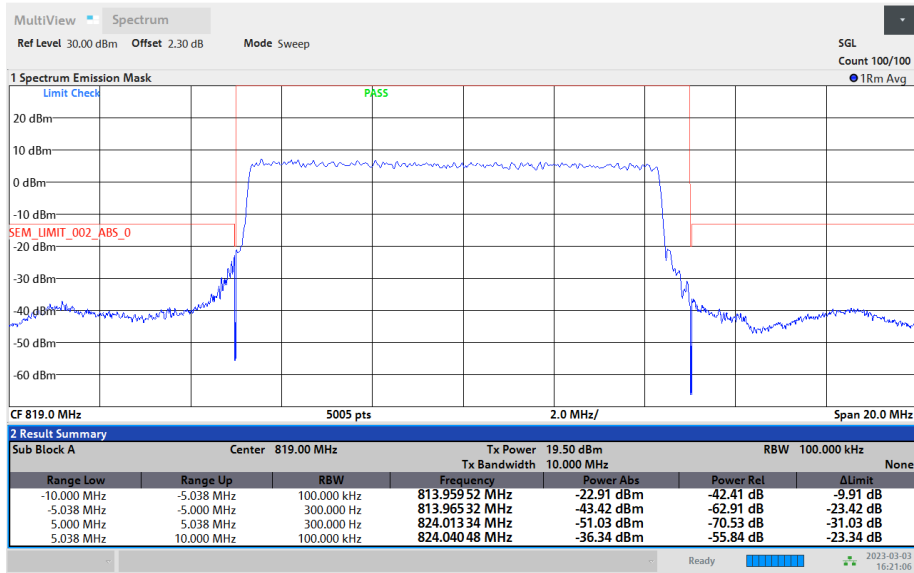




FR1 n26 / 10MHz / DFT-s-OFDM / PI/2 BPSK

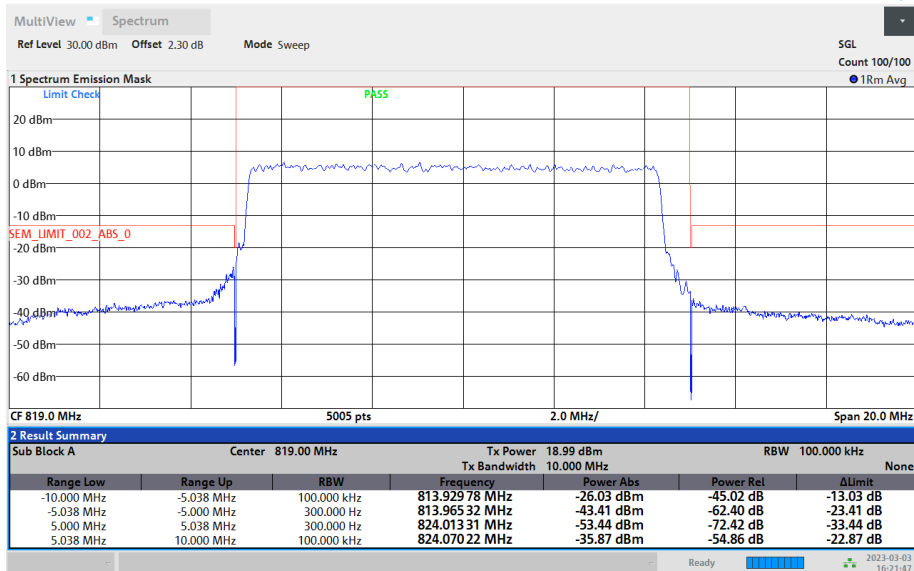
Middle MASK / Full RB



04:21:06 PM 03/03/2023

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

Lowest MASK / Full RB

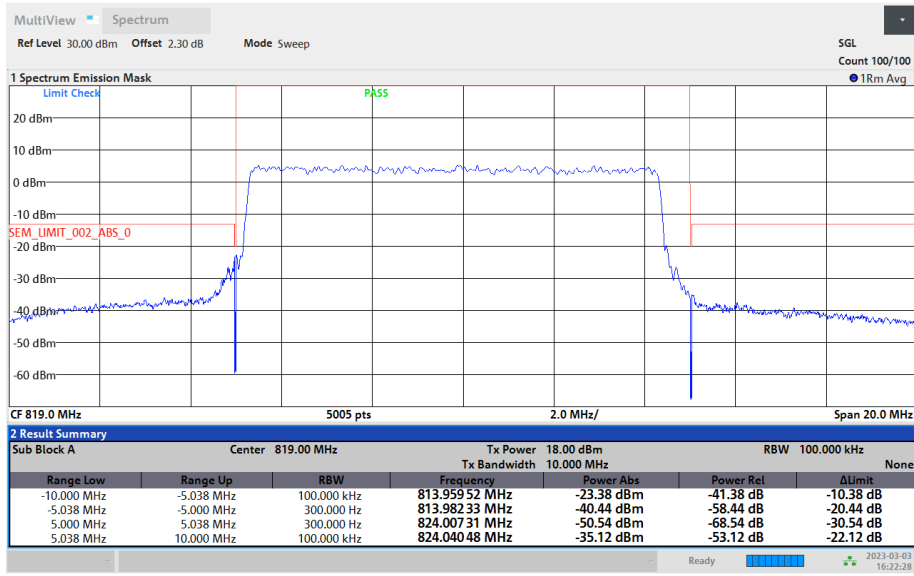


04:21:48 PM 03/03/2023



FR1 n26 / 10MHz / DFT-sOFDM / 16QAM

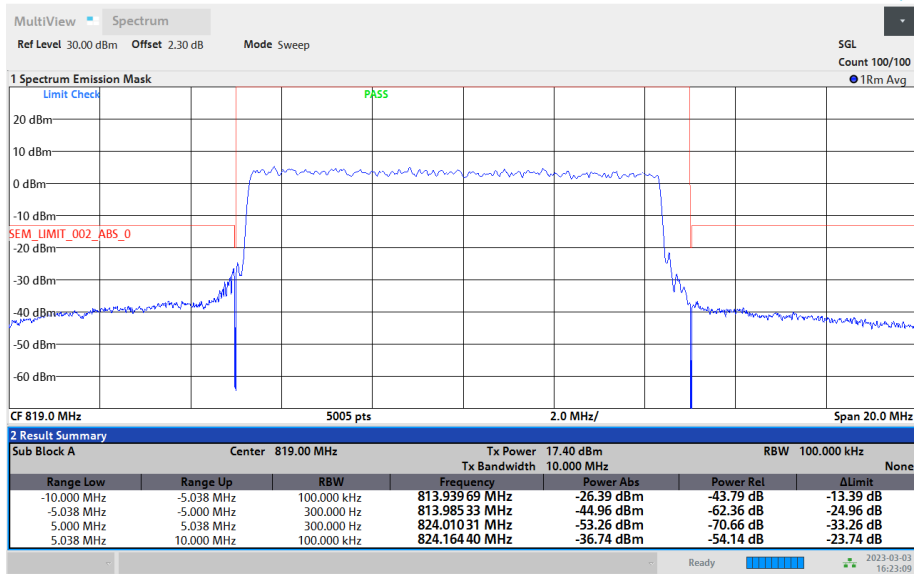
Middle MASK / Full RB



04:22:29 PM 03/03/2023

FR1 n26 / 10MHz / DFT-sOFDM / 64QAM

Middle MASK / Full RB

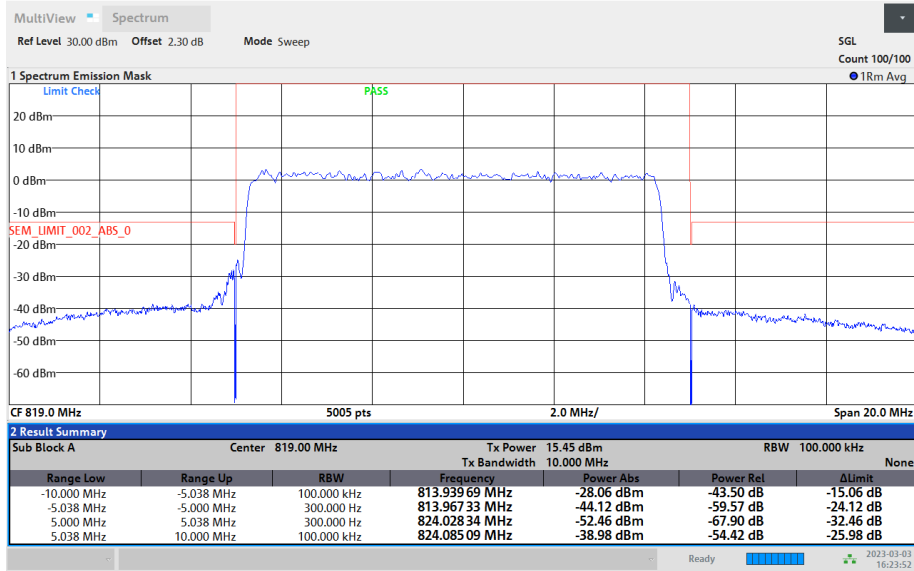


04:23:10 PM 03/03/2023



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

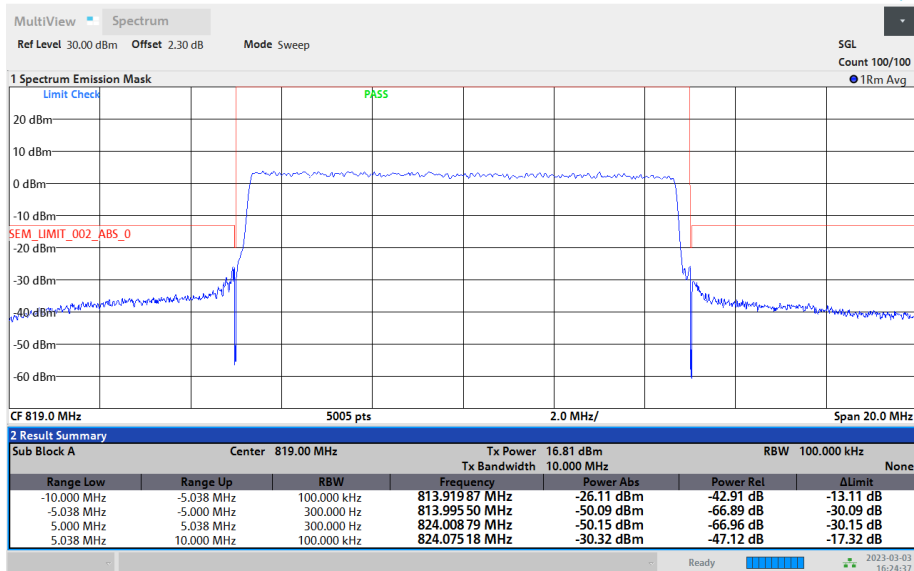
Middle MASK / Full RB



04:23:53 PM 03/03/2023

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

Middle MASK



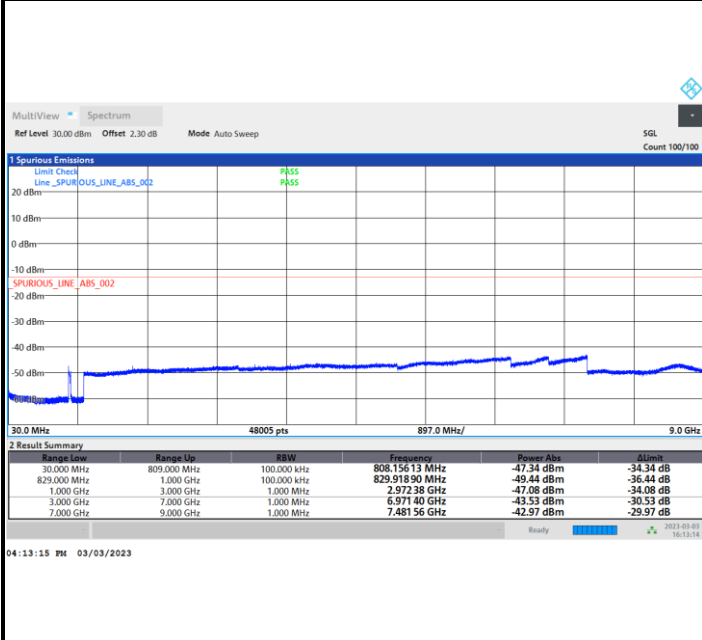
04:24:37 PM 03/03/2023



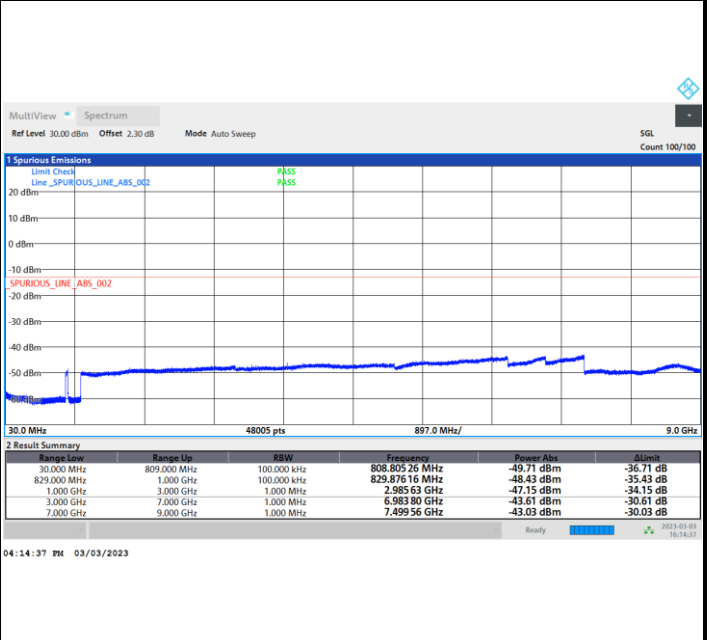
Emission masks – Out of band emissions

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

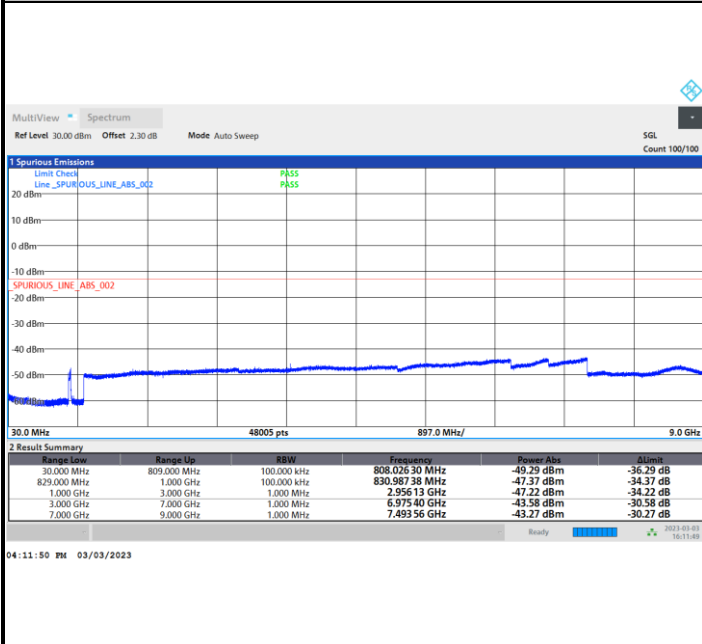
Lowest Channel



Middle Channel



Highest Channel





Frequency Stability

Test Conditions		FR1 n26 (PI/2 BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0029	PASS
40	Normal Voltage	0.0048	
30	Normal Voltage	0.0088	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0094	
0	Normal Voltage	0.0121	
-10	Normal Voltage	0.0059	
-20	Normal Voltage	0.0093	
-30	Normal Voltage	0.0093	
20	Maximum Voltage	0.0012	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0011	

