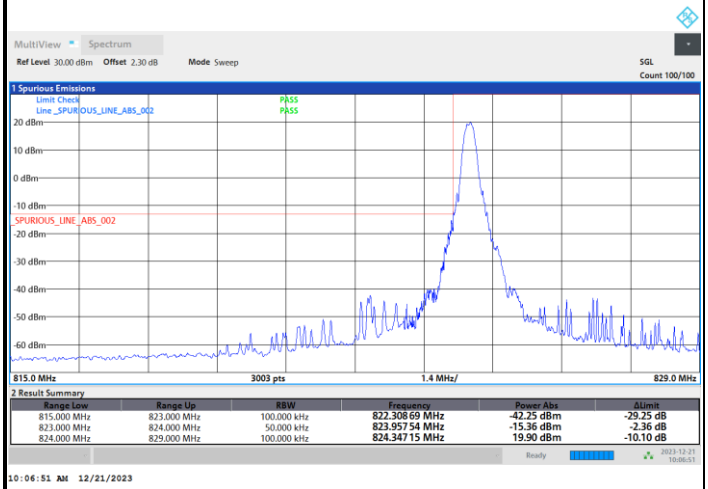
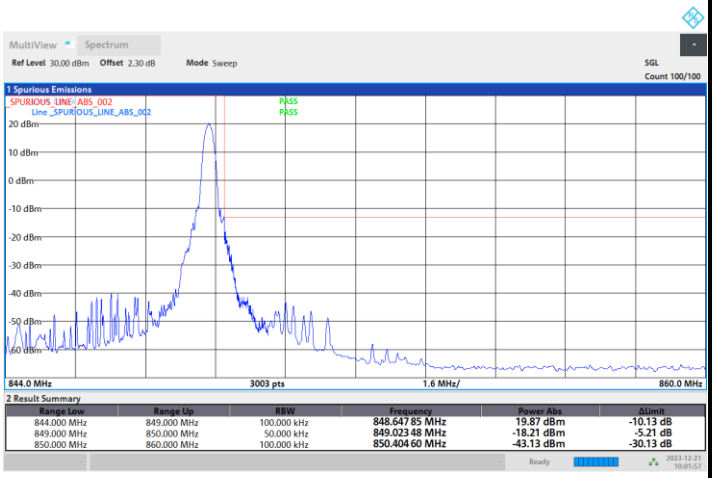
FR1 n26 / 5MHz / DFT-S OFDM / 64QAM

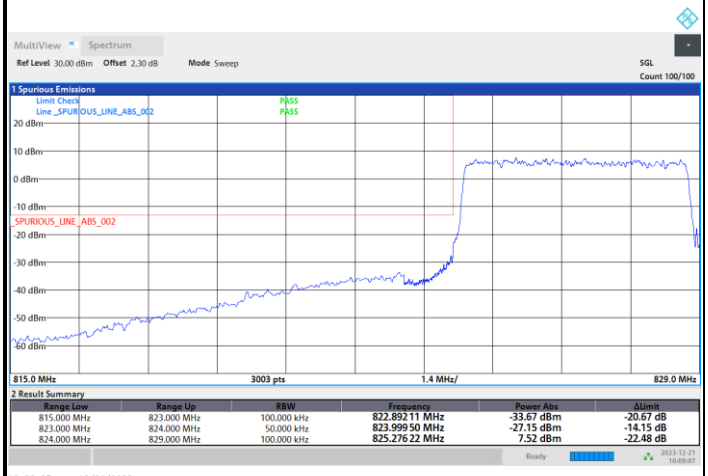
Lowest Band Edge / 1RB0



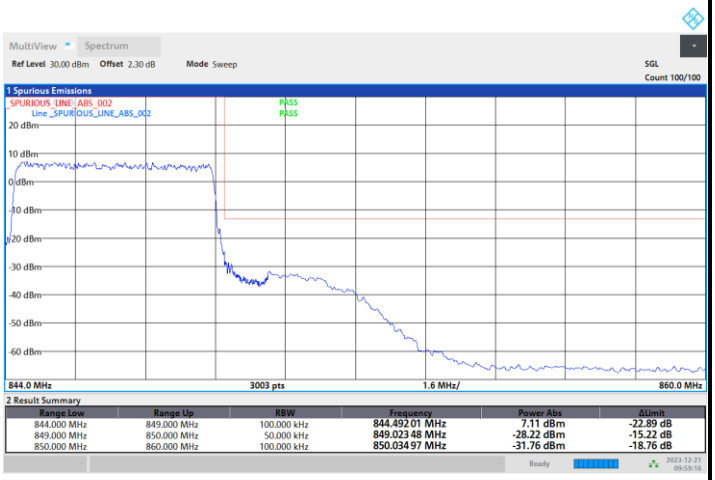
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

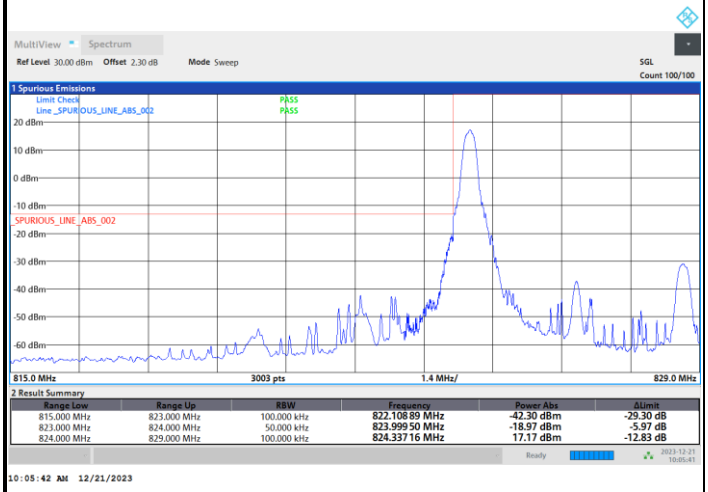


Highest Band Edge / Full RB

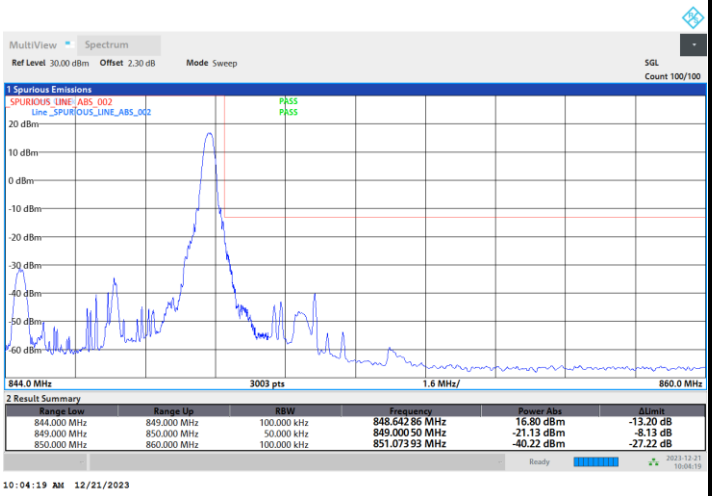


FR1 n26 / 5MHz / DFT-S OFDM / 256QAM

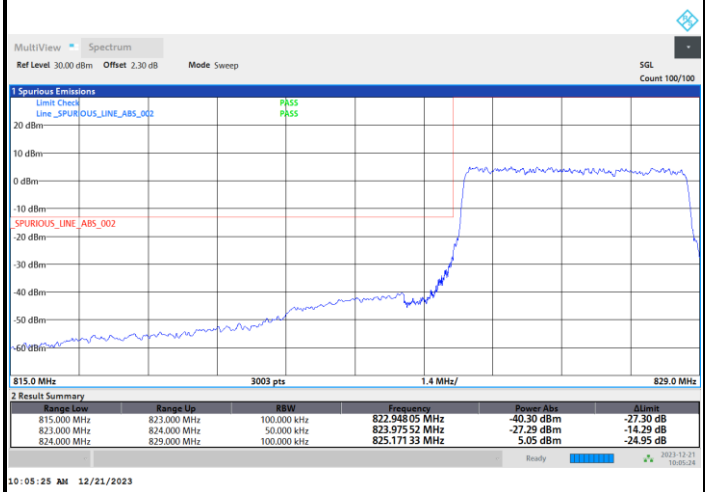
Lowest Band Edge / 1RB0



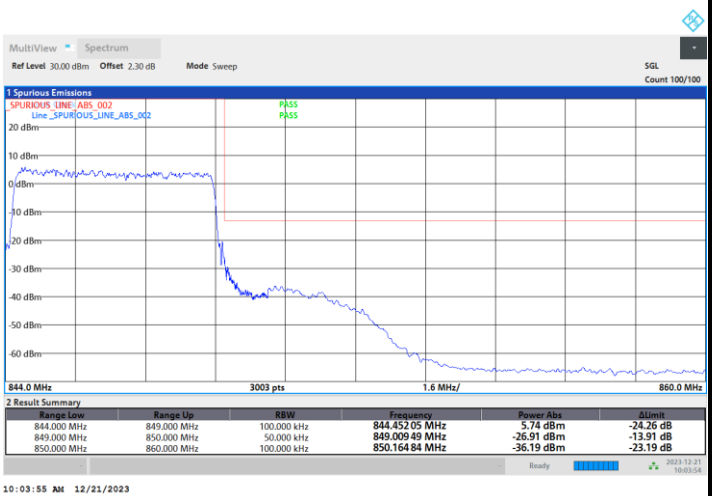
Highest Band Edge / 1RBmax

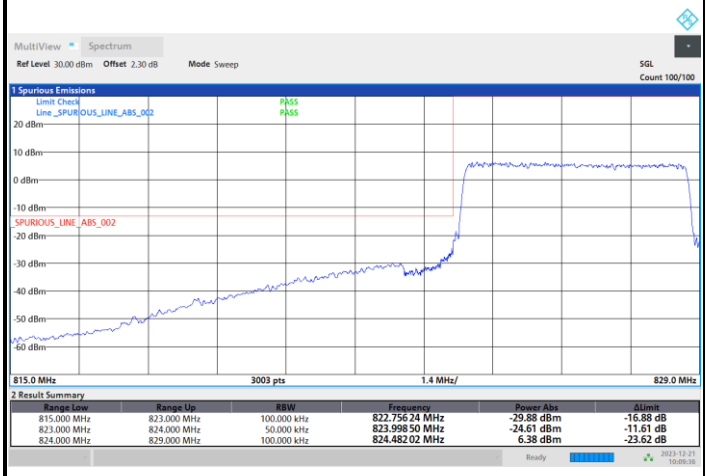
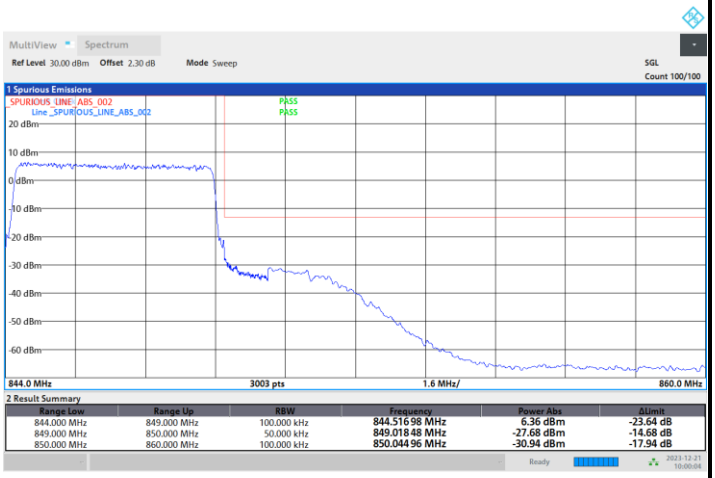


