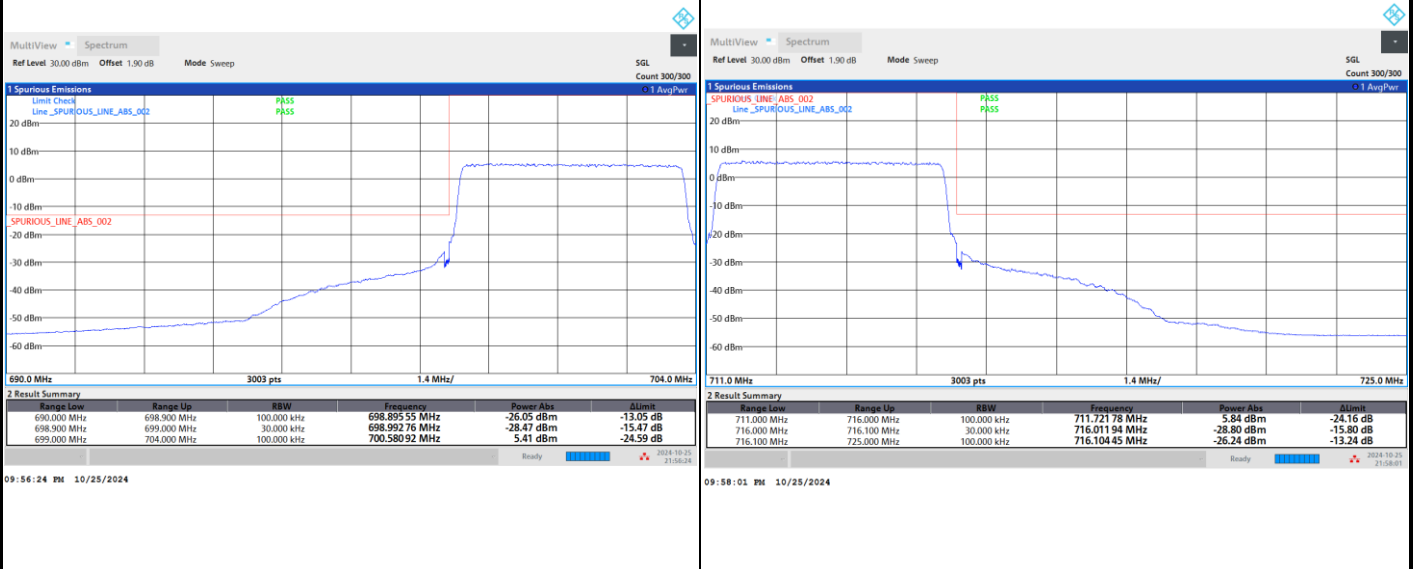




FR1 n12 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

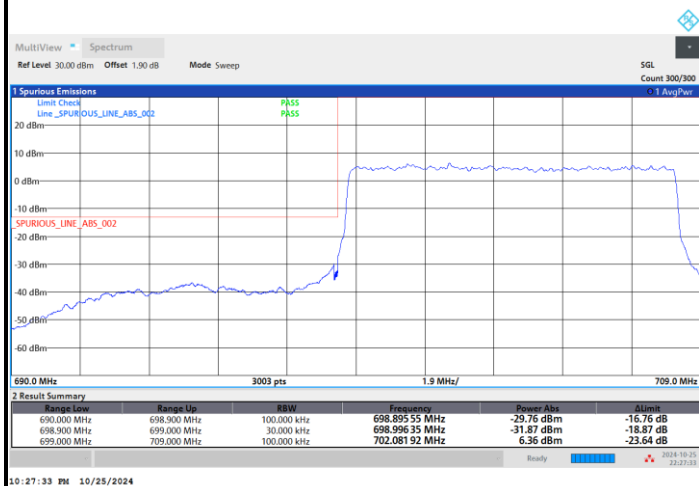
Highest Band Edge



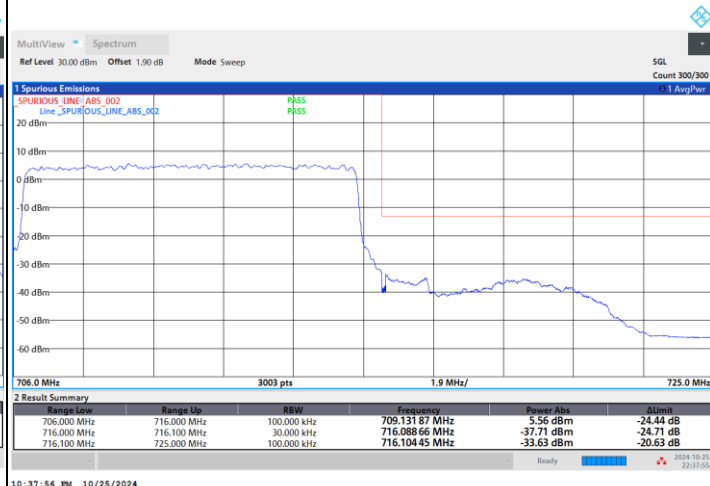


FR1 n12 / 10MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

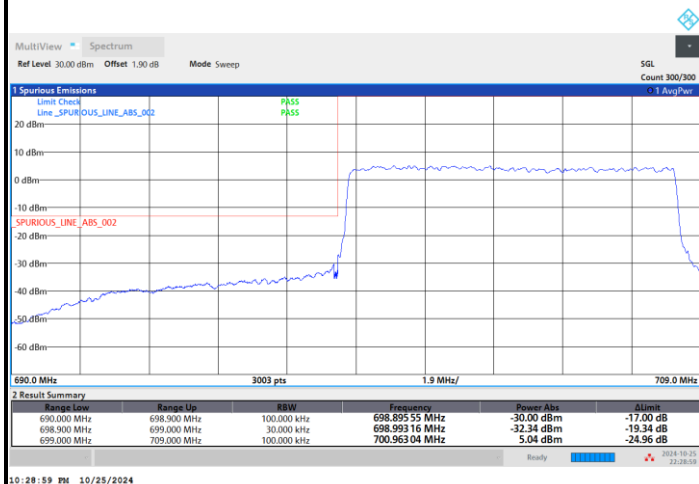


Highest Band Edge

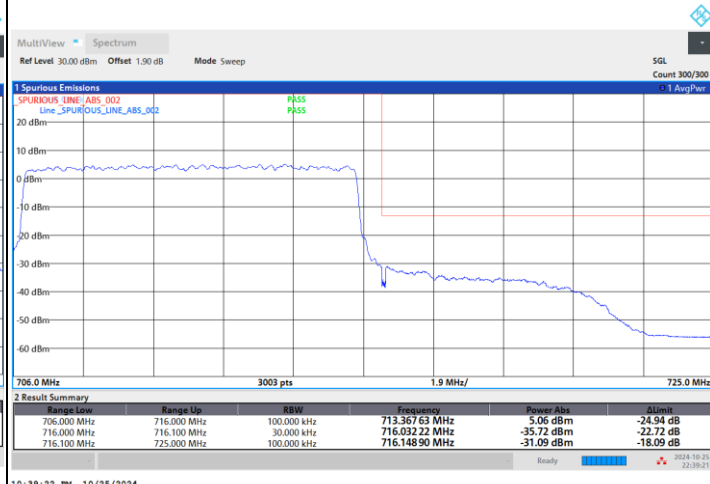


FR1 n12 / 10MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge



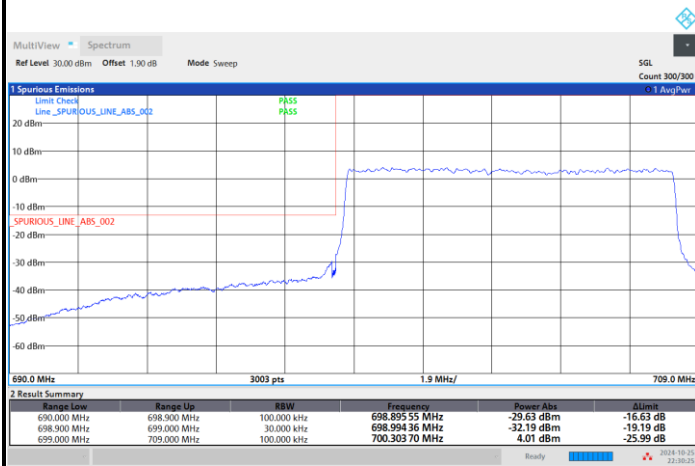
Highest Band Edge



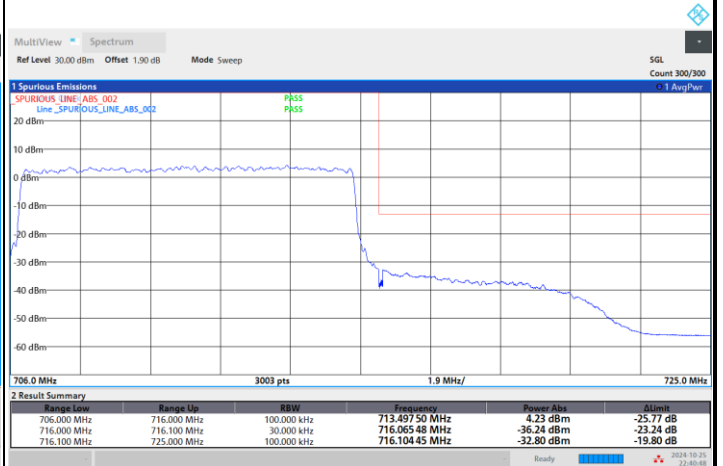


FR1 n12 / 10MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

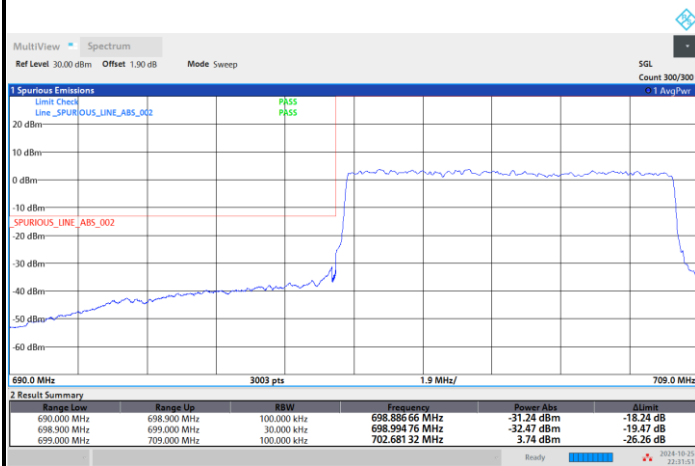


Highest Band Edge

