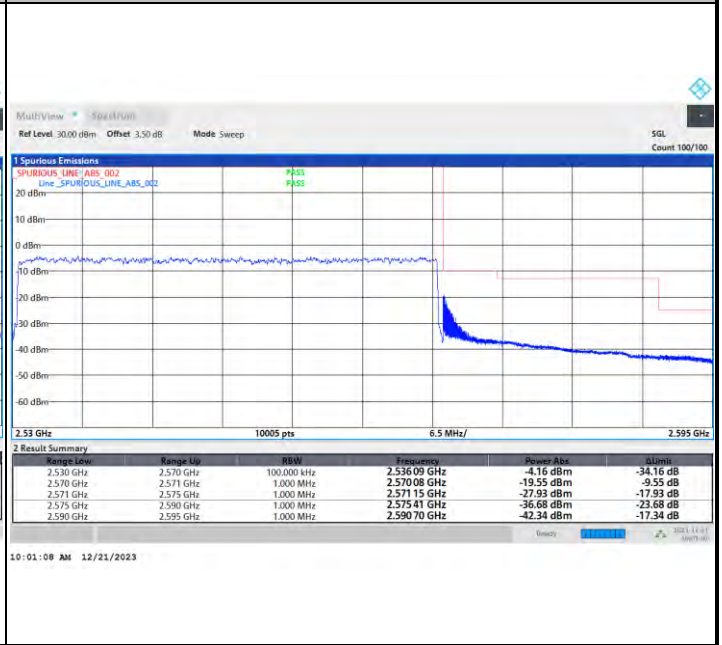
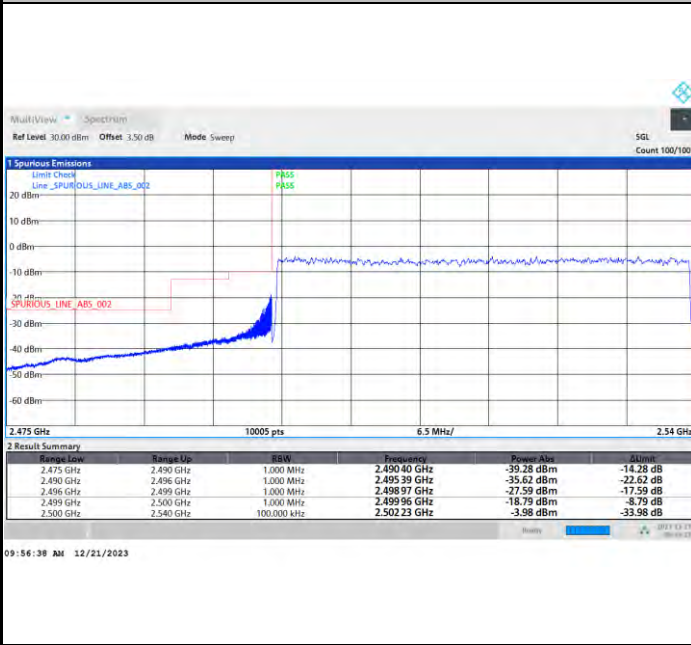




FR1 n7 / 40MHz / DFT-s-OFDM / 256QAM

Lowest Band Edge / Full RB

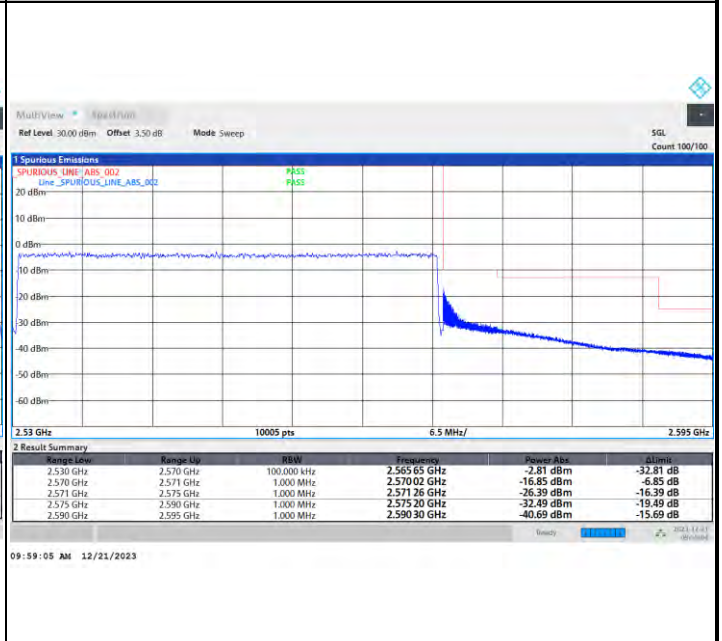
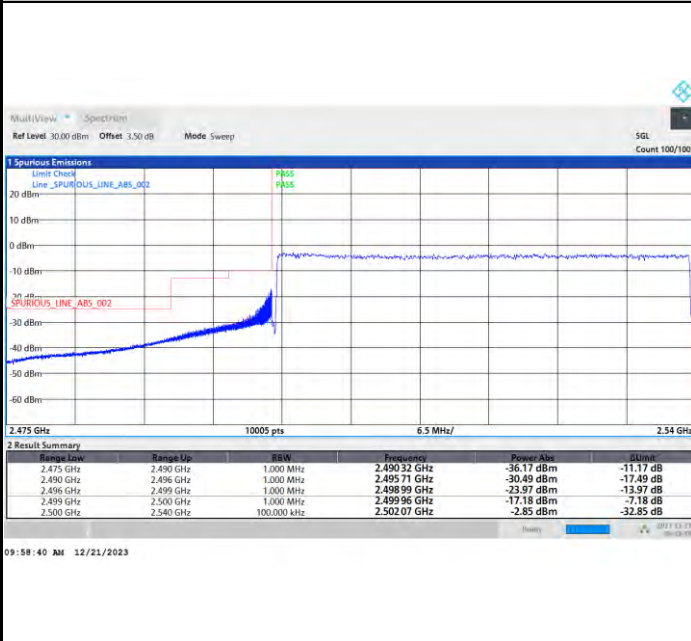
Highest Band Edge / Full RB



FR1 n7 / 40MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

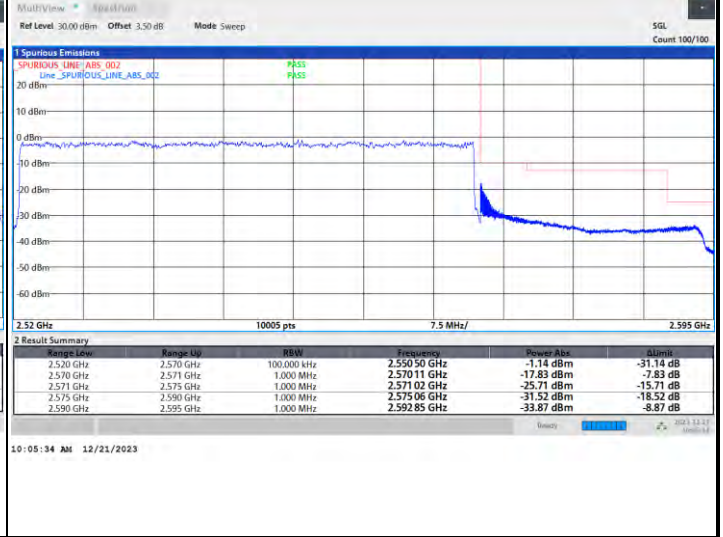




FR1 n7 / 50MHz / DFT-s-OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

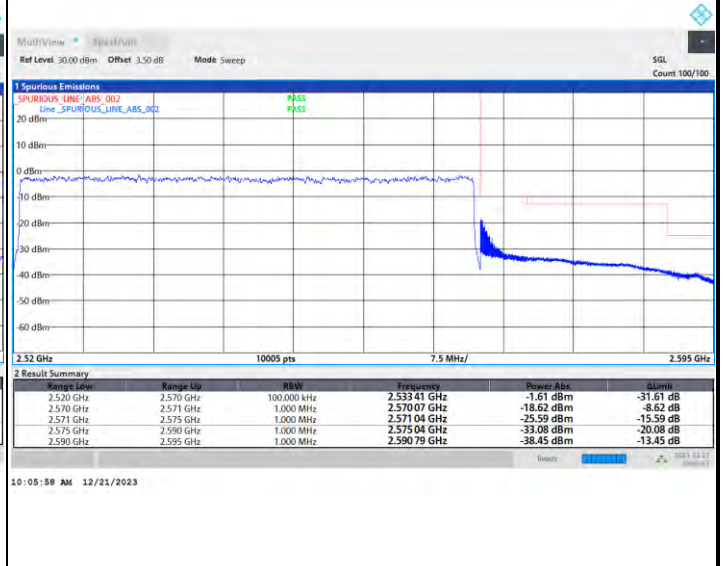
Highest Band Edge / Full RB



FR1 n7 / 50MHz / DFT-s-OFDM / QPSK

Lowest Band Edge / Full RB

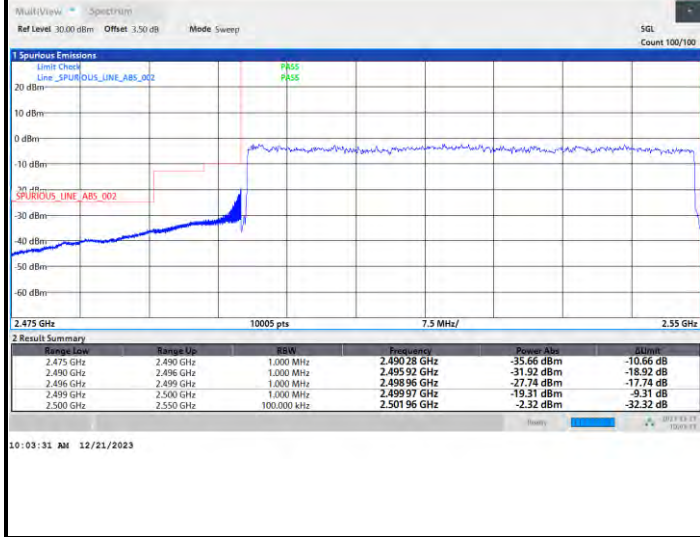
Highest Band Edge / Full RB



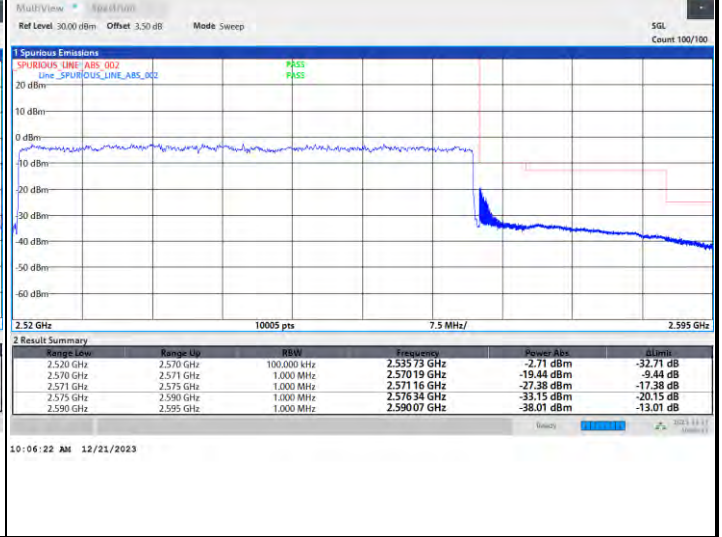


FR1 n7 / 50MHz / DFT-s-OFDM / 16QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

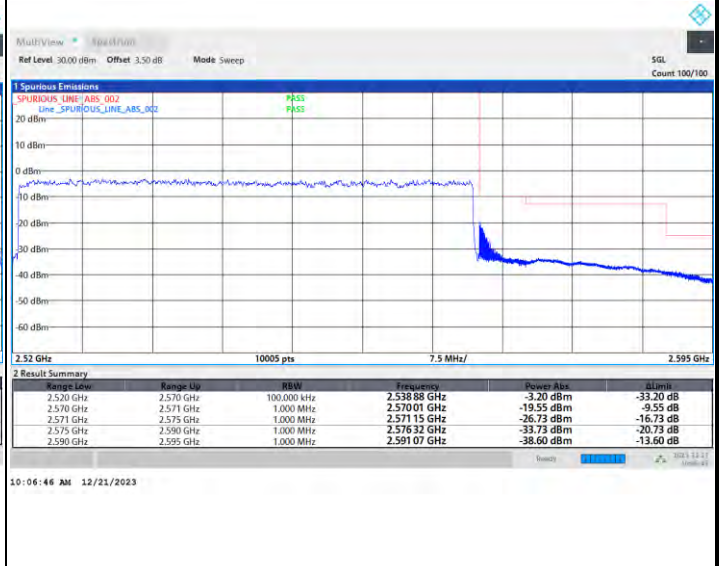


FR1 n7 / 50MHz / DFT-s-OFDM / 64QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

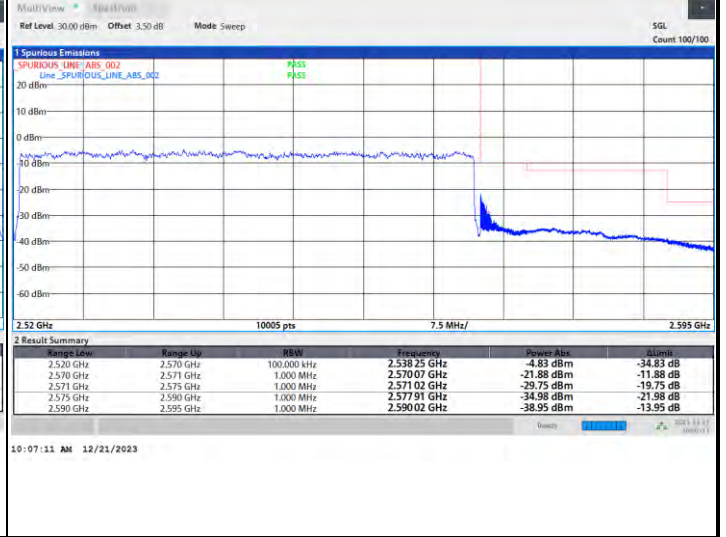




FR1 n7 / 50MHz / DFT-s-OFDM / 256QAM

Lowest Band Edge / Full RB

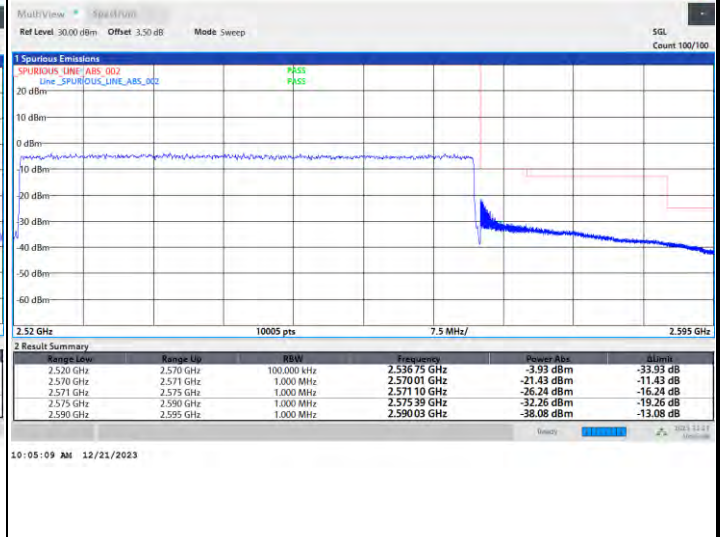
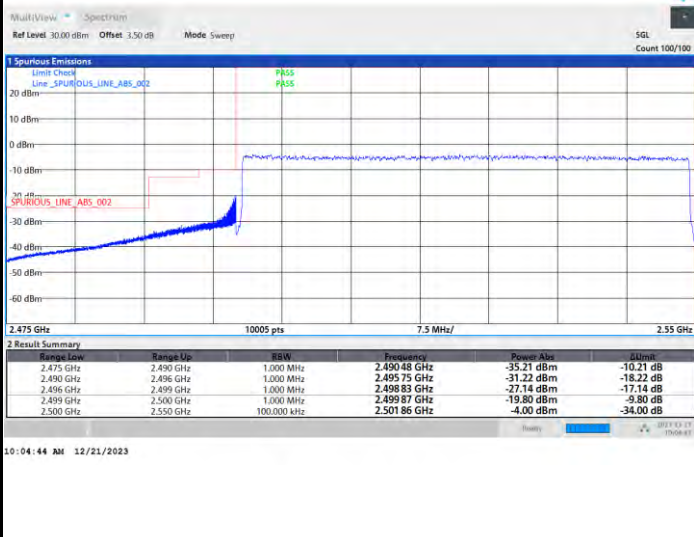
Highest Band Edge / Full RB



FR1 n7 / 50MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge





Conducted Spurious Emission

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

Lowest Channel



Middle Channel



Highest Channel





Frequency Stability

Test Conditions		FR1 n7 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0053	PASS
40	Normal Voltage	0.0005	
30	Normal Voltage	0.0007	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0013	
0	Normal Voltage	0.0050	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0048	
-30	Normal Voltage	0.0053	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0002	

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 n12

Peak-to-Average Ratio

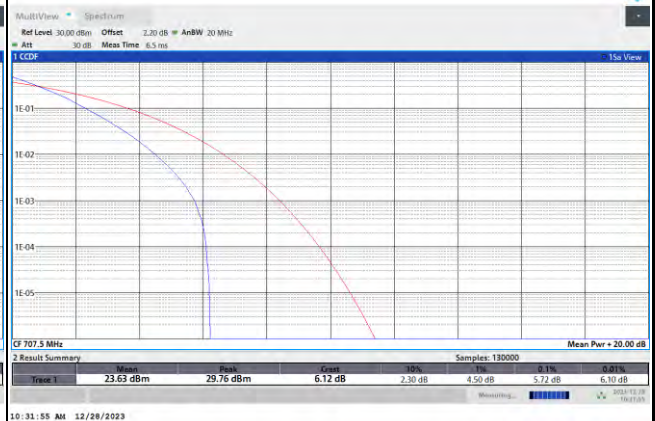
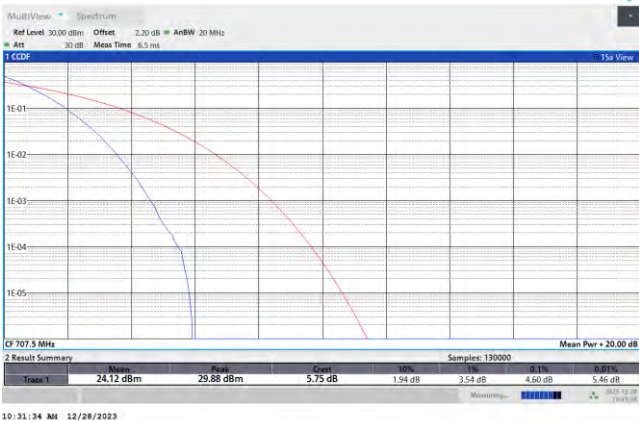
Mode	FR1 n12 / 15MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.60	5.72	6.48	6.60	PASS
Mode	FR1 n12 / 15MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.38				PASS



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

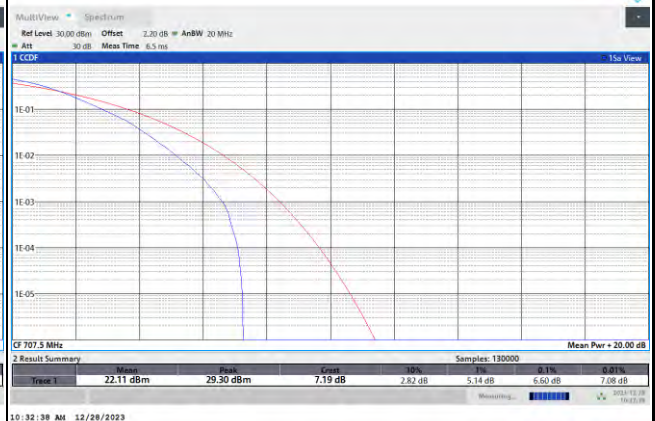
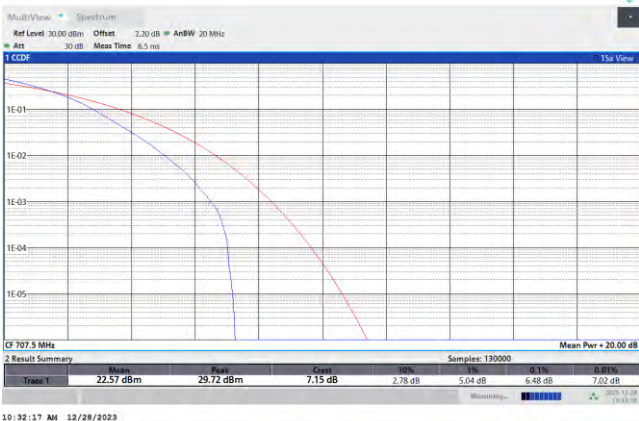
PI/2 BPSK

QPSK

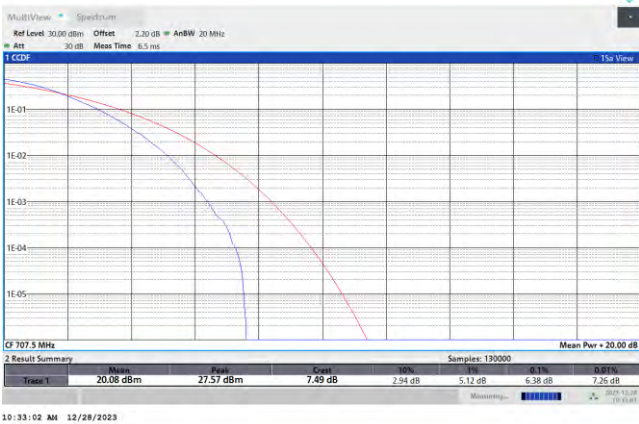


16QAM

64QAM



256QAM





26dB Bandwidth

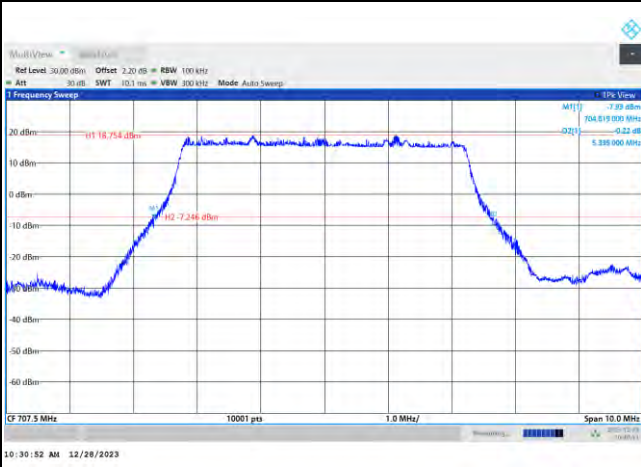
Mode	FR1 n12 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK			
Middle CH	5.34		10.05		14.71			

Mode	FR1 n12 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	5.48	5.34	10.43	10.42	15.52	15.51		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	5.60	5.32	10.37	10.45	15.53	15.40		



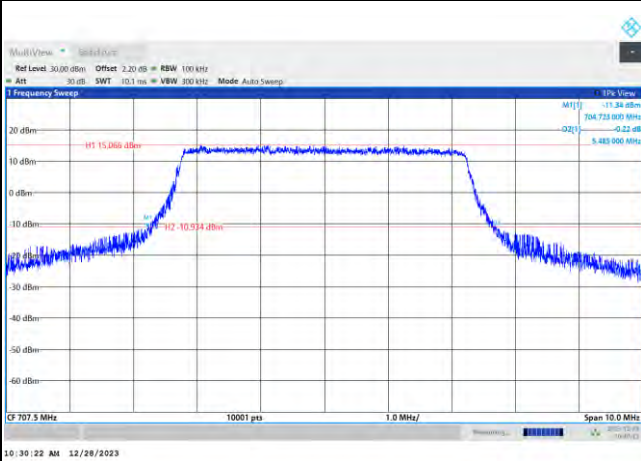
FR1 n12 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

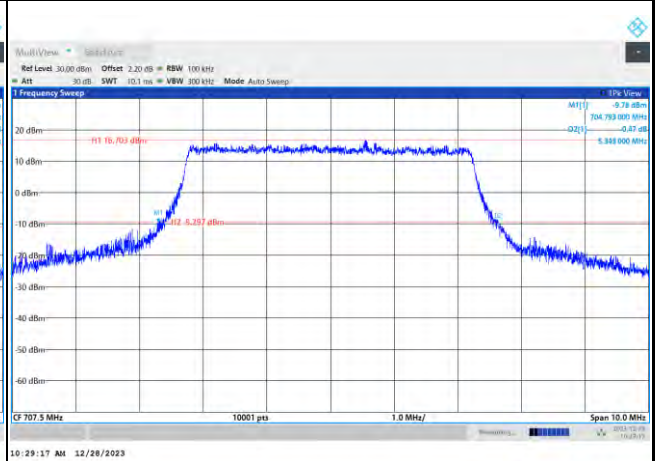


FR1 n12 / 5MHz / CP OFDM / Middle Channel / Full RB

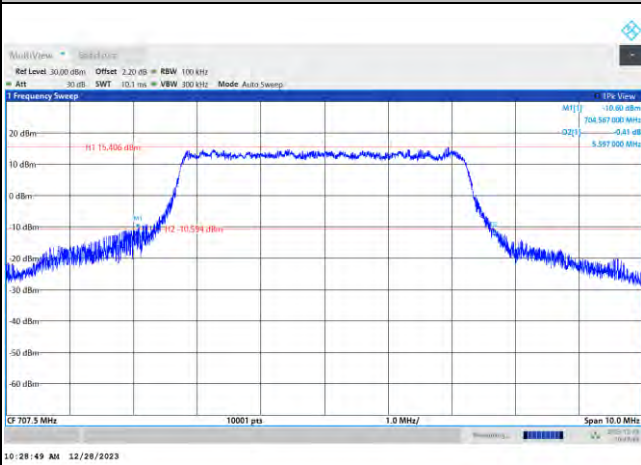
QPSK



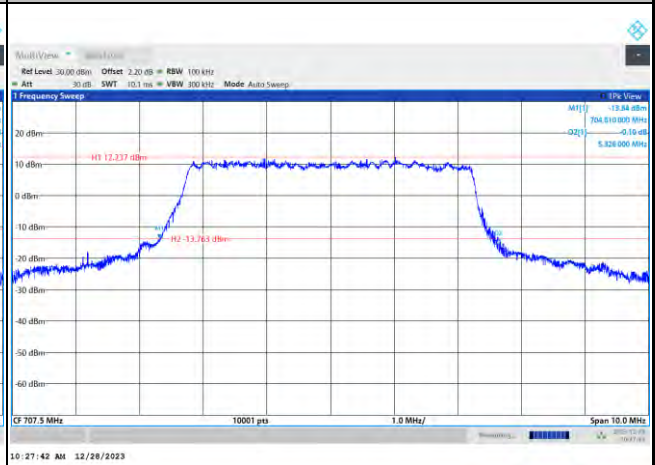
16QAM



64QAM



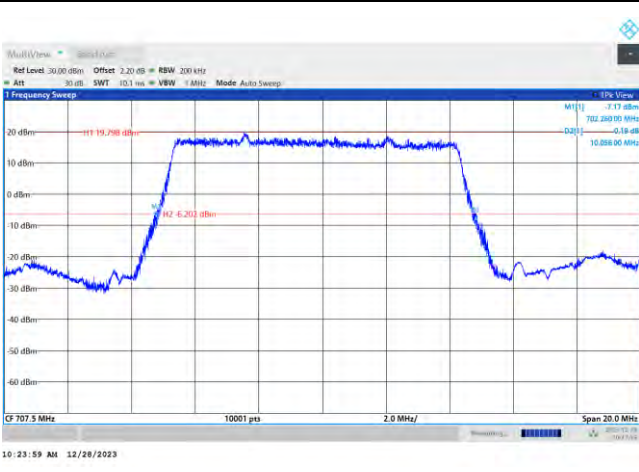
256QAM





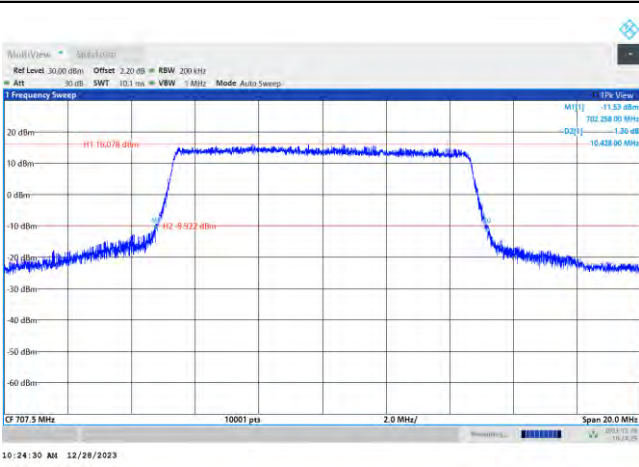
FR1 n12 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

