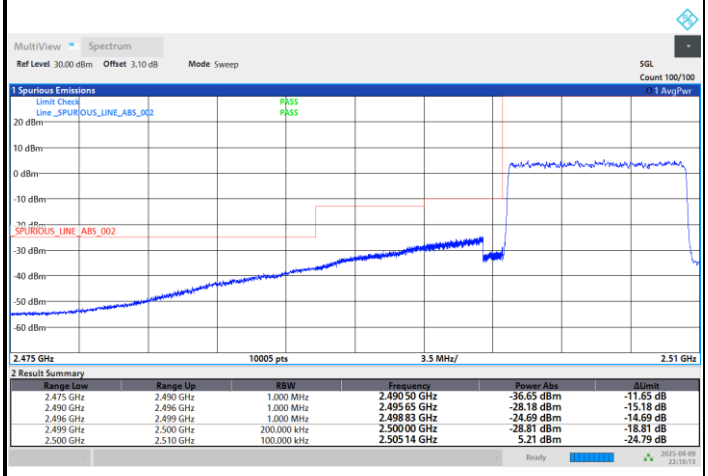
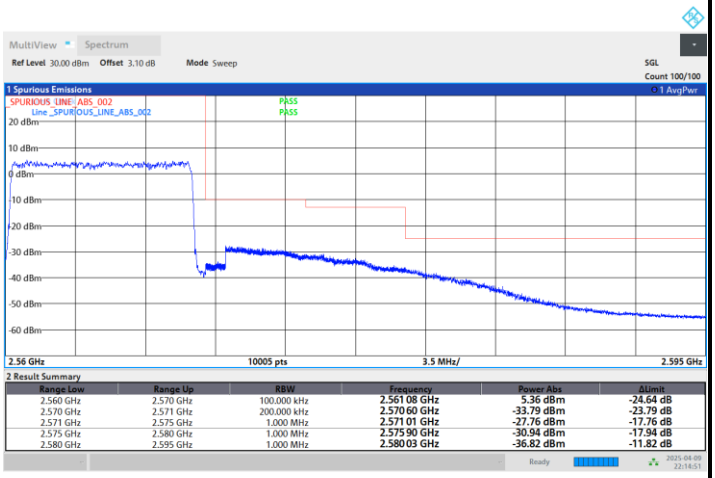
FR1 n7 / 10MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