Lowest Band Edge / Full RB



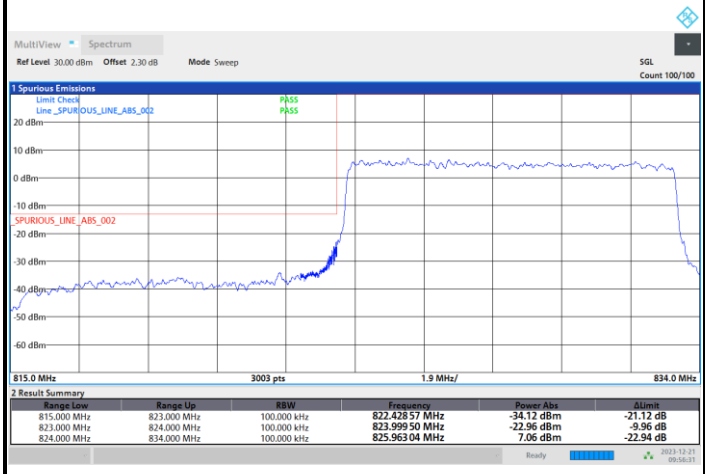
Highest Band Edge / Full RB



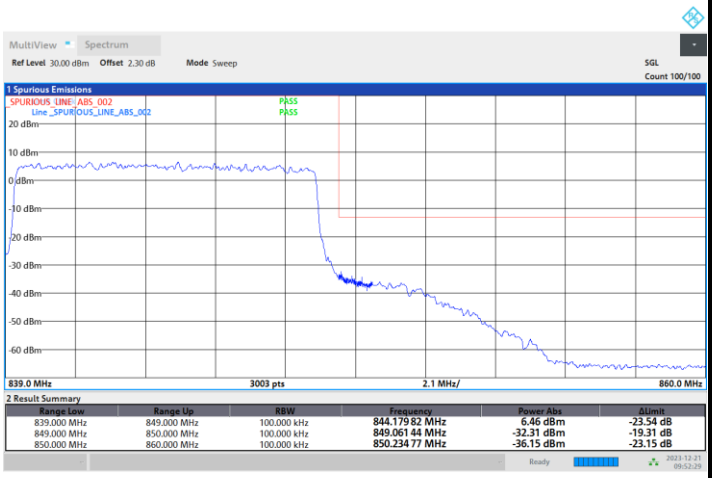
FR1 n26 / 5MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

