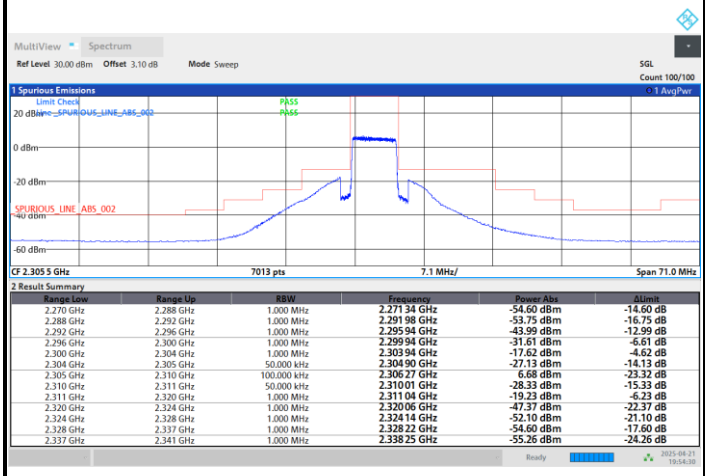
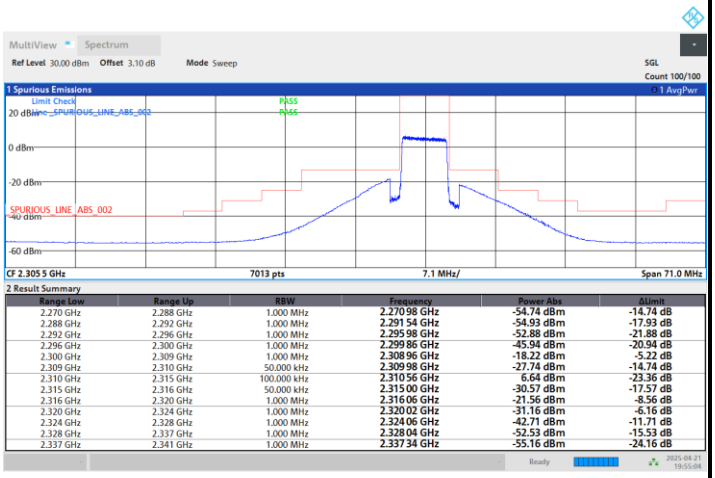
FR1 n30 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



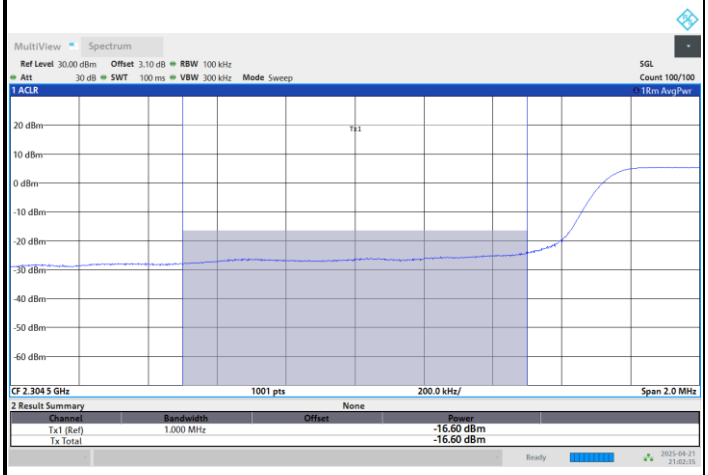
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.270 GHz	2.288 GHz	1.000 MHz	2.271 34 GHz	-54.60 dBm	-14.60 dB
2.288 GHz	2.292 GHz	1.000 MHz	2.291 98 GHz	-53.75 dBm	-16.75 dB
2.292 GHz	2.296 GHz	1.000 MHz	2.295 94 GHz	-43.99 dBm	-12.99 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.299 94 GHz	-31.61 dBm	-6.61 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.303 94 GHz	-17.62 dBm	-4.62 dB
2.304 GHz	2.305 GHz	50.000 kHz	2.304 90 GHz	-27.13 dBm	-14.13 dB
2.305 GHz	2.310 GHz	100.000 kHz	2.306 27 GHz	6.68 dBm	-23.32 dB
2.310 GHz	2.311 GHz	50.000 kHz	2.310 01 GHz	-28.33 dBm	-15.33 dB
2.311 GHz	2.320 GHz	1.000 MHz	2.311 04 GHz	-19.23 dBm	-6.23 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.320 06 GHz	-47.37 dBm	-22.37 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.324 14 GHz	-52.10 dBm	-21.10 dB
2.328 GHz	2.337 GHz	1.000 MHz	2.328 22 GHz	-54.60 dBm	-17.60 dB
2.337 GHz	2.341 GHz	1.000 MHz	2.338 25 GHz	-55.26 dBm	-24.26 dB

Highest Band Edge



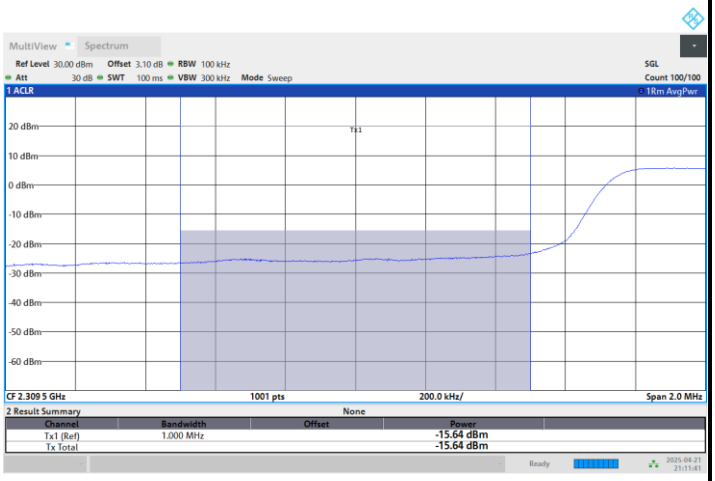
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.270 GHz	2.288 GHz	1.000 MHz	2.270 98 GHz	-54.74 dBm	-14.74 dB
2.288 GHz	2.292 GHz	1.000 MHz	2.291 54 GHz	-54.93 dBm	-17.93 dB
2.292 GHz	2.296 GHz	1.000 MHz	2.295 98 GHz	-52.88 dBm	-21.88 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.299 86 GHz	-45.94 dBm	-20.94 dB
2.300 GHz	2.309 GHz	1.000 MHz	2.308 96 GHz	-18.22 dBm	-5.22 dB
2.309 GHz	2.310 GHz	50.000 kHz	2.309 98 GHz	-27.74 dBm	-14.74 dB
2.310 GHz	2.315 GHz	100.000 kHz	2.310 56 GHz	6.64 dBm	-23.36 dB
2.315 GHz	2.316 GHz	50.000 kHz	2.315 00 GHz	-30.57 dBm	-17.57 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.316 06 GHz	-21.56 dBm	-8.56 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.320 02 GHz	-31.16 dBm	-6.16 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.324 06 GHz	-42.71 dBm	-11.71 dB
2.328 GHz	2.337 GHz	1.000 MHz	2.328 04 GHz	-52.53 dBm	-15.53 dB
2.337 GHz	2.341 GHz	1.000 MHz	2.337 34 GHz	-55.16 dBm	-24.16 dB

Lowest Band Edge / Full RB / Lower zoom in

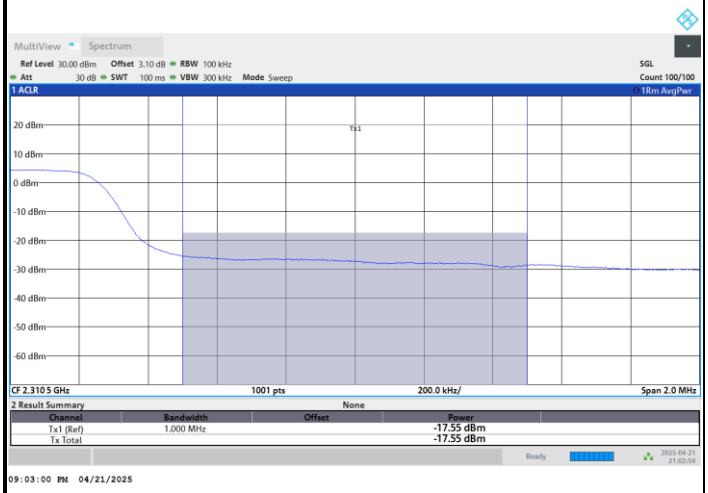
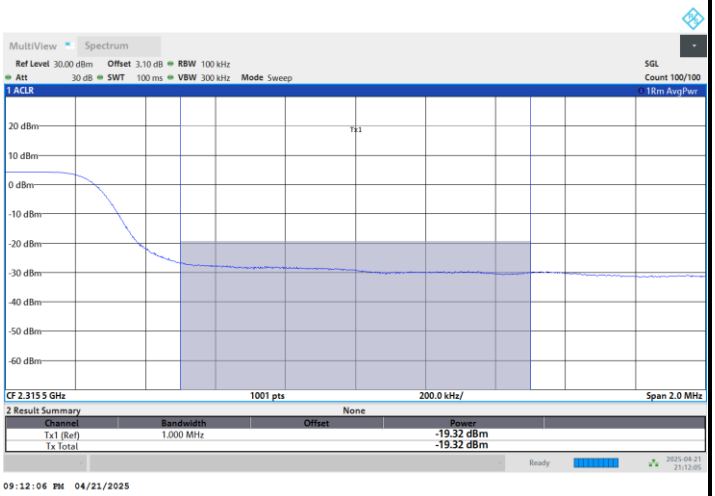


Channel	Bandwidth	Offset	Power
Tx1 (Ref)	1.000 MHz		-16.60 dBm
Tx Total			-16.60 dBm

Highest Band Edge / Full RB / Lower zoom in

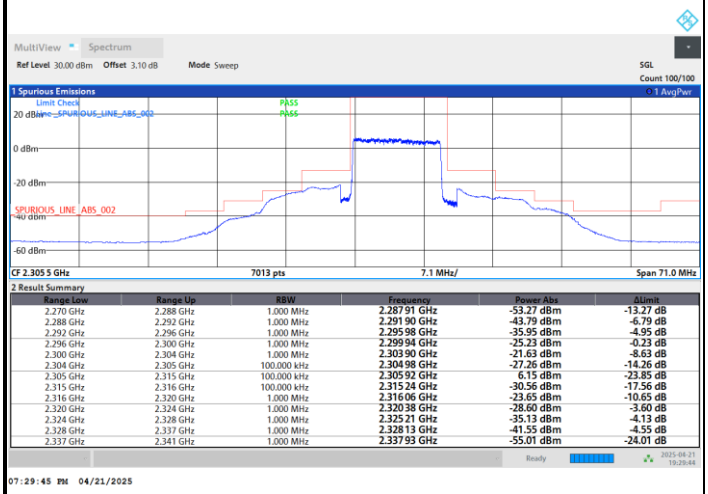


Channel	Bandwidth	Offset	Power
Tx1 (Ref)	1.000 MHz		-15.64 dBm
Tx Total			-15.64 dBm

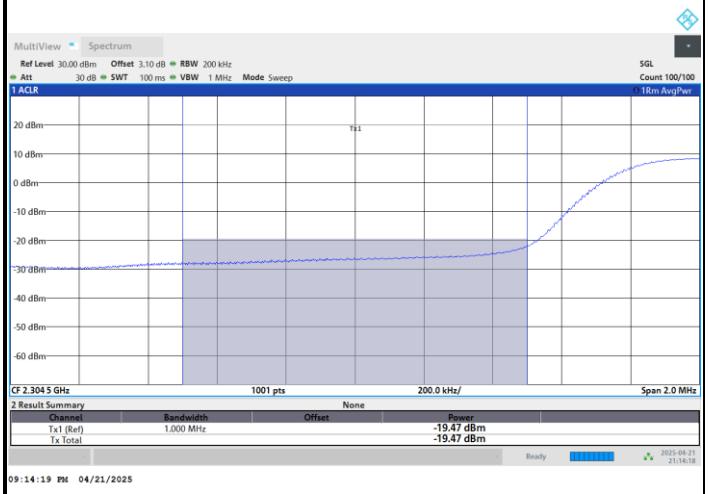
Lowest Band Edge / Full RB / Upper zoom in	Highest Band Edge / Full RB / Upper zoom in
	