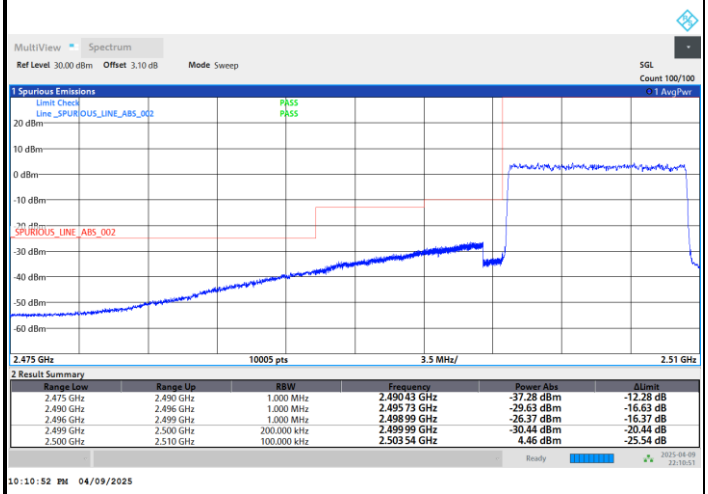


Highest Band Edge

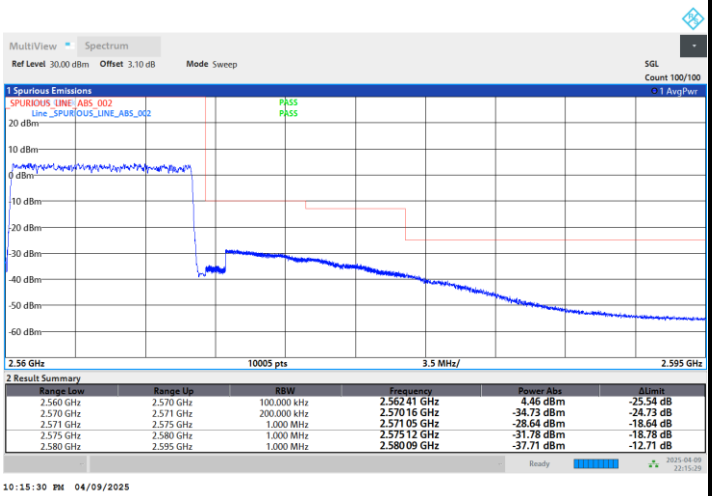


FR1 n7 / 10MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

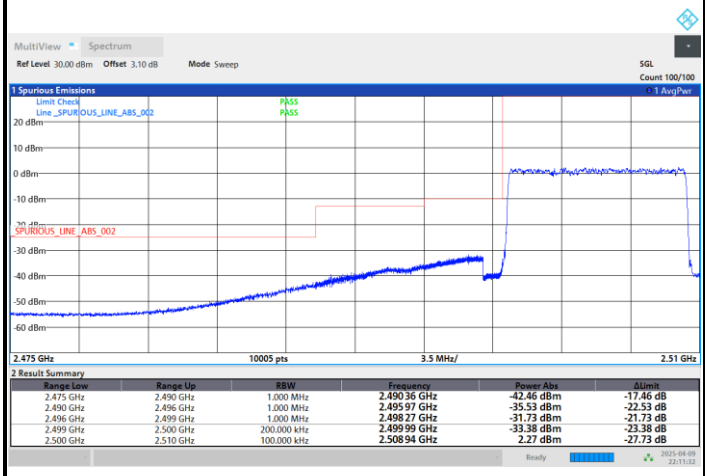


Highest Band Edge

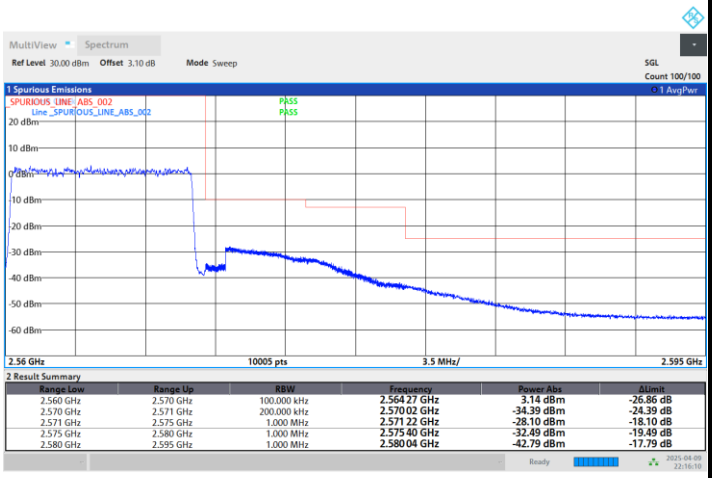


FR1 n7 / 10MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

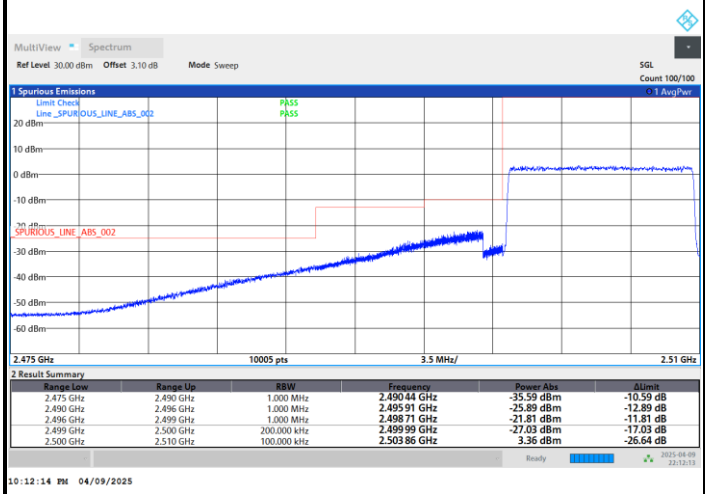


Highest Band Edge

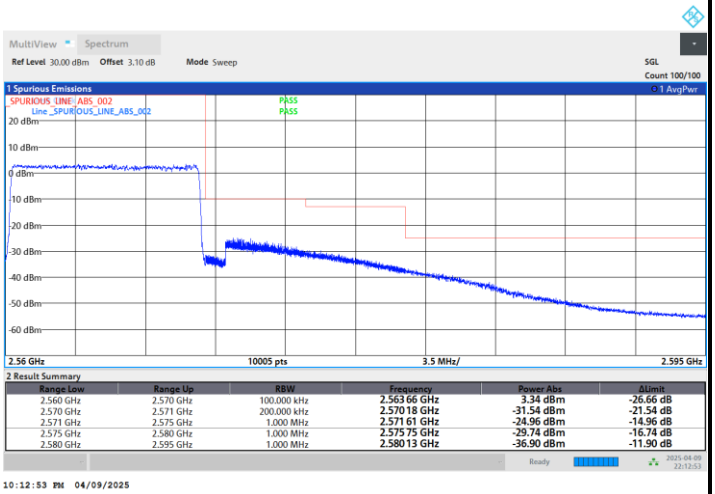


FR1 n7 / 10MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

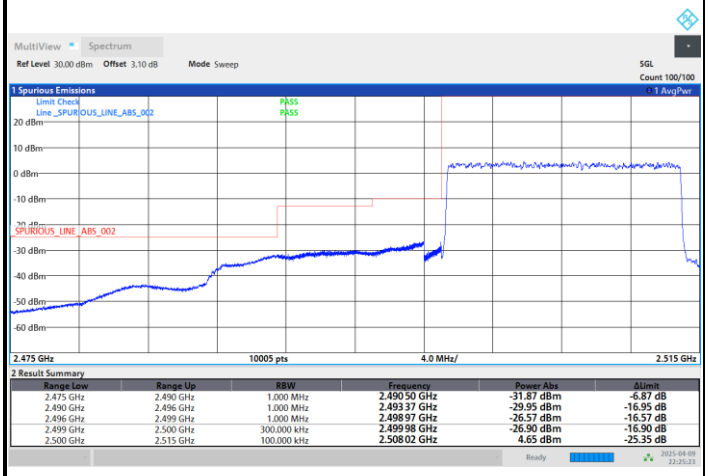


Highest Band Edge

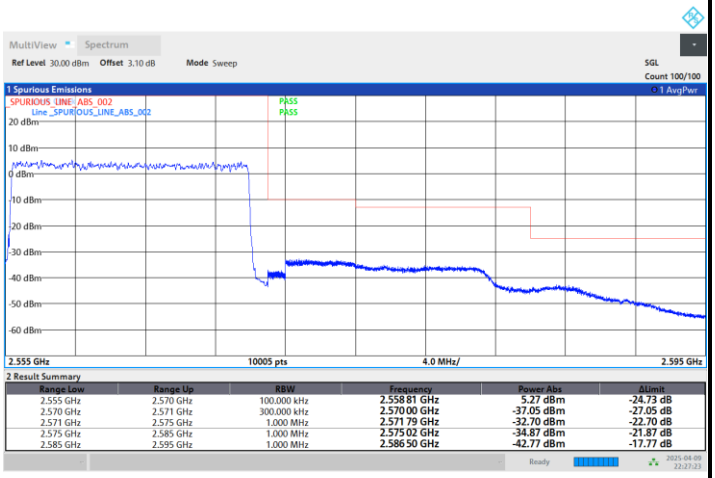


FR1 n7 / 15MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

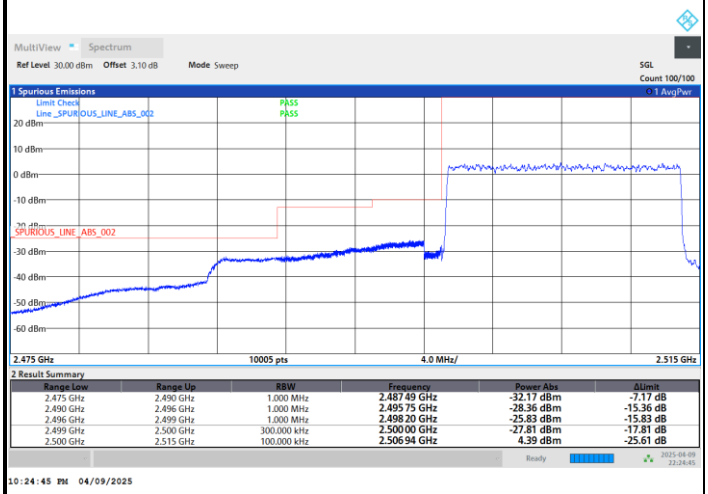


Highest Band Edge

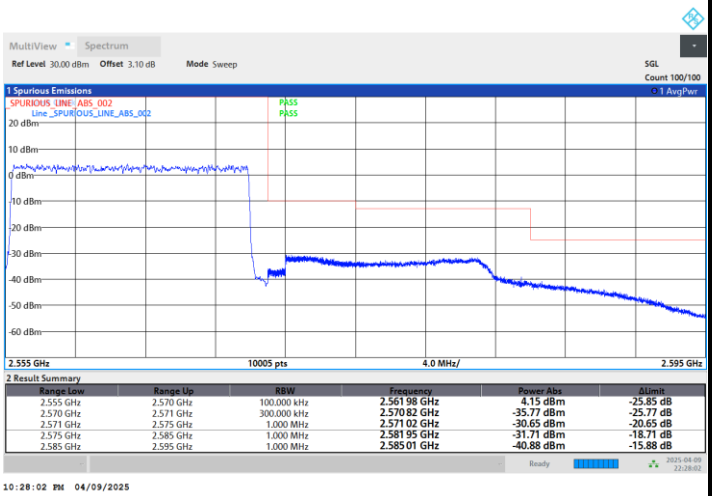


FR1 n7 / 15MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge

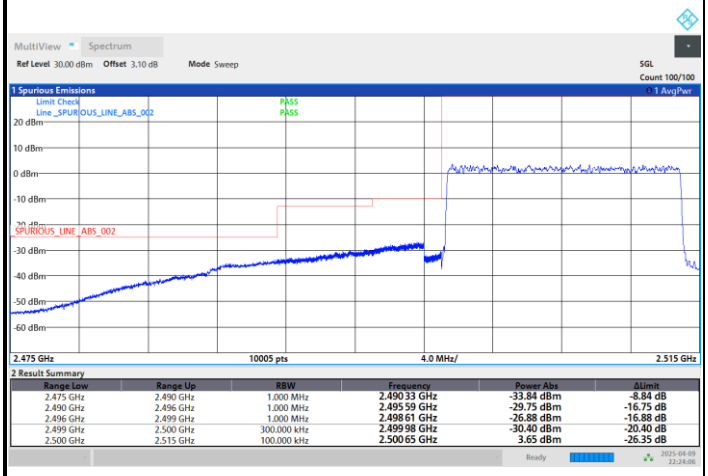


Highest Band Edge

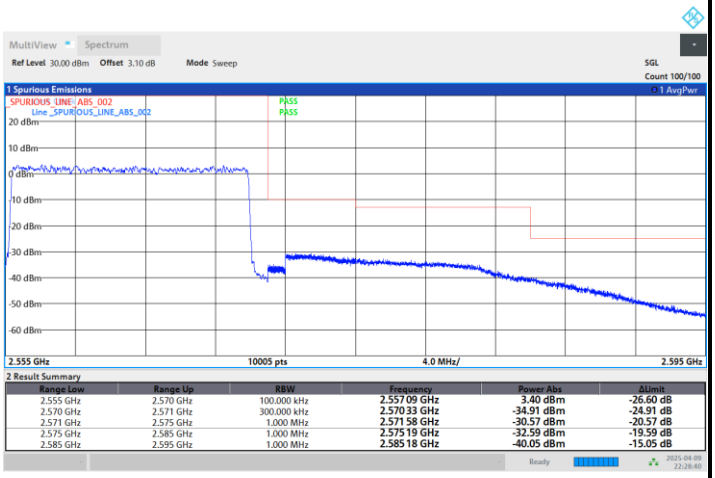


FR1 n7 / 15MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

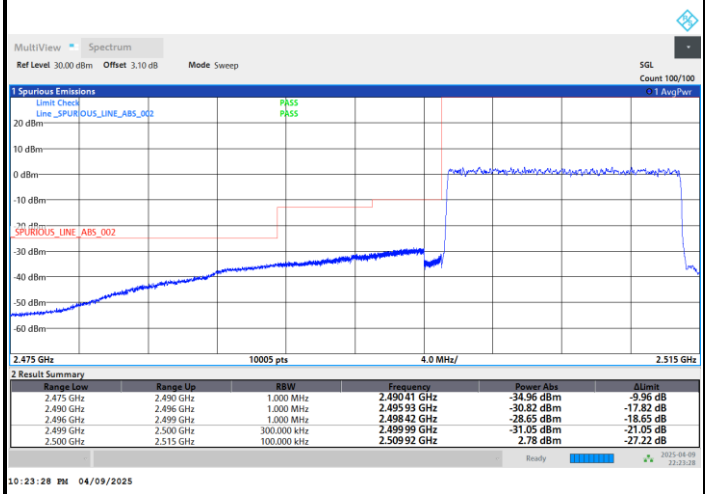


Highest Band Edge

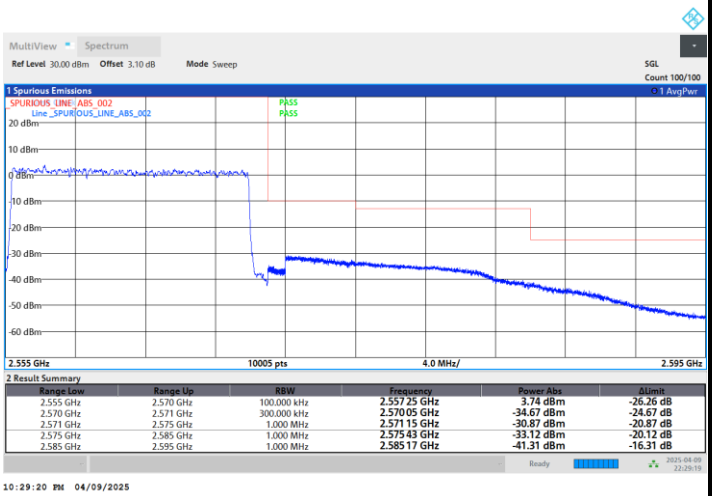


FR1 n7 / 15MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

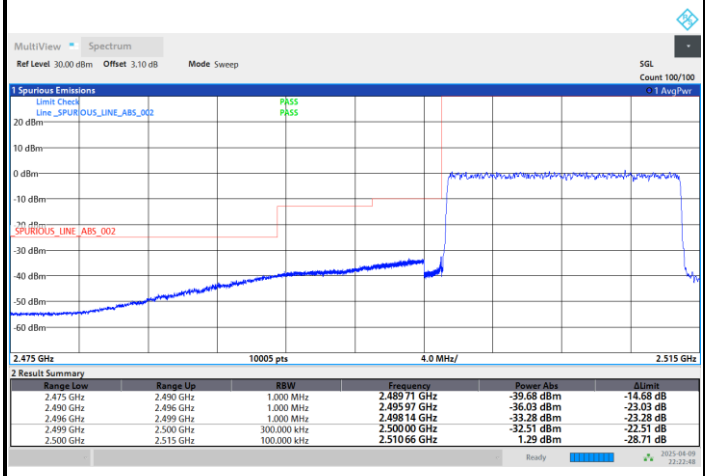


Highest Band Edge

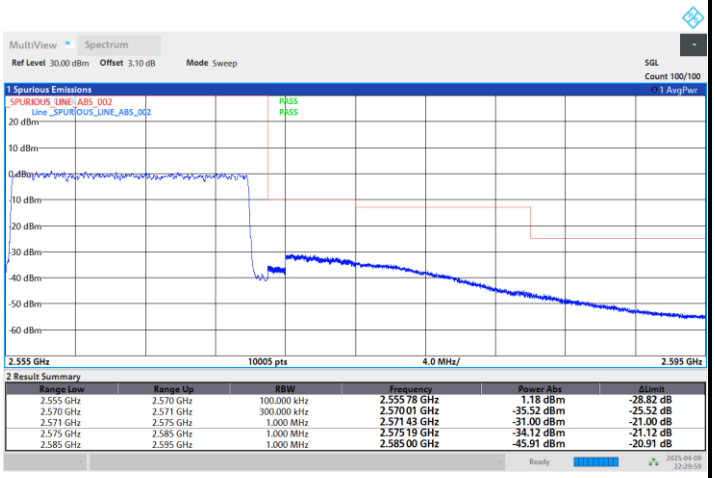


FR1 n7 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

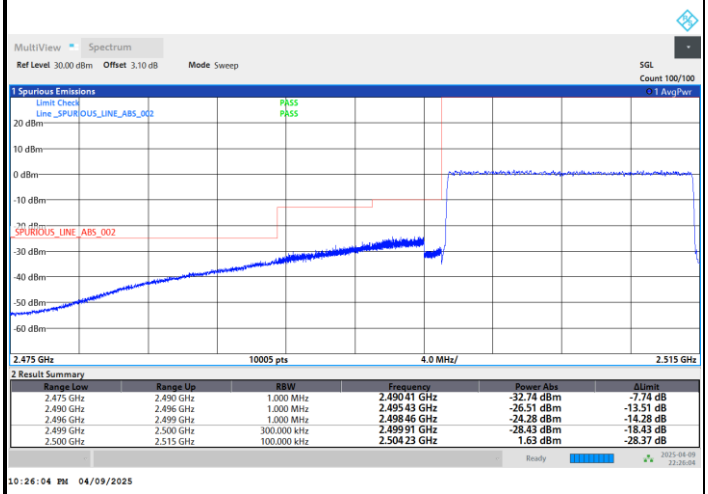


Highest Band Edge

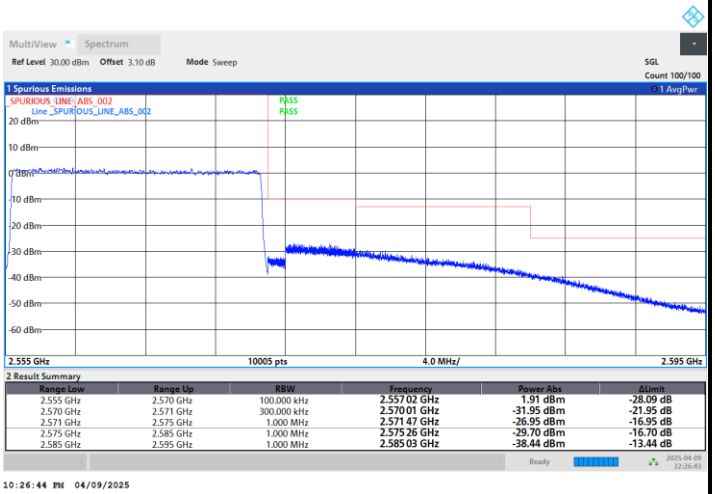


FR1 n7 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

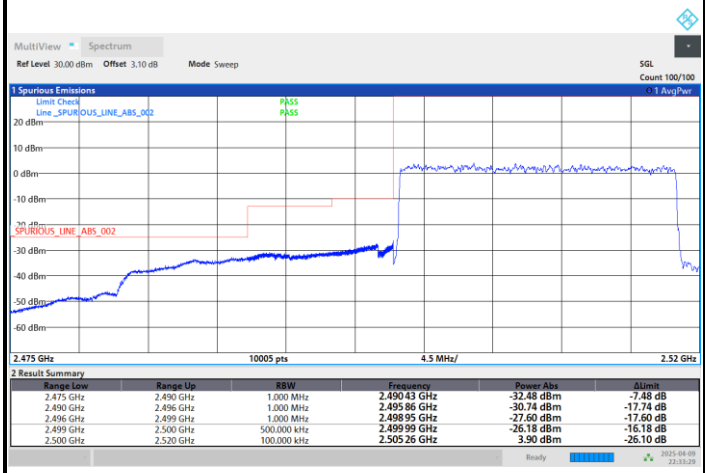


Highest Band Edge

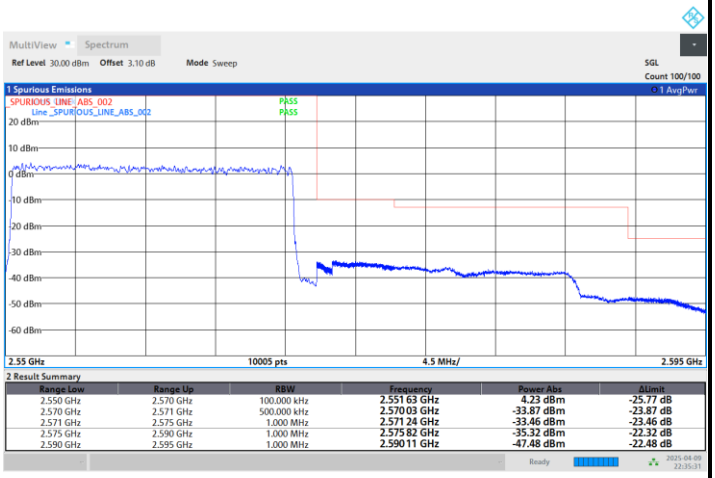


FR1 n7 / 20MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

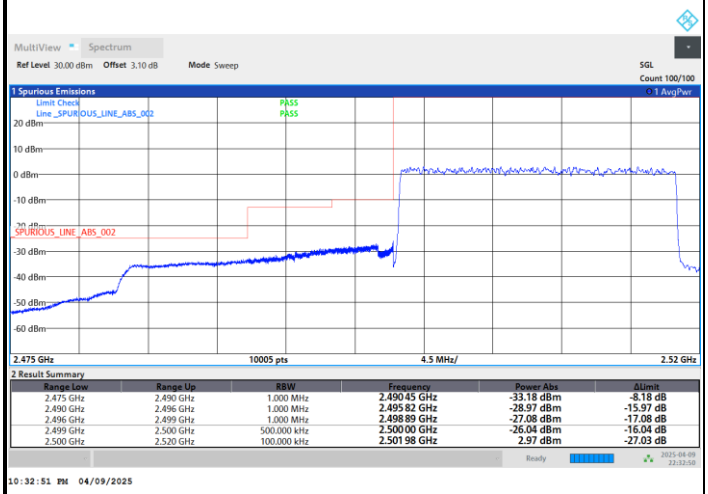


Highest Band Edge

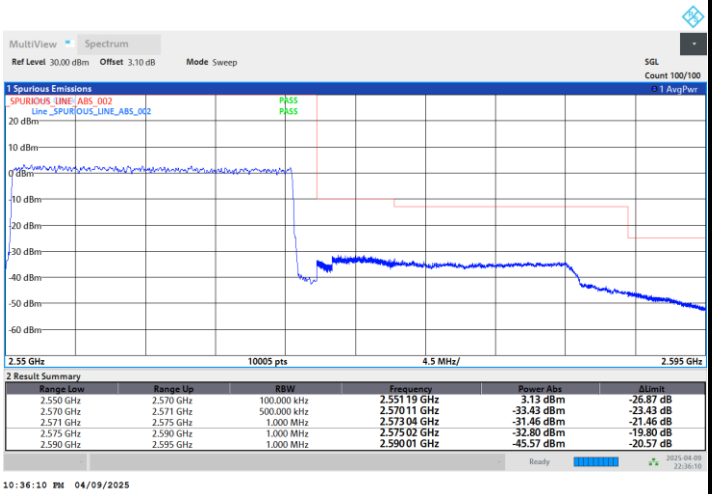


FR1 n7 / 20MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge

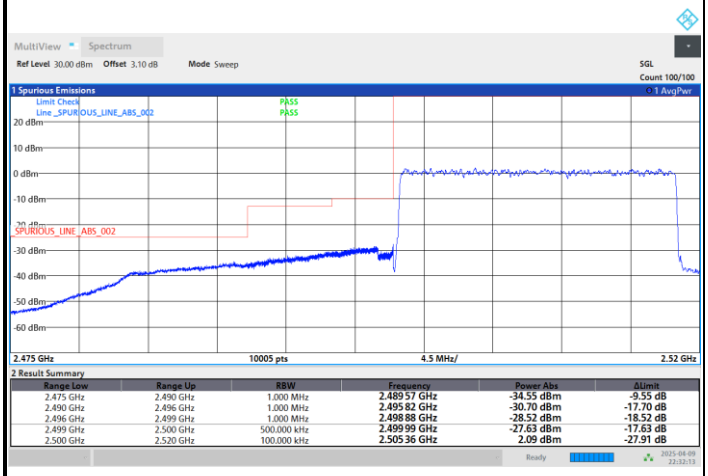


Highest Band Edge