Note:

- 1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.4 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



FR1 n26 (Part90s Straddle Channel)

Peak-to-Average Ratio

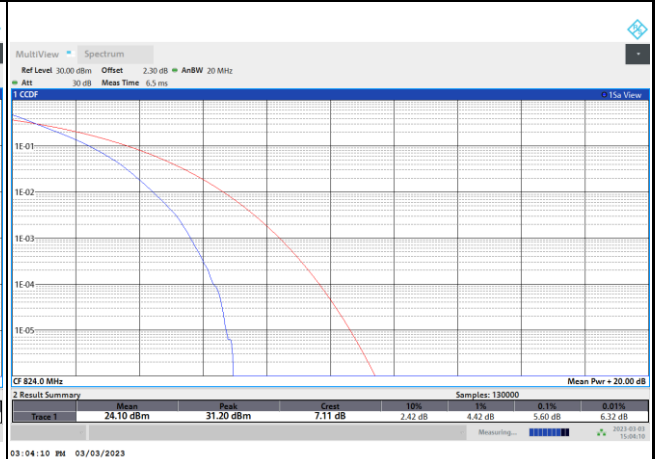
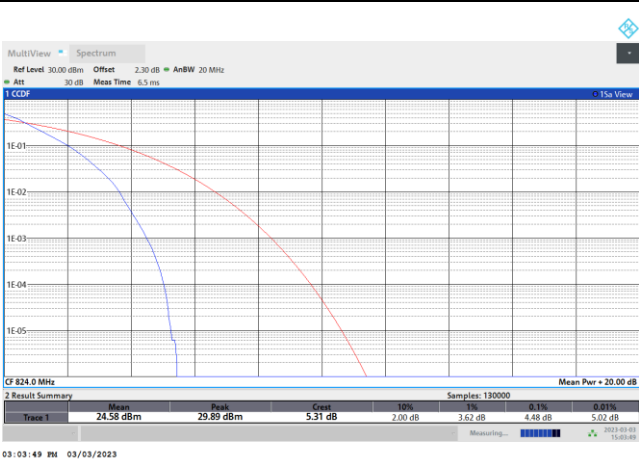
Mode	FR1 n26 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.48	5.60	6.32	6.52	PASS
Mode	FR1 n26 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.68				PASS



FR1 n26 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

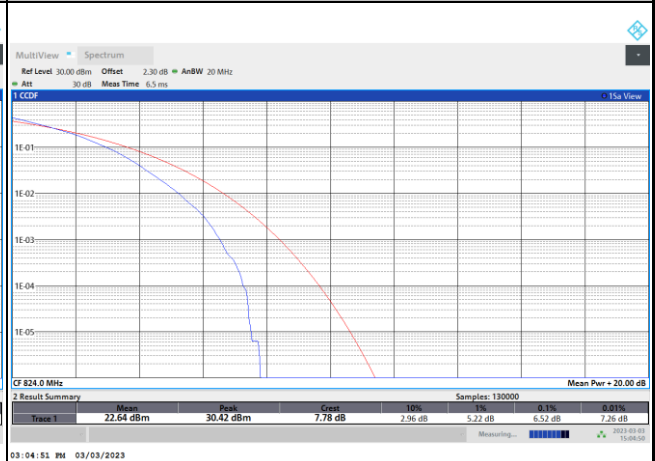
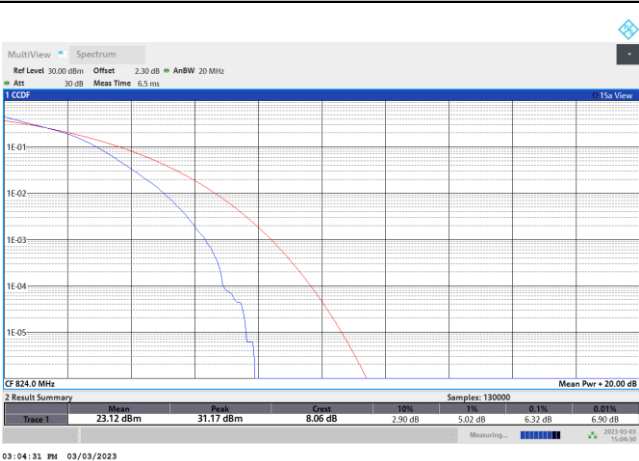
PI/2 BPSK

QPSK

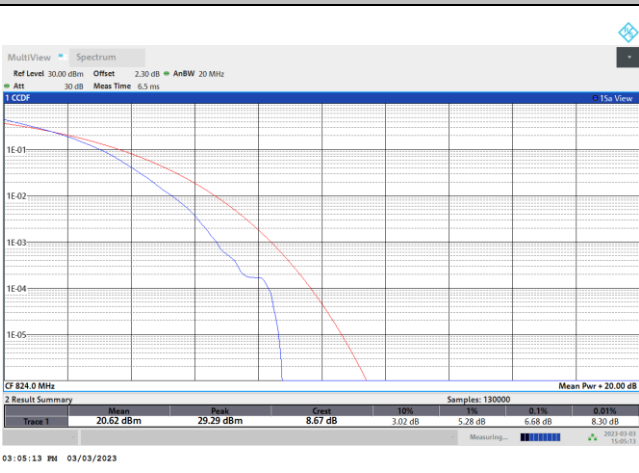


16QAM

64QAM



256QAM





26dB Bandwidth

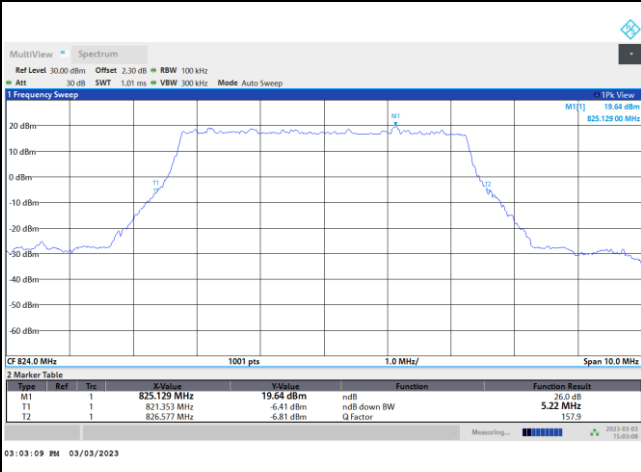
Mode	FR1 n26 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	5.22		9.85		14.63		19.22	

Mode	FR1 n26 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	5.36	5.42	10.41	10.21	15.35	15.38	20.82	20.86
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	5.32	5.28	10.17	10.21	15.38	15.31	20.94	20.98



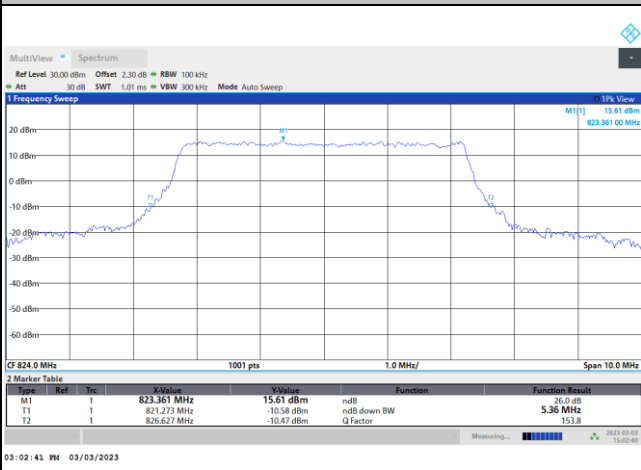
FR1 n26 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

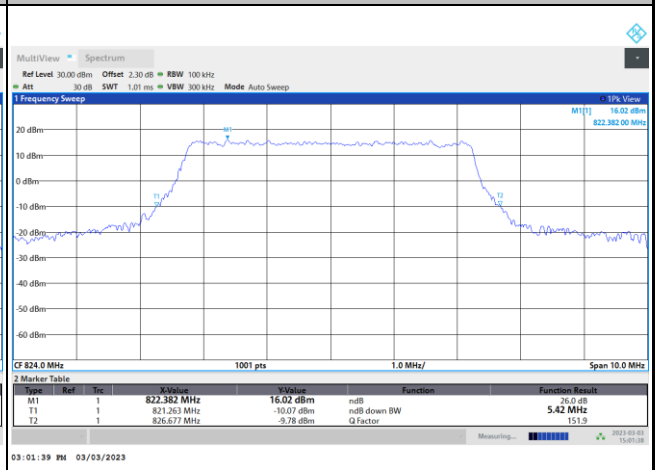


FR1 n26 / 5MHz / CP OFDM / Middle Channel / Full RB

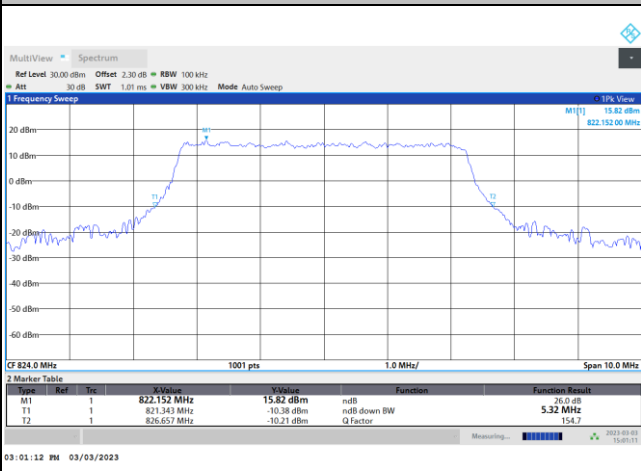
QPSK



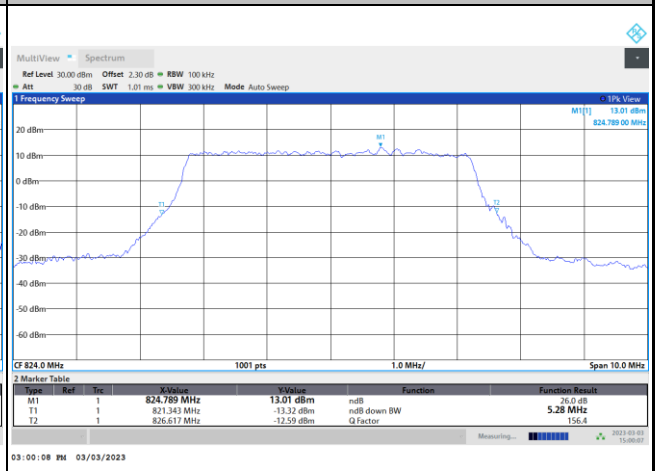
16QAM



64QAM



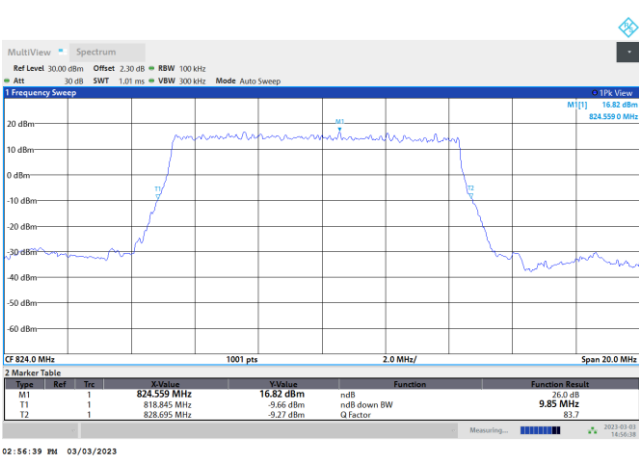
256QAM





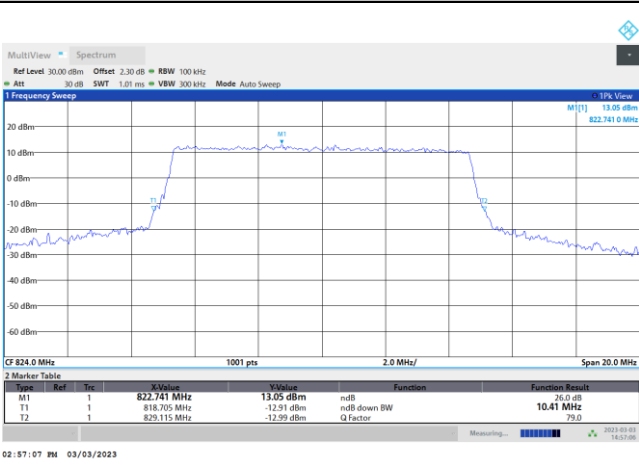
FR1 n26 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

