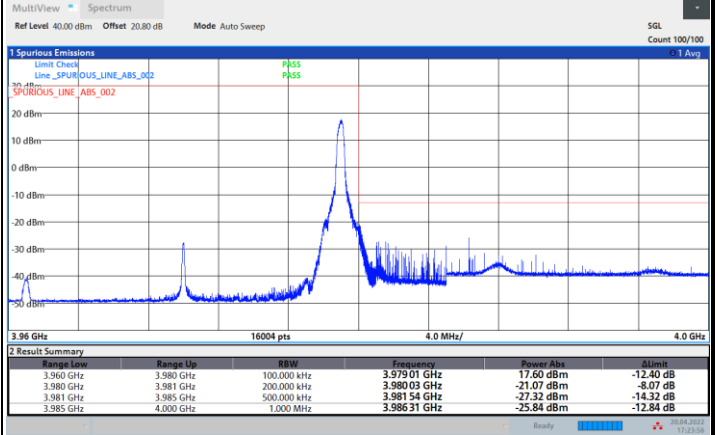
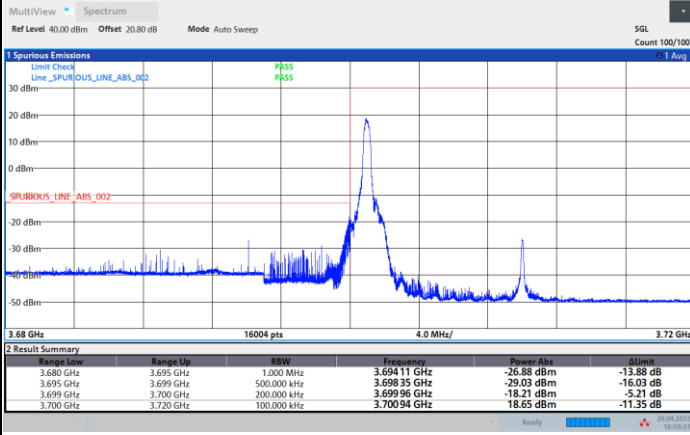




FR1 n77 / 20MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax

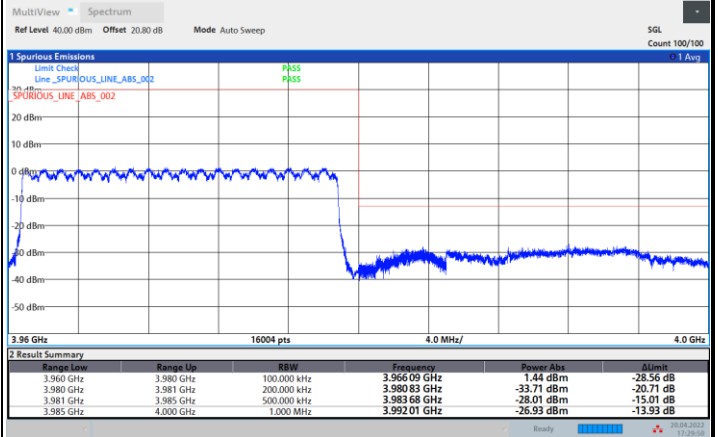
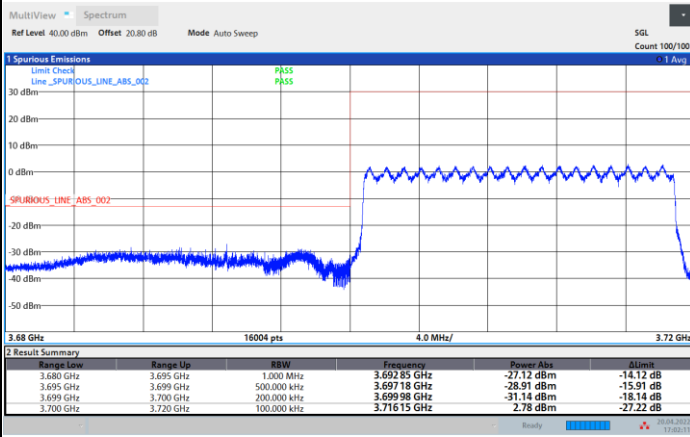


16:59:31 20.04.2022

17:23:57 20.04.2022

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



17:02:11 20.04.2022

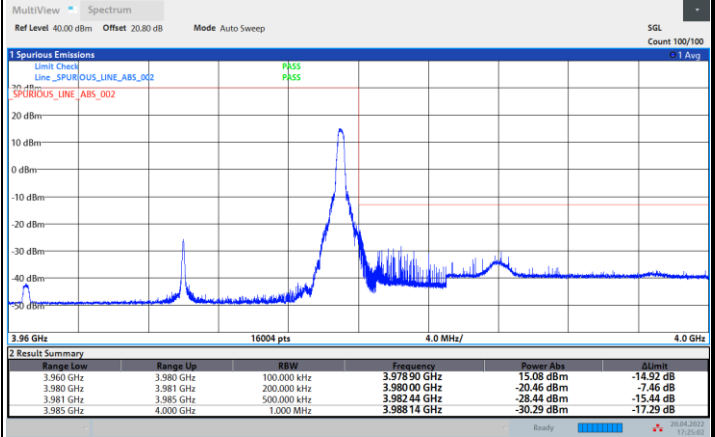
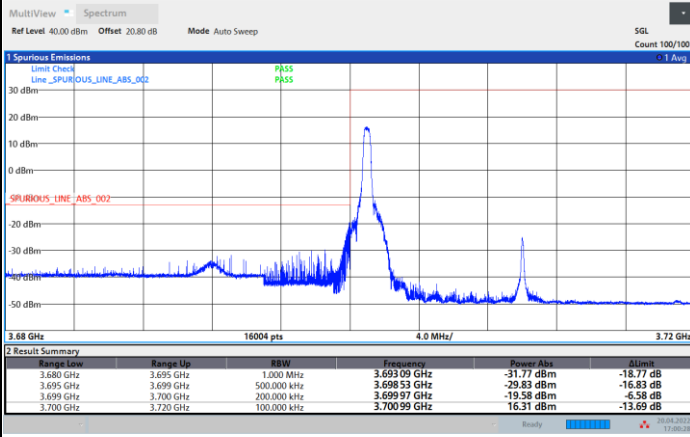
17:29:51 20.04.2022



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

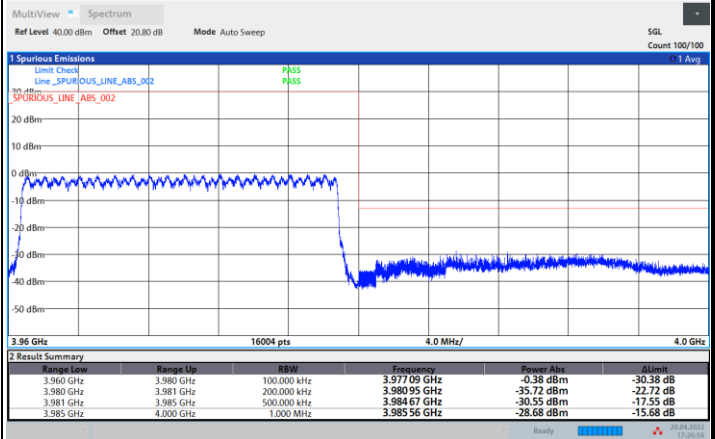
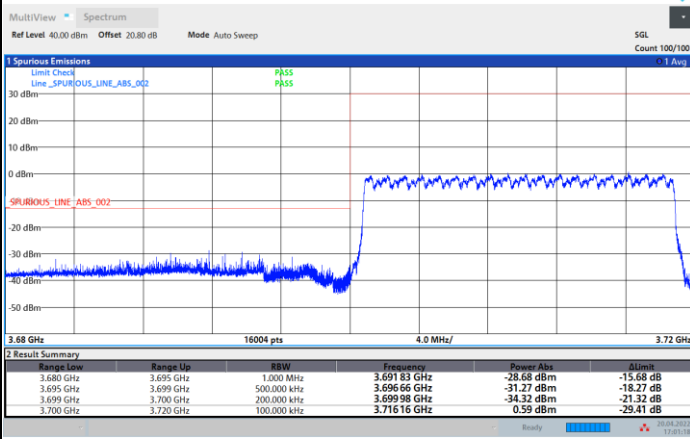
Lowest Band Edge / 1RB0

Highest Band Edge / 1RBmax



Lowest Band Edge / Full RB

Highest Band Edge / Full RB

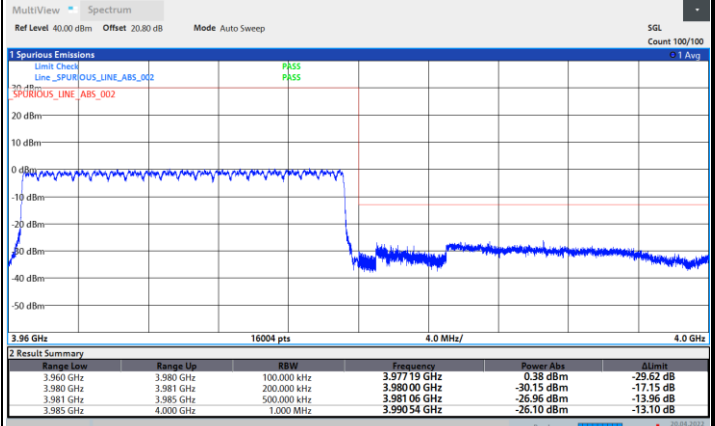
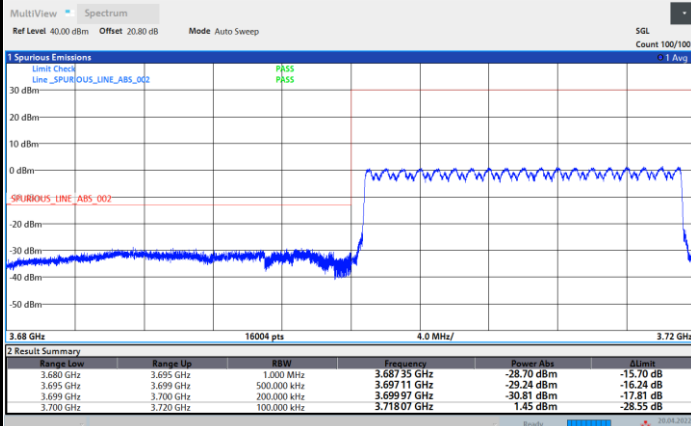




FR1 n77 / 20MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



17:06:10 20.04.2022

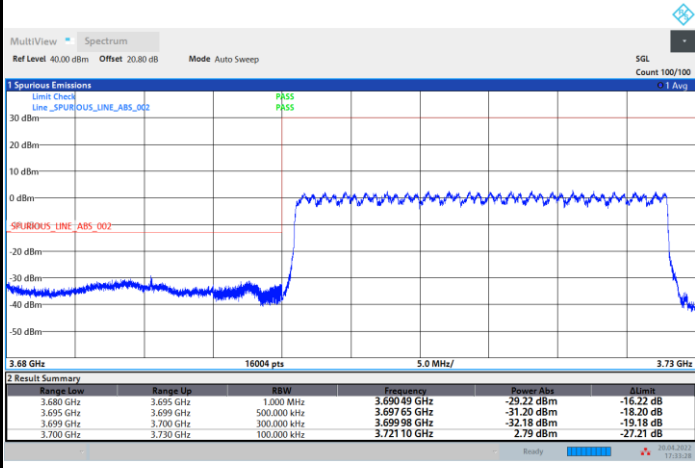
17:07:27 20.04.2022



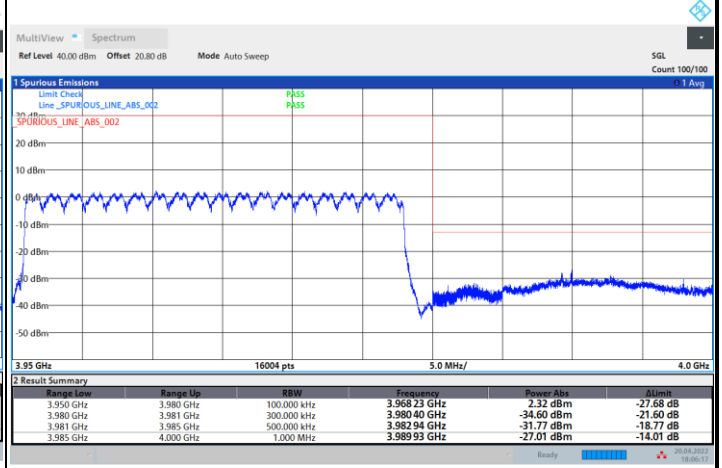
FR1 n77 / 30MHz / DFT-S OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

