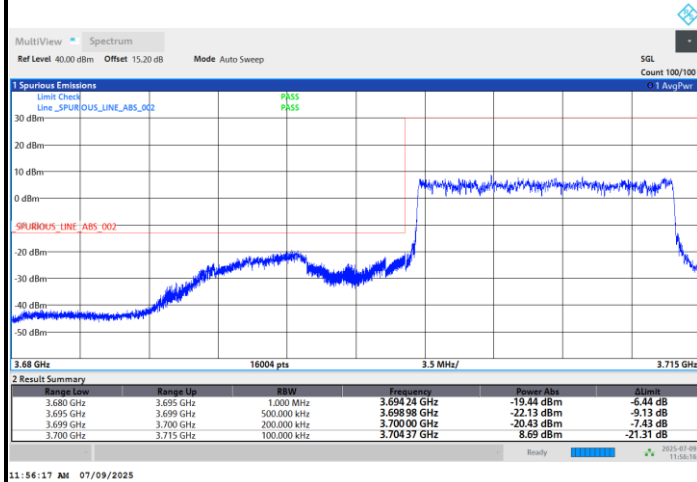


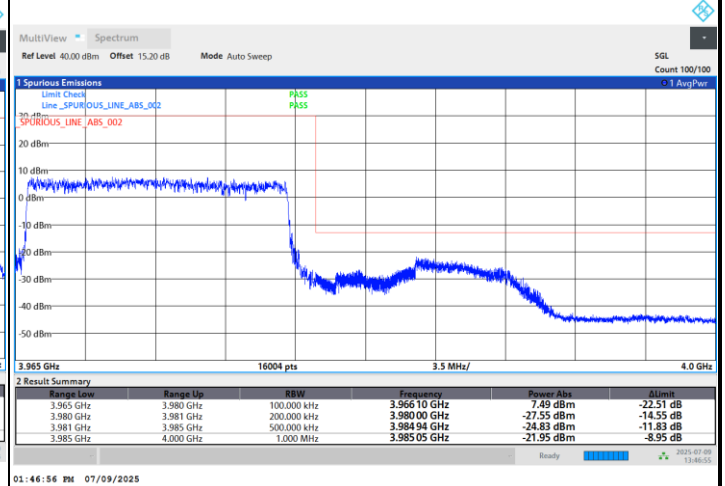


FR1 n77 / 15MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

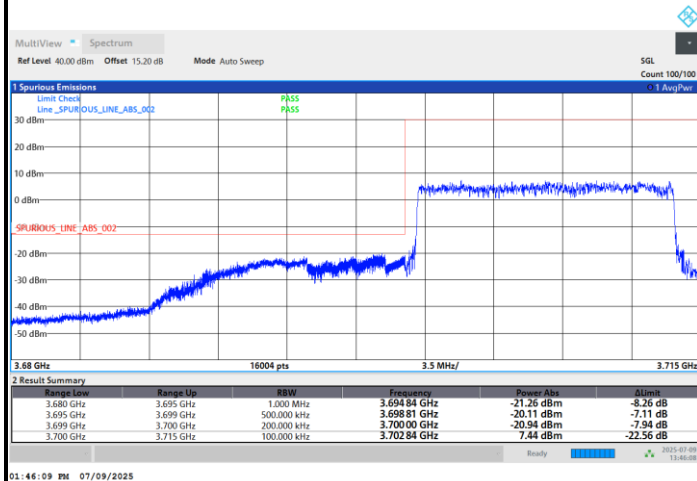


Highest Band Edge / Full RB

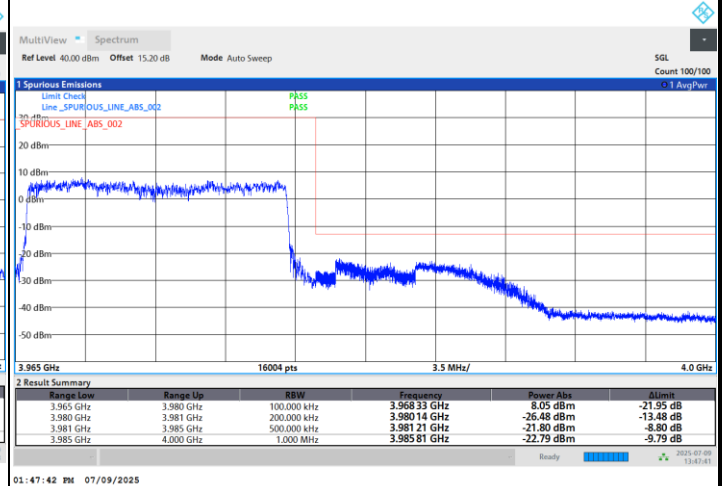


FR1 n77 / 15MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



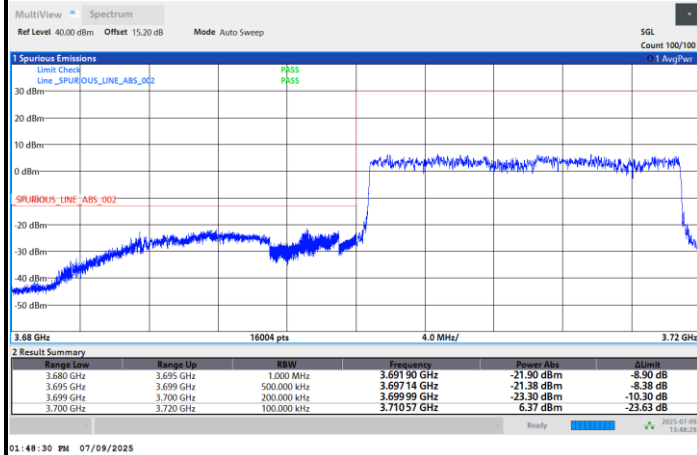
Highest Band Edge / Full RB



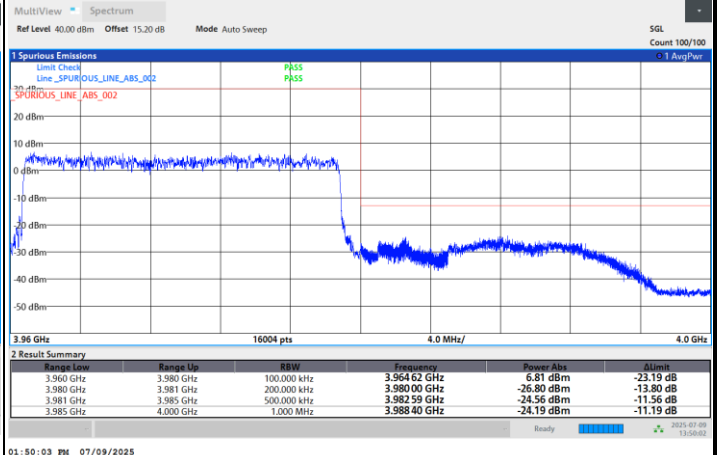


FR1 n77 / 20MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

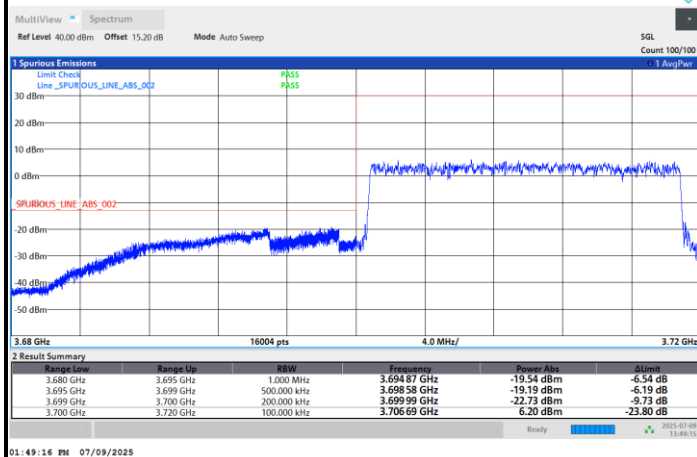


Highest Band Edge / Full RB

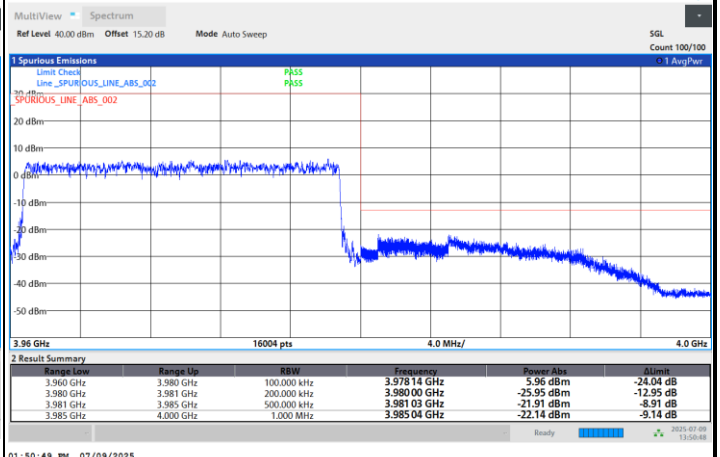


FR1 n77 / 20MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

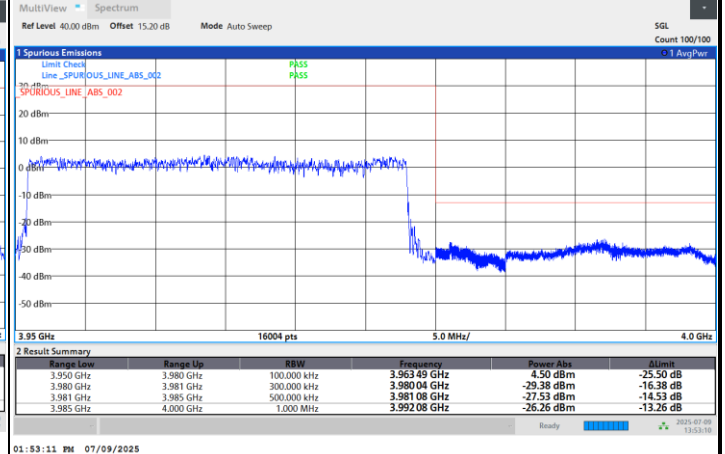
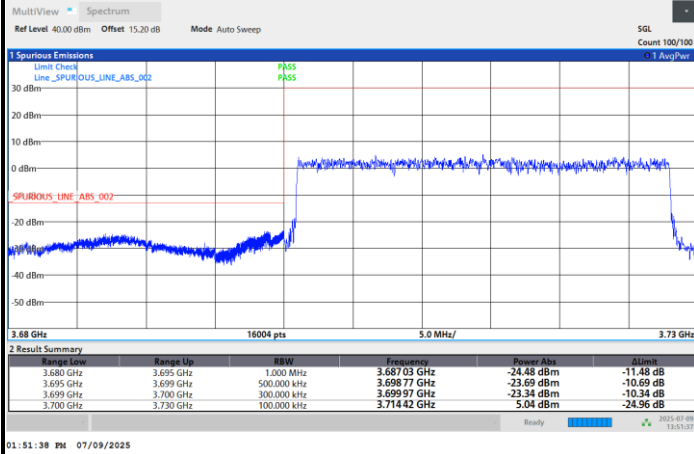