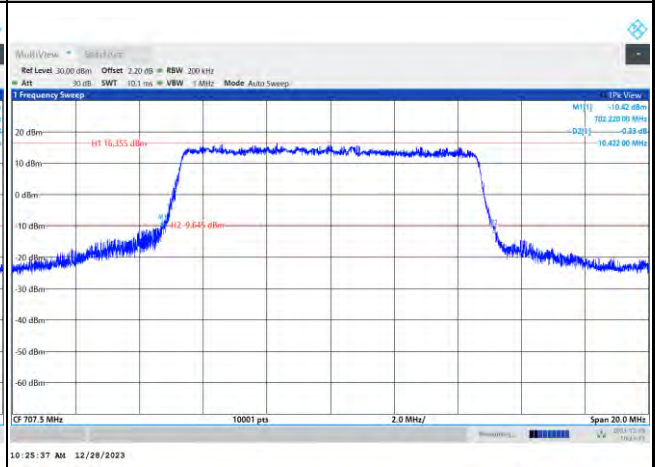


FR1 n12 / 10MHz / CP OFDM / Middle Channel / Full RB

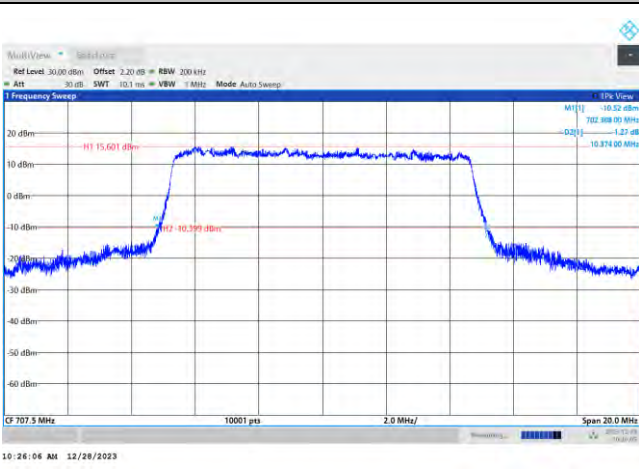
QPSK



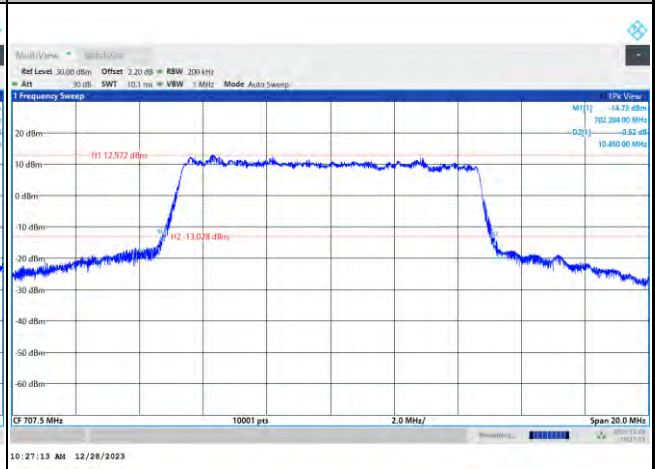
16QAM



64QAM



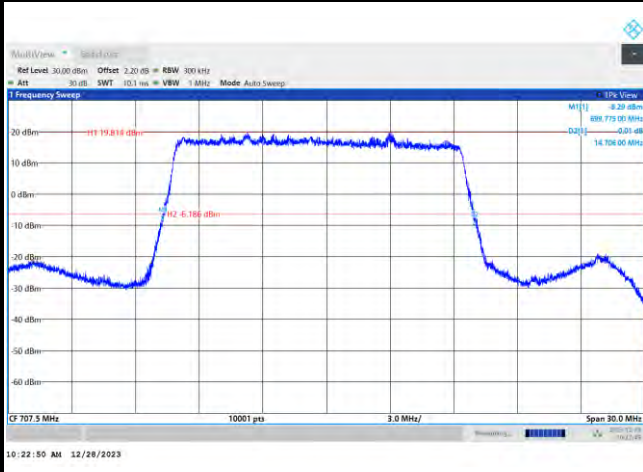
256QAM





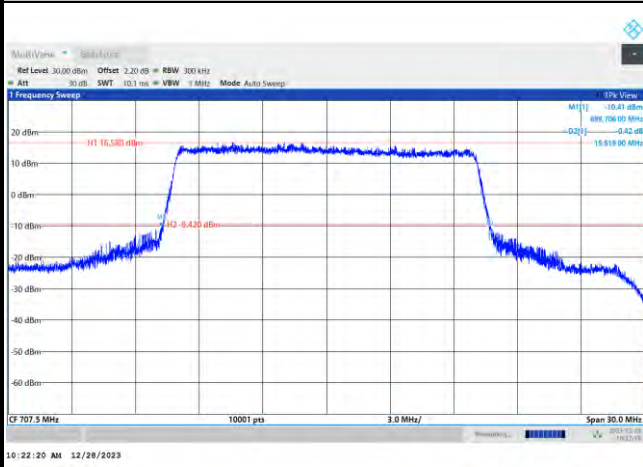
FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

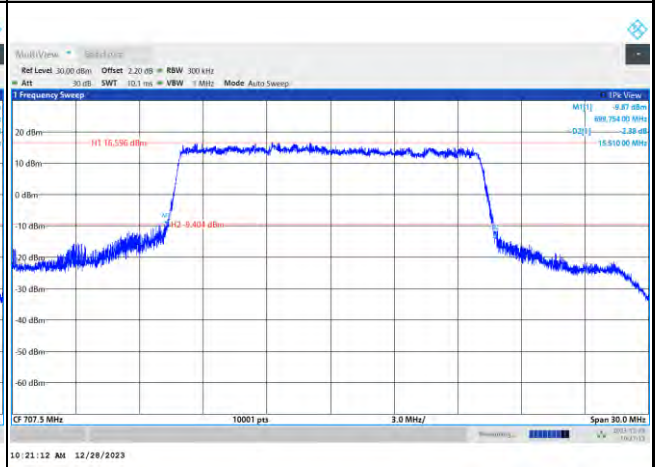


FR1 n12 / 15MHz / CP OFDM / Middle Channel / Full RB

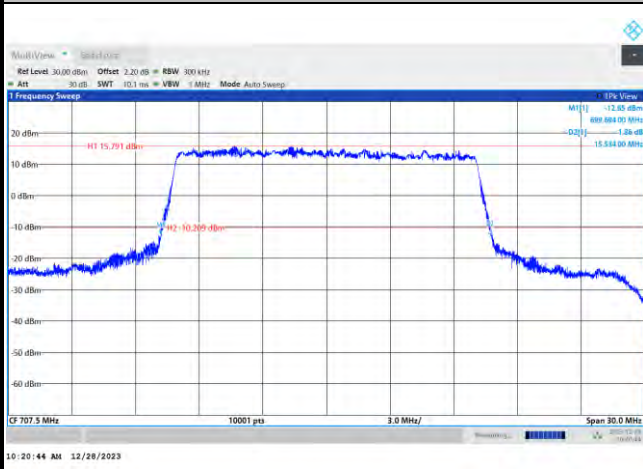
QPSK



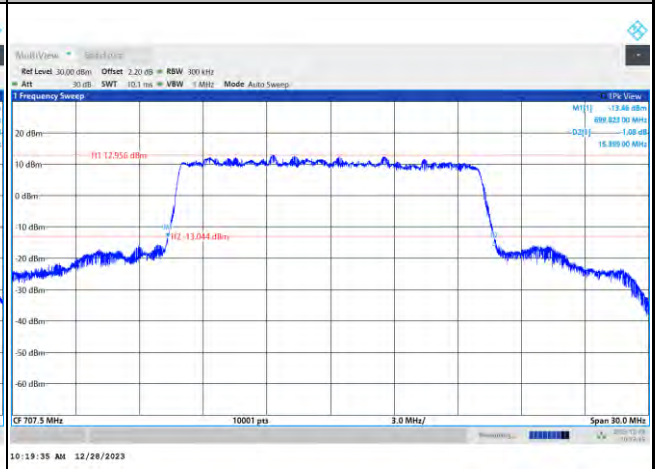
16QAM



64QAM



256QAM





Occupied Bandwidth

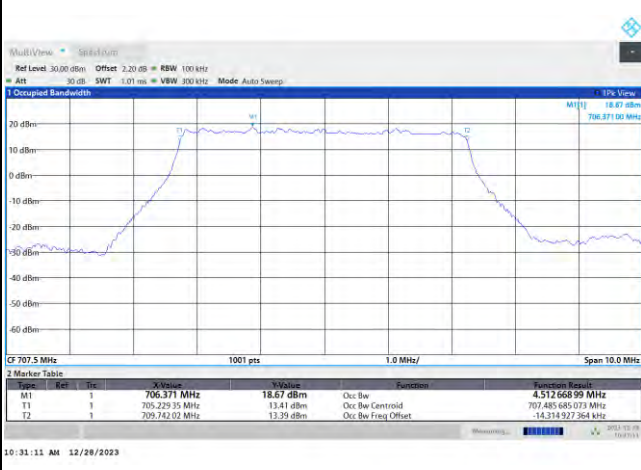
Mode	FR1 n12 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	PI/2 BPSK		PI/2 BPSK		PI/2 BPSK			
Middle CH	4.51		9.01		13.50			

Mode	FR1 n12 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz		15MHz			
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM		
Middle CH	4.54	4.50	9.34	9.34	14.18	14.20		
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM		
Middle CH	4.51	4.52	9.35	9.38	14.18	14.20		



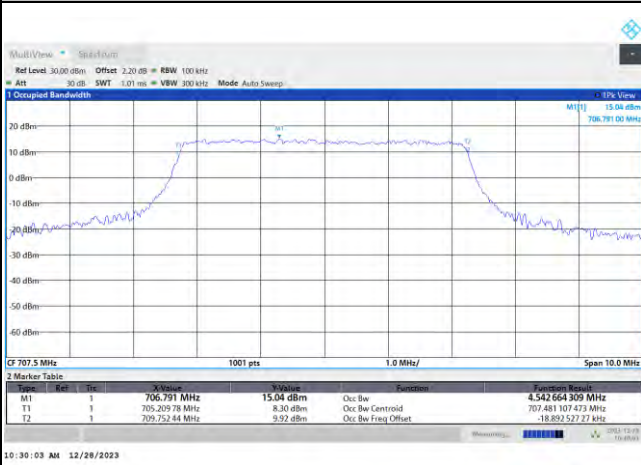
FR1 n12 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

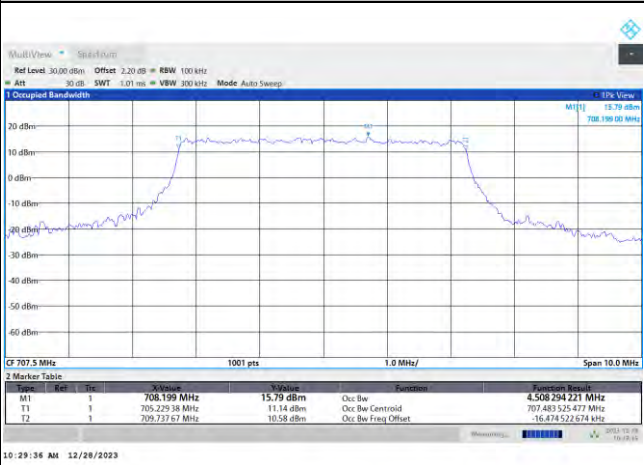


FR1 n12 / 5MHz / CP OFDM / Middle Channel / Full RB

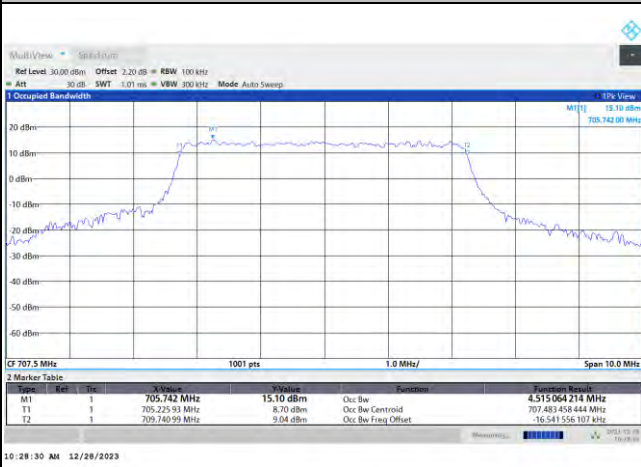
QPSK



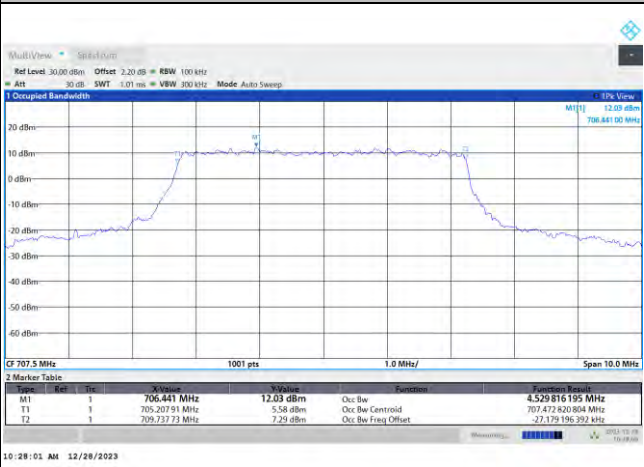
16QAM



64QAM



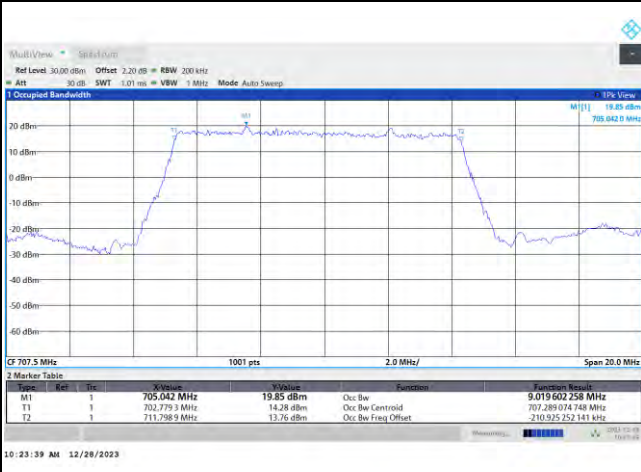
256QAM





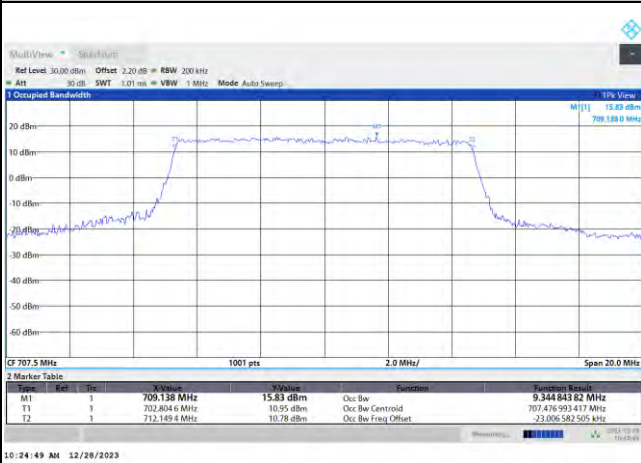
FR1 n12 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

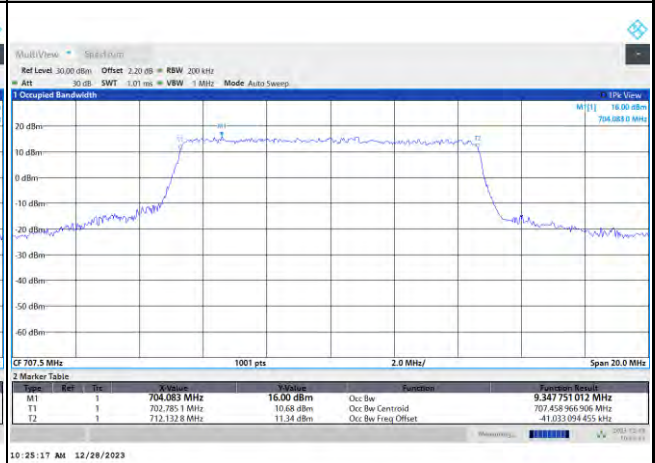


FR1 n12 / 10MHz / CP OFDM / Middle Channel / Full RB

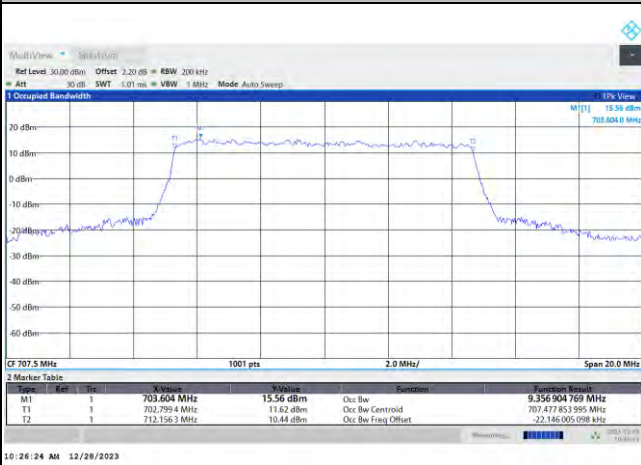
QPSK



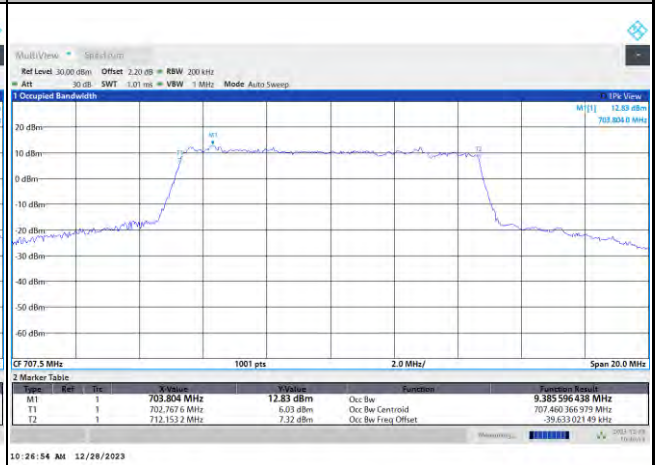
16QAM



64QAM



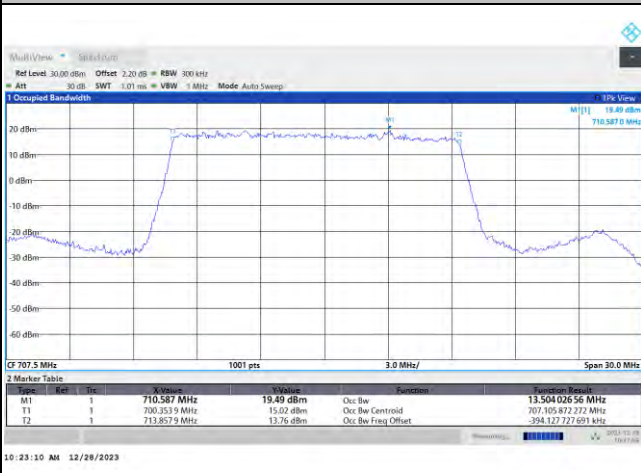
256QAM





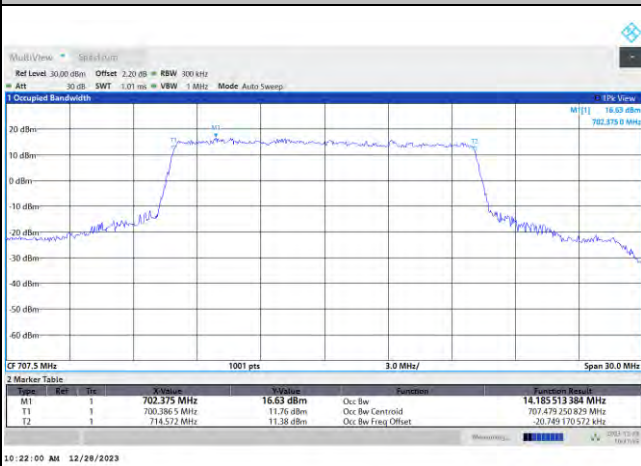
FR1 n12 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

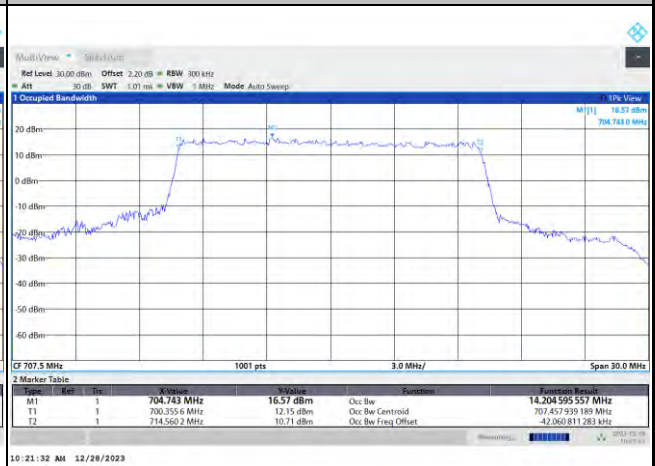


FR1 n12 / 15MHz / CP OFDM / Middle Channel / Full RB

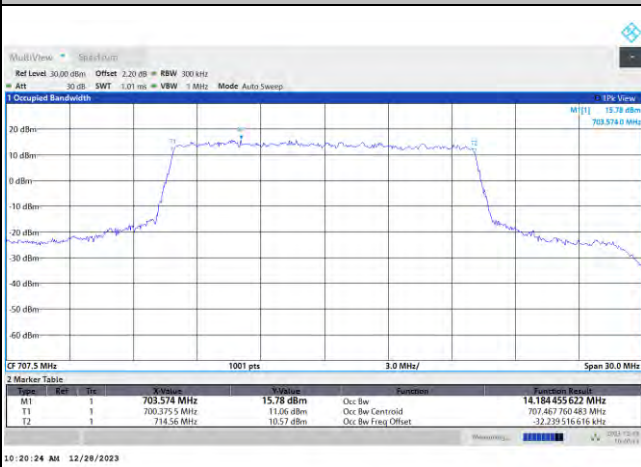
QPSK



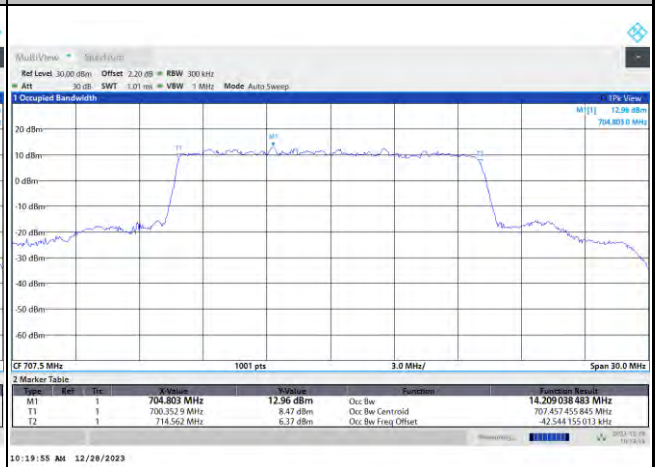
16QAM



64QAM



256QAM



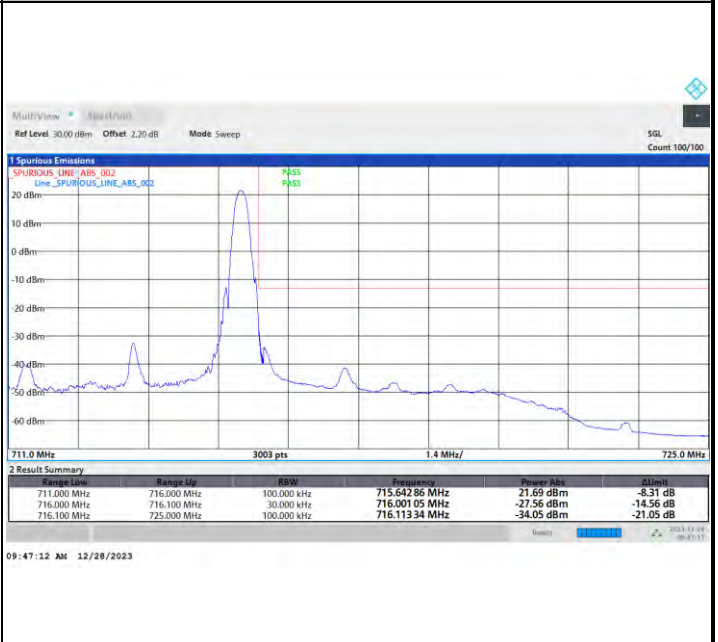
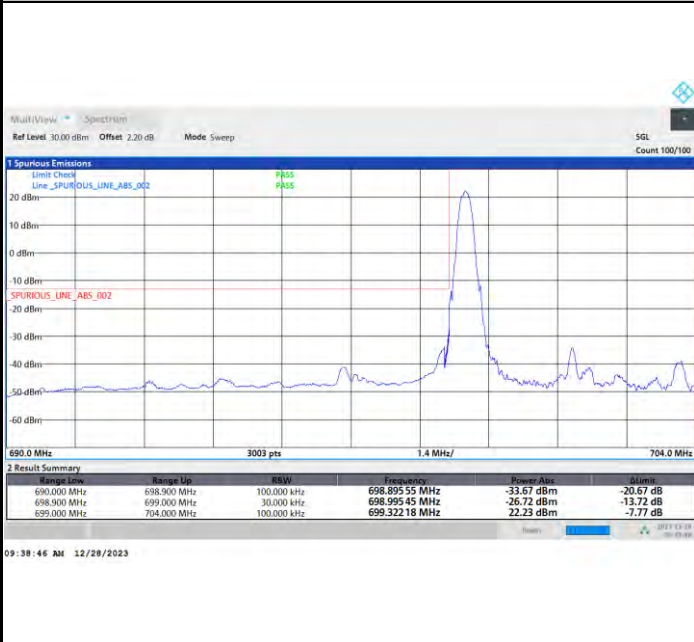


