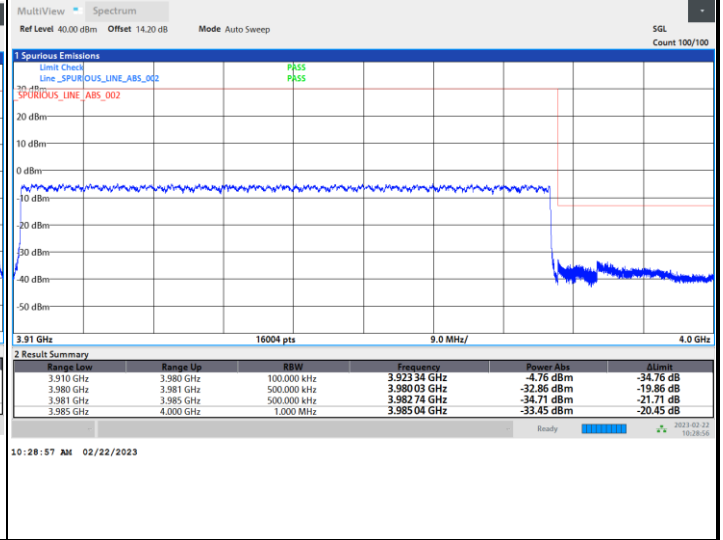
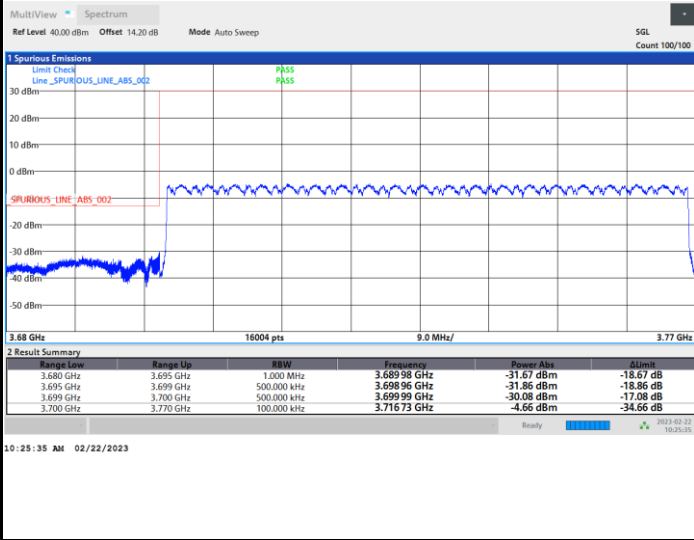




FR1 n77 / 70MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

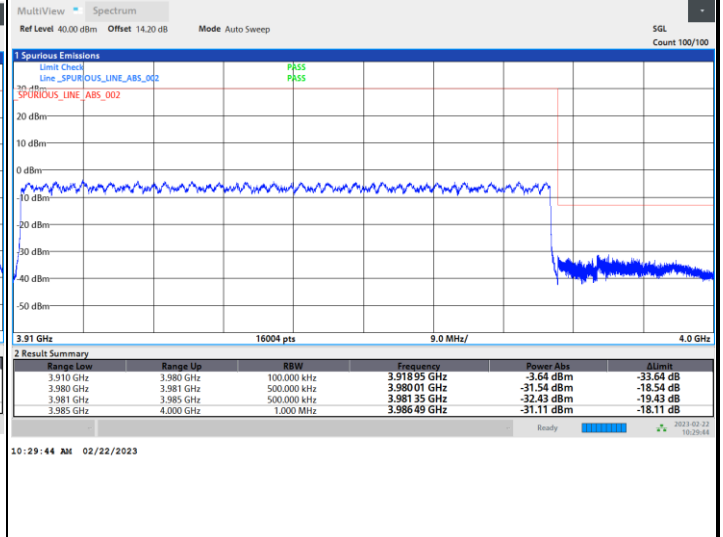
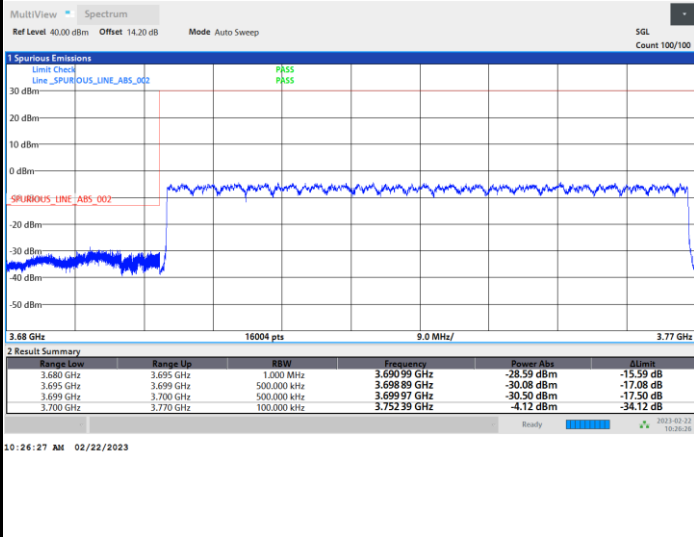
Highest Band Edge / Full RB



FR1 n77 / 70MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

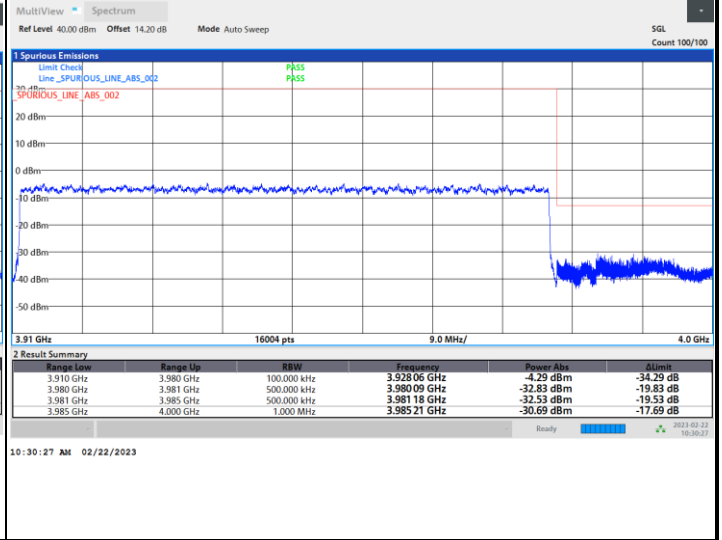
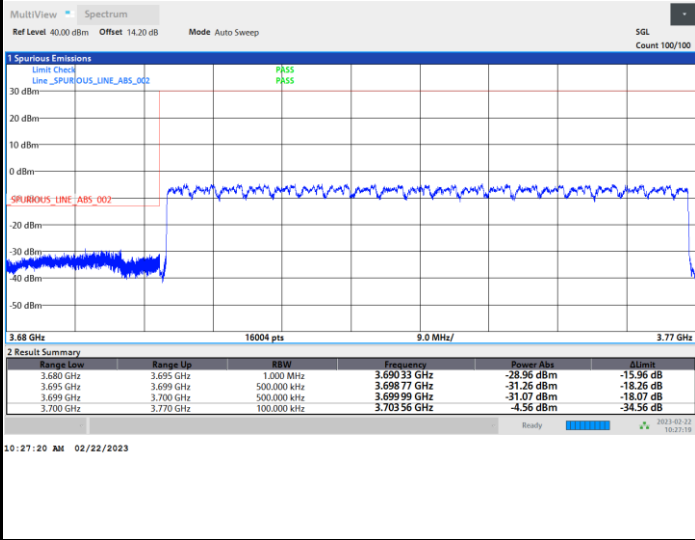




