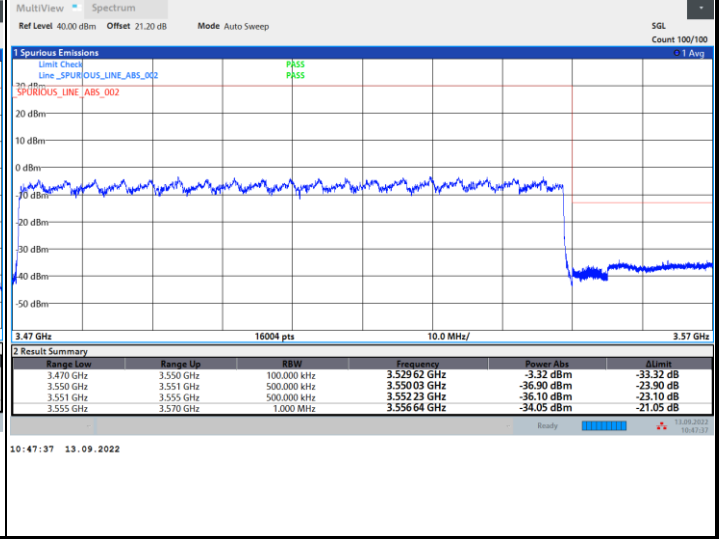
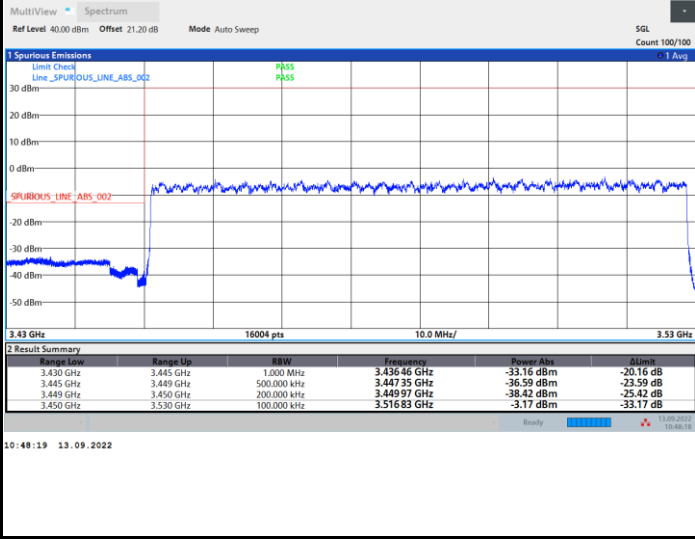




FR1 n77 / 80MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

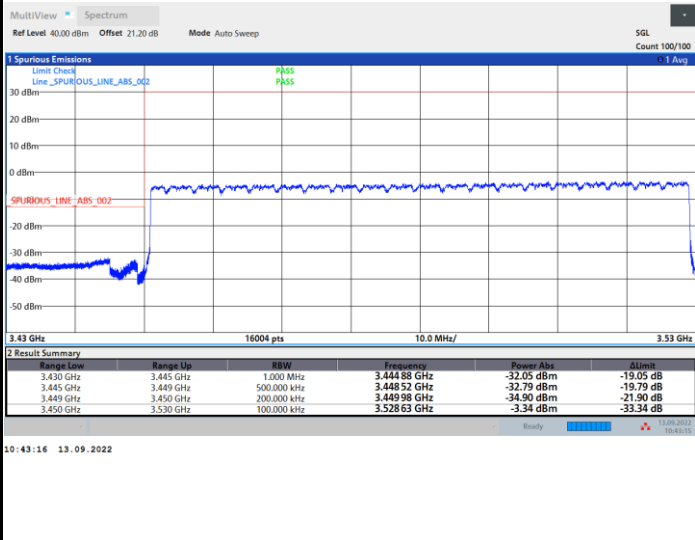
Highest Band Edge / Full RB



FR1 n77 / 80MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

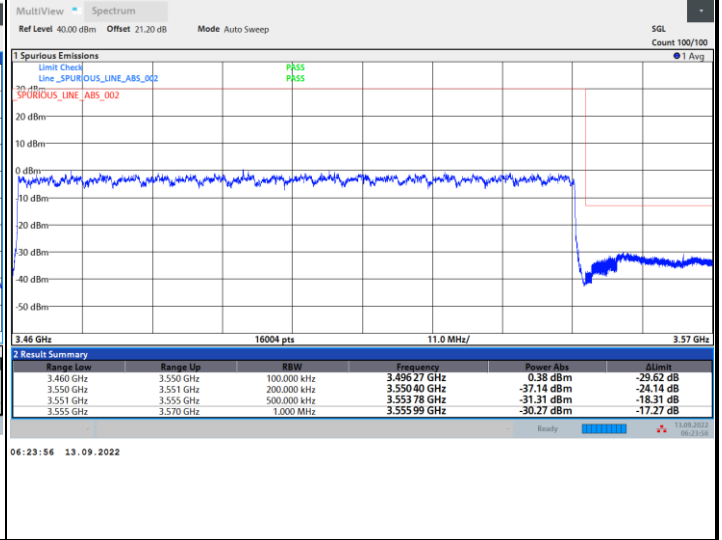
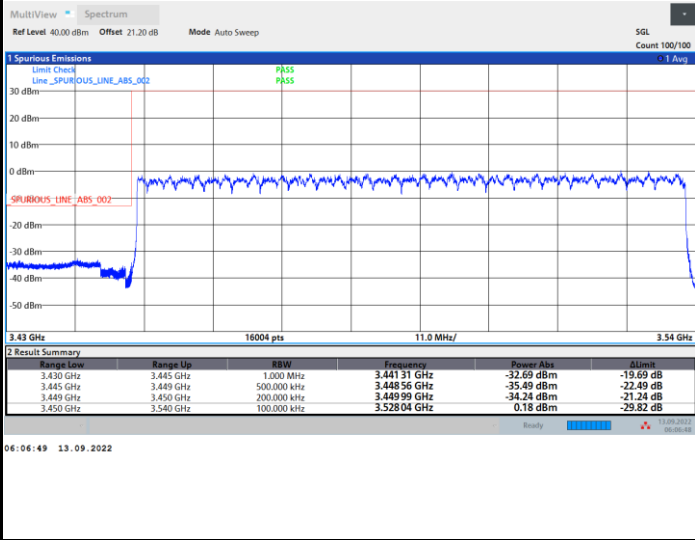




FR1 n77 / 90MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

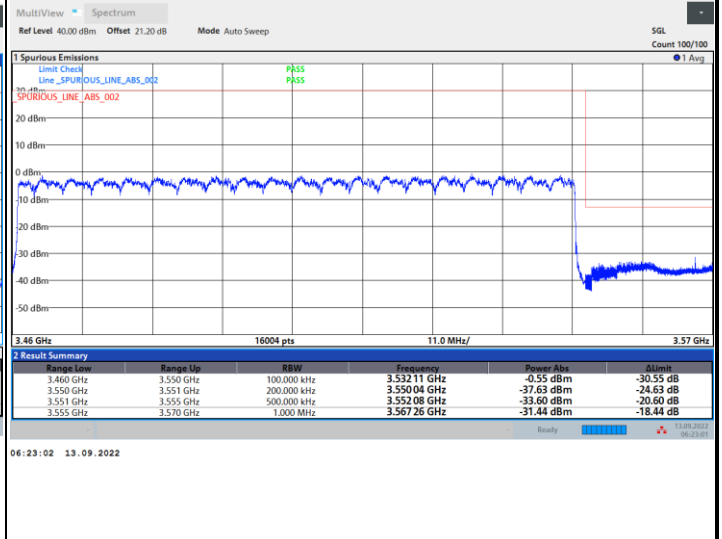
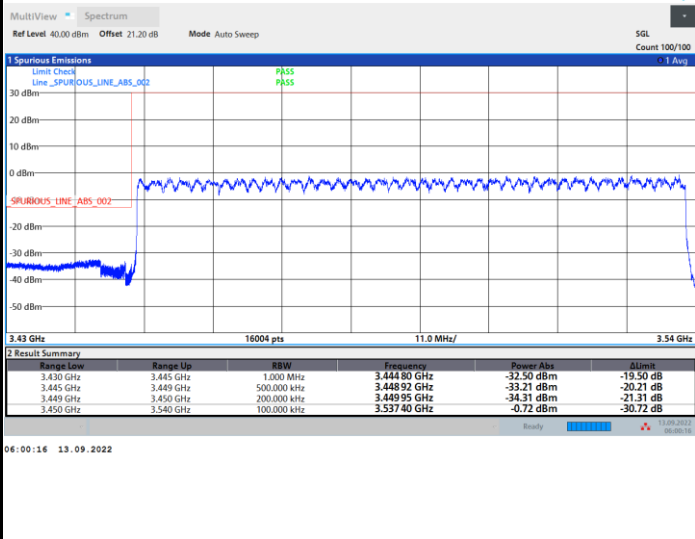
Highest Band Edge / Full RB



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

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

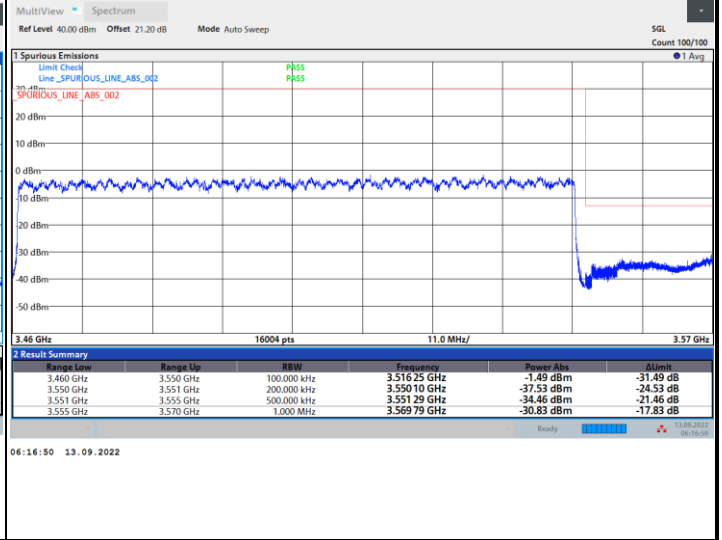
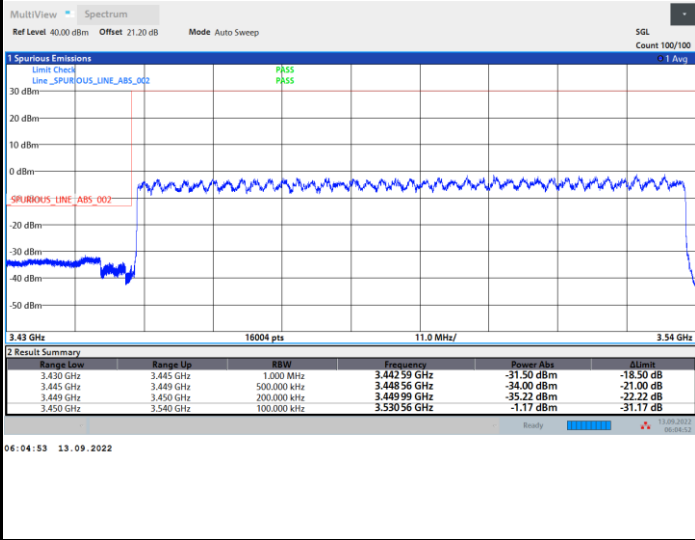