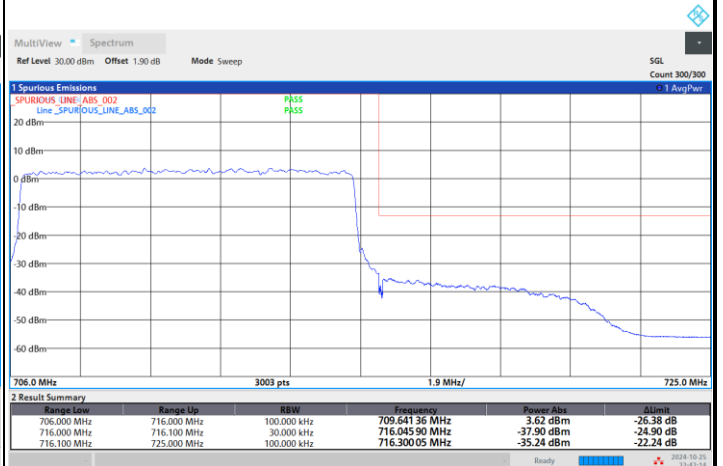


FR1 n12 / 10MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge



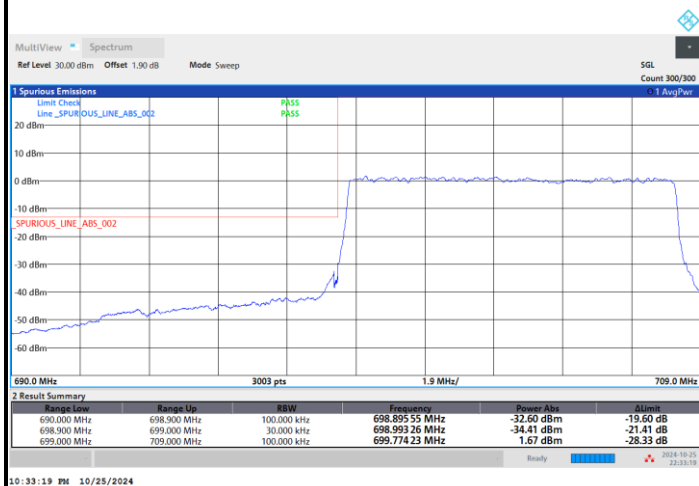
Highest Band Edge





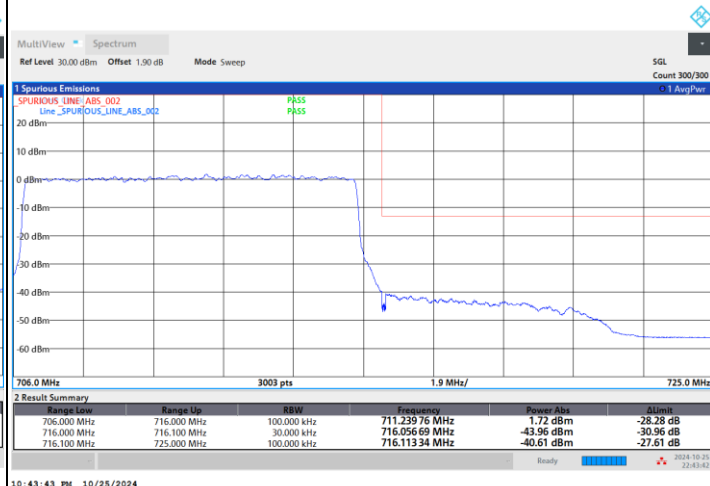
FR1 n12 / 10MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge



10:33:19 PM 10/25/2024

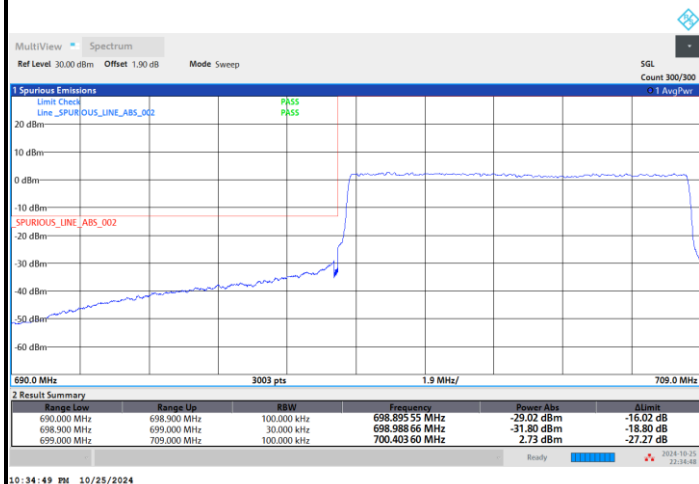
Highest Band Edge



10:43:43 PM 10/25/2024

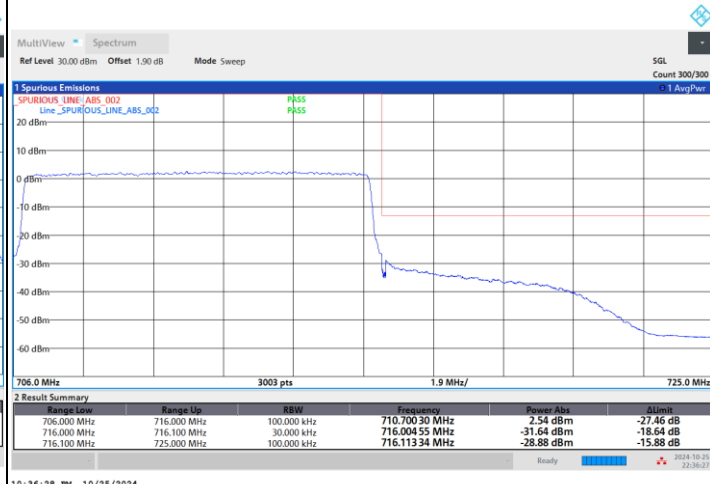
FR1 n12 / 10MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



10:34:49 PM 10/25/2024

Highest Band Edge

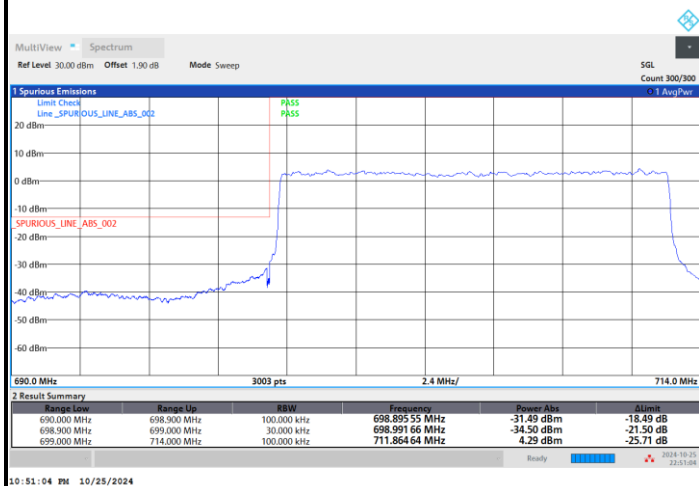


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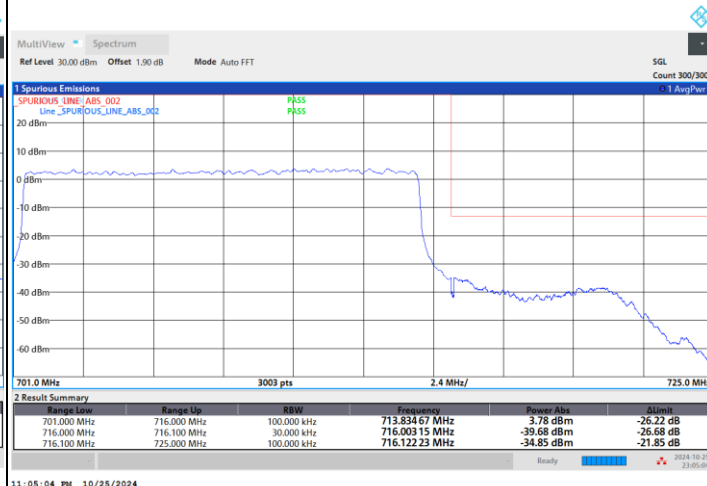


