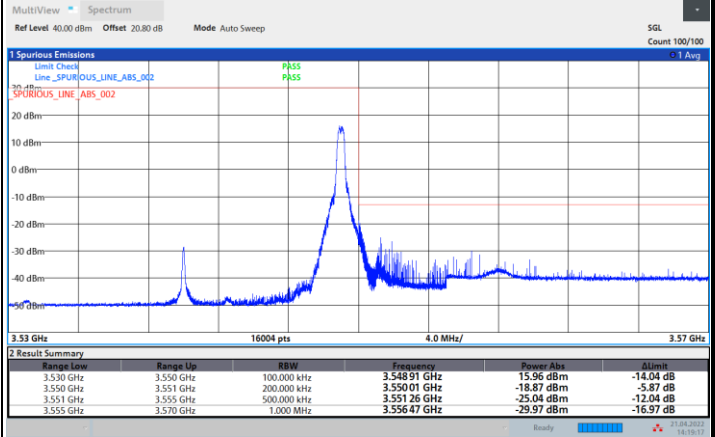
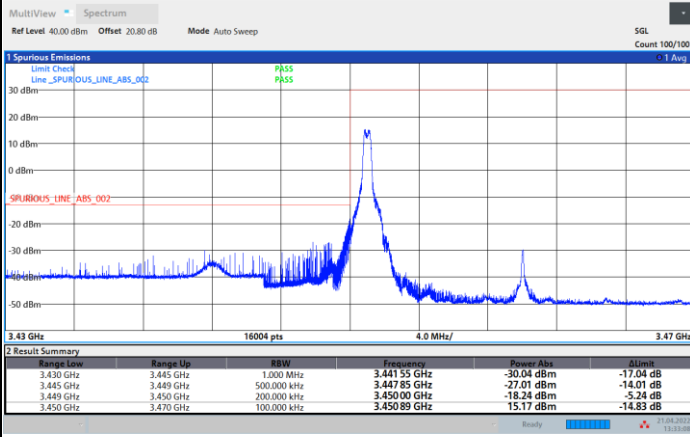




FR1 n77 / 20MHz / DFT-S OFDM / 64QAM

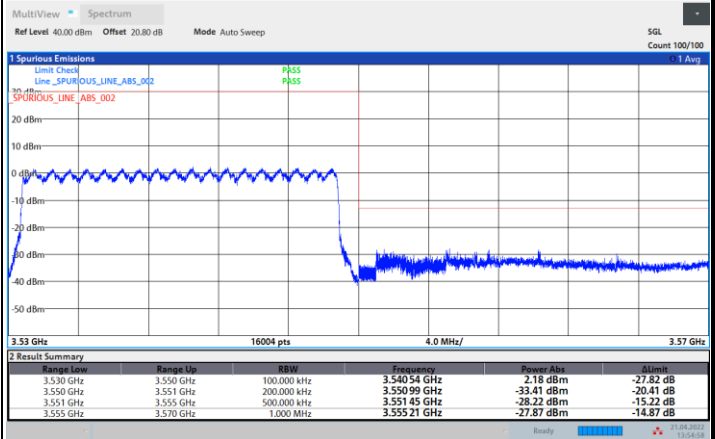
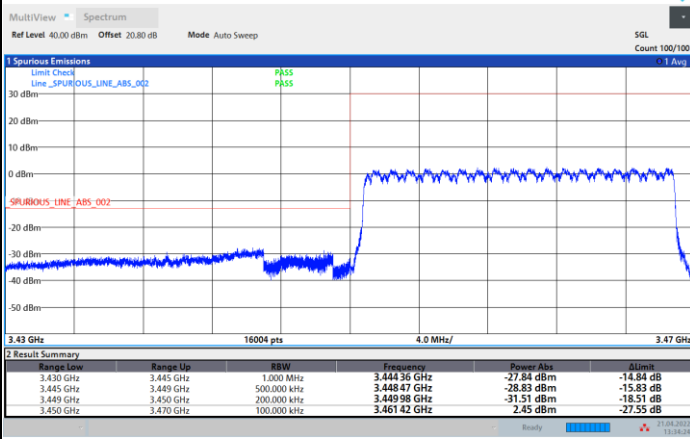
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

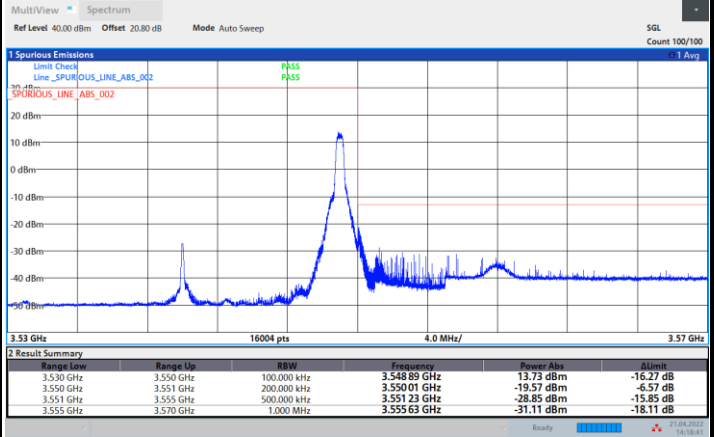
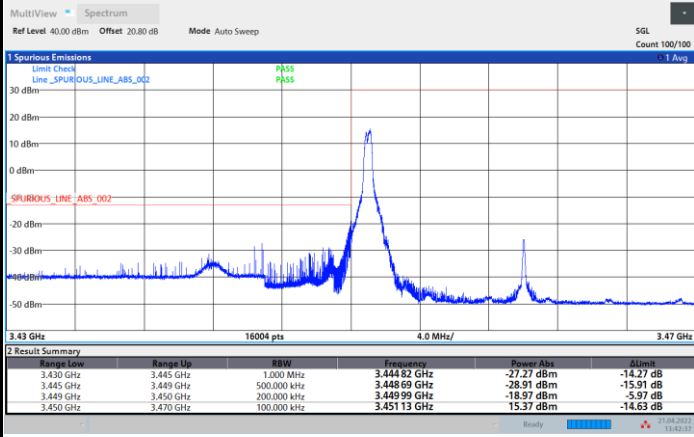




FR1 n77 / 20MHz / DFT-S OFDM / 256QAM

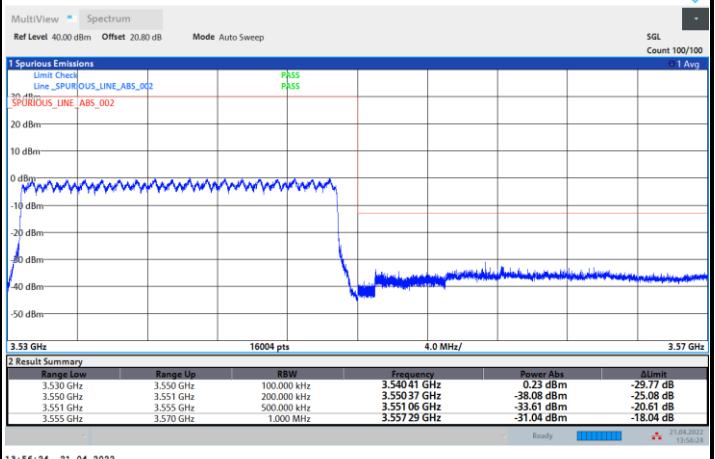
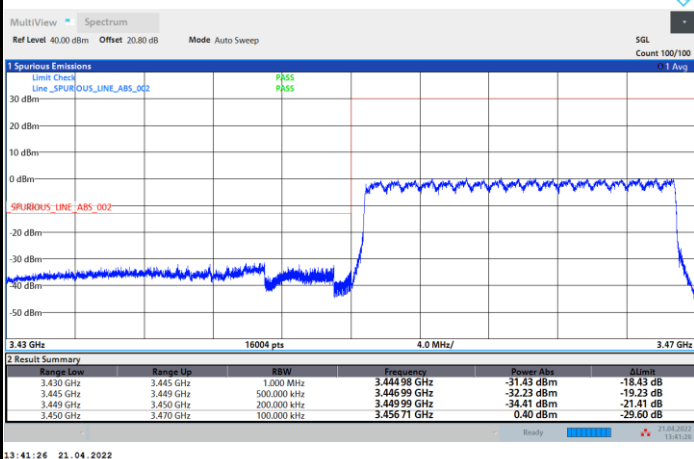
Lowest Band Edge / 1RB0

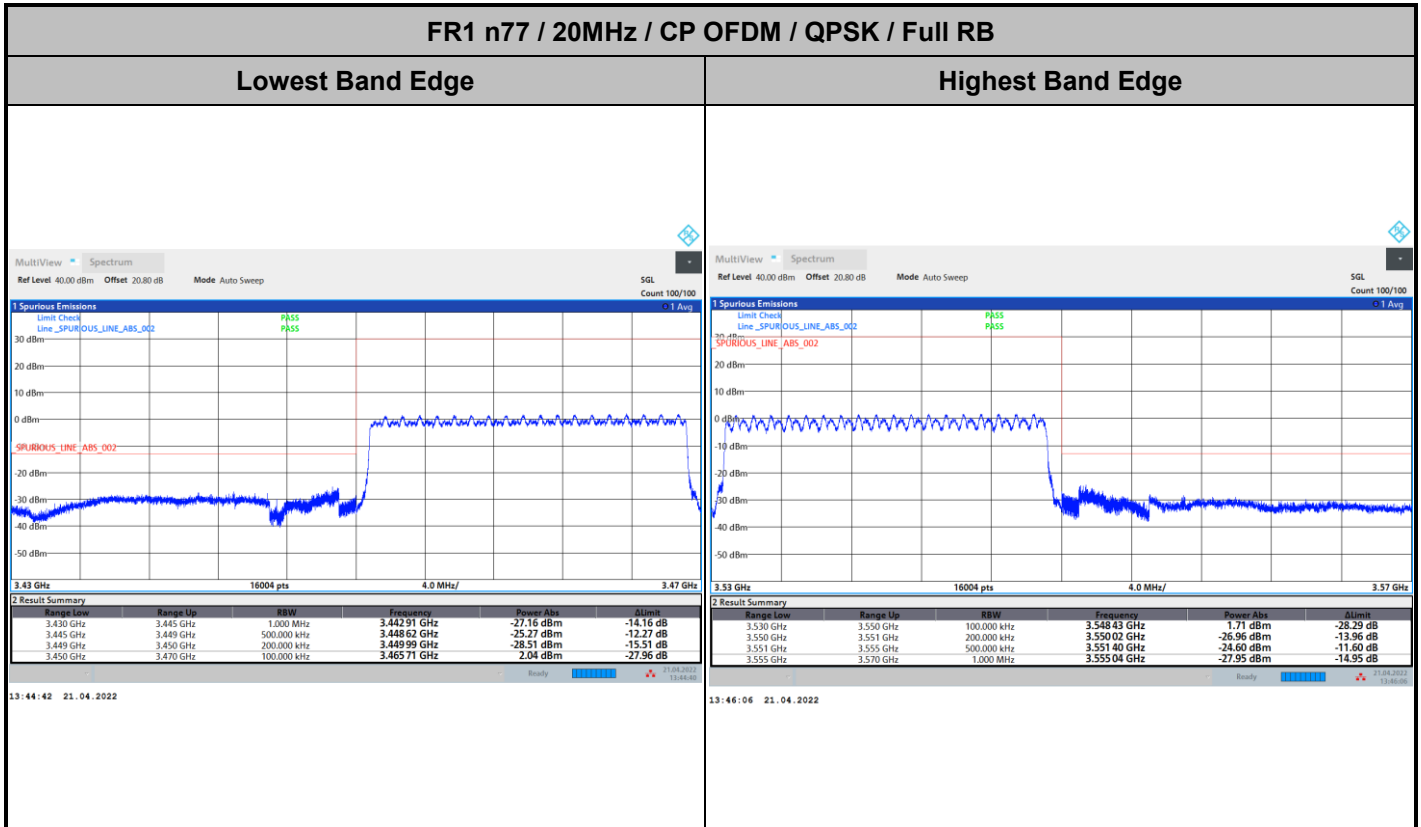
Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB



