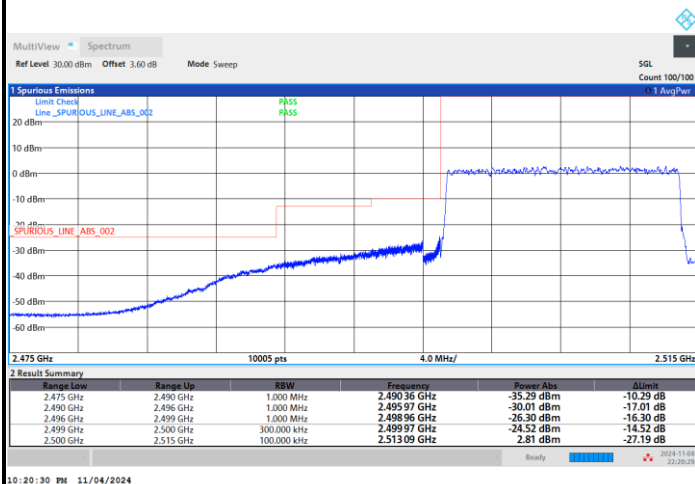


Highest Band Edge

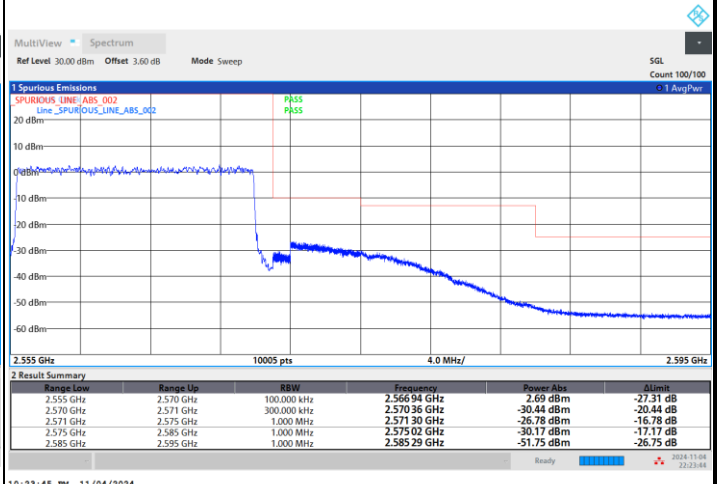


FR1 n7 / 15MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge



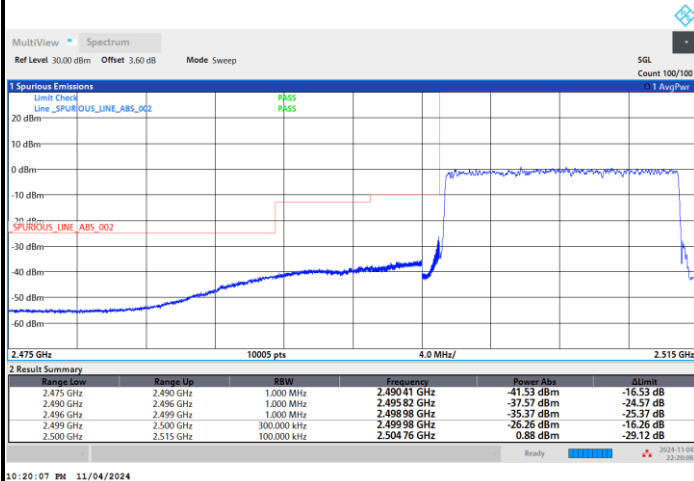
Highest Band Edge



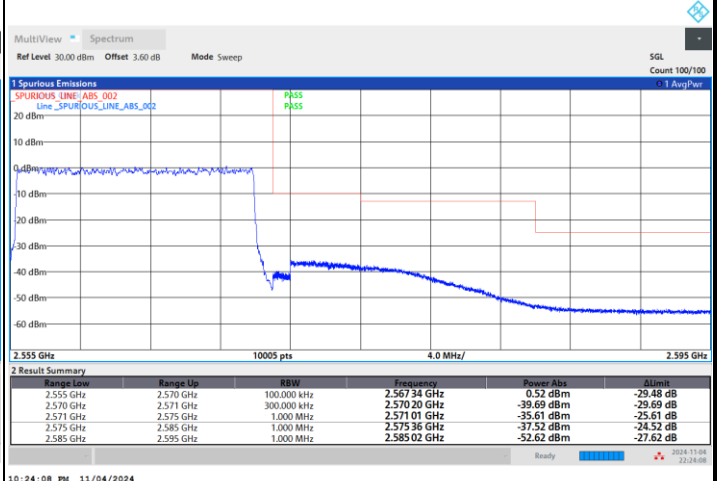


FR1 n7 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

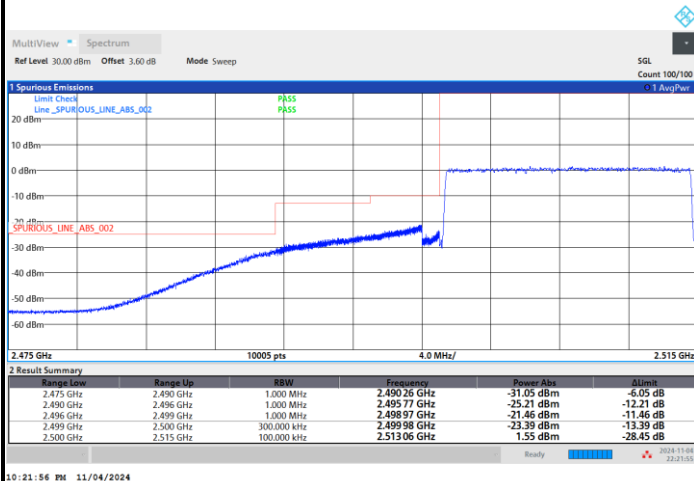


Highest Band Edge

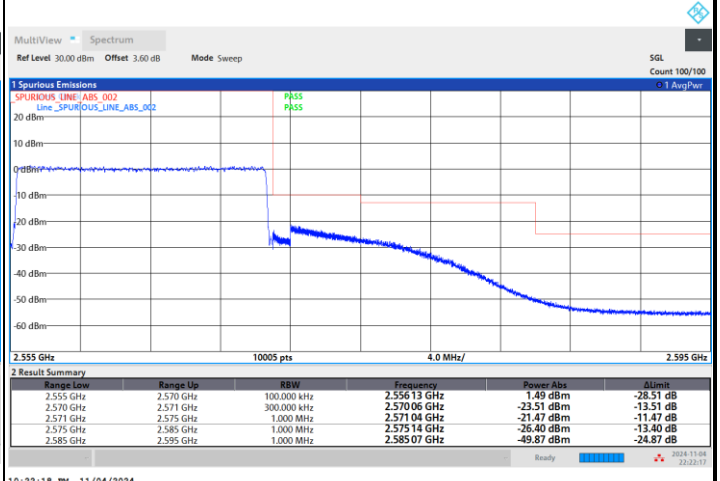


FR1 n7 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



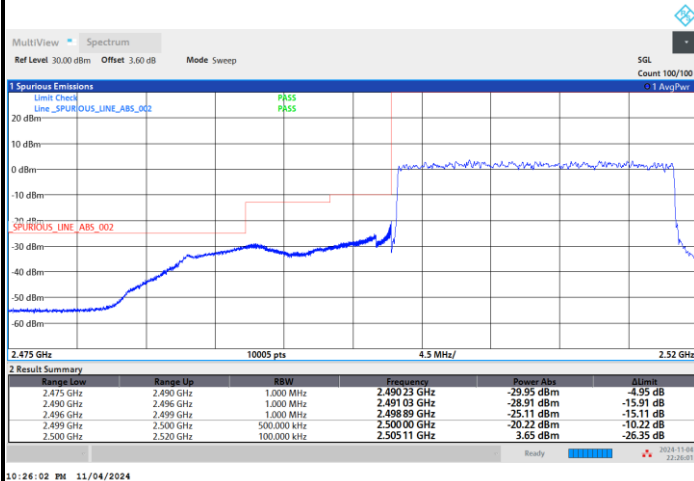
Highest Band Edge



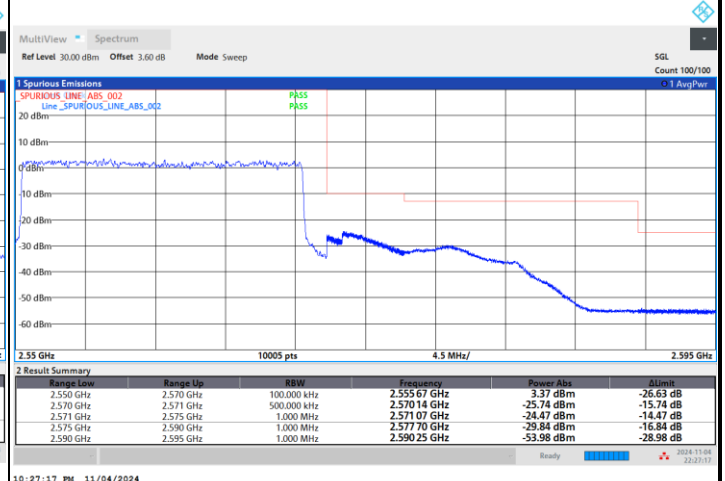


FR1 n7 / 20MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

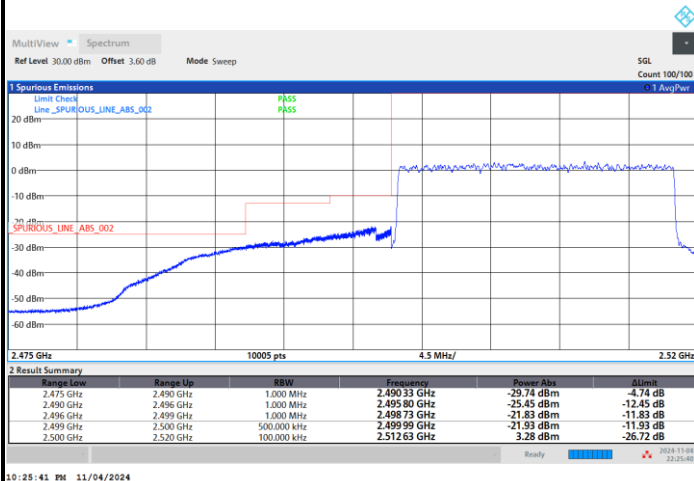


Highest Band Edge

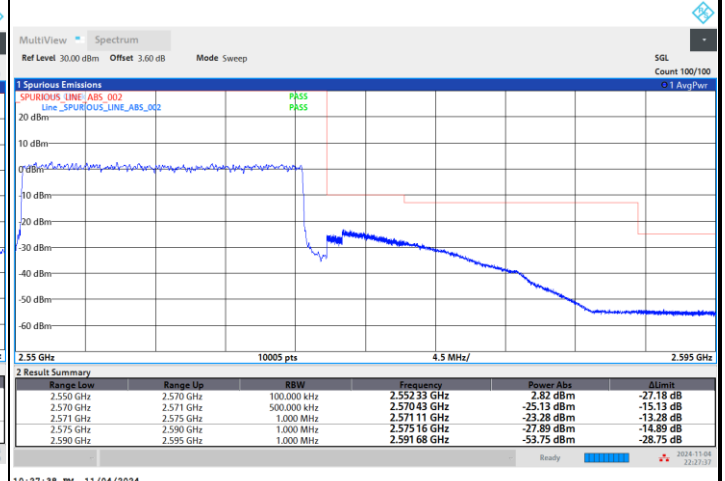


FR1 n7 / 20MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge



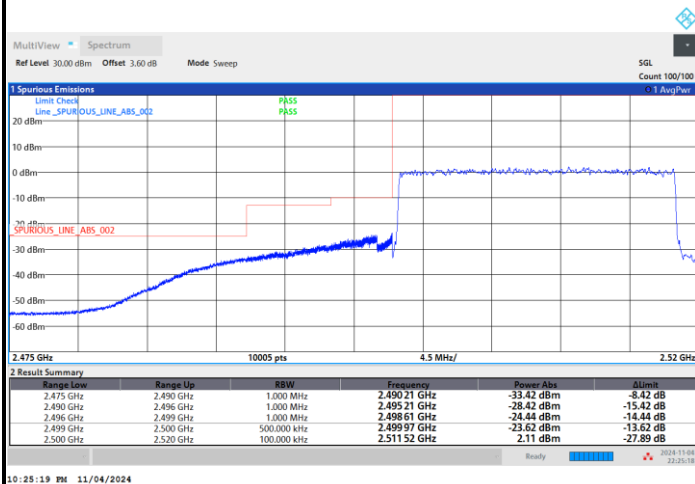
Highest Band Edge



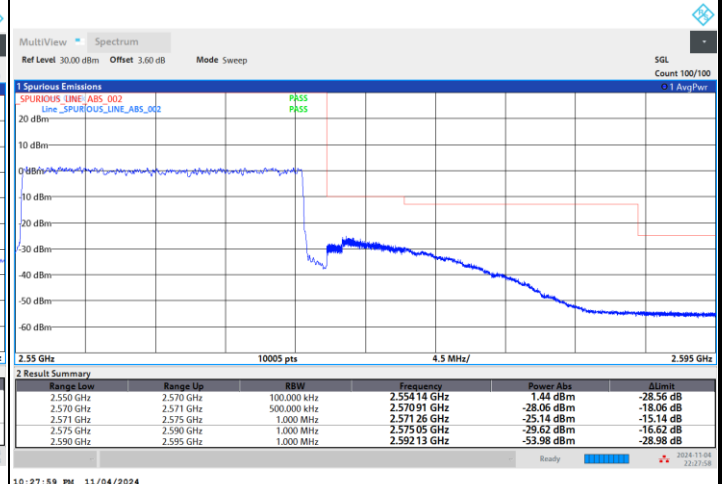


FR1 n7 / 20MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

