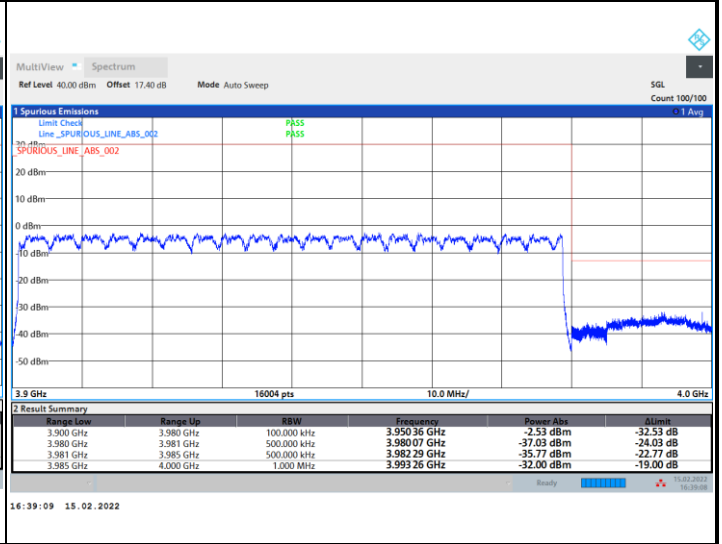
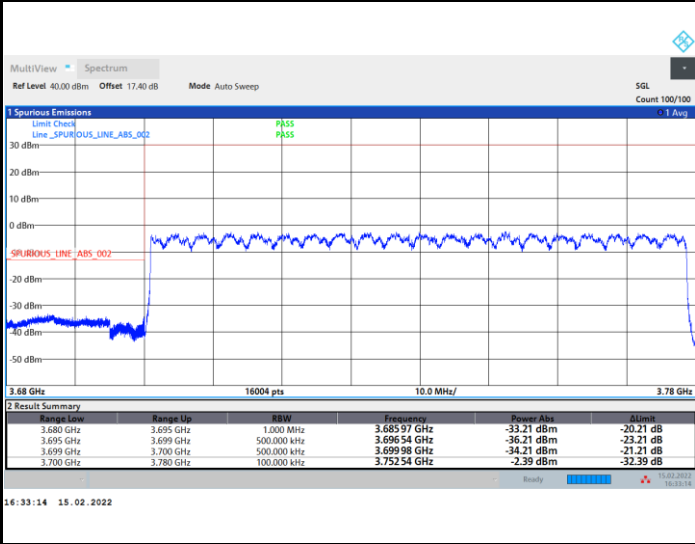




FR1 n77 / 80MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

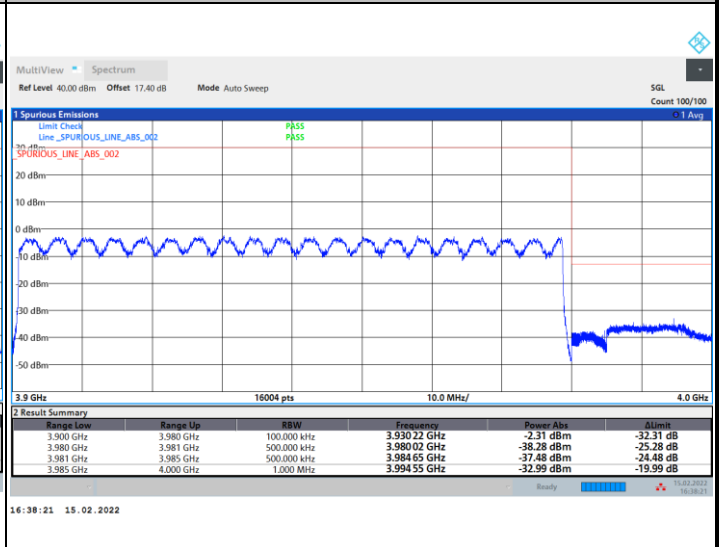
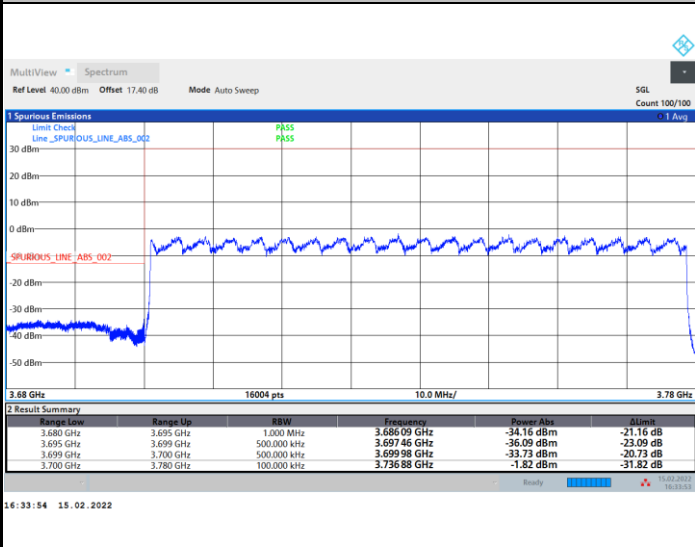
Highest Band Edge



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

Lowest Band Edge

Highest Band Edge

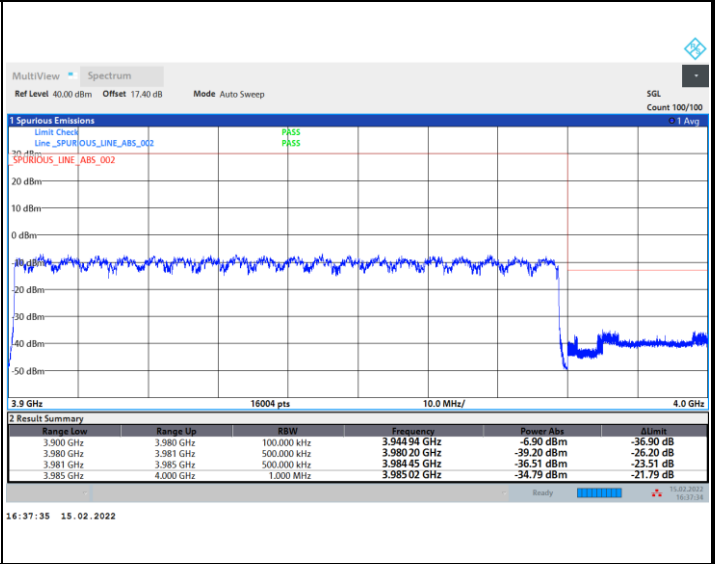
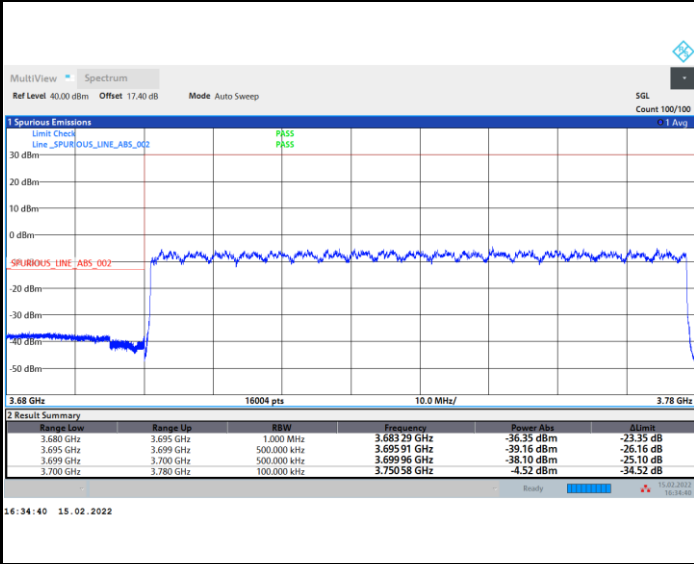