FR1 n77 / 90MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / Full RB

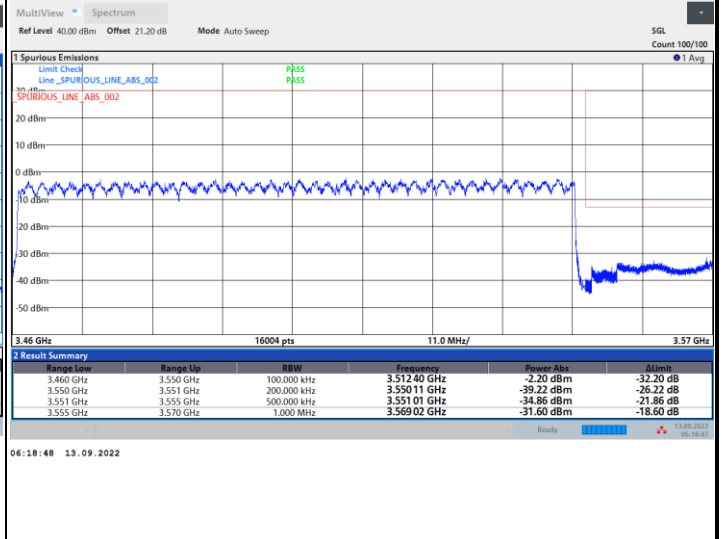
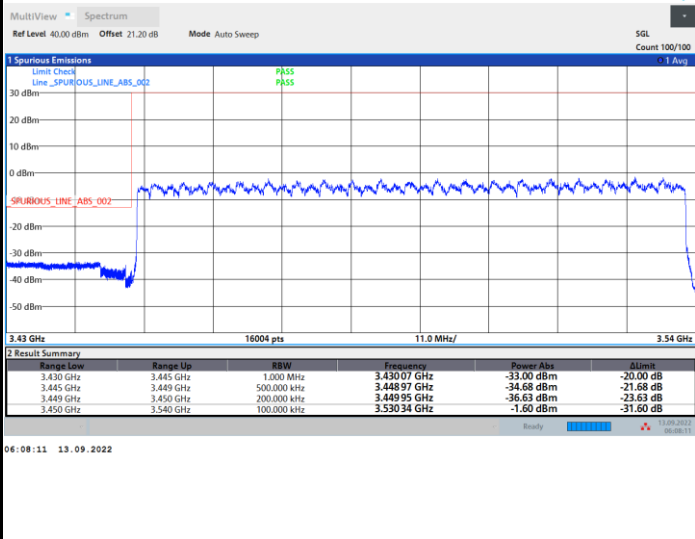
Highest Band Edge / Full RB



FR1 n77 / 90MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

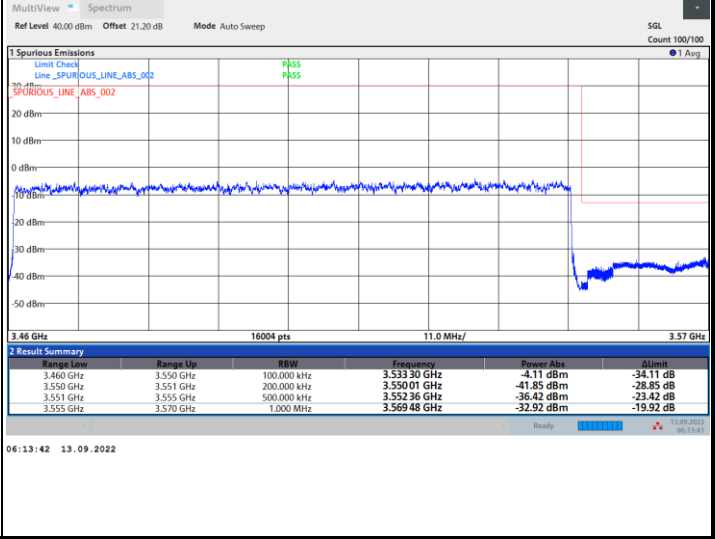
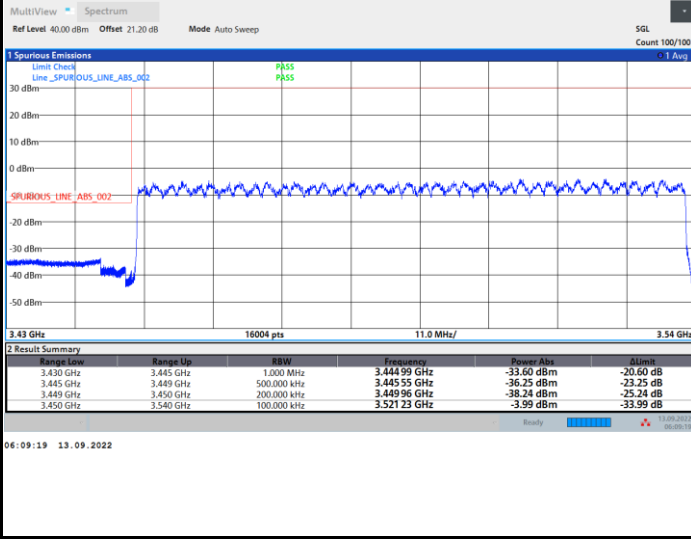




FR1 n77 / 90MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

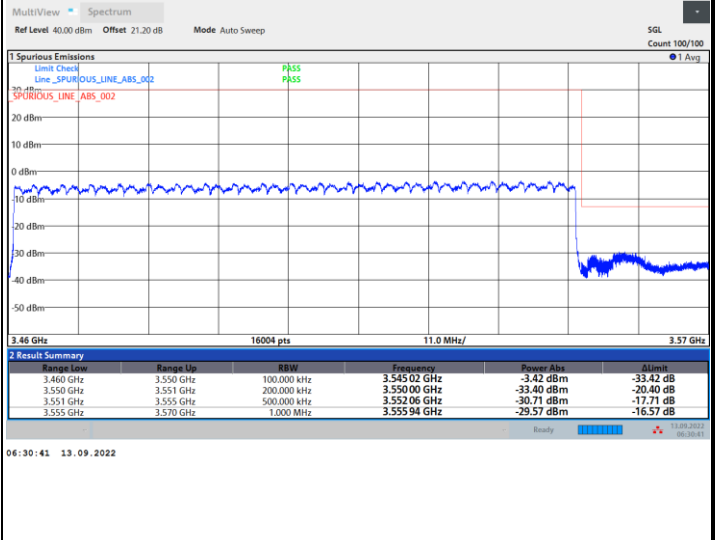
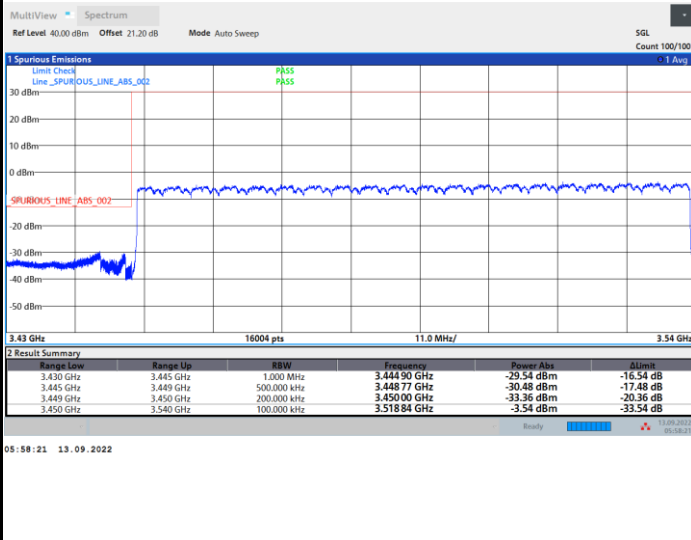
Highest Band Edge / Full RB



FR1 n77 / 90MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

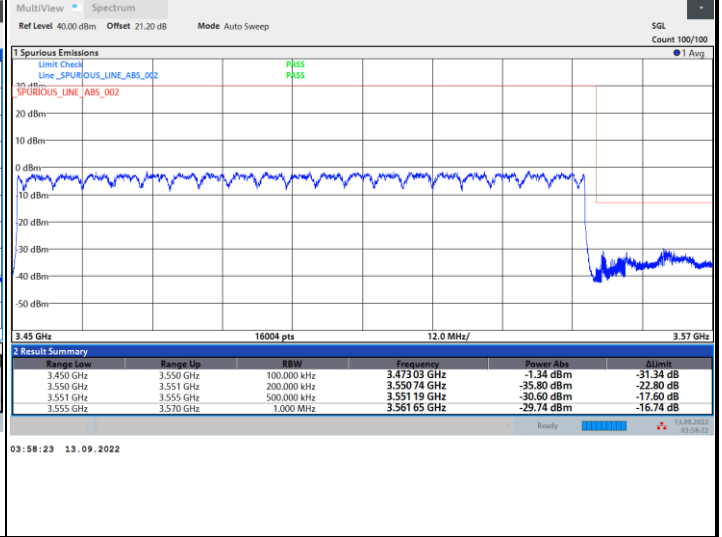
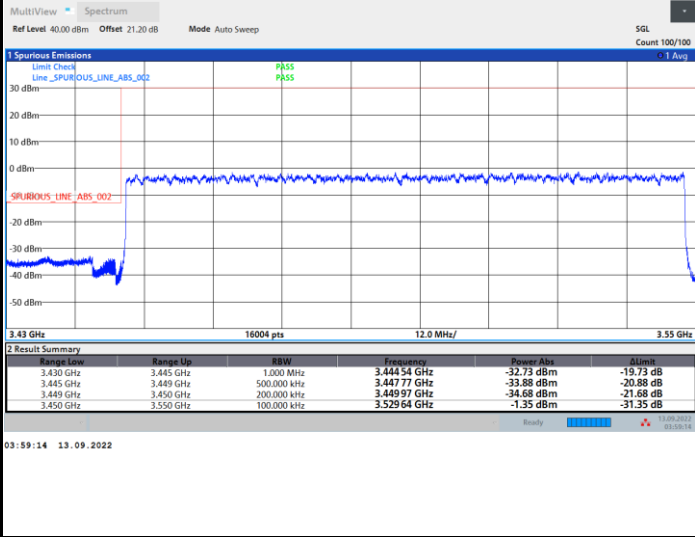




FR1 n77 / 100MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

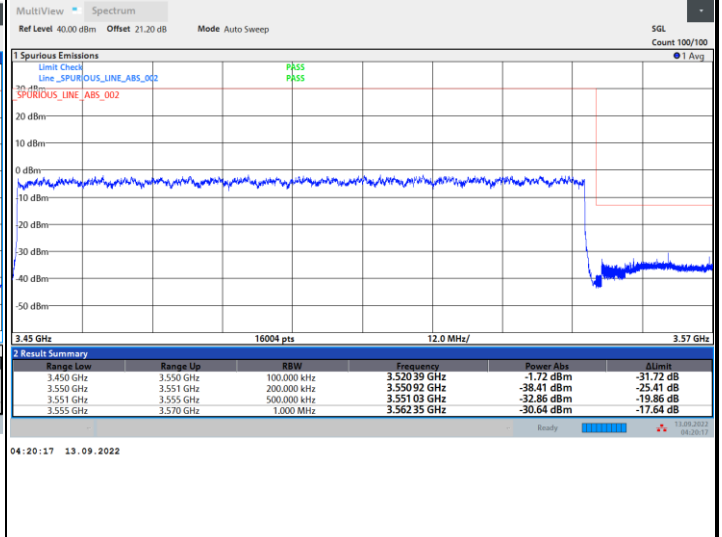
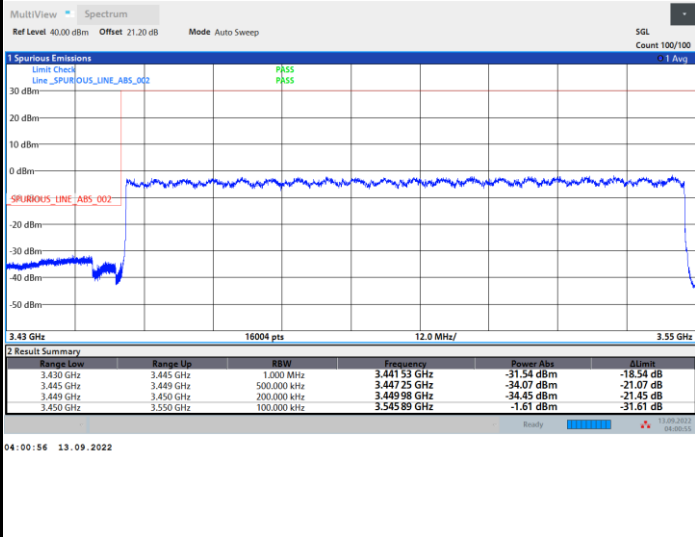
Highest Band Edge / Full RB