FR1 n77 / 30MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

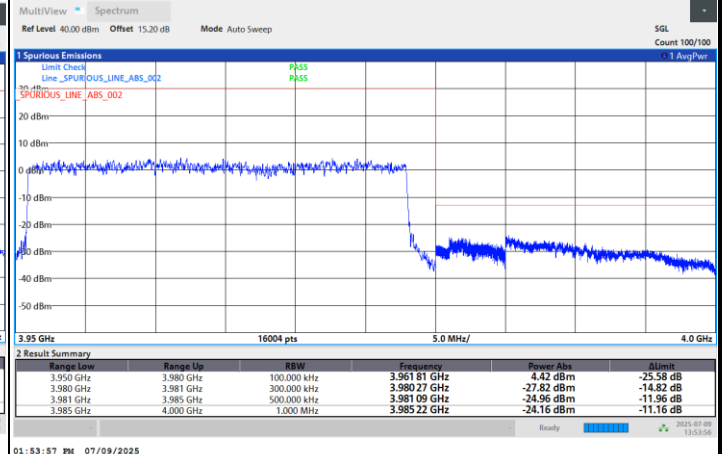
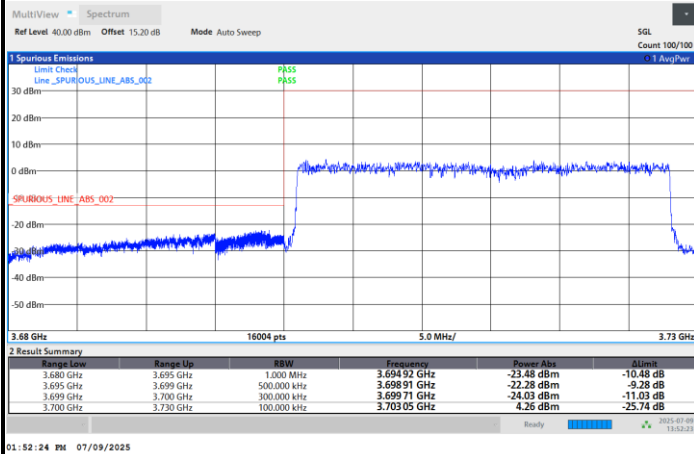
Highest Band Edge / Full RB



FR1 n77 / 30MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB

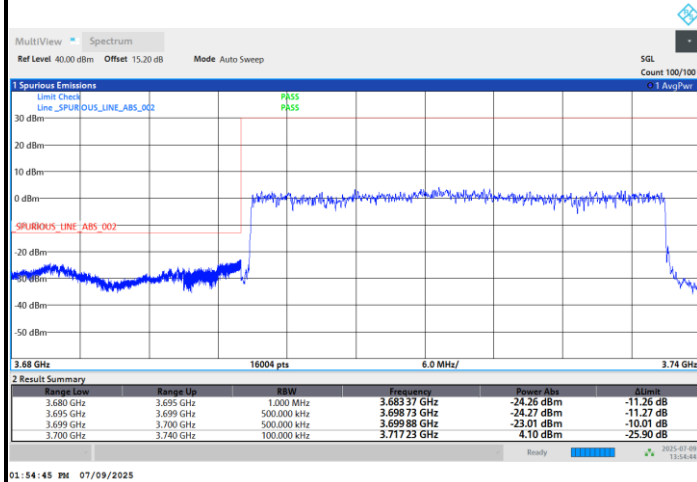
Highest Band Edge / Full RB



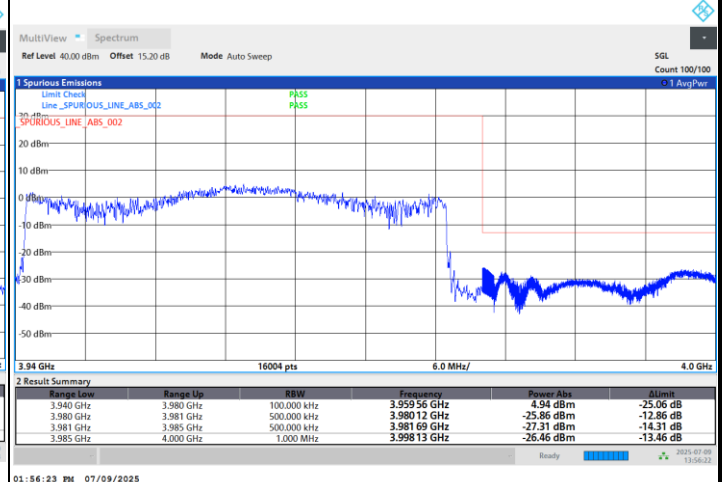


FR1 n77 / 40MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

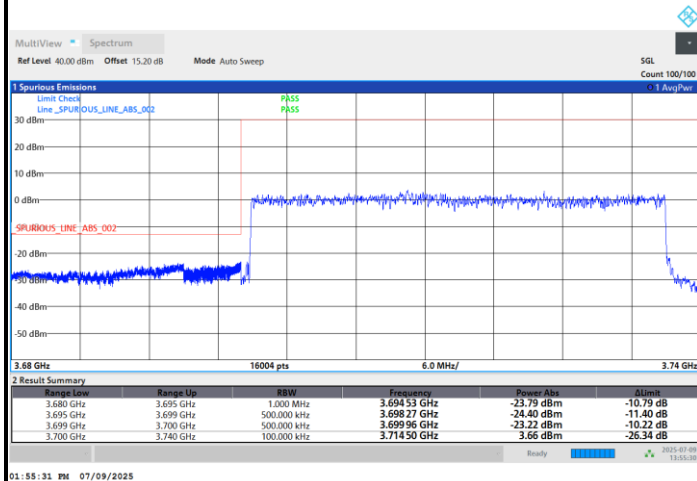


Highest Band Edge / Full RB

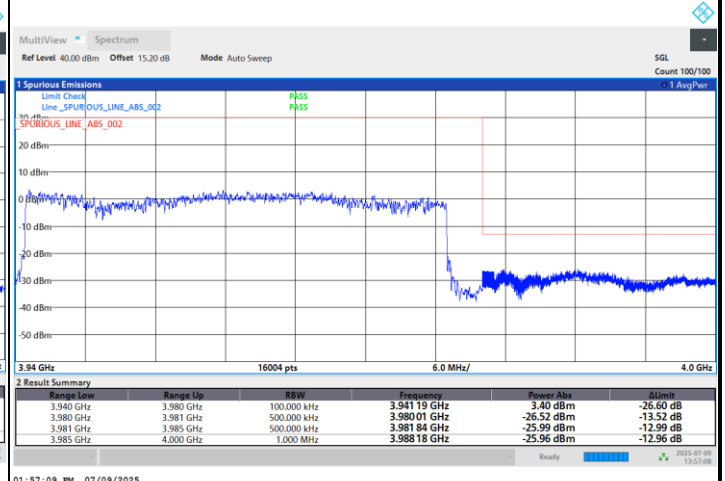


FR1 n77 / 40MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



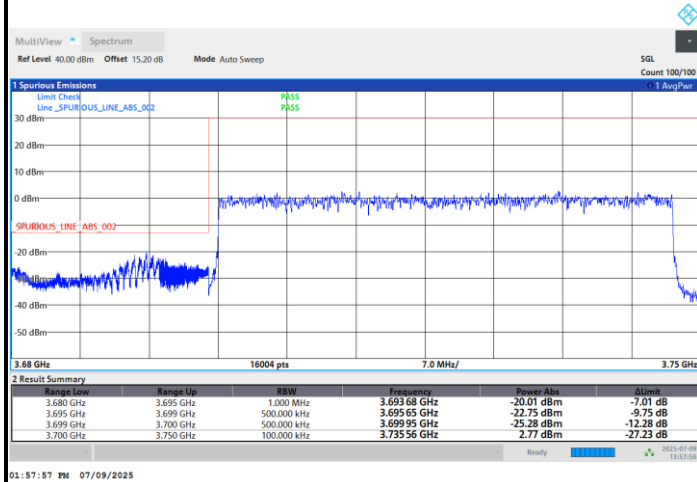
Highest Band Edge / Full RB



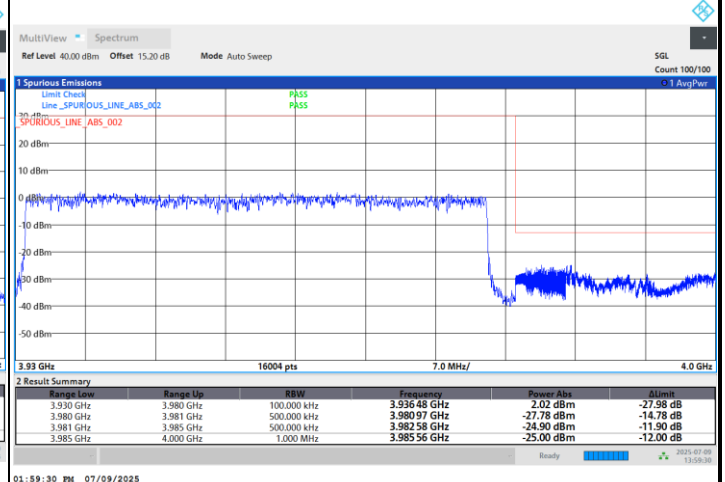


FR1 n77 / 50MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

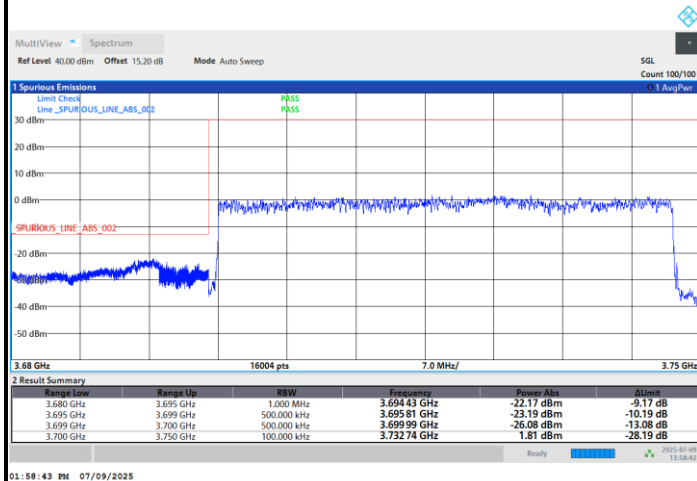


Highest Band Edge / Full RB

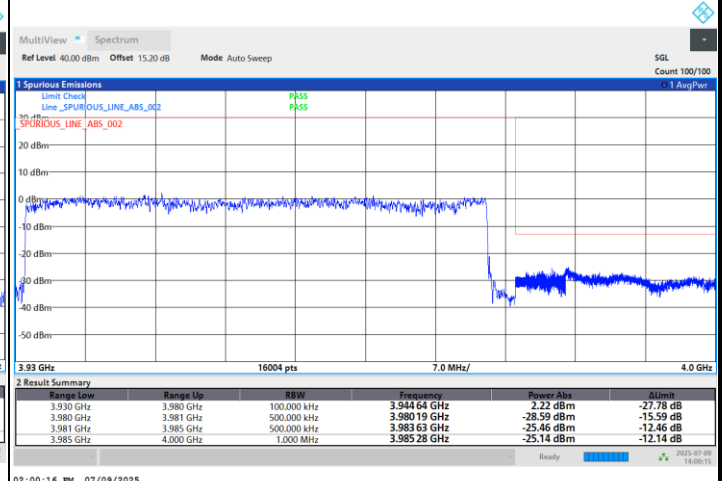


FR1 n77 / 50MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

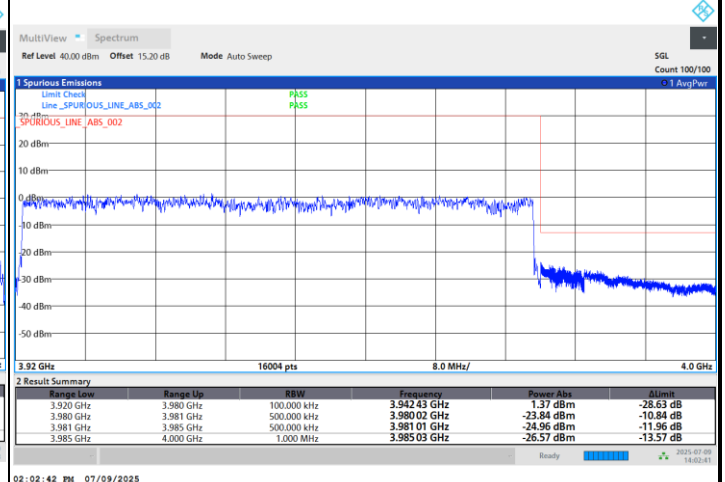
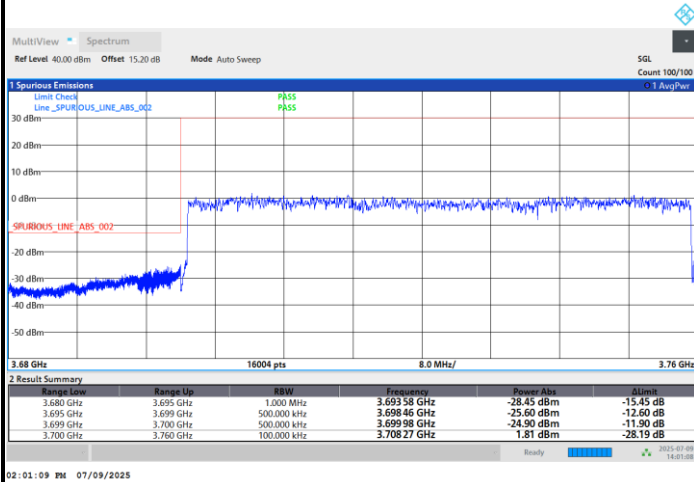