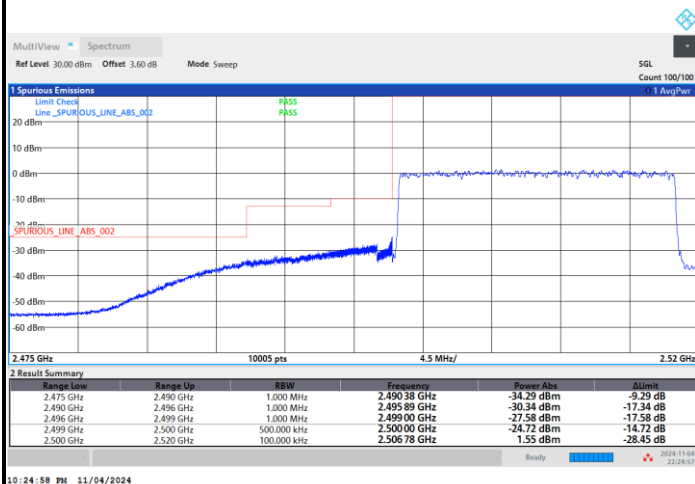


Highest Band Edge

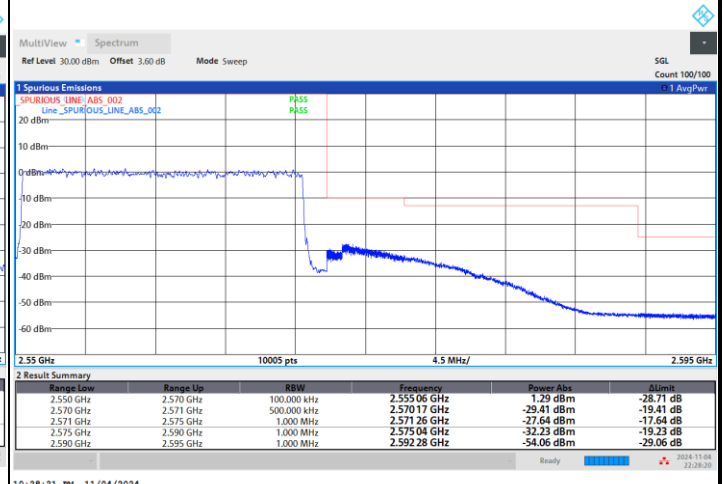


FR1 n7 / 20MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge



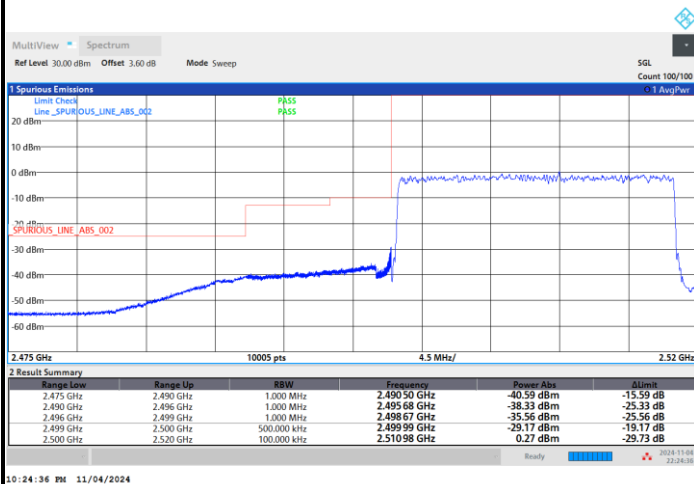
Highest Band Edge



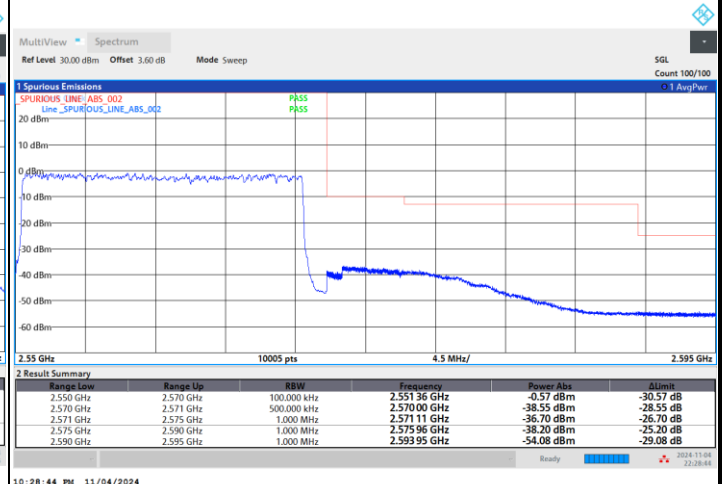


FR1 n7 / 20MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

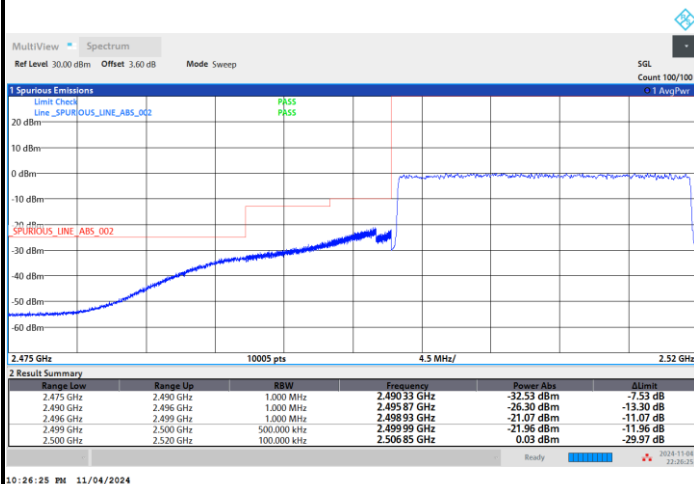


Highest Band Edge

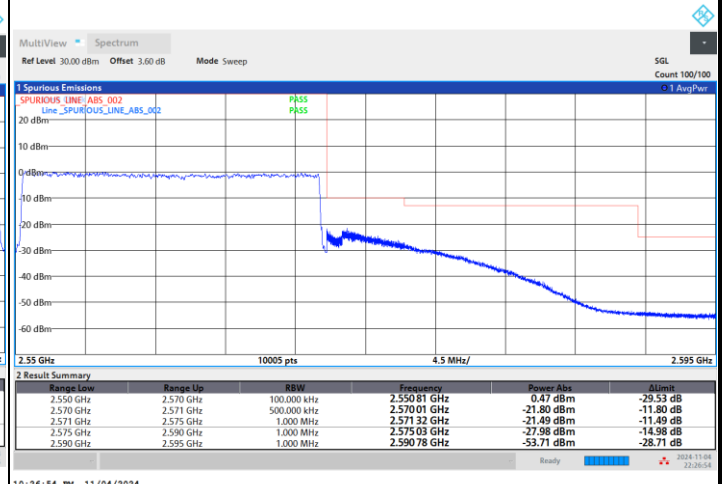


FR1 n7 / 20MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



Highest Band Edge

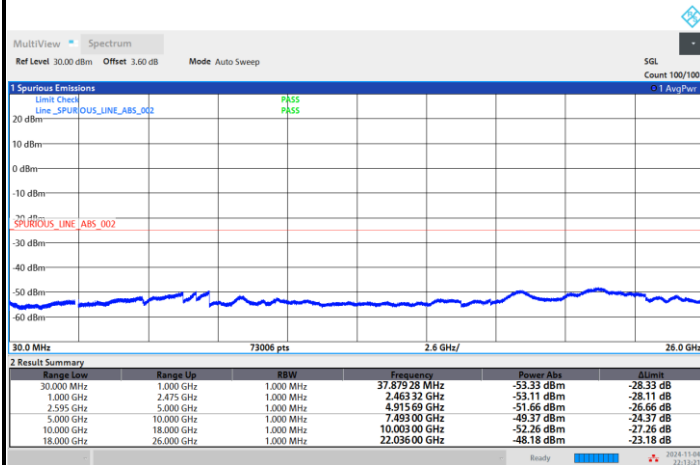




Conducted Spurious Emission

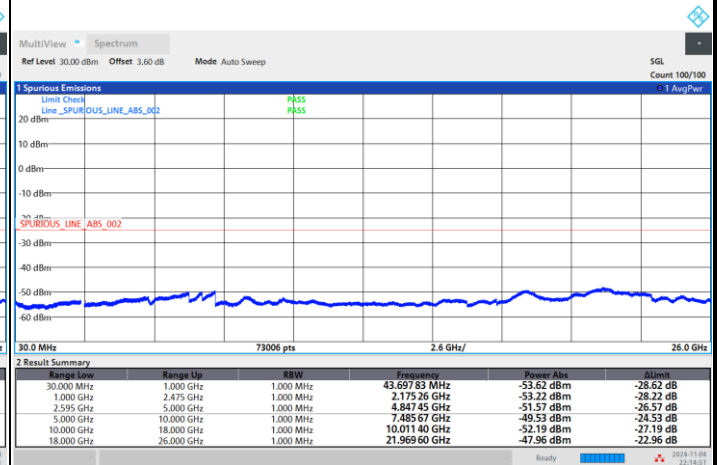
FR1 n7 / 5MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel



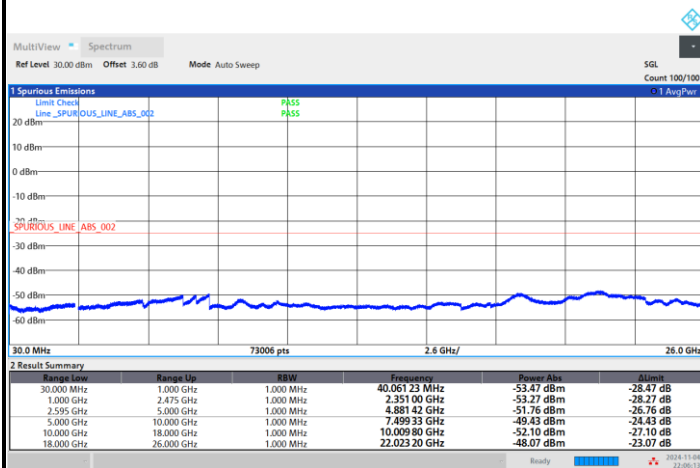
10:13:22 PM 11/04/2024

Middle Channel



10:14:51 PM 11/04/2024

Highest Channel



10:06:14 PM 11/04/2024

Frequency Stability

Test Conditions		FR1 n7 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0048	PASS
40	Normal Voltage	0.0256	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0081	
