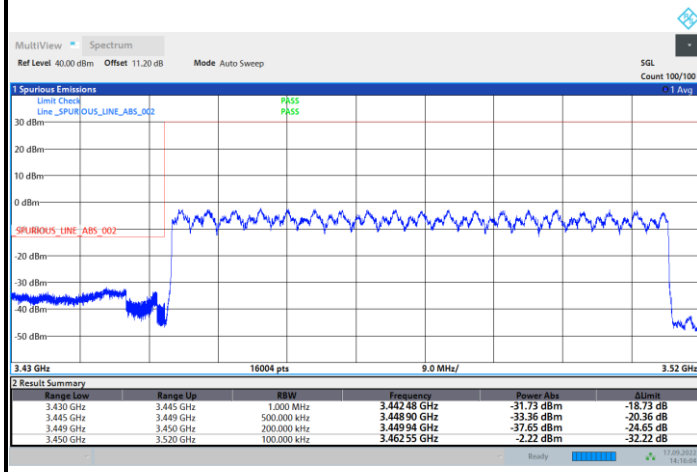


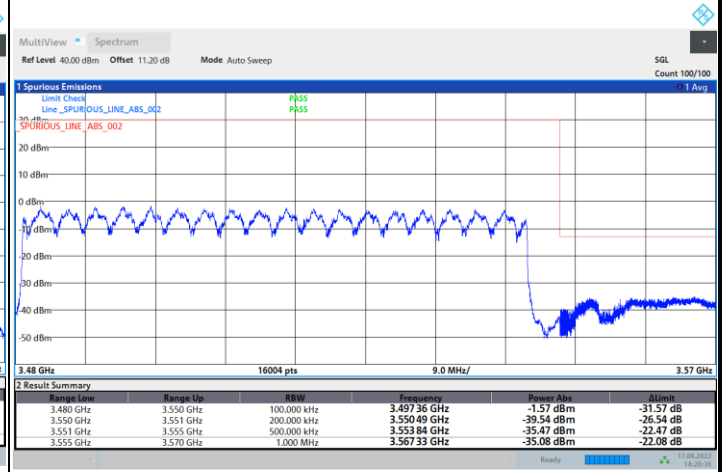


FR1 n77 / 70MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

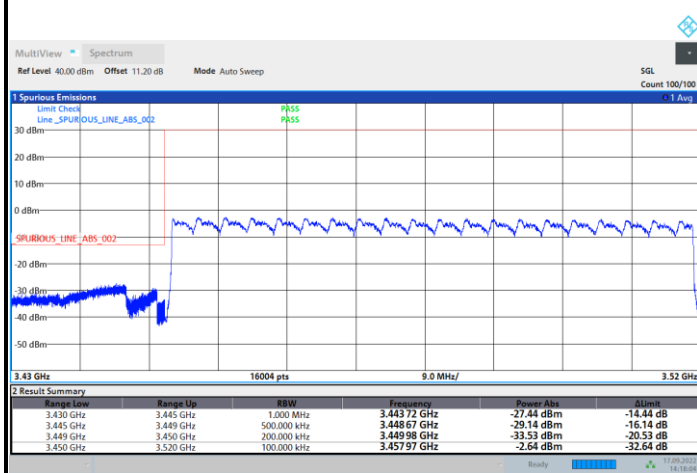


Highest Band Edge / Full RB

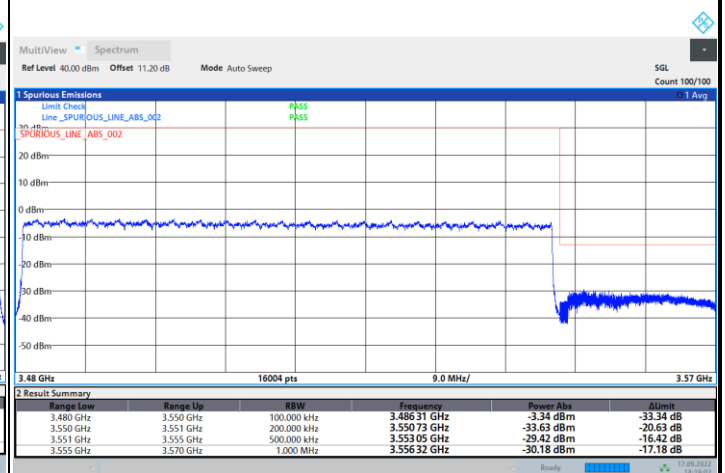


FR1 n77 / 70MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



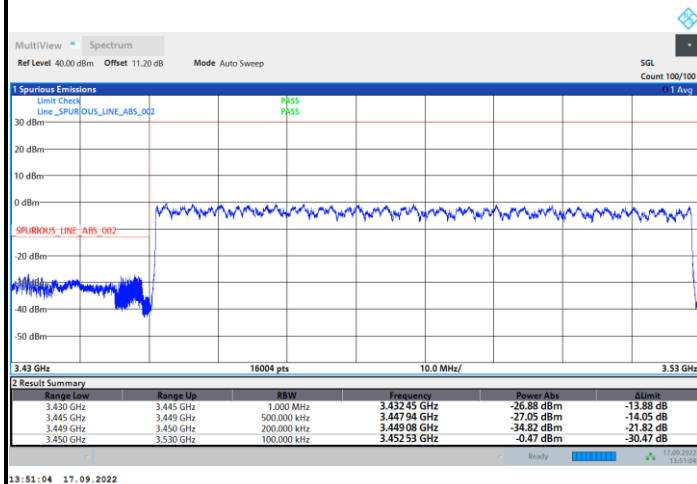
Highest Band Edge



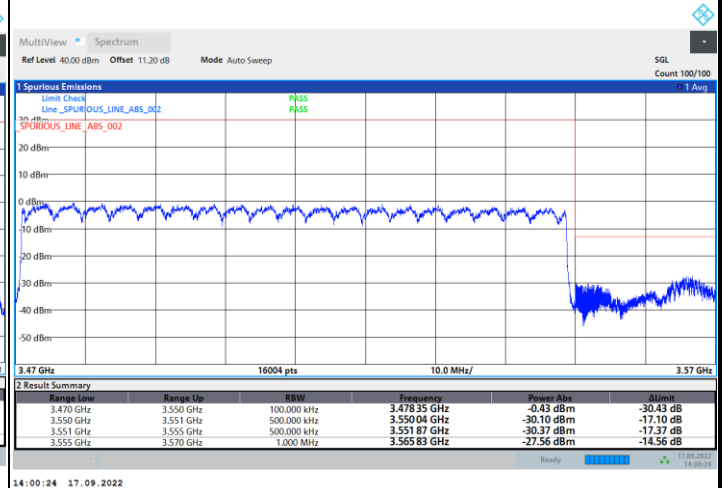


FR1 n77 / 80MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

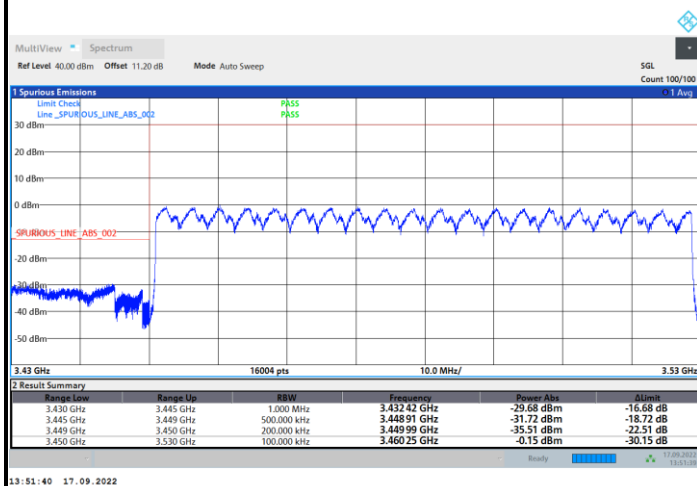