FR1 n77 / 80MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

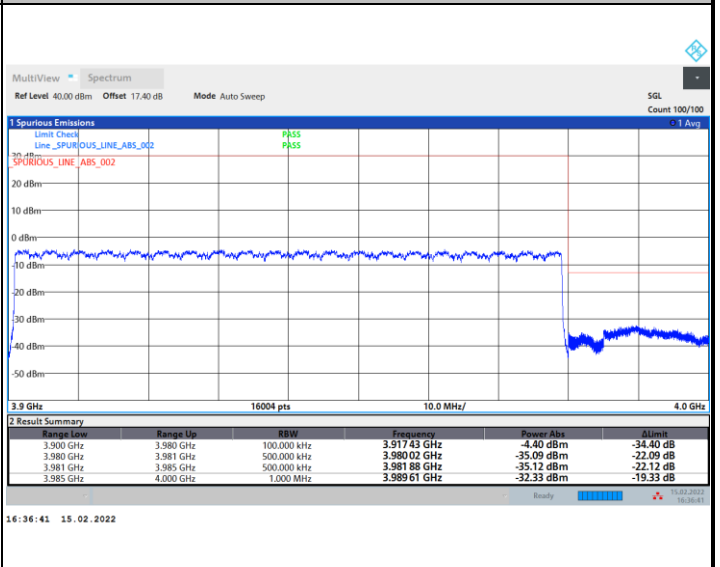
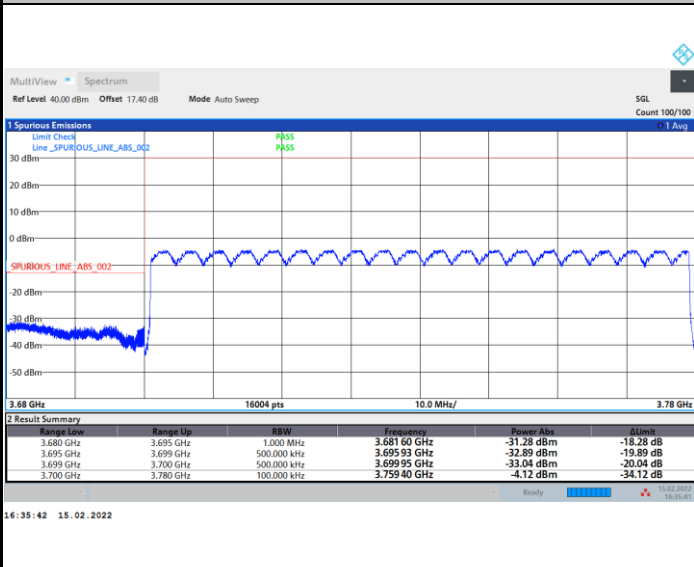
Highest Band Edge



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

Lowest Band Edge

Highest Band Edge

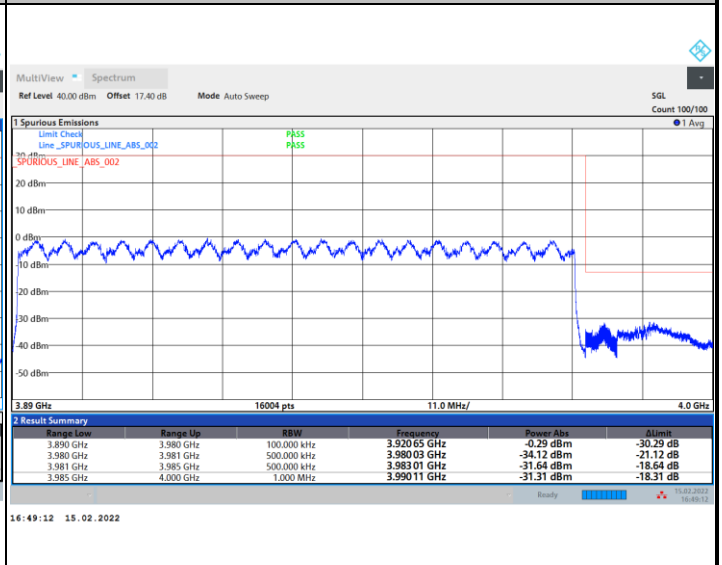
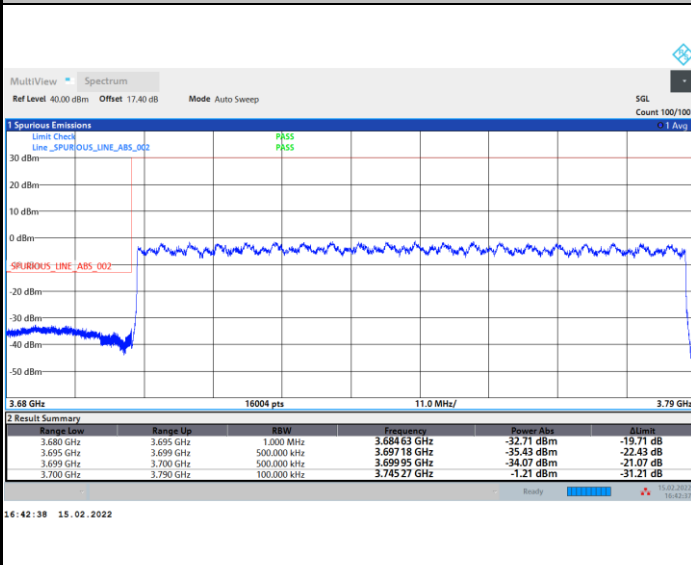




FR1 n77 / 90MHz / DFT-S OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

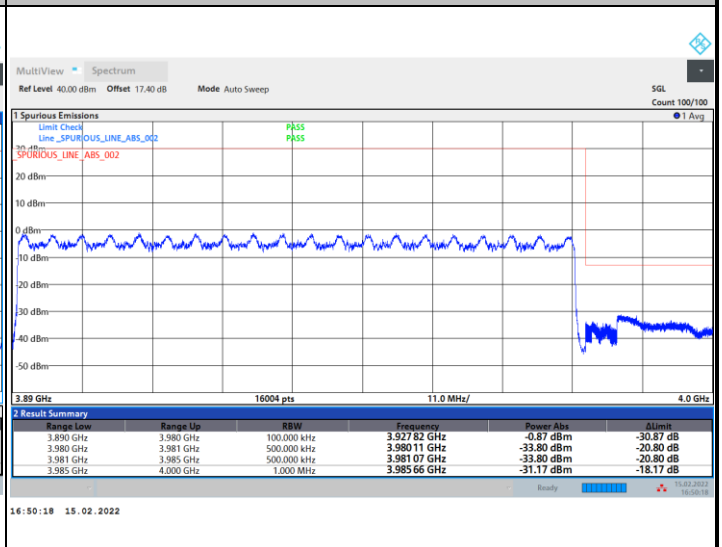
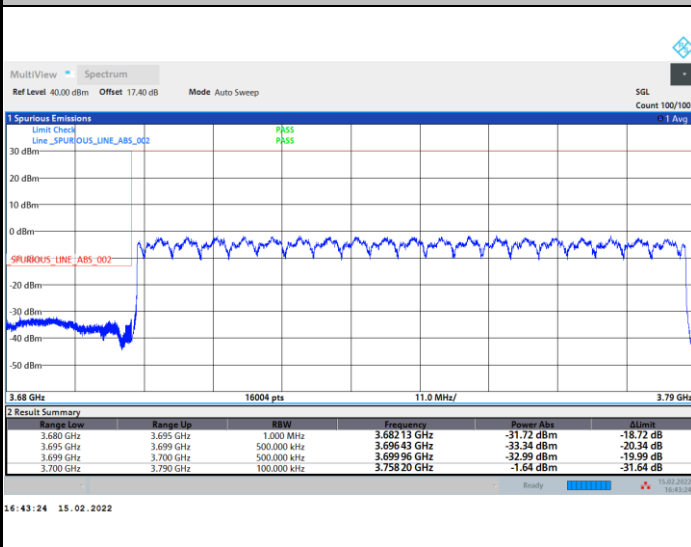
Highest Band Edge