FR1 n26 / 10MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

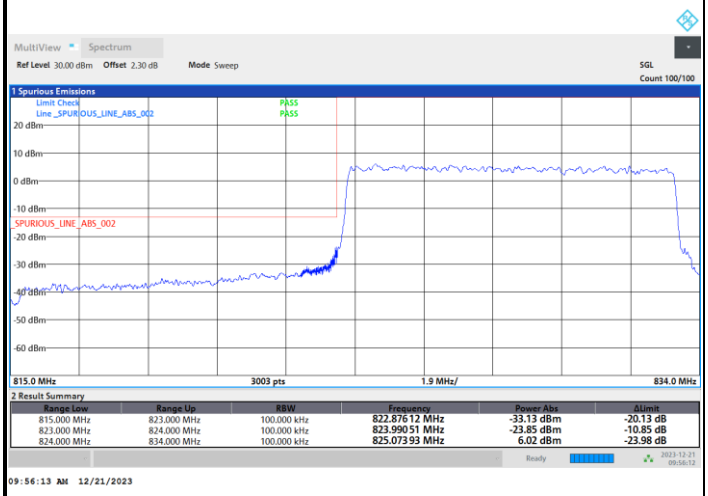


Highest Band Edge

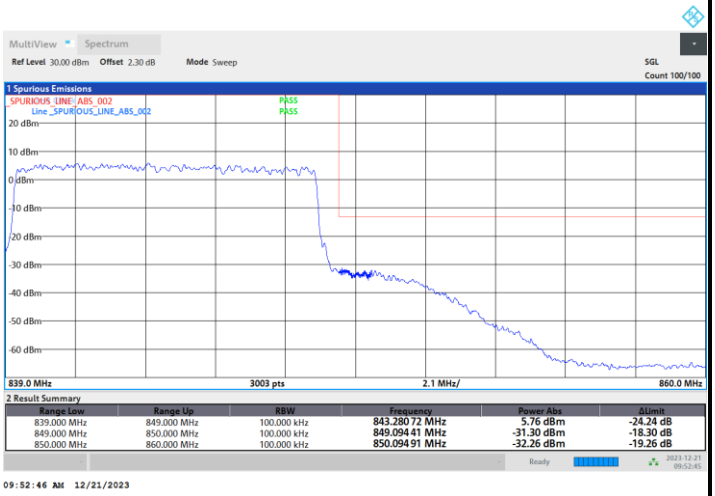


FR1 n26 / 10MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge

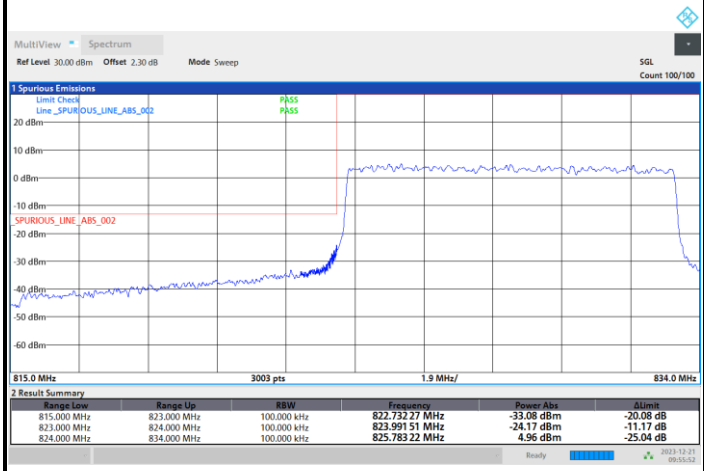


Highest Band Edge

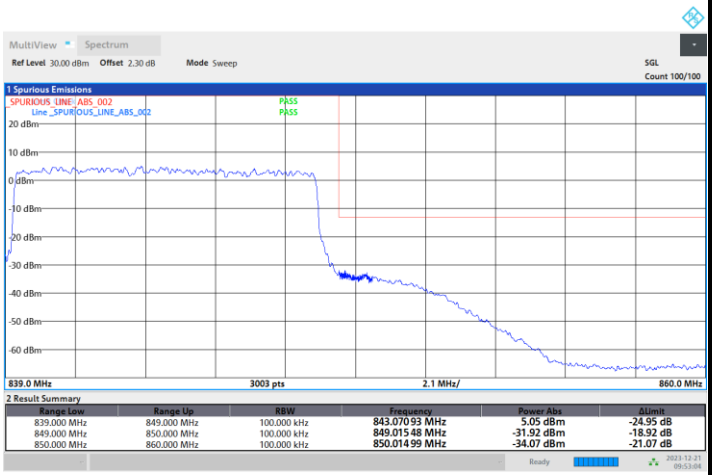


FR1 n26 / 10MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

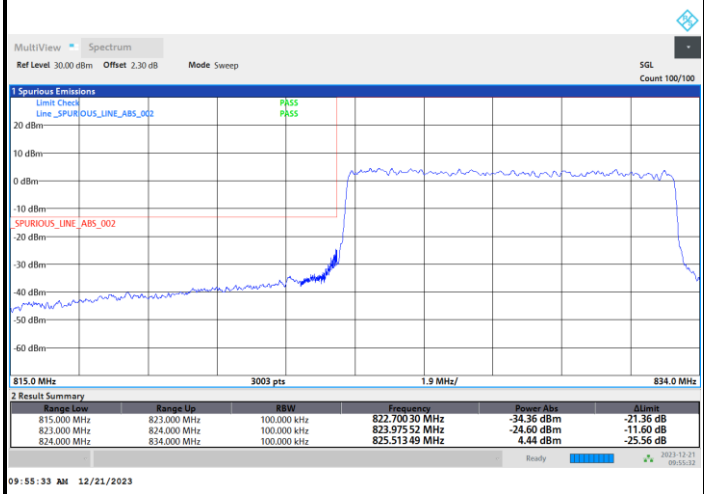


Highest Band Edge

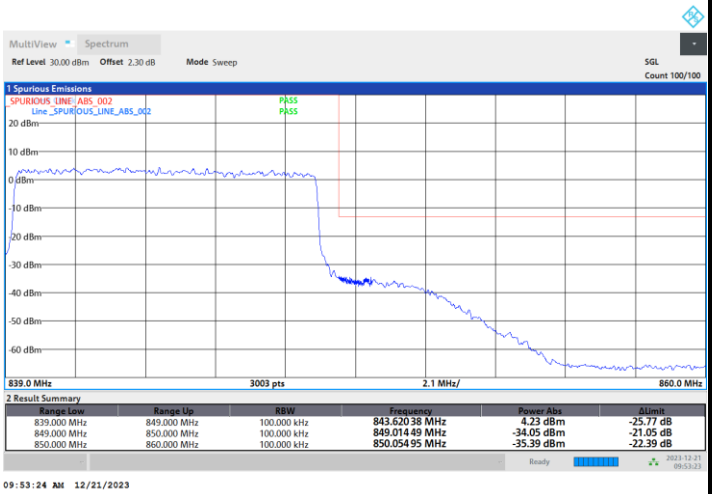


FR1 n26 / 10MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

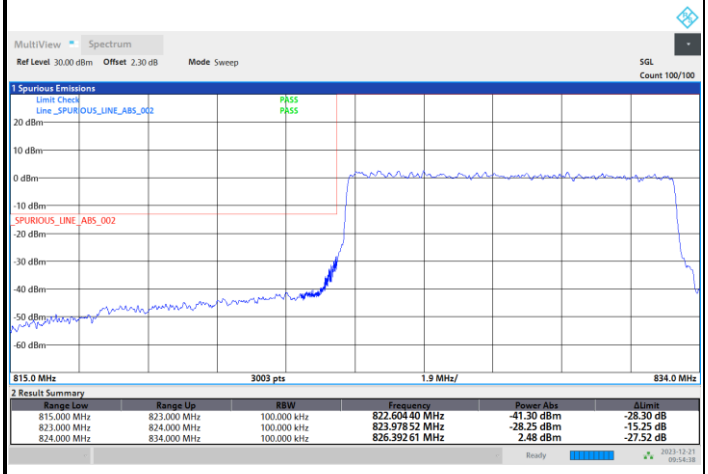


Highest Band Edge

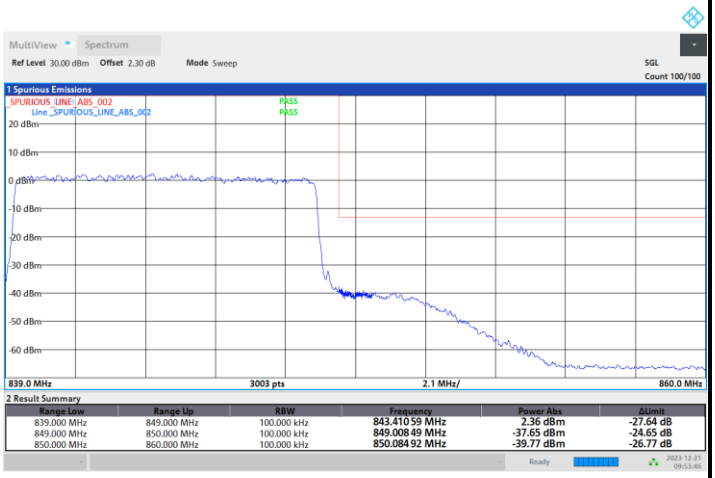


FR1 n26 / 10MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

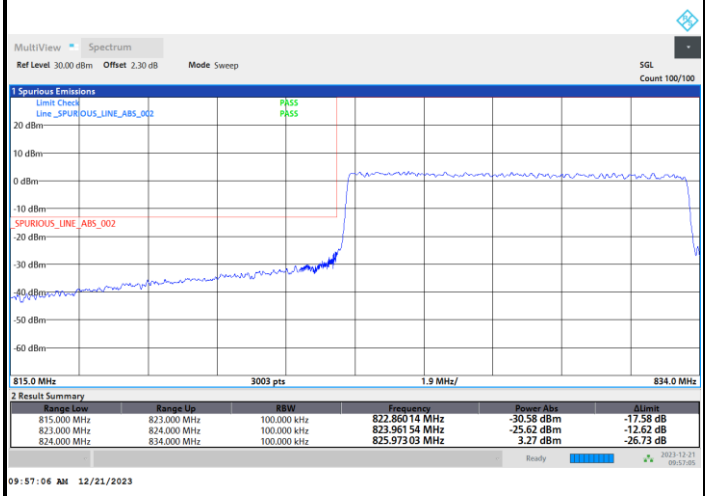


Highest Band Edge

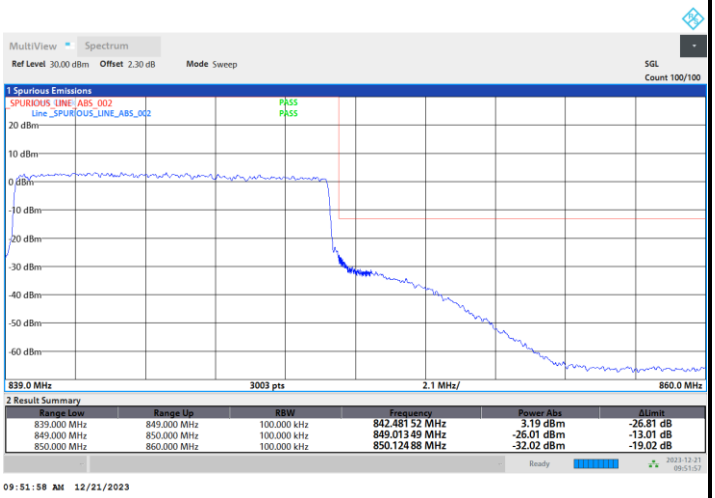


FR1 n26 / 10MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

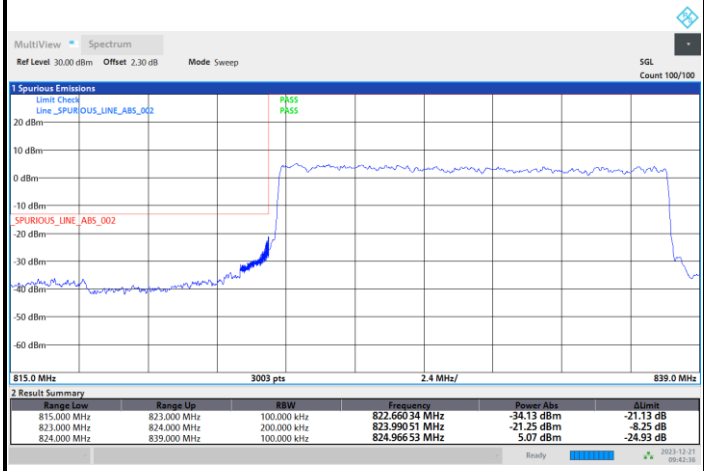


Highest Band Edge

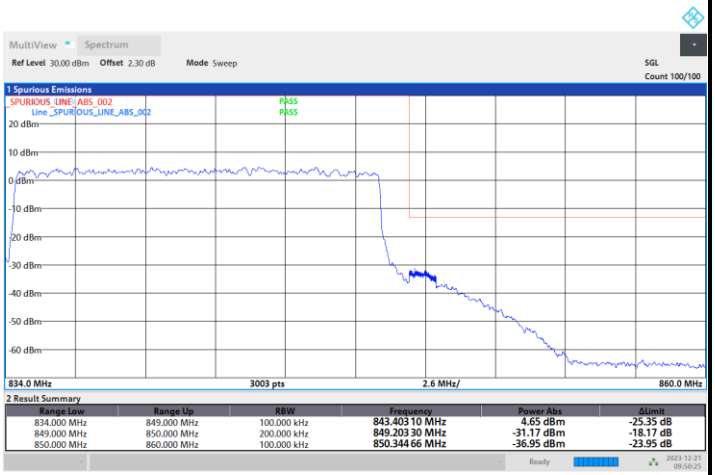


FR1 n26 / 15MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

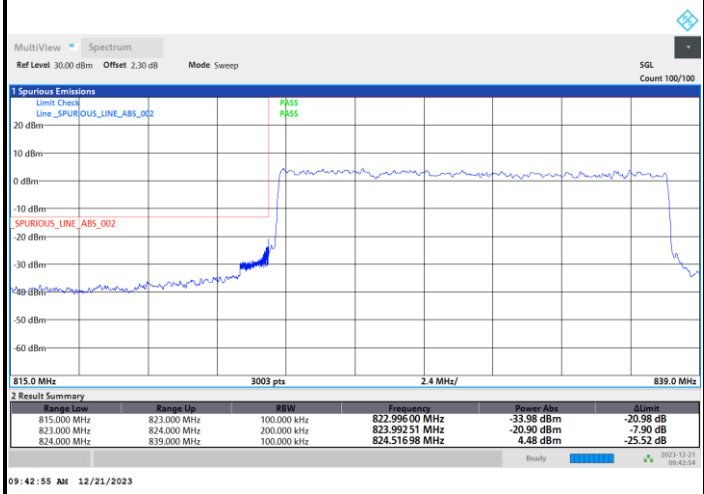


Highest Band Edge

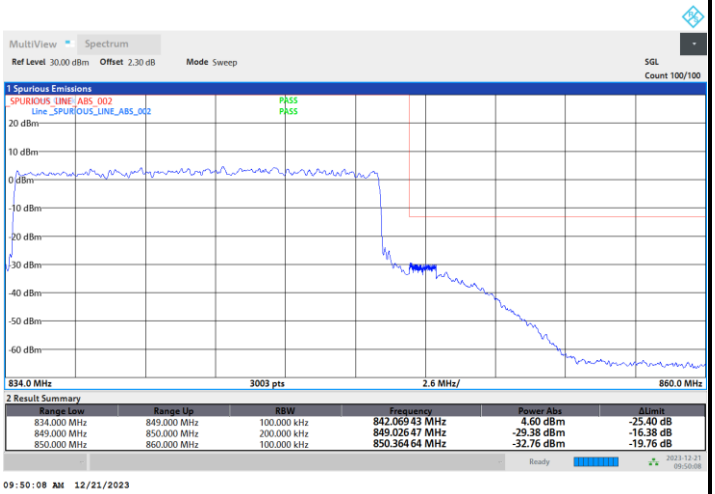


FR1 n26 / 15MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge

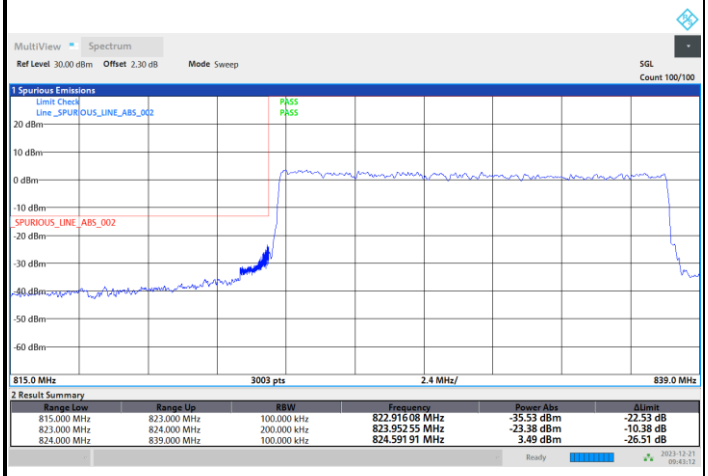


Highest Band Edge

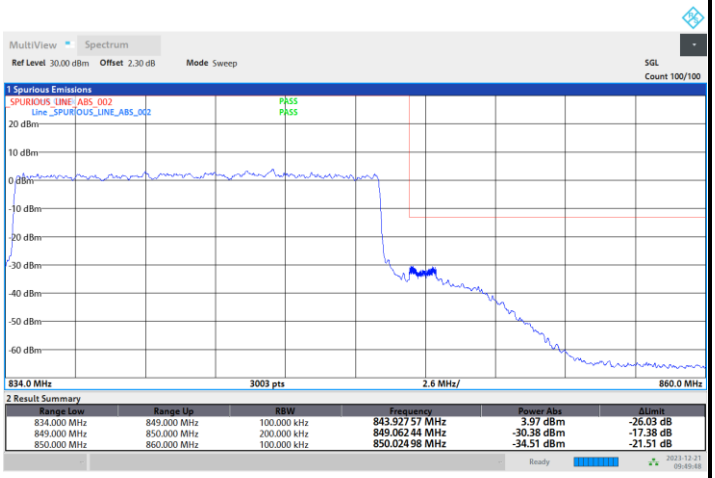


FR1 n26 / 15MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

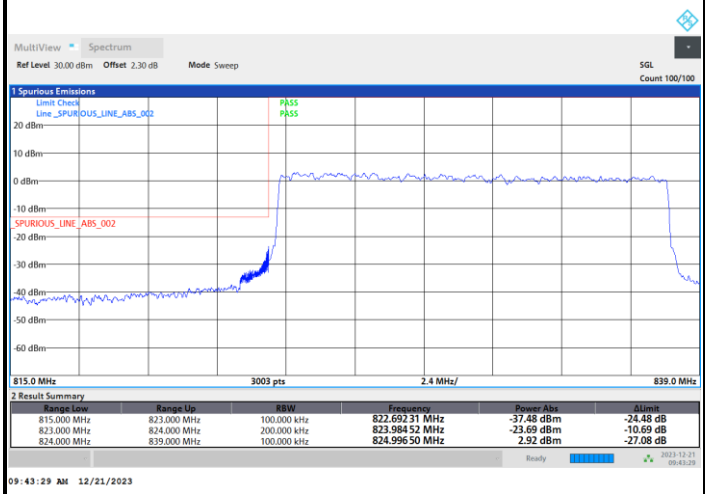


Highest Band Edge