FR1 n30 / 10MHz / DFT-s-OFDM / PI/2 BPSK

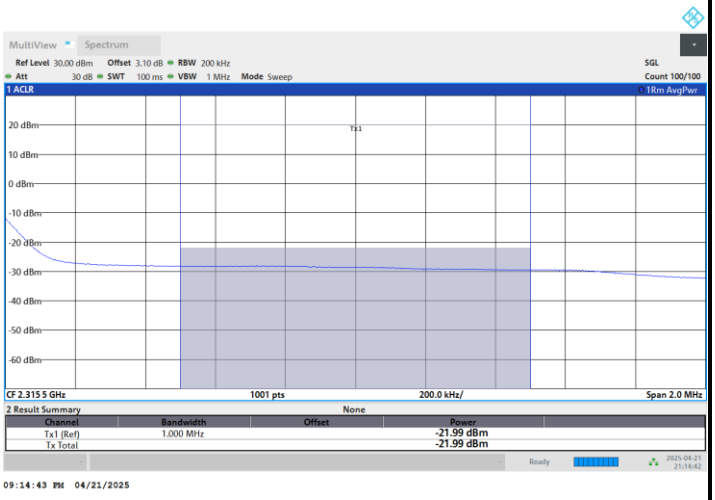
Middle Band Edge / Full RB



Middle Band Edge / Full RB / Lower zoom in

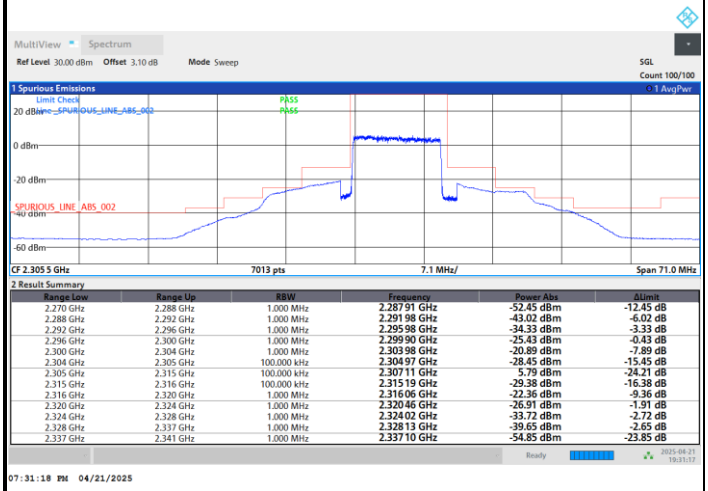


Middle Band Edge / Full RB / Upper zoom in

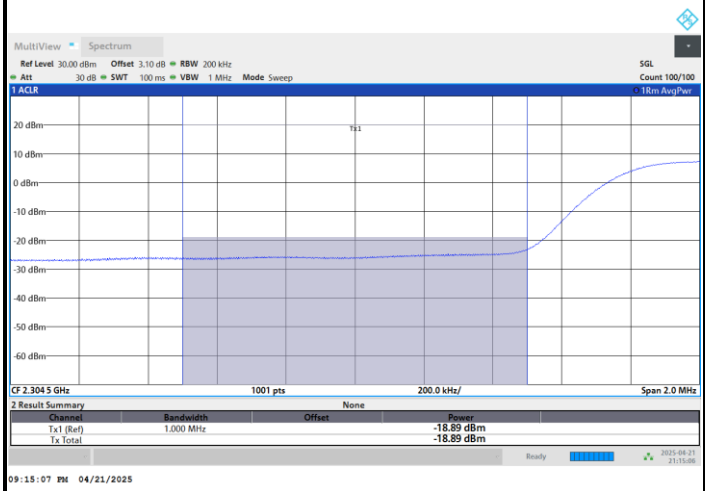


FR1 n30 / 10MHz / DFT-s-OFDM / QPSK

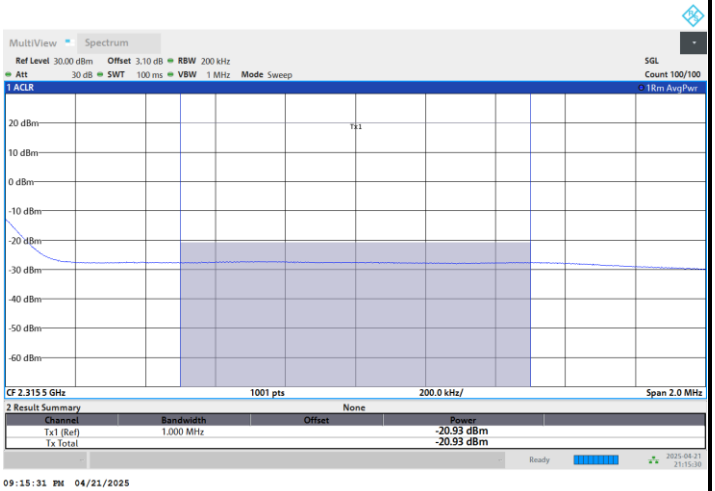
Middle Band Edge / Full RB



Middle Band Edge / Full RB / Lower zoom in

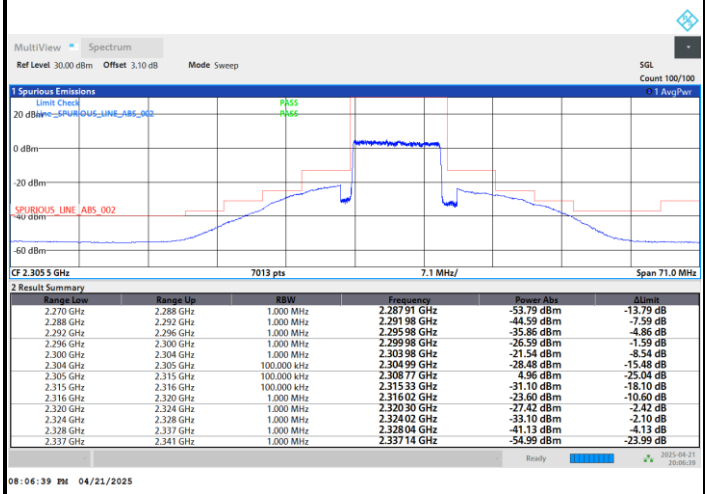


Middle Band Edge / Full RB / Upper zoom in

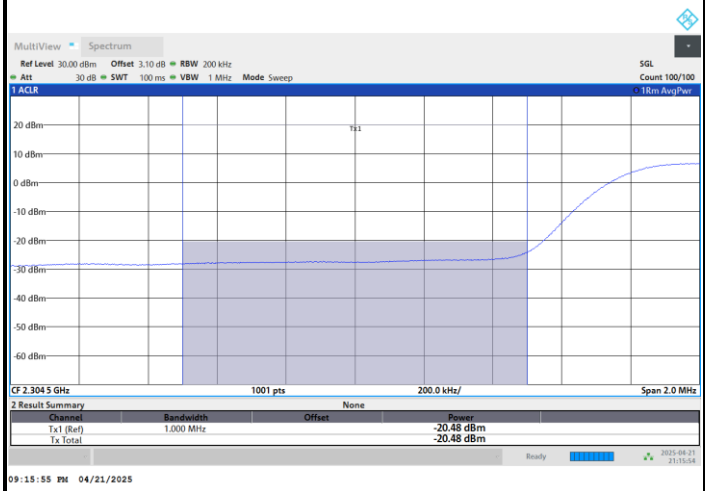


FR1 n30 / 10MHz / DFT-s-OFDM / 16QAM

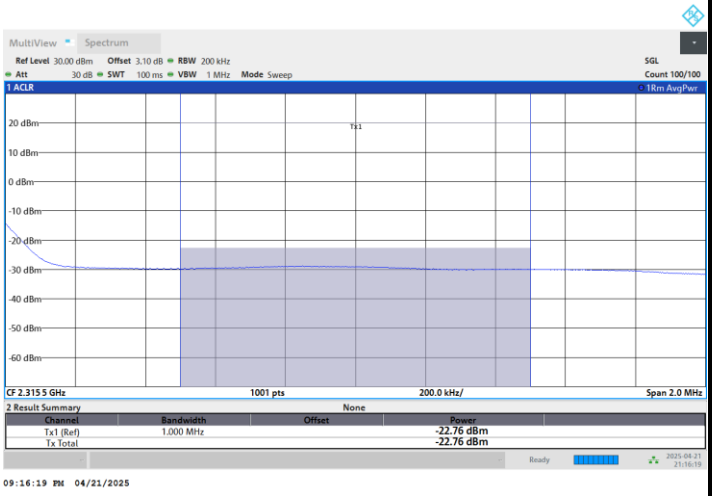
Middle Band Edge / Full RB



Middle Band Edge / Full RB / Lower zoom in

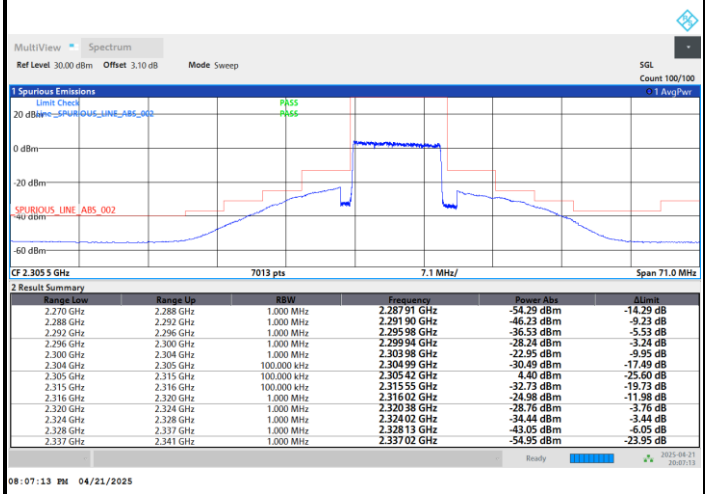


Middle Band Edge / Full RB / Upper zoom in

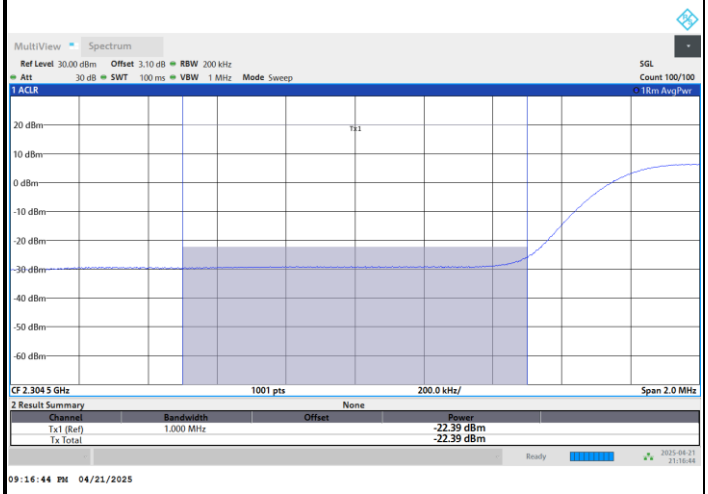


FR1 n30 / 10MHz / DFT-s-OFDM / 64QAM

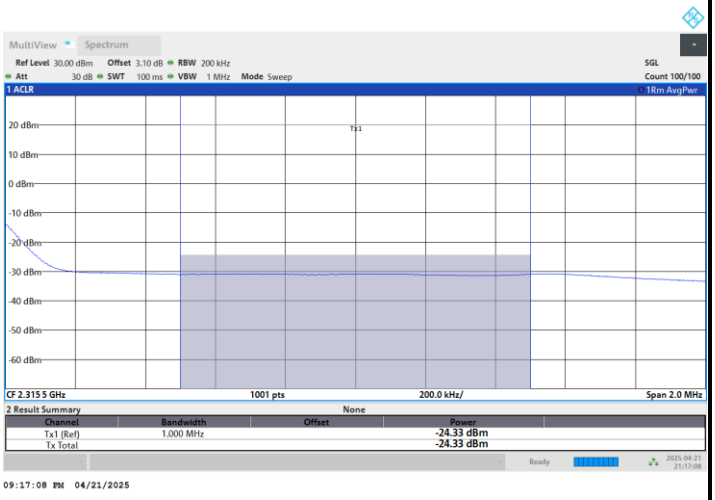
Middle Band Edge / Full RB



Middle Band Edge / Full RB / Lower zoom in

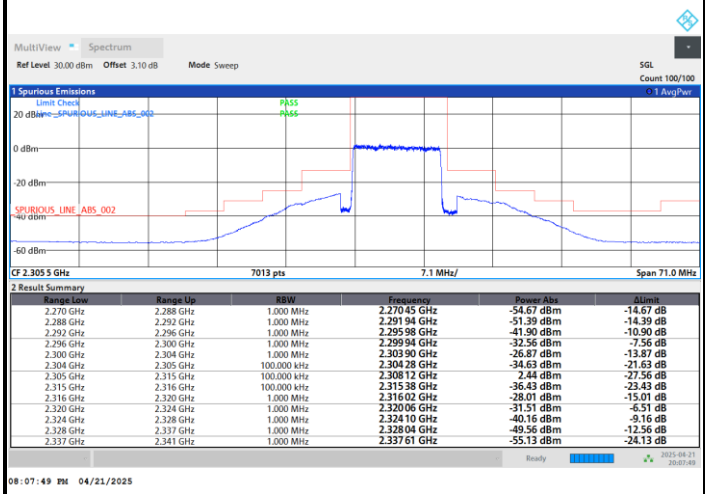


Middle Band Edge / Full RB / Upper zoom in

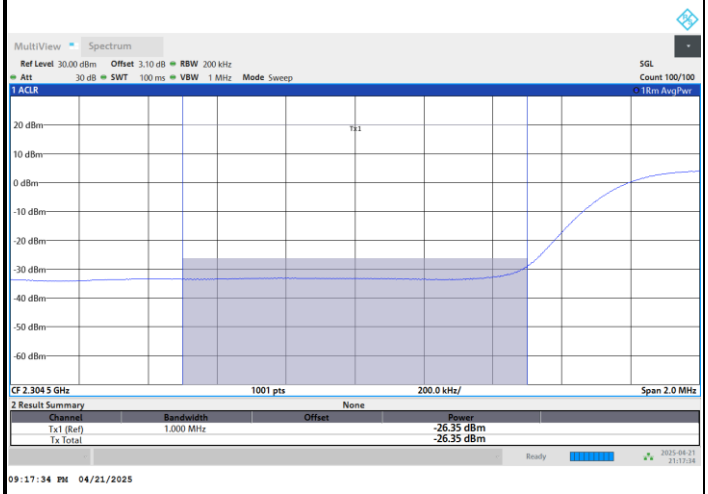


FR1 n30 / 10MHz / DFT-s-OFDM / 256QAM

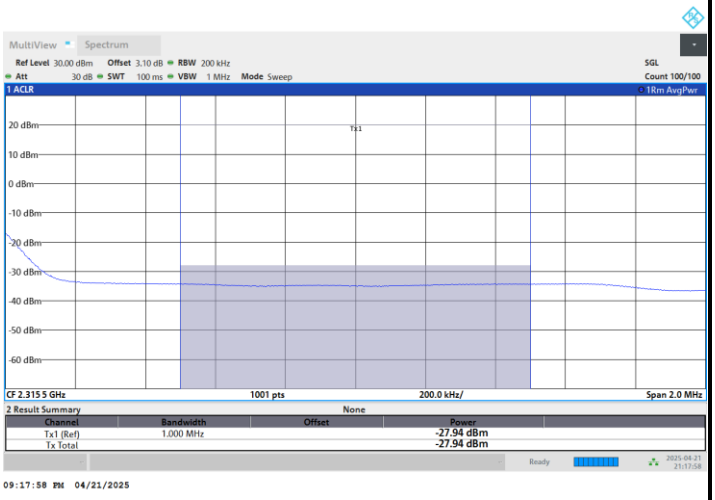
Middle Band Edge / Full RB



Middle Band Edge / Full RB / Lower zoom in

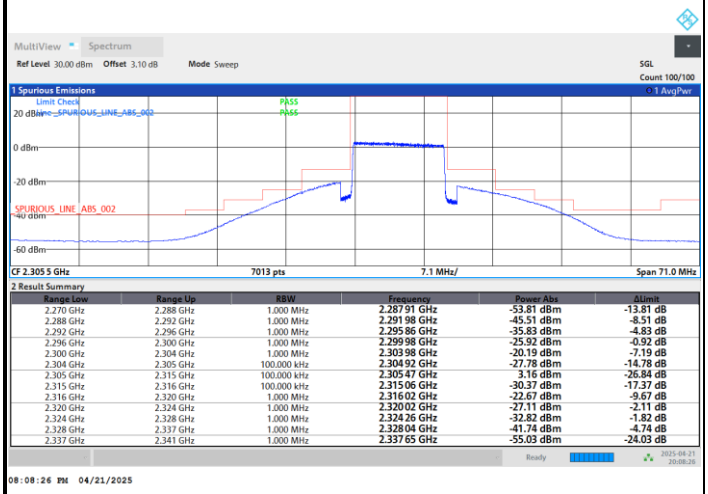


Middle Band Edge / Full RB / Upper zoom in

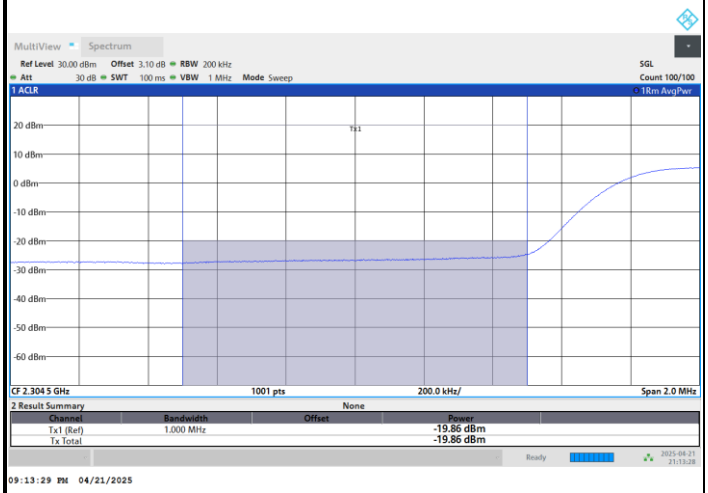


FR1 n30 / 10MHz / CP OFDM / QPSK / Full RB

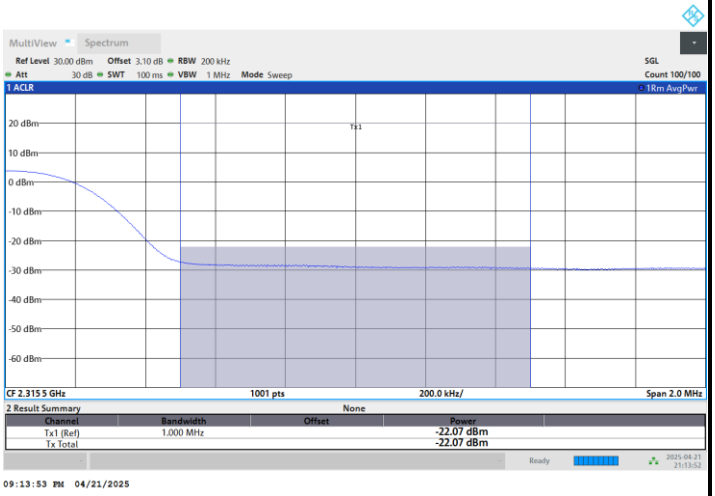
Middle Band Edge / Full RB



Middle Band Edge / Full RB / Lower zoom in



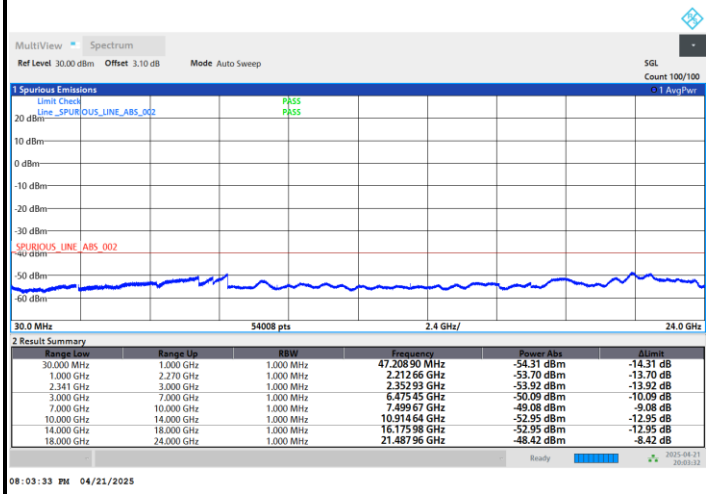