FR1 n77 / 70MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

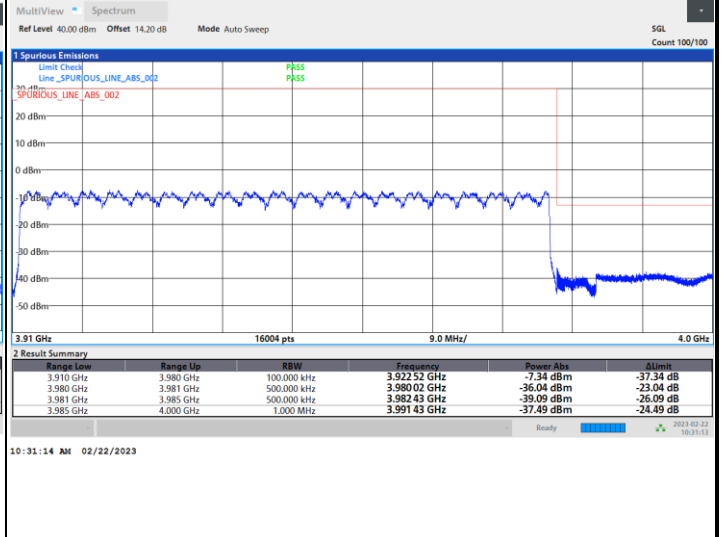
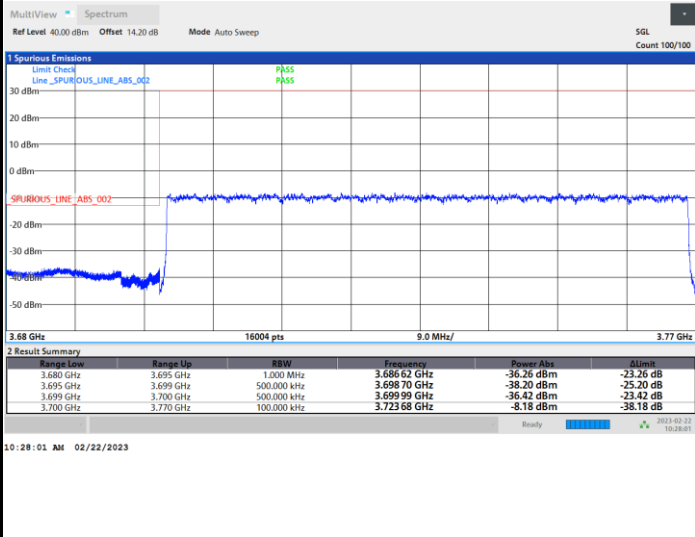
Highest Band Edge / Full RB



FR1 n77 / 70MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

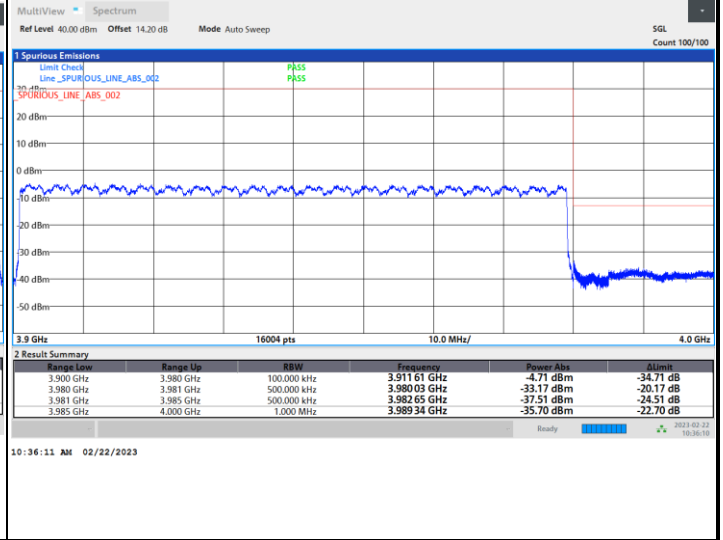
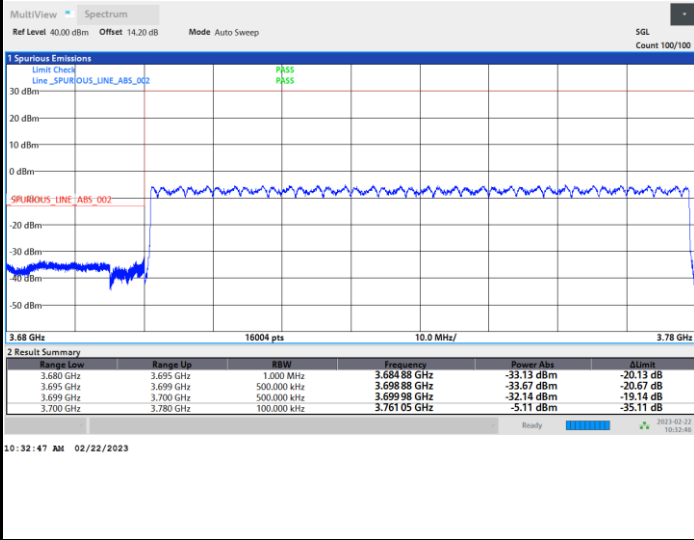