FR1 n12 / 15MHz / DFT-s-OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

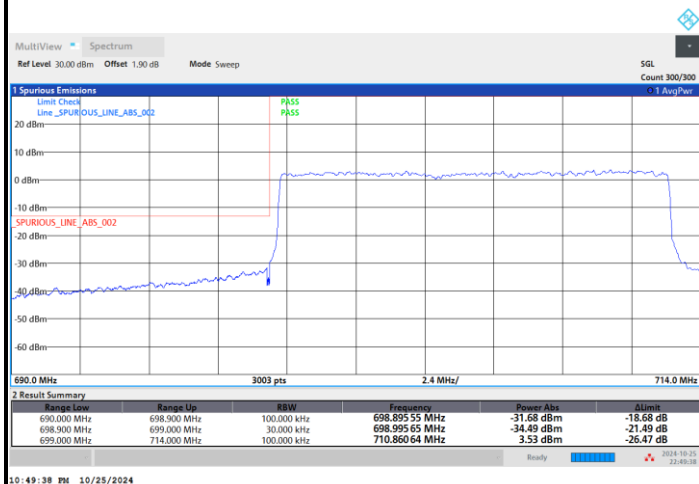


Highest Band Edge

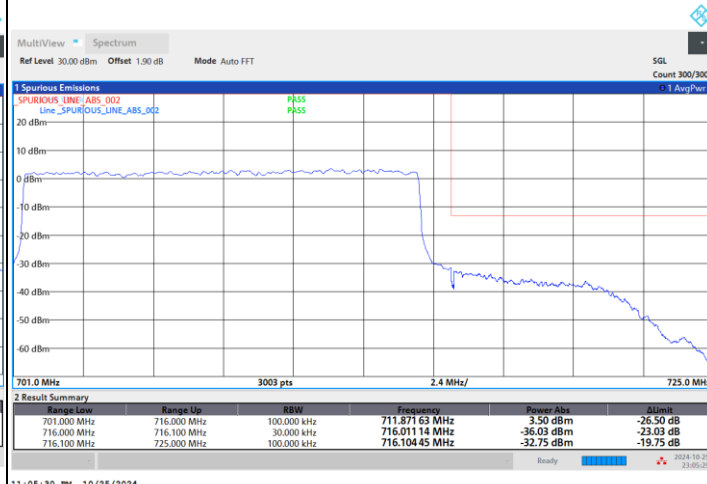


FR1 n12 / 15MHz / DFT-s-OFDM / QPSK / Full RB

Lowest Band Edge



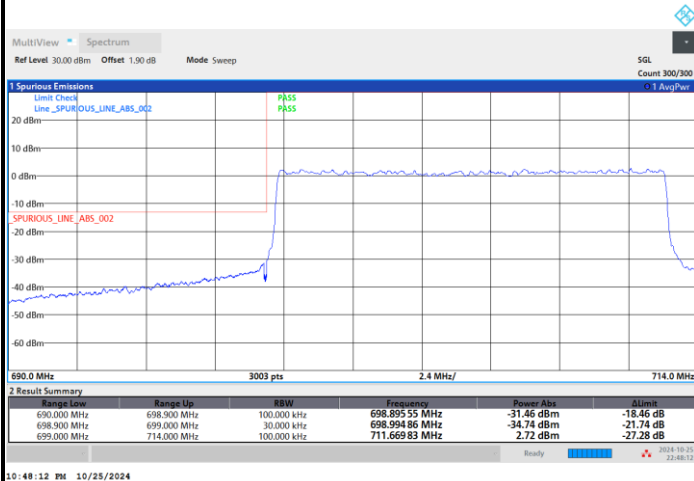
Highest Band Edge



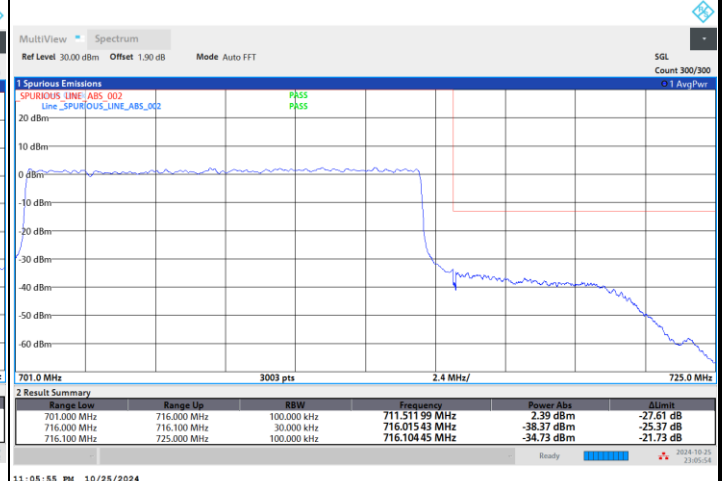


FR1 n12 / 15MHz / DFT-s-OFDM / 16QAM / Full RB

Lowest Band Edge

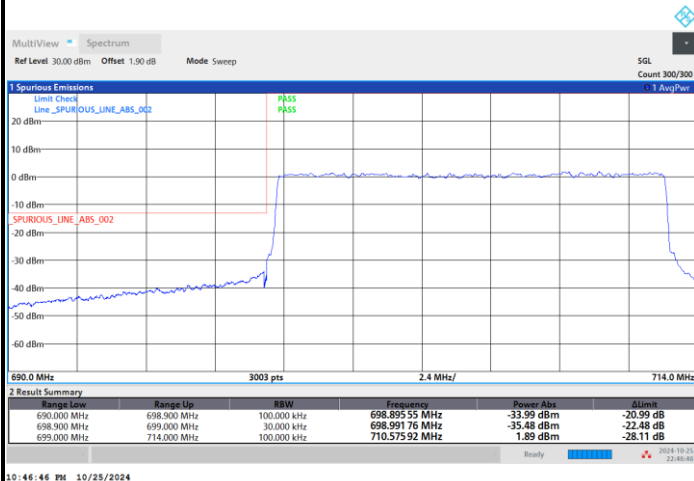


Highest Band Edge

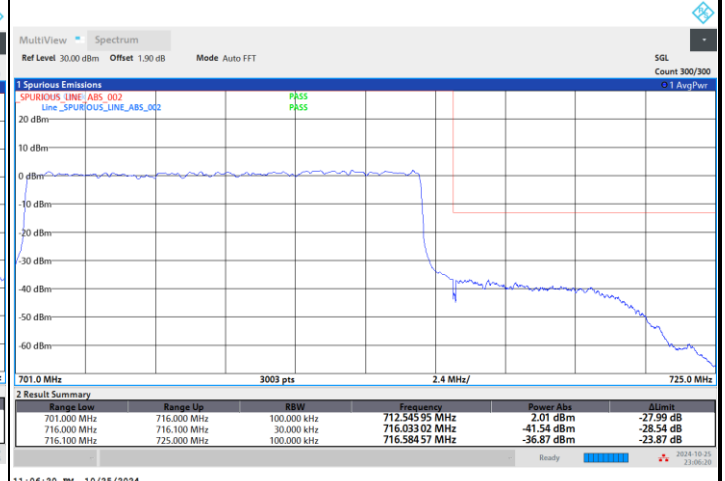


FR1 n12 / 15MHz / DFT-s-OFDM / 64QAM / Full RB

Lowest Band Edge



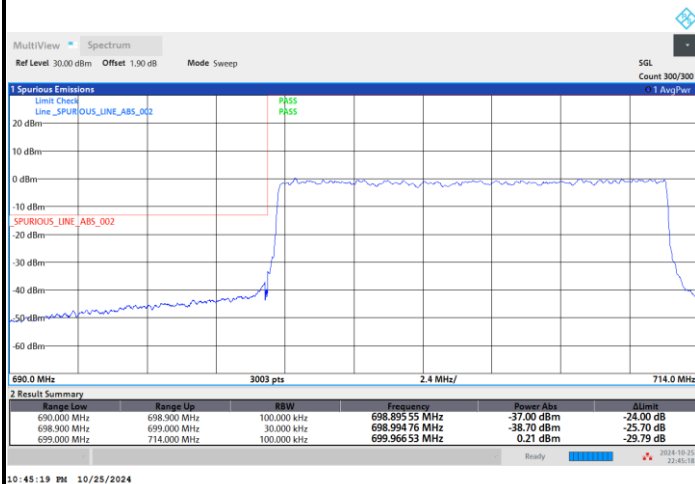
Highest Band Edge





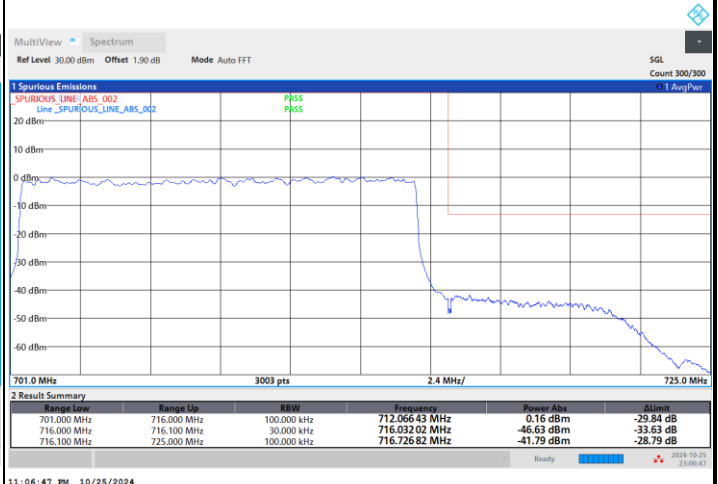
FR1 n12 / 15MHz / DFT-s-OFDM / 256QAM / Full RB

Lowest Band Edge



10:45:19 PM 10/25/2024

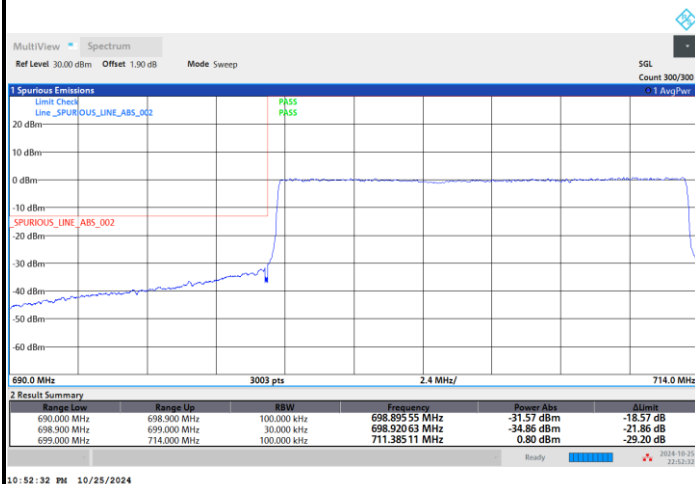
Highest Band Edge



11:06:47 PM 10/25/2024

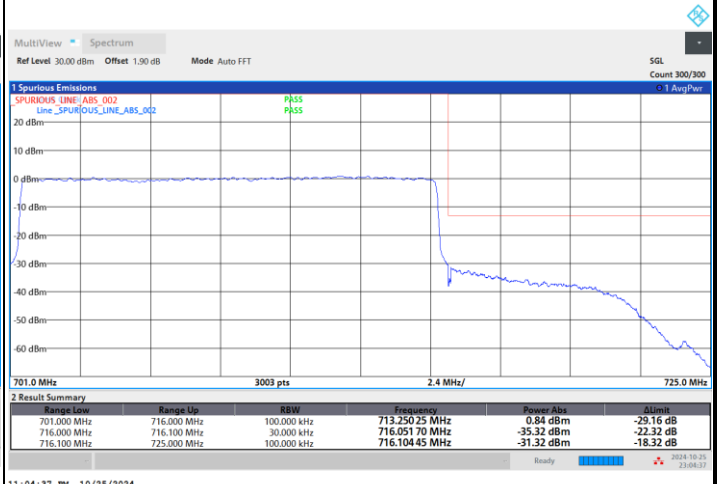
FR1 n12 / 15MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



10:52:32 PM 10/25/2024

Highest Band Edge



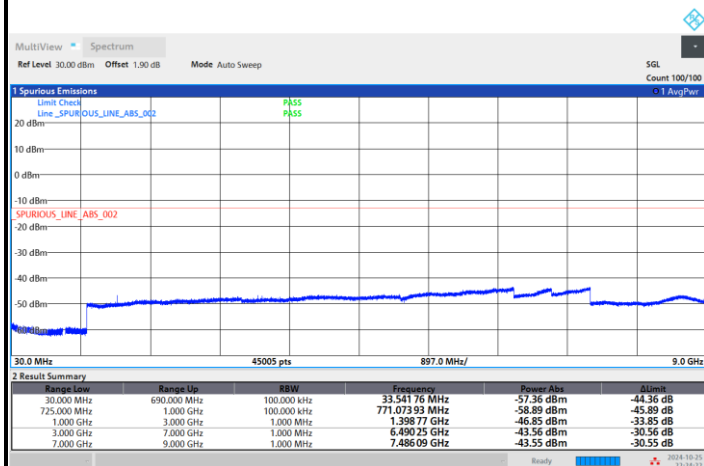
11:04:37 PM 10/25/2024



Conducted Spurious Emission

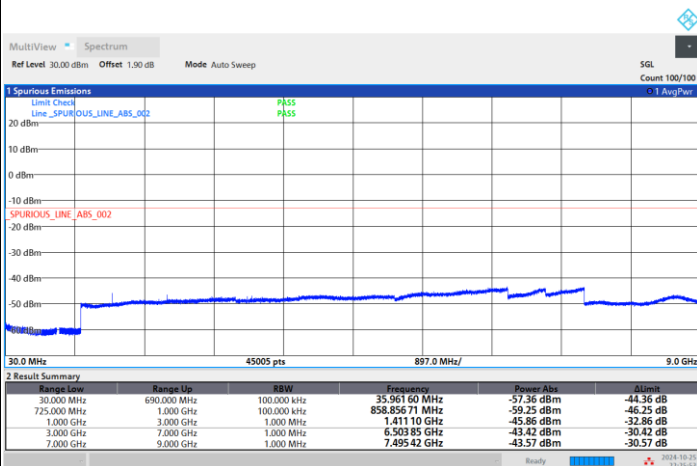
FR1 n12 / 5MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel



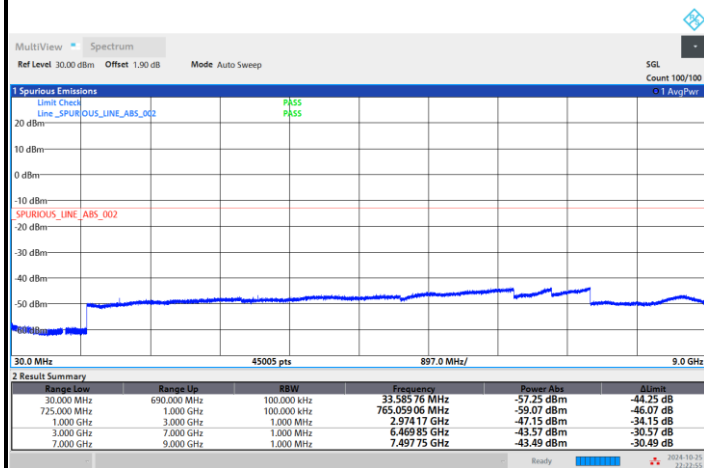
10:24:22 PM 10/25/2024

Middle Channel



10:25:53 PM 10/25/2024

Highest Channel



10:22:56 PM 10/25/2024

Frequency Stability

Test Conditions		FR1 n12 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 15MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0048	PASS
40	Normal Voltage	0.0256	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0004	
0	Normal Voltage	0.0081	
-10	Normal Voltage	0.0242	
-20	Normal Voltage	0.0206	
-30	Normal Voltage	0.0163	
20	Maximum Voltage	0.0040	
20	Normal Voltage	0.0250	
20	Minimum Voltage	0.0189	