Middle Band Edge / Full RB / Upper zoom in



Conducted Spurious Emission

FR1 n30 / 5MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel



2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	47.208 90 MHz	-54.31 dBm	-14.31 dB
1.000 GHz	2.270 GHz	1.000 MHz	2.212 66 GHz	-53.70 dBm	-13.70 dB
2.341 GHz	3.000 GHz	1.000 MHz	2.352 93 GHz	-53.92 dBm	-13.92 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.475 45 GHz	-50.09 dBm	-10.09 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.499 67 GHz	-49.08 dBm	-9.08 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.914 64 GHz	-52.95 dBm	-12.95 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.175 98 GHz	-52.95 dBm	-12.95 dB
18.000 GHz	24.000 GHz	1.000 MHz	21.487 96 GHz	-48.42 dBm	-8.42 dB

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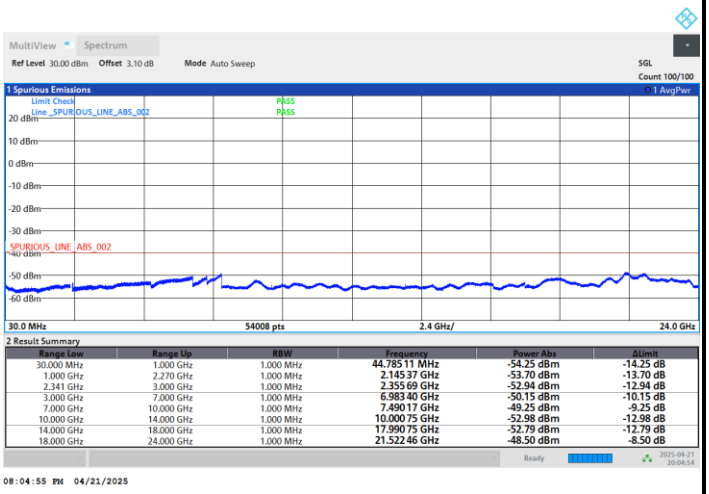
Middle Channel



2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	44.785 11 MHz	-54.25 dBm	-14.25 dB
1.000 GHz	2.270 GHz	1.000 MHz	2.145 37 GHz	-53.70 dBm	-13.70 dB
2.341 GHz	3.000 GHz	1.000 MHz	2.355 69 GHz	-52.94 dBm	-12.94 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.983 40 GHz	-50.15 dBm	-10.15 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.490 17 GHz	-49.25 dBm	-9.25 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.000 75 GHz	-52.98 dBm	-12.98 dB
14.000 GHz	18.000 GHz	1.000 MHz	17.990 75 GHz	-52.79 dBm	-12.79 dB
18.000 GHz	24.000 GHz	1.000 MHz	21.522 46 GHz	-48.50 dBm	-8.50 dB

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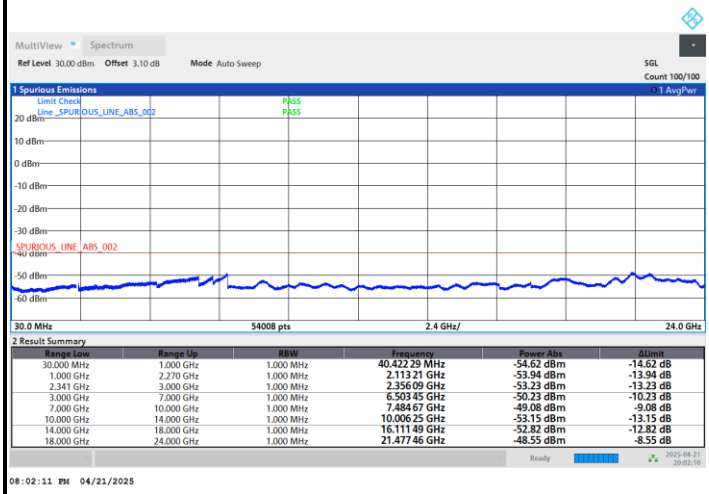
Highest Channel