FR1 n77 / 80MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

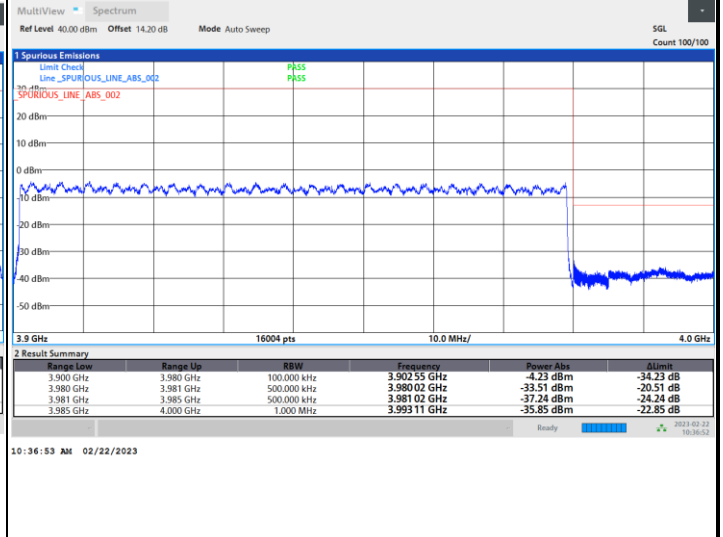
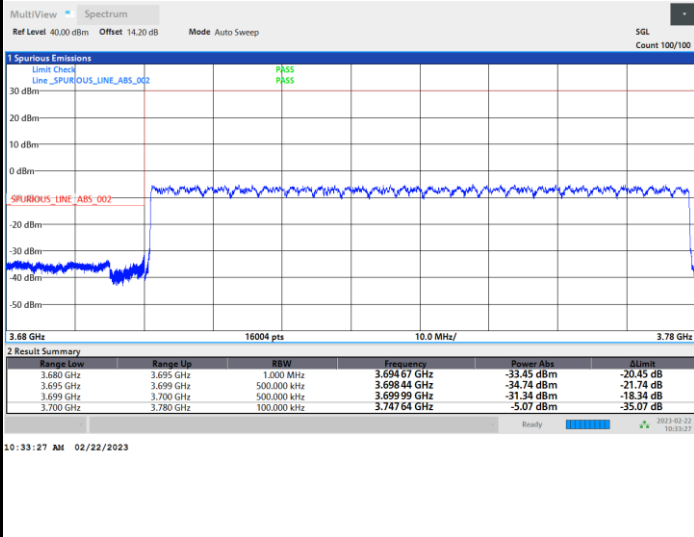
Highest Band Edge / Full RB



FR1 n77 / 80MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

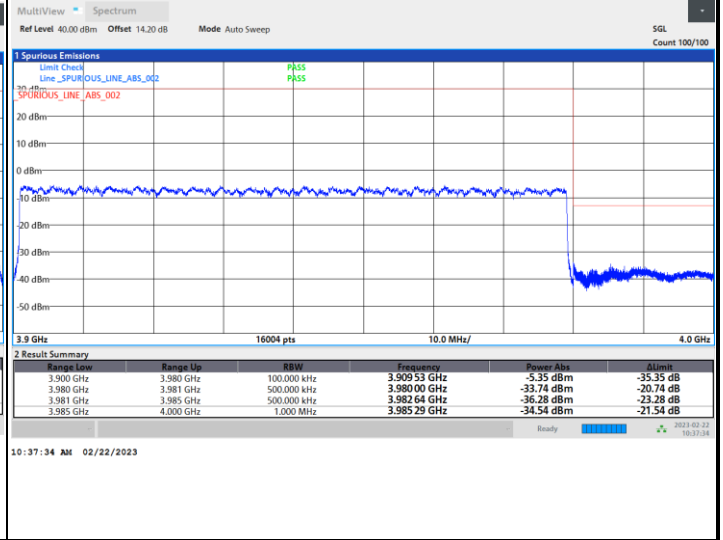
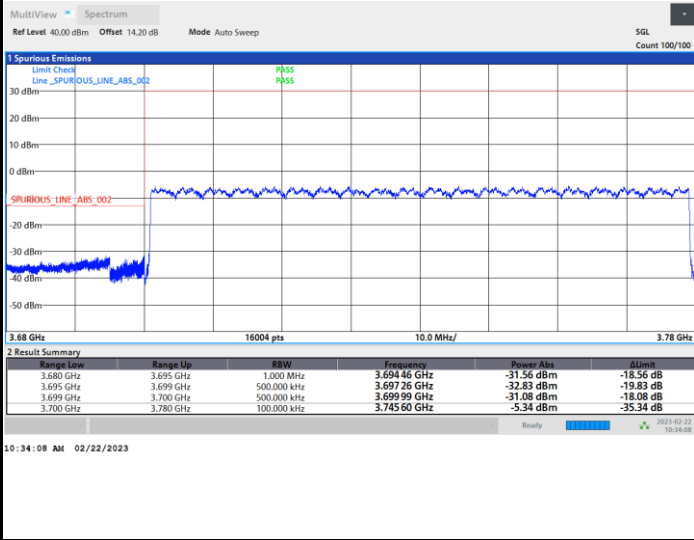




FR1 n77 / 80MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

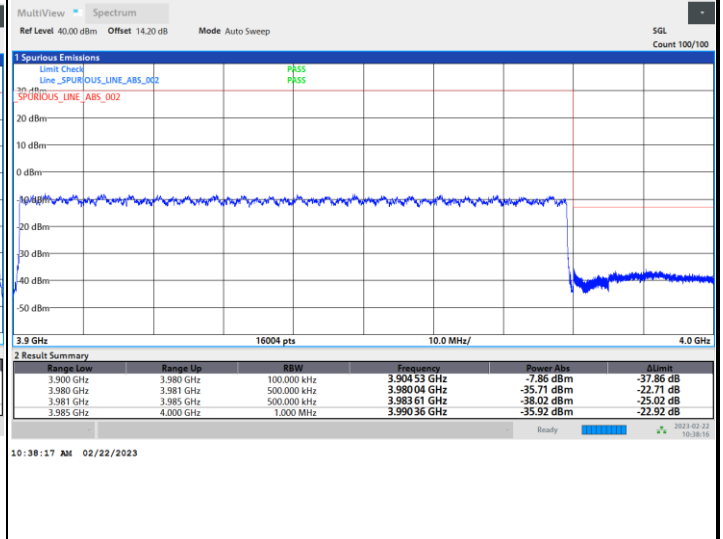
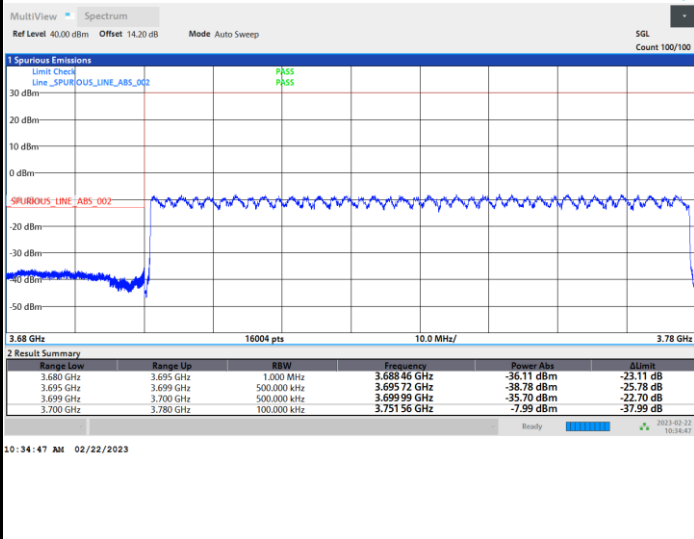
Highest Band Edge / Full RB