FR1 n77 / 60MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

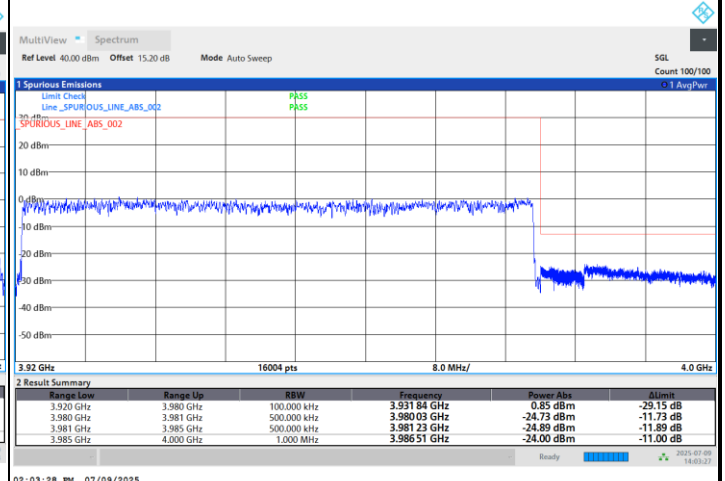
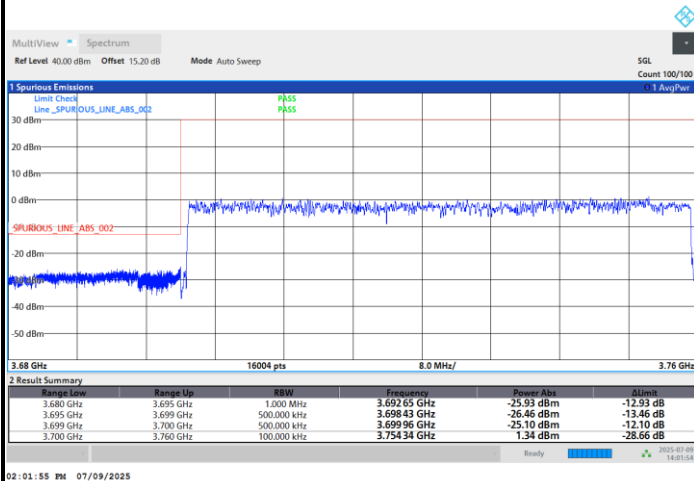
Highest Band Edge / Full RB



FR1 n77 / 60MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

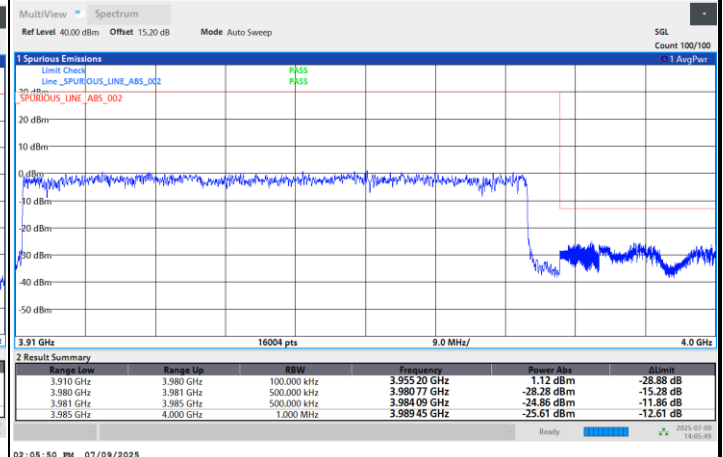
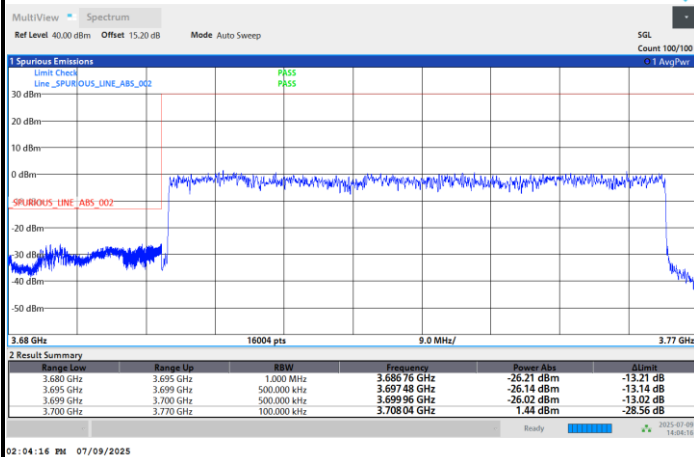




FR1 n77 / 70MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

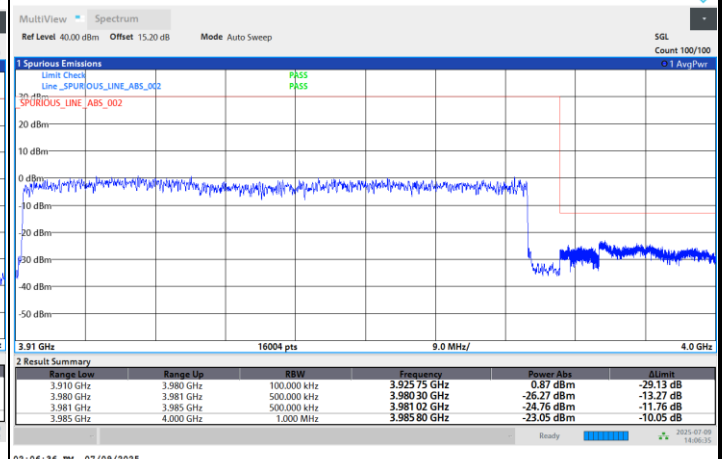
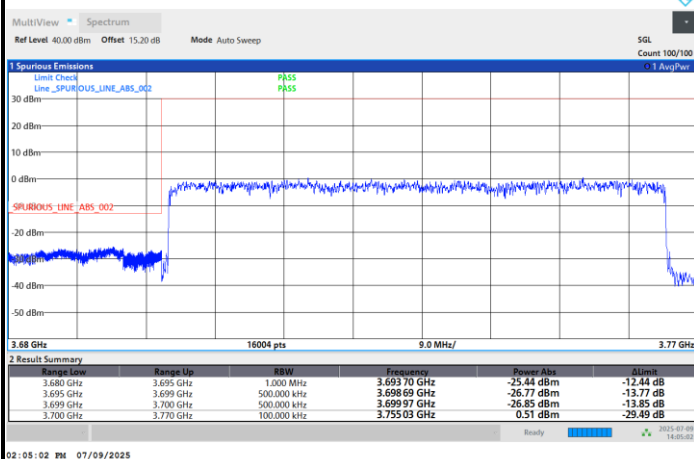
Highest Band Edge / Full RB



