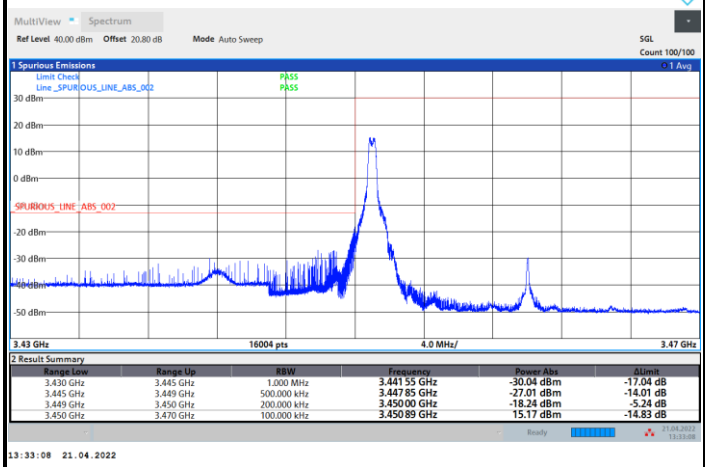
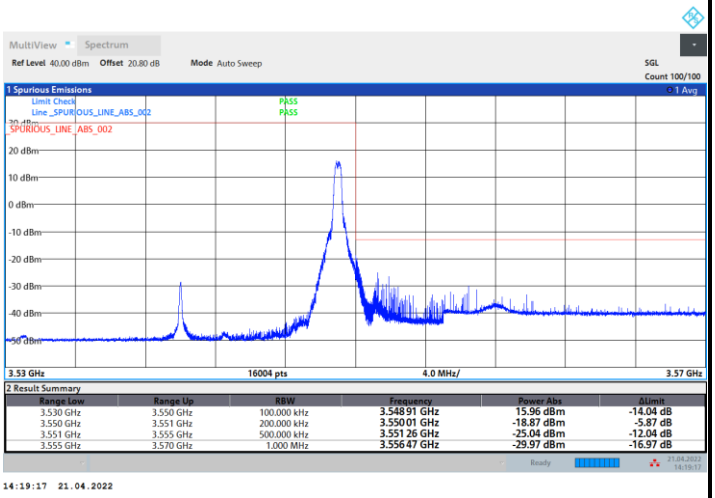
FR1 n77 / 20MHz / DFT-S OFDM / 64QAM

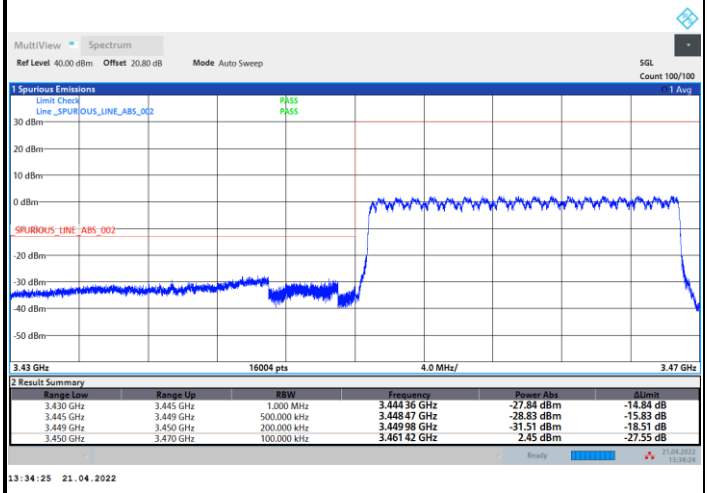
Lowest Band Edge / 1RB0



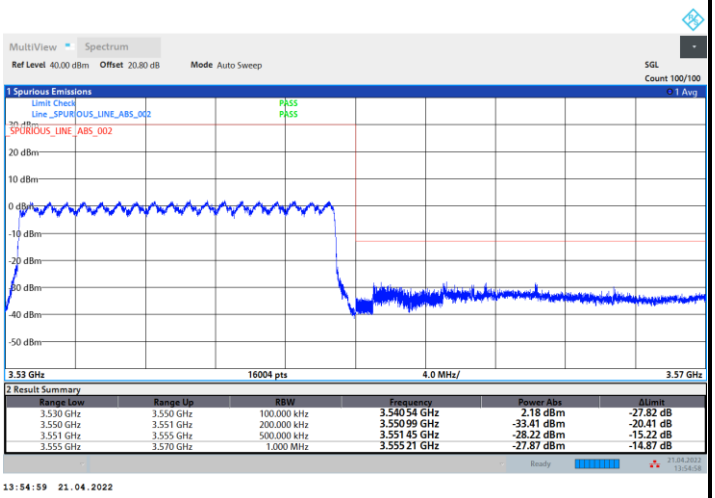
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

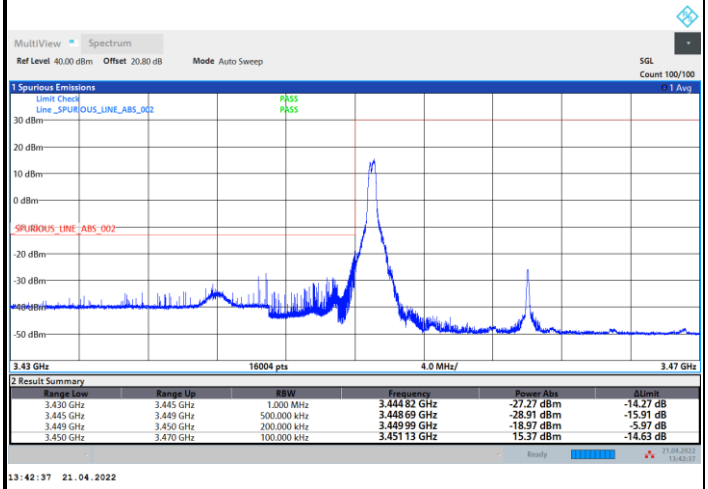


Highest Band Edge / Full RB

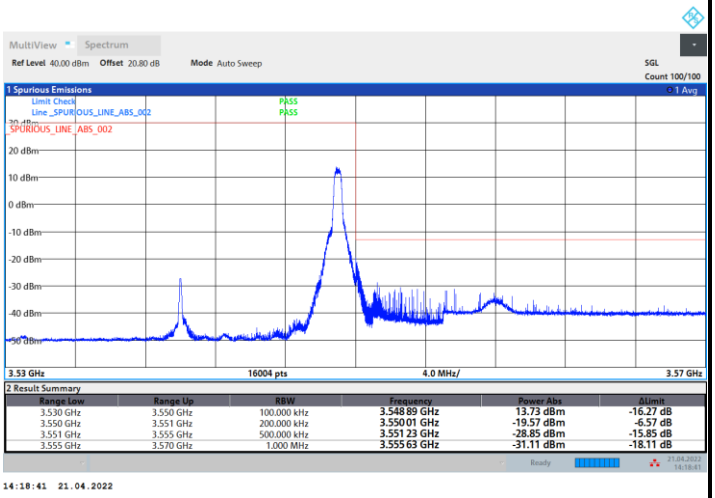


FR1 n77 / 20MHz / DFT-S OFDM / 256QAM

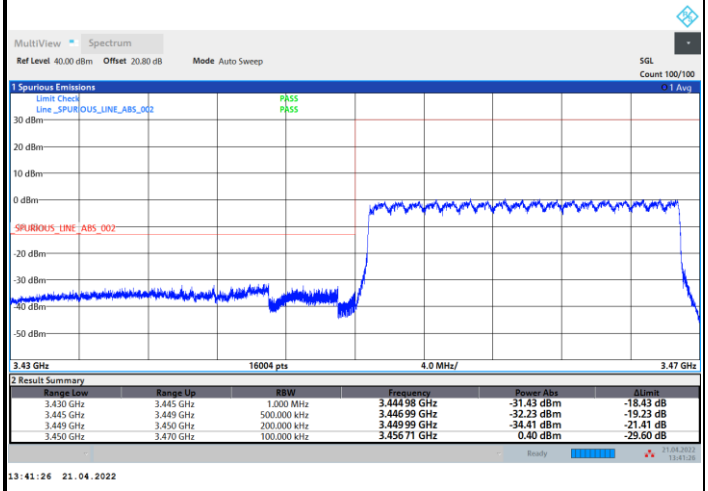
Lowest Band Edge / 1RB0



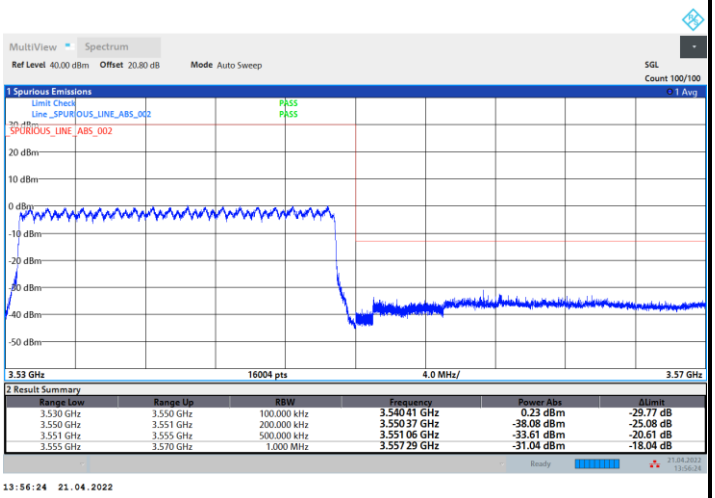
Highest Band Edge / 1RBmax

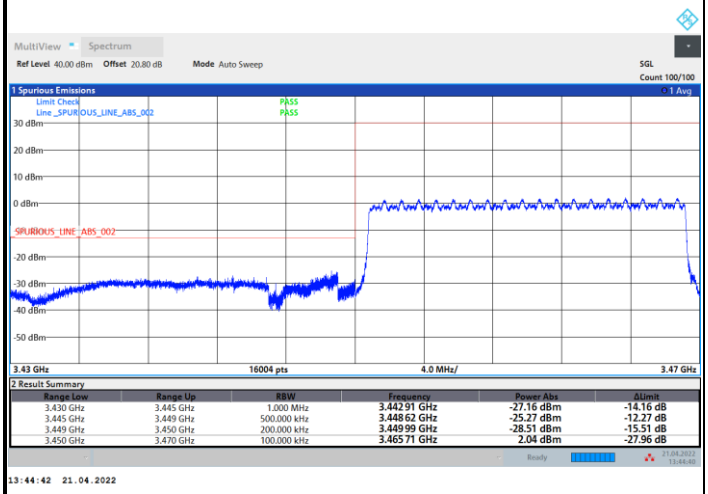
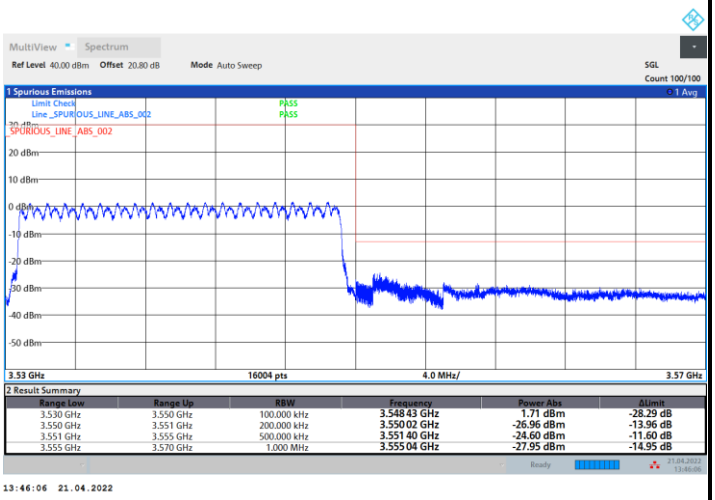