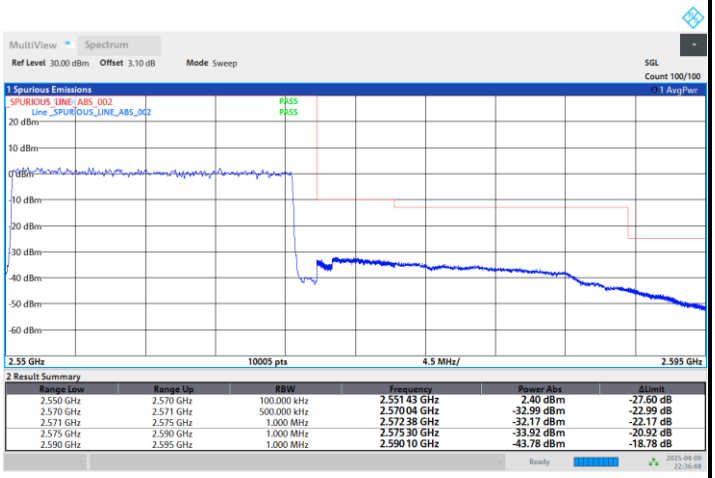
FR1 n7 / 20MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.489 57 GHz	-34.55 dBm	-9.55 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.495 82 GHz	-30.70 dBm	-17.70 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.498 88 GHz	-28.52 dBm	-18.52 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.499 99 GHz	-27.63 dBm	-17.63 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.505 36 GHz	2.09 dBm	-27.91 dB

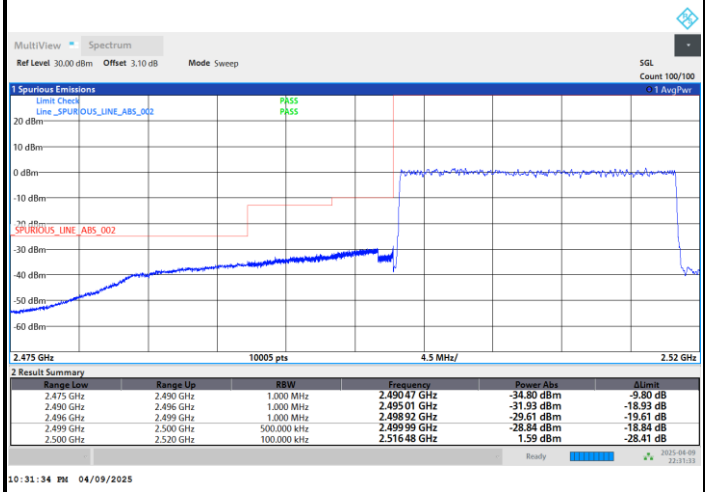
Highest Band Edge



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.551 43 GHz	2.40 dBm	-27.60 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.570 04 GHz	-32.99 dBm	-22.99 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.572 38 GHz	-32.17 dBm	-22.17 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.575 30 GHz	-33.92 dBm	-20.92 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.590 10 GHz	-43.78 dBm	-18.78 dB

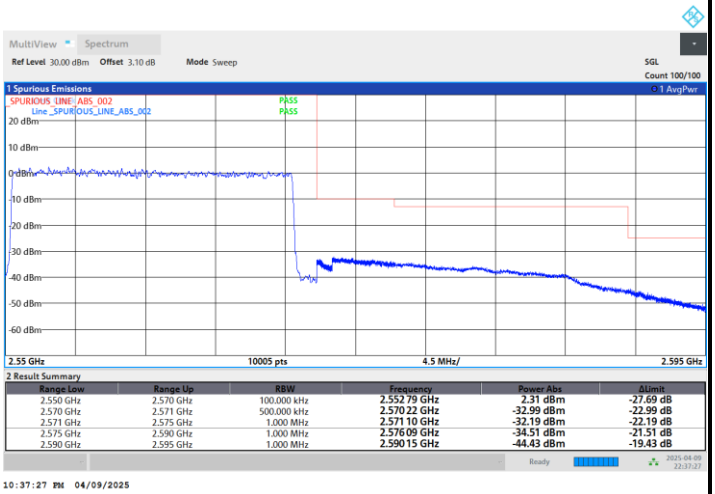
FR1 n7 / 20MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge



Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.490 47 GHz	-34.80 dBm	-9.80 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.495 01 GHz	-31.93 dBm	-18.93 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.498 92 GHz	-29.61 dBm	-19.61 dB
2.499 GHz	2.500 GHz	500.000 kHz	2.499 99 GHz	-28.84 dBm	-18.84 dB
2.500 GHz	2.520 GHz	100.000 kHz	2.516 48 GHz	1.59 dBm	-28.41 dB

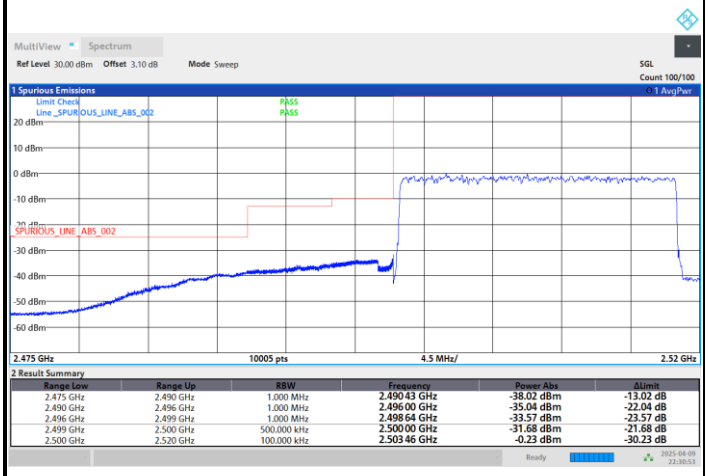
Highest Band Edge



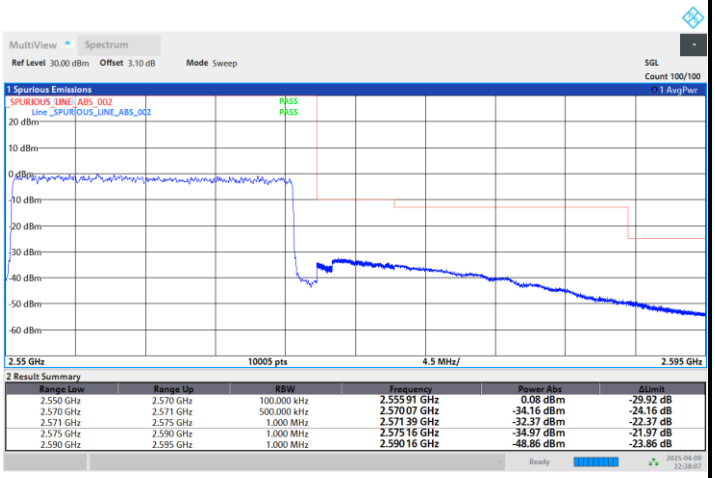
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.550 GHz	2.570 GHz	100.000 kHz	2.552 79 GHz	2.31 dBm	-27.69 dB
2.570 GHz	2.571 GHz	500.000 kHz	2.570 22 GHz	-32.99 dBm	-22.99 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.571 10 GHz	-32.19 dBm	-22.19 dB
2.575 GHz	2.590 GHz	1.000 MHz	2.576 09 GHz	-34.51 dBm	-21.51 dB
2.590 GHz	2.595 GHz	1.000 MHz	2.590 15 GHz	-44.43 dBm	-19.43 dB