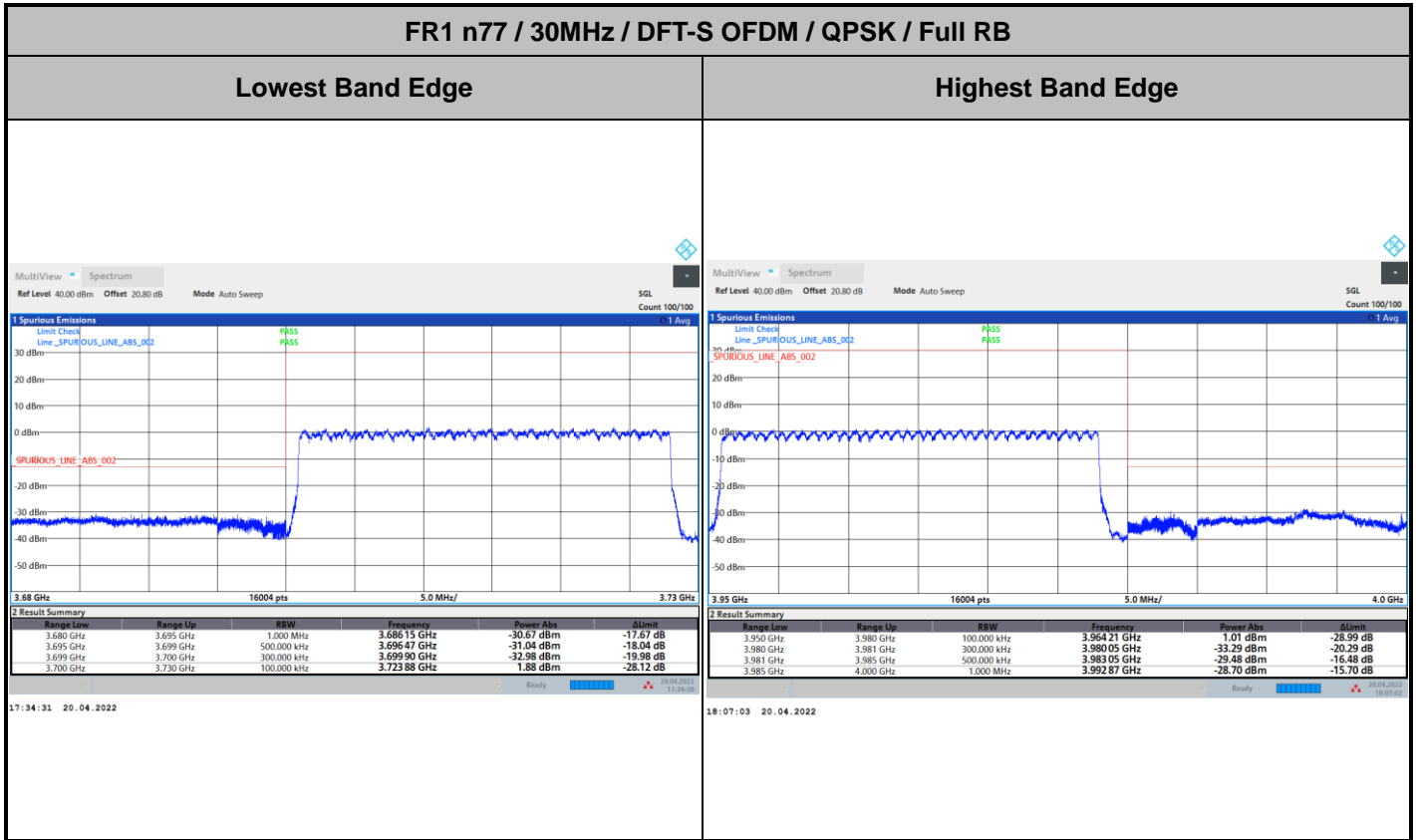
Highest Band Edge



17:33:29 20.04.2022



18:06:17 20.04.2022

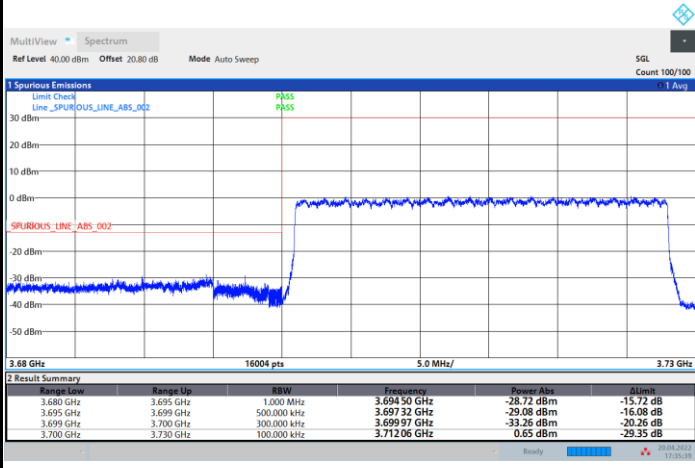




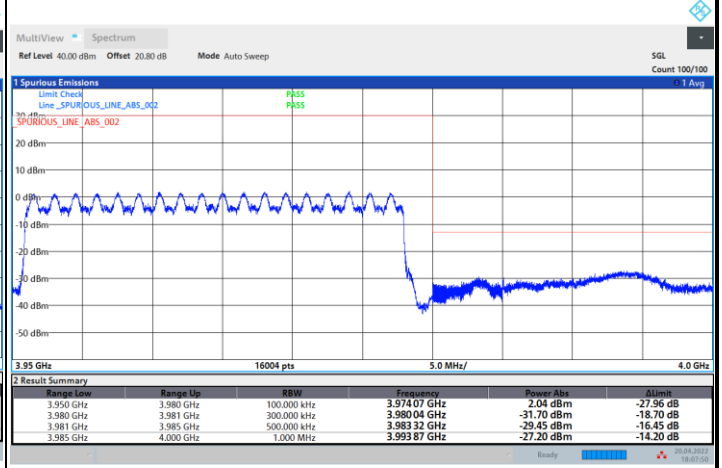
FR1 n77 / 30MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge



17:35:41 20.04.2022



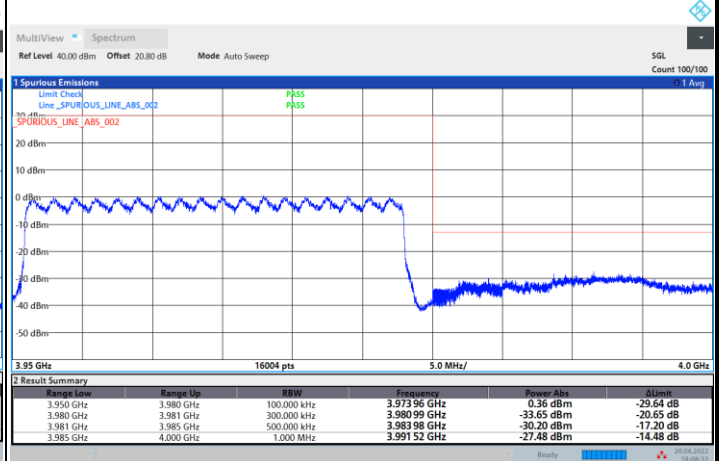
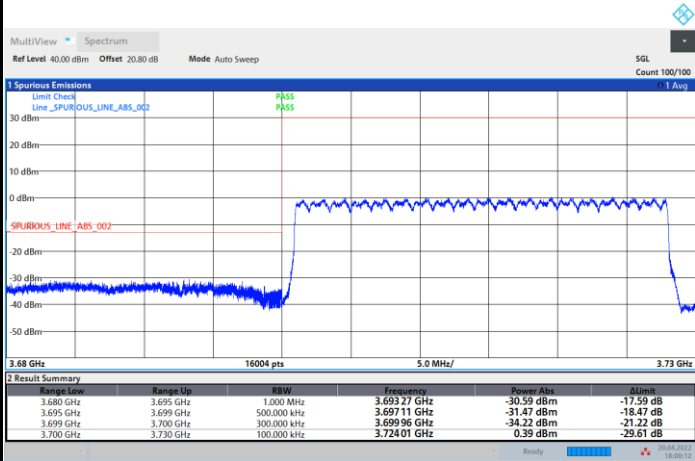
18:07:50 20.04.2022



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

Lowest Band Edge

Highest Band Edge



18:00:12 20.04.2022

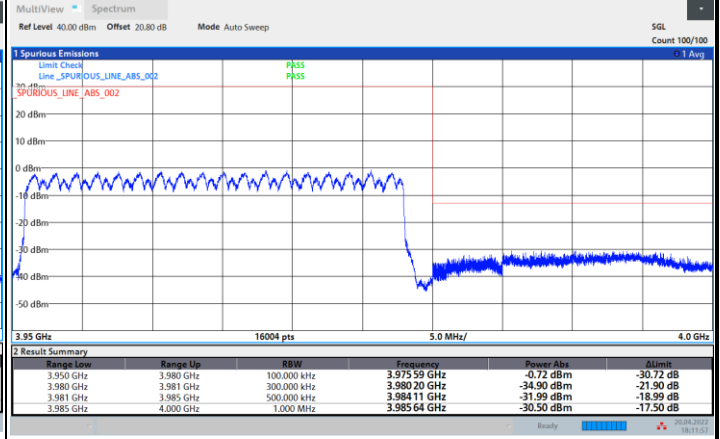
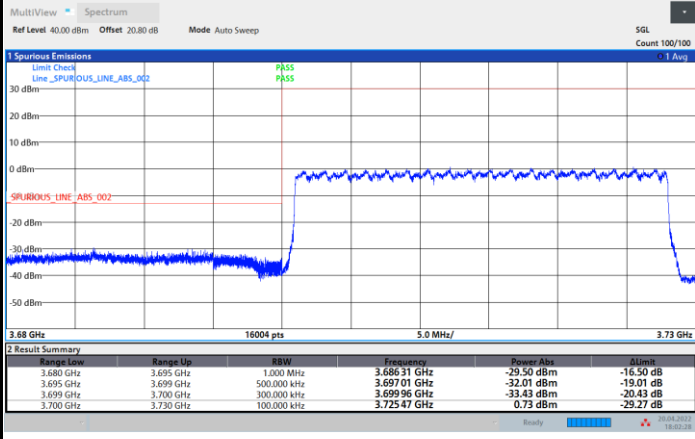
18:08:32 20.04.2022



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

Lowest Band Edge

Highest Band Edge

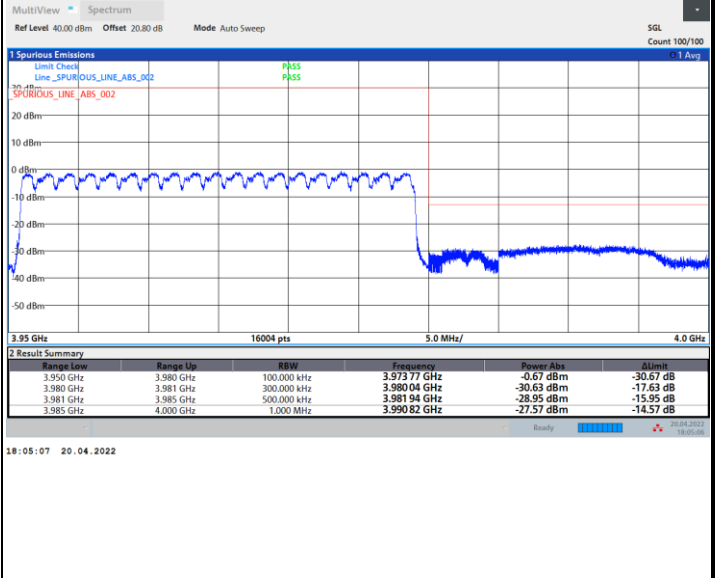
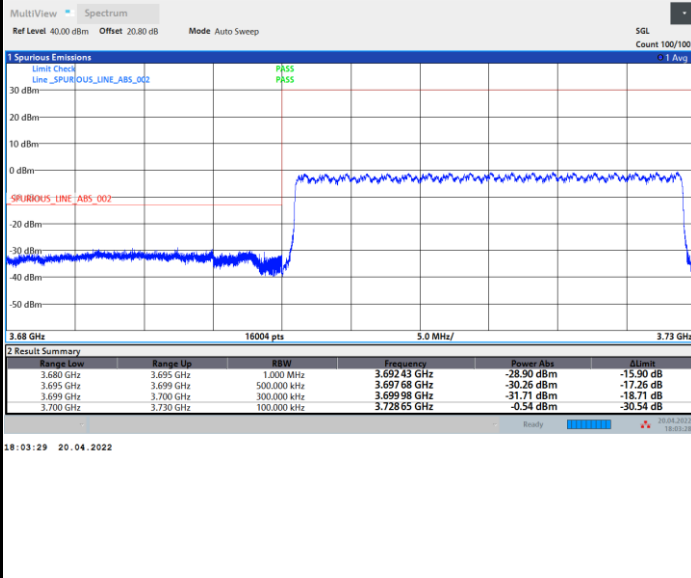




