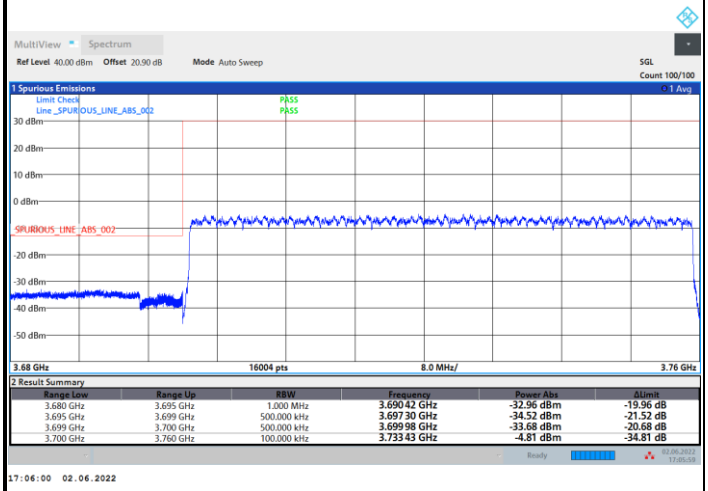
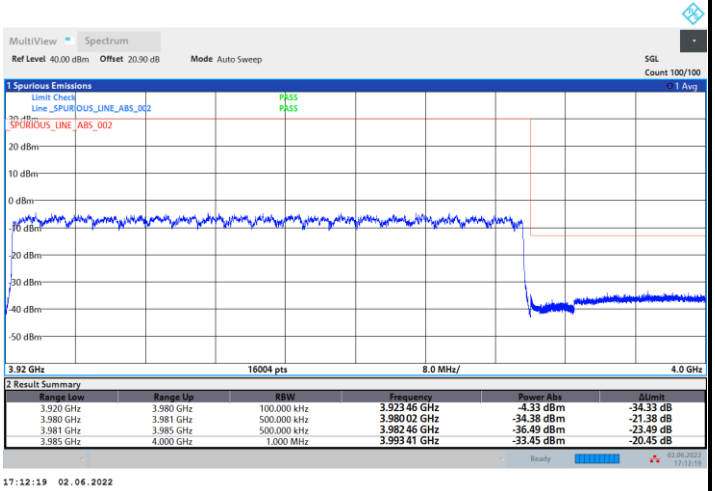
FR1 n77 / 60MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

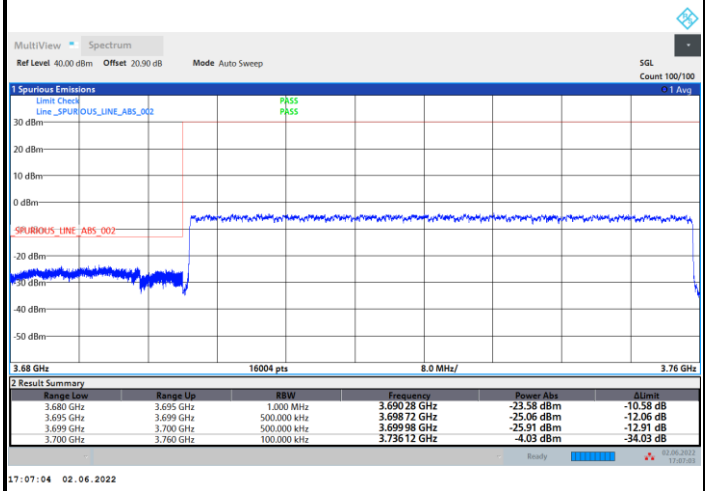


Highest Band Edge / Full RB

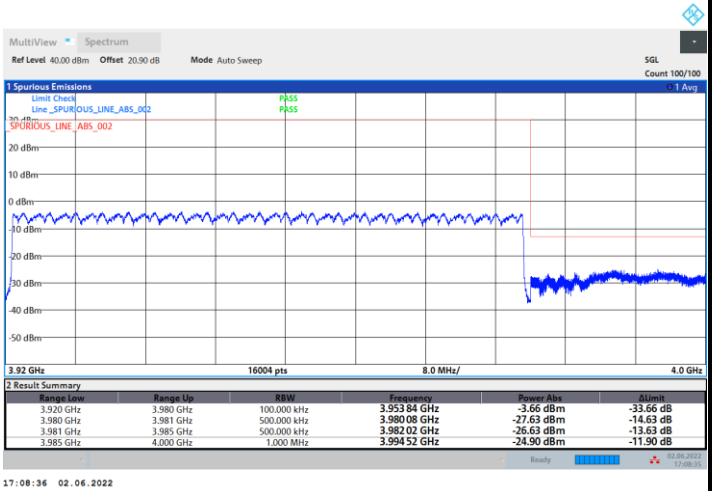


FR1 n77 / 60MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

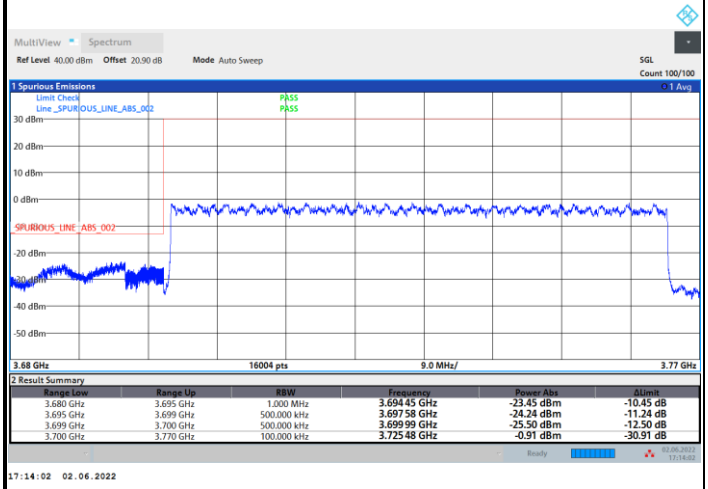


Highest Band Edge

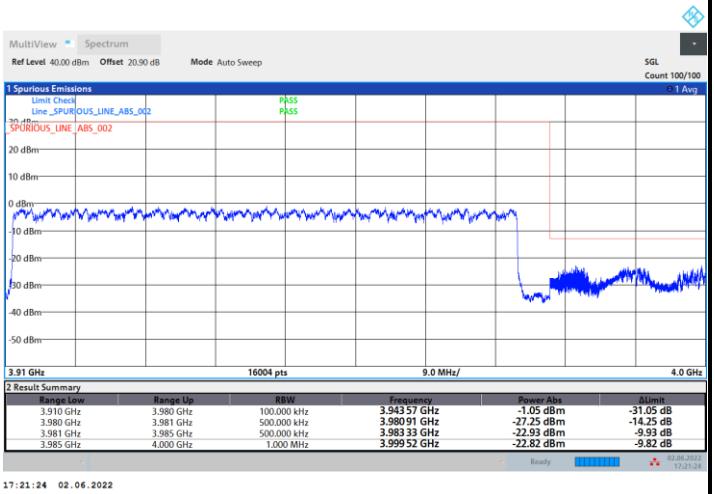


FR1 n77 / 70MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

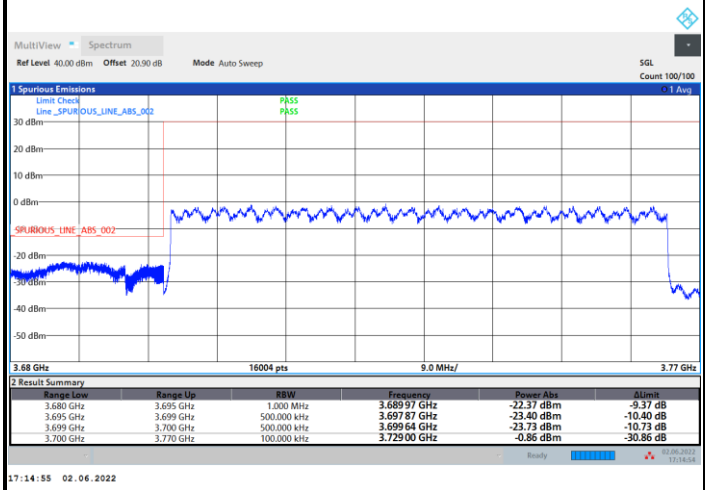


Highest Band Edge / Full RB

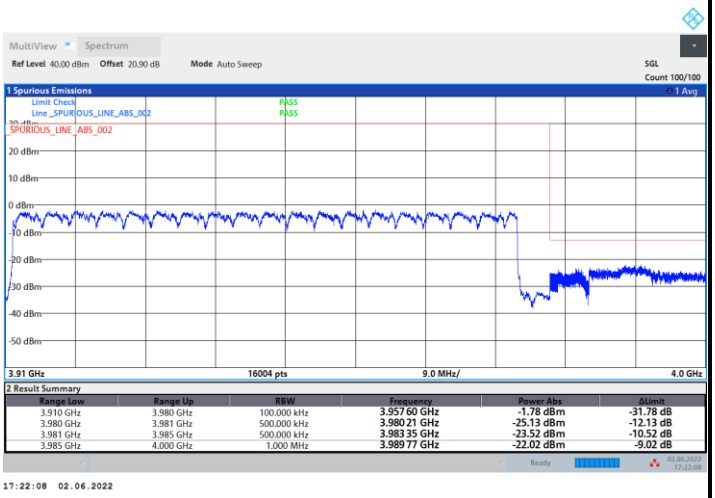


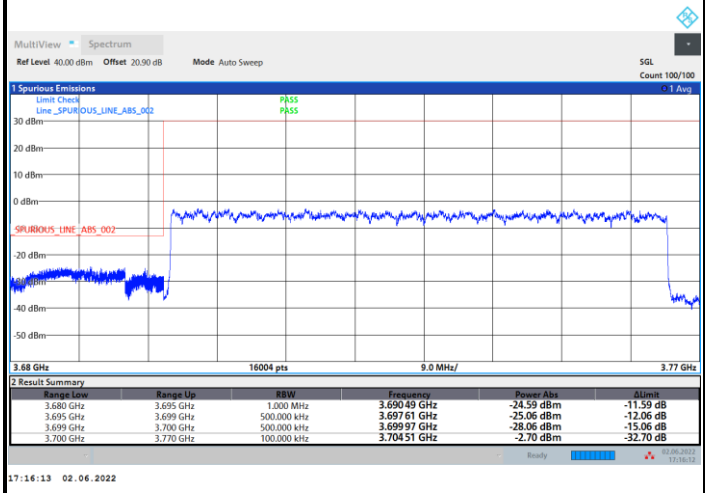
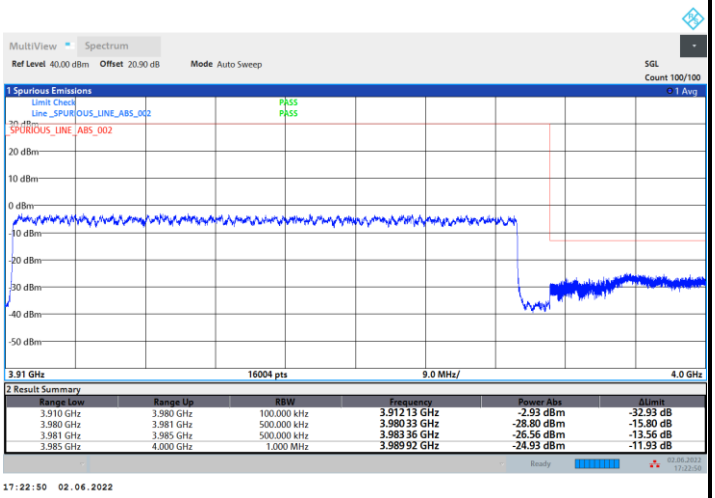
FR1 n77 / 70MHz / DFT-S OFDM / QPSK

