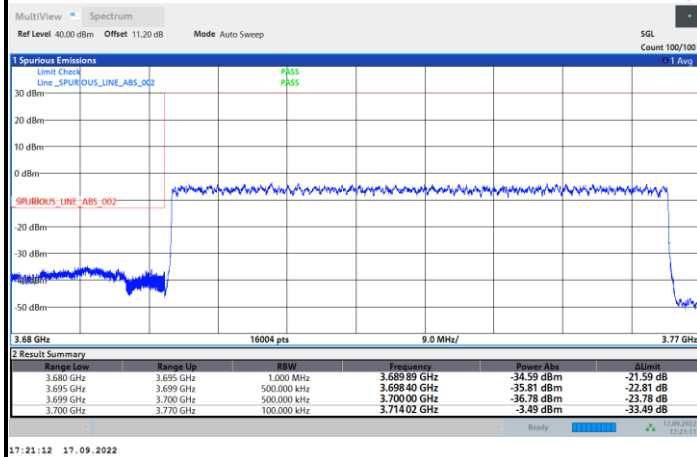
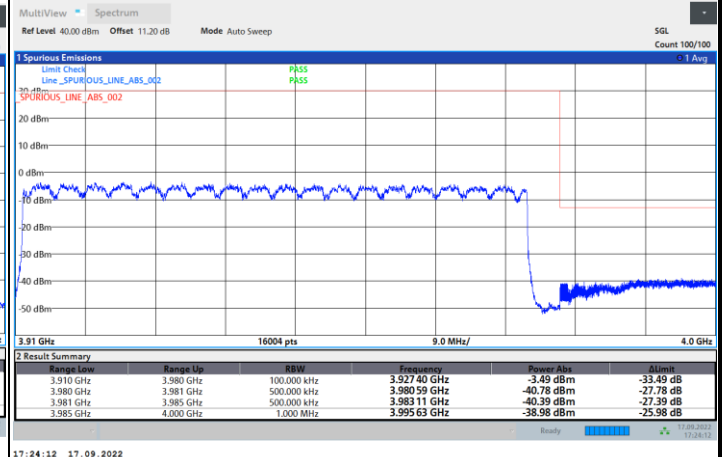
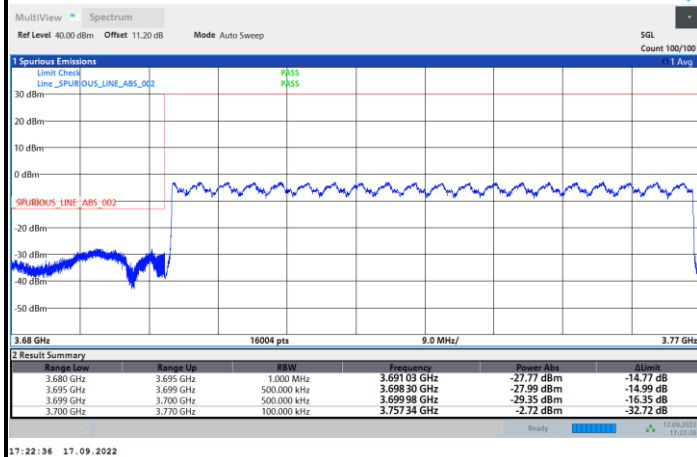
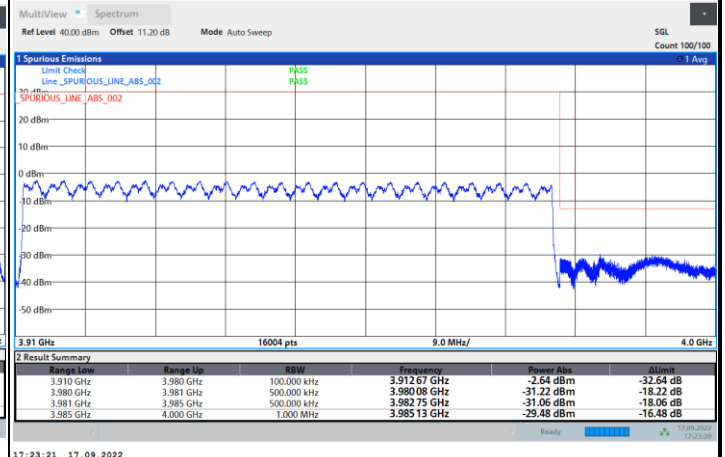
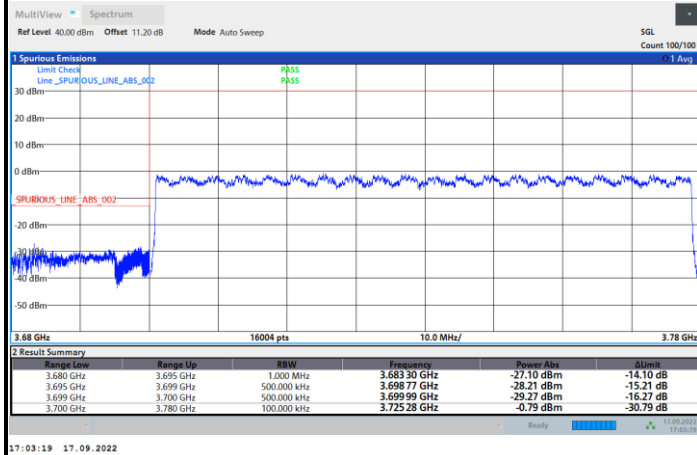


**FR1 n77 / 70MHz / DFT-S OFDM / 256QAM****Lowest Band Edge / Full RB****Highest Band Edge / Full RB****FR1 n77 / 70MHz / CP OFDM / QPSK / Full RB****Lowest Band Edge****Highest Band Edge**



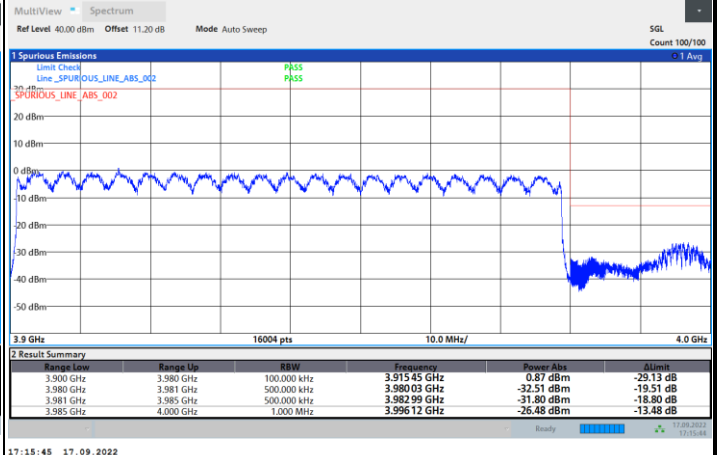
FR1 n77 / 80MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB



17:03:19 17.09.2022

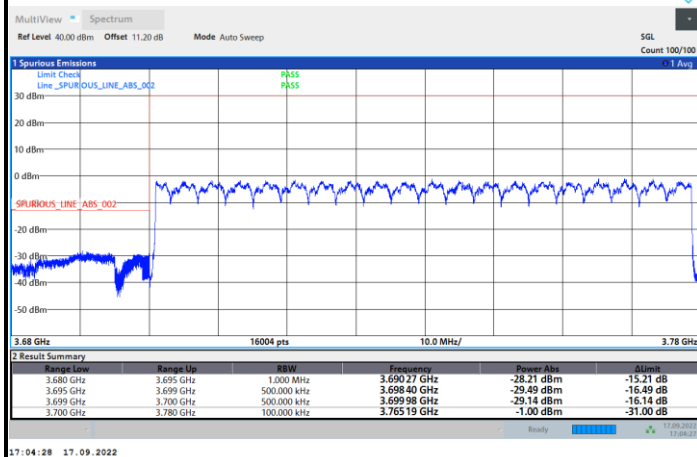
Highest Band Edge / Full RB



17:15:45 17.09.2022

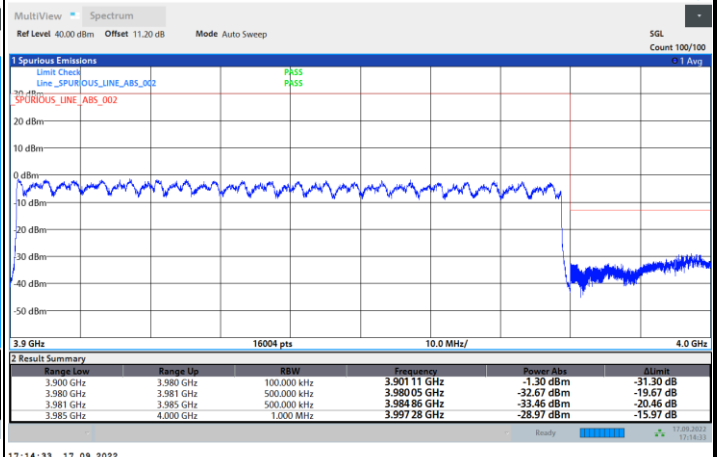
FR1 n77 / 80MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



