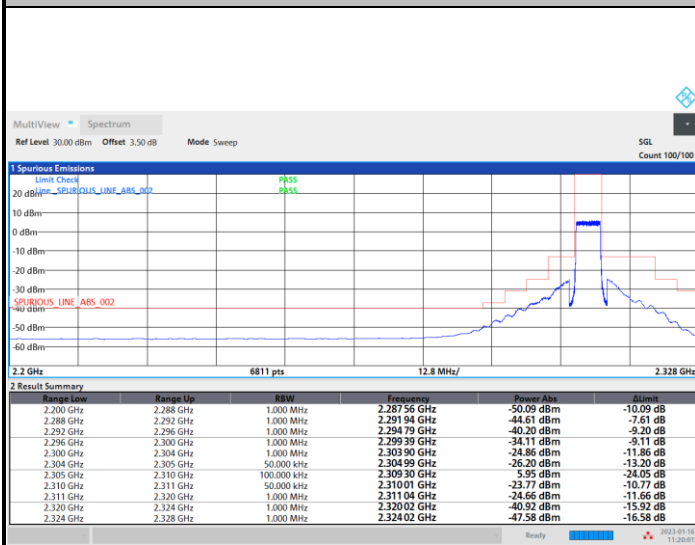


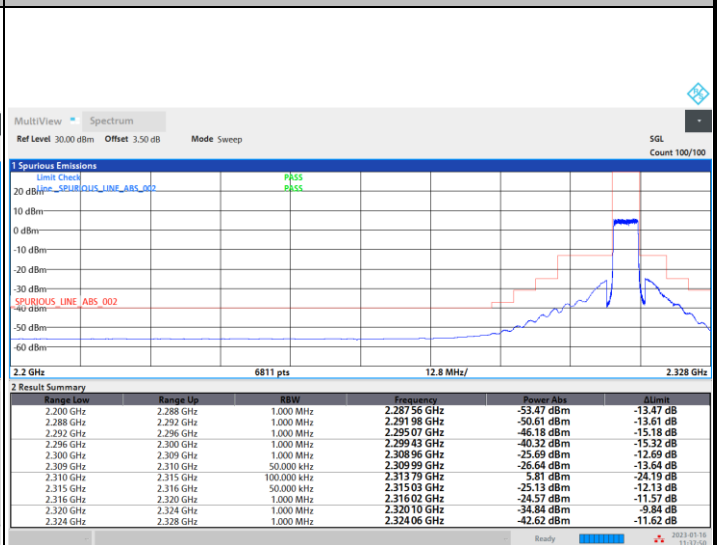


Lowest Band Edge / Full RB



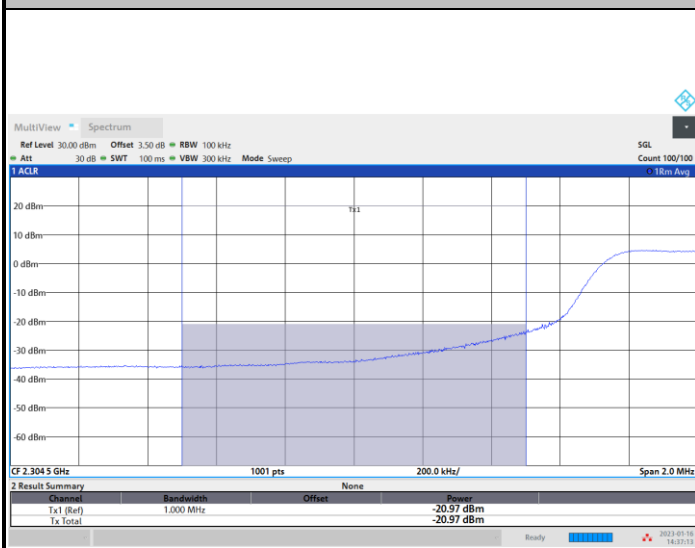
11:20:02 AM 01/16/2023

Highest Band Edge / Full RB



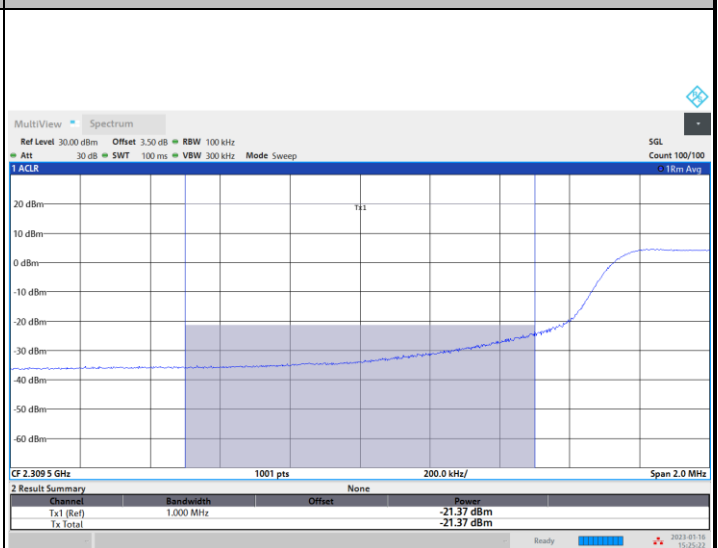
11:37:50 AM 01/16/2023

Lowest Band Edge / Full RB / Lower zoom in



02:37:13 PM 01/16/2023

Highest Band Edge / Full RB / Lower zoom in

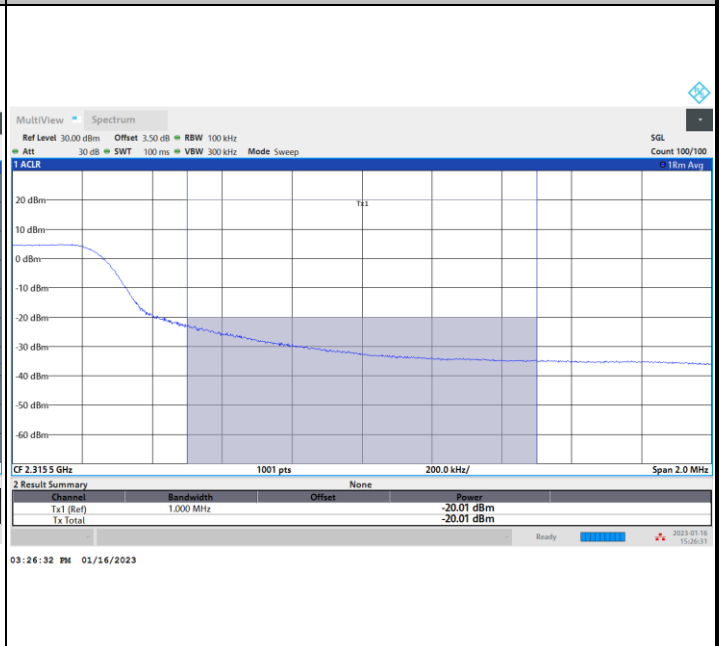
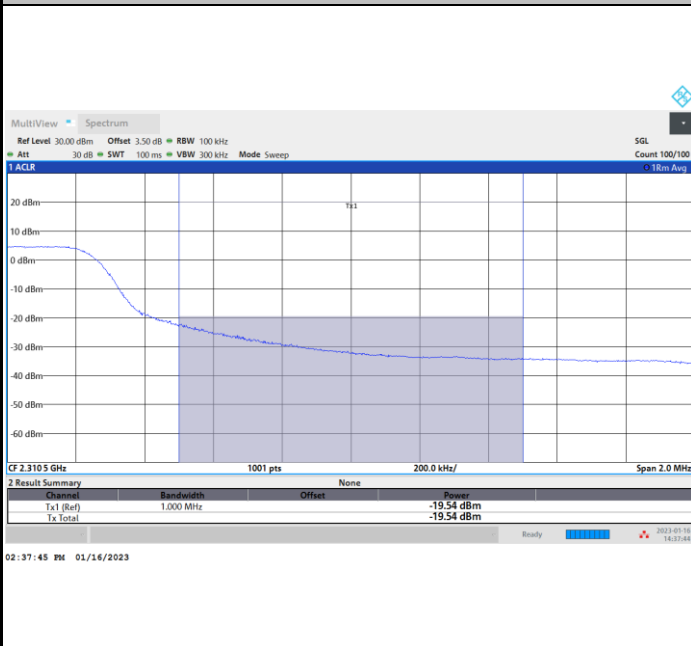


03:25:23 PM 01/16/2023



Lowest Band Edge / Full RB / Upper zoom in

Highest Band Edge / Full RB / Upper zoom in

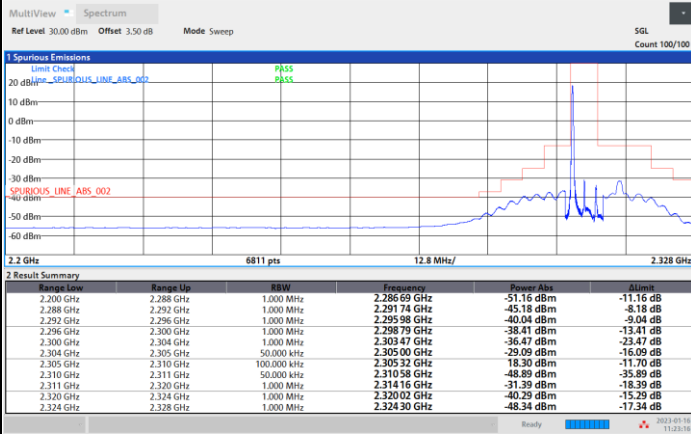




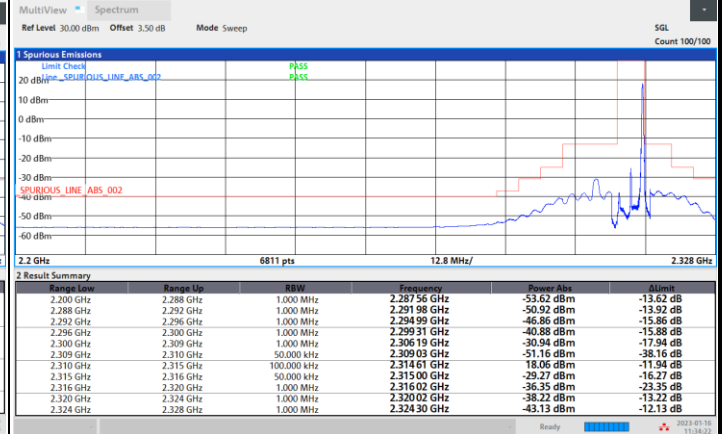
FR1 n30 / 5MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



