

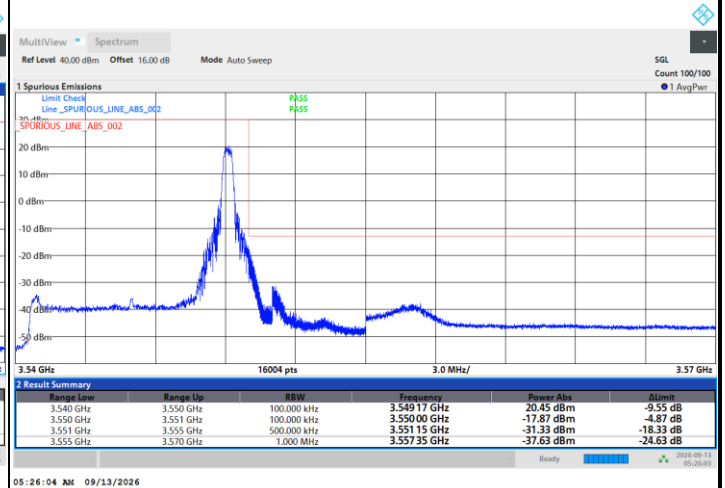
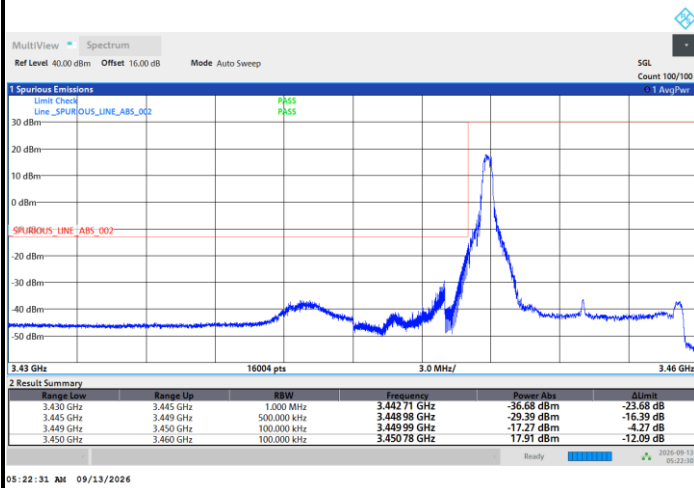


Conducted Band Edge

FR1 n77 / 10MHz / DFT-S OFDM / PI/2 BPSK

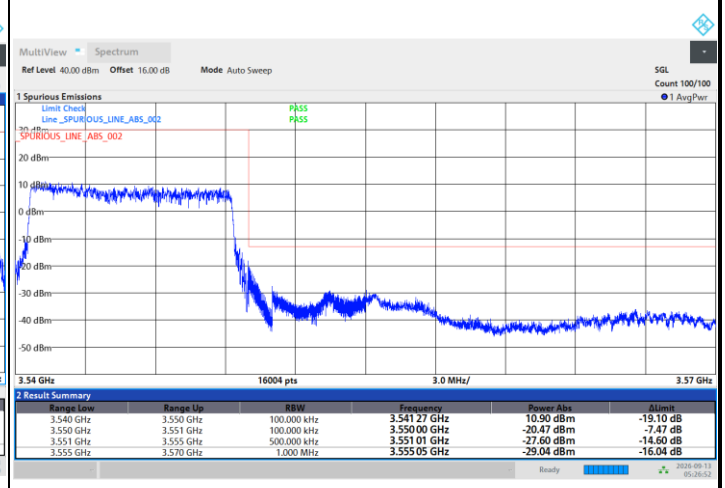
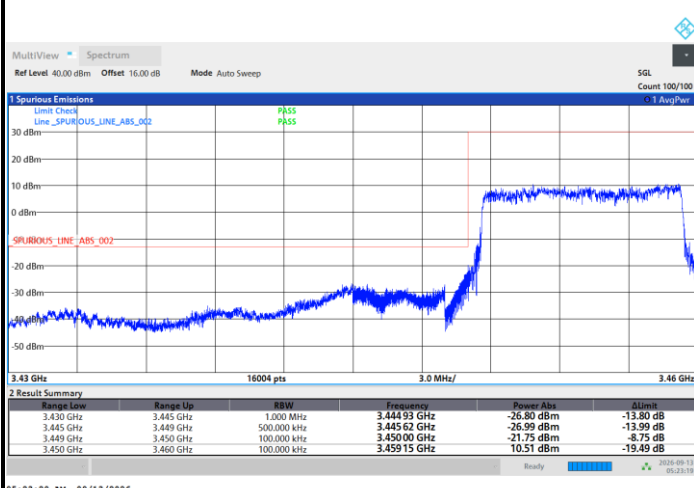
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

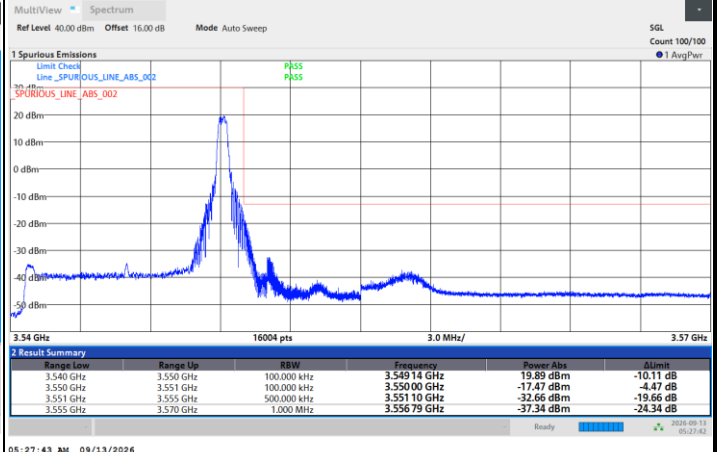
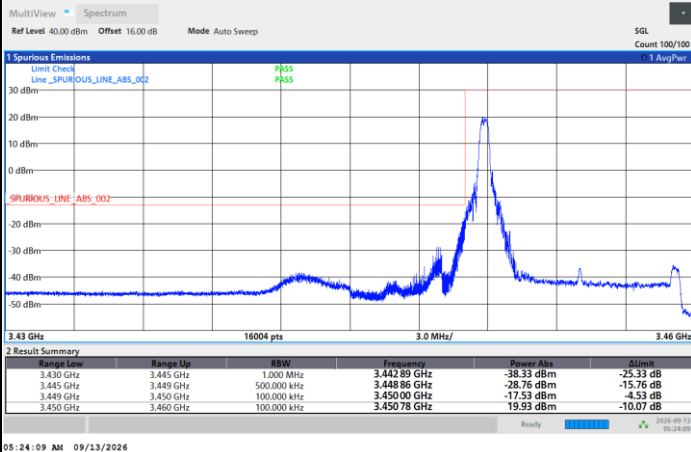




FR1 n77 / 10MHz / DFT-S OFDM / QPSK

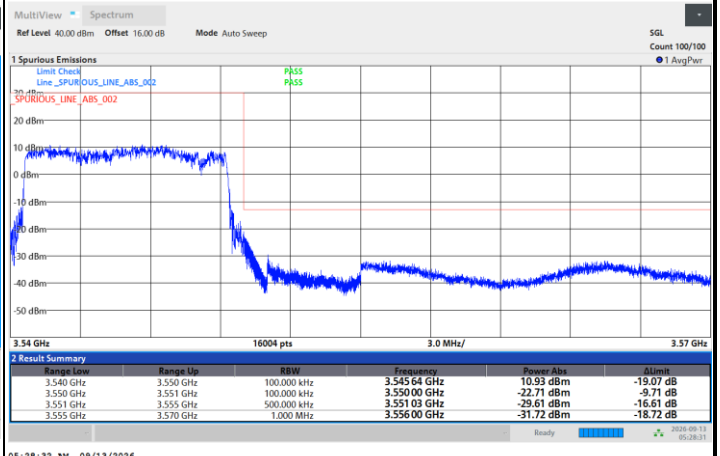
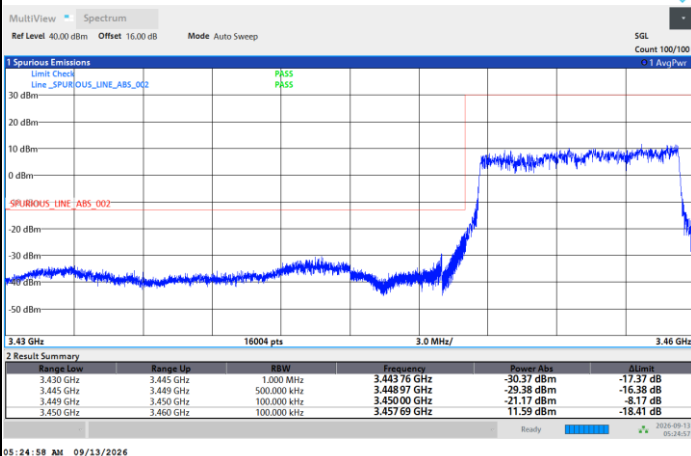
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