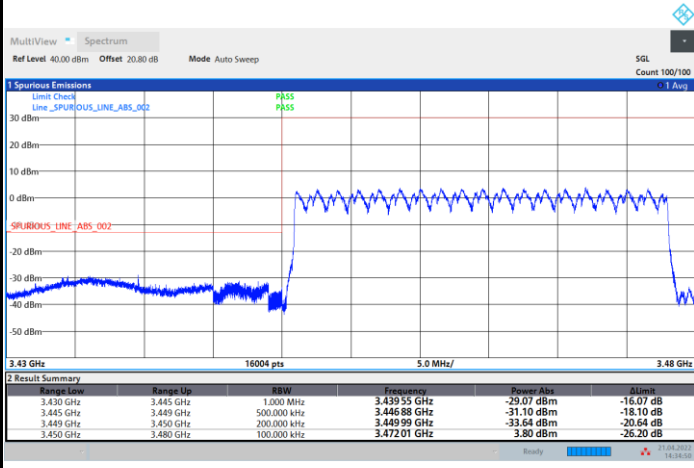




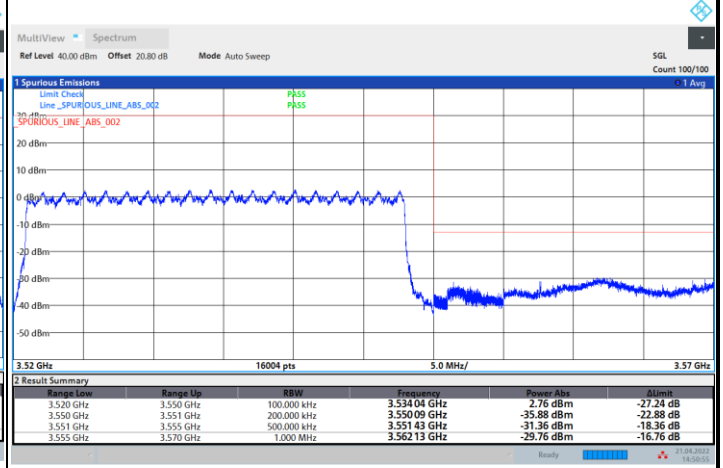
FR1 n77 / 30MHz / DFT-S OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

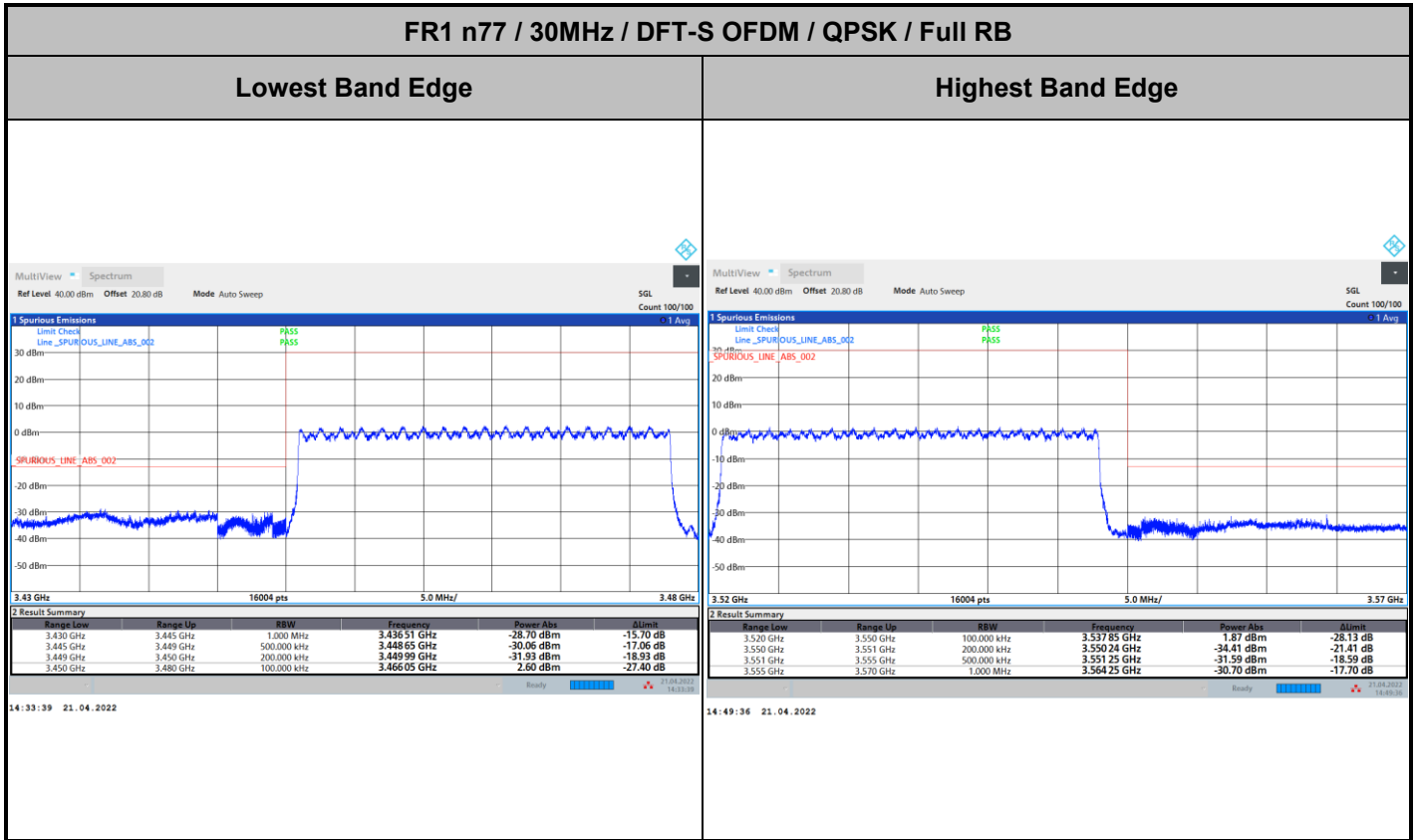
Highest Band Edge



14:34:51 21.04.2022



14:50:56 21.04.2022

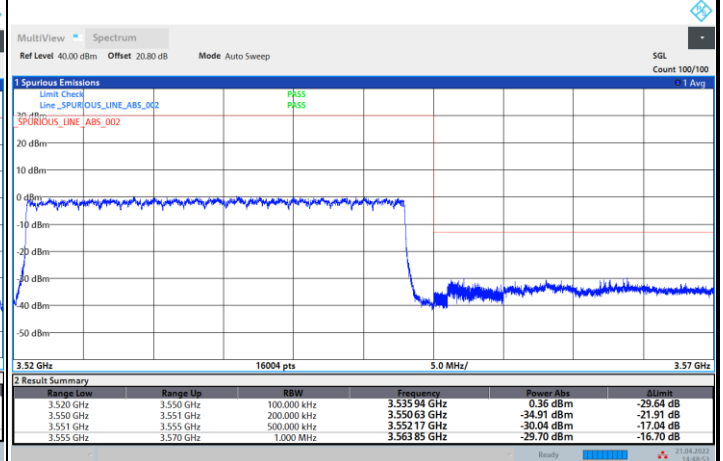
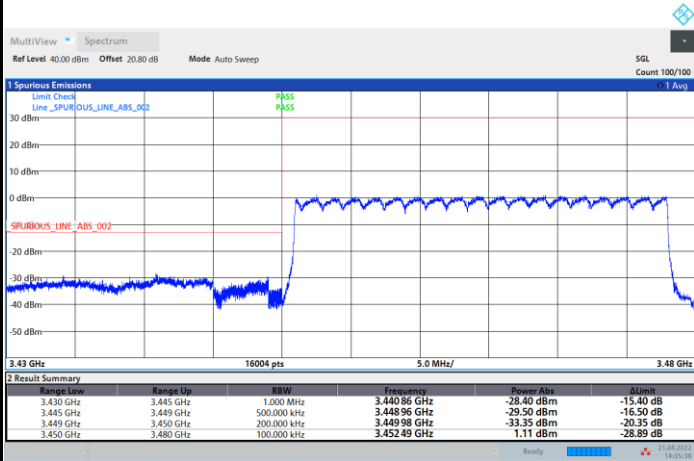




FR1 n77 / 30MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge

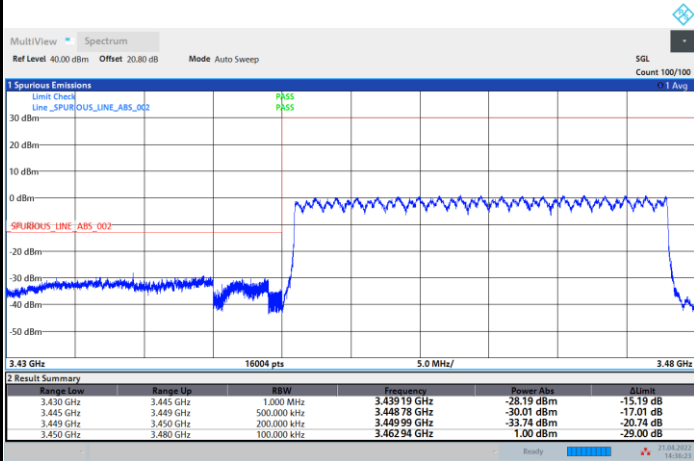




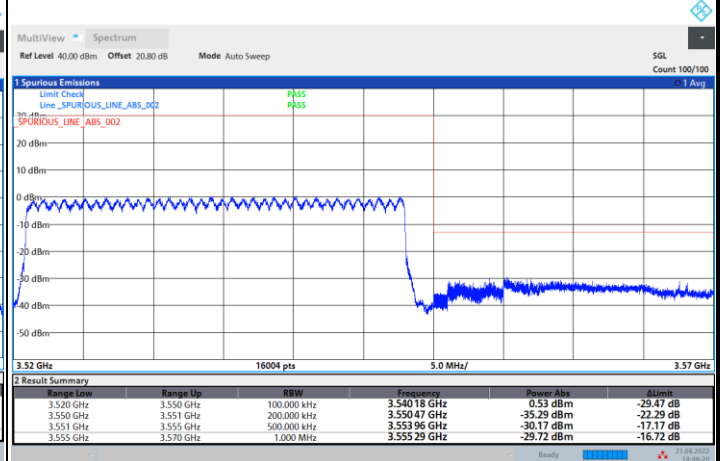
FR1 n77 / 30MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



14:36:23 21.04.2022



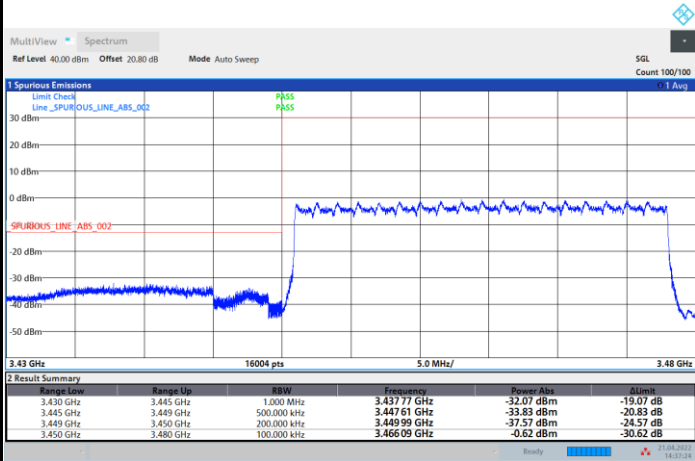
14:48:21 21.04.2022



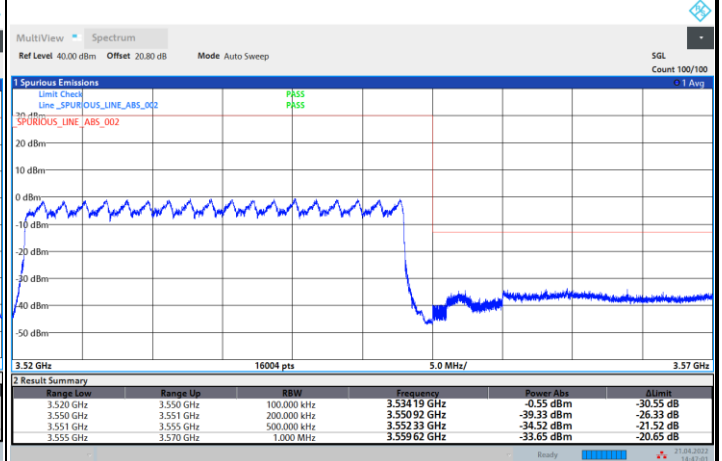
FR1 n77 / 30MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge



14:37:24 21.04.2022



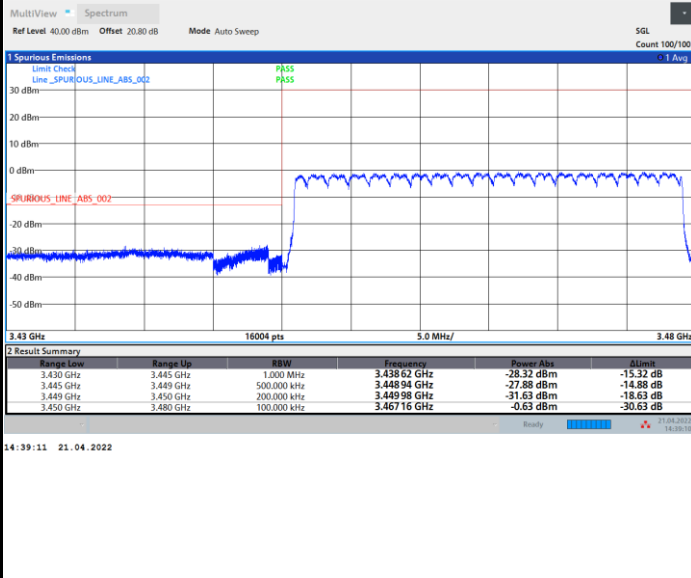
14:47:01 21.04.2022

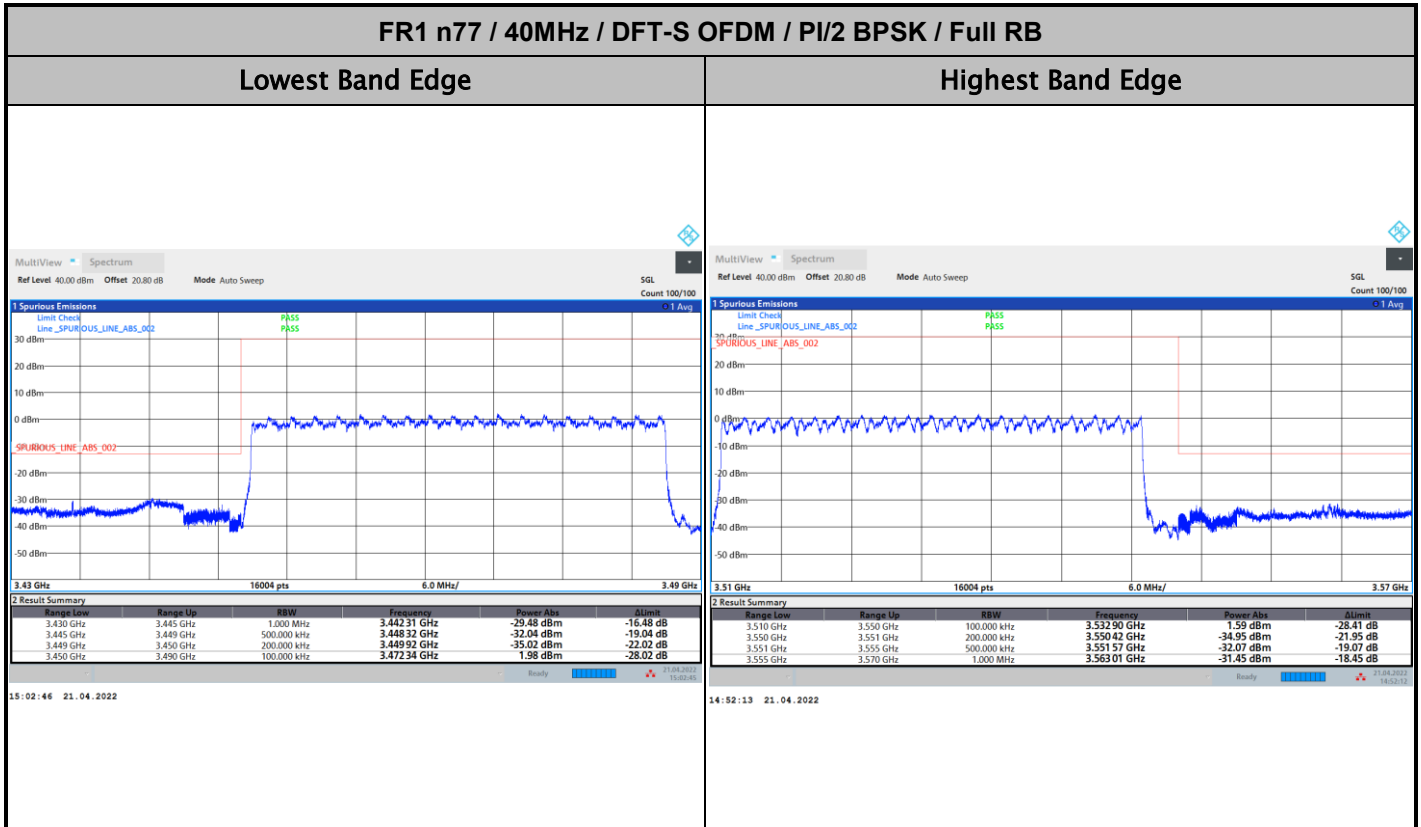


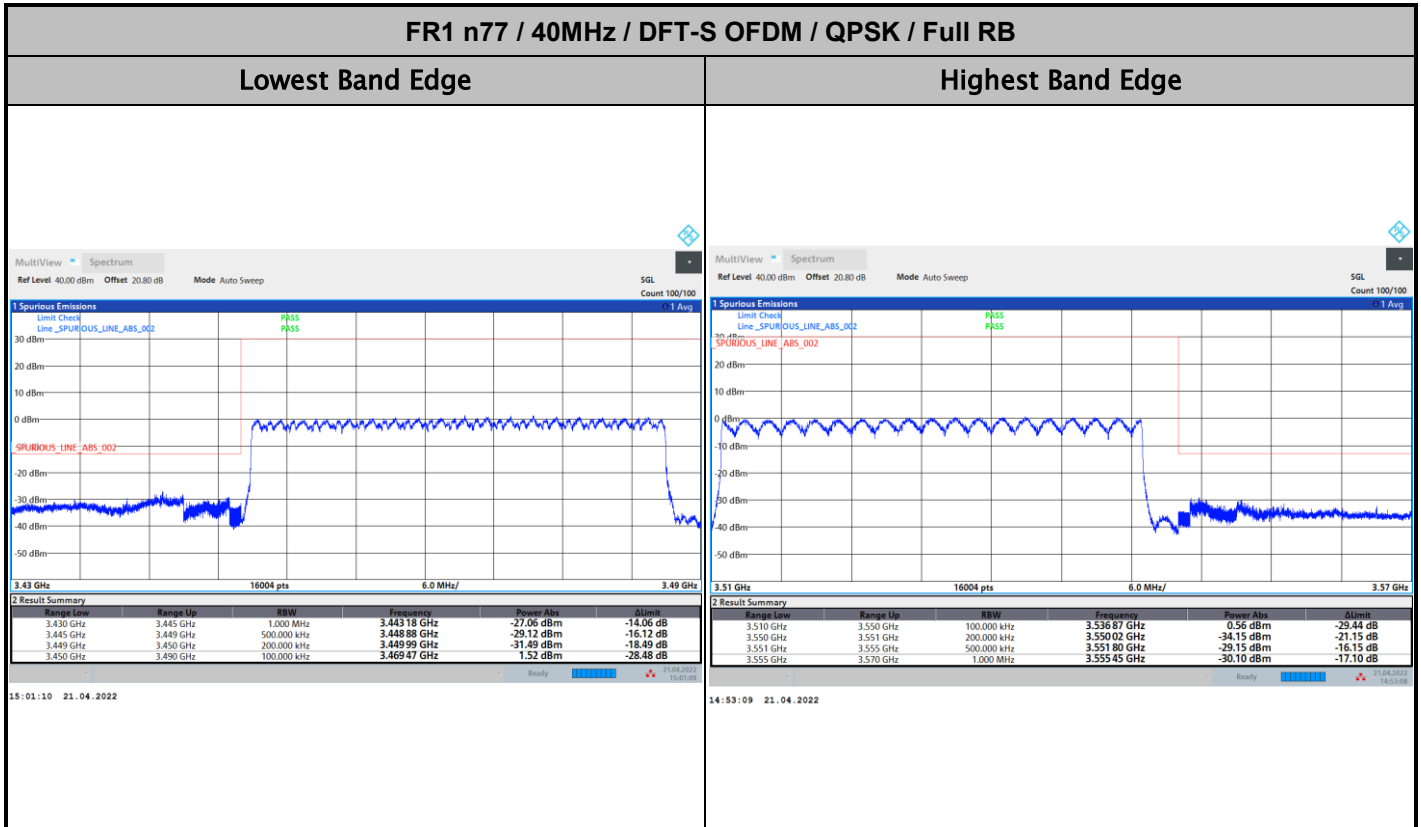
FR1 n77 / 30MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge





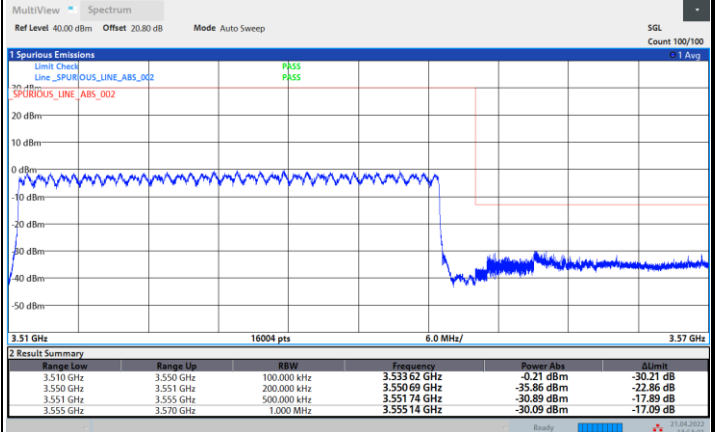
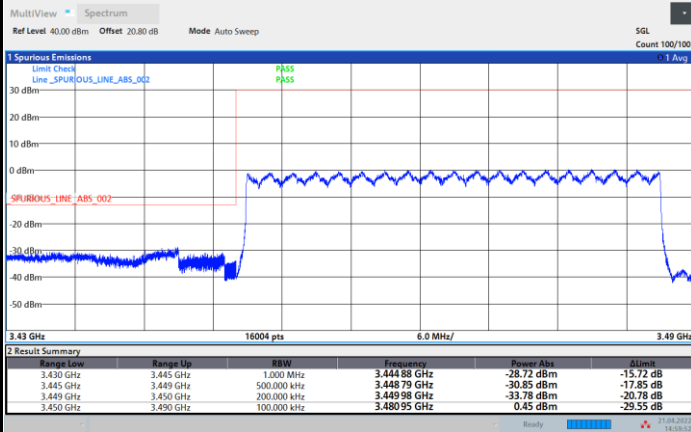




FR1 n77 / 40MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge



14:59:53 21.04.2022

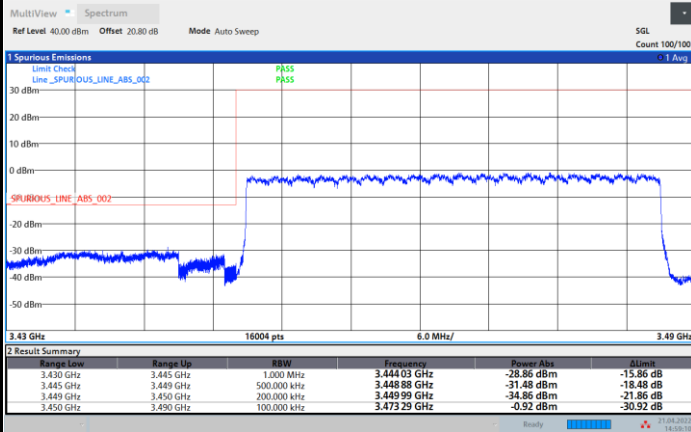
14:54:02 21.04.2022



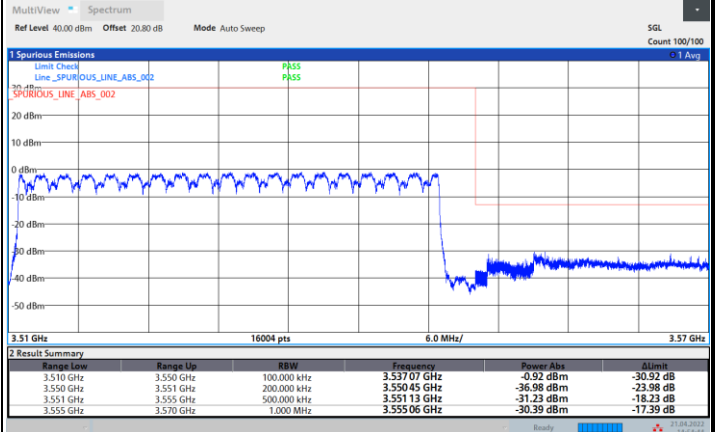
FR1 n77 / 40MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