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

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

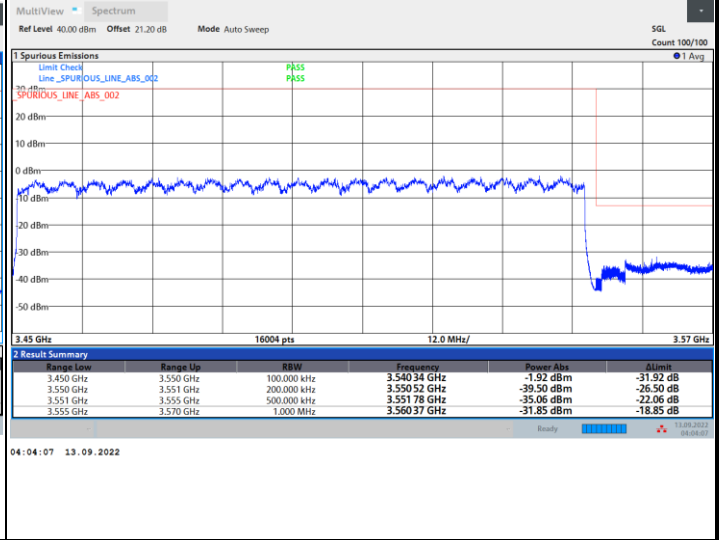
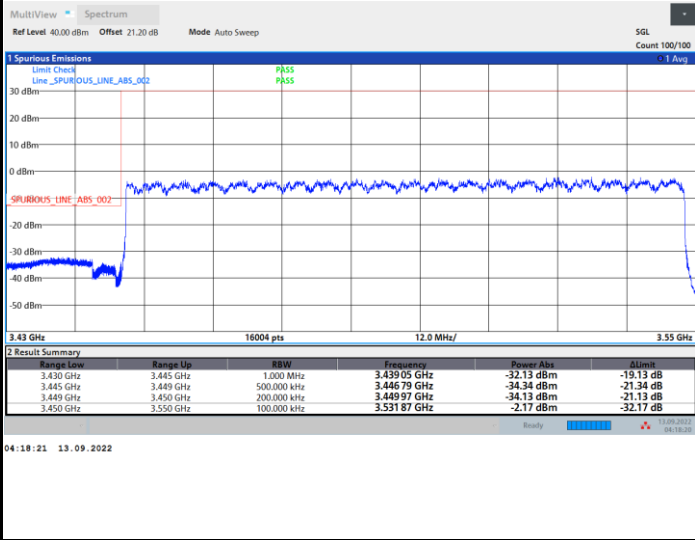




FR1 n77 / 100MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / Full RB

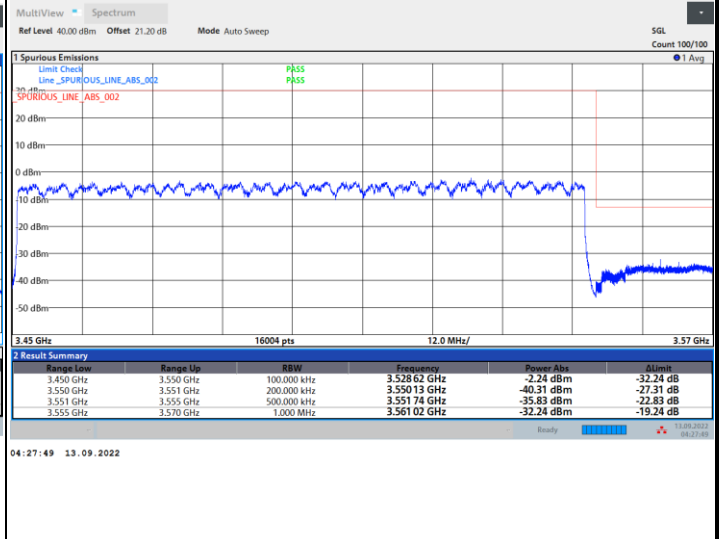
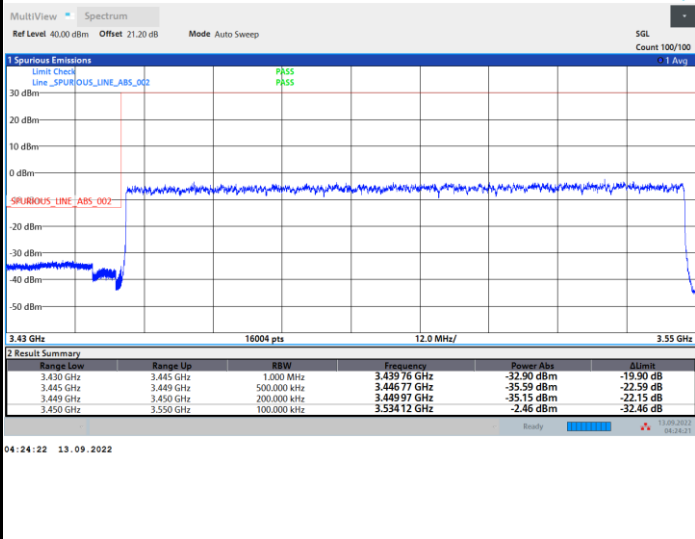
Highest Band Edge / Full RB



FR1 n77 / 100MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

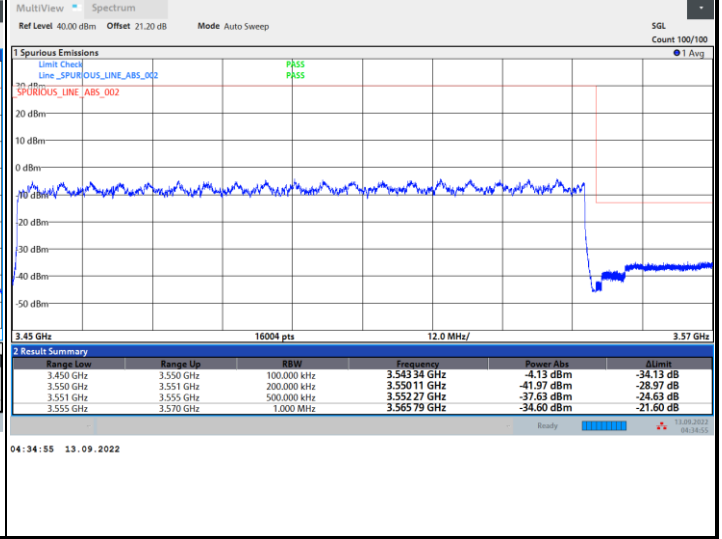
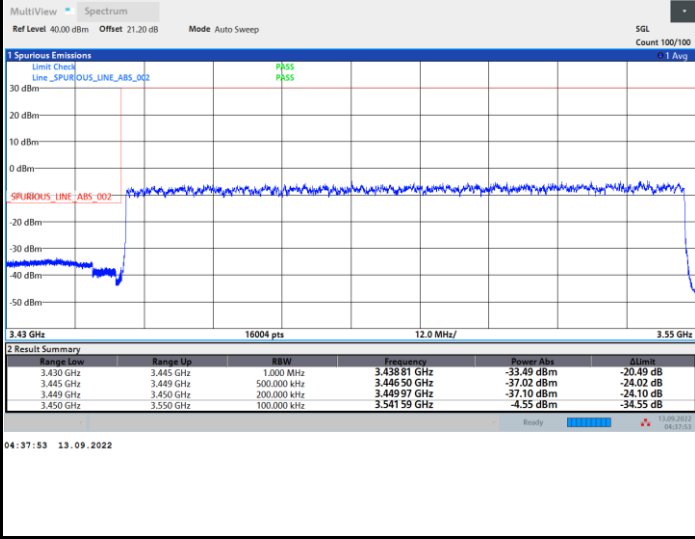




FR1 n77 / 100MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

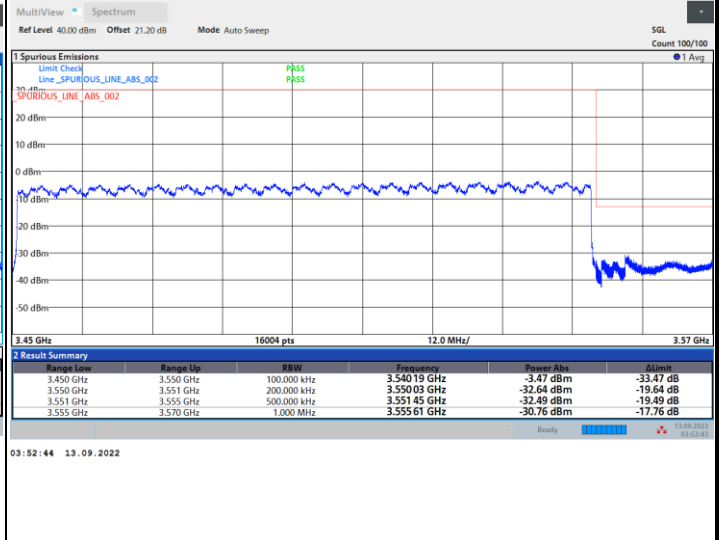
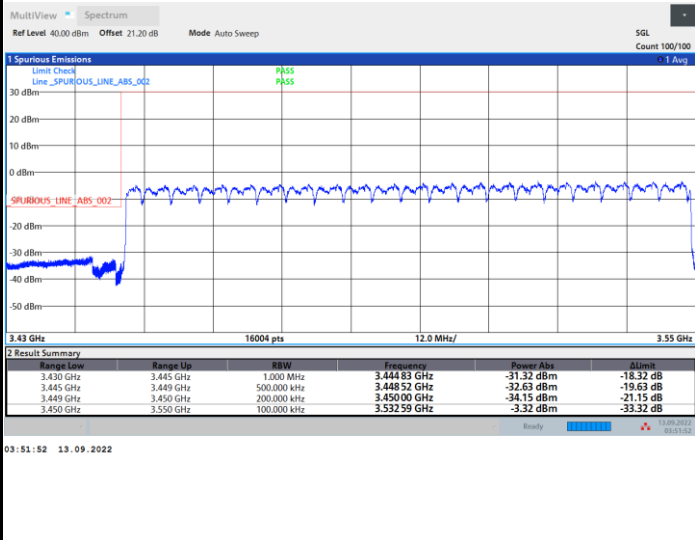
Highest Band Edge / Full RB