Conducted Band Edge

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

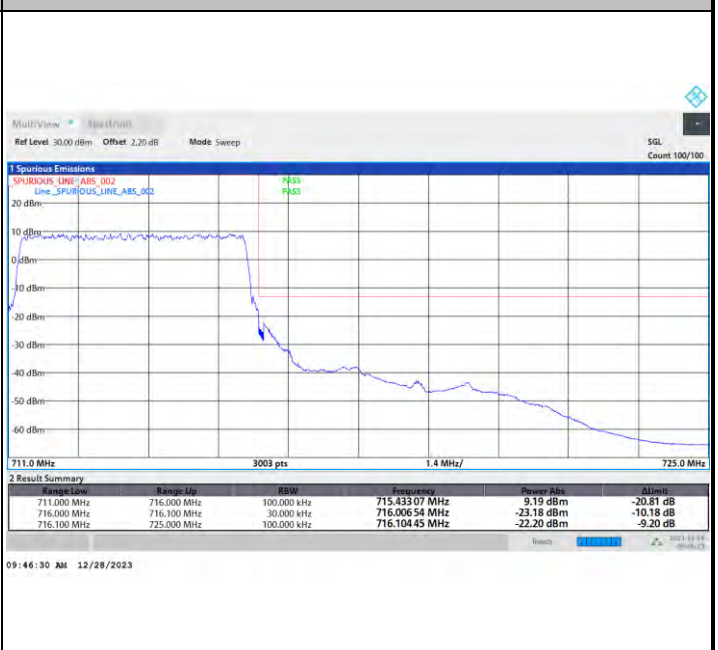
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

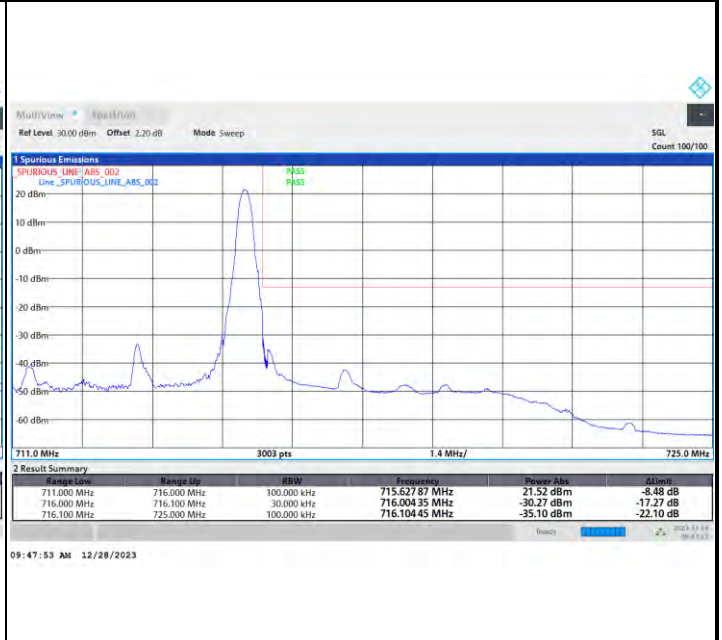
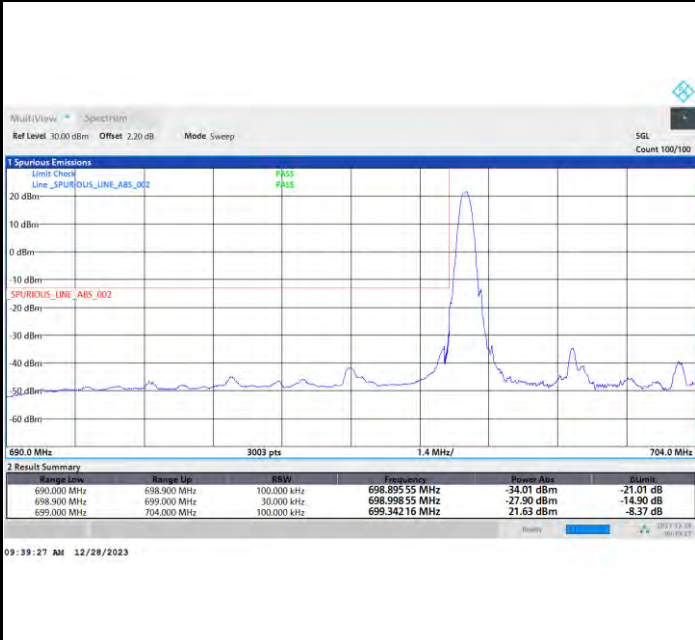




FR1 n12 / 5MHz / DFT-S OFDM / QPSK

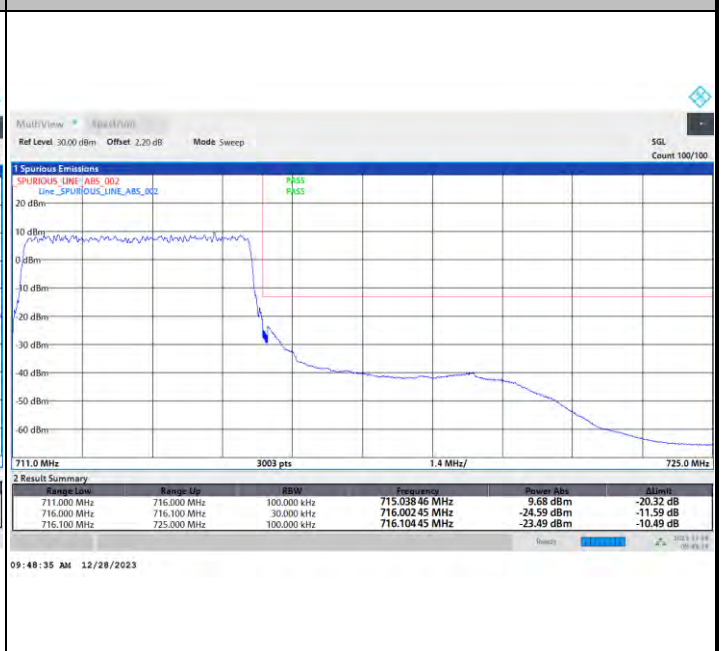
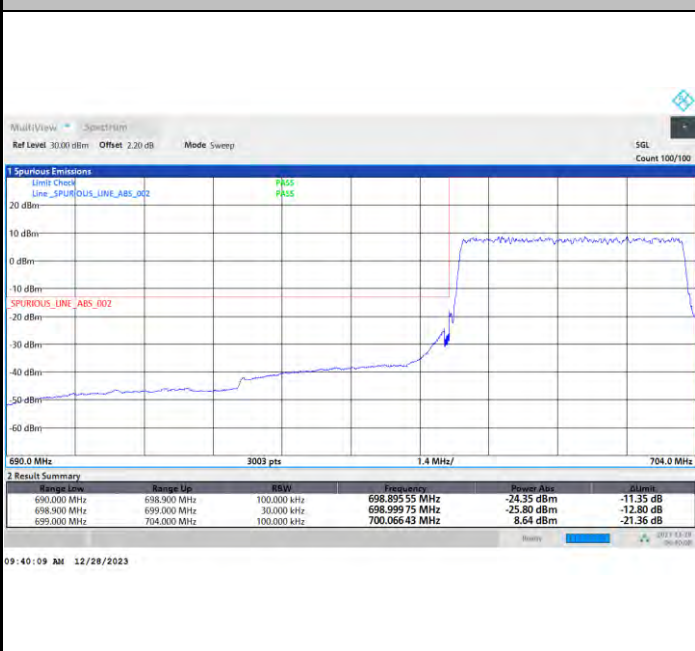
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

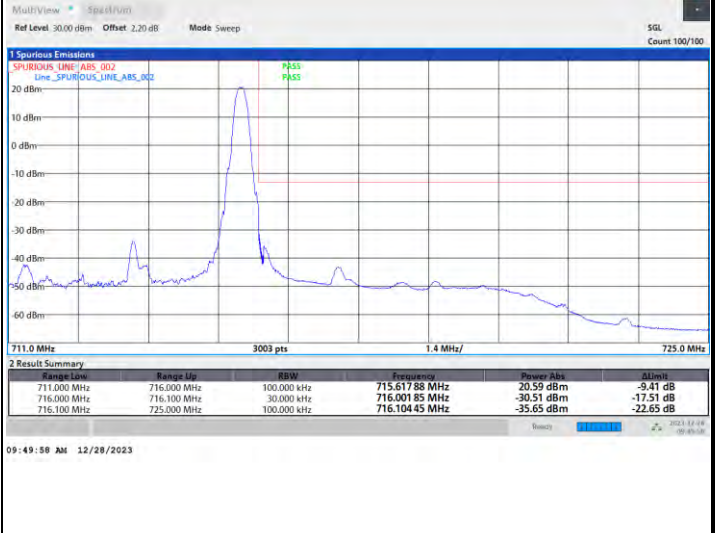
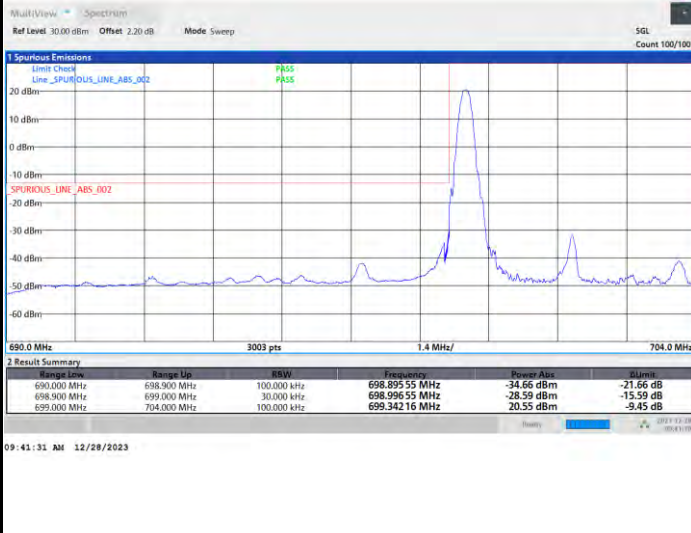




FR1 n12 / 5MHz / DFT-S OFDM / 16QAM

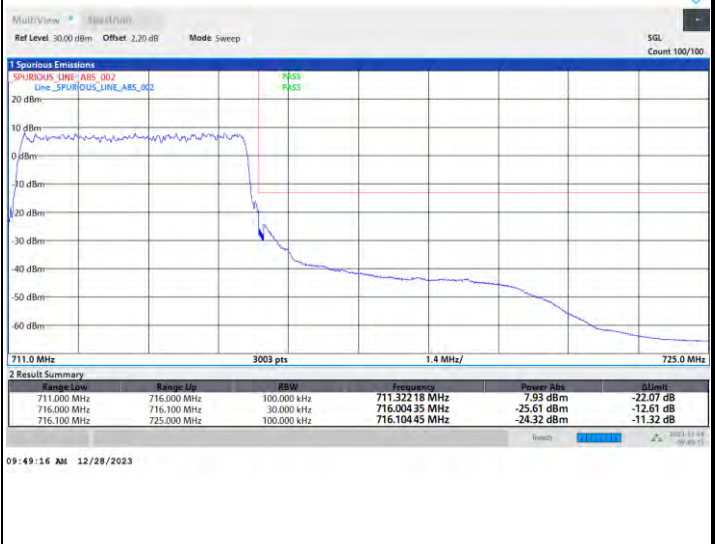
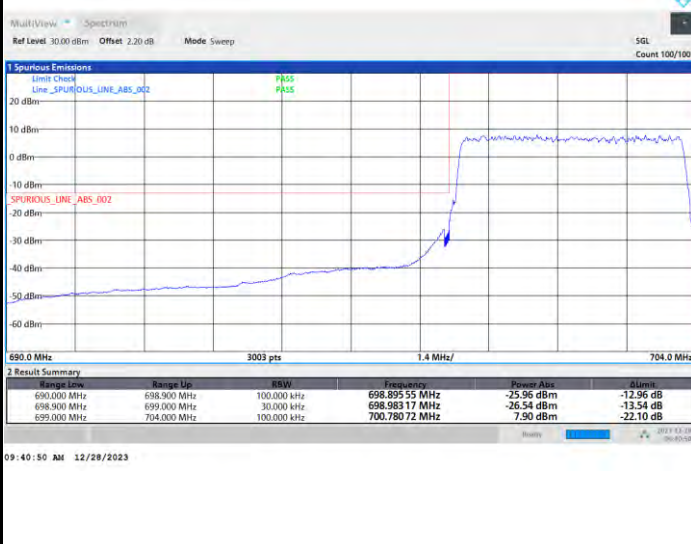
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

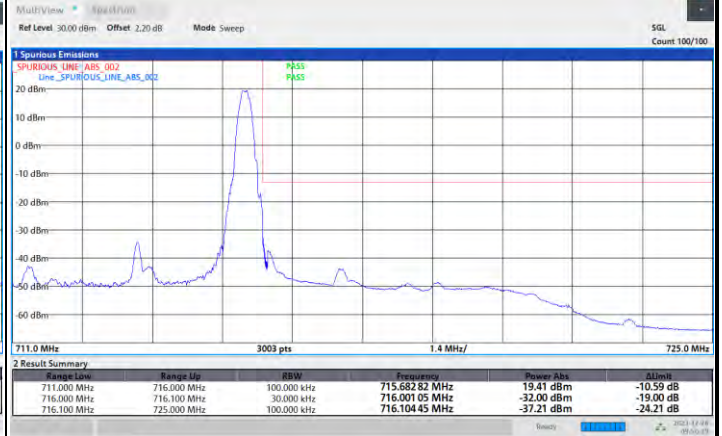
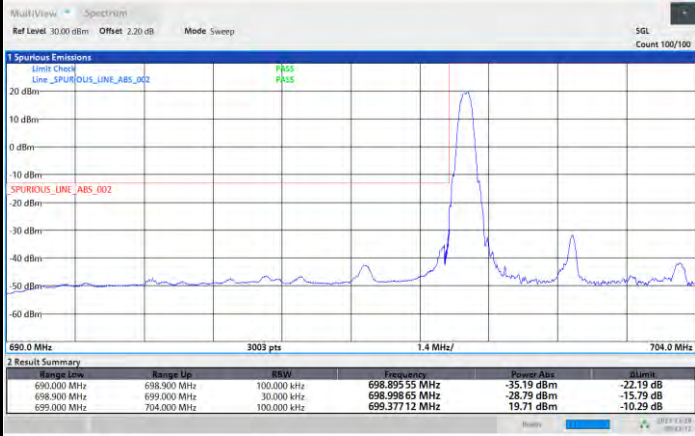




FR1 n12 / 5MHz / DFT-S OFDM / 64QAM

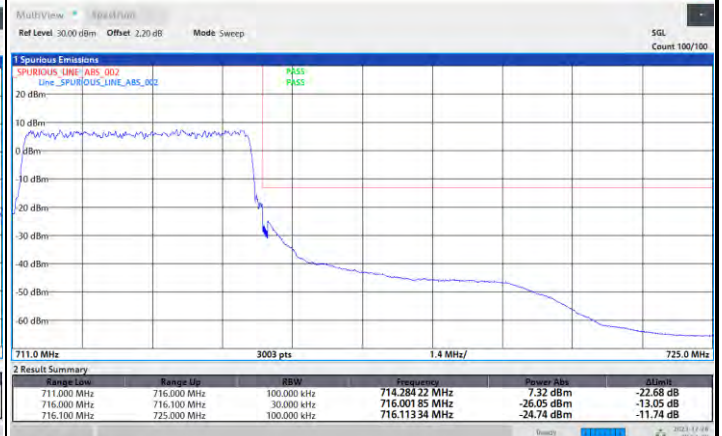
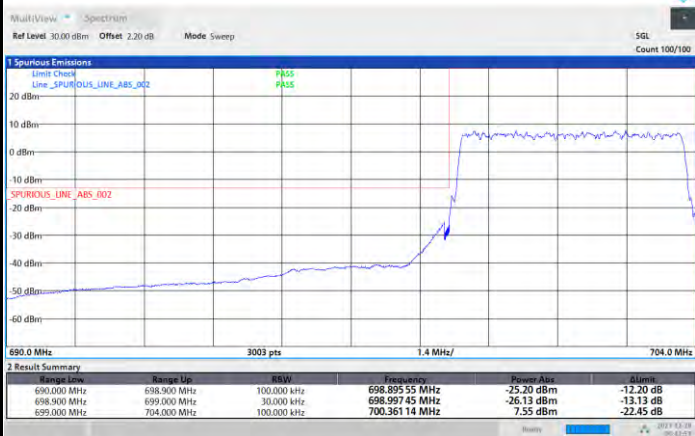
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

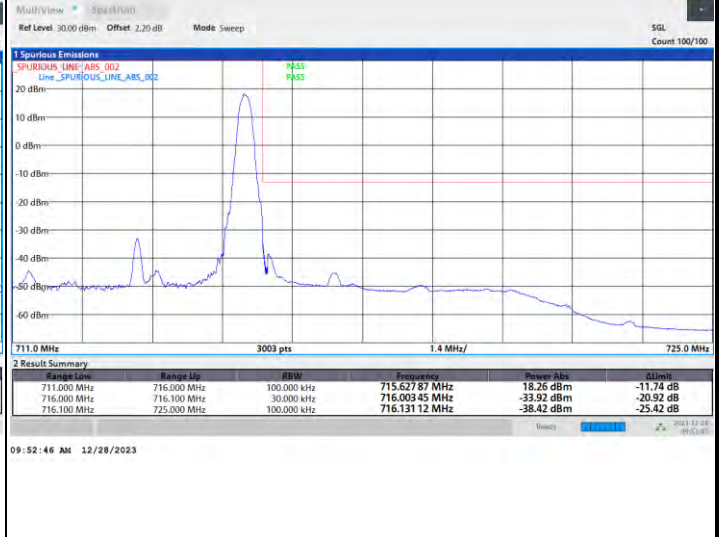
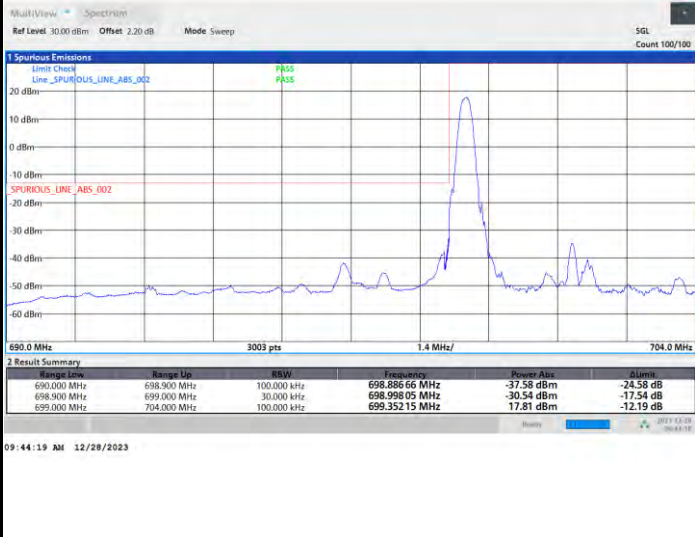




FR1 n12 / 5MHz / DFT-S OFDM / 256QAM

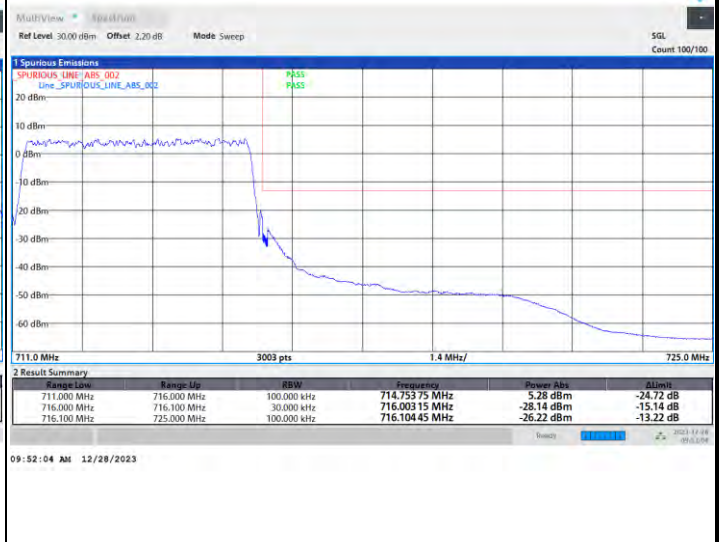
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

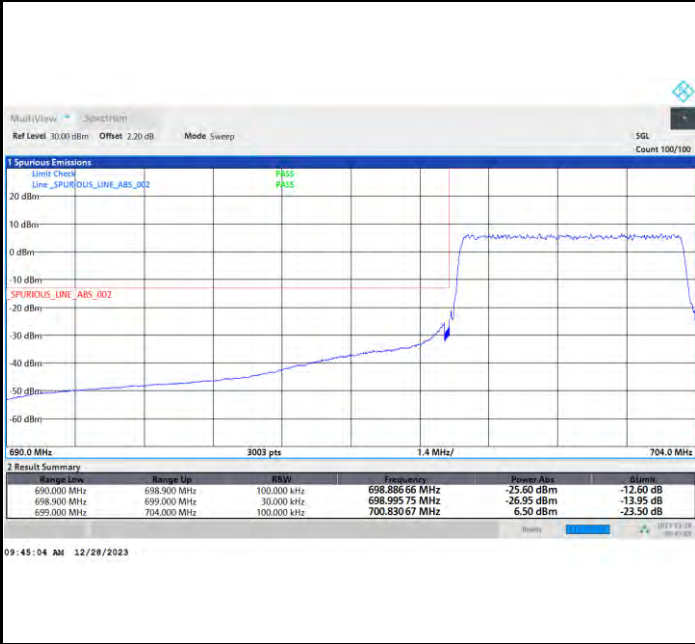




FR1 n12 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

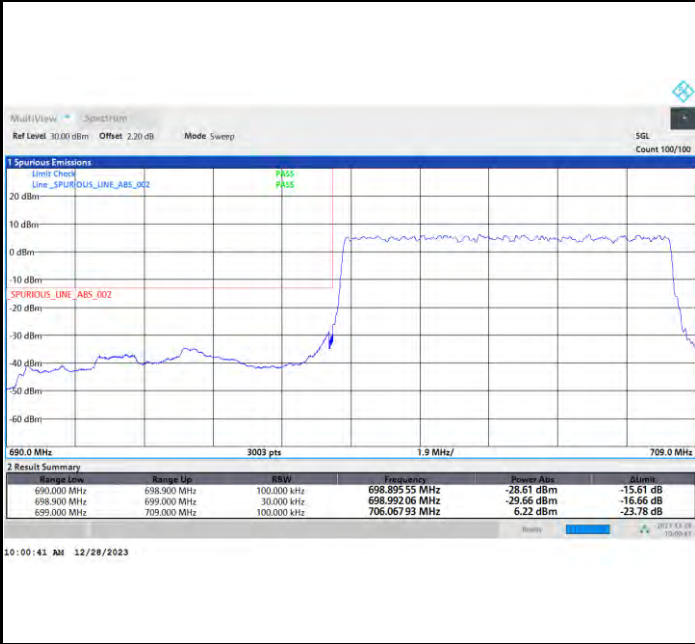




FR1 n12 / 10MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

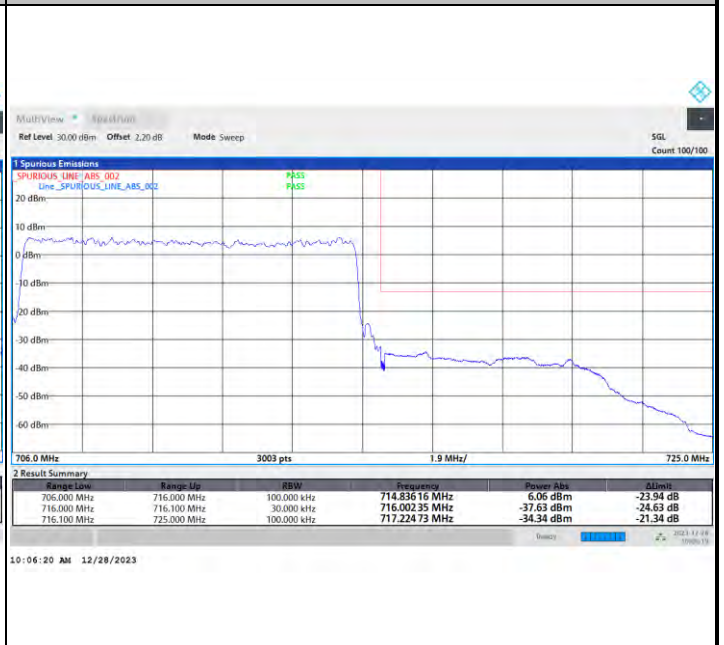
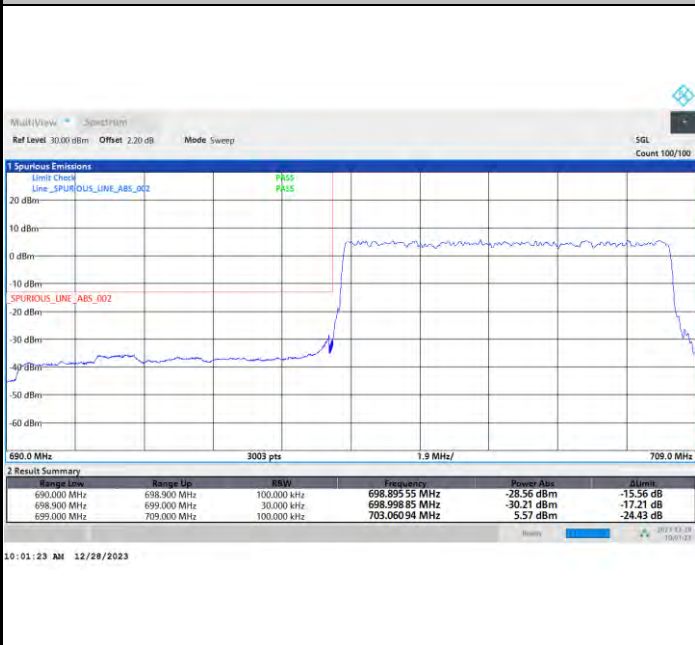
Highest Band Edge



FR1 n12 / 10MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

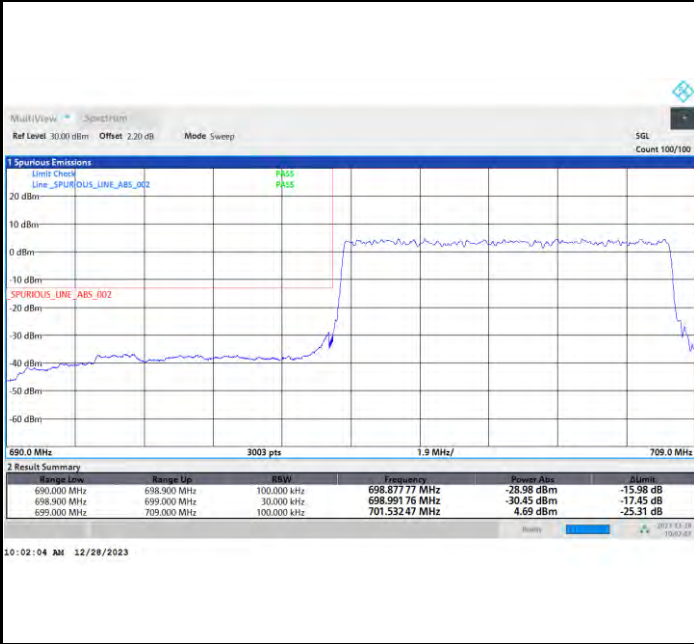




FR1 n12 / 10MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

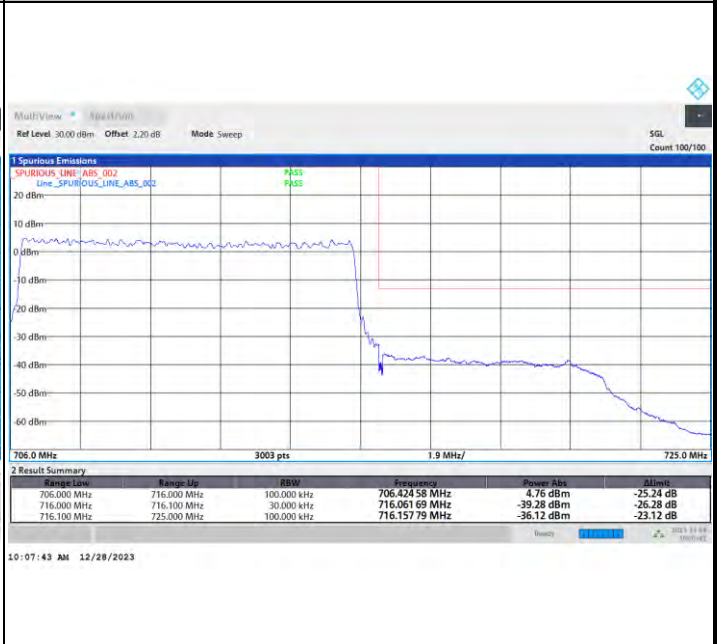
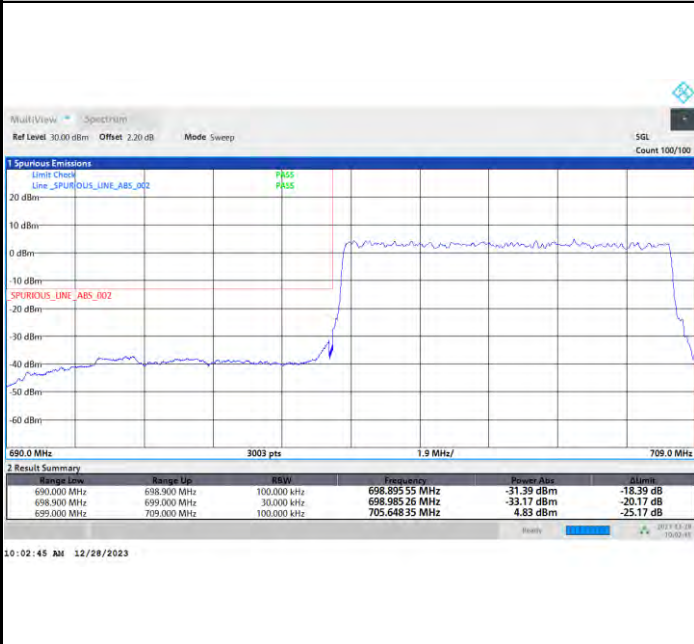
Highest Band Edge