14:59:11 21. 04. 2022



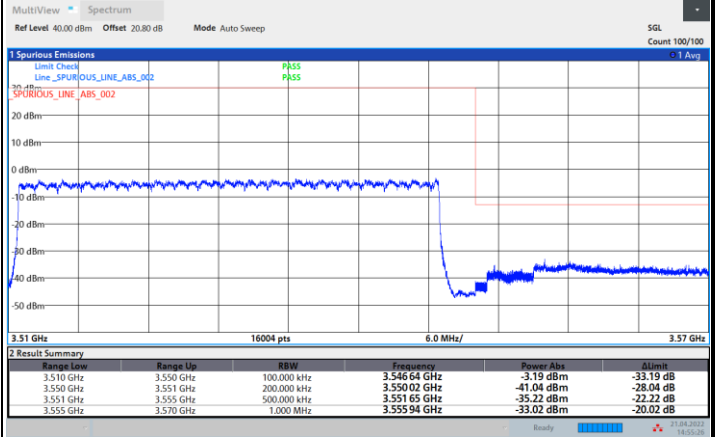
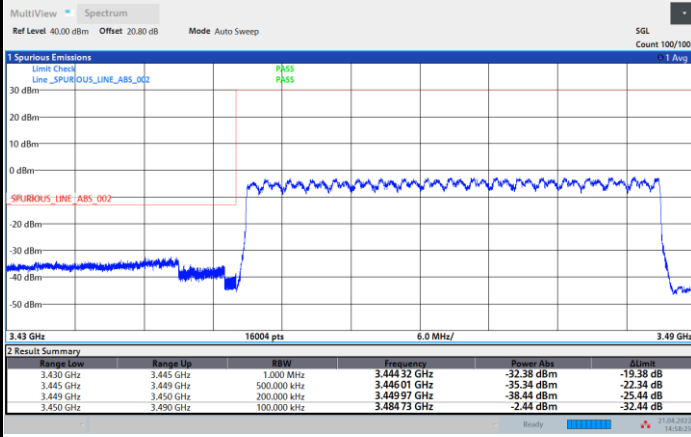
14:54:44 21. 04. 2022



FR1 n77 / 40MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge



14:58:26 21.04.2022

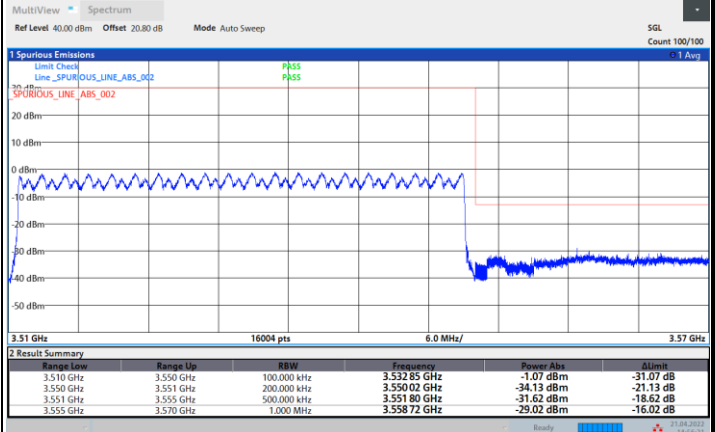
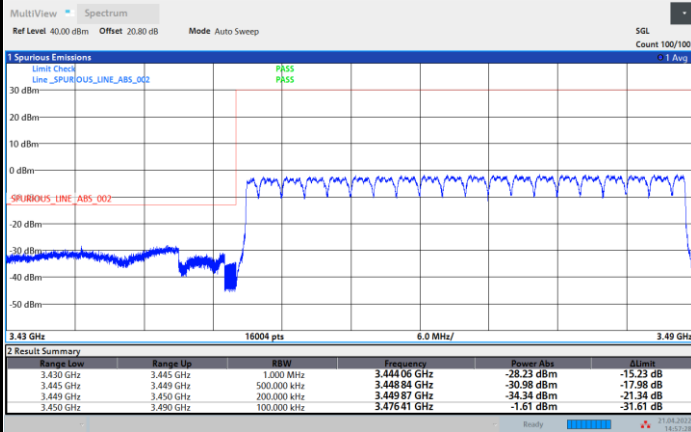
14:55:26 21.04.2022



FR1 n77 / 40MHz / CP OFDM / QPSK / Full RB

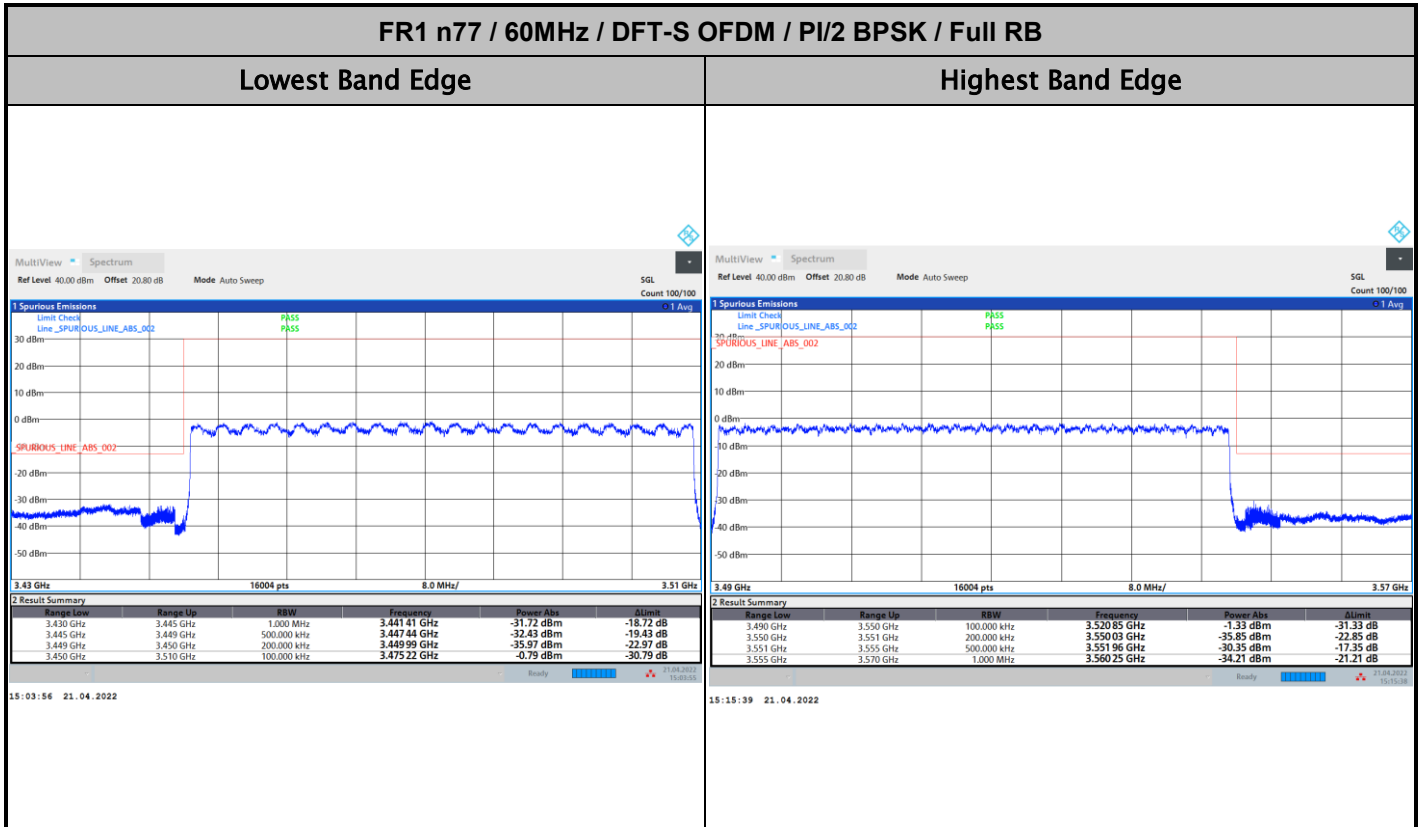
Lowest Band Edge

Highest Band Edge



14:57:28 21.04.2022

14:56:22 21.04.2022

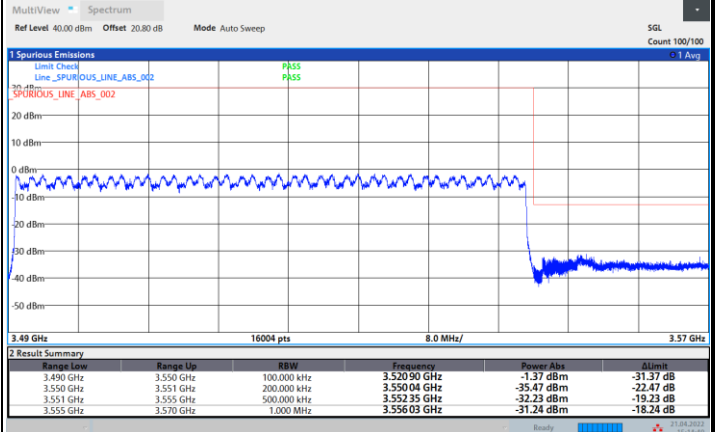
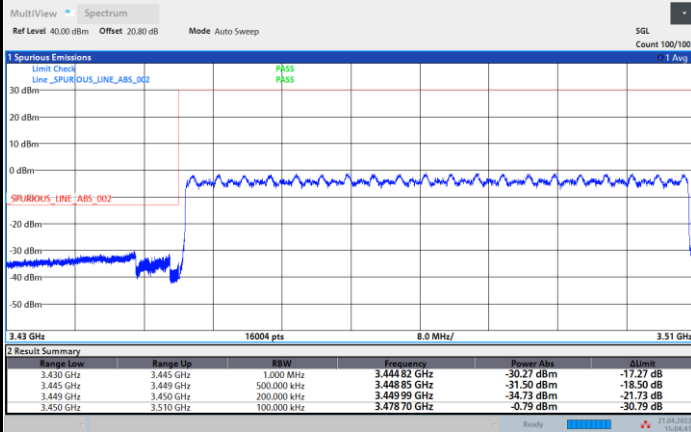




FR1 n77 / 60MHz / DFT-S OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



15:04:41 21.04.2022

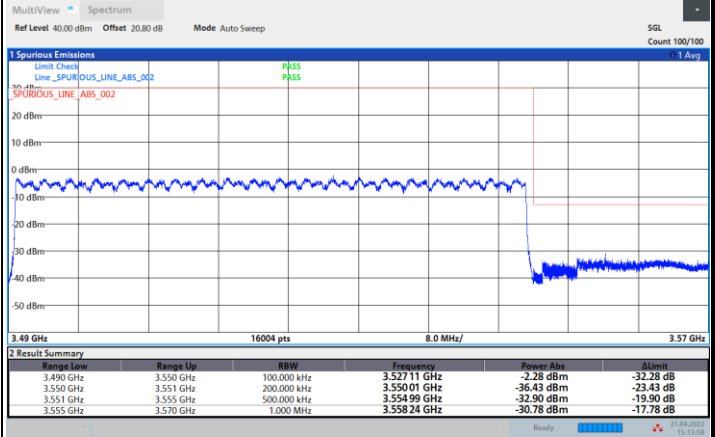
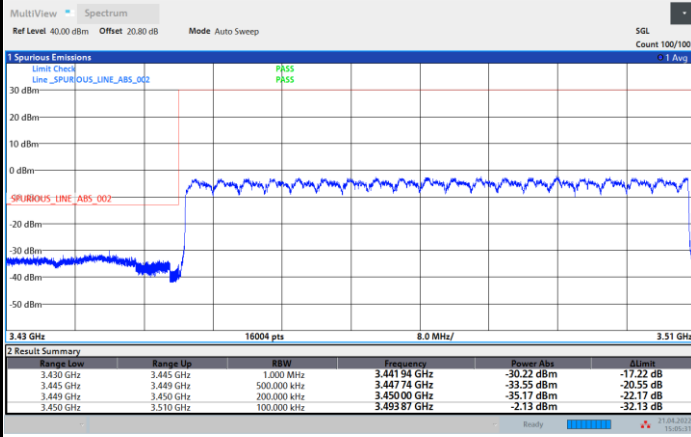
15:14:41 21.04.2022