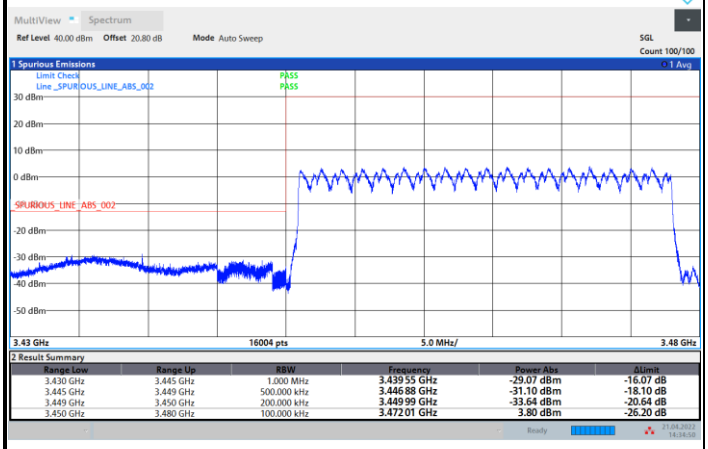
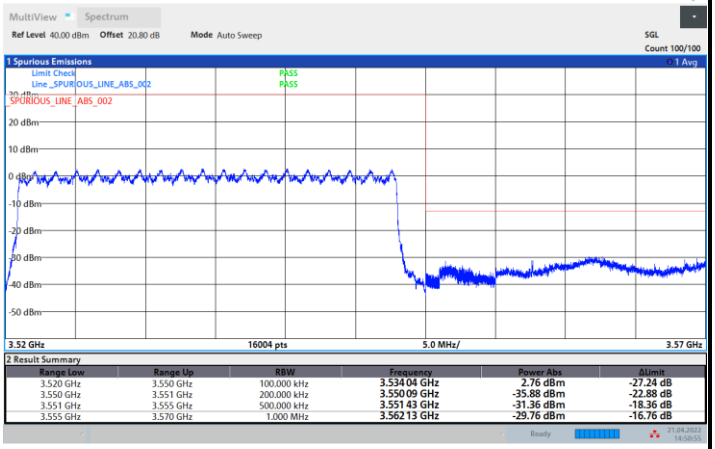
Lowest Band Edge / Full RB

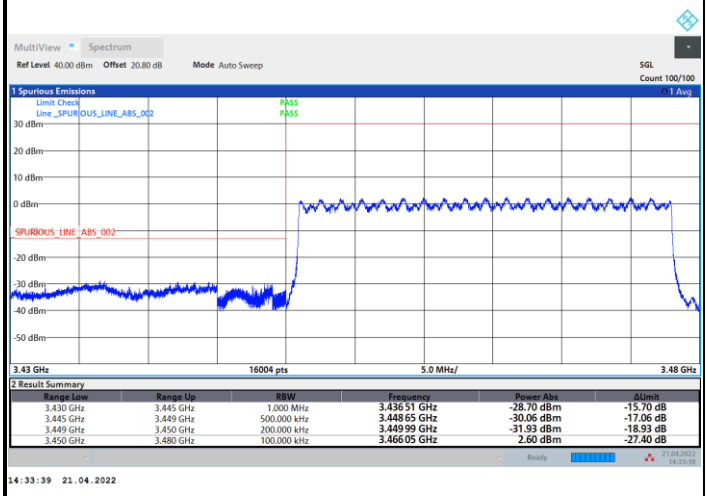
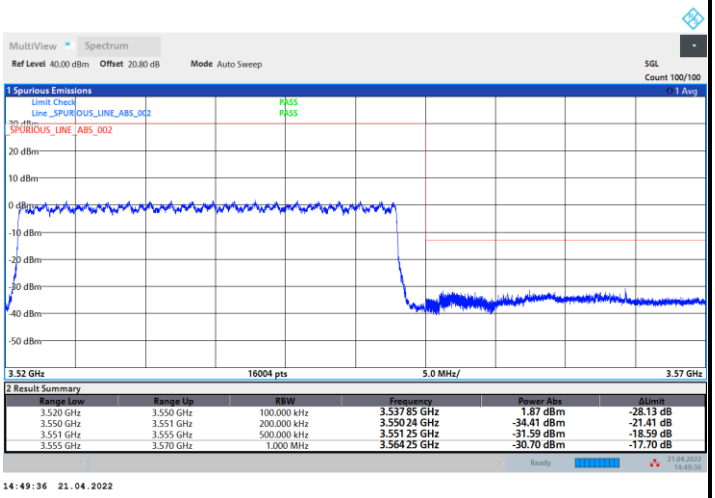


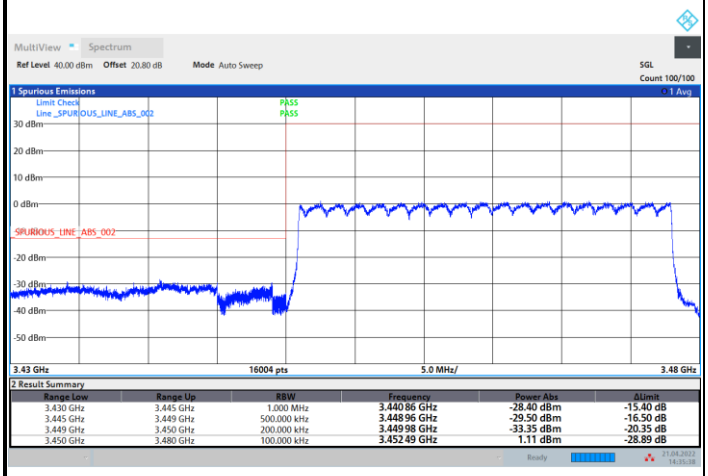
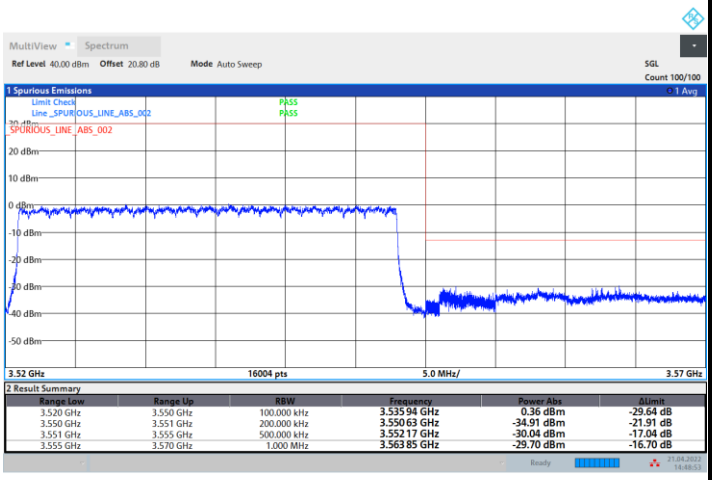
Highest Band Edge / Full RB

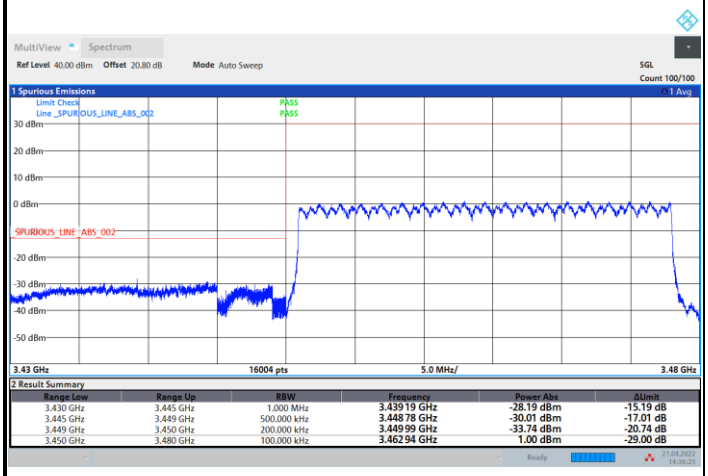
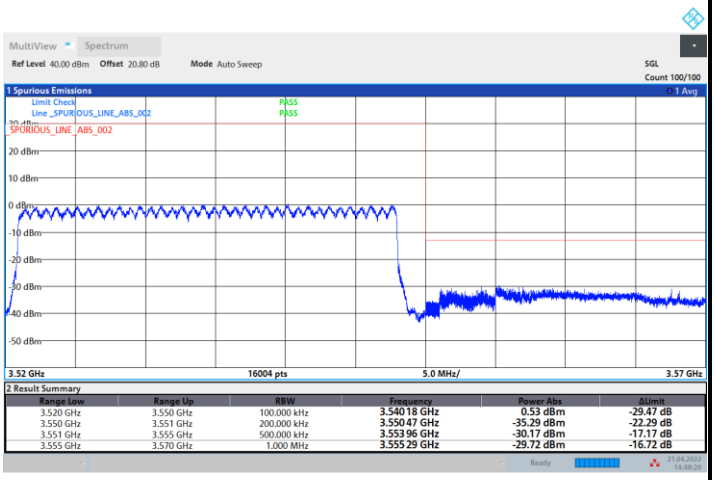


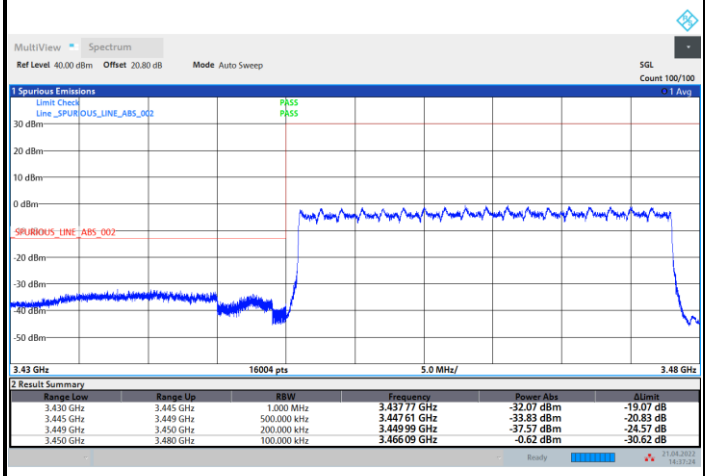
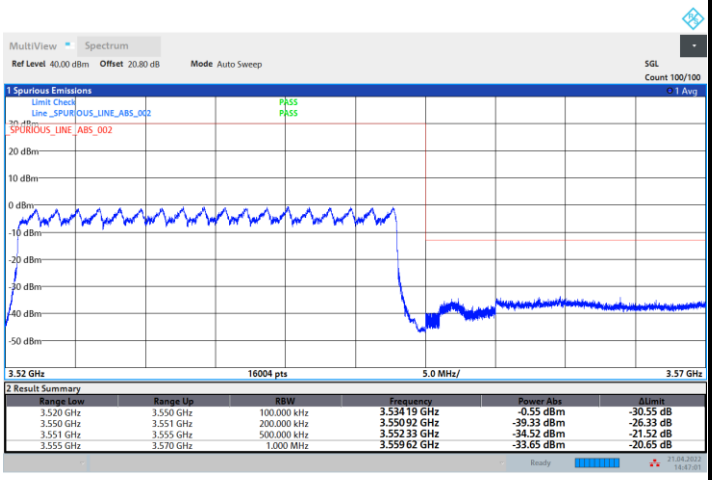
FR1 n77 / 20MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