FR1 n77 / 70MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB

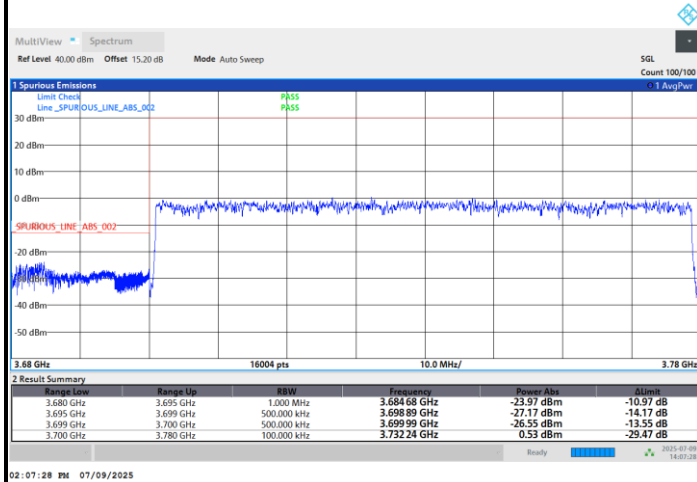
Highest Band Edge / Full RB



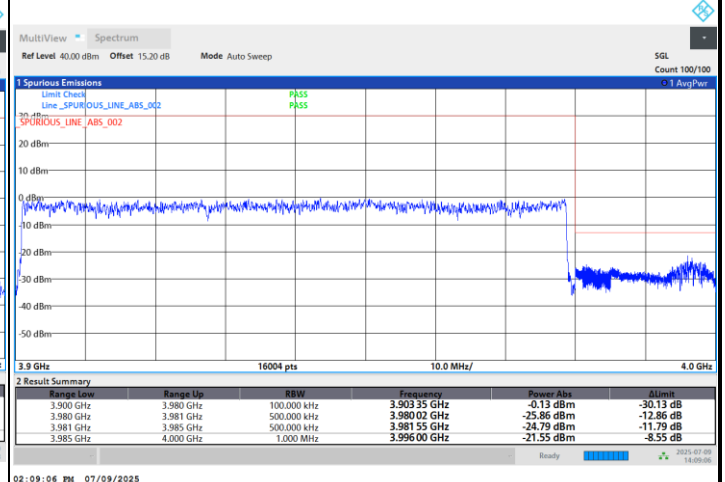


FR1 n77 / 80MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

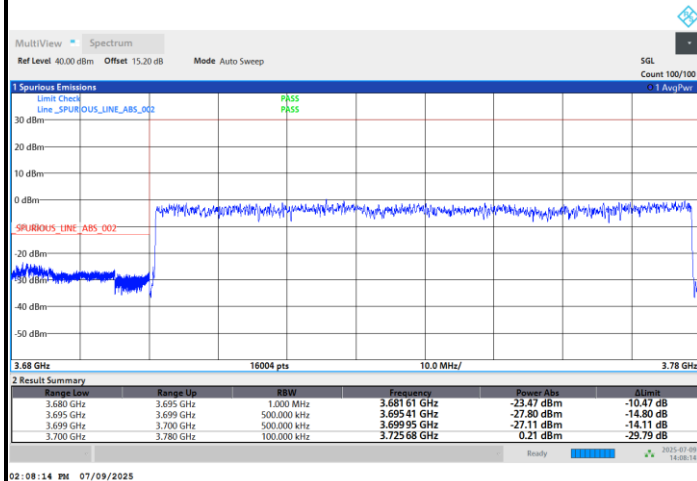


Highest Band Edge / Full RB

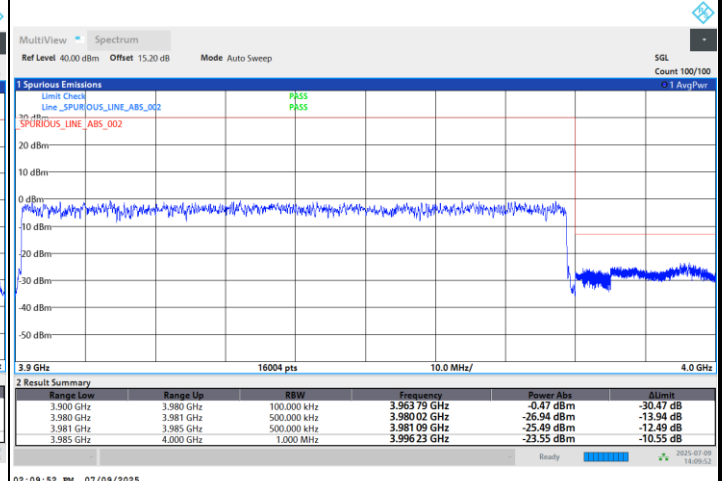


FR1 n77 / 80MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



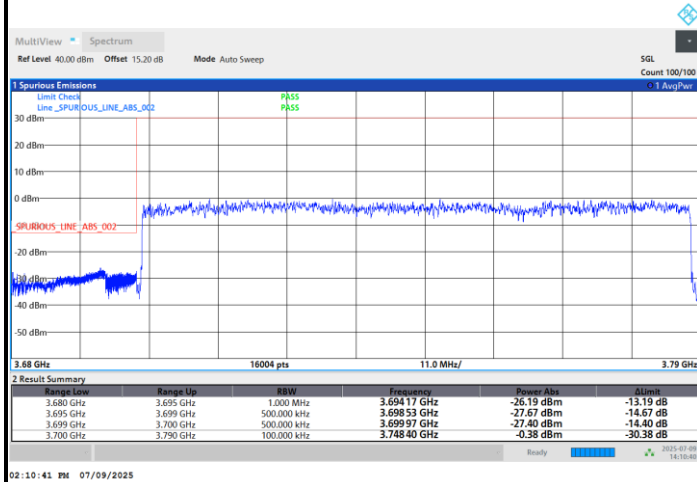
Highest Band Edge / Full RB



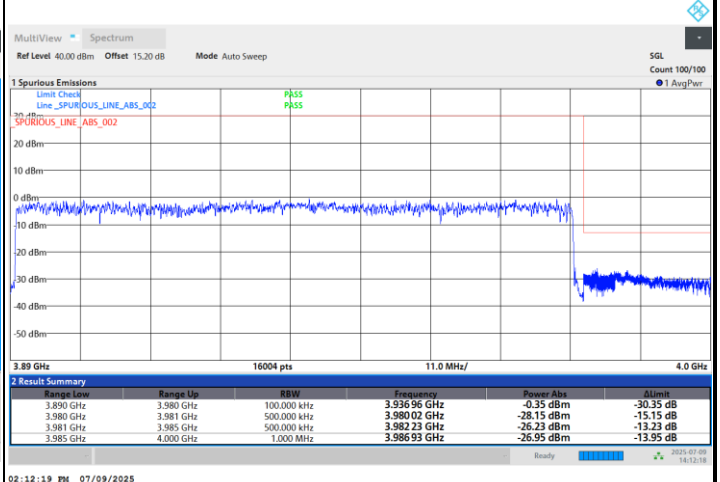


FR1 n77 / 90MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

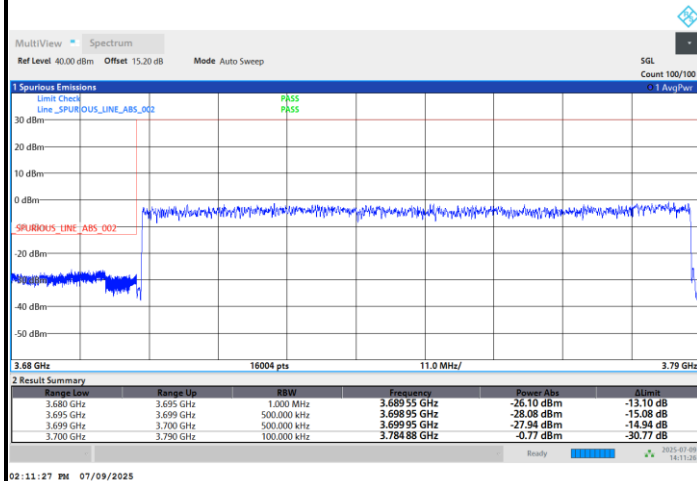


Highest Band Edge / Full RB

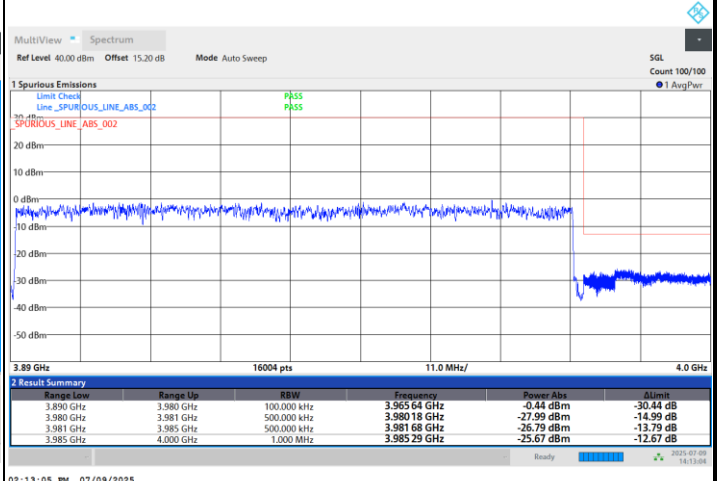


FR1 n77 / 90MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



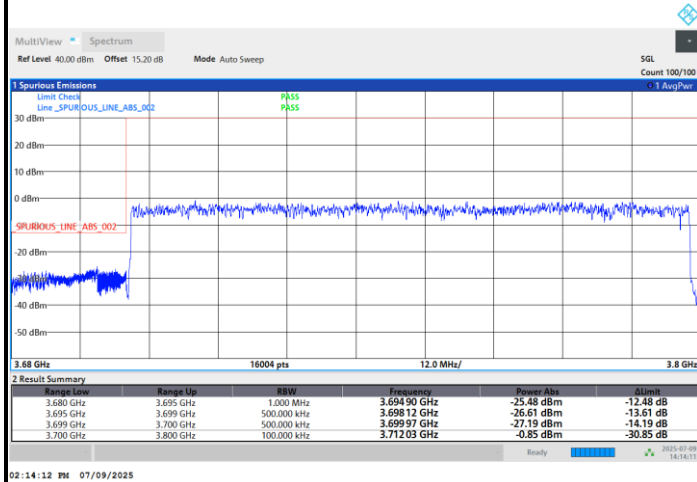
Highest Band Edge / Full RB



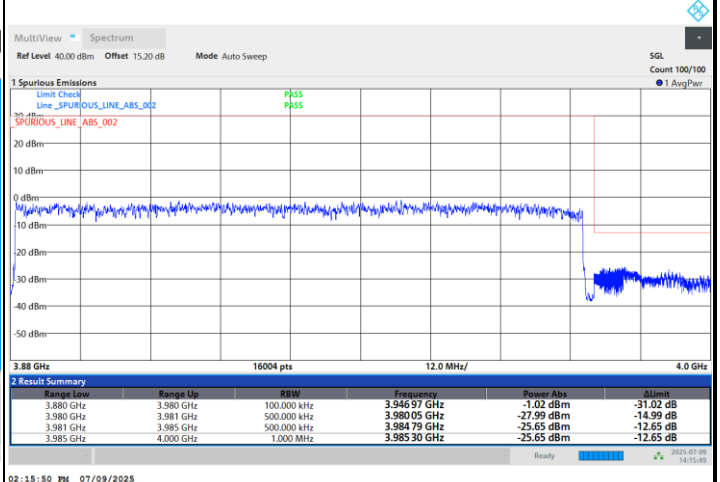


FR1 n77 / 100MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

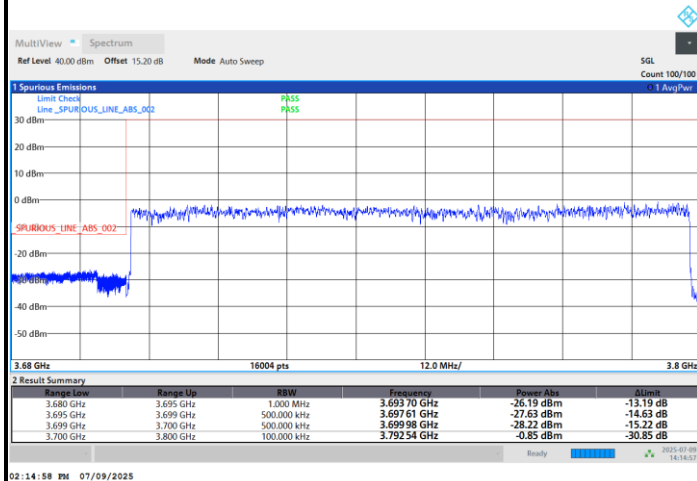


Highest Band Edge / Full RB

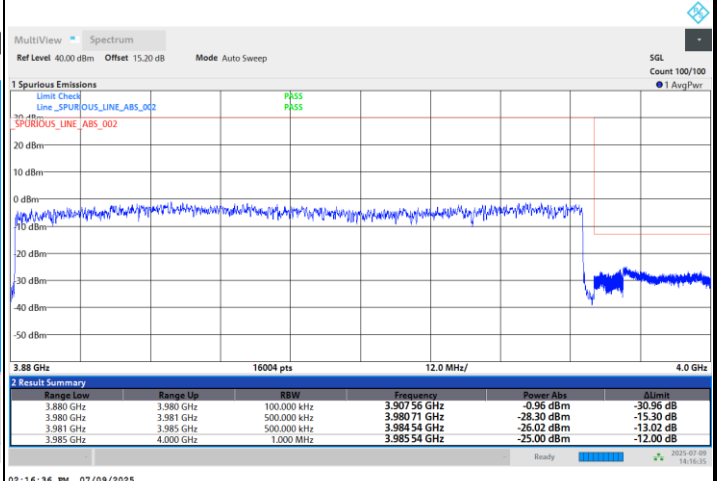


FR1 n77 / 100MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

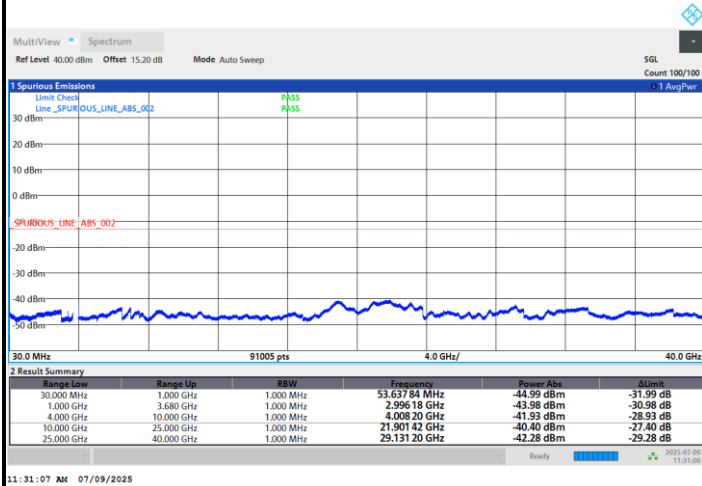




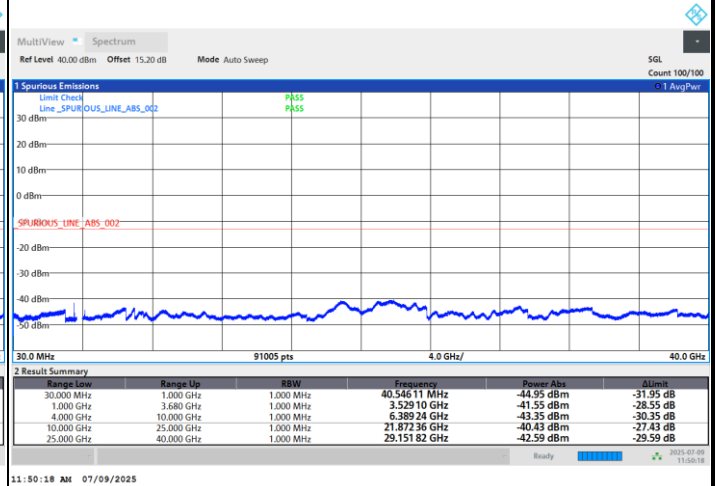
Conducted Spurious Emission

FR1 n77 / 10MHz / DFT-S OFDM / QPSK / 1RB1

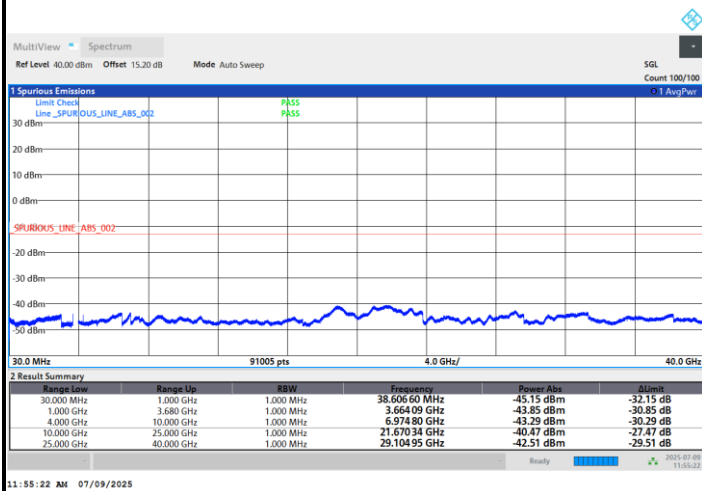
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n77 (BPSK) / Middle Channel 10M			
Temperature (°C)	Voltage (Volt)	Deviation (ppm)	Frequency Offset (Δf) (Hz)	Within Authorized Frequency Block(Hz)	Result
50	Normal Voltage	0.0017	6	Yes	PASS
40	Normal Voltage	0.0015	5.4	Yes	
30	Normal Voltage	0.0009	-3	Yes	
20(Ref.)	Normal Voltage	0.0000	0	Yes	
10	Normal Voltage	0.0013	-4.5	Yes	
0	Normal Voltage	0.0019	-6.8	Yes	
-10	Normal Voltage	0.0013	-4.6	Yes	
-20	Normal Voltage	0.0011	3.9	Yes	