FR1 n77 / 80MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

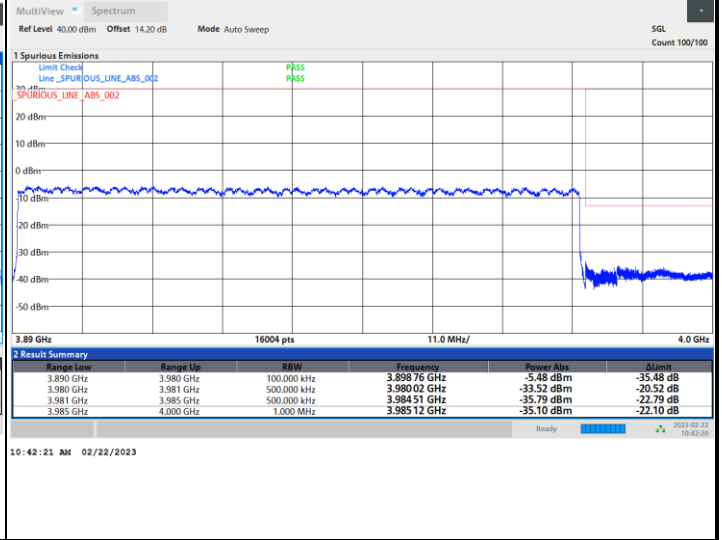
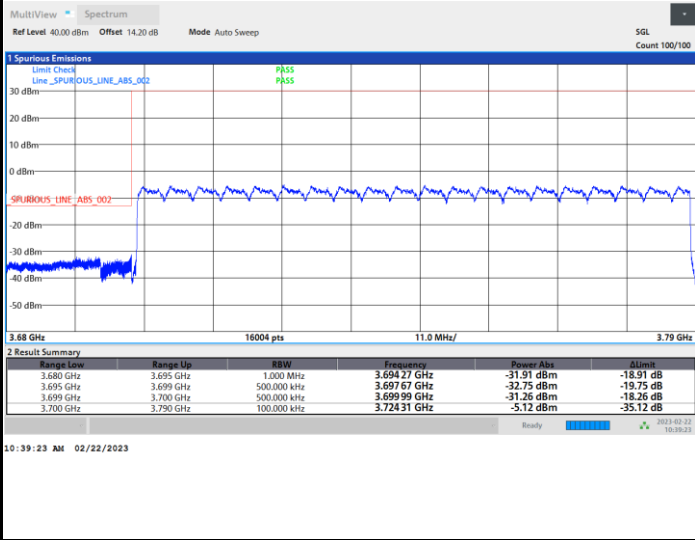




FR1 n77 / 90MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

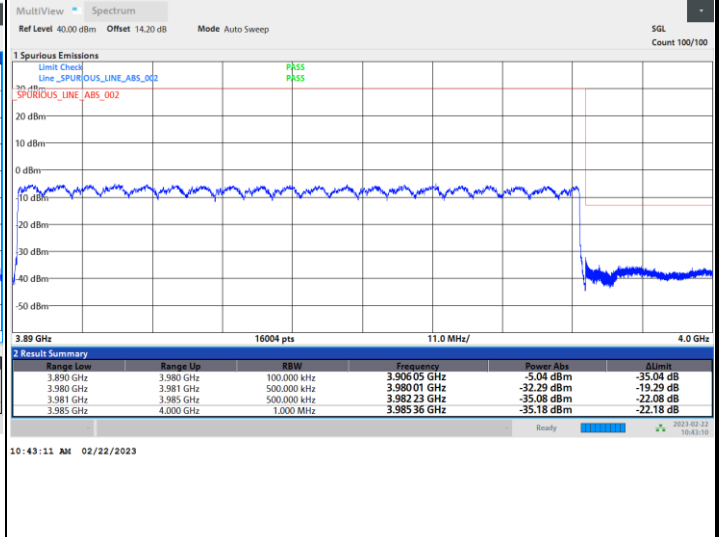
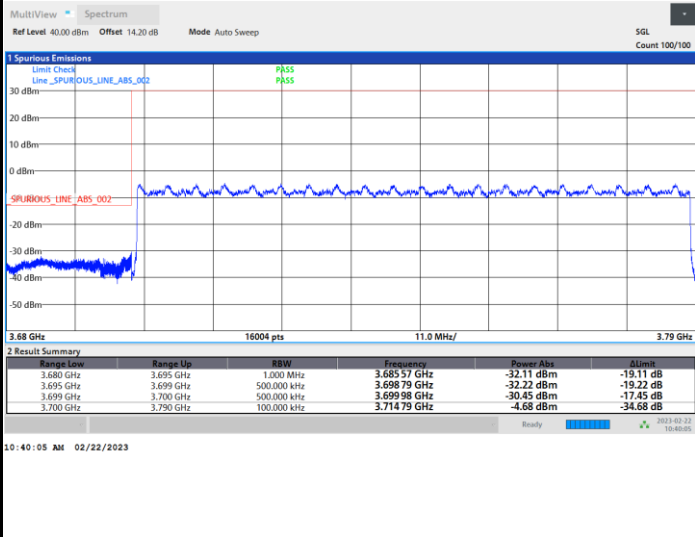
Highest Band Edge / Full RB



FR1 n77 / 90MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

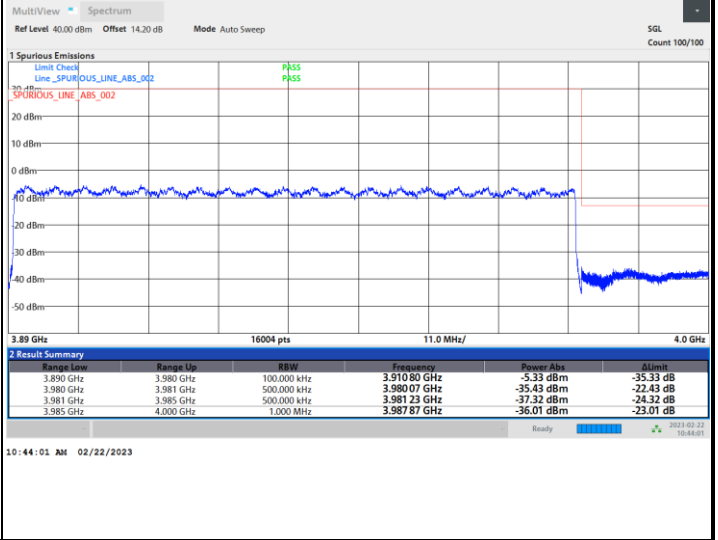
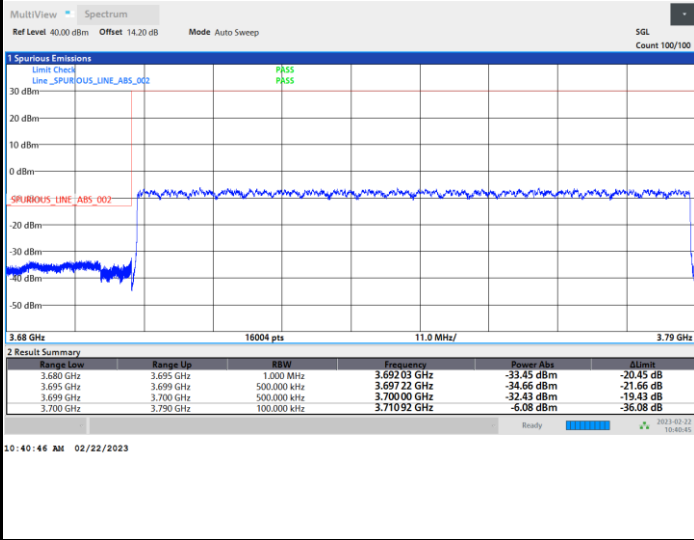