FR1 n77 / 60MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge



15:09:31 21.04.2022

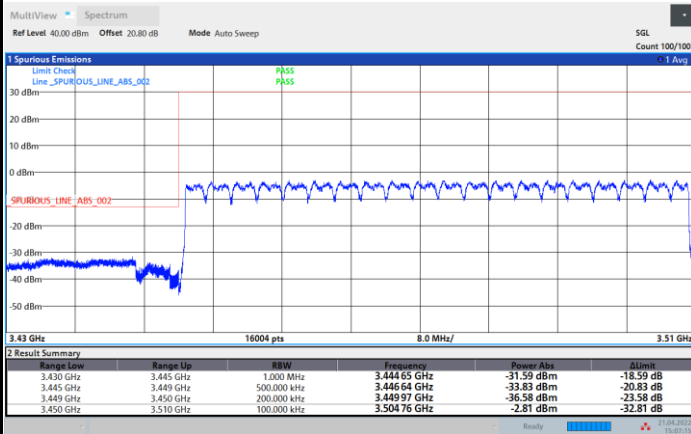
15:13:58 21.04.2022



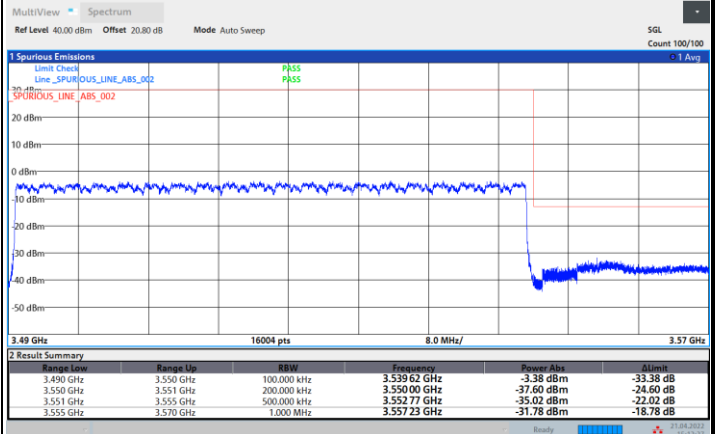
FR1 n77 / 60MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



15:07:15 21.04.2022



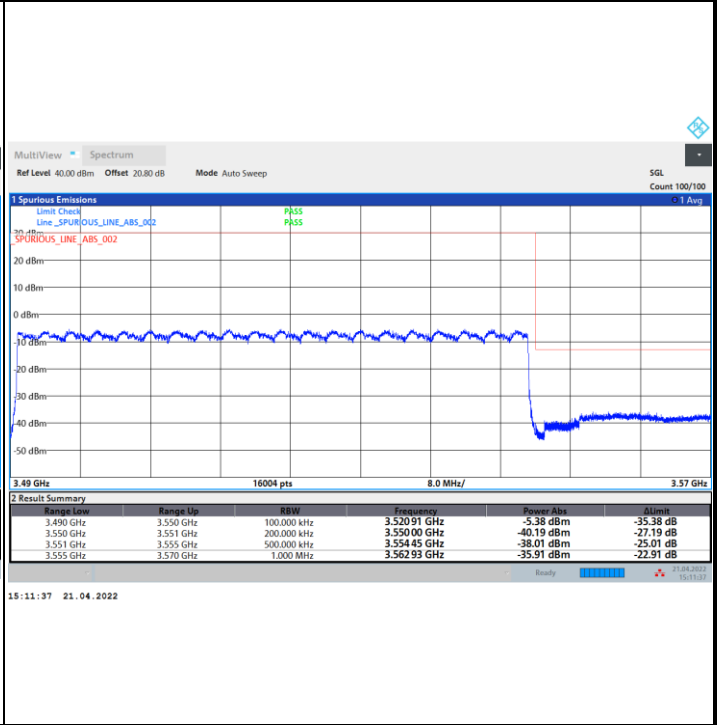
15:12:28 21.04.2022



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

Lowest Band Edge

Highest Band Edge

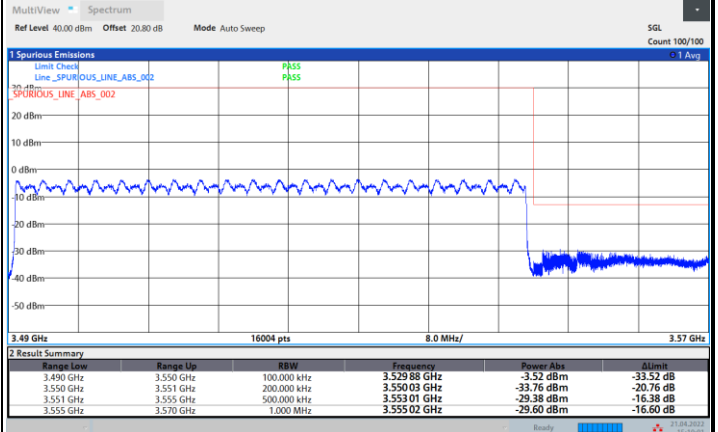
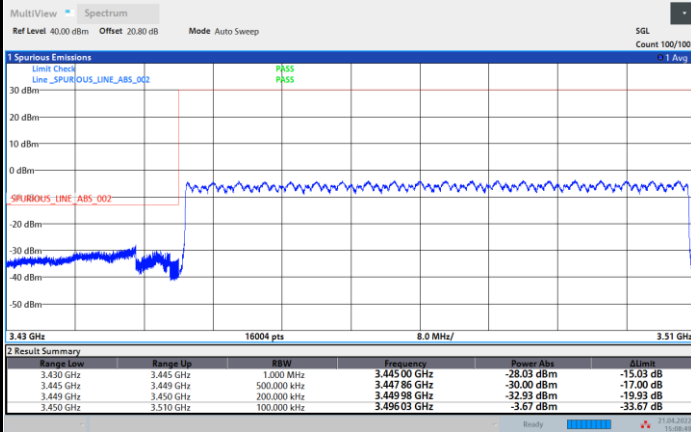




FR1 n77 / 60MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



15:08:50 21.04.2022

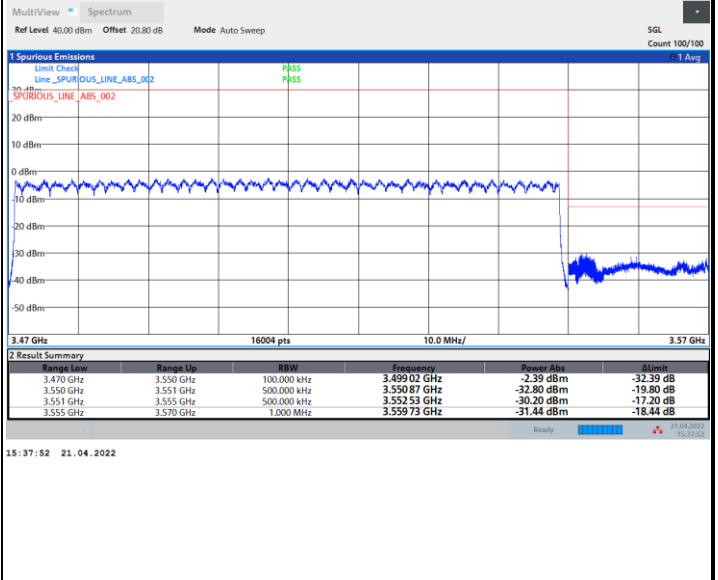
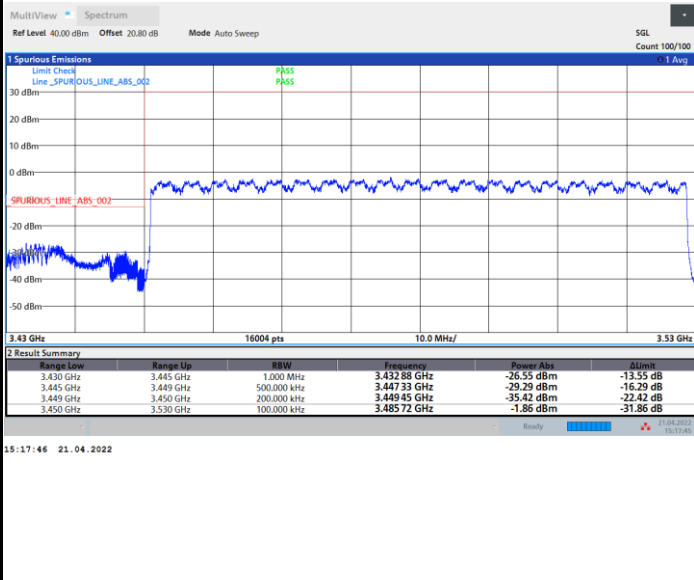
15:10:02 21.04.2022