2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	40.422 29 MHz	-54.62 dBm	-14.62 dB
1.000 GHz	2.270 GHz	1.000 MHz	2.113 21 GHz	-53.94 dBm	-13.94 dB
2.341 GHz	3.000 GHz	1.000 MHz	2.356 09 GHz	-53.23 dBm	-13.23 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.503 45 GHz	-50.23 dBm	-10.23 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.484 67 GHz	-49.08 dBm	-9.08 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.006 25 GHz	-53.15 dBm	-13.15 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.111 49 GHz	-52.82 dBm	-12.82 dB
18.000 GHz	24.000 GHz	1.000 MHz	21.477 46 GHz	-48.55 dBm	-8.55 dB

08:02:11 PM 04/21/2025

Frequency Stability

Test Conditions		FR1 n30 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0018	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0006	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0010	
0	Normal Voltage	0.0002	
-10	Normal Voltage	0.0023	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0023	
20	Maximum Voltage	0.0015	
20	Normal Voltage	0.0000	
20	Minimum Voltage	0.0013	

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 n41

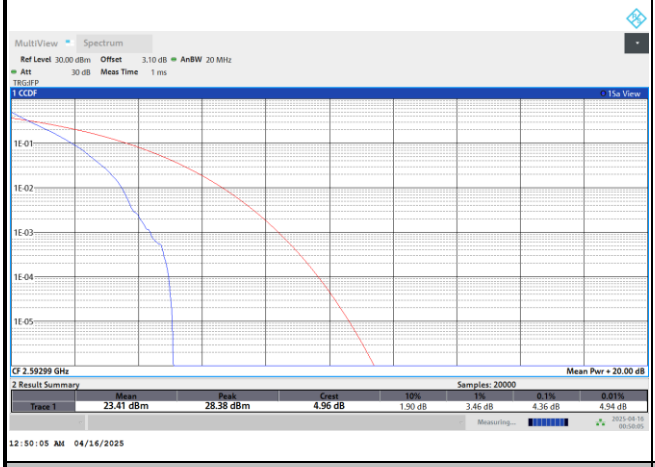
<SISO Mode>

Peak-to-Average Ratio

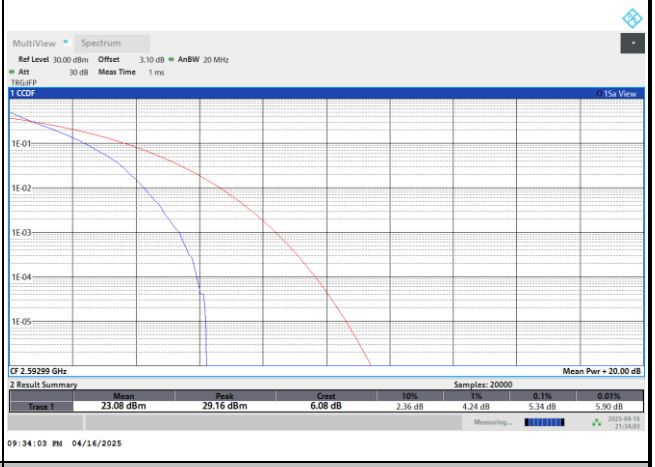
Mode	FR1 n41 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.36	5.34	5.98	6.28	PASS
Mode	FR1 n41 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.50				PASS

FR1 n41 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

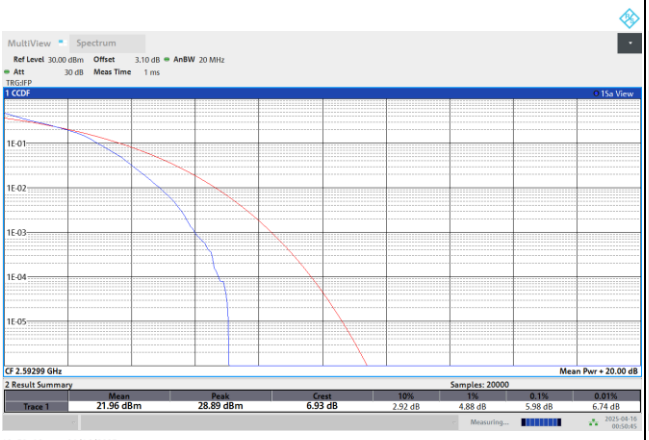
PI/2 BPSK



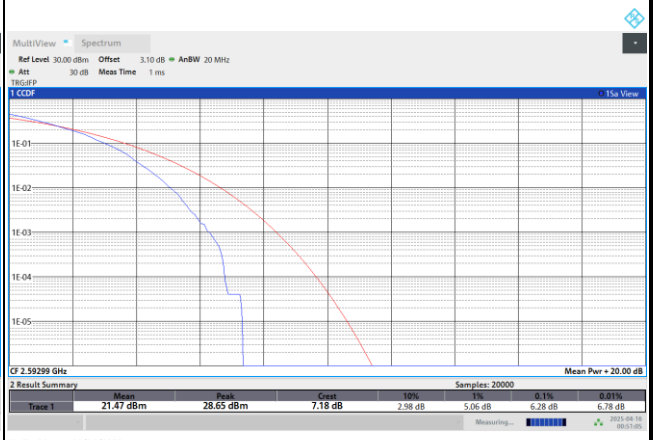
QPSK



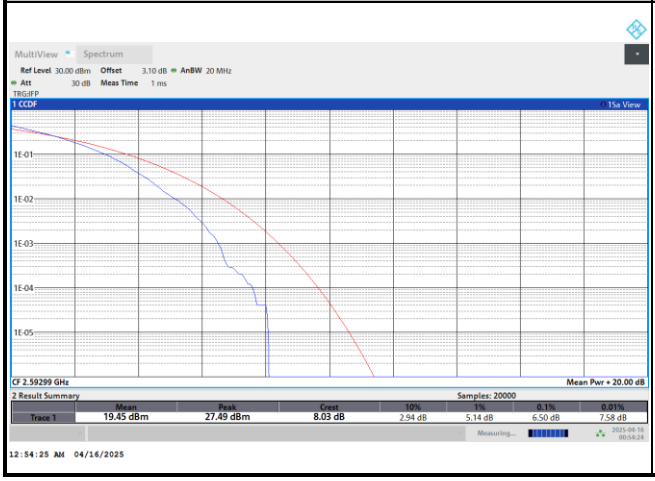
16QAM



64QAM



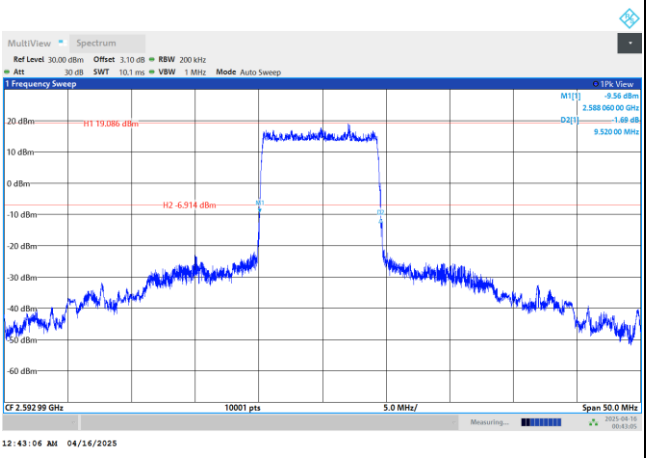
256QAM

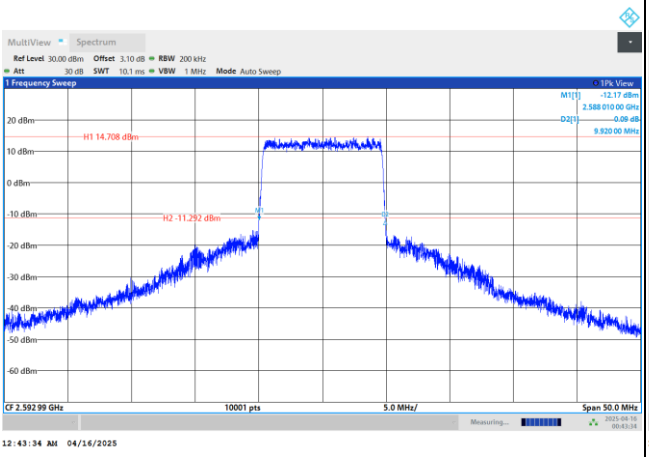
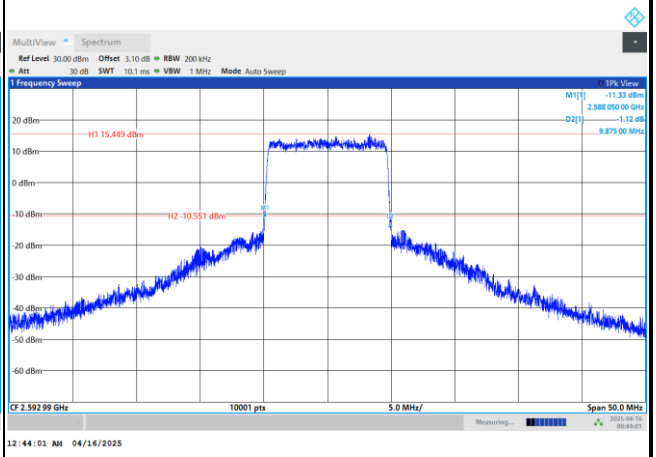
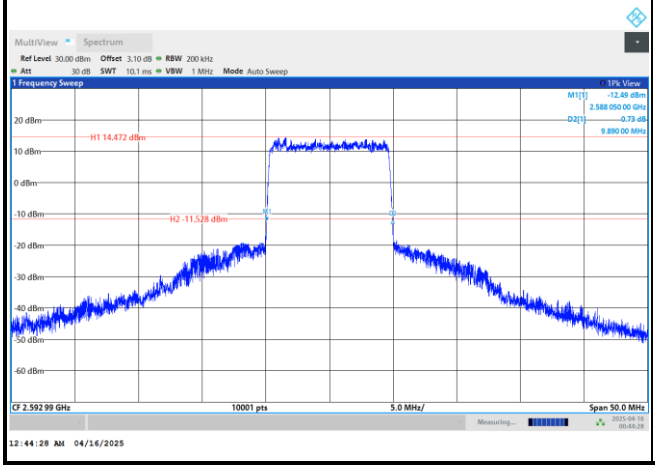
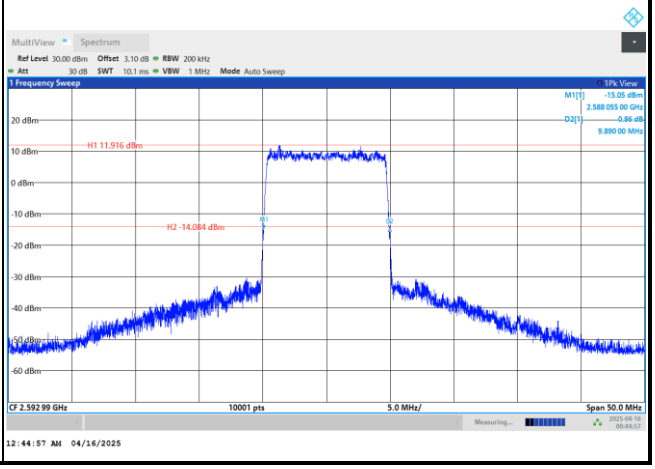