FR1 n77 / 90MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

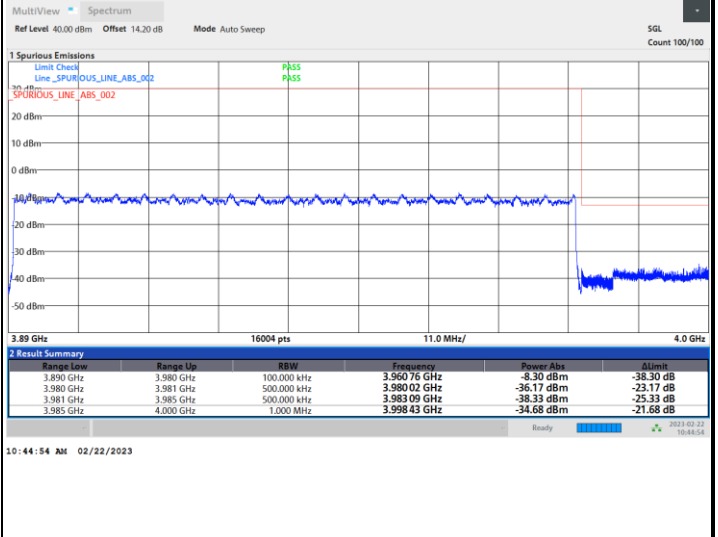
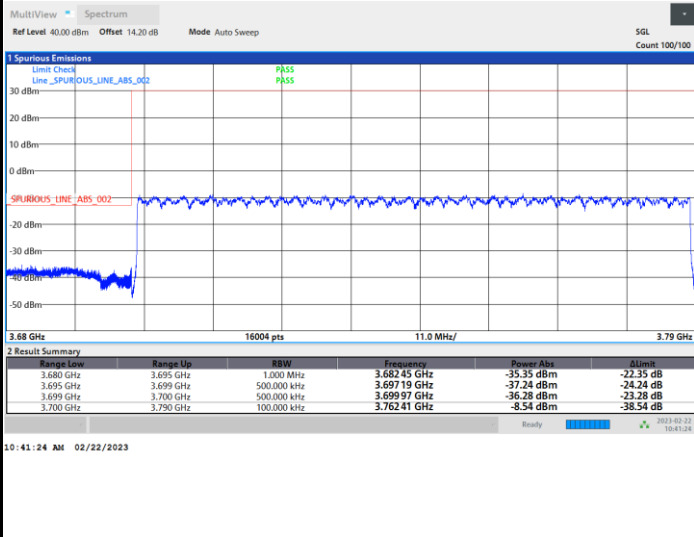
Highest Band Edge / Full RB



FR1 n77 / 90MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

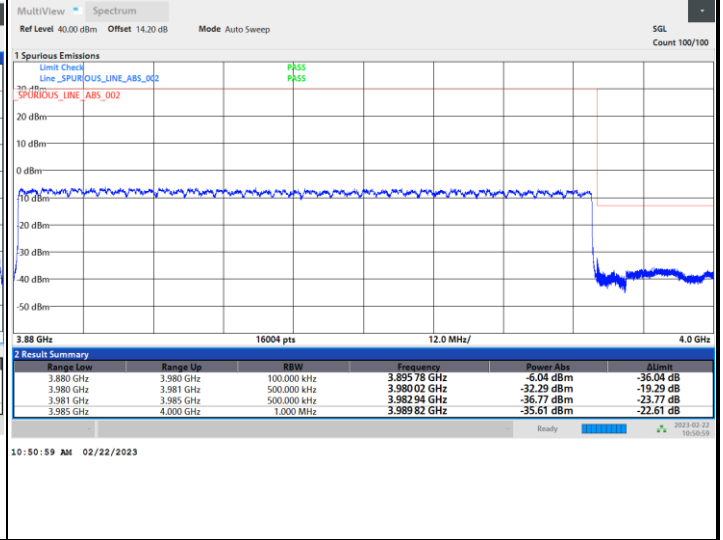
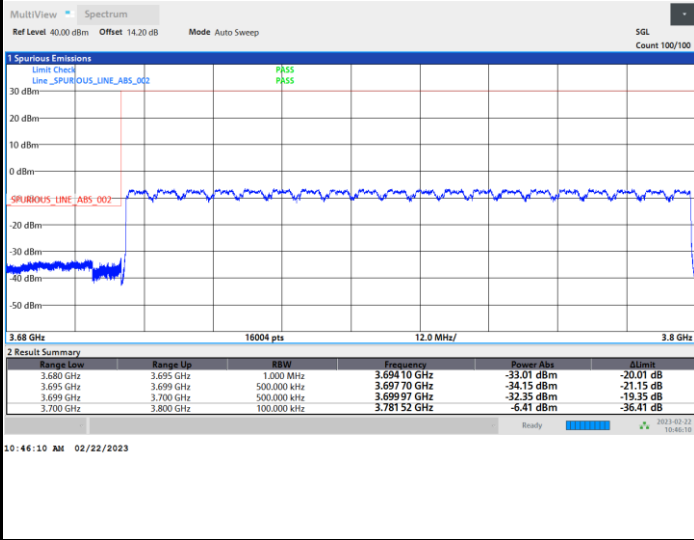




FR1 n77 / 100MHz / CP OFDM / QPSK

Lowest Band Edge / Full RB

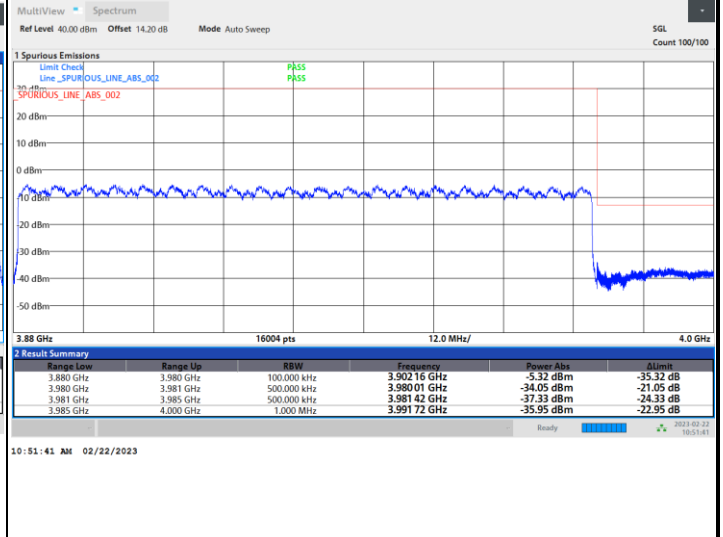
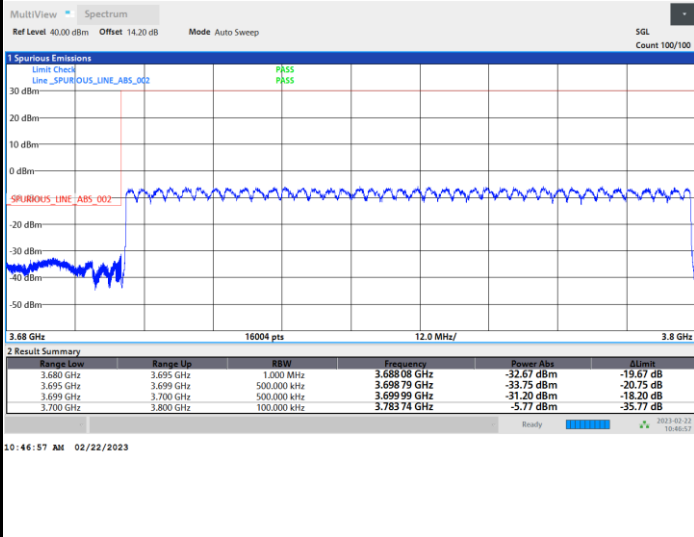
Highest Band Edge / Full RB