17:04:28 17.09.2022

Highest Band Edge / Full RB

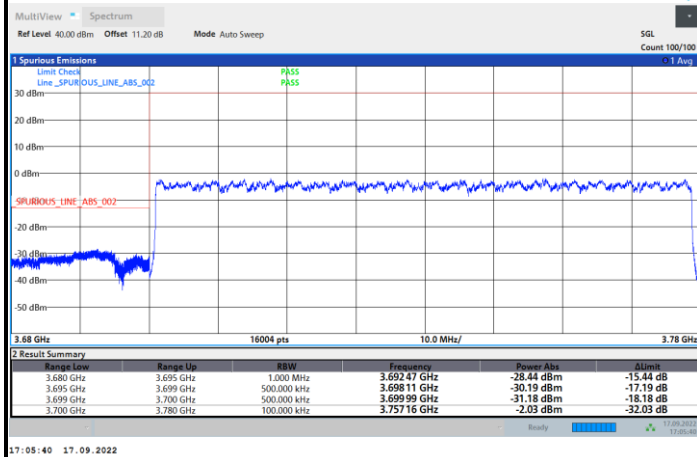


17:14:33 17.09.2022

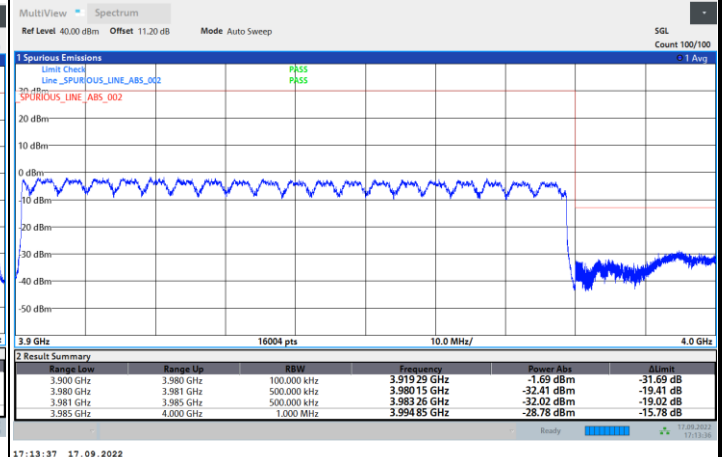


FR1 n77 / 80MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / Full RB

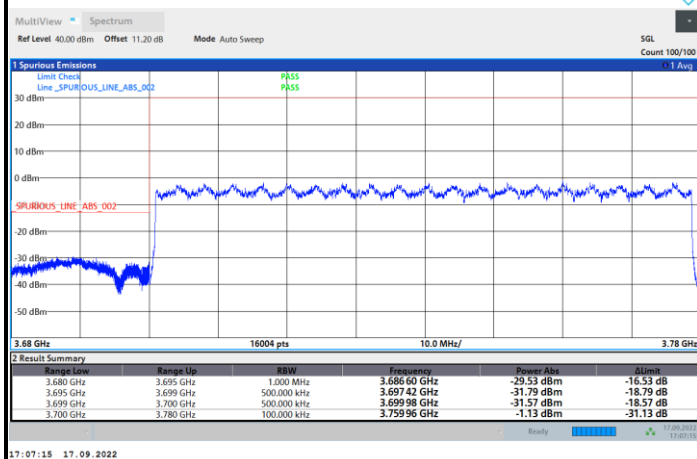


Highest Band Edge / Full RB

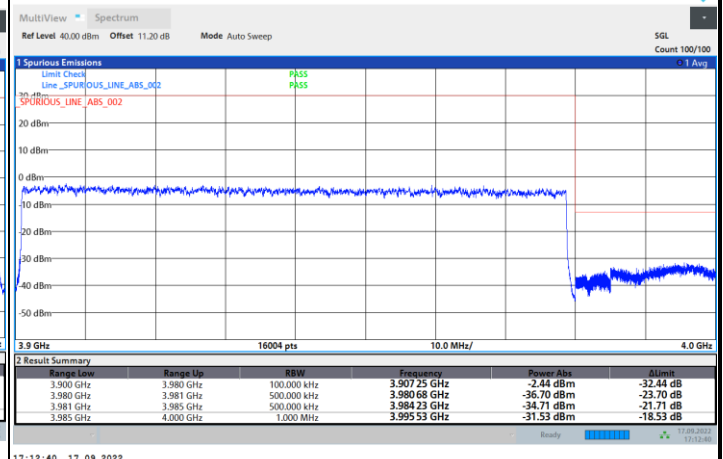


FR1 n77 / 80MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / Full RB



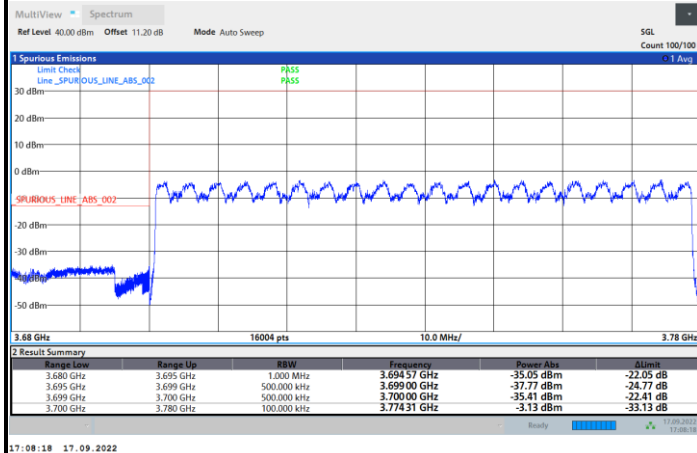
Highest Band Edge / Full RB



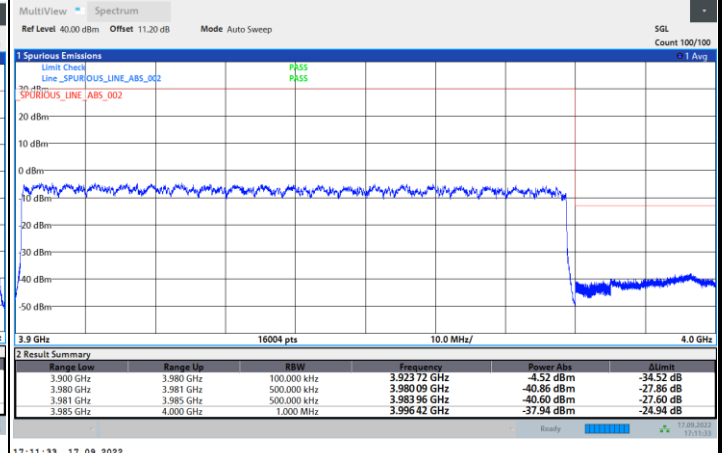


FR1 n77 / 80MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

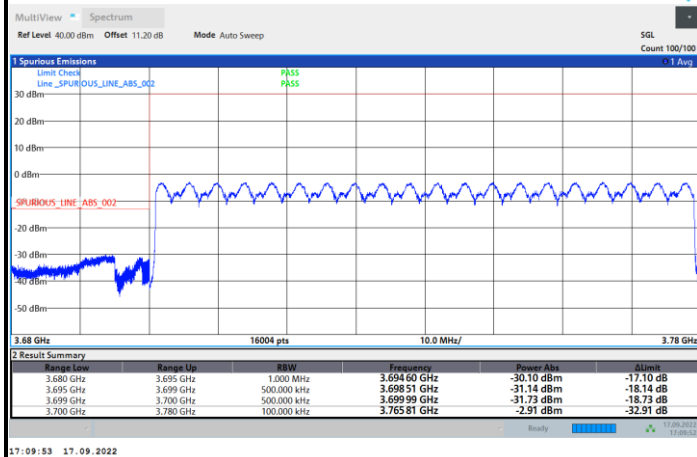


Highest Band Edge / Full RB