FR1 n12 / 10MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge

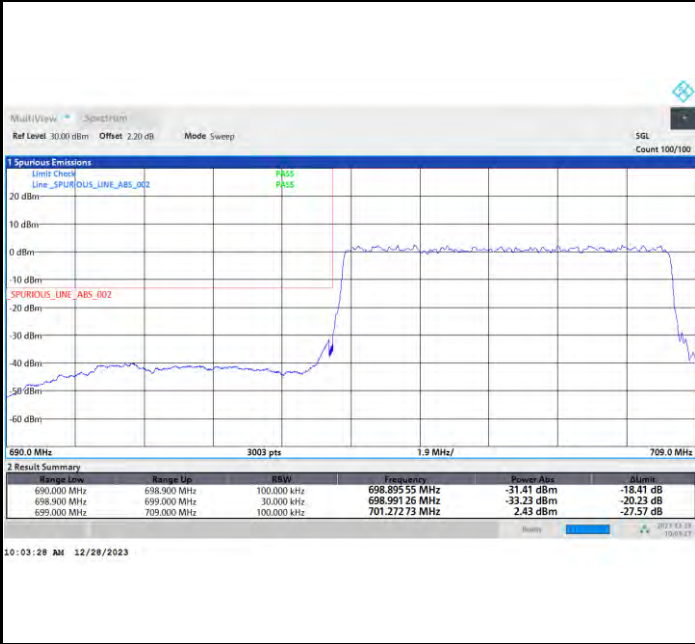




FR1 n12 / 10MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

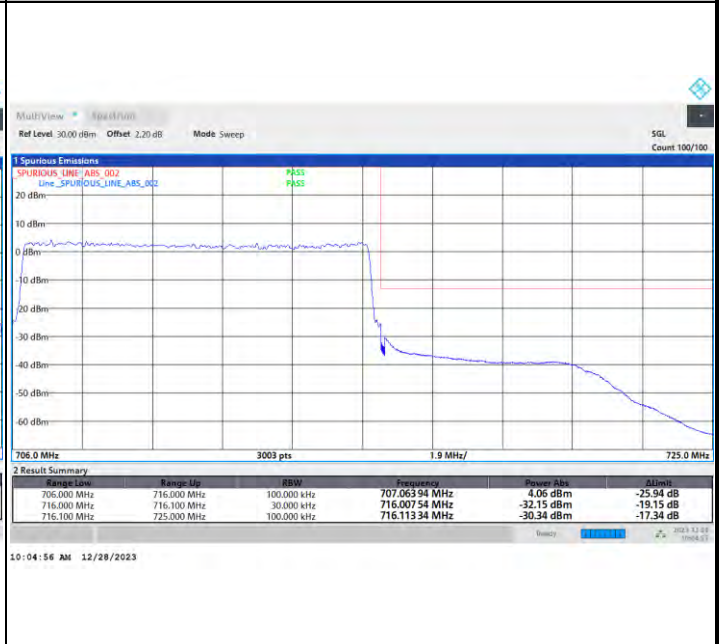
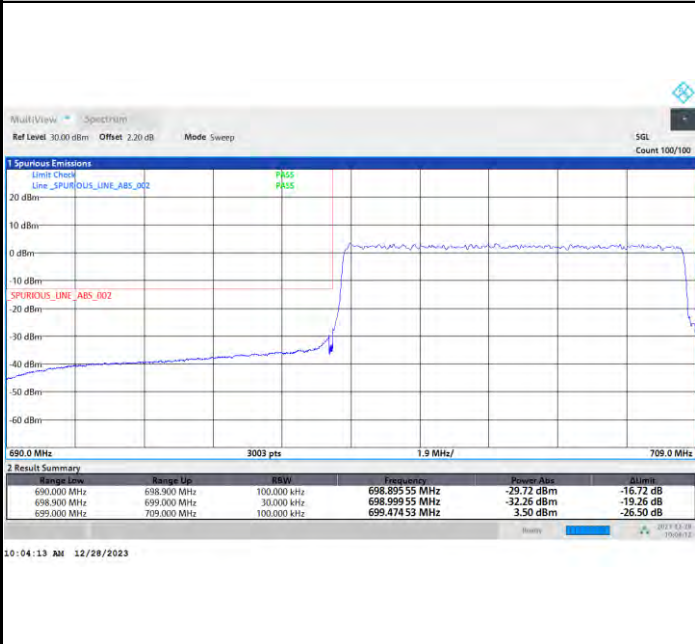
Highest Band Edge



FR1 n12 / 10MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

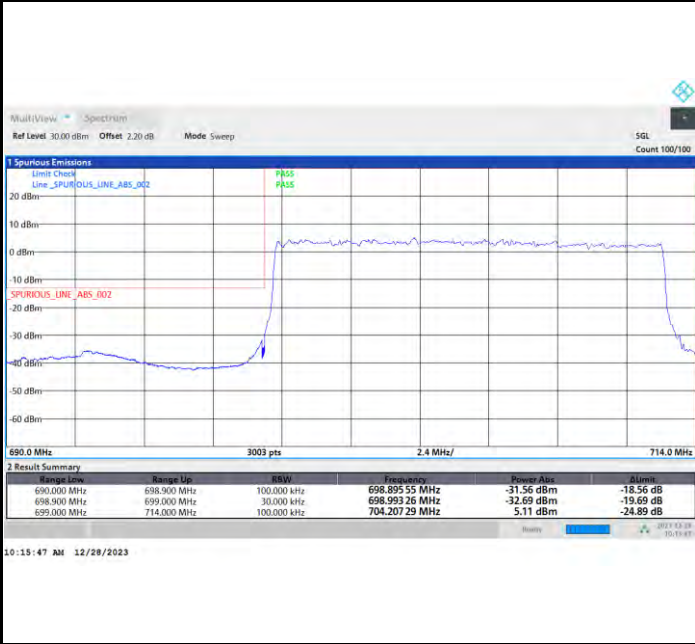




FR1 n12 / 15MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

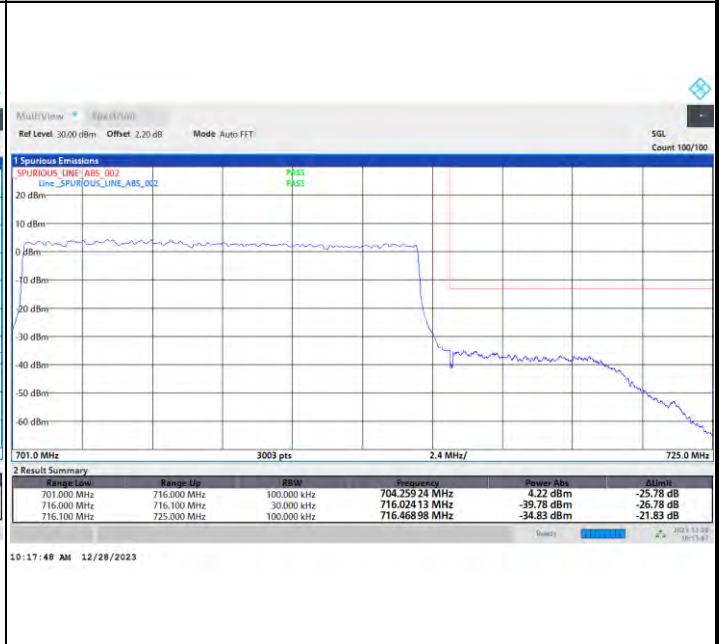
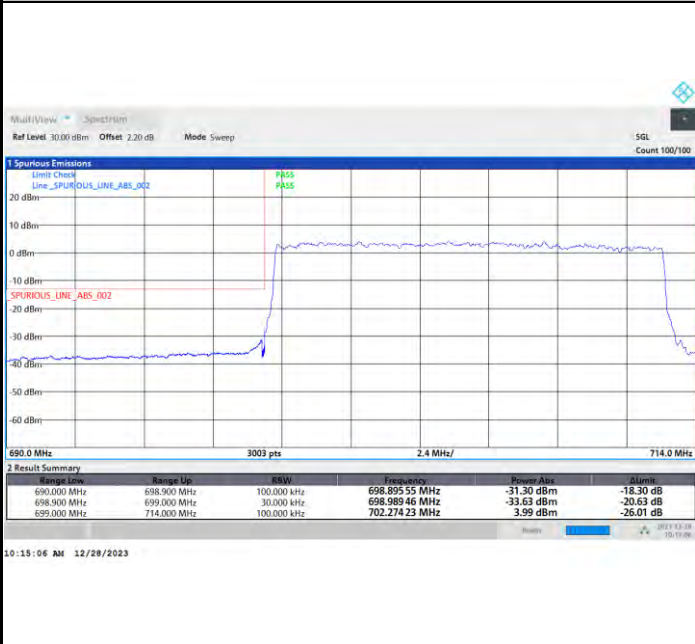
Highest Band Edge



FR1 n12 / 15MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

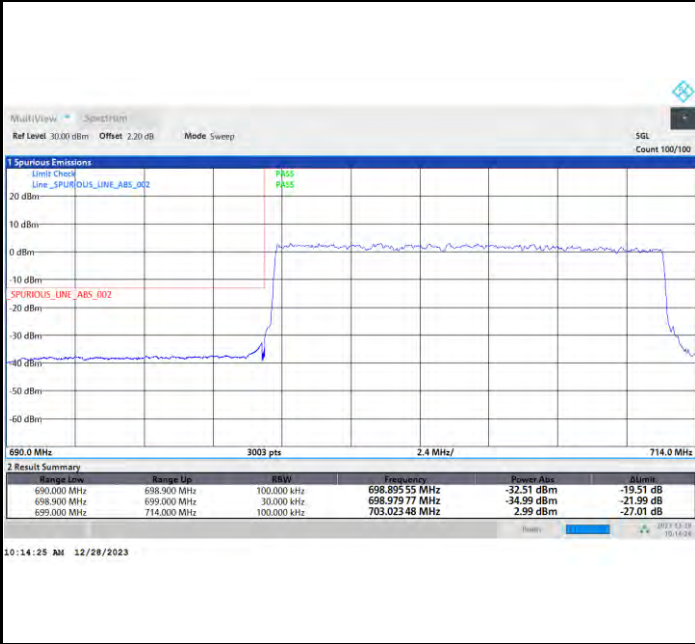




FR1 n12 / 15MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

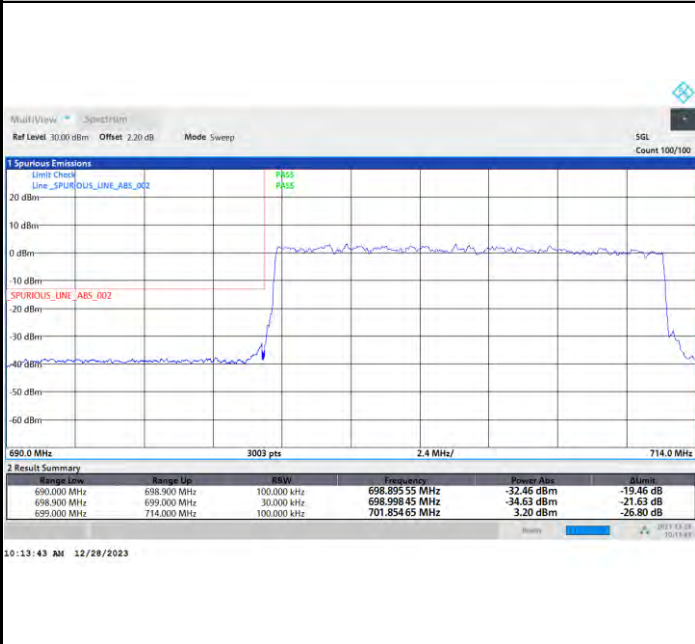
Highest Band Edge



FR1 n12 / 15MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge

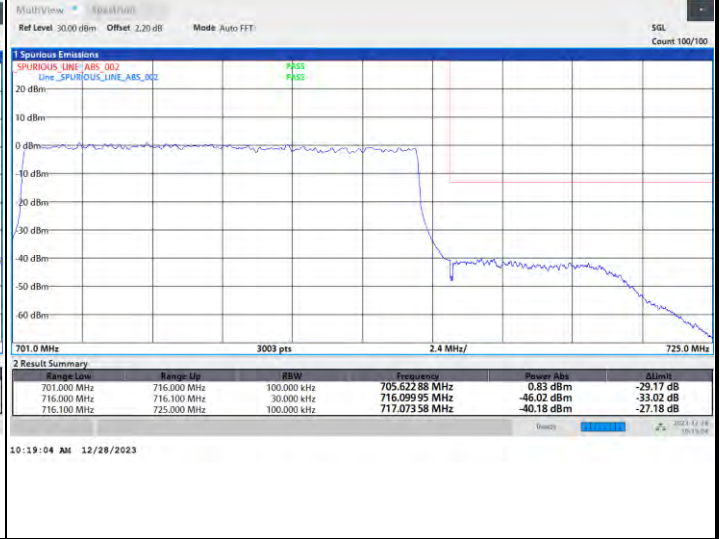
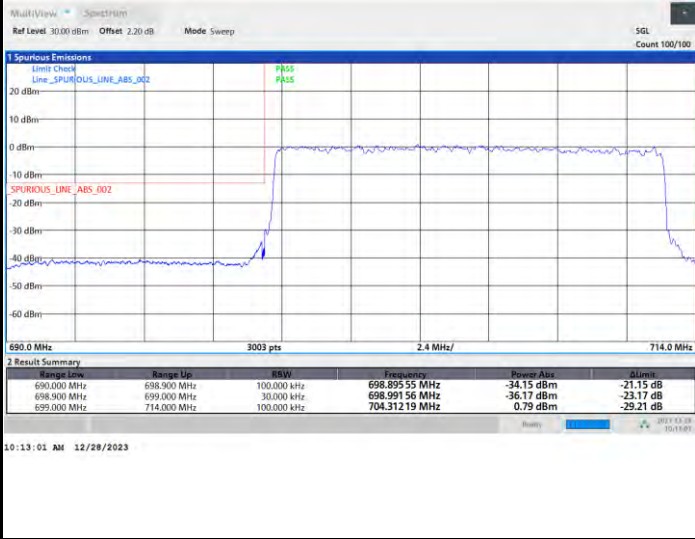




FR1 n12 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge

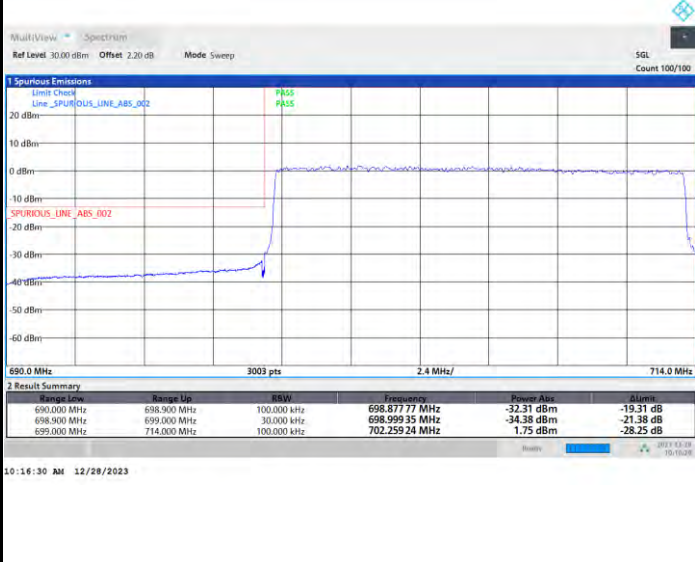
Highest Band Edge



FR1 n12 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

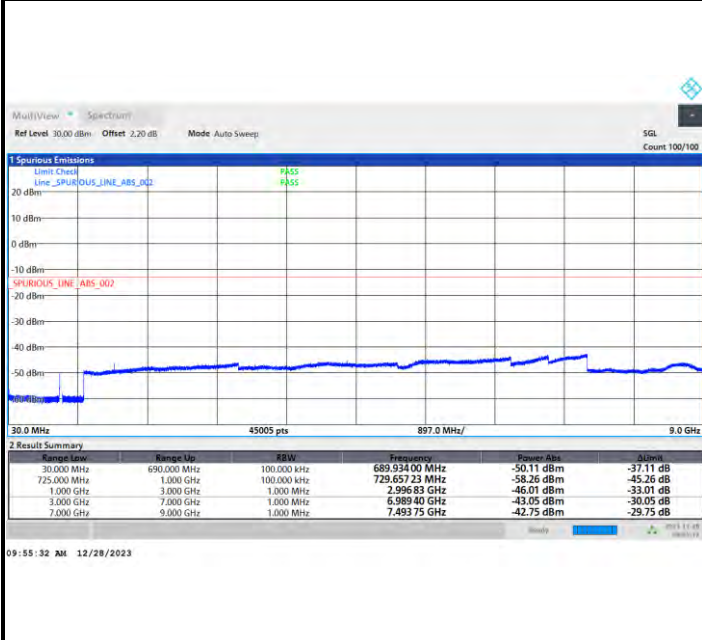




Conducted Spurious Emission

FR1 n12 / 5MHz / DFT-S OFDM / QPSK / 1RB1

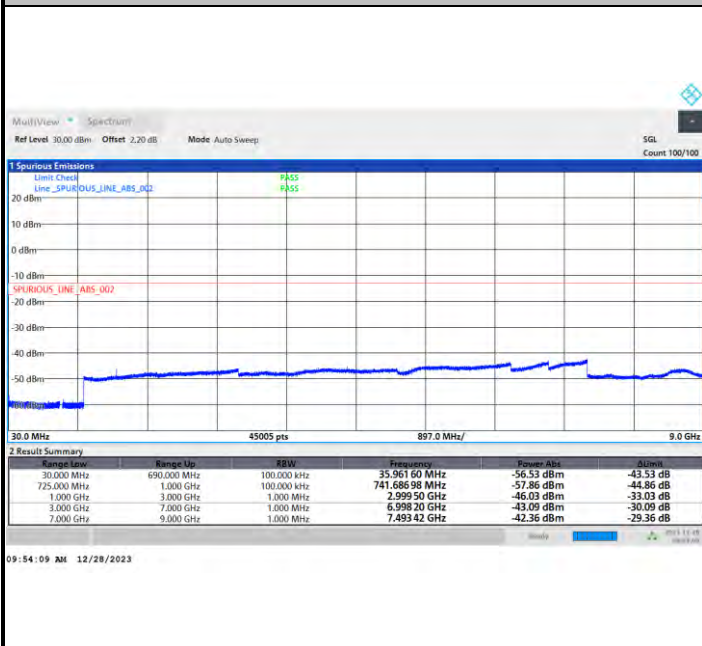
Lowest Channel



Middle Channel



Highest Channel





Frequency Stability

Test Conditions		FR1 n12 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0033	PASS
40	Normal Voltage	0.0028	
30	Normal Voltage	0.0016	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0007	
0	Normal Voltage	0.0010	
-10	Normal Voltage	0.0056	
-20	Normal Voltage	0.0045	
-30	Normal Voltage	0.0015	
20	Maximum Voltage	0.0032	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0032	

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 n14

Peak-to-Average Ratio

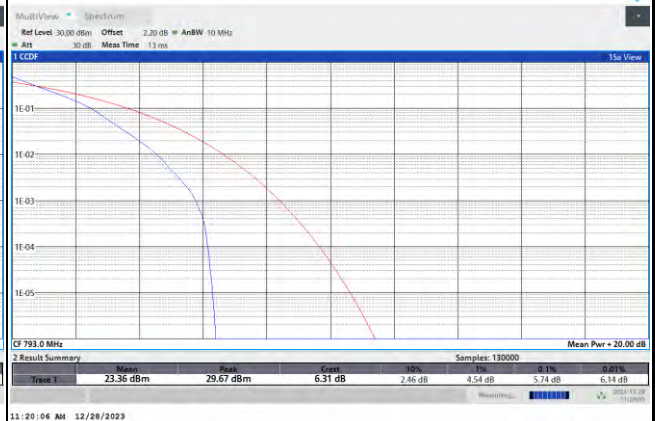
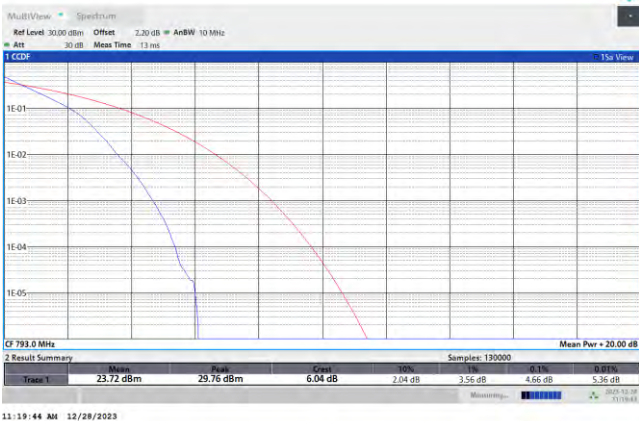
Mode	FR1 n14 / 10MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.66	5.74	6.56	6.76	PASS
Mode	FR1 n14 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.58				PASS



FR1 n14 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

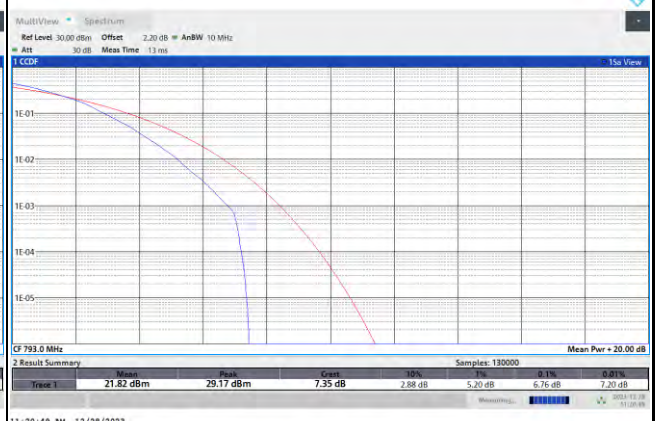
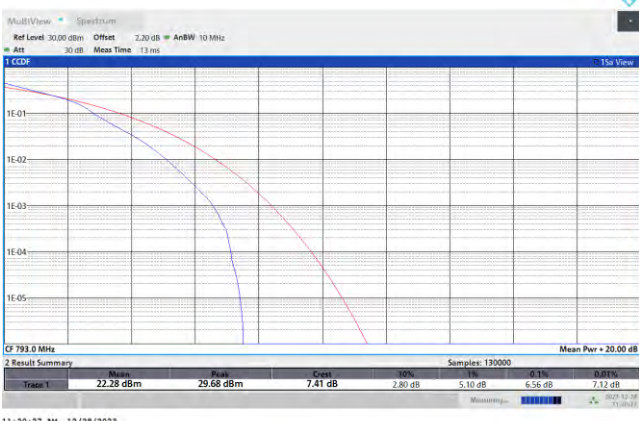
PI/2 BPSK

QPSK

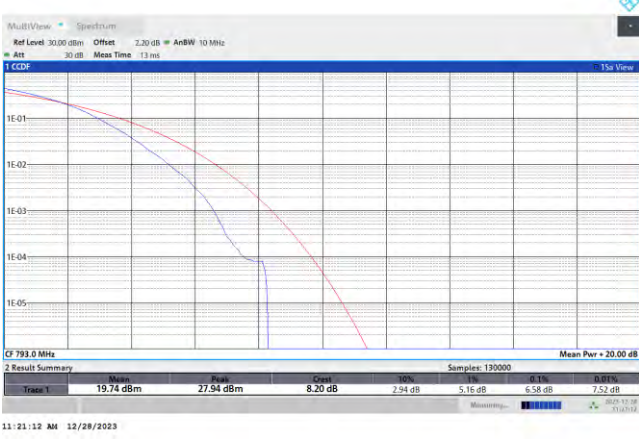


16QAM

64QAM



256QAM





26dB Bandwidth

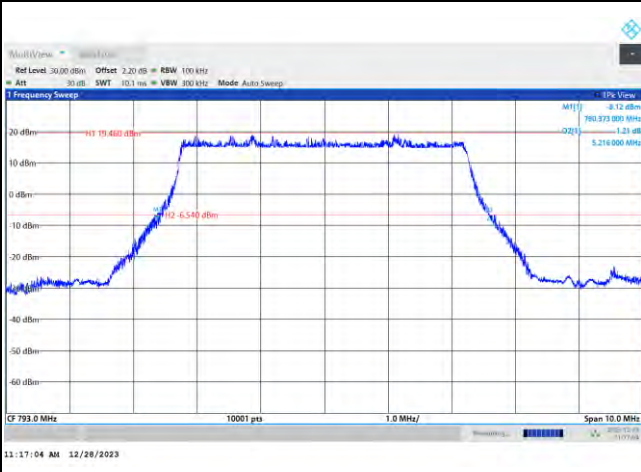
Mode	FR1 n14 : 26dB BW(MHz) / DFT-S OFDM						
BW	5MHz		10MHz				
Mod.	PI/2 BPSK		PI/2 BPSK				
Middle CH	5.22		9.99				

Mode	FR1 n14 : 26dB BW(MHz) / CP OFDM						
BW	5MHz		10MHz				
Mod.	QPSK	16QAM	QPSK	16QAM			
Middle CH	5.46	5.49	10.47	10.45			
Mod.	64QAM	256QAM	64QAM	256QAM			
Middle CH	5.45	5.44	10.53	10.37			



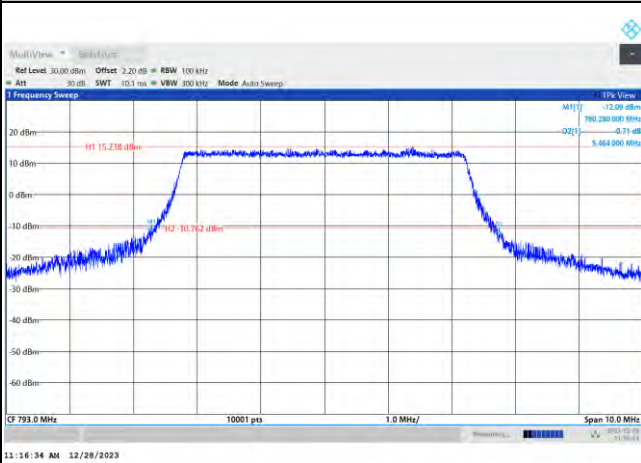
FR1 n14 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