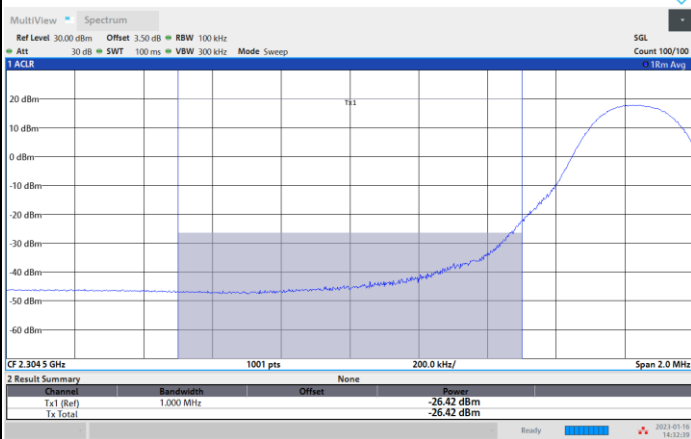
11:23:16 AM 01/16/2023



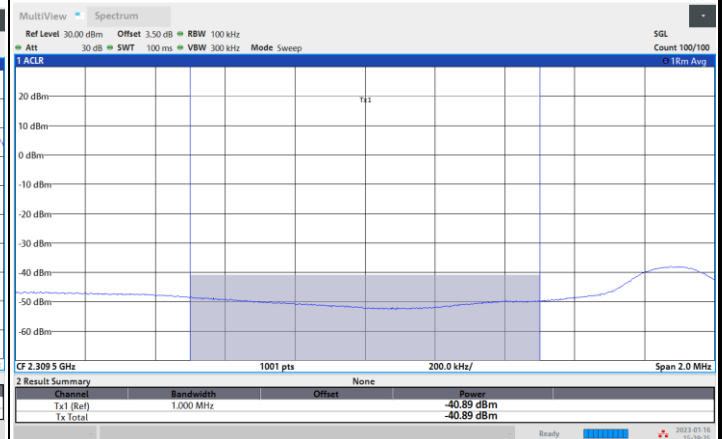
11:34:23 AM 01/16/2023

Lowest Band Edge / 1 RB / Lower zoom in

Highest Band Edge / 1 RB / Lower zoom in



02:32:39 PM 01/16/2023

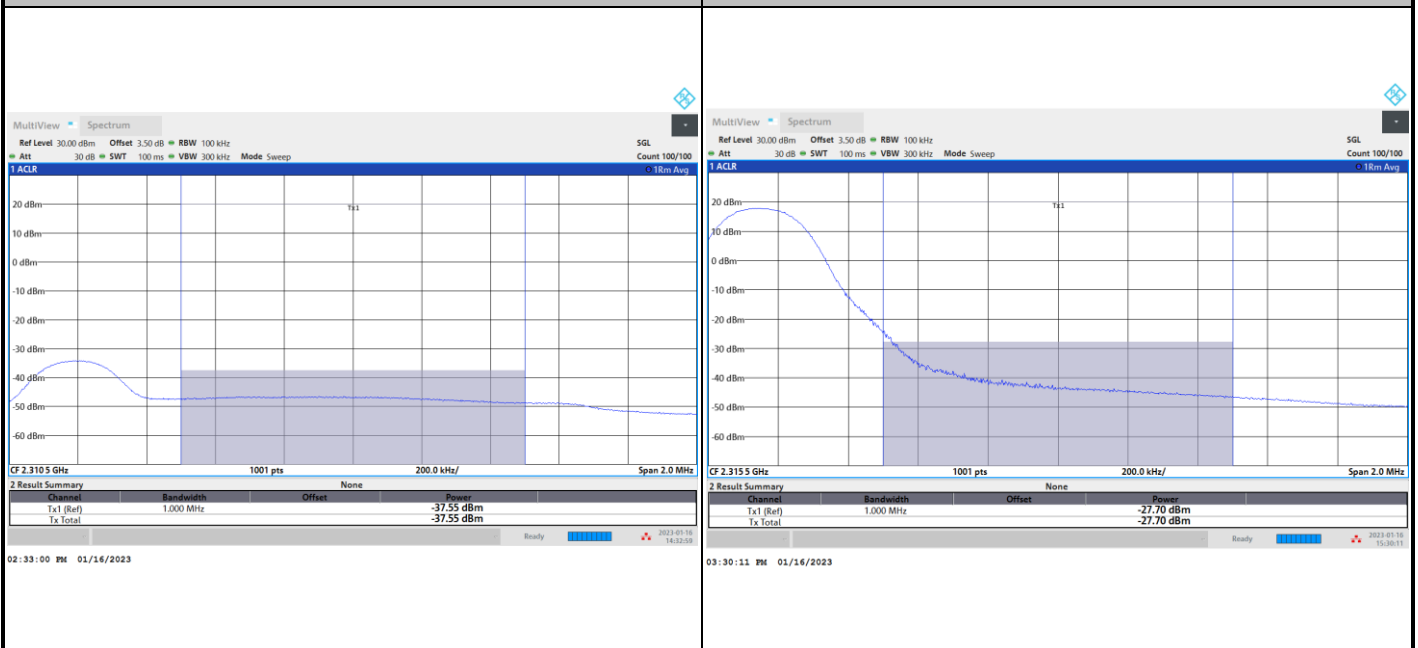


03:29:26 PM 01/16/2023



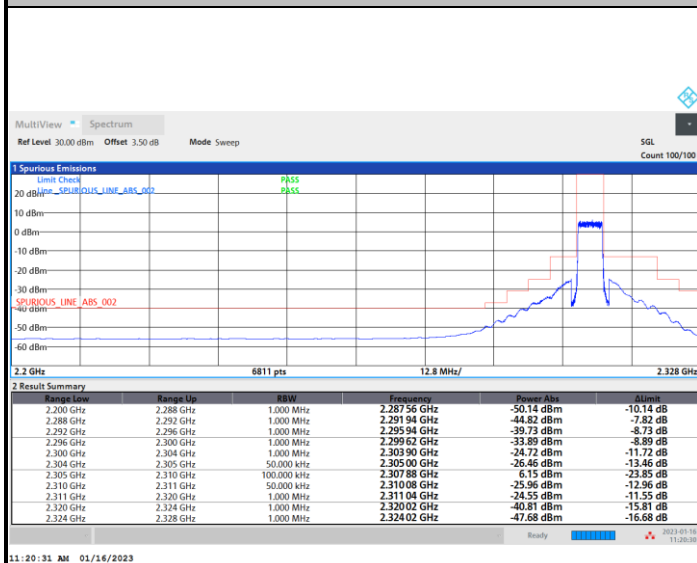
Lowest Band Edge / 1 RB / Upper zoom in

Highest Band Edge / 1 RB / Upper zoom in

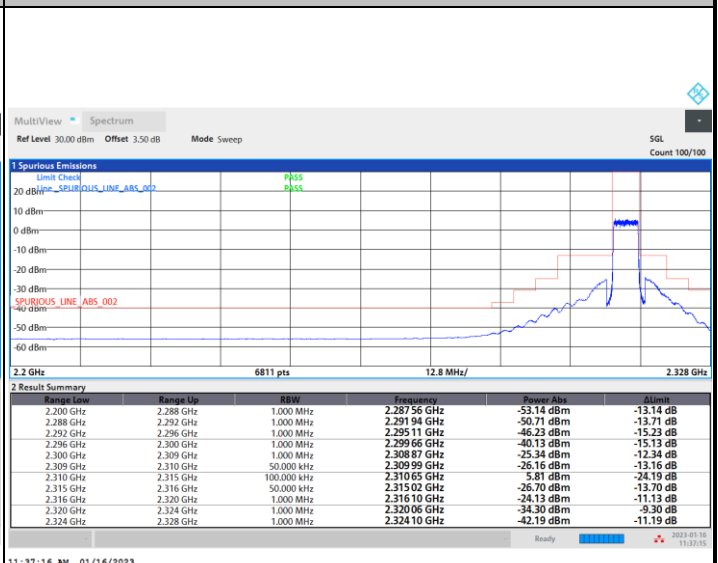




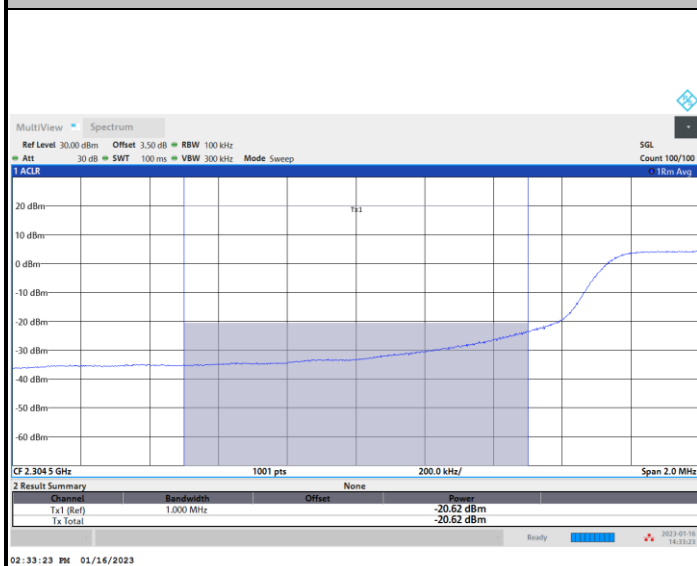
Lowest Band Edge / Full RB



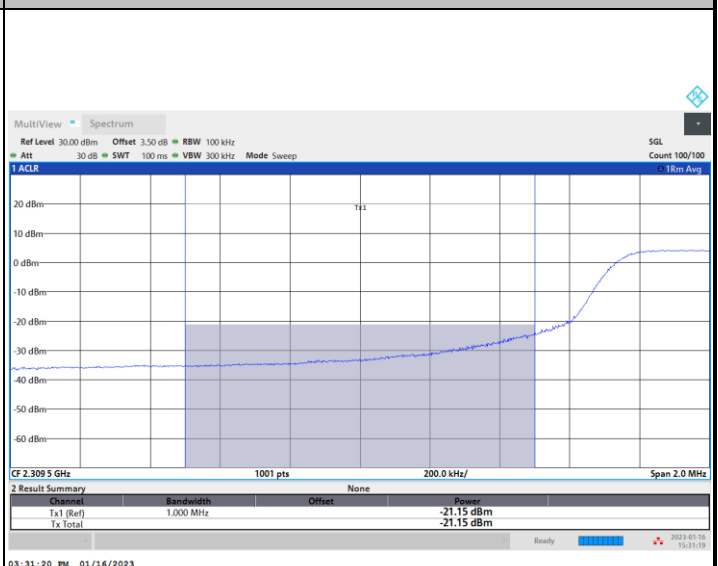
Highest Band Edge / Full RB



Lowest Band Edge / Full RB / Lower zoom in



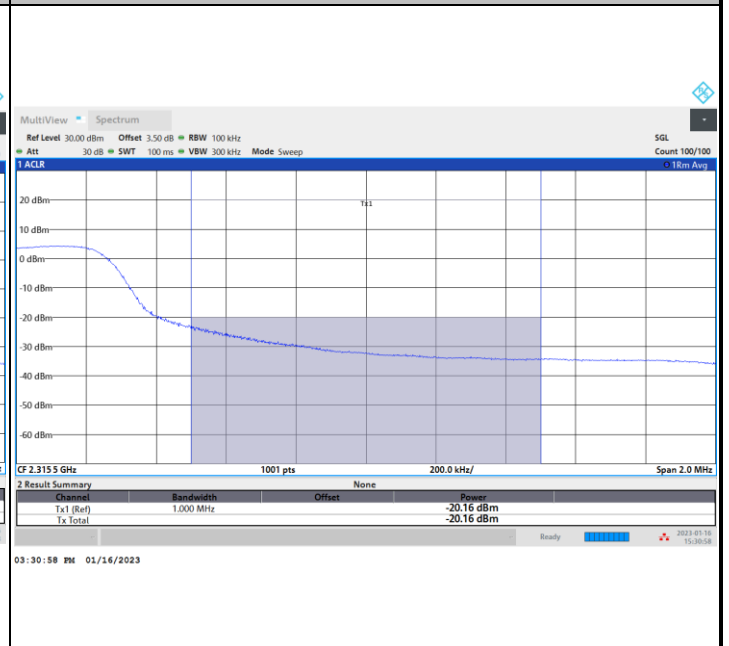
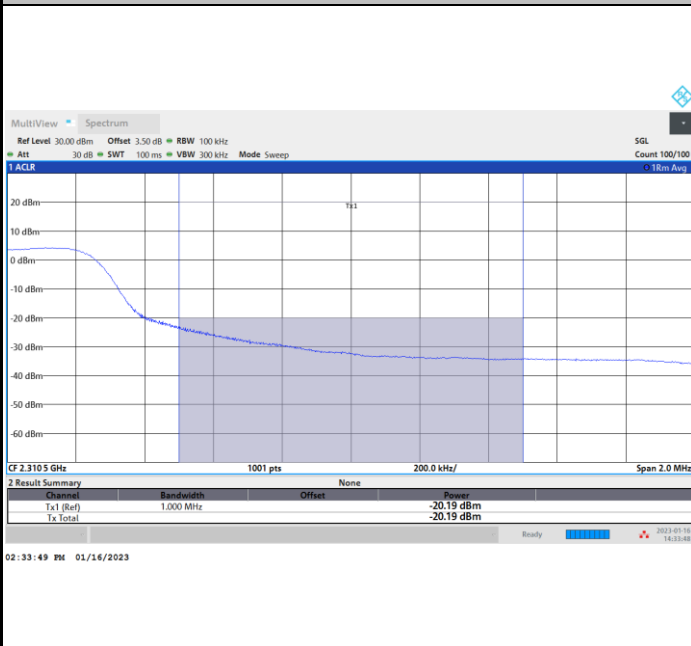
Highest Band Edge / Full RB / Lower zoom in





Lowest Band Edge / Full RB / Upper zoom in

Highest Band Edge / Full RB / Upper zoom in

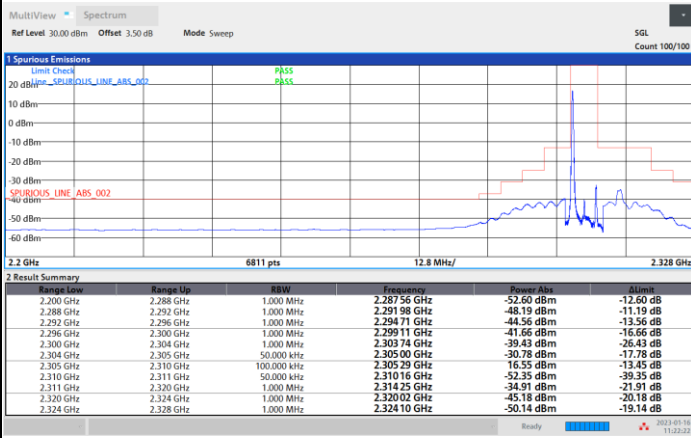




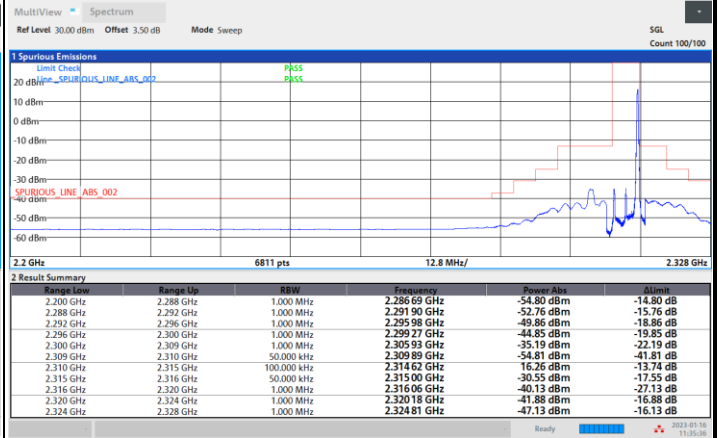
FR1 n30 / 5MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