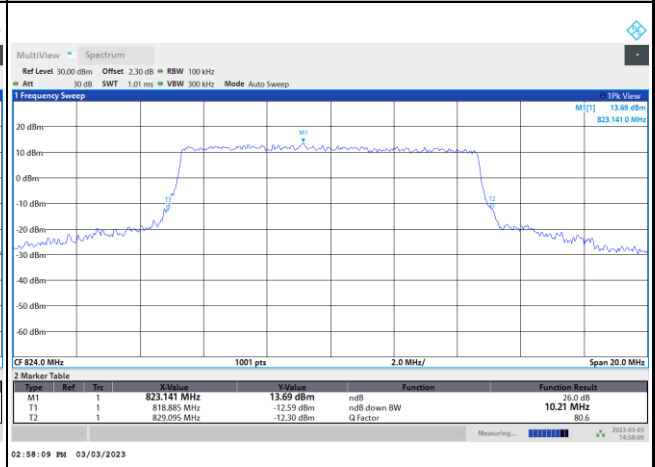


FR1 n26 / 10MHz / CP OFDM / Middle Channel / Full RB

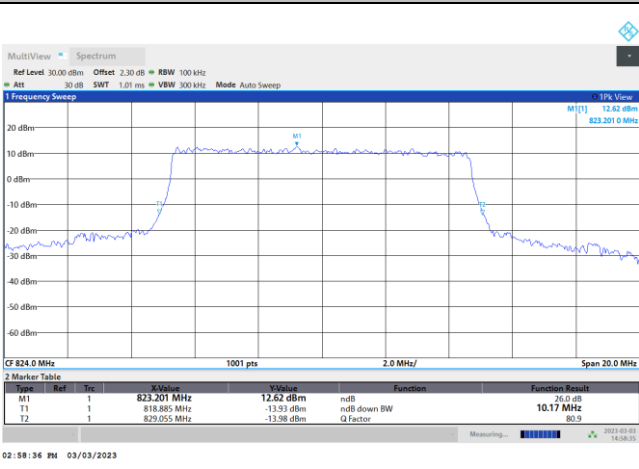
QPSK



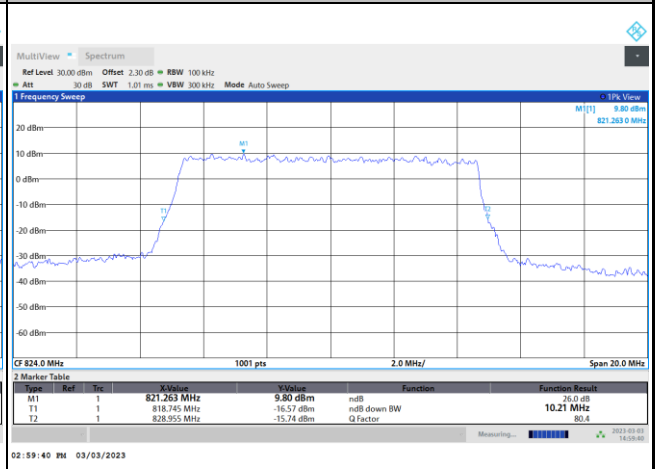
16QAM



64QAM



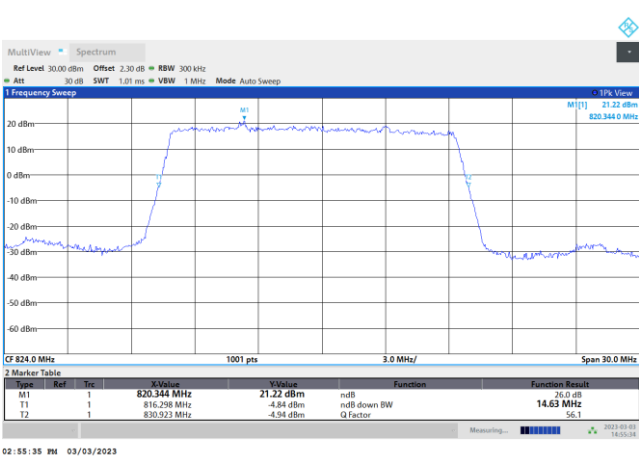
256QAM





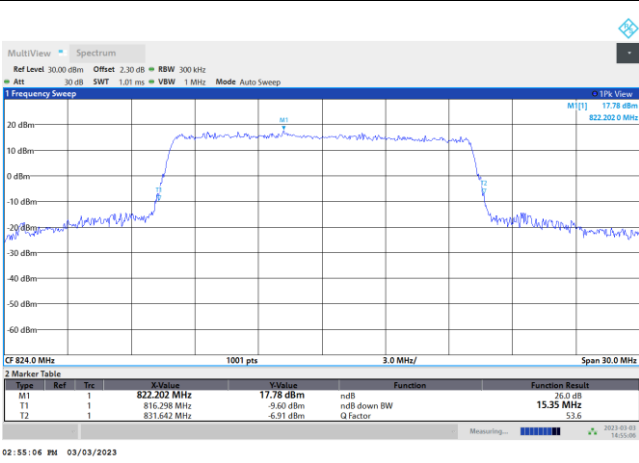
FR1 n26 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

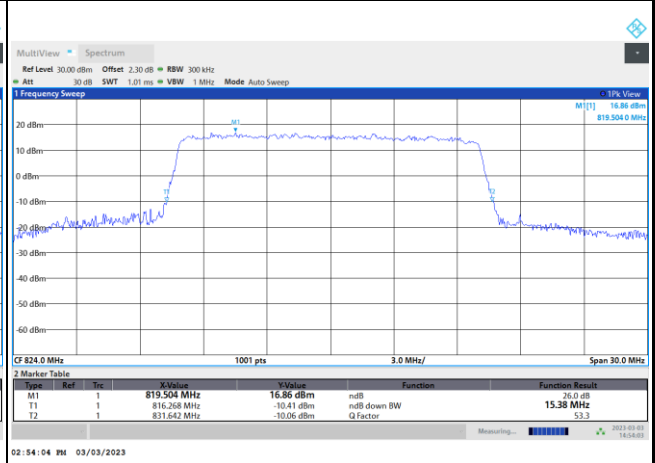


FR1 n26 / 15MHz / CP OFDM / Middle Channel / Full RB

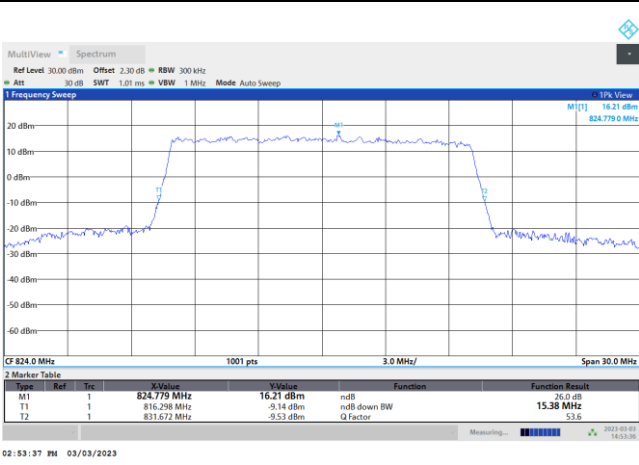
QPSK



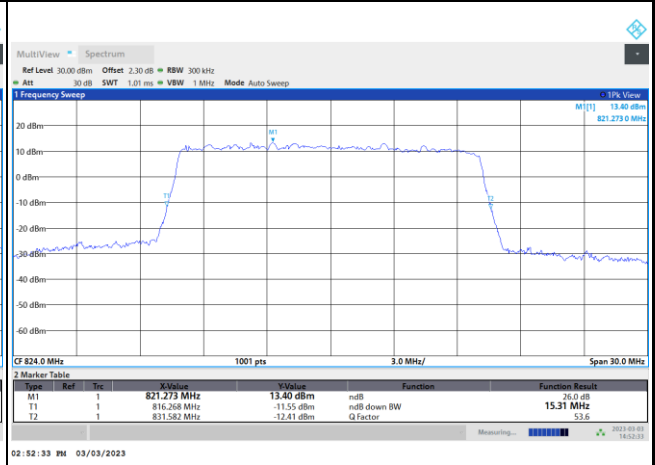
16QAM



64QAM



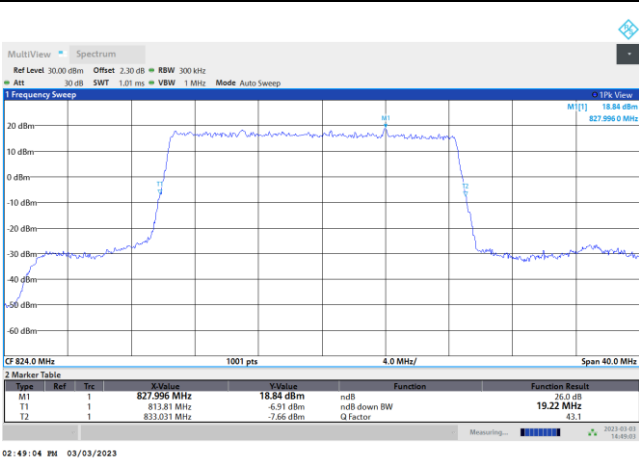
256QAM





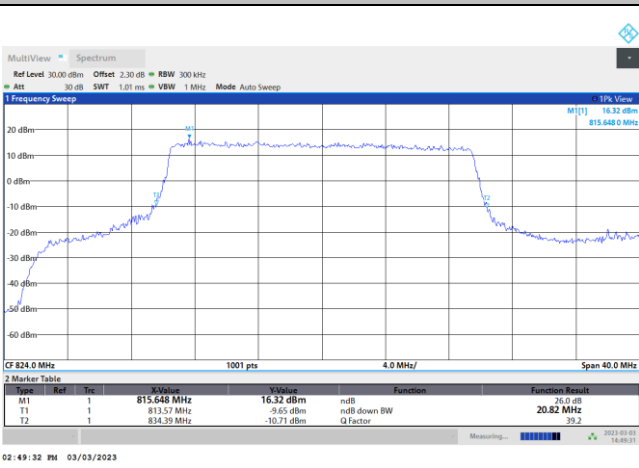
FR1 n26 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

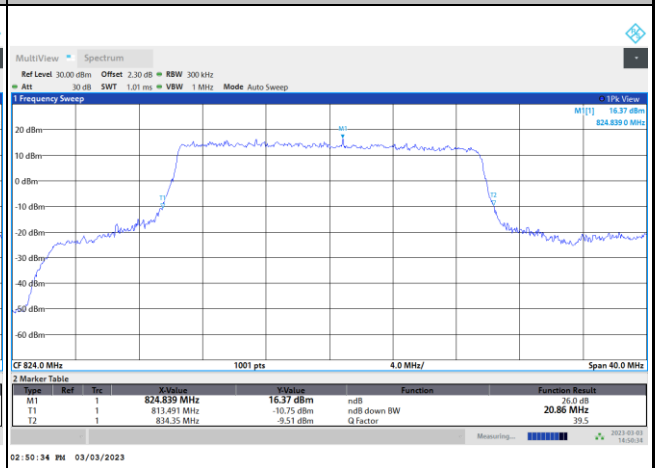


FR1 n26 / 20MHz / CP OFDM / Middle Channel / Full RB

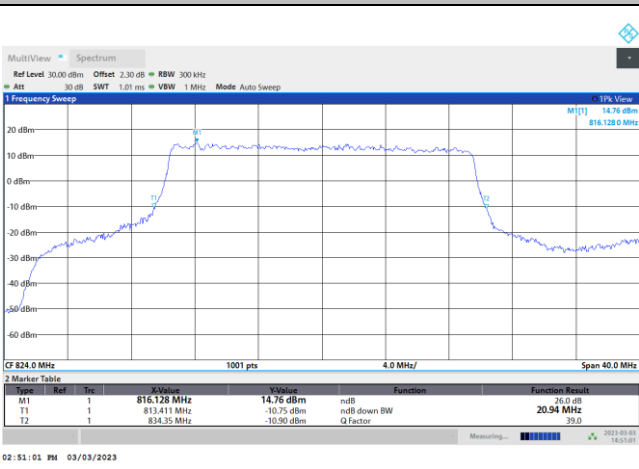
QPSK



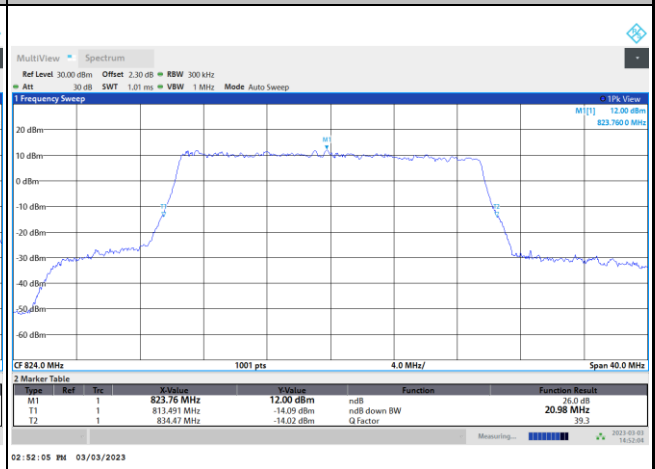
16QAM



64QAM



256QAM





Occupied Bandwidth

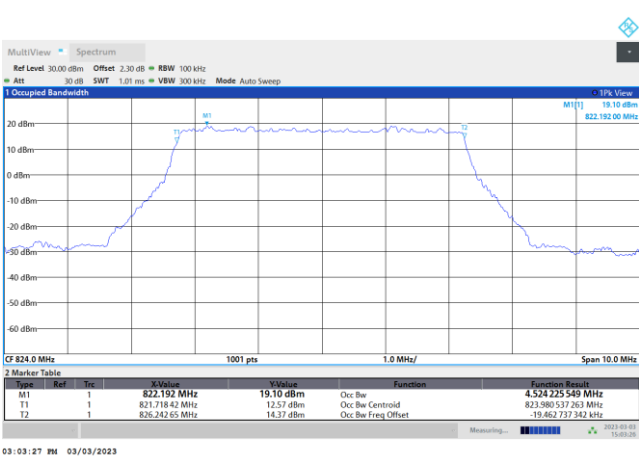
Mode	FR1 n26 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK		PI/2 BPSK	
Middle CH	4.52		8.97		13.45		17.92	