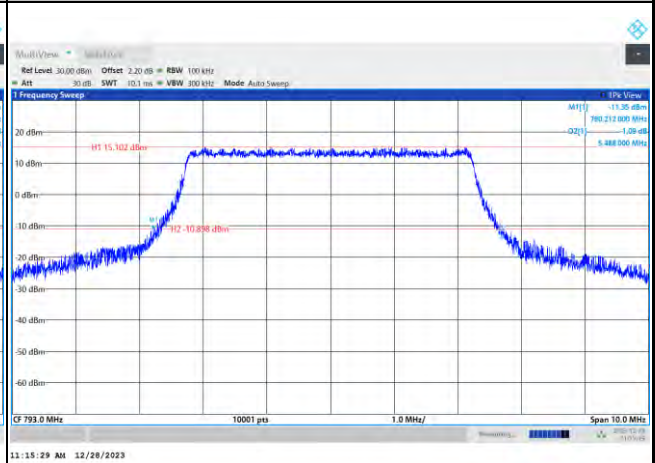


FR1 n14 / 5MHz / CP OFDM / Middle Channel / Full RB

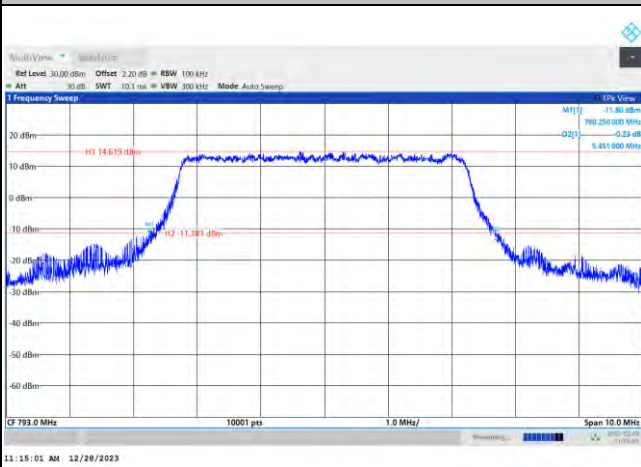
QPSK



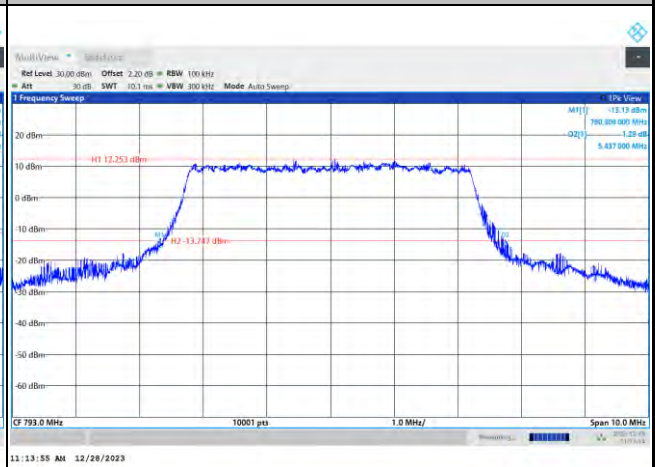
16QAM



64QAM



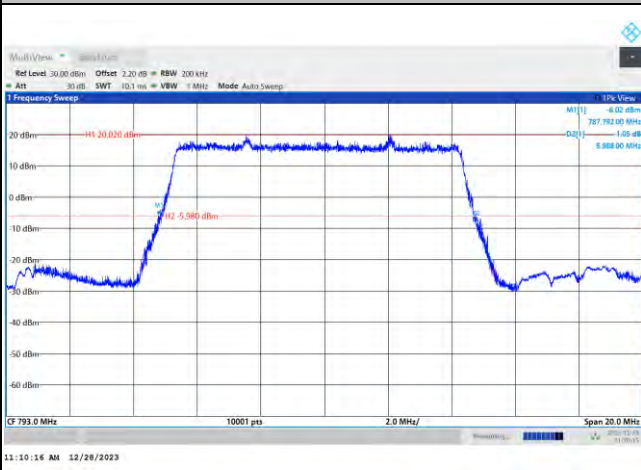
256QAM





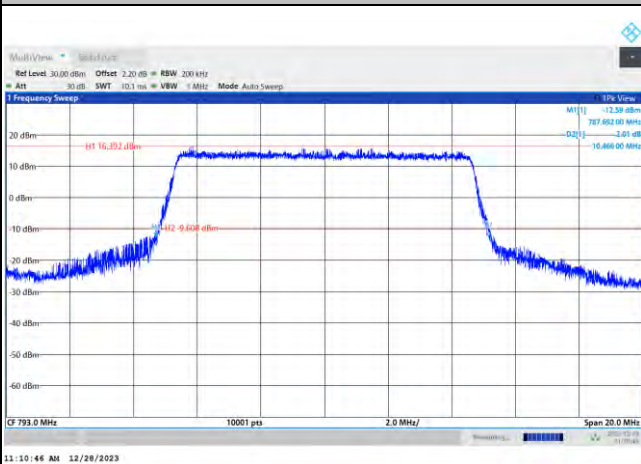
FR1 n14 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

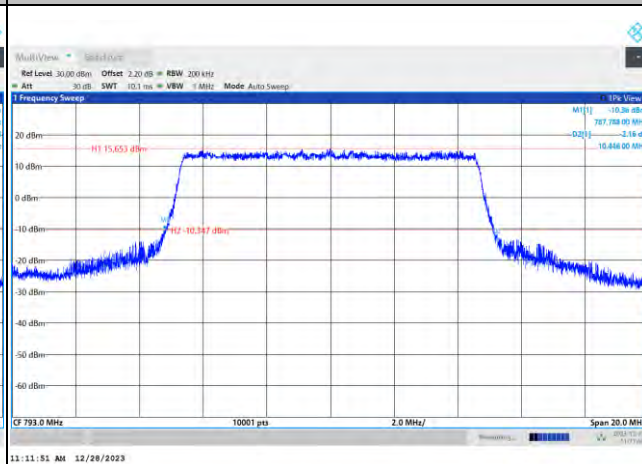


FR1 n14 / 10MHz / CP OFDM / Middle Channel / Full RB

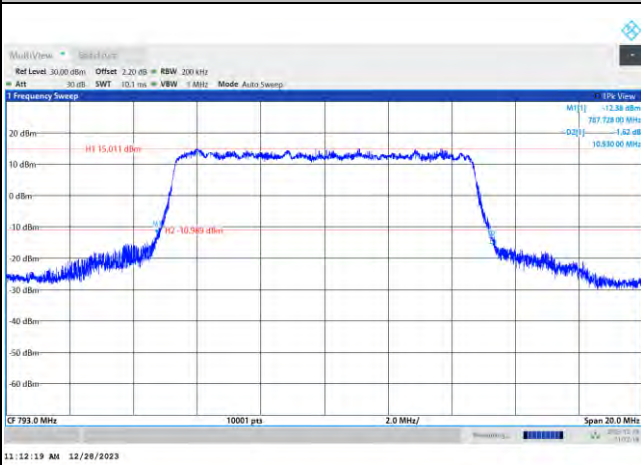
QPSK



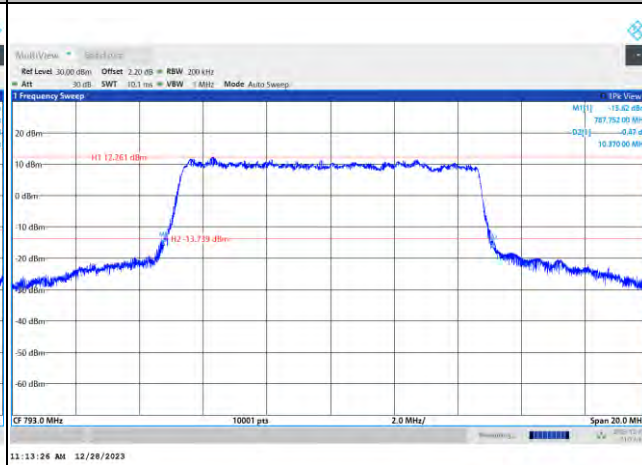
16QAM



64QAM



256QAM





Occupied Bandwidth

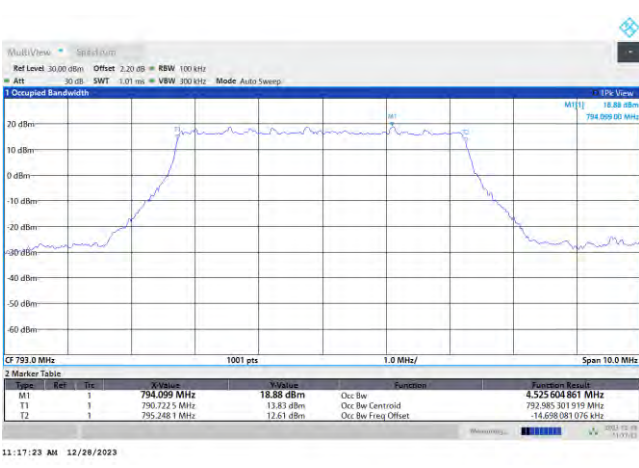
Mode	FR1 n14 : 99%OBW(MHz) / DFT-S OFDM						
BW	5MHz		10MHz				
Mod.	PI/2 BPSK		PI/2 BPSK				
Middle CH	4.52		9.01				

Mode	FR1 n14 : 99%OBW (MHz) / CP OFDM						
BW	5MHz		10MHz				
Mod.	QPSK	16QAM	QPSK	16QAM			
Middle CH	4.53	4.53	9.35	9.35			
Mod.	64QAM	256QAM	64QAM	256QAM			
Middle CH	4.54	4.53	9.37	9.36			



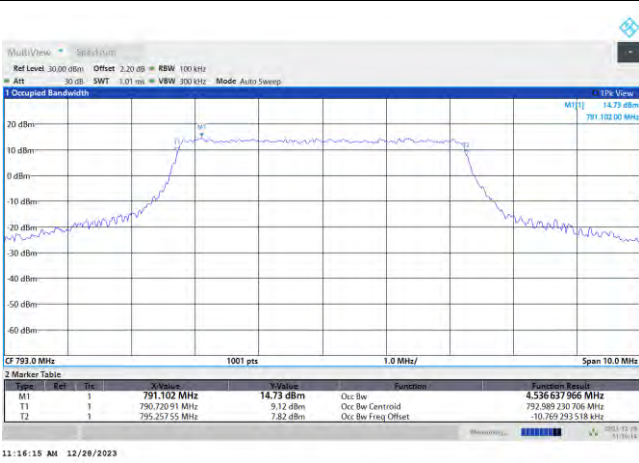
FR1 n14 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

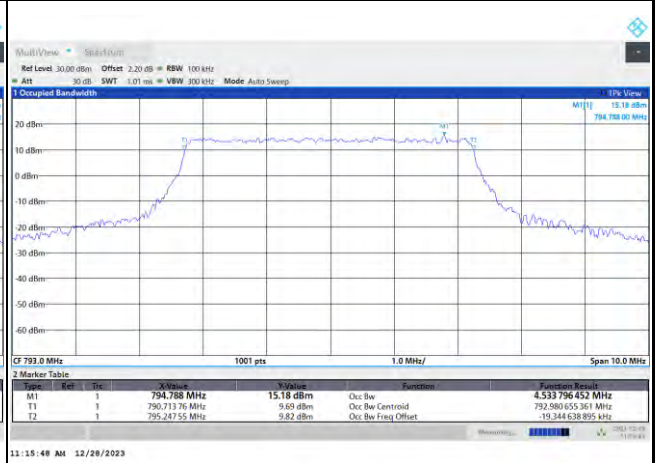


FR1 n14 / 5MHz / CP OFDM / Middle Channel / Full RB

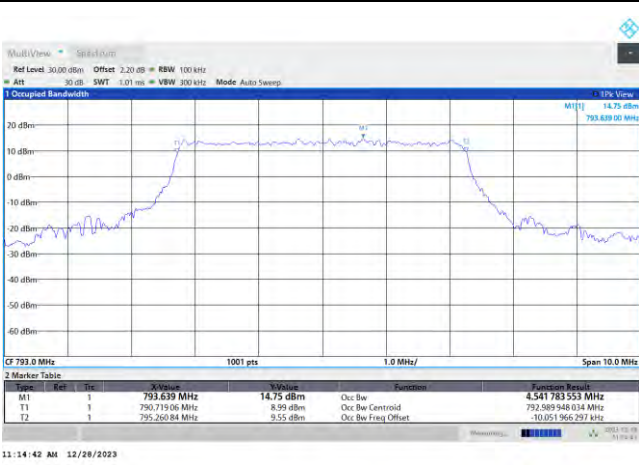
QPSK



16QAM



64QAM



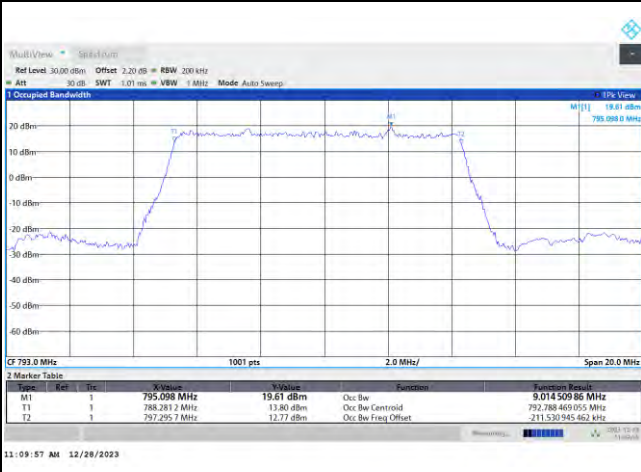
256QAM





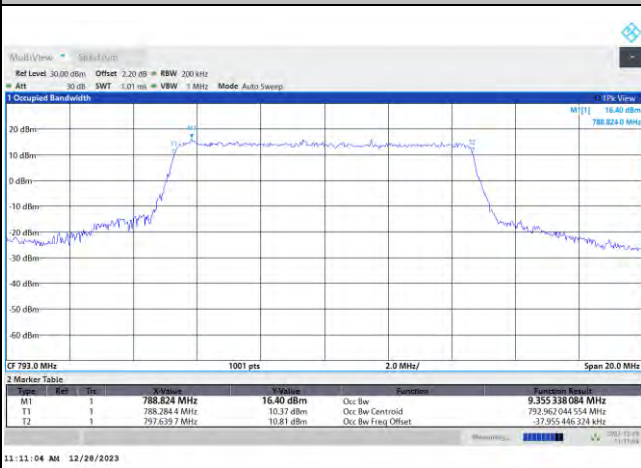
FR1 n14 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

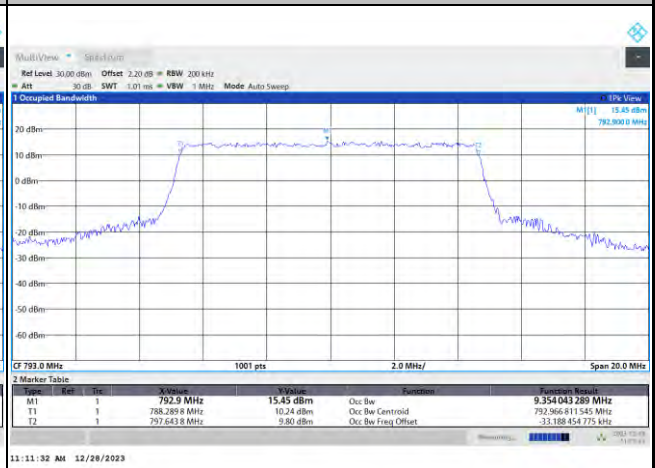


FR1 n14 / 10MHz / CP OFDM / Middle Channel / Full RB

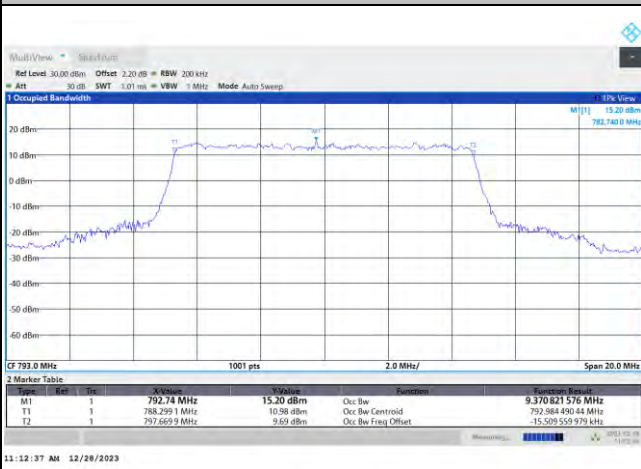
QPSK



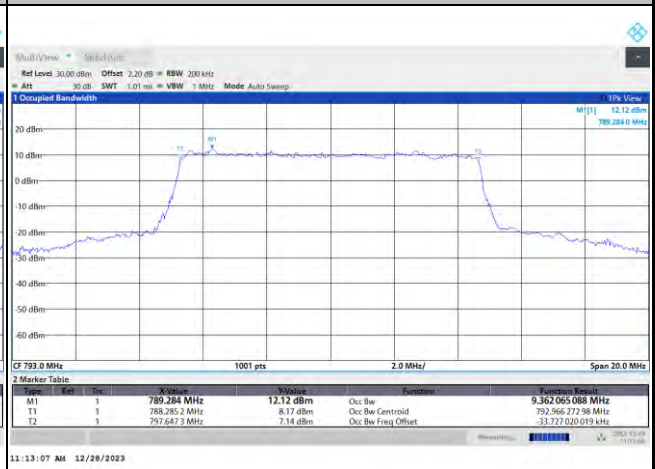
16QAM



64QAM



256QAM



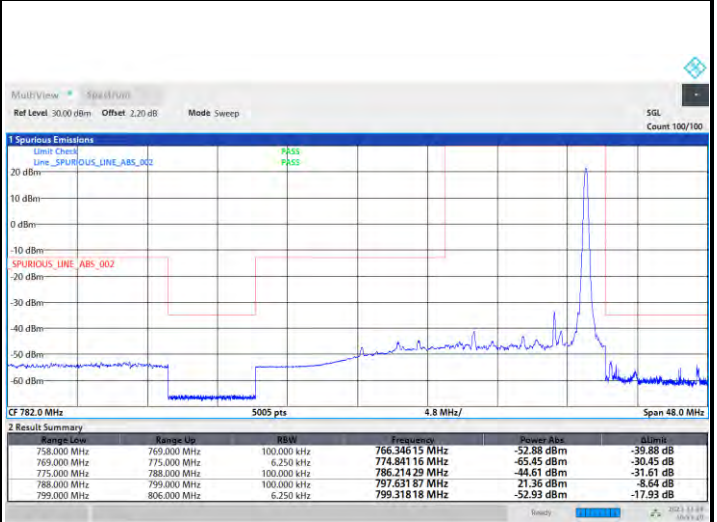


Conducted Band Edge

FR1 n14 / 5MHz / DFT-S OFDM / PI/2 BPSK

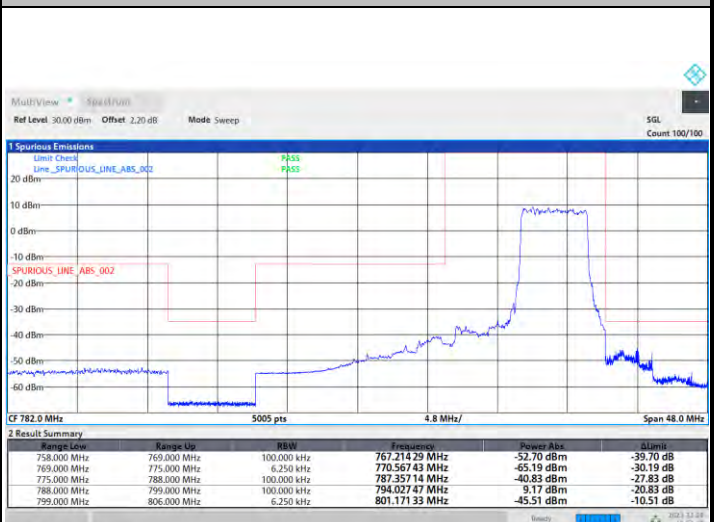
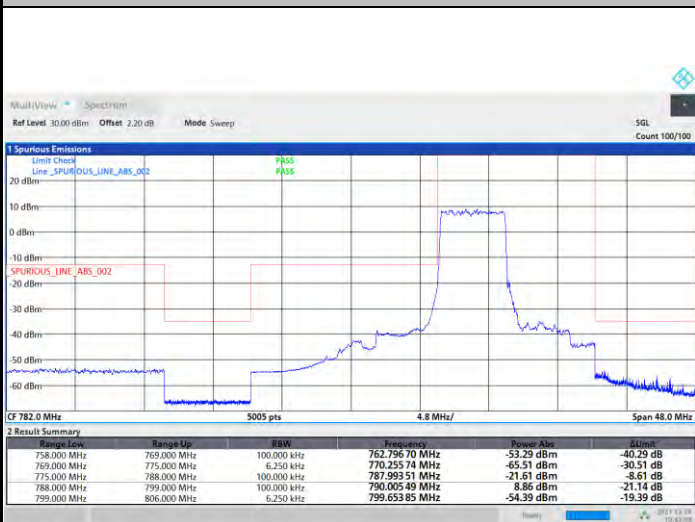
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

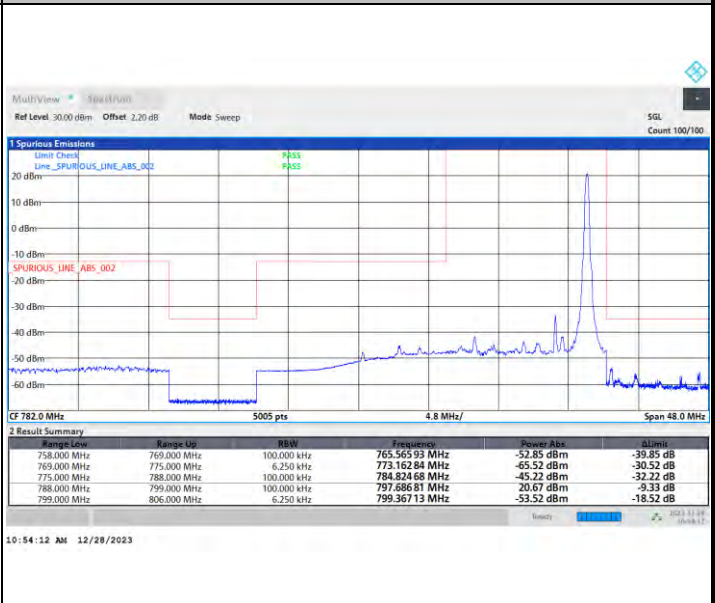
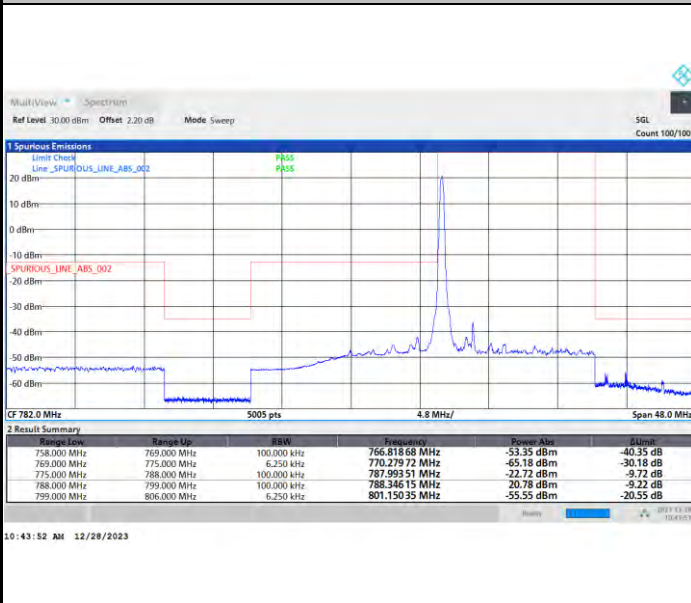




FR1 n14 / 5MHz / DFT-S OFDM / QPSK

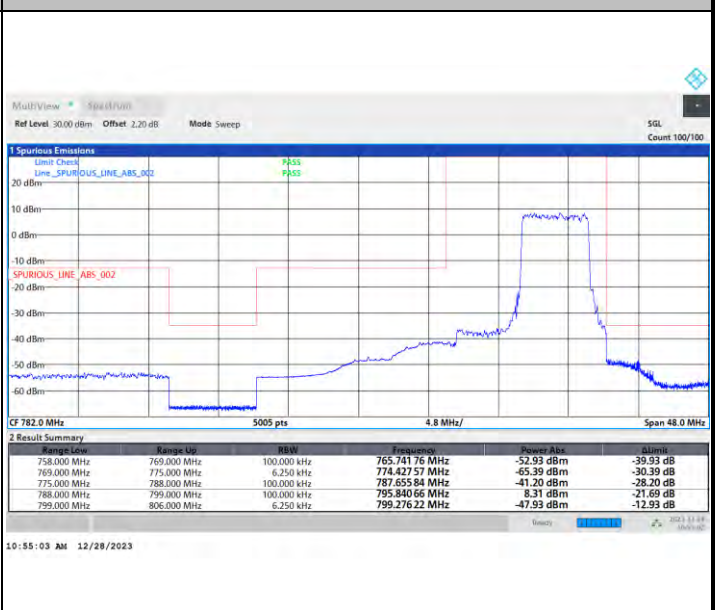
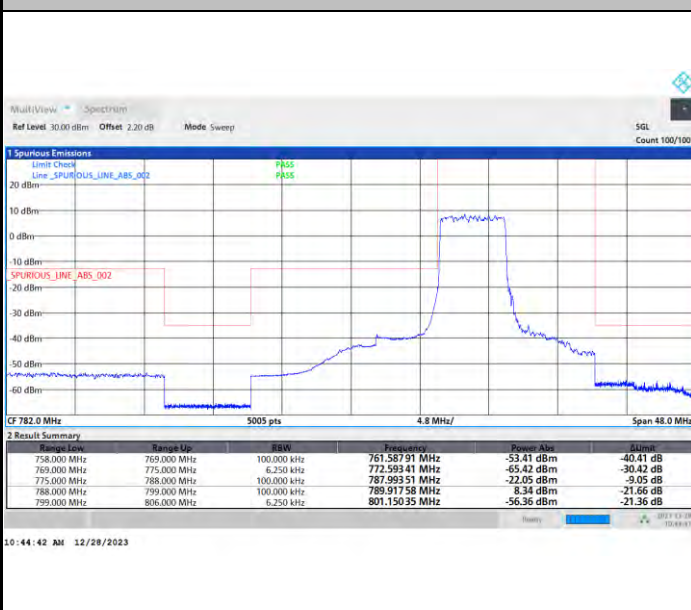
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