FR1 n77 / 30MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge

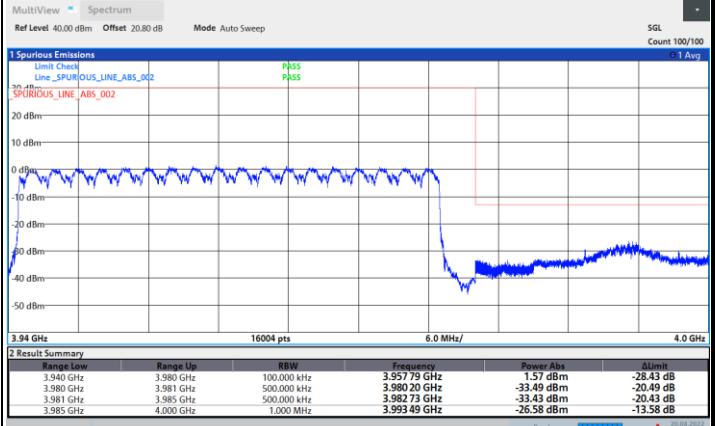
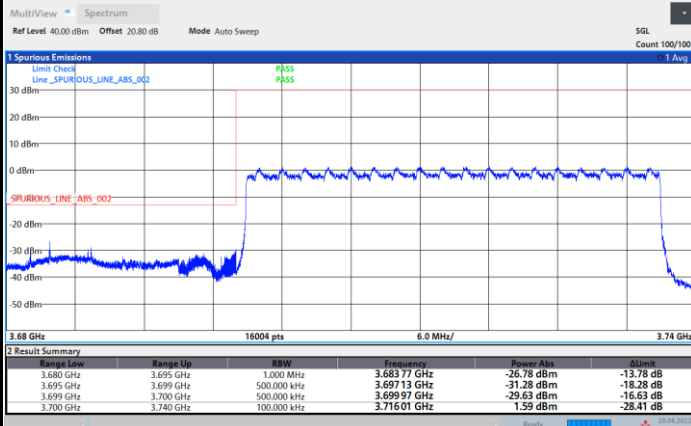




FR1 n77 / 40MHz / DFT-S OFDM / PI/2 BPSK / Full RB

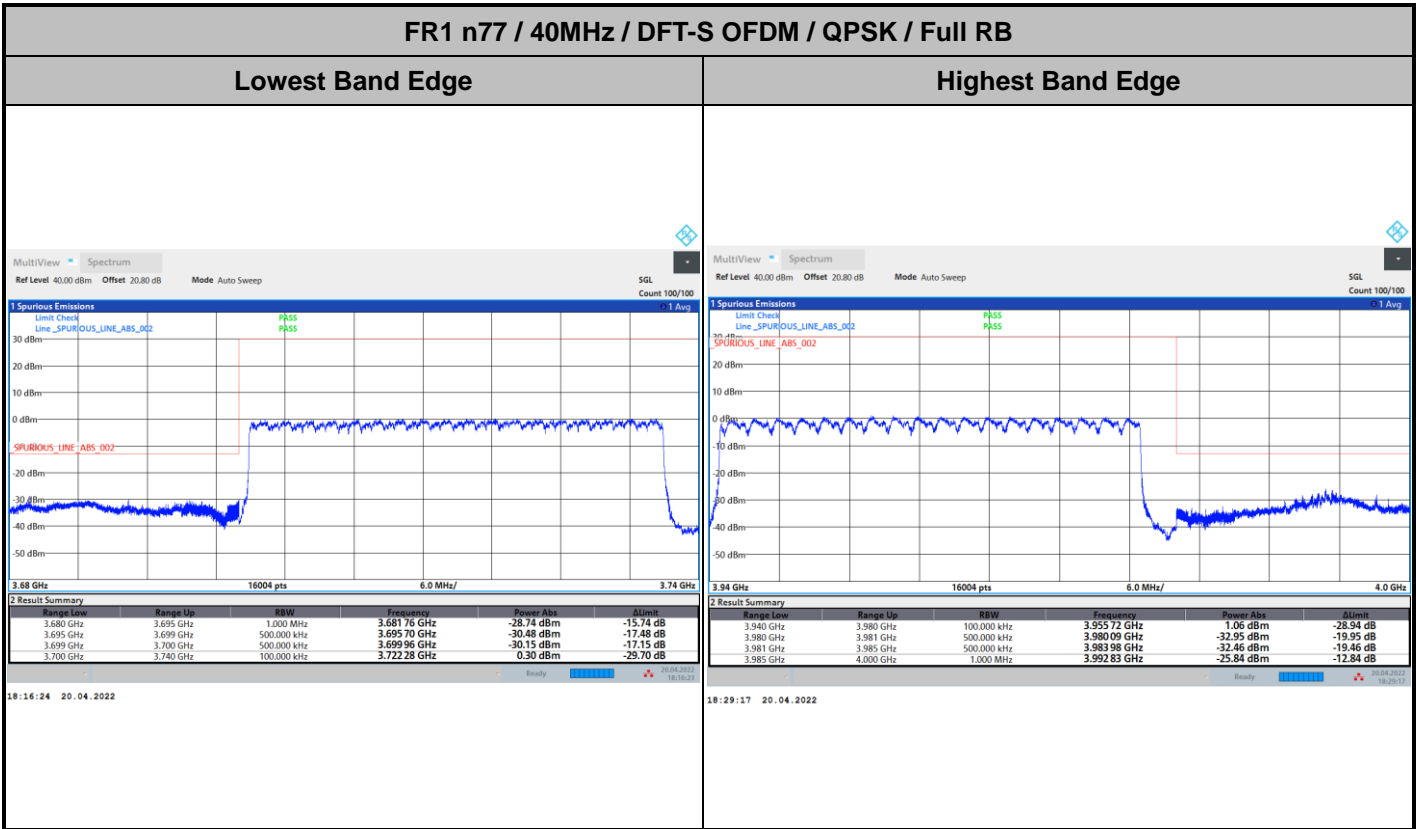
Lowest Band Edge

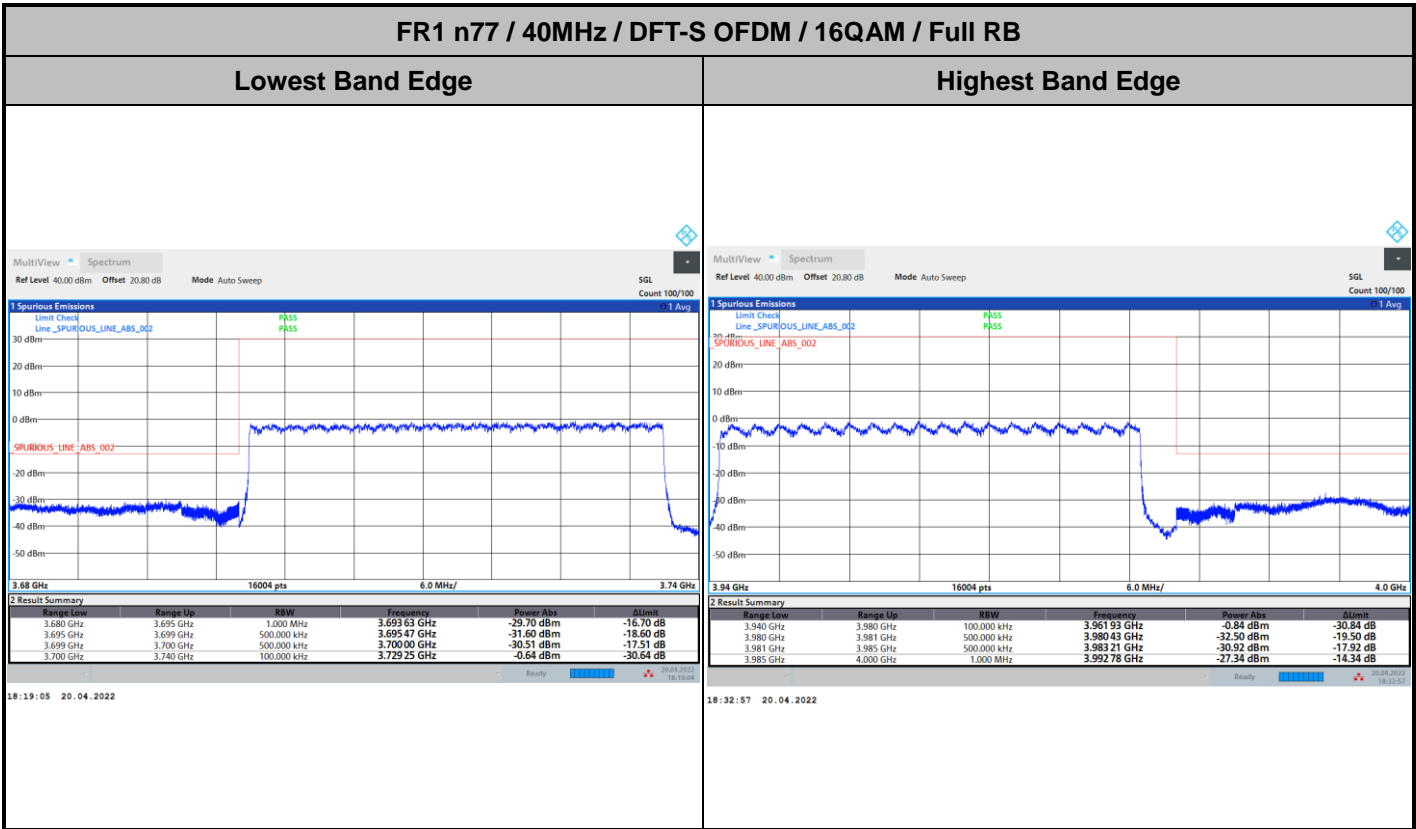
Highest Band Edge



18:14:58 20.04.2022

18:30:46 20.04.2022



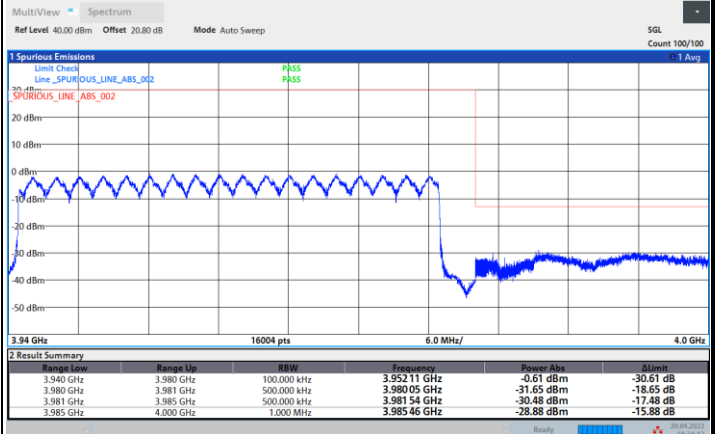
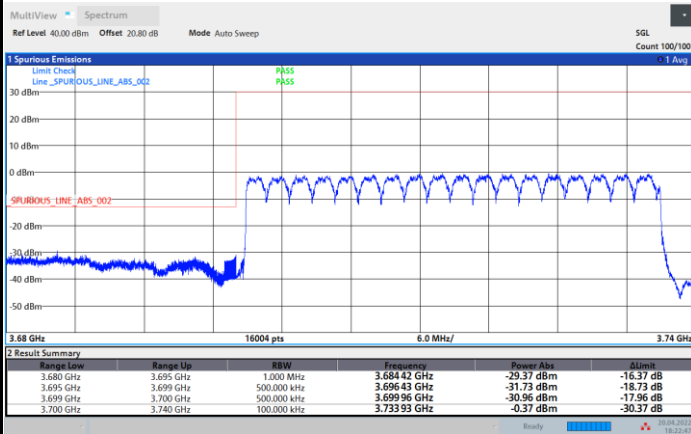




FR1 n77 / 40MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



18:22:47 20.04.2022

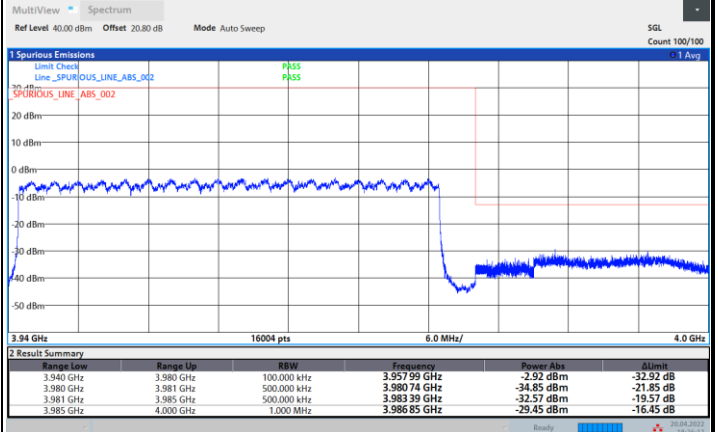
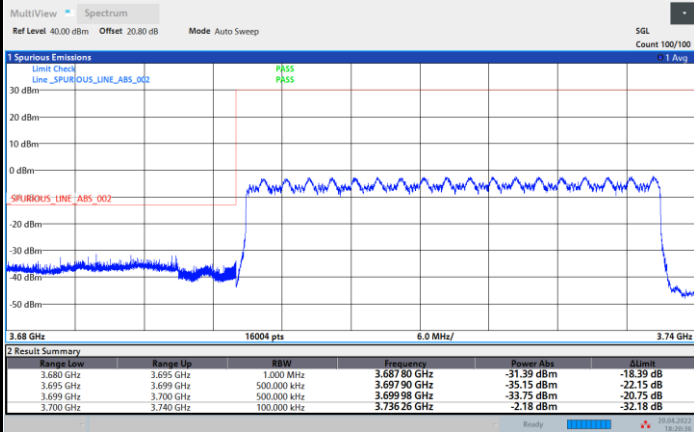
18:34:43 20.04.2022