-10	Normal Voltage	0.0242	
-20	Normal Voltage	0.0206	
-30	Normal Voltage	0.0163	
20	Maximum Voltage	0.0040	
20	Normal Voltage	0.0250	
20	Minimum Voltage	0.0189	

Note:

1. Normal Voltage = 3.3 V. ; Minimum Voltage = 3.135 V. ; Maximum Voltage = 3.465 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

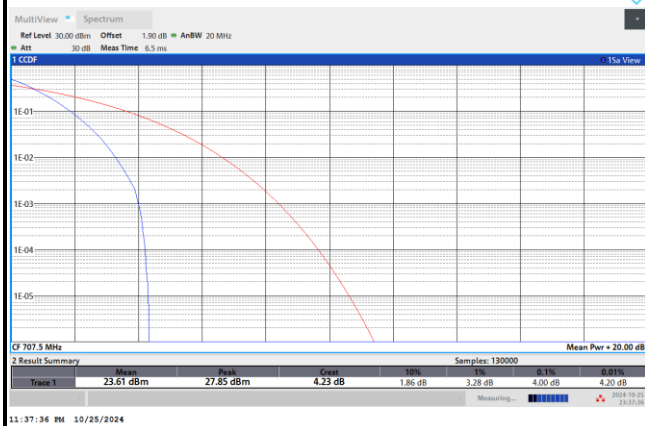
**FR1 n12****Peak-to-Average Ratio**

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	4.00	4.48	5.34	5.78	PASS
Mode	FR1 n12 / 15MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.32				PASS

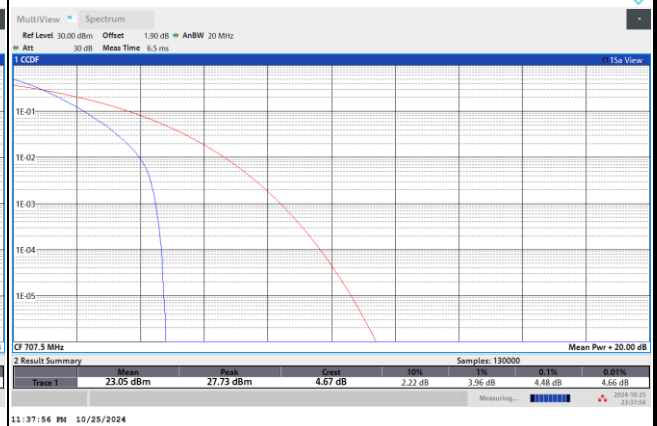


FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

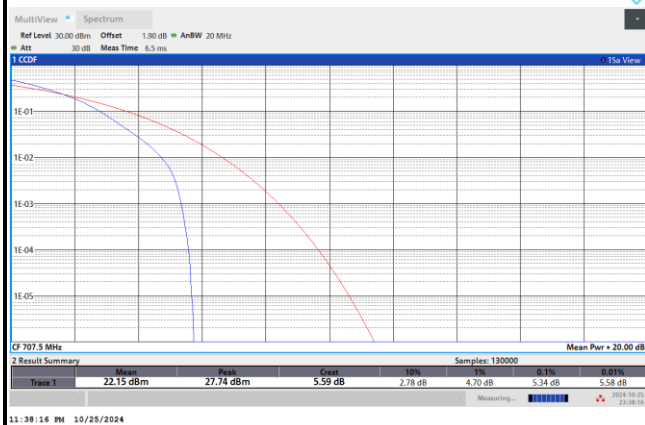
PI/2 BPSK



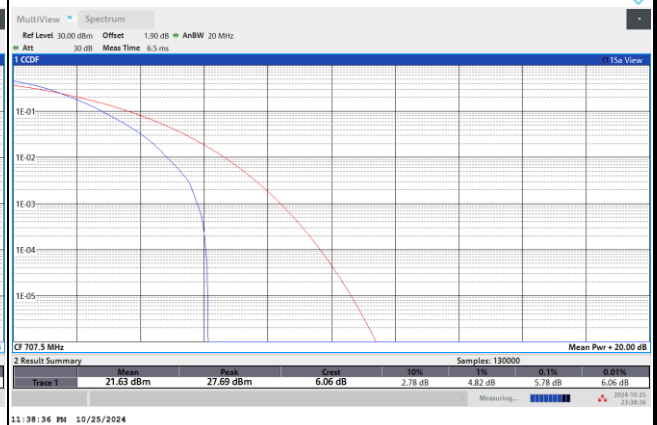
QPSK



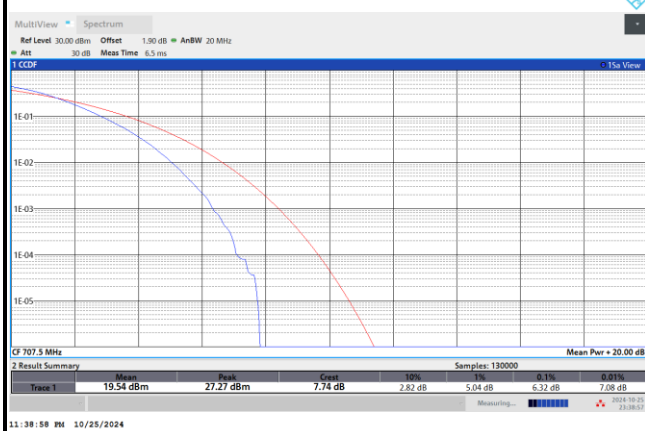
16QAM



64QAM



256QAM



**26dB Bandwidth**

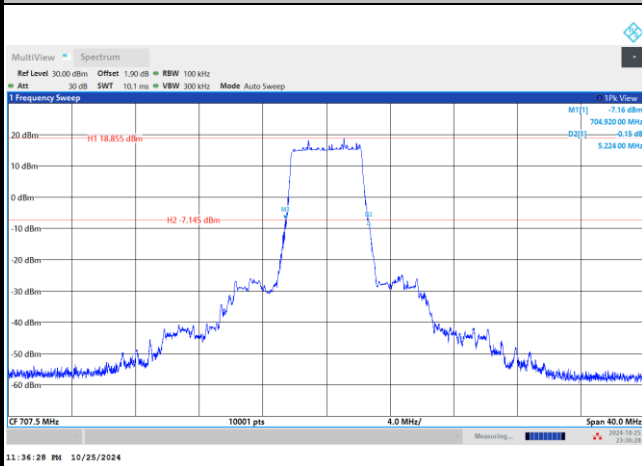
Mode	FR1 n12 : 26dB BW(MHz) / DFT-S OFDM		
BW	5MHz	10MHz	15MHz
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK
Middle CH	5.22	9.82	14.53