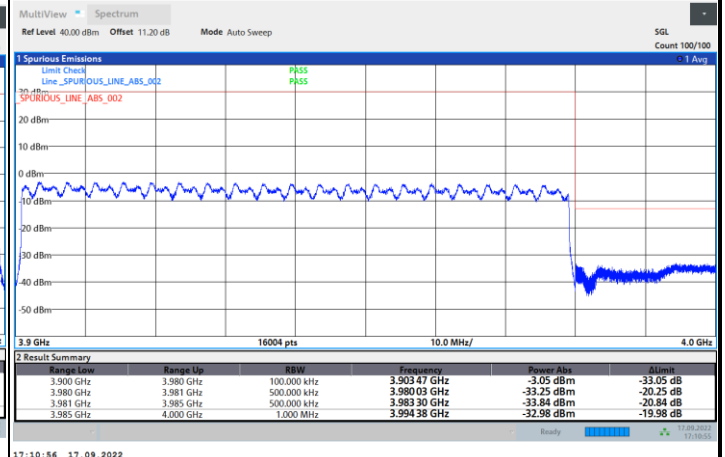


FR1 n77 / 80MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



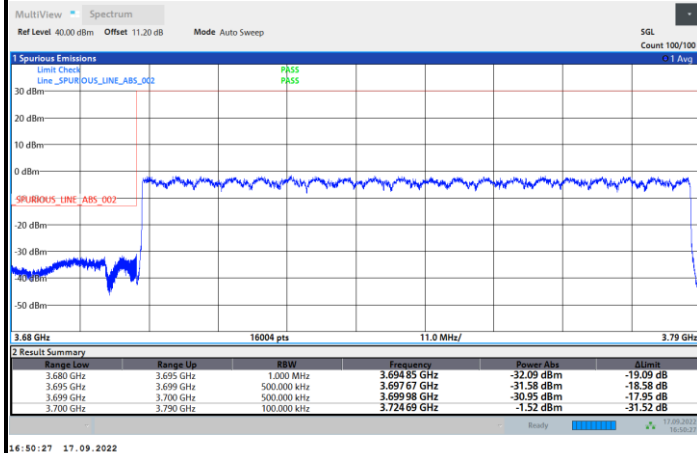
Highest Band Edge



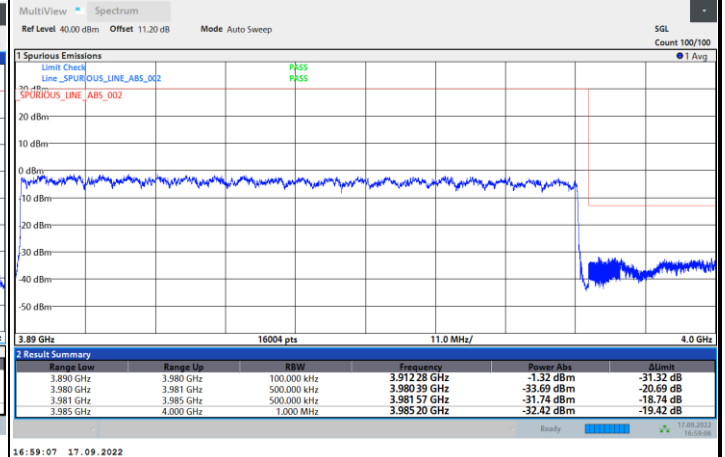


FR1 n77 / 90MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB

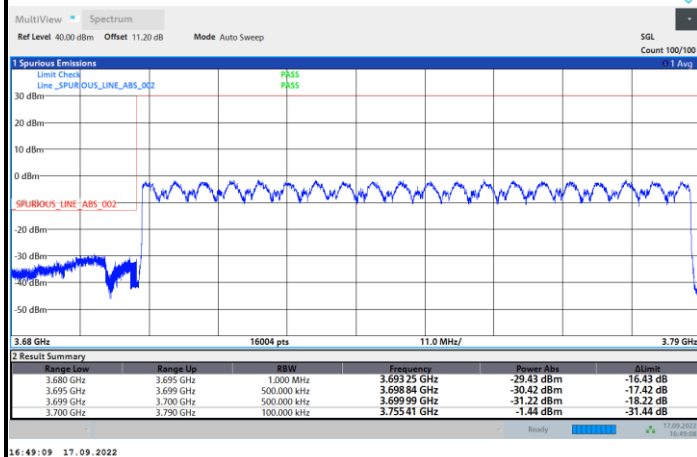


Highest Band Edge / Full RB

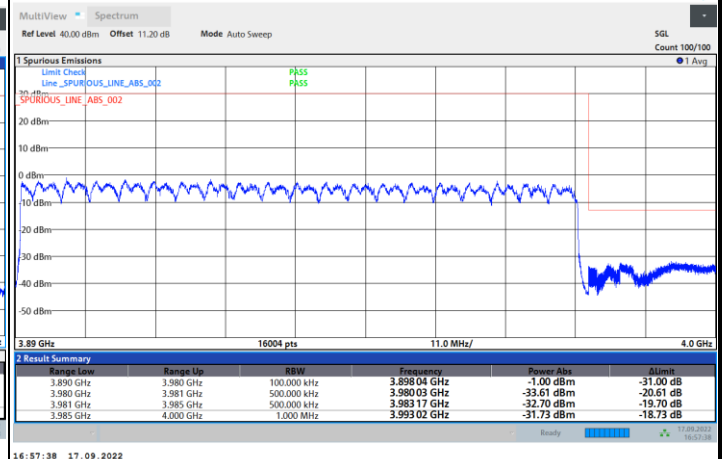


FR1 n77 / 90MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



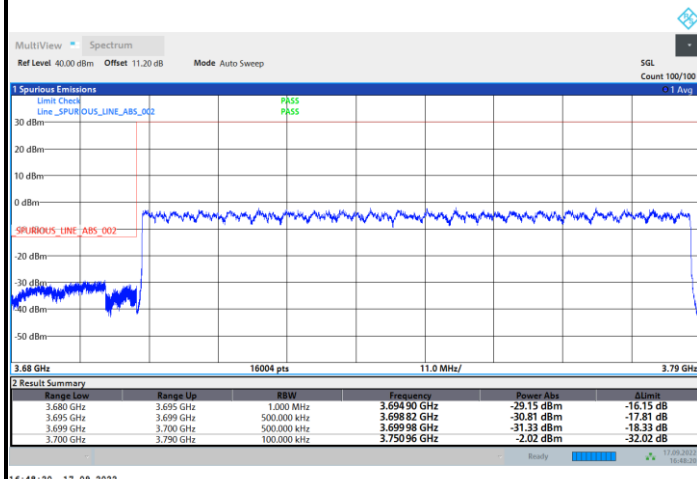
Highest Band Edge / Full RB



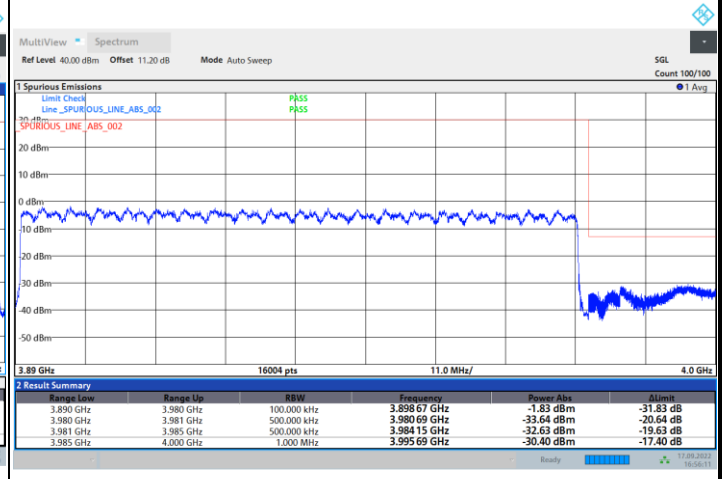


FR1 n77 / 90MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / Full RB

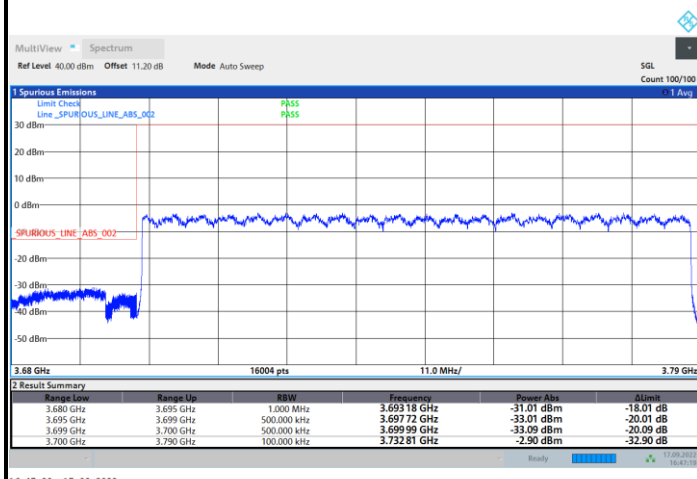