Highest Band Edge / Full RB

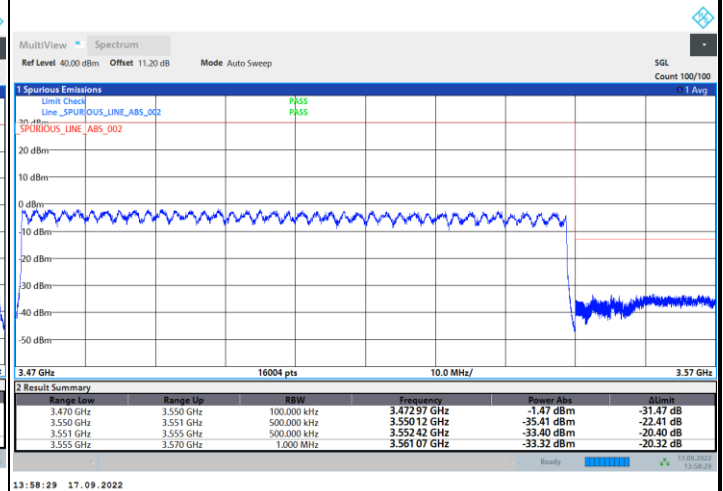


FR1 n77 / 80MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



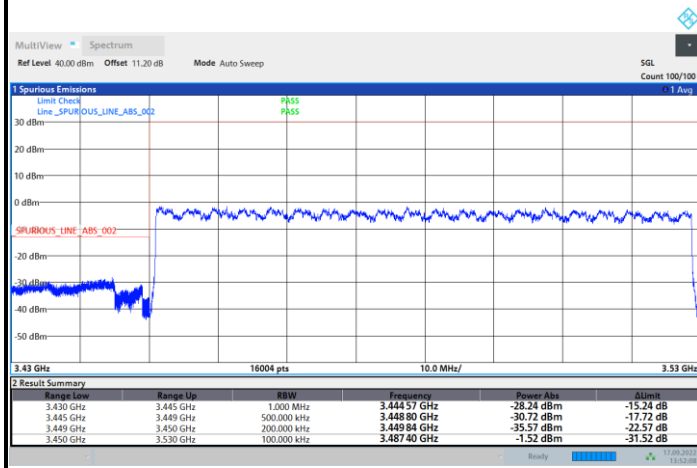
Highest Band Edge / Full RB





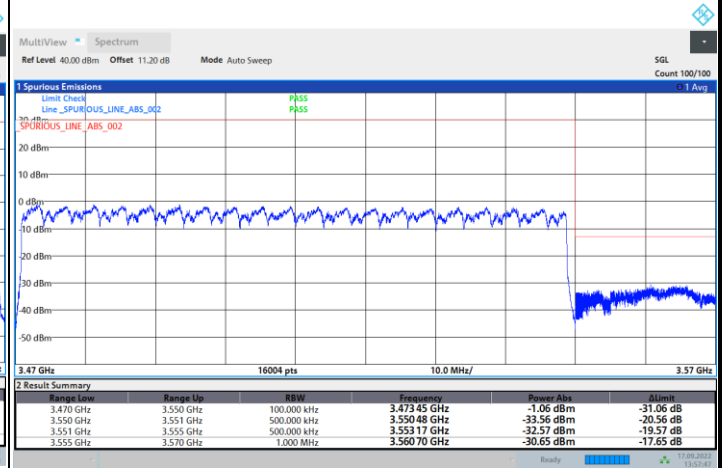
FR1 n77 / 80MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / Full RB



13:52:09 17.09.2022

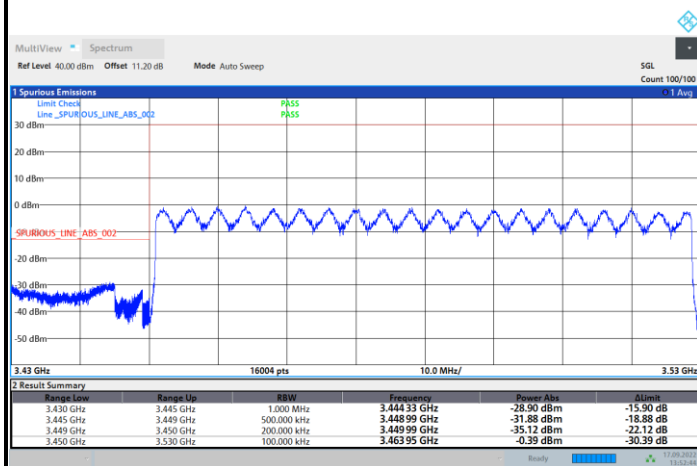
Highest Band Edge / Full RB



13:57:40 17.09.2022

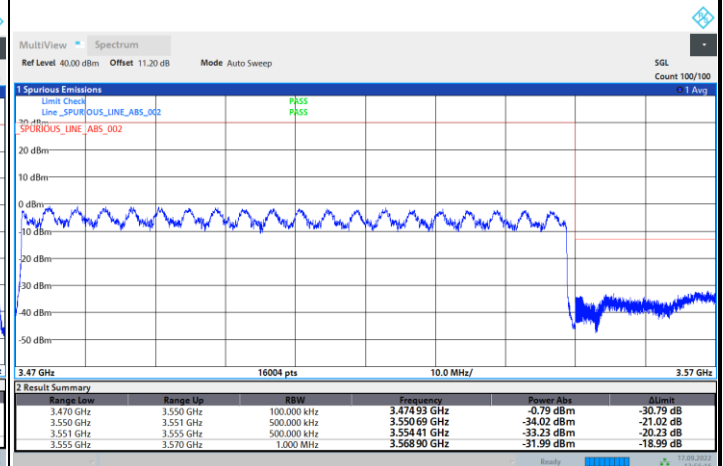
FR1 n77 / 80MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / Full RB