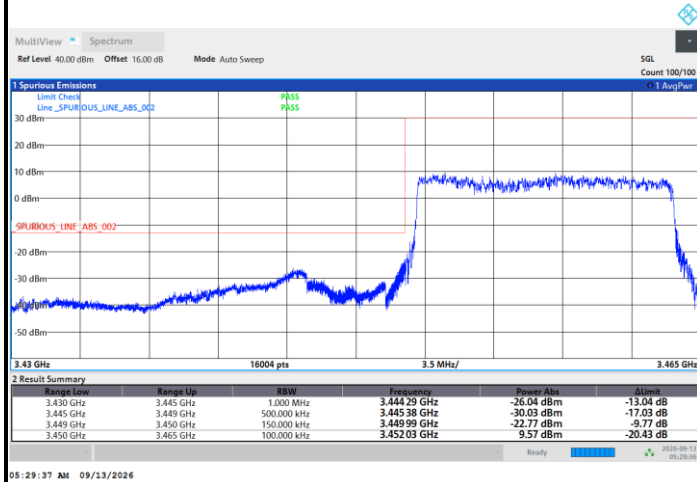
Highest Band Edge / Full RB



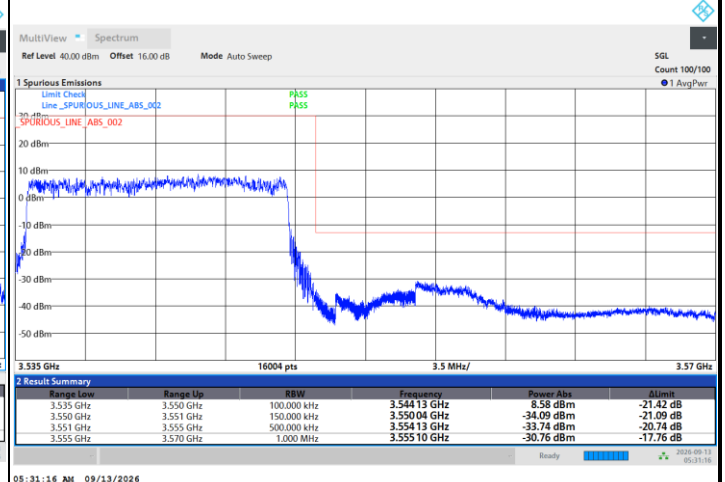


FR1 n77 / 15MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

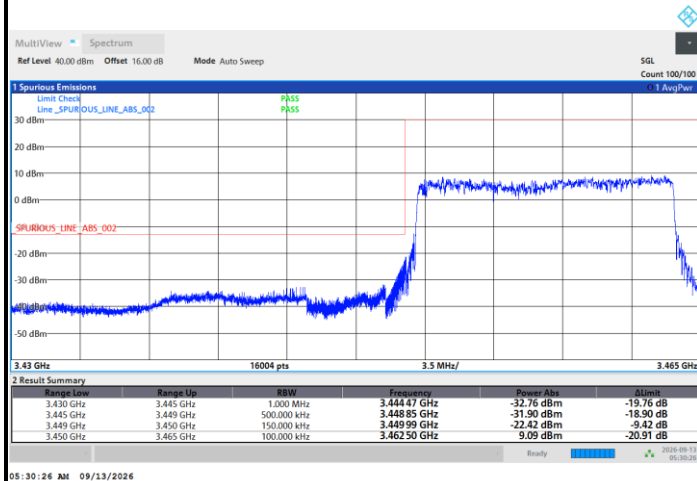


Highest Band Edge / Full RB

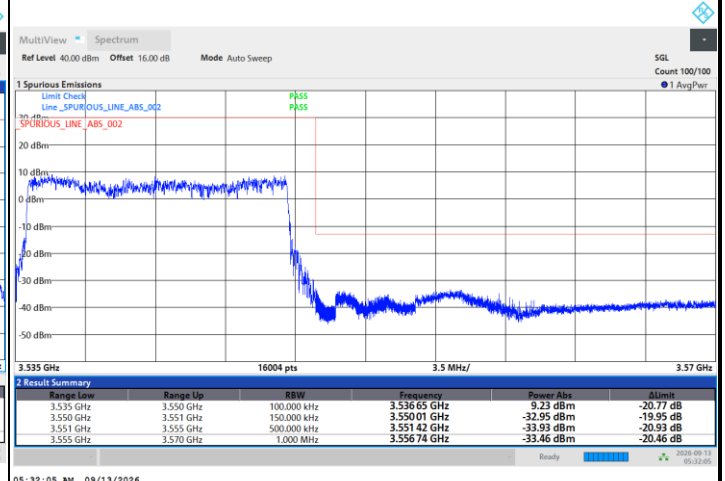


FR1 n77 / 15MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



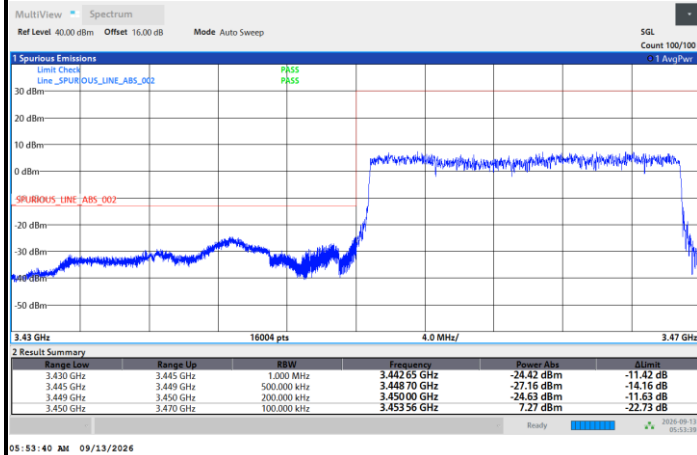
Highest Band Edge / Full RB



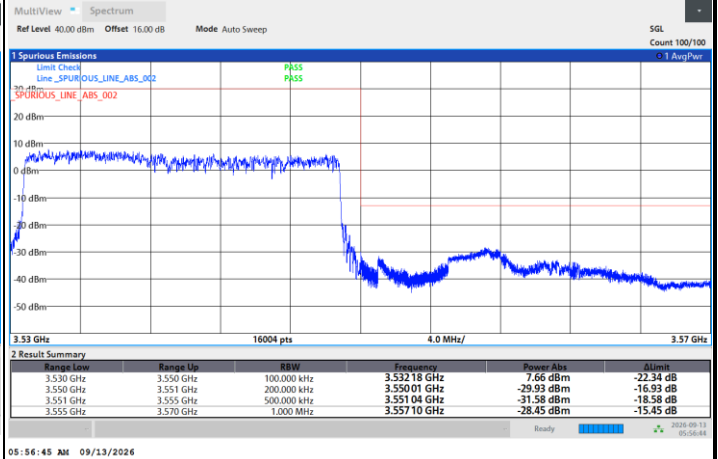


FR1 n77 / 20MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

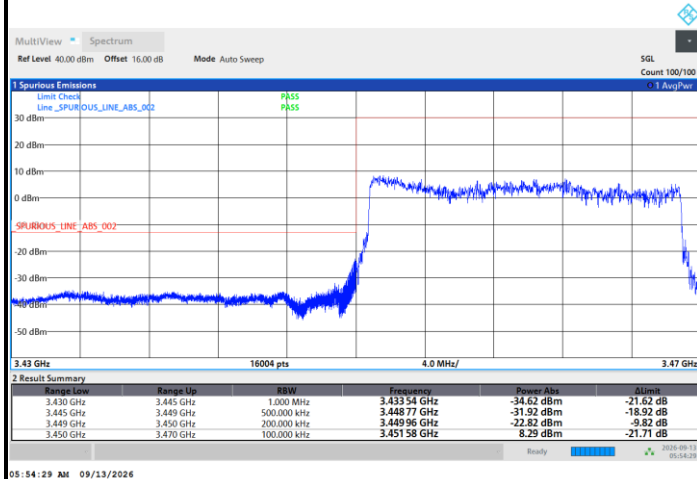


Highest Band Edge / Full RB

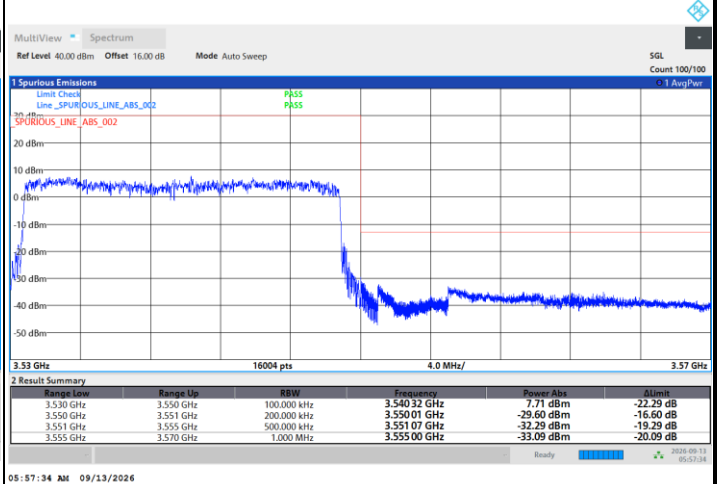


FR1 n77 / 20MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



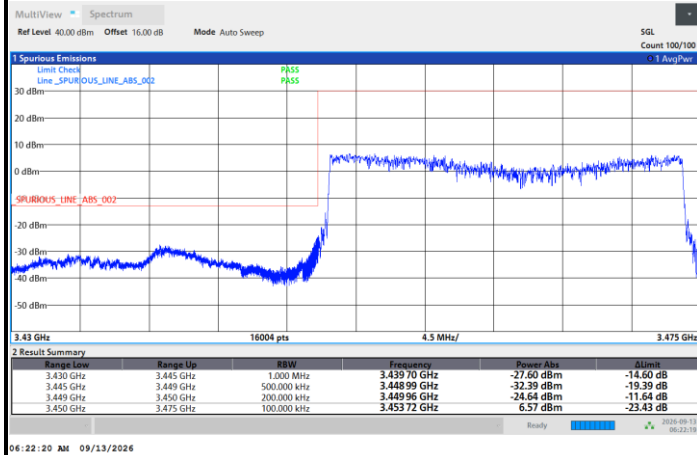
Highest Band Edge / Full RB



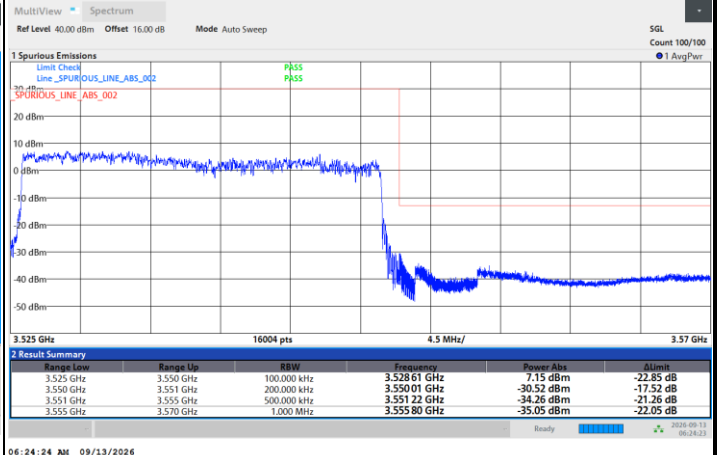


FR1 n77 / 25MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

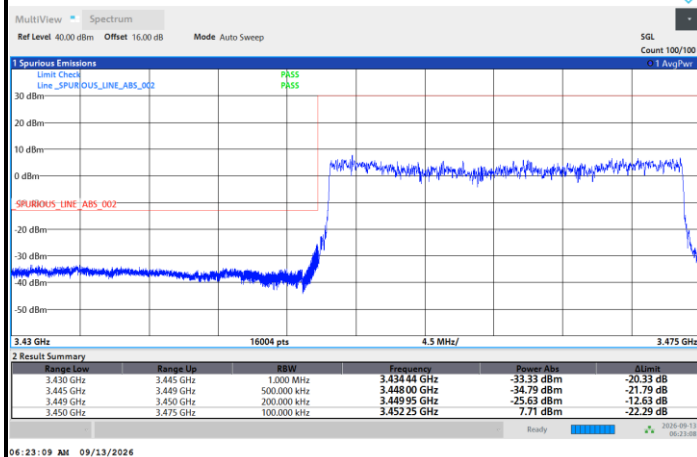