-30	Normal Voltage	0.0005	1.6	Yes	
20	Maximum Voltage	0.0011	3.7	Yes	
20	Normal Voltage	0.0000	0	Yes	
20	Minimum Voltage	0.0022	-7.8	Yes	

Note:

1. Normal Voltage = 3.3 V. ; Minimum Voltage = 3.135 V. ; Maximum Voltage = 3.63 V.
2. The frequency fundamental emissions stay within the authorized frequency block.
3. The frequency variation is sufficient to ensure that the occupied bandwidth of all operation channels stay within the operating frequency block or frequency block group.

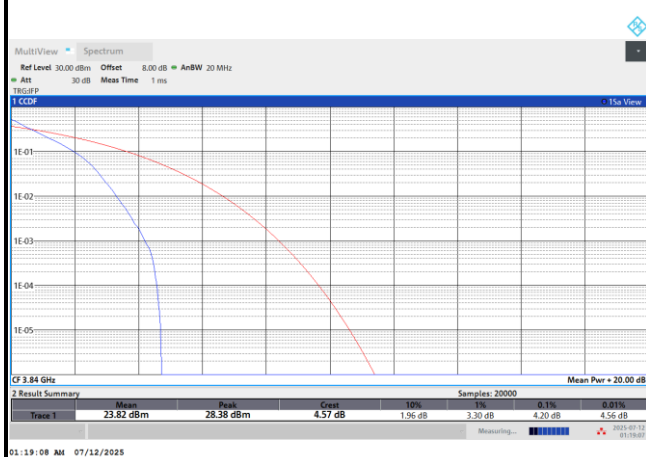
**FR1 n77_Part27O****MIMO <Ant. 0+2> (Ant. 0)****Peak-to-Average Ratio**

Mode	FR1 n77 / 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	4.20	4.96	5.92	6.12	PASS
Mode	FR1 n77 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.22				PASS

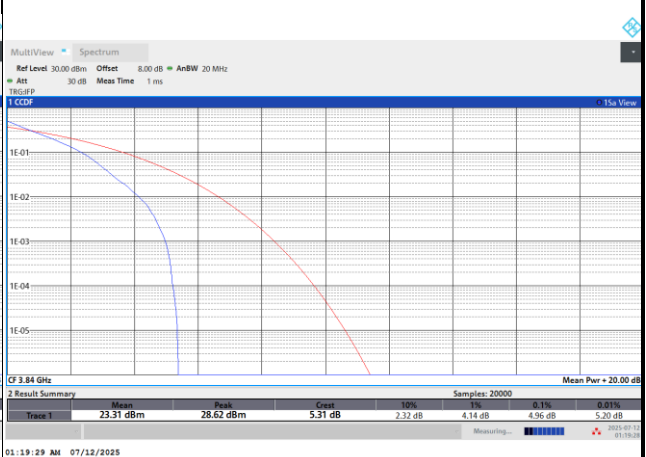


FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

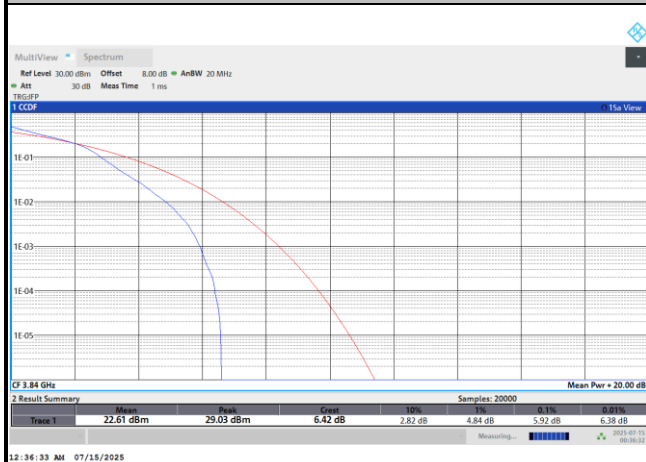
PI/2 BPSK



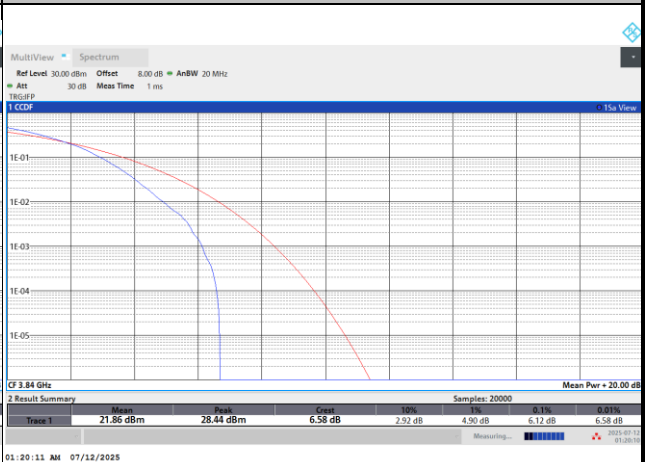
QPSK



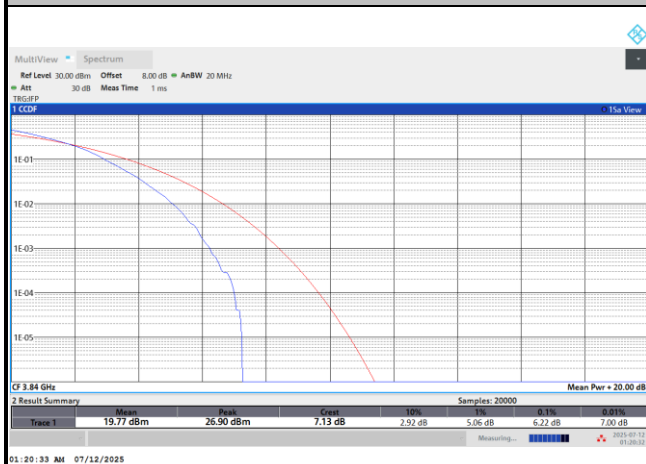
16QAM



64QAM



256QAM



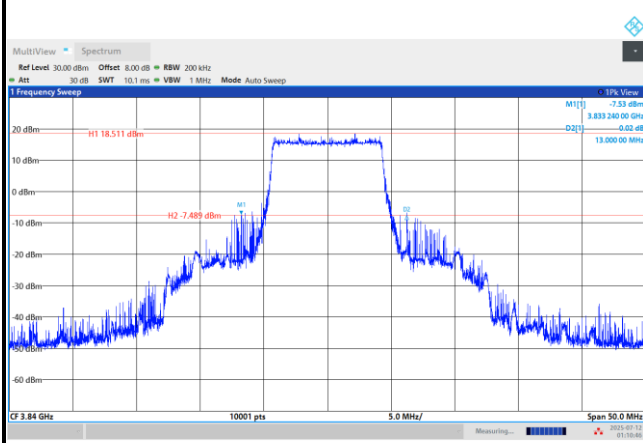
**26dB Bandwidth**

Mode	FR1 n77 : 26dB BW(MHz) / DFT-S OFDM							
BW	10MHz		15MHz		20MHz		30MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Middle CH	13.00	13.50	19.34	18.75	22.56	24.94	34.97	35.53
Mod.	16QAM		16QAM		16QAM		16QAM	
Middle CH	12.78		20.22		26.32		32.13	
BW	40MHz		50MHz		60MHz		70MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Middle CH	44.79	43.79	51.55	54.43	63.15	66.40	72.96	73.98
Mod.	16QAM		16QAM		16QAM		16QAM	
Middle CH	41.75		52.76		65.37		70.89	
BW	80MHz		90MHz		100MHz			
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK		
Middle CH	85.21	85.51	93.80	96.89	104.05	105.08		
Mod.	16QAM		16QAM		16QAM			
Middle CH	84.17		93.70		105.38			



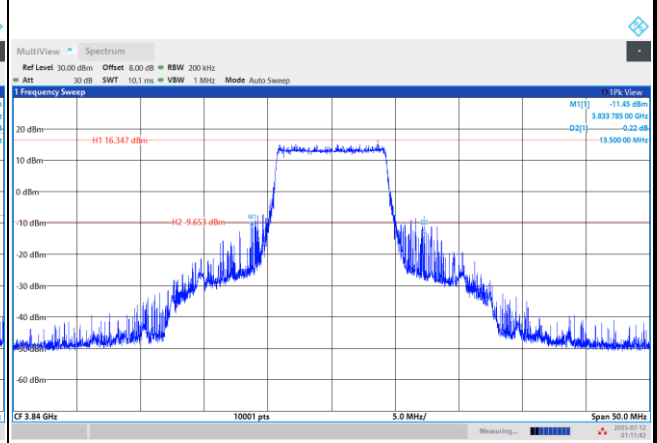
FR1 n77 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