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

Lowest Band Edge

Highest Band Edge

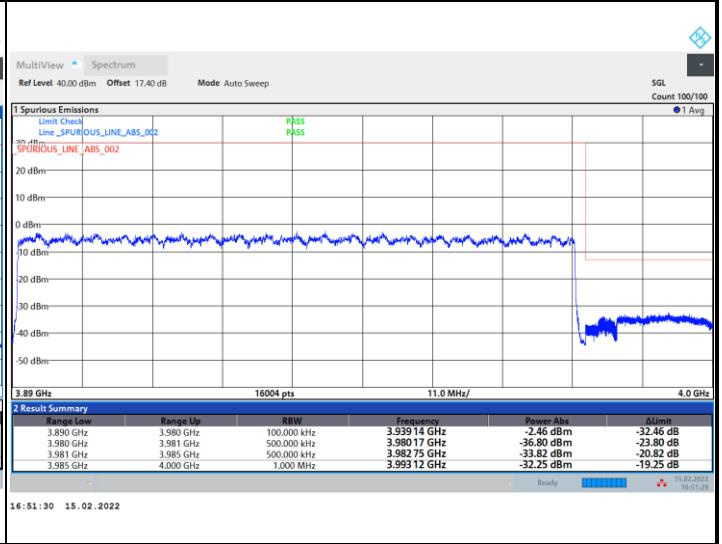
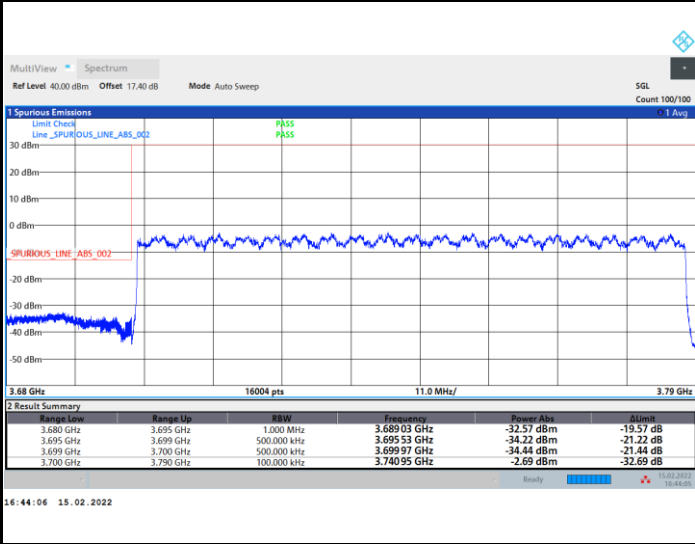




FR1 n77 / 90MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

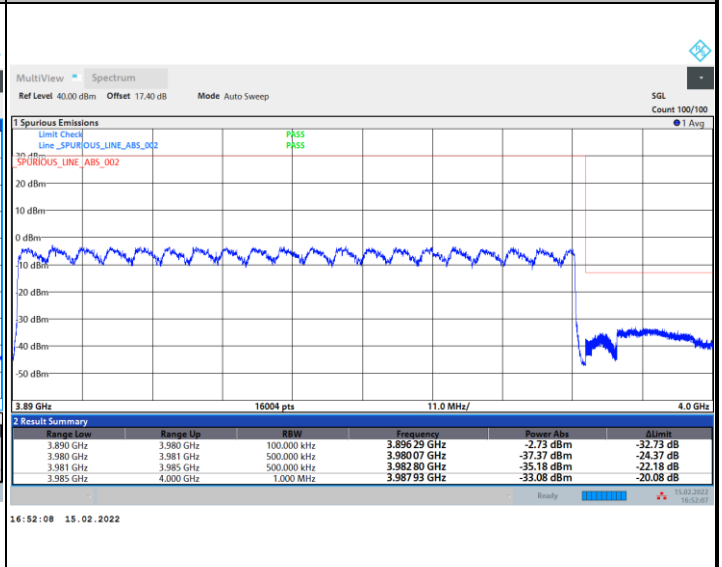
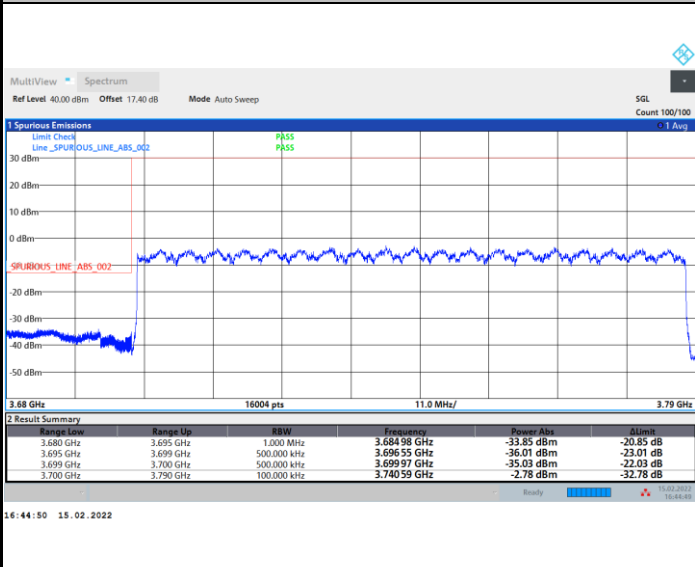
Highest Band Edge



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

Lowest Band Edge

Highest Band Edge

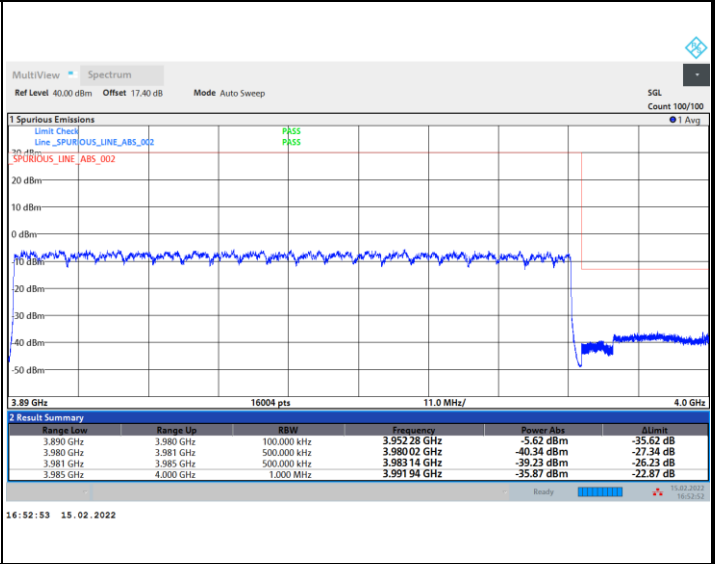
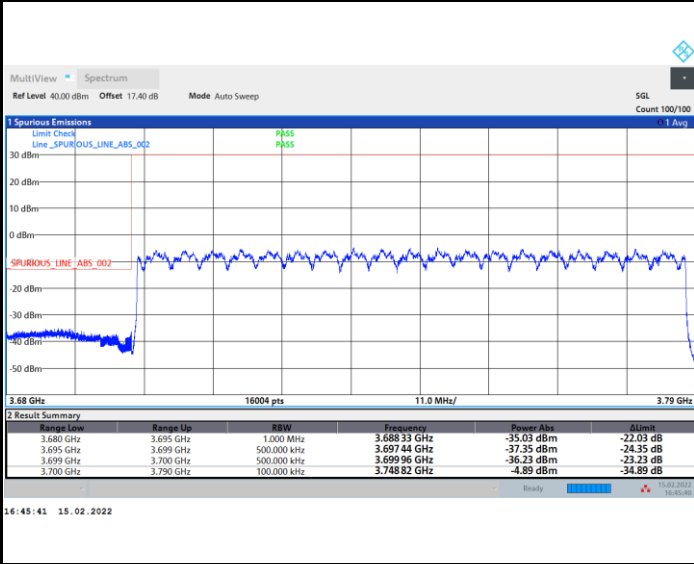