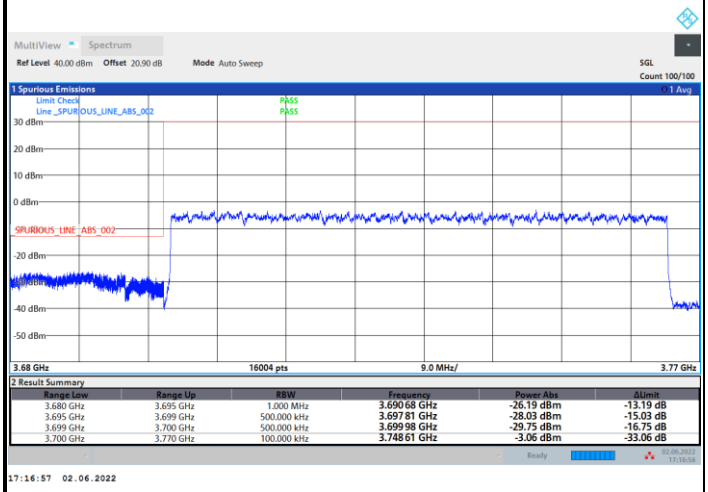
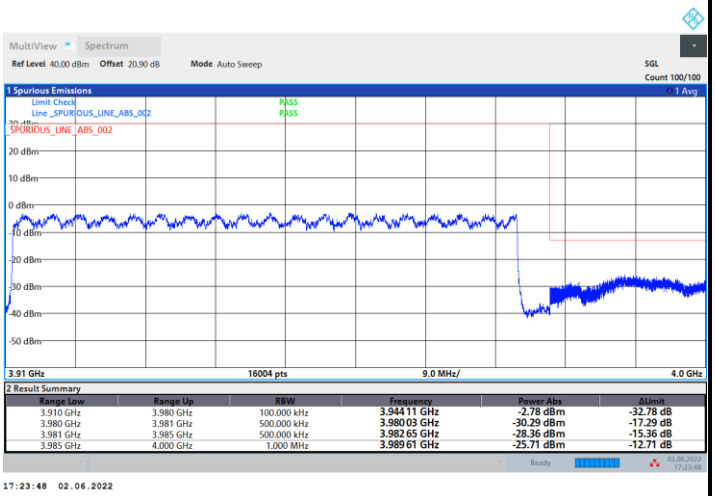
Lowest Band Edge / Full RB



Highest Band Edge / Full RB

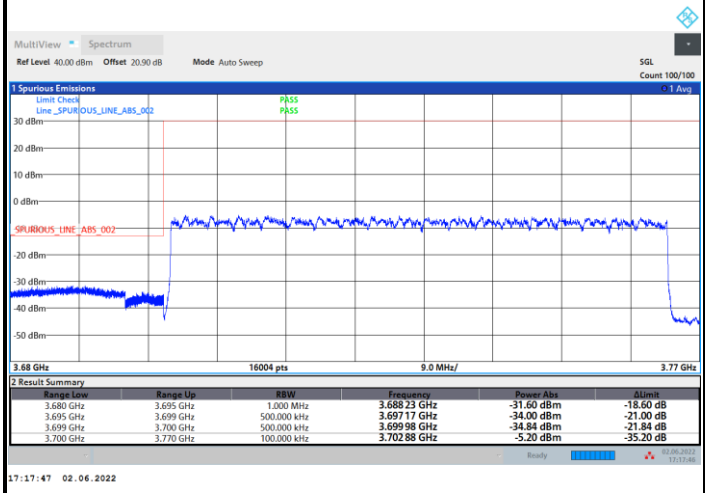


FR1 n77 / 70MHz / DFT-S OFDM / 16QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

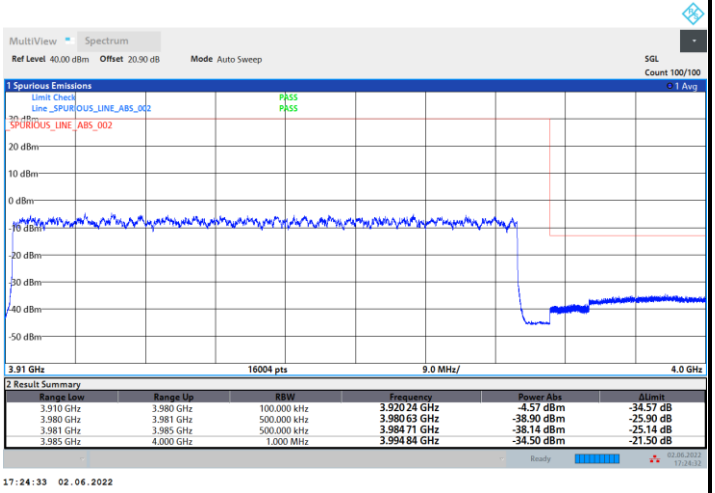
FR1 n77 / 70MHz / DFT-S OFDM / 64QAM	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n77 / 70MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

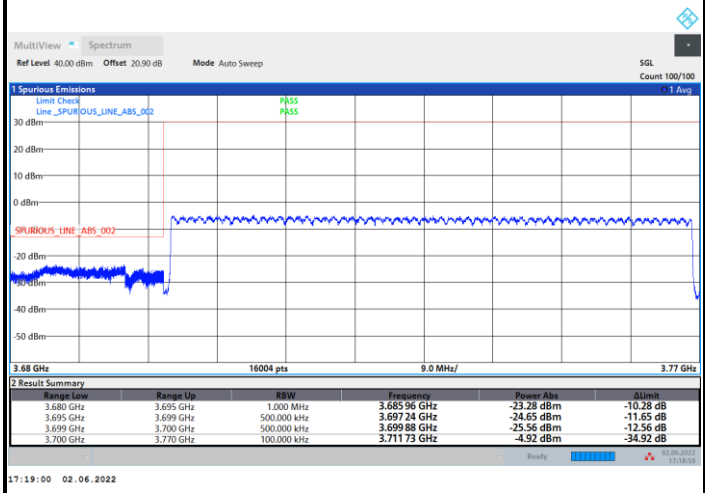


Highest Band Edge / Full RB

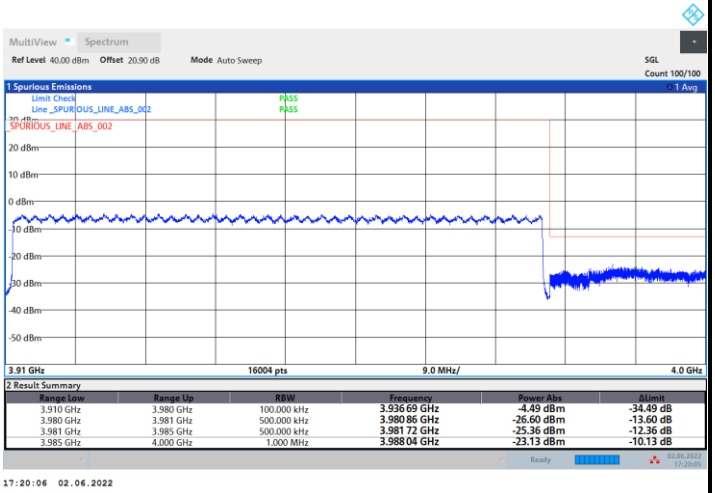


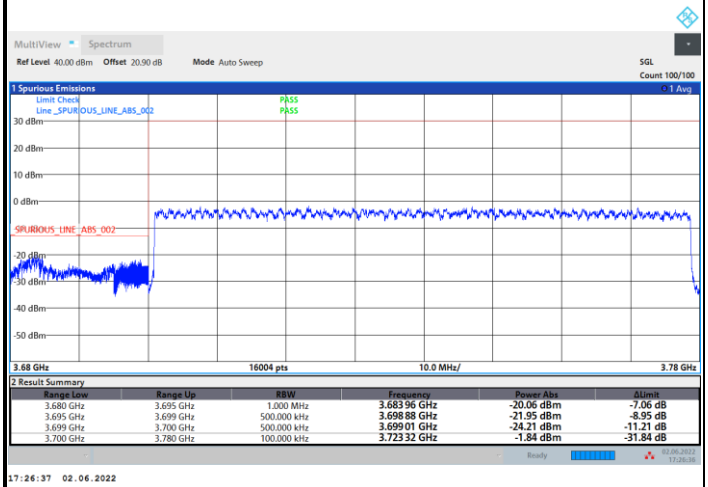
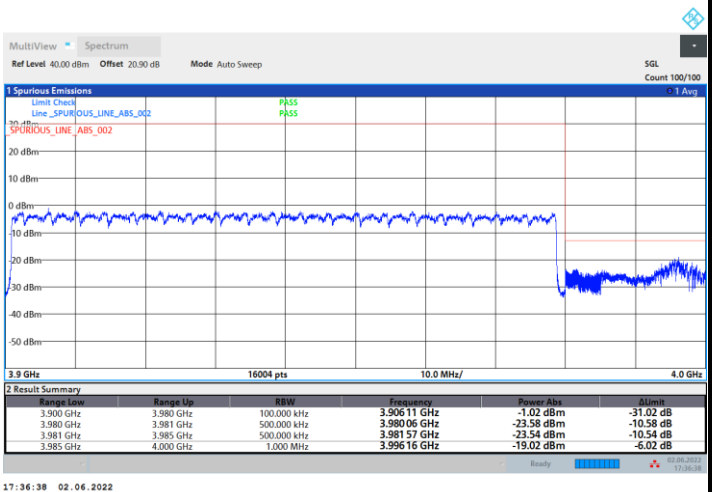
FR1 n77 / 70MHz / CP OFDM / QPSK / Full RB

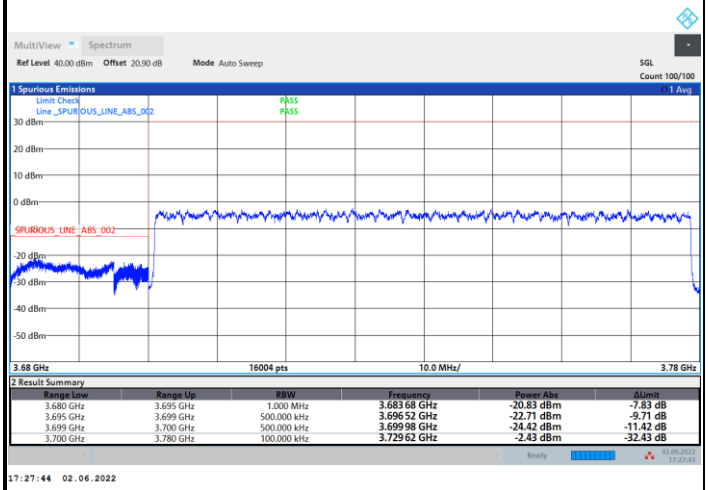
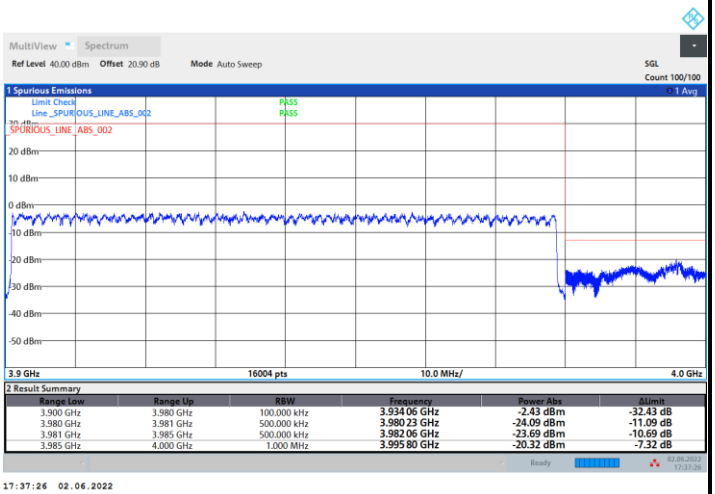
Lowest Band Edge



Highest Band Edge

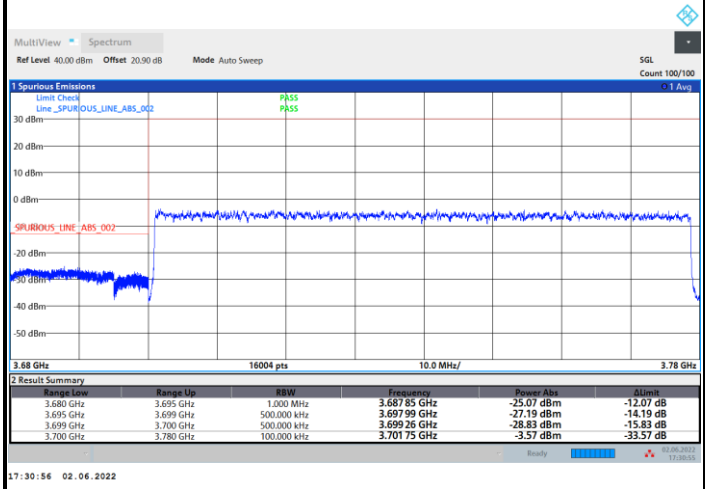


FR1 n77 / 80MHz / DFT-S OFDM / PI/2 BPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