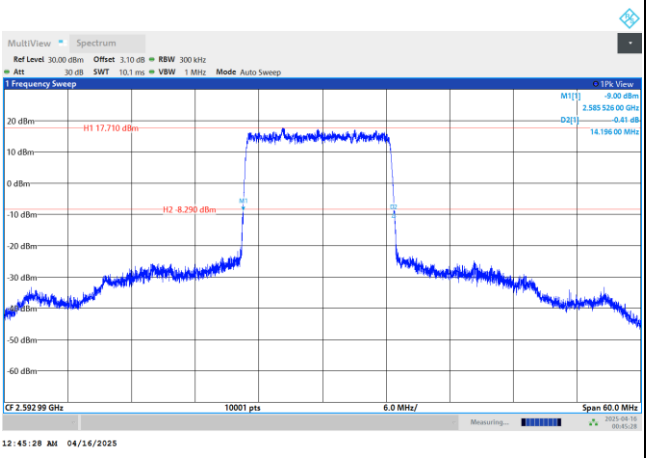
26dB Bandwidth

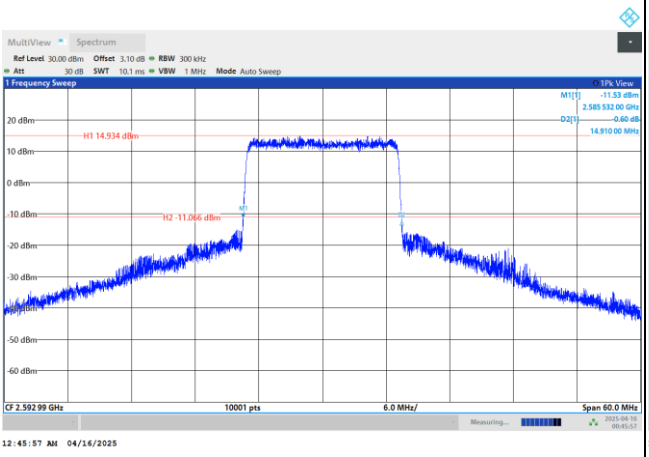
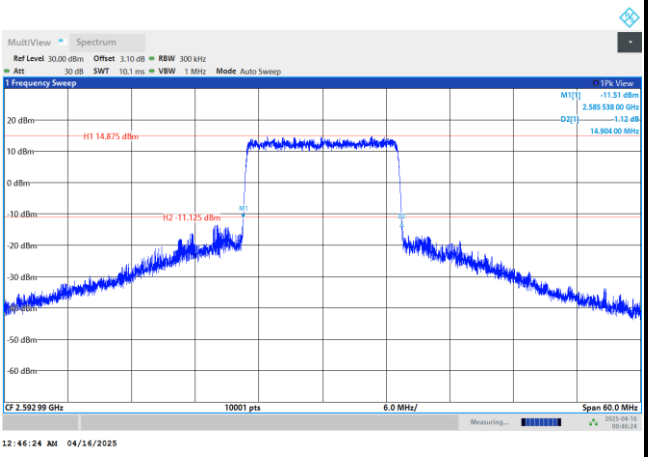
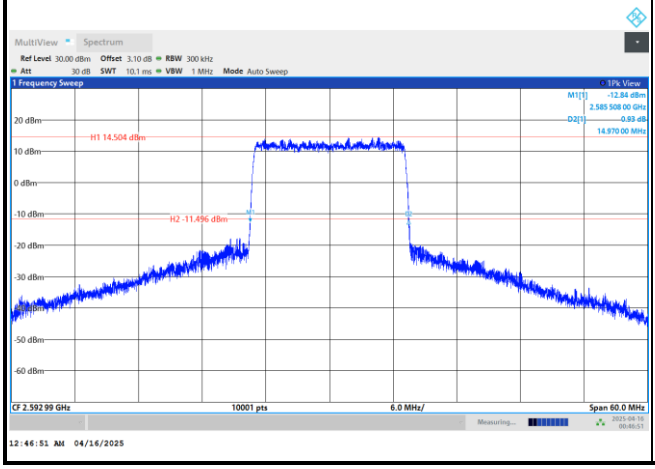
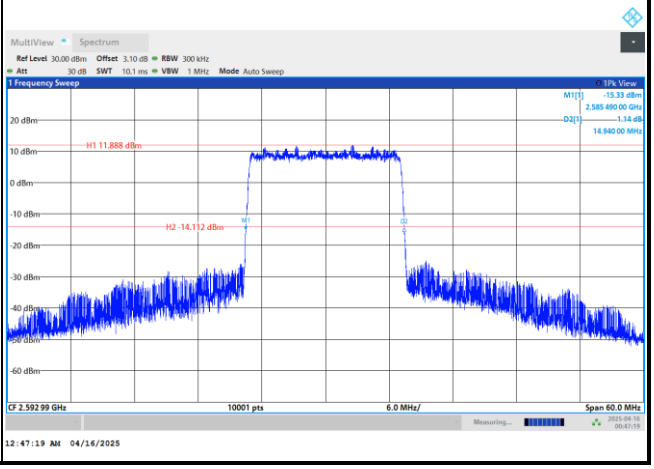
Mode	FR1 n41 : 26dB BW(MHz) / DFT-S OFDM							
BW	10MHz	15MHz	20MHz					
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK					
Middle CH	9.52	14.19	19.12					

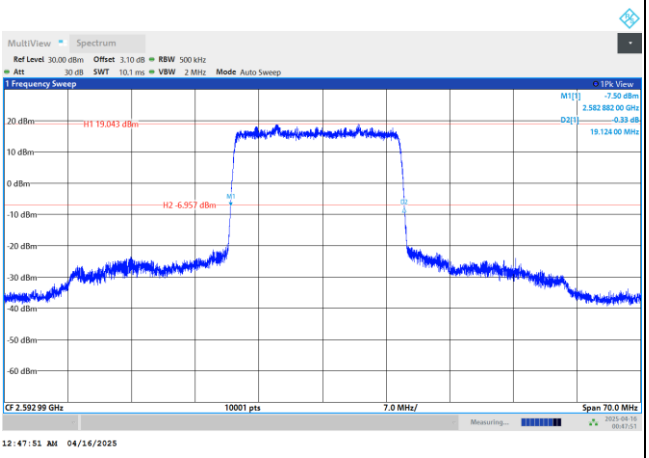
Mode	FR1 n41 : 26dB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	9.92	9.87	14.91	14.90	20.23	20.26		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	9.89	9.89	14.97	14.94	20.18	20.20		

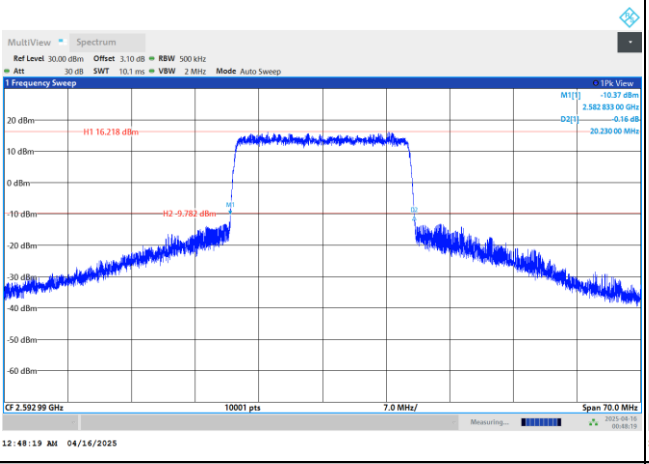
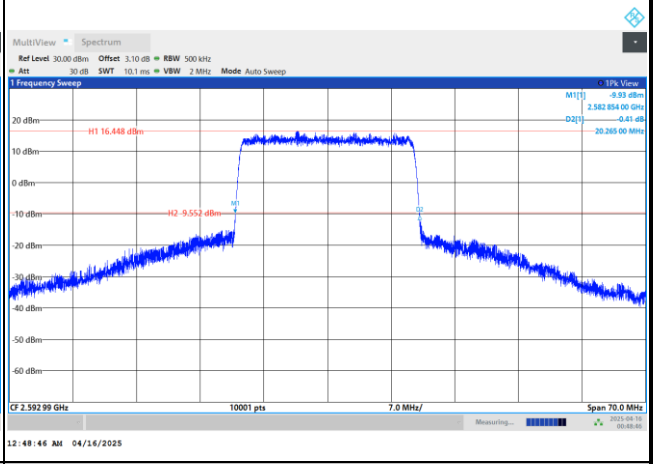
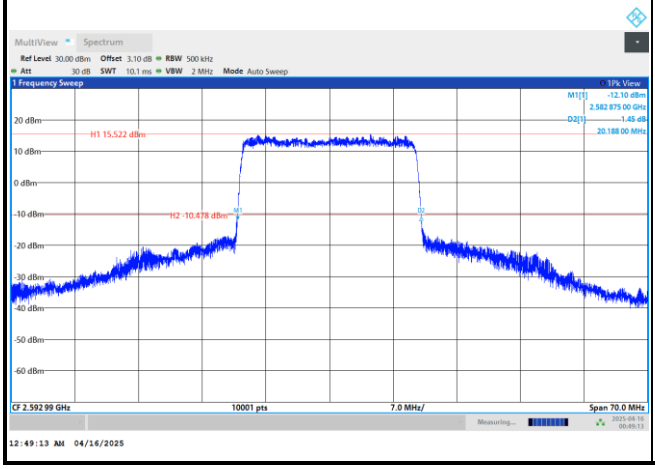
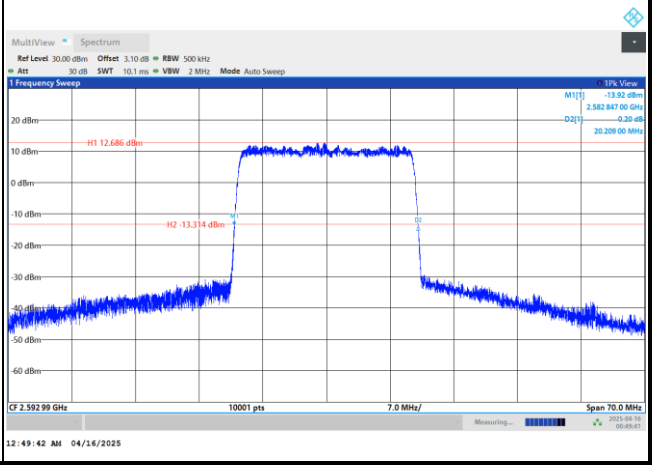
FR1 n41 / 10MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

FR1 n41 / 10MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

FR1 n41 / 15MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

FR1 n41 / 15MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

FR1 n41 / 20MHz / DFT-S OFDM / Middle Channel / Full RB	
PI/2 BPSK	
	

FR1 n41 / 20MHz / CP OFDM / Middle Channel / Full RB	
QPSK	16QAM
	
64QAM	256QAM
	

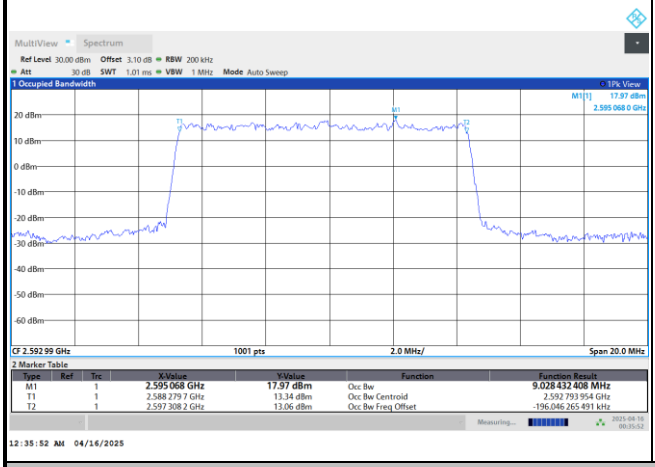
Occupied Bandwidth

Mode	FR1 n41 : OB BW(MHz) / DFT-S OFDM							
BW	10MHz	15MHz	20MHz					
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK					
Middle CH	9.02	13.48	18.07					

Mode	FR1 n41 : OB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	9.31	9.31	14.13	14.17	19.03	19.00		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	9.33	9.31	14.17	14.16	19.05	18.99		

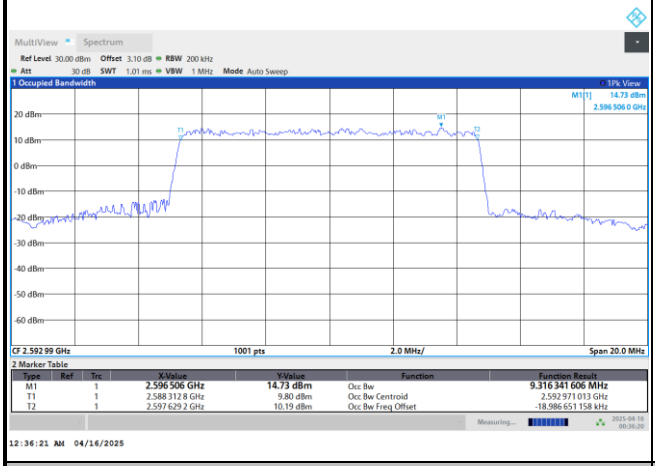
FR1 n41 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