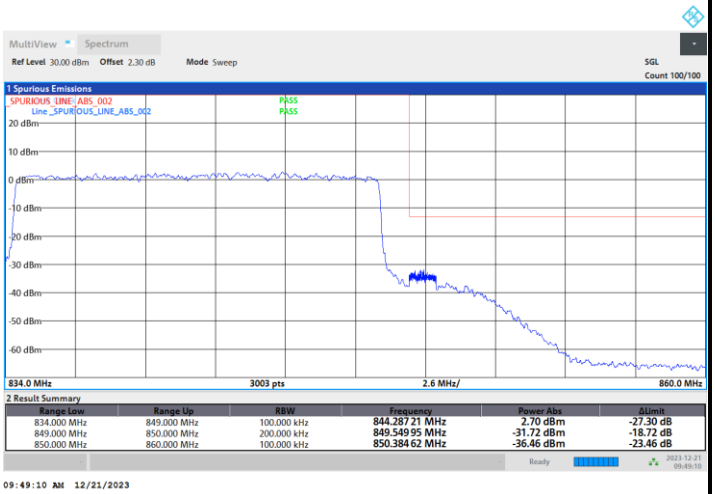


FR1 n26 / 15MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

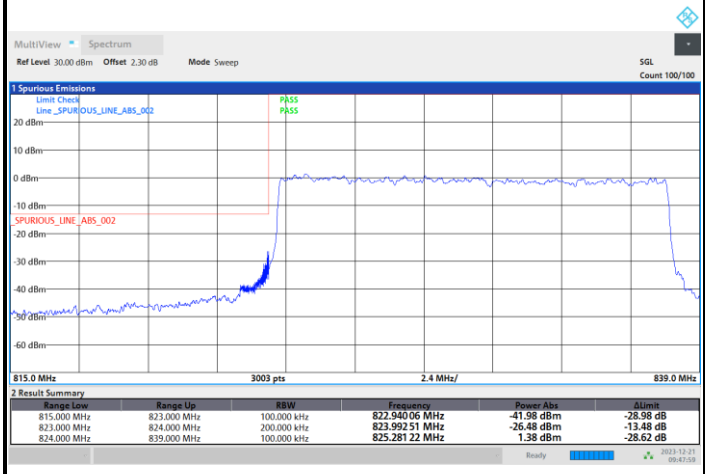


Highest Band Edge

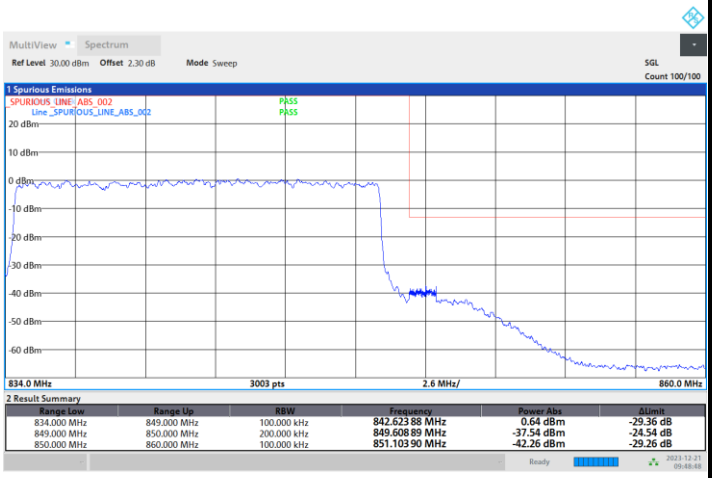


FR1 n26 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

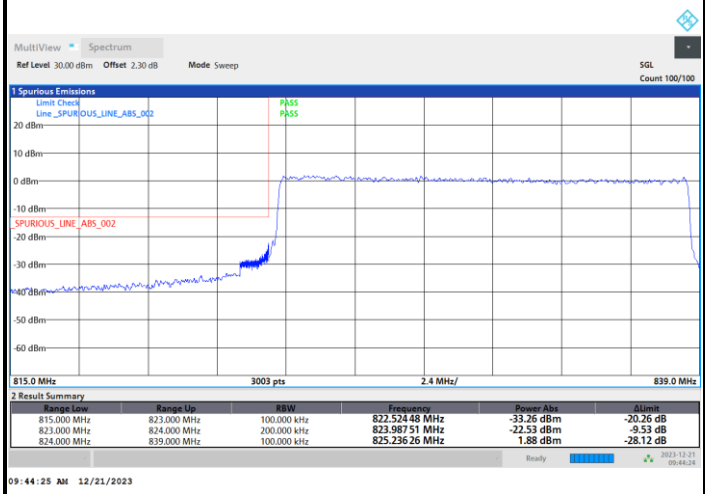


Highest Band Edge

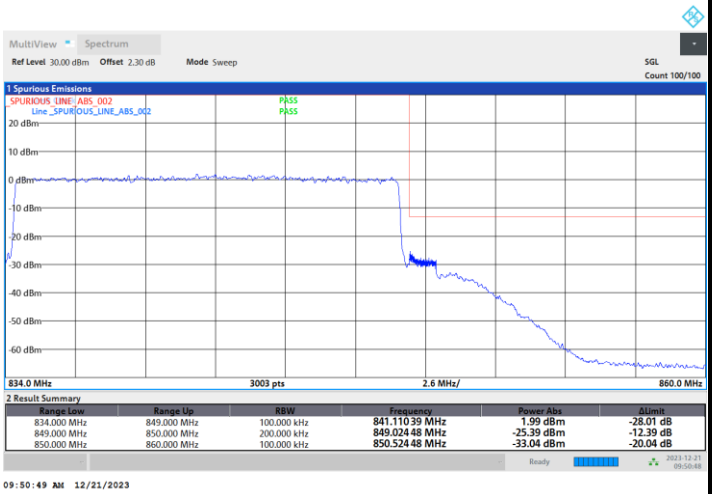


FR1 n26 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

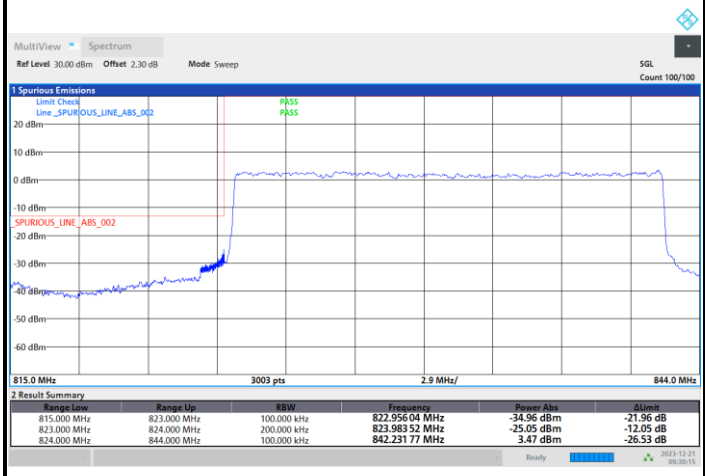


Highest Band Edge

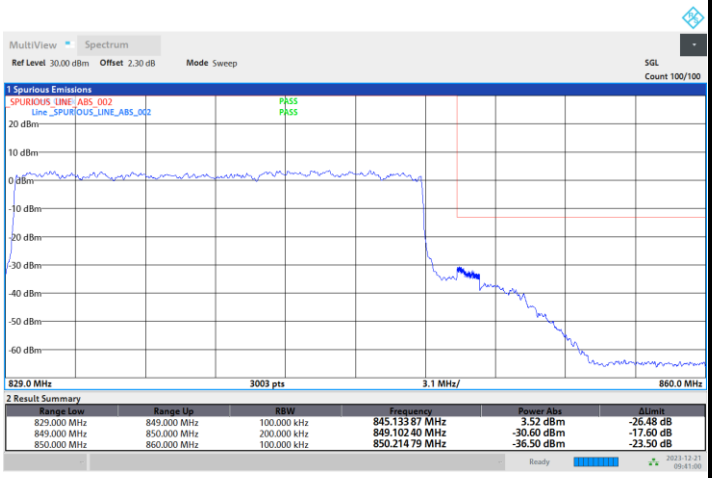


FR1 n26 / 20MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

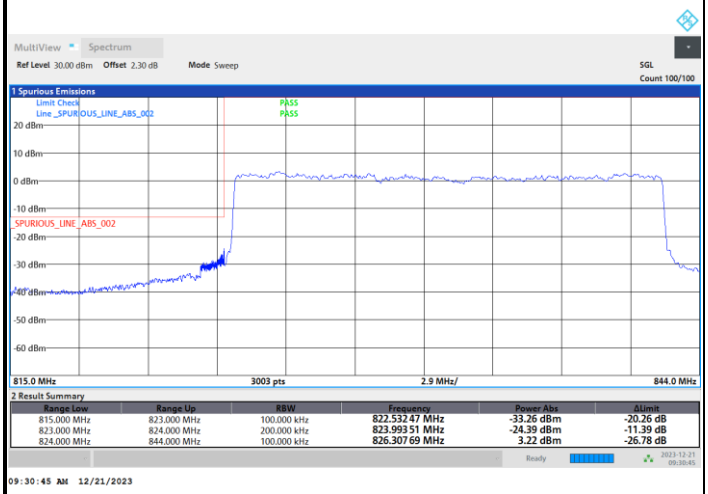


Highest Band Edge

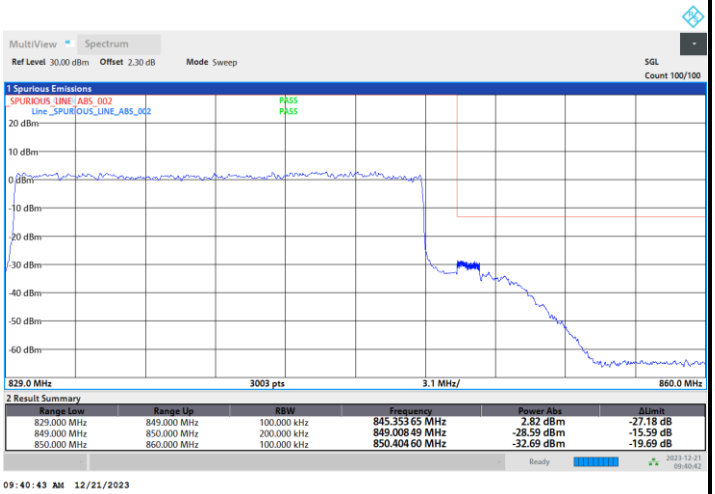


FR1 n26 / 20MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge

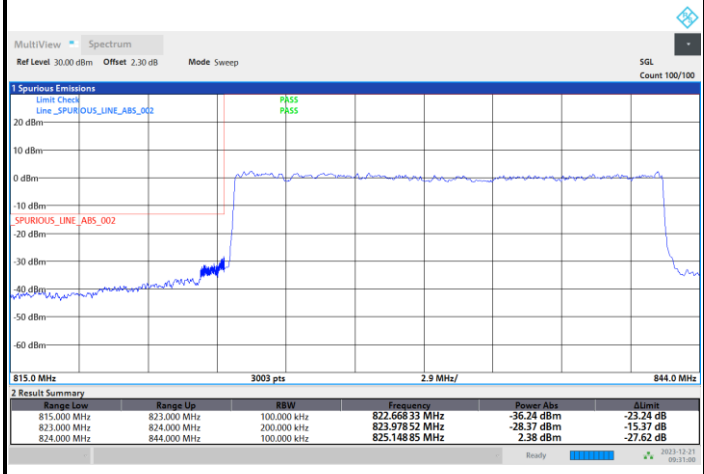


Highest Band Edge

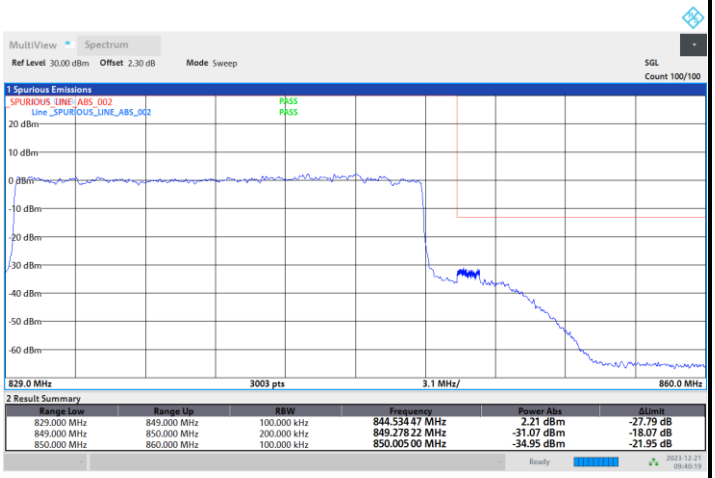


FR1 n26 / 20MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

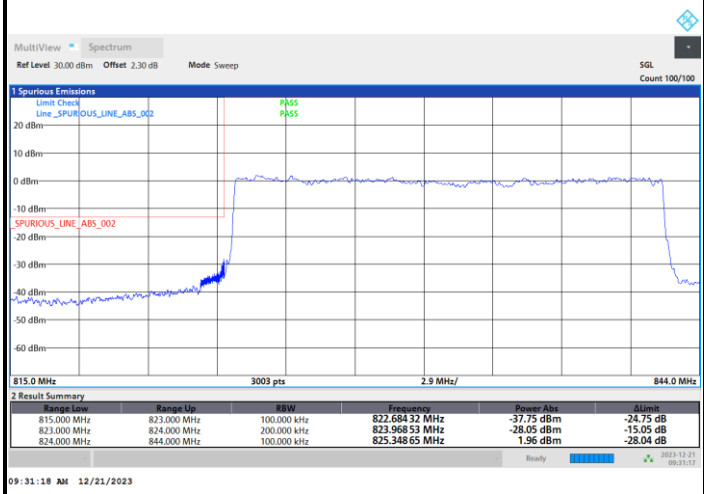


Highest Band Edge

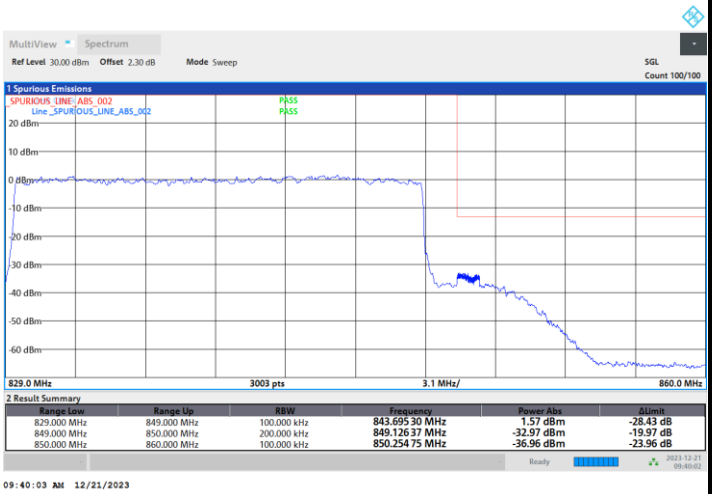


FR1 n26 / 20MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

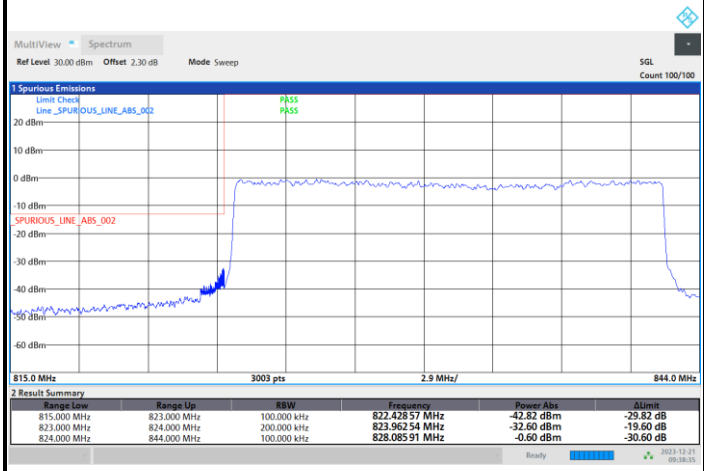


Highest Band Edge

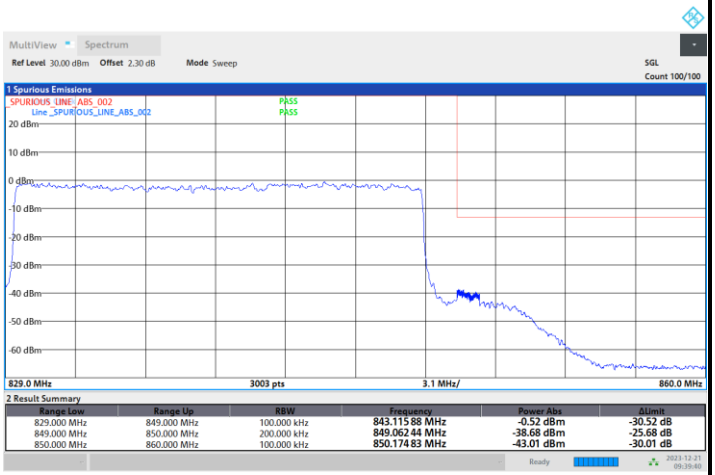


FR1 n26 / 20MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

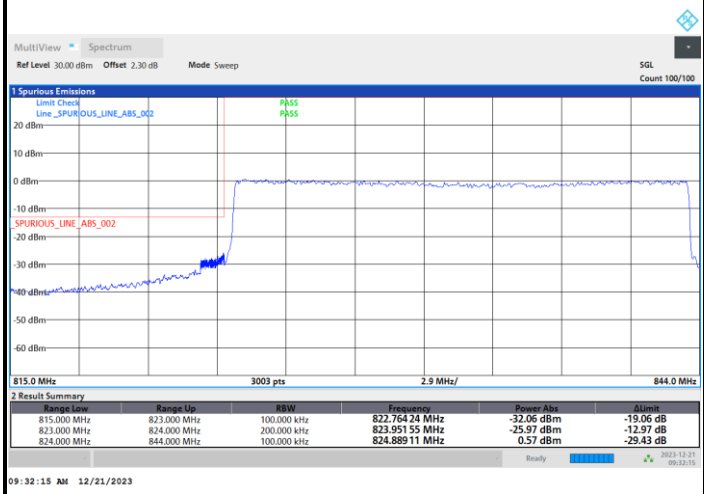


Highest Band Edge

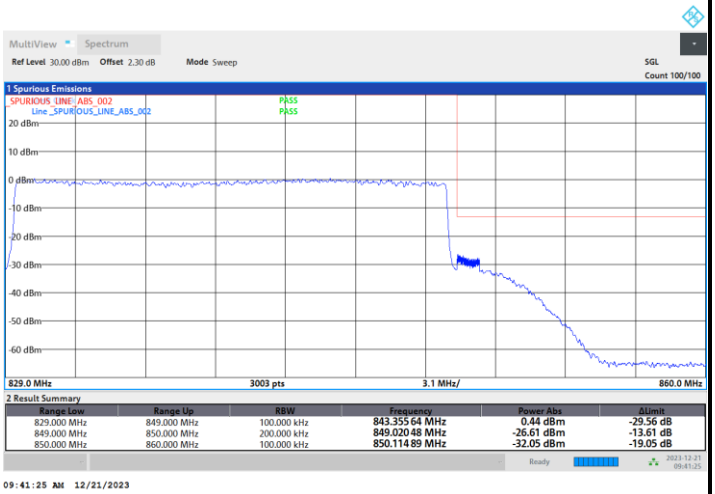


FR1 n26 / 20MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



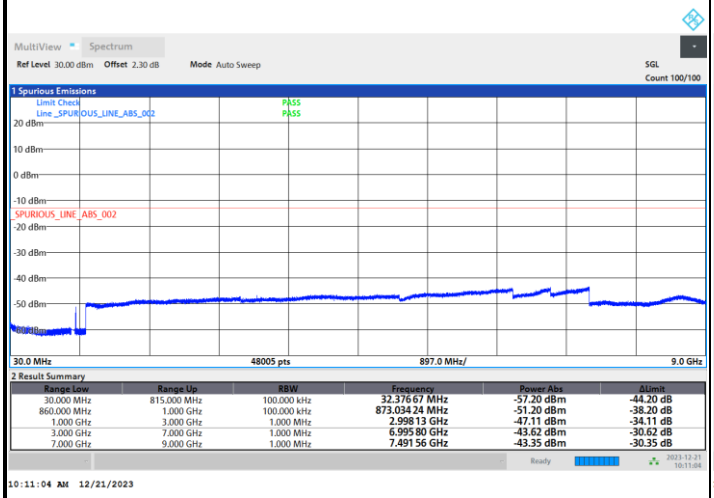