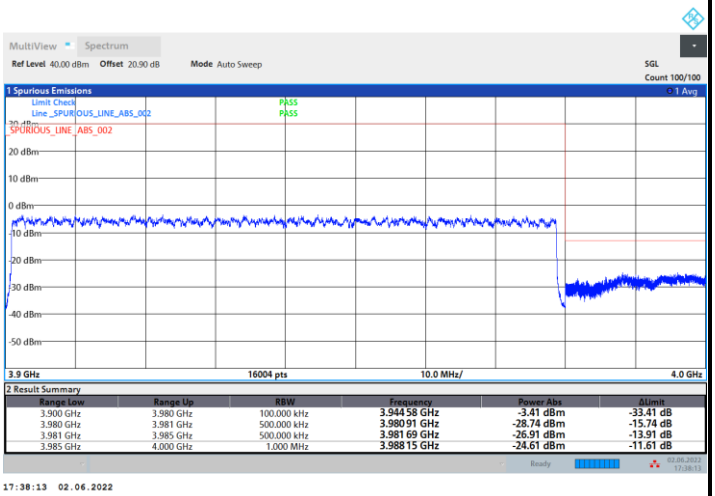
FR1 n77 / 80MHz / DFT-S OFDM / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

FR1 n77 / 80MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / Full RB

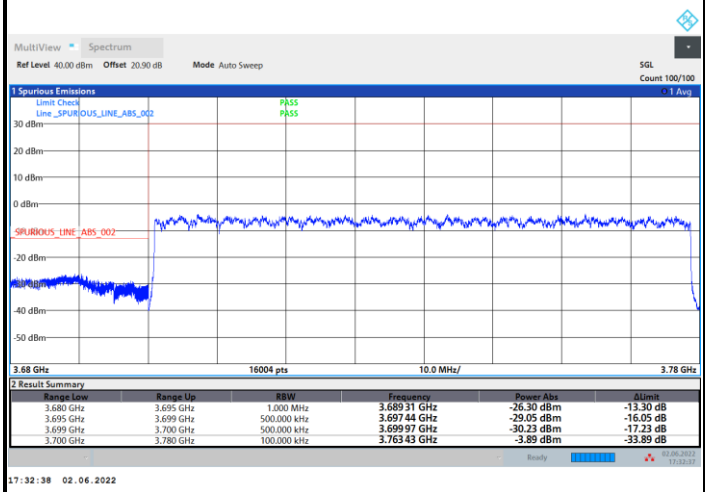


Highest Band Edge / Full RB

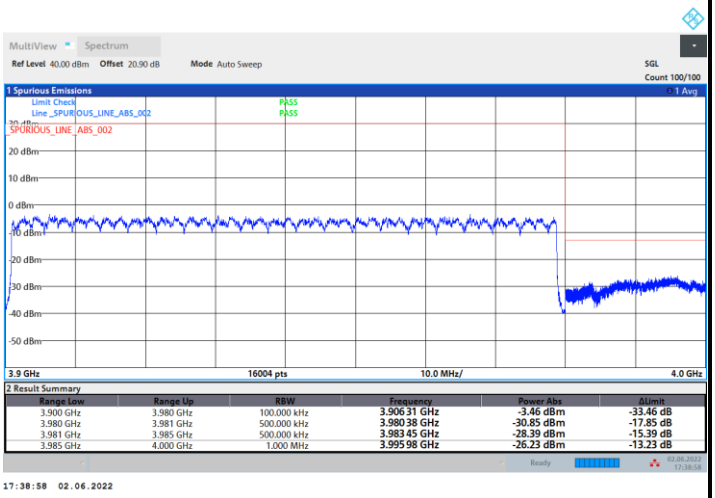


FR1 n77 / 80MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / Full RB

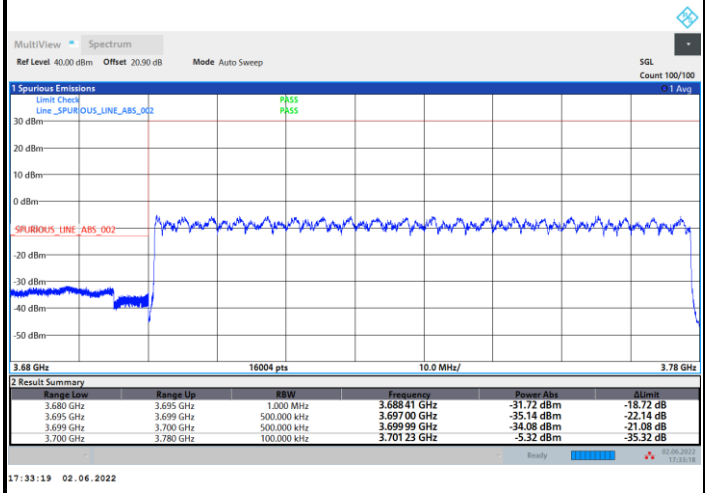


Highest Band Edge / Full RB

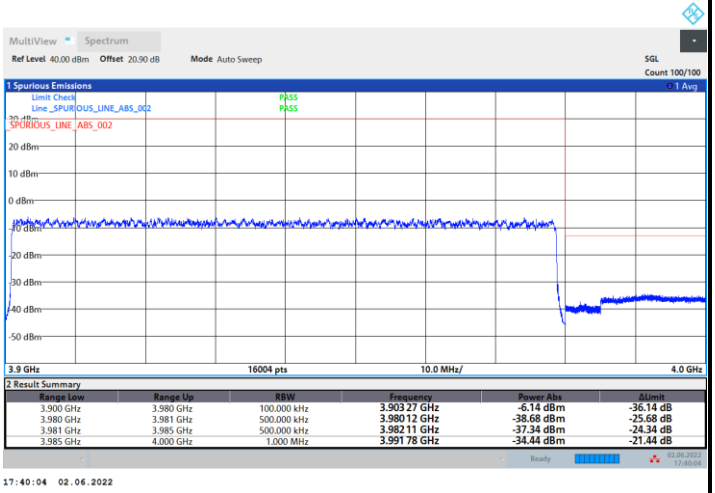


FR1 n77 / 80MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

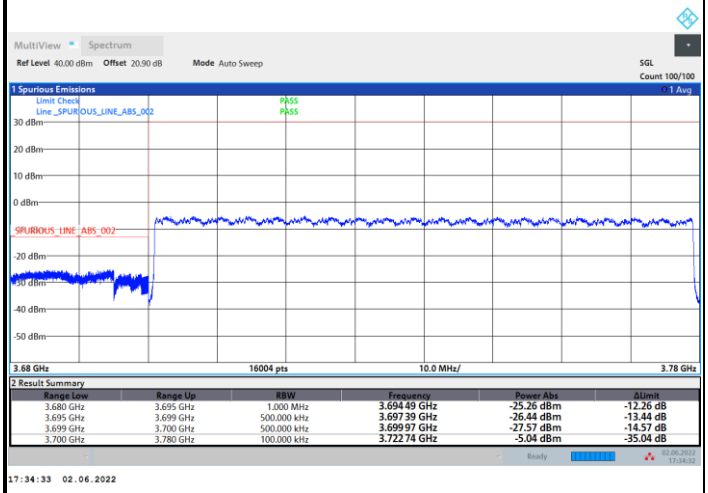


Highest Band Edge / Full RB

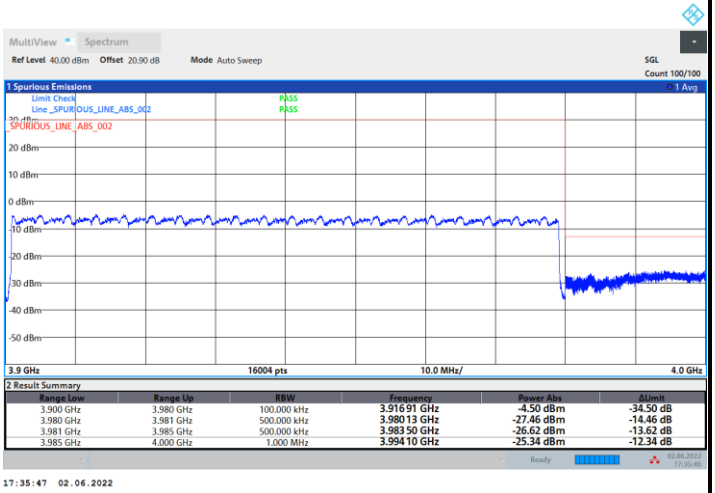


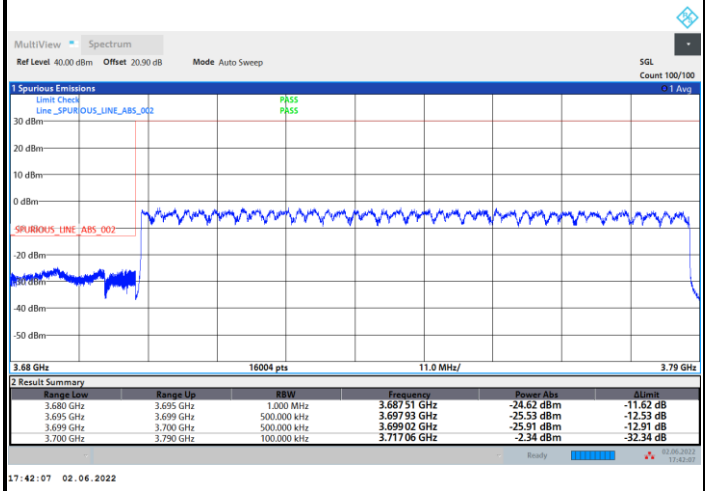
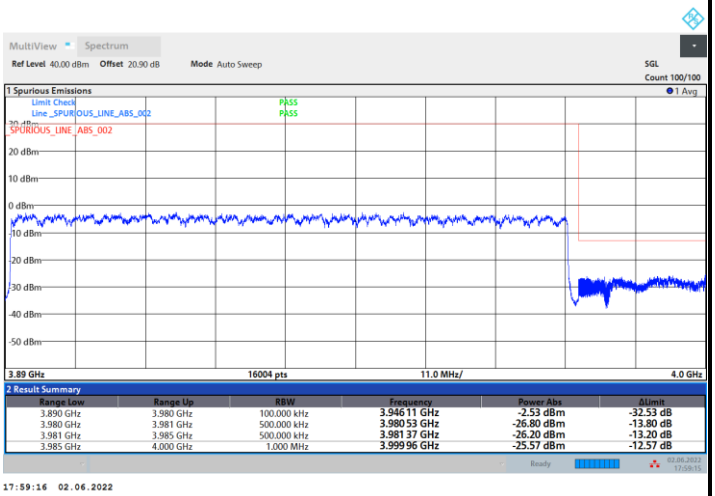
FR1 n77 / 80MHz / CP OFDM / QPSK / Full RB