Highest Band Edge / Full RB

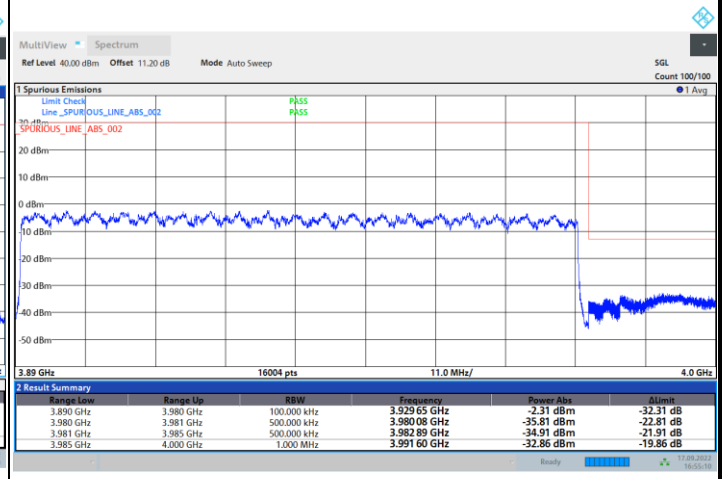


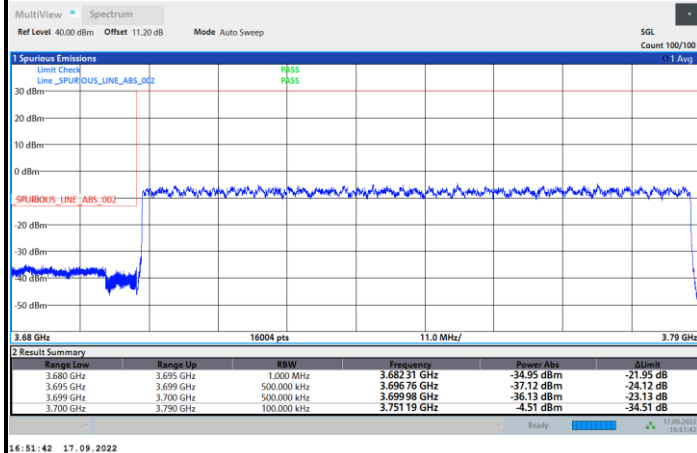
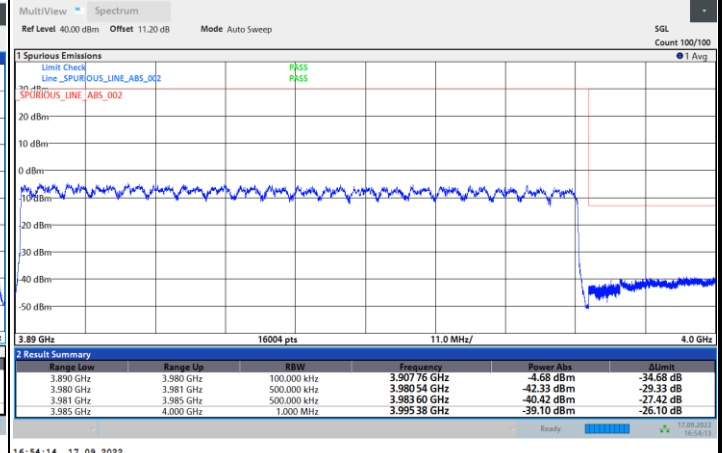
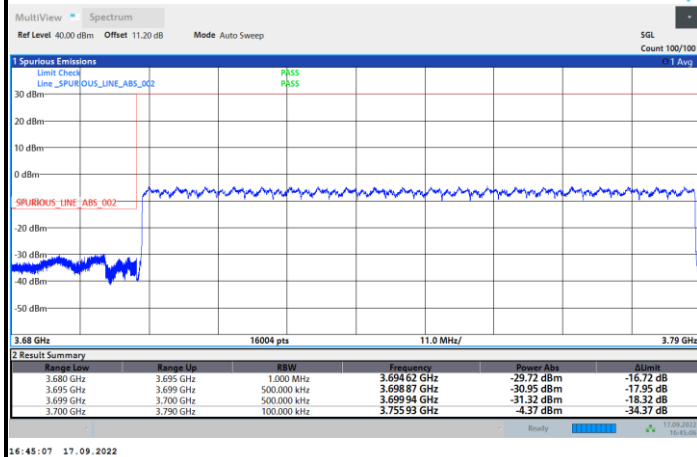
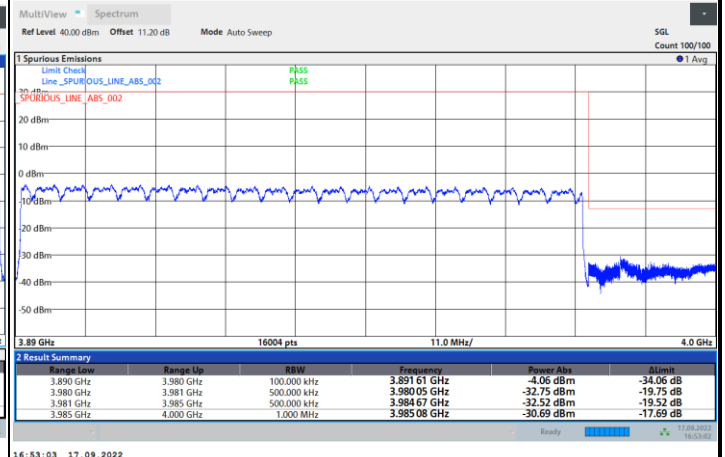
FR1 n77 / 90MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / Full RB



Highest Band Edge / Full RB

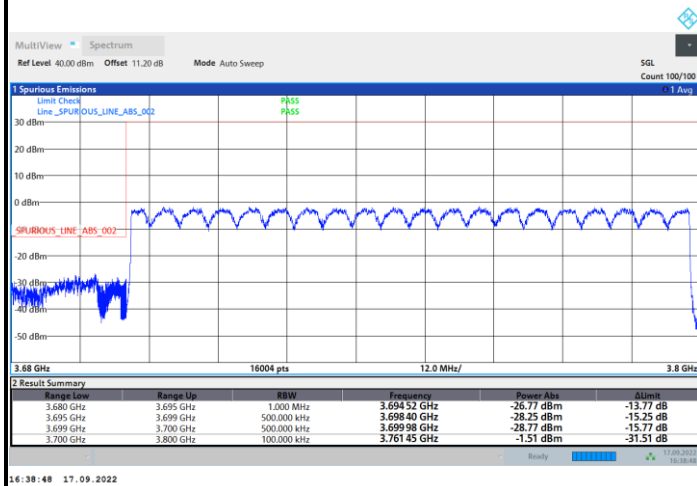


**FR1 n77 / 90MHz / DFT-S OFDM / 256QAM****Lowest Band Edge / Full RB****Highest Band Edge / Full RB****FR1 n77 / 90MHz / CP OFDM / QPSK / Full RB****Lowest Band Edge****Highest Band Edge**



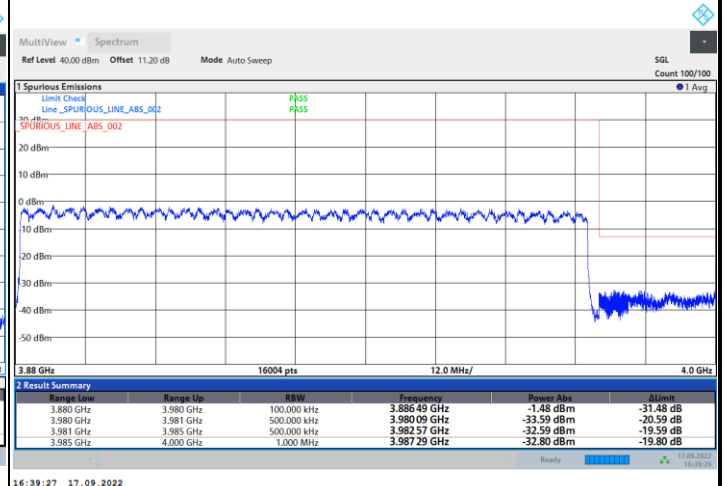
FR1 n77 / 100MHz / DFT-S OFDM / PI/2 BPSK