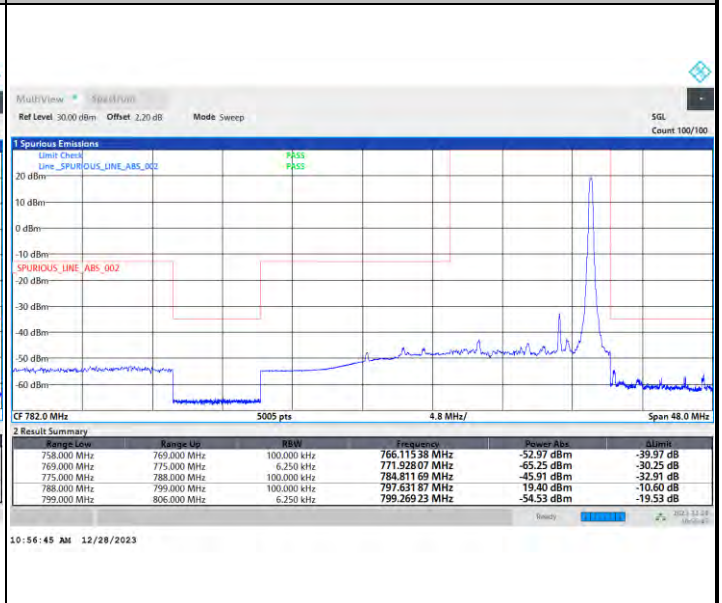
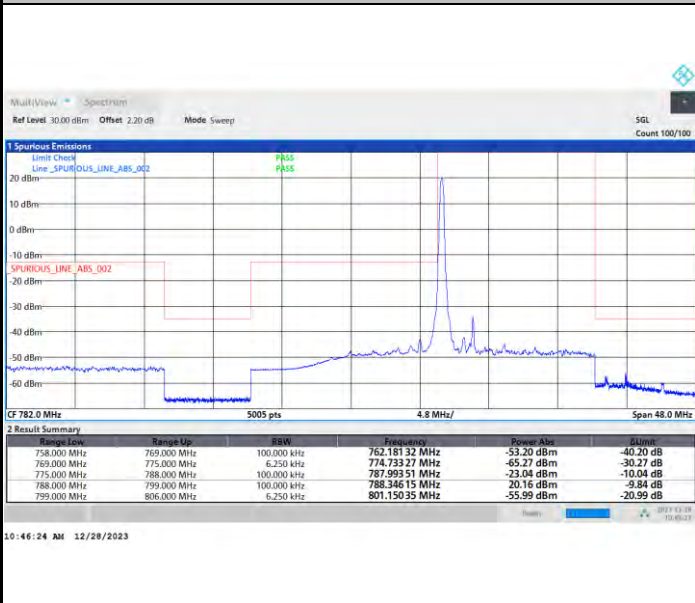




FR1 n14 / 5MHz / DFT-S OFDM / 16QAM

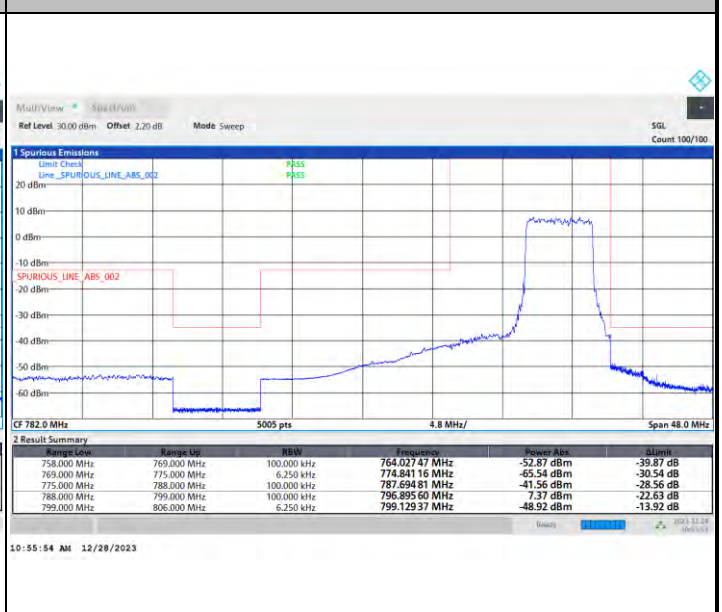
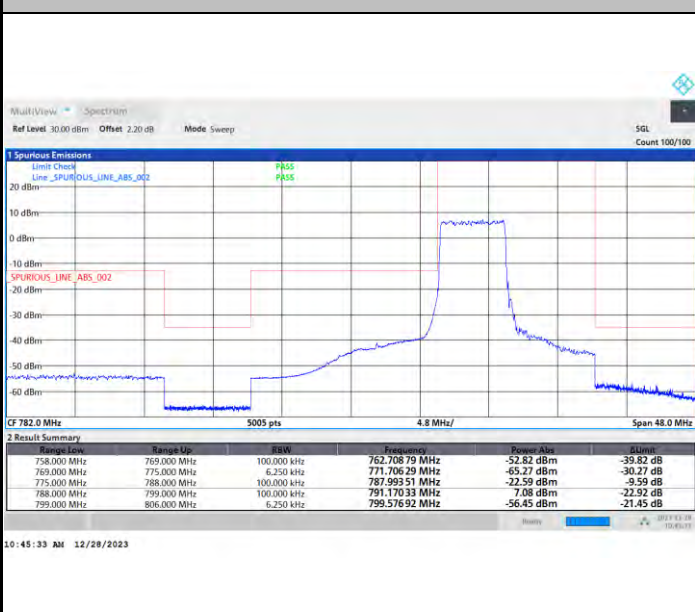
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

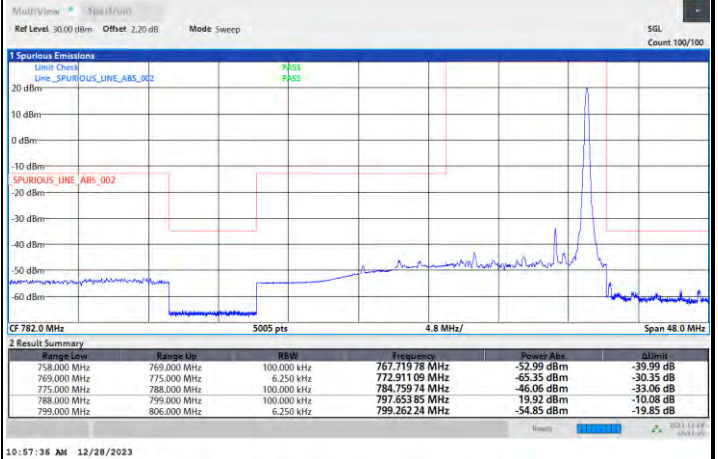
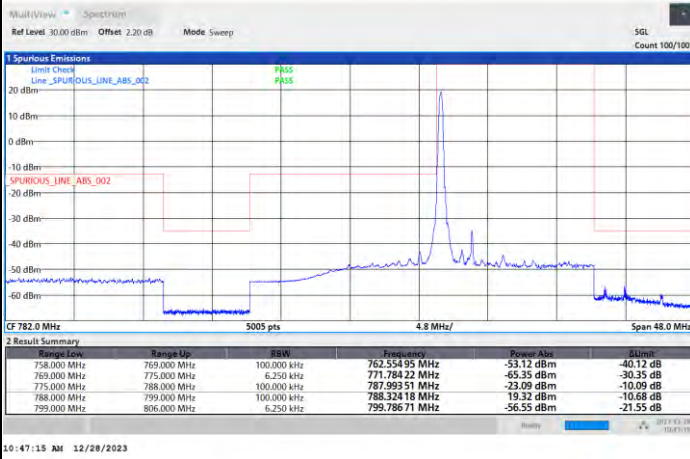




FR1 n14 / 5MHz / DFT-S OFDM / 64QAM

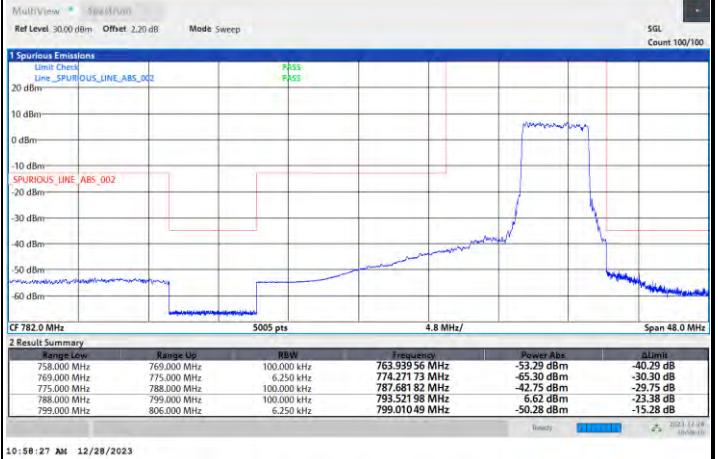
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

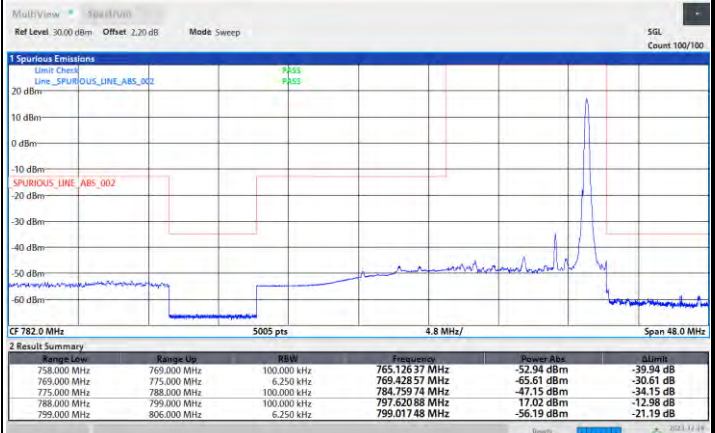
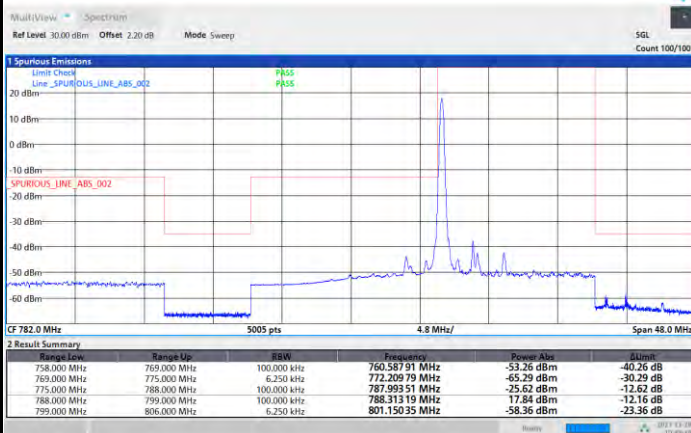




FR1 n14 / 5MHz / DFT-S OFDM / 256QAM

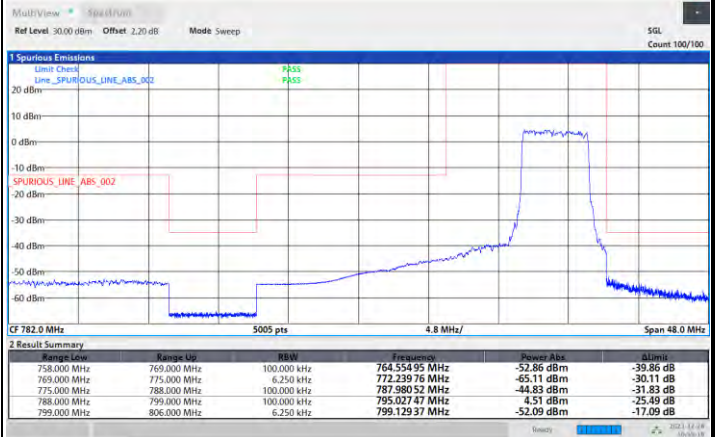
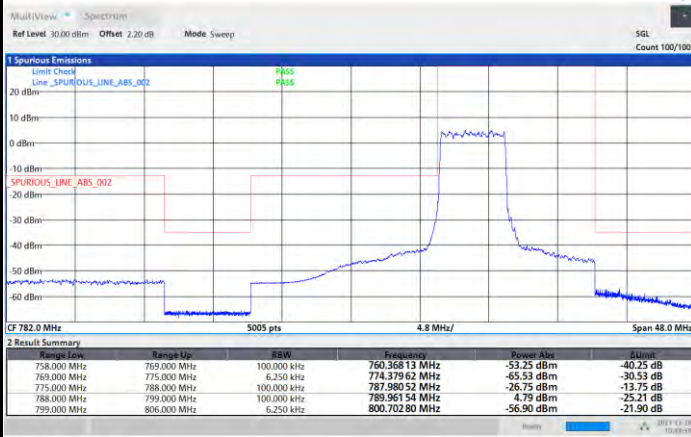
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB





FR1 n14 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

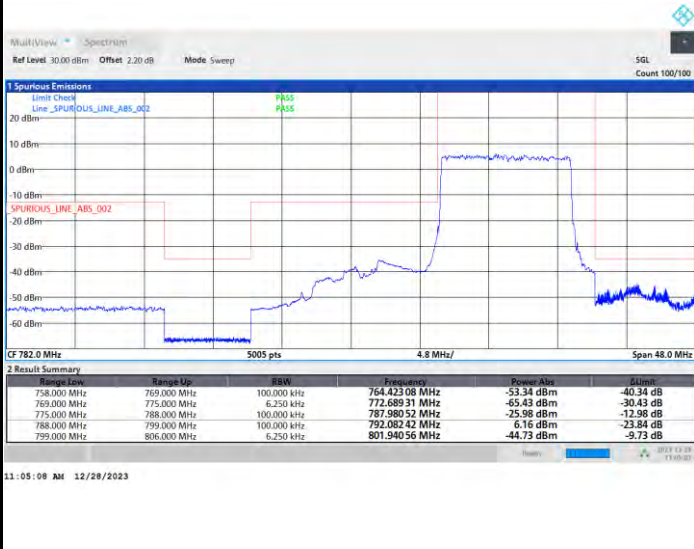
Highest Band Edge





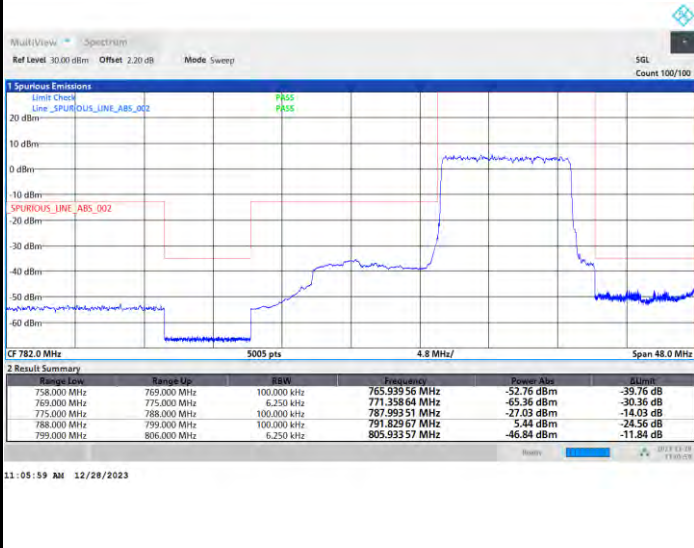
FR1 n14 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Middle Band Edge / Full RB



FR1 n14 / 10MHz / DFT-s-OFDM / QPSK

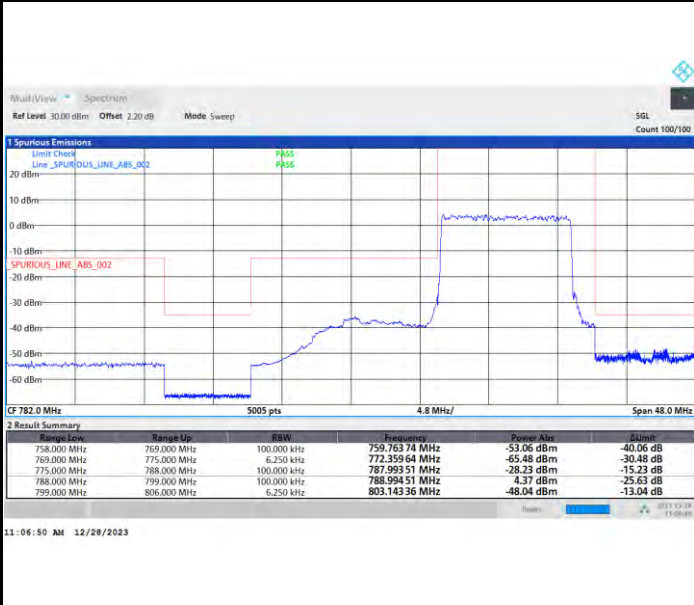
Middle Band Edge / Full RB





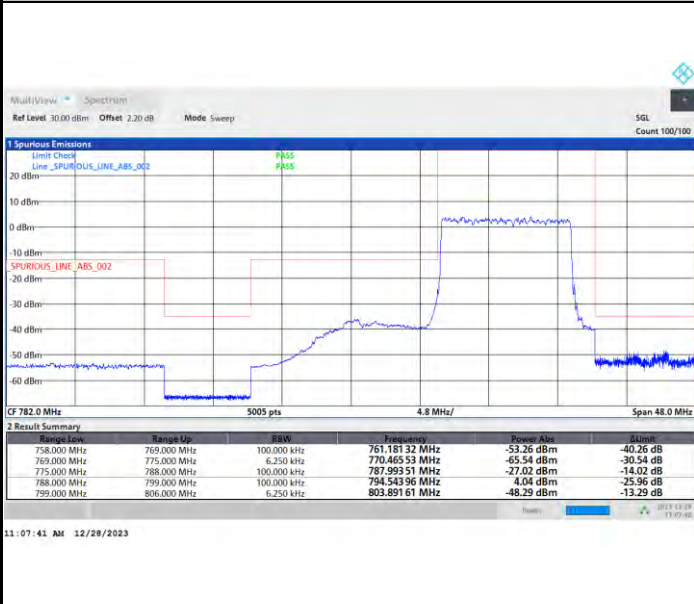
FR1 n14 / 10MHz / DFT-s-OFDM / 16QAM

Middle Band Edge / Full RB



FR1 n14 / 10MHz / DFT-s-OFDM / 64QAM

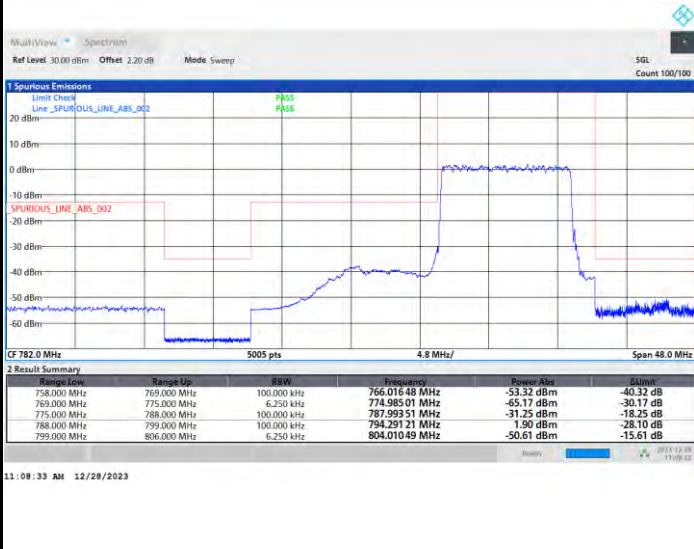
Middle Band Edge / Full RB





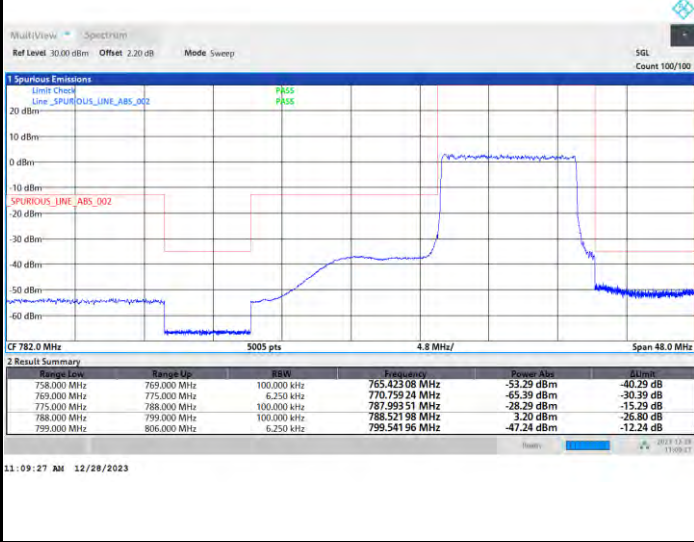
FR1 n14 / 10MHz / DFT-s-OFDM / 256QAM

Middle Band Edge / Full RB



FR1 n14 / 10MHz / CP OFDM / QPSK / Full RB

Middle Band Edge / Full RB





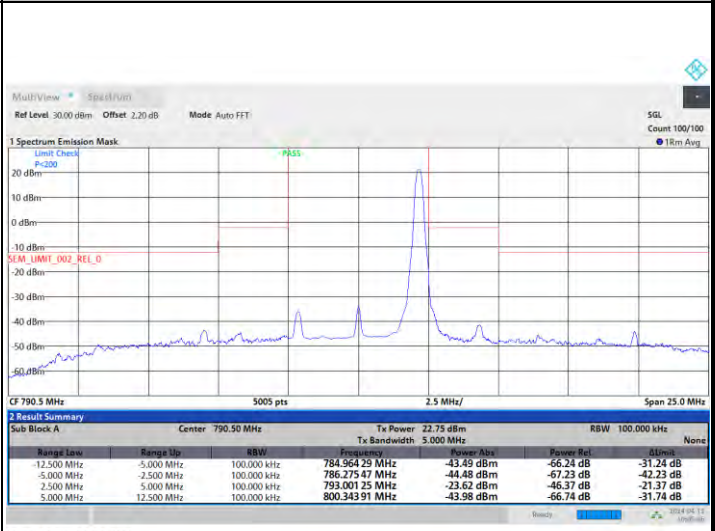
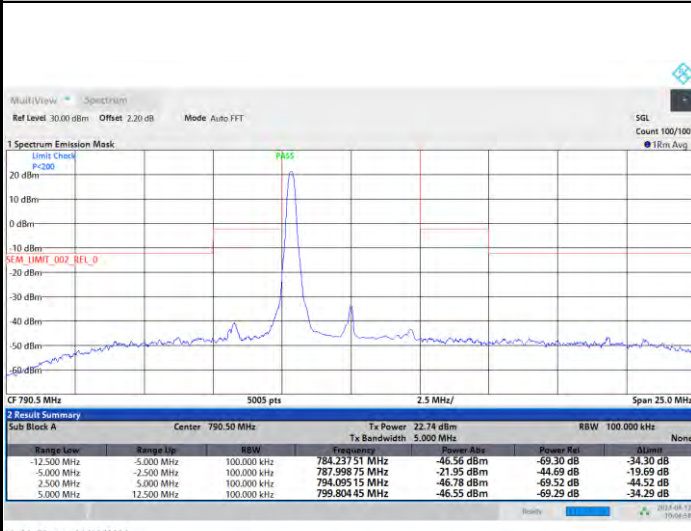
Unwanted Emission (MASK)

FR1 n14 / 5MHz / DFT-S OFDM / PI/2 BPSK

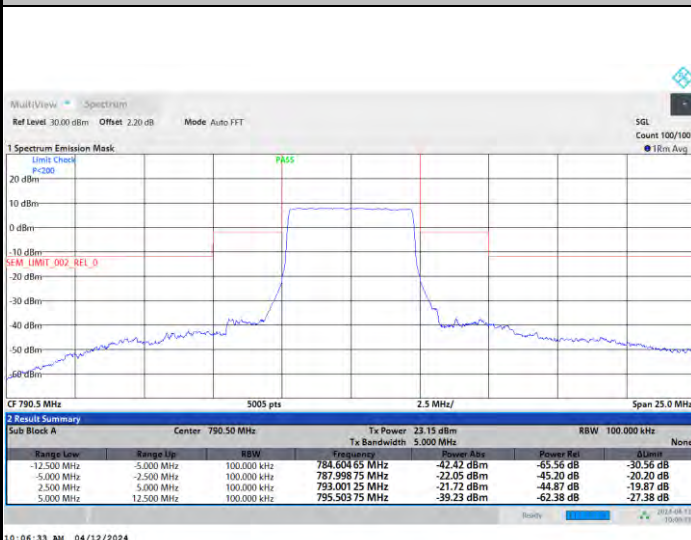
Lowest Channel

1RB0

1RBmax



Full RB



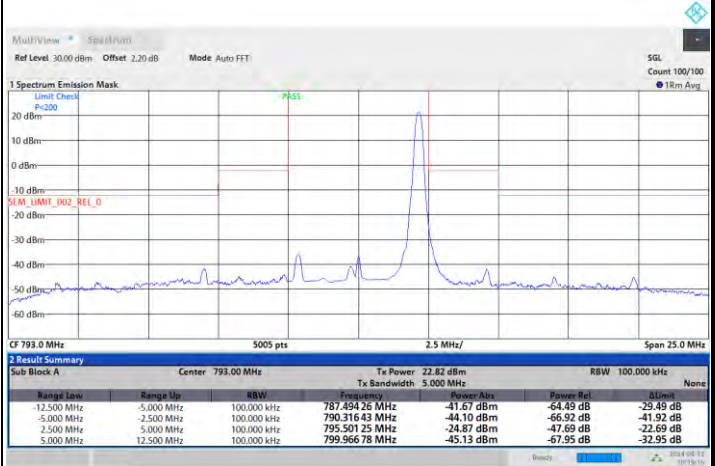
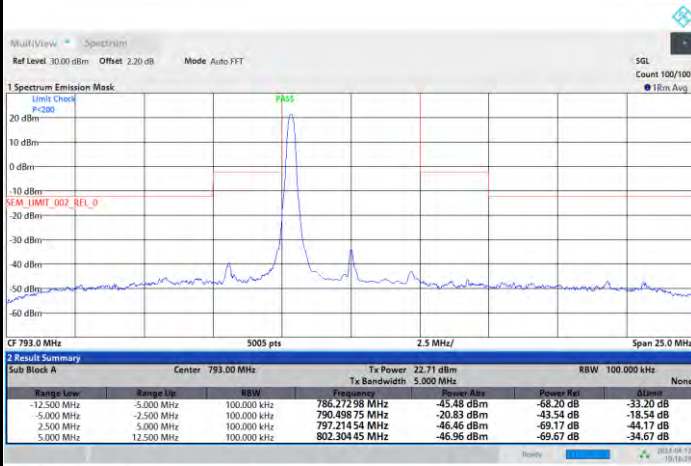