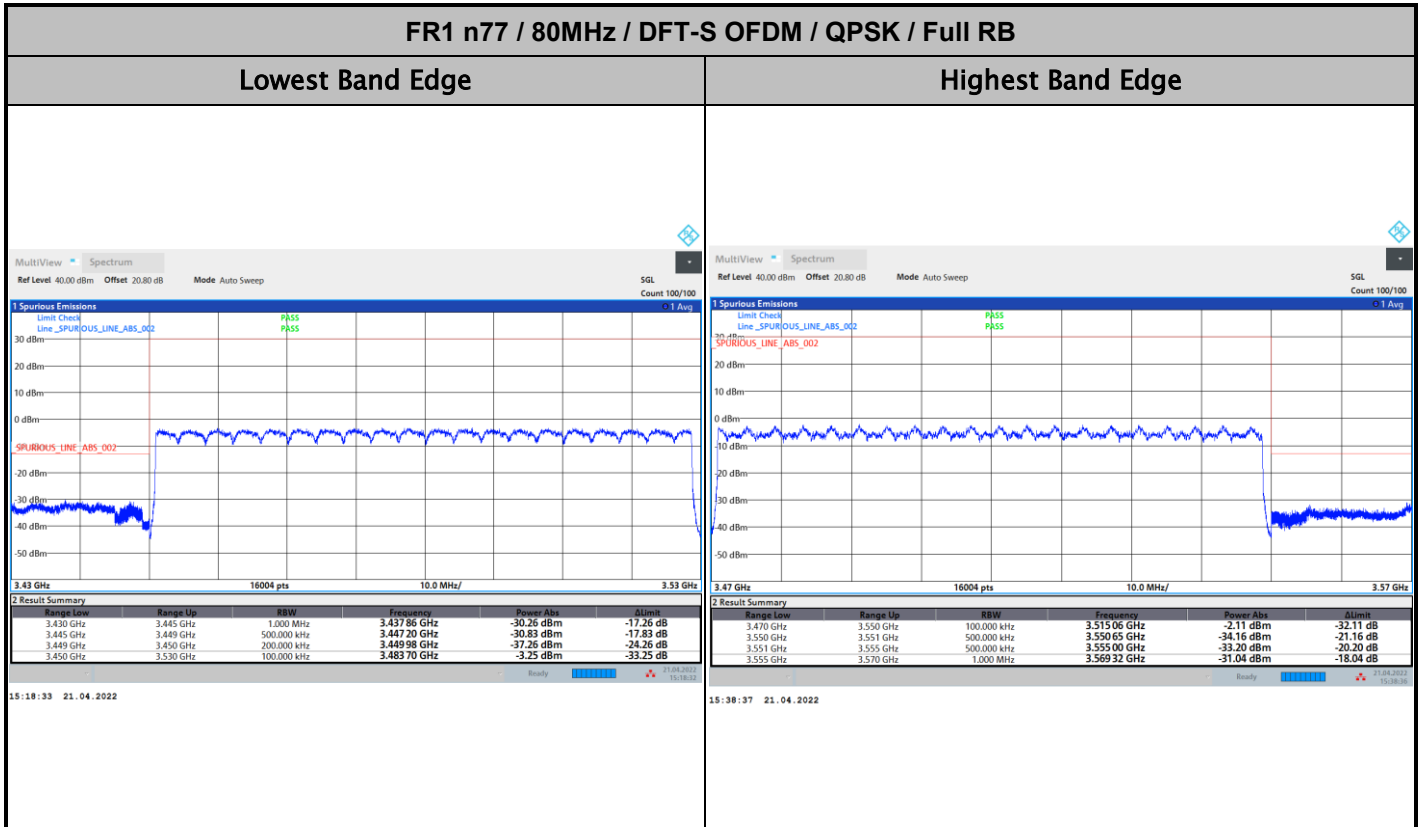


FR1 n77 / 80MHz / DFT-S OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge



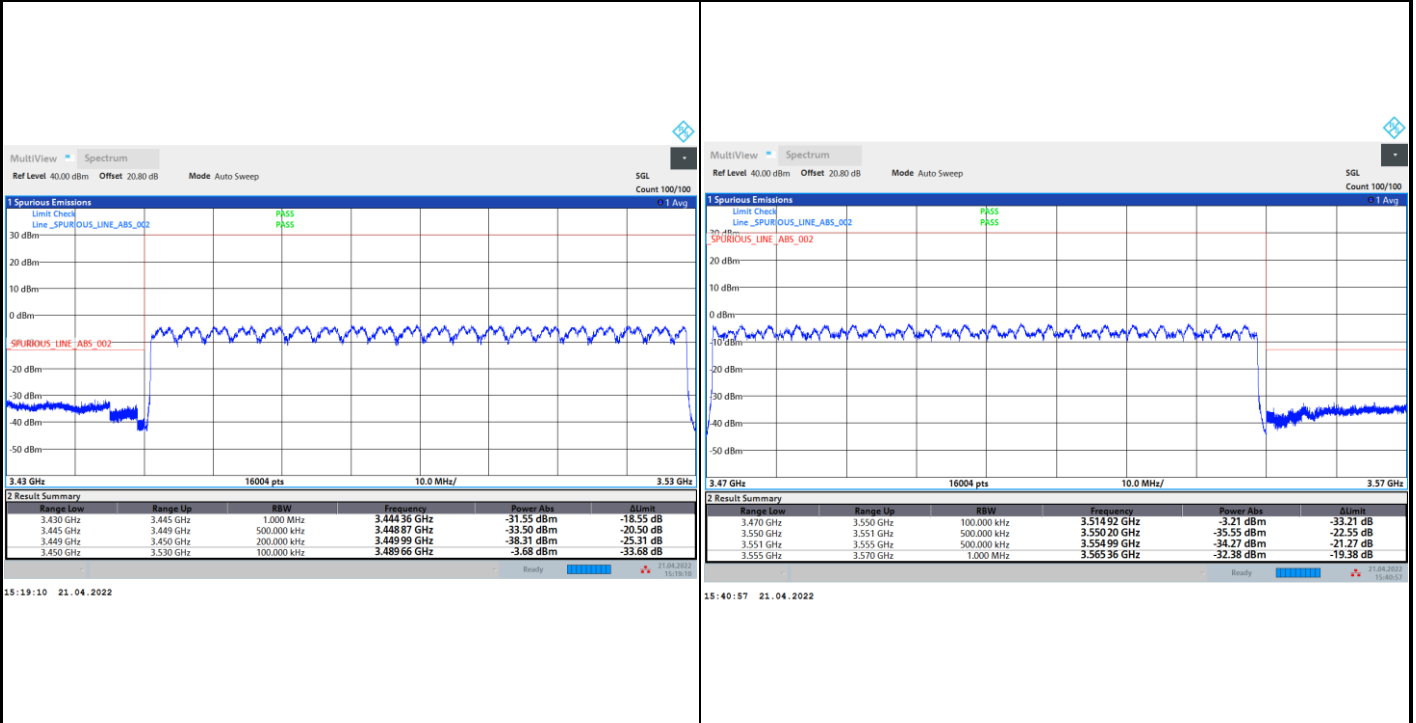




FR1 n77 / 80MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge

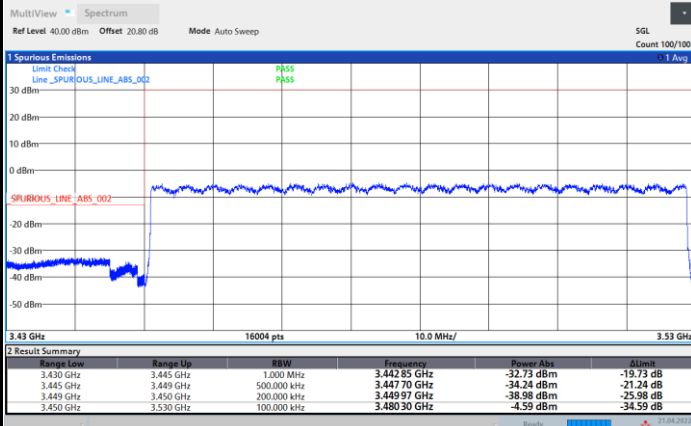




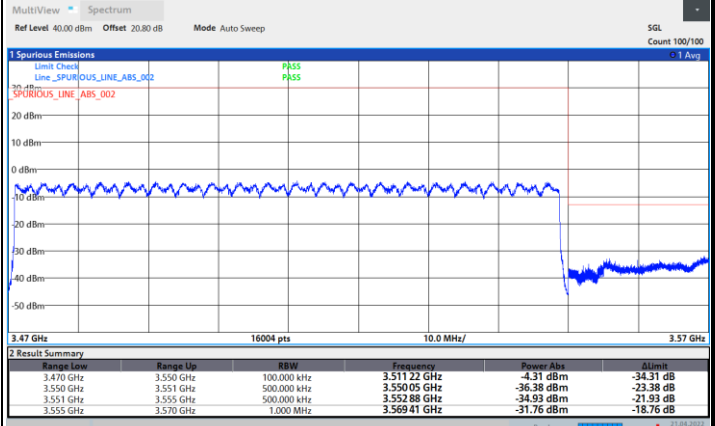
FR1 n77 / 80MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



15:19:57 21.04.2022



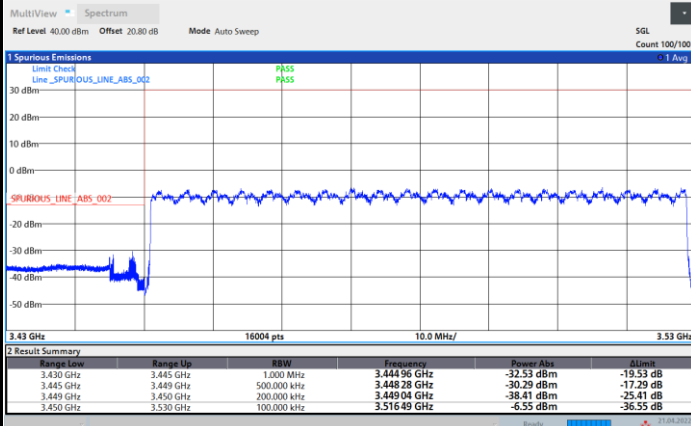
15:44:42 21.04.2022



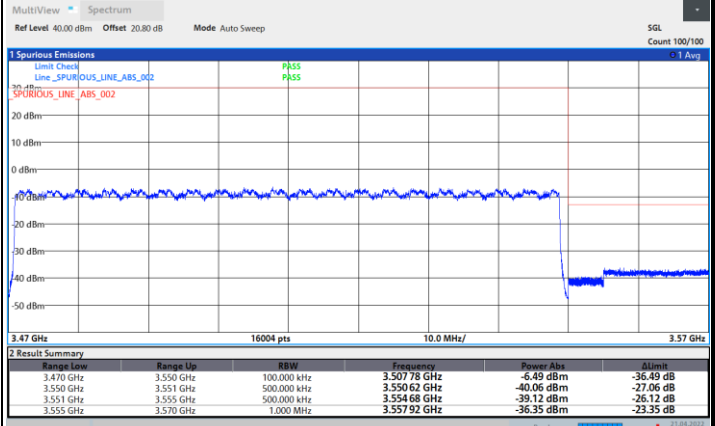
FR1 n77 / 80MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