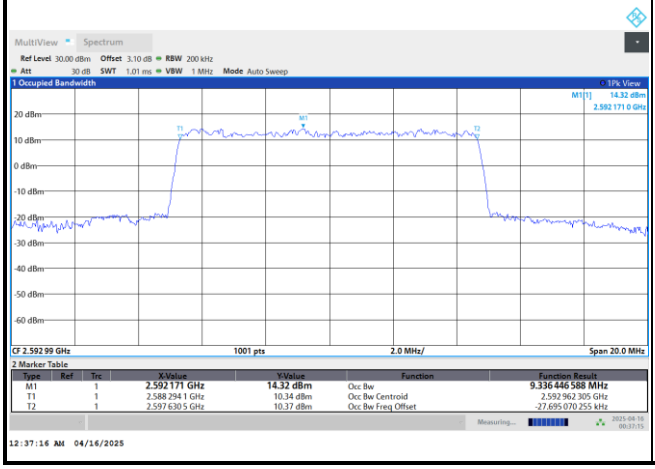
FR1 n41 / 10MHz / CP OFDM / Middle Channel / Full RB

QPSK

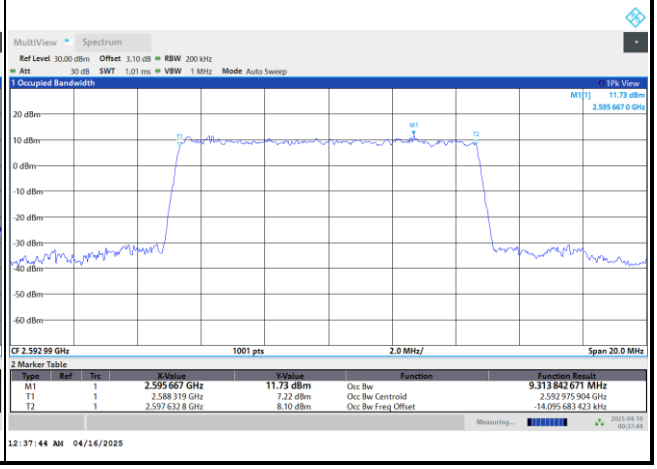


16QAM

64QAM

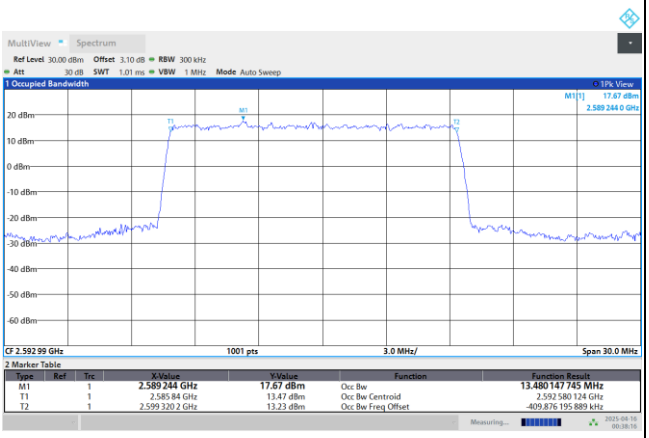


256QAM



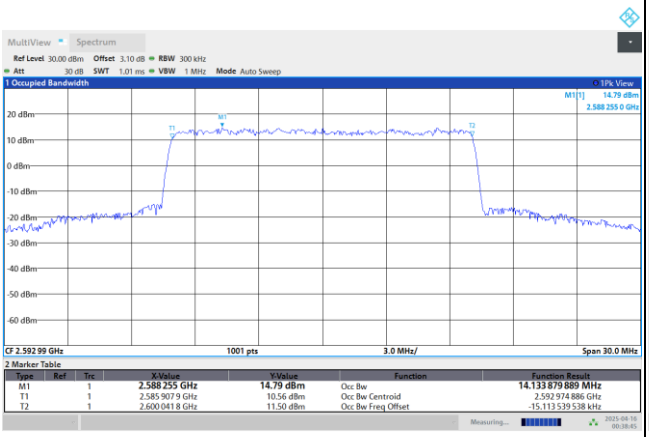
FR1 n41 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

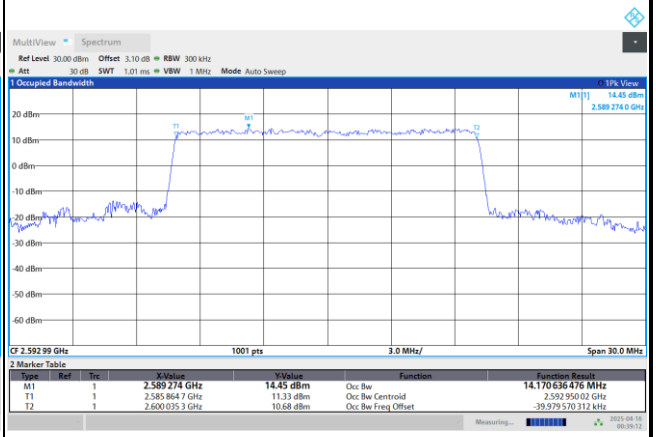


FR1 n41 / 15MHz / CP OFDM / Middle Channel / Full RB

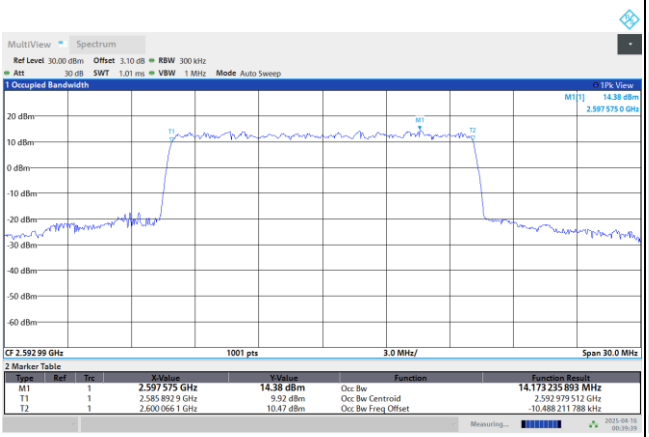
QPSK



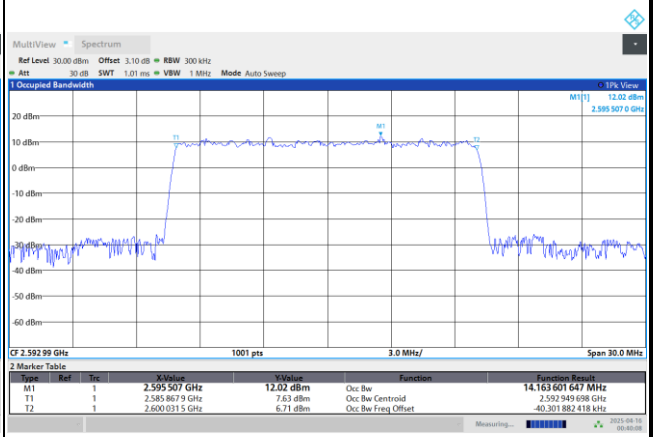
16QAM



64QAM

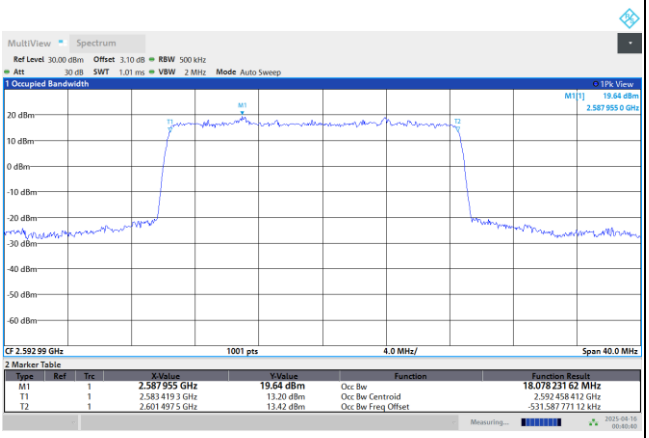


256QAM



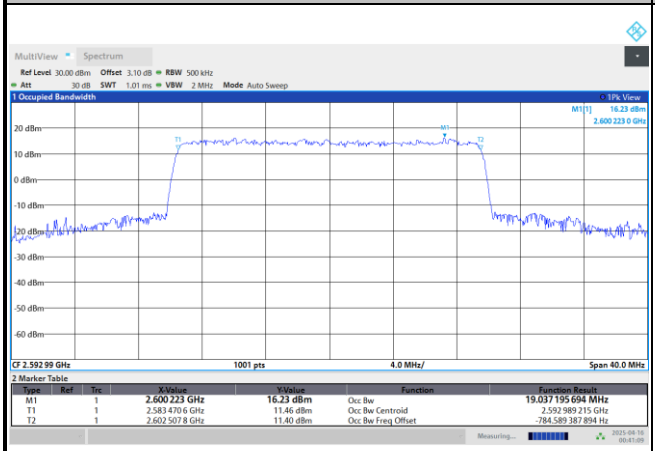
FR1 n41 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