FR1 n77 / 100MHz / CP OFDM / 16QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB

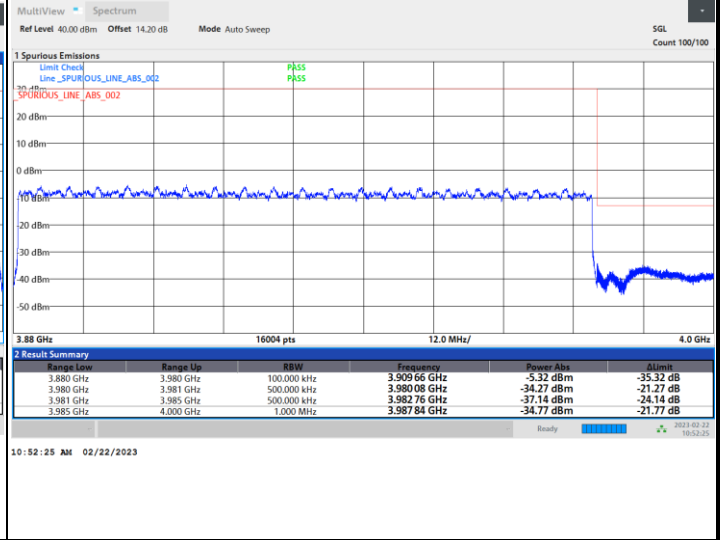
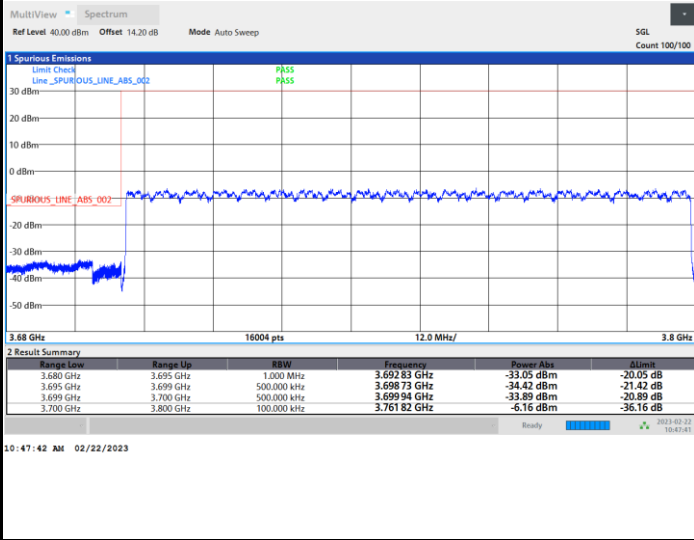




FR1 n77 / 100MHz / CP OFDM / 64QAM

Lowest Band Edge / Full RB

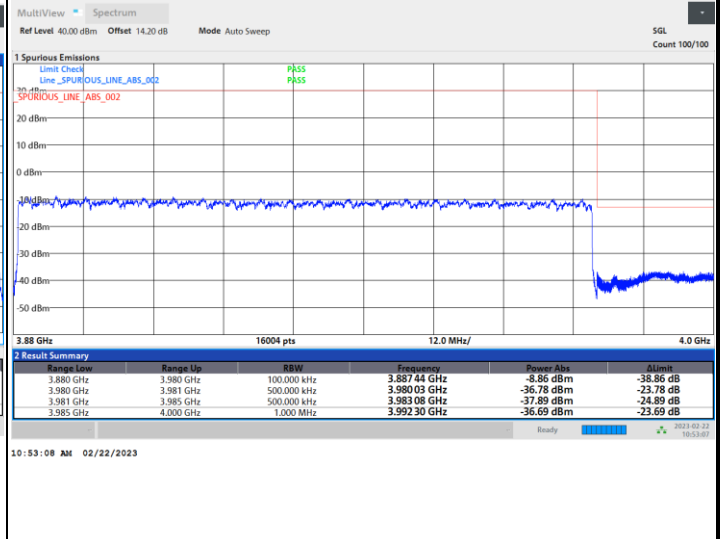
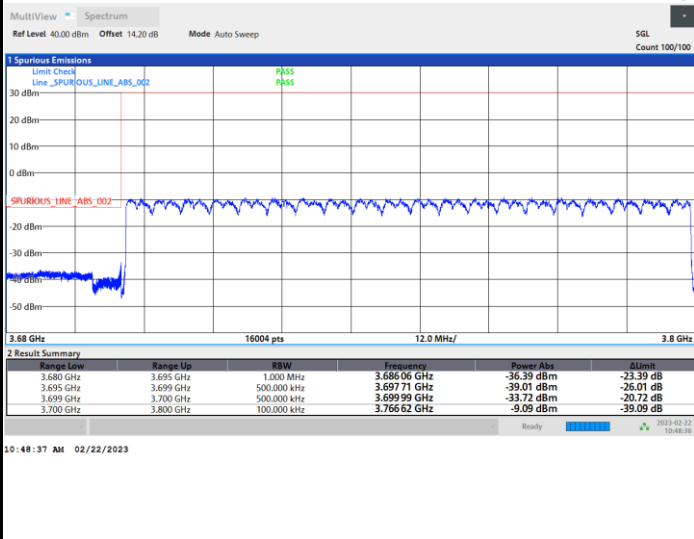
Highest Band Edge / Full RB