FR1 n77 / 100MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

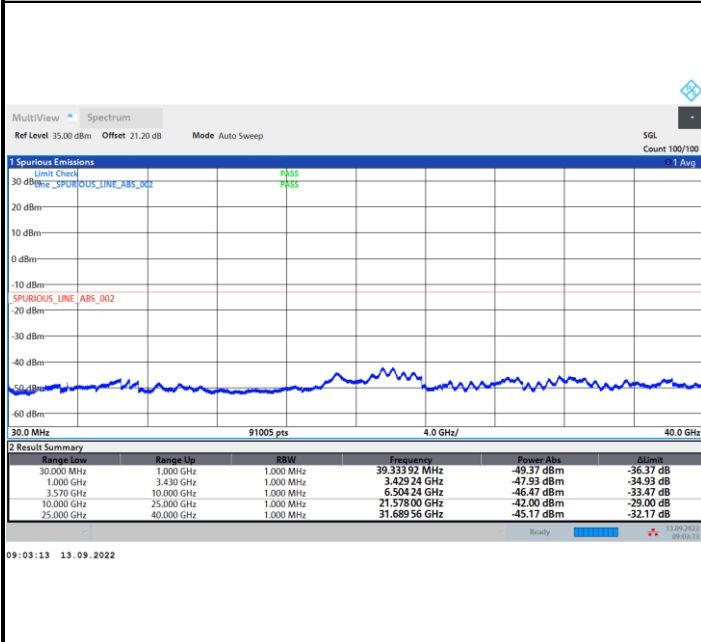




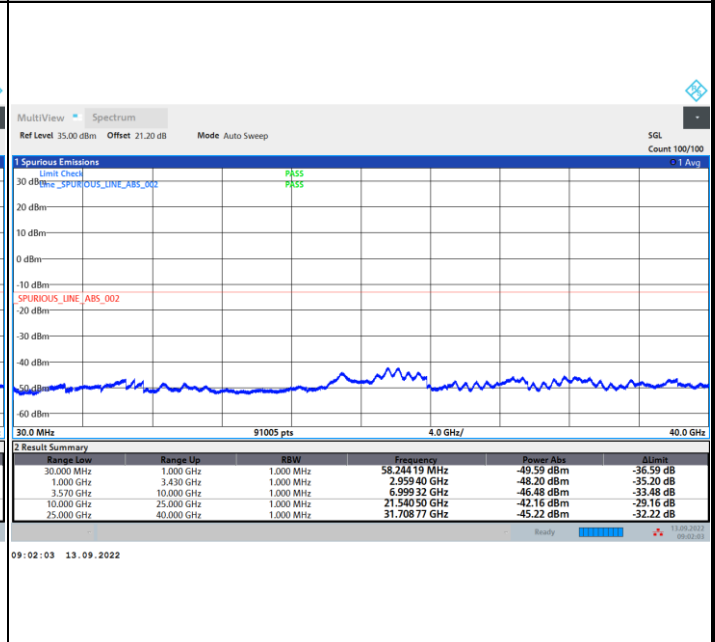
# Conducted Spurious Emission

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

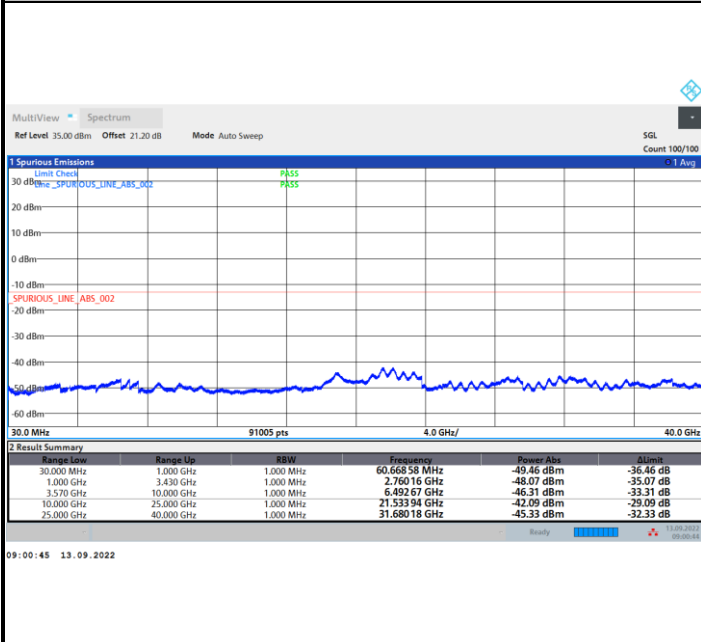
## Lowest Channel



## Middle Channel



## Highest Channel







### Frequency Stability

Test Conditions		FR1 n77 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0039	PASS
40	Normal Voltage	0.0012	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0024	
0	Normal Voltage	0.0032	
-10	Normal Voltage	0.0037	
-20	Normal Voltage	0.0016	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0026	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0003	

**Note:**

1. Normal Voltage = 3.3 V. ; Battery End Point (BEP) = 3.135 V. ; Maximum Voltage = 3.63 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

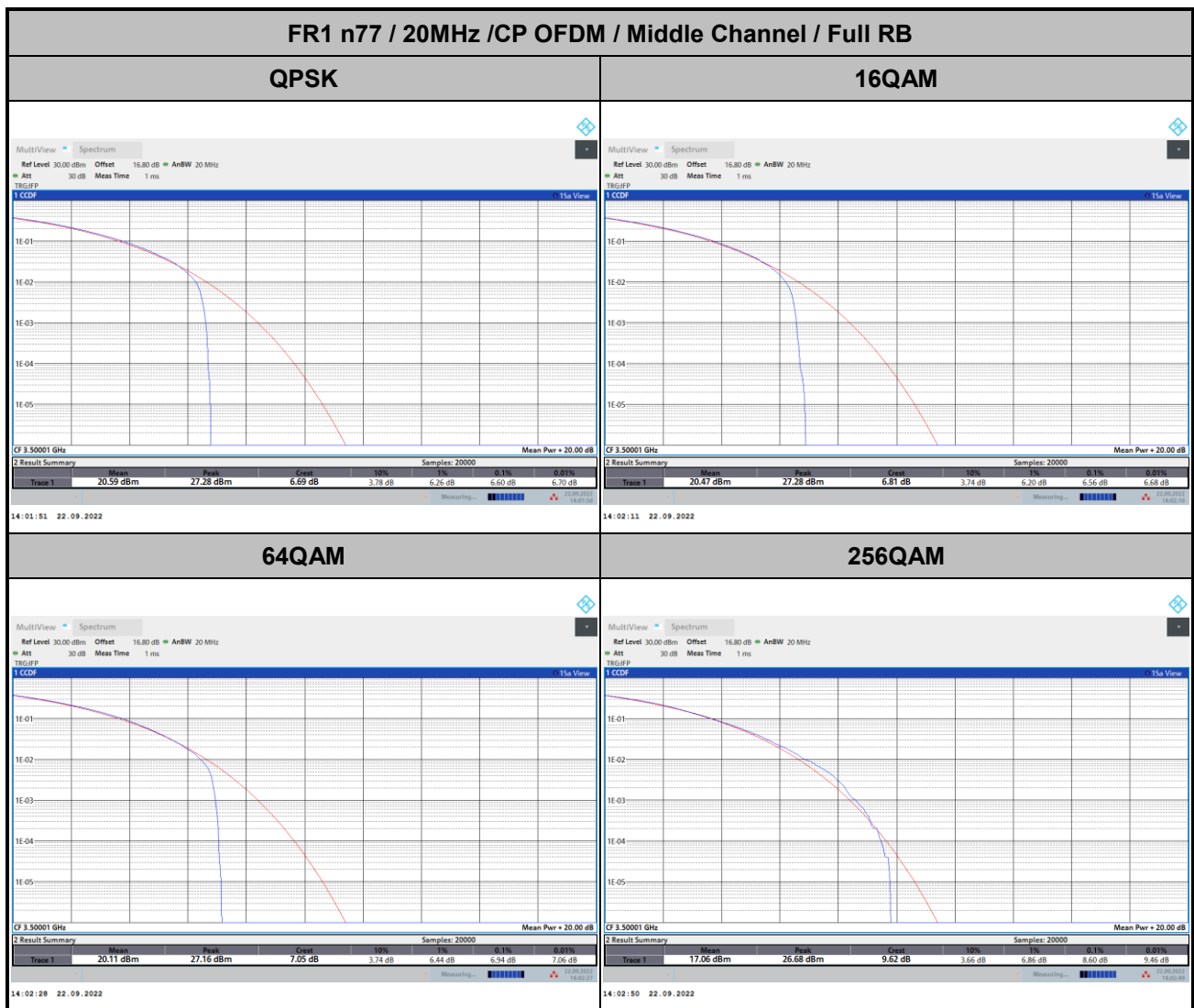


<MIMO Mode>

MIMO <Ant. 0>

**Peak-to-Average Ratio**

Mode	FR1 n77 / 20MHz / CP OFDM				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	6.60	6.56	6.94	8.60	PASS





**26dB Bandwidth**

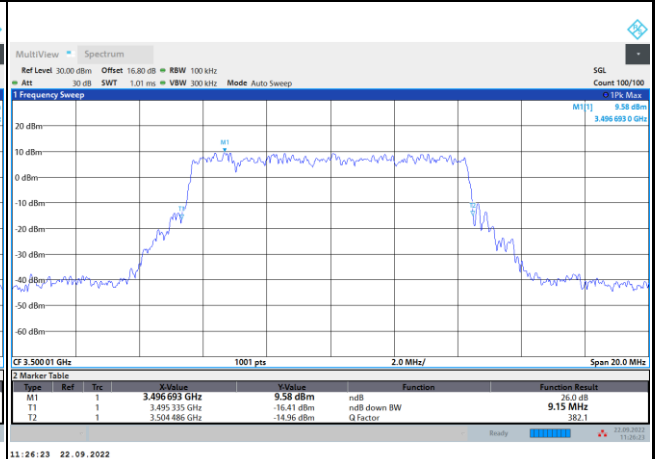
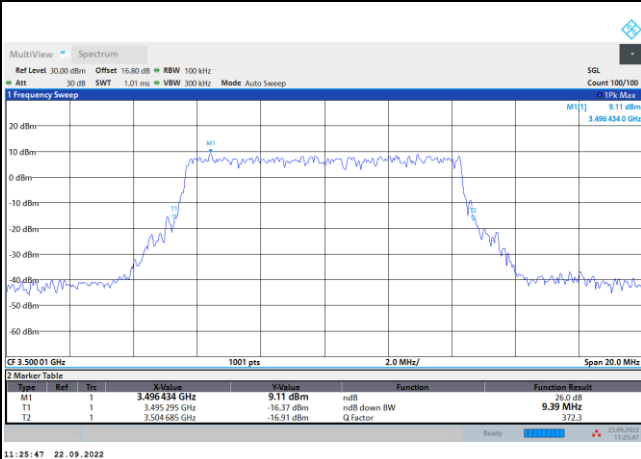
Mode	FR1 n77 : 26dB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	9.39	9.15	14.42	14.45	19.02	19.10	-	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	9.25	9.11	14.48	14.45	19.22	19.26	-	-
BW	30MHz		40MHz		50MHz		60MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	29.07	28.95	40.36	40.44	50.25	49.85	60.66	60.42
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	28.77	29.07	40.36	40.20	50.15	50.25	60.66	60.54
BW	70MHz		80MHz		90MHz		100MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	70.35	70.35	80.56	80.40	90.27	90.45	100.50	100.50
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	70.21	70.35	80.56	80.40	90.45	90.45	100.70	100.50