13:52:44 17.09.2022

Highest Band Edge / Full RB

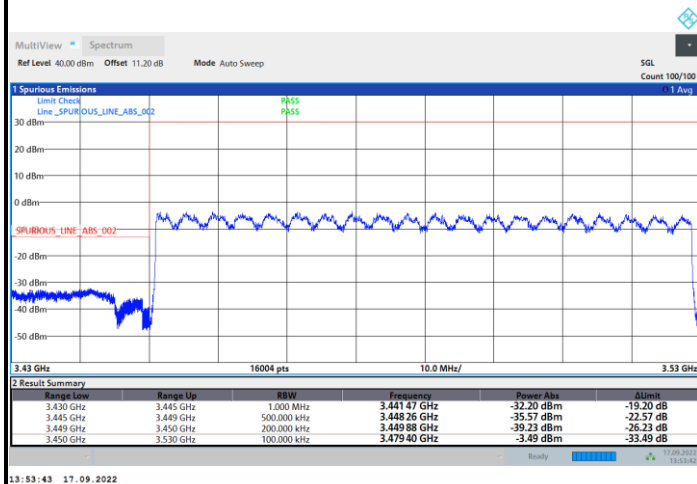


13:56:17 17.09.2022

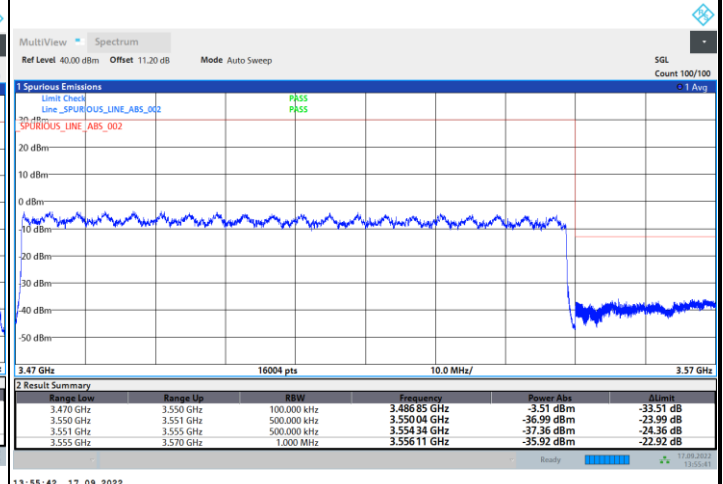


FR1 n77 / 80MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

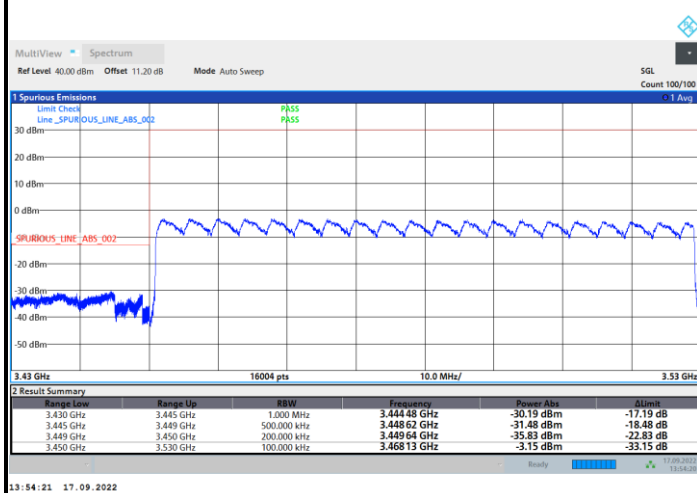


Highest Band Edge / Full RB

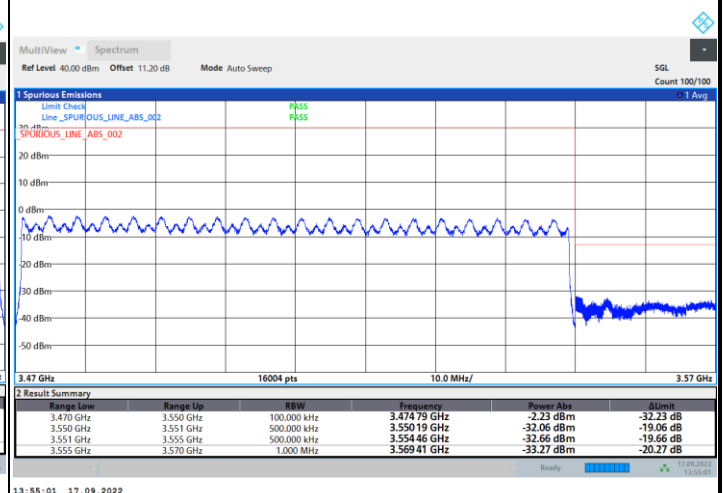


FR1 n77 / 80MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



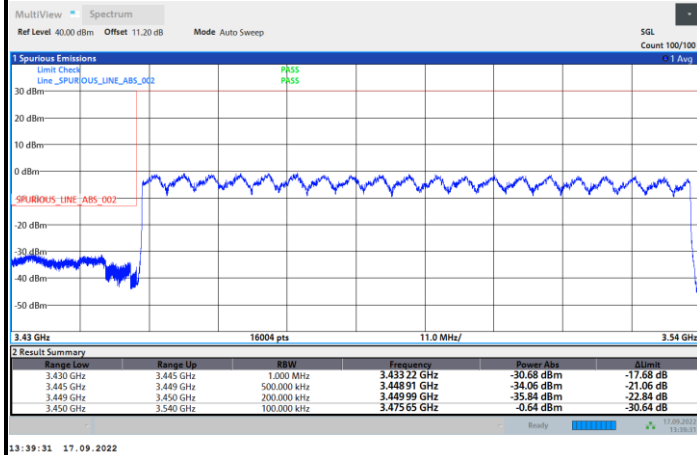
Highest Band Edge



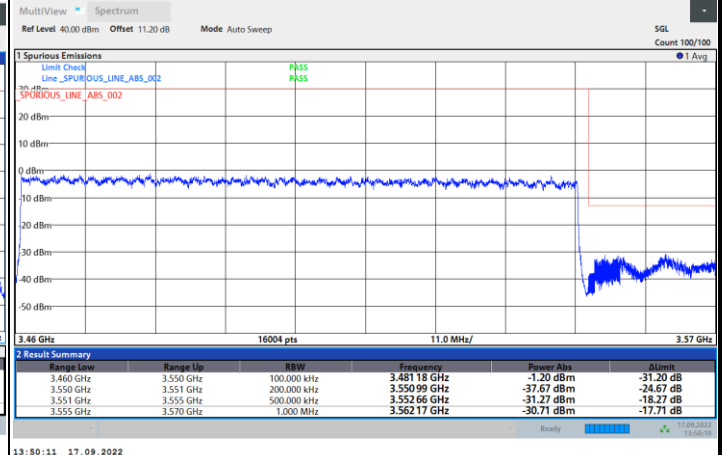