Note:

1. Normal Voltage = 3.3 V. ; Minimum Voltage = 3.135 V. ; Maximum Voltage = 3.465 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

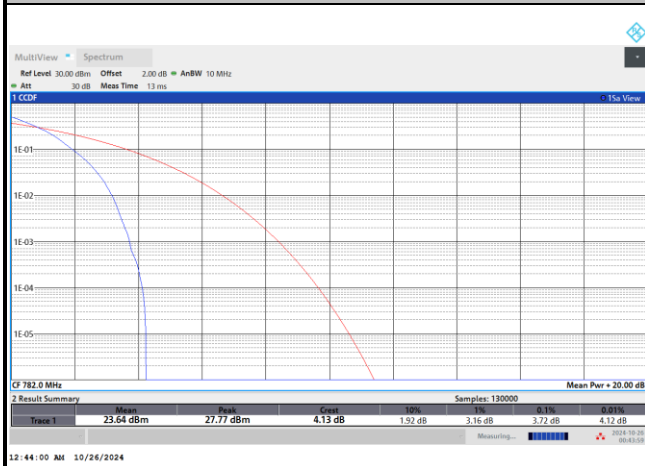
**FR1 n13****Peak-to-Average Ratio**

Mode	FR1 n13 / 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	3.72	4.64	5.40	5.80	PASS
Mode	FR1 n13 / 10MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.20				PASS

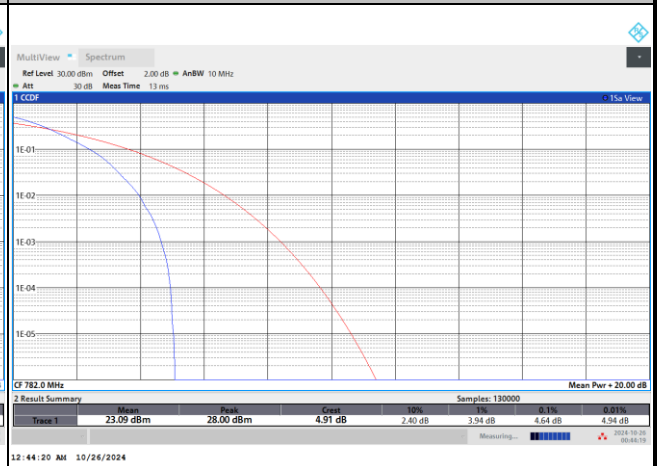


FR1 n13 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

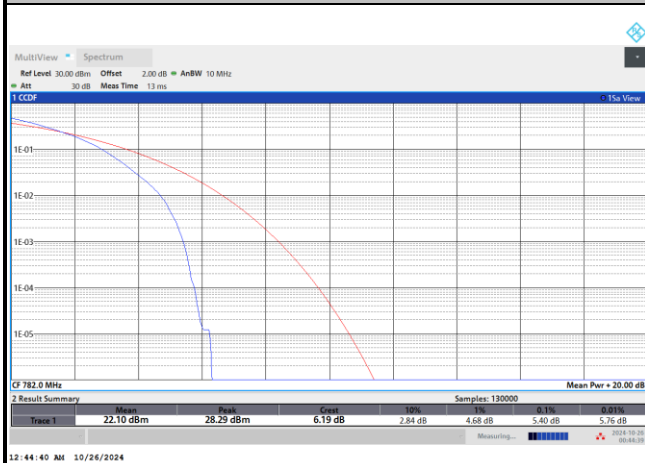
PI/2 BPSK



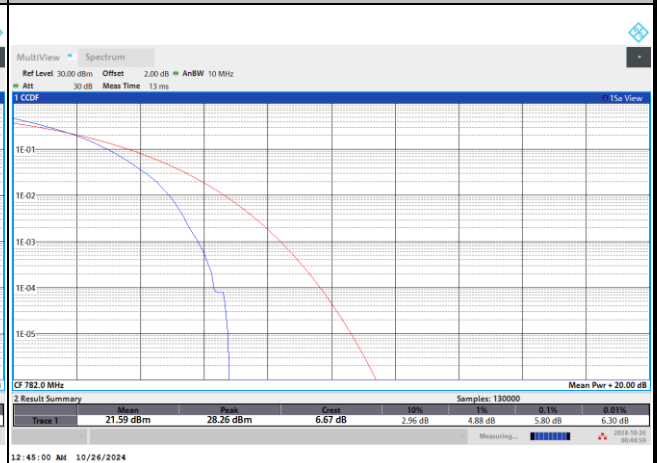
QPSK



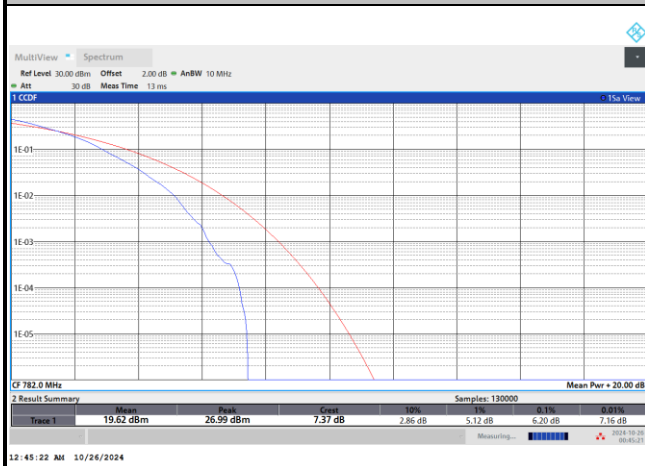
16QAM



64QAM



256QAM



**26dB Bandwidth**

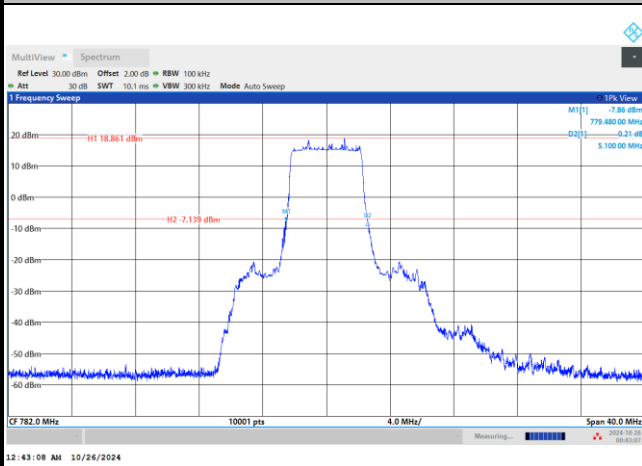
Mode	FR1 n13 : 26dB BW(MHz) / DFT-S OFDM					
BW	5MHz		10MHz			
Mod.	PI/2 BPSK		PI/2 BPSK			
Middle CH	5.09		9.79			

Mode	FR1 n13 : 26dB BW(MHz) / CP OFDM							
BW	5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM				
Middle CH	5.33	5.17	10.28	10.17				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	5.16	5.23	10.21	10.21				



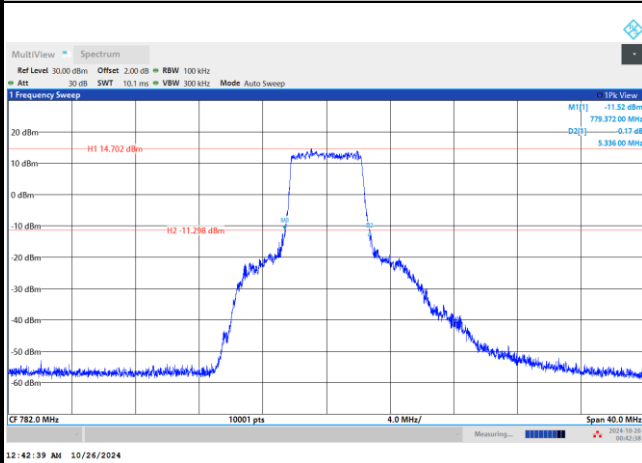
FR1 n13 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