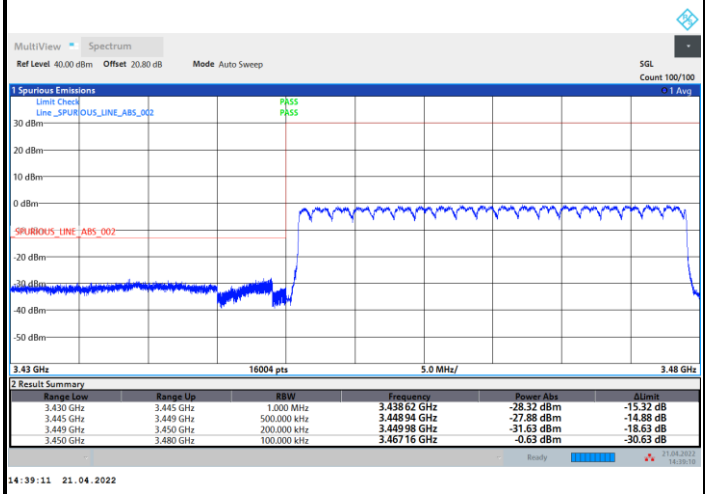
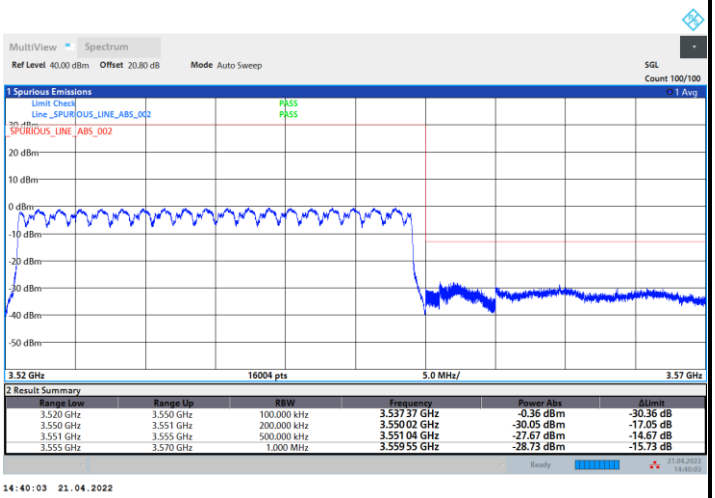
FR1 n77 / 30MHz / DFT-S OFDM / PI/2 BPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

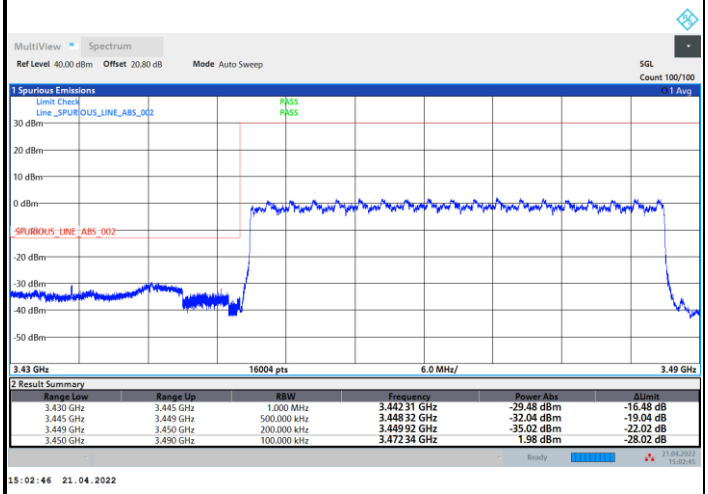
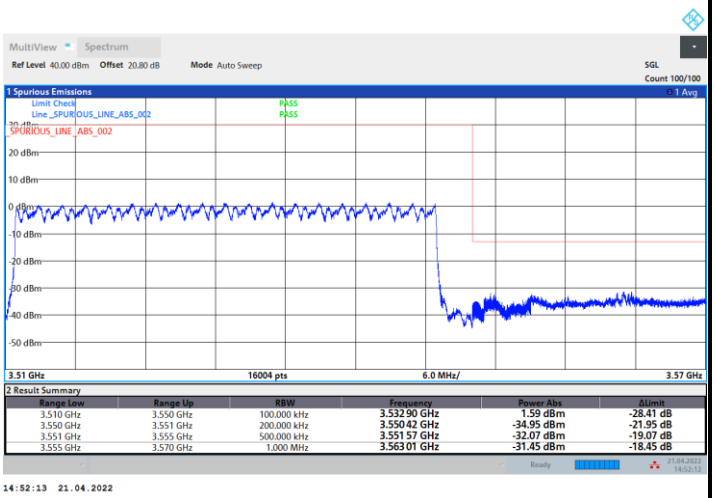
FR1 n77 / 30MHz / DFT-S OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

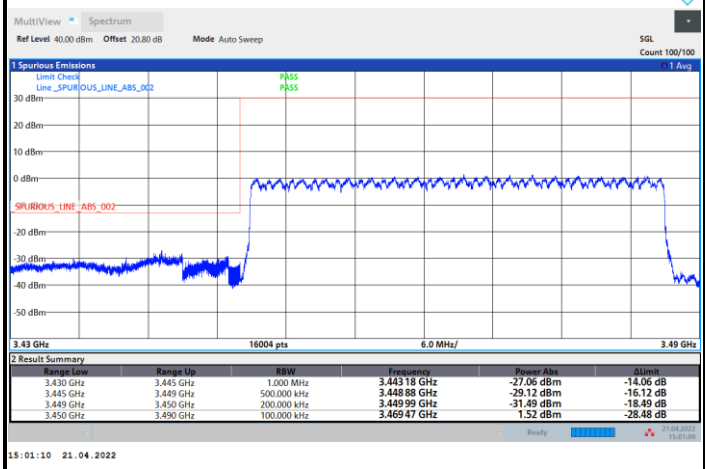
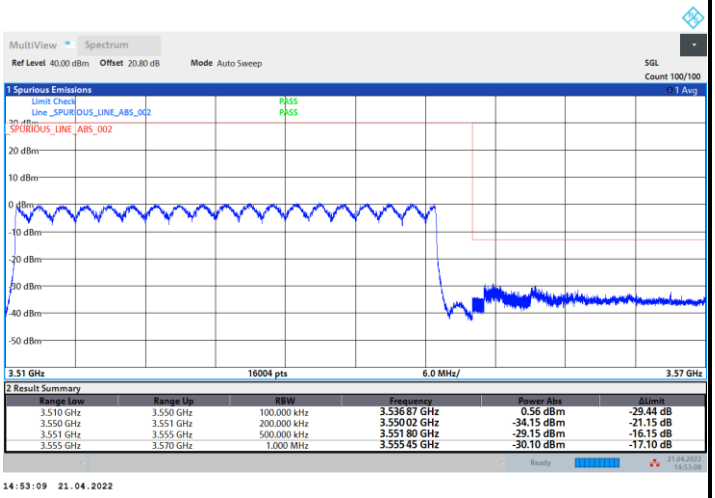
FR1 n77 / 30MHz / DFT-S OFDM / 16QAM / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

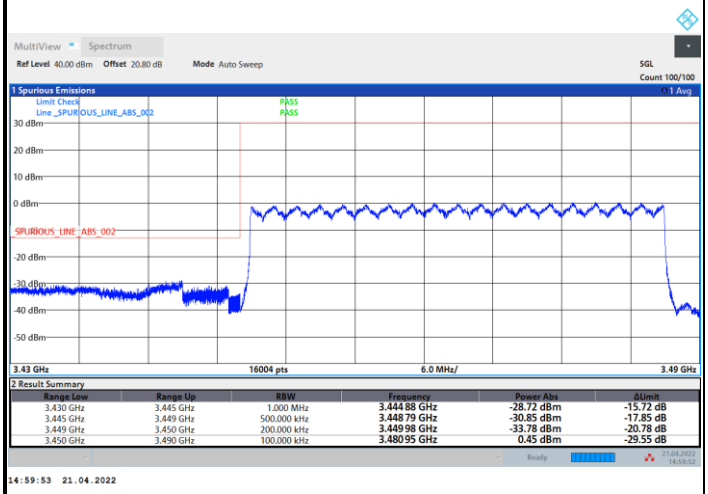
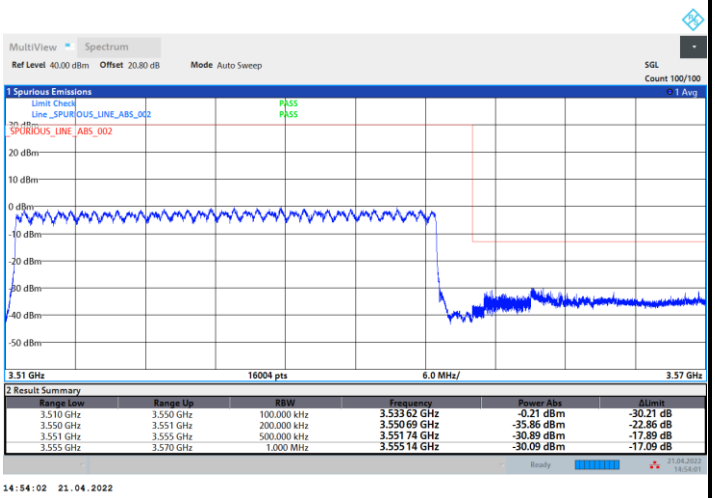
FR1 n77 / 30MHz / DFT-S OFDM / 64QAM / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

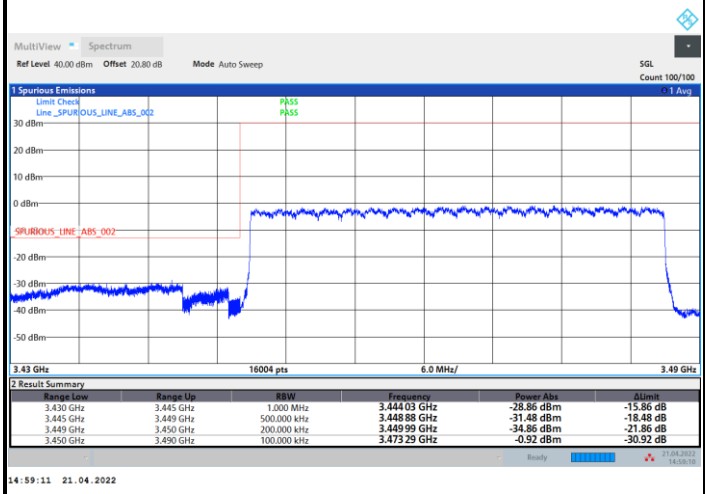
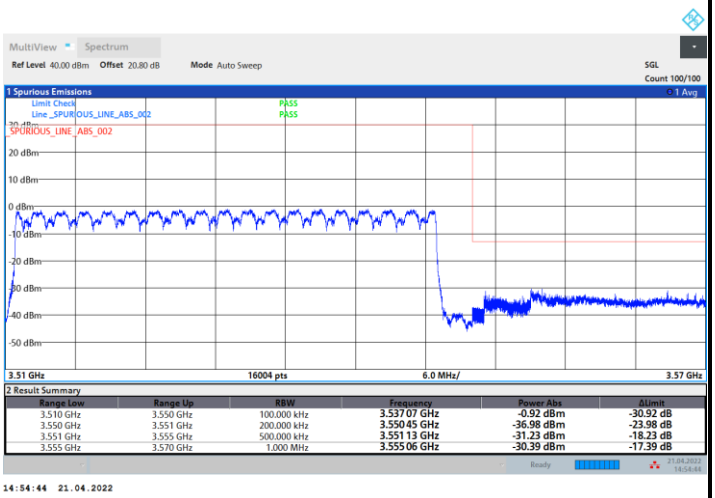
FR1 n77 / 30MHz / DFT-S OFDM / 256QAM / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