Mode	FR1 n26 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	4.53	4.52	9.32	9.29	14.15	14.12	18.98	18.94
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	4.53	4.51	9.29	9.31	14.15	14.12	18.98	18.97



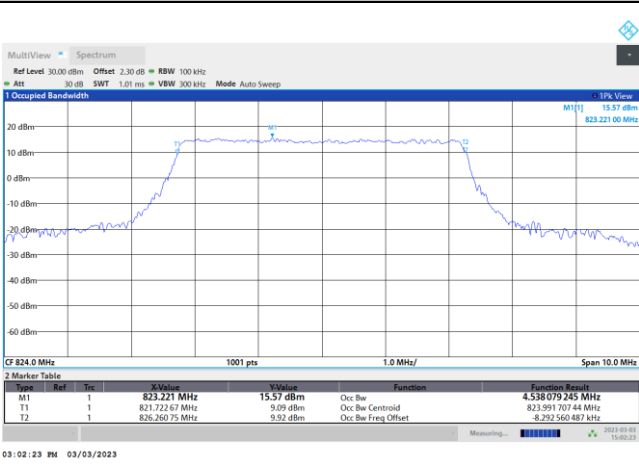
FR1 n26 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

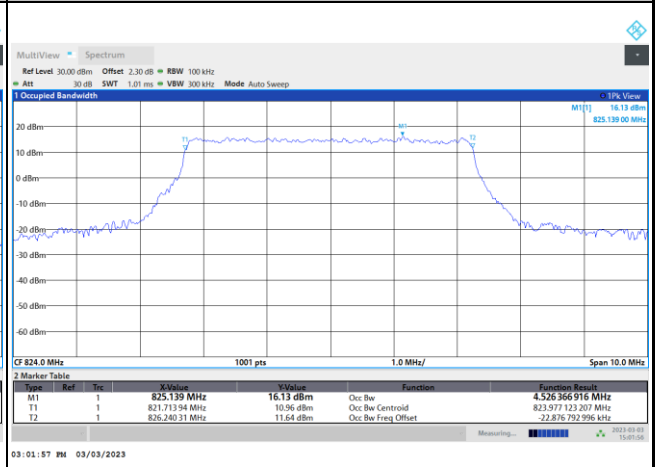


FR1 n26 / 5MHz / CP OFDM / Middle Channel / Full RB

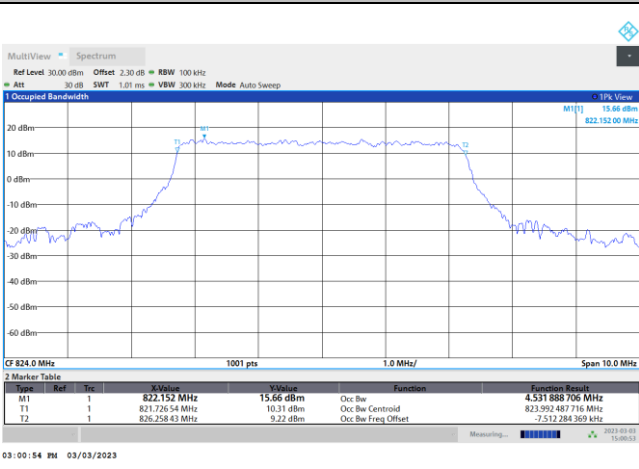
QPSK



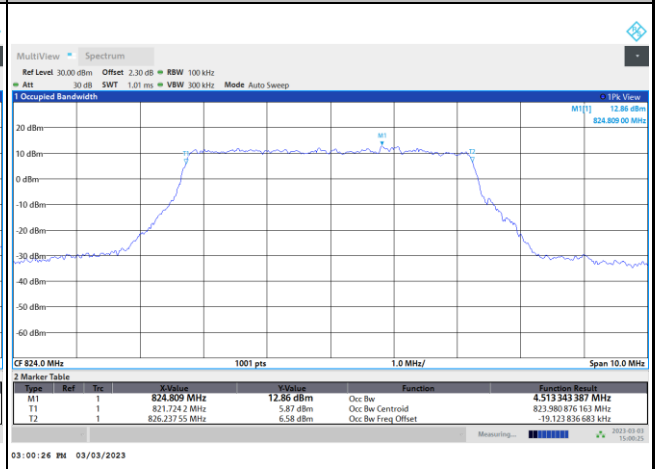
16QAM



64QAM



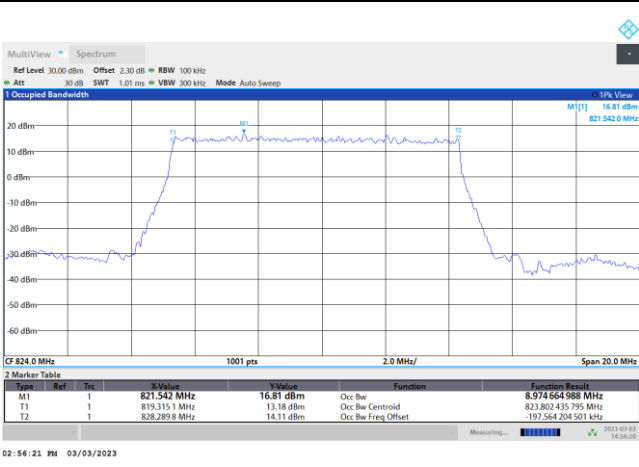
256QAM





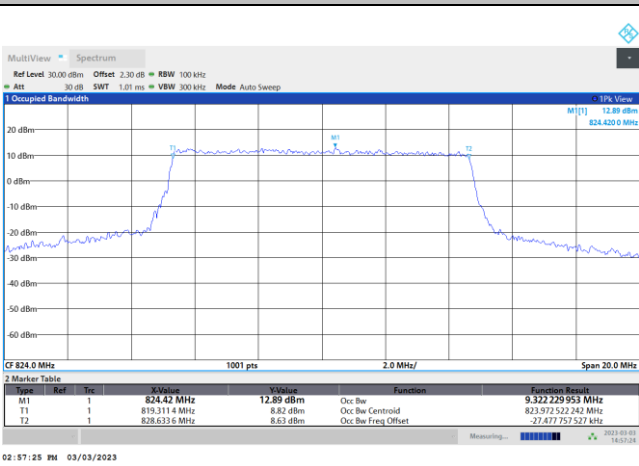
FR1 n26 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

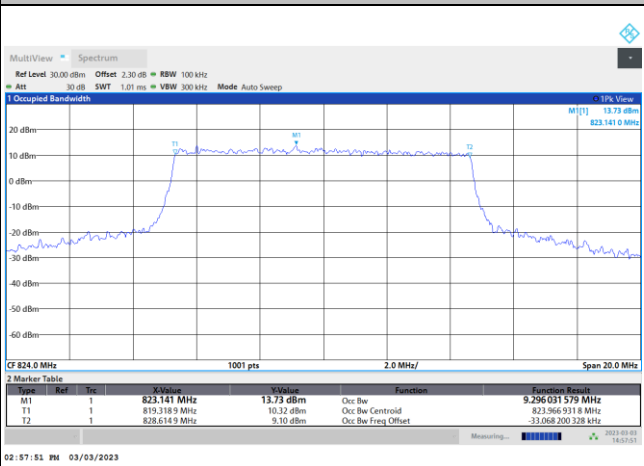


FR1 n26 / 10MHz / CP OFDM / Middle Channel / Full RB

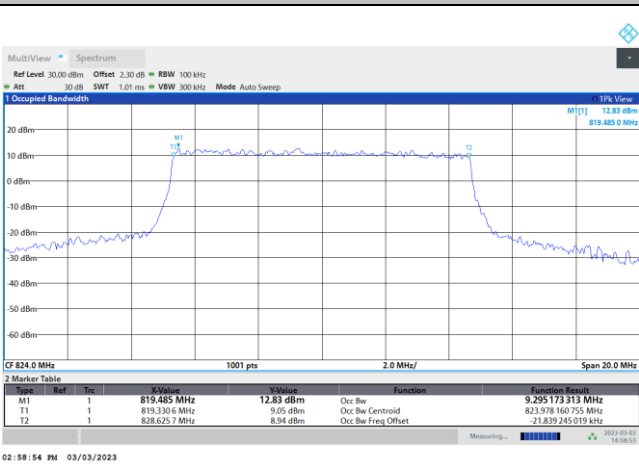
QPSK



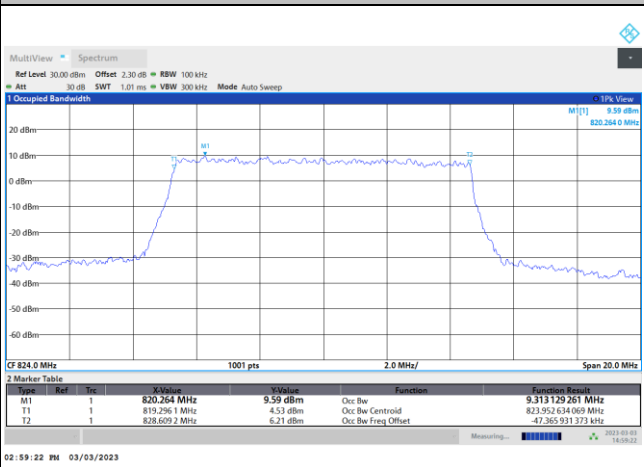
16QAM



64QAM



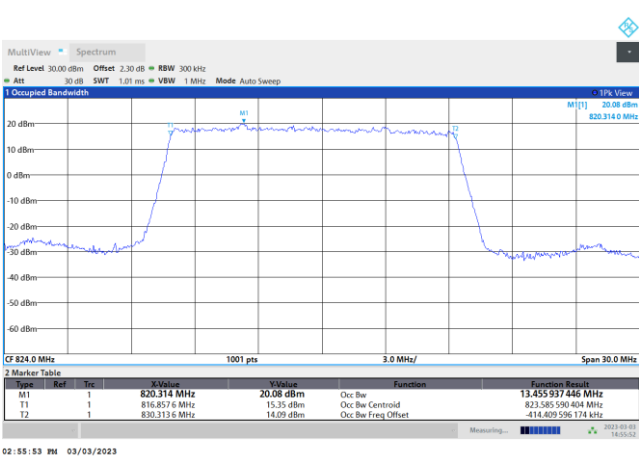
256QAM





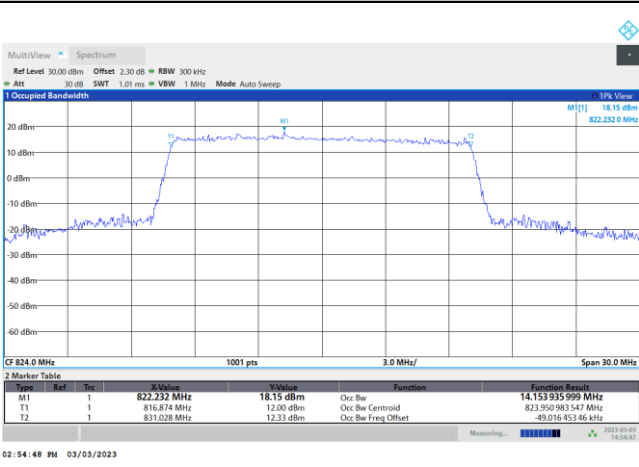
FR1 n26 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