Highest Band Edge



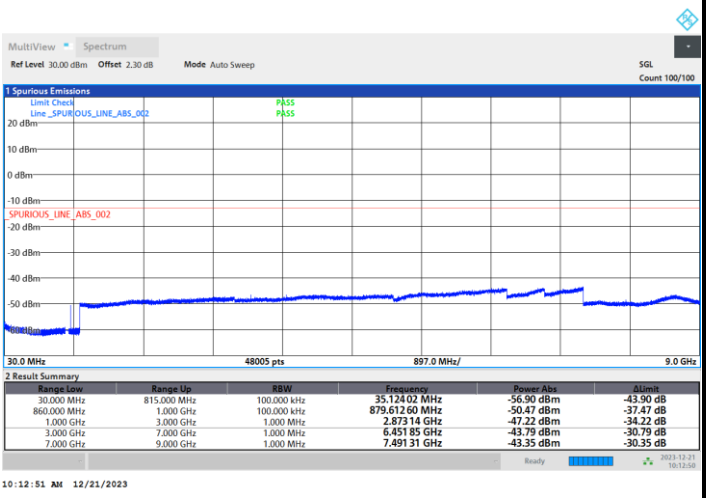
Conducted Spurious Emission

FR1 n26 / 5MHz / DFT-S OFDM / QPSK / 1RB1

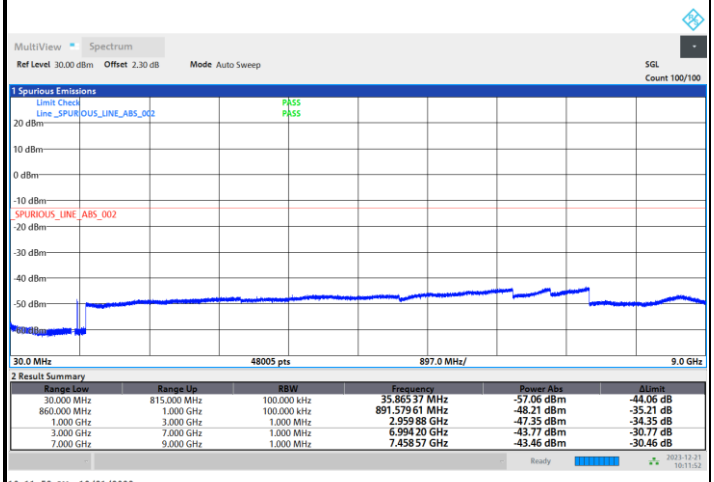
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n26 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	2.5ppm
		Deviation (ppm)	Result
50	Normal Voltage	0.0119	PASS
40	Normal Voltage	0.0066	
30	Normal Voltage	0.0130	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0116	
0	Normal Voltage	0.0095	
-10	Normal Voltage	0.0041	
-20	Normal Voltage	0.0069	
-30	Normal Voltage	0.0064	
20	Maximum Voltage	0.0109	
20	Normal Voltage	0.0011	
20	Battery End Point	0.0137	

Note:

1. Normal Voltage = 3.8 V.；Battery End Point (BEP) = 3.6 V.；Maximum Voltage = 4.2 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

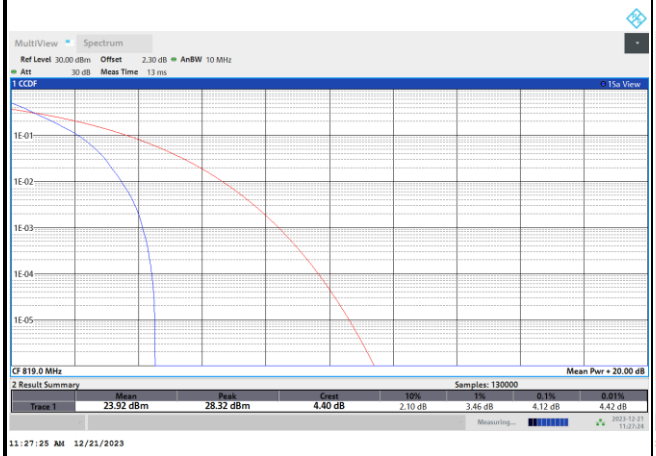
Part90S FR1 n26

Peak-to-Average Ratio

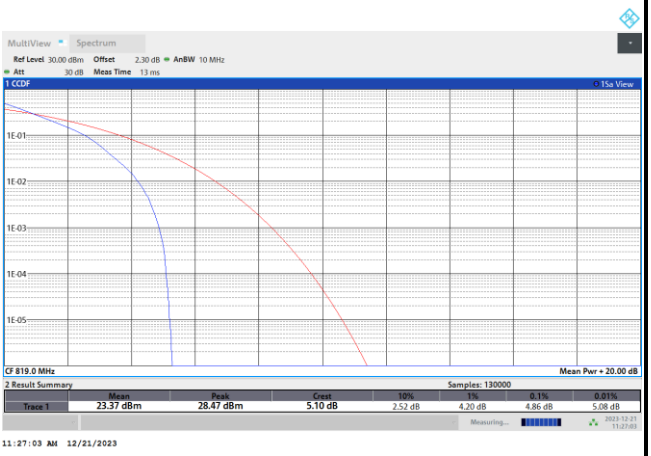
Mode	FR1 n26 / 10MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.12	4.86	5.82	6.08	PASS
Mode	FR1 n26 / 10MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.68				PASS

FR1 n26 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

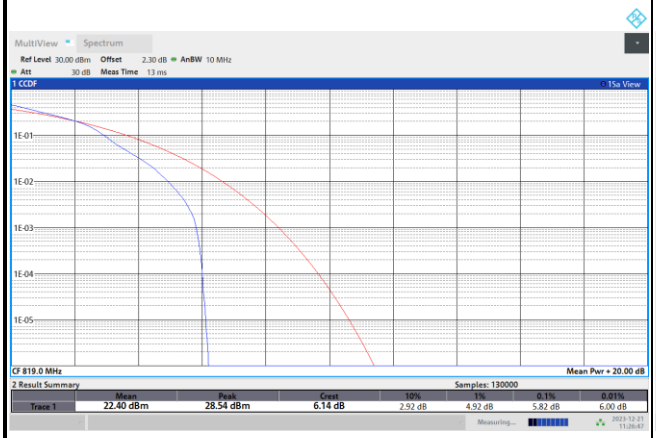
PI/2 BPSK



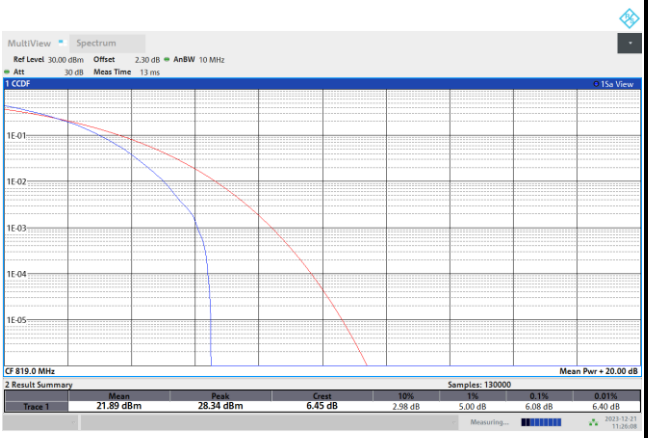
QPSK



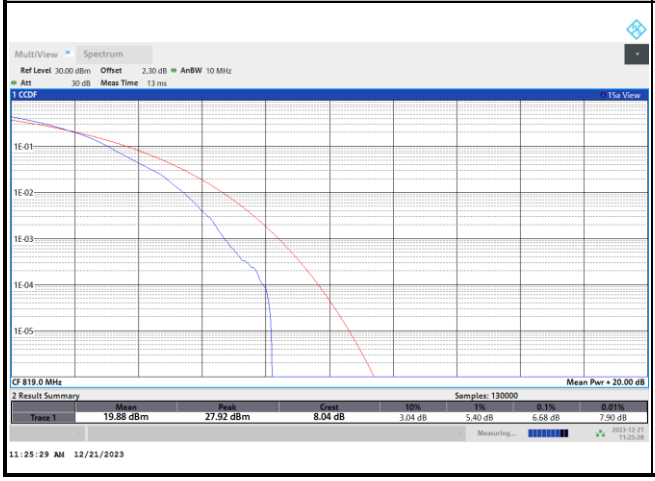
16QAM



64QAM



256QAM



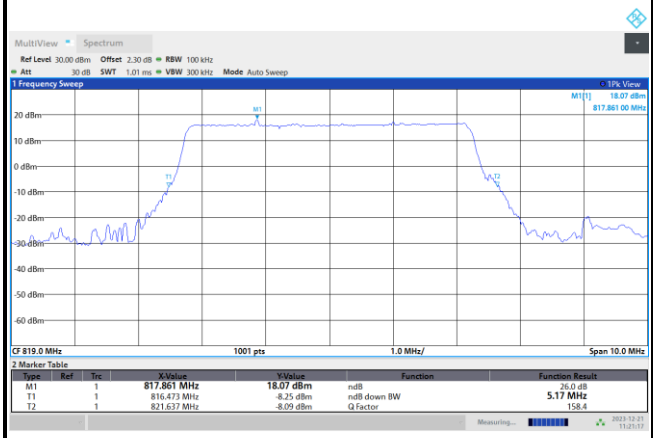
26dB Bandwidth

Mode	FR1 n26 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz					
Mod.	PI/2 BPSK		PI/2 BPSK					
Middle CH	5.17		9.83					