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

Lowest Band Edge

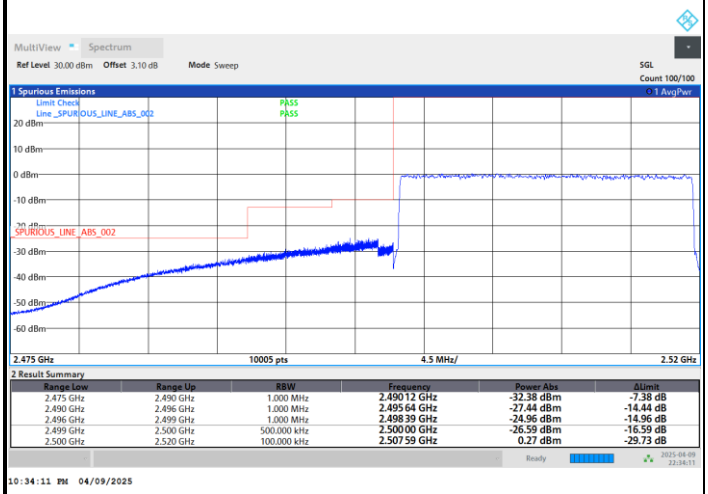


Highest Band Edge

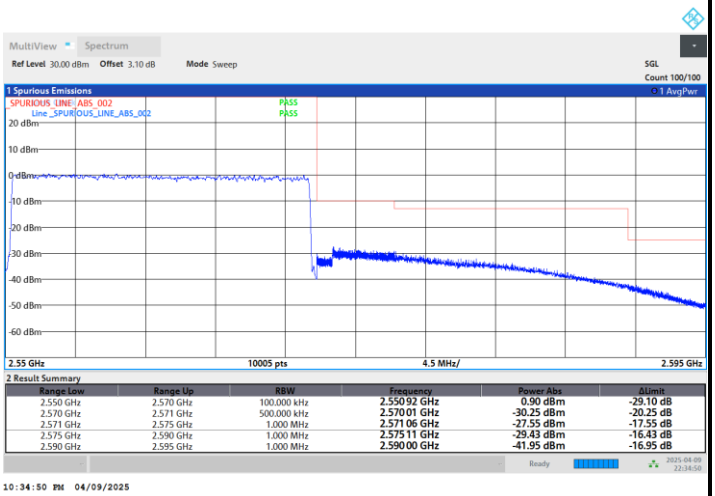


FR1 n7 / 20MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



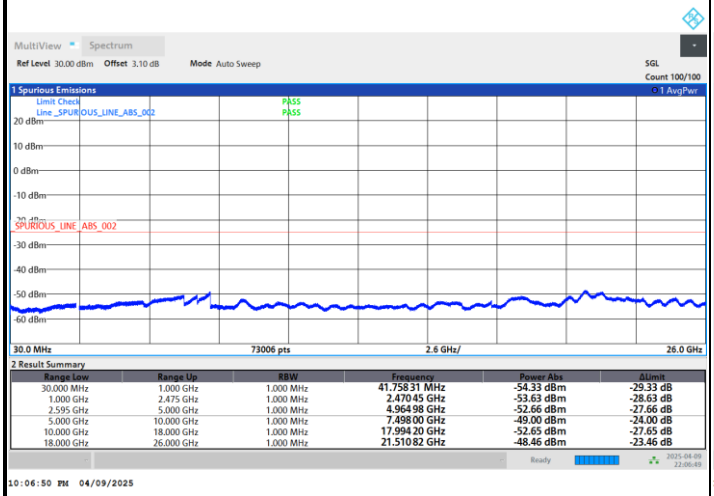
Highest Band Edge



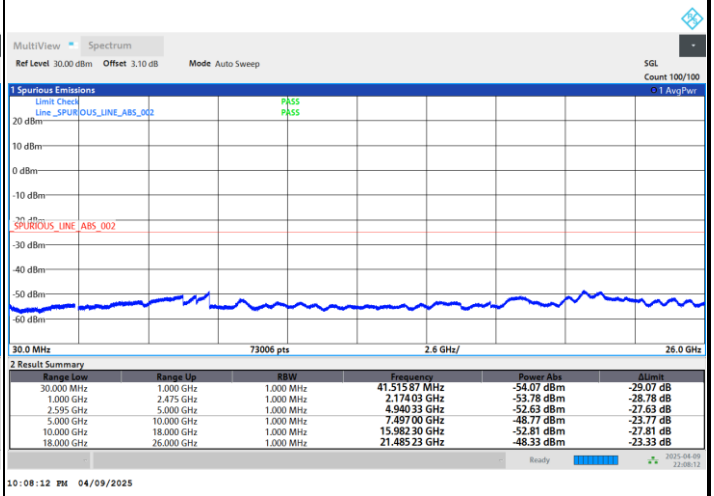
Conducted Spurious Emission

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

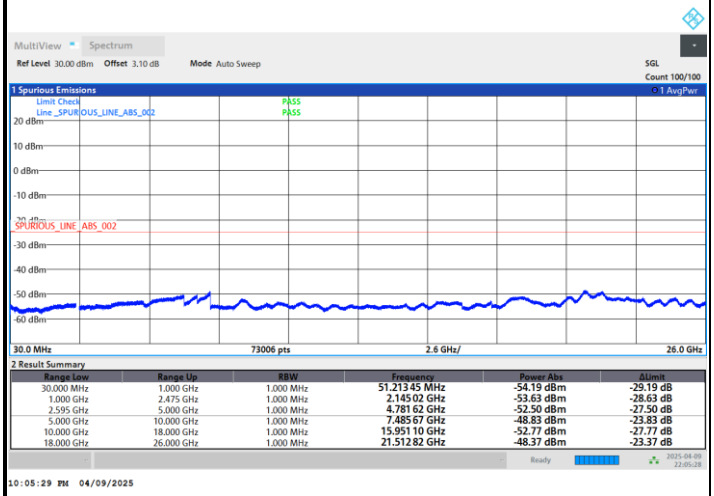
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n7 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0025	PASS
40	Normal Voltage	0.0026	
30	Normal Voltage	0.0021	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0025	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0014	
-20	Normal Voltage	0.0032	
-30	Normal Voltage	0.0020	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0009	

Note:

1. Normal Voltage = 3.8 V.；Minimum Voltage = 3.4 V.；Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

FR1 n12

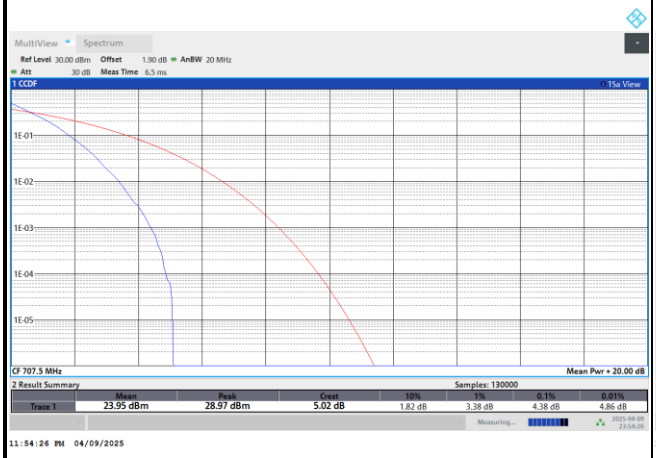
<SISO Mode>

Peak-to-Average Ratio

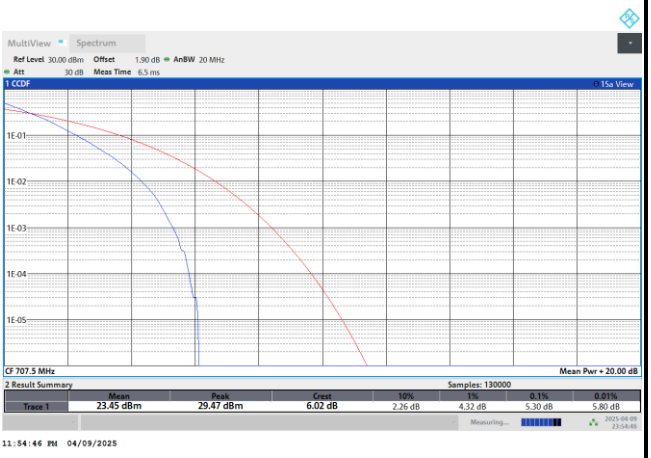
Mode	FR1 n12 / 15MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.38	5.30	6.00	6.38	PASS
Mode	FR1 n12 / 15MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.56				PASS