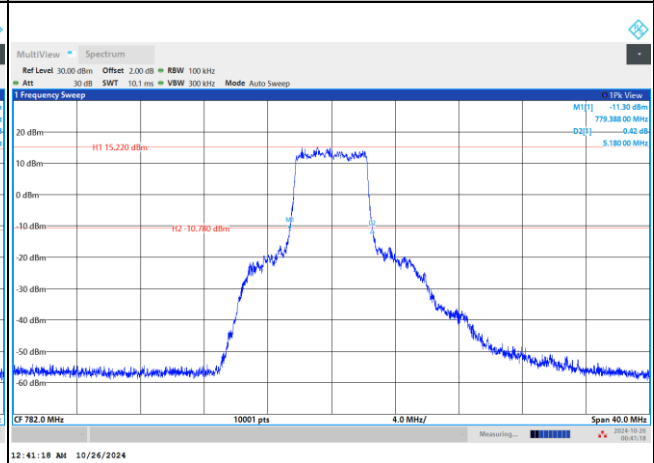


FR1 n13 / 5MHz / CP OFDM / Middle Channel / Full RB

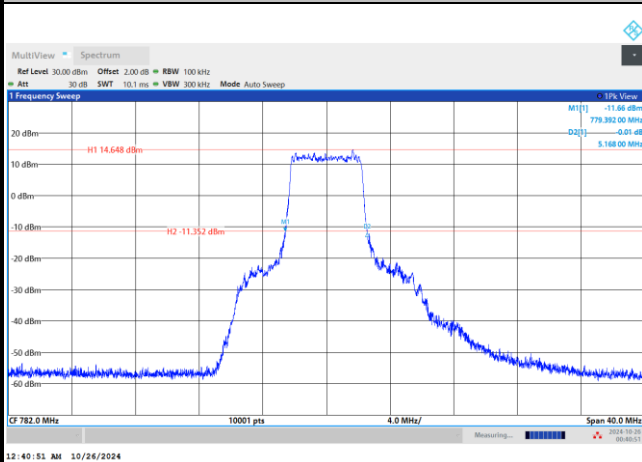
QPSK



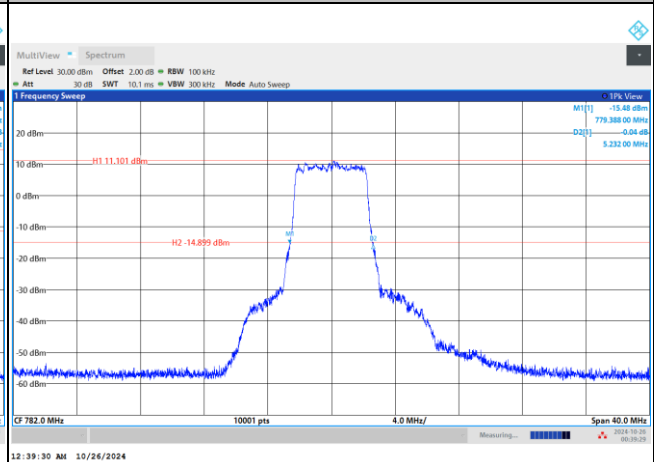
16QAM



64QAM

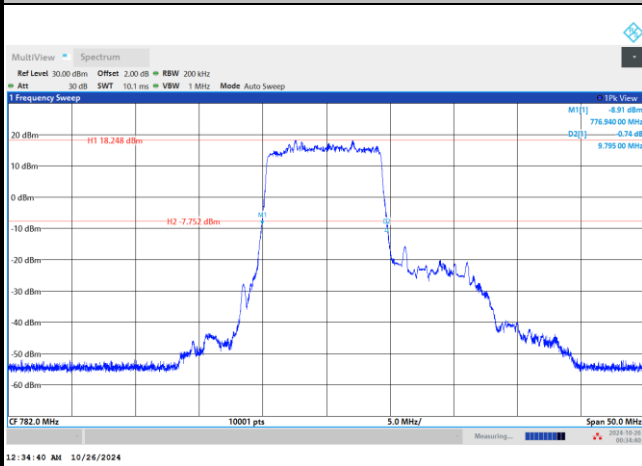


256QAM



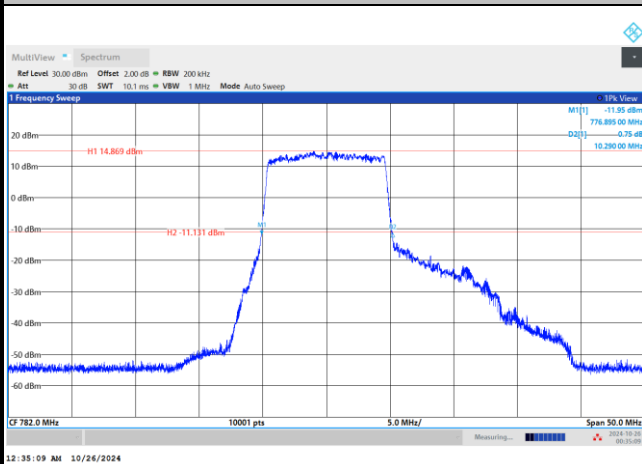


FR1 n13 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

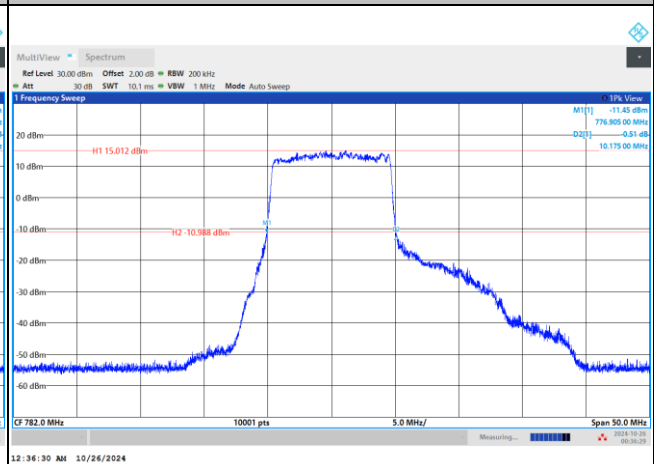
PI/2 BPSK

FR1 n13 / 10MHz / CP OFDM / Middle Channel / Full RB

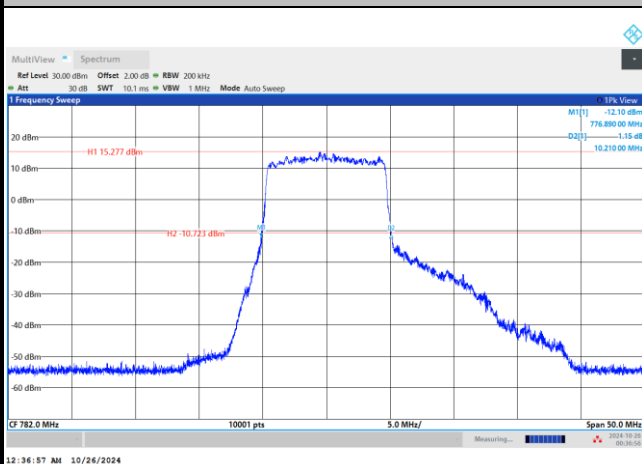
QPSK



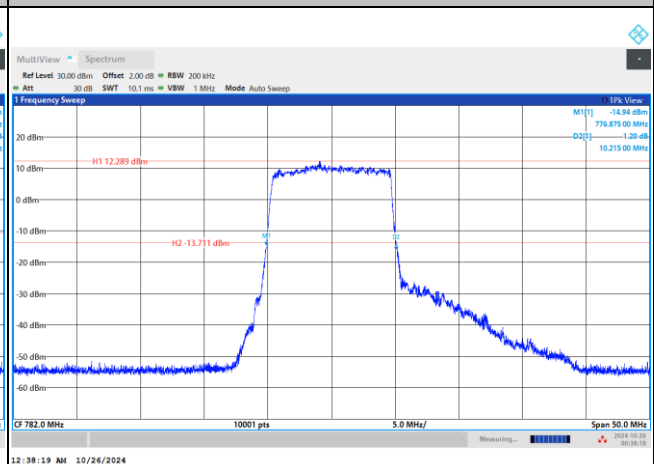
16QAM



64QAM



256QAM



**Occupied Bandwidth**

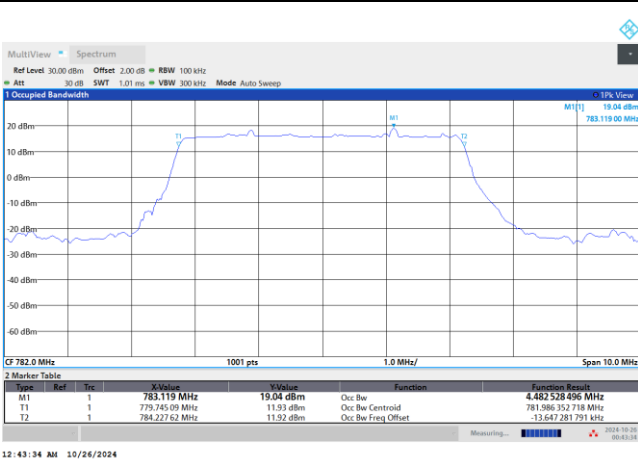
Mode	FR1 n13 : 99%OBW(MHz) / DFT-S OFDM					
BW	5MHz		10MHz			
Mod.	PI/2 BPSK		PI/2 BPSK			
Middle CH	4.48		8.94			

Mode	FR1 n13 : 99%OBW (MHz) / CP OFDM							
BW	5MHz		10MHz					
Mod.	QPSK	16QAM	QPSK	16QAM				
Middle CH	4.53	4.52	9.29	9.29				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	4.50	4.51	9.28	9.32				



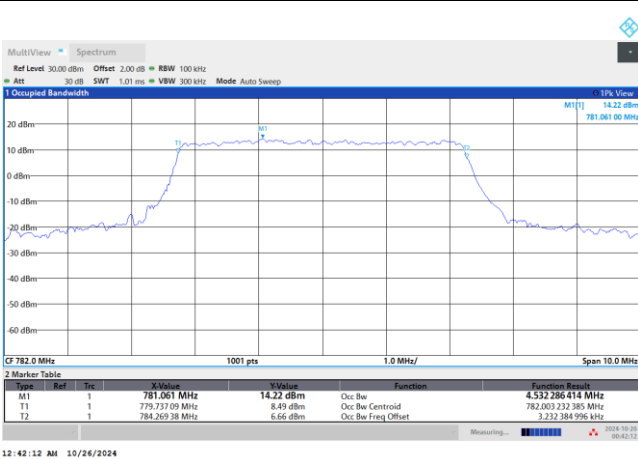
FR1 n13 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

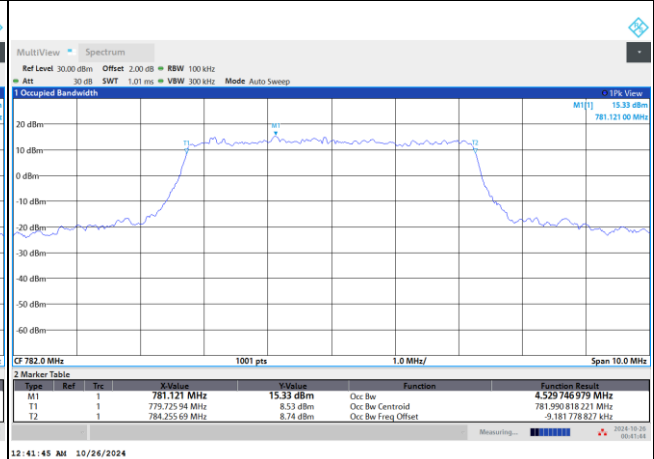


FR1 n13 / 5MHz / CP OFDM / Middle Channel / Full RB

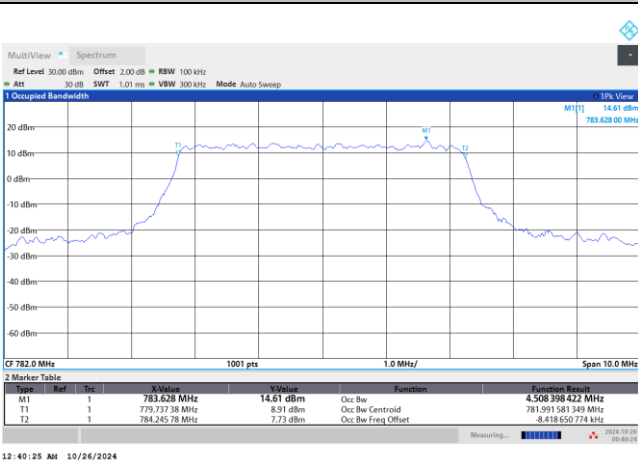
QPSK



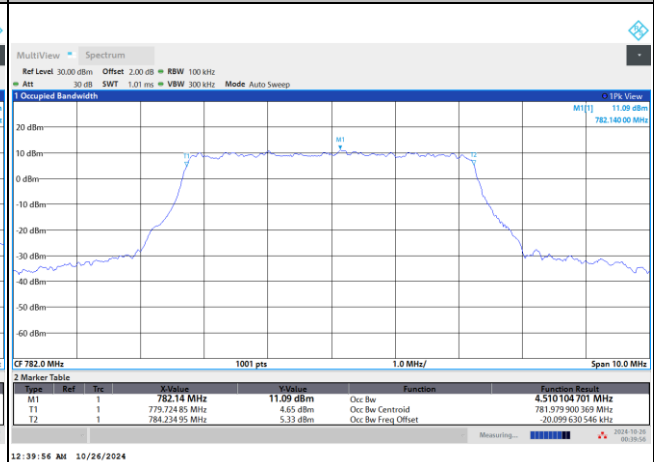
16QAM



64QAM



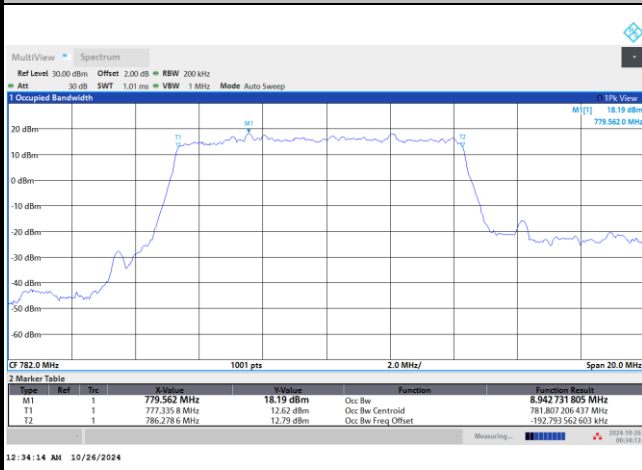
256QAM





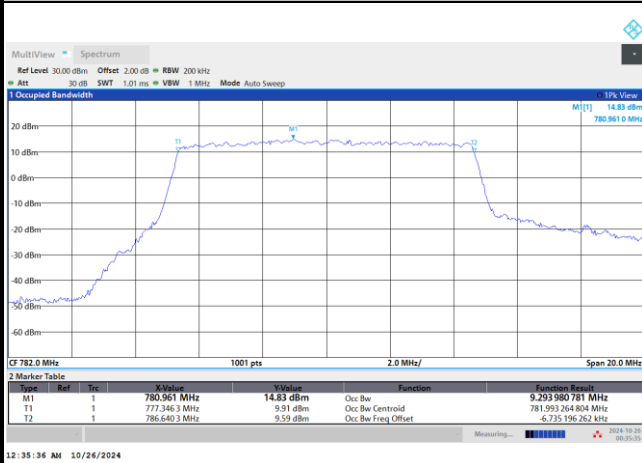
FR1 n13 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