FR1 n14 / 5MHz / DFT-S OFDM / PI/2 BPSK

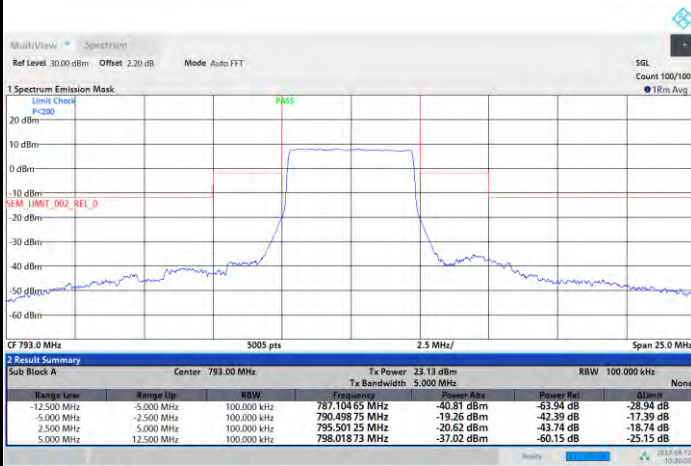
Middle Channel

1RB0

1RBmax



Full RB



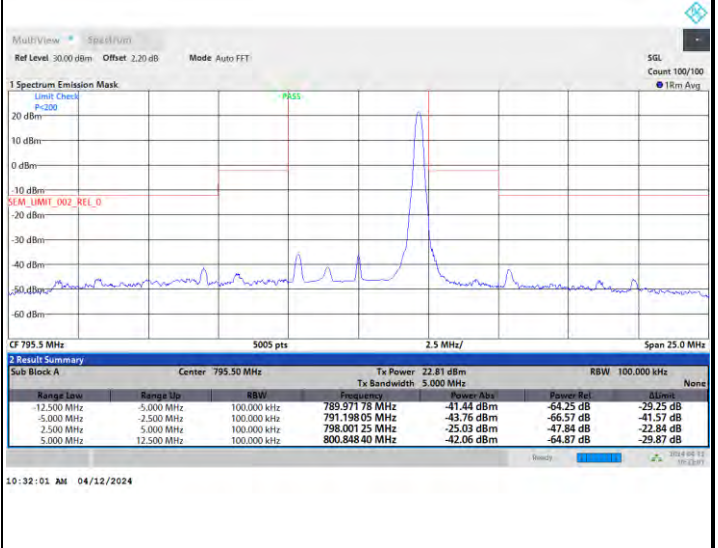
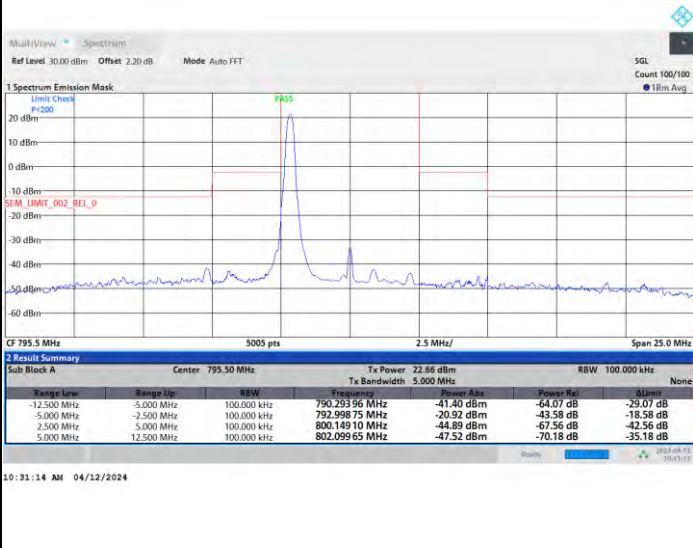


FR1 n14 / 5MHz / DFT-S OFDM / PI/2 BPSK

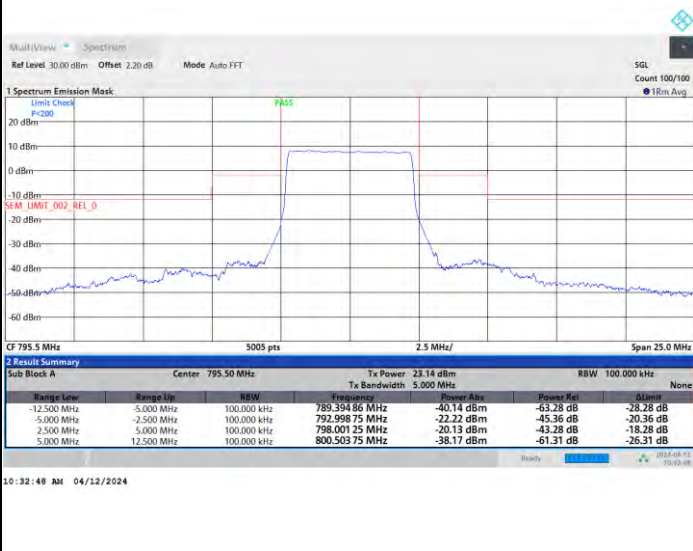
Highest Channel

1RB0

1RBmax



Full RB



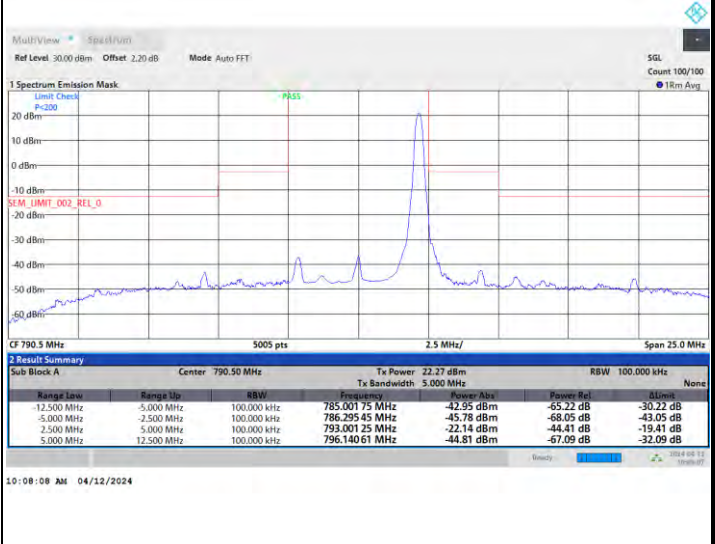
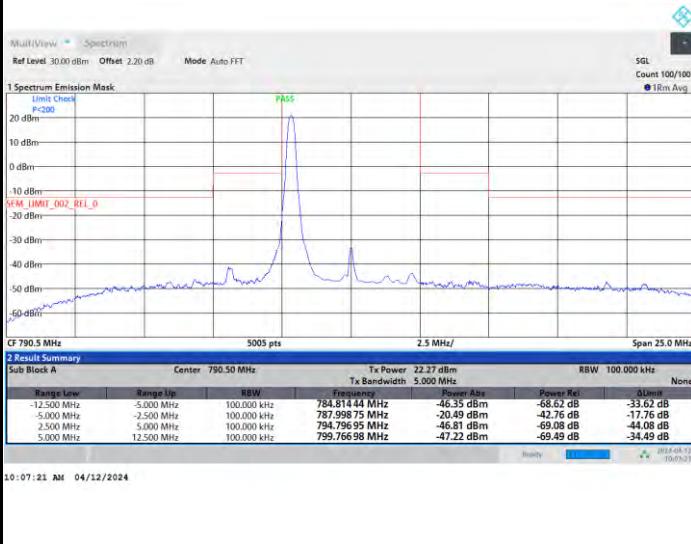


FR1 n14 / 5MHz / DFT-S OFDM / QPSK

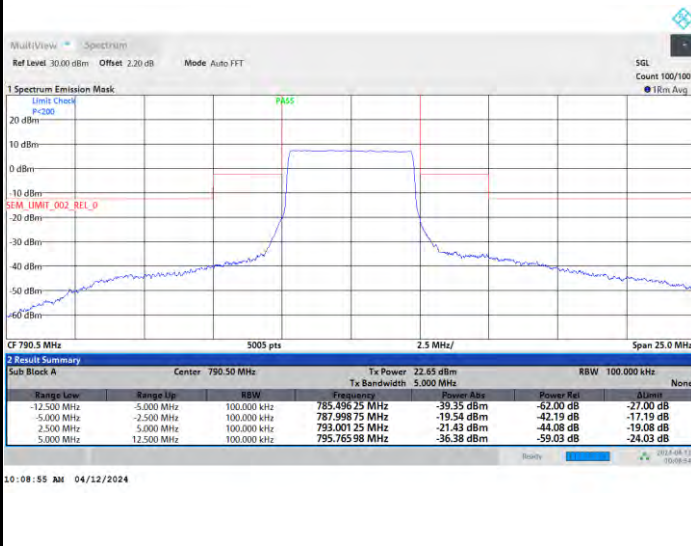
Lowest Channel

1RB0

1RBmax



Full RB



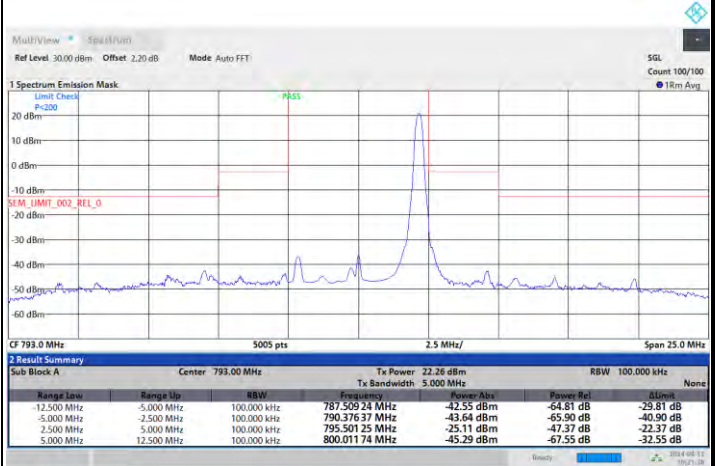
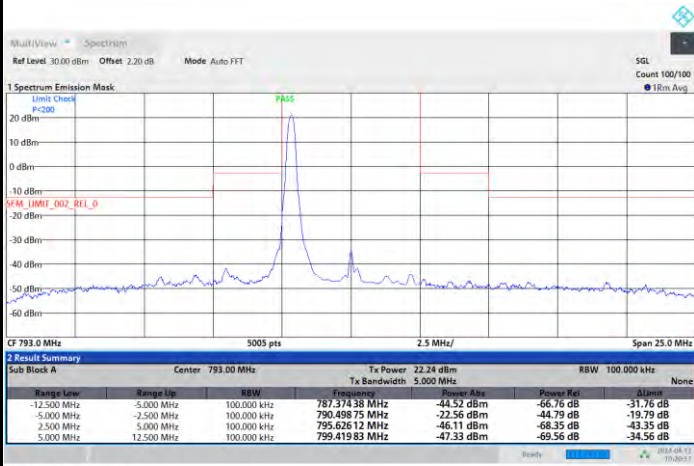


FR1 n14 / 5MHz / DFT-S OFDM / QPSK

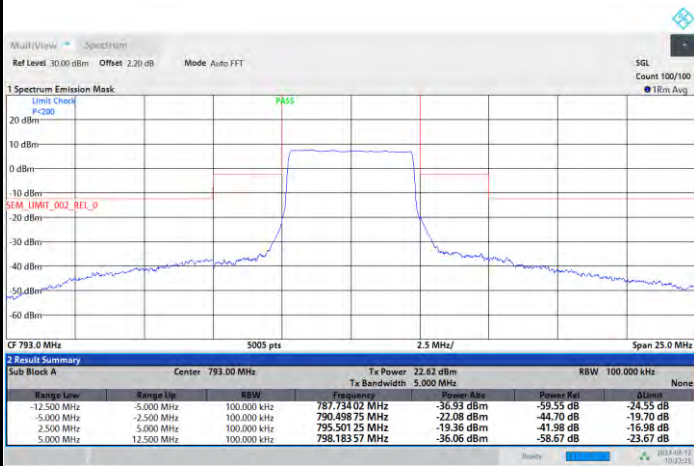
Middle Channel

1RB0

1RBmax



Full RB



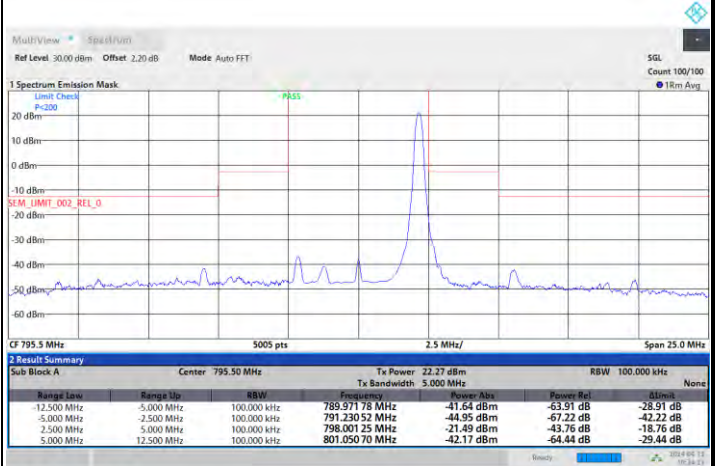
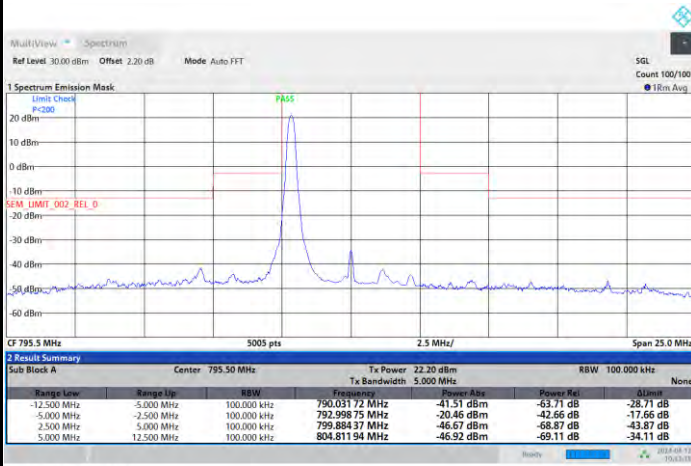


FR1 n14 / 5MHz / DFT-S OFDM / QPSK

Highest Channel

1RB0

1RBmax



10:33:35 AM 04/12/2024

10:34:23 AM 04/12/2024

Full RB



10:35:10 AM 04/12/2024

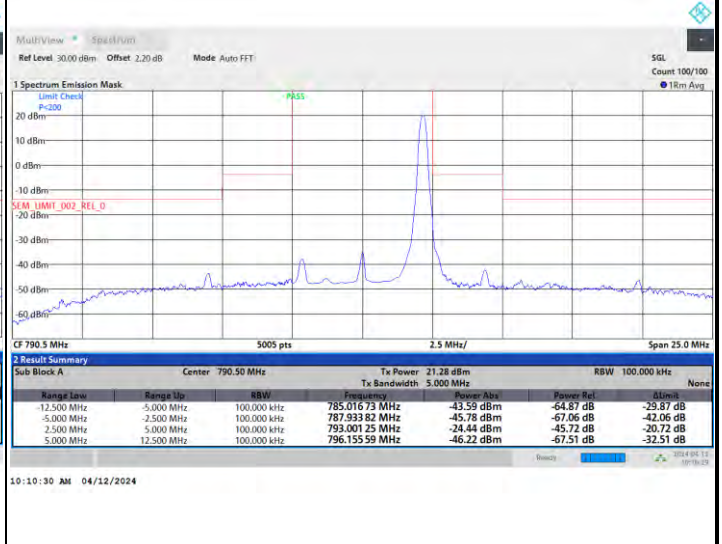
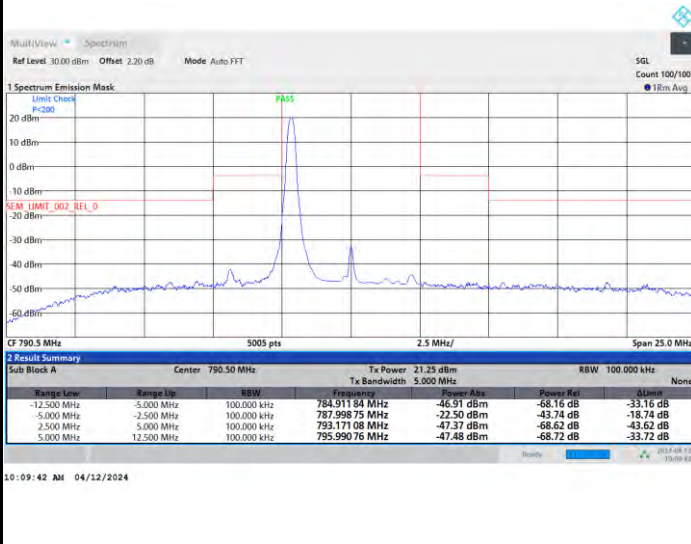


FR1 n14 / 5MHz / DFT-S OFDM / 16QAM

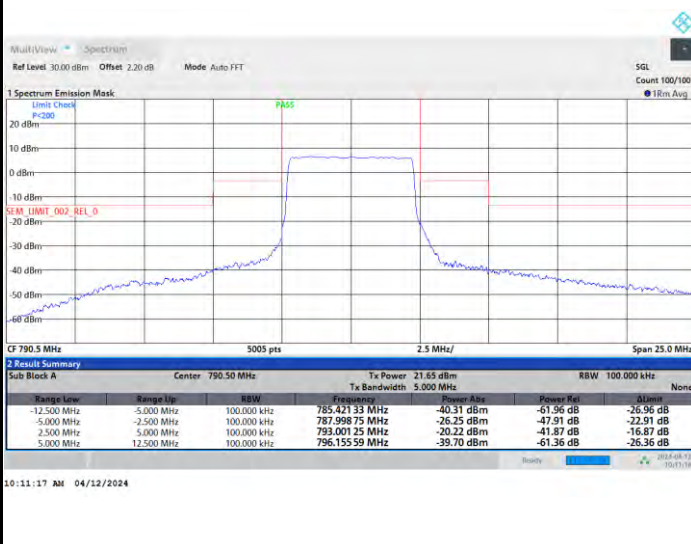
Lowest Channel

1RB0

1RBmax



Full RB

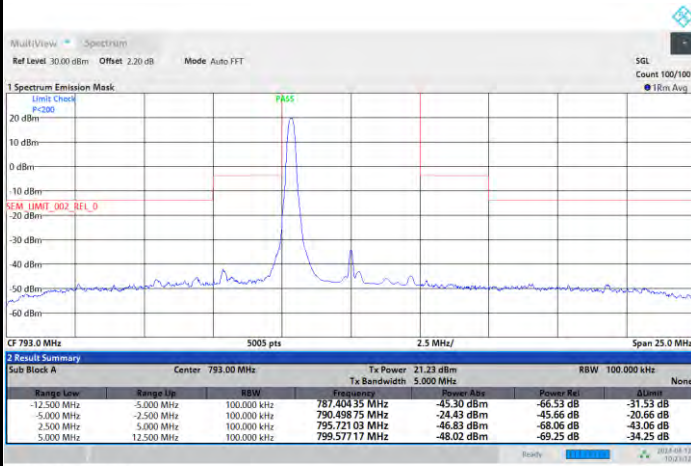




FR1 n14 / 5MHz / DFT-S OFDM / 16QAM

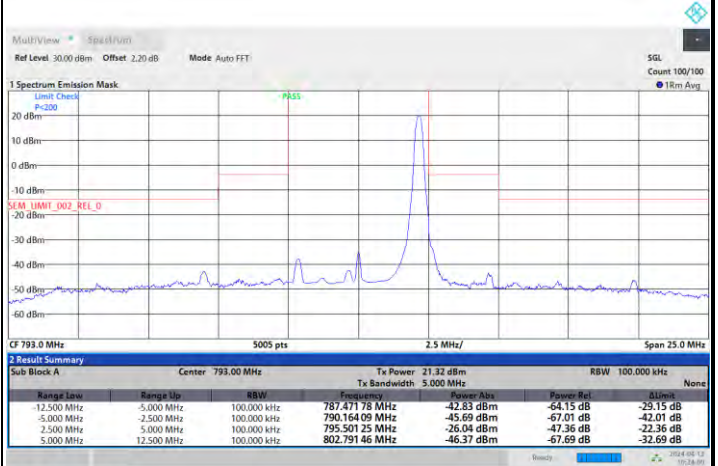
Middle Channel

1RB0



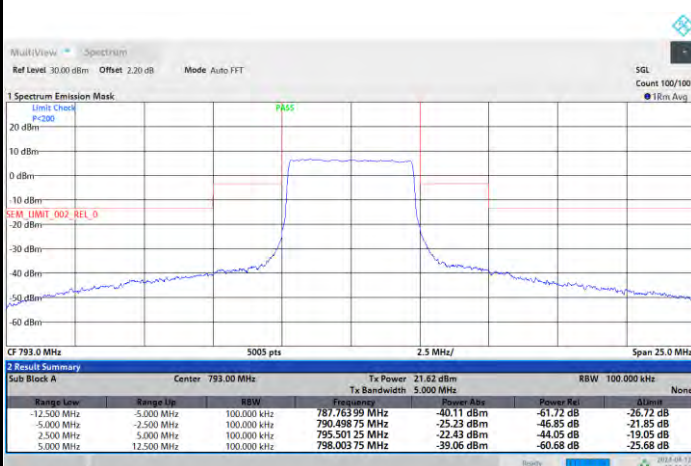
10:23:13 AM 04/12/2024

1RBmax



10:24:00 AM 04/12/2024

Full RB



10:24:47 AM 04/12/2024

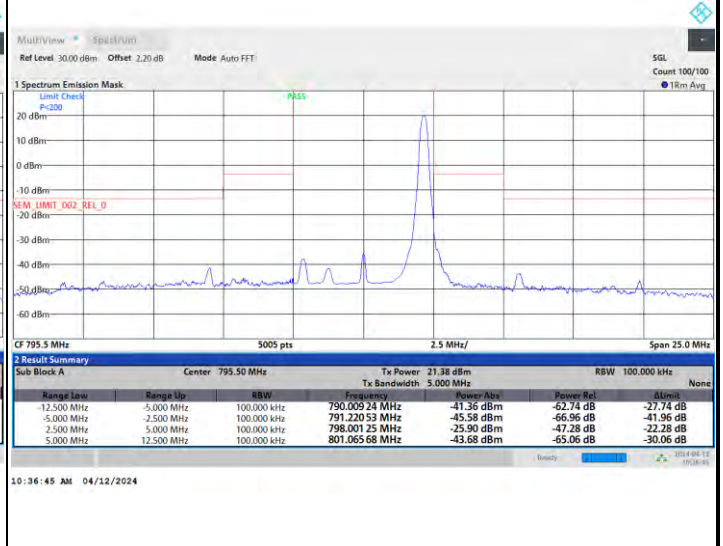
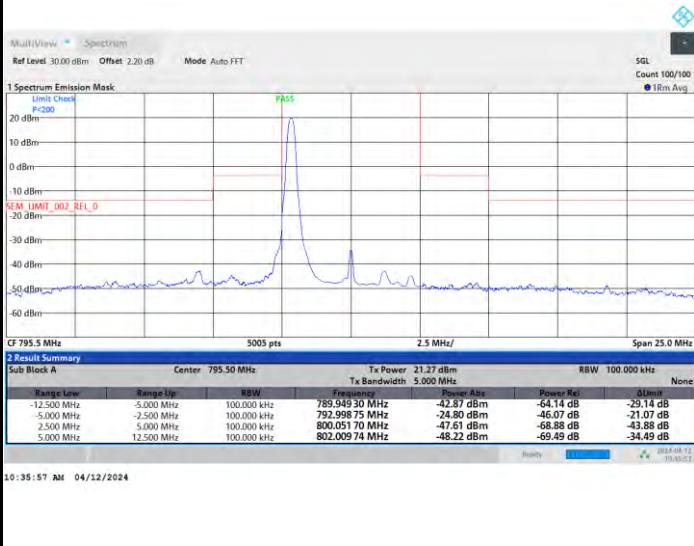


FR1 n14 / 5MHz / DFT-S OFDM / 16QAM

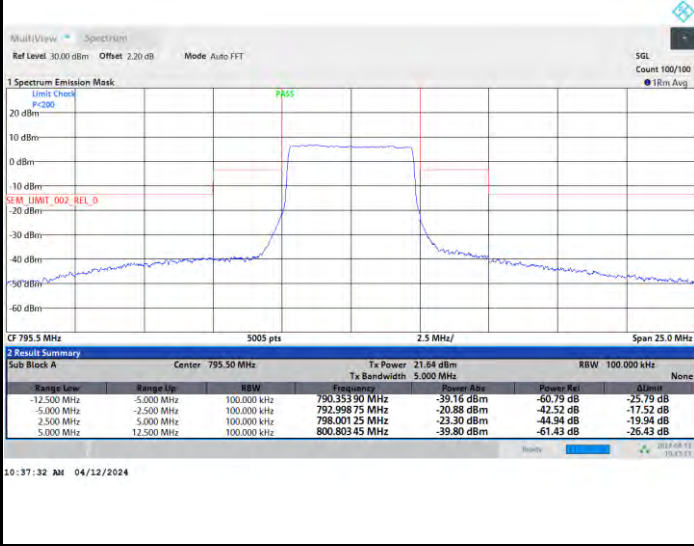
Highest Channel

1RB0

1RBmax



Full RB



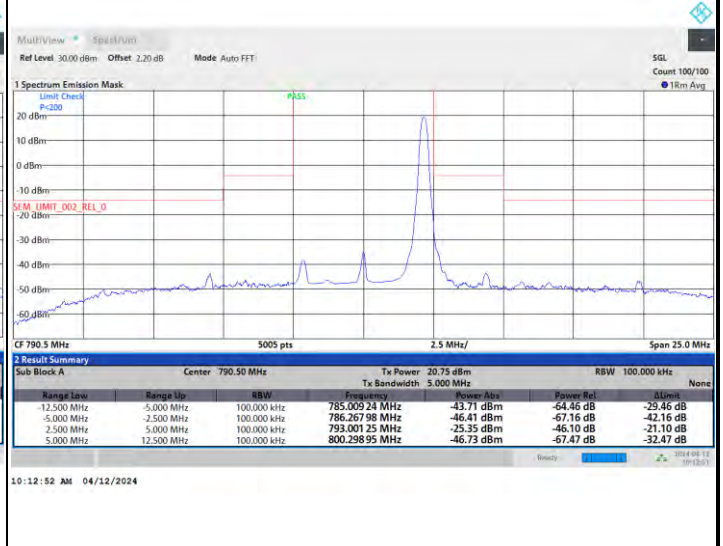
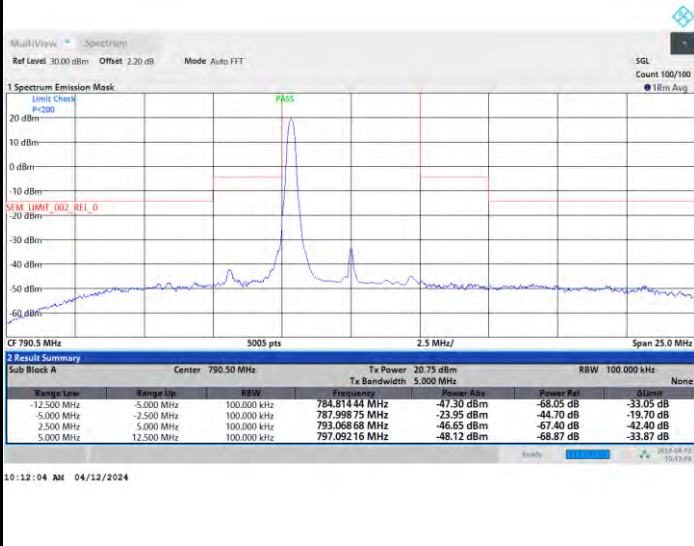