Highest Band Edge / Full RB

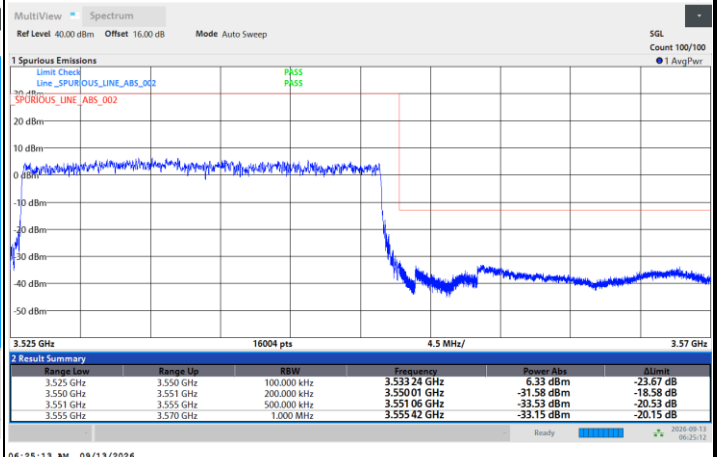


FR1 n77 / 25MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



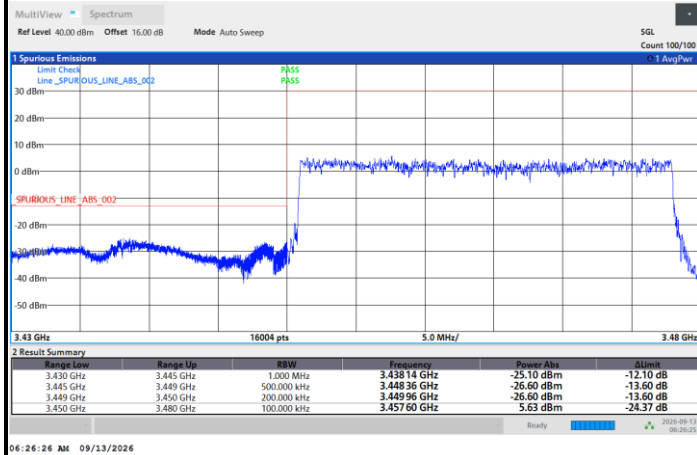
Highest Band Edge / Full RB



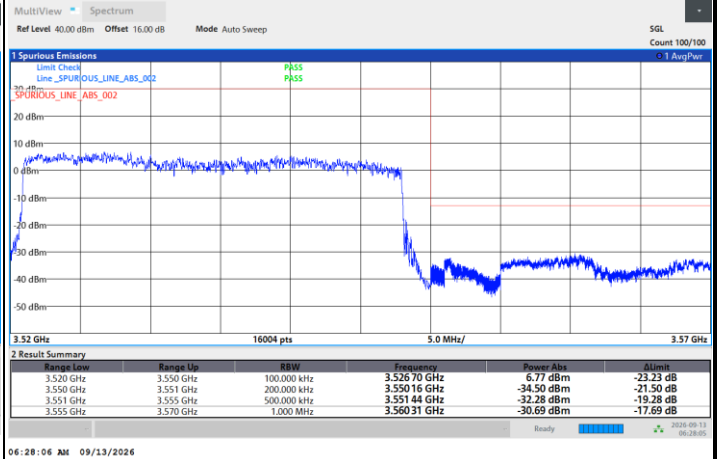


FR1 n77 / 30MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

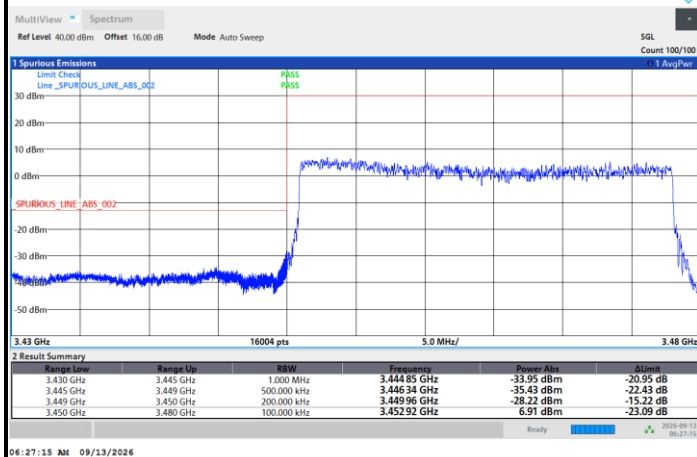


Highest Band Edge / Full RB

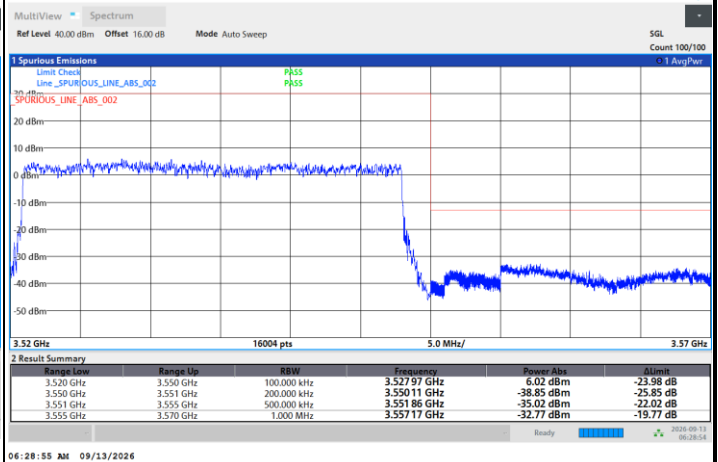


FR1 n77 / 30MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



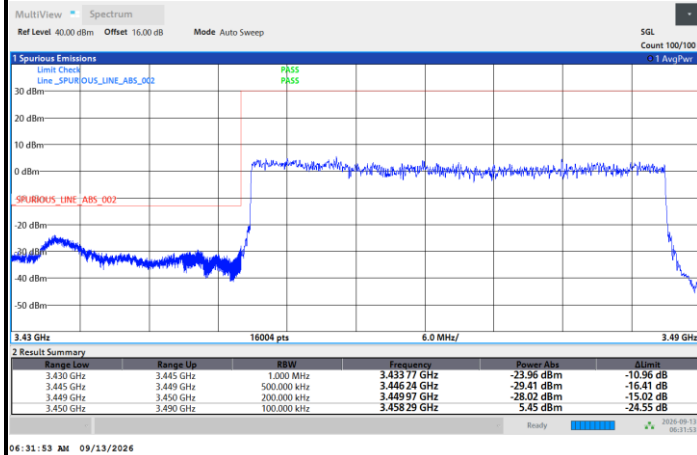
Highest Band Edge / Full RB



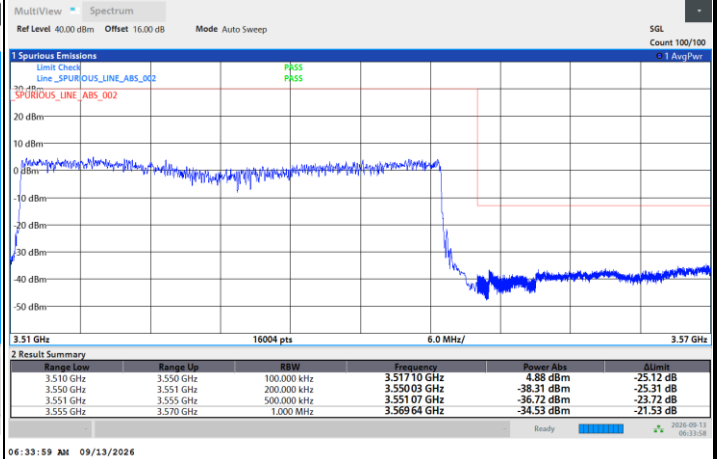


FR1 n77 / 40MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

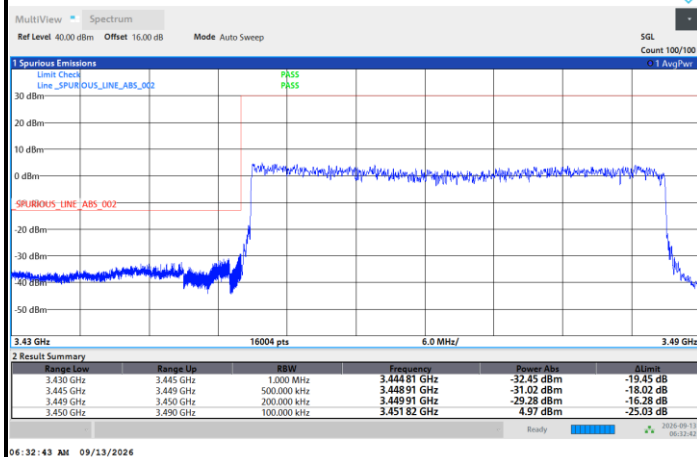


Highest Band Edge / Full RB

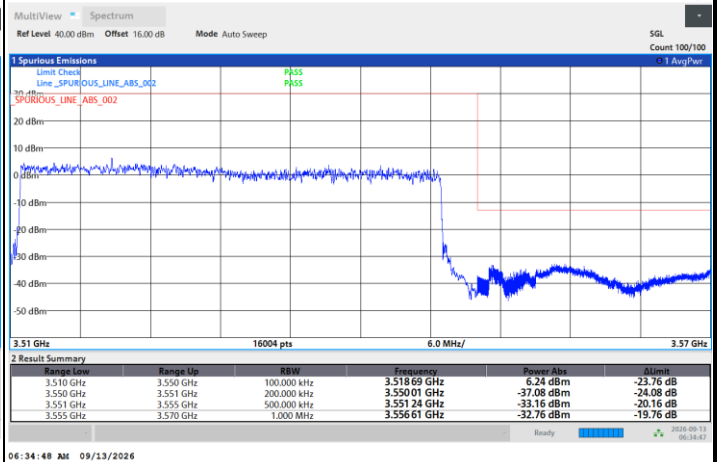


FR1 n77 / 40MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



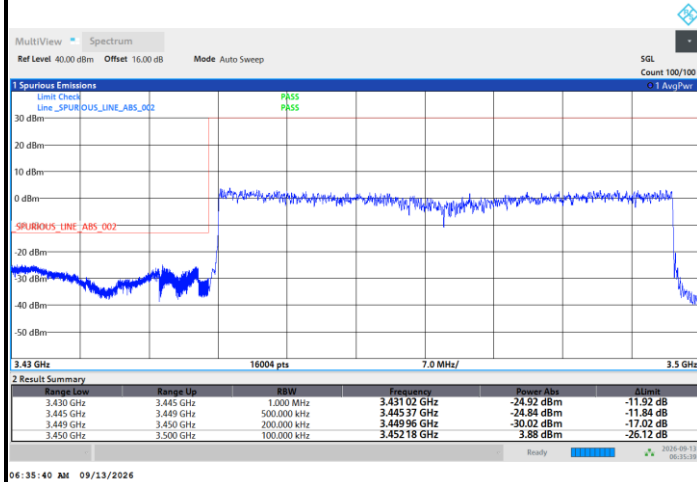