FR1 n77 / 90MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge

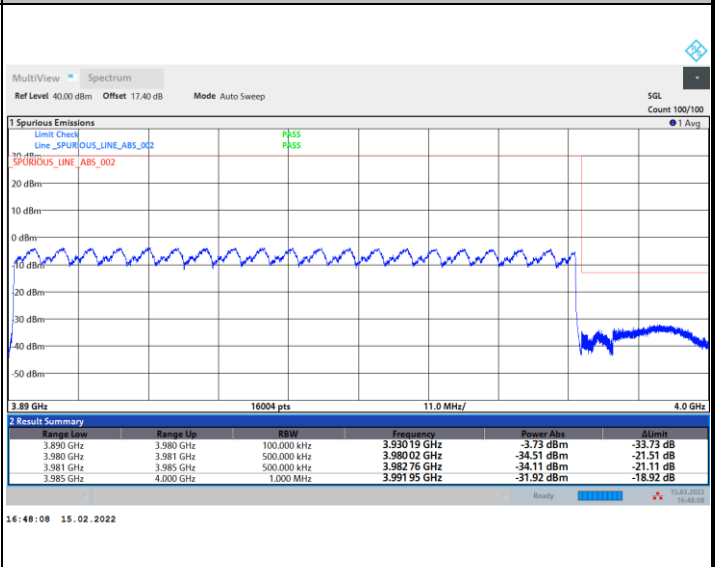
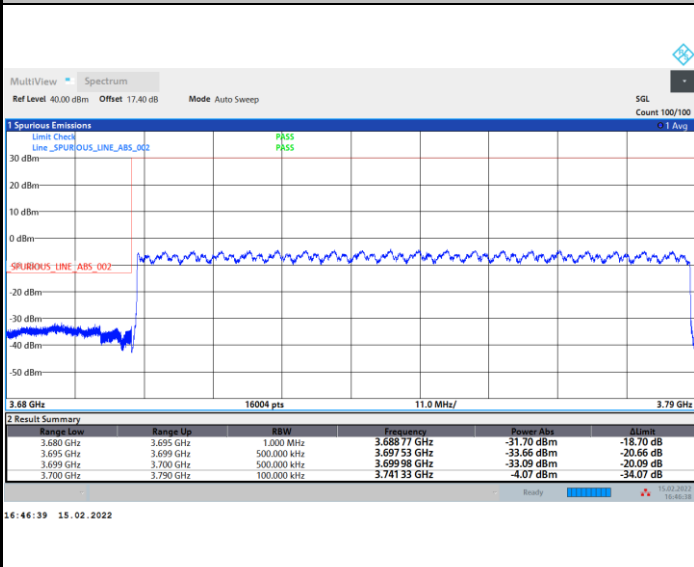
Highest Band Edge



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

Lowest Band Edge

Highest Band Edge

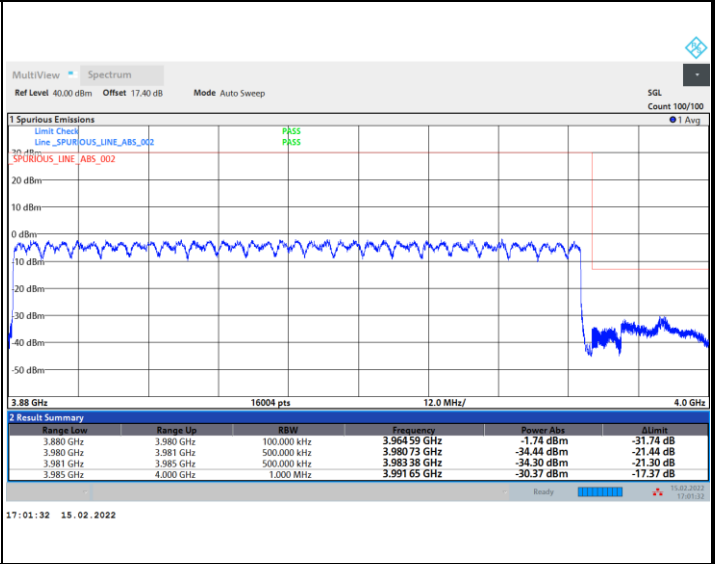
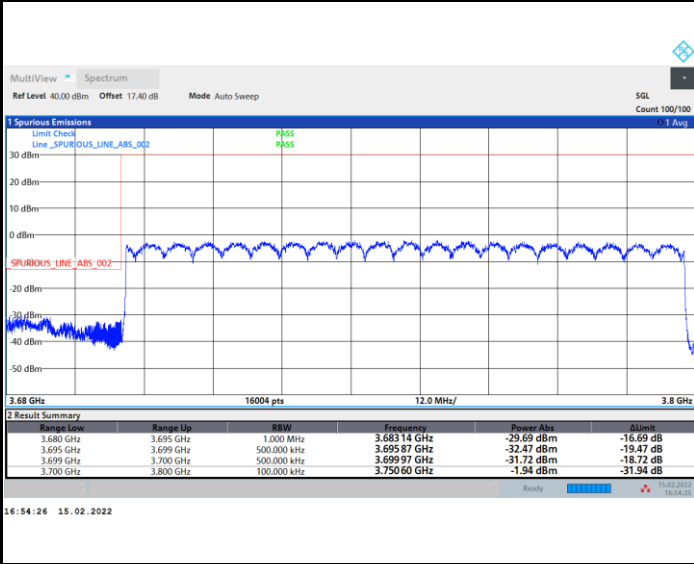




FR1 n77 / 100MHz / DFT-S OFDM / PI/2 BPSK / Full RB

Lowest Band Edge

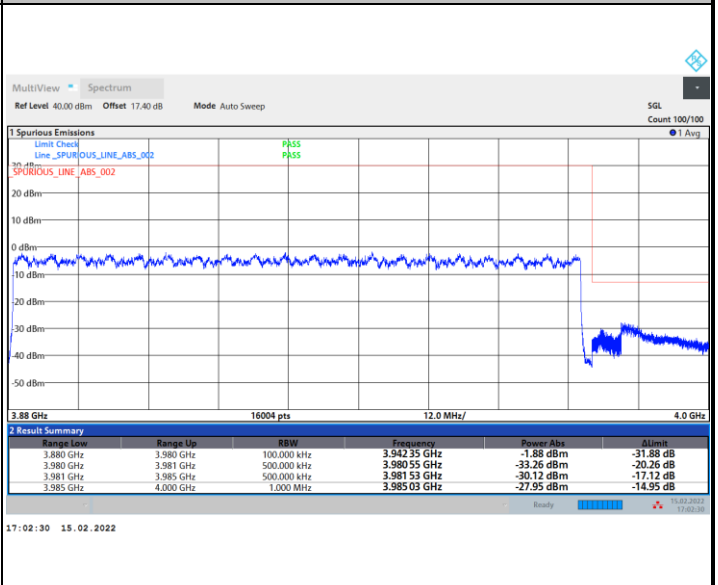
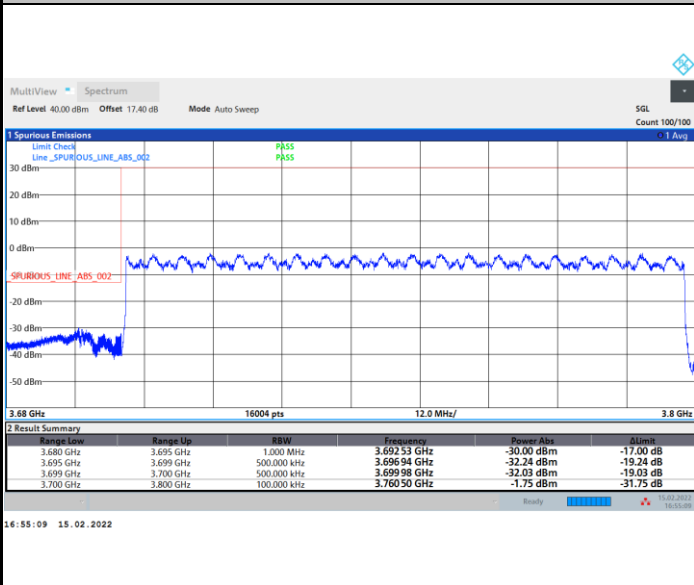
Highest Band Edge