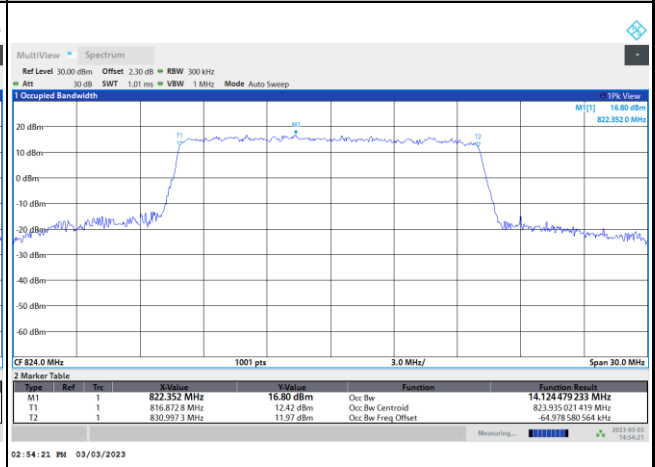


FR1 n26 / 15MHz / CP OFDM / Middle Channel / Full RB

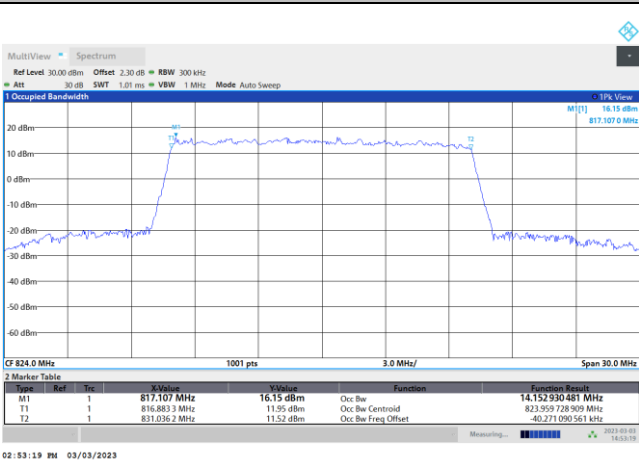
QPSK



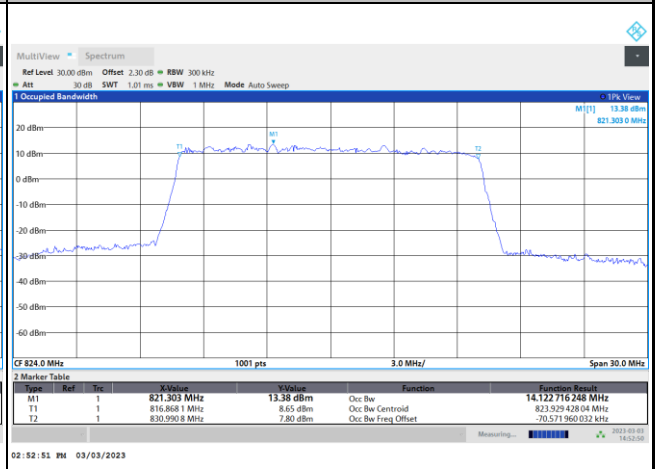
16QAM



64QAM



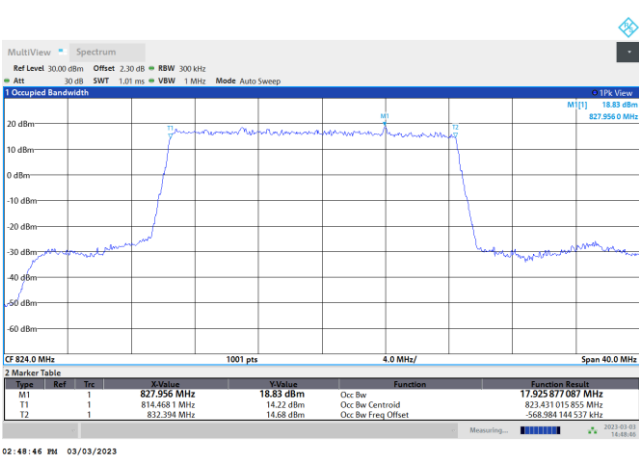
256QAM





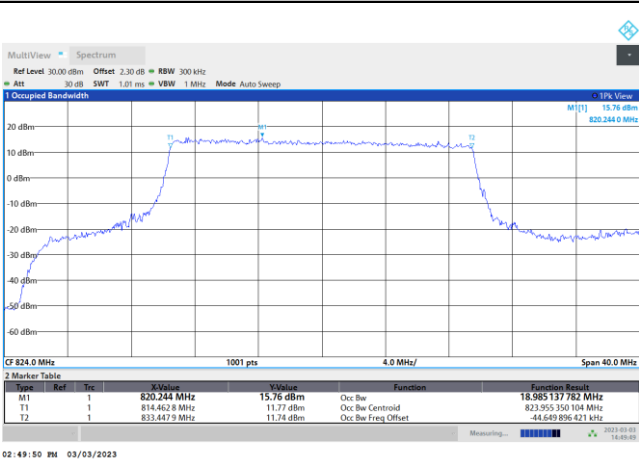
FR1 n26 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

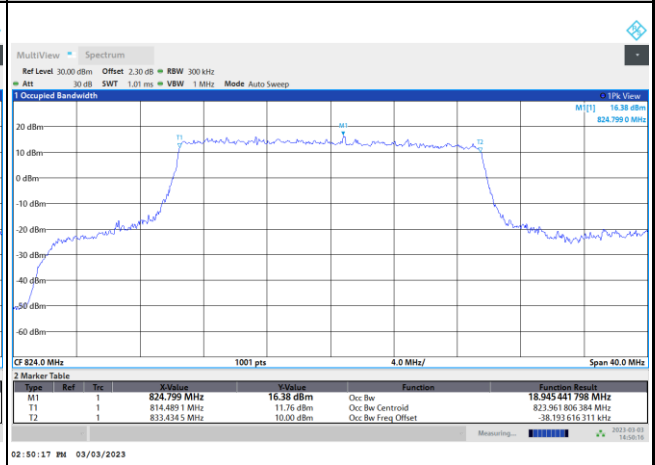


FR1 n26 / 20MHz / CP OFDM / Middle Channel / Full RB

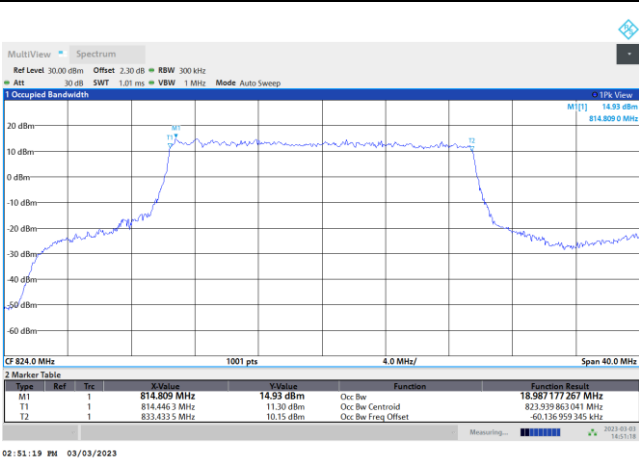
QPSK



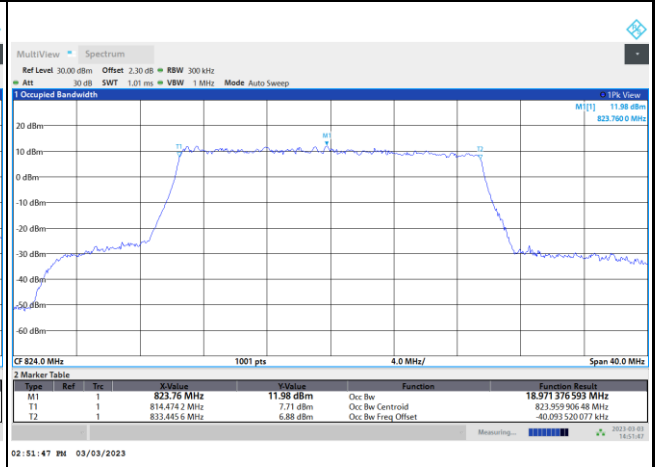
16QAM



64QAM



256QAM





Frequency Stability

Test Conditions		FR1 n26 (PI/2 BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0112	PASS
40	Normal Voltage	0.0108	
30	Normal Voltage	0.0180	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0085	
0	Normal Voltage	0.0192	
-10	Normal Voltage	0.0030	
-20	Normal Voltage	0.0079	
-30	Normal Voltage	0.0192	
20	Maximum Voltage	0.0074	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0006	

Note:

- 1. Normal Voltage = 3.89 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.4 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



FR1 n30

Peak-to-Average Ratio

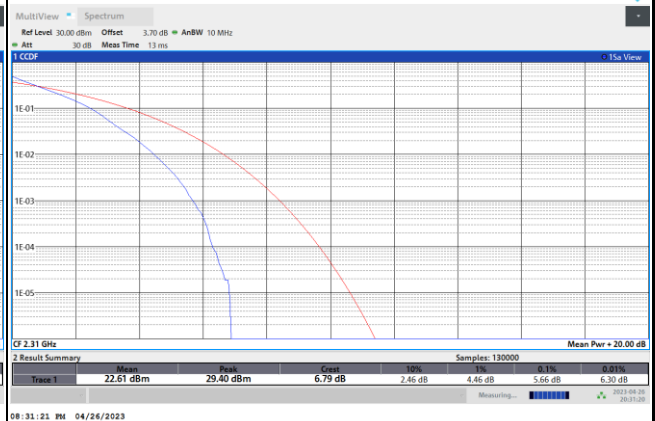
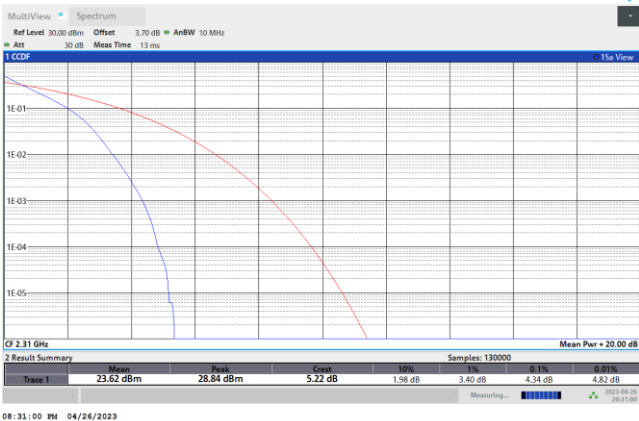
Mode	FR1 n30 / 10MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.34	5.66	6.36	6.44	PASS
Mode	FR1 n30 / 10MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.46				PASS



FR1 n30 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

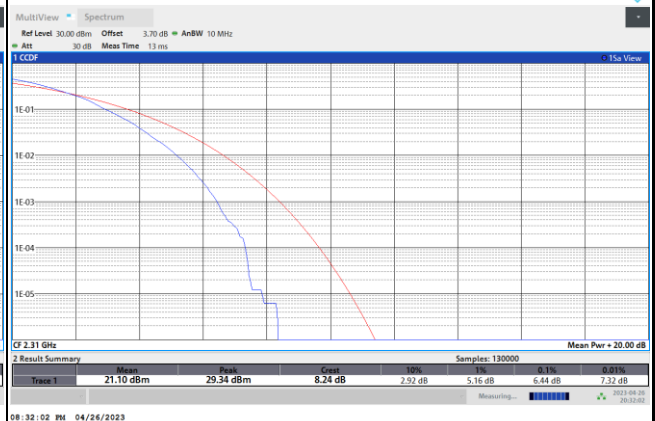
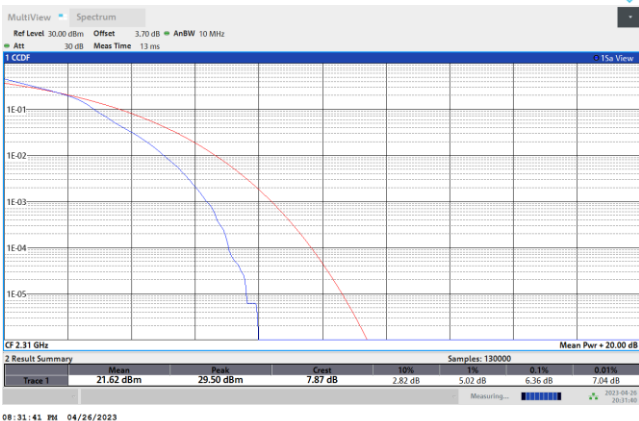
PI/2 BPSK

QPSK

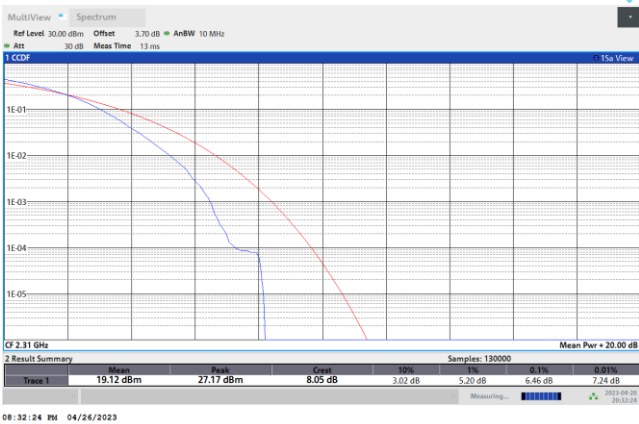


16QAM

64QAM



256QAM





26dB Bandwidth

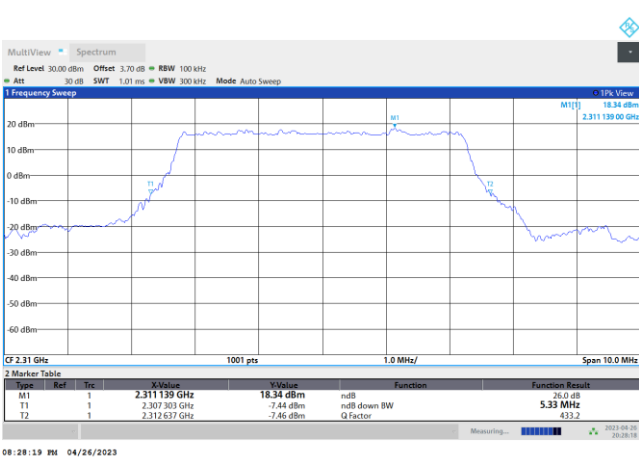
Mode	FR1 n30 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz					
Mod.	PI/2 BPSK		PI/2 BPSK					
Middle CH	5.34		9.83					