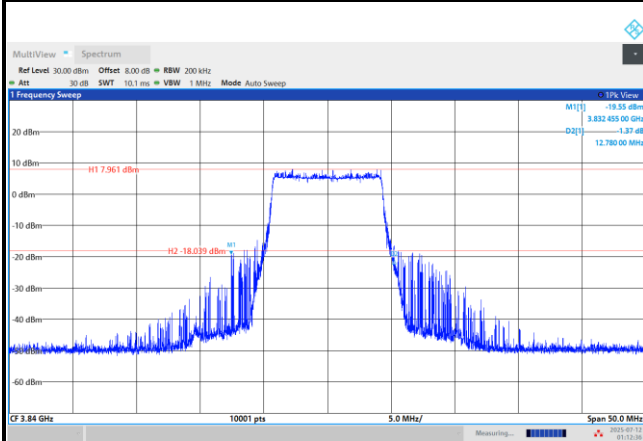
01:10:47 AM 07/12/2025

QPSK



01:11:42 AM 07/12/2025

16QAM

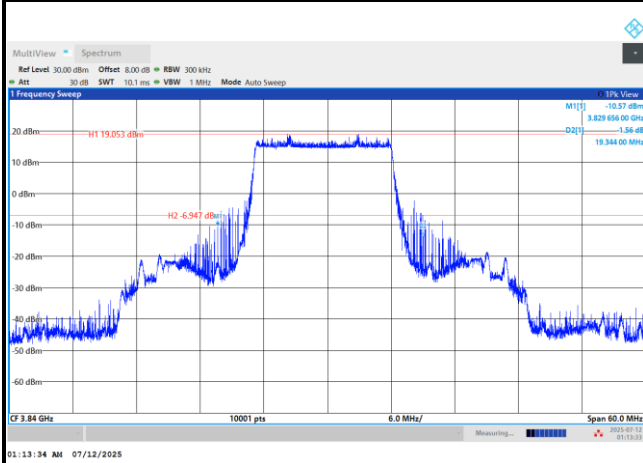


01:12:37 AM 07/12/2025

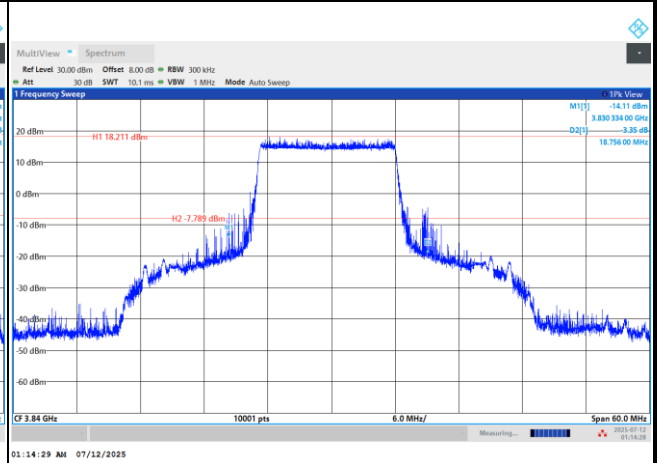


FR1 n77 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

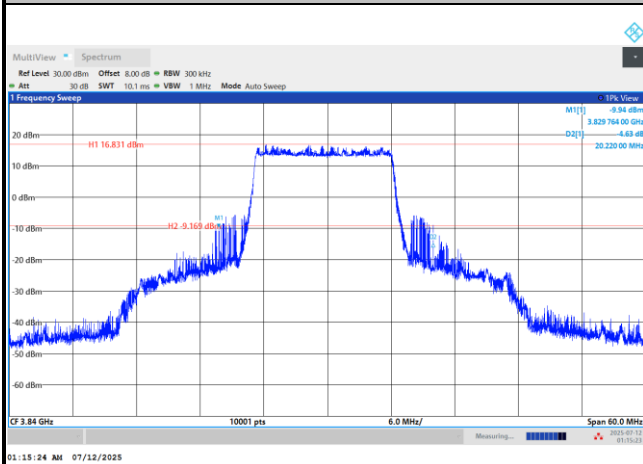
QPSK



QPSK



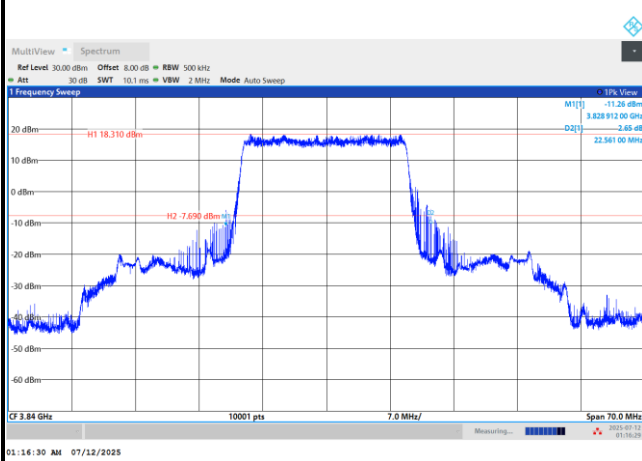
16QAM





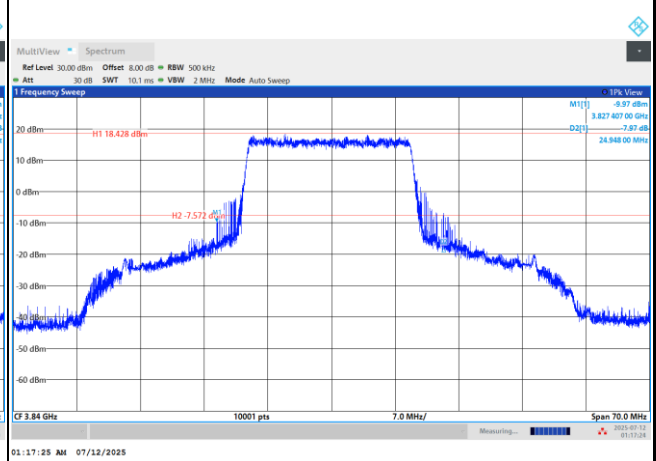
FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