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

Lowest Band Edge

Highest Band Edge

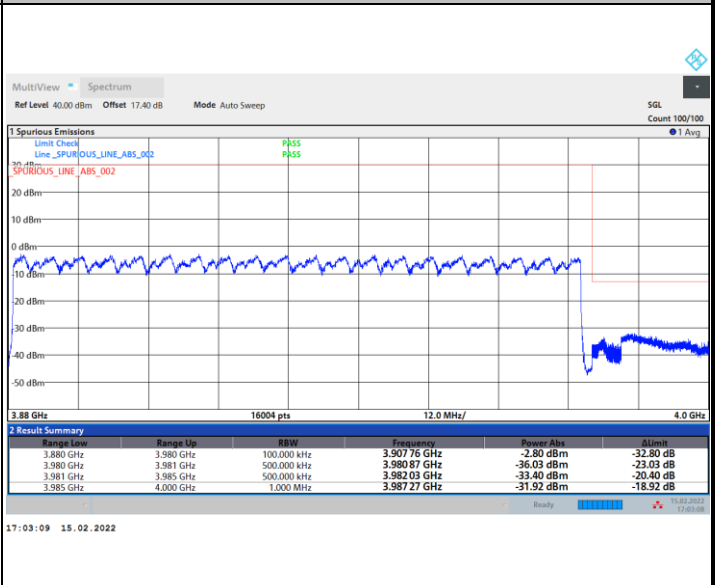
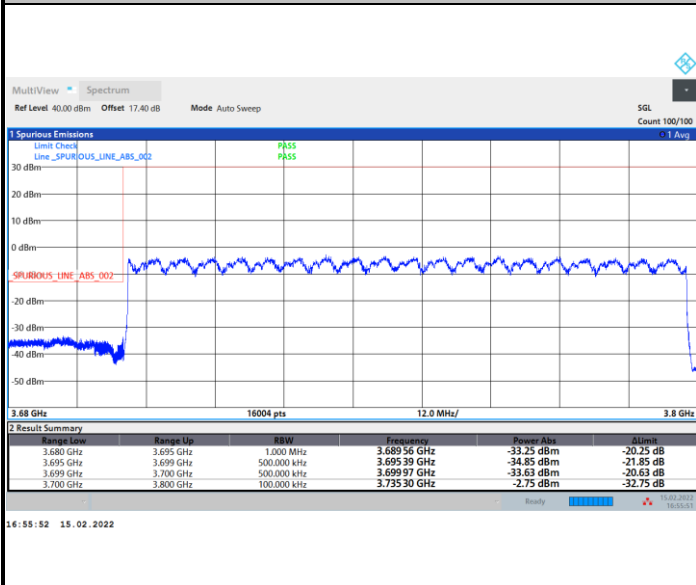




FR1 n77 / 100MHz / DFT-S OFDM / 16QAM / Full RB

Lowest Band Edge

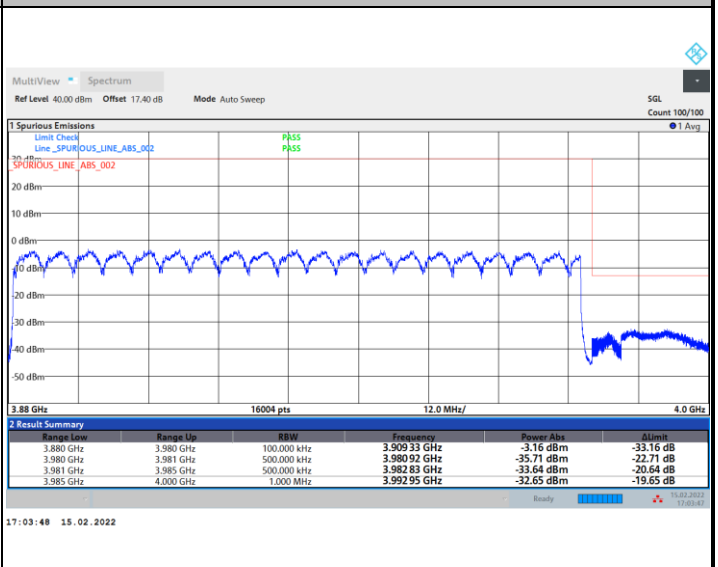
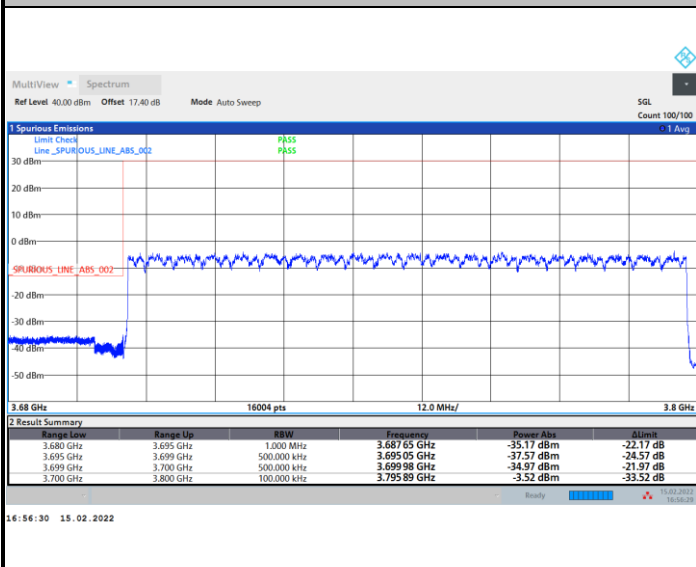
Highest Band Edge