FR1 n77 / 90MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

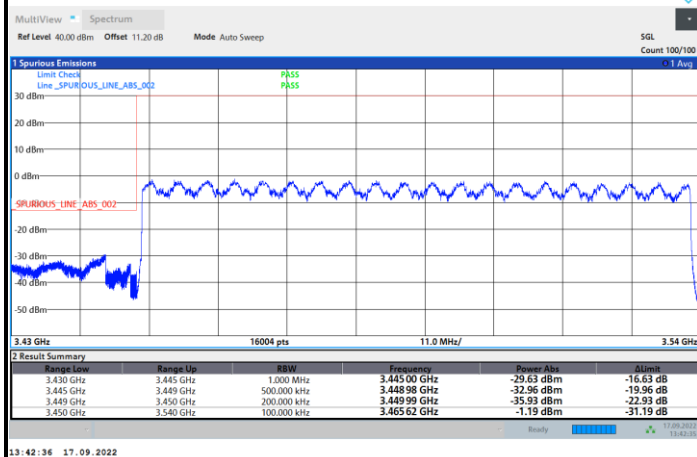


Highest Band Edge / Full RB

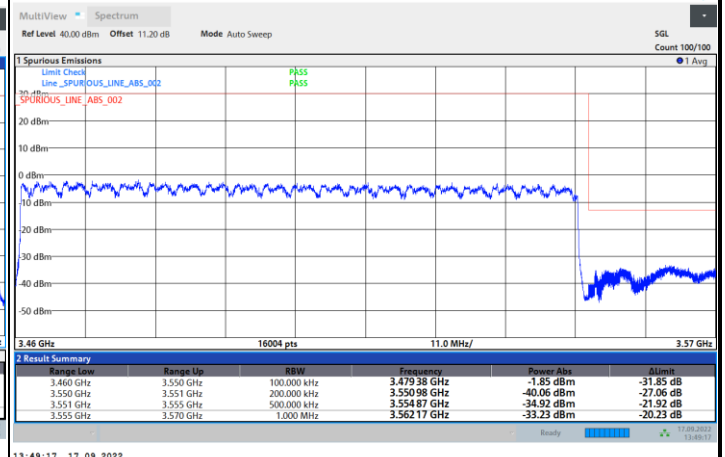


FR1 n77 / 90MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



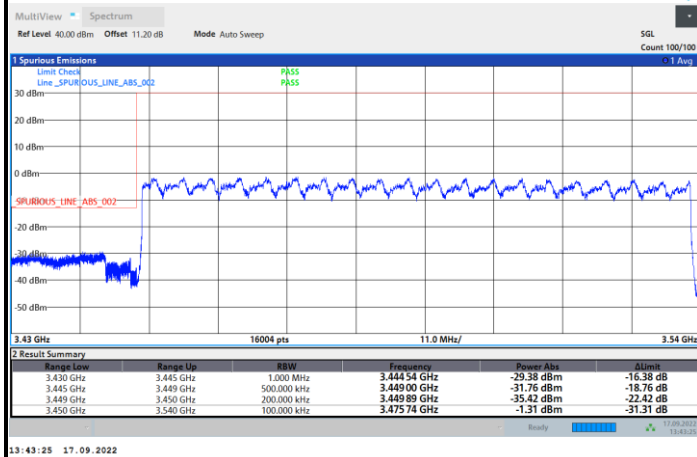
Highest Band Edge / Full RB



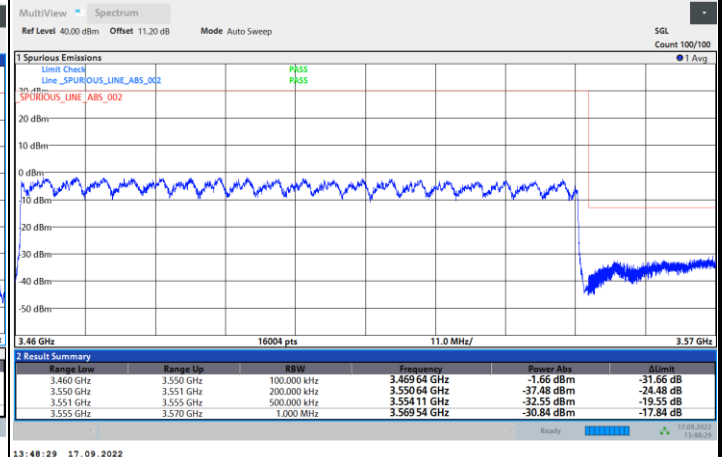


FR1 n77 / 90MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / Full RB

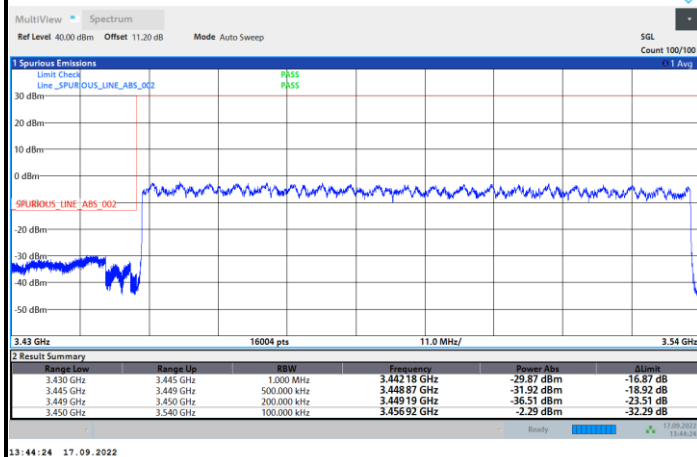


Highest Band Edge / Full RB