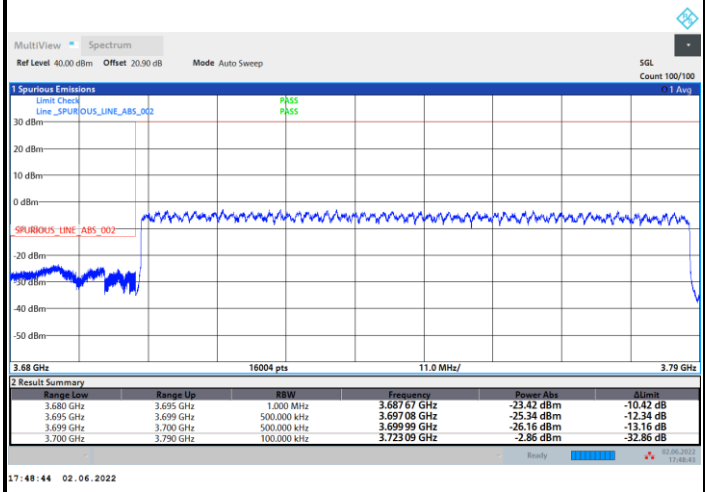
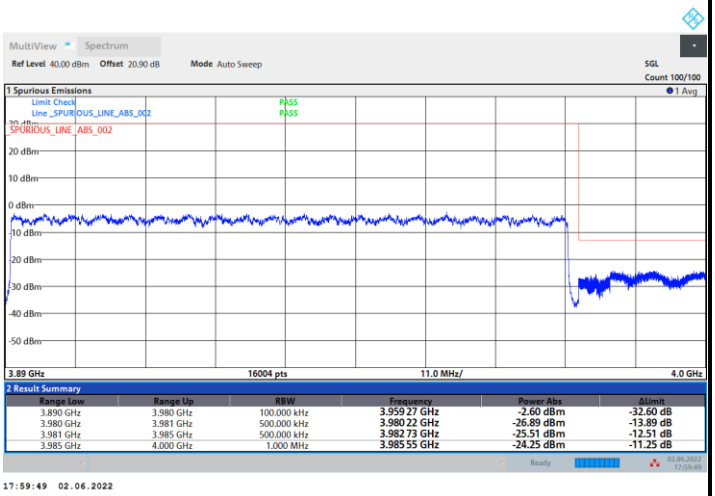
Lowest Band Edge



Highest Band Edge

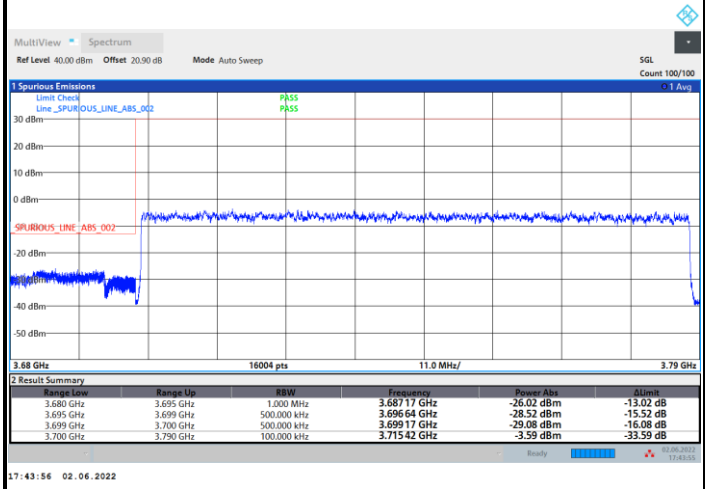


FR1 n77 / 90MHz / DFT-S OFDM / PI/2 BPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

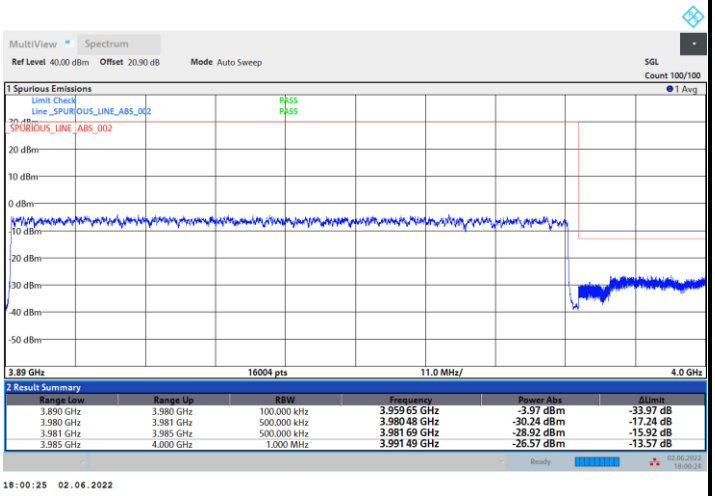
FR1 n77 / 90MHz / DFT-S OFDM / QPSK	
Lowest Band Edge / Full RB	**Highest Band Edge / Full RB**
	