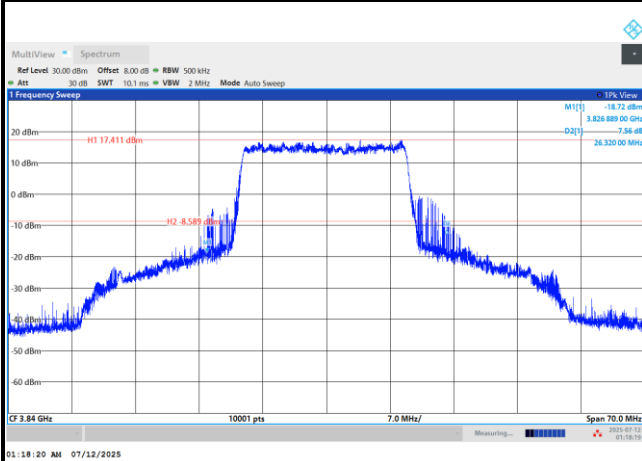
01:16:30 AM 07/12/2025

QPSK



01:17:25 AM 07/12/2025

16QAM

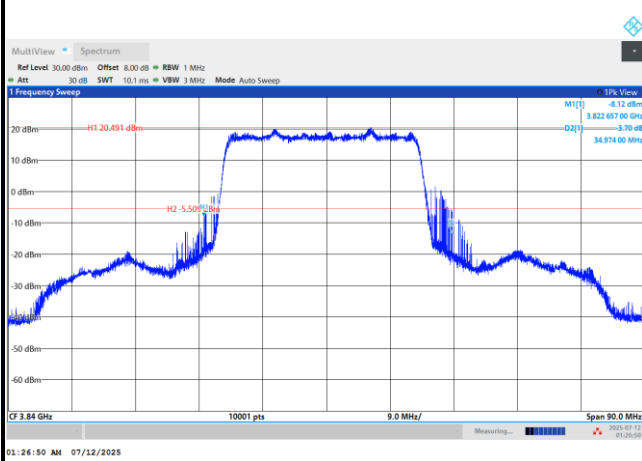


01:18:20 AM 07/12/2025

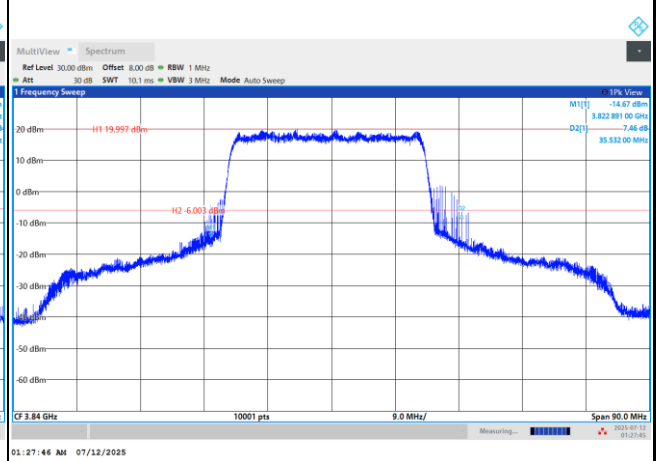


FR1 n77 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

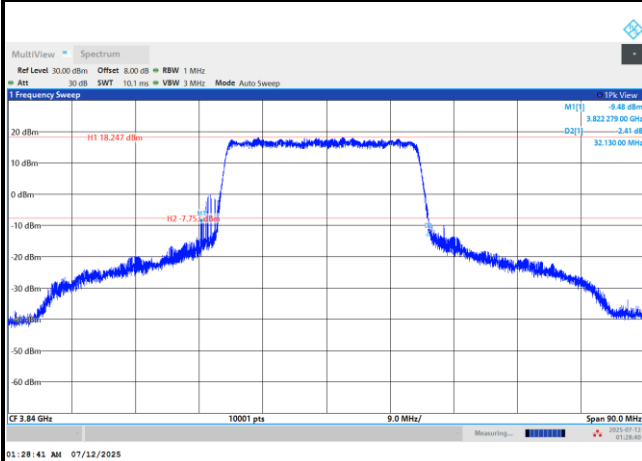
PI/2 BPSK



QPSK



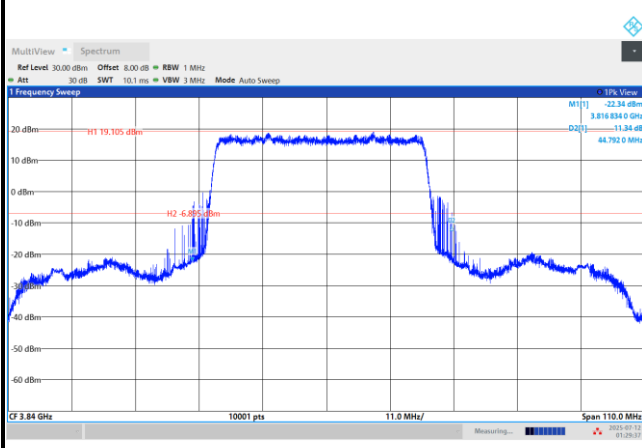
16QAM



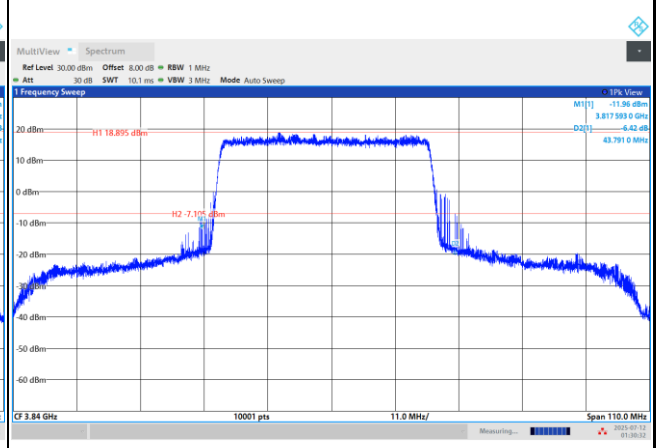


FR1 n77 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

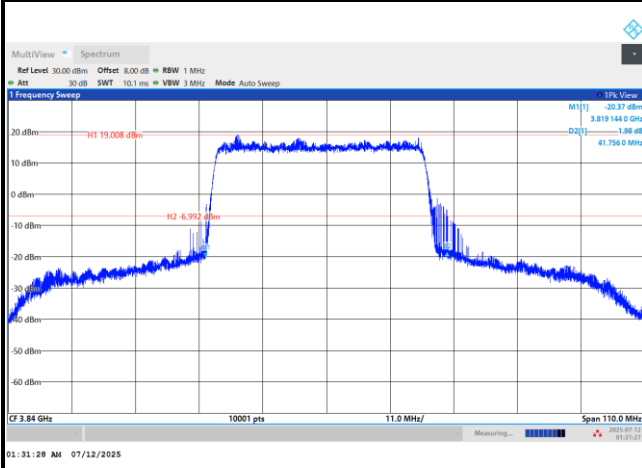
PI/2 BPSK



QPSK



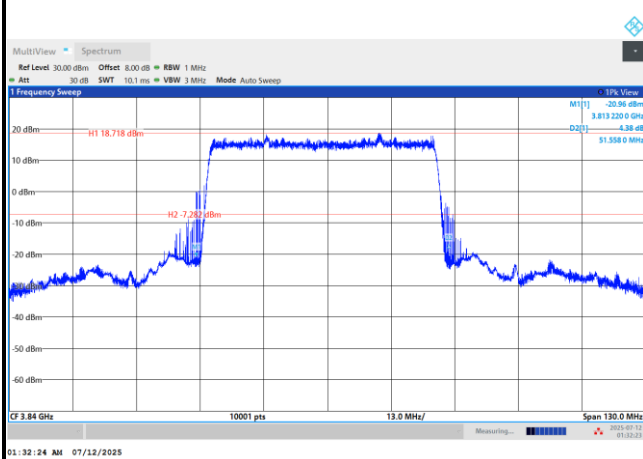
16QAM



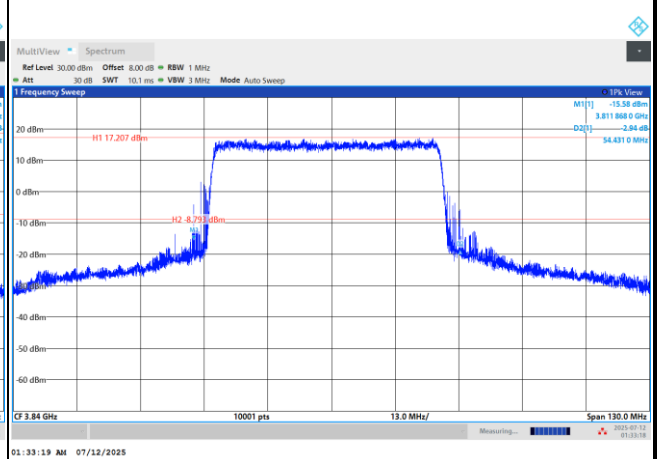


FR1 n77 / 50MHz / DFT-S OFDM / Middle Channel / Full RB

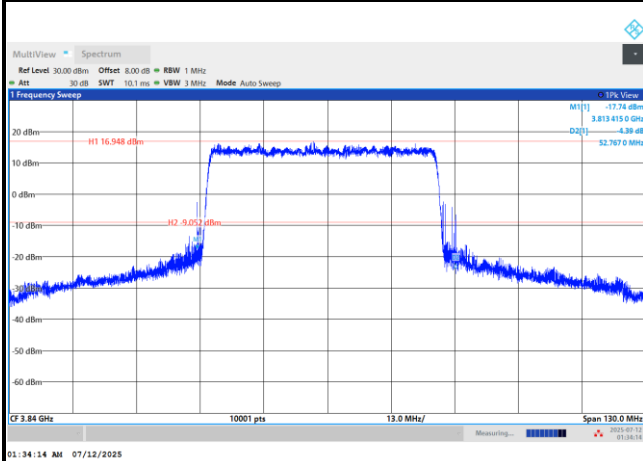
PI/2 BPSK



QPSK



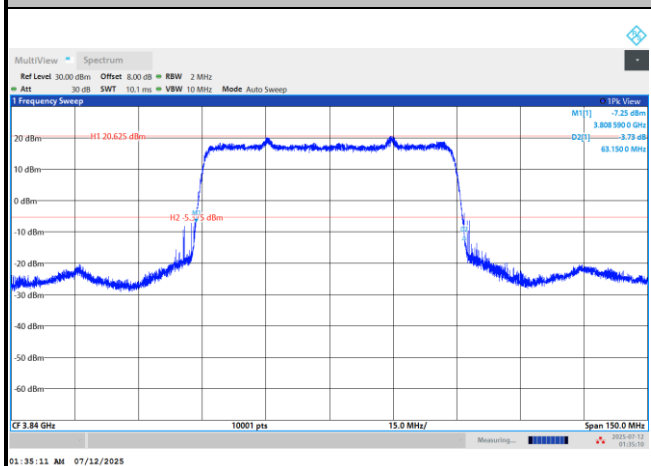
16QAM



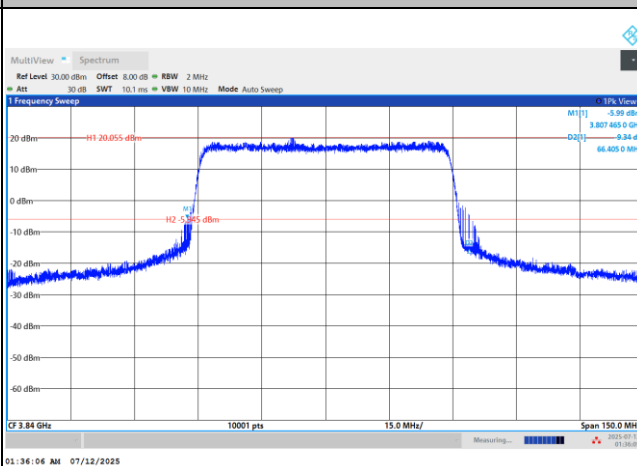


FR1 n77 / 60MHz / DFT-S OFDM / Middle Channel / Full RB

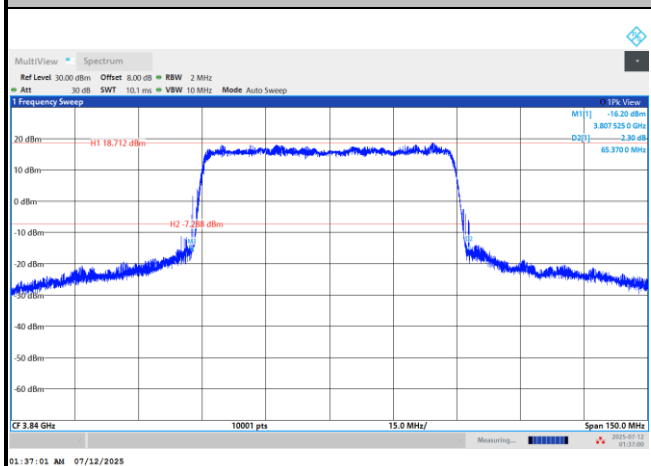
PI/2 BPSK



QPSK



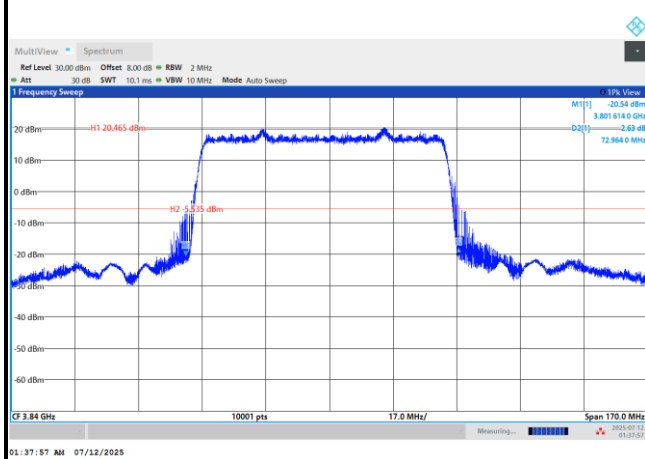
16QAM



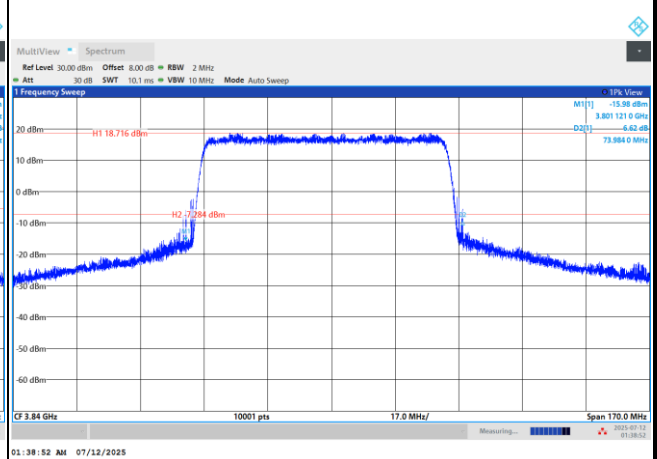


FR1 n77 / 70MHz / DFT-S OFDM / Middle Channel / Full RB

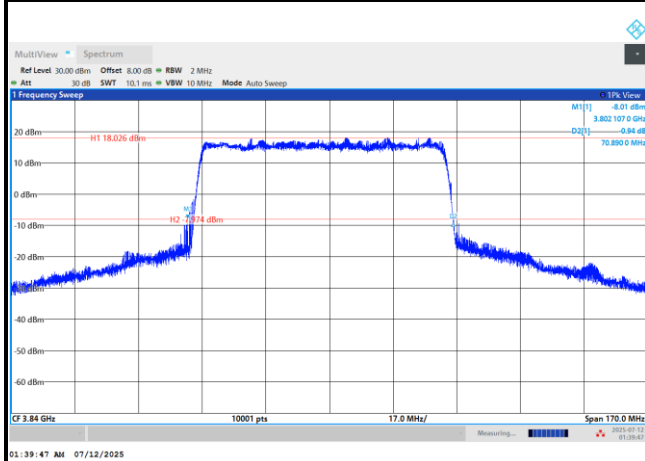
PI/2 BPSK



QPSK



16QAM

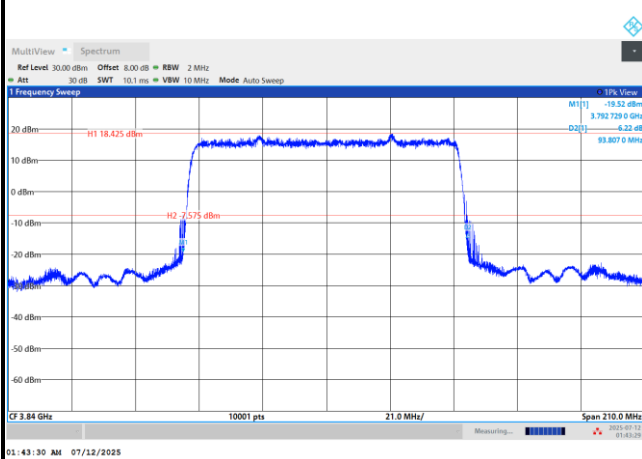




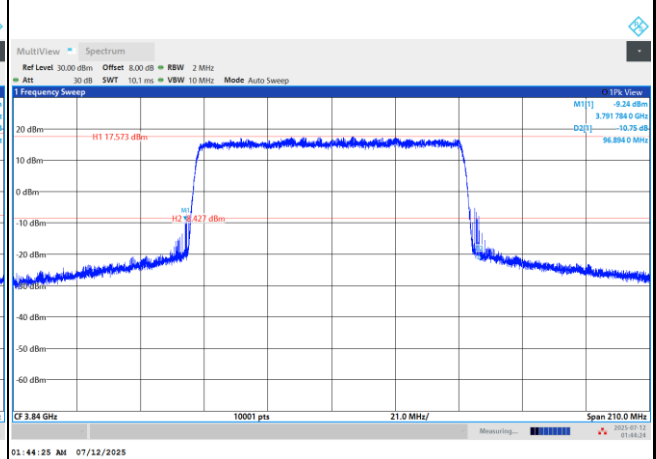


FR1 n77 / 90MHz / DFT-S OFDM / Middle Channel / Full RB

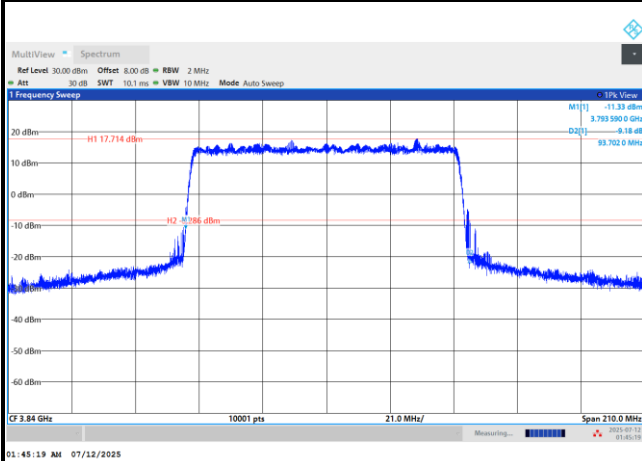
PI/2 BPSK



QPSK



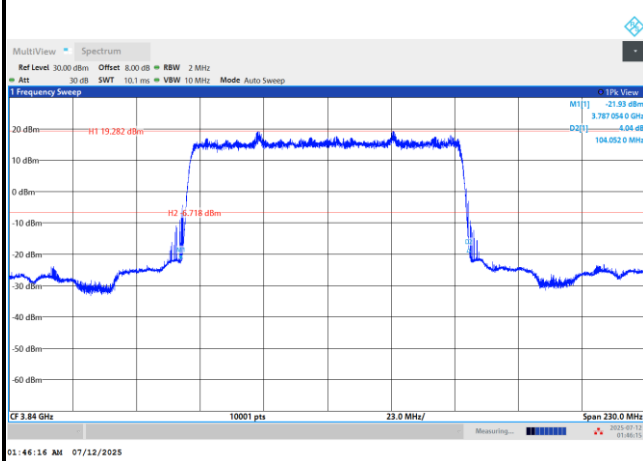