Mode	FR1 n12 : 26dB BW(MHz) / CP OFDM					
BW	5MHz		10MHz		15MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	5.32	5.22	10.62	10.26	15.32	15.24
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	5.23	5.27	10.30	10.26	15.36	15.39



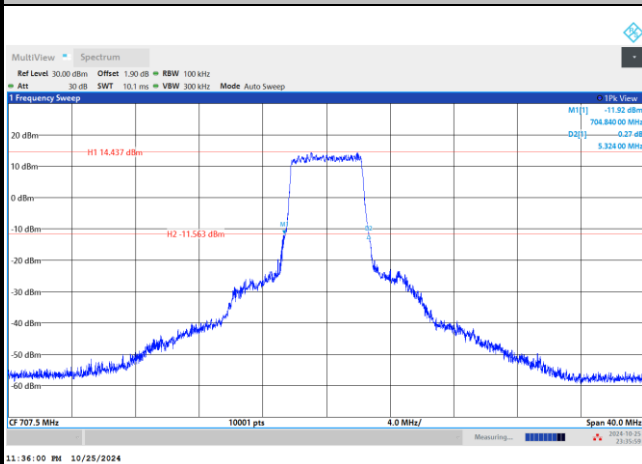
FR1 n12 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

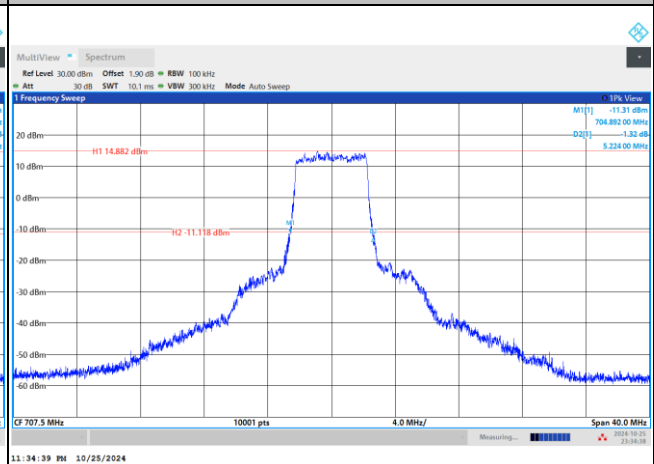


FR1 n12 / 5MHz / CP OFDM / Middle Channel / Full RB

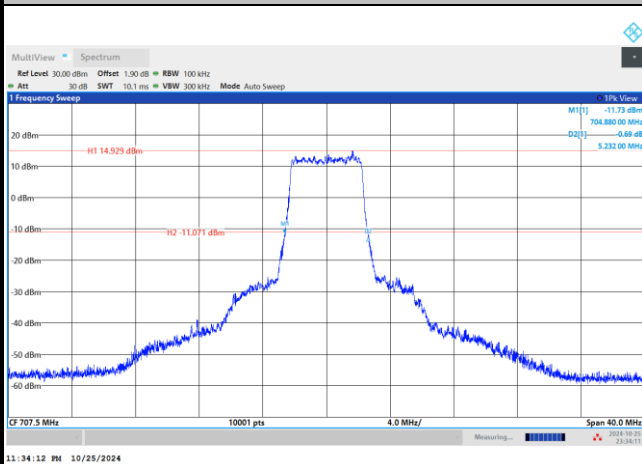
QPSK



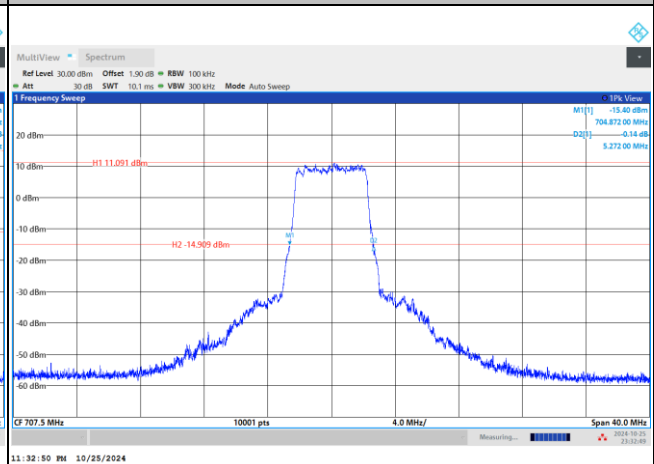
16QAM



64QAM



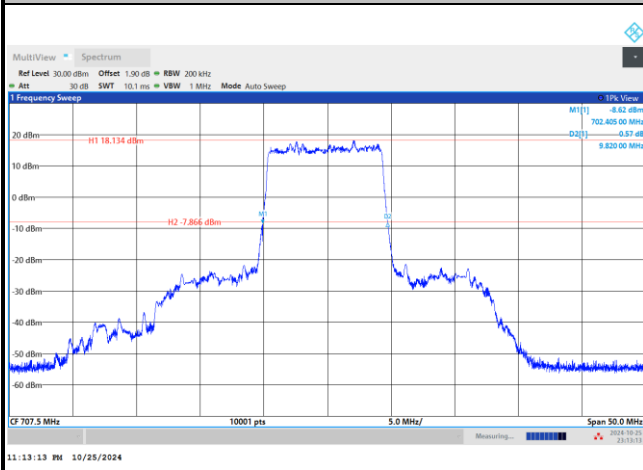
256QAM





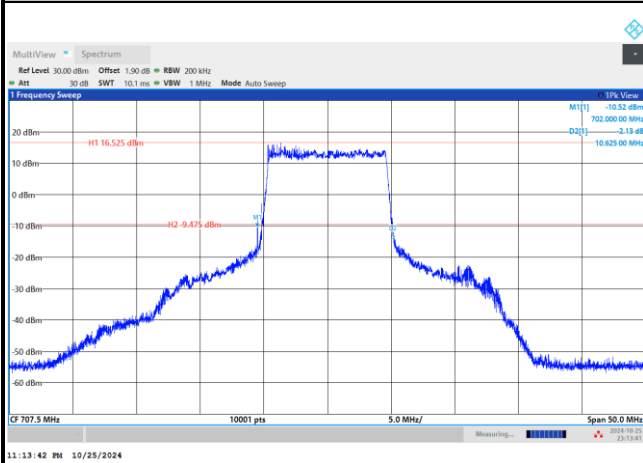
FR1 n12 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