Lowest Band Edge / Full RB



16:38:48 17.09.2022

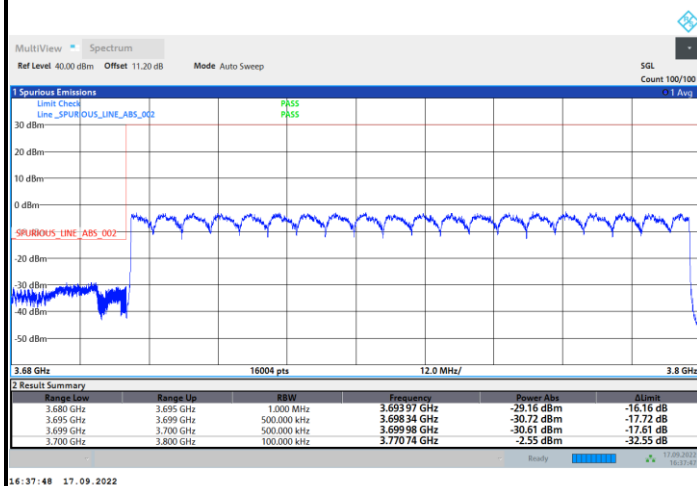
Highest Band Edge / Full RB



16:39:27 17.09.2022

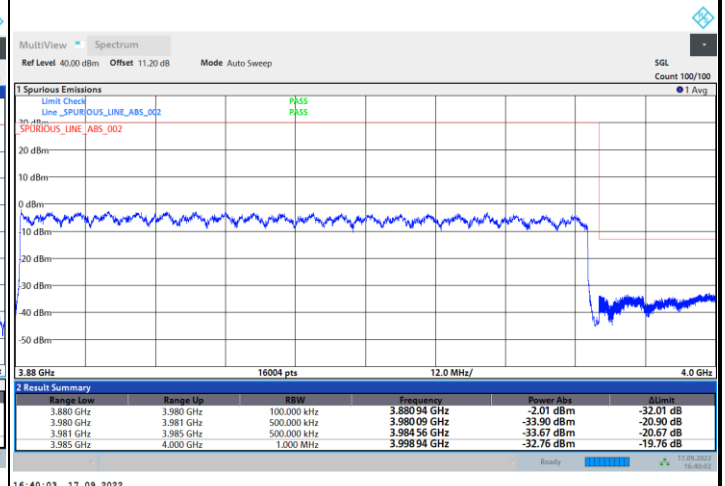
FR1 n77 / 100MHz / DFT-S OFDM / QPSK

Lowest Band Edge / Full RB



16:37:48 17.09.2022

Highest Band Edge / Full RB

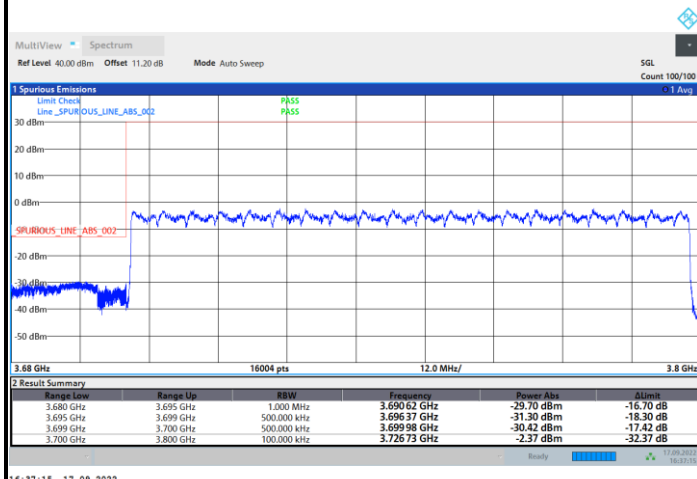


16:40:03 17.09.2022

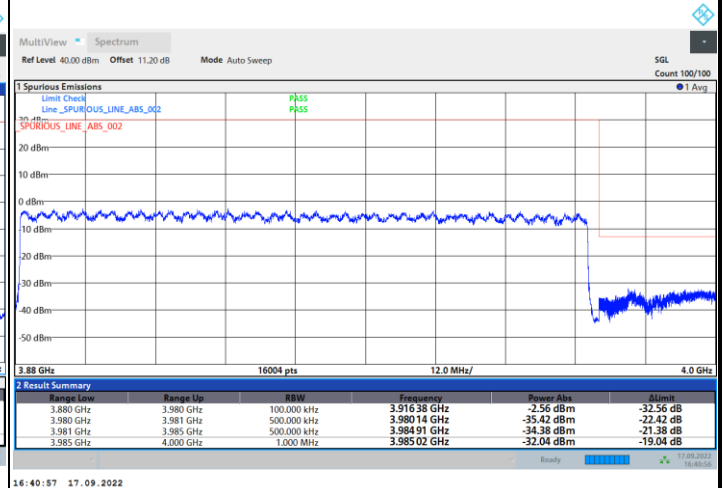


FR1 n77 / 100MHz / DFT-S OFDM / 16QAM

Lowest Band Edge / Full RB

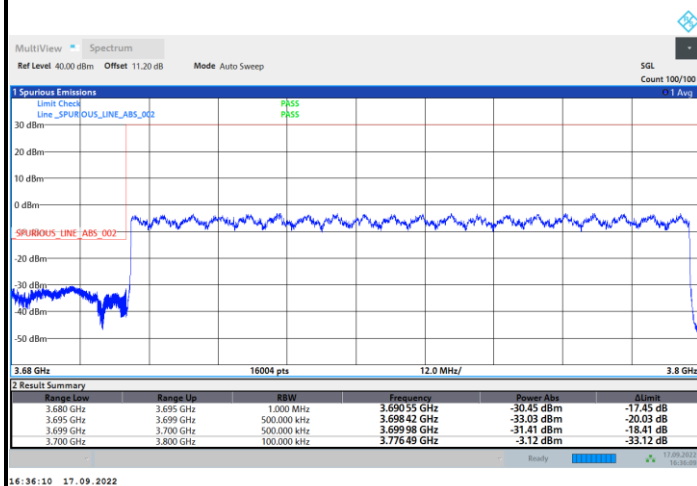


Highest Band Edge / Full RB

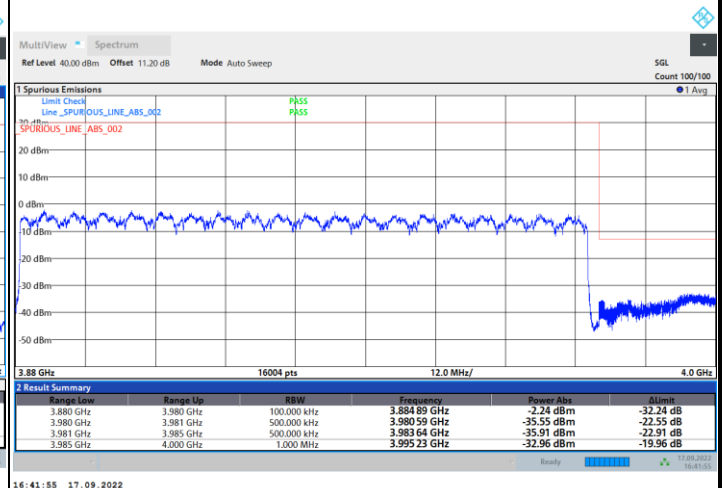


FR1 n77 / 100MHz / DFT-S OFDM / 64QAM

Lowest Band Edge / Full RB



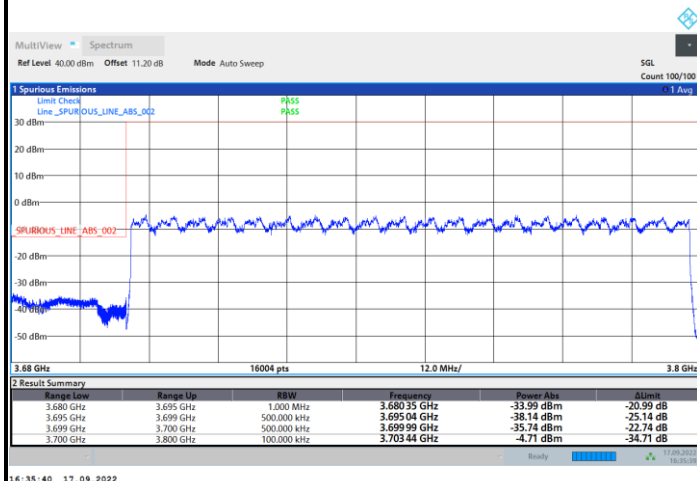
Highest Band Edge / Full RB



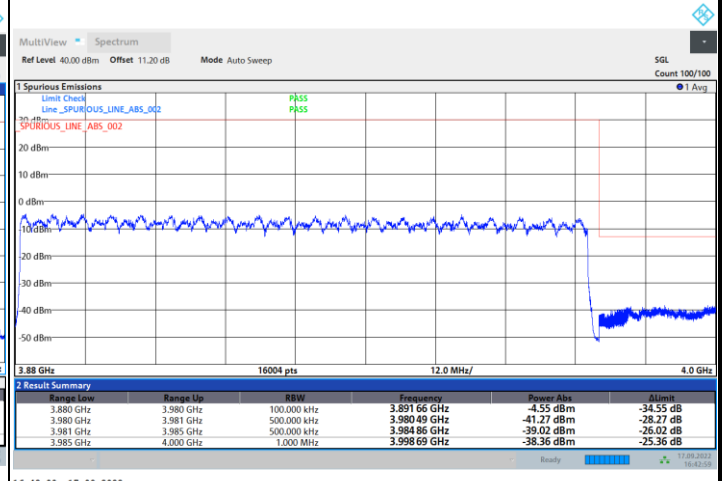


FR1 n77 / 100MHz / DFT-S OFDM / 256QAM