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

Lowest Band Edge / Full RB

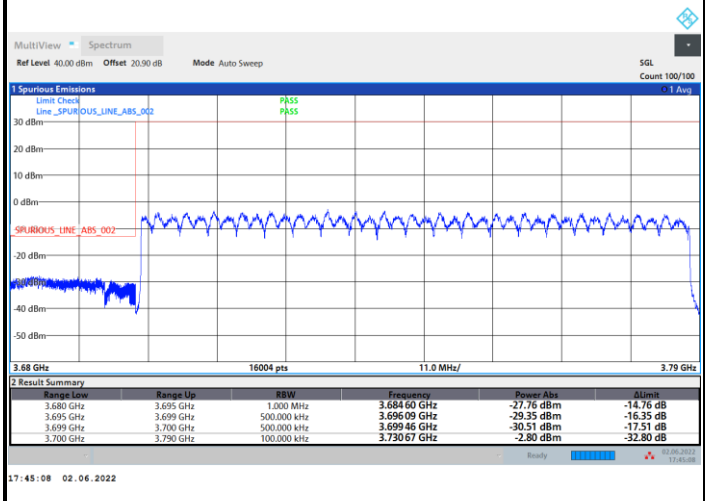


Highest Band Edge / Full RB

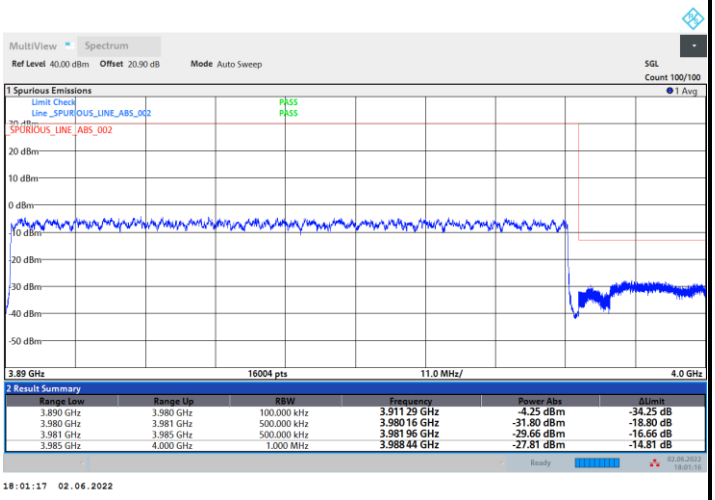


FR1 n77 / 90MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / Full RB

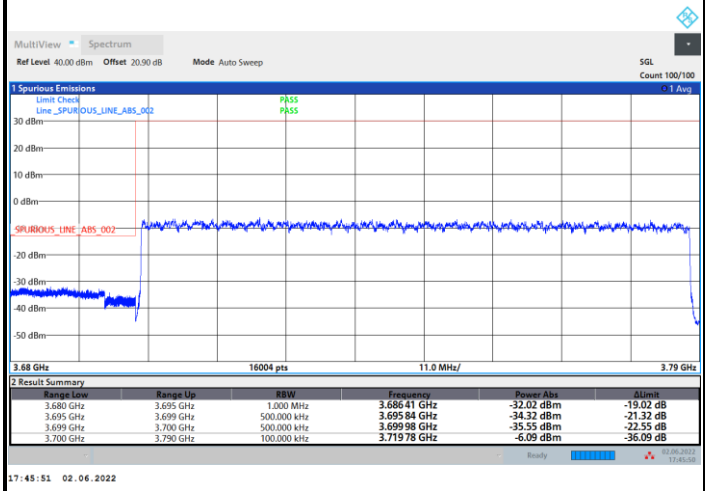


Highest Band Edge / Full RB

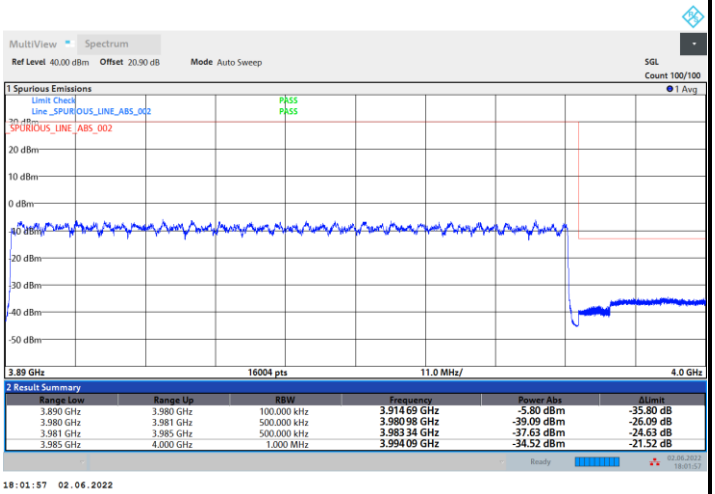


FR1 n77 / 90MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

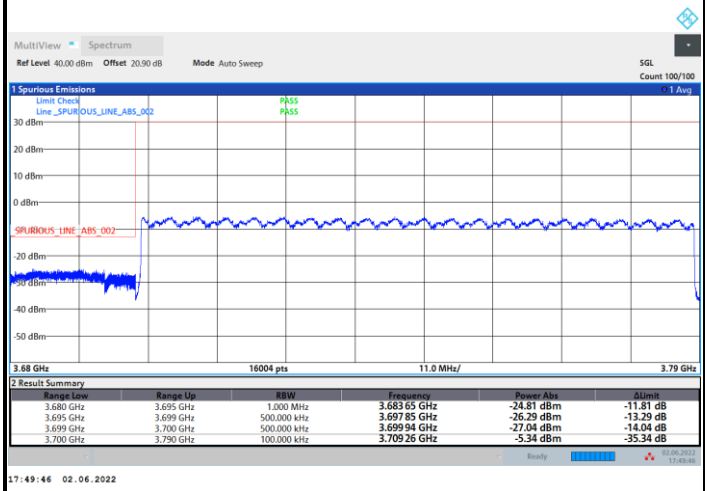


Highest Band Edge / Full RB

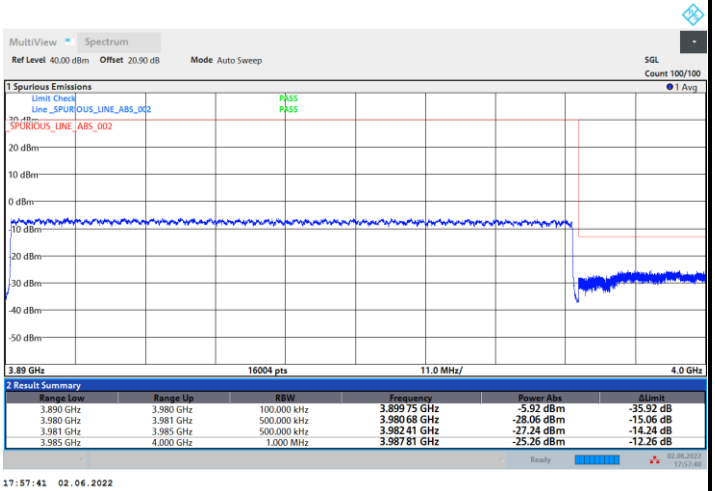


FR1 n77 / 90MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

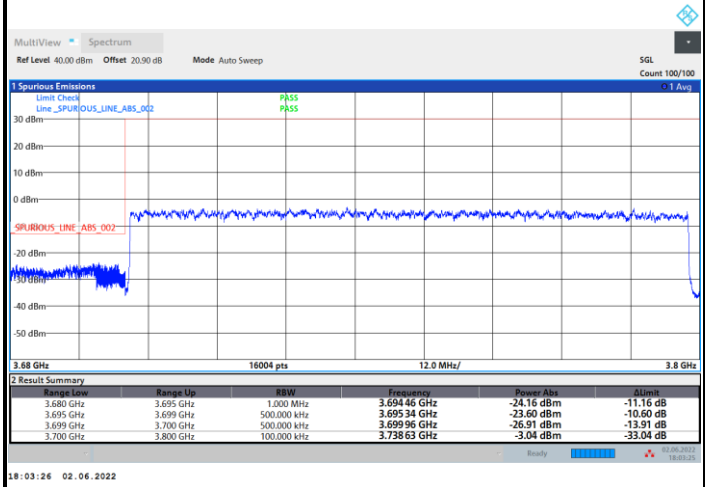


Highest Band Edge

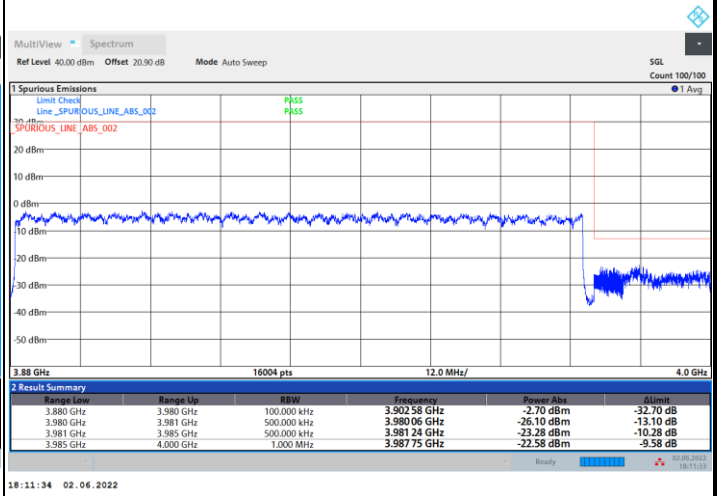


FR1 n77 / 100MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

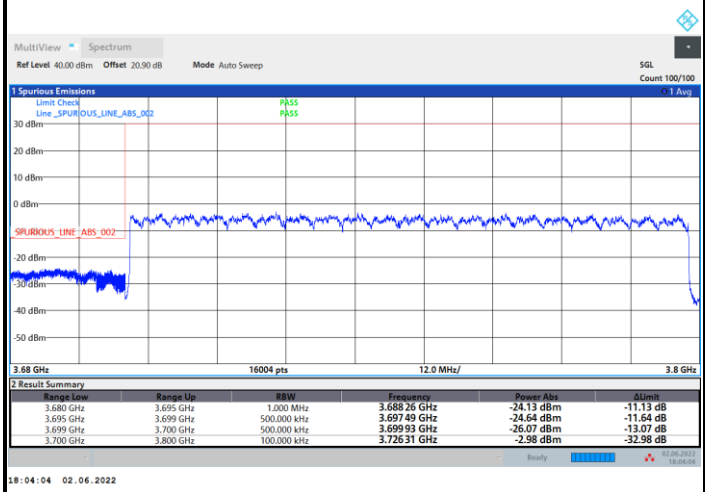


Highest Band Edge / Full RB

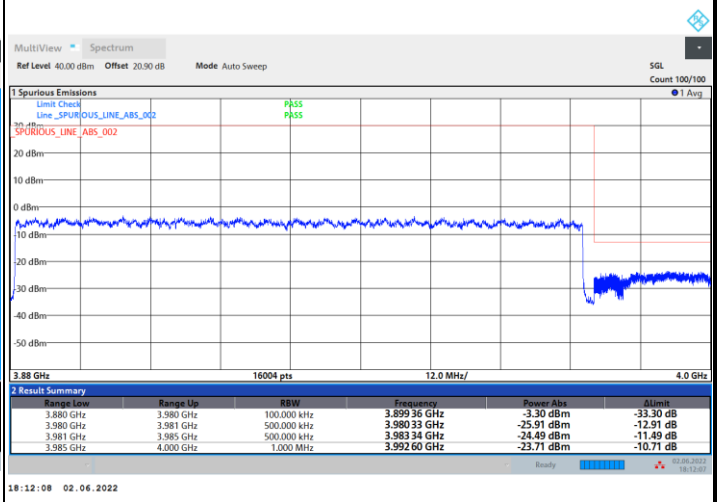


FR1 n77 / 100MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB

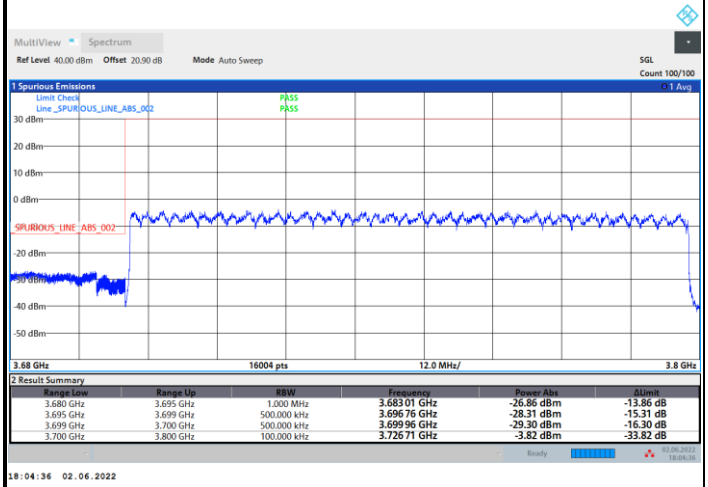


Highest Band Edge / Full RB

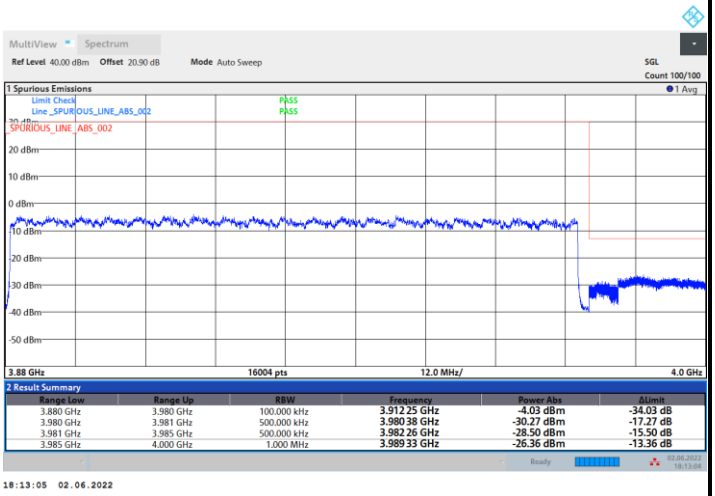


FR1 n77 / 100MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / Full RB

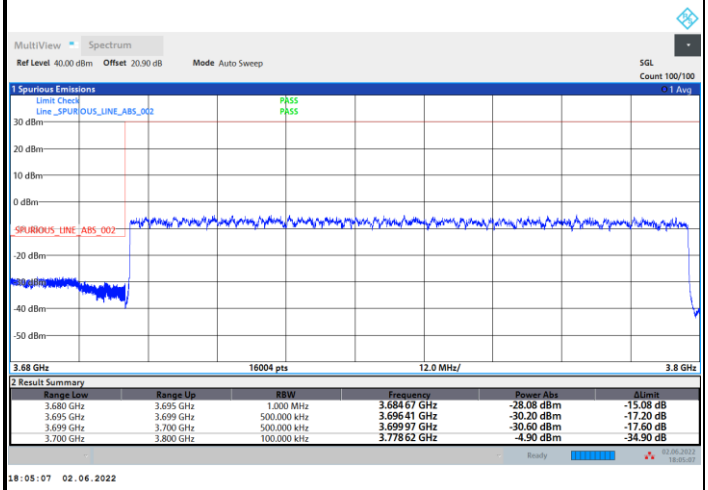


Highest Band Edge / Full RB

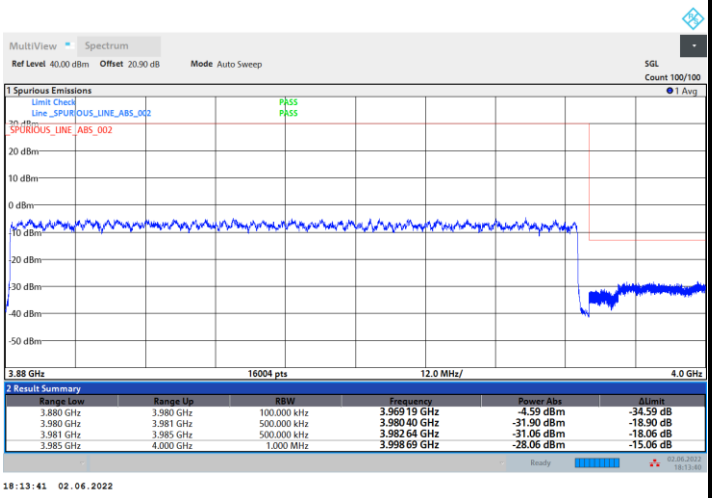


FR1 n77 / 100MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / Full RB

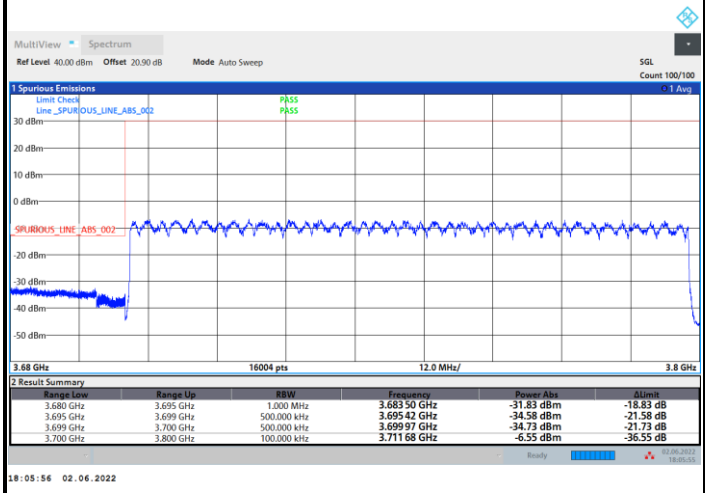


Highest Band Edge / Full RB

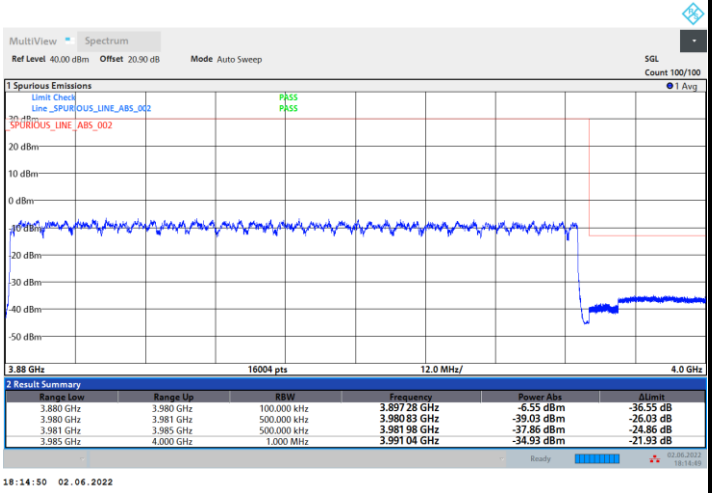


FR1 n77 / 100MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

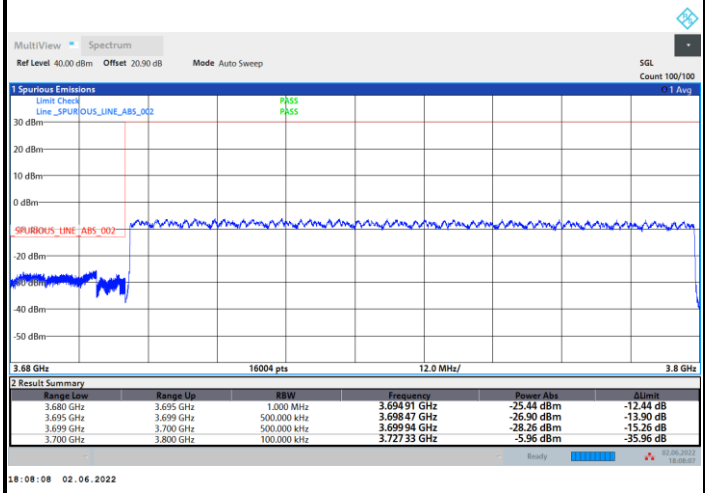


Highest Band Edge / Full RB

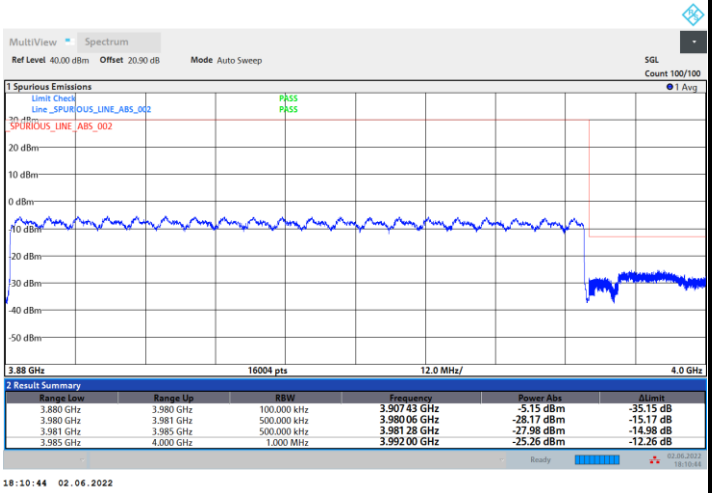