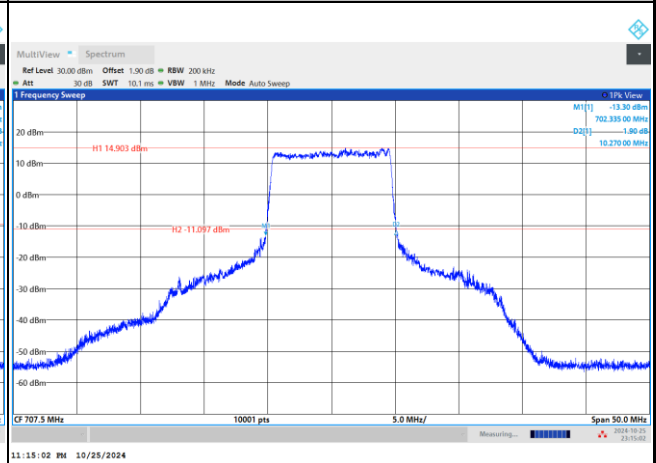


FR1 n12 / 10MHz / CP OFDM / Middle Channel / Full RB

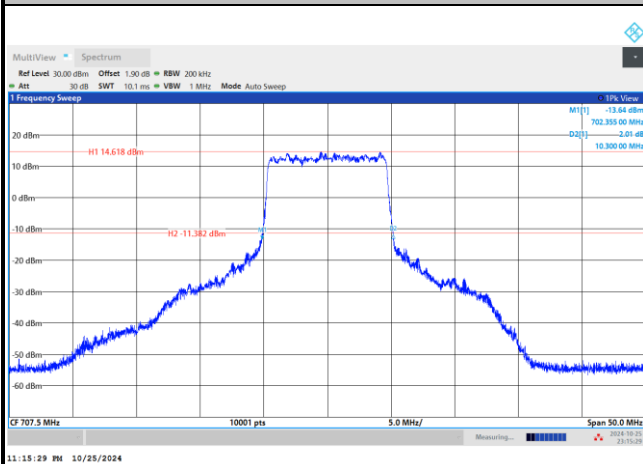
QPSK



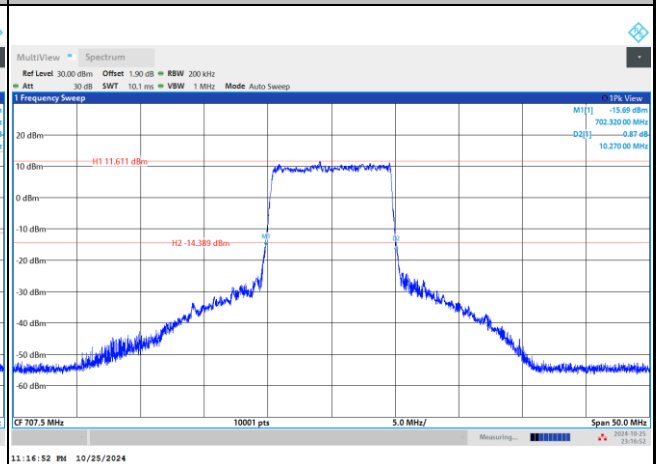
16QAM



64QAM



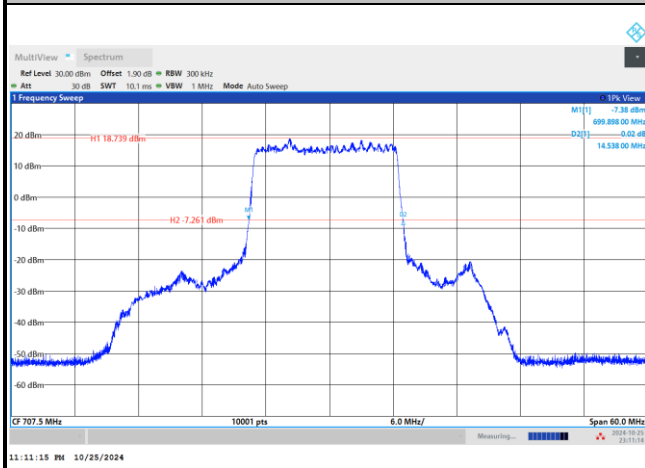
256QAM





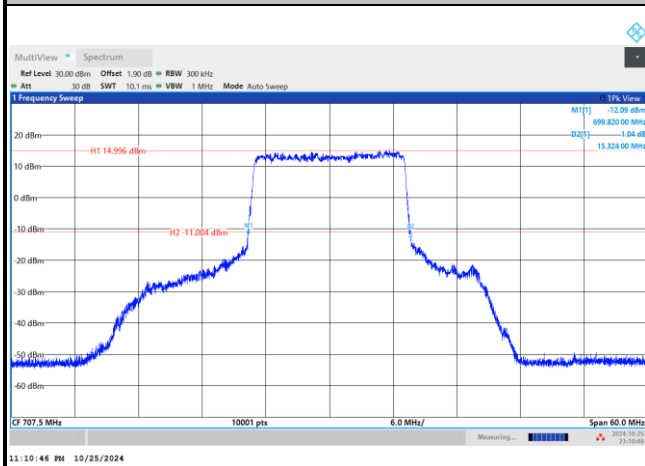
FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

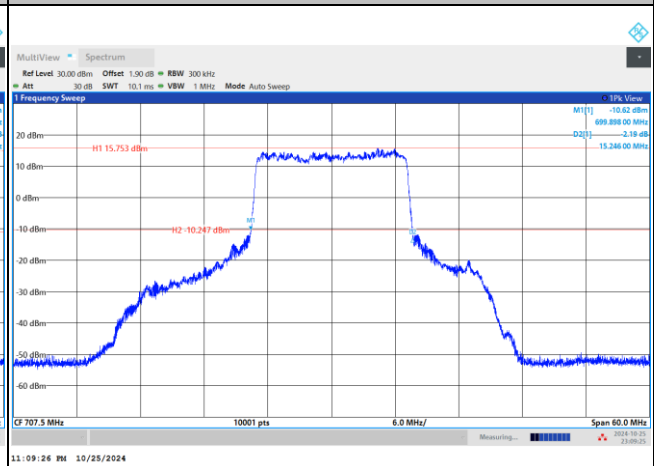


FR1 n12 / 15MHz / CP OFDM / Middle Channel / Full RB

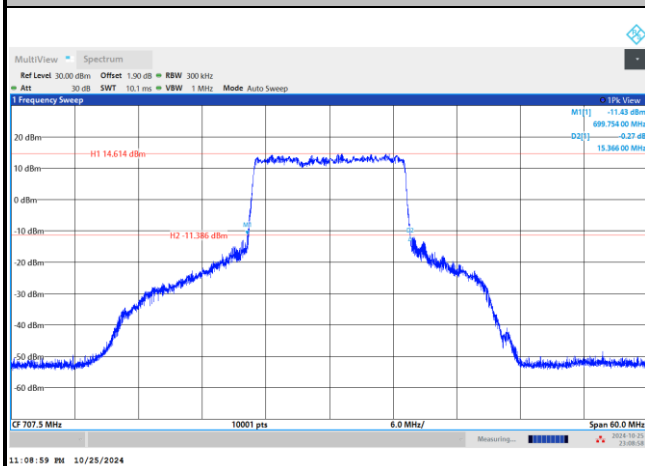
QPSK



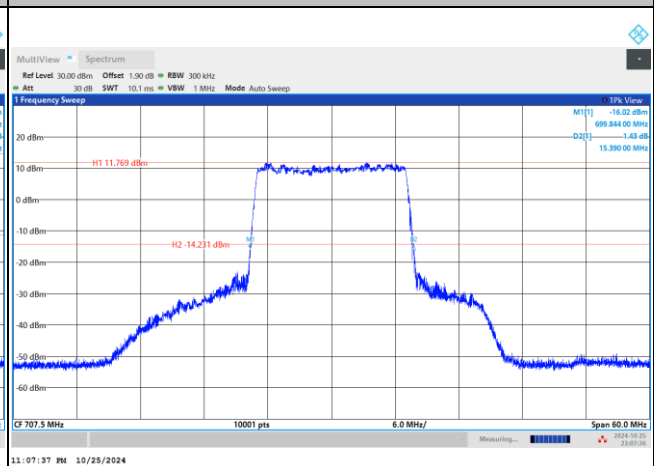
16QAM



64QAM



256QAM



**Occupied Bandwidth**

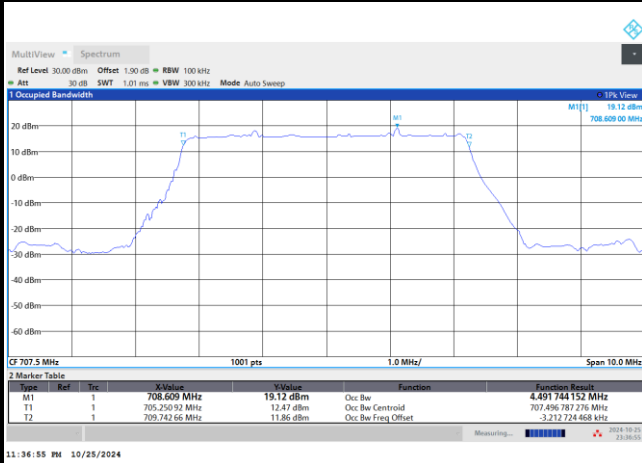
Mode	FR1 n12 : 99%OBW(MHz) / DFT-S OFDM		
BW	5MHz	10MHz	15MHz
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK
Middle CH	4.49	8.97	13.45

Mode	FR1 n12 : 99%OBW (MHz) / CP OFDM					
BW	5MHz		10MHz		15MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.52	4.52	9.32	9.32	14.16	14.18
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.51	4.52	9.32	9.35	14.19	14.16



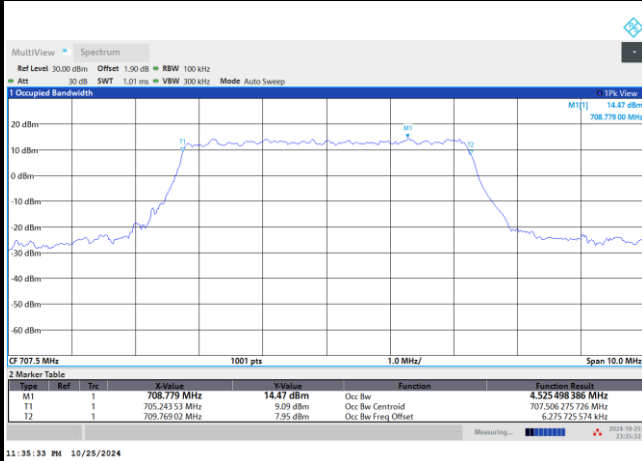
FR1 n12 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