16QAM



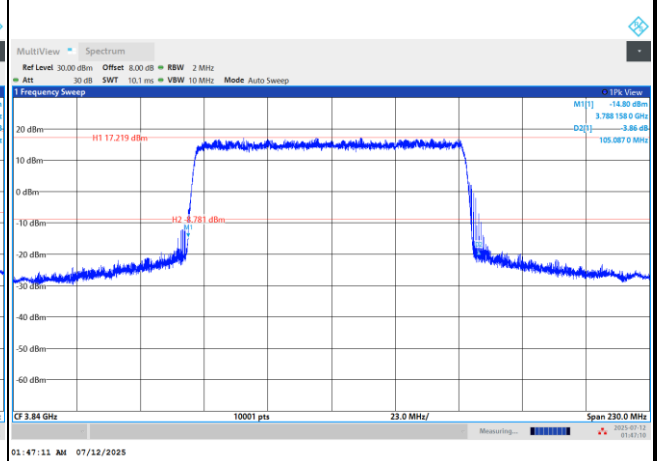


FR1 n77 / 100MHz / DFT-S OFDM / Middle Channel / Full RB

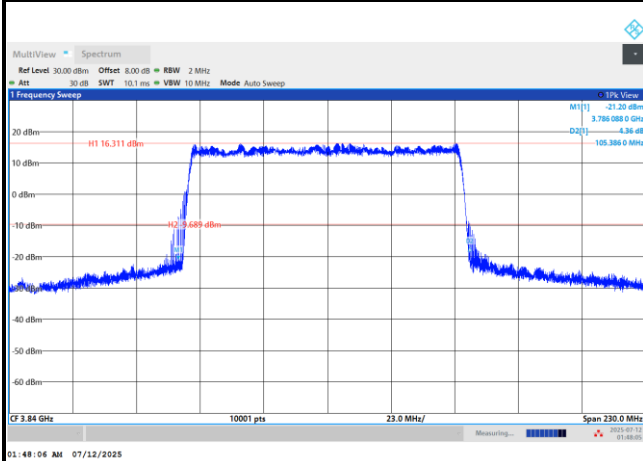
PI/2 BPSK



QPSK



16QAM



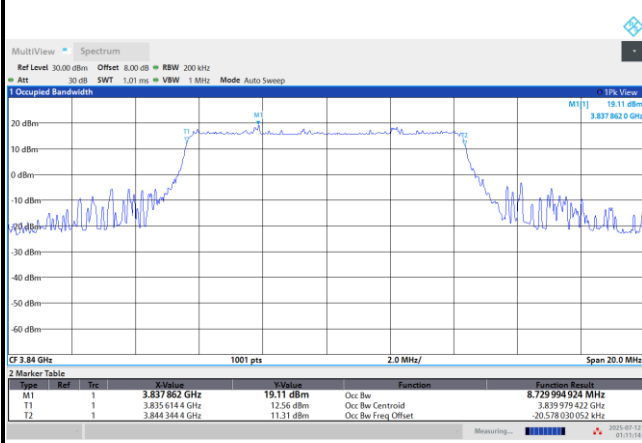
**Occupied Bandwidth**

Mode	FR1 n77 : 99%OBW(MHz) / DFT-S OFDM							
BW	10MHz		15MHz		20MHz		30MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Middle CH	8.72	8.71	13.05	13.00	18.05	18.11	27.30	27.24
Mod.	16QAM		16QAM		16QAM		16QAM	
Middle CH	8.71		13.08		18.21		27.25	
BW	40MHz		50MHz		60MHz		70MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Middle CH	36.05	36.10	45.96	46.09	58.58	58.44	64.89	64.83
Mod.	16QAM		16QAM		16QAM		16QAM	
Middle CH	35.90		46.09		58.80		65.10	
BW	80MHz		90MHz		100MHz			
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK		
Middle CH	77.44	77.79	87.24	87.14	96.86	96.64		
Mod.	16QAM		16QAM		16QAM			
Middle CH	77.62		87.50		96.87			



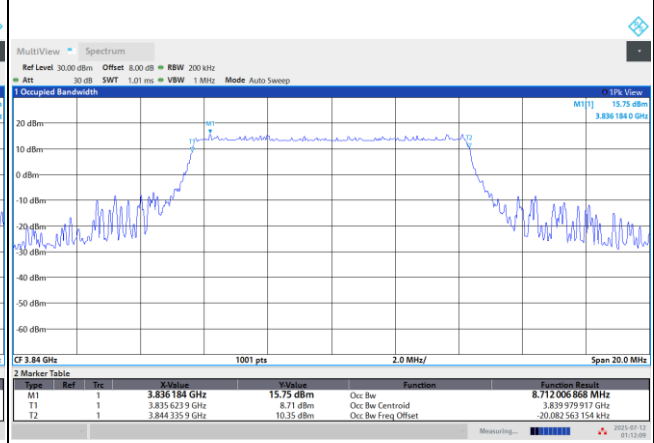
FR1 n77 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK



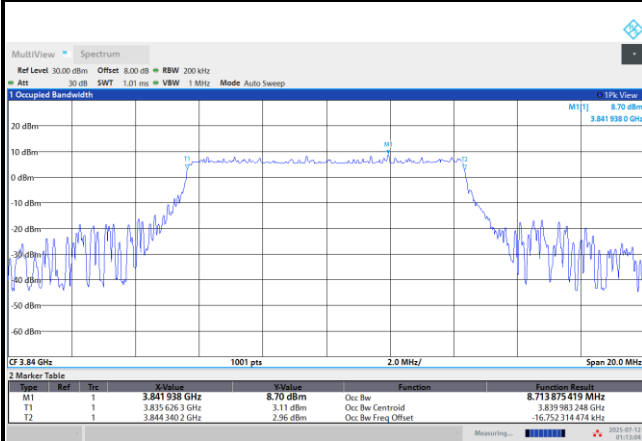
01:11:15 AM 07/12/2025

QPSK



01:12:10 AM 07/12/2025

16QAM

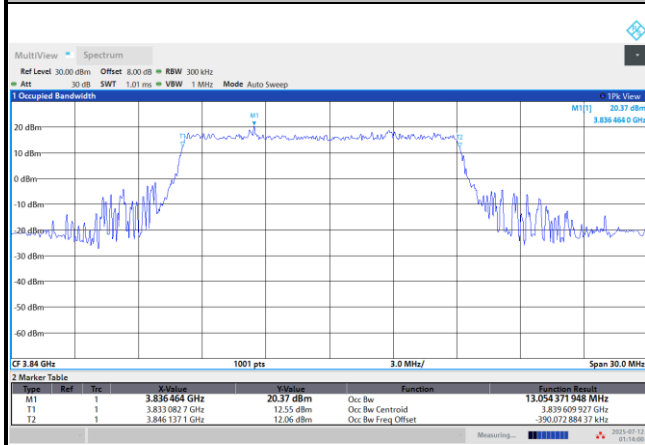


01:13:04 AM 07/12/2025



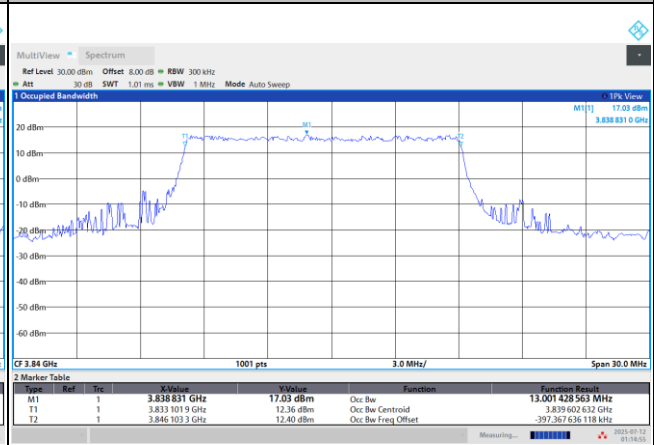
FR1 n77 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

QPSK



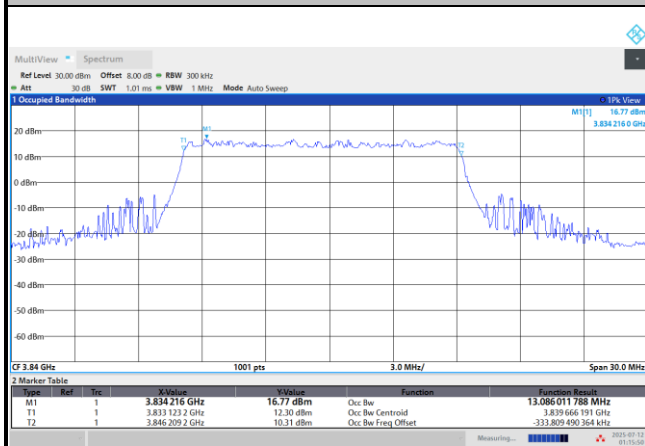
01:14:01 AM 07/12/2025

QPSK



01:14:56 AM 07/12/2025

16QAM



01:15:51 AM 07/12/2025