Lowest Band Edge / Full RB

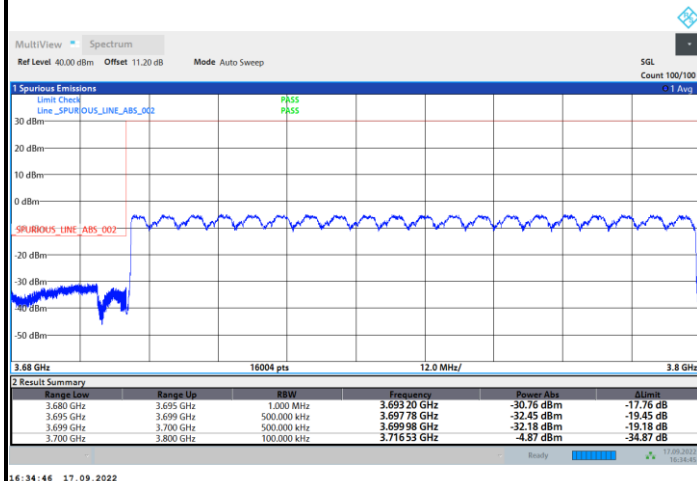


Highest Band Edge / Full RB

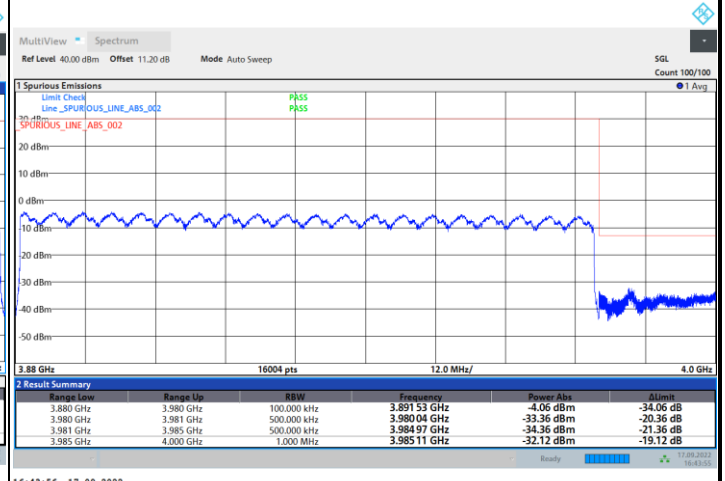


FR1 n77 / 100MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



Highest Band Edge

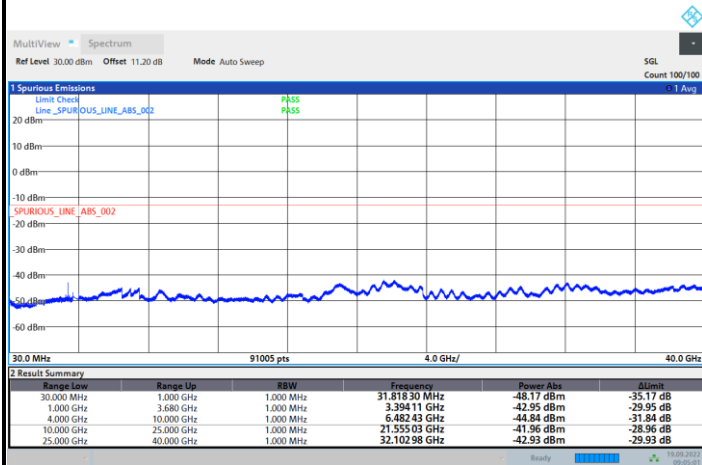




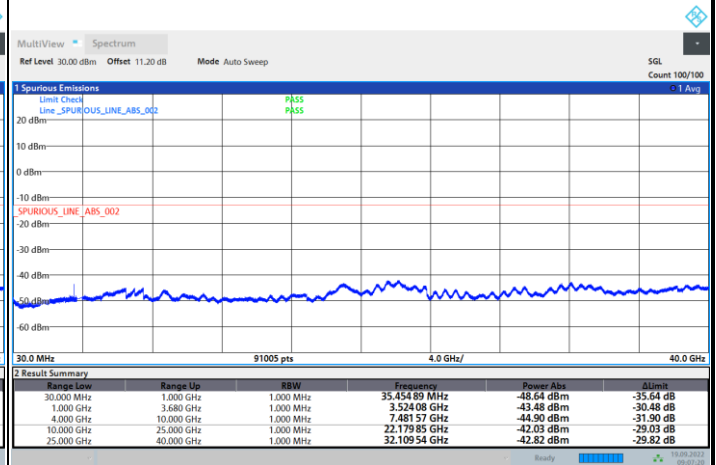
Conducted Spurious Emission

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

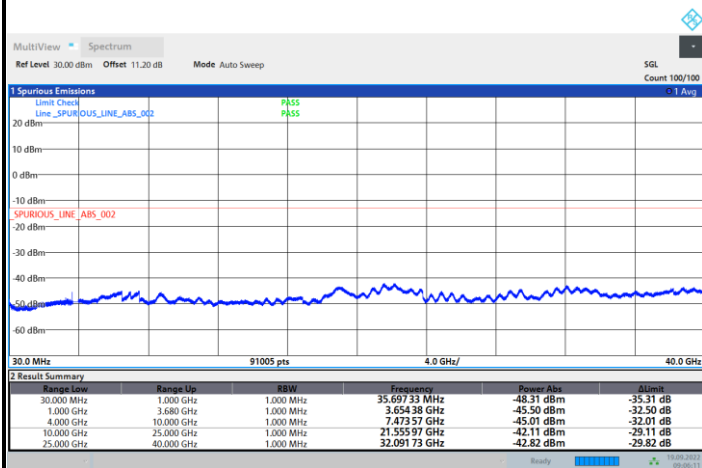
Lowest Channel



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	0.0016	PASS
40	Normal Voltage	0.0003	
30	Normal Voltage	0.0000	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0022	
0	Normal Voltage	0.0026	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0025	
-30	Normal Voltage	0.0027	
20	Maximum Voltage	0.0007	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