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

Lowest Band Edge

Highest Band Edge

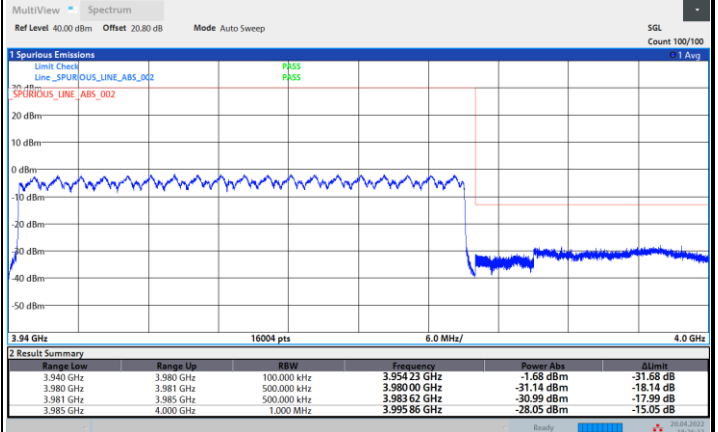
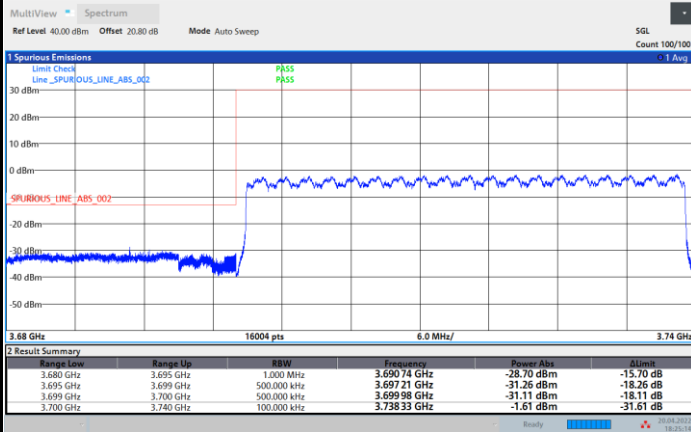




FR1 n77 / 40MHz / CP OFDM / QPSK / Full RB

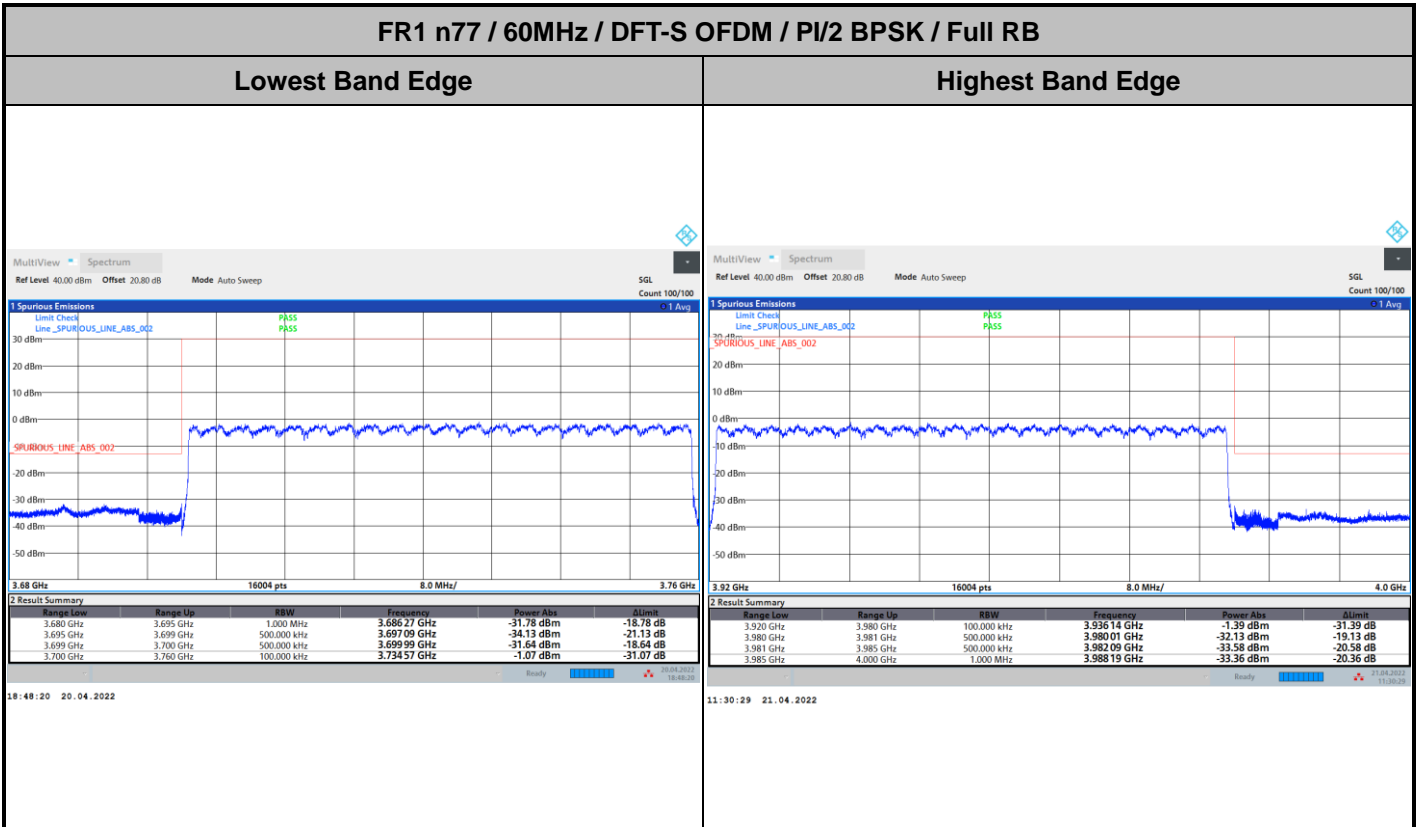
Lowest Band Edge

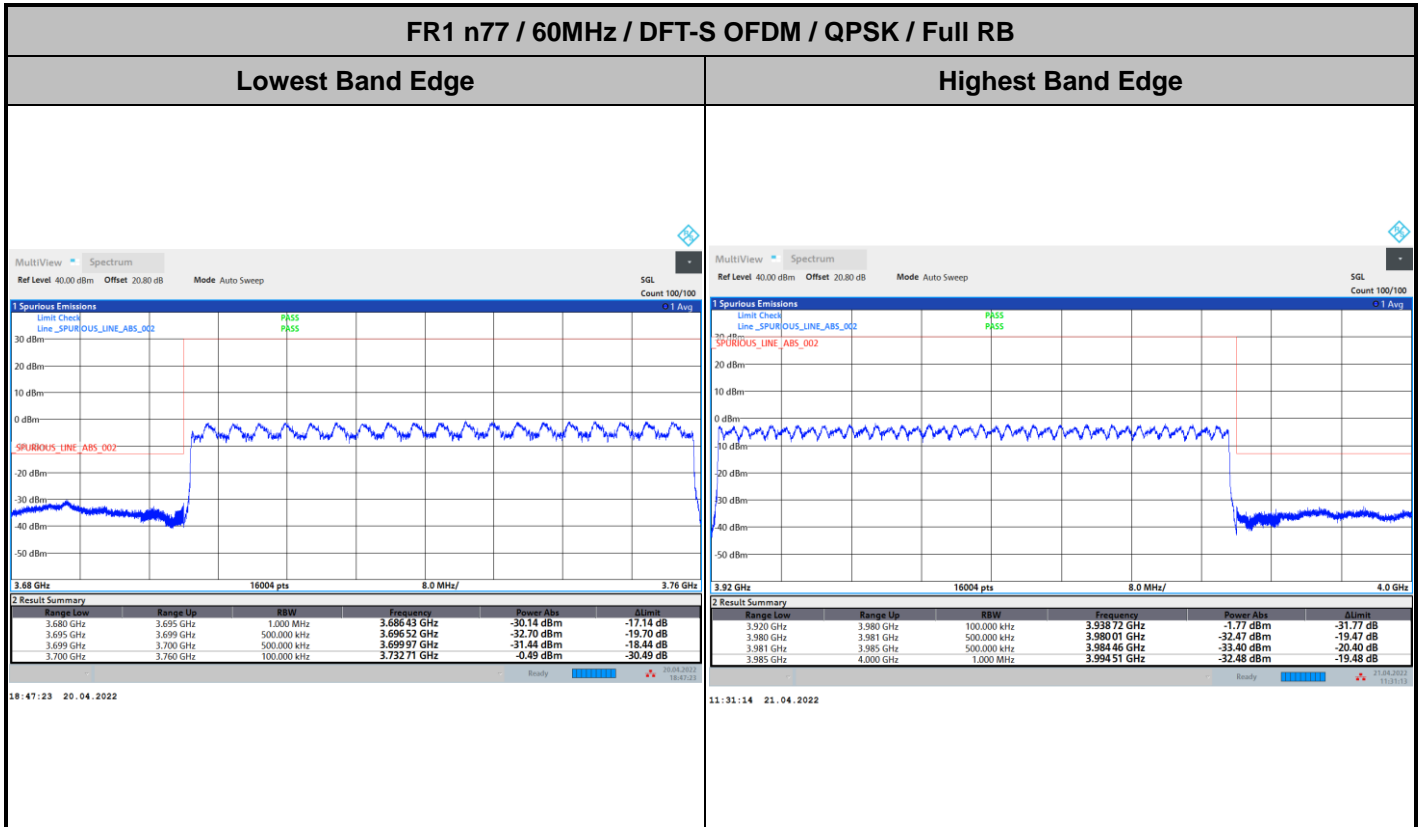
Highest Band Edge



18:25:14 20.04.2022

18:26:32 20.04.2022



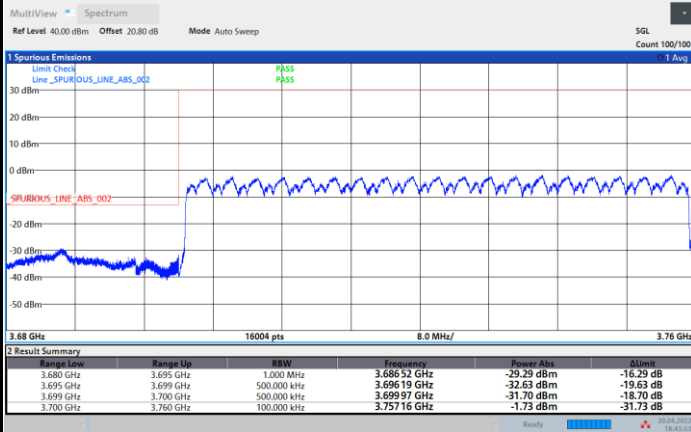




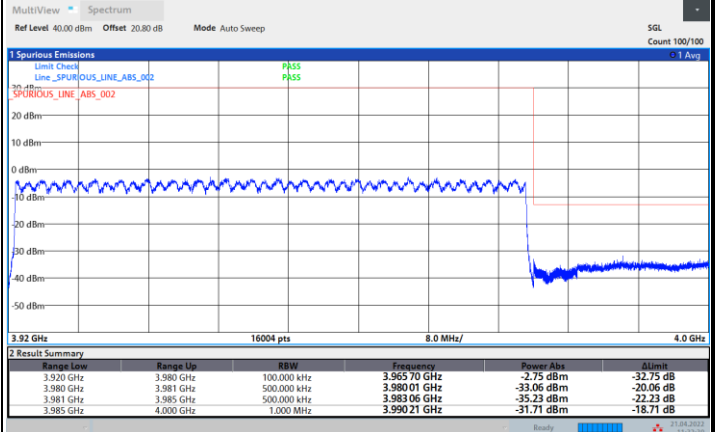
FR1 n77 / 60MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge



18:43:54 20.04.2022



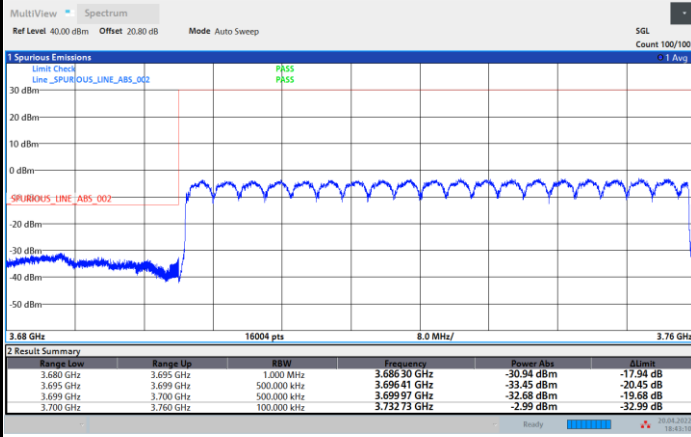
11:32:30 21.04.2022



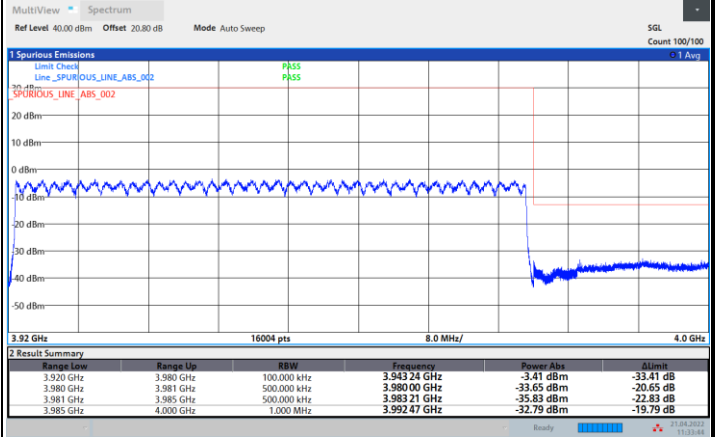
FR1 n77 / 60MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge



18:43:11 20.04.2022



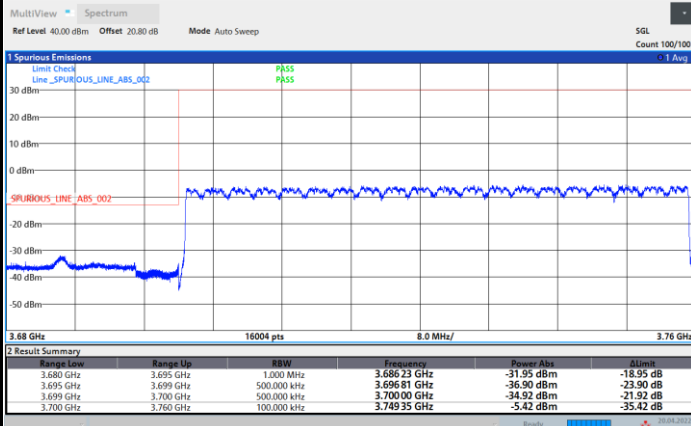
11:33:45 21.04.2022



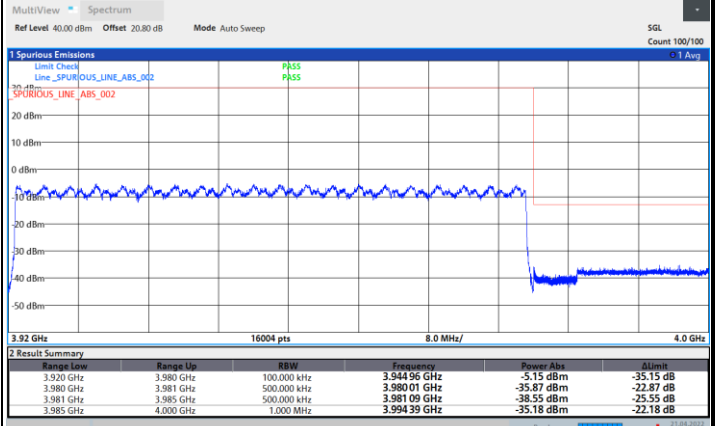
FR1 n77 / 60MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

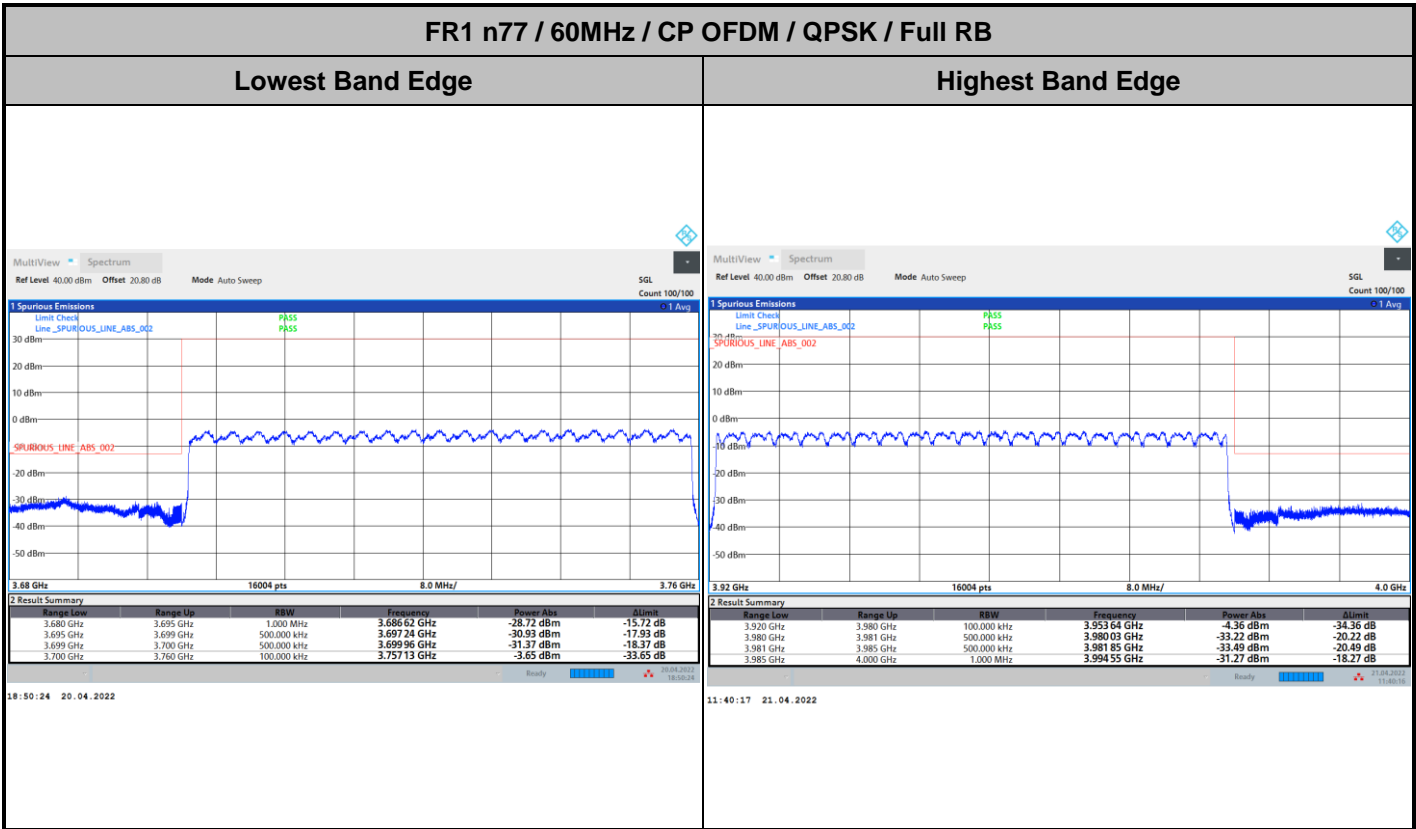
Highest Band Edge



18:41:53 20.04.2022



11:37:37 21.04.2022

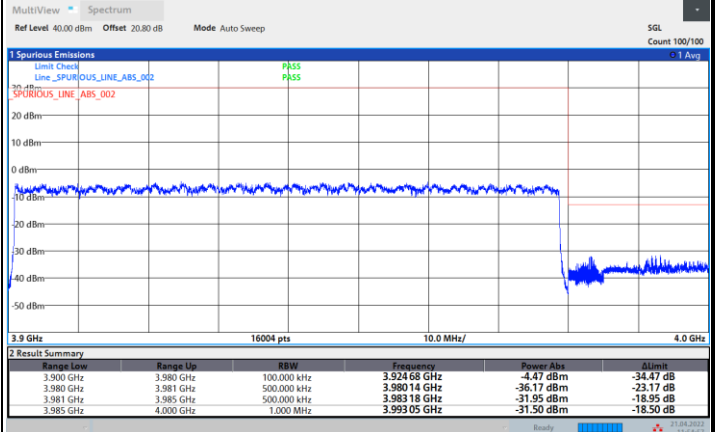
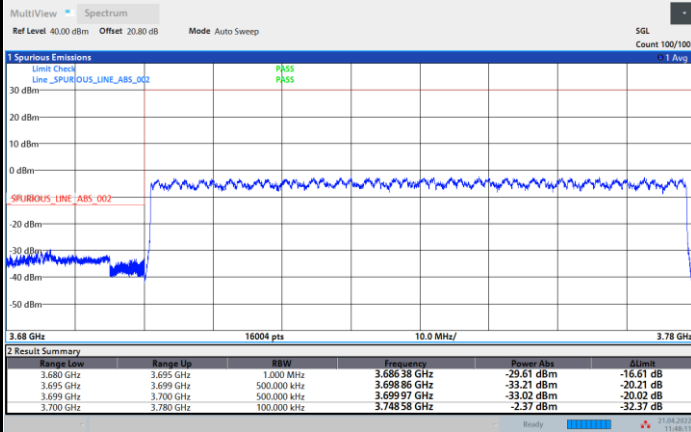