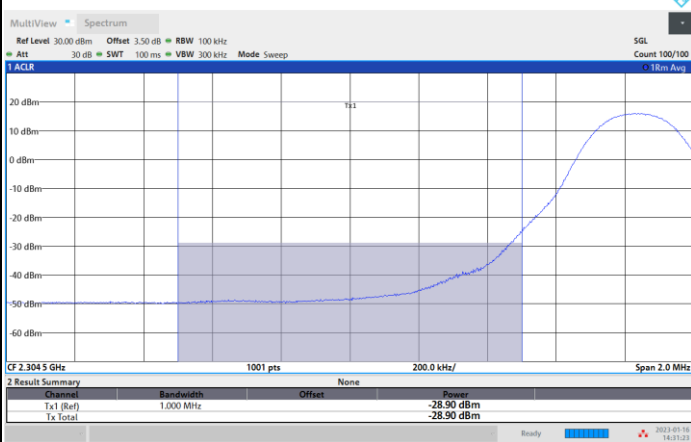
11:22:22 AM 01/16/2023



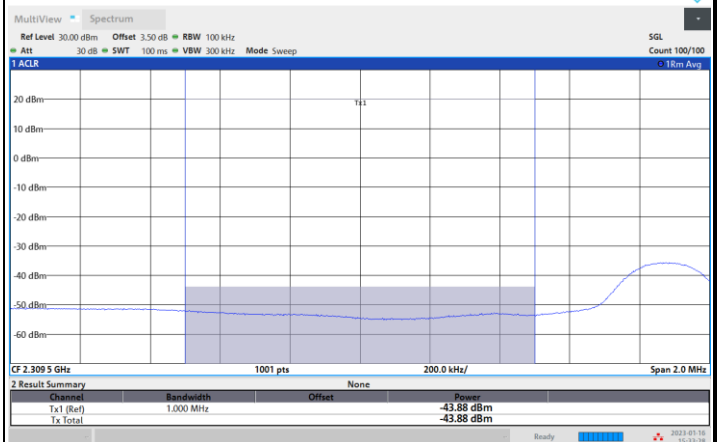
11:35:37 AM 01/16/2023

Lowest Band Edge / 1 RB / Lower zoom in

Highest Band Edge / 1 RB / Lower zoom in



02:31:23 PM 01/16/2023

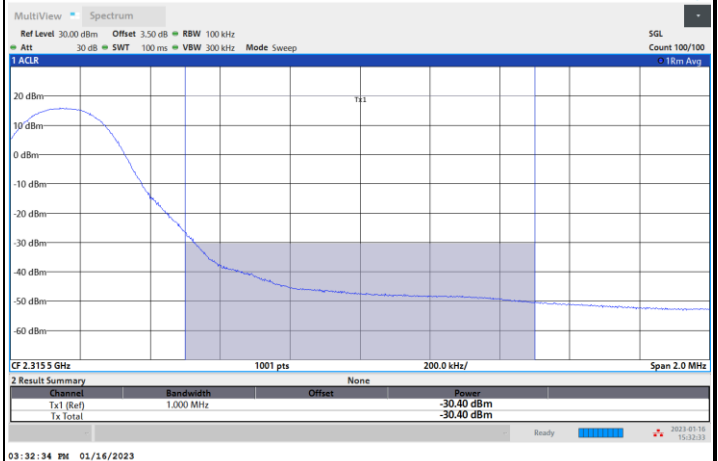
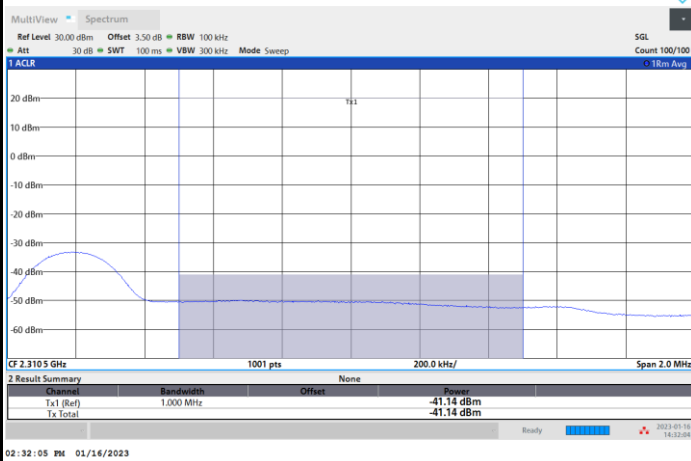


03:33:29 PM 01/16/2023



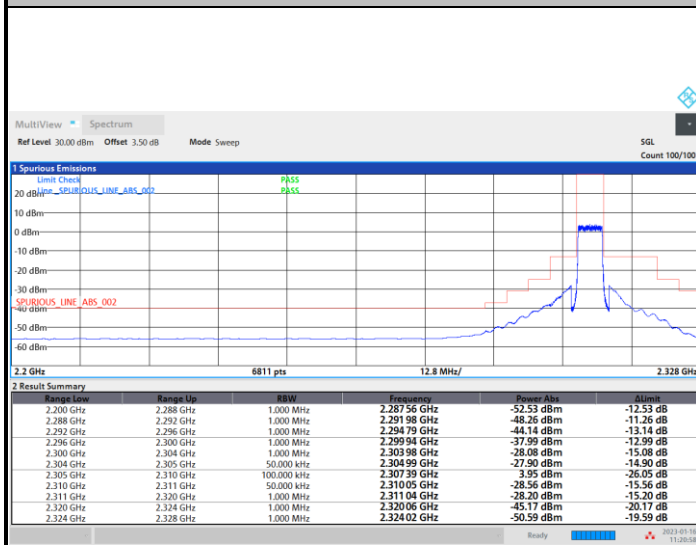
Lowest Band Edge / 1 RB / Upper zoom in

Highest Band Edge / 1 RB / Upper zoom in



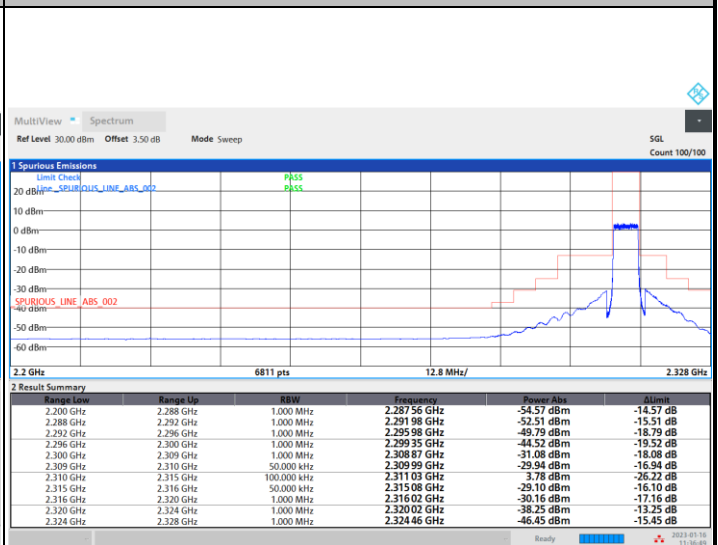


Lowest Band Edge / Full RB



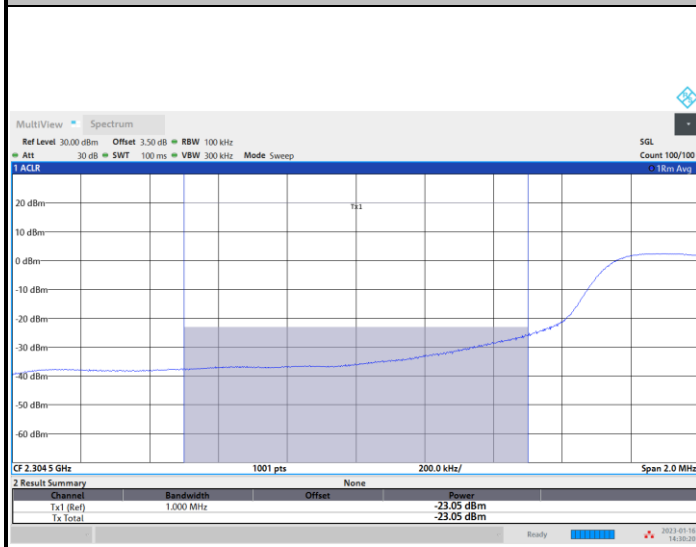
11:20:58 AM 01/16/2023

Highest Band Edge / Full RB



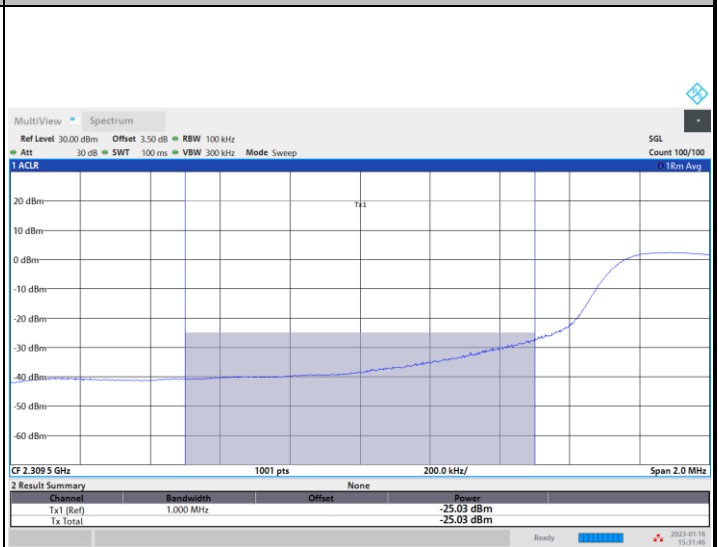
11:36:50 AM 01/16/2023

Lowest Band Edge / Full RB / Lower zoom in



02:30:20 PM 01/16/2023

Highest Band Edge / Full RB / Lower zoom in

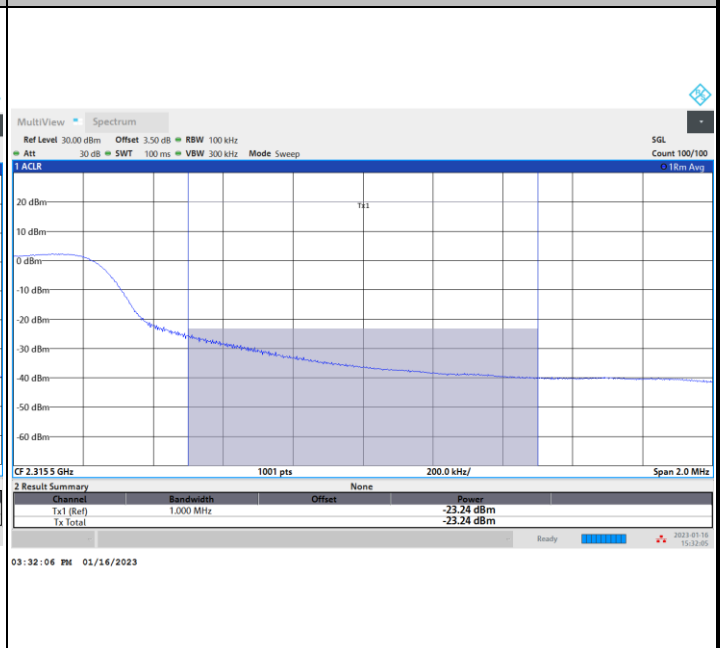
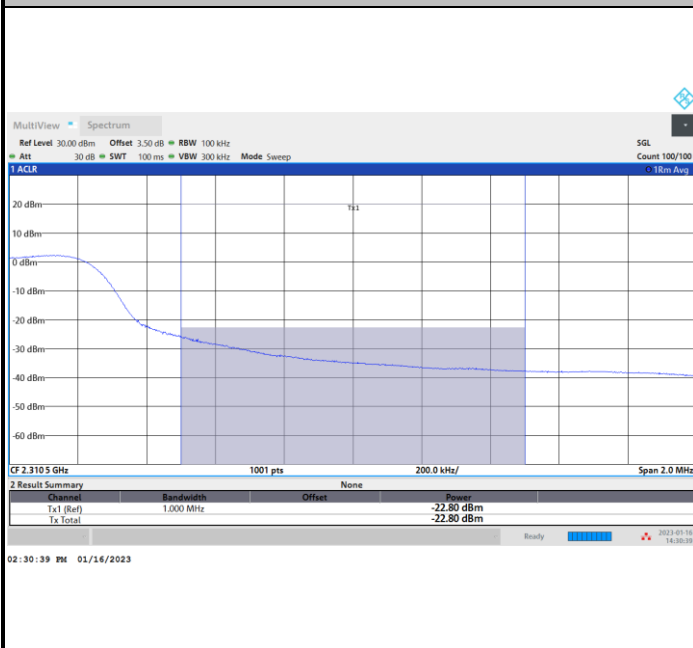