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

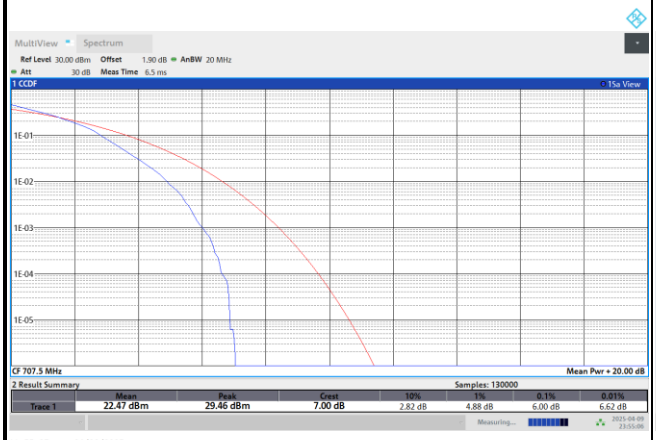
PI/2 BPSK



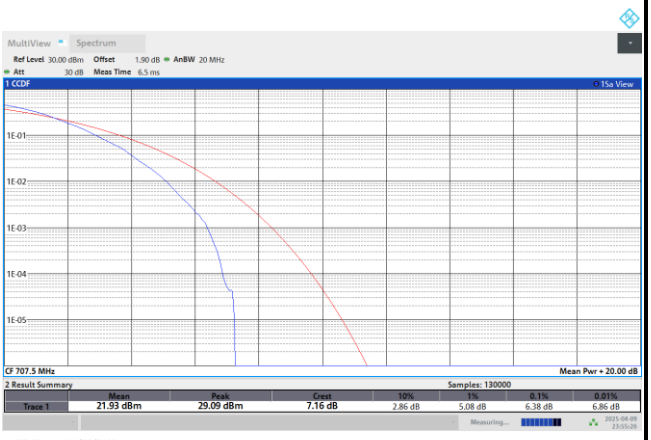
QPSK



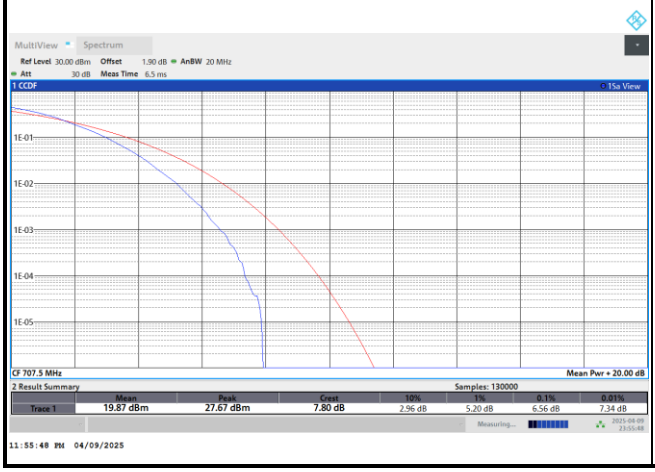
16QAM



64QAM



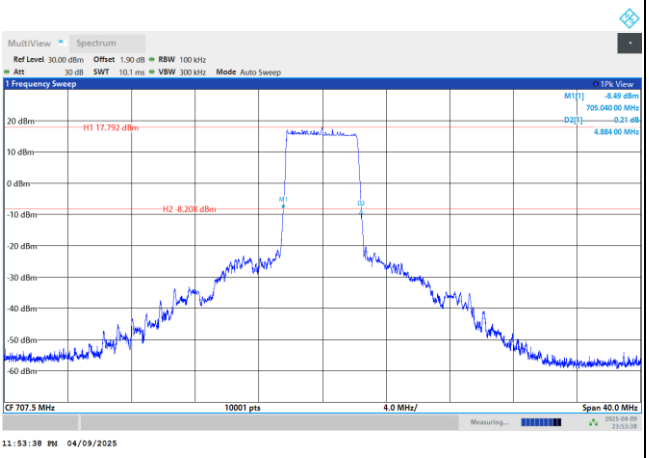
256QAM

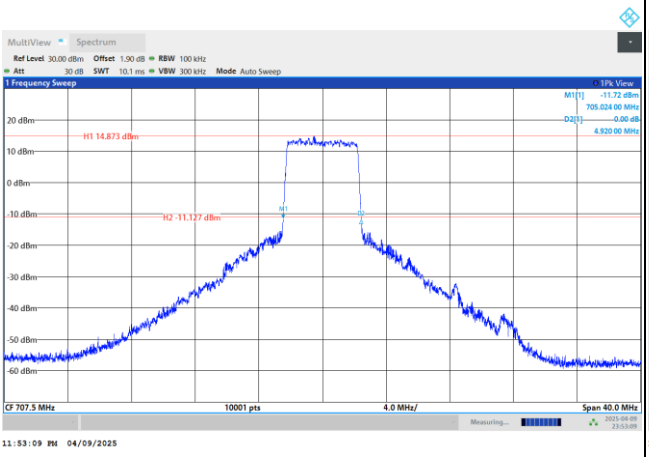
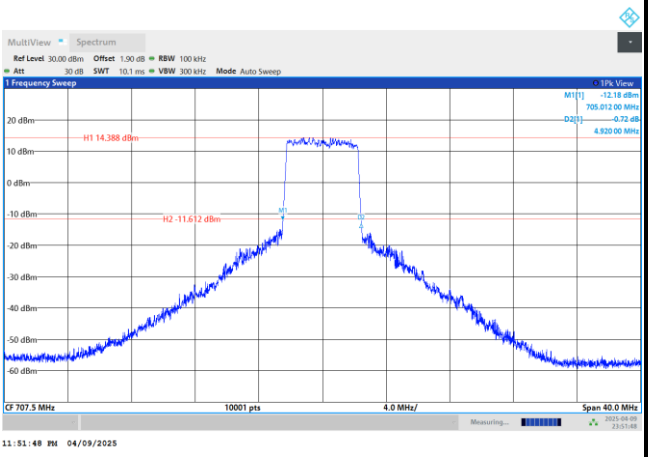


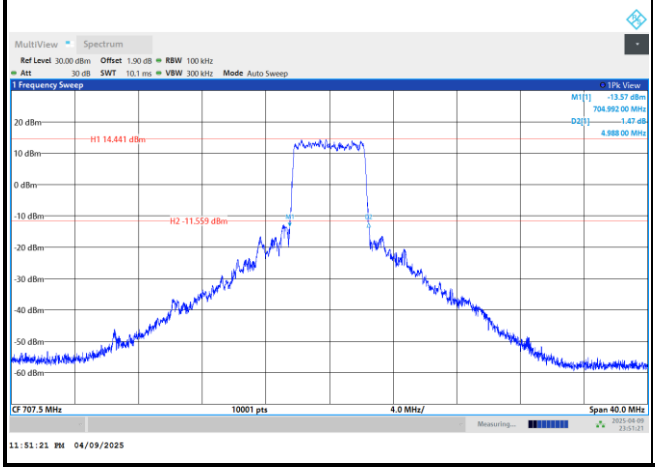
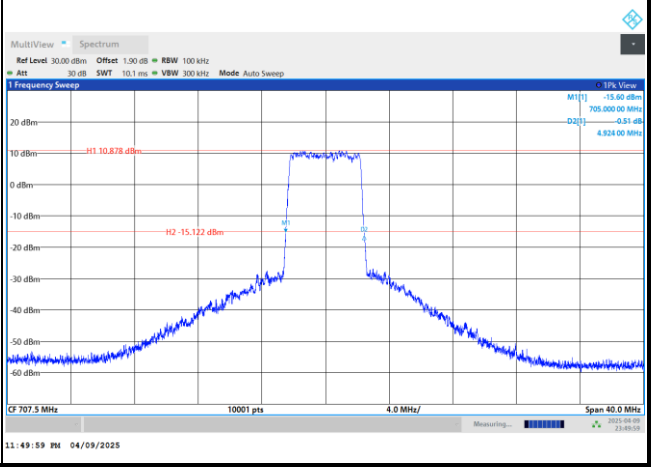
26dB Bandwidth

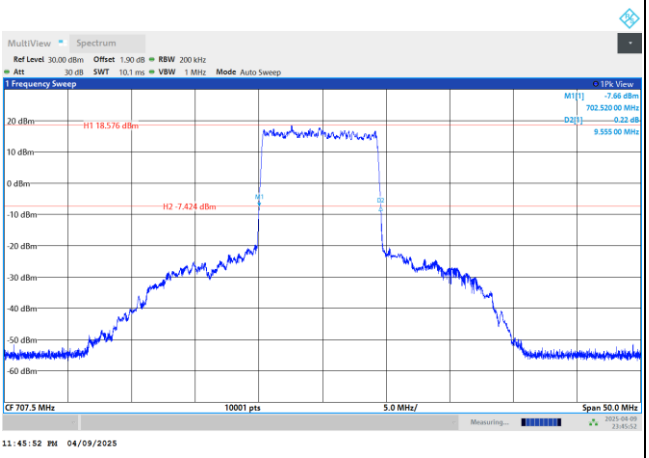
Mode	FR1 n12 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK			
Middle CH	4.88		9.55		14.24			

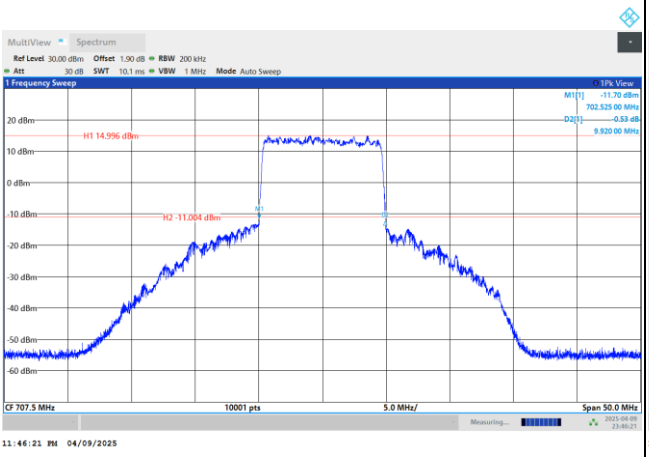
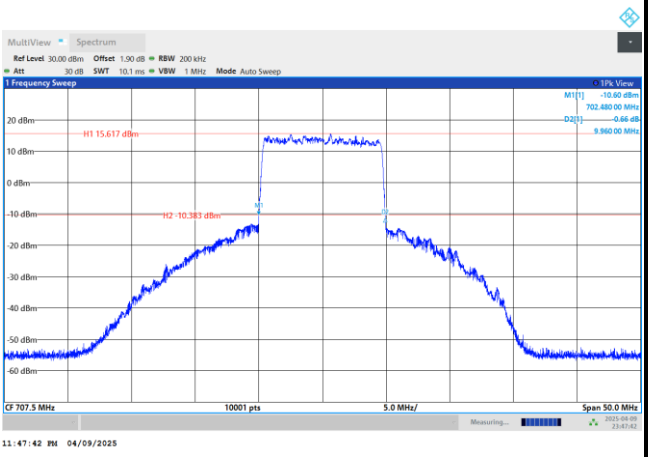
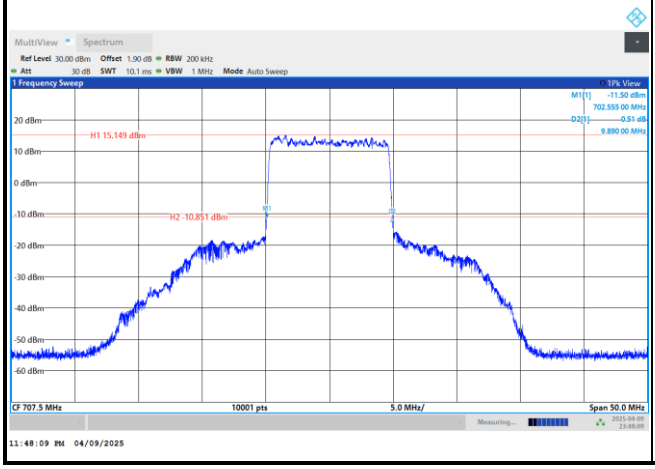
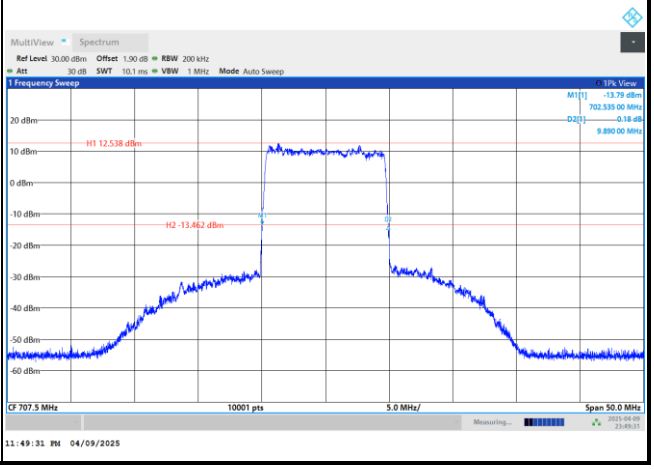
Mode	FR1 n12 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	4.92	4.92	9.92	9.96	14.98	15.00		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	4.98	4.92	9.89	9.89	15.01	14.93		

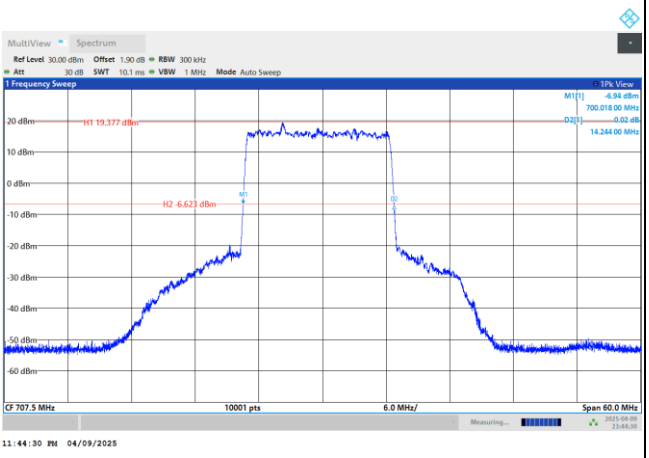
FR1 n12 / 5MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