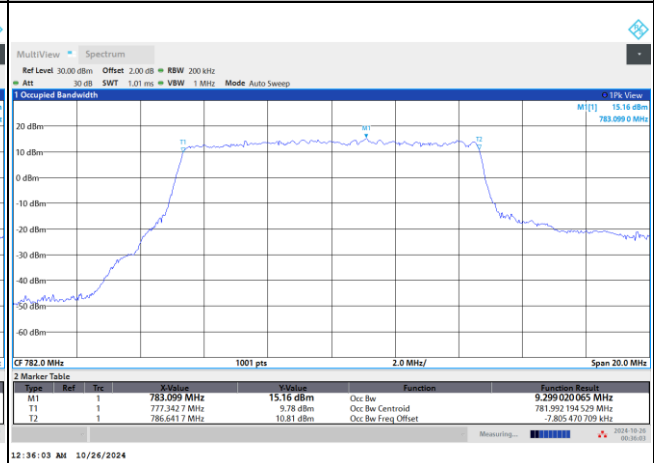


FR1 n13 / 10MHz / CP OFDM / Middle Channel / Full RB

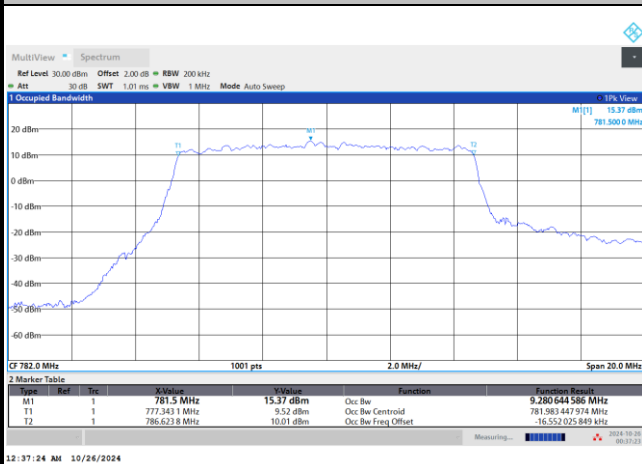
QPSK



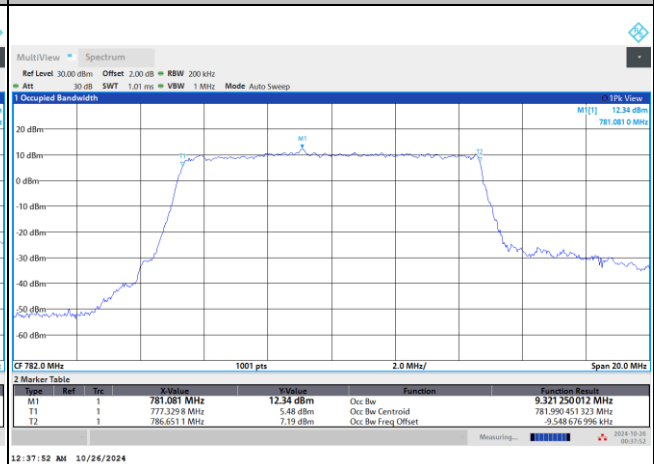
16QAM



64QAM



256QAM

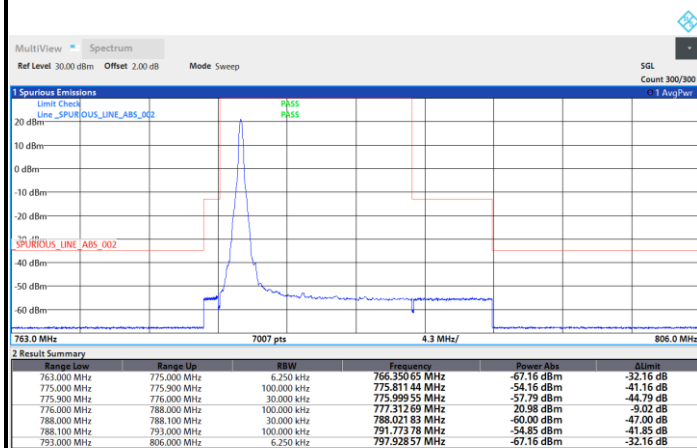




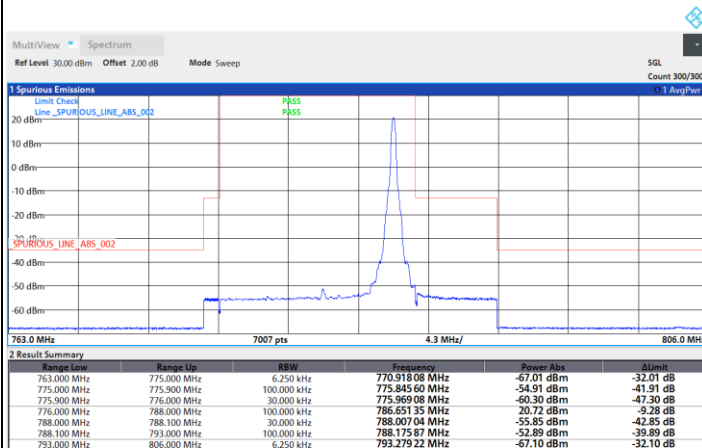
Conducted Band Edge

FR1 n13 / 5MHz / DFT-S OFDM / PI/2 BPSK

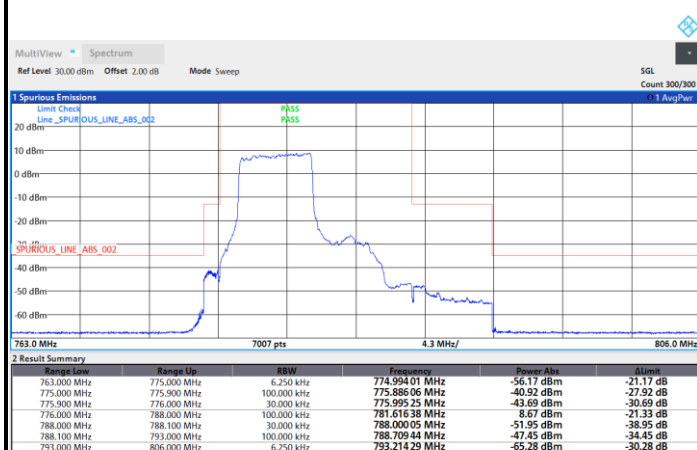
Lowest Band Edge / 1RB0



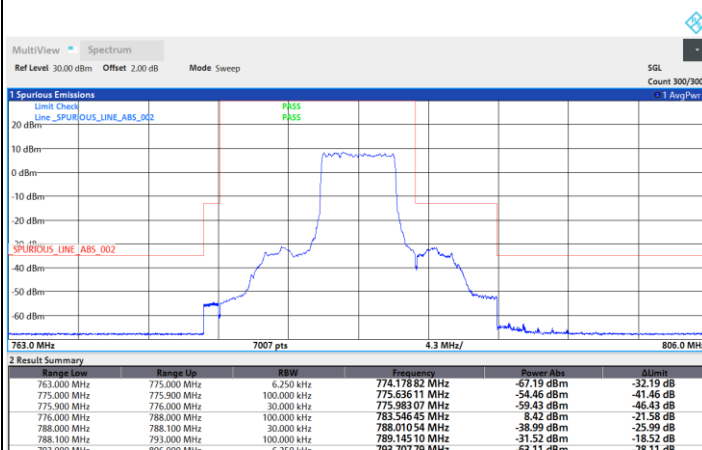
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

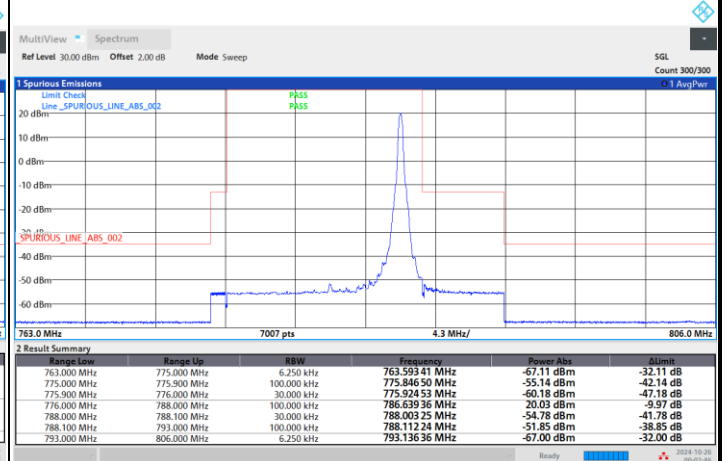
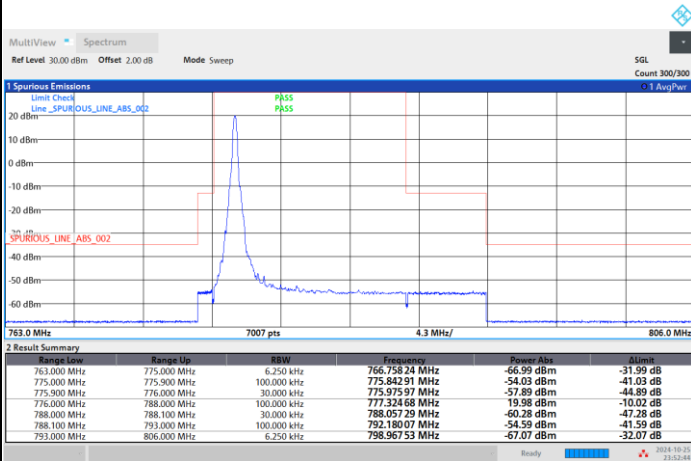