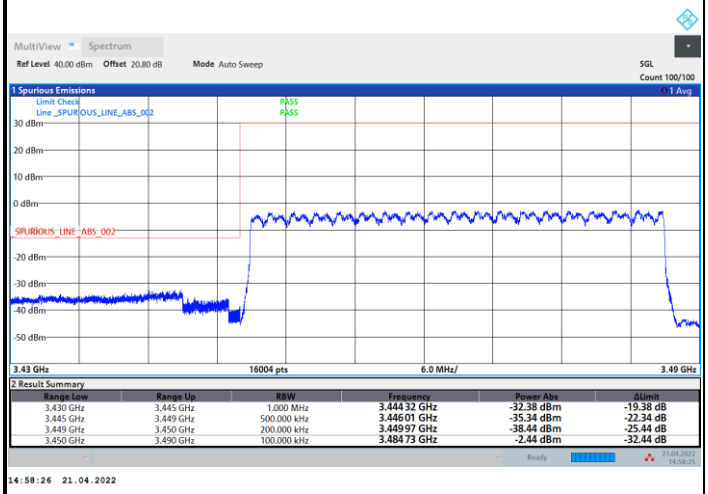
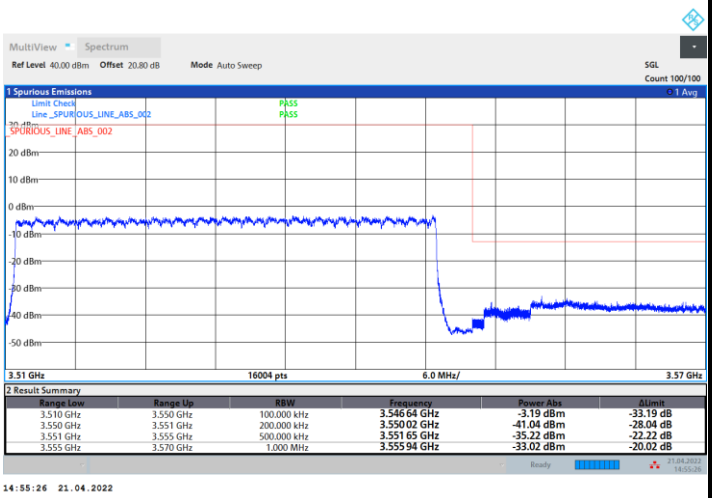
FR1 n77 / 30MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

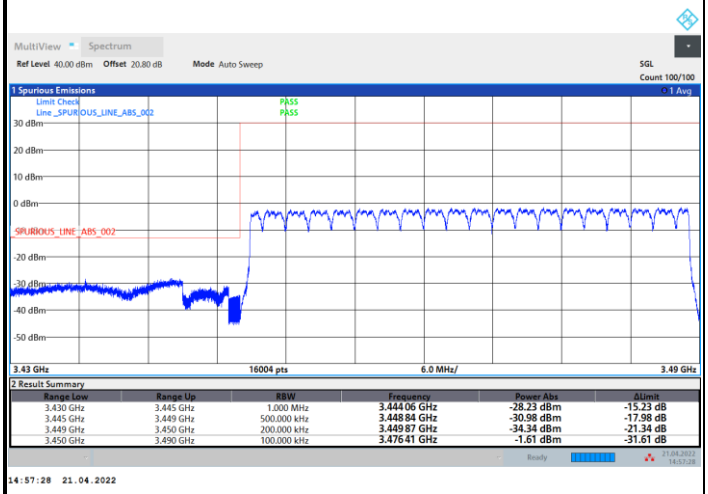
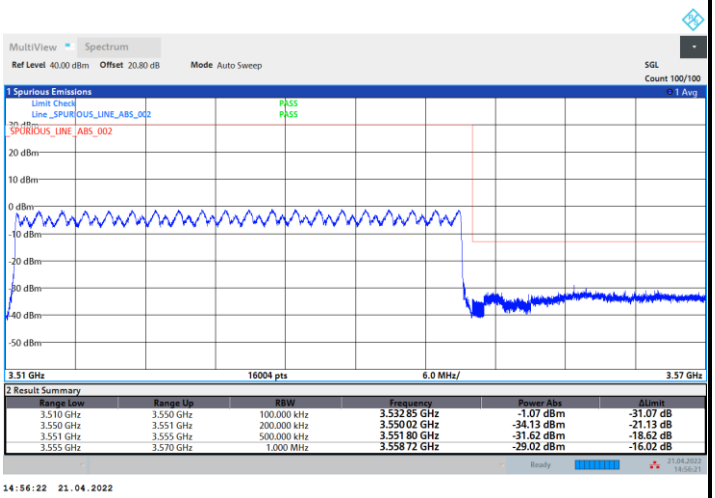
FR1 n77 / 40MHz / DFT-S OFDM / PI/2 BPSK / Full RB	
Lowest Band Edge	Highest Band Edge
	

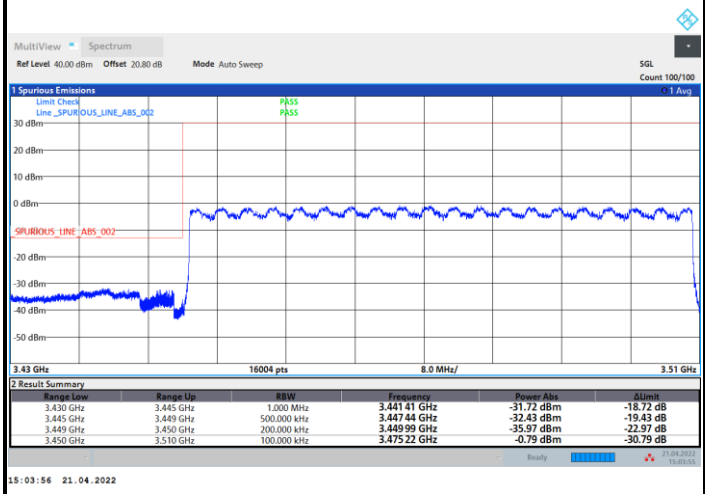
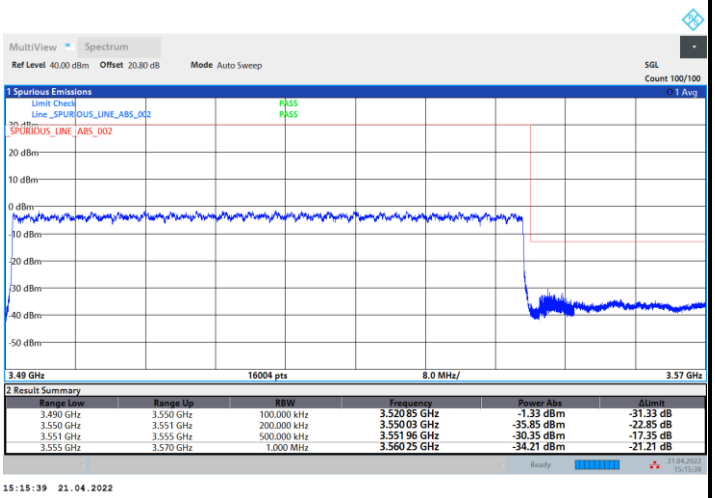
FR1 n77 / 40MHz / DFT-S OFDM / QPSK / Full RB	
Lowest Band Edge	Highest Band Edge
	

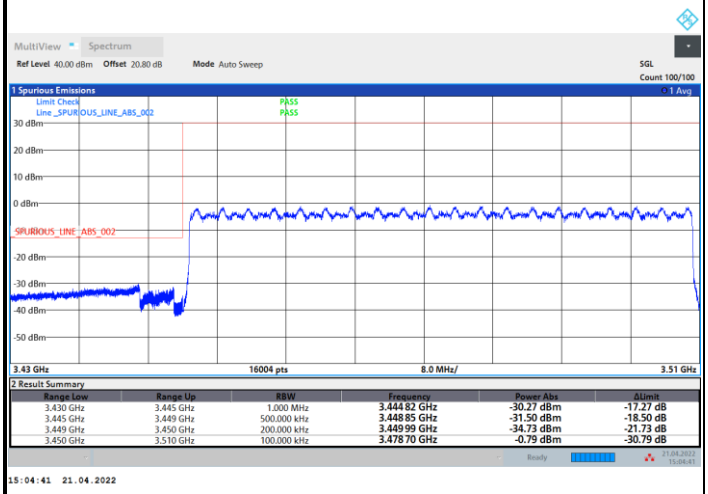
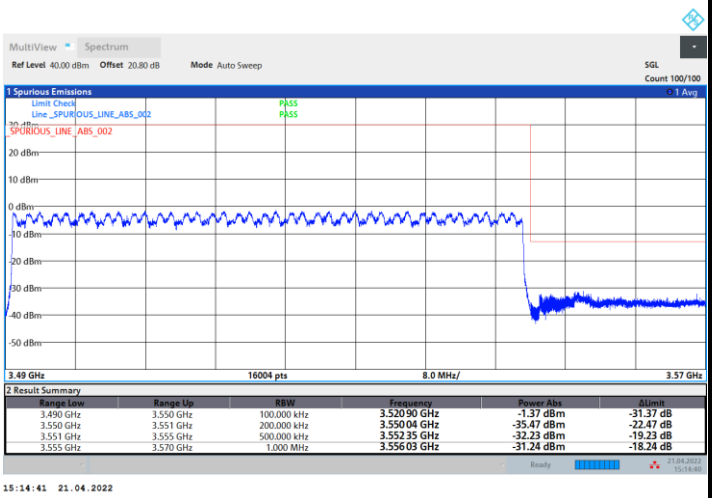
FR1 n77 / 40MHz / DFT-S OFDM / 16QAM / Full RB	
Lowest Band Edge	Highest Band Edge
	

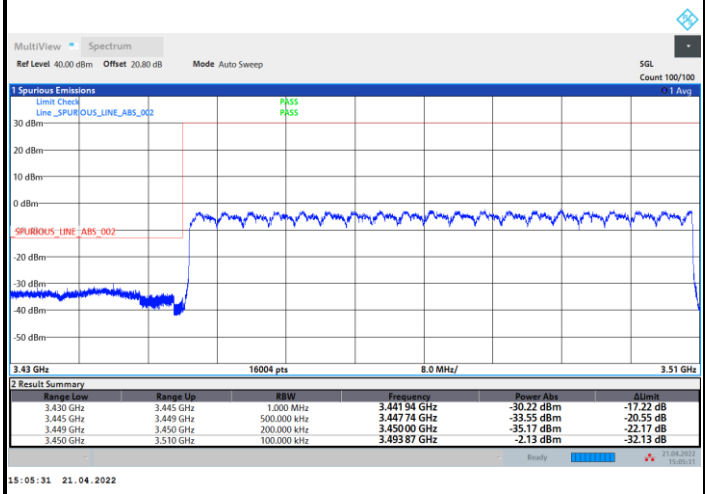
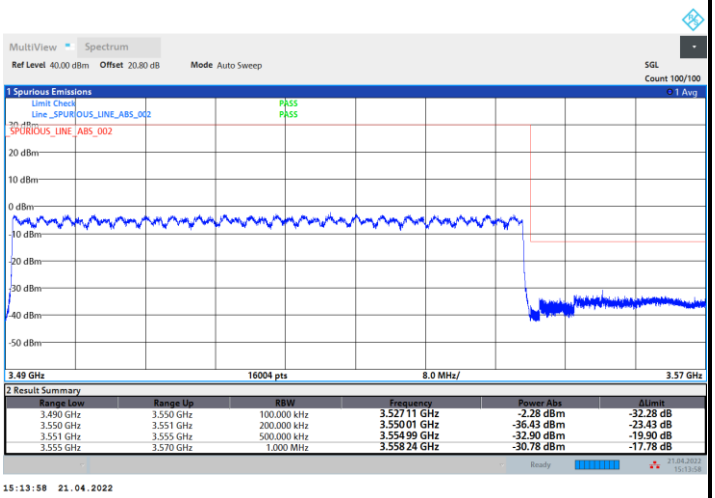
FR1 n77 / 40MHz / DFT-S OFDM / 64QAM / Full RB	
Lowest Band Edge	Highest Band Edge
	