Highest Band Edge / Full RB



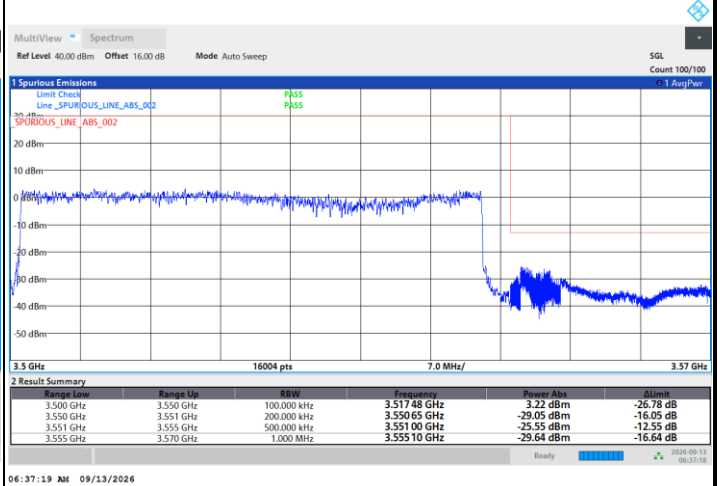


FR1 n77 / 50MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

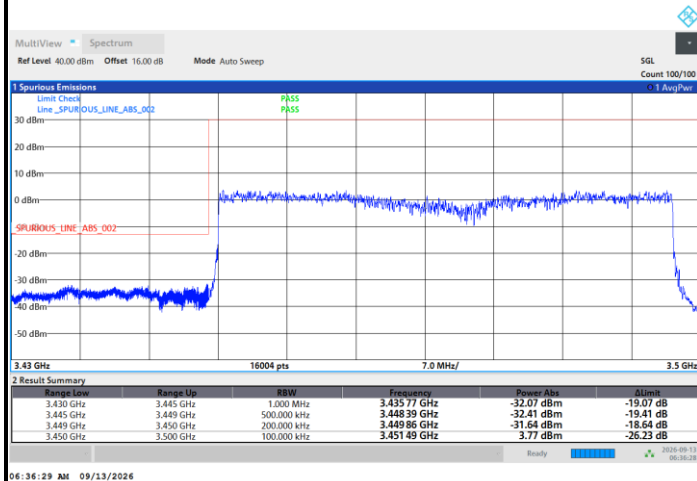


Highest Band Edge / Full RB

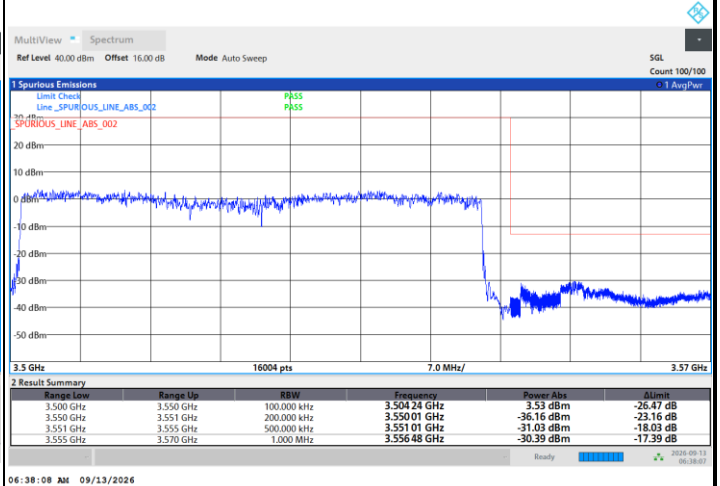


FR1 n77 / 50MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



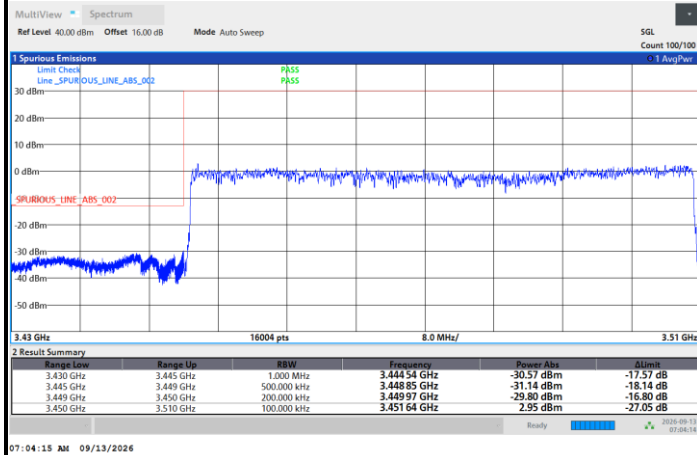
Highest Band Edge / Full RB



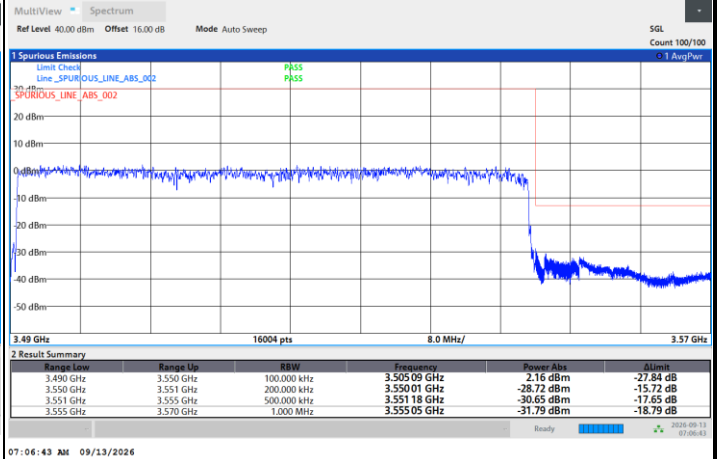


FR1 n77 / 60MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

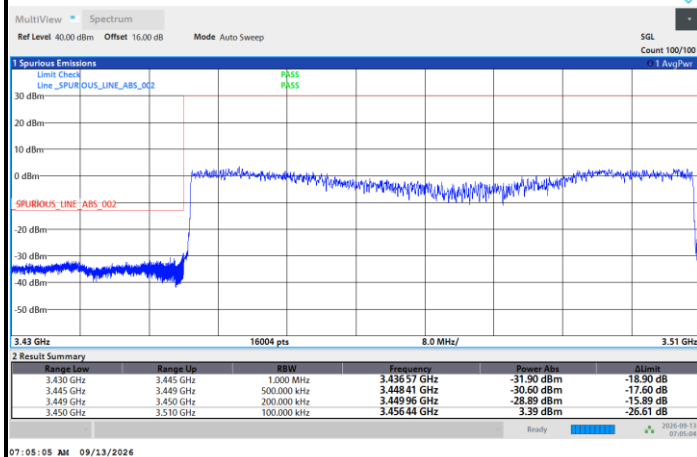


Highest Band Edge / Full RB

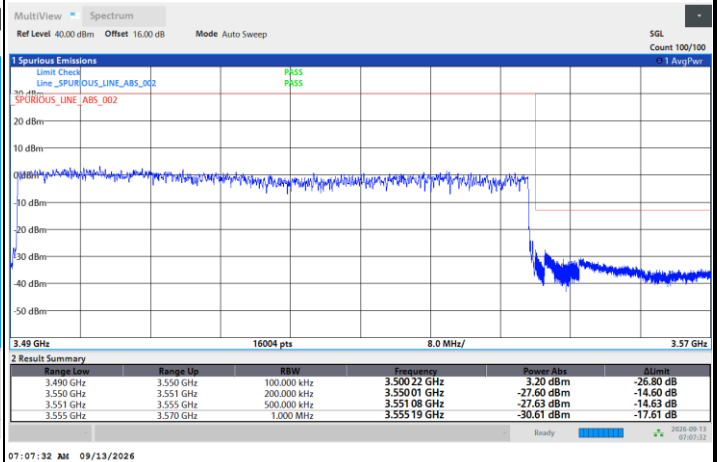


FR1 n77 / 60MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

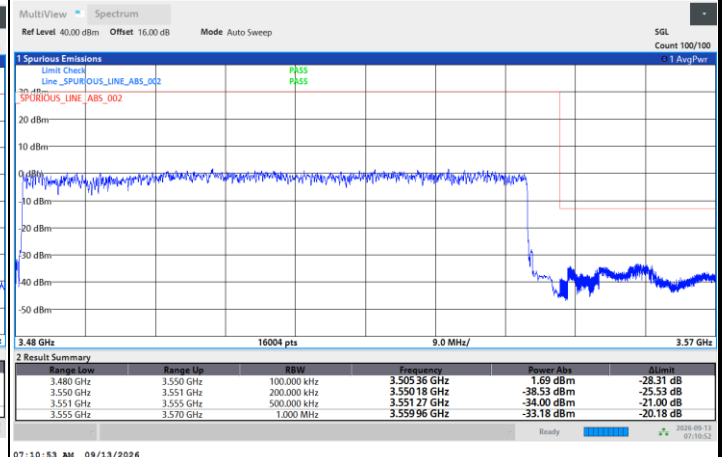
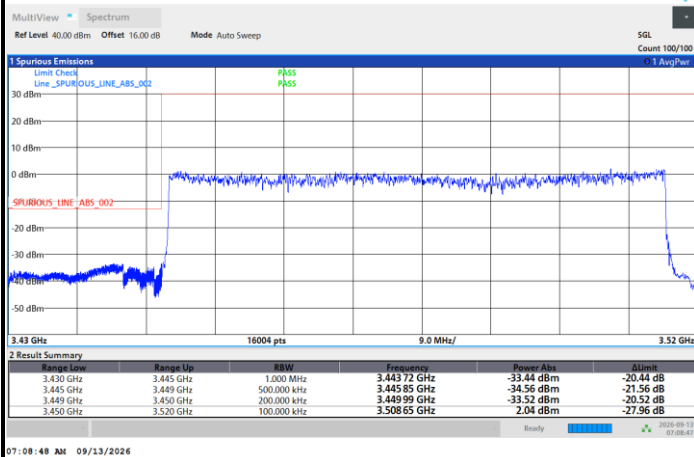




FR1 n77 / 70MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

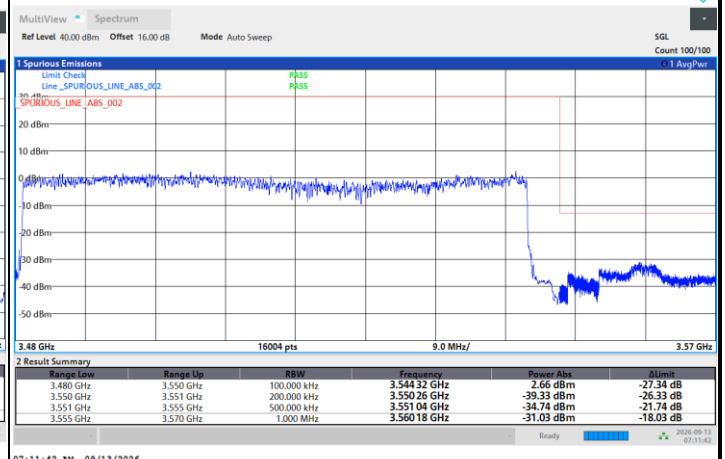
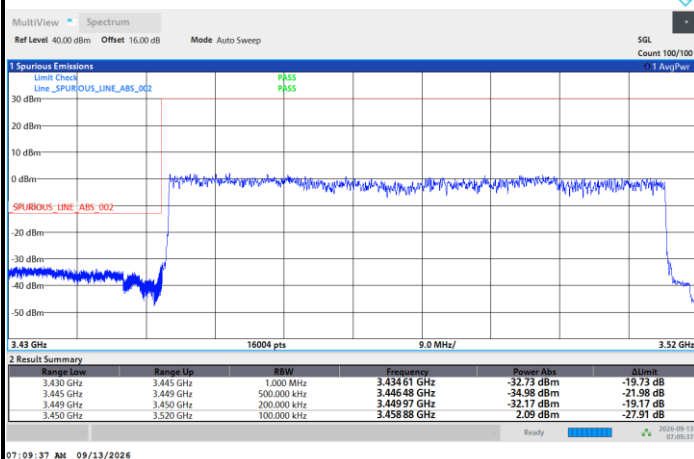
Highest Band Edge / Full RB