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)
Lowest	7402	-40.53	-13	-27.53	-71.43	-47.84	1.94	11.40	H
	11103	-35.62	-13	-22.62	-72.75	-41.85	2.24	10.62	H
	14808	-28.66	-13	-15.66	-71.58	-36.70	2.58	12.78	H
	18506	-60.02	-13	-47.02	-71.9	-72.22	3.24	17.59	H
	22208	-60.89	-13	-47.89	-76.62	-74.08	3.52	18.86	H
	25909	-59.10	-13	-46.10	-77.92	-72.11	3.92	19.08	H
	7402	-40.89	-13	-27.89	-71.89	-48.20	1.94	11.40	V
	11103	-35.59	-13	-22.59	-72.67	-41.82	2.24	10.62	V
	14808	-27.54	-13	-14.54	-71.57	-35.58	2.58	12.78	V
	18506	-62.52	-13	-49.52	-74.18	-74.72	3.24	17.59	V
	22208	-61.39	-13	-48.39	-76.72	-74.58	3.52	18.86	V
	25909	-59.36	-13	-46.36	-77.87	-72.37	3.92	19.08	V
Middle	7582	-41.40	-13	-28.40	-71.92	-48.88	1.90	11.53	H
	11373	-34.65	-13	-21.65	-72.07	-41.10	2.35	10.95	H
	15168	-28.76	-13	-15.76	-71.02	-37.95	2.60	13.94	H
	18956	-62.51	-13	-49.51	-74.08	-74.25	3.26	17.14	H
	22748	-60.05	-13	-47.05	-76.58	-73.05	3.55	18.70	H
	26539	-54.93	-13	-41.93	-74.62	-67.51	3.93	18.65	H
	7582	-41.65	-13	-28.65	-72.34	-49.13	1.90	11.53	V
	11373	-35.10	-13	-22.10	-72.59	-41.55	2.35	10.95	V
	15168	-27.84	-13	-14.84	-71.18	-37.03	2.60	13.94	V
	18956	-63.92	-13	-50.92	-75.26	-75.66	3.26	17.14	V
	22748	-60.66	-13	-47.66	-76.81	-73.66	3.55	18.70	V
	26539	-56.52	-13	-43.52	-75.83	-69.10	3.93	18.65	V



Highest	7762	-41.17	-13	-28.17	-71.96	-48.82	1.88	11.68	H
	11643	-33.84	-13	-20.84	-71.99	-40.84	2.46	11.61	H
	15528	-29.93	-13	-16.93	-71.01	-40.56	2.70	15.48	H
	19406	-63.46	-13	-50.46	-75.77	-75.51	3.23	17.42	H
	23288	-59.52	-13	-46.52	-76.63	-72.39	3.63	18.66	H
	27169	-56.95	-13	-43.95	-77.52	-70.24	3.93	19.37	H
	7762	-40.71	-13	-27.71	-71.77	-48.36	1.88	11.68	V
	11643	-34.01	-13	-21.01	-72.07	-41.01	2.46	11.61	V
	15528	-29.36	-13	-16.36	-70.71	-39.99	2.70	15.48	V
	19406	-63.30	-13	-50.30	-75.35	-75.35	3.23	17.42	V
	23288	-59.83	-13	-46.83	-76.61	-72.70	3.63	18.66	V
	27169	-57.49	-13	-44.49	-77.7	-70.78	3.93	19.37	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)
Lowest	7402	-41.01	-13	-28.01	-71.91	-48.32	1.94	11.40	H
	11103	-35.85	-13	-22.85	-72.98	-42.08	2.24	10.62	H
	14808	-28.77	-13	-15.77	-71.69	-36.81	2.58	12.78	H
	18506	-54.66	-13	-41.66	-66.54	-66.86	3.24	17.59	H
	22208	-60.50	-13	-47.50	-76.23	-73.69	3.52	18.86	H
	25909	-54.34	-13	-41.34	-73.16	-67.35	3.92	19.08	H
	7402	-40.51	-13	-27.51	-71.51	-47.82	1.94	11.40	V
	11103	-36.01	-13	-23.01	-73.09	-42.24	2.24	10.62	V
	14808	-27.57	-13	-14.57	-71.6	-35.61	2.58	12.78	V
	18506	-60.53	-13	-47.53	-72.18	-72.73	3.24	17.59	V
	22208	-61.46	-13	-48.46	-76.79	-74.65	3.52	18.86	V
	25909	-59.50	-13	-46.50	-78.01	-72.51	3.92	19.08	V
Middle	7582	-41.41	-13	-28.41	-71.93	-48.89	1.90	11.53	H
	11373	-35.24	-13	-22.24	-72.66	-41.69	2.35	10.95	H
	15168	-29.09	-13	-16.09	-71.35	-38.28	2.60	13.94	H
	18956	-59.02	-13	-46.02	-70.59	-70.76	3.26	17.14	H
	22748	-59.71	-13	-46.71	-76.24	-72.71	3.55	18.70	H
	26539	-53.83	-13	-40.83	-73.52	-66.41	3.93	18.65	H
	7582	-41.94	-13	-28.94	-72.63	-49.42	1.90	11.53	V
	11373	-35.20	-13	-22.20	-72.69	-41.65	2.35	10.95	V
	15168	-28.47	-13	-15.47	-71.81	-37.66	2.60	13.94	V
	18956	-64.02	-13	-51.02	-75.36	-75.76	3.26	17.14	V
	22748	-60.98	-13	-47.98	-77.13	-73.98	3.55	18.70	V
	26539	-56.47	-13	-43.47	-75.78	-69.05	3.93	18.65	V



Highest	7762	-41.23	-13	-28.23	-72.02	-48.88	1.88	11.68	H
	11643	-34.02	-13	-21.02	-72.17	-41.02	2.46	11.61	H
	15528	-29.86	-13	-16.86	-70.94	-40.49	2.70	15.48	H
	19406	-59.92	-13	-46.92	-72.23	-71.97	3.23	17.42	H
	23288	-55.70	-13	-42.70	-72.81	-68.57	3.63	18.66	H
	27169	-54.32	-13	-41.32	-74.89	-67.61	3.93	19.37	H
	7762	-41.14	-13	-28.14	-72.2	-48.79	1.88	11.68	V
	11643	-34.10	-13	-21.10	-72.16	-41.10	2.46	11.61	V
	15528	-29.71	-13	-16.71	-71.06	-40.34	2.70	15.48	V
	19406	-62.07	-13	-49.07	-74.12	-74.12	3.23	17.42	V
	23288	-59.69	-13	-46.69	-76.47	-72.56	3.63	18.66	V
	27169	-55.93	-13	-42.93	-76.14	-69.22	3.93	19.37	V

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