FR1 n13 / 5MHz / DFT-S OFDM / QPSK

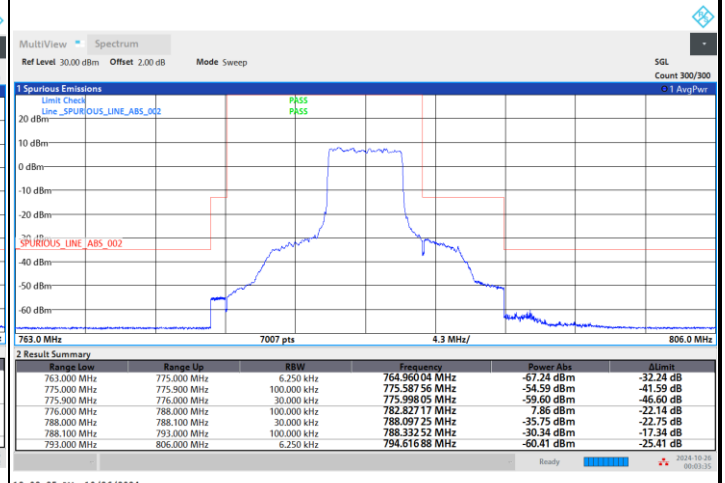
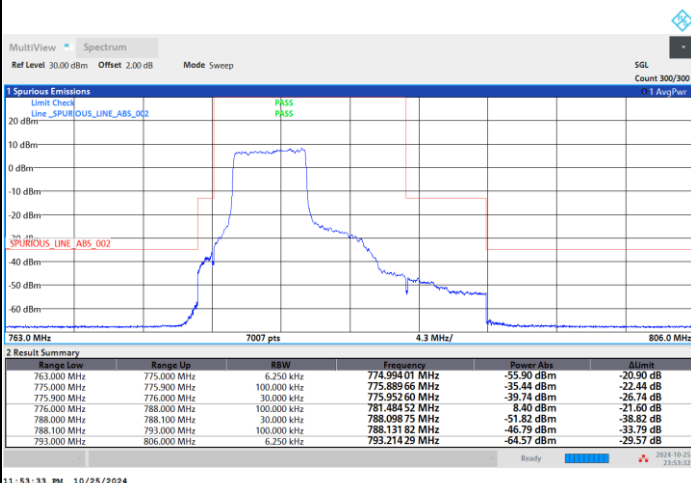
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

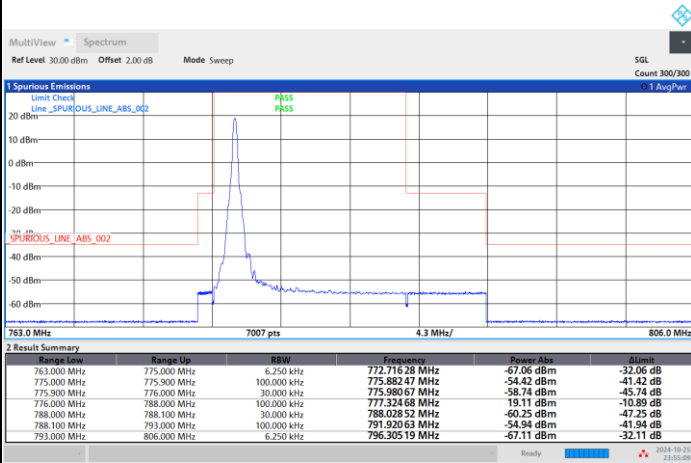




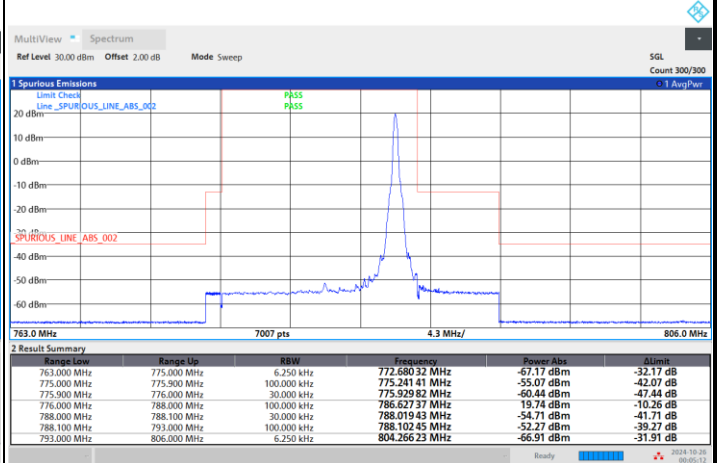
FR1 n13 / 5MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



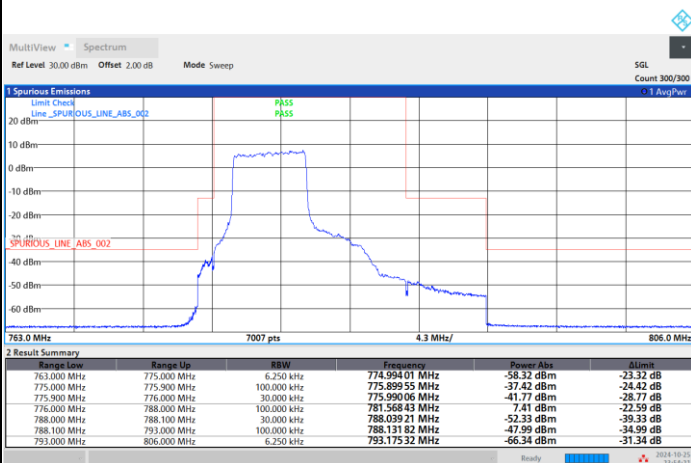
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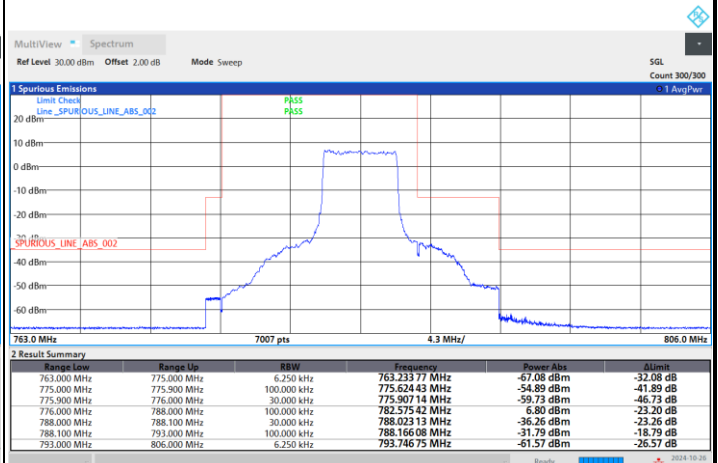
12:05:13 AM 10/26/2024

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



11:54:21 PM 10/25/2024



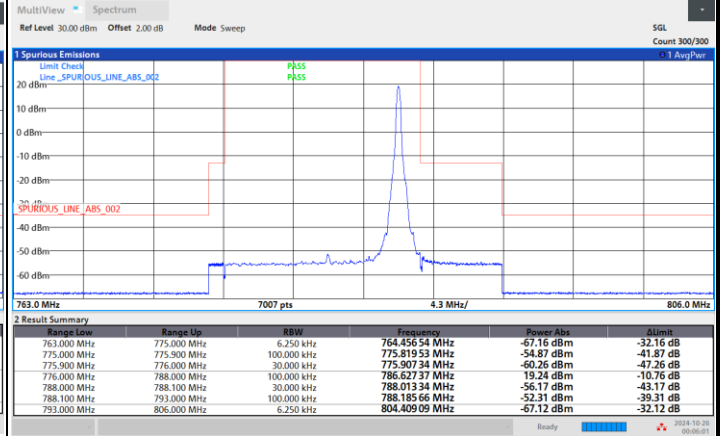
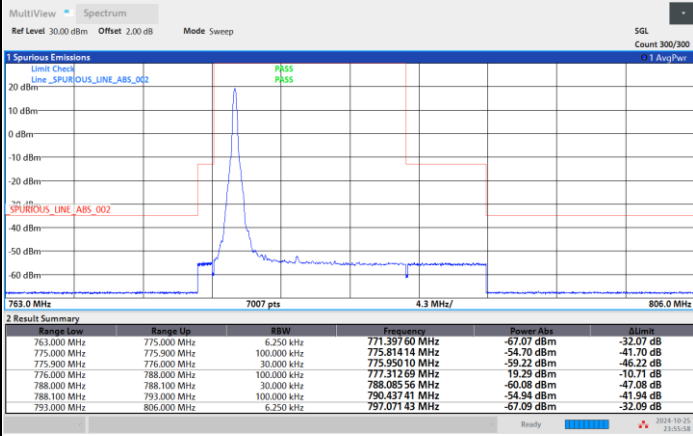
12:04:24 AM 10/26/2024



FR1 n13 / 5MHz / DFT-S OFDM / 64QAM

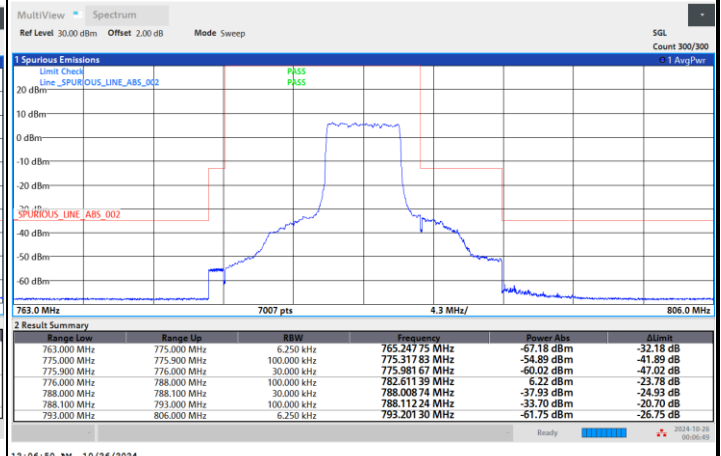
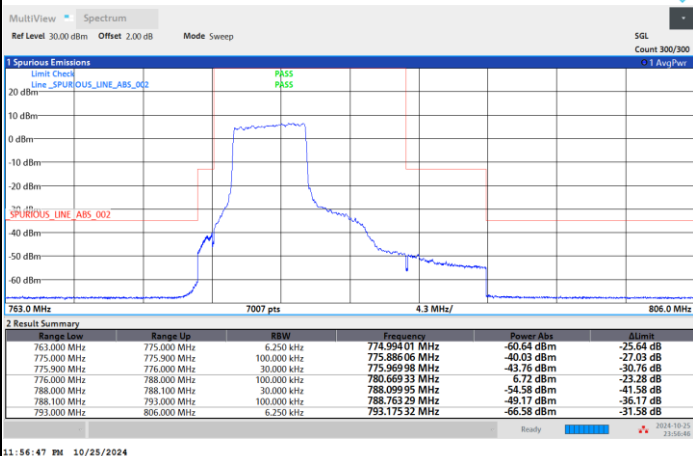
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

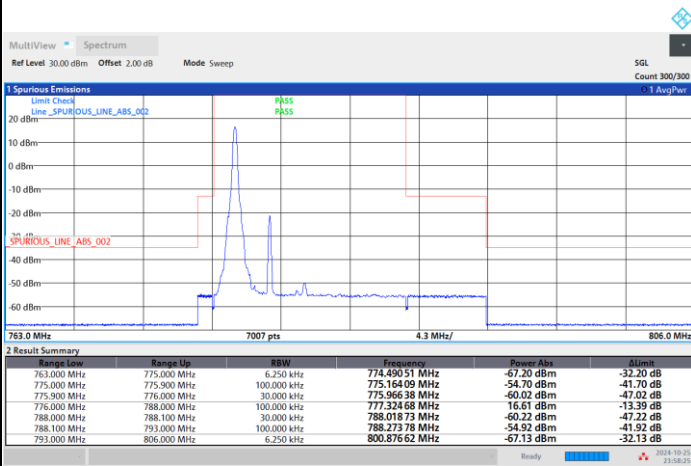




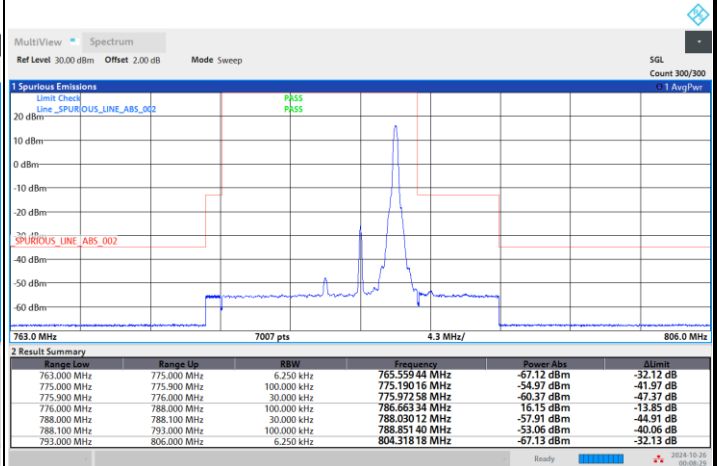
FR1 n13 / 5MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