FR1 n14 / 5MHz / DFT-S OFDM / 64QAM

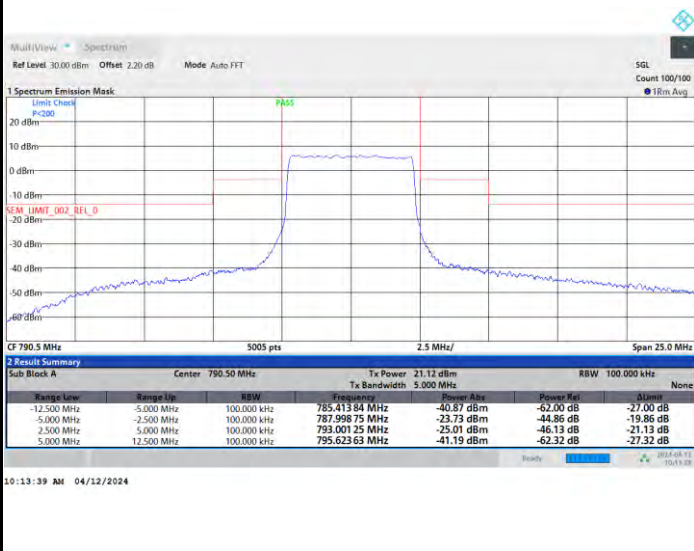
Lowest Channel

1RB0

1RBmax



Full RB



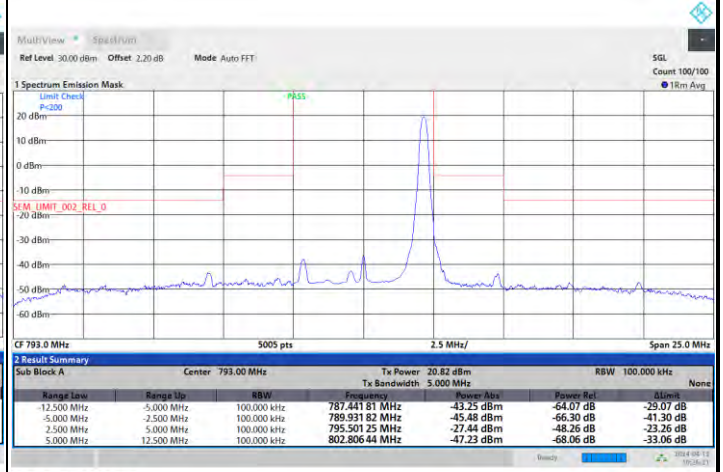
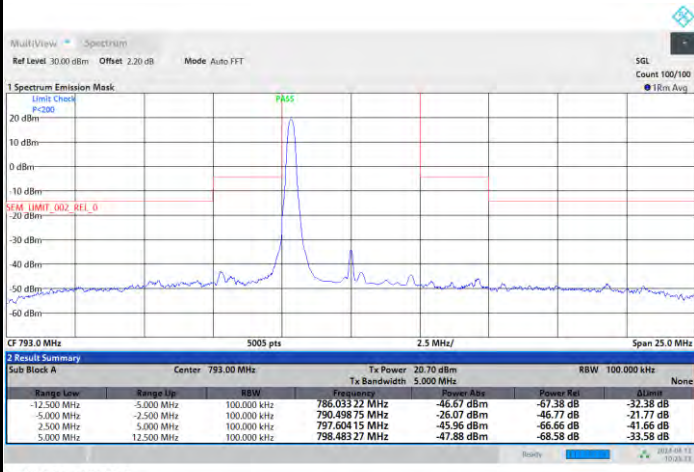


FR1 n14 / 5MHz / DFT-S OFDM / 64QAM

Middle Channel

1RB0

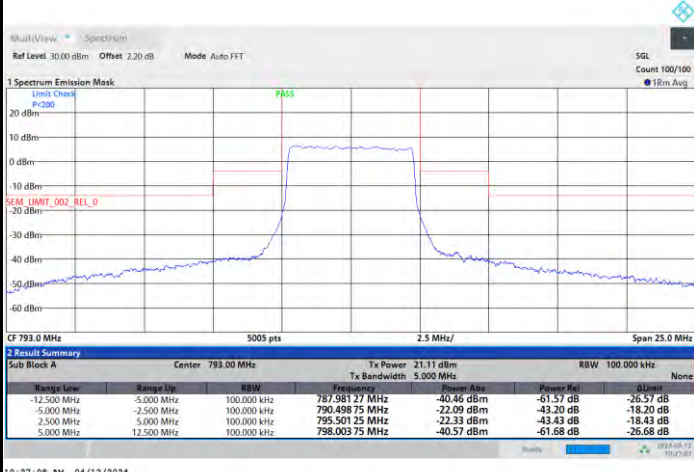
1RBmax



10:25:34 AM 04/12/2024

10:26:21 AM 04/12/2024

Full RB



10:27:08 AM 04/12/2024

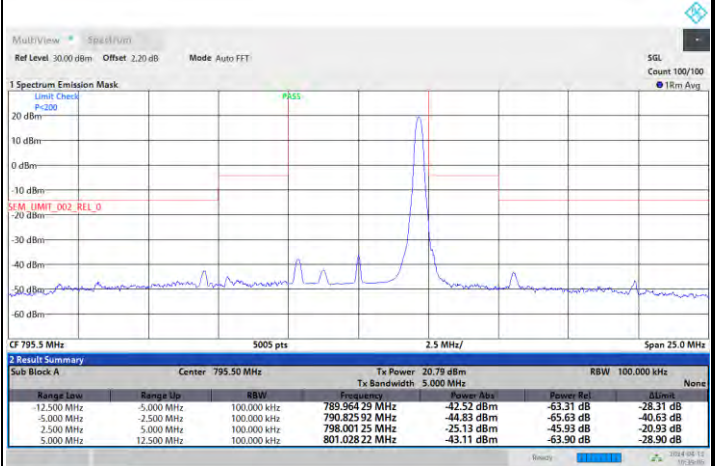
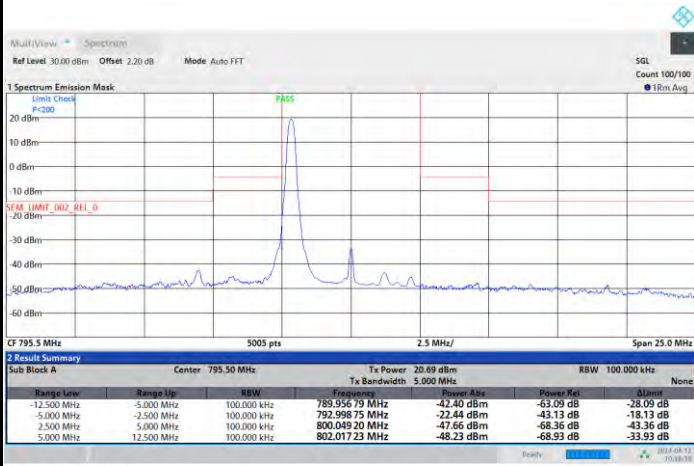


FR1 n14 / 5MHz / DFT-S OFDM / 64QAM

Highest Channel

1RB0

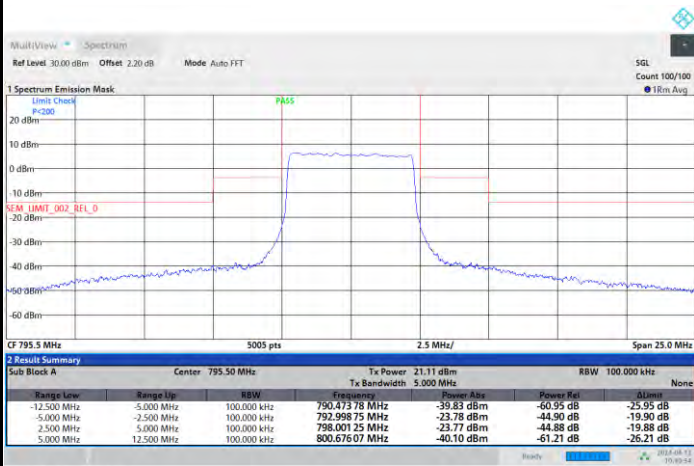
1RBmax



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10:39:07 AM 04/12/2024

Full RB



10:39:54 AM 04/12/2024

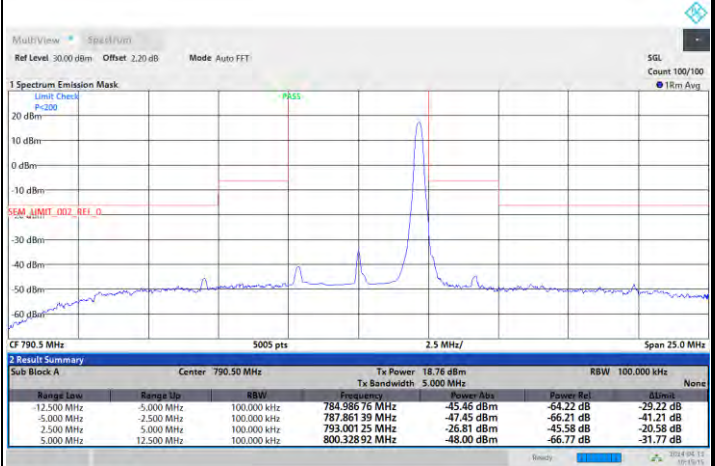
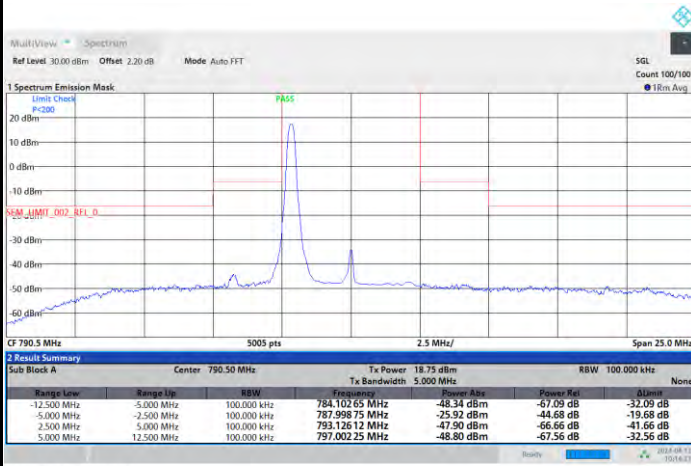


FR1 n14 / 5MHz / DFT-S OFDM / 256QAM

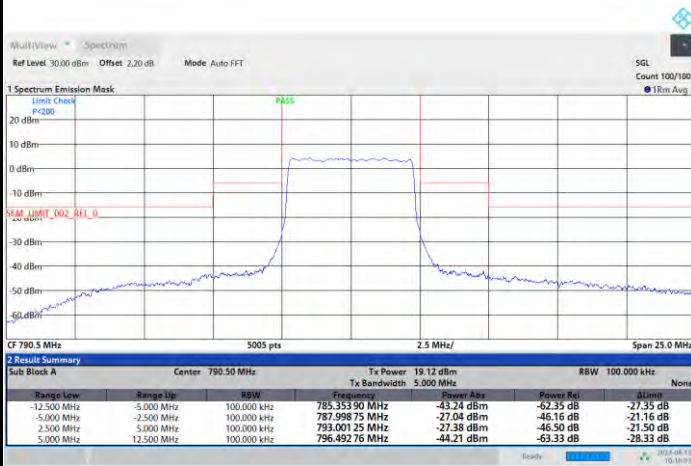
Lowest Channel

1RB0

1RBmax



Full RB



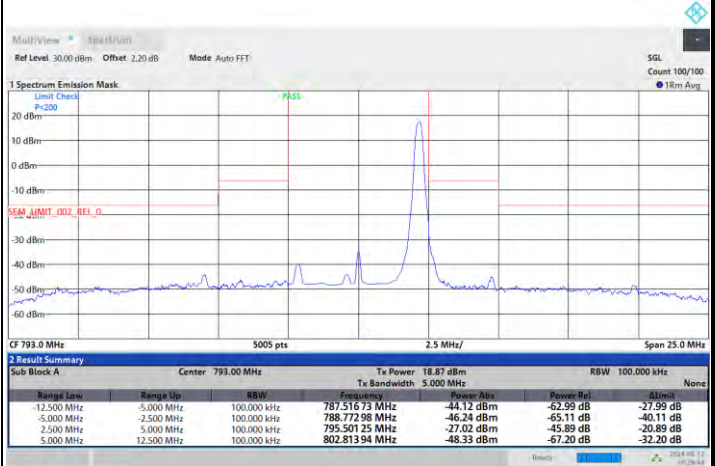
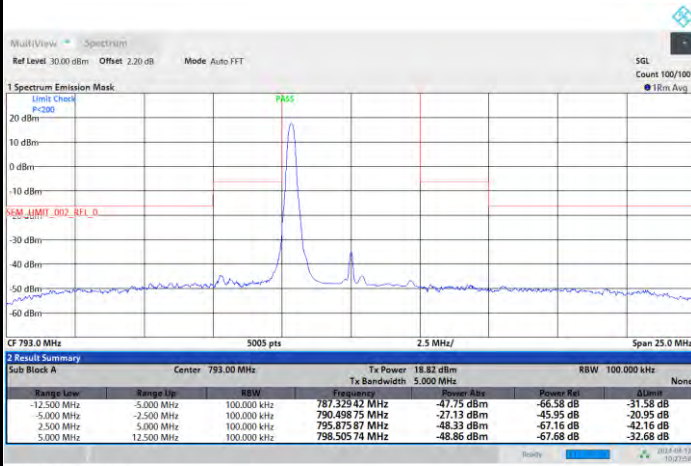


FR1 n14 / 5MHz / DFT-S OFDM / 256QAM

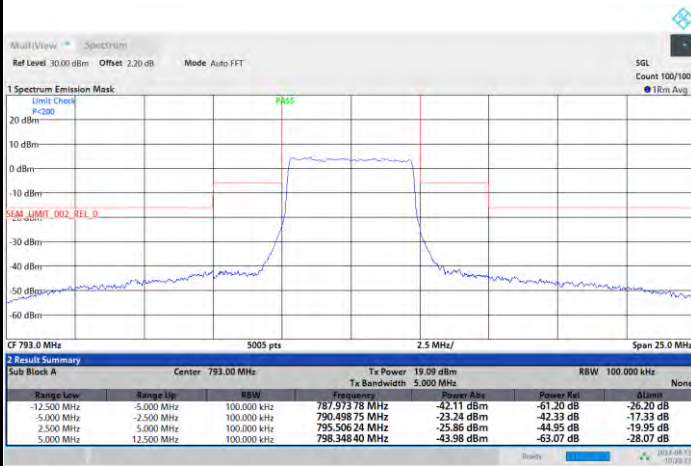
Middle Channel

1RB0

1RBmax



Full RB



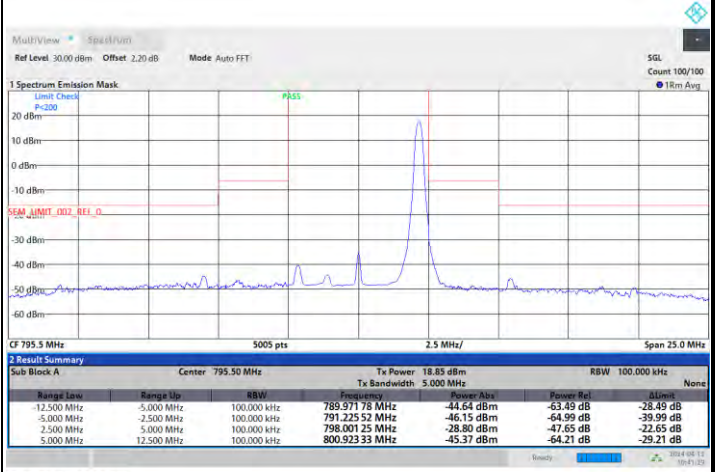
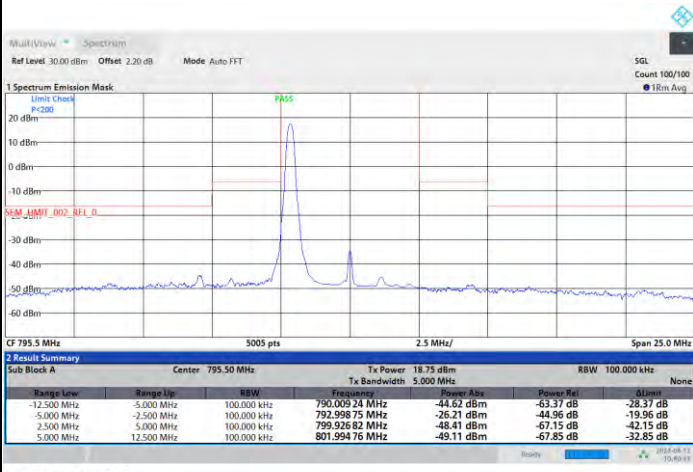


FR1 n14 / 5MHz / DFT-S OFDM / 256QAM

Highest Channel

1RB0

1RBmax



10:40:43 AM 04/12/2024

10:41:30 AM 04/12/2024

Full RB



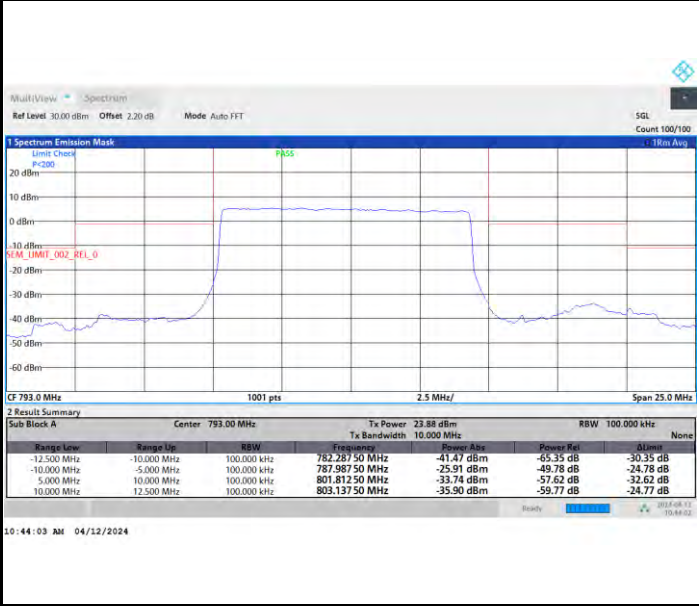
10:42:17 AM 04/12/2024



FR1 n14 / 10MHz / DFT-S OFDM / BPSK

Middle Channel

Full RB

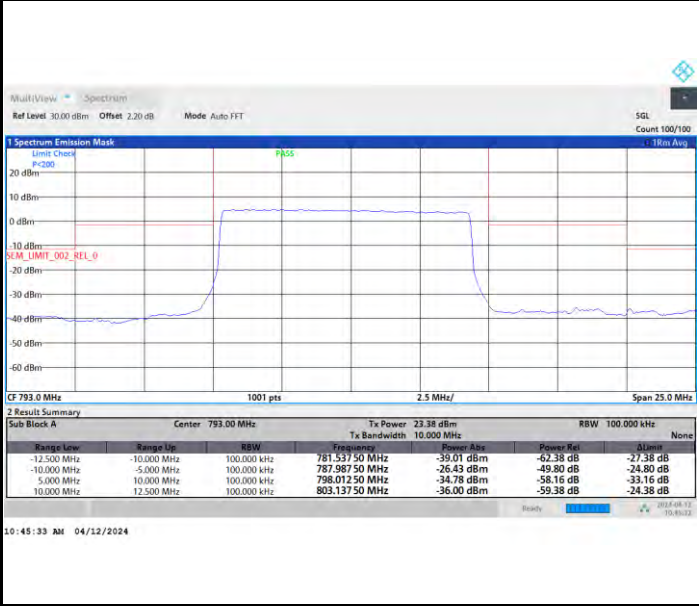




FR1 n14 / 10MHz / DFT-S OFDM / QPSK

Middle Channel

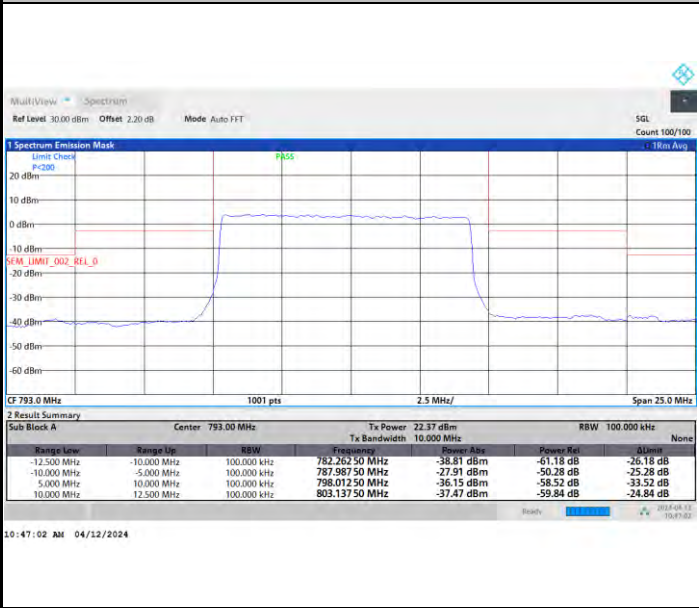
Full RB

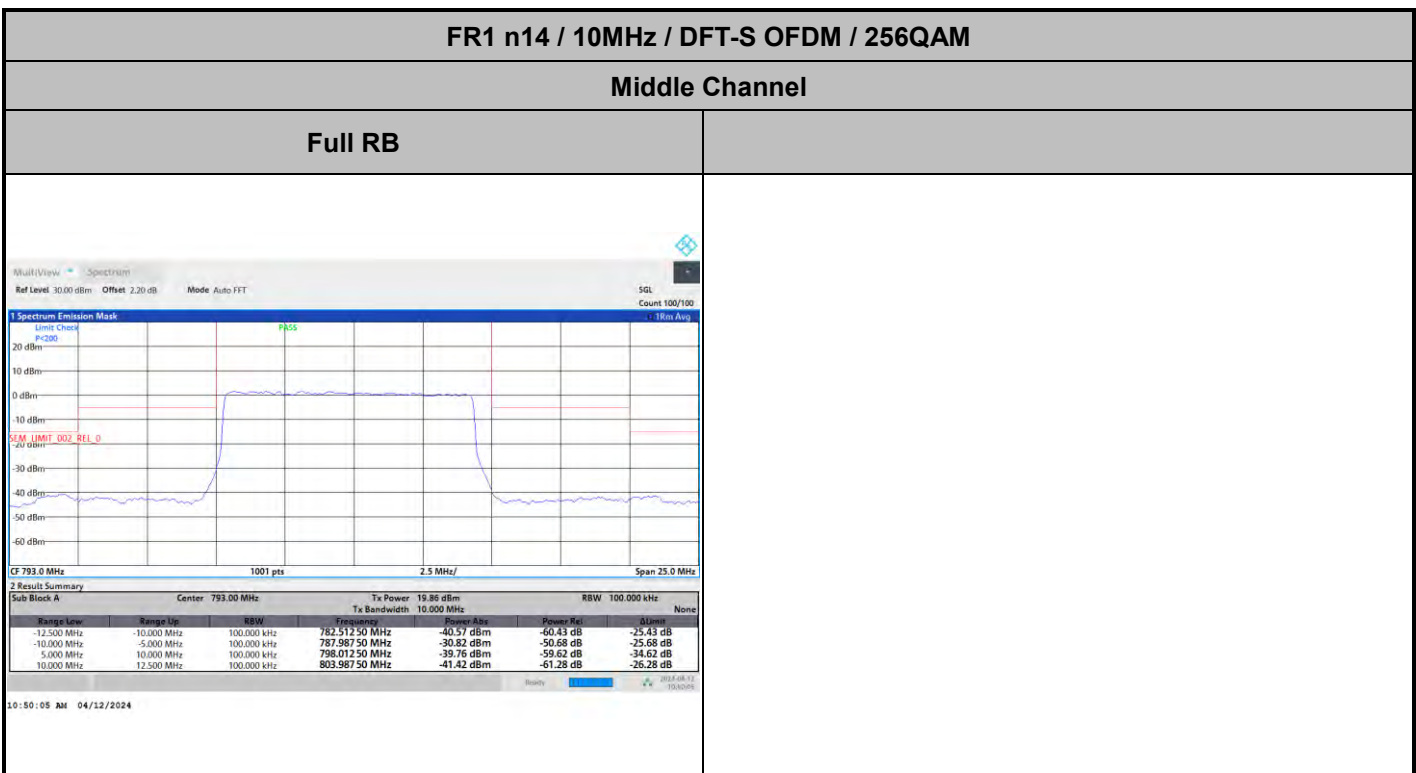
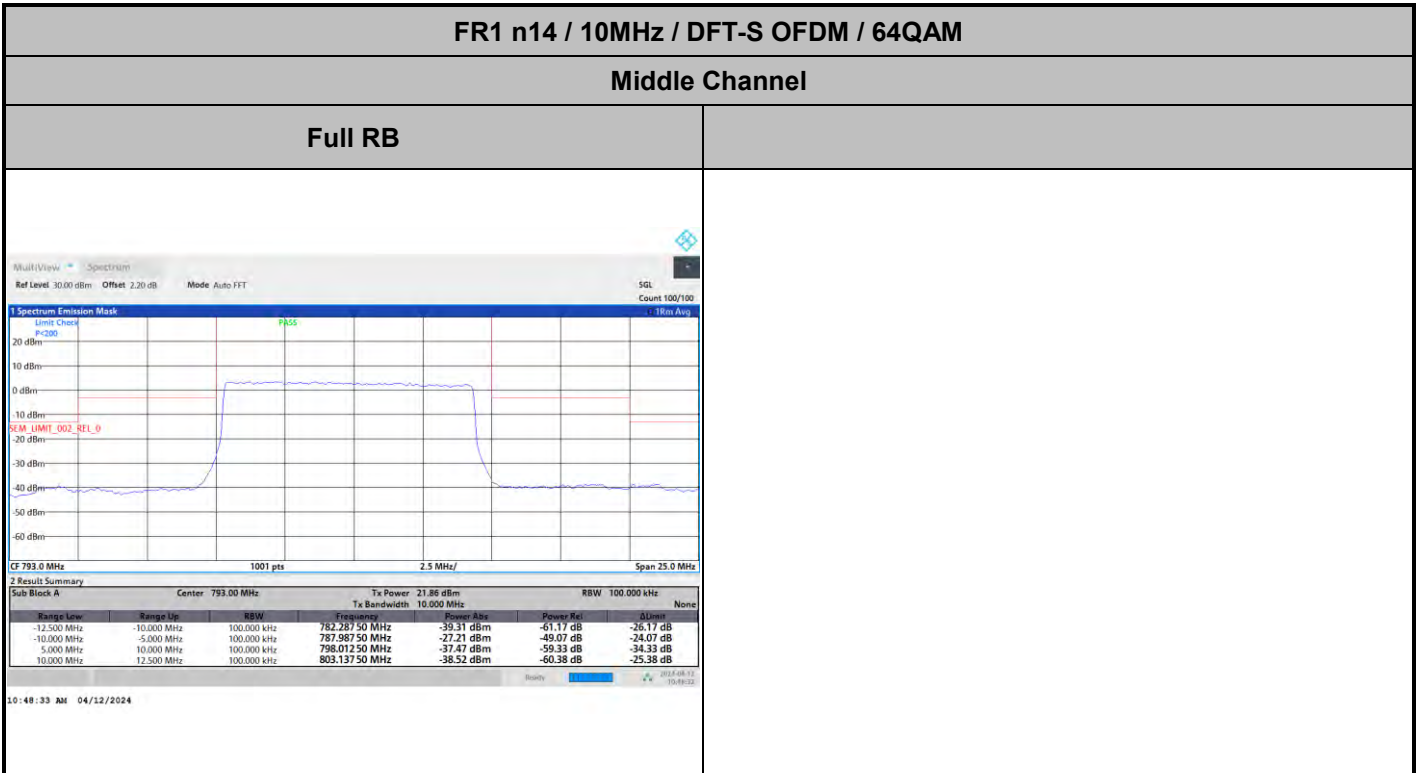


FR1 n14 / 10MHz / DFT-S OFDM / 16QAM

Middle Channel

Full RB

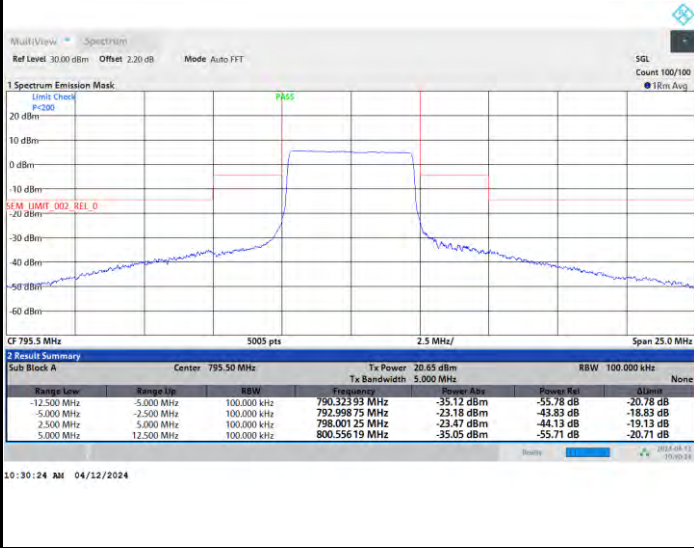






FR1 n14 / 5MHz / CP OFDM / QPSK / Full RB

Highest Channel



FR1 n14 / 10MHz / CP OFDM / QPSK / Full RB

Middle Channel