FR1 n77 / 80MHz / DFT-S OFDM / PI/2 BPSK / Full RB

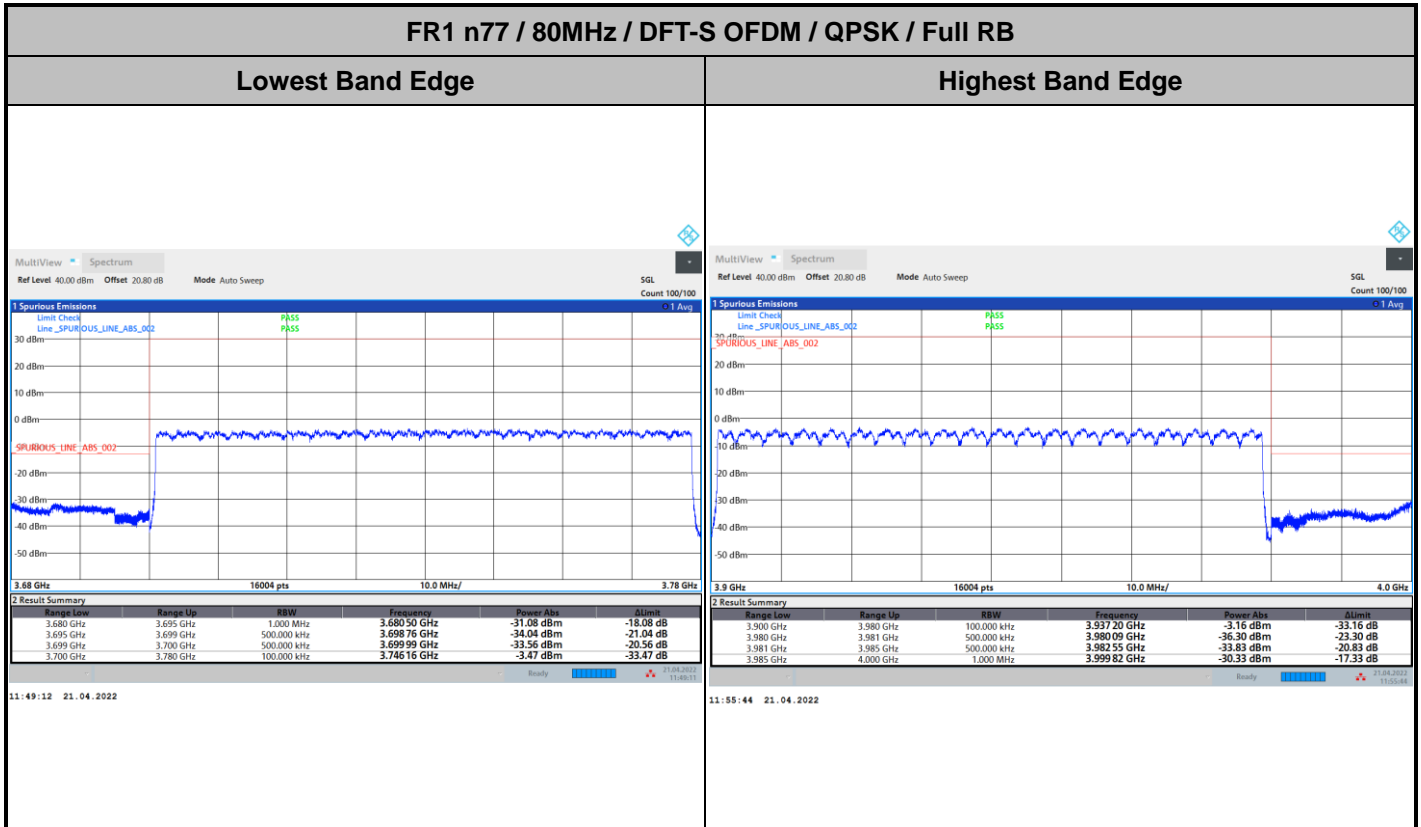
Lowest Band Edge

Highest Band Edge



11:48:12 21.04.2022

11:54:58 21.04.2022

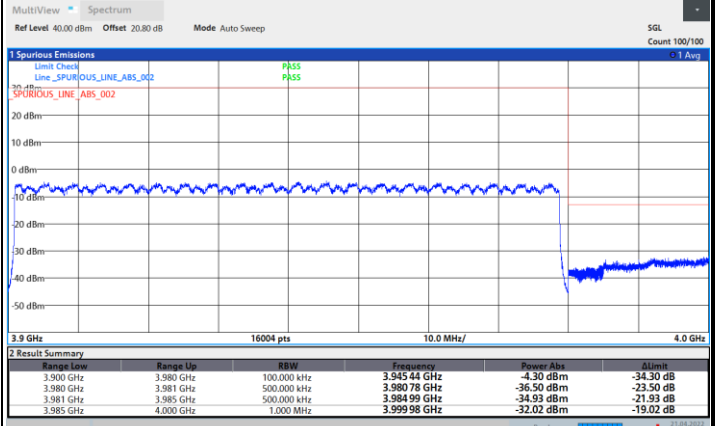
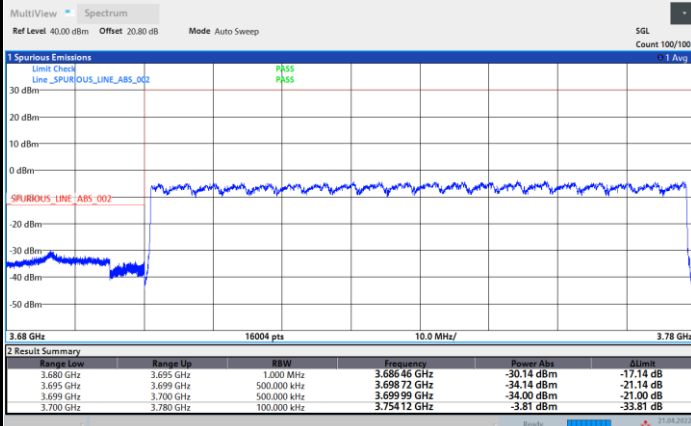




FR1 n77 / 80MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge



11:50:12 21.04.2022

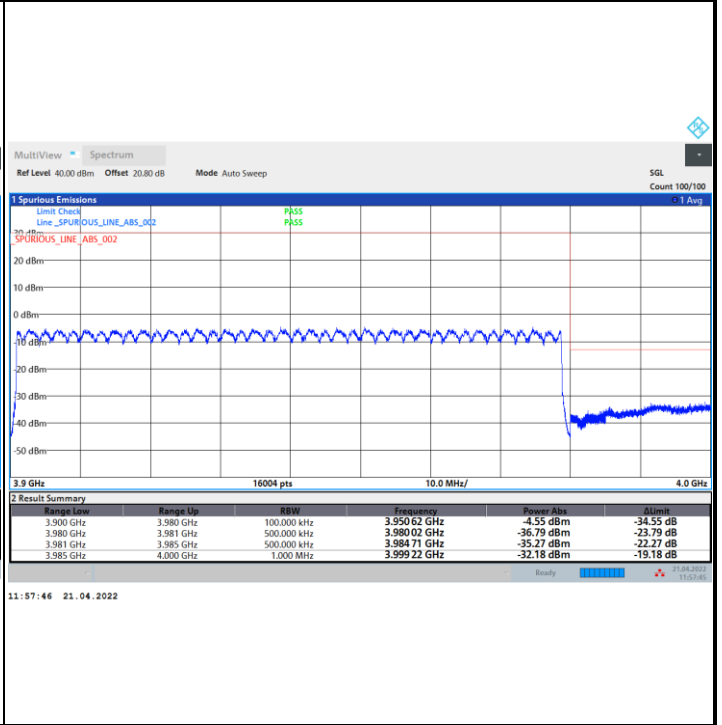
11:56:46 21.04.2022



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

Lowest Band Edge

Highest Band Edge

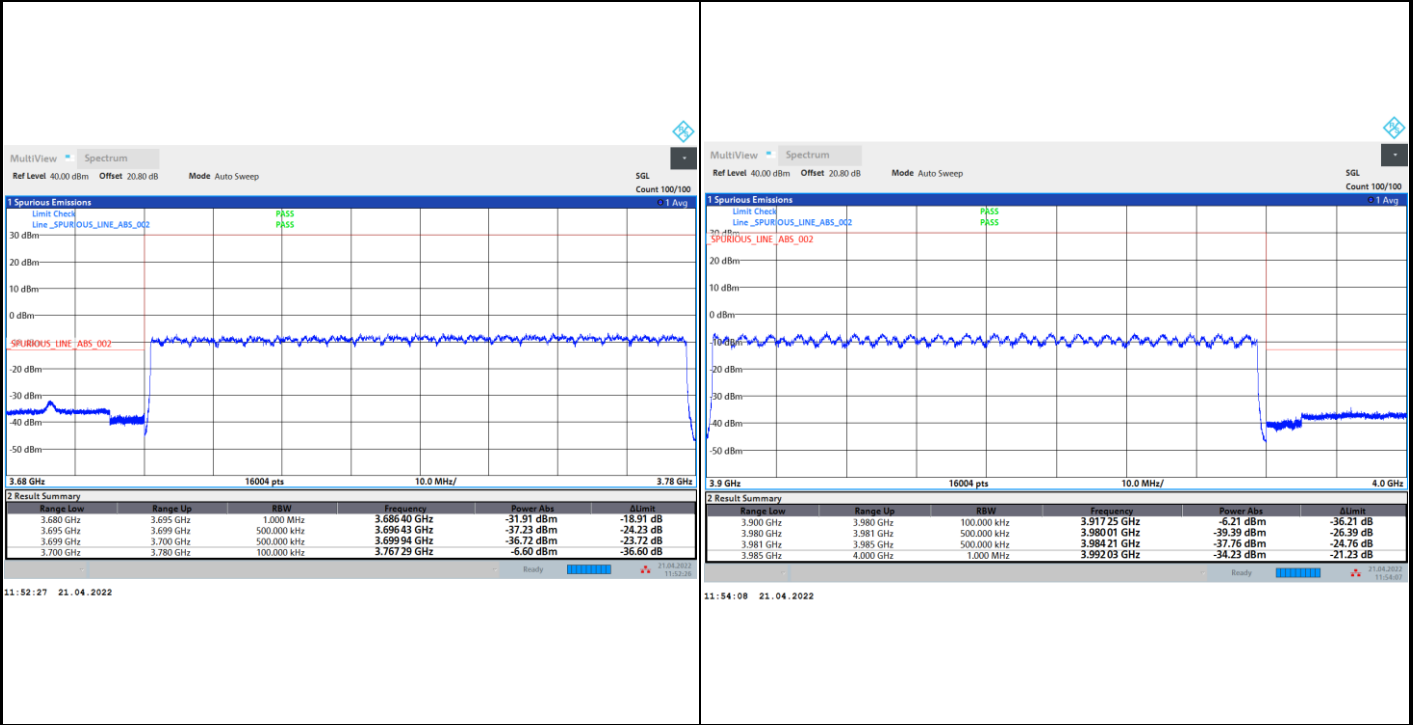




FR1 n77 / 80MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

Highest Band Edge

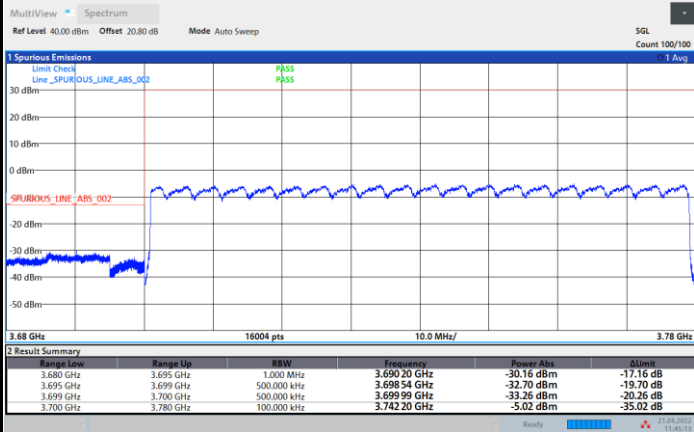




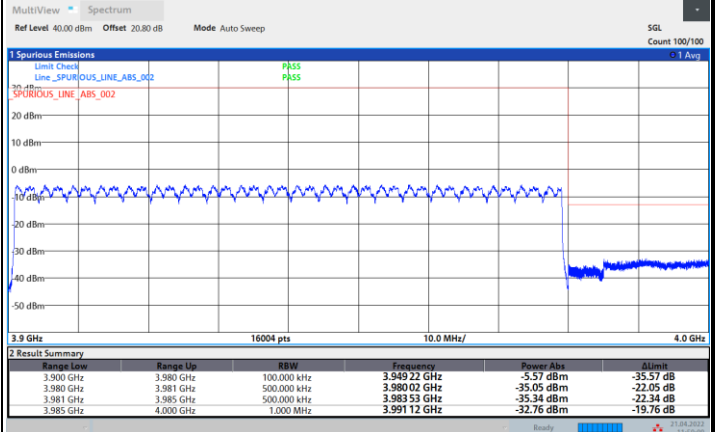
FR1 n77 / 80MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge

Highest Band Edge



11:45:14 21.04.2022



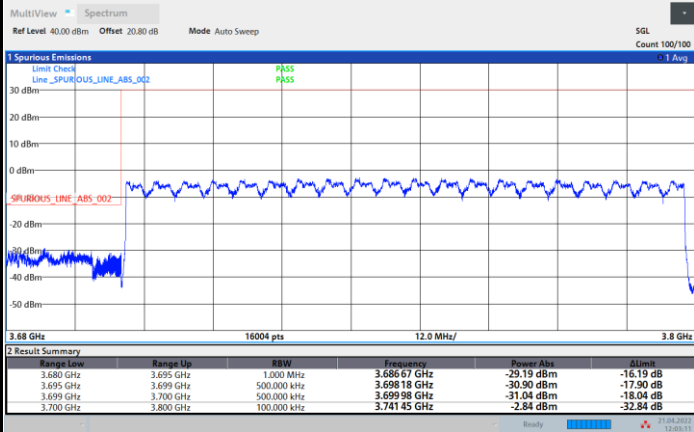
11:59:10 21.04.2022



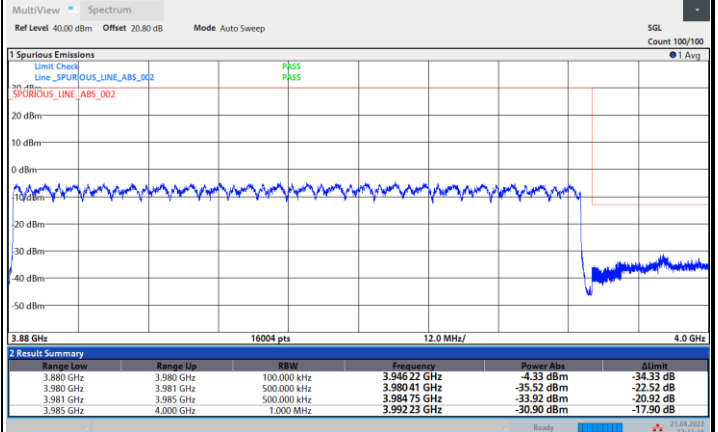
FR1 n77 / 100MHz / DFT-S OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