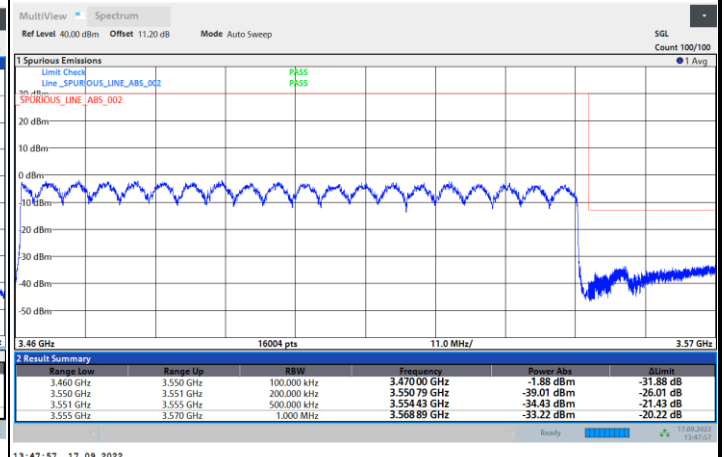


FR1 n77 / 90MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / Full RB



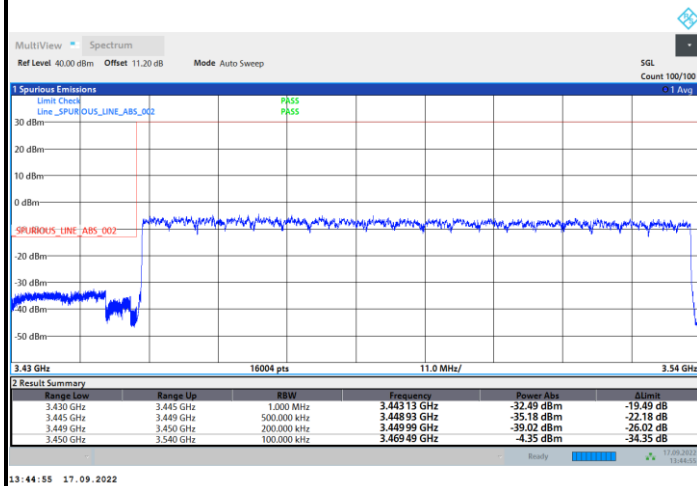
Highest Band Edge / Full RB



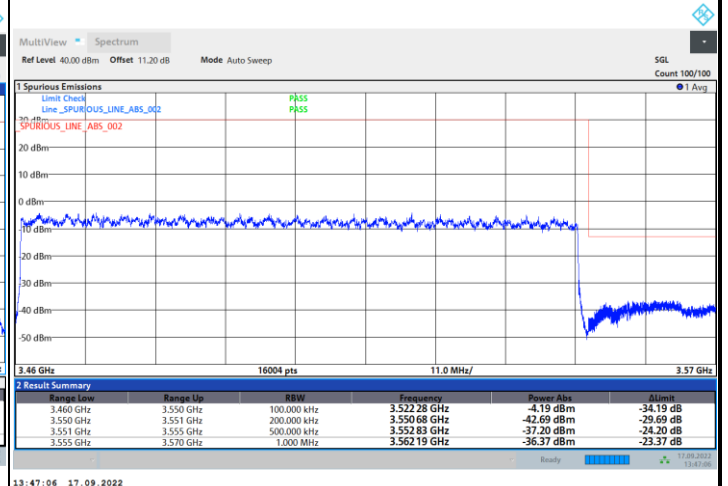


FR1 n77 / 90MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

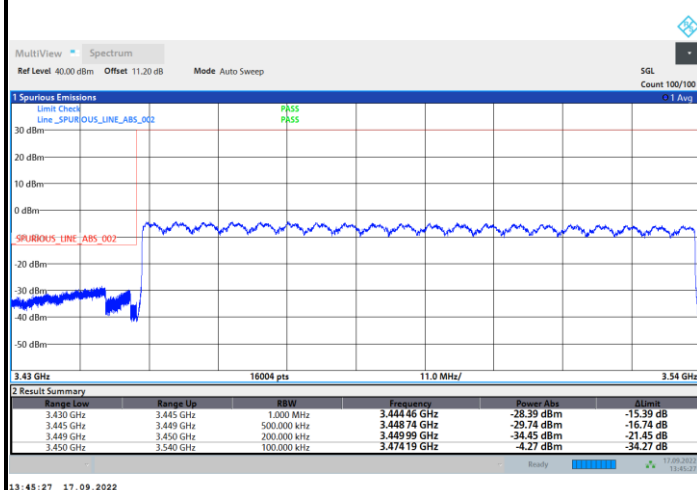


Highest Band Edge / Full RB

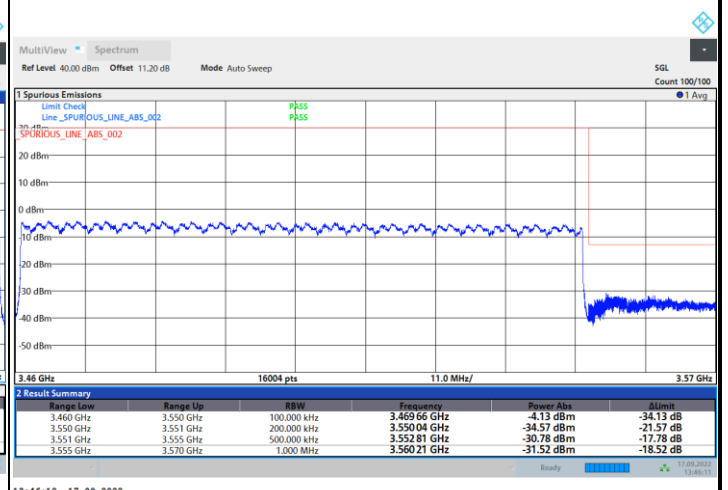


FR1 n77 / 90MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



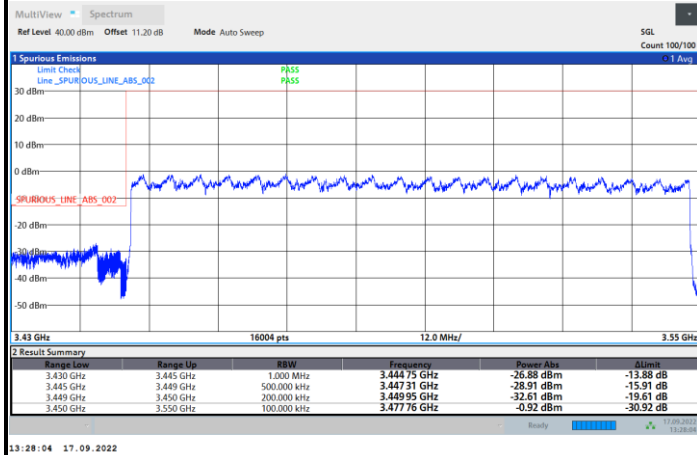