Mode	FR1 n30 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM				
Middle CH	5.48	5.40	10.31	10.19				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	5.29	5.31	10.21	10.21				



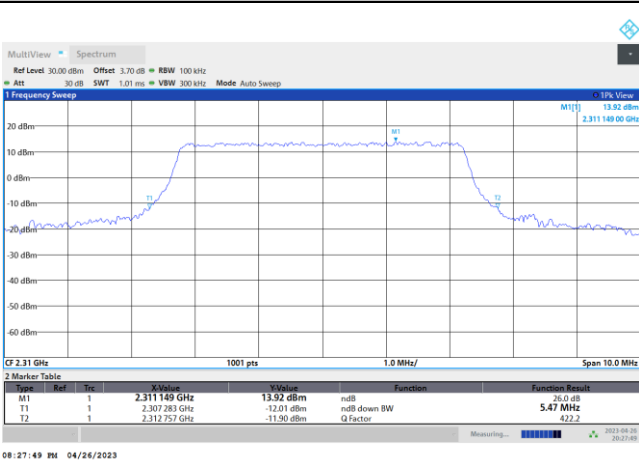
FR1 n30 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

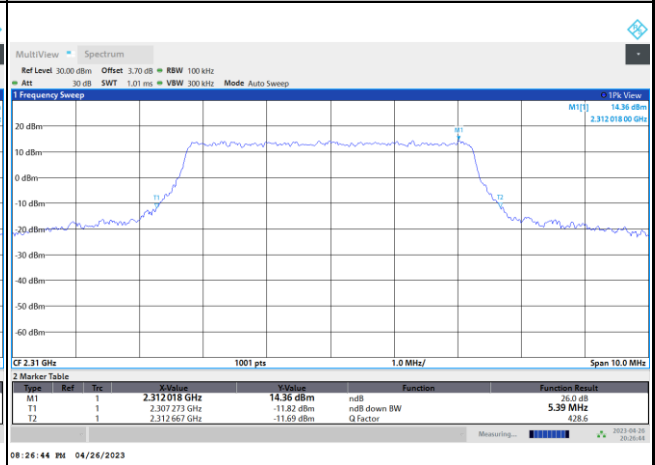


FR1 n30 / 5MHz / CP OFDM / Middle Channel / Full RB

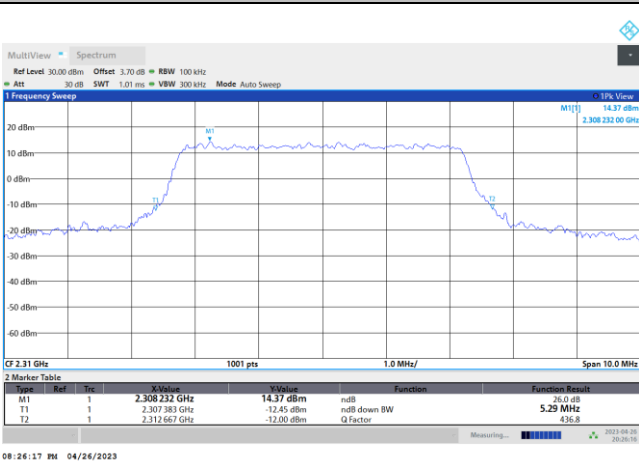
QPSK



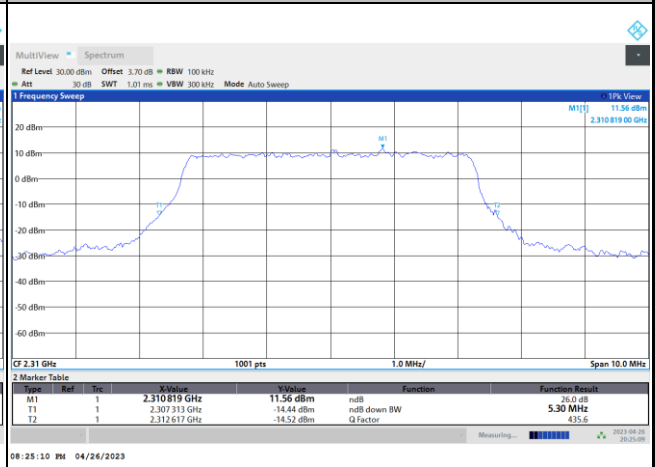
16QAM



64QAM



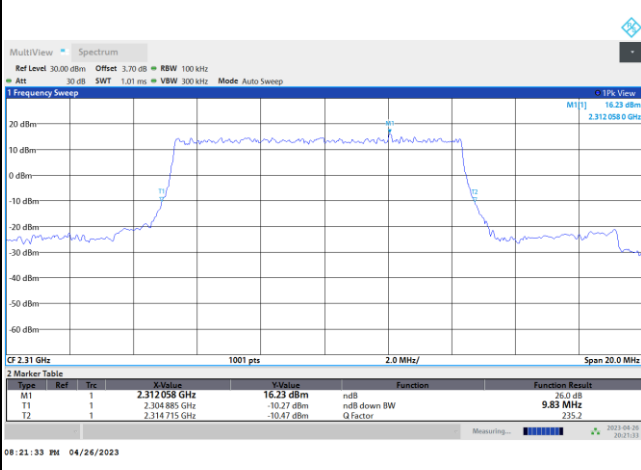
256QAM





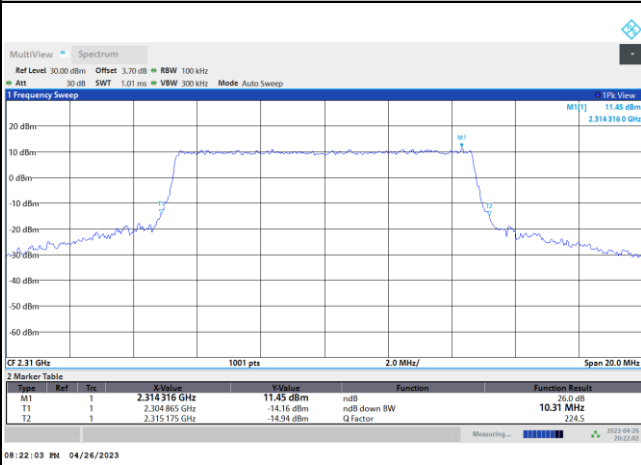
FR1 n30 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

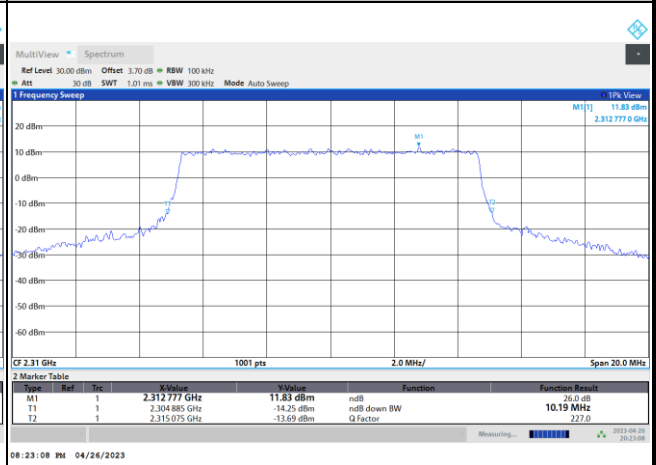


FR1 n30 / 10MHz / CP OFDM / Middle Channel / Full RB

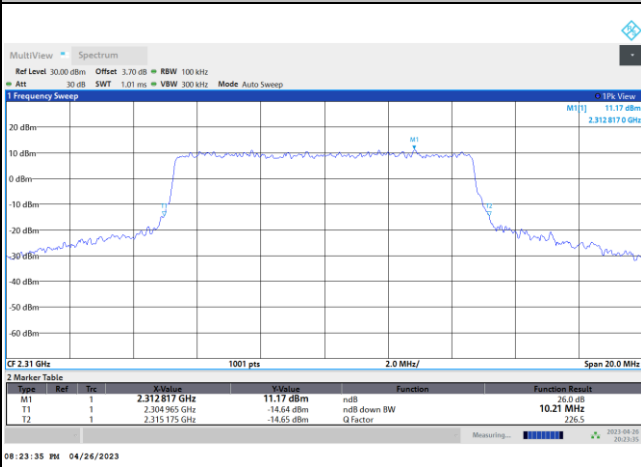
QPSK



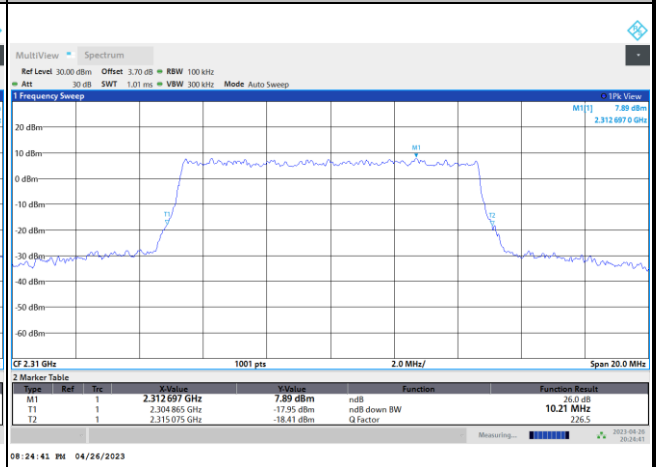
16QAM



64QAM



256QAM





Occupied Bandwidth

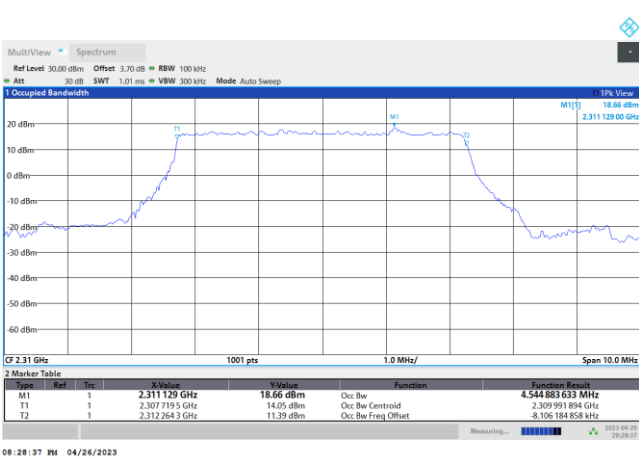
Mode	FR1 n30 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz					
Mod.	PI/2 BPSK		PI/2 BPSK					
Middle CH	4.54		8.98					

Mode	FR1 n30 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM				
Middle CH	4.52	4.51	9.30	9.29				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	4.51	4.52	9.29	9.28				



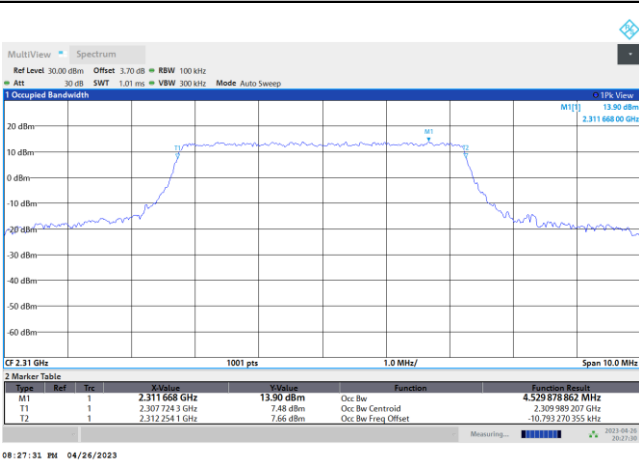
FR1 n30 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