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

Lowest Band Edge

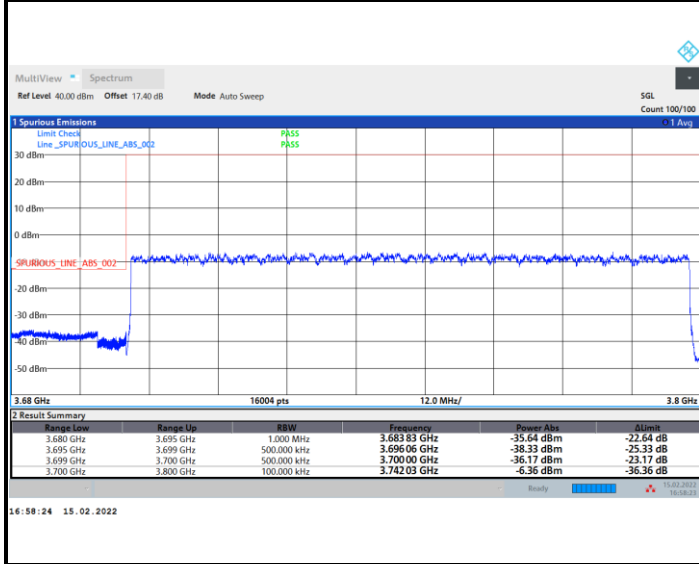
Highest Band Edge



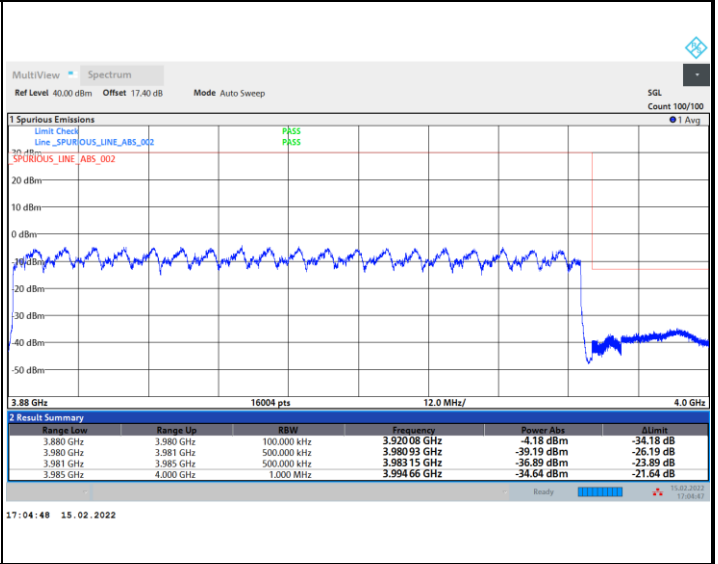


FR1 n77 / 100MHz / DFT-S OFDM / 256QAM / Full RB

Lowest Band Edge / Full RB

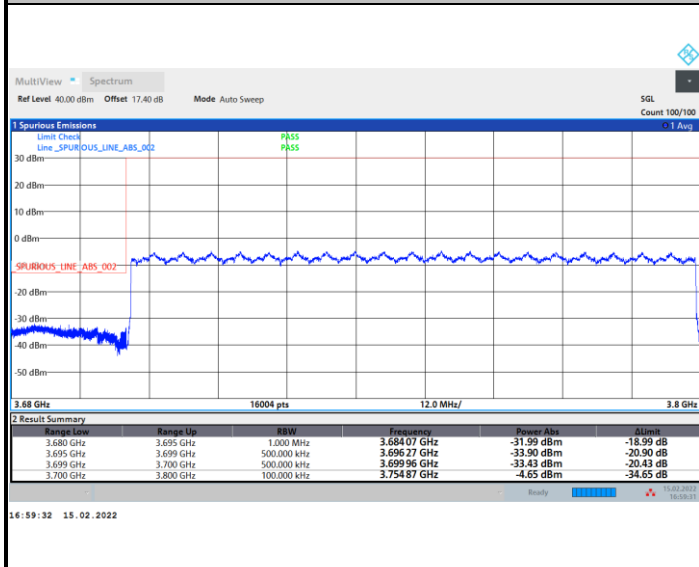


Highest Band Edge / Full RB

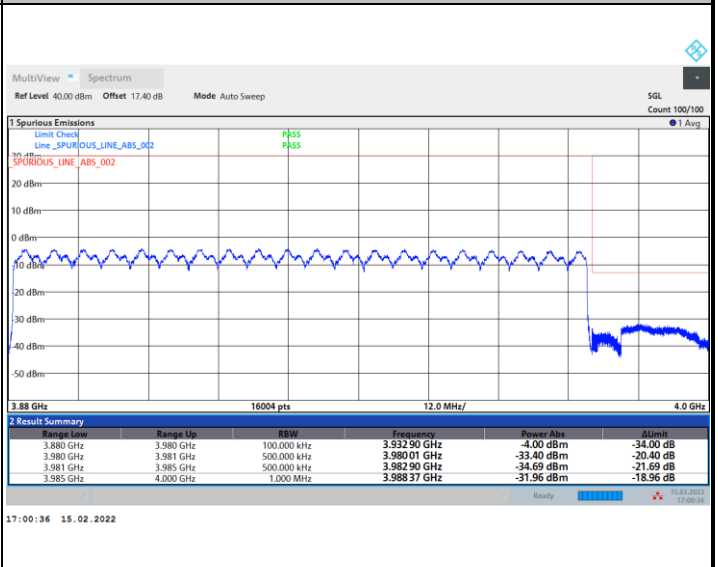


FR1 n77 / 100MHz / CP OFDM / QPSK / Full RB

Lowest Band Edge



Highest Band Edge



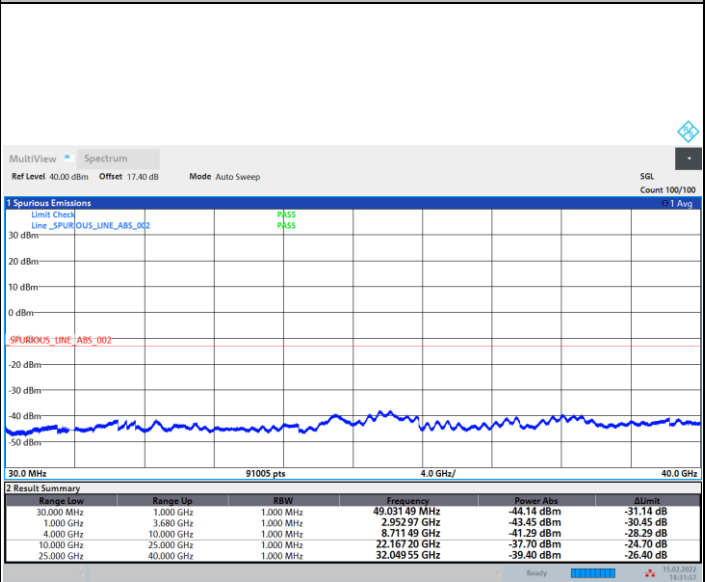
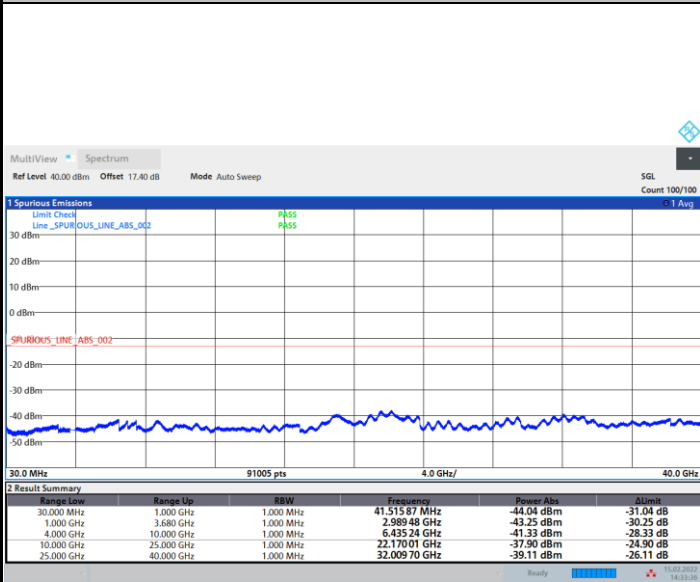


Conducted Spurious Emission

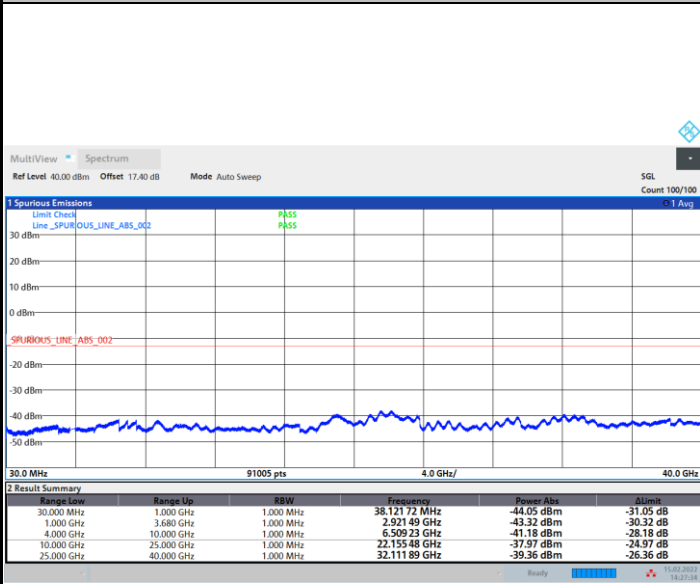
FR1 n77 / 20MHz / DFT-S OFDM / QPSK / 1RB1

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	0.0023	PASS
40	Normal Voltage	0.0015	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0017	
-10	Normal Voltage	0.0015	
-20	Normal Voltage	0.0015	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0023	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0000	

Note:

1. Normal Voltage =14 V. ; Battery End Point (BEP) =12 V. ; Maximum Voltage =16 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

<SIM 1>

EN-DC 2A-n77A(HPUE)