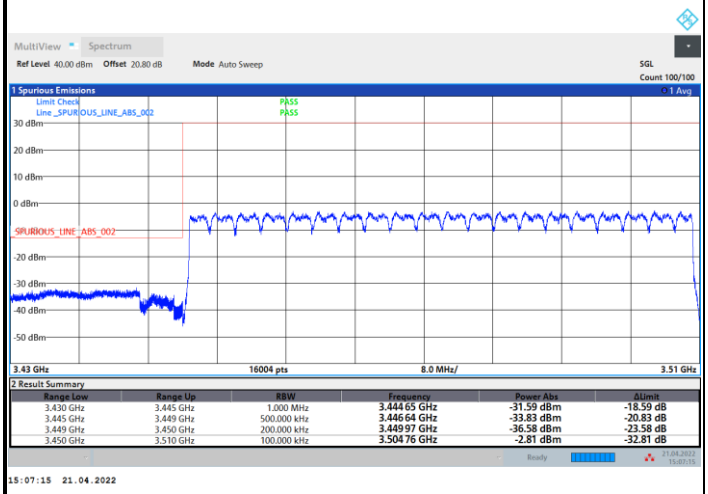
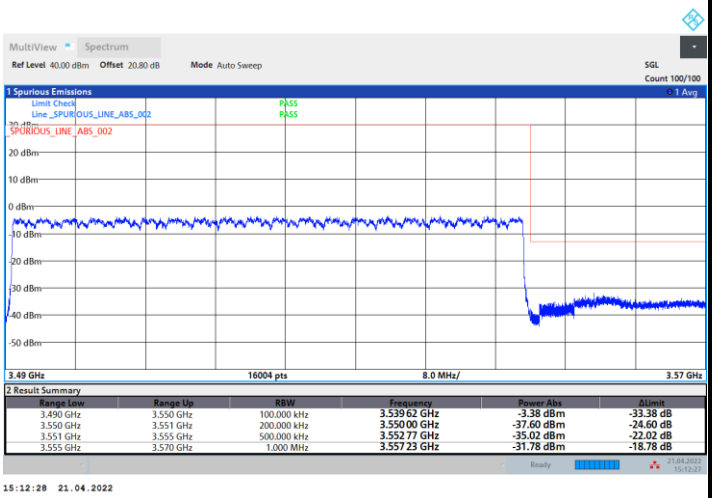
FR1 n77 / 40MHz / DFT-S OFDM / 256QAM / Full RB	
Lowest Band Edge	Highest Band Edge
	

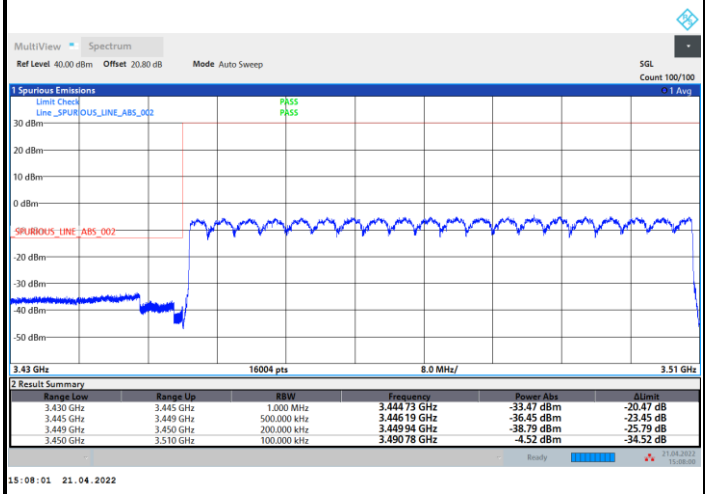
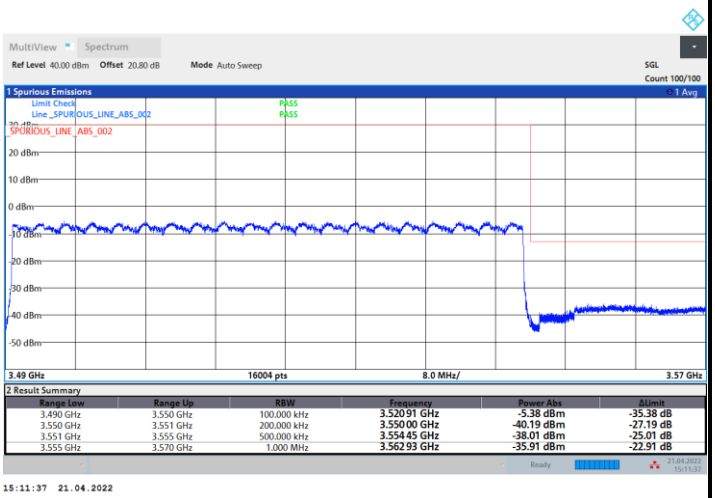
FR1 n77 / 40MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

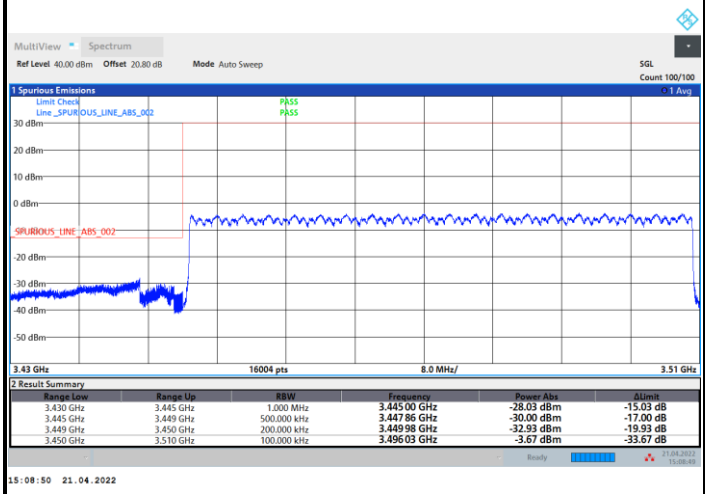
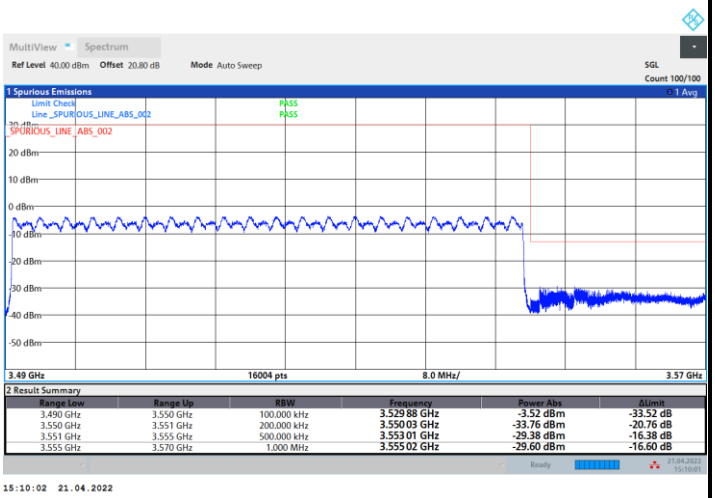
FR1 n77 / 60MHz / DFT-S OFDM / PI/2 BPSK / Full RB	
Lowest Band Edge	Highest Band Edge
	

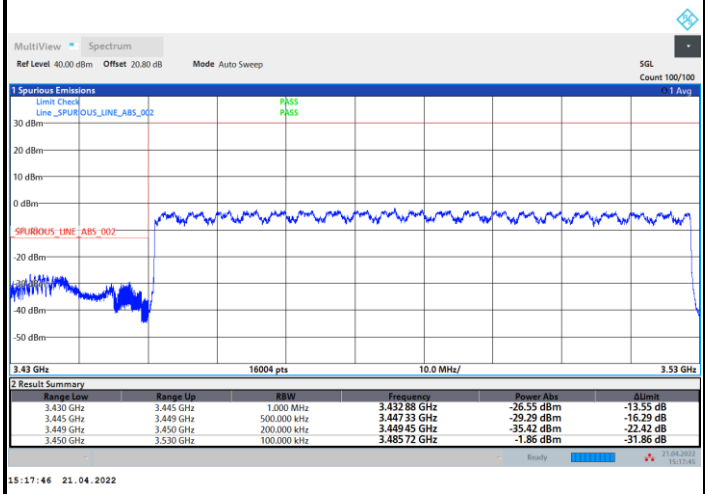
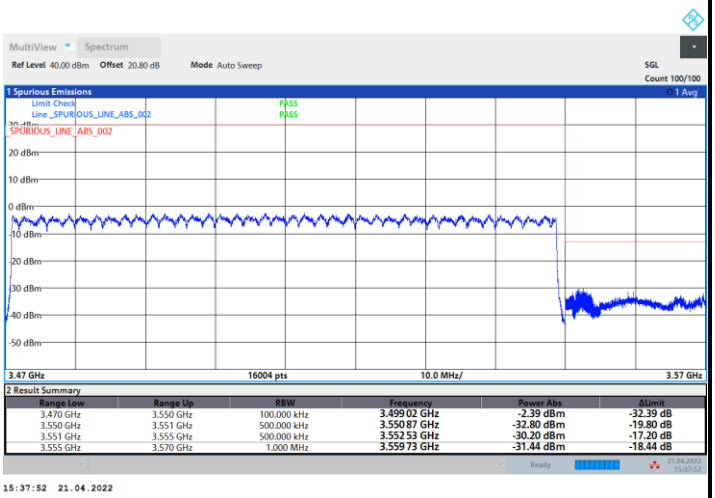
FR1 n77 / 60MHz / DFT-S OFDM / QPSK / Full RB	
Lowest Band Edge	Highest Band Edge
	

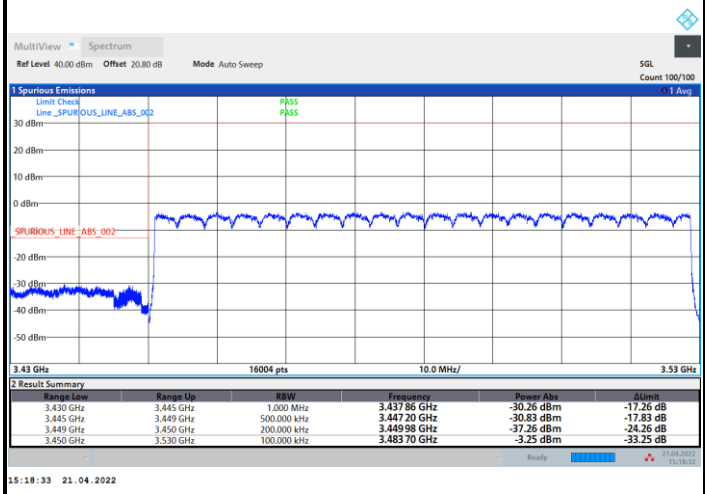
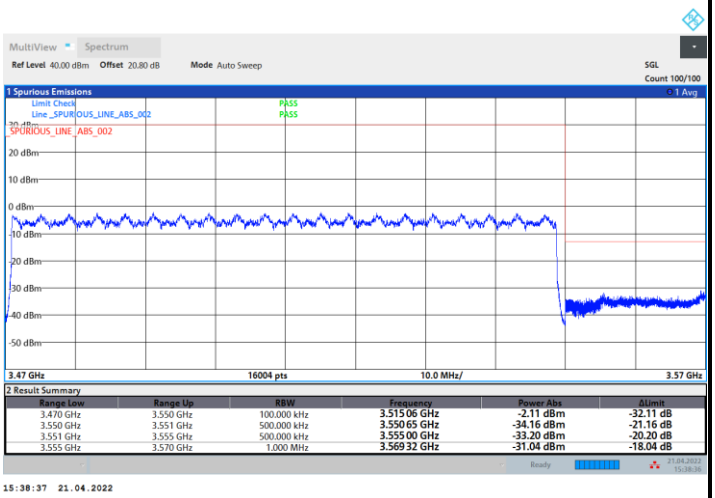
FR1 n77 / 60MHz / DFT-S OFDM / 16QAM / Full RB	
Lowest Band Edge	Highest Band Edge
	