03:31:47 PM 01/16/2023



Lowest Band Edge / Full RB / Upper zoom in

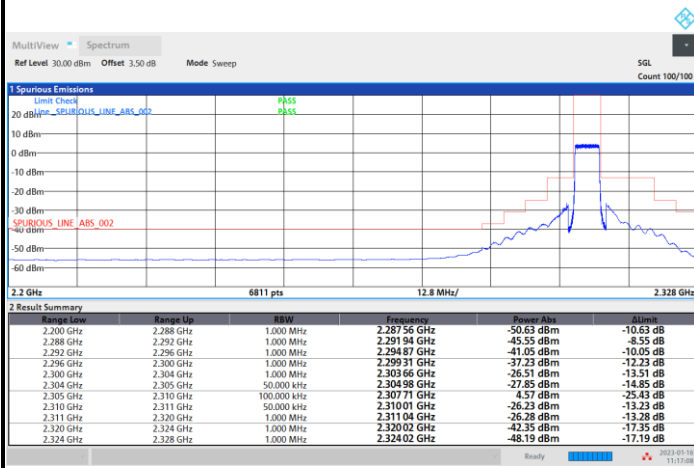
Highest Band Edge / Full RB / Upper zoom in





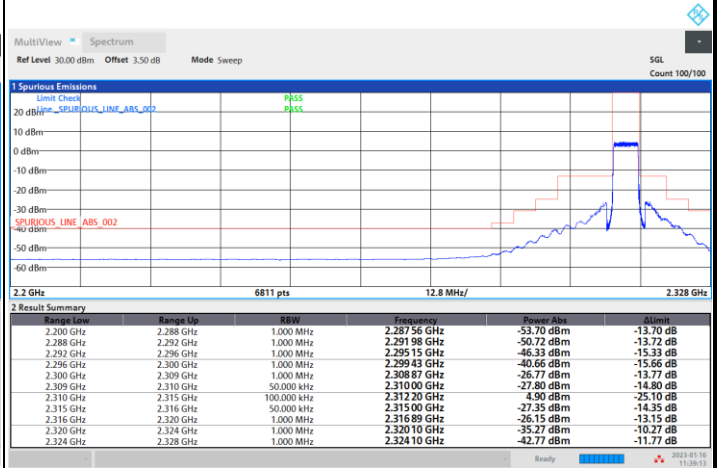
FR1 n30 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



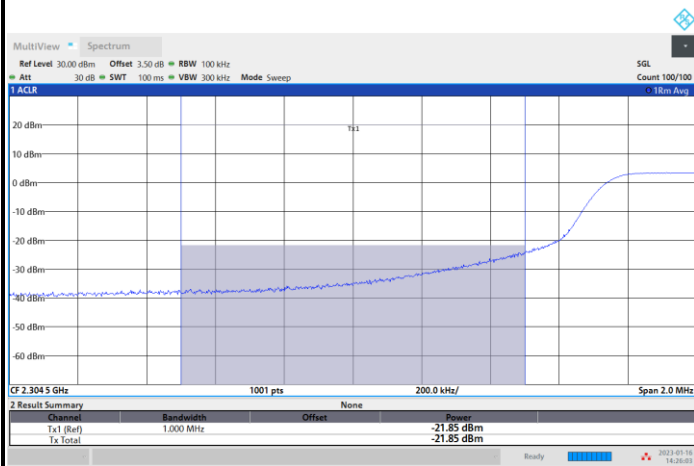
11:17:09 AM 01/16/2023

Highest Band Edge



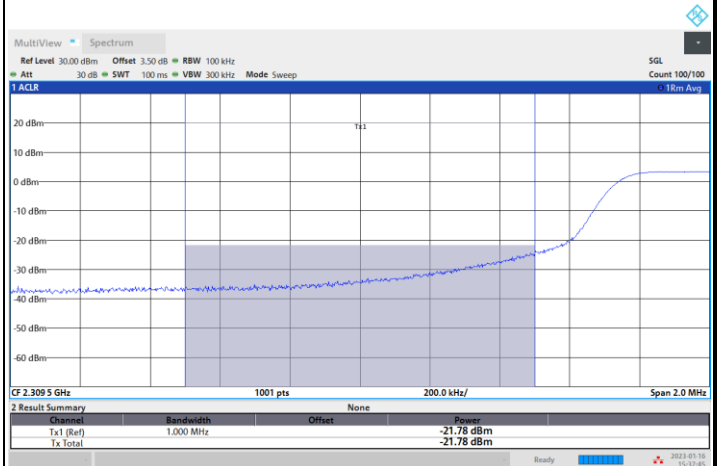
11:39:14 AM 01/16/2023

Lowest Band Edge / Full RB / Lower zoom in

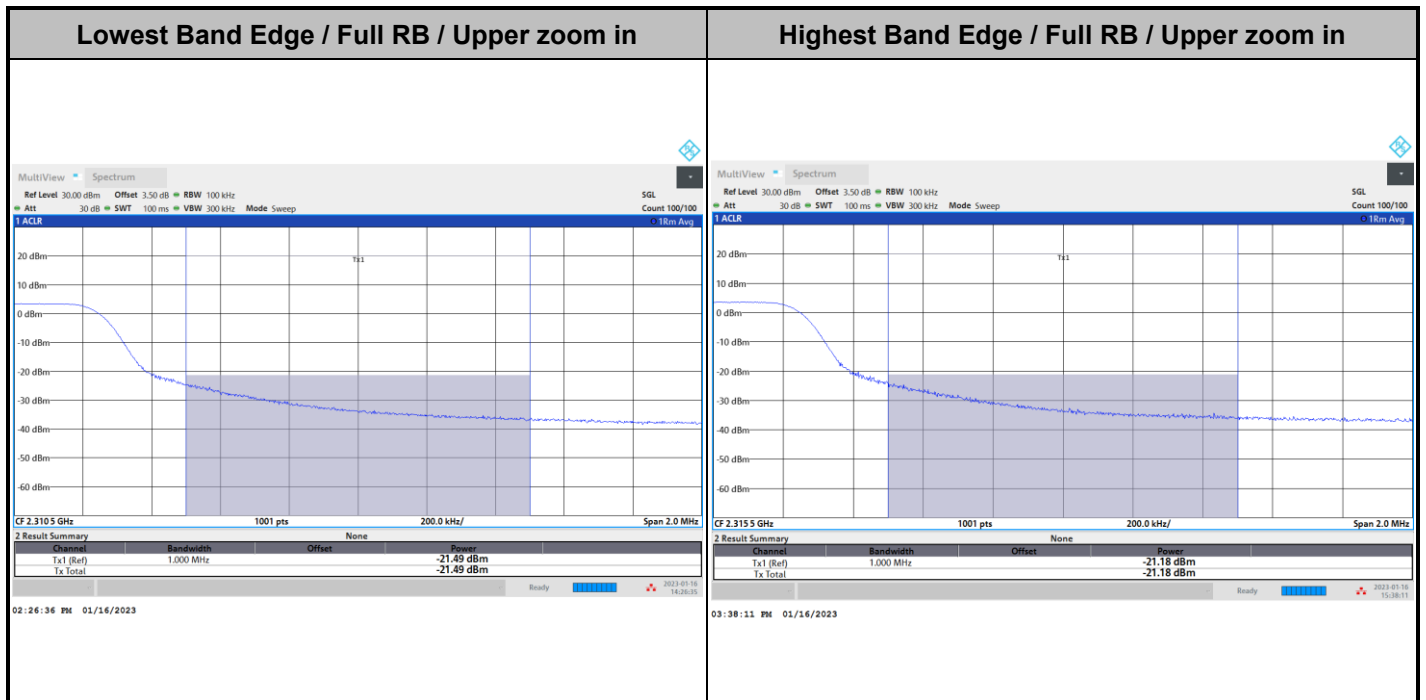


02:26:04 PM 01/16/2023

Highest Band Edge / Full RB / Lower zoom in



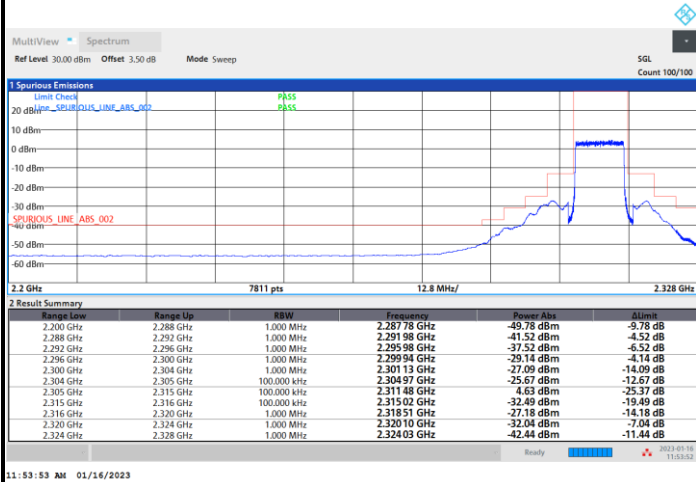
03:37:45 PM 01/16/2023



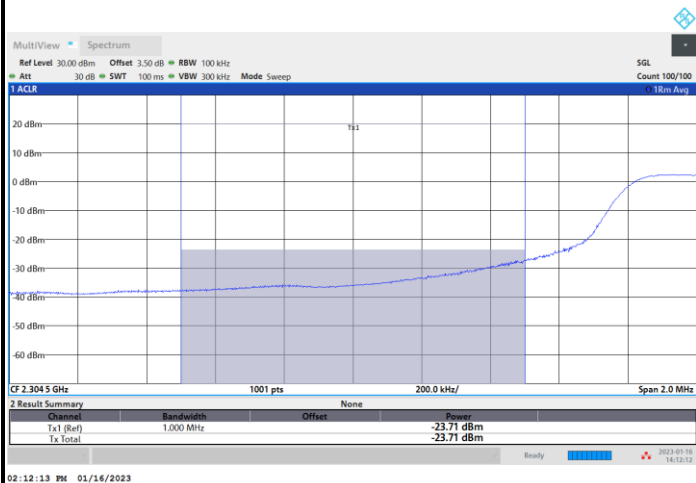


FR1 n30 / 10MHz / DFT-s-OFDM / PI/2 BPSK

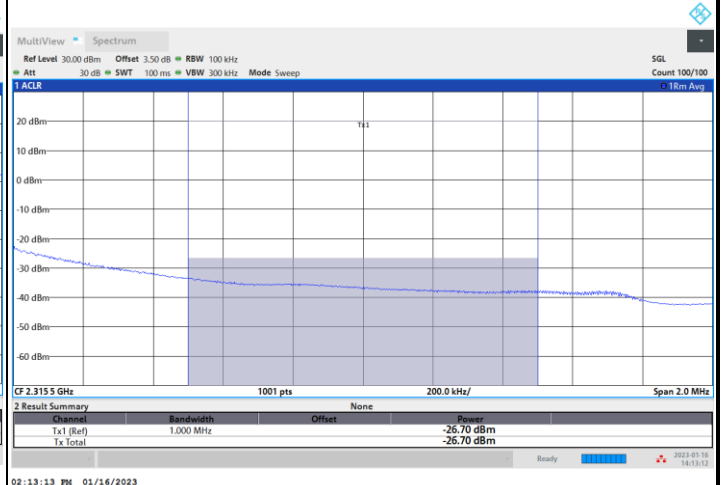
Middle Band Edge / Full RB



Middle Band Edge / Full RB / Lower zoom in



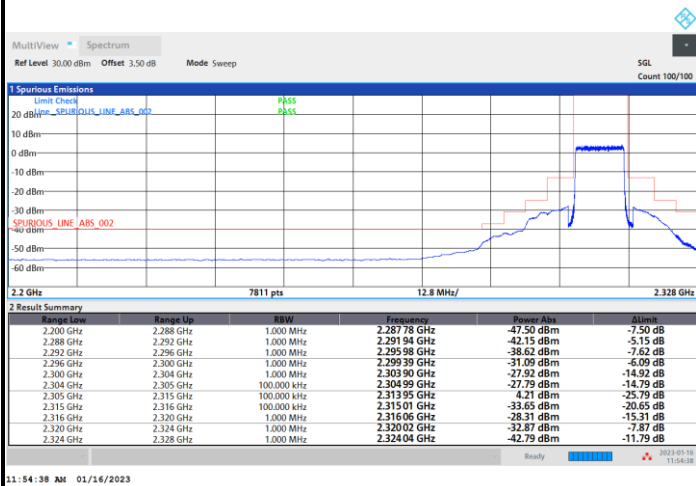
Middle Band Edge / Full RB / Upper zoom in