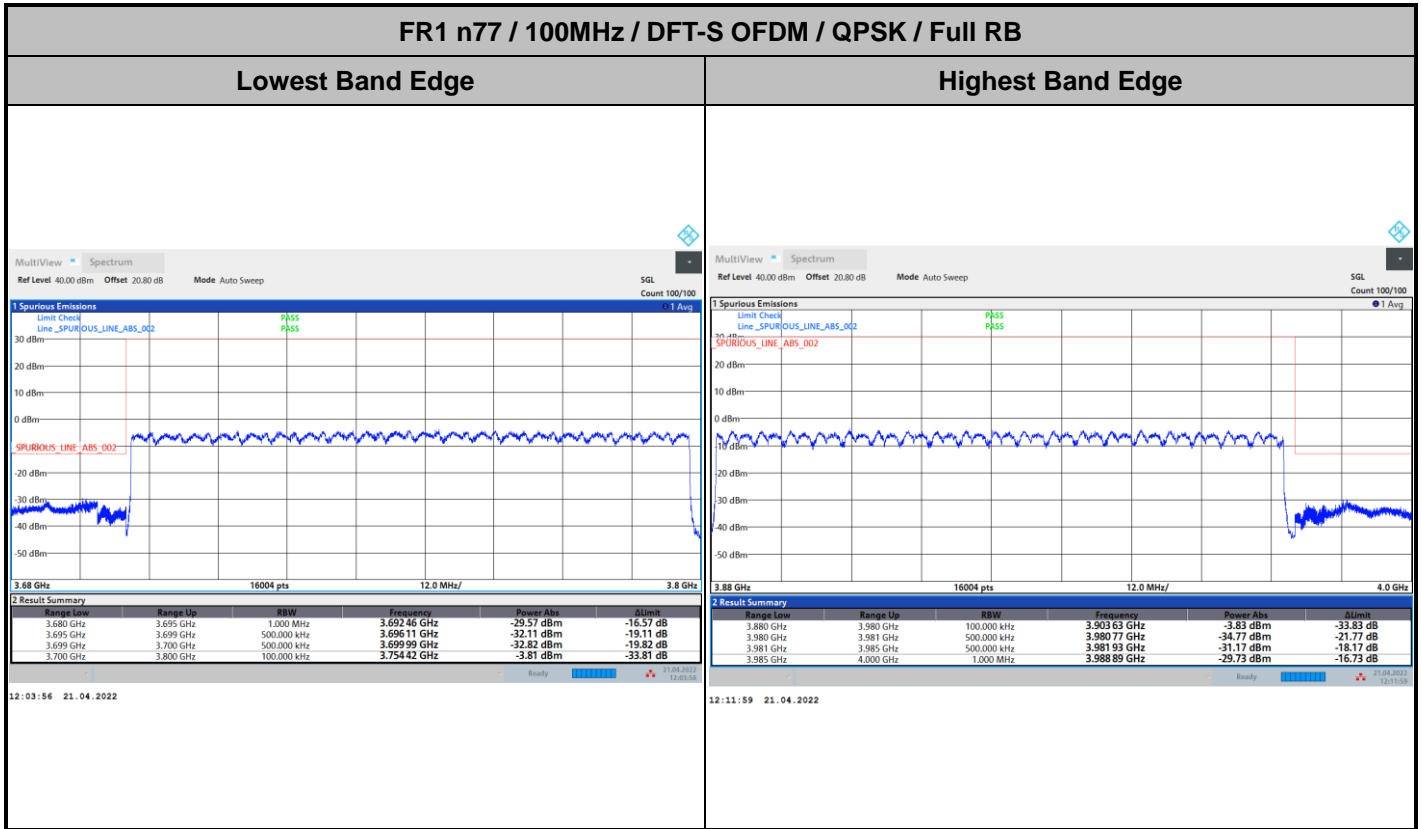
Highest Band Edge



12:03:11 21.04.2022



12:11:17 21.04.2022

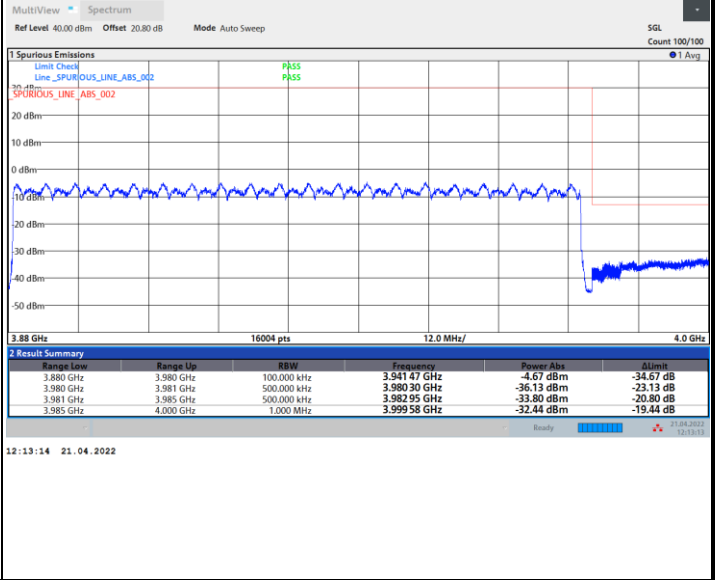
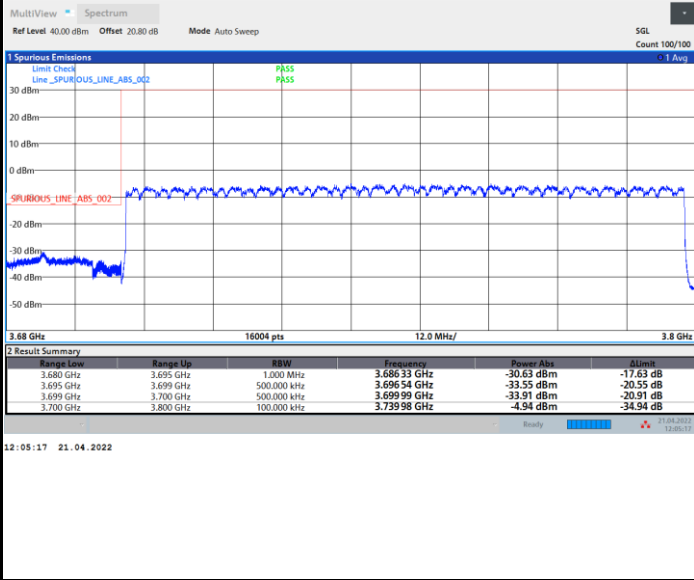




FR1 n77 / 100MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

Highest Band Edge

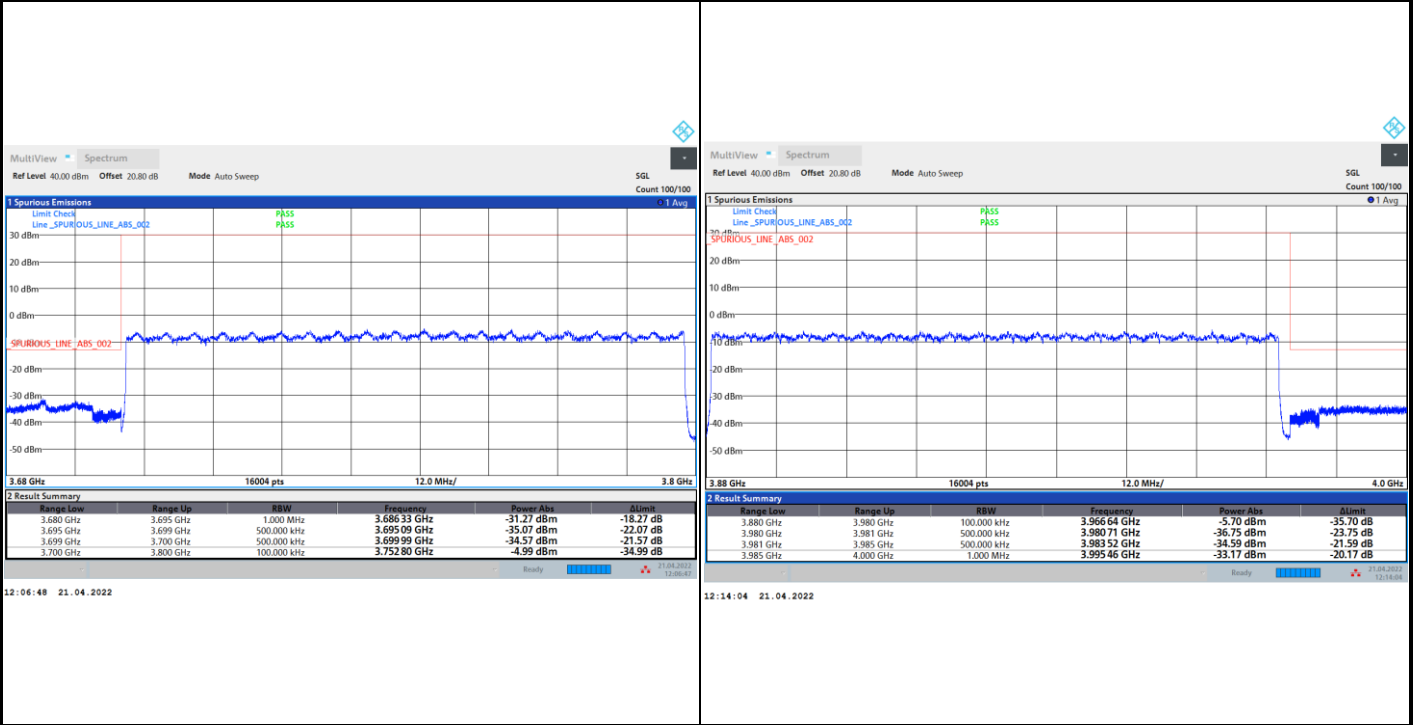




FR1 n77 / 100MHz / DFT-S OFDM / 64QAM / Full RB

Lowest Band Edge

Highest Band Edge

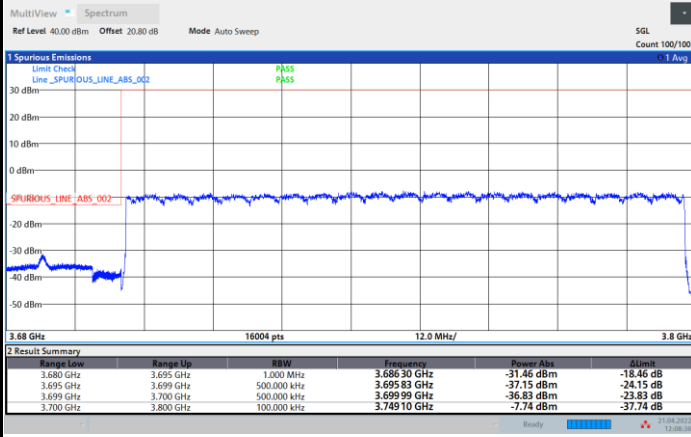




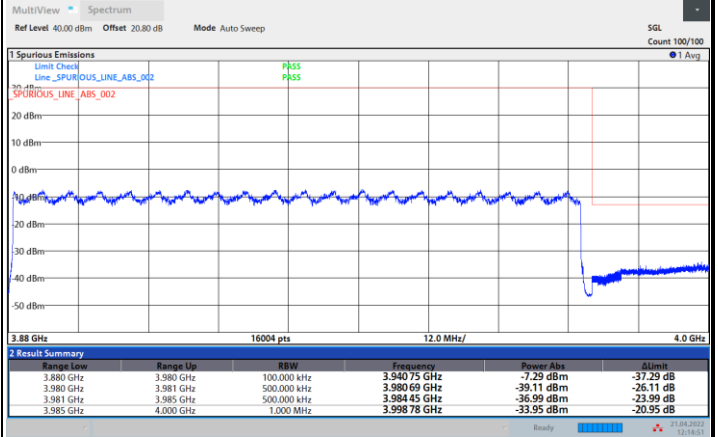
FR1 n77 / 100MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge / Full RB