FR1 n77 / 100MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



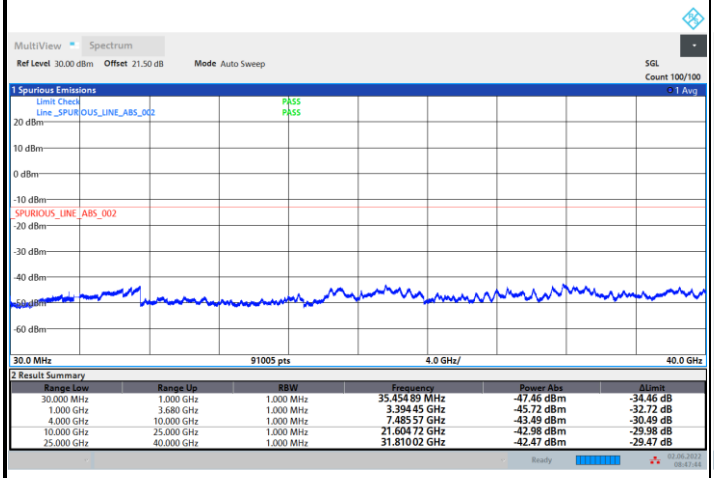
Highest Band Edge



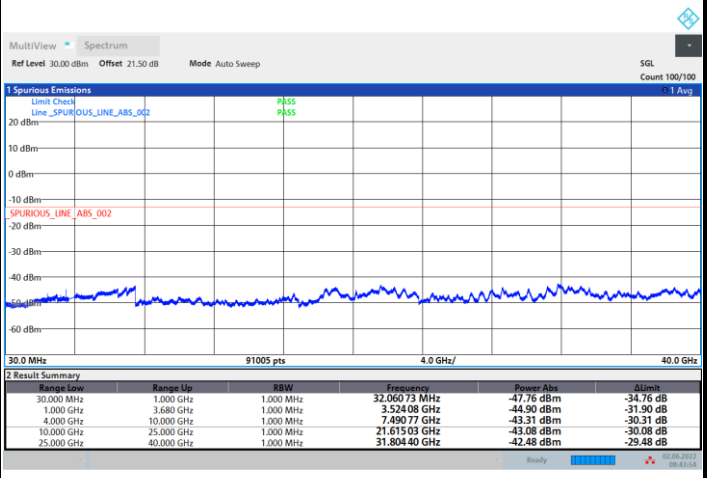
Conducted Spurious Emission

FR1 n77 / 20MHz / DFT-S OFDM / QPSK / 1RB1

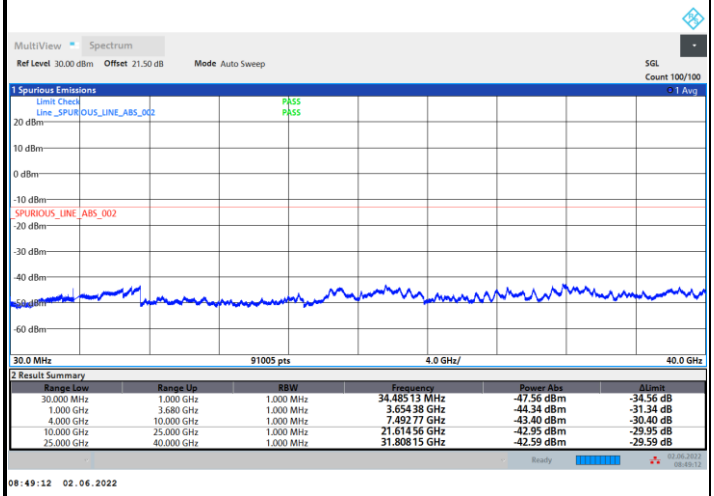
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n77 (PI/2 BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0020	PASS
40	Normal Voltage	0.0032	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0033	
0	Normal Voltage	0.0048	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0015	
-30	Normal Voltage	0.0028	
20	Maximum Voltage	0.0018	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0039	

Note:

1. Normal Voltage = 4.05 V.；Battery End Point (BEP) = 3.85 V.；Maximum Voltage = 4.35 V.
2. The frequency fundamental emissions stay within the authorized frequency block.

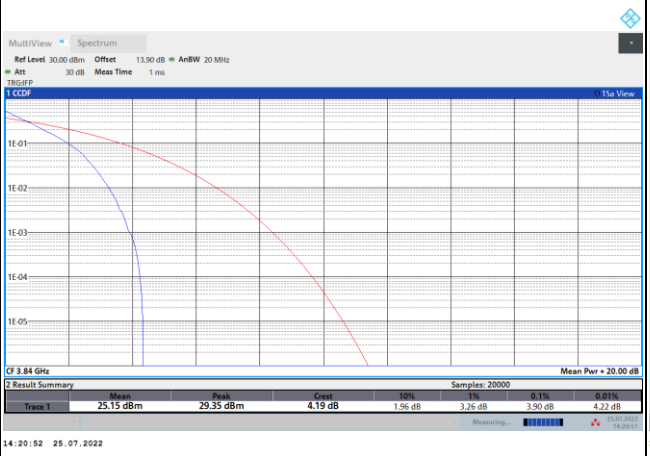
FR1 n77_HPUE

Peak-to-Average Ratio

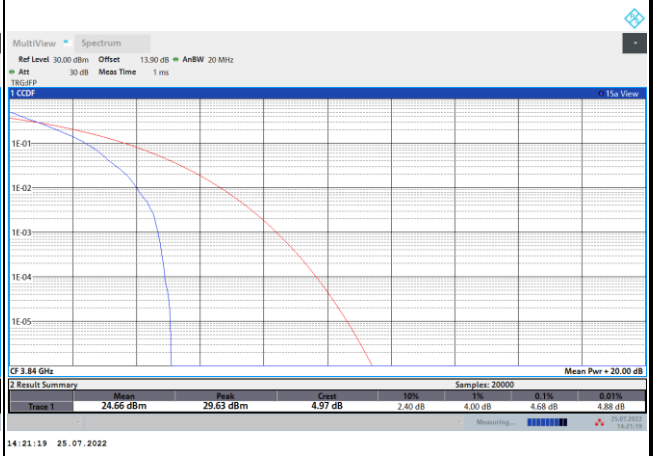
Mode	FR1 n77 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	3.90	4.68	5.58	5.92	PASS
Mode	FR1 n77 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.44				PASS

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

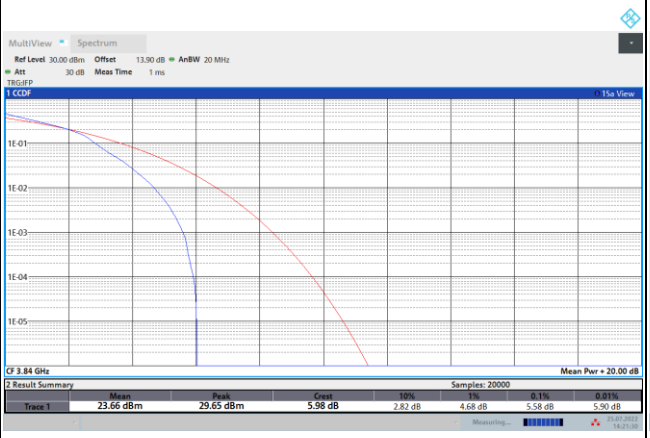
PI/2 BPSK



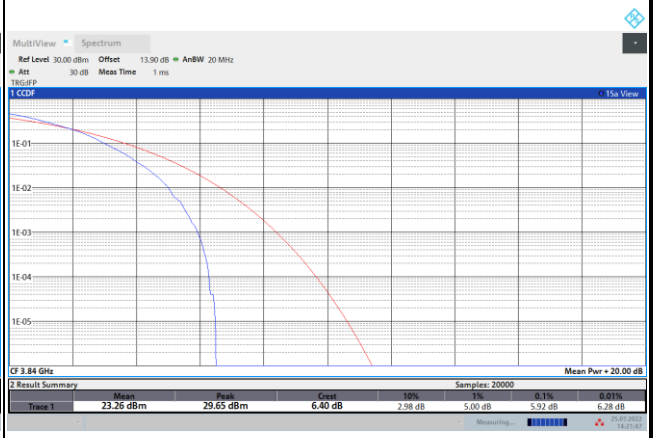
QPSK



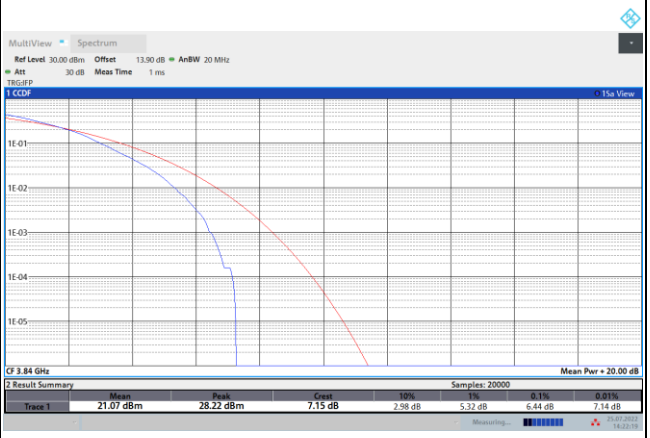
16QAM



64QAM



256QAM



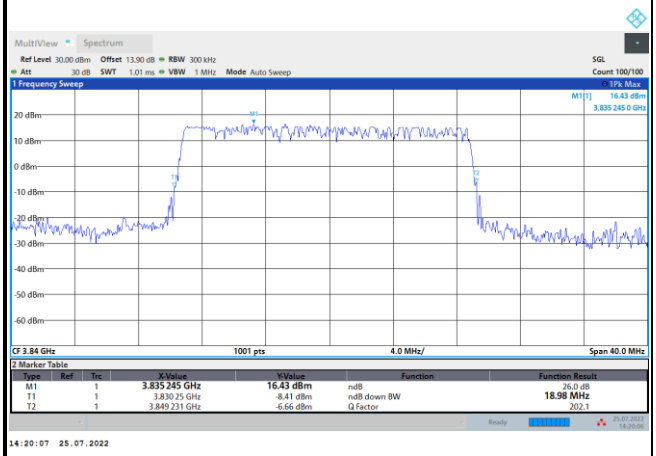
26dB Bandwidth

Mode	FR1 n77 : 26dB BW(MHz) / DFT-S OFDM							
BW	20MHz	25MHz	30MHz	40MHz	50MHz	60MHz	70MHz	80MHz
Mod.	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK	PI/2 BPSK
Middle CH	18.98	-	27.99	38.36	48.35	60.42	66.99	80.08
BW	90MHz	100MHz						
Mod.	PI/2 BPSK	PI/2 BPSK						
Middle CH	89.91	99.70						