Mode	FR1 n26 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM				
Middle CH	5.25	5.21	10.33	10.25				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	5.14	5.26	10.23	10.33				

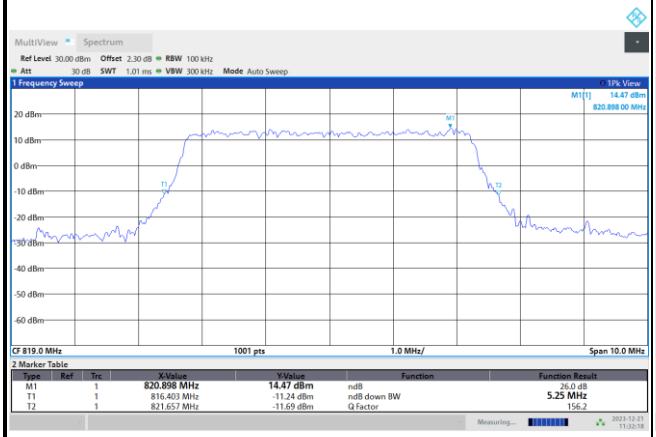
FR1 n26 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

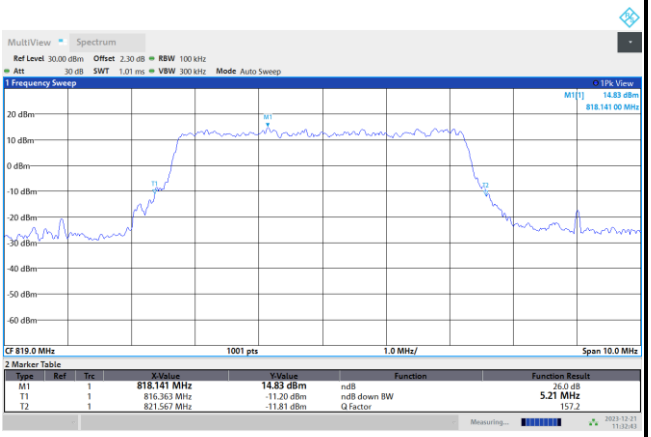


FR1 n26 / 5MHz / CP OFDM / Middle Channel / Full RB

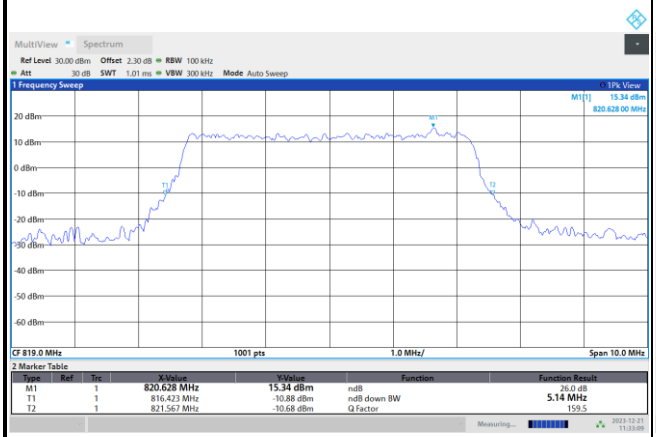
QPSK



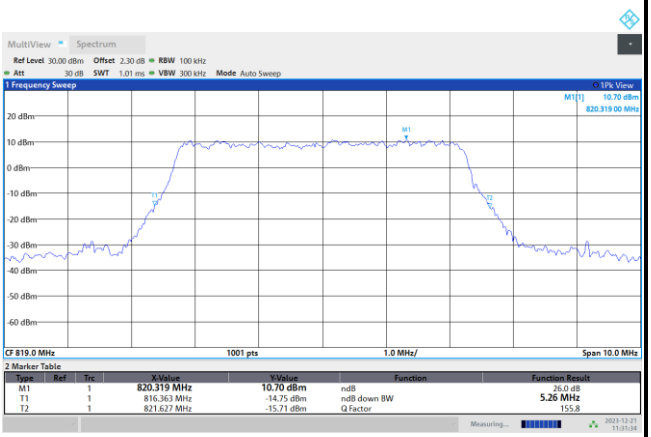
16QAM



64QAM

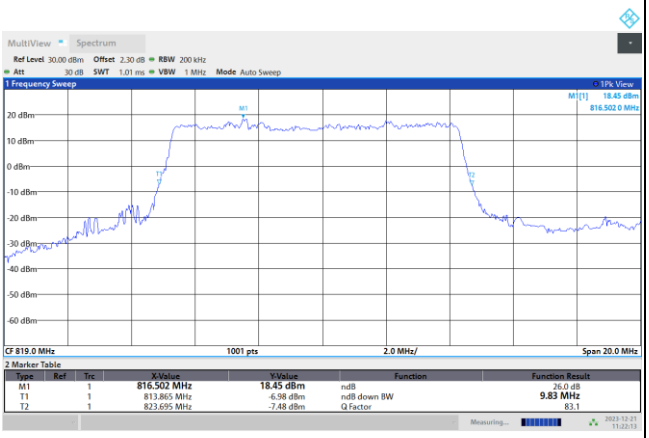


256QAM



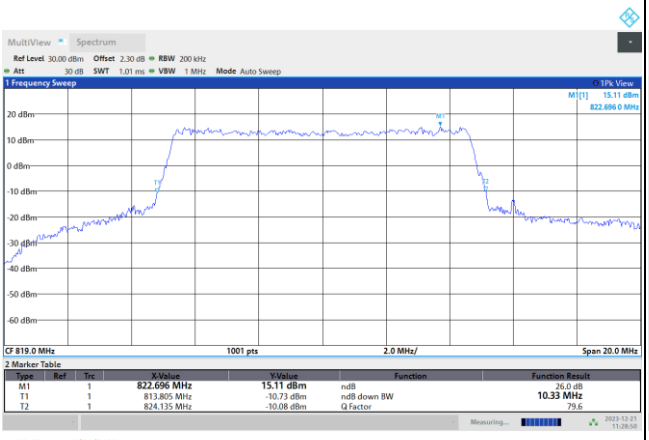
FR1 n26 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



FR1 n26 / 10MHz / CP OFDM / Middle Channel / Full RB

QPSK



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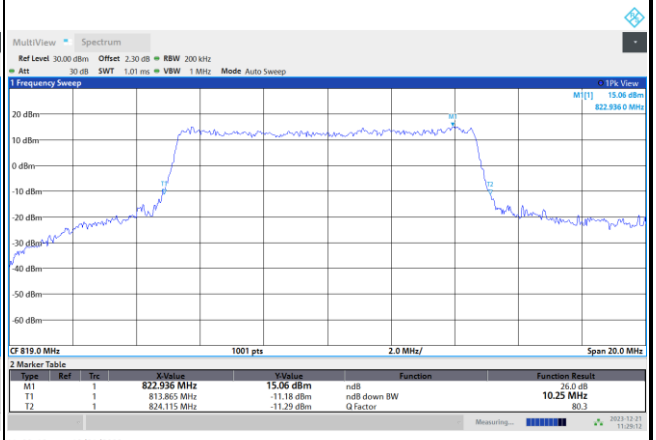
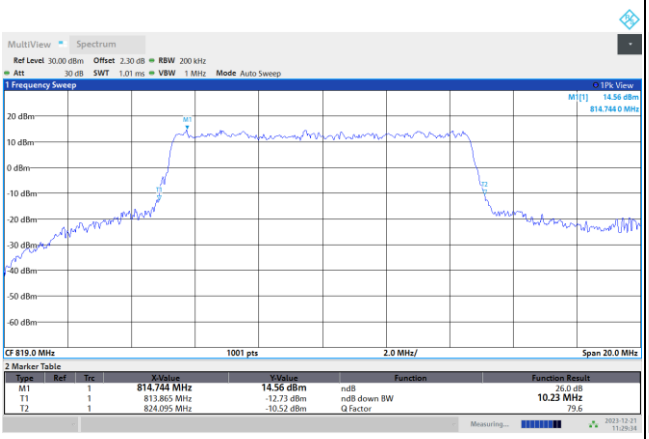
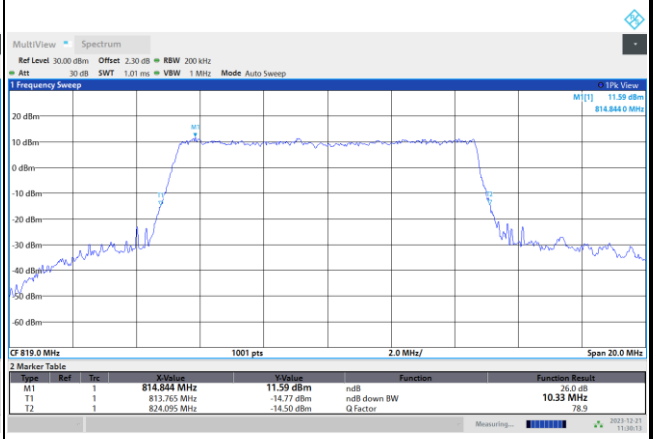


64QAM



256QAM



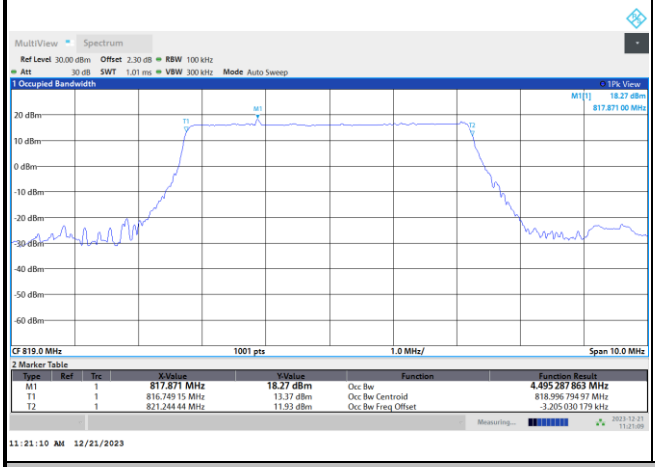
Occupied Bandwidth

Mode	FR1 n26 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz					
Mod.	PI/2 BPSK		PI/2 BPSK					
Middle CH	4.49		8.99					

Mode	FR1 n26 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM				
Middle CH	4.54	4.53	9.36	9.34				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	4.52	4.52	9.33	9.37				

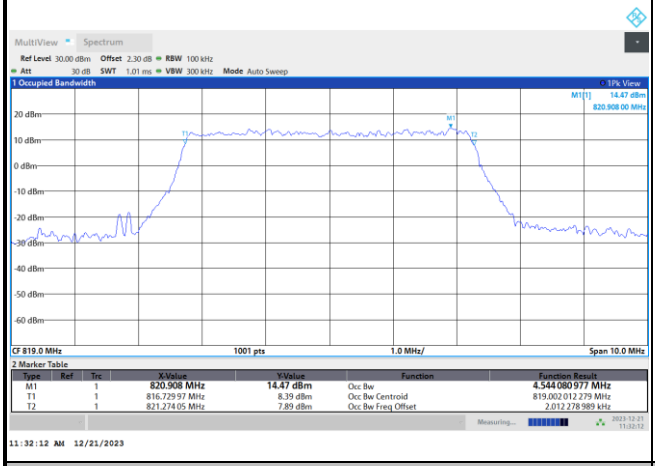
FR1 n26 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