FR1 n77 / 100MHz / CP OFDM / 256QAM

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



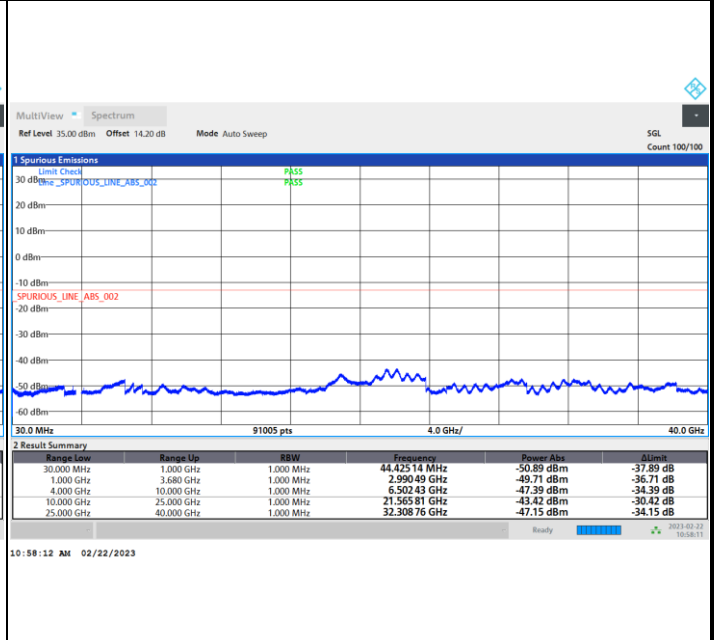
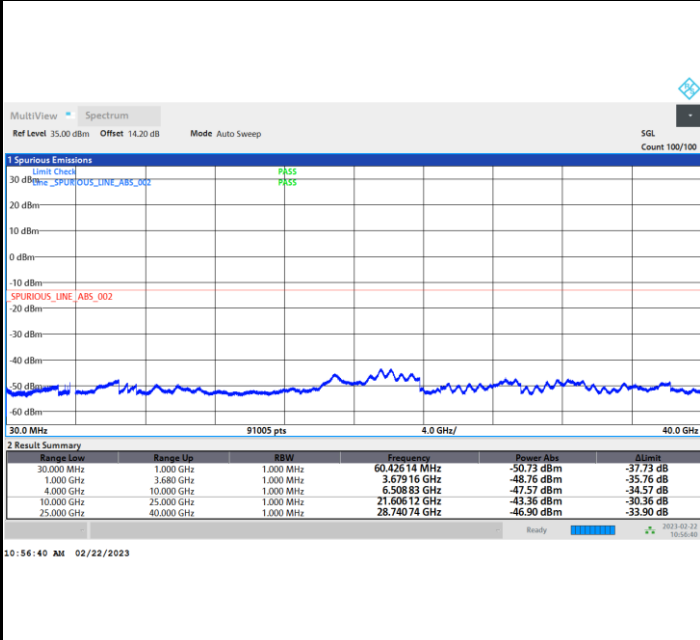


Conducted Spurious Emission

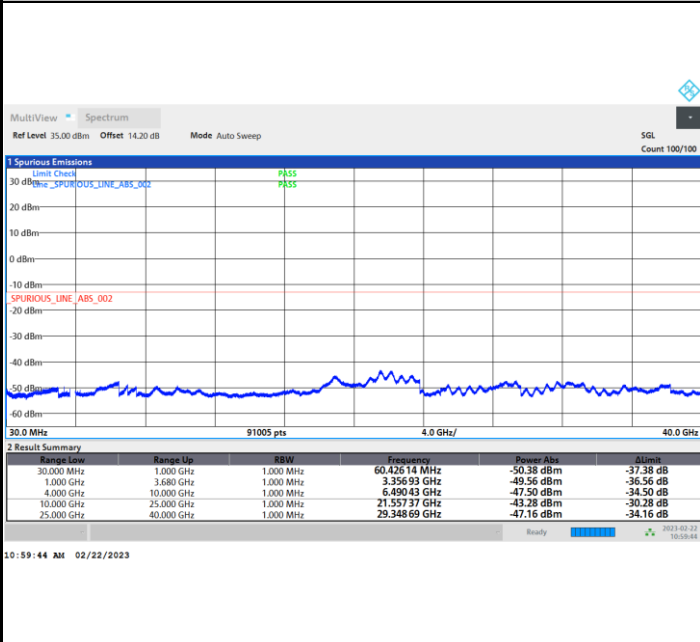
FR1 n77 / 10MHz / CP OFDM / QPSK / 1RB1

Lowest Channel

Middle Channel



Highest Channel





Frequency Stability

Test Conditions		FR1 n77 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0002	PASS
40	Normal Voltage	0.0021	
30	Normal Voltage	0.0011	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0015	
0	Normal Voltage	0.0021	
-10	Normal Voltage	0.0014	
-20	Normal Voltage	0.0031	
-30	Normal Voltage	0.0011	
20	Maximum Voltage	0.0020	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0010	

Note:

- 1. Normal Voltage = 3.85 V. ; Battery End Point (BEP) = 3.40 V. ; Maximum Voltage = 4.40 V.
- 2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

<Ant. 2 + Ant. 1>

EN-DC 4A-n78A HPUE

EN-DC 4A-n78A / 20MHz / 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	7482	-42.37	-13	-29.37	-72.02	-49.53	1.92	11.24	H
	11223	-36.63	-13	-23.63	-72.89	-42.96	2.29	10.77	H
	14965	-29.93	-13	-16.93	-71.76	-38.34	2.56	13.12	H
	18706	-56.62	-13	-43.62	-67.76	-68.62	3.25	17.39	H
	22448	-58.10	-13	-45.10	-73.24	-71.22	3.54	18.81	H
	26189	-59.35	-13	-46.35	-77.64	-72.17	3.94	18.91	H
									H
	7482	-42.46	-13	-29.46	-72.23	-49.62	1.92	11.24	V
	11223	-36.60	-13	-23.60	-72.86	-42.93	2.29	10.77	V
	14965	-27.93	-13	-14.93	-71.18	-36.34	2.56	13.12	V
	18706	-58.90	-13	-45.90	-69.82	-70.90	3.25	17.39	V
	22448	-55.38	-13	-42.38	-70.09	-68.50	3.54	18.81	V
	26189	-59.70	-13	-46.70	-77.65	-72.52	3.94	18.91	V
									V

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



EN-DC 7A-n78A HPUE

EN-DC 7A-n78A / 20MHz / 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	7482	-42.53	-13	-29.53	-72.18	-49.69	1.92	11.24	H
	11223	-36.71	-13	-23.71	-72.97	-43.04	2.29	10.77	H
	14965	-29.81	-13	-16.81	-71.64	-38.22	2.56	13.12	H
	18706	-59.22	-13	-46.22	-70.36	-71.22	3.25	17.39	H
	22448	-59.63	-13	-46.63	-74.77	-72.75	3.54	18.81	H
	26189	-57.45	-13	-44.45	-75.74	-70.27	3.94	18.91	H
									H
	7482	-42.83	-13	-29.83	-72.6	-49.99	1.92	11.24	V
	11223	-36.36	-13	-23.36	-72.62	-42.69	2.29	10.77	V
	14965	-28.41	-13	-15.41	-71.66	-36.82	2.56	13.12	V
	18706	-56.56	-13	-43.56	-67.48	-68.56	3.25	17.39	V
	22448	-60.02	-13	-47.02	-74.73	-73.14	3.54	18.81	V
	26189	-59.65	-13	-46.65	-77.6	-72.47	3.94	18.91	V
									V