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

Lowest Band Edge / Full RB

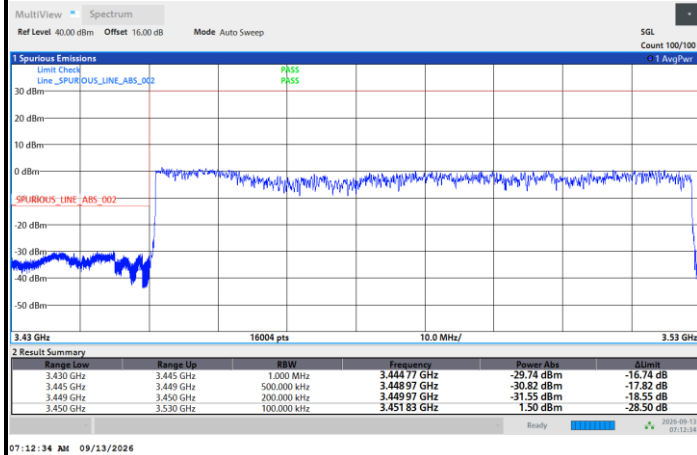
Highest Band Edge / Full RB



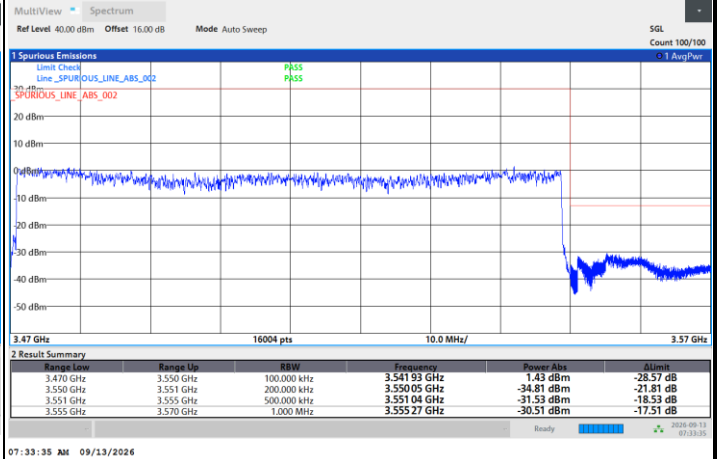


FR1 n77 / 80MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

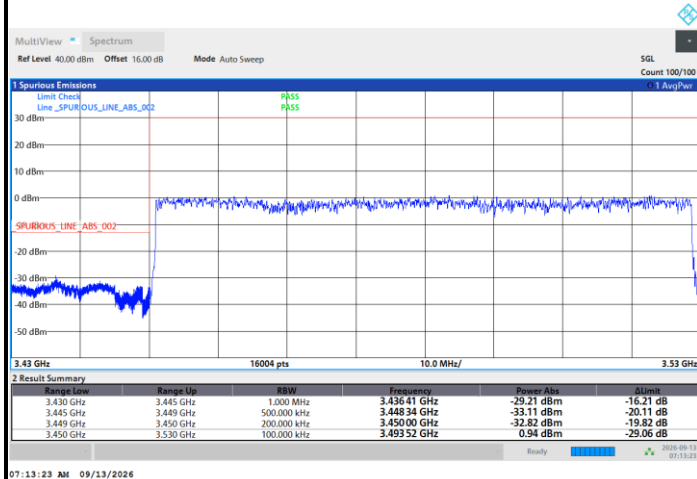


Highest Band Edge / Full RB

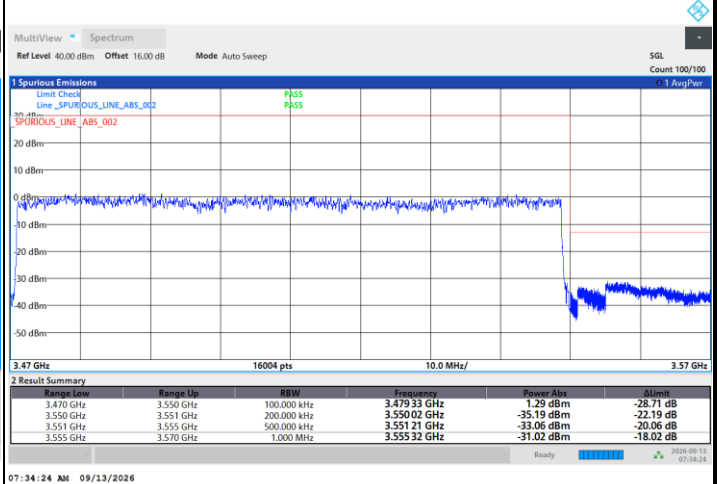


FR1 n77 / 80MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



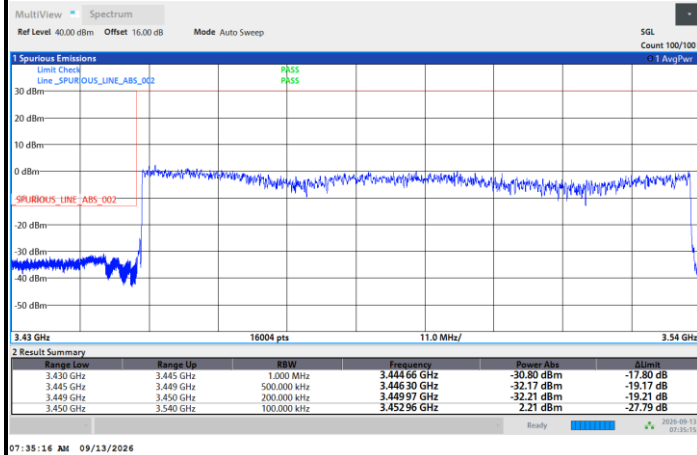
Highest Band Edge / Full RB



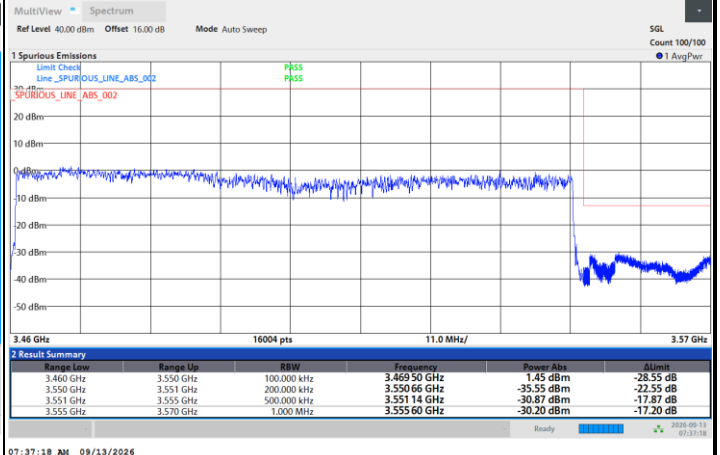


FR1 n77 / 90MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

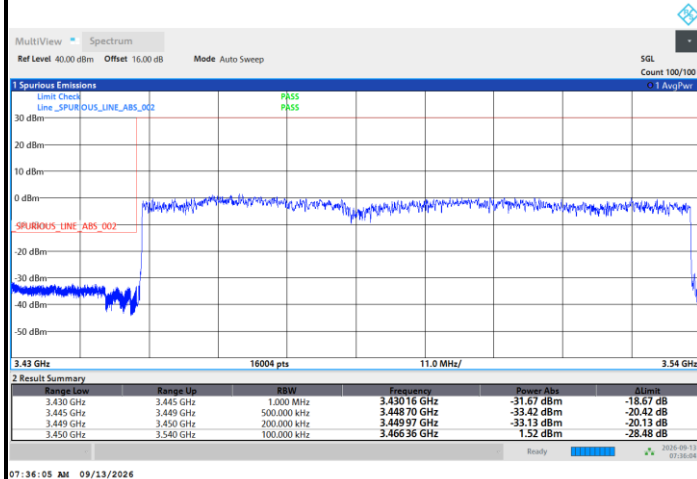


Highest Band Edge / Full RB

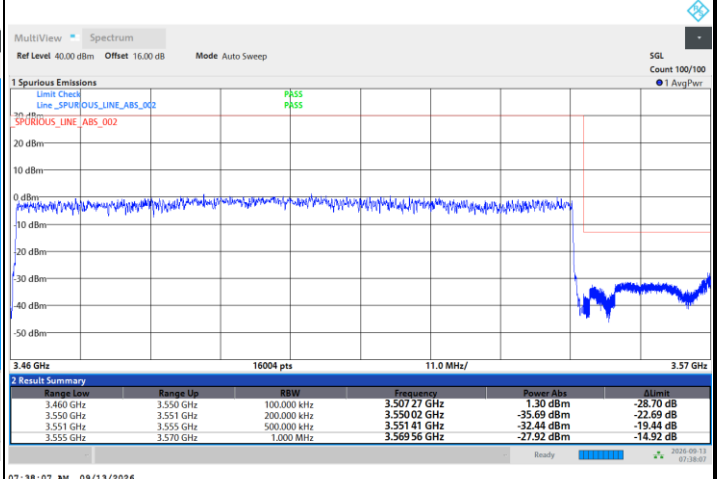


FR1 n77 / 90MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

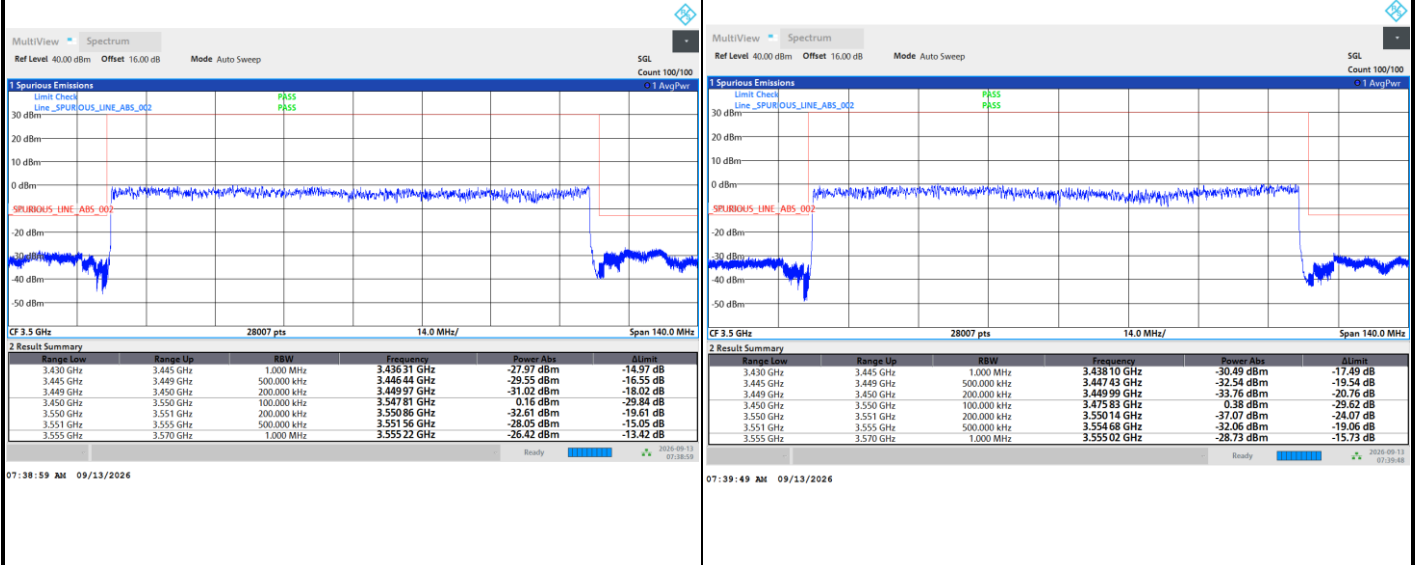




FR1 n77 / 100MHz / DFT-S OFDM

Middle Band Edge / Full RB / PI/2 BPSK

Middle Band Edge / Full RB / QPSK

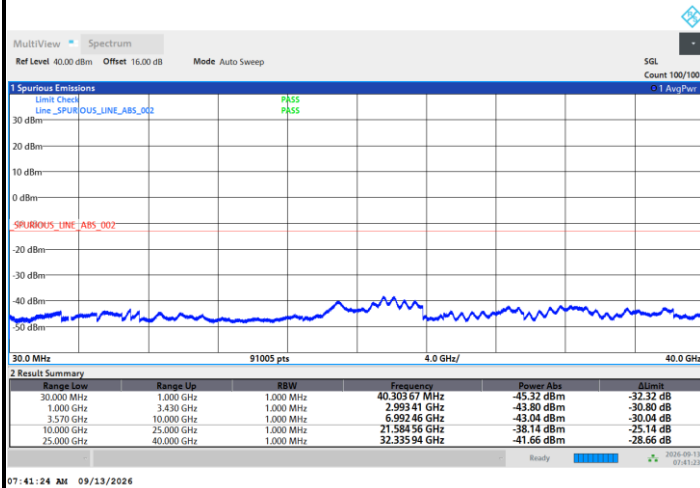




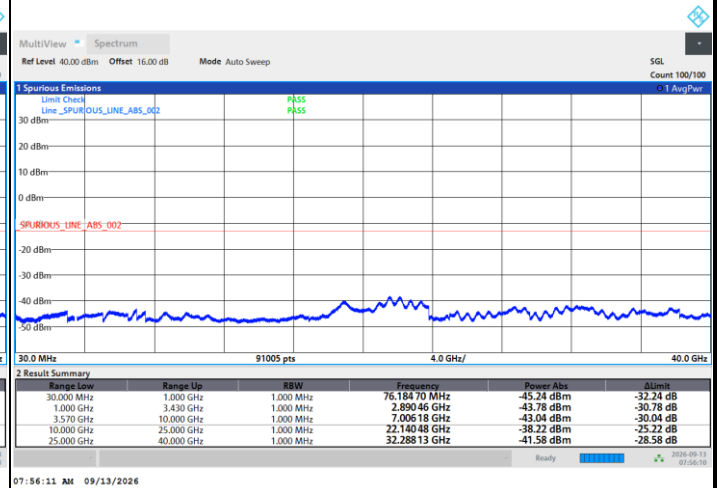
Conducted Spurious Emission

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

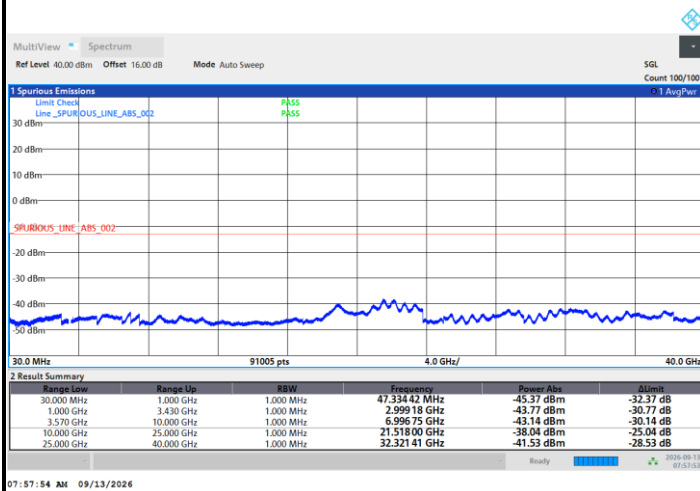
Lowest Channel



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	0.0007	2.5	Yes	PASS
40	Normal Voltage	0.0012	4.3	Yes	
30	Normal Voltage	0.0027	9.6	Yes	
20(Ref.)	Normal Voltage	0.0000	0	Yes	
10	Normal Voltage	0.0017	6	Yes	
0	Normal Voltage	0.0000	0.1	Yes	
-10	Normal Voltage	0.0011	3.9	Yes	
-20	Normal Voltage	0.0006	2.2	Yes	
-30	Normal Voltage	0.0011	3.9	Yes	
20	Maximum Voltage	0.0030	10.4	Yes	
20	Normal Voltage	0.0000	0	Yes	
20	Minimum Voltage	0.0003	1.1	Yes	