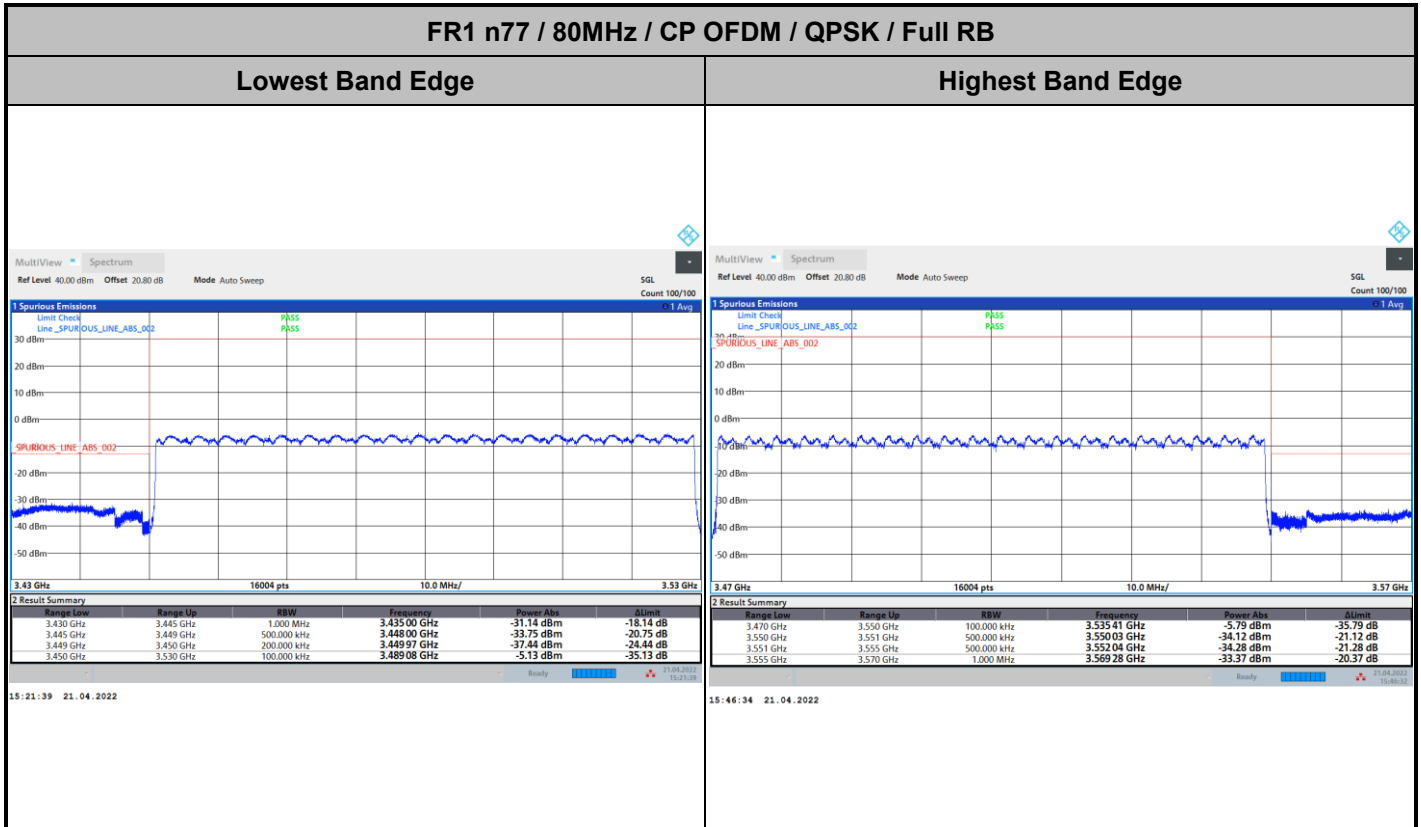
Highest Band Edge



15:20:48 21.04.2022



15:45:45 21.04.2022

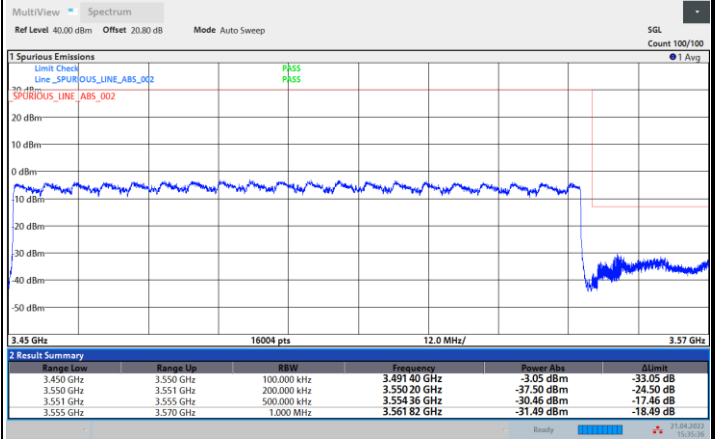
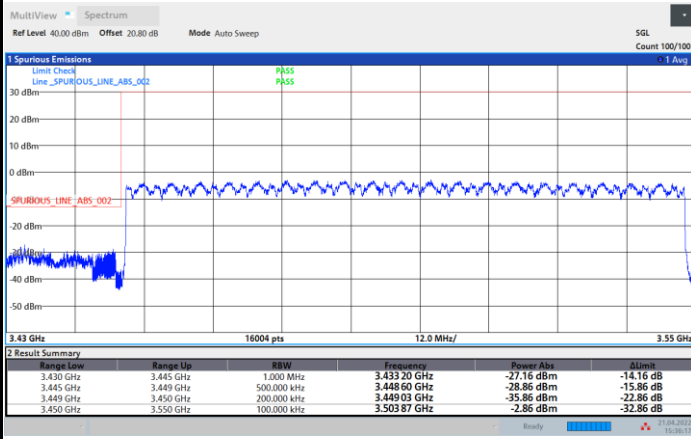


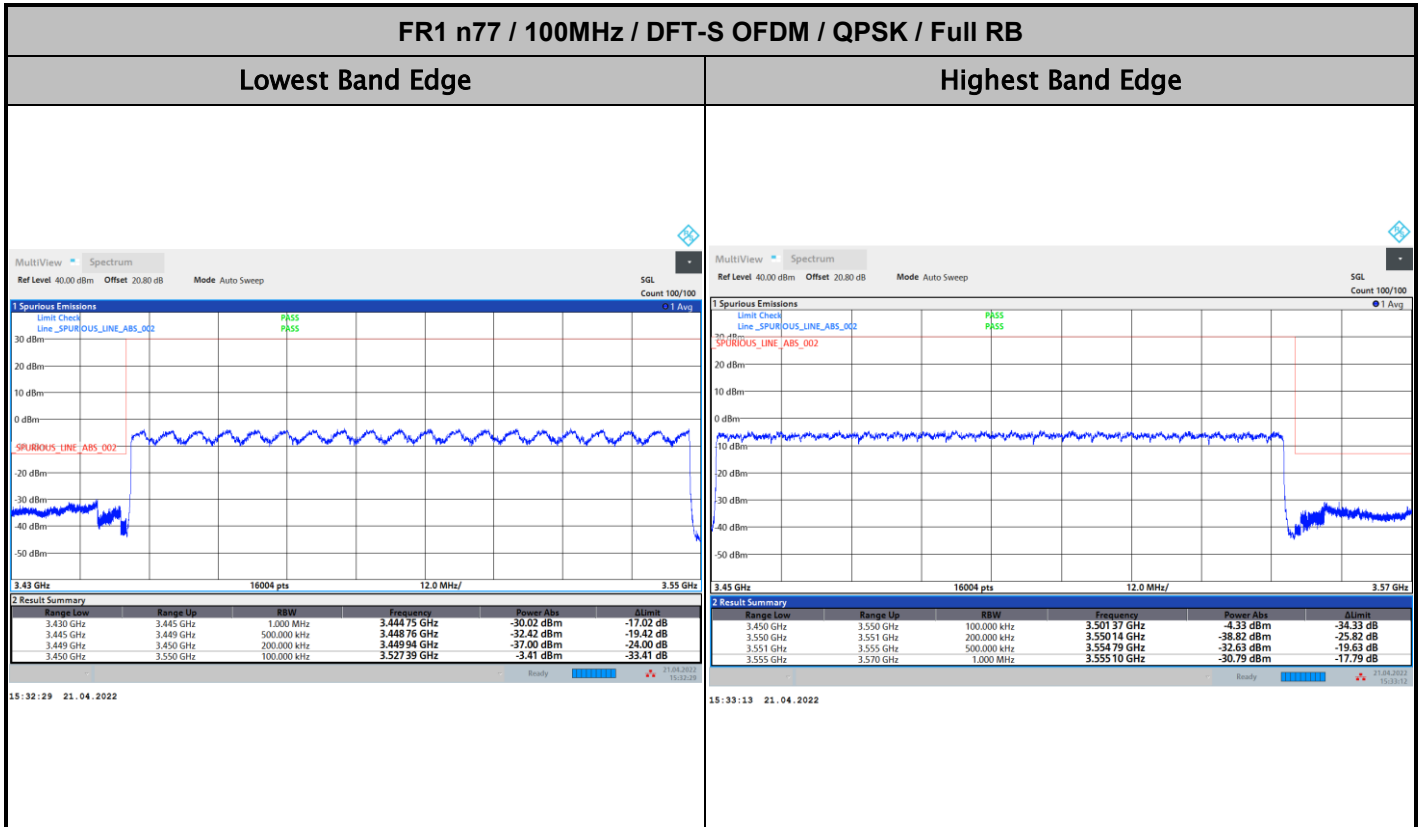


FR1 n77 / 100MHz / DFT-S OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

Highest Band Edge



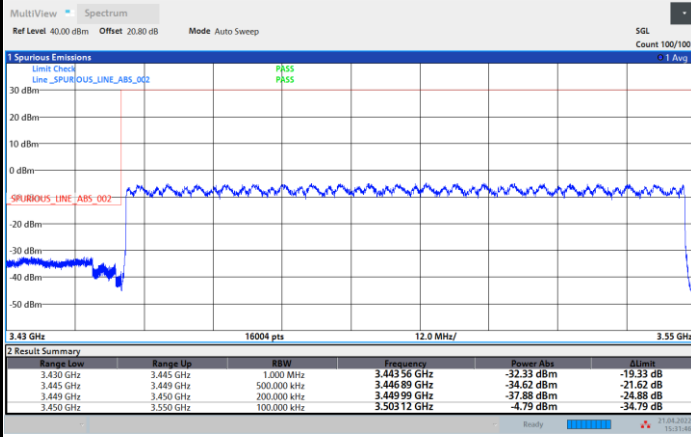




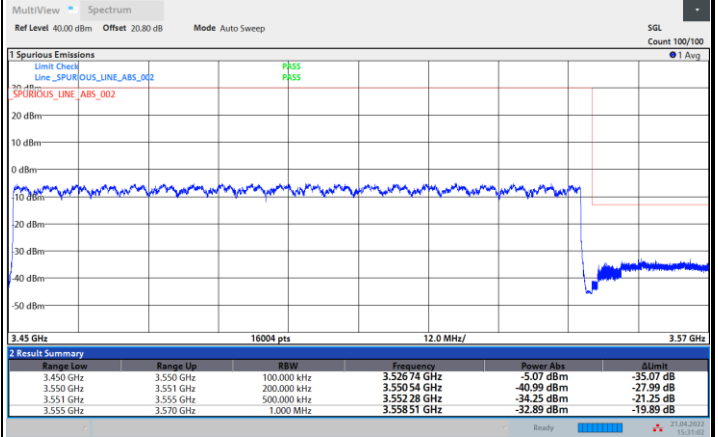
FR1 n77 / 100MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge



15:31:47 21.04.2022



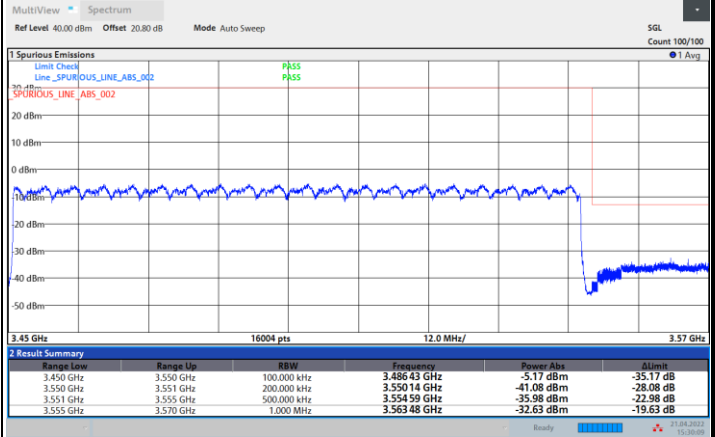
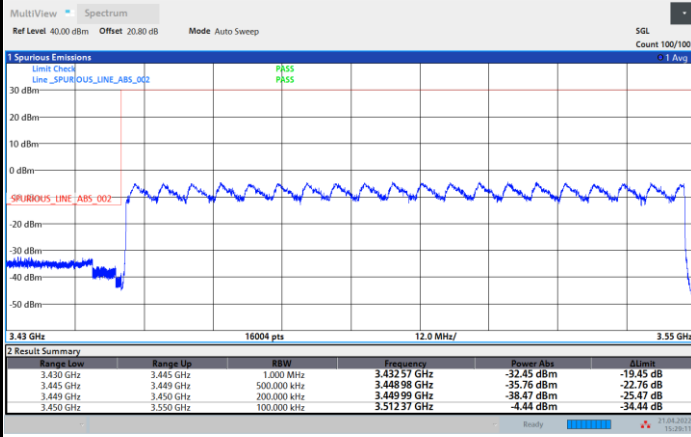
15:31:03 21.04.2022



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

Lowest Band Edge

Highest Band Edge



15:29:12 21.04.2022

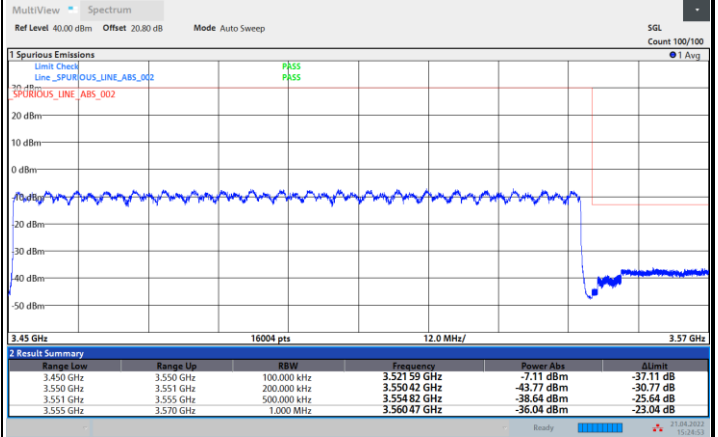
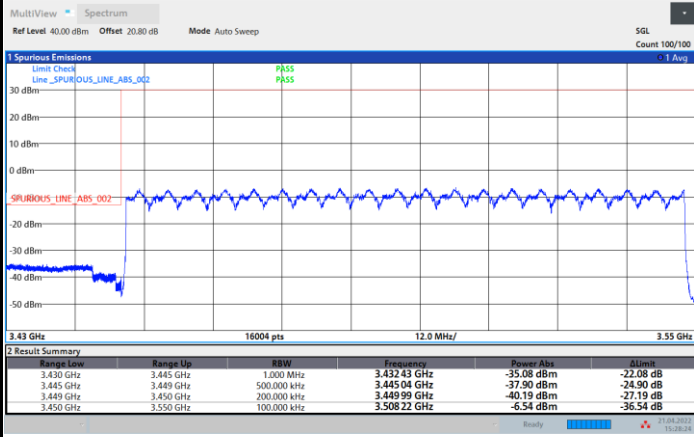
15:30:10 21.04.2022