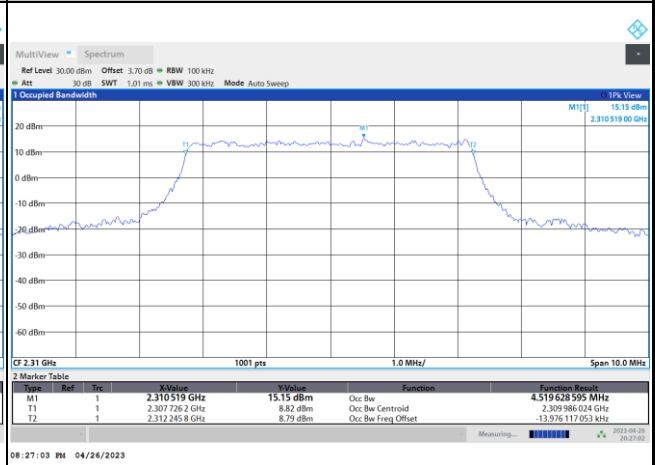


FR1 n30 / 5MHz / CP OFDM / Middle Channel / Full RB

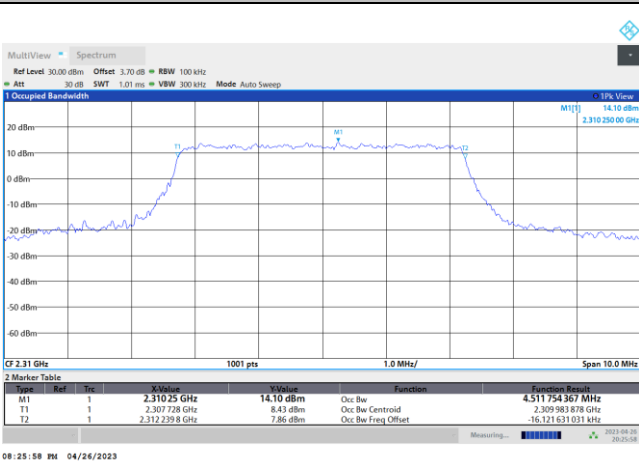
QPSK



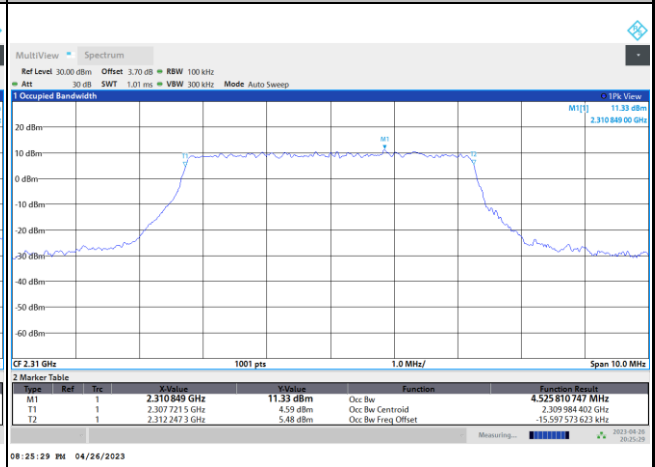
16QAM



64QAM



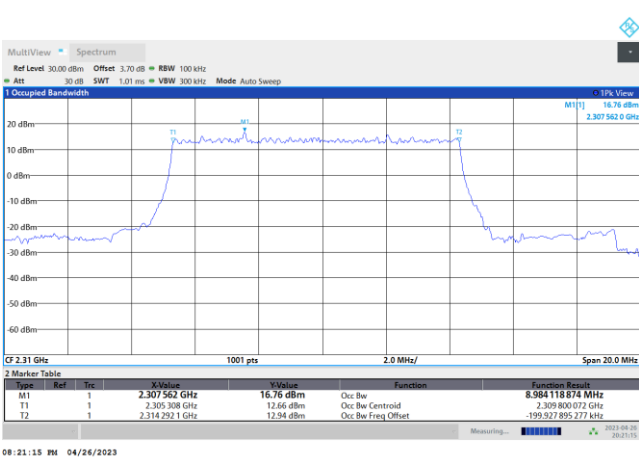
256QAM





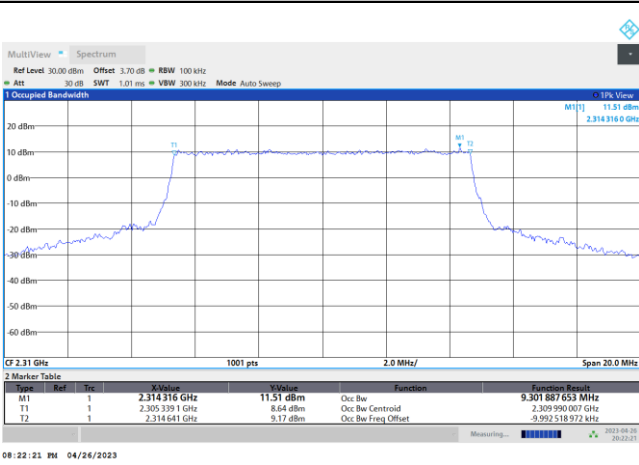
FR1 n30 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

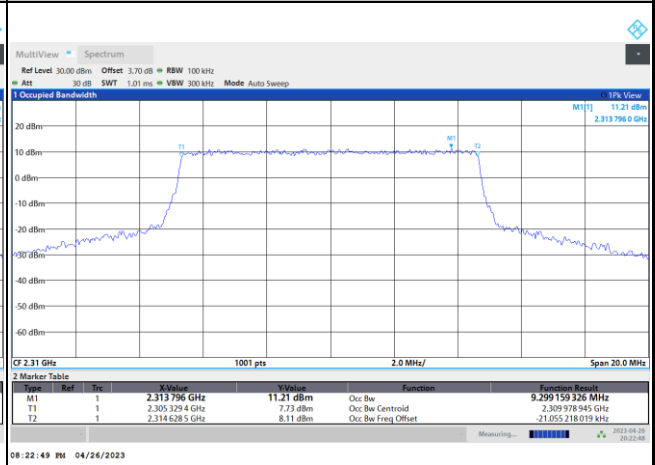


FR1 n30 / 10MHz / CP OFDM / Middle Channel / Full RB

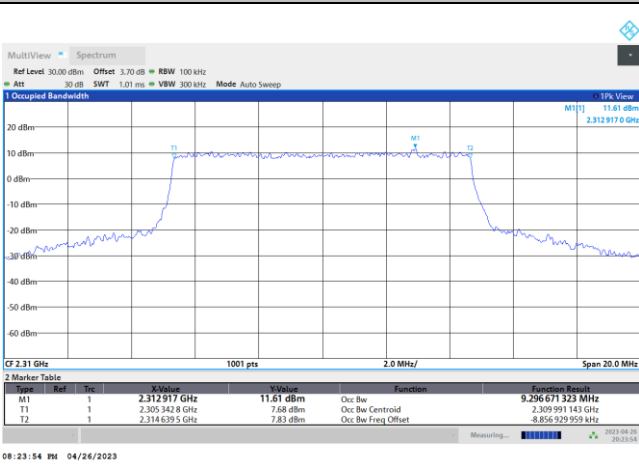
QPSK



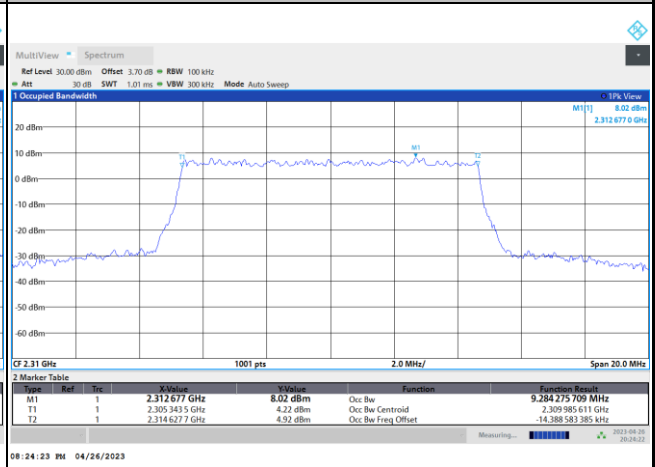
16QAM



64QAM



256QAM



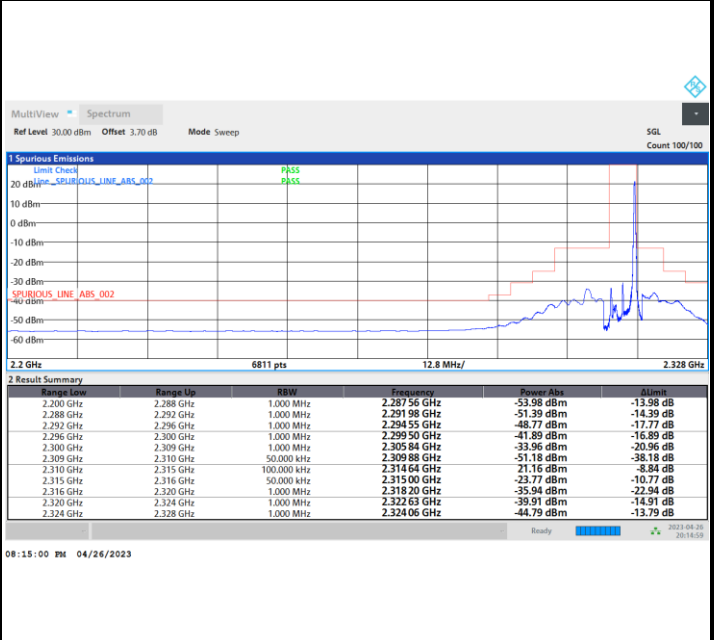
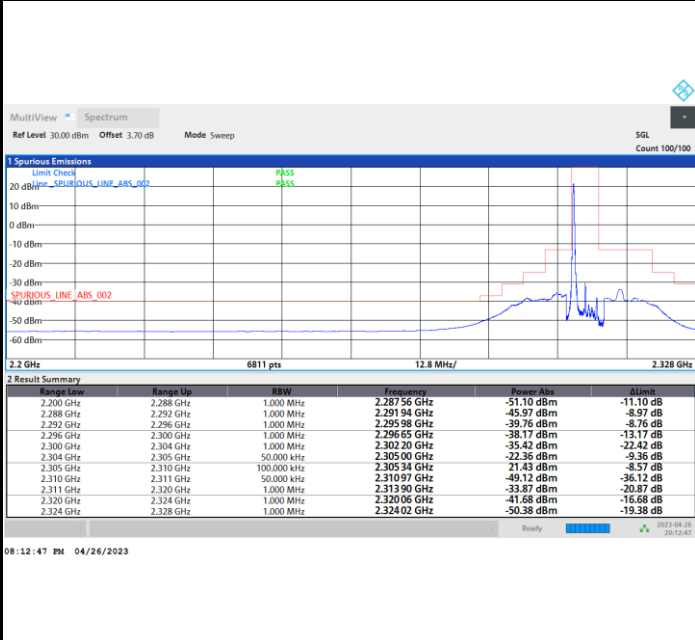


Conducted Band Edge

FR1 n30 / 5MHz / DFT-S OFDM / PI/2 BPSK

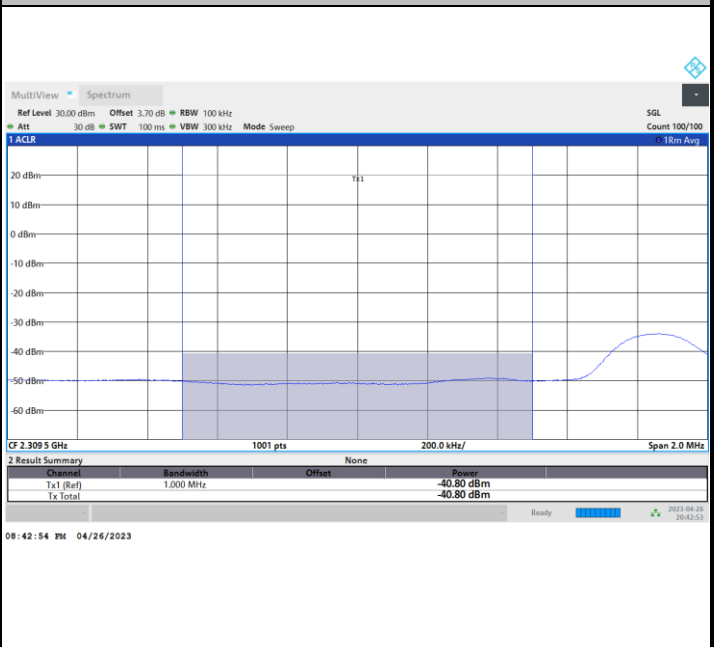
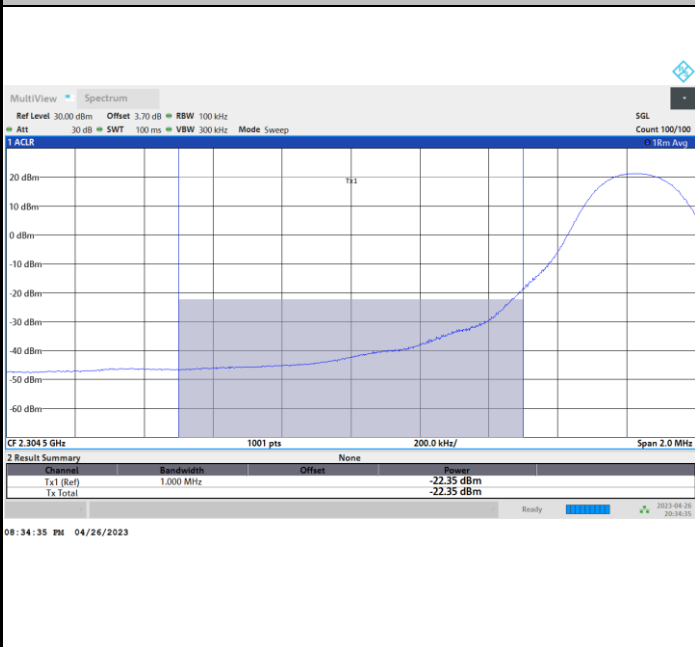
Lowest Band Edge / 1RB0