Note:

1. Normal Voltage = 3.75 V. ; Minimum Voltage = 3.5 V. ; Maximum Voltage = 4.57 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 n7**

<TxD Mode>

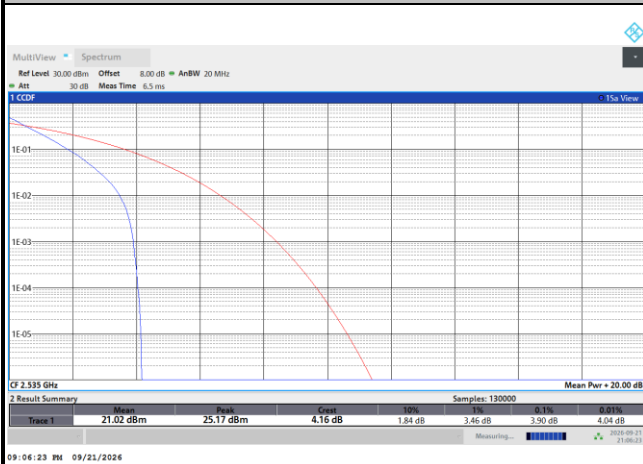
MIMO <Ant. 3+2> (Ant. 3)**Peak-to-Average Ratio**

Mode	FR1 n7 / 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	3.90	4.46	5.40	5.78	PASS
Mode	FR1 n7 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.82				PASS

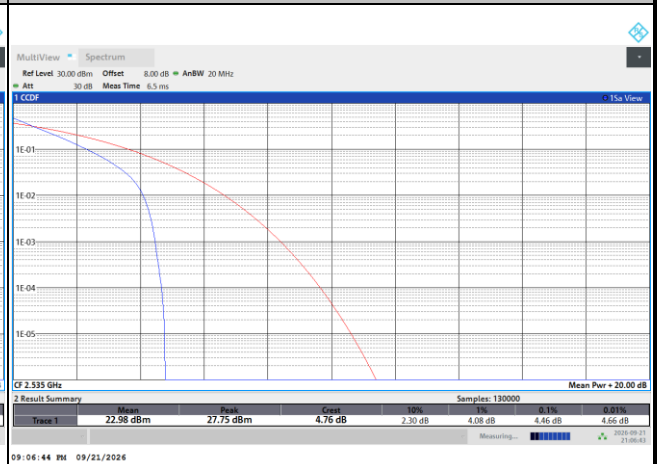


FR1 n7 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

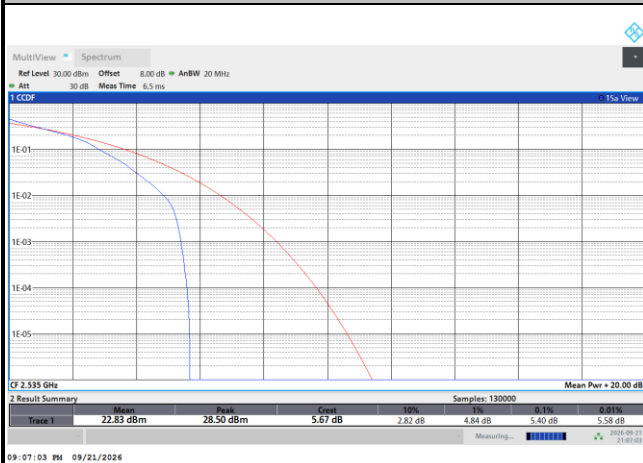
PI/2 BPSK



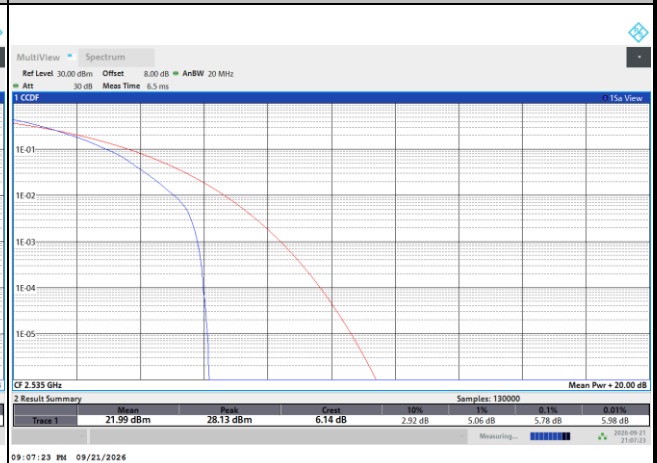
QPSK



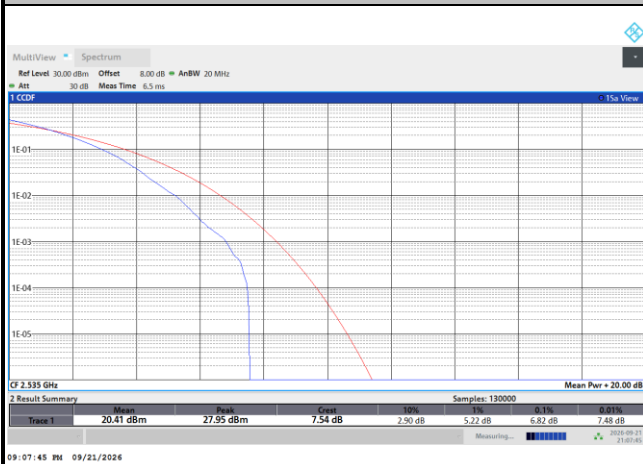
16QAM



64QAM



256QAM



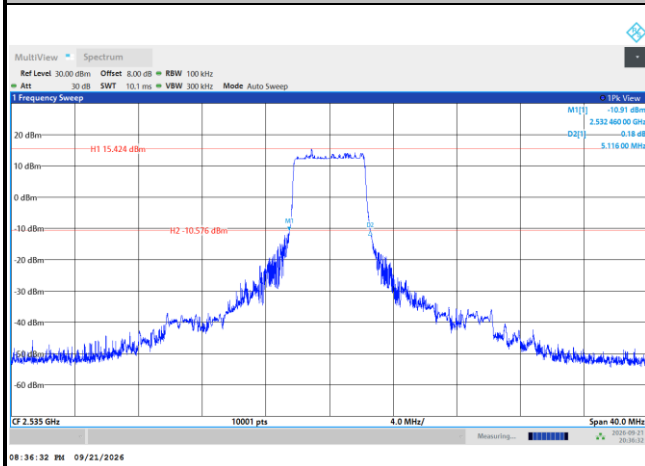
**26dB Bandwidth**

Mode	FR1 n7 : 26dB BW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Middle CH	5.11	5.08	9.91	10.39	14.83	15.28	19.71	20.14
Mod.	16QAM		16QAM		16QAM		16QAM	
Middle CH	5.12		9.92		15.26		20.32	
BW	25MHz		30MHz		35MHz		40MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Middle CH	25.25	25.02	31.54	31.84	35.40	35.04	41.17	41.23
Mod.	16QAM		16QAM		16QAM		16QAM	
Middle CH	24.67		31.05		34.65		41.16	
BW	50MHz							
Mod.	PI/2 BPSK	PI/2 BPSK						
Middle CH	50.86	51.63						
Mod.	16QAM							
Middle CH	50.96							