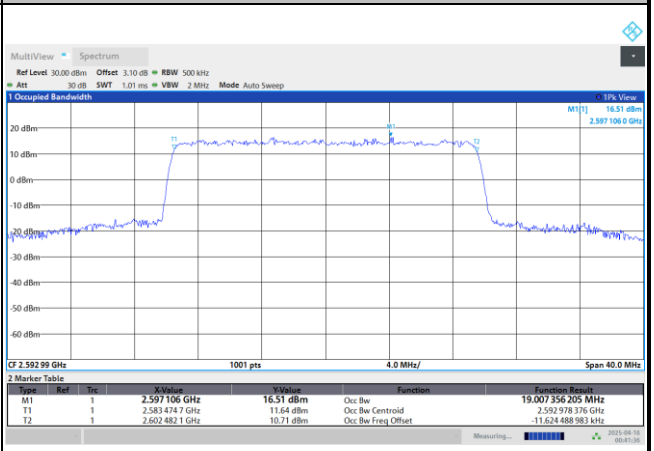


FR1 n41 / 20MHz / CP OFDM / Middle Channel / Full RB

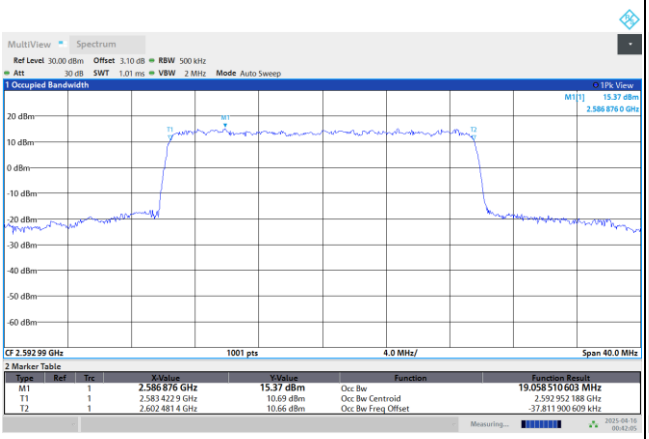
QPSK



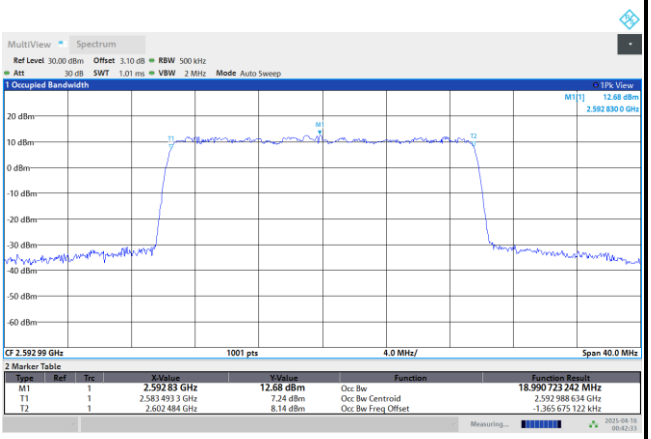
16QAM



64QAM



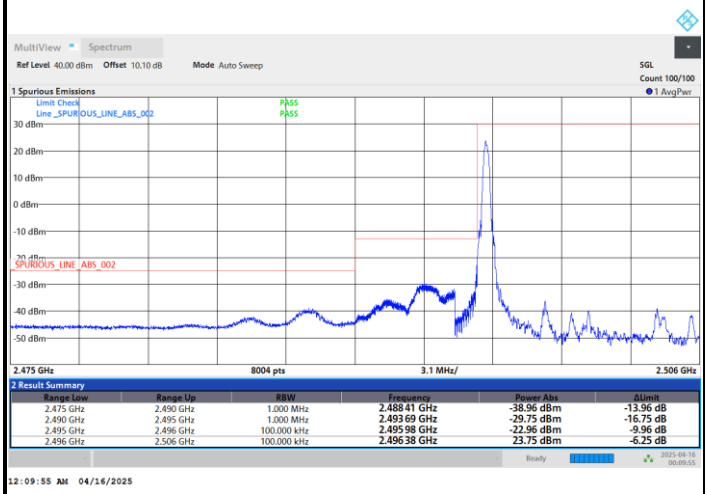
256QAM



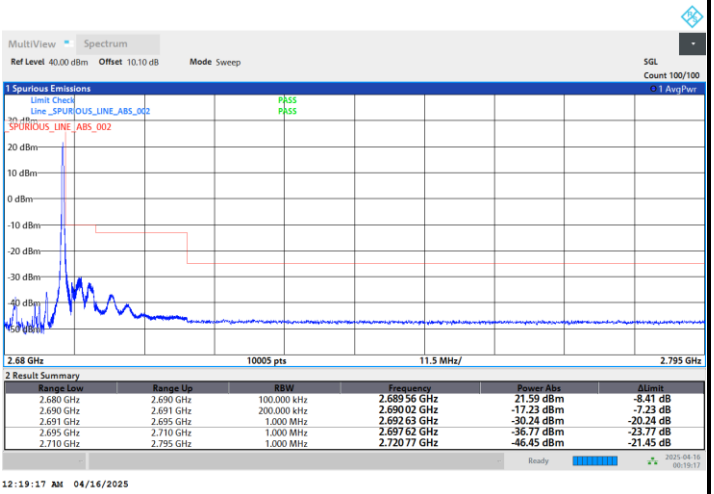
Conducted Band Edge

FR1 n41 / 10MHz / DFT-S OFDM / PI/2 BPSK

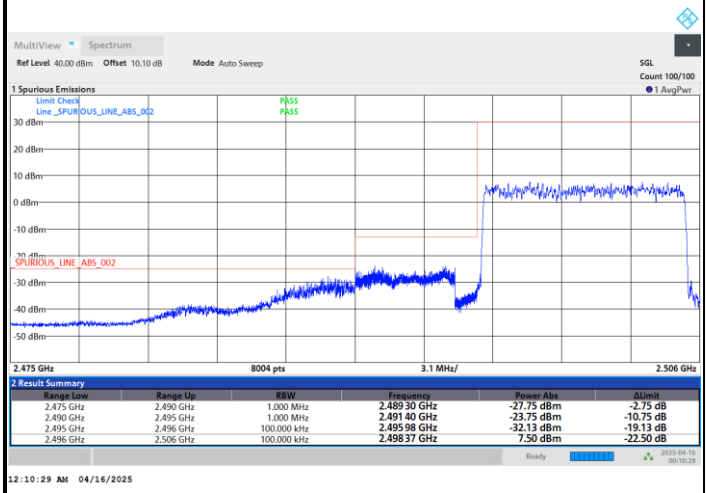
Lowest Band Edge / 1RB0



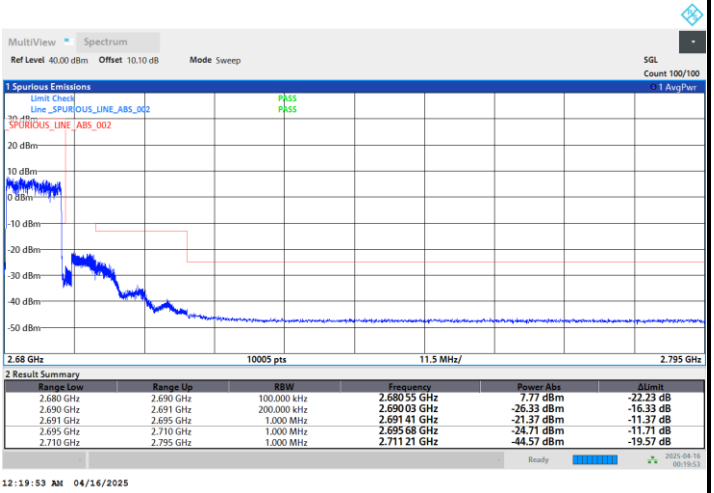
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

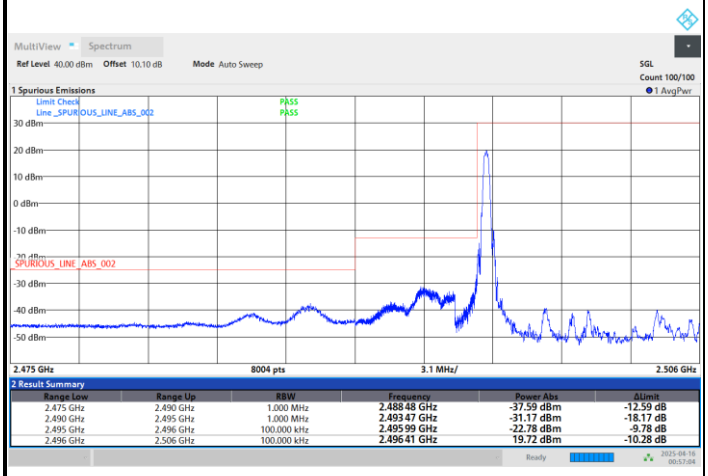


Highest Band Edge / Full RB

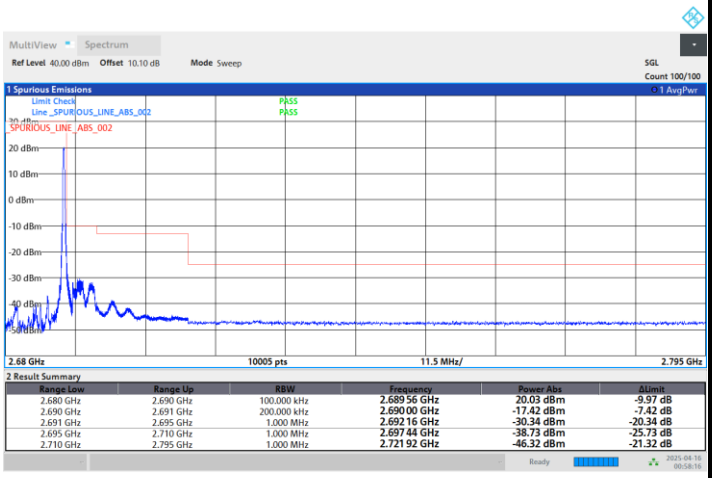


FR1 n41 / 10MHz / DFT-S OFDM / QPSK

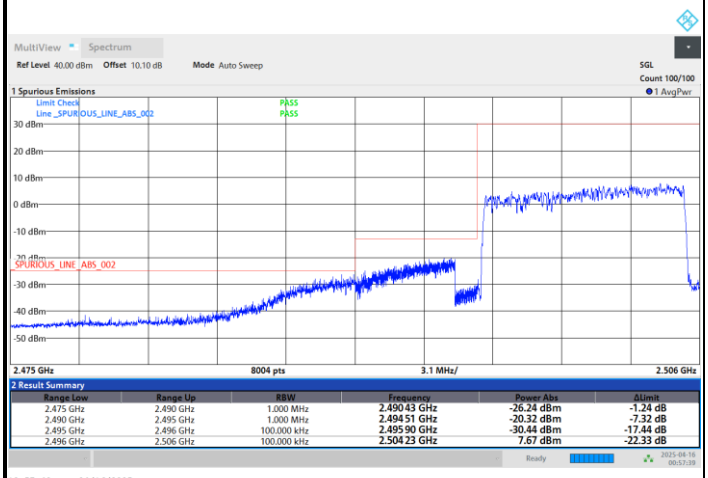
Lowest Band Edge / 1RB0



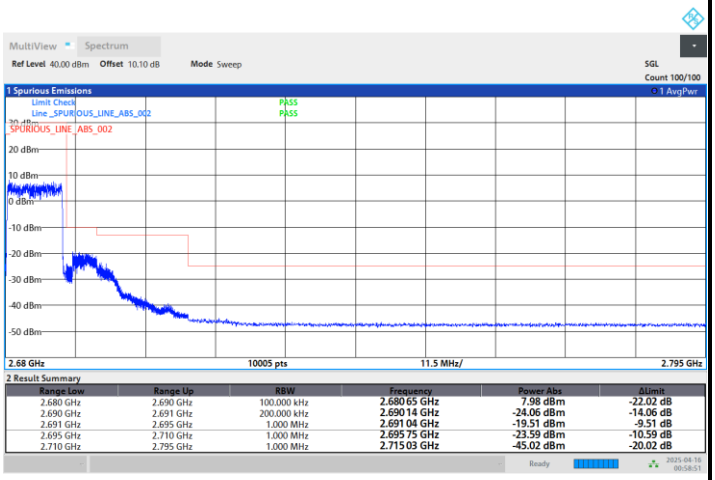
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

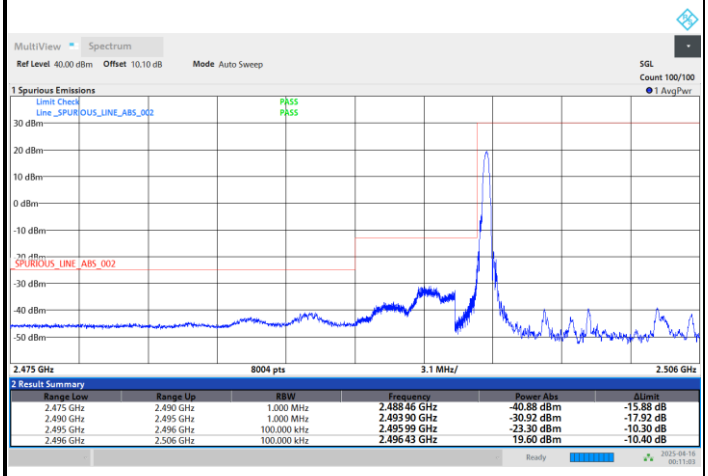


Highest Band Edge / Full RB

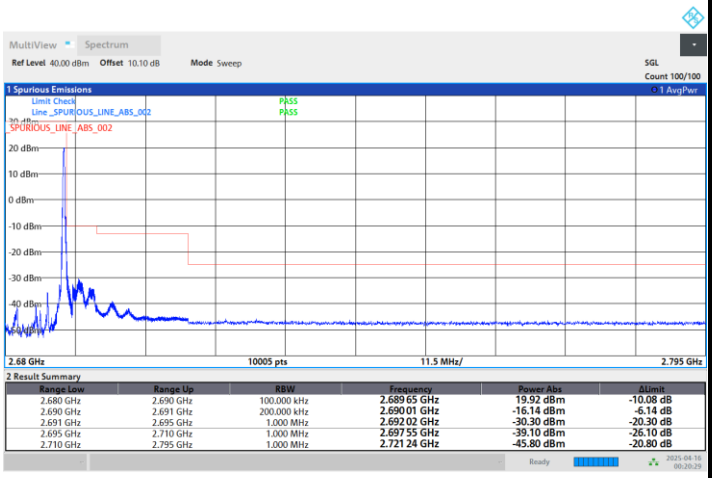


FR1 n41 / 10MHz / DFT-S OFDM / 16QAM

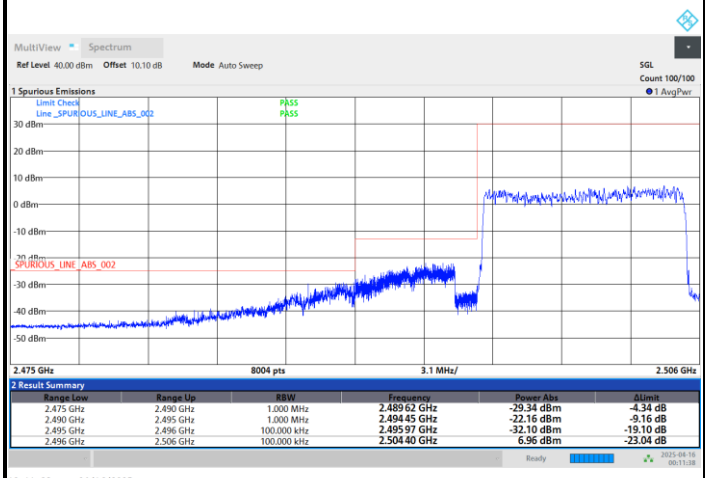
Lowest Band Edge / 1RB0



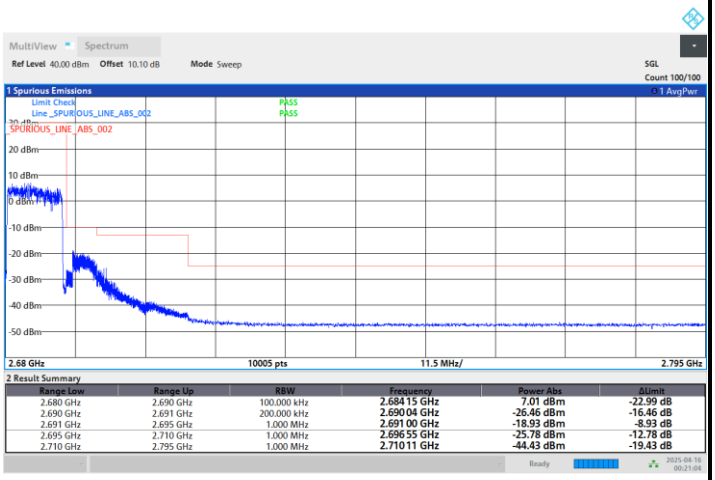
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