Highest Band Edge



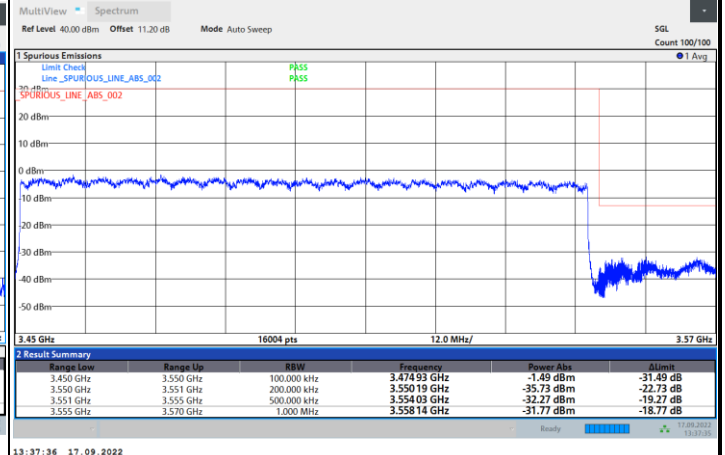


FR1 n77 / 100MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

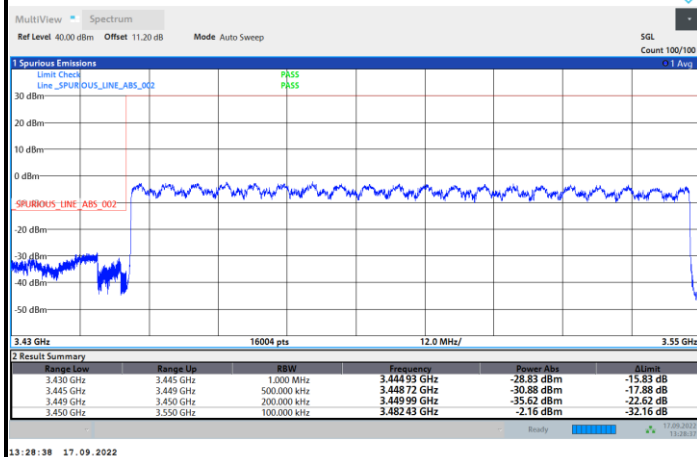


Highest Band Edge / Full RB

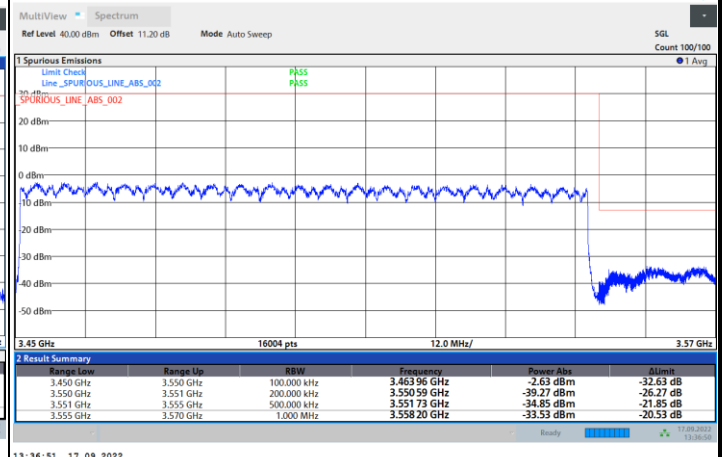


FR1 n77 / 100MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



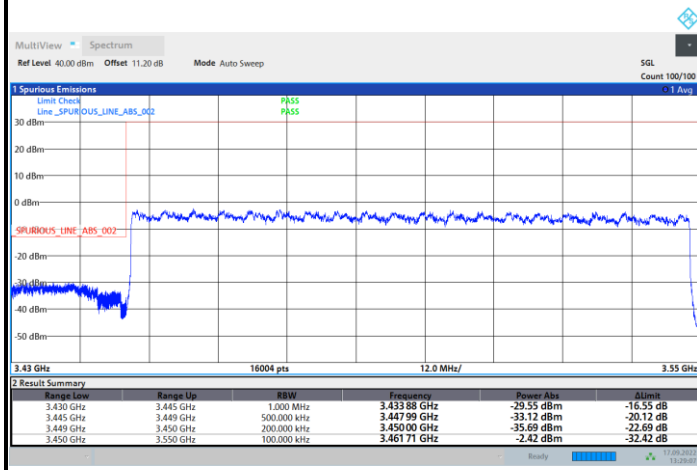
Highest Band Edge / Full RB





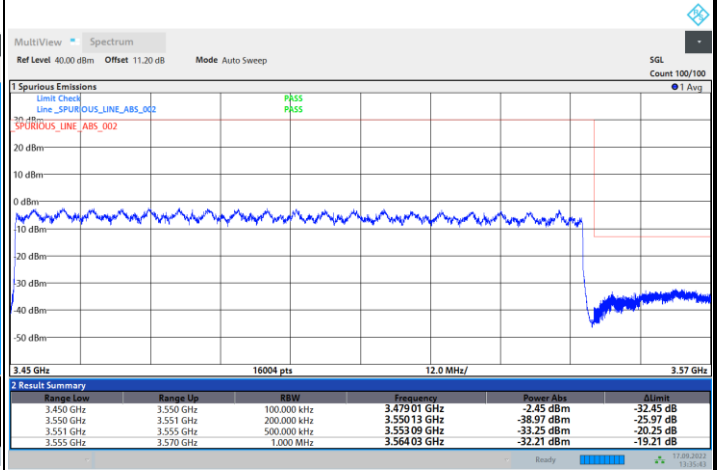
FR1 n77 / 100MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / Full RB