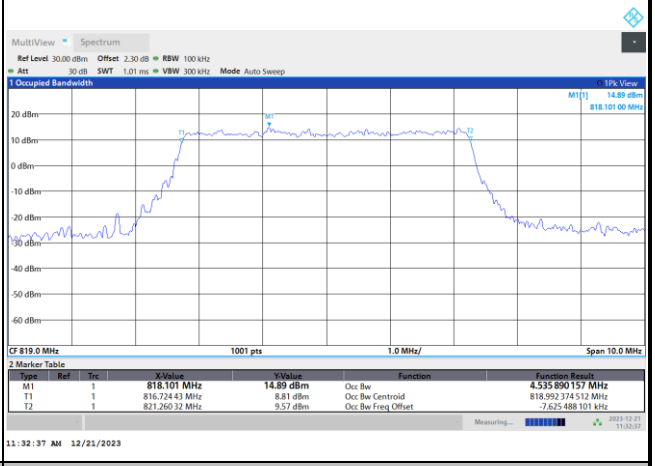


FR1 n26 / 5MHz / CP OFDM / Middle Channel / Full RB

QPSK



16QAM



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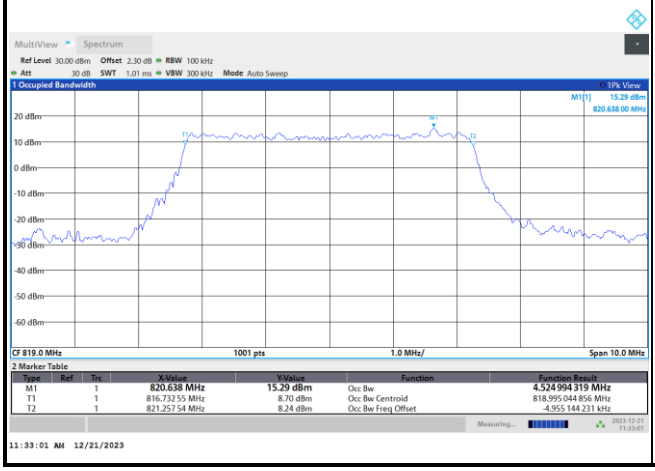
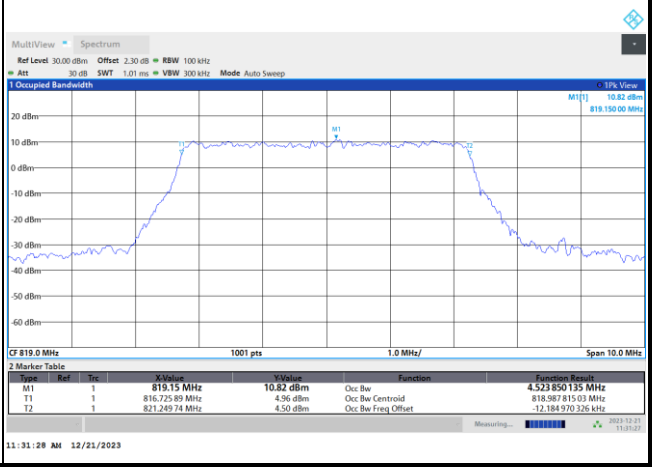
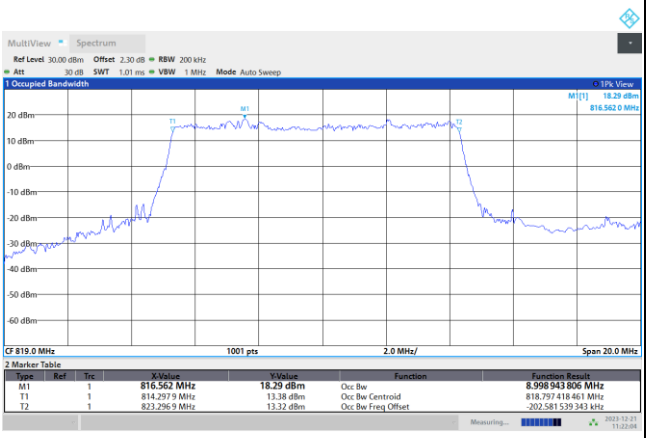


256QAM



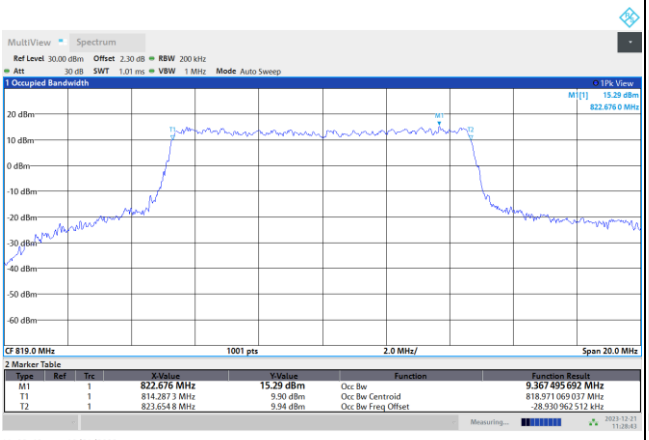
FR1 n26 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

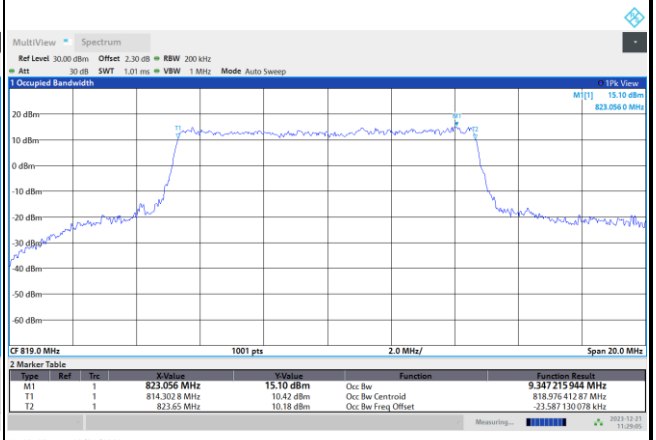


FR1 n26 / 10MHz / CP OFDM / Middle Channel / Full RB

QPSK



16QAM



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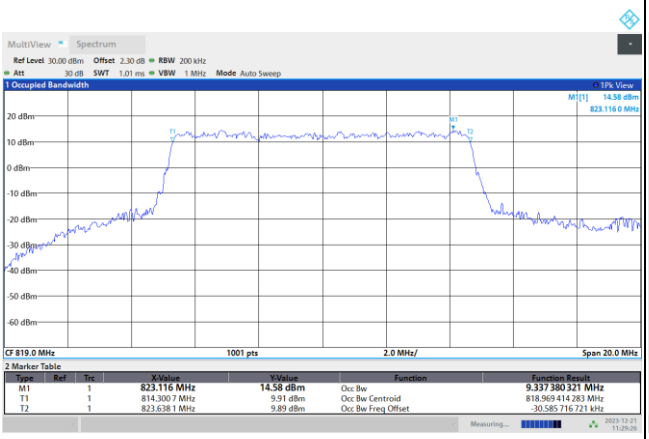
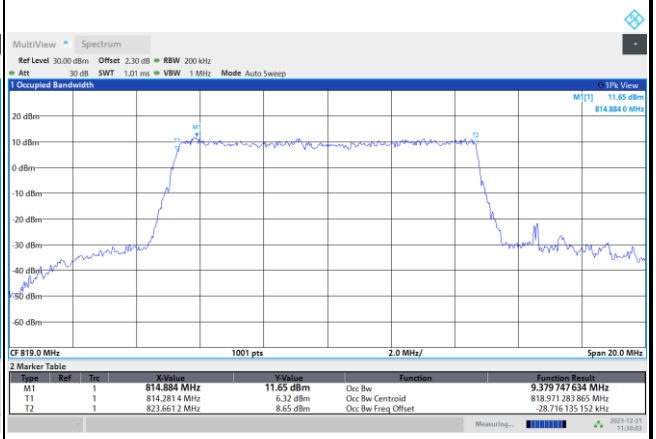