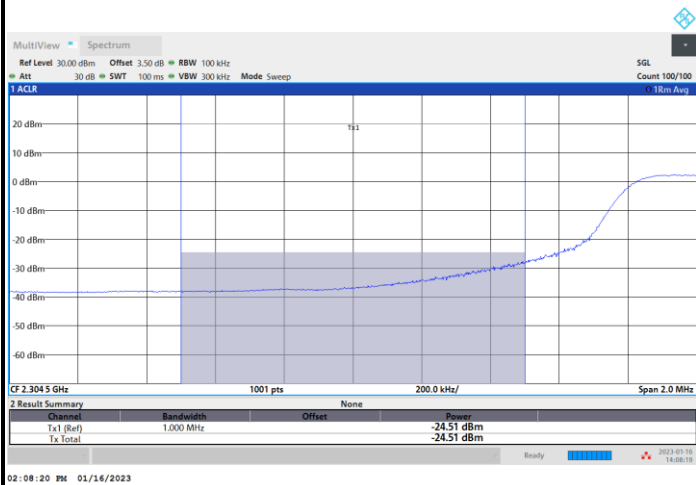


FR1 n30 / 10MHz / DFT-s-OFDM / QPSK

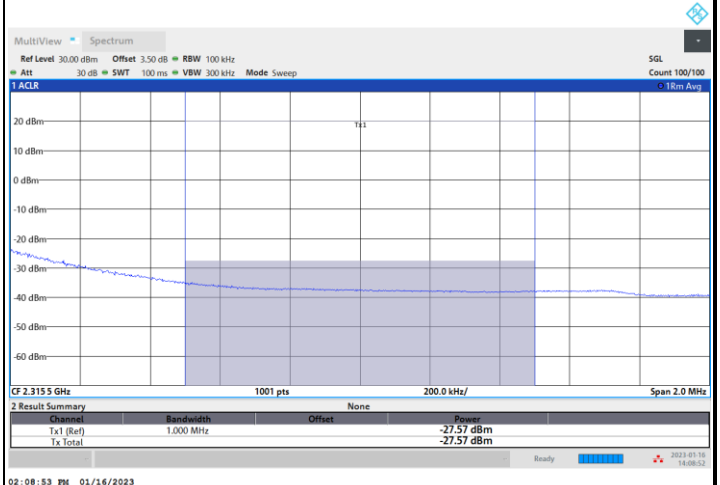
Middle Band Edge / Full RB



Middle Band Edge / Full RB / Lower zoom in



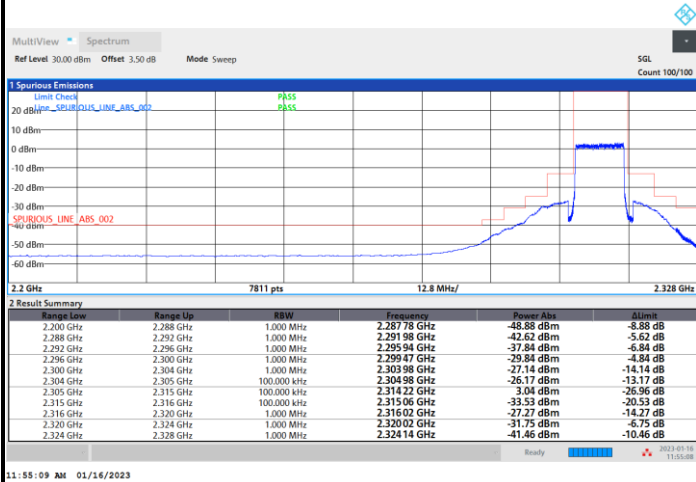
Middle Band Edge / Full RB / Upper zoom in



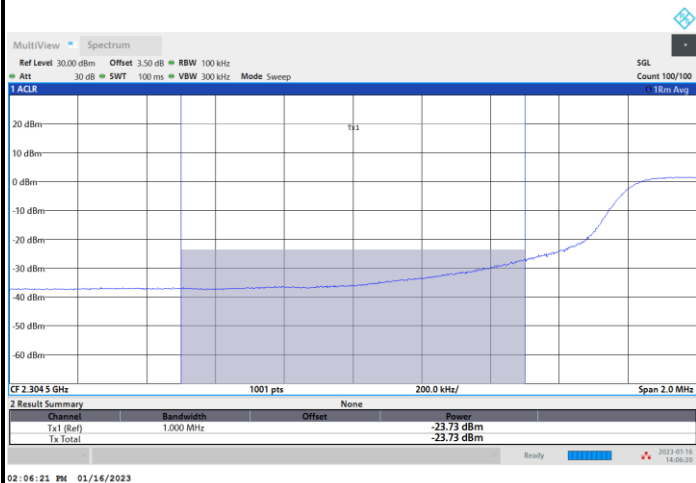


FR1 n30 / 10MHz / DFT-s-OFDM / 16QAM

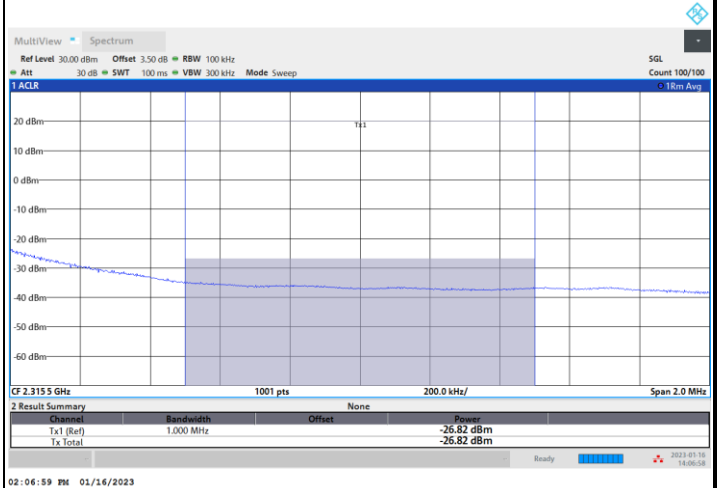
Middle Band Edge / Full RB



Middle Band Edge / Full RB / Lower zoom in



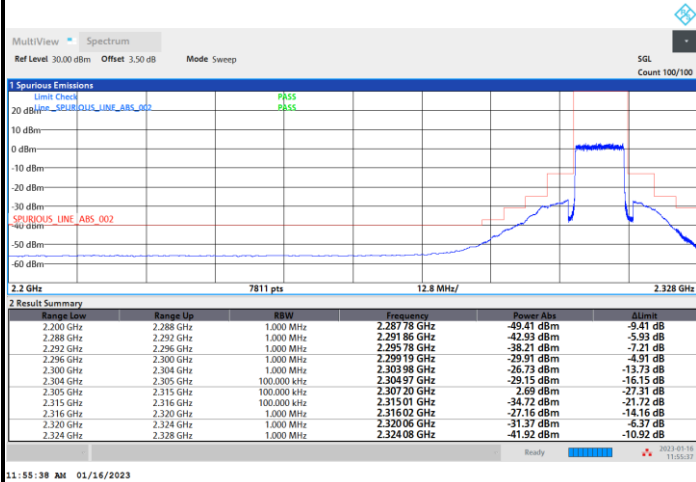
Middle Band Edge / Full RB / Upper zoom in



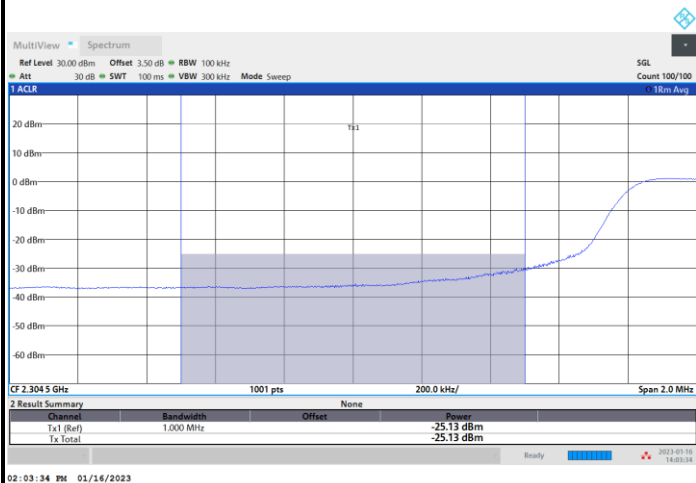


FR1 n30 / 10MHz / DFT-s-OFDM / 64QAM

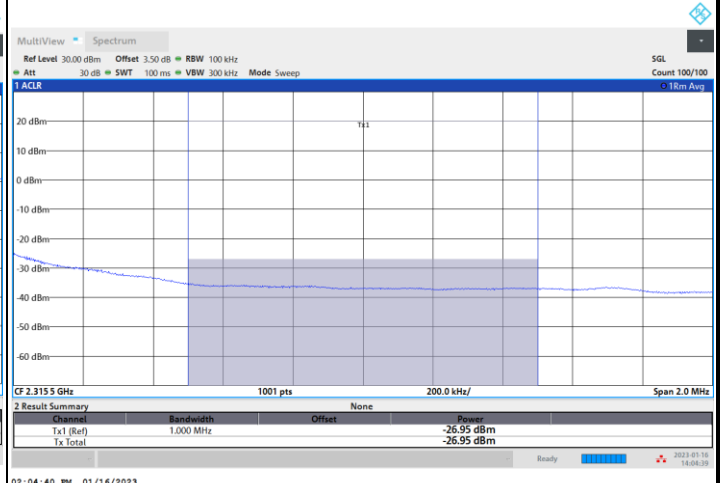
Middle Band Edge / Full RB



Middle Band Edge / Full RB / Lower zoom in



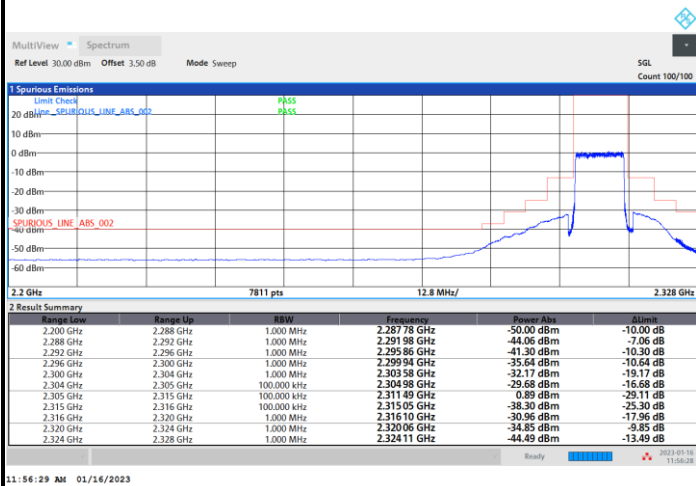
Middle Band Edge / Full RB / Upper zoom in