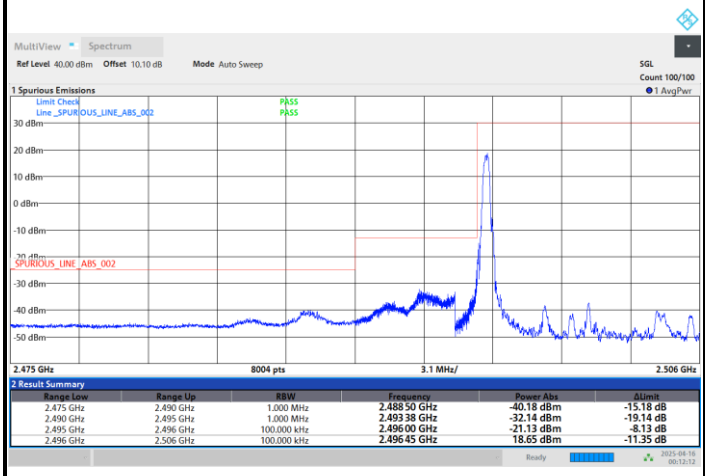


Highest Band Edge / Full RB

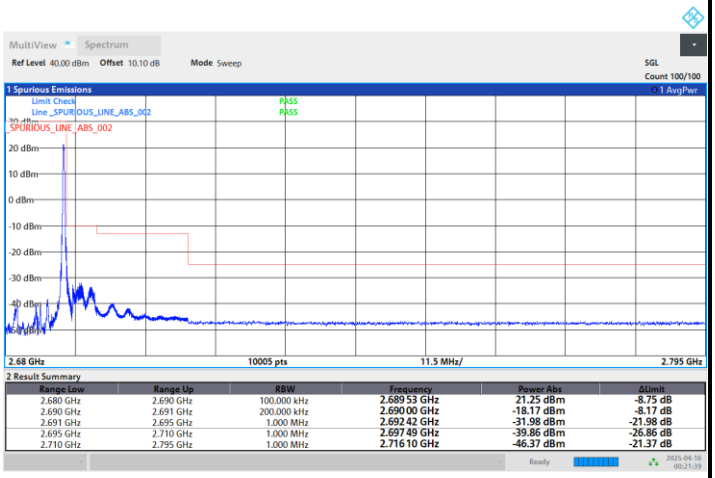


FR1 n41 / 10MHz / DFT-S OFDM / 64QAM

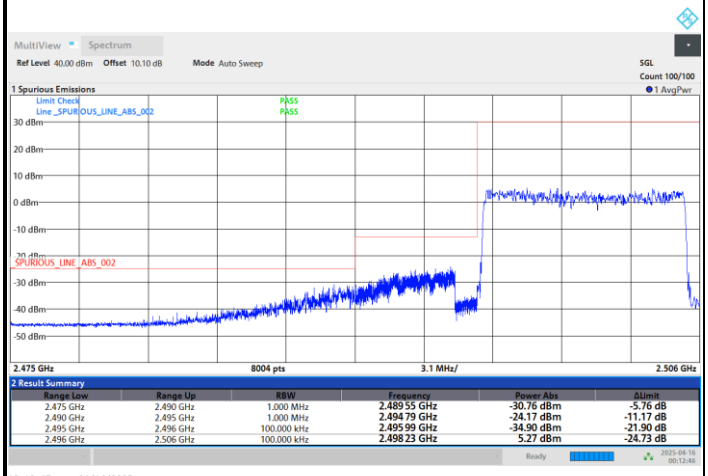
Lowest Band Edge / 1RB0



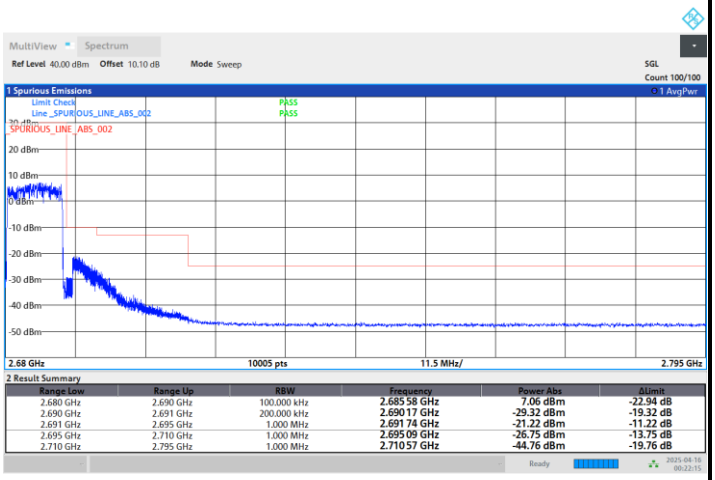
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

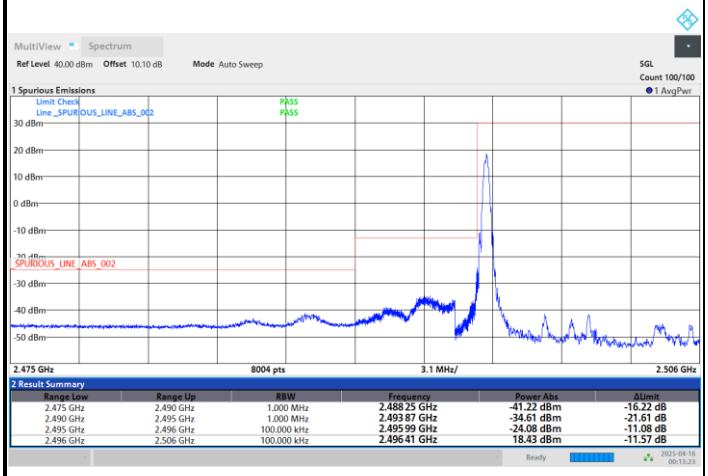


Highest Band Edge / Full RB

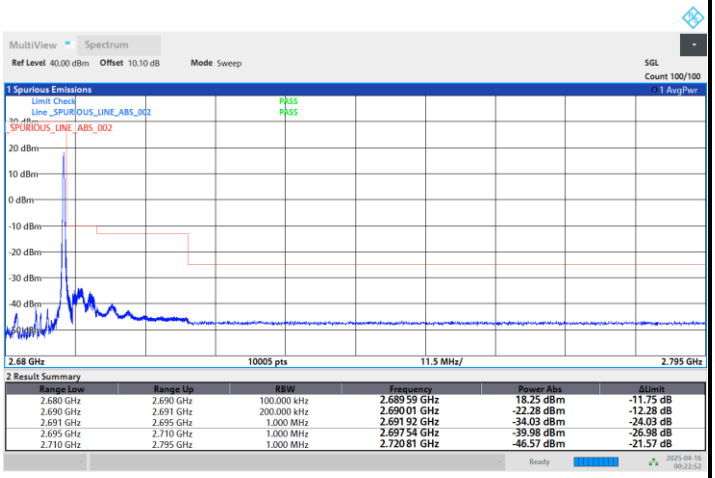


FR1 n41 / 10MHz / DFT-S OFDM / 256QAM

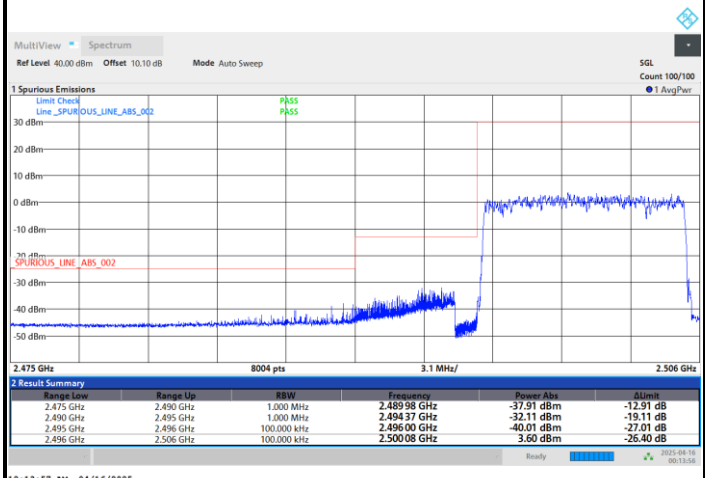
Lowest Band Edge / 1RB0



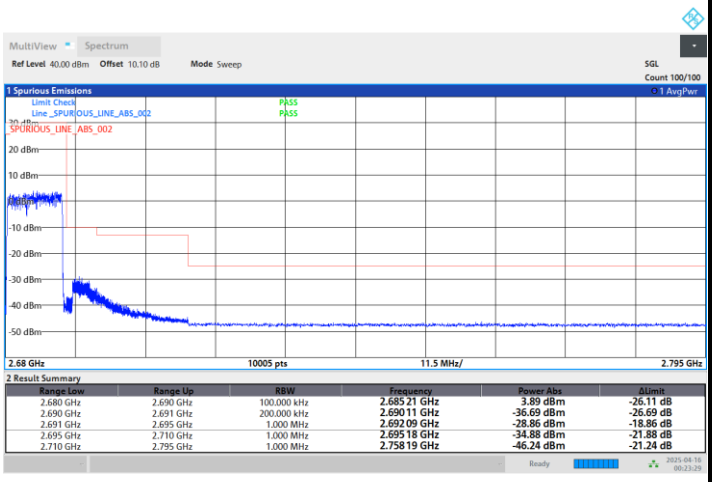
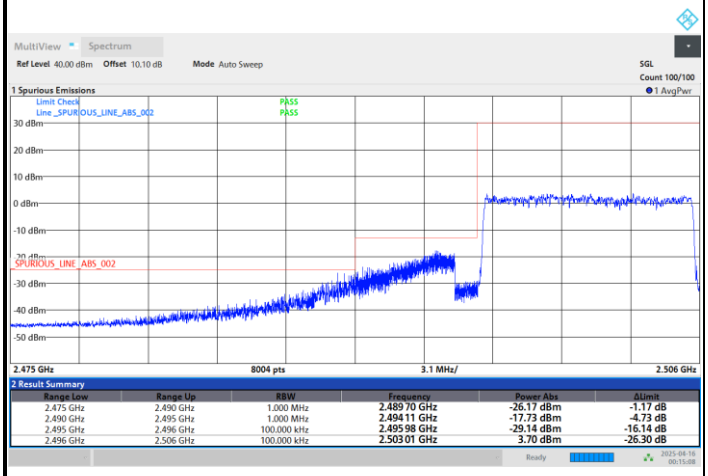
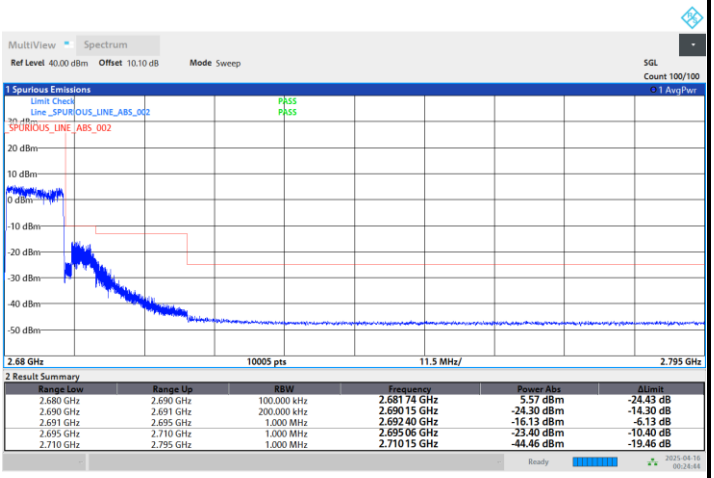
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB



Highest Band Edge / Full RB



FR1 n41 / 10MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**