FR1 n77 / 10MHz / CP OFDM / Middle Channel / Full RB

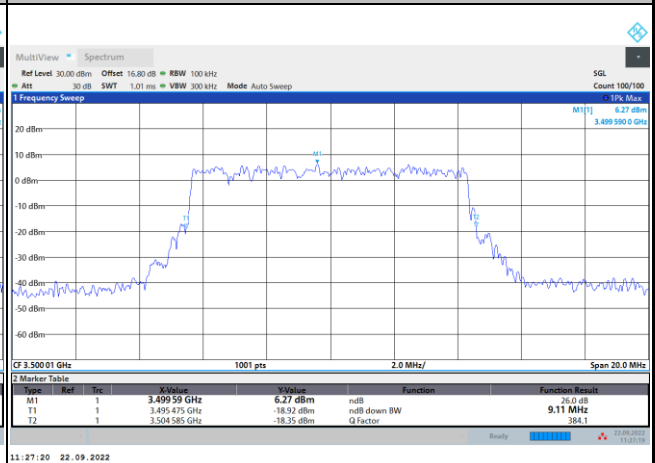
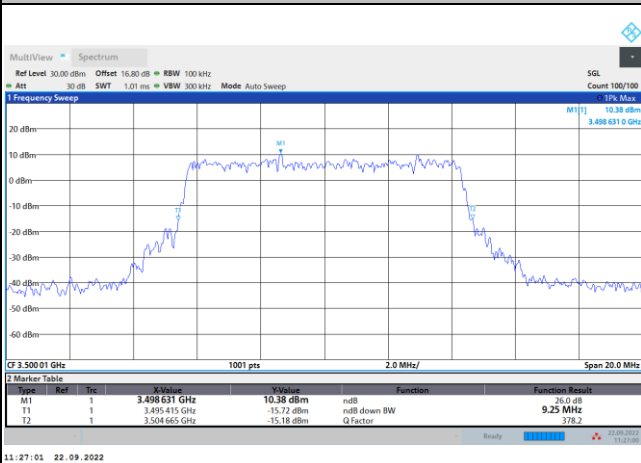
QPSK

16QAM



64QAM

256QAM

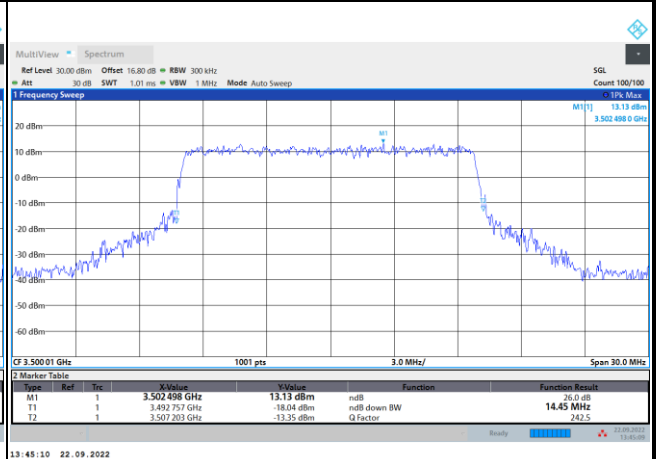
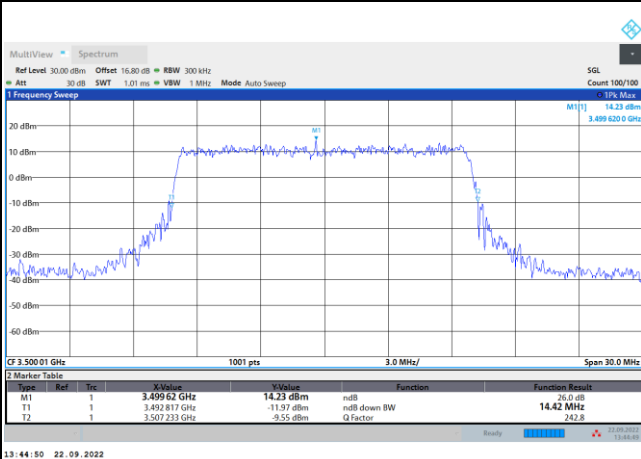




FR1 n77 / 15MHz / CP OFDM / Middle Channel / Full RB

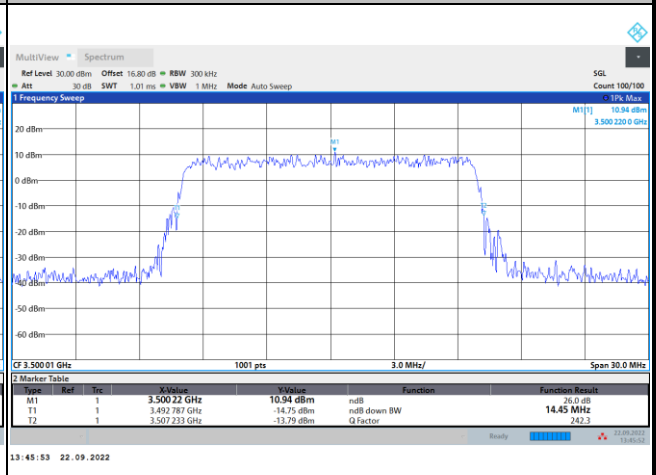
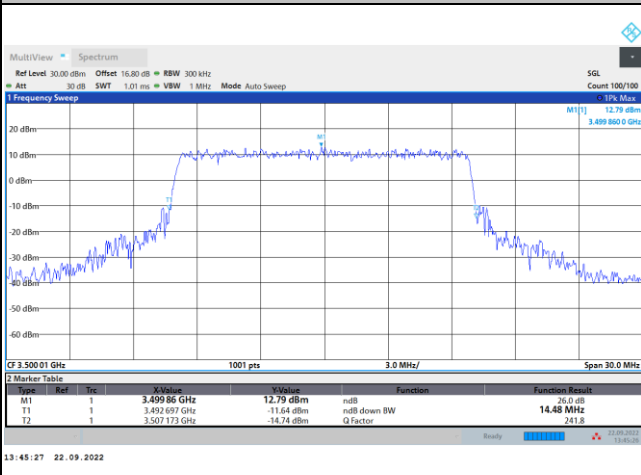
QPSK

16QAM



64QAM

256QAM

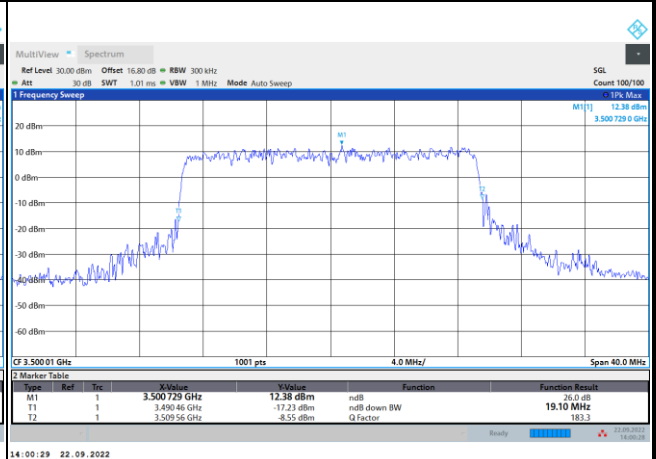
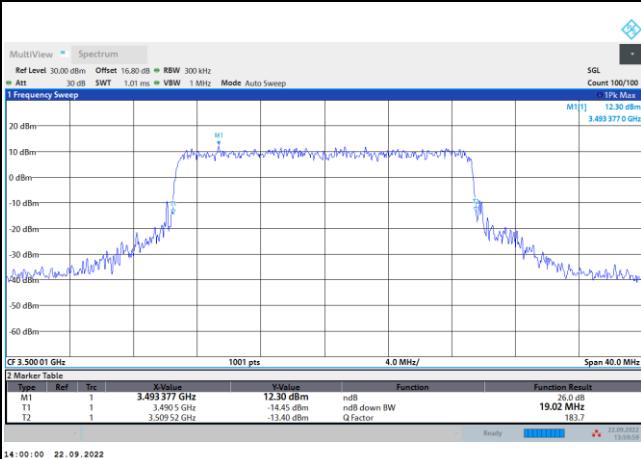




FR1 n77 / 20MHz / CP OFDM / Middle Channel / Full RB

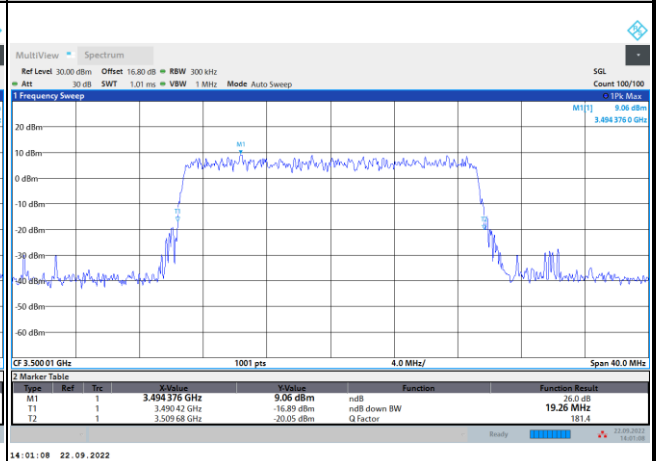
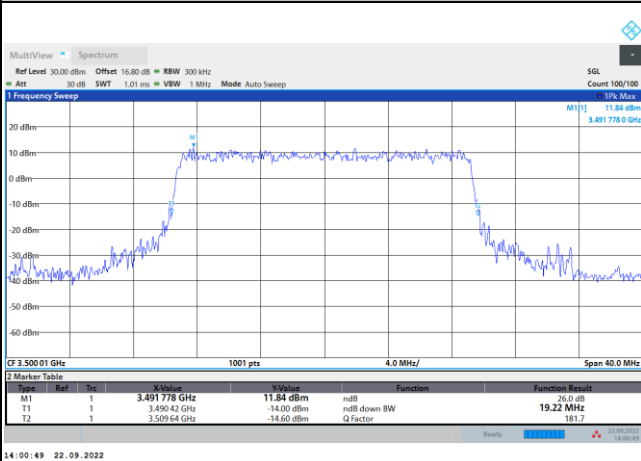
QPSK

16QAM



64QAM

256QAM

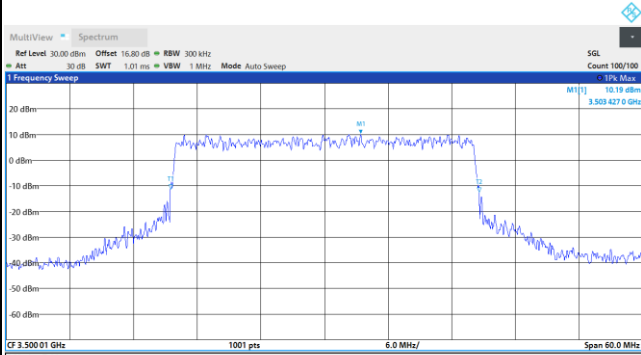




FR1 n77 / 30MHz / CP OFDM / Middle Channel / Full RB

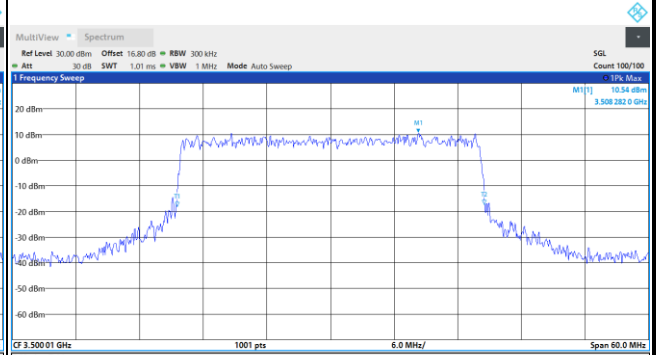
QPSK

16QAM



Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		3.503427 GHz	10.19 dBm	n/dB	26.0 dB
T1	1		3.485505 GHz	-11.28 dBm	n/dB down BW	29.07 MHz
T2	1		3.514575 GHz	-12.40 dBm	Q Factor	120.5