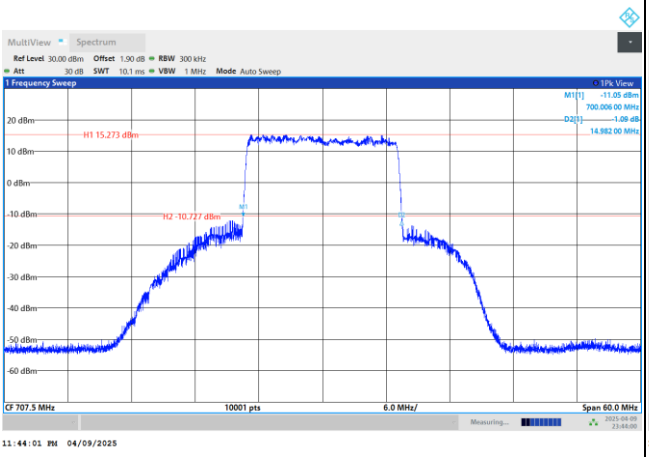
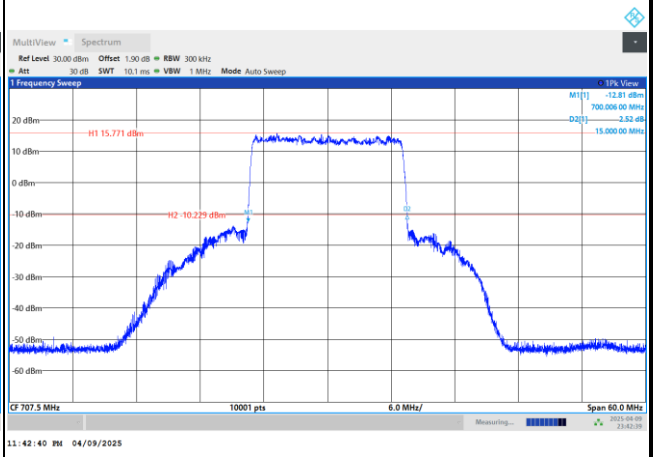
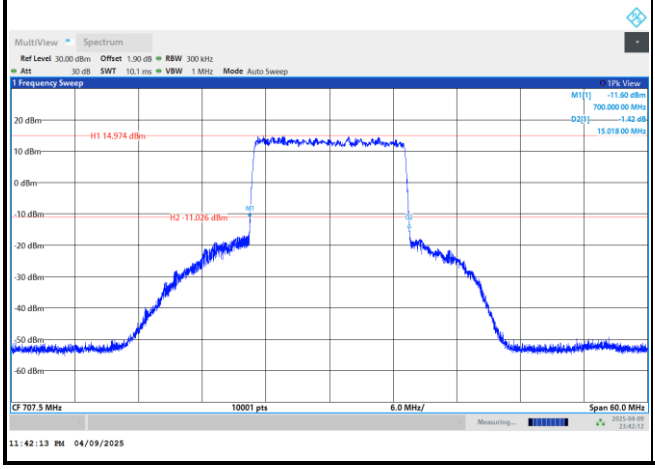
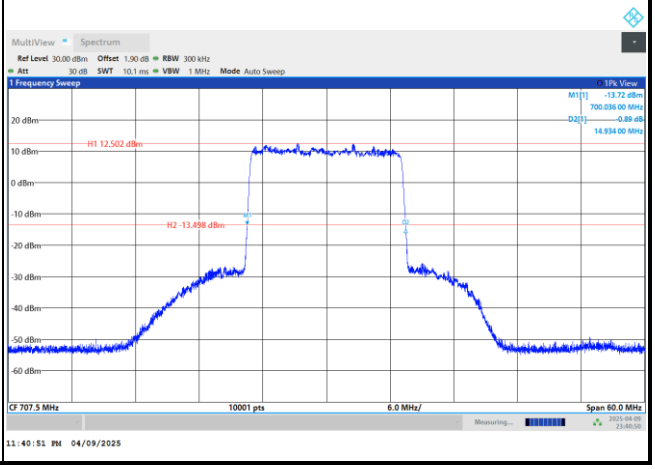
FR1 n12 / 5MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	

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
	

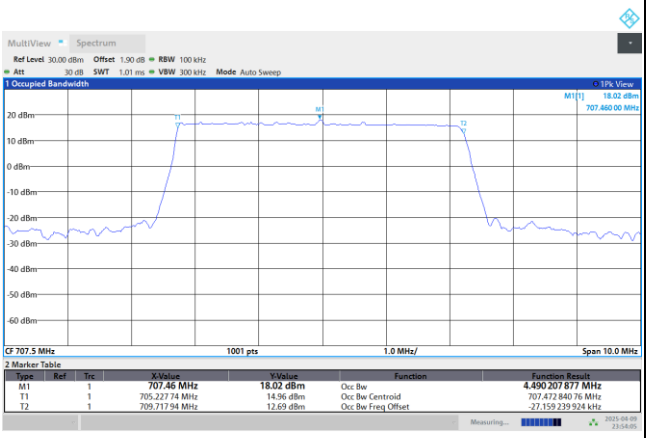
Occupied Bandwidth

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		9.00		13.47			

Mode	FR1 n12 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	4.49	4.50	9.30	9.32	14.13	14.16		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	4.50	4.49	9.32	9.32	14.16	14.13		

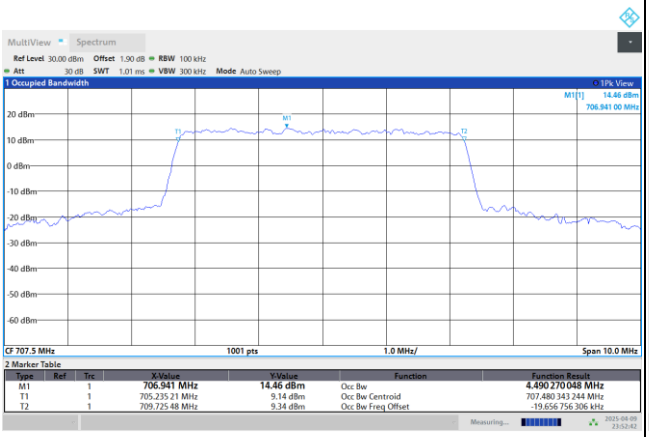
FR1 n12 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

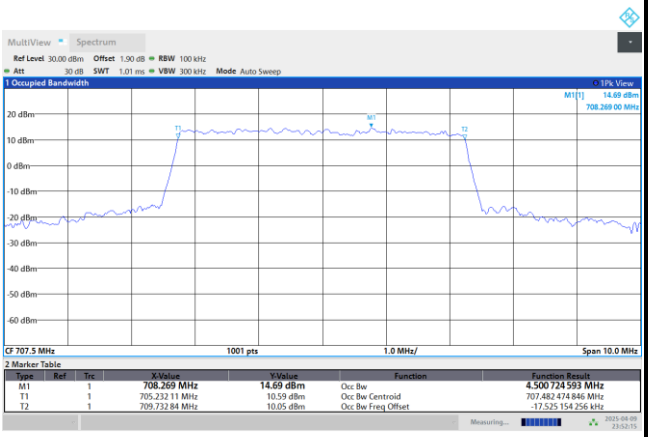


FR1 n12 / 5MHz / CP OFDM / Middle Channel / Full RB

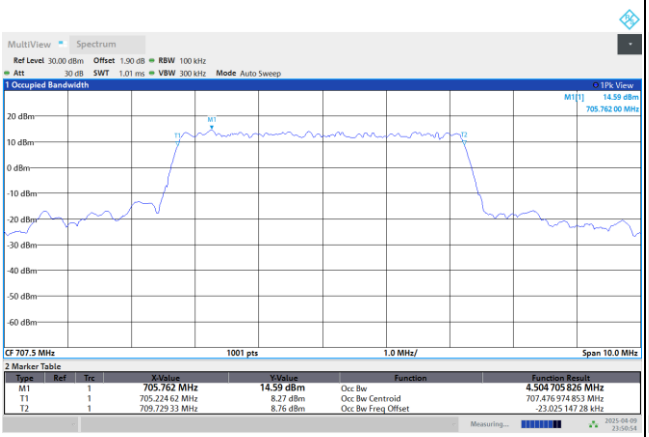
QPSK



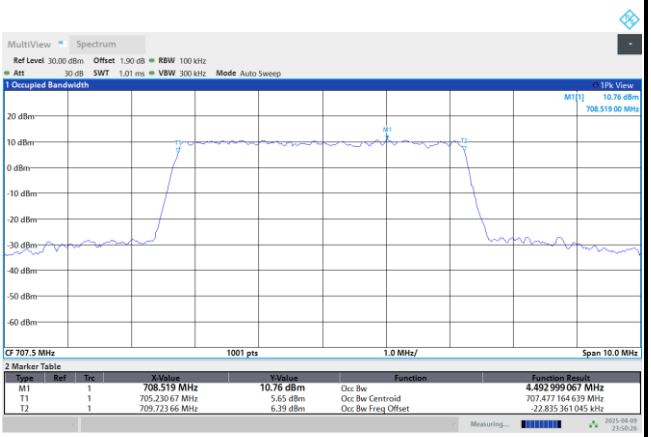
16QAM



64QAM

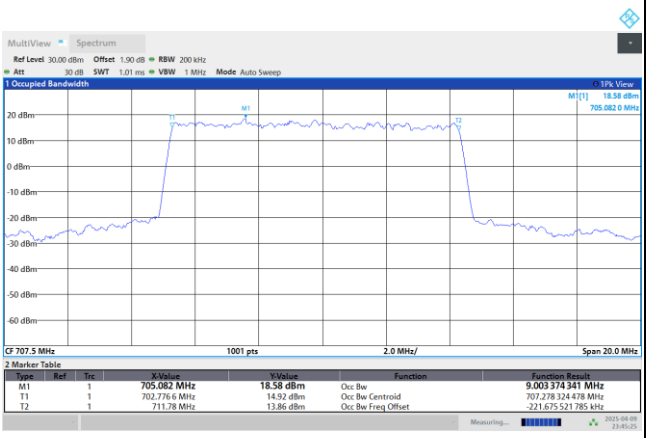


256QAM



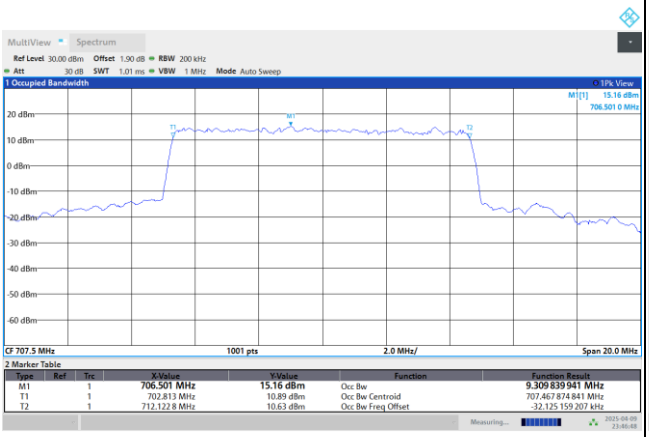
FR1 n12 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



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

QPSK



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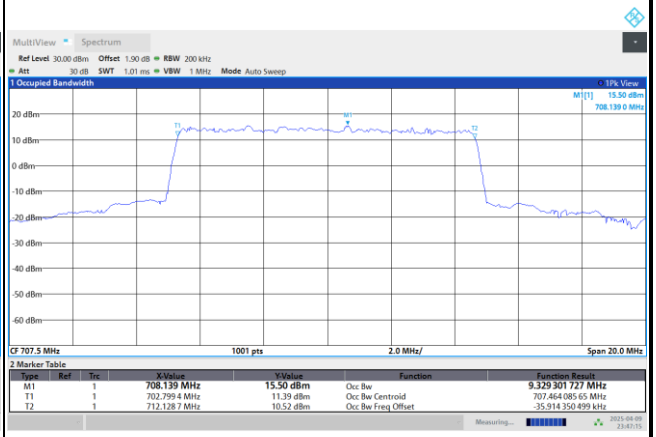
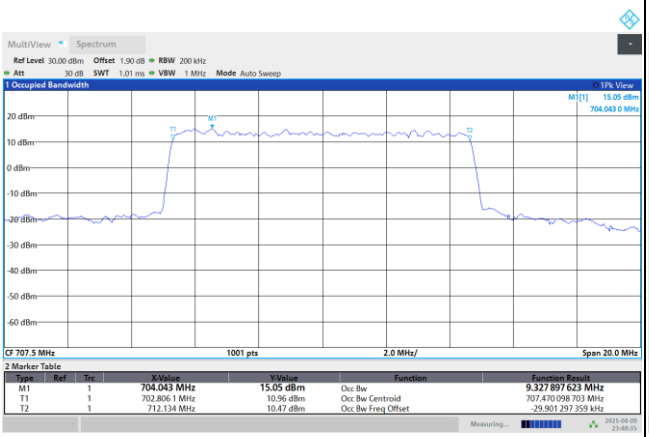