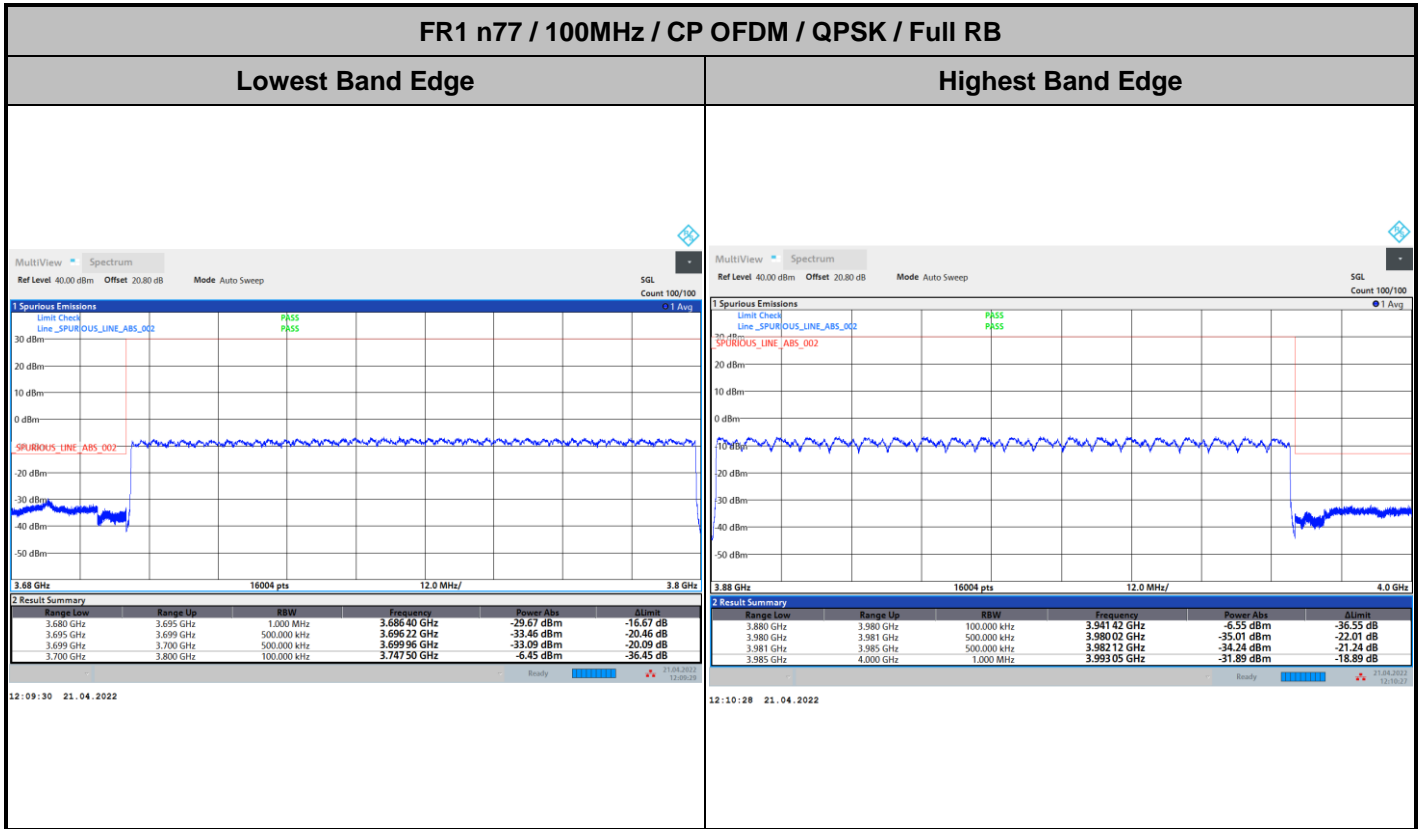
Highest Band Edge / Full RB



12:08:36 21.04.2022



12:14:52 21.04.2022

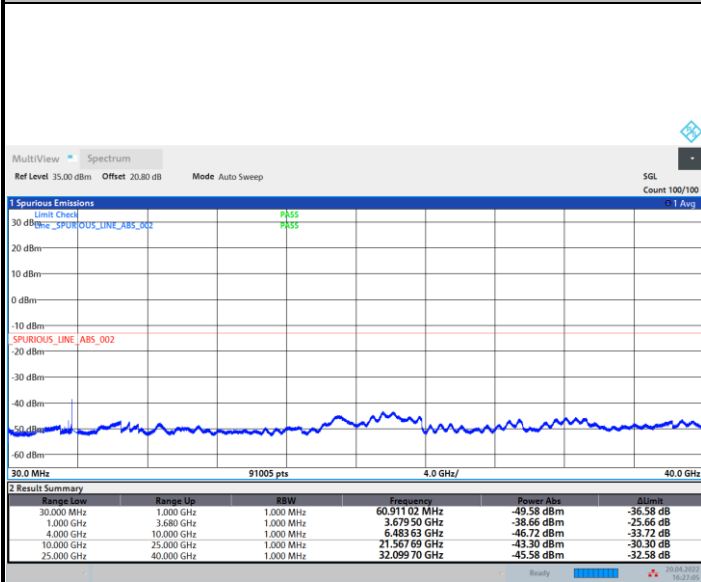




Conducted Spurious Emission

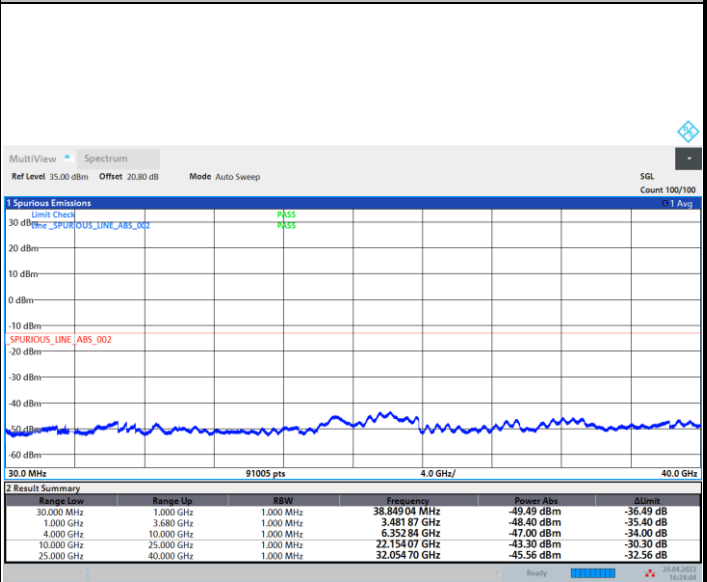
FR1 n77 / 20MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel



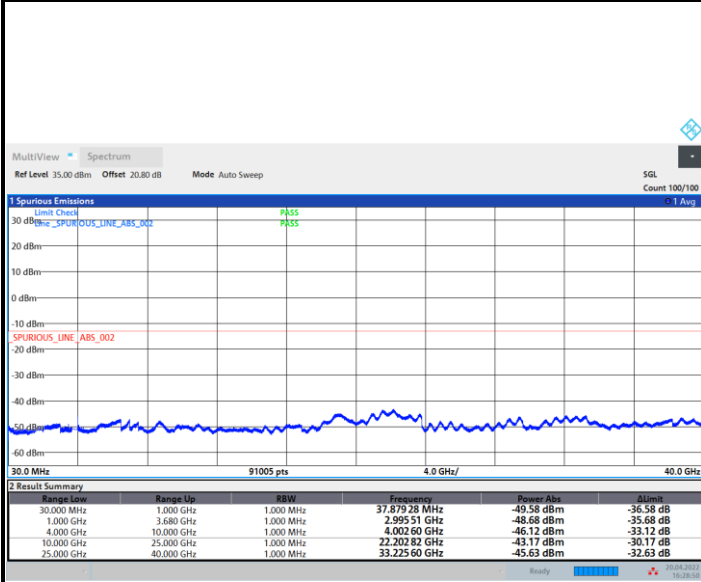
16:27:05 20.04.2022

Middle Channel



16:24:05 20.04.2022

Highest Channel



16:28:51 20.04.2022



Frequency Stability

Test Conditions		FR1 n77 (BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0029	PASS
40	Normal Voltage	0.0001	
30	Normal Voltage	0.0015	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0041	
0	Normal Voltage	0.0033	
-10	Normal Voltage	0.0005	
-20	Normal Voltage	0.0003	
-30	Normal Voltage	0.0016	
20	Maximum Voltage	0.0030	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0029	

Note:

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



FR1 n78

Peak-to-Average Ratio

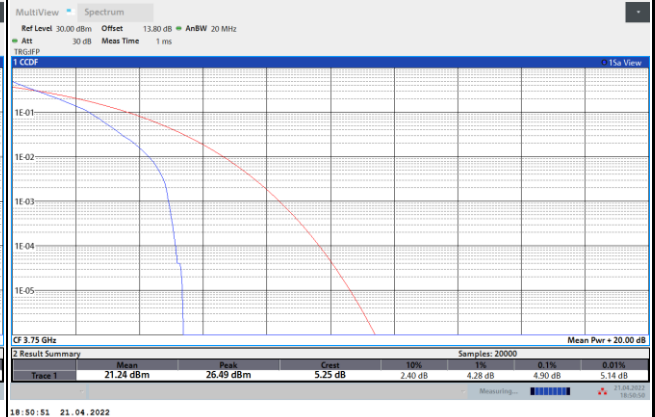
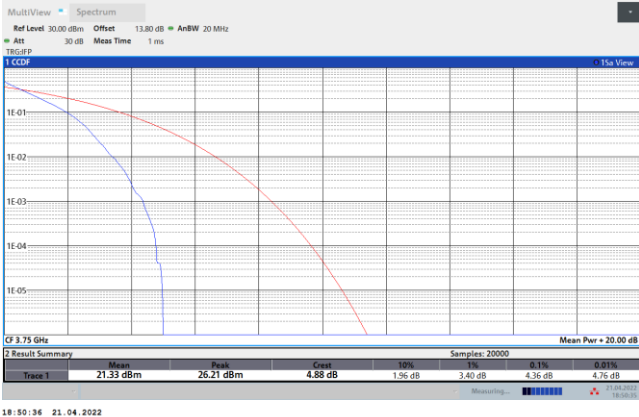
Mode	FR1 n78 / 20MHz / DFT-S OFDM				
Mod.	PI/2 BPSK	QPSK	16QAM	64QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	4.36	4.90	6.70	6.82	PASS
Mode	FR1 n78 / 20MHz / DFT-S OFDM				
Mod.	256QAM				Limit: 13dB
RB Size	Full RB				Result
Middle CH	6.58				PASS



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

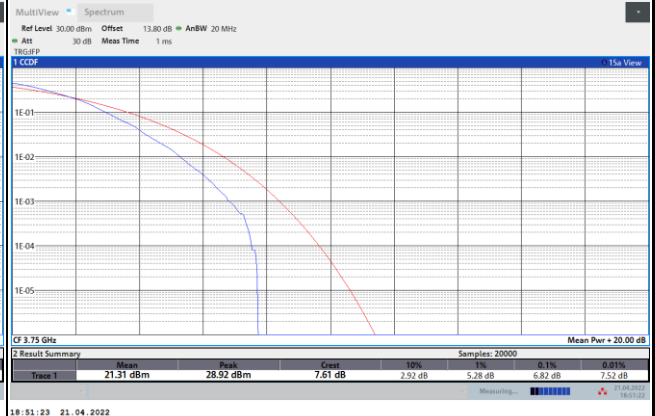
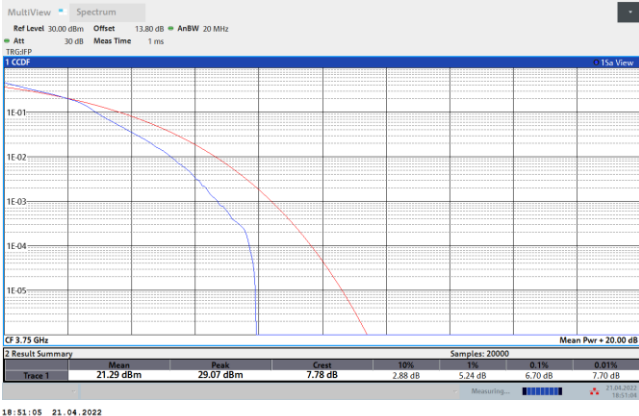
PI/2 BPSK

QPSK

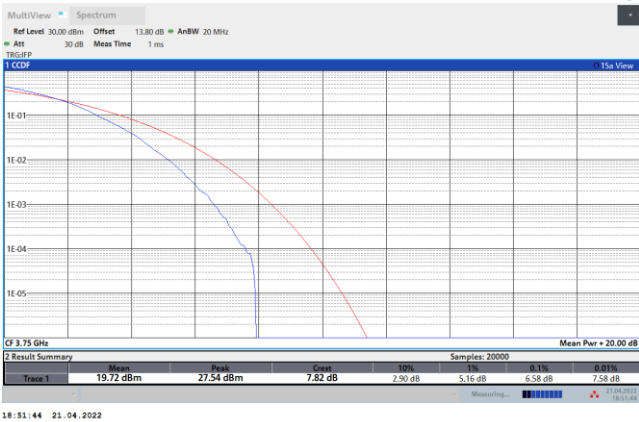


16QAM

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	19.02	27.93	38.20	48.35	60.54	66.99	79.92	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	19.34	19.18	29.19	28.89	40.28	40.44	50.05	50.05
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	19.34	19.14	29.13	28.77	40.20	40.20	50.05	49.95
BW	60MHz		70MHz		80MHz		90MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	60.54	60.54	70.35	70.21	80.40	80.40	90.45	90.27
Mod.	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM	64QAM	256QAM
Middle CH	60.30	60.42	70.21	70.49	80.40	80.24	90.45	90.45
BW	100MHz							
Mod.	QPSK	16QAM						
Middle CH	100.50	100.70						
Mod.	64QAM	256QAM						
Middle CH	100.50	100.70						