13:29:08 17.09.2022

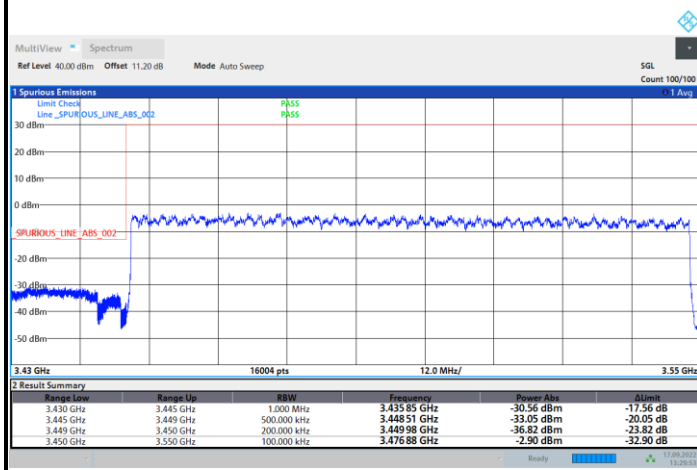
Highest Band Edge / Full RB



13:35:43 17.09.2022

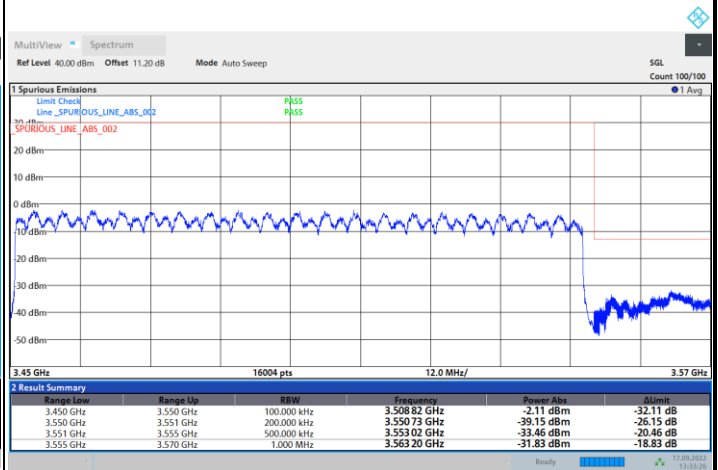
FR1 n77 / 100MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / Full RB