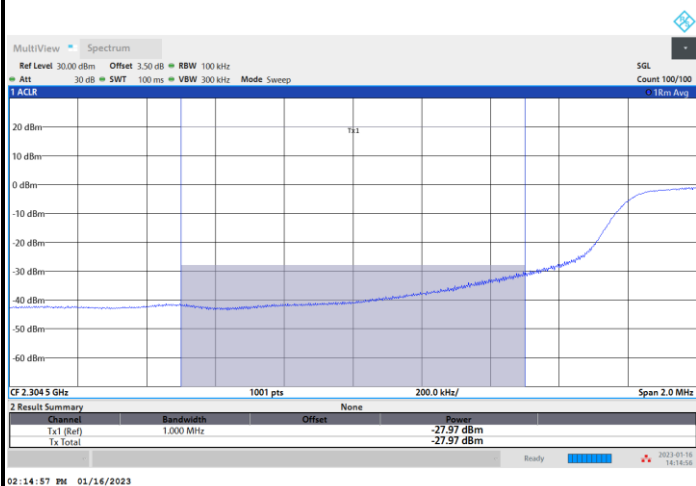


FR1 n30 / 10MHz / DFT-s-OFDM / 256QAM

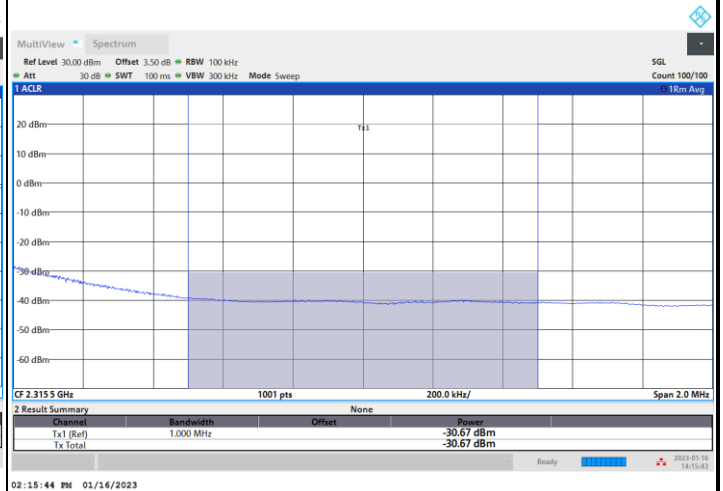
Middle Band Edge / Full RB



Middle Band Edge / Full RB / Lower zoom in



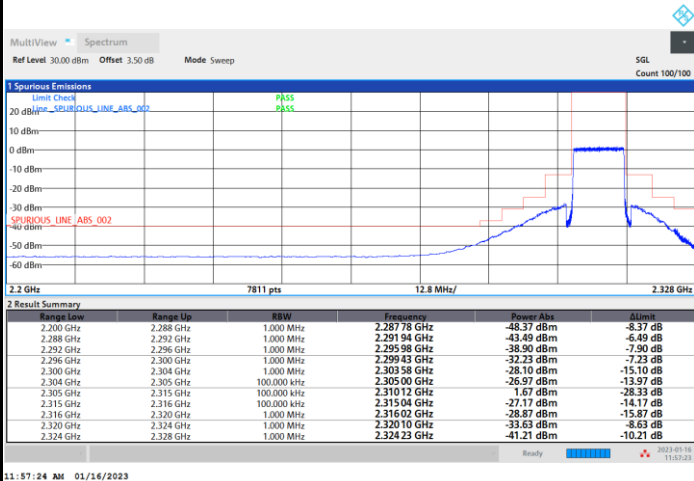
Middle Band Edge / Full RB / Upper zoom in



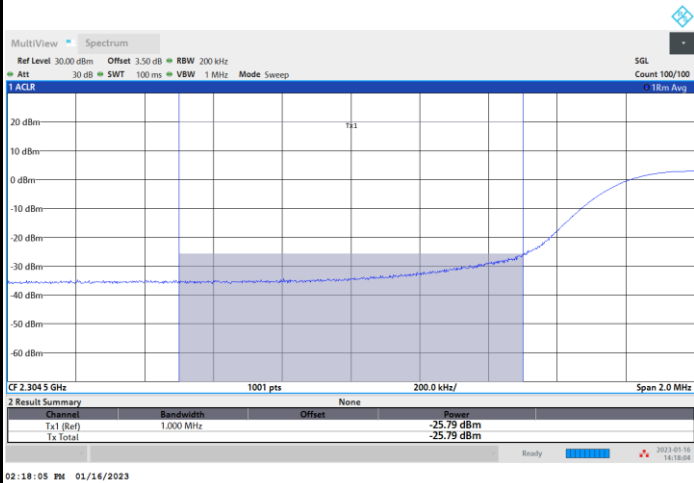


FR1 n30 / 10MHz / CP OFDM / QPSK / Full RB

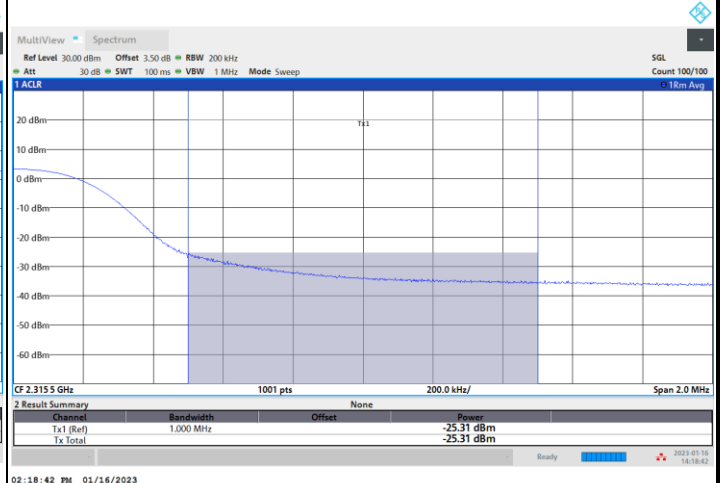
Middle Band Edge / Full RB



Middle Band Edge / Full RB / Lower zoom in



Middle Band Edge / Full RB / Upper zoom in

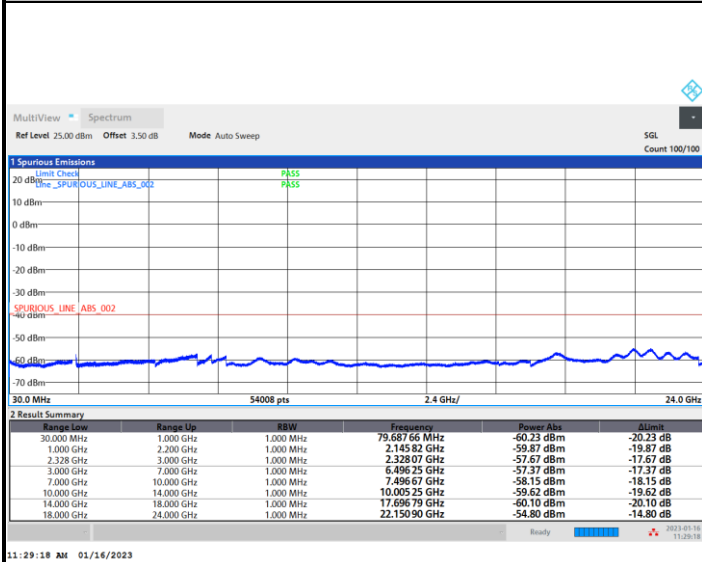




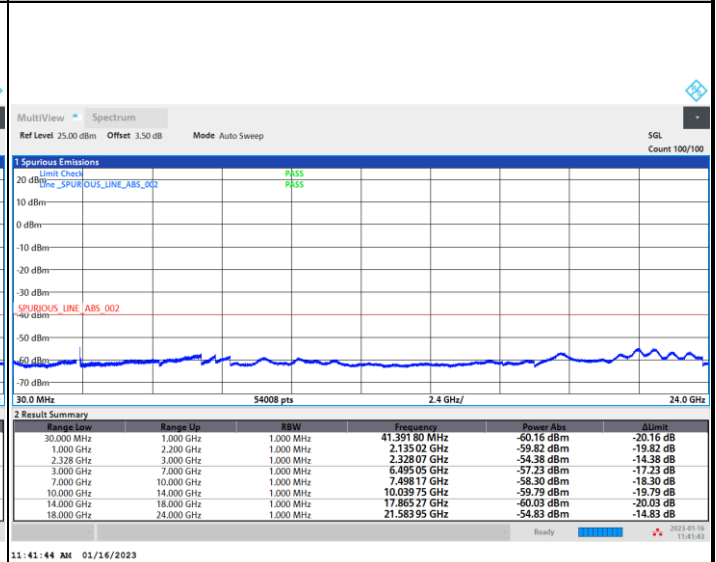
Conducted Spurious Emission

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

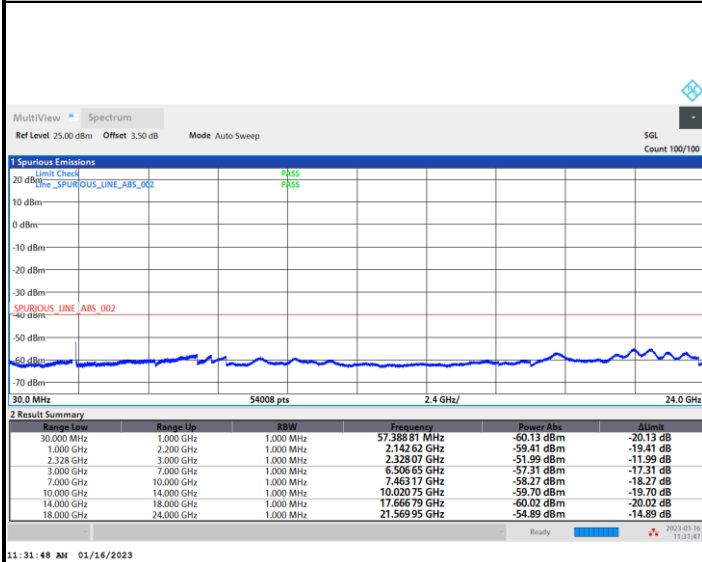
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n30 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0009	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0071	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0048	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0068	
-20	Normal Voltage	0.0059	
-30	Normal Voltage	0.0069	
20	Maximum Voltage	0.0073	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0069	

Note:

1. Normal Voltage = 3.88 V. ; Battery End Point (BEP) = 3.6 V. ; Maximum Voltage = 4.4 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

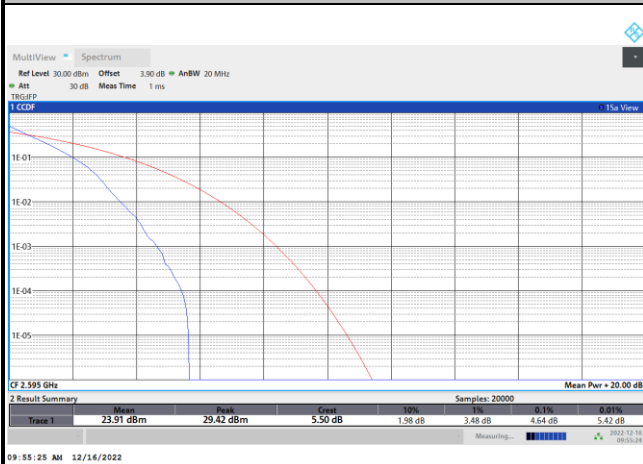
**FR1 n38****Peak-to-Average Ratio**

Mode	FR1 n38 / 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	4.64	5.74	6.20	6.20	PASS
Mode	FR1 n38 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.88				PASS

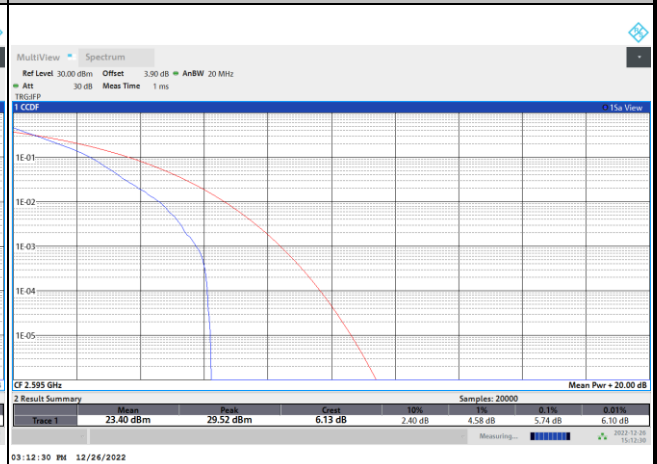


FR1 n38 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

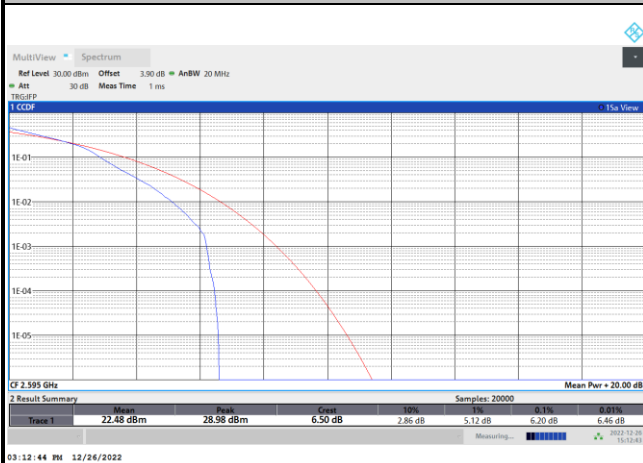
PI/2 BPSK



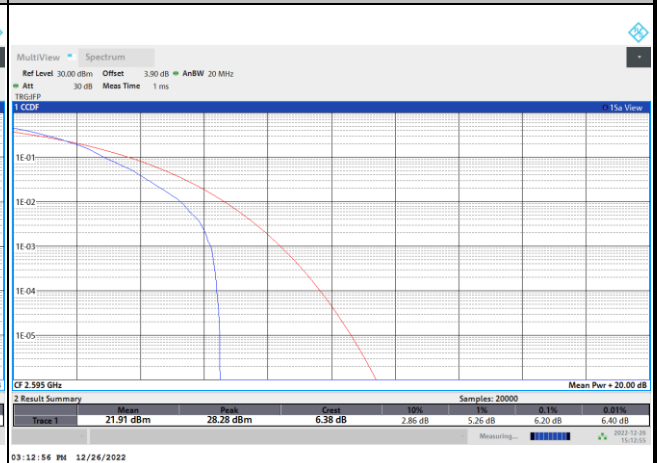
QPSK



16QAM



64QAM



256QAM



**26dB Bandwidth**

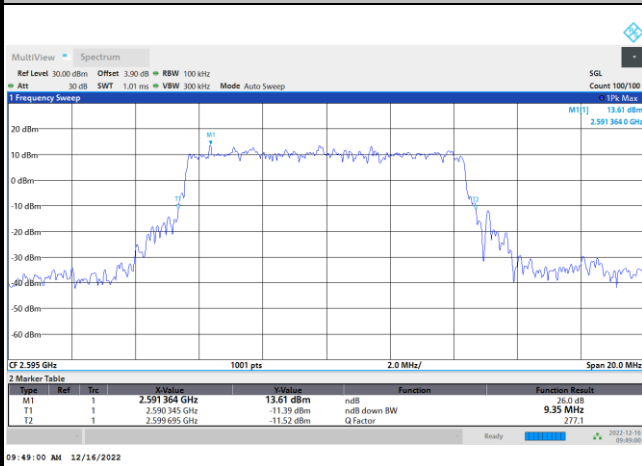
Mode	FR1 n38 : 26dB BW(MHz) / DFT-S OFDM							
BW	10MHz	15MHz	20MHz					
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK					
Middle CH	9.35	14.03	18.74					