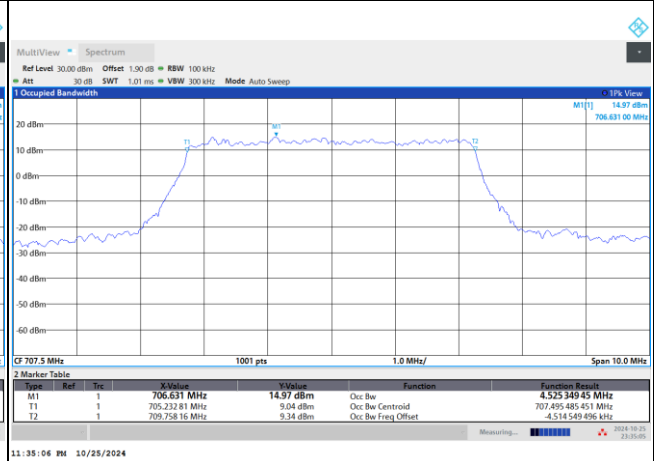


FR1 n12 / 5MHz / CP OFDM / Middle Channel / Full RB

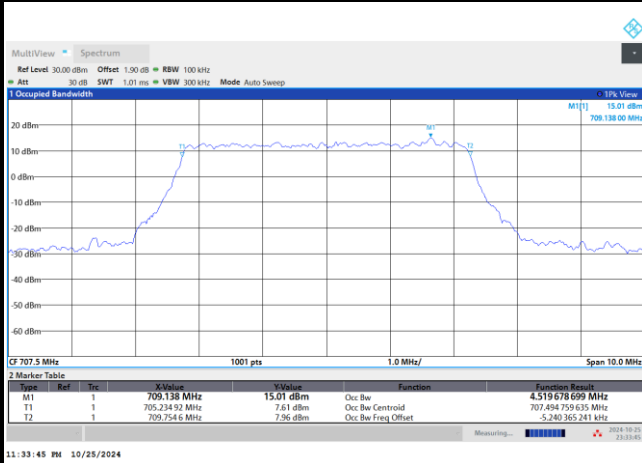
QPSK



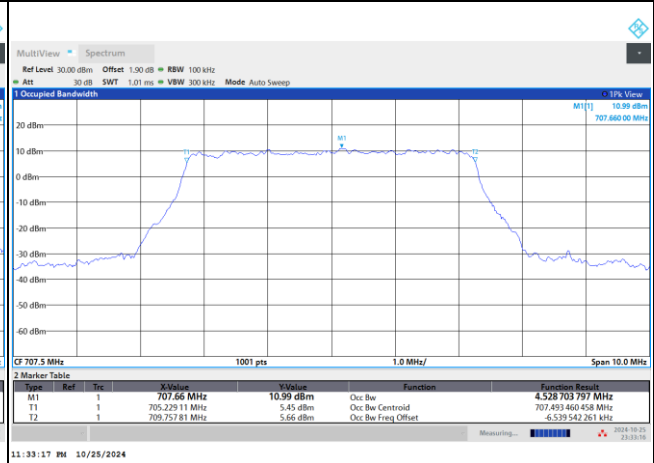
16QAM



64QAM



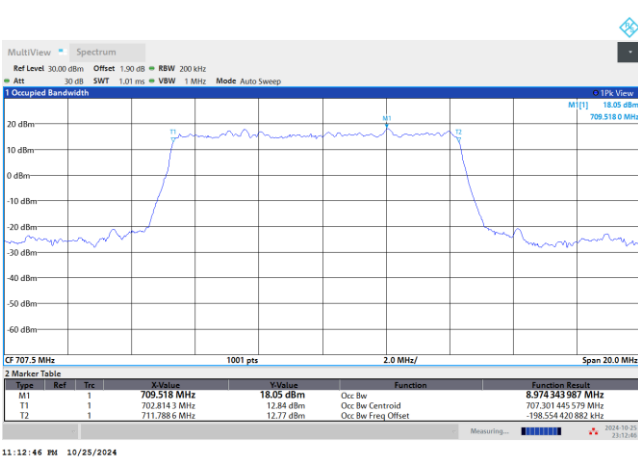
256QAM





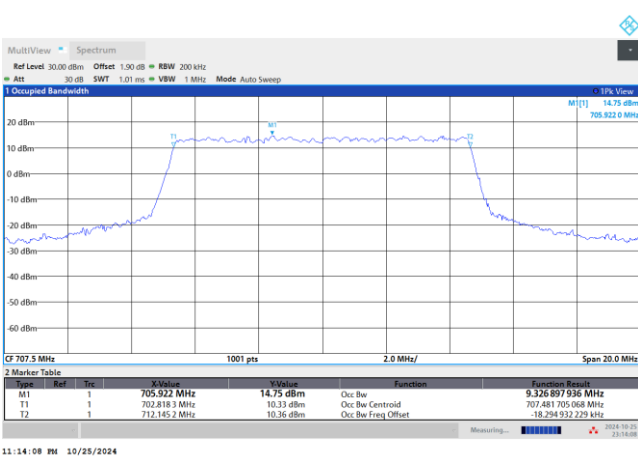
FR1 n12 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

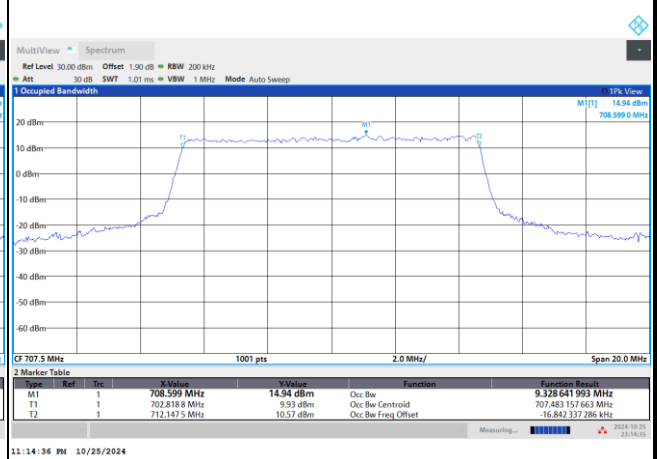


FR1 n12 / 10MHz / CP OFDM / Middle Channel / Full RB

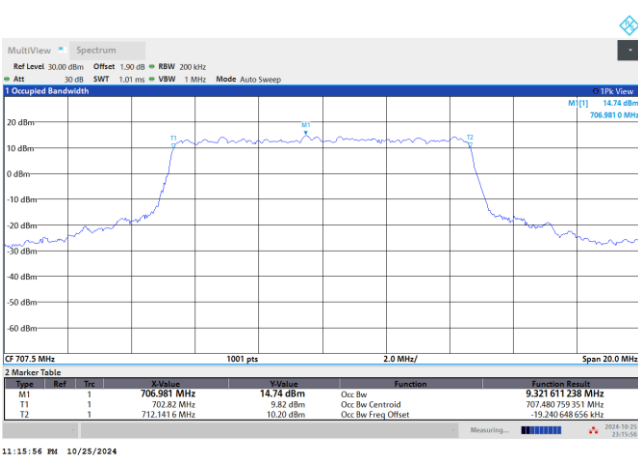
QPSK



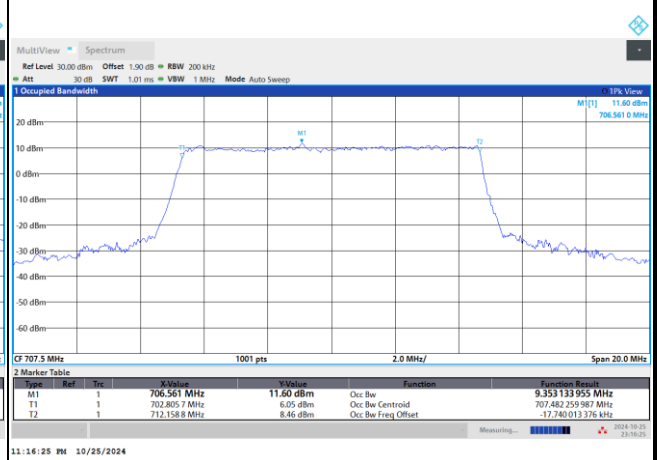
16QAM



64QAM



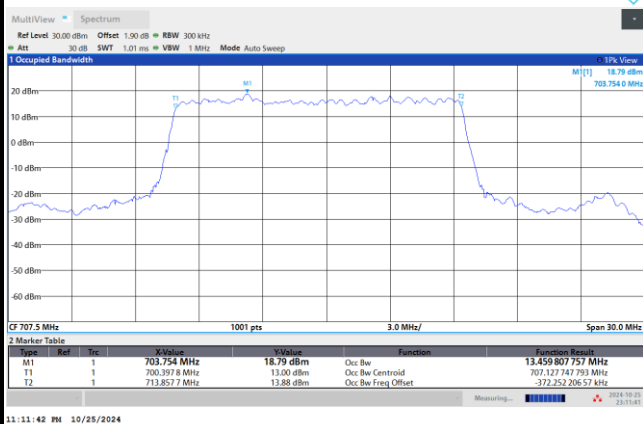
256QAM





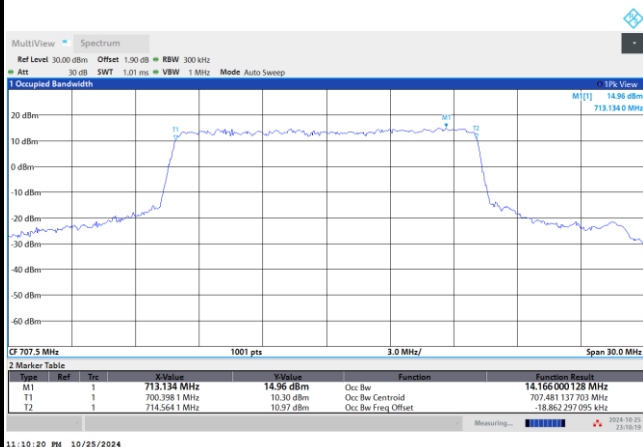
FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