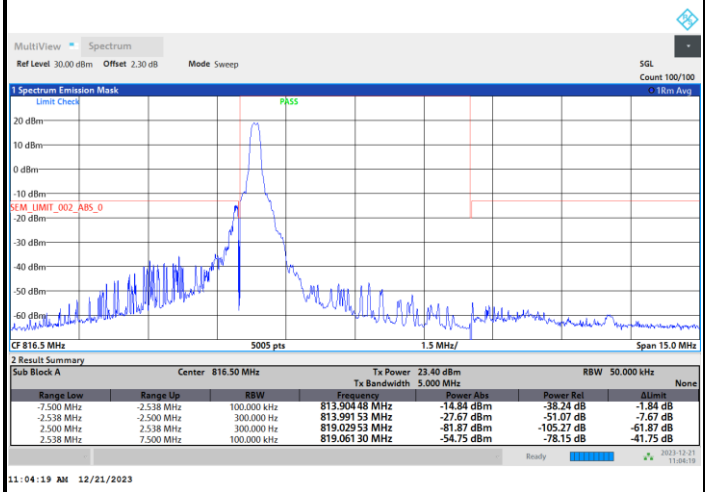
256QAM



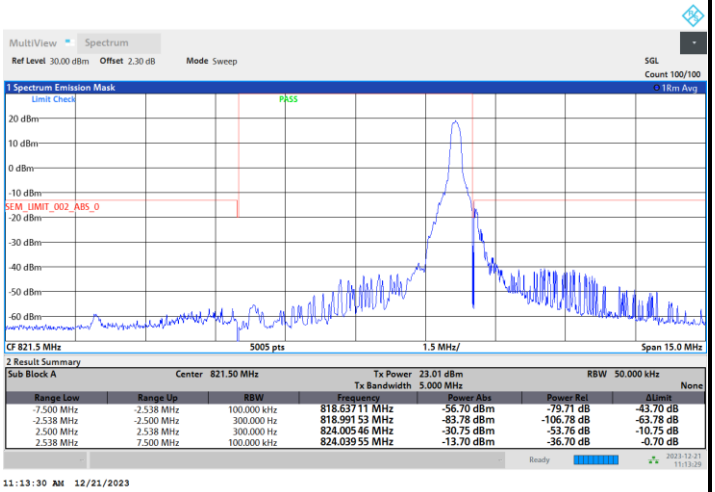
Emission masks – In-band emissions

FR1 n26 / 5MHz / DFT-S OFDM / PI/2 BPSK

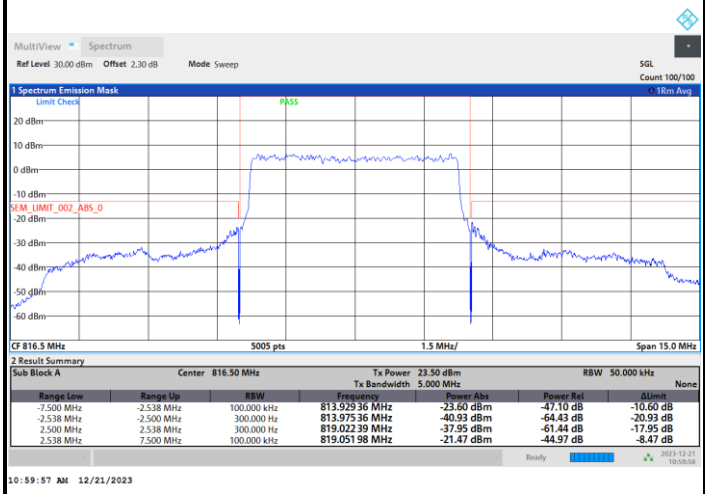
Lowest MASK / 1RB0



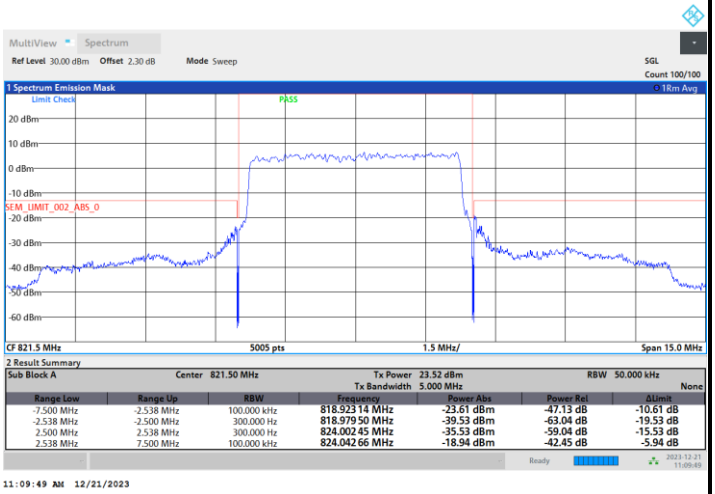
Highest MASK / 1RBmax



Lowest MASK / Full RB

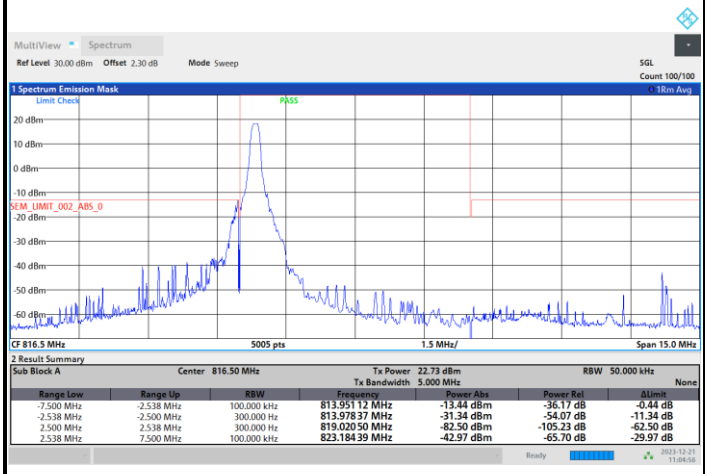


Highest MASK / Full RB



FR1 n26 / 5MHz / DFT-S OFDM / QPSK

Lowest MASK / 1RB0

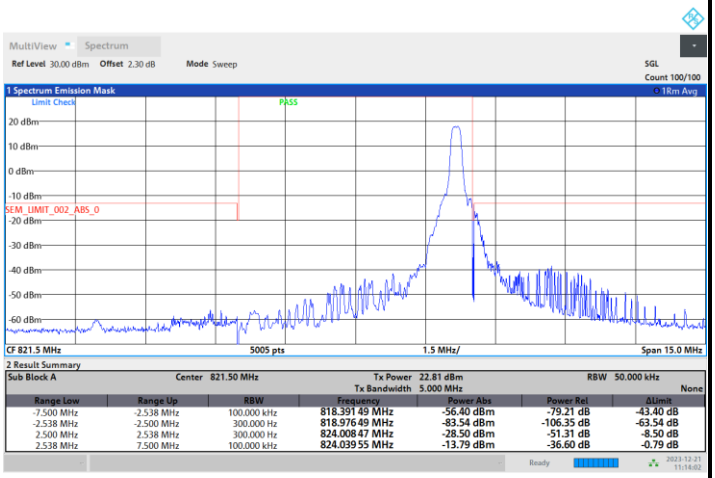


2 Result Summary

Sub Block A	Center 816.50 MHz		Tx Power 22.73 dBm Tx Bandwidth 5.000 MHz		RBW 50.000 kHz	None
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	813.951 12 MHz	-13.44 dBm	-36.17 dB	-0.44 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	813.978 37 MHz	-31.34 dBm	-54.07 dB	-11.34 dB
2.500 MHz	2.538 MHz	300.000 Hz	819.020 50 MHz	-82.50 dBm	-105.23 dB	-62.50 dB
2.538 MHz	7.500 MHz	100.000 kHz	823.184 39 MHz	-42.97 dBm	-65.70 dB	-29.97 dB

11:04:57 AM 12/21/2023

Highest MASK / 1RBmax

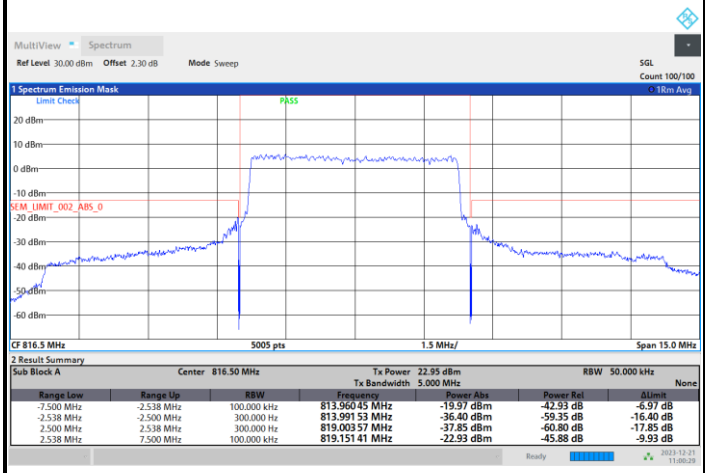


2 Result Summary

Sub Block A	Center 821.50 MHz		Tx Power 22.81 dBm Tx Bandwidth 5.000 MHz		RBW 50.000 kHz	None
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	818.391 49 MHz	-56.40 dBm	-79.21 dB	-43.40 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	818.976 49 MHz	-83.54 dBm	-106.35 dB	-63.54 dB
2.500 MHz	2.538 MHz	300.000 Hz	824.008 47 MHz	-28.50 dBm	-51.31 dB	-8.50 dB
2.538 MHz	7.500 MHz	100.000 kHz	824.039 55 MHz	-13.79 dBm	-36.60 dB	-0.79 dB

11:14:02 AM 12/21/2023

Lowest MASK / Full RB



2 Result Summary

Sub Block A	Center 816.50 MHz		Tx Power 22.95 dBm Tx Bandwidth 5.000 MHz		RBW 50.000 kHz	None
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	813.960 45 MHz	-19.97 dBm	-42.93 dB	-6.97 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	813.991 53 MHz	-36.40 dBm	-59.35 dB	-16.40 dB
2.500 MHz	2.538 MHz	300.000 Hz	819.003 57 MHz	-37.85 dBm	-60.80 dB	-17.85 dB
2.538 MHz	7.500 MHz	100.000 kHz	819.151 41 MHz	-22.93 dBm	-45.88 dB	-9.93 dB

11:00:29 AM 12/21/2023

Highest MASK / Full RB

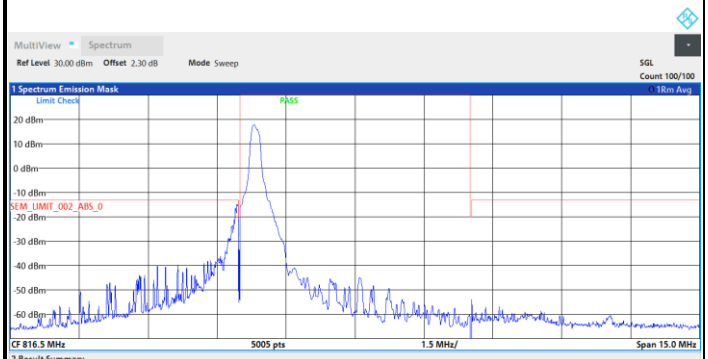
2 Result Summary

Sub Block A	Center 821.50 MHz		Tx Power 22.93 dBm Tx Bandwidth 5.000 MHz		RBW 50.000 kHz	None
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	818.898 27 MHz	-23.85 dBm	-46.78 dB	-10.85 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	818.994 54 MHz	-39.38 dBm	-62.31 dB	-19.38 dB
2.500 MHz	2.538 MHz	300.000 Hz	824.005 46 MHz	-37.04 dBm	-59.98 dB	-17.04 dB
2.538 MHz	7.500 MHz	100.000 kHz	824.055 09 MHz	-20.37 dBm	-43.31 dB	-7.37 dB

11:10:23 AM 12/21/2023

FR1 n26 / 5MHz / DFT-S OFDM / 16QAM

Lowest MASK / 1RB0

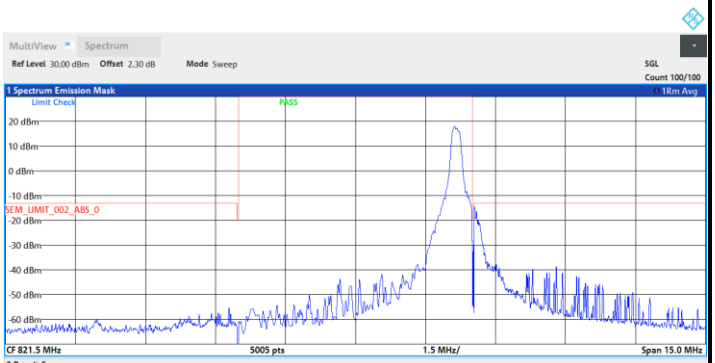


2 Result Summary

Sub Block A			Center 816.50 MHz	Tx Power 21.63 dBm Tx Bandwidth 5.000 MHz		RBW 50.000 kHz None
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	813.929 36 MHz	-14.82 dBm	-36.45 dB	-1.82 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	813.973 48 MHz	-33.33 dBm	-54.96 dB	-13.33 dB
2.500 MHz	2.538 MHz	300.000 Hz	819.023 51 MHz	-83.25 dBm	-104.88 dB	-63.25 dB
2.538 MHz	7.500 MHz	100.000 kHz	819.039 55 MHz	-53.93 dBm	-75.56 dB	-40.93 dB

11:05:31 AM 12/21/2023

Highest MASK / 1RBmax

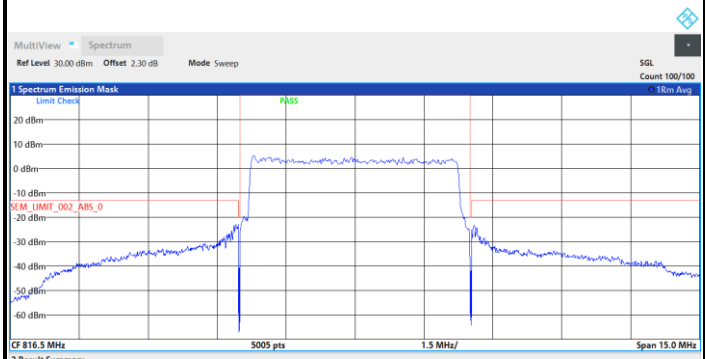


2 Result Summary

Sub Block A			Center 821.50 MHz	Tx Power 21.91 dBm Tx Bandwidth 5.000 MHz		RBW 50.000 kHz None
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	818.786 34 MHz	-55.23 dBm	-77.14 dB	-42.23 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	818.976 49 MHz	-84.29 dBm	-106.20 dB	-64.29 dB
2.500 MHz	2.538 MHz	300.000 Hz	824.008 47 MHz	-28.29 dBm	-50.20 dB	-8.29 dB
2.538 MHz	7.500 MHz	100.000 kHz	824.039 55 MHz	-14.46 dBm	-36.38 dB	-1.46 dB

11:14:33 AM 12/21/2023

Lowest MASK / Full RB

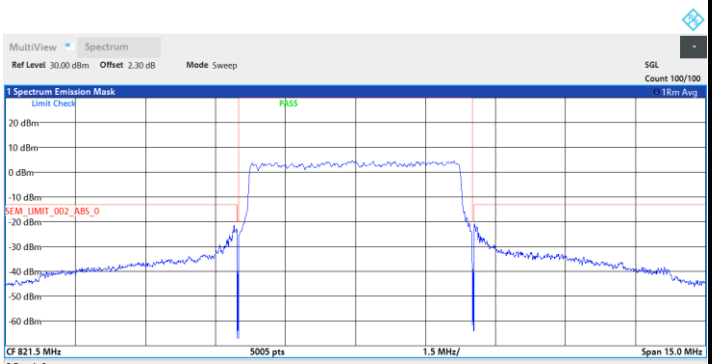


2 Result Summary

Sub Block A			Center 816.50 MHz	Tx Power 21.95 dBm Tx Bandwidth 5.000 MHz		RBW 50.000 kHz None
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	813.960 45 MHz	-22.79 dBm	-44.74 dB	-9.79 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	813.994 54 MHz	-38.44 dBm	-60.39 dB	-18.44 dB
2.500 MHz	2.538 MHz	300.000 Hz	819.005 46 MHz	-41.17 dBm	-63.12 dB	-21.17 dB
2.538 MHz	7.500 MHz	100.000 kHz	819.101 70 MHz	-23.29 dBm	-45.24 dB	-10.29 dB

11:01:04 AM 12/21/2023

Highest MASK / Full RB



2 Result Summary

Sub Block A			Center 821.50 MHz	Tx Power 22.03 dBm Tx Bandwidth 5.000 MHz		RBW 50.000 kHz None
Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-7.500 MHz	-2.538 MHz	100.000 kHz	818.895 16 MHz	-21.23 dBm	-43.26 dB	-8.23 dB
-2.538 MHz	-2.500 MHz	300.000 Hz	818.998 31 MHz	-40.02 dBm	-62.05 dB	-20.02 dB
2.500 MHz	2.538 MHz	300.000 Hz	824.002 45 MHz	-38.47 dBm	-60.50 dB	-18.47 dB
2.538 MHz	7.500 MHz	100.000 kHz	824.048 87 MHz	-20.75 dBm	-42.78 dB	-7.75 dB

11:10:56 AM 12/21/2023