64QAM



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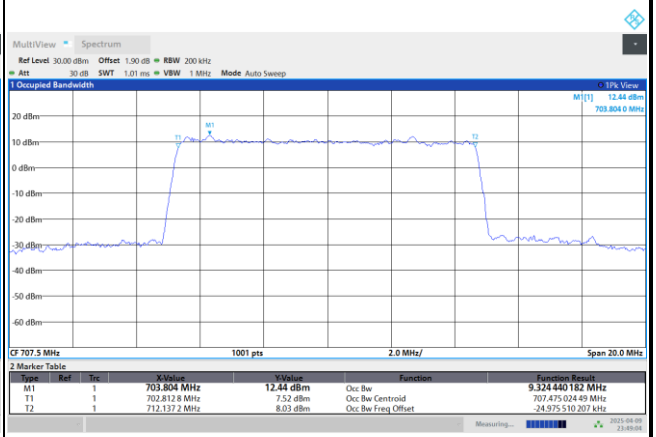
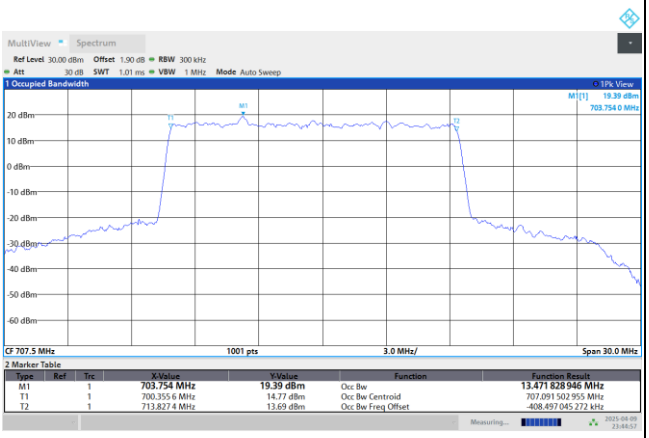


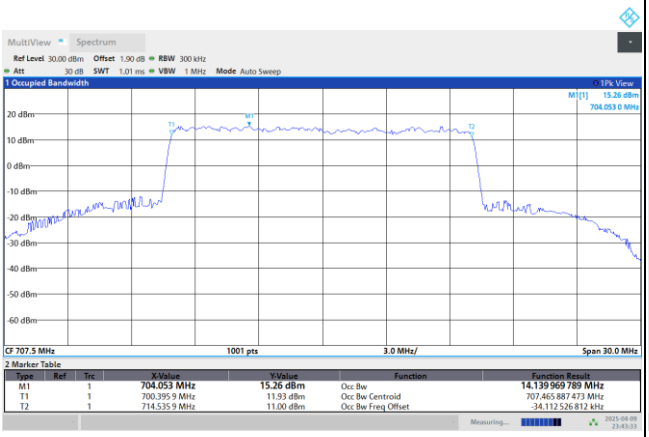
FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

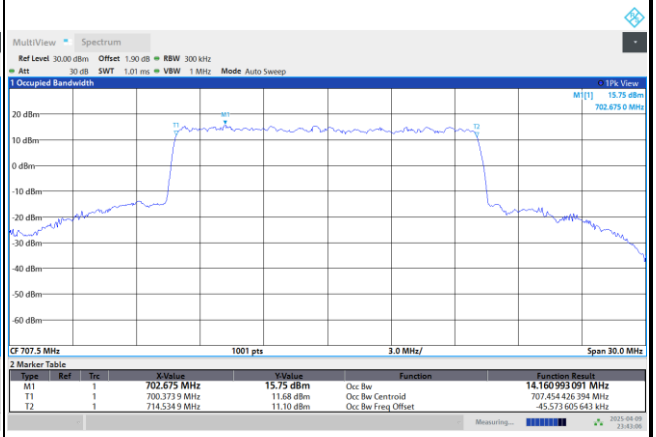


FR1 n12 / 15MHz / CP OFDM / Middle Channel / Full RB

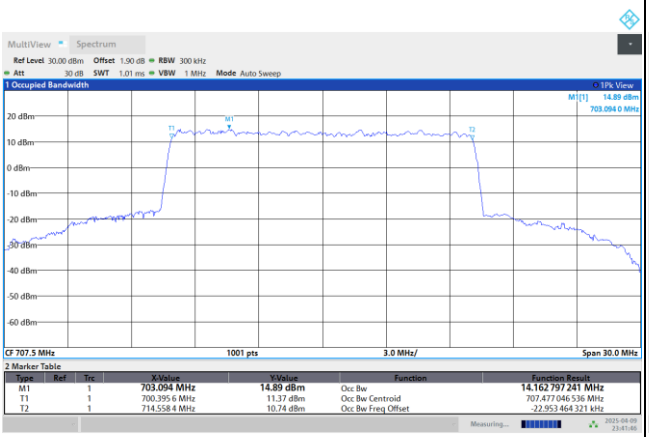
QPSK



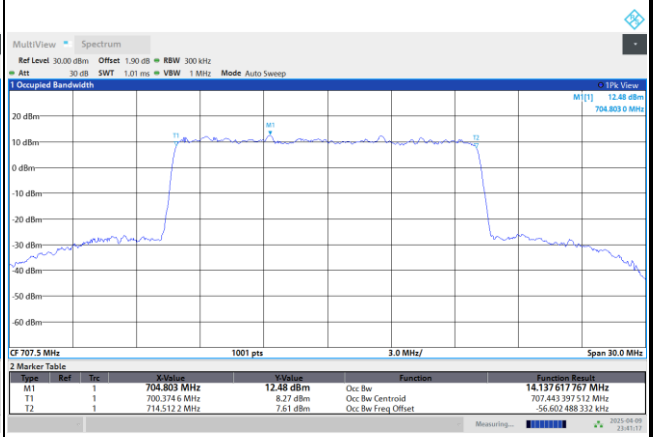
16QAM



64QAM



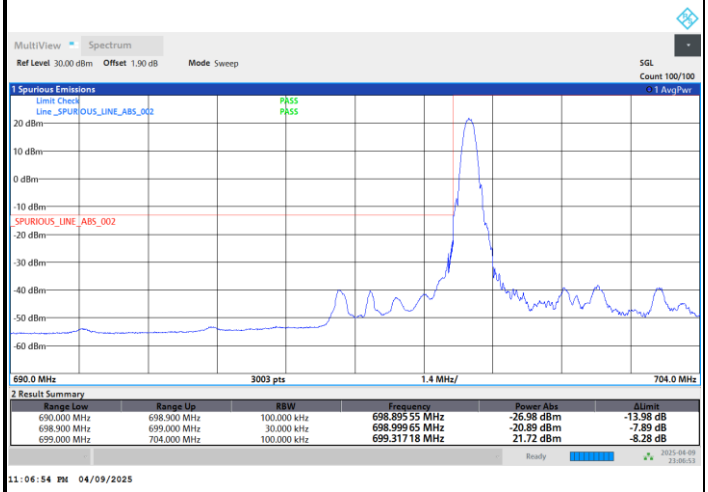
256QAM



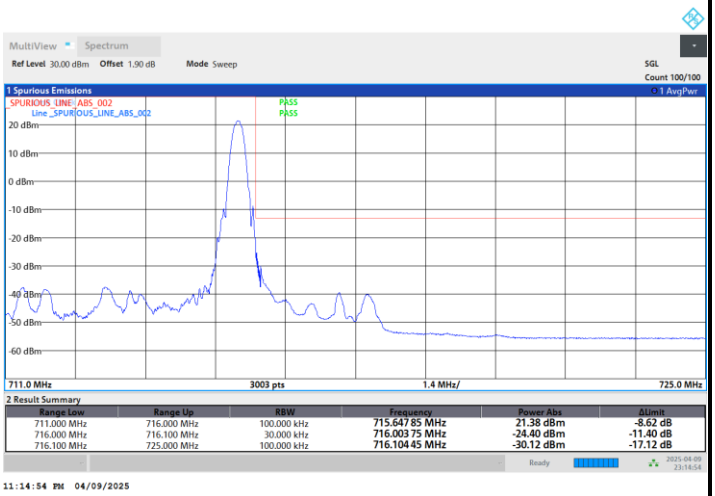
Conducted Band Edge

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

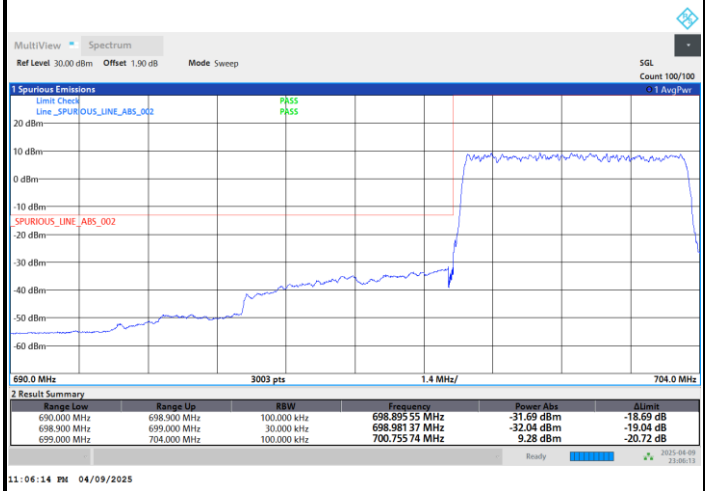
Lowest Band Edge / 1RB0



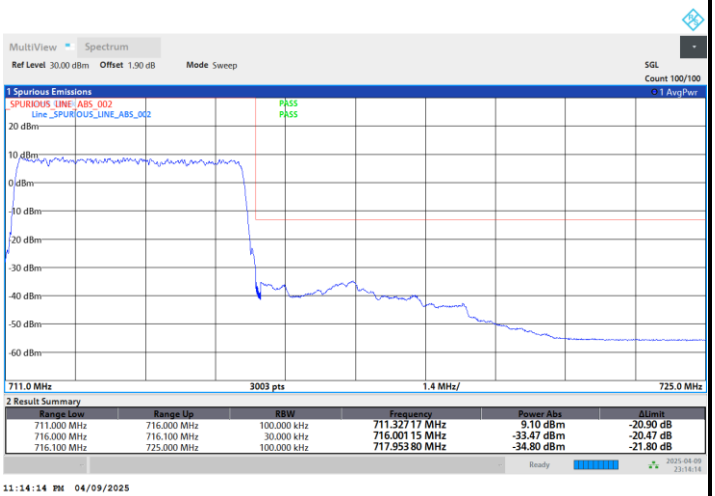
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