Mode	FR1 n77 : 26dB BW(MHz) / CP OFDM							
BW	20MHz		25MHz		30MHz		40MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	19.22	19.26	-	-	29.13	28.77	40.36	40.52
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	19.14	19.06	-	-	28.77	28.77	40.44	40.28
BW	50MHz		60MHz		70MHz		80MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	50.15	49.95	60.54	60.54	70.35	70.63	80.24	80.40
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	50.05	49.95	60.54	60.42	70.21	70.35	80.40	80.24
BW	90MHz		100MHz					
Mod.	QPSK	16QAM	QPSK	16QAM				
Middle CH	90.45	90.45	100.70	100.50				
Mod.	64QAM	256QAM	64QAM	256QAM				
Middle CH	90.27	90.45	100.70	100.30				

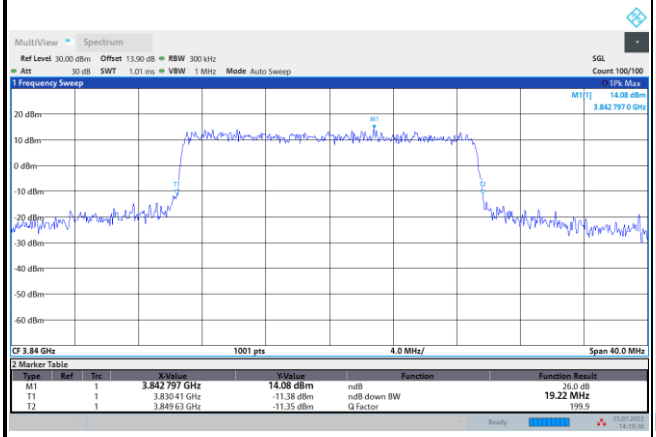
FR1 n77 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

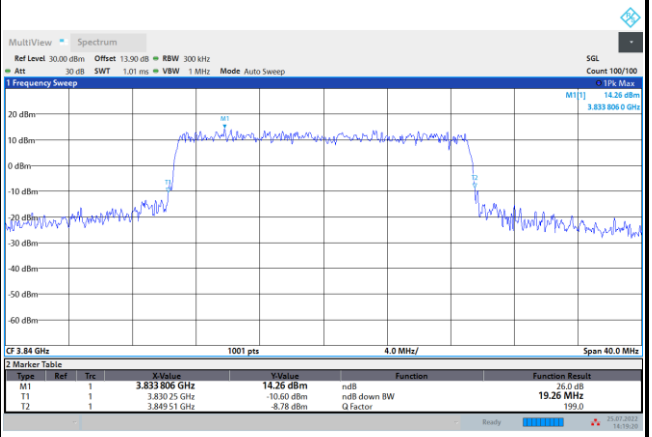


FR1 n77 / 20MHz / CP OFDM / Middle Channel / Full RB

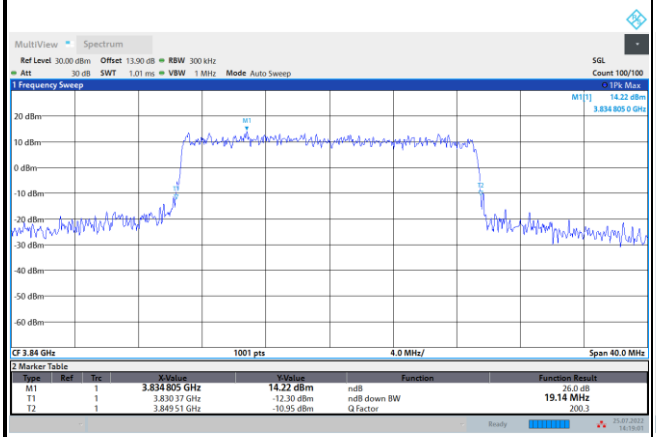
QPSK



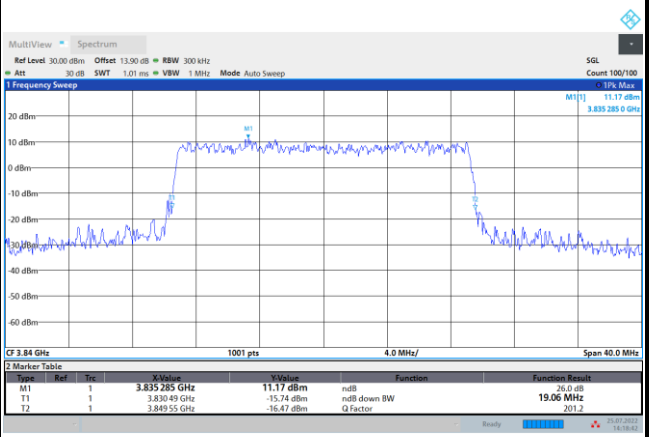
16QAM



64QAM

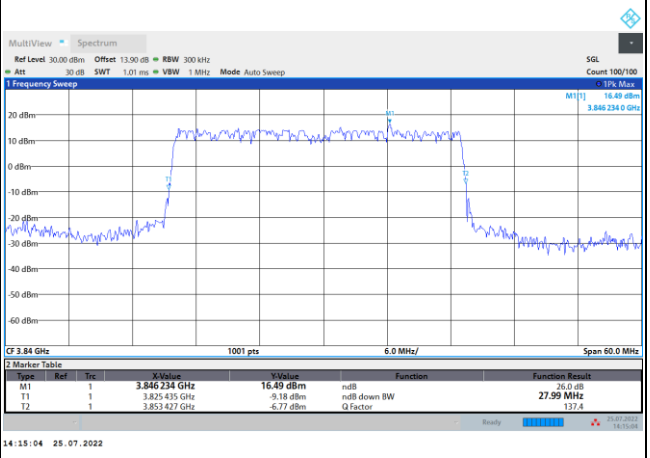


256QAM



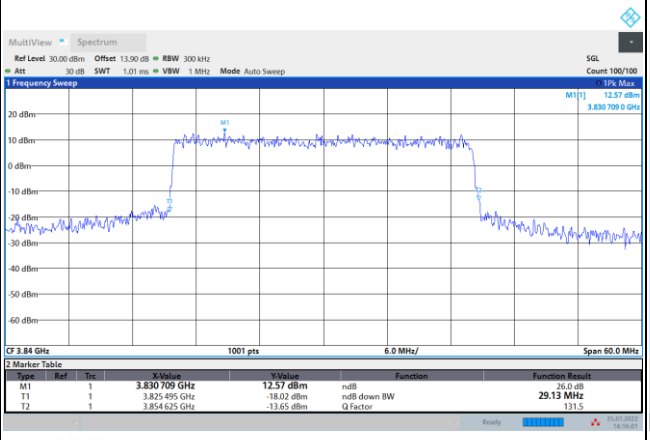
FR1 n77 / 30MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

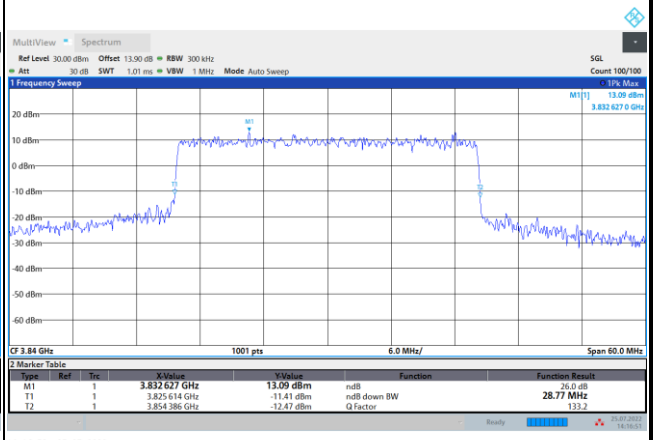


FR1 n77 / 30MHz / CP OFDM / Middle Channel / Full RB

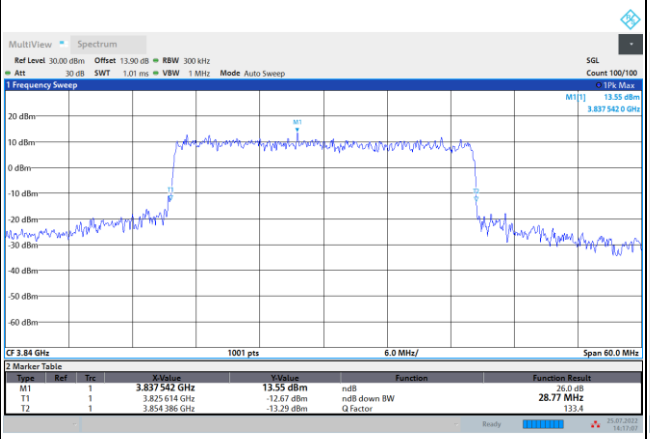
QPSK



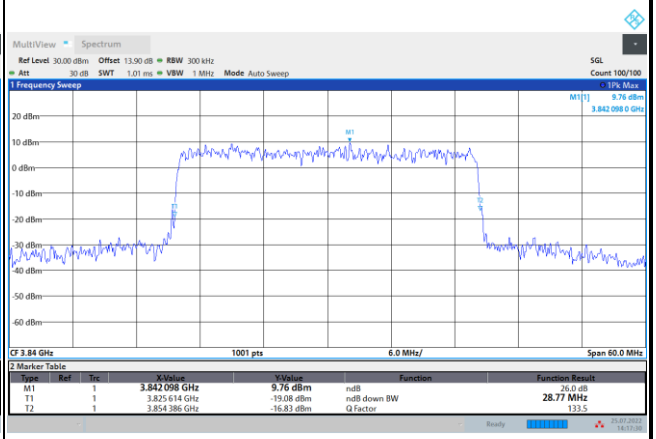
16QAM



64QAM

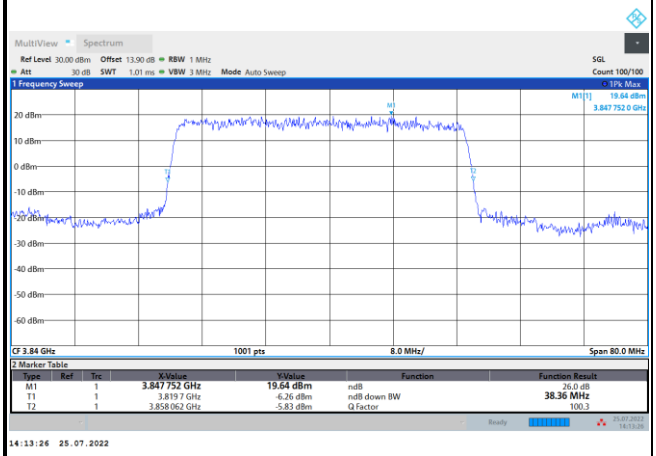


256QAM



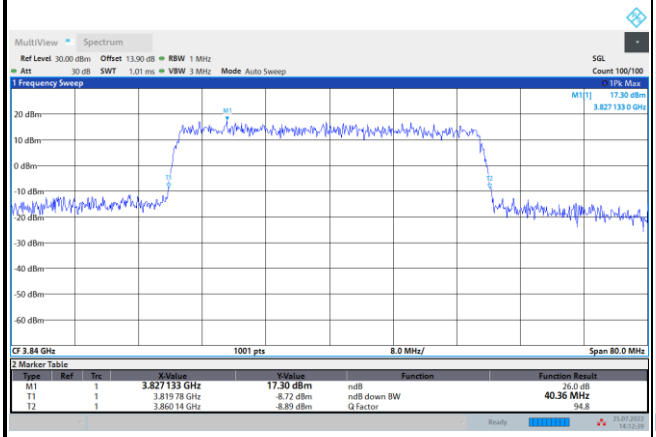
FR1 n77 / 40MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