EN-DC 2A-n77A / 10+100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7584	-45.75	-13	-32.75	-72.22	-52.72	2.00	11.12	H
	11375	-39.87	-13	-26.87	-71.91	-46.58	2.49	11.35	H
	15168	-33.18	-13	-20.18	-71.39	-41.73	3.04	13.74	H
	18955	-53.31	-13	-40.31	-71.59	-67.31	1.75	17.90	H
	22746	-52.10	-13	-39.10	-75.23	-66.43	1.97	18.45	H
	26537	-49.34	-13	-36.34	-76.33	-63.62	2.36	18.79	H
									H
	7584	-45.59	-13	-32.59	-72.01	-52.56	2.00	11.12	V
	11375	-40.57	-13	-27.57	-72.46	-47.28	2.49	11.35	V
	15168	-35.35	-13	-22.35	-36.35	-43.90	3.04	13.74	V
	18955	-54.58	-13	-41.58	-72.15	-68.58	1.75	17.90	V
	22746	-52.39	-13	-39.39	-75.56	-66.72	1.97	18.45	V
	26537	-48.41	-13	-35.41	-76.9	-62.69	2.36	18.79	V
									V

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



EN-DC 5A-n77A(HPUE)

EN-DC 5A-n77A / 10+100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7584	-45.87	-13	-32.87	-72.34	-52.84	2.00	11.12	H
	11375	-39.98	-13	-26.98	-72.02	-46.69	2.49	11.35	H
	15168	-33.11	-13	-20.11	-71.32	-41.66	3.04	13.74	H
	18955	-53.13	-13	-40.13	-71.41	-67.13	1.75	17.90	H
	22746	-52.37	-13	-39.37	-75.5	-66.70	1.97	18.45	H
	26537	-49.84	-13	-36.84	-76.83	-64.12	2.36	18.79	H
									H
	7584	-45.66	-13	-32.66	-72.08	-52.62	2.00	11.12	V
	11375	-40.11	-13	-27.11	-72	-46.82	2.49	11.35	V
	15168	-35.25	-13	-22.25	-71.49	-43.80	3.04	13.74	V
	18955	-54.70	-13	-41.70	-72.27	-68.70	1.75	17.90	V
	22746	-52.73	-13	-39.73	-75.89	-67.06	1.97	18.45	V
	26537	-48.58	-13	-35.58	-77.07	-62.86	2.36	18.79	V
									V

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



EN-DC 7A-n77A(HPUE) Part 270

EN-DC 7A-n77A / 10+100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7584	-45.53	-13	-32.53	-72	-52.50	2.00	11.12	H
	11375	-40.16	-13	-27.16	-72.2	-46.87	2.49	11.35	H
	15168	-33.12	-13	-20.12	-71.33	-41.67	3.04	13.74	H
	18955	-52.95	-13	-39.95	-71.23	-66.95	1.75	17.90	H
	22746	-52.27	-13	-39.27	-75.4	-66.60	1.97	18.45	H
	26537	-49.92	-13	-36.92	-76.91	-64.20	2.36	18.79	H
									H
	7584	-45.96	-13	-32.96	-72.38	-52.93	2.00	11.12	V
	11375	-40.34	-13	-27.34	-72.23	-47.05	2.49	11.35	V
	15168	-35.29	-13	-22.29	-71.51	-43.84	3.04	13.74	V
	18955	-54.34	-13	-41.34	-71.91	-68.34	1.75	17.90	V
	22746	-51.75	-13	-38.75	-74.91	-66.08	1.97	18.45	V
	26537	-48.45	-13	-35.45	-76.94	-62.73	2.36	18.79	V
									V

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



EN-DC 12A-n77A(HPUE)

EN-DC 12A-n77A / 10+100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	7401	-44.52	-13	-31.52	-71.9	-51.69	1.94	11.26	H
	11103	-40.16	-13	-27.16	-71.84	-46.43	2.61	11.02	H
	14802	-33.46	-13	-20.46	-71.32	-40.34	2.93	11.97	H
	18505	-55.10	-13	-42.10	-71.52	-68.95	1.90	17.90	H
	22206	-54.44	-13	-41.44	-75.92	-69.06	2.05	18.82	H
	25907	-48.79	-13	-35.79	-76.3	-63.76	1.96	19.08	H
									H
	7401	-44.76	-13	-31.76	-71.98	-51.93	1.94	11.26	V
	11103	-40.58	-13	-27.58	-72.1	-46.85	2.61	11.02	V
	14802	-35.21	-13	-22.21	-71.13	-42.09	2.93	11.97	V
	18505	-54.47	-13	-41.47	-71.75	-68.32	1.90	17.90	V
	22206	-54.53	-13	-41.53	-75.98	-69.15	2.05	18.82	V
	25907	-49.61	-13	-36.61	-76.01	-64.58	1.96	19.08	V
									V
Middle	7583	-45.45	-13	-32.45	-71.94	-52.41	2.00	11.12	H
	11374	-39.88	-13	-26.88	-71.93	-46.59	2.49	11.35	H
	15165	-32.96	-13	-19.96	-71.18	-41.49	3.04	13.72	H
	18955	-53.43	-13	-40.43	-71.71	-67.43	1.75	17.90	H
	22746	-51.98	-13	-38.98	-75.11	-66.31	1.97	18.45	H
	26537	-49.45	-13	-36.45	-76.44	-63.73	2.36	18.79	H
									H
	7583	-45.50	-13	-32.50	-71.94	-52.46	2.00	11.12	V
	11374	-39.96	-13	-26.96	-71.85	-46.67	2.49	11.35	V
	15165	-35.05	-13	-22.05	-71.27	-43.58	3.04	13.72	V
	18955	-54.26	-13	-41.26	-71.83	-68.26	1.75	17.90	V
	22746	-52.54	-13	-39.54	-75.7	-66.87	1.97	18.45	V
	26537	-48.49	-13	-35.49	-76.98	-62.77	2.36	18.79	V
									V



Highest	7762	-45.74	-13	-32.74	-72.2	-52.72	2.03	11.15	H
	11643	-39.55	-13	-26.55	-71.98	-46.81	2.49	11.90	H
	15524	-33.56	-13	-20.56	-71.06	-44.36	3.13	16.08	H
	19405	-54.06	-13	-41.06	-72.28	-68.26	1.96	18.31	H
	23286	-51.29	-13	-38.29	-75.34	-65.25	1.97	18.09	H
	27167	-50.78	-13	-37.78	-76.9	-65.40	2.10	18.87	H
									H
	7762	-45.97	-13	-32.97	-72.17	-52.95	2.03	11.15	V
	11643	-39.42	-13	-26.42	-71.93	-46.68	2.49	11.90	V
	15524	-34.34	-13	-21.34	-71.13	-45.14	3.13	16.08	V
	19405	-54.41	-13	-41.41	-71.96	-68.61	1.96	18.31	V
	23286	-51.34	-13	-38.34	-75.52	-65.30	1.97	18.09	V
	27167	-49.47	-13	-36.47	-77	-64.09	2.10	18.87	V
									V

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



EN-DC 13A-n77A(HPUE)

EN-DC 13A-n77A / 10+100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7583	-44.73	-13	-31.73	-71.22	-51.69	2.00	11.12	H
	11374	-39.04	-13	-26.04	-71.09	-45.75	2.49	11.35	H
	15165	-32.55	-13	-19.55	-70.77	-41.08	3.04	13.72	H
	18955	-53.14	-13	-40.14	-71.42	-67.14	1.75	17.90	H
	22746	-52.46	-13	-39.46	-75.59	-66.79	1.97	18.45	H
	26537	-49.85	-13	-36.85	-76.84	-64.13	2.36	18.79	H
									H
	7583	-45.07	-13	-32.07	-71.51	-52.03	2.00	11.12	V
	11374	-39.21	-13	-26.21	-71.1	-45.92	2.49	11.35	V
	15165	-34.71	-13	-21.71	-70.93	-43.24	3.04	13.72	V
	18955	-54.16	-13	-41.16	-71.73	-68.16	1.75	17.90	V
	22746	-52.57	-13	-39.57	-75.73	-66.90	1.97	18.45	V
	26537	-48.34	-13	-35.34	-76.83	-62.62	2.36	18.79	V
									V

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



EN-DC 14A-n77A(HPUE)