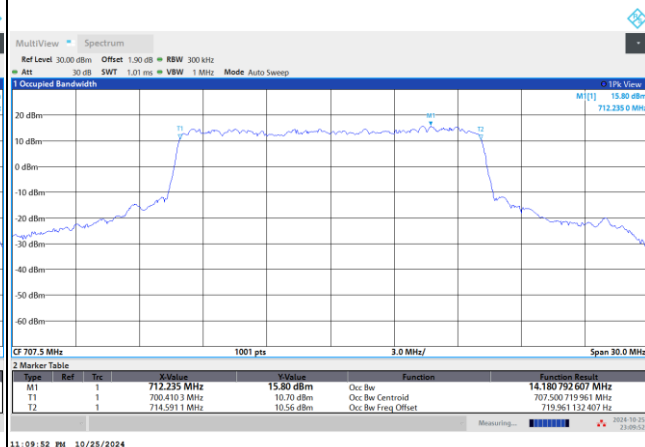


FR1 n12 / 15MHz / CP OFDM / Middle Channel / Full RB

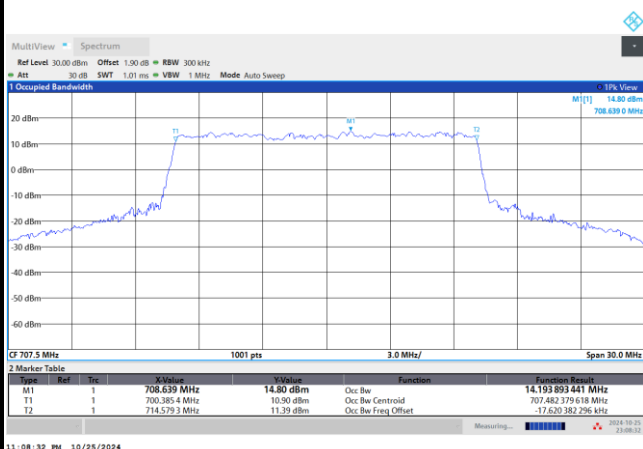
QPSK



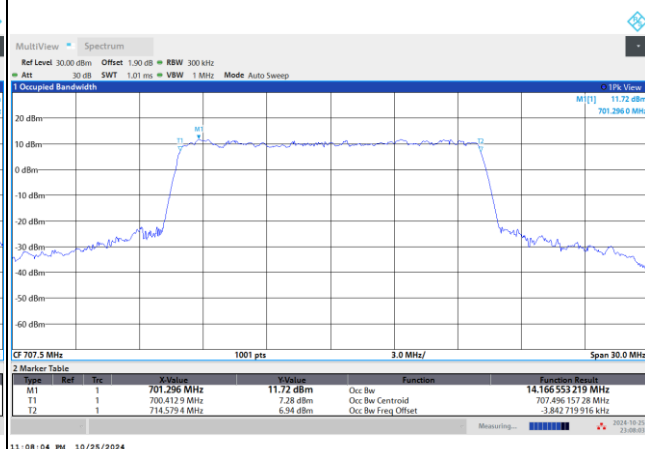
16QAM



64QAM



256QAM



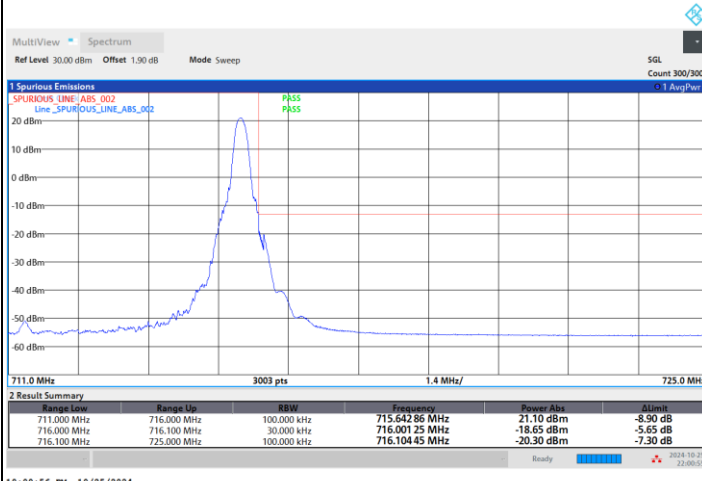
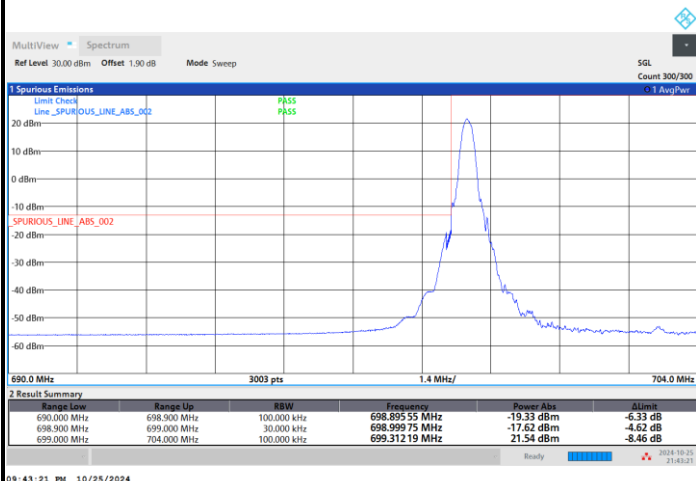


Conducted Band Edge

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

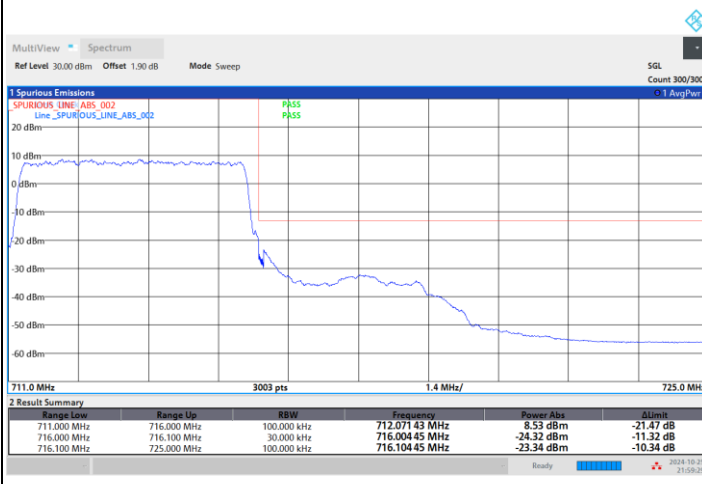
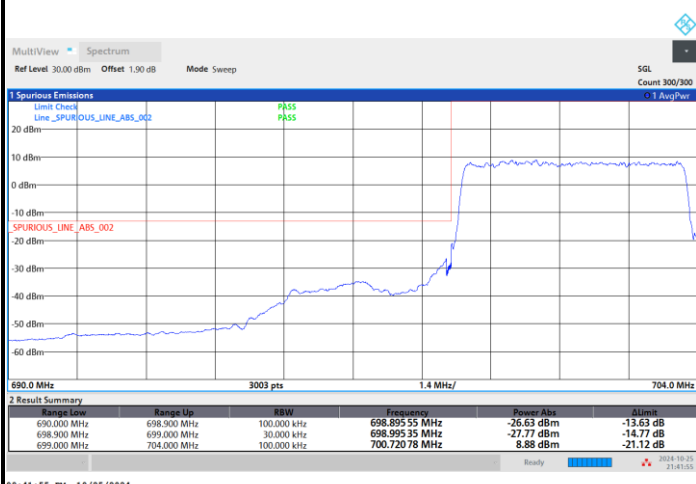
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

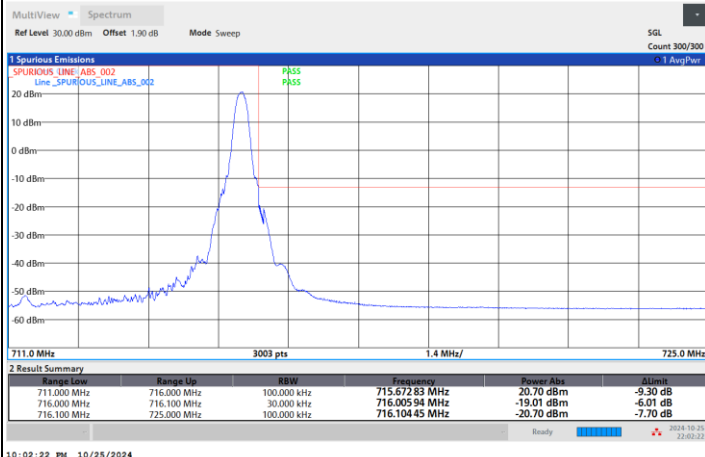
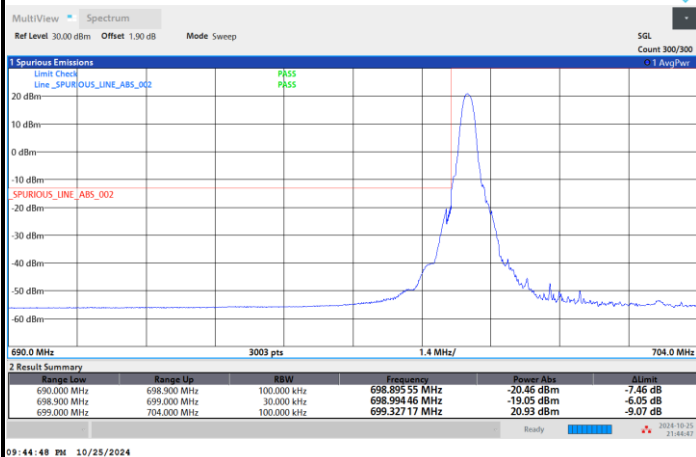




FR1 n12 / 5MHz / DFT-S OFDM / QPSK

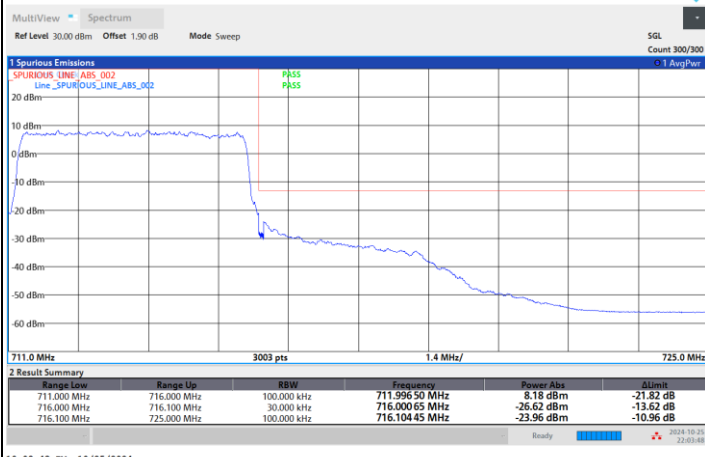
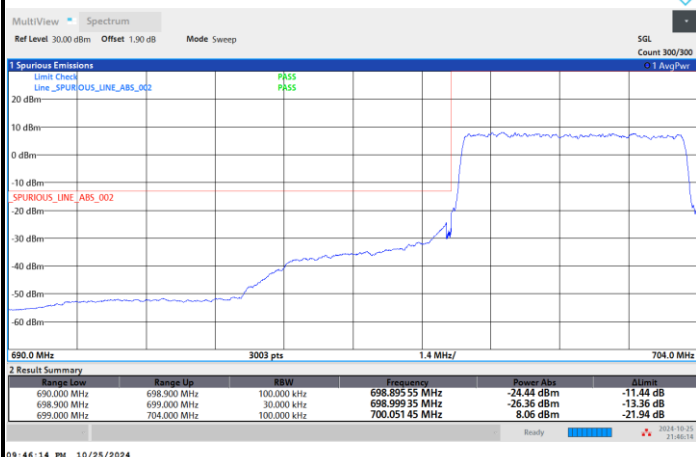
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