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

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

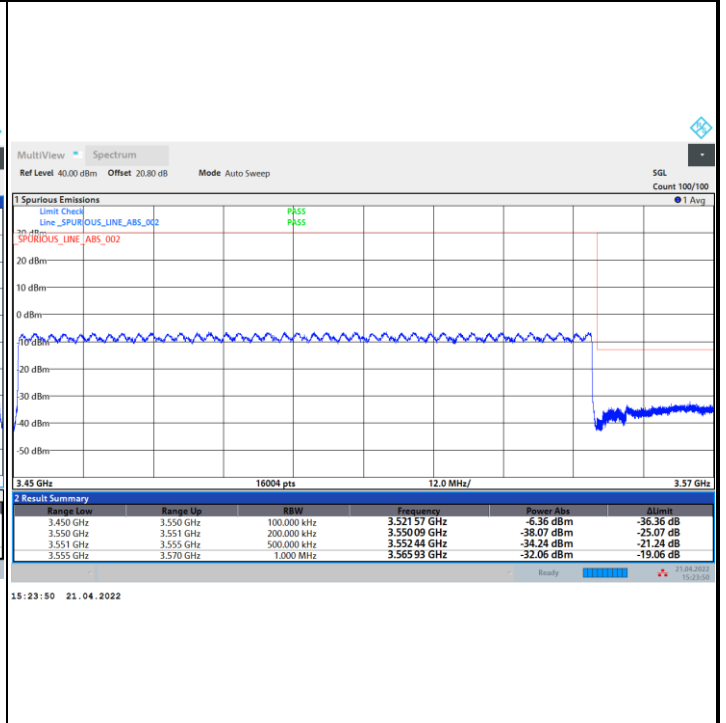
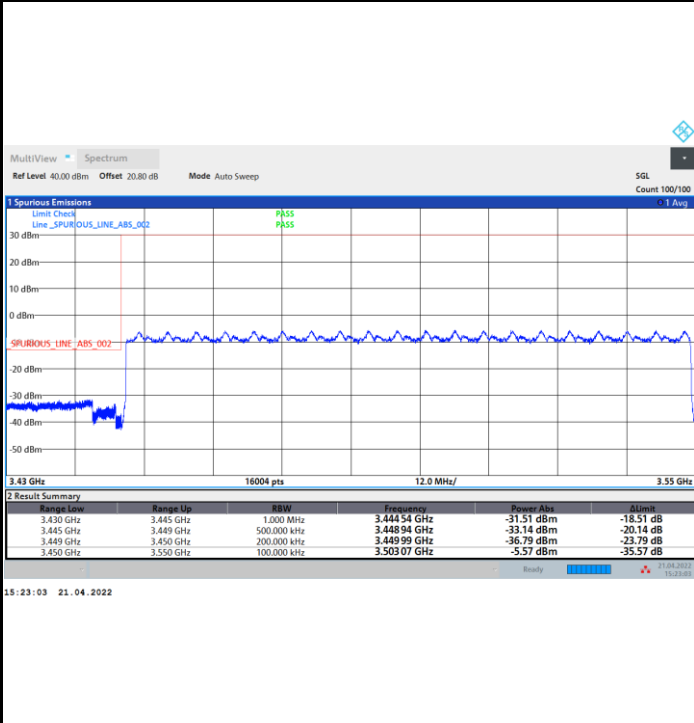




FR1 n77 / 100MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

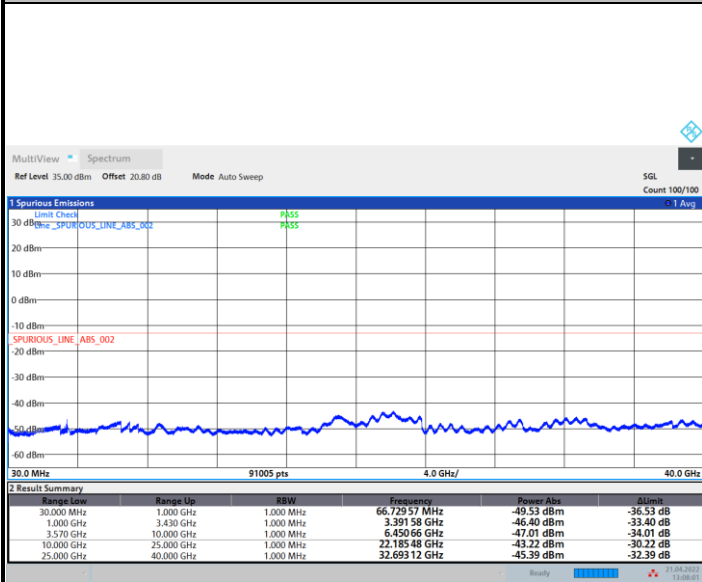




Conducted Spurious Emission

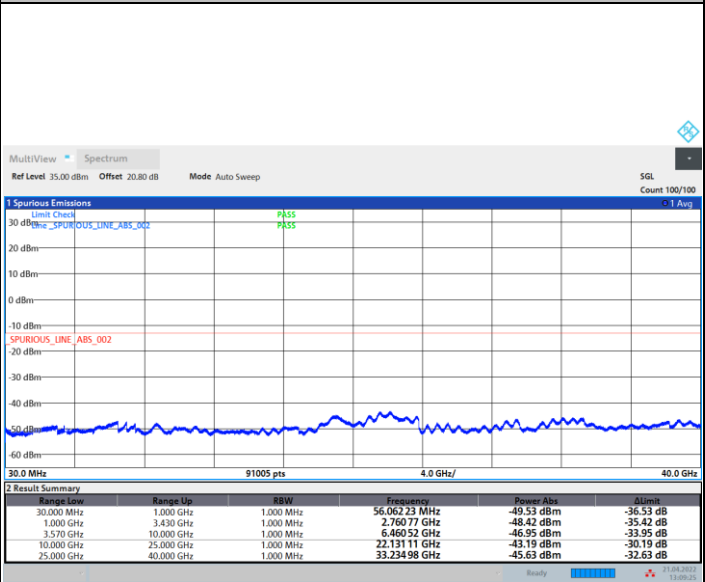
FR1 n77 / 20MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel



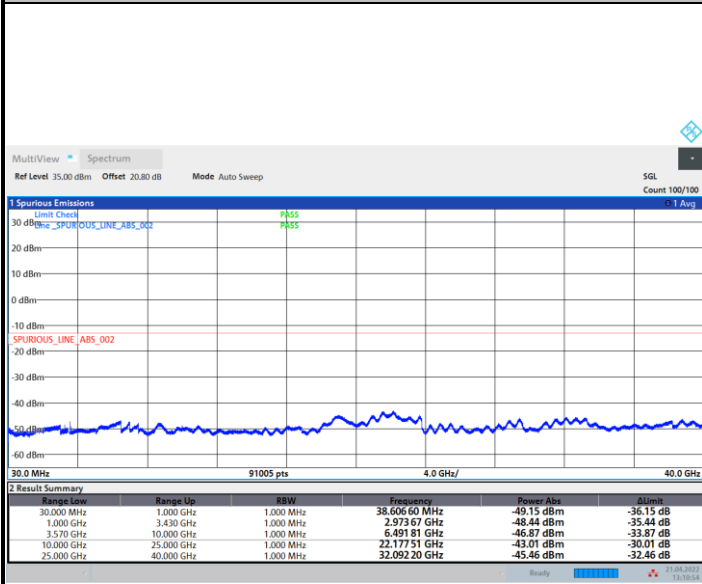
13:08:02 21.04.2022

Middle Channel



13:09:26 21.04.2022

Highest Channel



13:10:54 21.04.2022



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

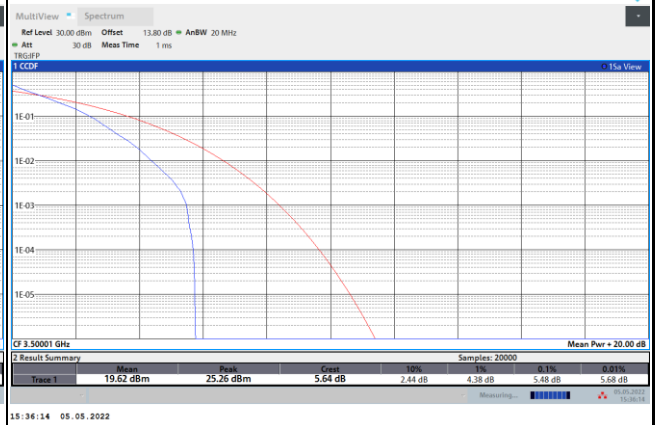
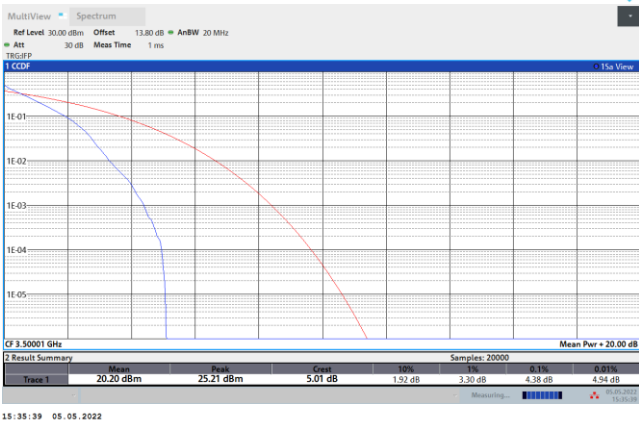
Mode	FR1 n78 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.38	5.48	6.50	7.74	PASS
Mode	FR1 n78 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.62				PASS



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

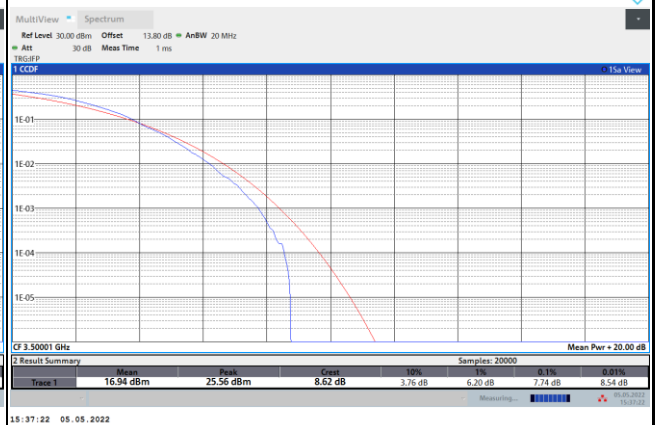
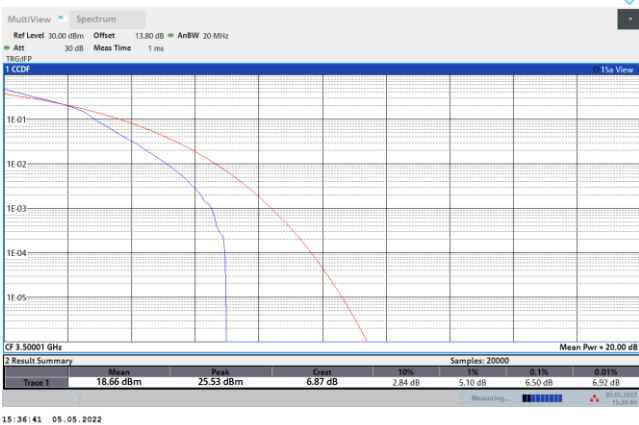
PI/2 BPSK

QPSK

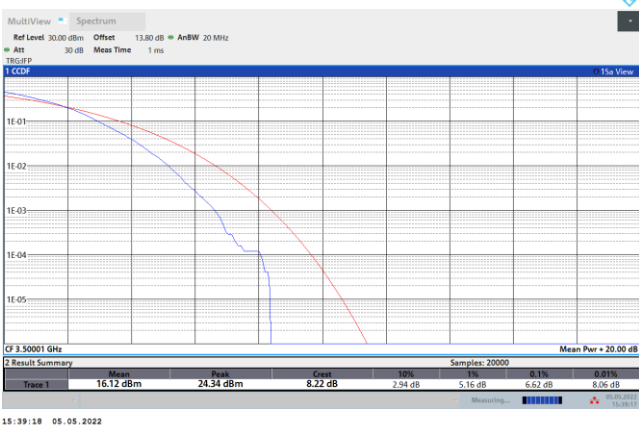


16QAM

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						