EN-DC 14A-n77A / 10+100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7584	-45.71	-13	-32.71	-72.18	-52.68	2.00	11.12	H
	11375	-39.36	-13	-26.36	-71.4	-46.07	2.49	11.35	H
	15168	-32.72	-13	-19.72	-70.93	-41.27	3.04	13.74	H
	18955	-53.26	-13	-40.26	-71.54	-67.26	1.75	17.90	H
	22746	-52.35	-13	-39.35	-75.48	-66.68	1.97	18.45	H
	26537	-50.14	-13	-37.14	-77.13	-64.42	2.36	18.79	H
									H
	7584	-45.58	-13	-32.58	-72	-52.55	2.00	11.12	V
	11375	-39.26	-13	-26.26	-71.15	-45.97	2.49	11.35	V
	15168	-35.06	-13	-22.06	-71.28	-43.61	3.04	13.74	V
	18955	-54.62	-13	-41.62	-72.19	-68.62	1.75	17.90	V
	22746	-52.28	-13	-39.28	-75.44	-66.61	1.97	18.45	V
	26537	-48.35	-13	-35.35	-76.84	-62.63	2.36	18.79	V
									V

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



EN-DC 26A-n77A(HPUE)

EN-DC 26A-n77A / 10+100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7584	-44.90	-13	-31.90	-71.37	-51.87	2.00	11.12	H
	11375	-39.13	-13	-26.13	-71.17	-45.84	2.49	11.35	H
	15168	-32.21	-13	-19.21	-70.42	-40.76	3.04	13.74	H
	18954	-55.65	-13	-42.65	-74.87	-69.65	1.75	17.90	H
	22746	-52.38	-13	-39.38	-76.56	-66.71	1.97	18.45	H
	26535	51.90	-13	64.90	-77.3	37.62	2.37	18.79	H
									H
	7584	-45.41	-13	-32.41	-71.83	-52.38	2.00	11.12	V
	11375	-39.48	-13	-26.48	-71.37	-46.19	2.49	11.35	V
	15168	-34.66	-13	-21.66	-70.88	-43.21	3.04	13.74	V
	18954	-56.64	-13	-43.64	-75.15	-70.64	1.75	17.90	V
	22746	-52.46	-13	-39.46	-76.67	-66.79	1.97	18.45	V
	26535	-48.79	-13	-35.79	-77.69	-63.07	2.37	18.79	V
									V

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



EN-DC 41A-n77A(HPUE)

EN-DC 41A-n77A / 10+100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7584	-45.92	-13	-32.92	-72.39	-52.89	2.00	11.12	H
	11375	-40.24	-13	-27.24	-72.28	-46.95	2.49	11.35	H
	15168	-33.30	-13	-20.30	-71.51	-41.85	3.04	13.74	H
	18955	-53.43	-13	-40.43	-71.71	-67.43	1.75	17.90	H
	22746	-52.54	-13	-39.54	-75.67	-66.87	1.97	18.45	H
	26537	-49.53	-13	-36.53	-76.52	-63.81	2.36	18.79	H
									H
	7584	-45.85	-13	-32.85	-72.27	-52.82	2.00	11.12	V
	11375	-40.22	-13	-27.22	-72.11	-46.93	2.49	11.35	V
	15168	-35.04	-13	-22.04	-71.26	-43.59	3.04	13.74	V
	18955	-54.40	-13	-41.40	-71.97	-68.40	1.75	17.90	V
	22746	-51.95	-13	-38.95	-75.11	-66.28	1.97	18.45	V
	26537	-48.68	-13	-35.68	-77.17	-62.96	2.36	18.79	V
									V

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



EN-DC 66A-n77A(HPUE)

EN-DC 66A-n77A / 10+100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7584	-45.78	-13	-32.78	-72.25	-52.75	2.00	11.12	H
	11375	-40.58	-13	-27.58	-72.62	-47.29	2.49	11.35	H
	15168	-33.22	-13	-20.22	-71.43	-41.77	3.04	13.74	H
	18955	-53.81	-13	-40.81	-72.09	-67.81	1.75	17.90	H
	22746	-52.25	-13	-39.25	-75.38	-66.58	1.97	18.45	H
	26537	-50.04	-13	-37.04	-77.03	-64.32	2.36	18.79	H
									H
	7584	-45.56	-13	-32.56	-71.98	-52.53	2.00	11.12	V
	11375	-40.72	-13	-27.72	-72.61	-47.43	2.49	11.35	V
	15168	-34.97	-13	-21.97	-71.19	-43.52	3.04	13.74	V
	18955	-54.41	-13	-41.41	-71.98	-68.41	1.75	17.90	V
	22746	-52.65	-13	-39.65	-75.81	-66.98	1.97	18.45	V
	26537	-48.15	-13	-35.15	-76.64	-62.43	2.36	18.79	V
									V

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



5G NR n77(HPUE)

SA NR n77 / 100MHz / PI/2 BPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	7401	-44.06	-13	-31.06	-71.45	-51.23	1.94	11.26	H
	11102	-39.63	-13	-26.63	-71.31	-45.90	2.61	11.02	H
	14808	-33.59	-13	-20.59	-71.47	-40.49	2.94	11.99	H
	18510	-54.80	-13	-41.80	-72.1	-68.65	1.90	17.90	H
	22207	-53.58	-13	-40.58	-75.04	-68.20	2.05	18.82	H
	25914	-49.92	-13	-36.92	-76.33	-64.90	1.95	19.08	H
									H
	7401	-44.37	-13	-31.37	-71.6	-51.54	1.94	11.26	V
	11102	-39.76	-13	-26.76	-71.27	-46.03	2.61	11.02	V
	14808	-35.51	-13	-22.51	-71.44	-42.41	2.94	11.99	V
	18510	-54.73	-13	-41.73	-71.17	-68.58	1.90	17.90	V
	22207	-53.41	-13	-40.41	-74.89	-68.03	2.05	18.82	V
	25914	-48.43	-13	-35.43	-75.94	-63.41	1.95	19.08	V
									V
Middle	7579	-45.11	-13	-32.11	-71.62	-52.07	2.00	11.12	H
	11375	-38.47	-13	-25.47	-70.51	-45.18	2.49	11.35	H
	15162	-32.35	-13	-19.35	-70.57	-40.86	3.04	13.70	H
	18954	-53.83	-13	-40.83	-72.11	-67.83	1.75	17.90	H
	22747	-52.51	-13	-39.51	-75.64	-66.84	1.97	18.45	H
	26535	-50.02	-13	-37.02	-77001	-64.30	2.37	18.79	H
									H
	7579	-45.19	-13	-32.19	-71.65	-52.15	2.00	11.12	V
	11375	-39.40	-13	-26.40	-71.29	-46.11	2.49	11.35	V
	15162	-34.45	-13	-21.45	-70.66	-42.96	3.04	13.70	V
	18954	-48.53	-13	-35.53	-66.1	-62.53	1.75	17.90	V
	22747	-50.92	-13	-37.92	-74.08	-65.25	1.97	18.45	V
	26535	-48.51	-13	-35.51	-77	-62.79	2.37	18.79	V
									V



Highest	7763	-44.87	-13	-31.87	-71.33	-51.85	2.03	11.15	H
	11643	-39.17	-13	-26.17	-71.6	-46.43	2.49	11.90	H
	15522	-33.04	-13	-20.04	-70.53	-43.83	3.14	16.07	H
	19409	-53.25	-13	-40.25	-71.47	-67.45	1.96	18.31	H
	23287	-51.15	-13	-38.15	-75.2	-65.11	1.97	18.09	H
	27168	-50.97	-13	-37.97	-77.09	-65.59	2.10	18.87	H
									H
	7763	-45.07	-13	-32.07	-71.27	-52.05	2.03	11.15	V
	11643	-38.94	-13	-25.94	-71.45	-46.20	2.49	11.90	V
	15522	-33.93	-13	-20.93	-70.71	-44.72	3.14	16.07	V
	19409	-41.70	-13	-28.70	-59.25	-55.90	1.96	18.31	V
	23287	-48.89	-13	-35.89	-73.08	-62.85	1.97	18.09	V
	27168	-49.79	-13	-36.79	-77.32	-64.41	2.10	18.87	V
									V

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