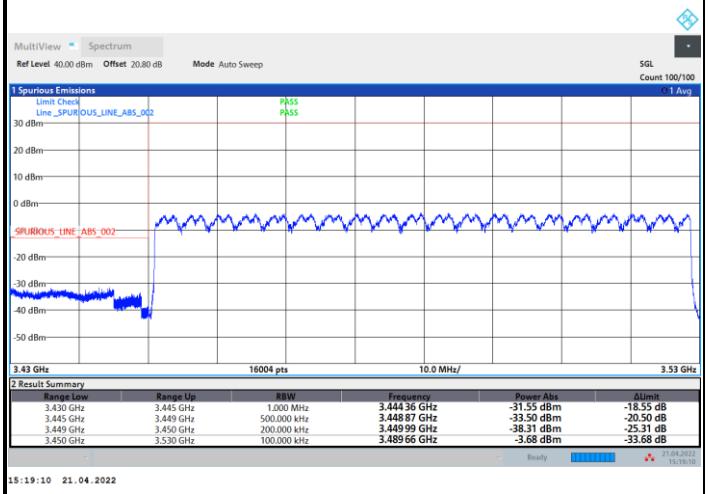
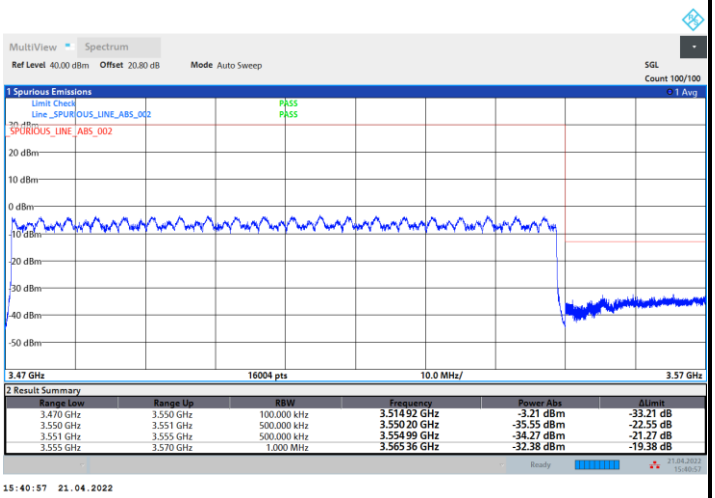
FR1 n77 / 60MHz / DFT-S OFDM / 64QAM / Full RB	
Lowest Band Edge	Highest Band Edge
	

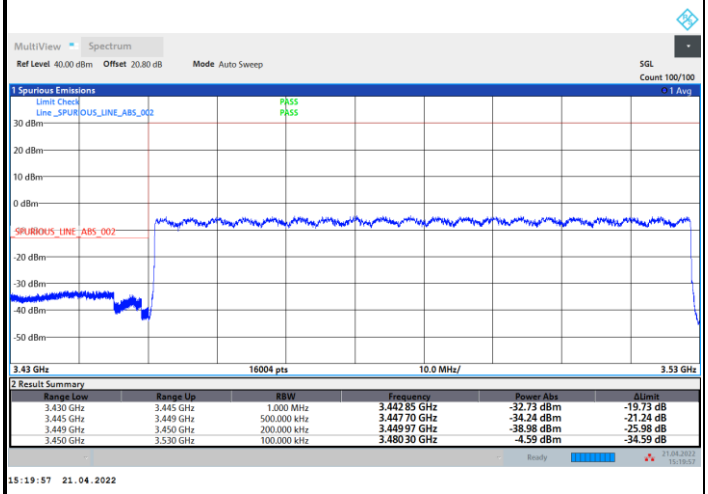
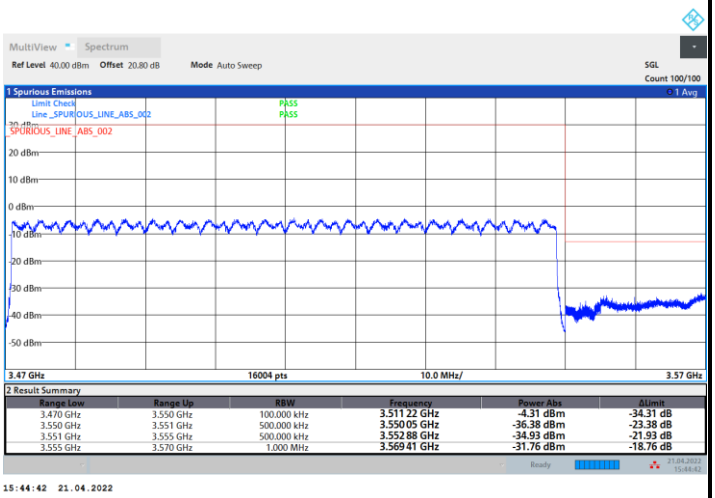
FR1 n77 / 60MHz / DFT-S OFDM / 256QAM / Full RB	
Lowest Band Edge	Highest Band Edge
	

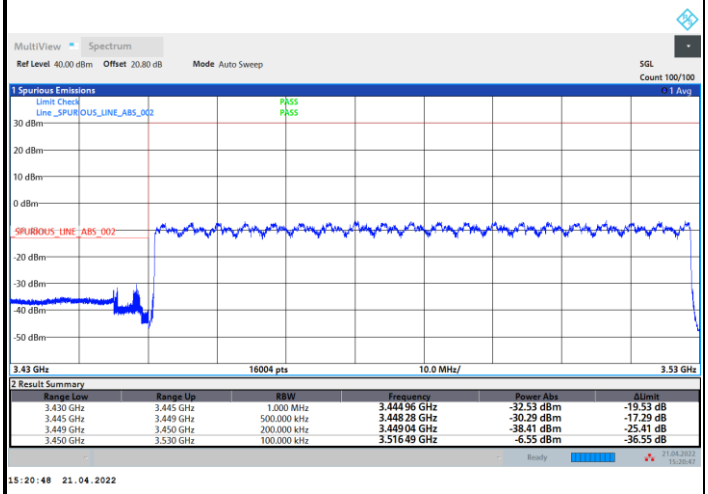
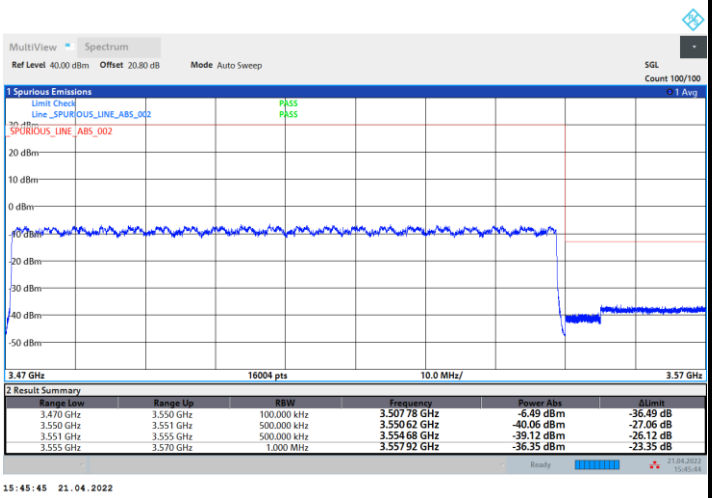
FR1 n77 / 60MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

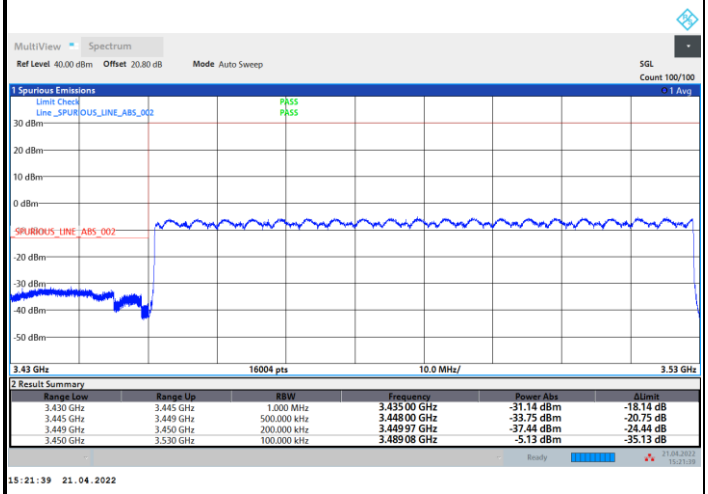
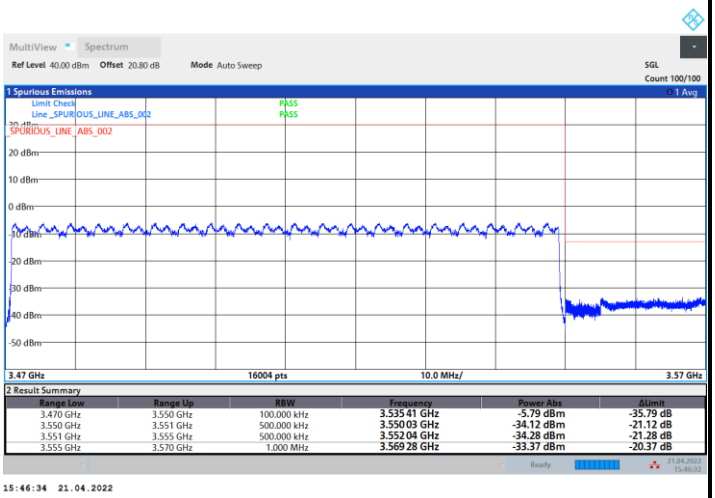
FR1 n77 / 80MHz / DFT-S OFDM / PI/2 BPSK / Full RB	
Lowest Band Edge	Highest Band Edge
	

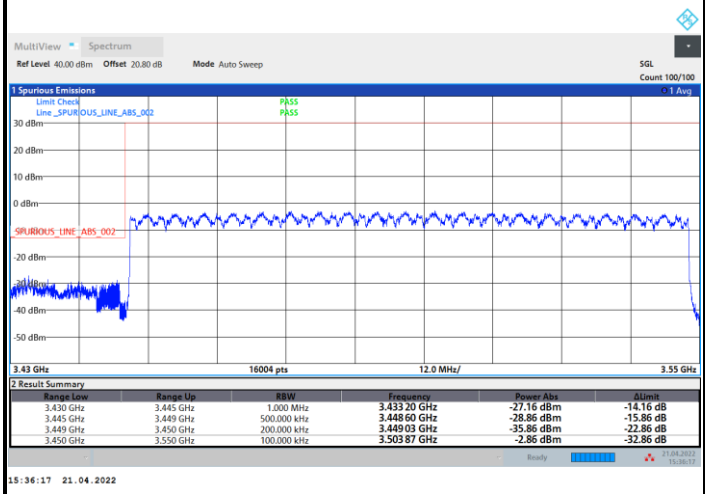
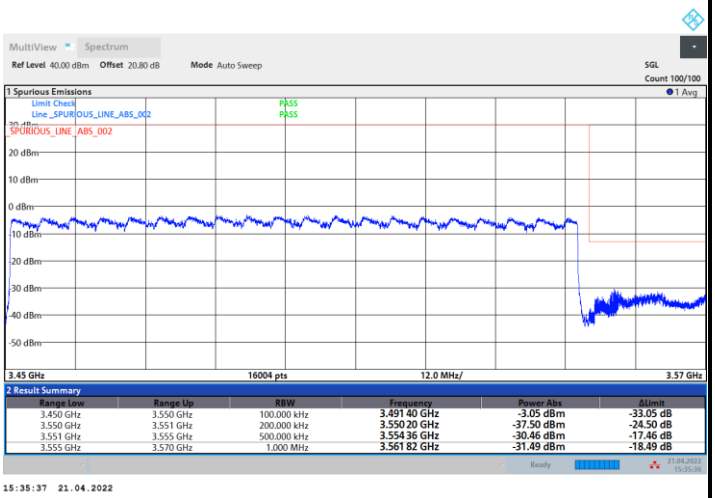
FR1 n77 / 80MHz / DFT-S OFDM / QPSK / Full RB	
Lowest Band Edge	Highest Band Edge
	