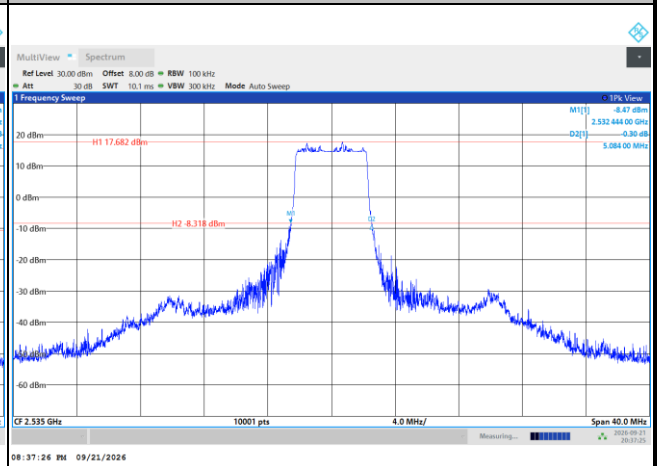


FR1 n7 / 5MHz / DFT-S OFDM / Middle Channel / Full RB

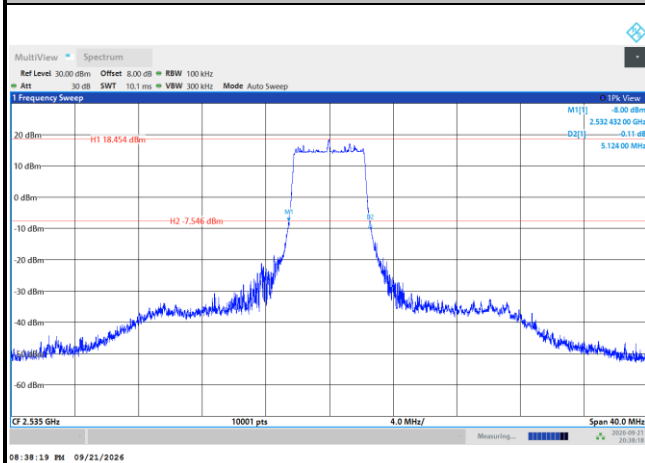
PI/2 BPSK



QPSK



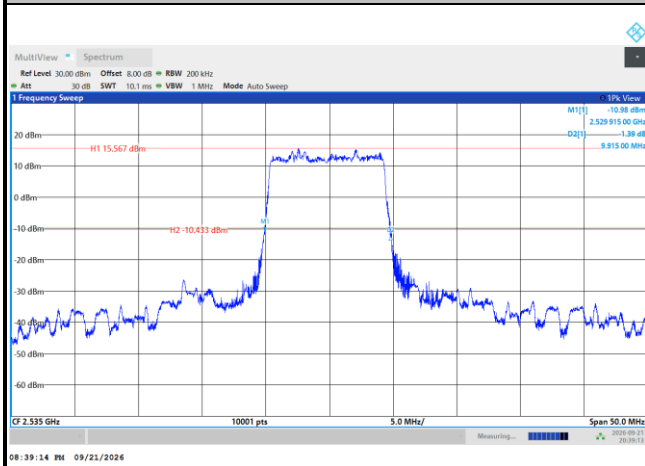
16QAM



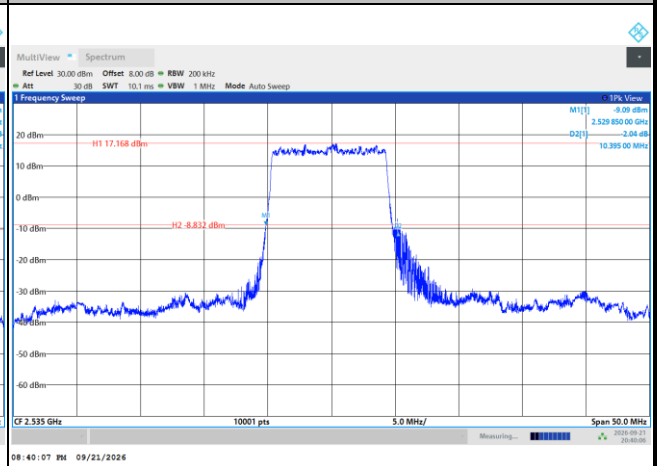


FR1 n7 / 10MHz / DFT-S OFDM / Middle Channel / Full RB

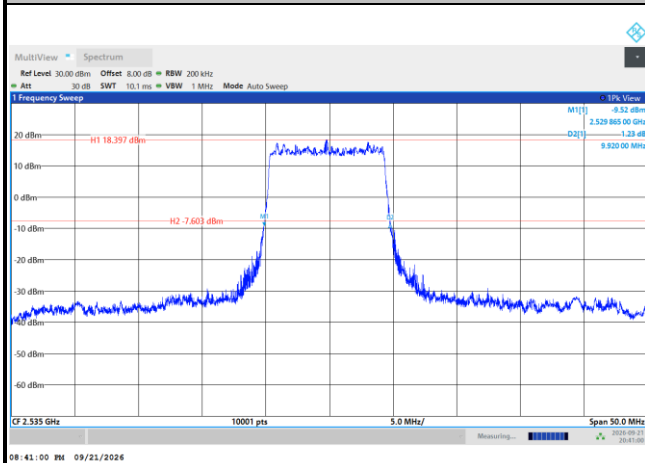
PI/2 BPSK



QPSK



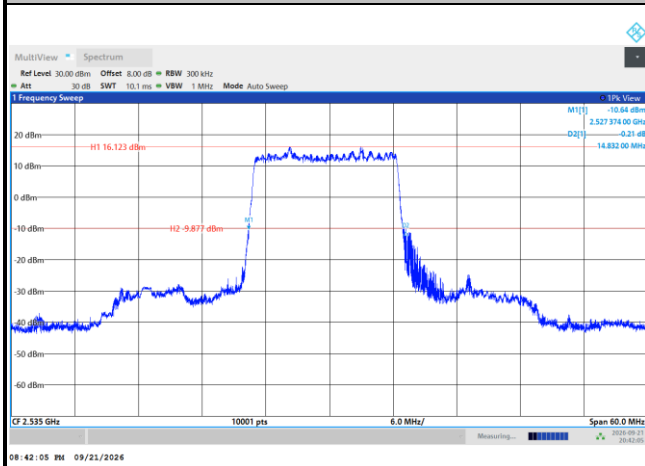
16QAM



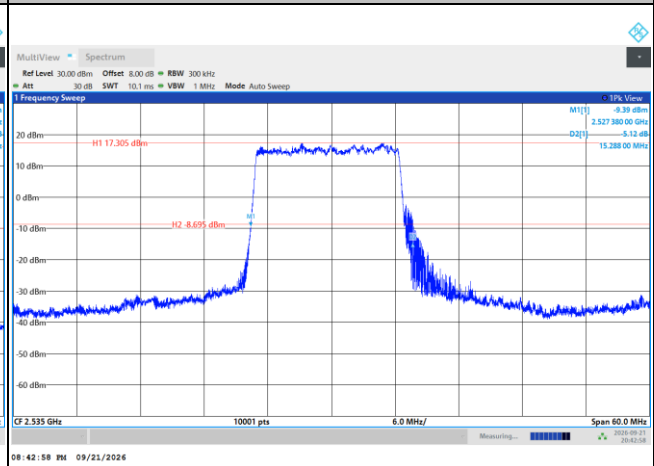


FR1 n7 / 15MHz / DFT-S OFDM / Middle Channel / Full RB

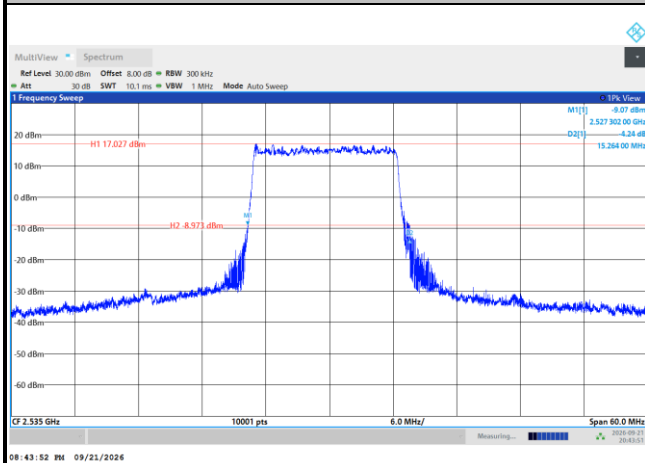
PI/2 BPSK



QPSK



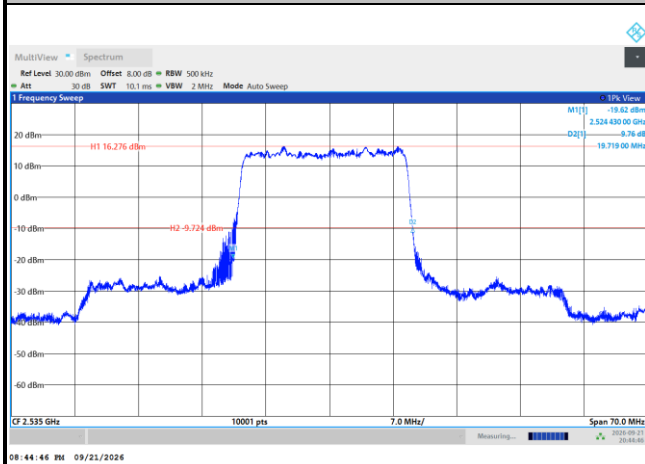
16QAM



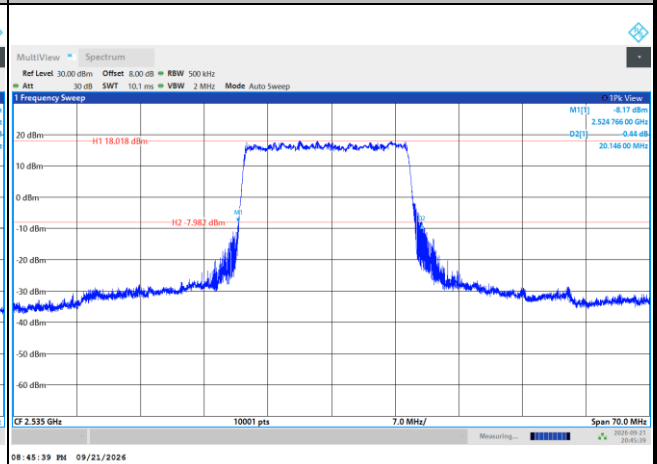


FR1 n7 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

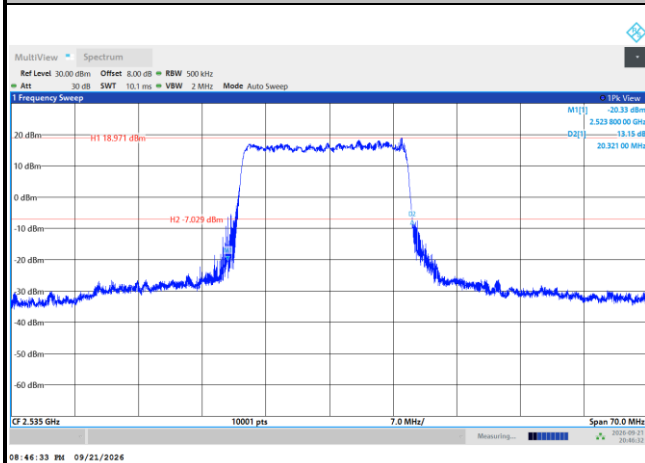
PI/2 BPSK



QPSK



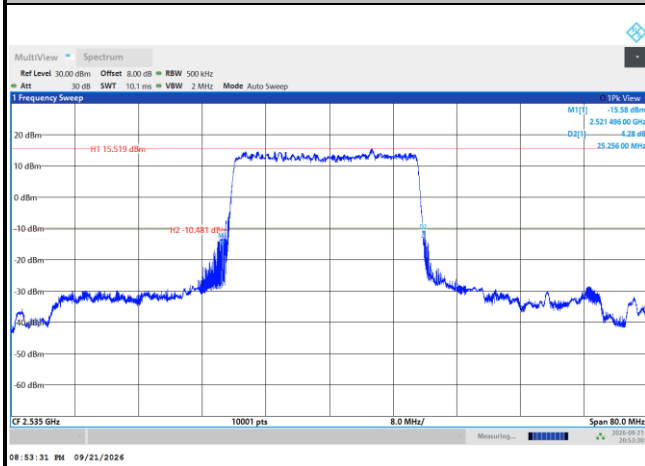
16QAM



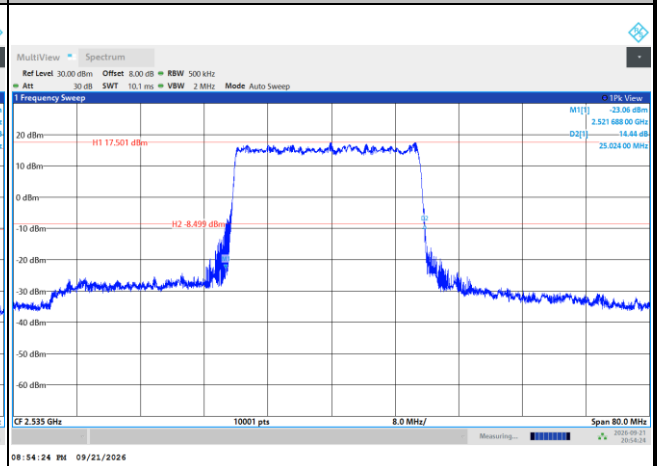


FR1 n7 / 25MHz / DFT-S OFDM / Middle Channel / Full RB

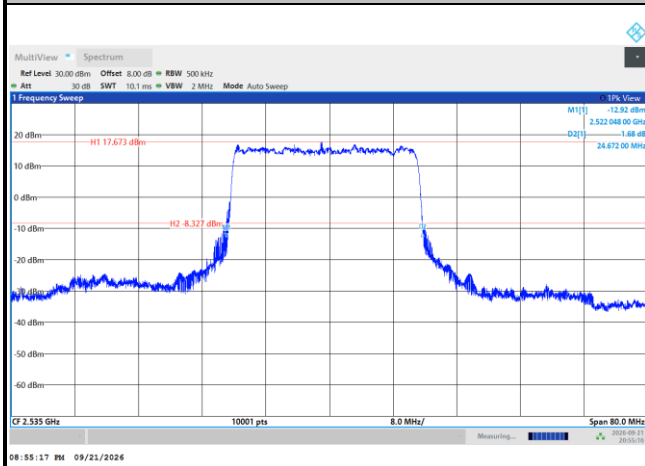
PI/2 BPSK



QPSK



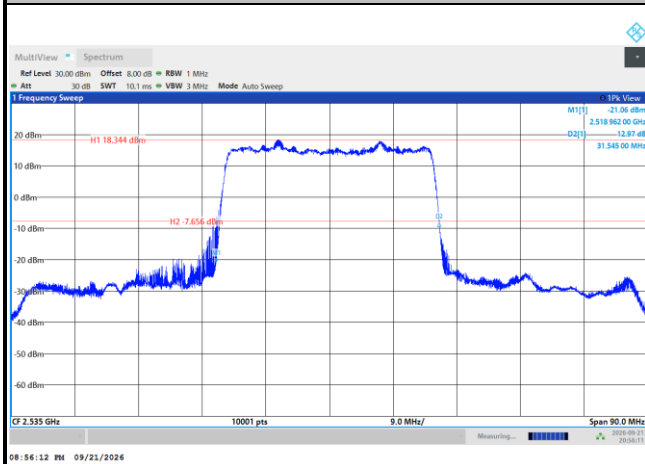
16QAM



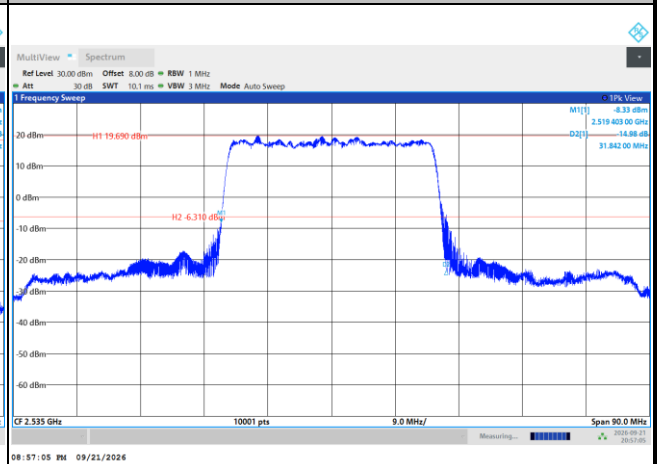


FR1 n7 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

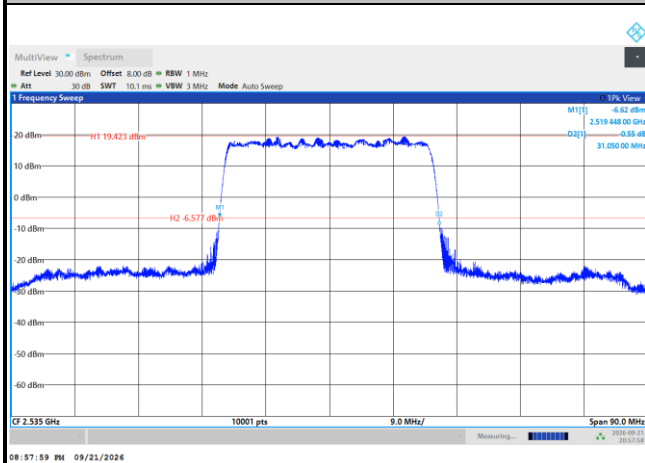
PI/2 BPSK



QPSK