Mode	FR1 n38 : 26dB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	8.93	9.11	14.60	14.66	19.34	19.06		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	9.23	9.19	14.33	14.39	19.26	19.26		



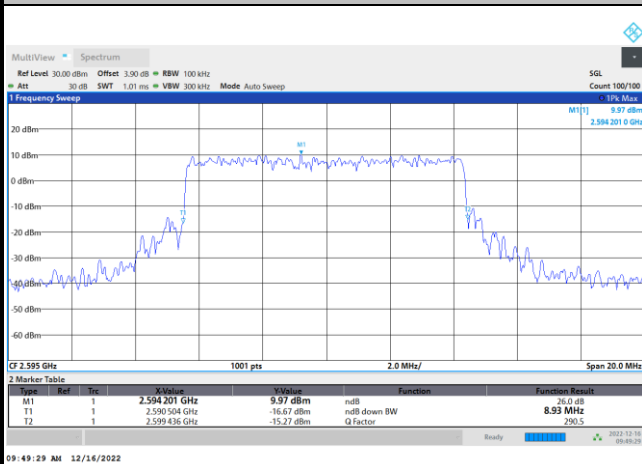
FR1 n38 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

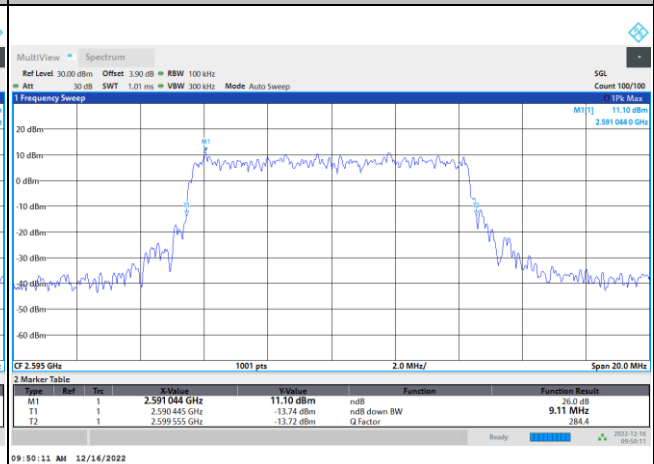


FR1 n38 / 10MHz / CP OFDM / Middle Channel / Full RB

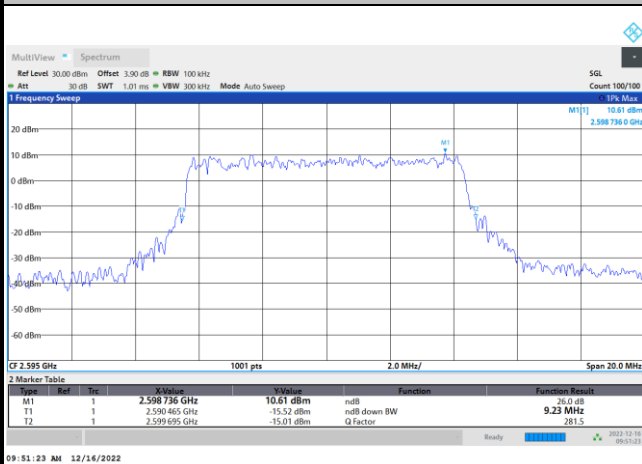
QPSK



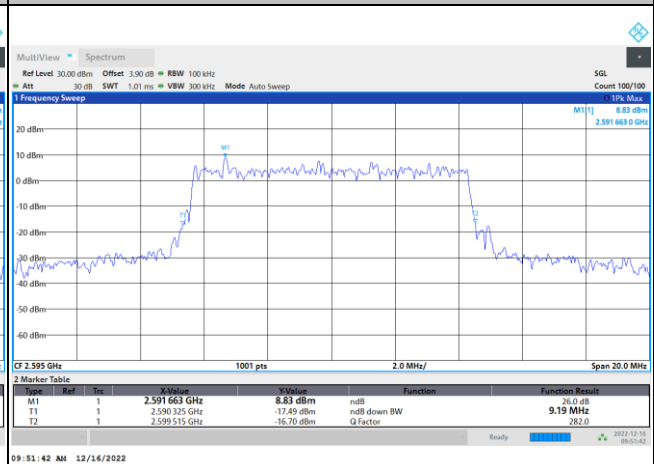
16QAM



64QAM



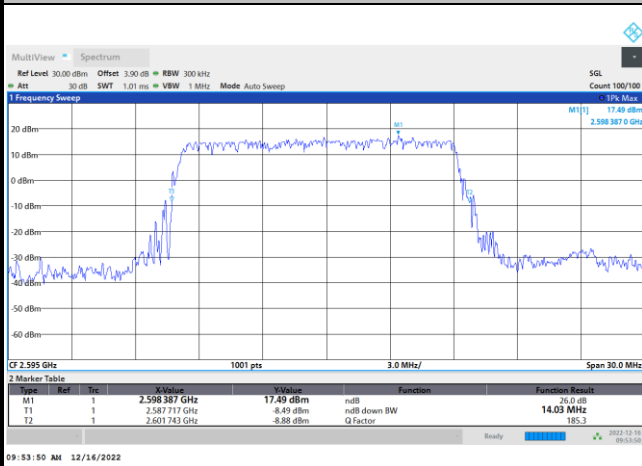
256QAM





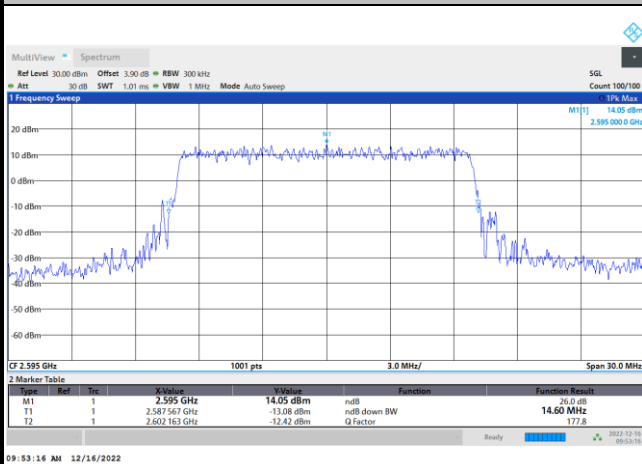
FR1 n38 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

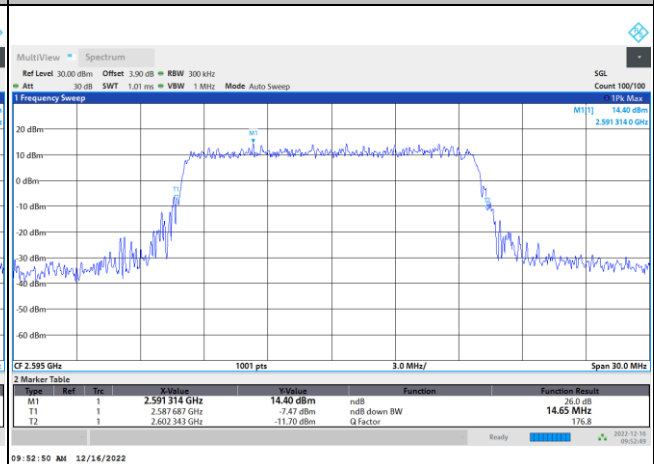


FR1 n38 / 15MHz / CP OFDM / Middle Channel / Full RB

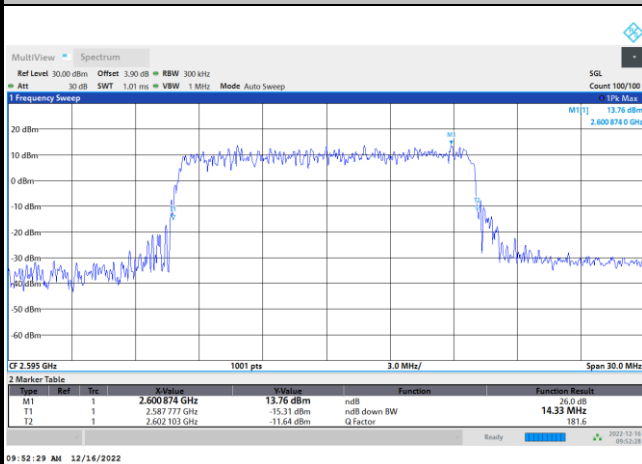
QPSK



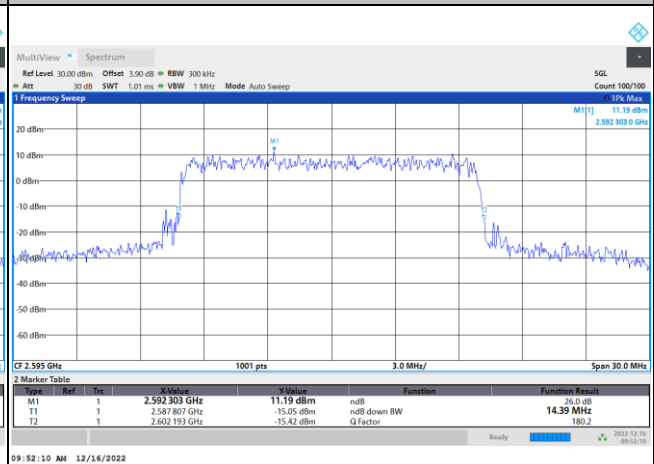
16QAM



64QAM

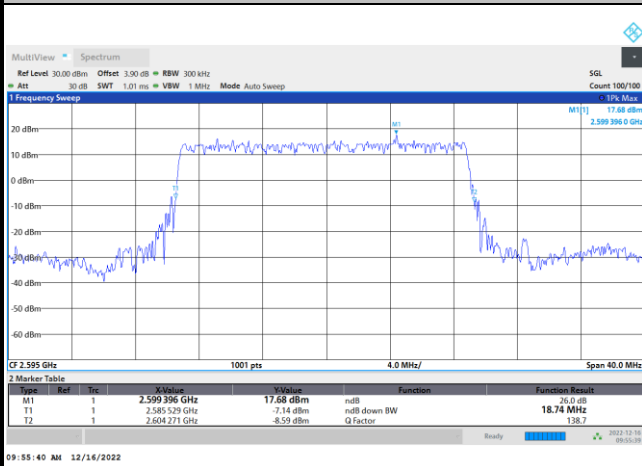


256QAM



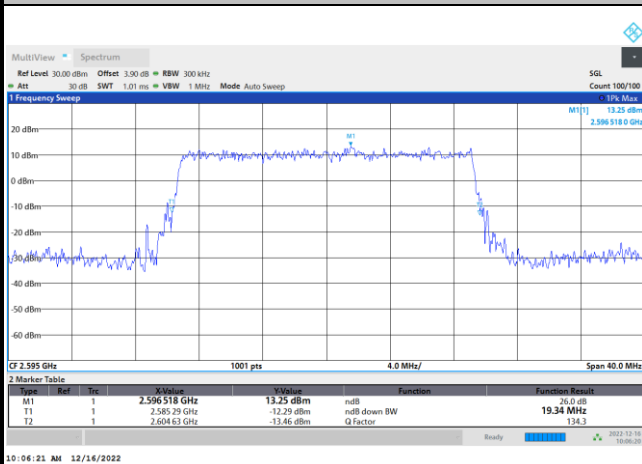
FR1 n38 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