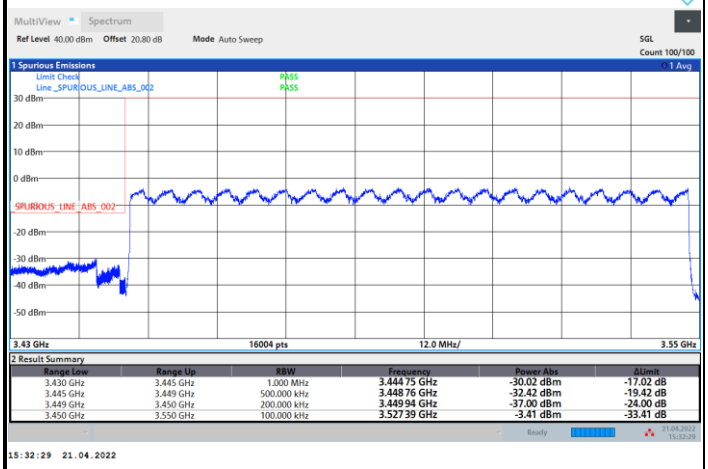
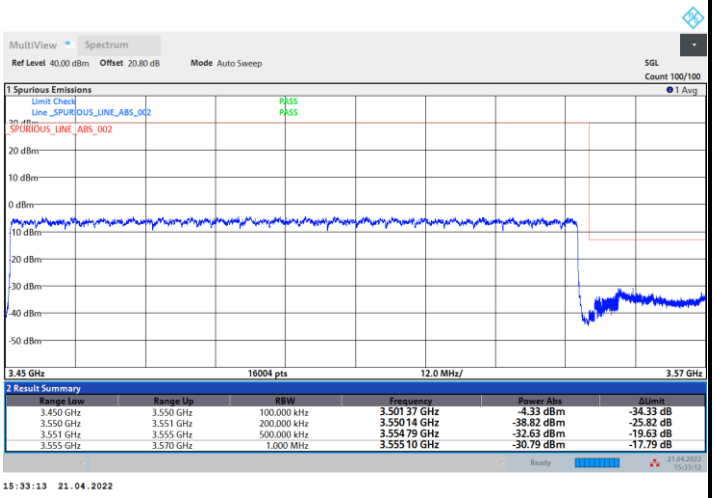
FR1 n77 / 80MHz / DFT-S OFDM / 16QAM / Full RB	
Lowest Band Edge	Highest Band Edge
	

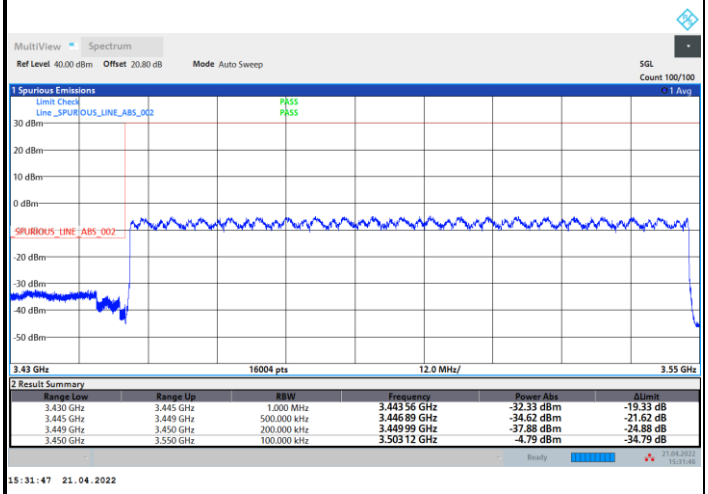
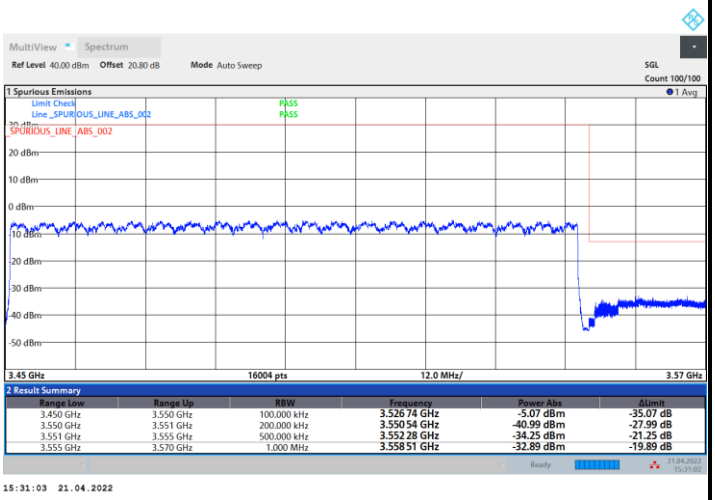
FR1 n77 / 80MHz / DFT-S OFDM / 64QAM / Full RB	
Lowest Band Edge	Highest Band Edge
	

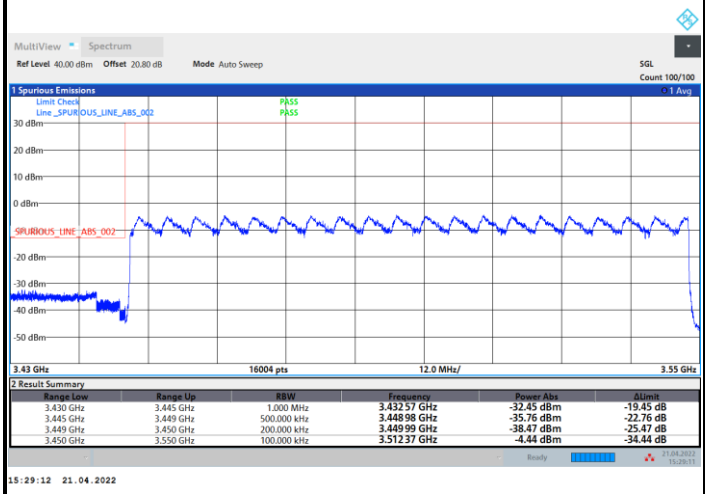
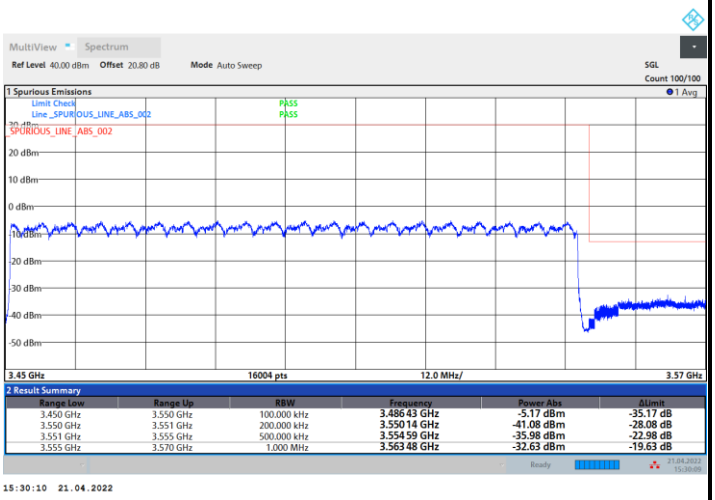
FR1 n77 / 80MHz / DFT-S OFDM / 256QAM / Full RB	
Lowest Band Edge	Highest Band Edge
	

FR1 n77 / 80MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

FR1 n77 / 100MHz / DFT-S OFDM / PI/2 BPSK / Full RB	
Lowest Band Edge	Highest Band Edge
	

FR1 n77 / 100MHz / DFT-S OFDM / QPSK / Full RB	
Lowest Band Edge	Highest Band Edge
	

FR1 n77 / 100MHz / DFT-S OFDM / 16QAM / Full RB	
Lowest Band Edge	Highest Band Edge
	

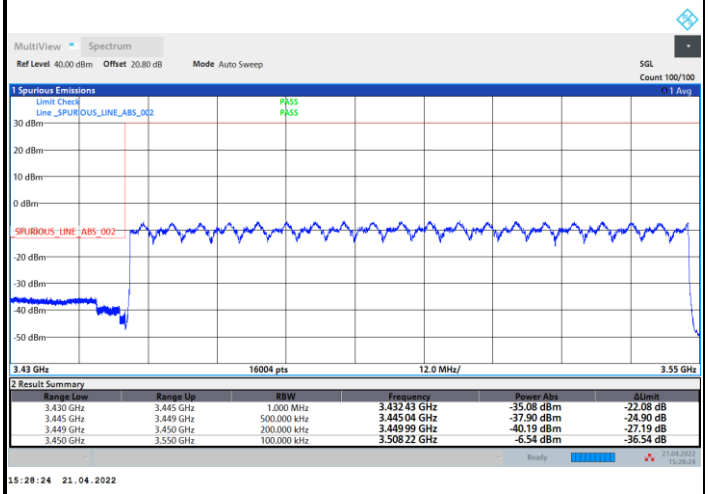
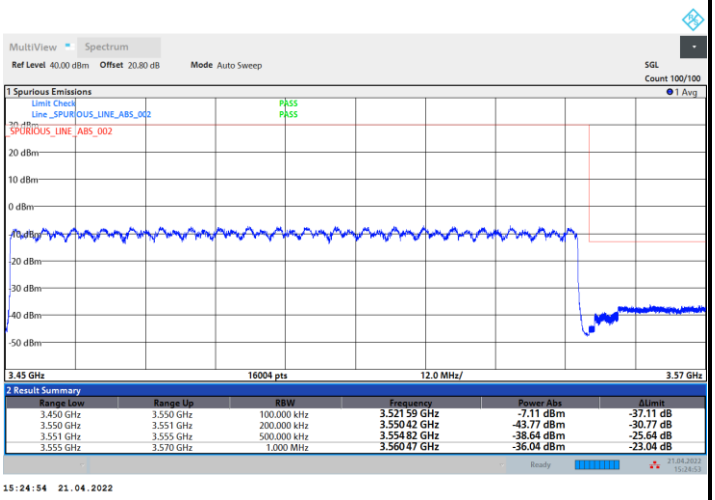
FR1 n77 / 100MHz / DFT-S OFDM / 64QAM / Full RB	
Lowest Band Edge	Highest Band Edge
	

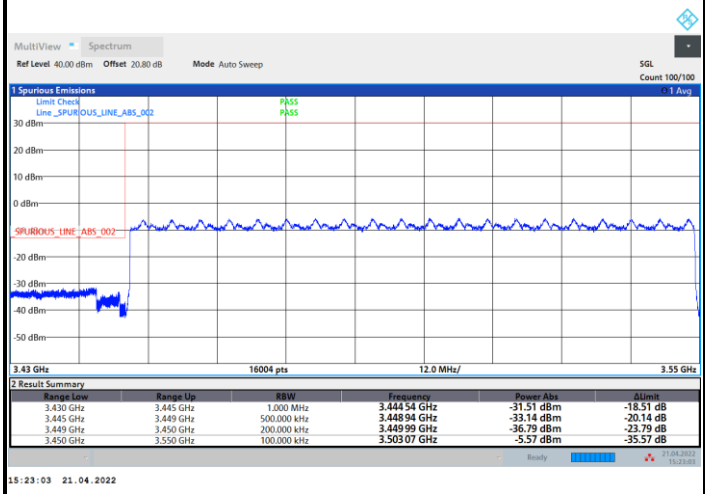
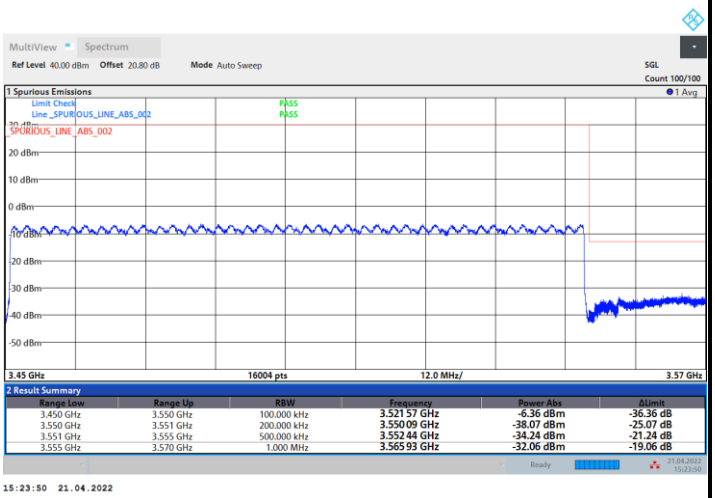
2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.430 GHz	3.445 GHz	1.000 MHz	3.43257 GHz	-32.45 dBm	-19.45 dB
3.445 GHz	3.449 GHz	500.000 kHz	3.44898 GHz	-35.76 dBm	-22.76 dB
3.449 GHz	3.450 GHz	200.000 kHz	3.44999 GHz	-38.47 dBm	-25.47 dB
3.450 GHz	3.550 GHz	100.000 kHz	3.51237 GHz	-4.44 dBm	-34.44 dB