13:29:53 17.09.2022

Highest Band Edge / Full RB

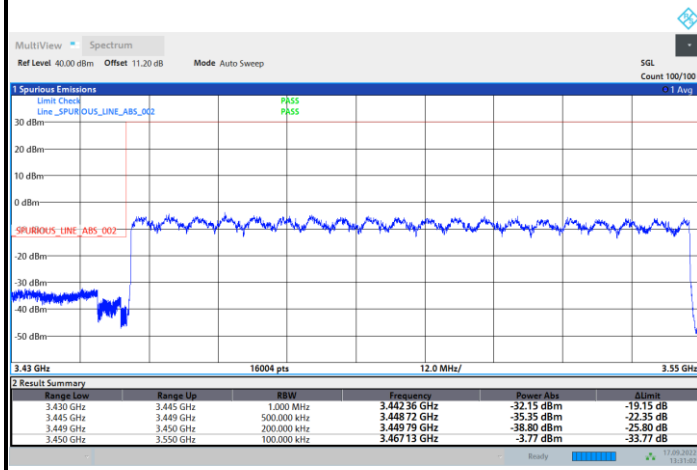


13:33:27 17.09.2022

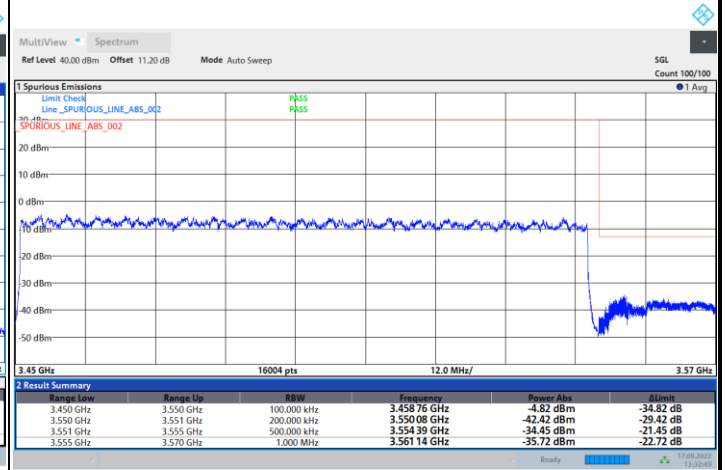


FR1 n77 / 100MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

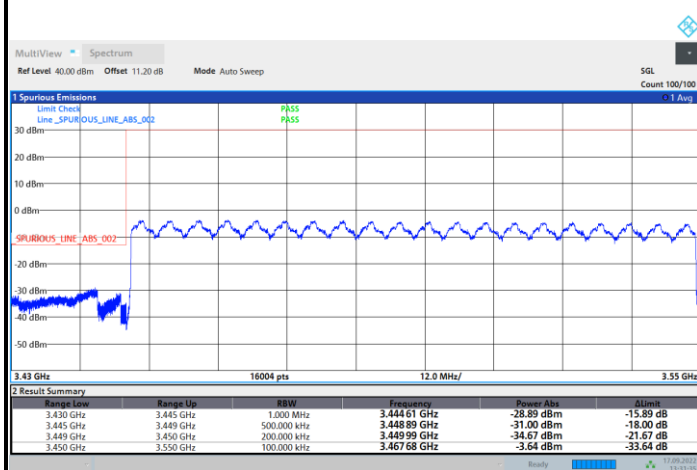


Highest Band Edge / Full RB

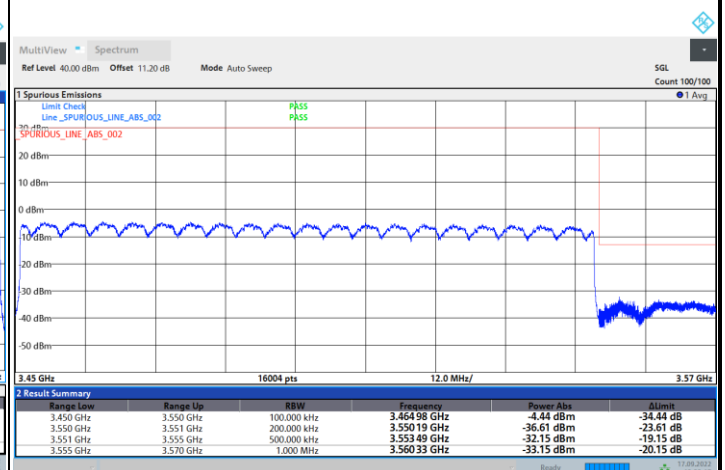


FR1 n77 / 100MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



Highest Band Edge

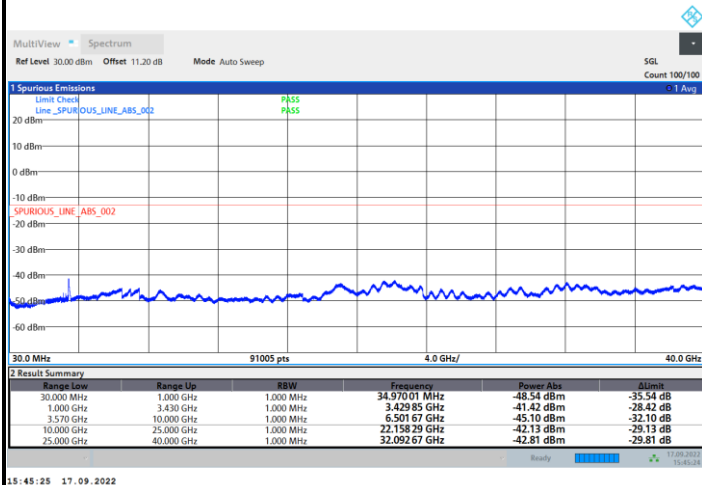




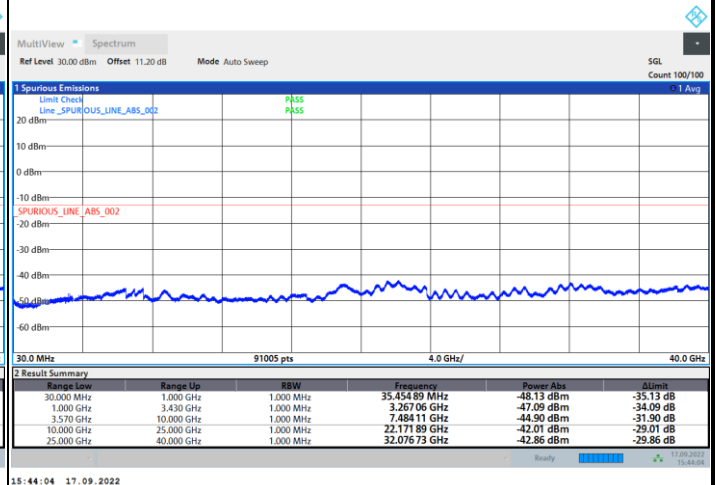
Conducted Spurious Emission

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

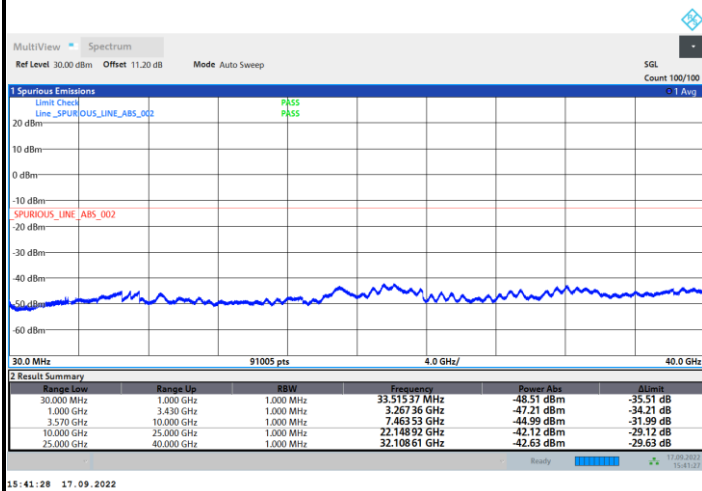
Lowest Channel



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	0.0028	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0024	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0005	
0	Normal Voltage	0.0015	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0019	
-30	Normal Voltage	0.0026	
20	Maximum Voltage	0.0000	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0025	

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.

Appendix B. Test Results of Radiated Test

<Ant. 12>

5G NR n77 HPUE

5G NR n77_HPUE / 100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	6902	-42.61	-13	-29.61	-72.02	-50.81	1.84	12.19	H
	10353	-36.03	-13	-23.03	-71.83	-42.51	2.26	10.89	H
	13805	-29.25	-13	-16.25	-73.15	-37.02	2.63	12.56	H
	20707	-59.23	-13	-46.23	-72.63	-71.77	3.22	17.92	H
	24158	-59.68	-13	-46.68	-77.34	-72.24	3.78	18.49	H
	27610	-56.26	-13	-43.26	-76.79	-69.71	3.95	19.54	H
	6902	-42.42	-13	-29.42	-72.33	-50.62	1.84	12.19	V
	10353	-36.90	-13	-23.90	-71.91	-43.38	2.26	10.89	V
	13805	-30.07	-13	-17.07	-72.94	-37.84	2.63	12.56	V
	20707	-62.37	-13	-49.37	-75.53	-74.91	3.22	17.92	V
	24158	-60.09	-13	-47.09	-77.38	-72.65	3.78	18.49	V
	27610	-57.04	-13	-44.04	-77.25	-70.49	3.95	19.54	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



<Ant. 4 + Ant. 11>

EN-DC 5A-n77A HPUE

EN-DC 5A-n77A_HPUE / 10M + 100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	6902	-43.14	-13	-30.14	-72.55	-51.34	1.84	12.19	H
	10353	-36.27	-13	-23.27	-72.07	-42.75	2.26	10.89	H
	13805	-29.16	-13	-16.16	-73.06	-36.93	2.63	12.56	H
	20707	-63.65	-13	-50.65	-77.05	-76.19	3.22	17.92	H
	24158	-57.94	-13	-44.94	-75.6	-70.50	3.78	18.49	H
	27610	-56.61	-13	-43.61	-77.14	-70.06	3.95	19.54	H
	6902	-42.14	-13	-29.14	-72.05	-50.34	1.84	12.19	V
	10353	-36.84	-13	-23.84	-71.85	-43.32	2.26	10.89	V
	13805	-30.27	-13	-17.27	-73.14	-38.04	2.63	12.56	V
	20707	-63.84	-13	-50.84	-77	-76.38	3.22	17.92	V
	24158	-59.49	-13	-46.49	-76.78	-72.05	3.78	18.49	V
	27610	-57.23	-13	-44.23	-77.44	-70.68	3.95	19.54	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.