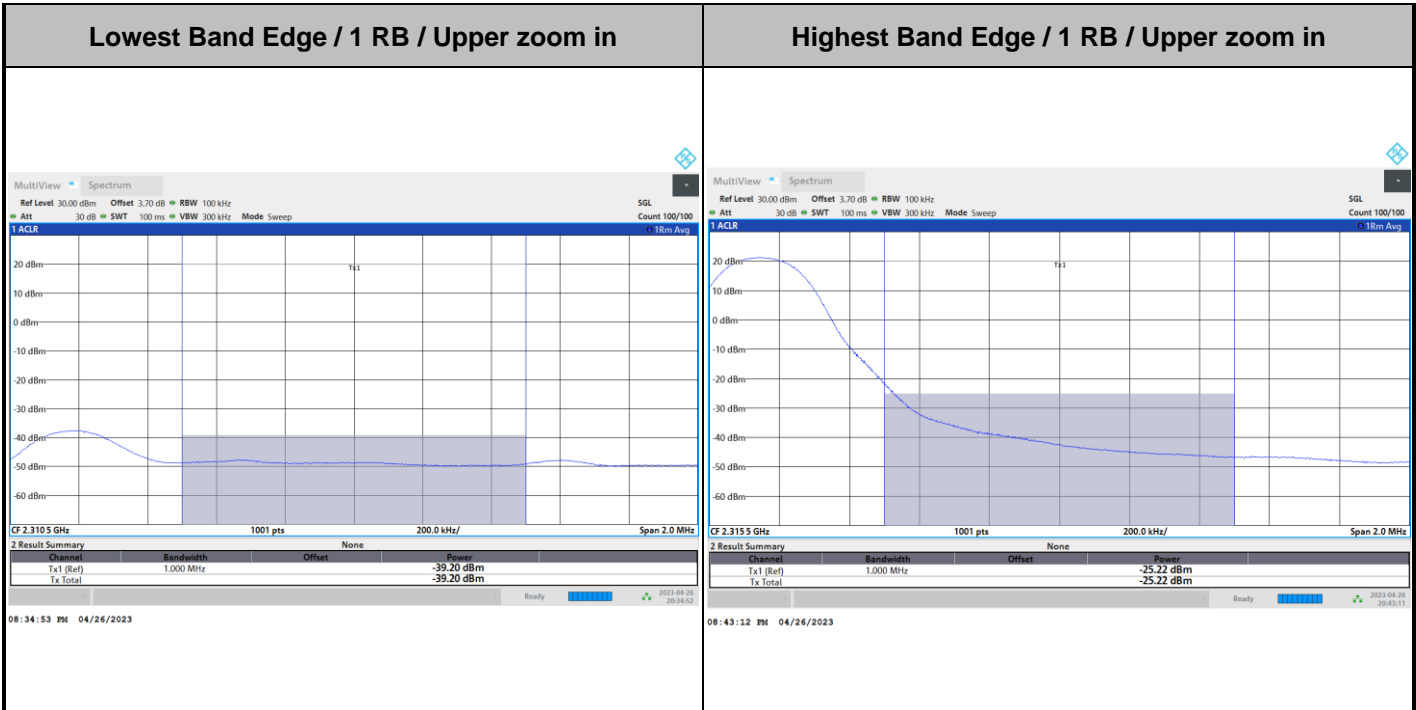
Highest Band Edge / 1RBmax

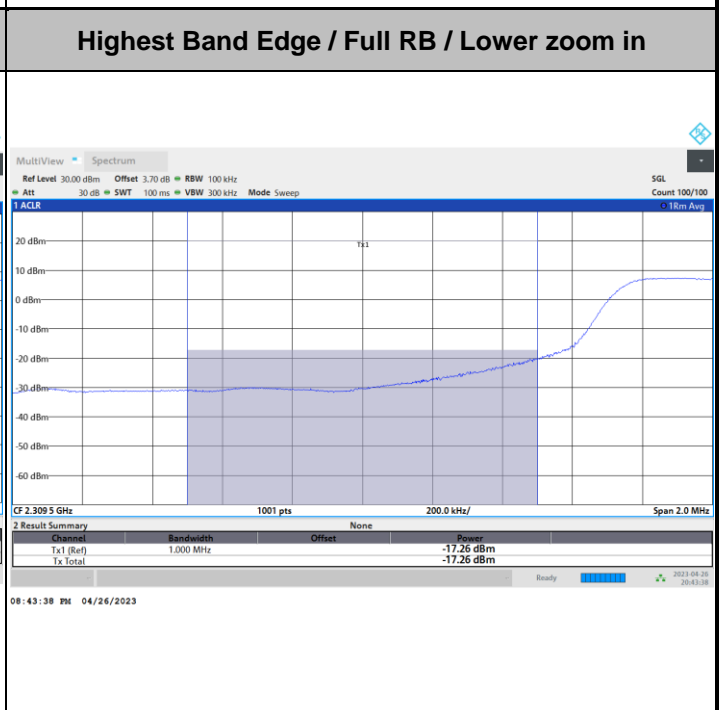
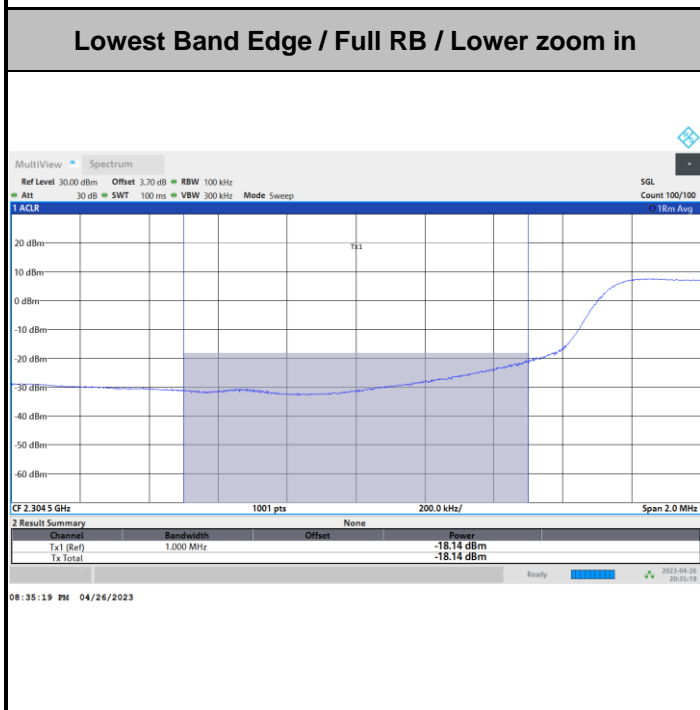
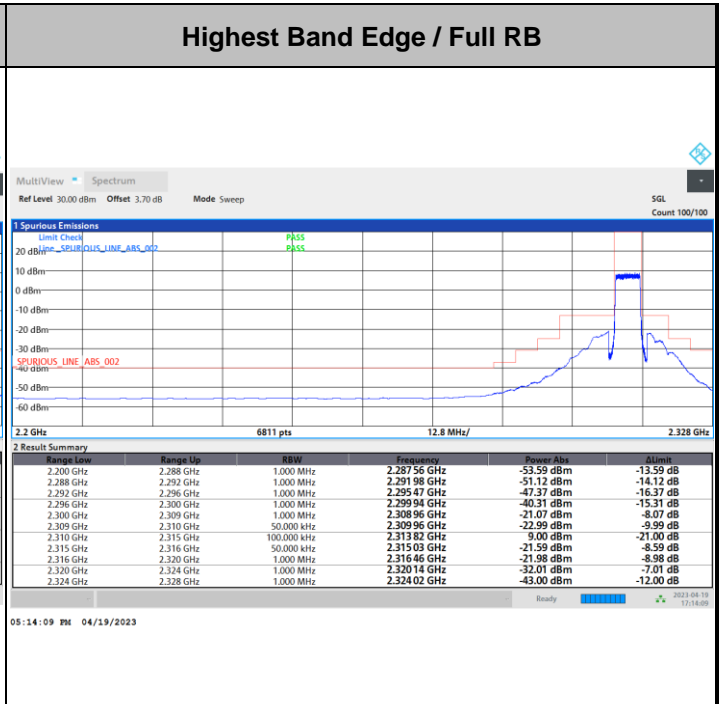
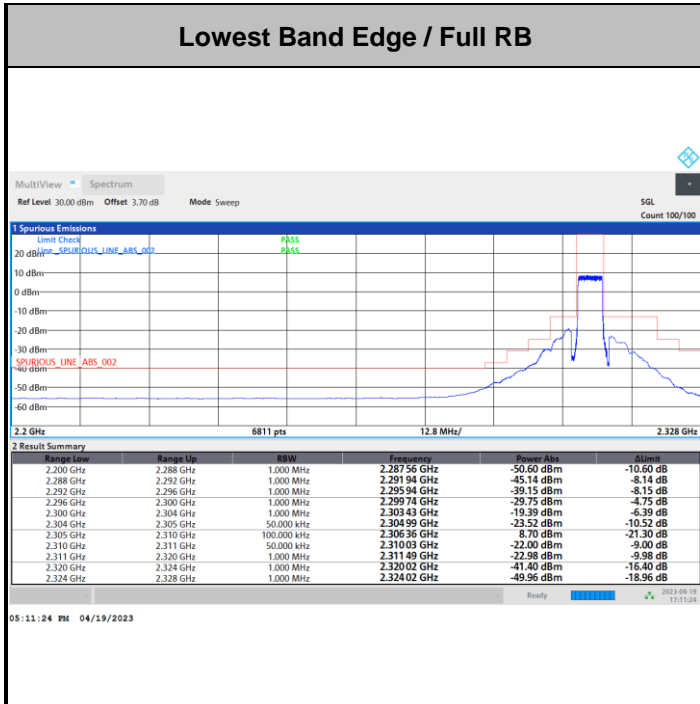


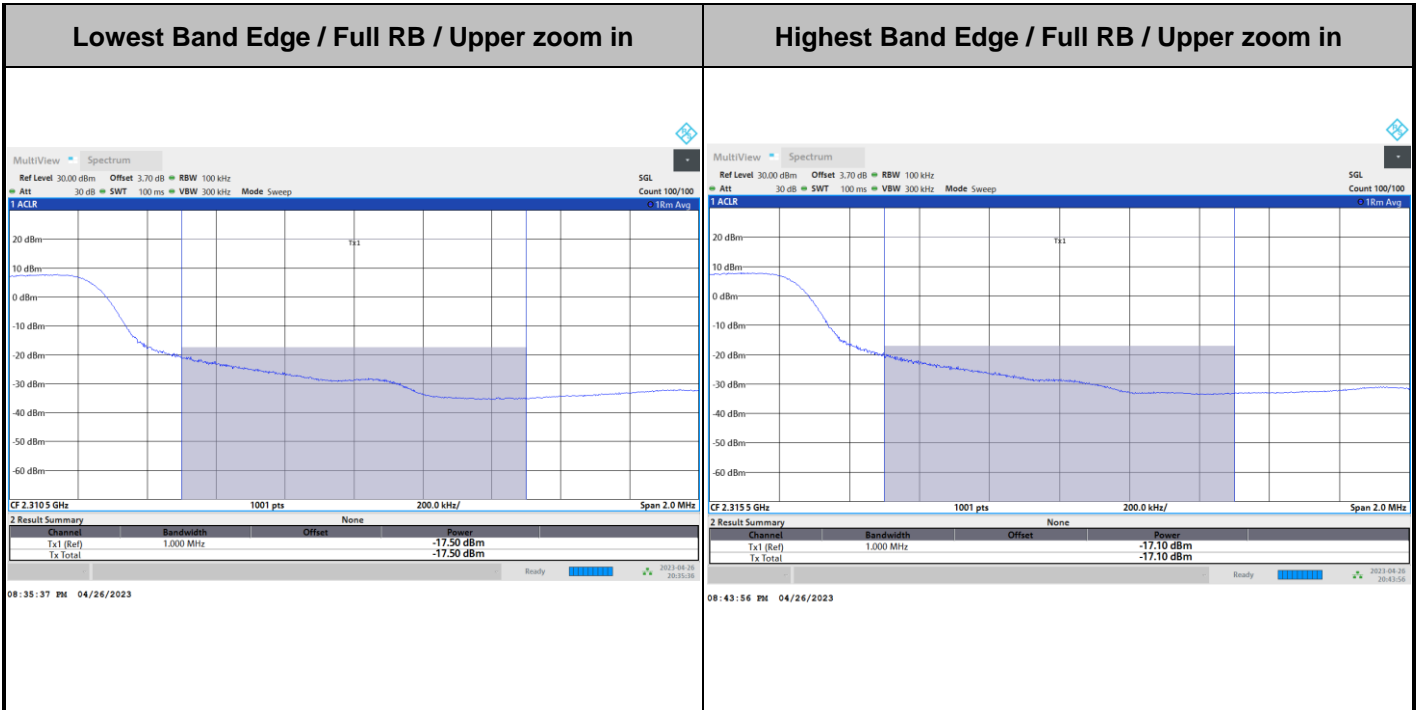
Lowest Band Edge / 1 RB / Lower zoom in

Highest Band Edge / 1 RB / Lower zoom in







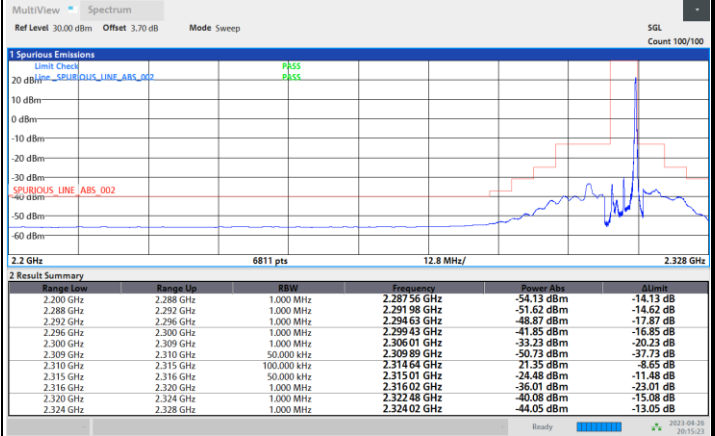
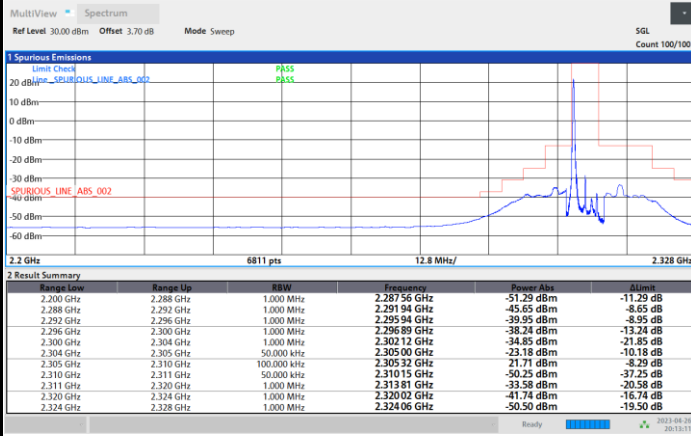




FR1 n30 / 5MHz / DFT-S OFDM / QPSK

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / 1 RB / Lower zoom in

Highest Band Edge / 1 RB / Lower zoom in