2 Result Summary

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.450 GHz	3.550 GHz	100.000 kHz	3.48643 GHz	-5.17 dBm	-35.17 dB
3.550 GHz	3.551 GHz	200.000 kHz	3.55014 GHz	-41.08 dBm	-28.08 dB
3.551 GHz	3.555 GHz	500.000 kHz	3.55459 GHz	-35.98 dBm	-22.98 dB
3.555 GHz	3.570 GHz	1.000 MHz	3.56348 GHz	-32.63 dBm	-19.63 dB

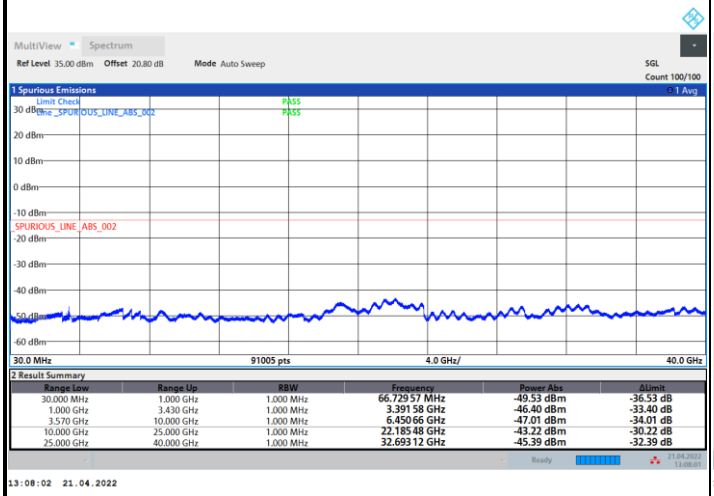
FR1 n77 / 100MHz / DFT-S OFDM / 256QAM / Full RB	
Lowest Band Edge / Full RB	Highest Band Edge / Full RB
	

FR1 n77 / 100MHz / CP OFDM / QPSK / Full RB	
Lowest Band Edge	**Highest Band Edge**
	

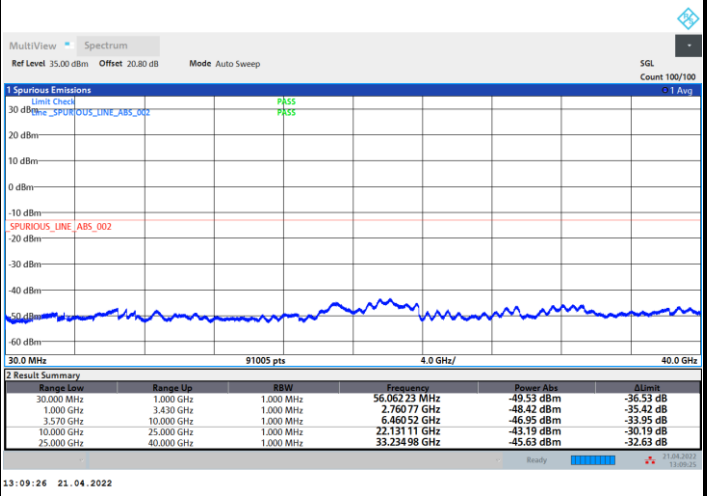
Conducted Spurious Emission

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

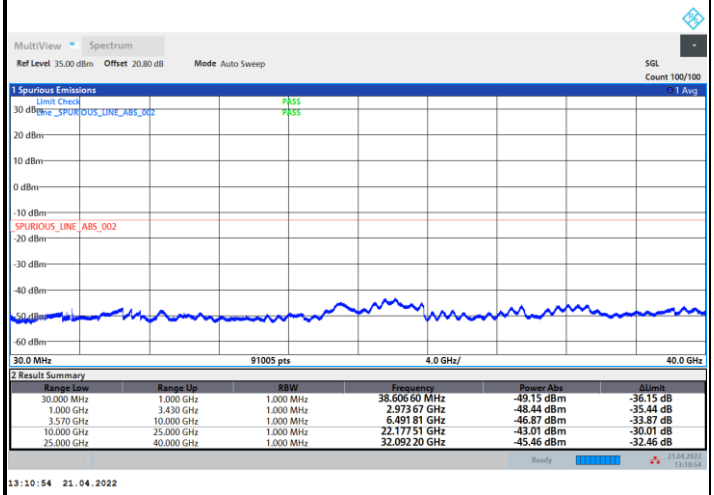
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n77 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0001	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0029	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0027	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0020	
-20	Normal Voltage	0.0027	
-30	Normal Voltage	0.0032	
20	Maximum Voltage	0.0020	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0016	

Note:

1. Normal Voltage =3.3 V.；Battery End Point (BEP) =3.1 V.；Maximum Voltage =3.6 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

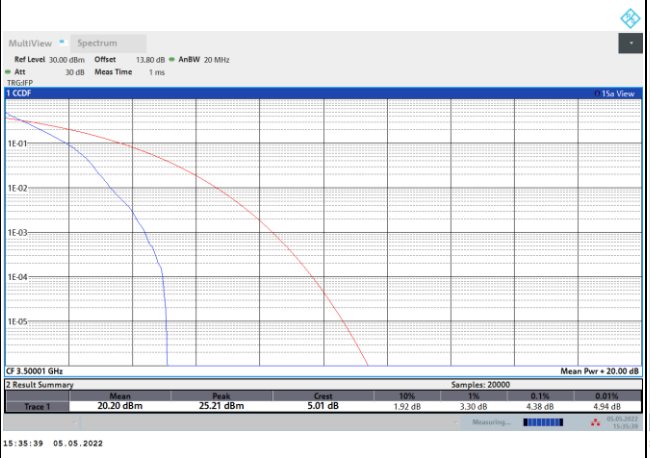
FR1 n78

Peak-to-Average Ratio

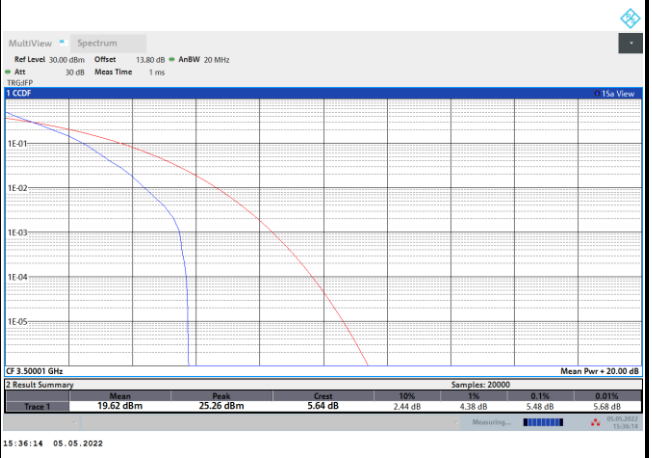
Mode	FR1 n78 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.38	5.48	6.50	7.74	PASS
Mode	FR1 n78 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.62				PASS

FR1 n78 / 20MHz / DFT-S OFDM / Middle Channel / Full RB

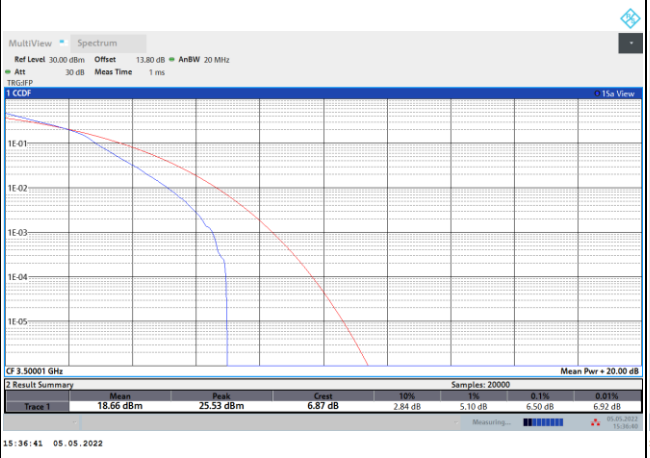
PI/2 BPSK



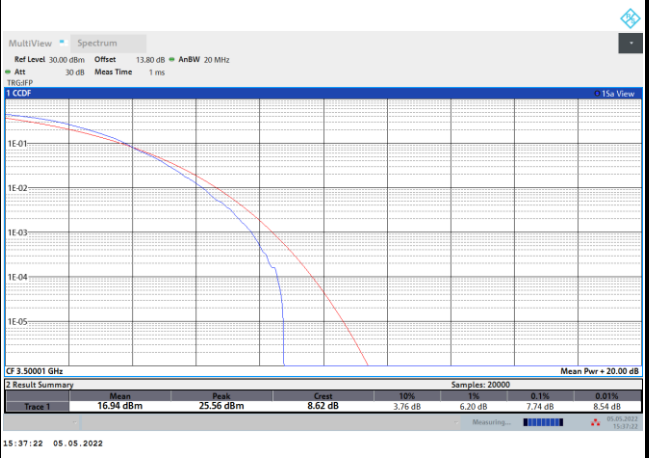
QPSK



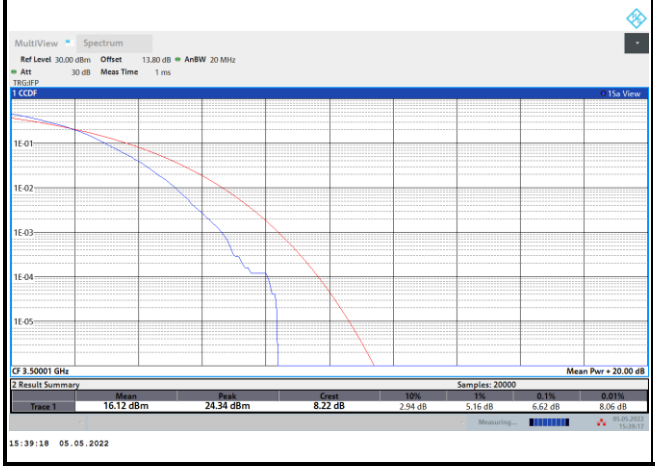
16QAM



64QAM



256QAM



26dB Bandwidth

Mode	FR1 n78 : 26dB BW(MHz) / DFT-S OFDM							
BW	20MHz	30MHz	40MHz	50MHz	60MHz	70MHz	80MHz	90MHz
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	18.82	27.93	38.20	48.35	60.54	66.99	80.08	89.73
BW	100MHz							
Mod.	PI/2 BPSK							
Middle CH	99.50							

Mode	FR1 n78 : 26dB BW(MHz) / CP OFDM							
BW	20MHz		30MHz		40MHz		50MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	19.06	19.34	29.01	29.01	40.28	40.36	49.95	49.95
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	19.18	19.30	29.01	28.95	40.36	40.20	49.95	50.15
BW	60MHz		70MHz		80MHz		90MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	60.30	60.42	70.21	70.35	80.24	80.24	90.45	90.27
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	60.66	60.42	70.21	70.21	80.24	80.40	90.63	90.27
BW	100MHz							
Mod.	QPSK	16QAM						
Middle CH	100.50	100.70						
Mod.	64QAM	256QAM						
Middle CH	100.30	100.70						