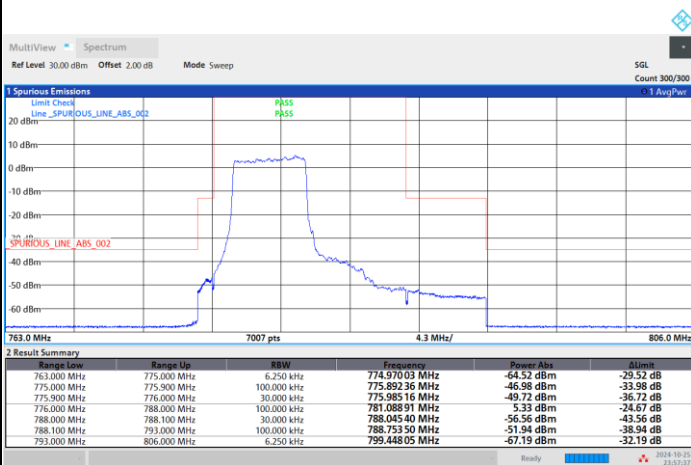
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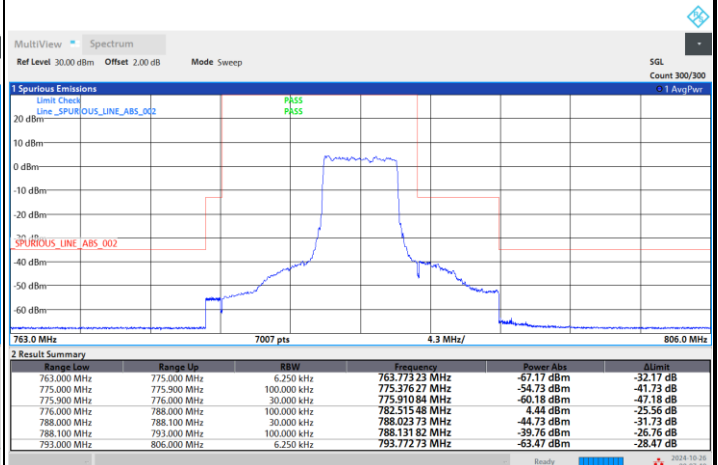
12:08:30 AM 10/26/2024

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



11:57:37 PM 10/25/2024



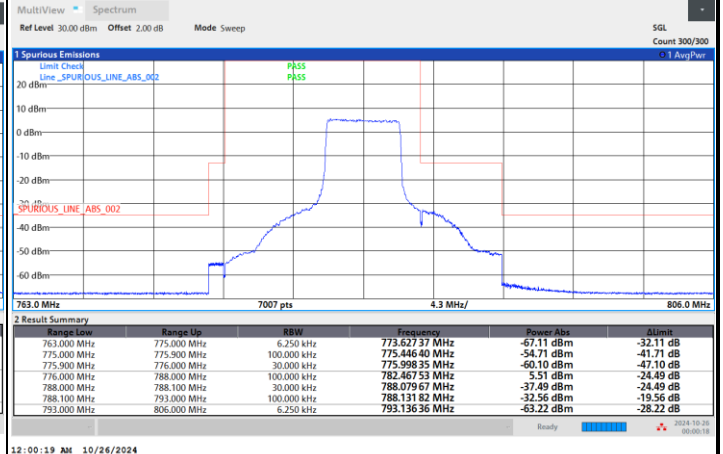
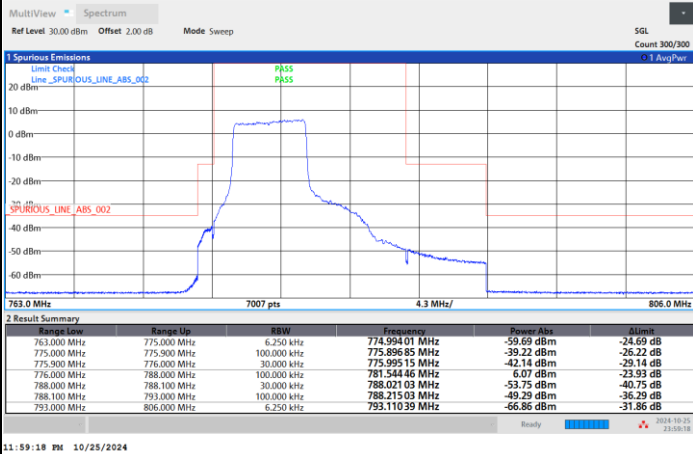
12:07:40 AM 10/26/2024



FR1 n13 / 5MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

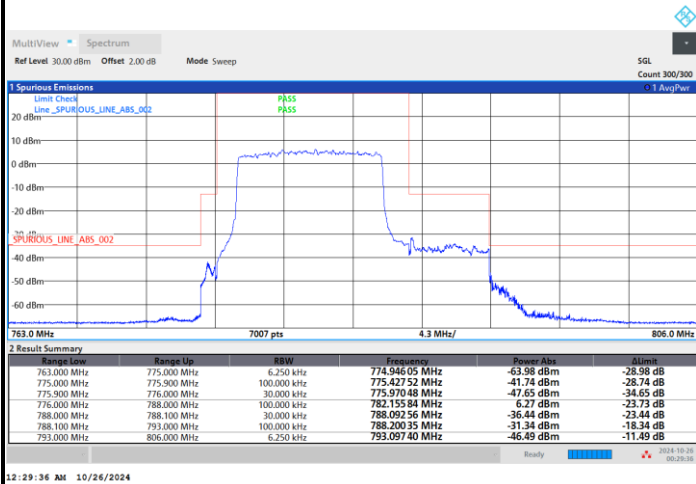
Highest Band Edge





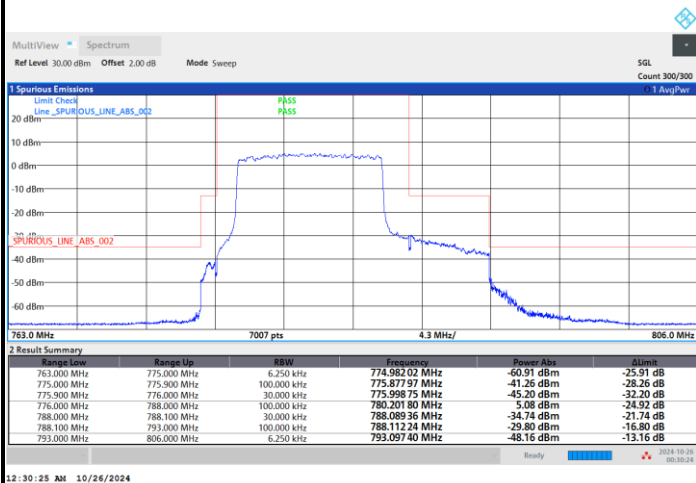
FR1 n13 / 10MHz / DFT-s-OFDM / PI/2 BPSK

Middle Band Edge / Full RB



FR1 n13 / 10MHz / DFT-s-OFDM / QPSK

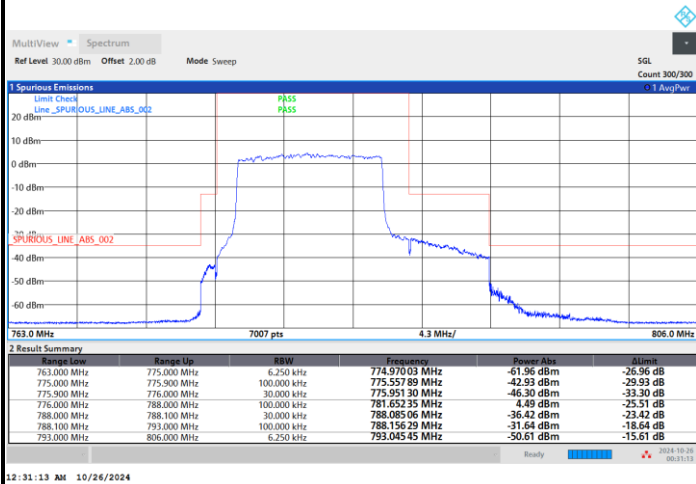
Middle Band Edge / Full RB





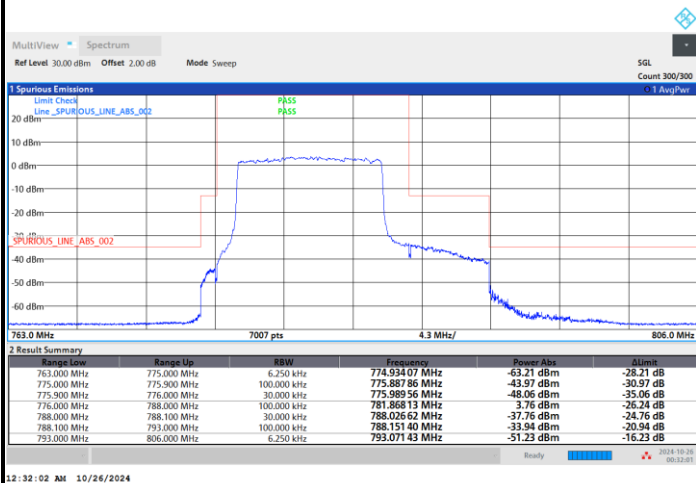
FR1 n13 / 10MHz / DFT-s-OFDM / 16QAM

Middle Band Edge / Full RB



FR1 n13 / 10MHz / DFT-s-OFDM / 64QAM

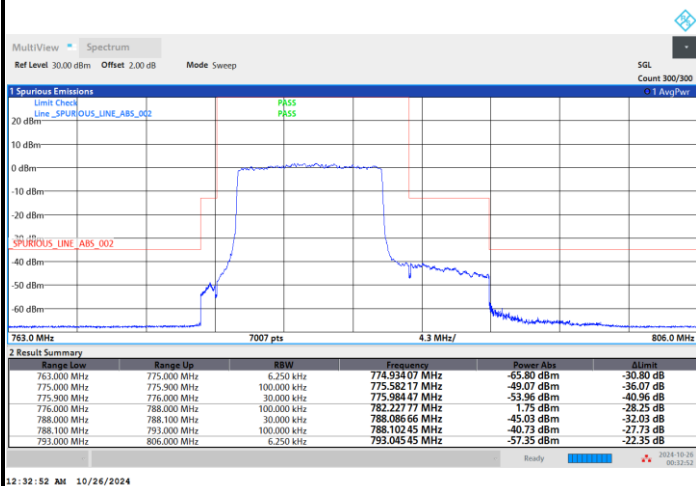
Middle Band Edge / Full RB





FR1 n13 / 10MHz / DFT-s-OFDM / 256QAM

Middle Band Edge / Full RB



FR1 n13 / 10MHz / CP OFDM / QPSK / Full RB

Middle Band Edge / Full RB