14:14:09 22.09.2022

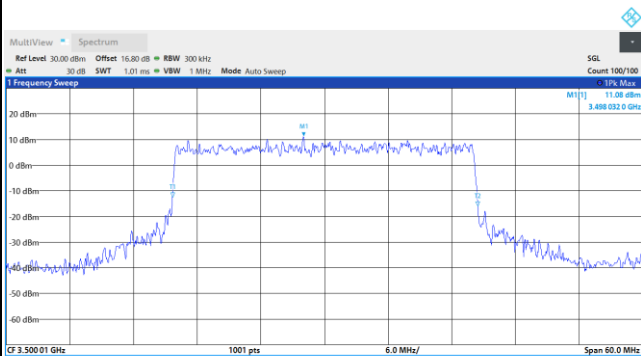


Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		3.508282 GHz	10.54 dBm	n/dB	26.0 dB
T1	1		3.485564 GHz	-18.19 dBm	n/dB down BW	28.95 MHz
T2	1		3.514515 GHz	-17.41 dBm	Q Factor	121.3

14:14:30 22.09.2022

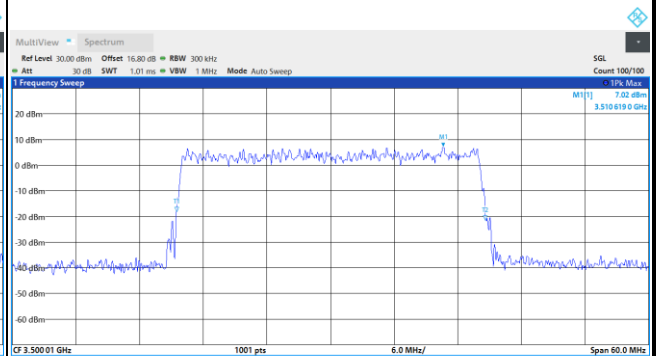
64QAM

256QAM



Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		3.498032 GHz	11.08 dBm	n/dB	26.0 dB
T1	1		3.485484 GHz	-12.07 dBm	n/dB down BW	28.77 MHz
T2	1		3.514656 GHz	-16.07 dBm	Q Factor	121.6

14:14:50 22.09.2022



Type	Ref	Trc	X Value	Y Value	Function	Function Result
M1	1		3.510619 GHz	7.02 dBm	n/dB	26.0 dB
T1	1		3.485505 GHz	-18.20 dBm	n/dB down BW	29.07 MHz
T2	1		3.514575 GHz	-21.54 dBm	Q Factor	120.8

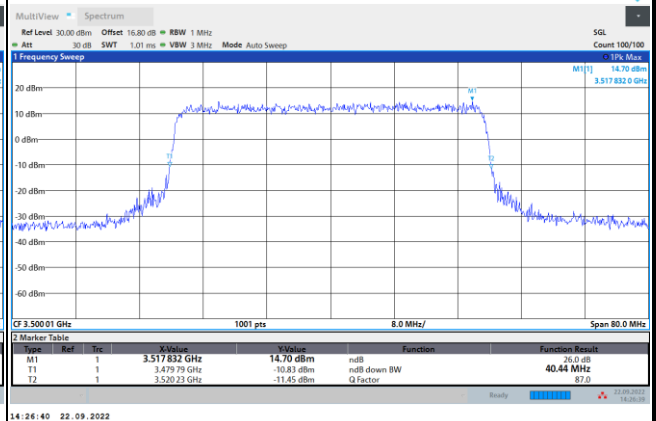
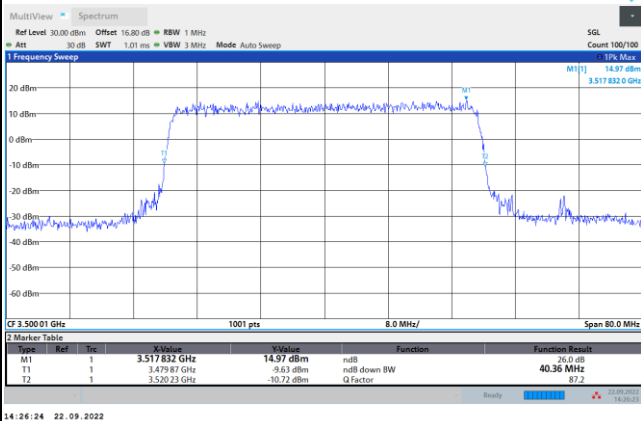
14:15:13 22.09.2022



FR1 n77 / 40MHz / CP OFDM / Middle Channel / Full RB

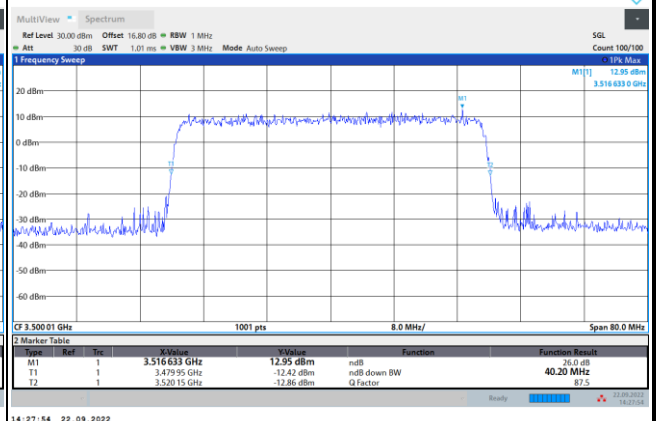
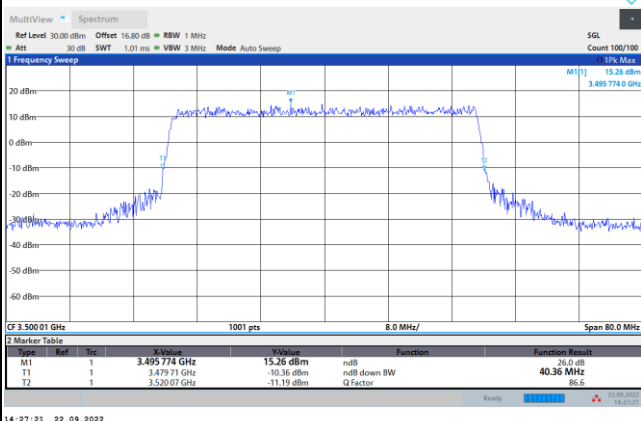
QPSK

16QAM



64QAM

256QAM



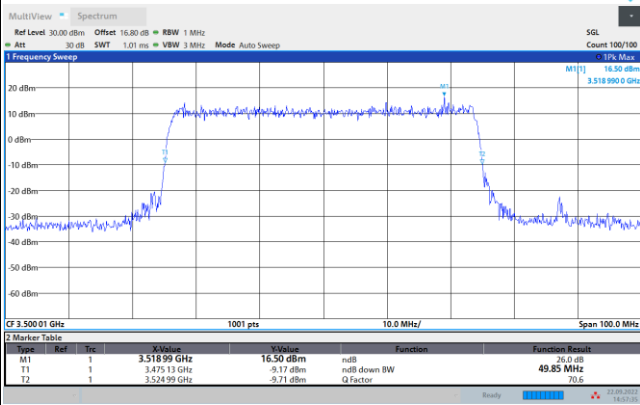
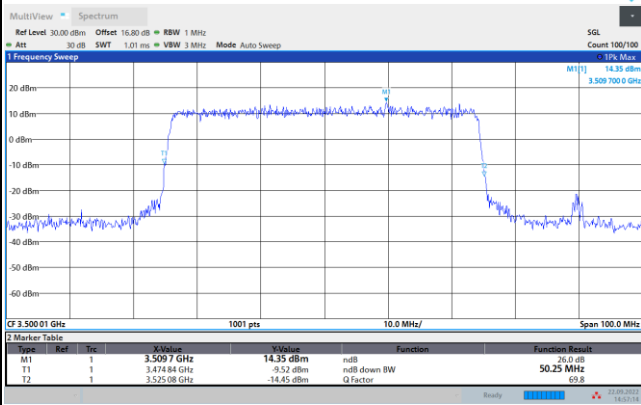




FR1 n77 / 50MHz / CP OFDM / Middle Channel / Full RB

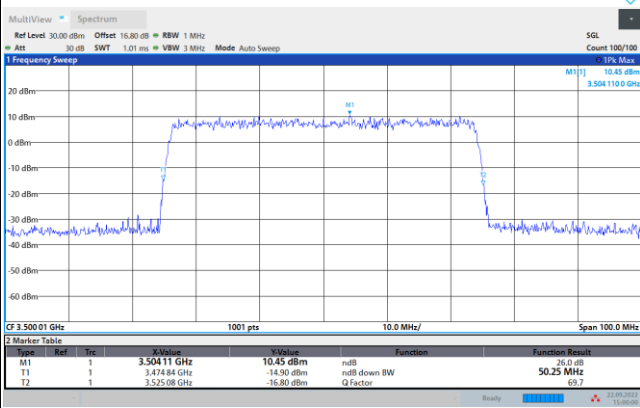
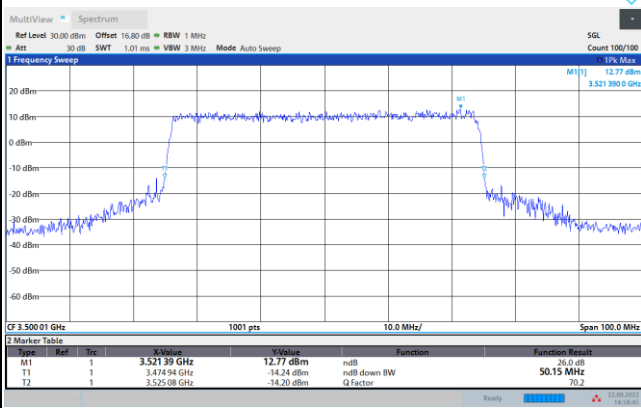
QPSK

16QAM



64QAM

256QAM

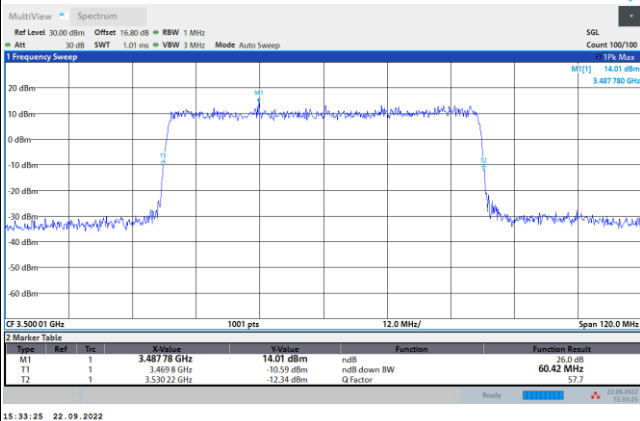
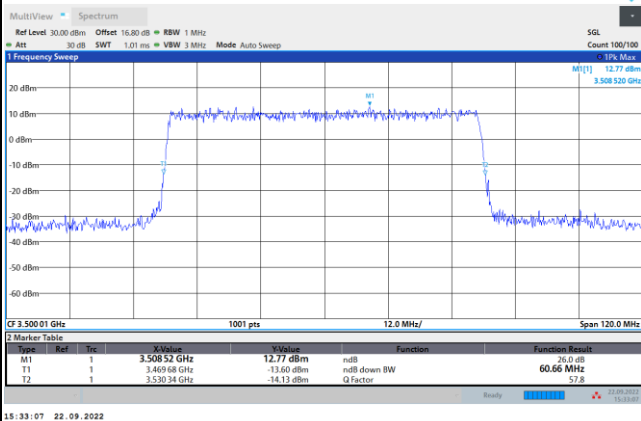