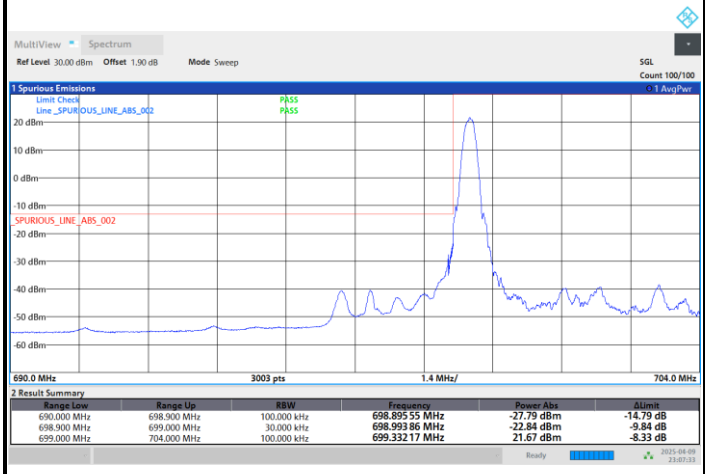


Highest Band Edge / Full RB

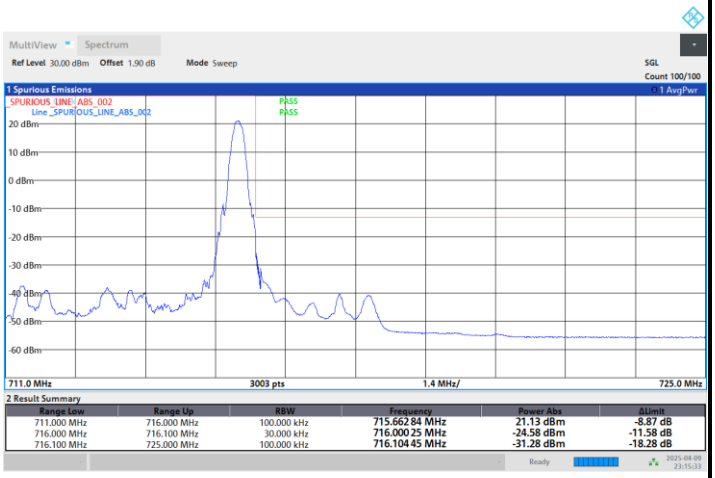


FR1 n12 / 5MHz / DFT-S OFDM / QPSK

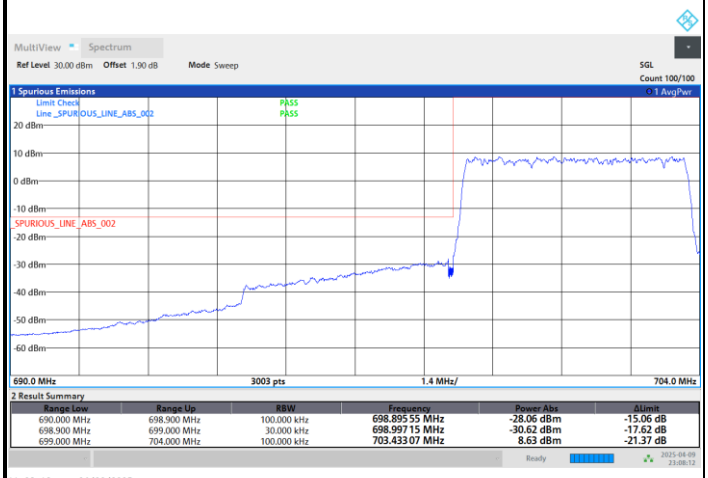
Lowest Band Edge / 1RB0



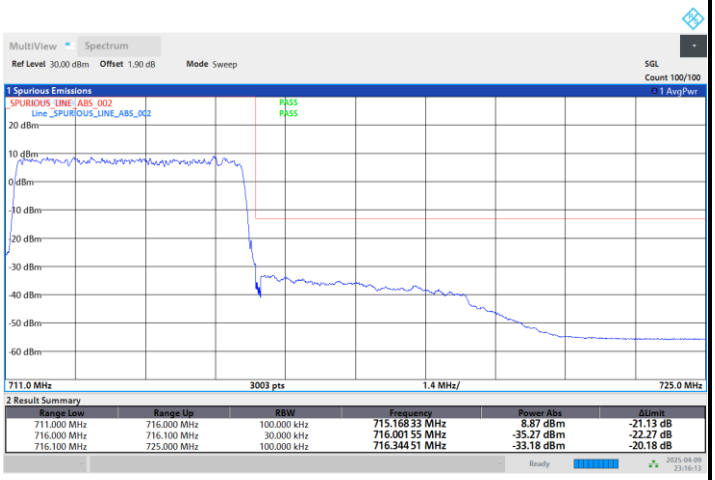
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

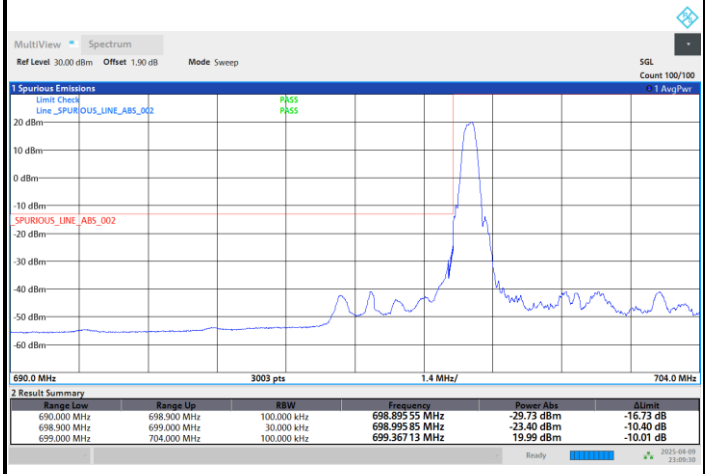


Highest Band Edge / Full RB

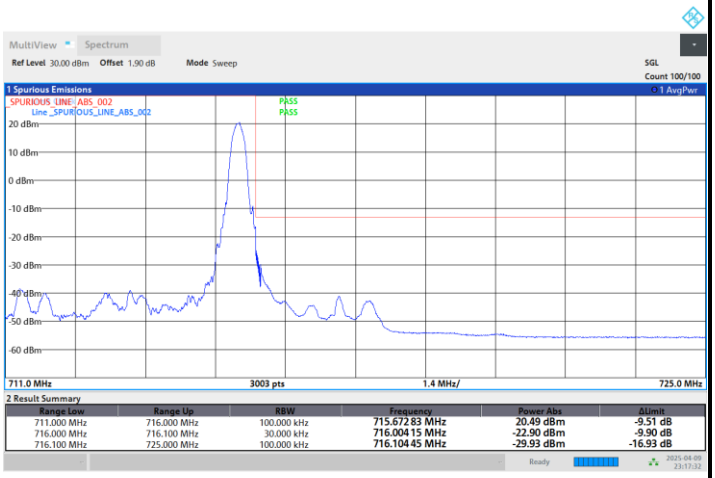


FR1 n12 / 5MHz / DFT-S OFDM / 16QAM

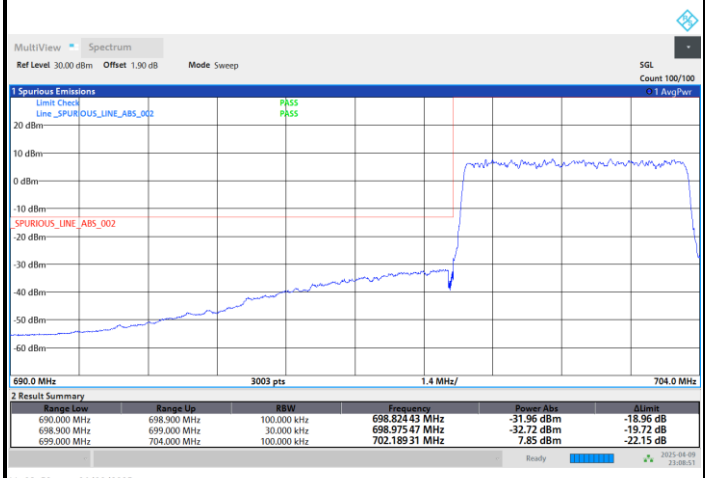
Lowest Band Edge / 1RB0



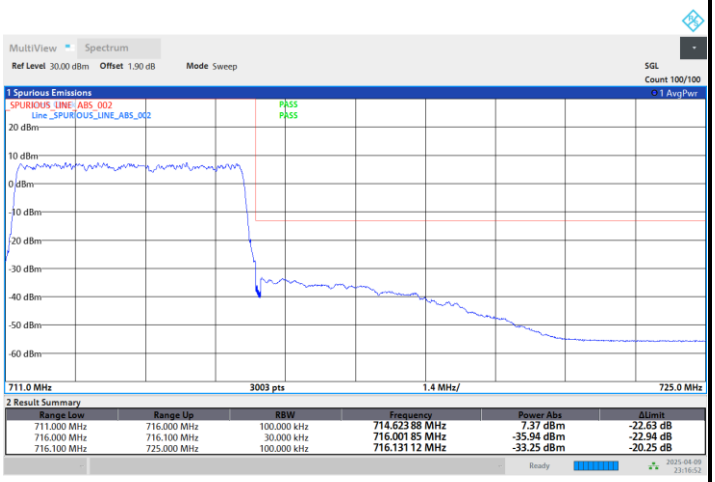
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

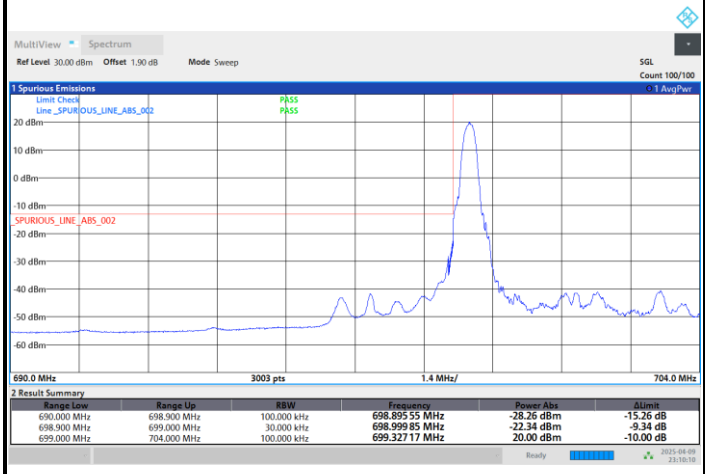


Highest Band Edge / Full RB

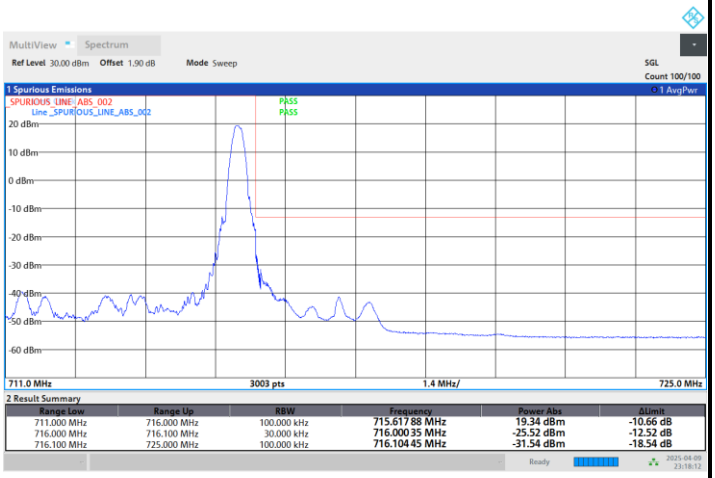


FR1 n12 / 5MHz / DFT-S OFDM / 64QAM

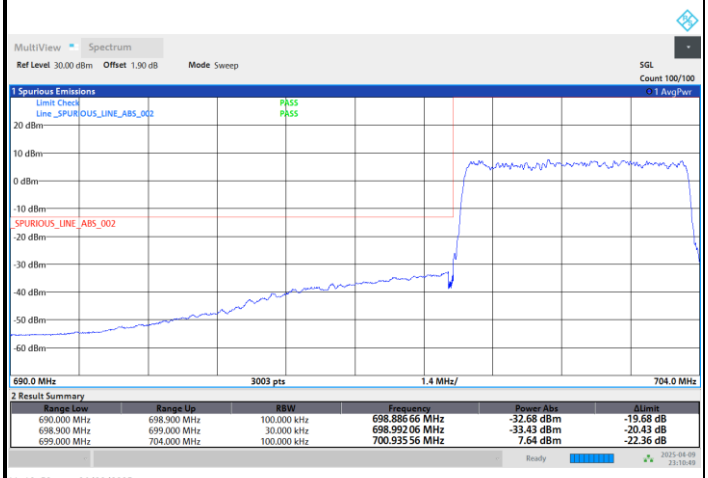
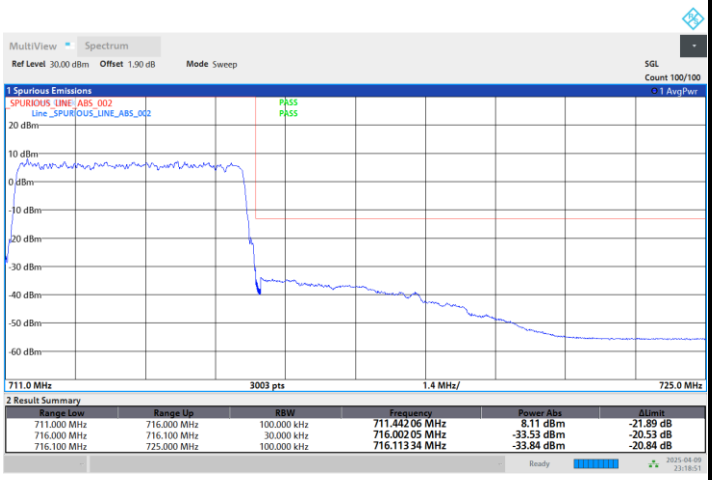
Lowest Band Edge / 1RB0



Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB



Highest Band Edge / Full RB