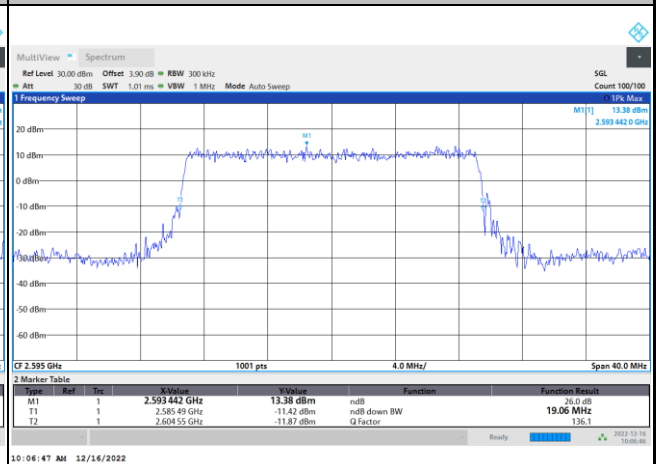


FR1 n38 / 20MHz / CP OFDM / Middle Channel / Full RB

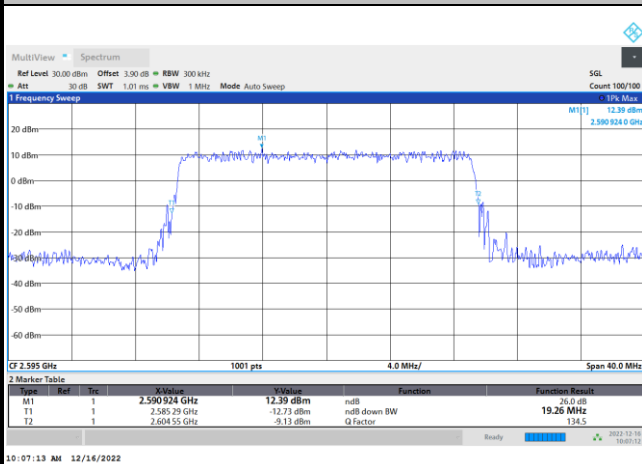
QPSK



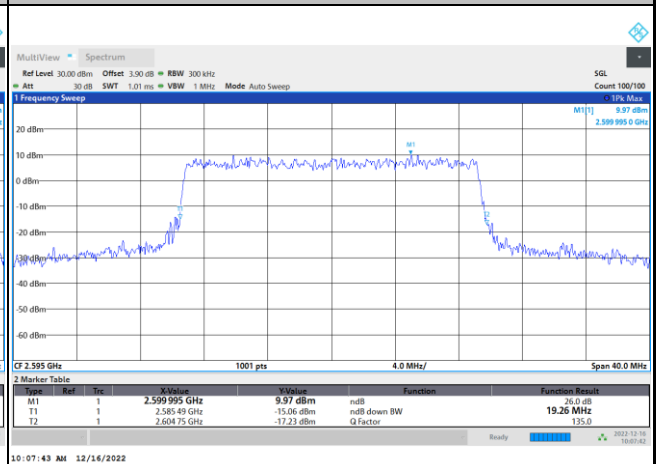
16QAM



64QAM



256QAM



**Occupied Bandwidth**

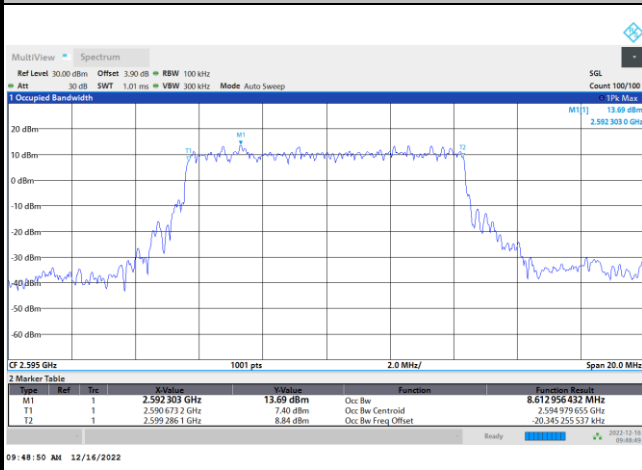
Mode	FR1 n38 : OB BW(MHz) / DFT-S OFDM							
BW	10MHz	15MHz	20MHz					
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK					
Middle CH	8.61	12.92	17.90					

Mode	FR1 n38 : OB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	8.56	8.55	13.61	13.61	18.27	18.26		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	8.59	8.57	13.57	13.61	18.24	18.29		



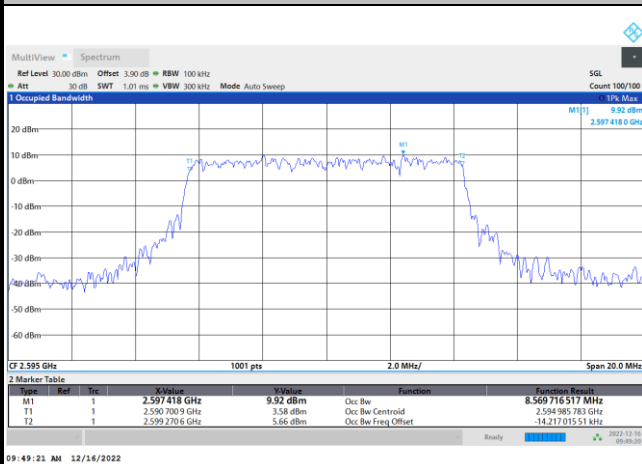
FR1 n38 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

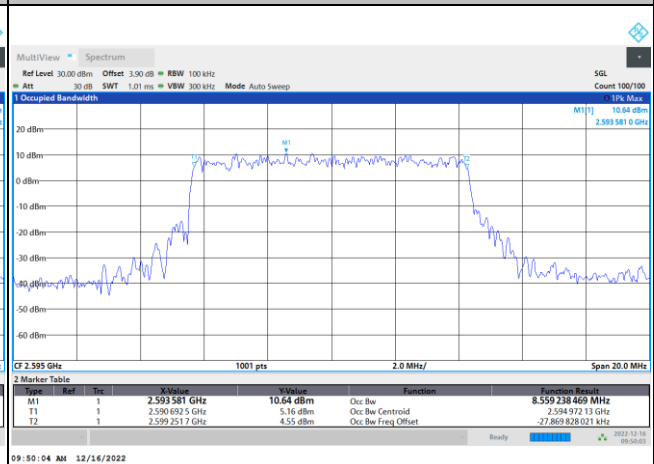


FR1 n38 / 10MHz / CP OFDM / Middle Channel / Full RB

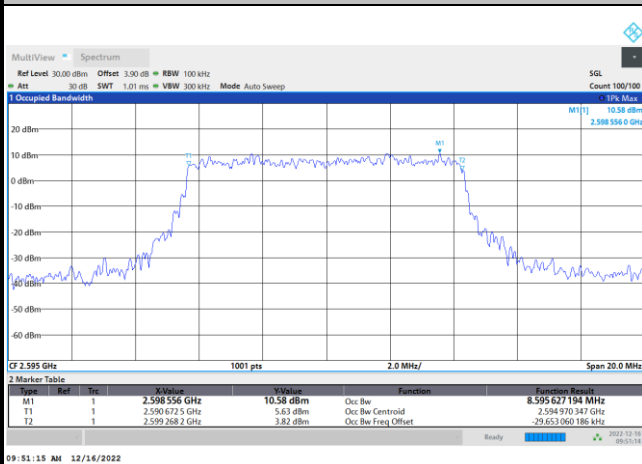
QPSK



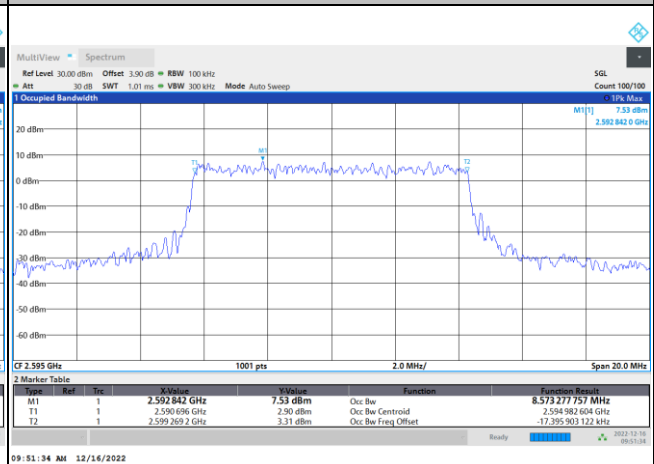
16QAM



64QAM

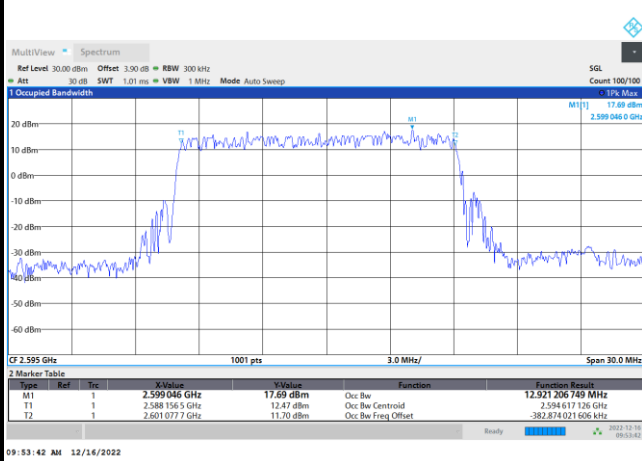


256QAM



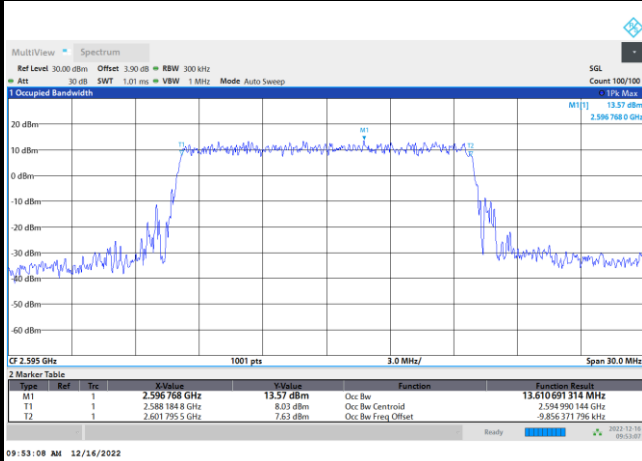
FR1 n38 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

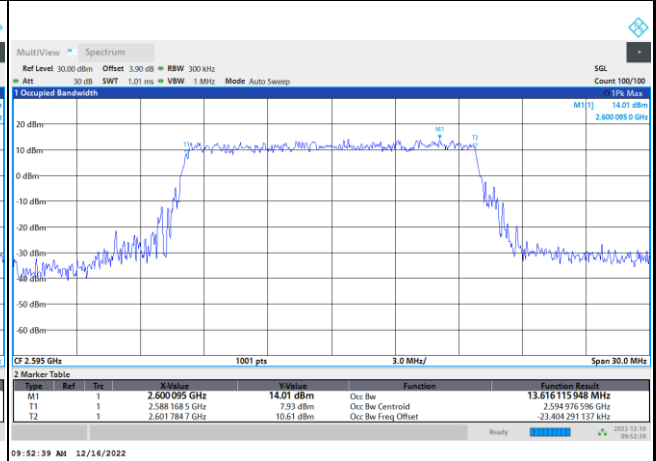


FR1 n38 / 15MHz / CP OFDM / Middle Channel / Full RB

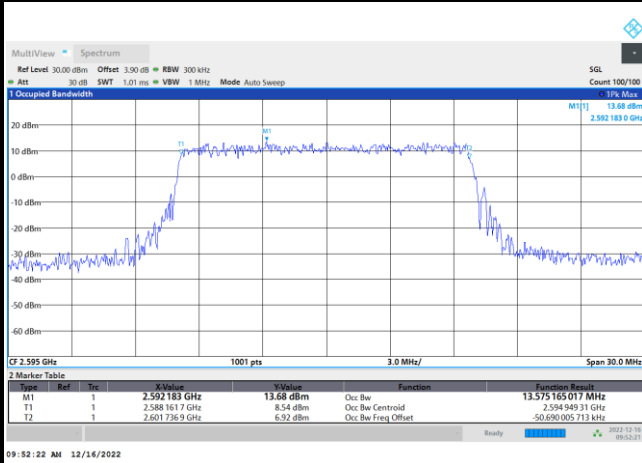
QPSK



16QAM



64QAM



256QAM