FR1 n77 / 60MHz / CP OFDM / Middle Channel / Full RB

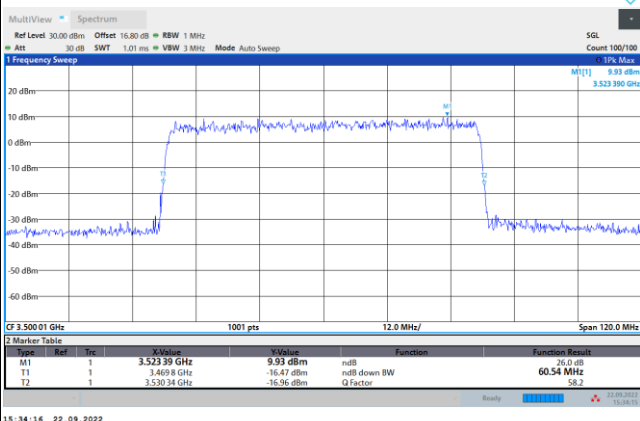
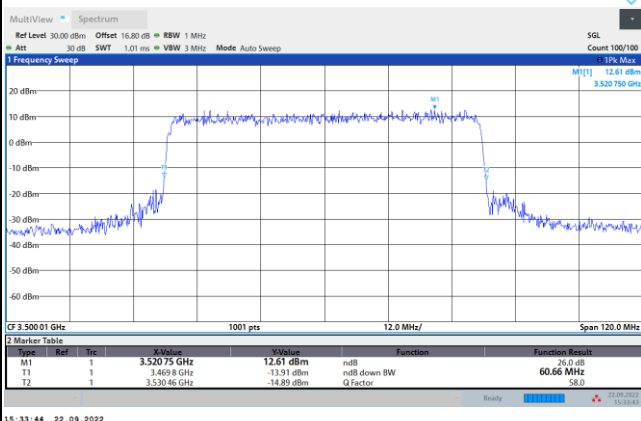
QPSK

16QAM



64QAM

256QAM

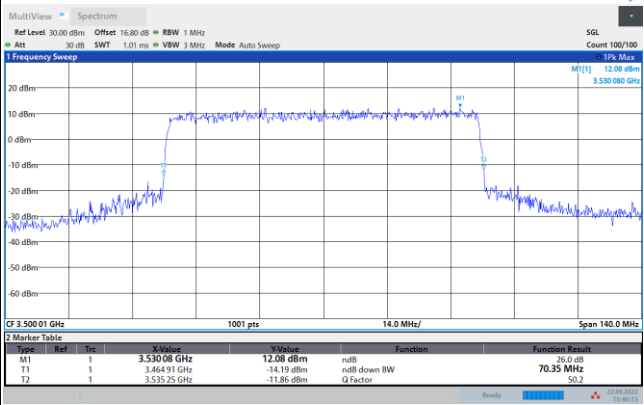
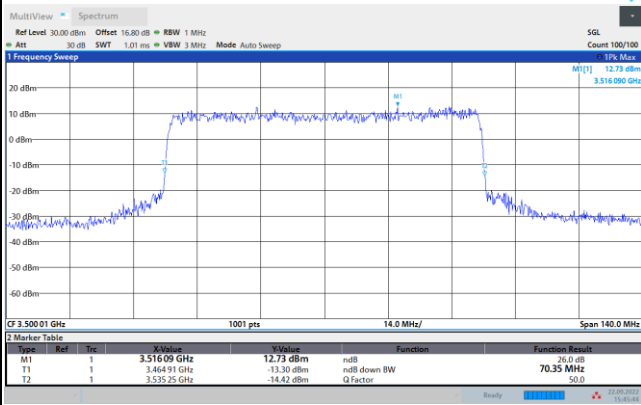




FR1 n77 / 70MHz / CP OFDM / Middle Channel / Full RB

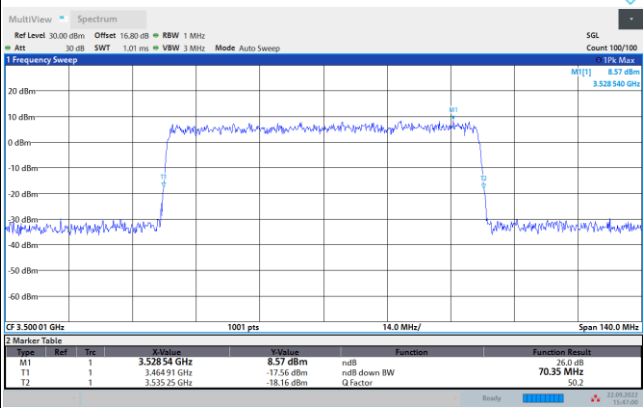
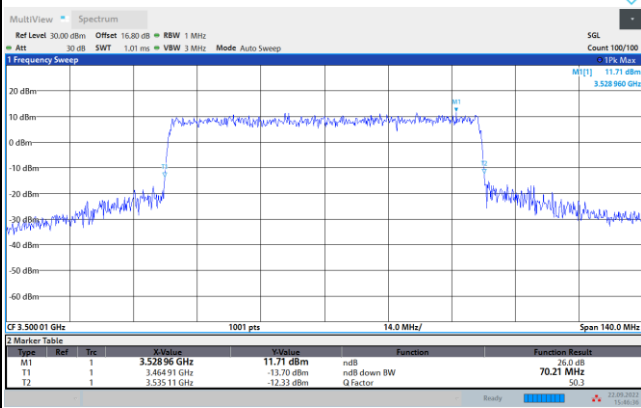
QPSK

16QAM



64QAM

256QAM

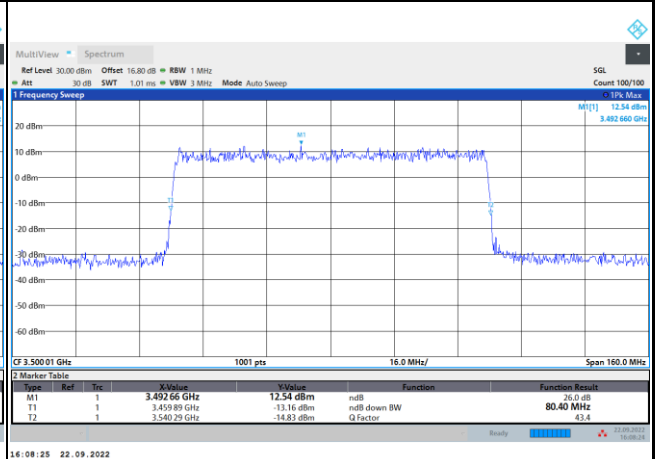
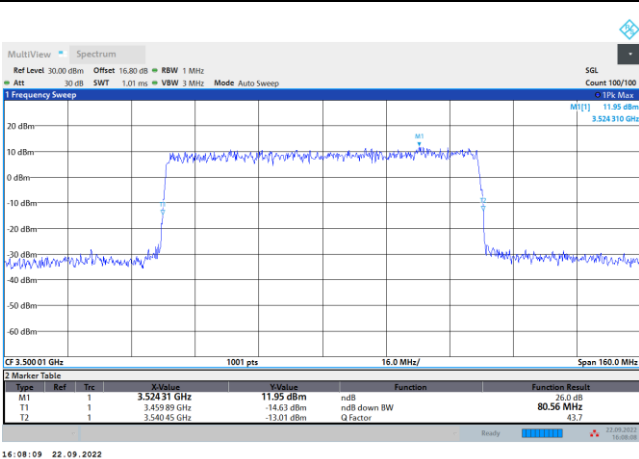




FR1 n77 / 80MHz / CP OFDM / Middle Channel / Full RB

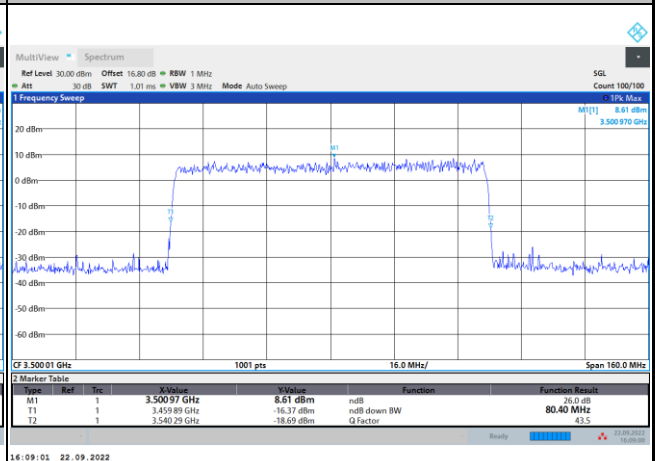
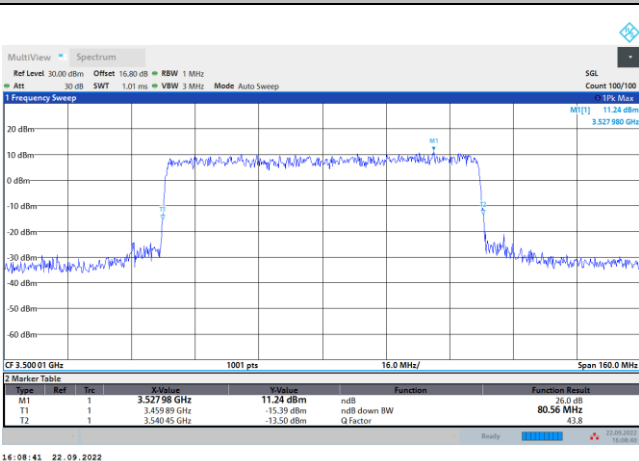
QPSK

16QAM



64QAM

256QAM

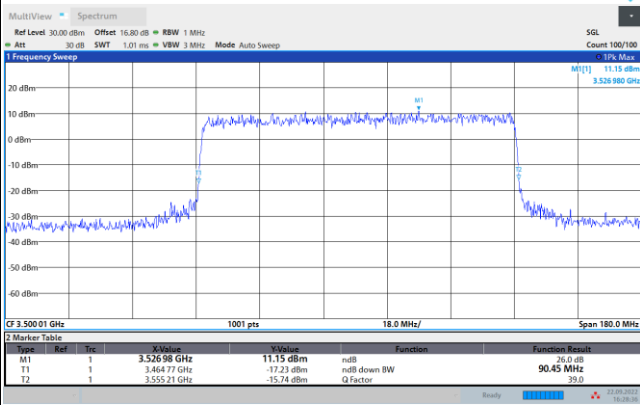
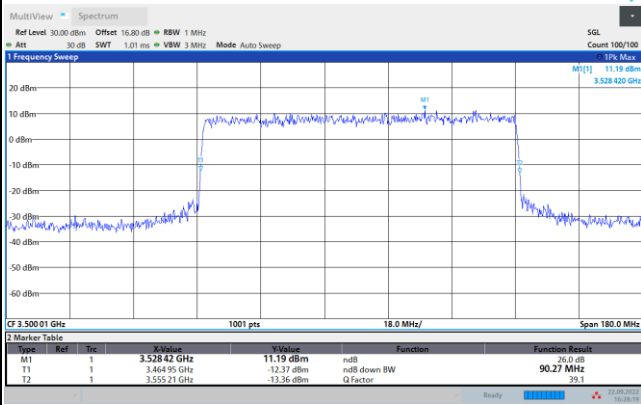