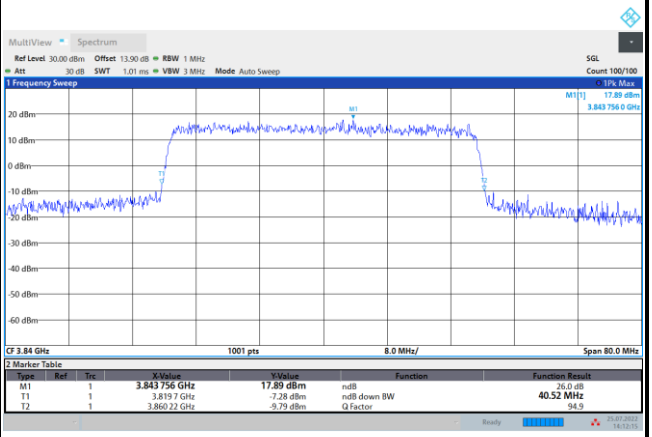


FR1 n77 / 40MHz / CP OFDM / Middle Channel / Full RB

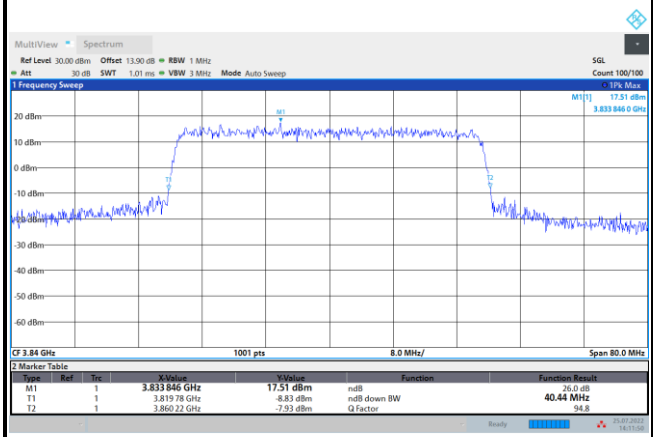
QPSK



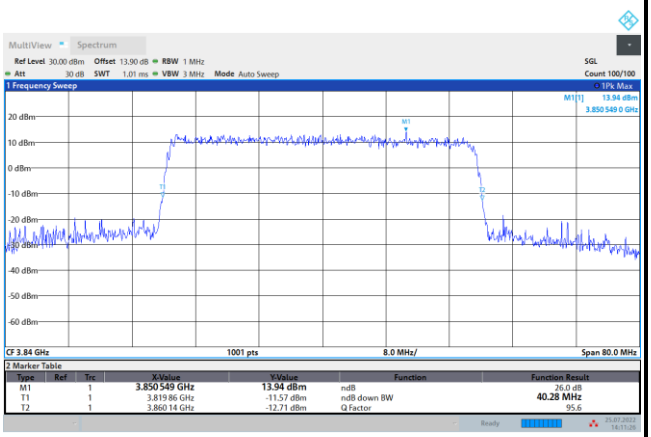
16QAM



64QAM

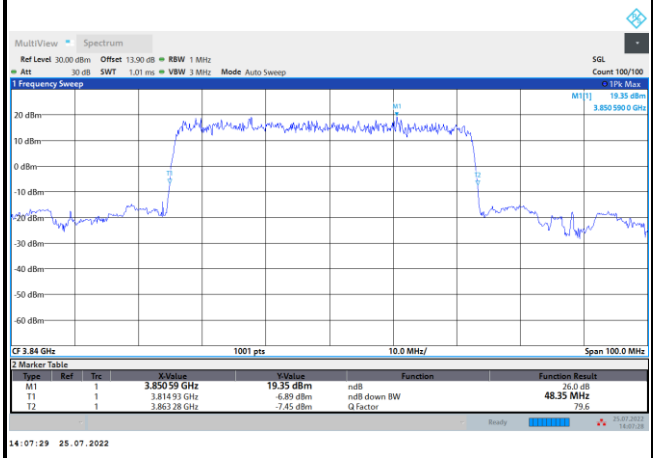


256QAM



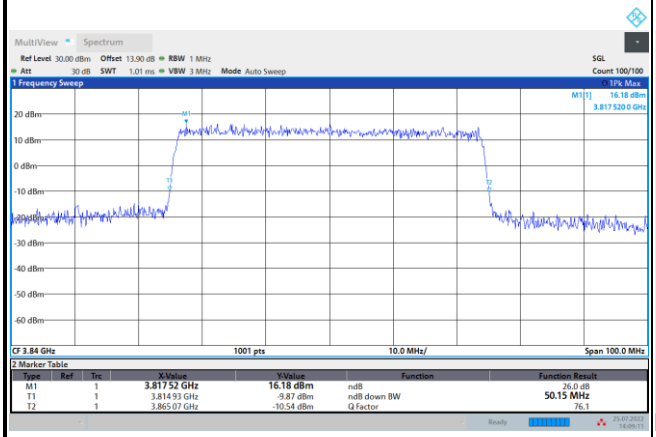
FR1 n77 / 50MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

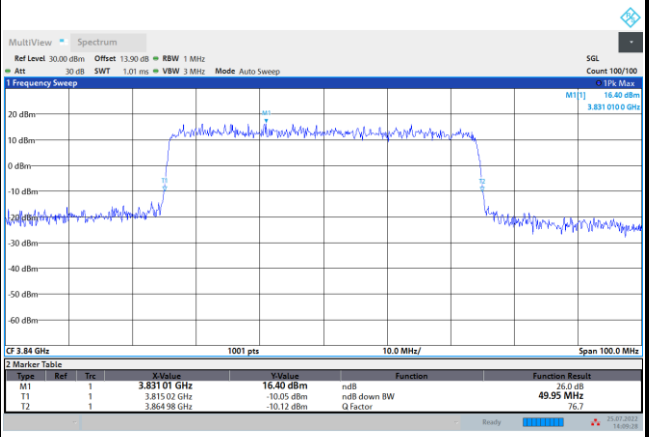


FR1 n77 / 50MHz / CP OFDM / Middle Channel / Full RB

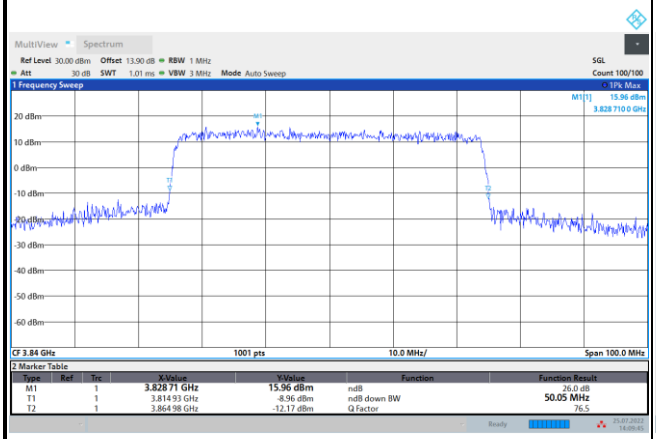
QPSK



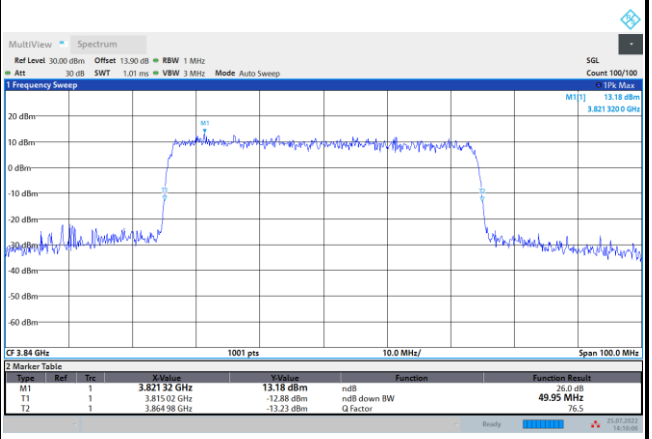
16QAM



64QAM

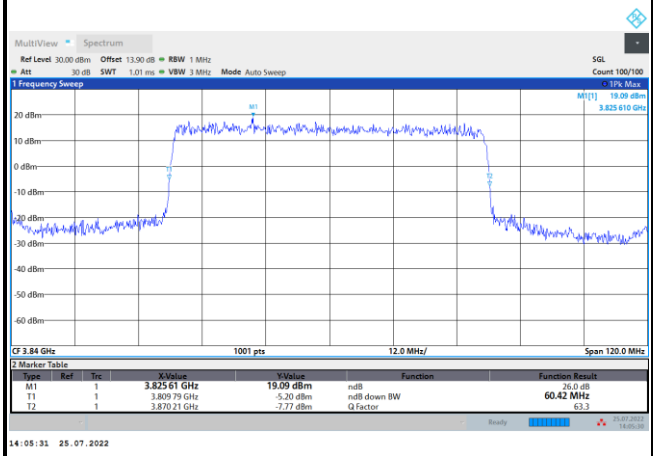


256QAM



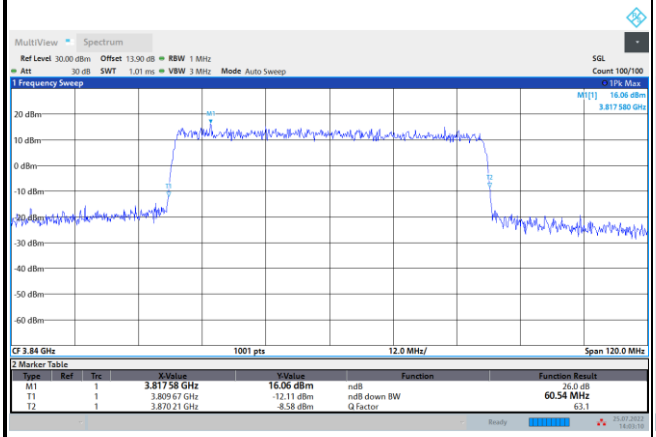
FR1 n77 / 60MHz / DFT-S OFDM / Middle Channel / Full RB

PI/2 BPSK

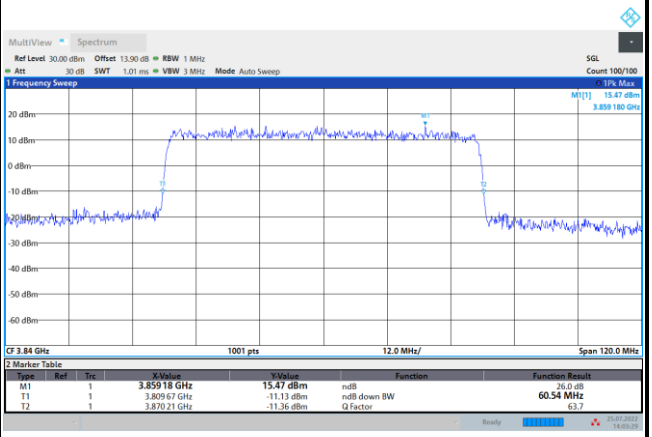


FR1 n77 / 60MHz / CP OFDM / Middle Channel / Full RB

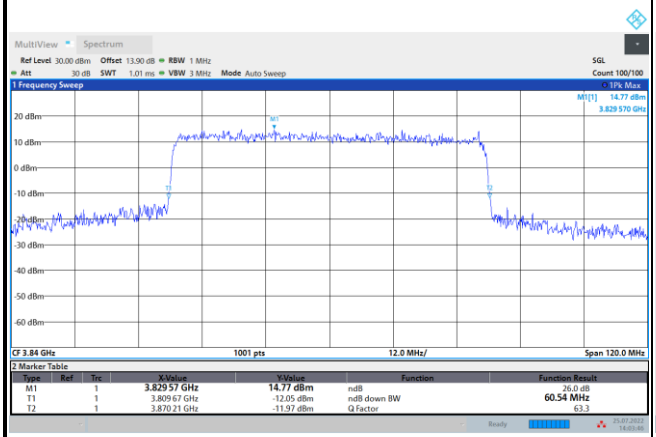
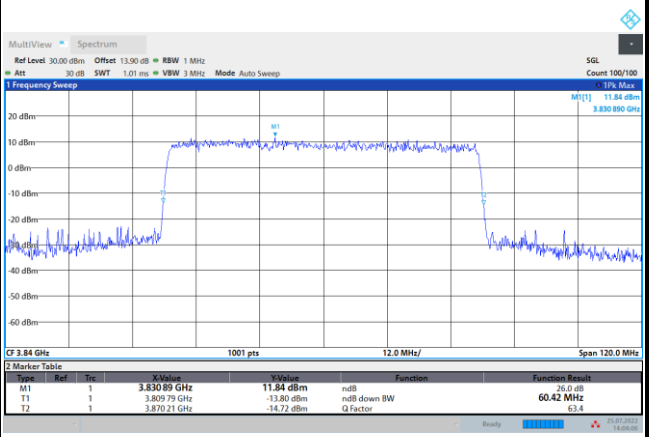
QPSK



16QAM



64QAM



256QAM