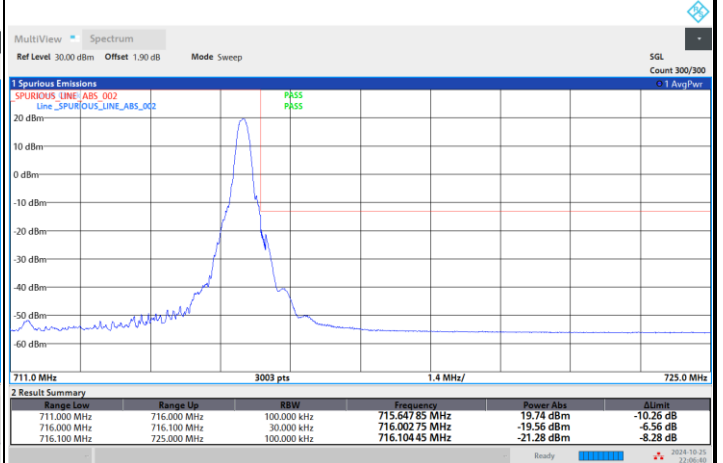
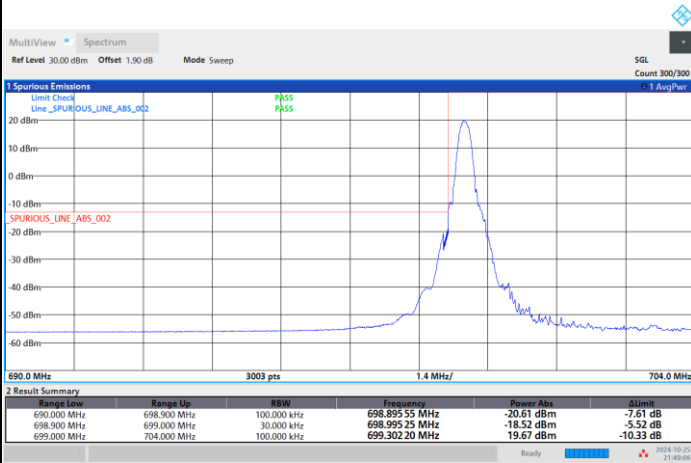




FR1 n12 / 5MHz / DFT-S OFDM / 16QAM

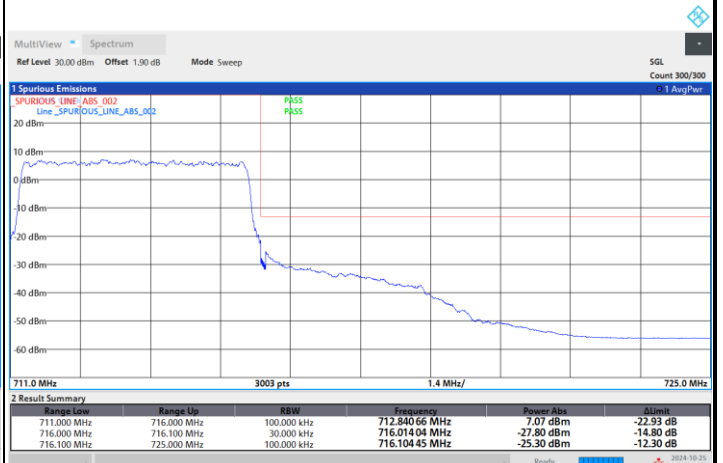
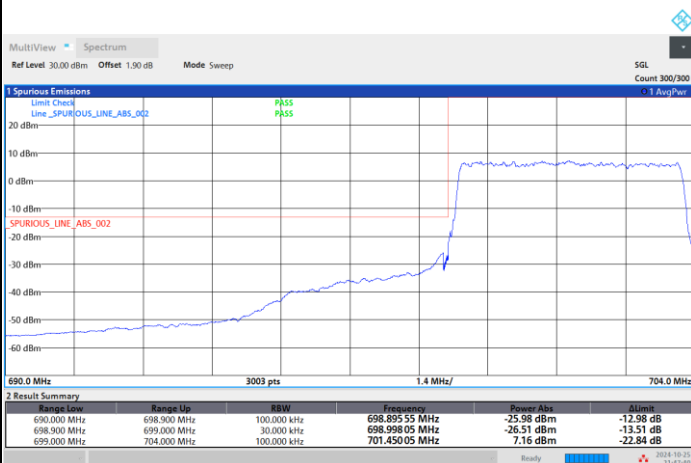
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

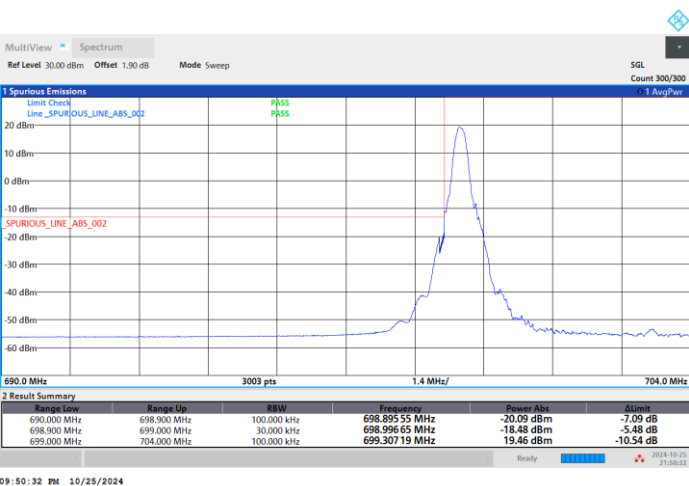
Highest Band Edge / Full RB



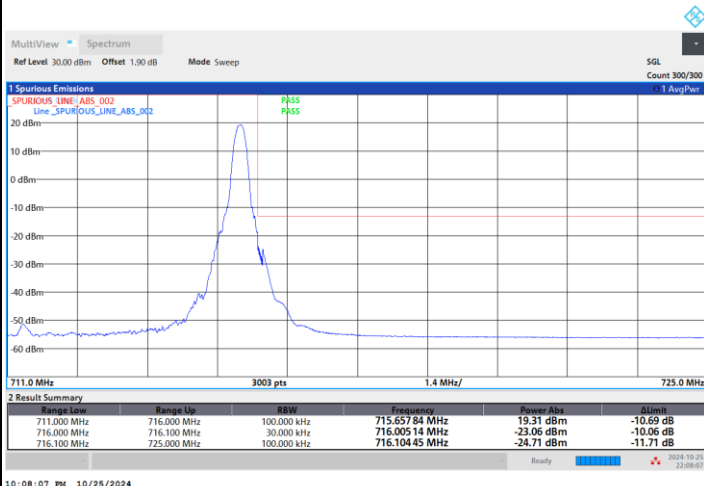


FR1 n12 / 5MHz / DFT-S OFDM / 64QAM

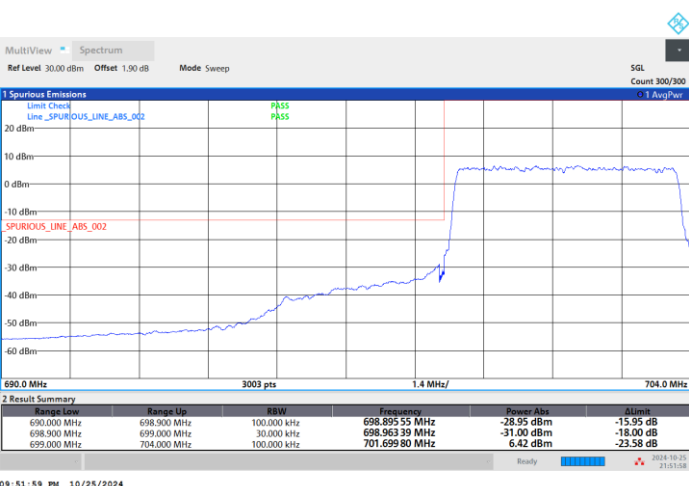
Lowest Band Edge / 1RB0



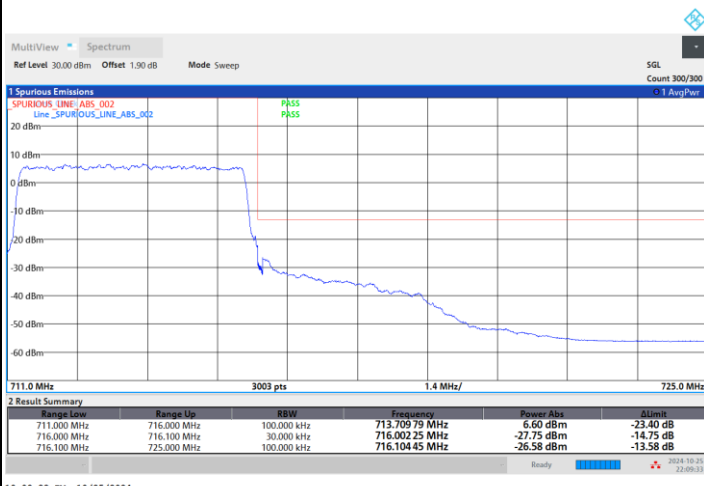
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

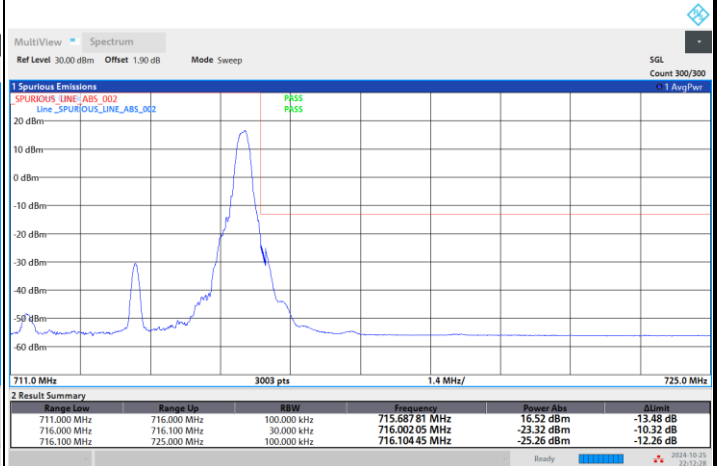
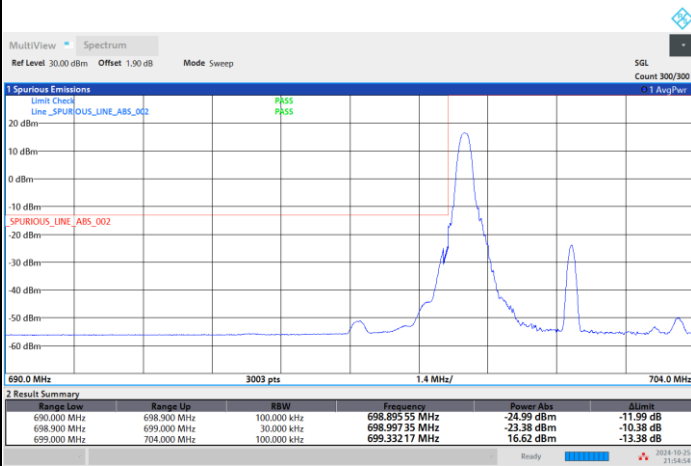




FR1 n12 / 5MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