FR1 n77 / 90MHz / CP OFDM / Middle Channel / Full RB

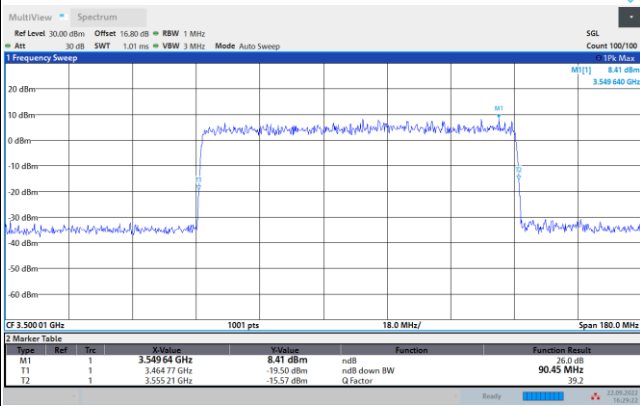
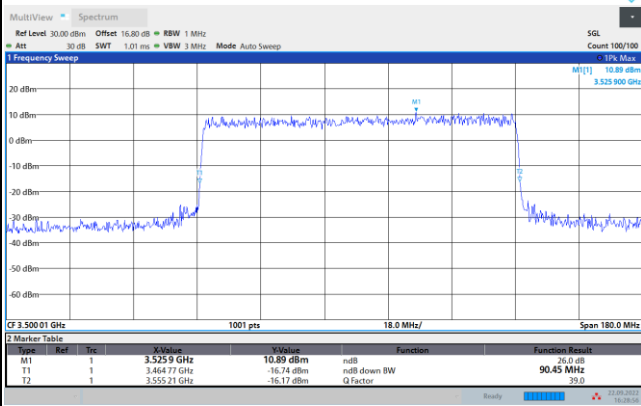
QPSK

16QAM



64QAM

256QAM

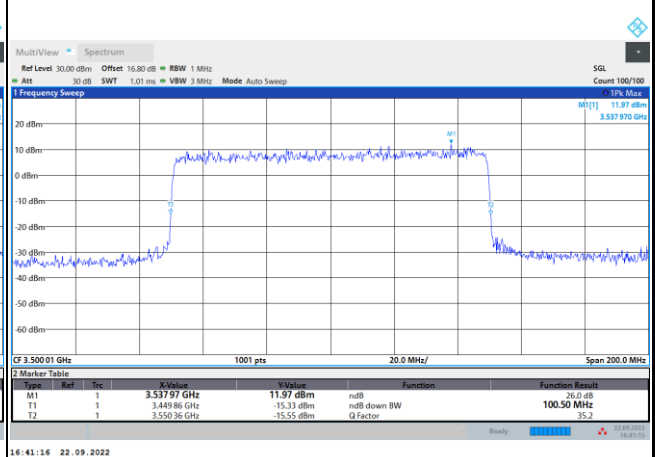
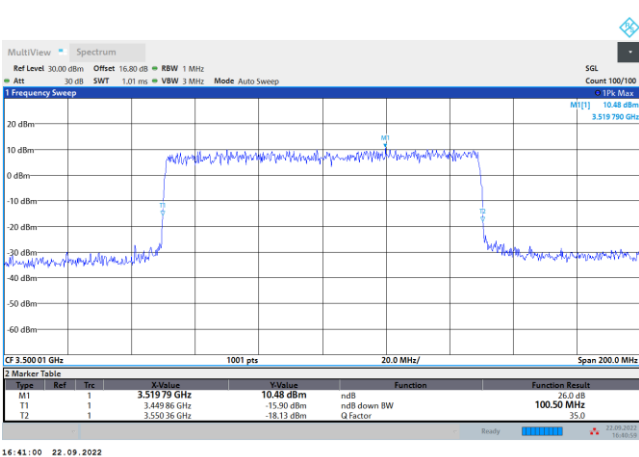




FR1 n77 / 100MHz / CP OFDM / Middle Channel / Full RB

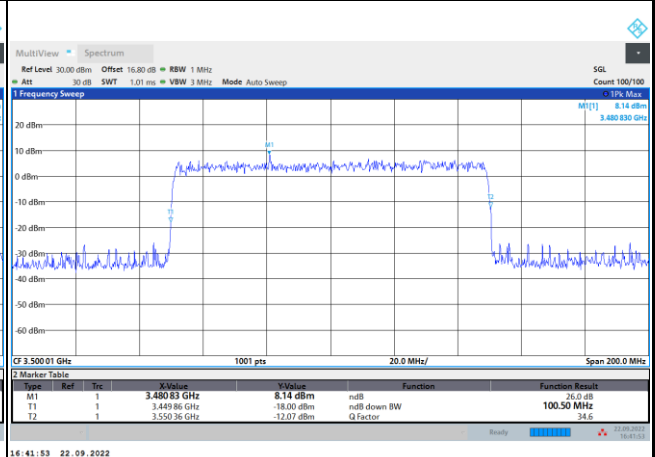
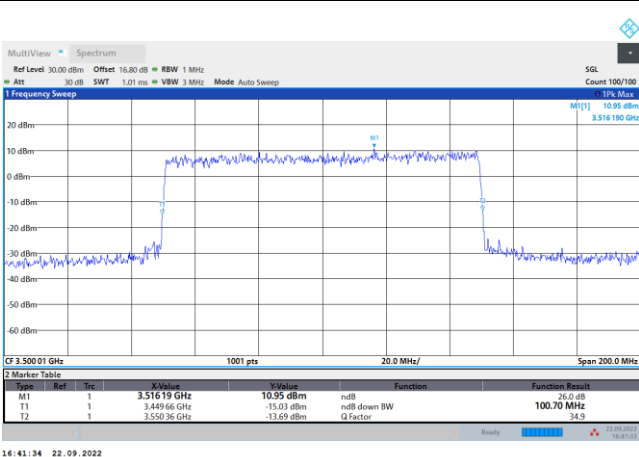
QPSK

16QAM



64QAM

256QAM





### Occupied Bandwidth

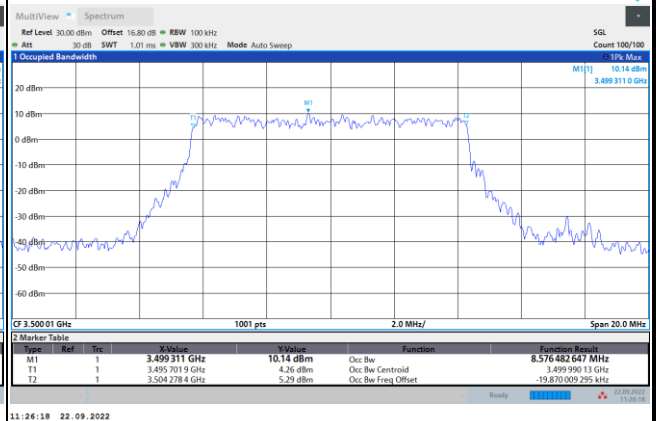
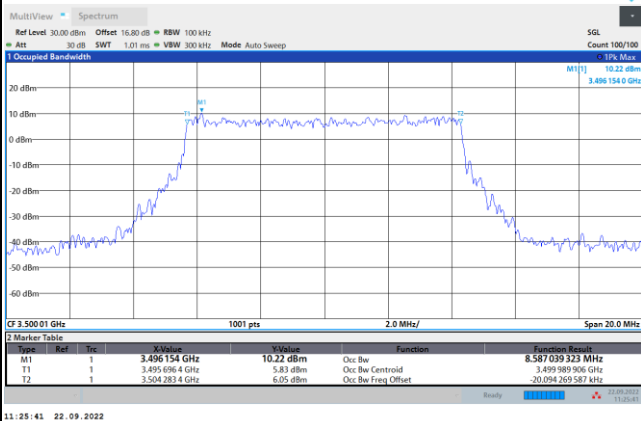
Mode	FR1 n77 : OB BW(MHz) / CP OFDM							
BW	10MHz		15MHz		20MHz		25MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	8.58	8.57	13.66	13.64	18.21	18.29	-	-
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	8.56	8.56	13.60	13.65	18.24	18.21	-	-
BW	30MHz		40MHz		50MHz		60MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	27.89	27.80	38.02	38.08	47.64	47.59	58.08	57.89
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	27.72	27.92	37.94	38.03	47.35	47.58	57.89	57.76
BW	70MHz		80MHz		90MHz		100MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	67.47	67.58	77.31	77.43	87.18	87.50	97.29	97.26
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	67.45	67.29	77.54	77.41	87.26	87.22	97.41	97.36



FR1 n77 / 10MHz / CP OFDM / Middle Channel / Full RB

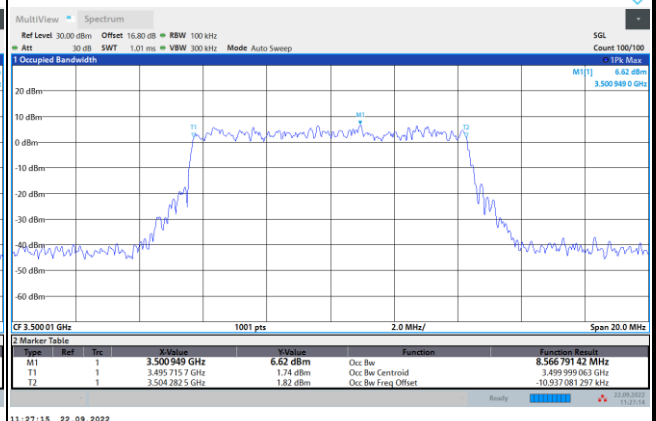
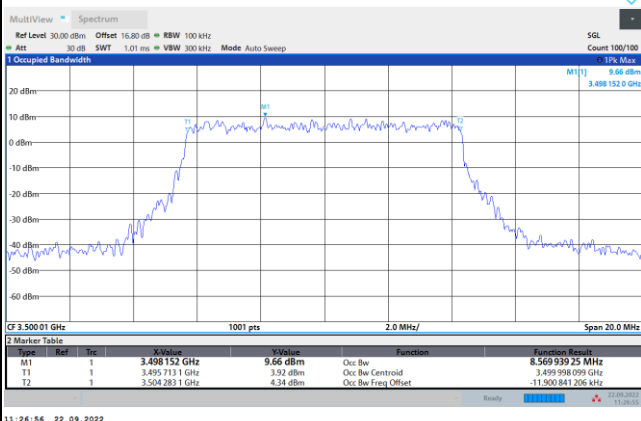
QPSK

16QAM



64QAM

256QAM



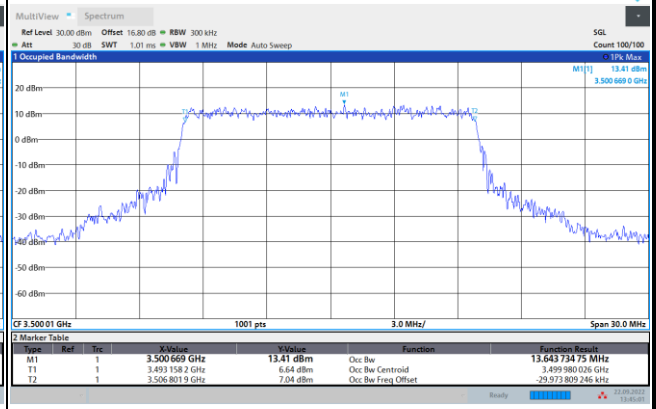
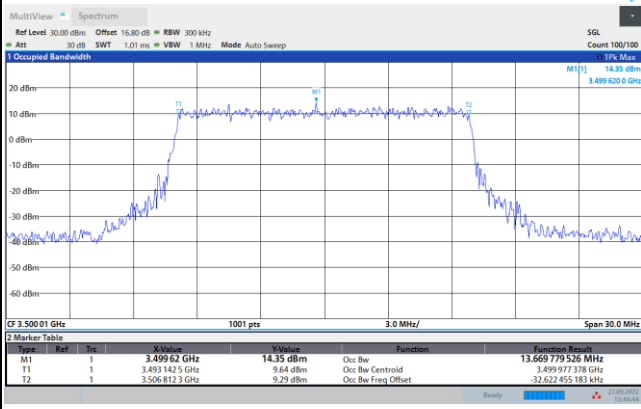




FR1 n77 / 15MHz / CP OFDM / Middle Channel / Full RB

QPSK

16QAM



64QAM

256QAM