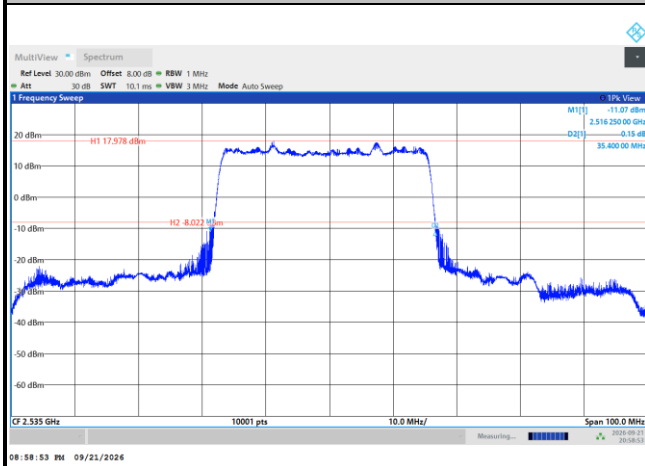
16QAM



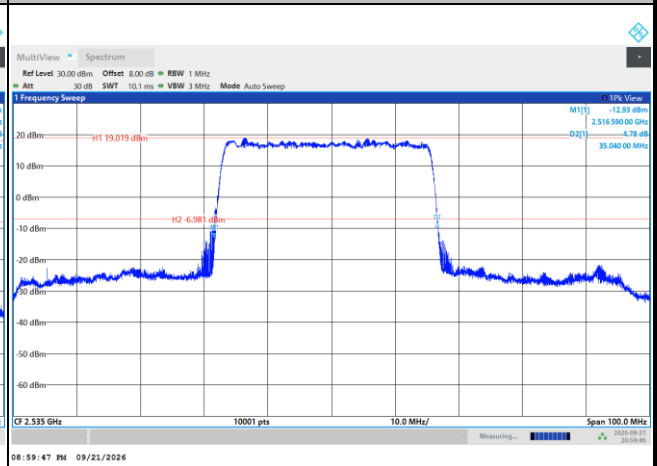


FR1 n7 / 35MHz / DFT-S OFDM / Middle Channel / Full RB

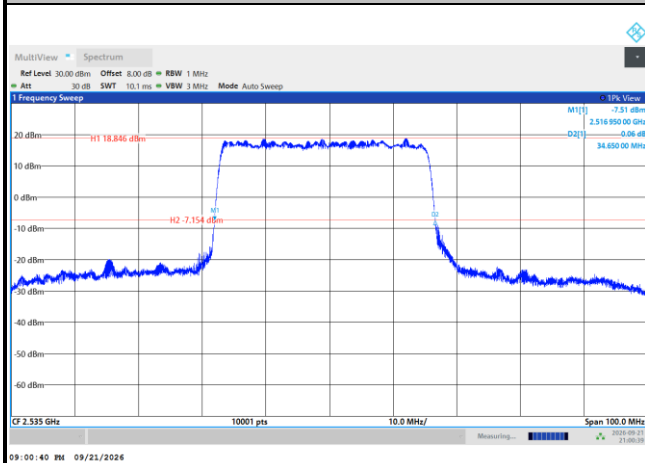
PI/2 BPSK



QPSK



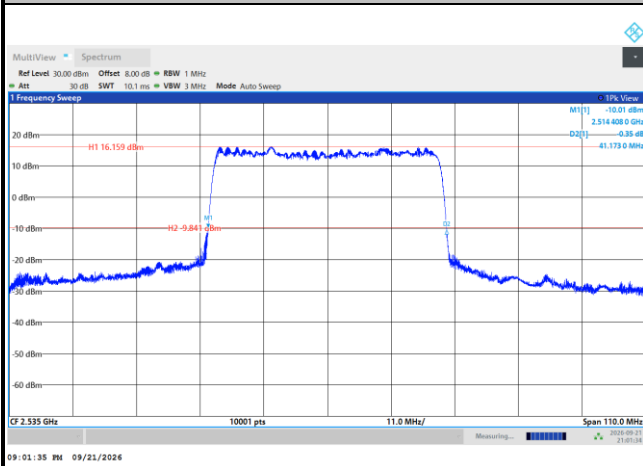
16QAM



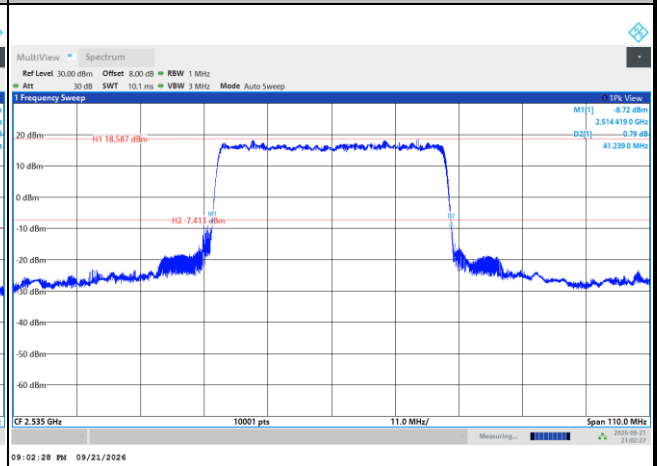


FR1 n7 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

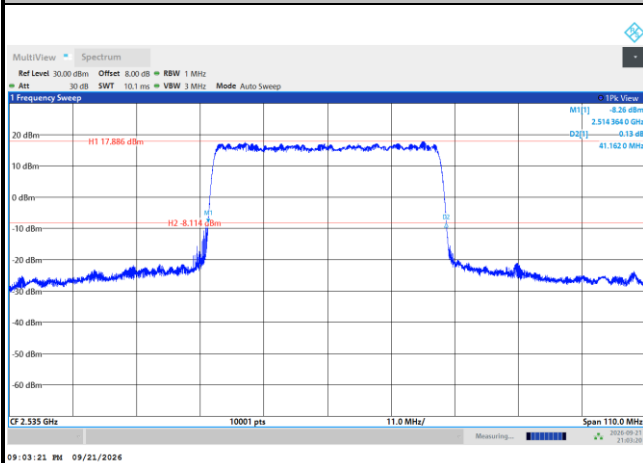
PI/2 BPSK



QPSK



16QAM

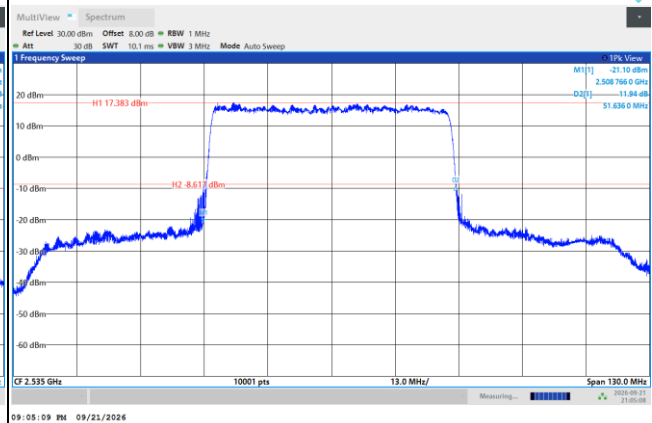
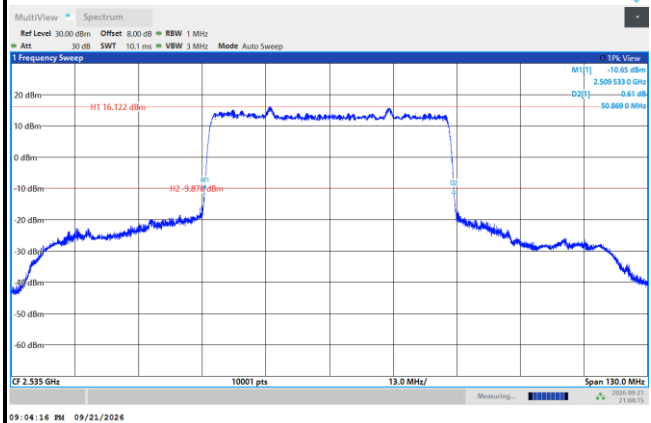




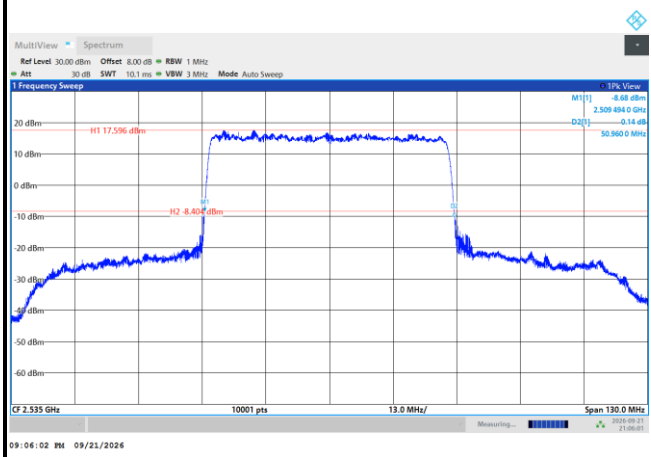
FR1 n7 / 50MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

QPSK



16QAM



**Occupied Bandwidth**

Mode	FR1 n7 : 99%OBW(MHz) / DFT-S OFDM							
BW	5MHz		10MHz		15MHz		20MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Middle CH	4.49	4.48	8.98	9.00	13.47	13.49	18.02	18.00
Mod.	16QAM		16QAM		16QAM		16QAM	
Middle CH	4.50		9.01		13.53		17.96	
BW	25MHz		30MHz		35MHz		40MHz	
Mod.	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK	PI/2 BPSK	QPSK
Middle CH	23.02	23.04	29.06	28.97	32.56	32.56	38.78	38.99
Mod.	16QAM		16QAM		16QAM		16QAM	
Middle CH	22.99		28.92		32.46		38.80	
BW	50MHz							
Mod.	PI/2 BPSK	QPSK						
Middle CH	48.43	48.27						
Mod.	16QAM							
Middle CH	48.38							