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



EN-DC 25A-n78A HPUE

EN-DC 25A-n78A / 20MHz / 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	7482	-42.49	-13	-29.49	-72.14	-49.65	1.92	11.24	H
	11223	-36.54	-13	-23.54	-72.8	-42.87	2.29	10.77	H
	14965	-29.49	-13	-16.49	-71.32	-37.90	2.56	13.12	H
	18706	-57.97	-13	-44.97	-69.11	-69.97	3.25	17.39	H
	22448	-58.14	-13	-45.14	-73.28	-71.26	3.54	18.81	H
	26189	-59.18	-13	-46.18	-77.47	-72.00	3.94	18.91	H
									H
	7482	-42.23	-13	-29.23	-72	-49.39	1.92	11.24	V
	11223	-36.83	-13	-23.83	-73.09	-43.16	2.29	10.77	V
	14965	-28.39	-13	-15.39	-71.64	-36.80	2.56	13.12	V
	18706	-58.04	-13	-45.04	-68.96	-70.04	3.25	17.39	V
	22448	-55.76	-13	-42.76	-70.47	-68.88	3.54	18.81	V
	26189	-59.42	-13	-46.42	-77.37	-72.24	3.94	18.91	V
									V

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



<Ant. 1 + Ant. 2>

EN-DC 13A-n78A HPUE

EN-DC 13A-n78A / 20MHz / 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	7482	-42.74	-13	-29.74	-72.39	-49.90	1.92	11.24	H
	11223	-36.43	-13	-23.43	-72.69	-42.76	2.29	10.77	H
	14965	-29.92	-13	-16.92	-71.75	-38.33	2.56	13.12	H
	18706	-63.11	-13	-50.11	-74.25	-75.11	3.25	17.39	H
	22448	-60.95	-13	-47.95	-76.09	-74.07	3.54	18.81	H
	26189	-59.89	-13	-46.89	-78.18	-72.71	3.94	18.91	H
									H
	7482	-42.49	-13	-29.49	-72.26	-49.65	1.92	11.24	V
	11223	-36.41	-13	-23.41	-72.67	-42.74	2.29	10.77	V
	14965	-28.22	-13	-15.22	-71.47	-36.63	2.56	13.12	V
	18706	-61.45	-13	-48.45	-72.37	-73.45	3.25	17.39	V
	22448	-61.61	-13	-48.61	-76.32	-74.74	3.54	18.81	V
	26189	-58.65	-13	-45.65	-76.6	-71.47	3.94	18.91	V
									V

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



EN-DC 26A-n78A HPUE

EN-DC 26A-n78A / 20MHz / 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	7482	-42.97	-13	-29.97	-72.62	-50.13	1.92	11.24	H
	11223	-36.64	-13	-23.64	-72.9	-42.97	2.29	10.77	H
	14965	-30.04	-13	-17.04	-71.87	-38.45	2.56	13.12	H
	18706	-63.33	-13	-50.33	-74.47	-75.33	3.25	17.39	H
	22448	-61.47	-13	-48.47	-76.61	-74.59	3.54	18.81	H
	26189	-58.86	-13	-45.86	-77.15	-71.68	3.94	18.91	H
									H
	7482	-40.94	-13	-27.94	-70.71	-48.10	1.92	11.24	V
	11223	-36.91	-13	-23.91	-73.17	-43.24	2.29	10.77	V
	14965	-28.42	-13	-15.42	-71.67	-36.83	2.56	13.12	V
	18706	-61.76	-13	-48.76	-72.68	-73.76	3.25	17.39	V
	22448	-61.60	-13	-48.60	-76.31	-74.72	3.54	18.81	V
	26189	-60.16	-13	-47.16	-78.11	-72.98	3.94	18.91	V
									V

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

**EN-DC 71A-n78A HPUE**

EN-DC 71A-n78A / 20MHz / 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	7482	-42.92	-13	-29.92	-72.57	-50.08	1.92	11.24	H
	11223	-36.47	-13	-23.47	-72.73	-42.80	2.29	10.77	H
	14965	-29.60	-13	-16.60	-71.43	-38.01	2.56	13.12	H
	18706	-62.10	-13	-49.10	-73.24	-74.10	3.25	17.39	H
	22448	-61.29	-13	-48.29	-76.43	-74.41	3.54	18.81	H
	26189	-59.52	-13	-46.52	-77.81	-72.34	3.94	18.91	H
									H
	7482	-41.02	-13	-28.02	-70.79	-48.18	1.92	11.24	V
	11223	-36.72	-13	-23.72	-72.98	-43.05	2.29	10.77	V
	14965	-28.38	-13	-15.38	-71.63	-36.79	2.56	13.12	V
	18706	-62.37	-13	-49.37	-73.29	-74.37	3.25	17.39	V
	22448	-61.89	-13	-48.89	-76.6	-75.01	3.54	18.81	V
	26189	-59.88	-13	-46.88	-77.83	-72.70	3.94	18.91	V
									V

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



MIMO <Ant. 1 + Ant. 2>

5G NR n77 HPUE MIMO

5G NR n77 MIMO / 20MHz / 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	7403	-41.03	-13	-28.03	-70.93	-48.33	1.94	11.39	H
	11104	-36.80	-13	-23.80	-72.93	-43.03	2.24	10.62	H
	14805	-31.67	-13	-18.67	-73.59	-39.71	2.58	12.77	H
	18506	-63.16	-13	-50.16	-74.44	-75.36	3.24	17.59	H
	22208	-61.98	-13	-48.98	-76.81	-75.17	3.52	18.86	H
	25909	-59.77	-13	-46.77	-77.73	-72.78	3.92	19.08	H
	7403	-42.09	-13	-29.09	-72.09	-49.39	1.94	11.39	V
	11104	-36.67	-13	-23.67	-72.75	-42.90	2.24	10.62	V
	14805	-30.63	-13	-17.63	-73.66	-38.67	2.58	12.77	V
	18506	-63.19	-13	-50.19	-74.25	-75.39	3.24	17.59	V
	22208	-62.30	-13	-49.30	-76.73	-75.49	3.52	18.86	V
	25909	-60.01	-13	-47.01	-77.66	-73.02	3.92	19.08	V
Middle	7663	-42.12	-13	-29.12	-71.73	-49.71	1.89	11.63	H
	11494	-36.93	-13	-23.93	-73.47	-43.48	2.40	11.09	H
	15325	-32.92	-13	-19.92	-73.64	-42.76	2.64	14.63	H
	19156	-64.73	-13	-51.73	-75.96	-76.56	3.25	17.22	H
	22988	-60.06	-13	-47.06	-76.2	-72.95	3.57	18.60	H
	26819	-58.26	-13	-45.26	-77.73	-71.23	3.92	19.05	H
	7663	-42.20	-13	-29.20	-72.03	-49.79	1.89	11.63	V
	11494	-36.90	-13	-23.90	-73.56	-43.45	2.40	11.09	V
	15325	-32.28	-13	-19.28	-73.7	-42.12	2.64	14.63	V
	19156	-61.47	-13	-48.47	-72.46	-73.30	3.25	17.22	V
	22988	-59.81	-13	-46.81	-75.62	-72.70	3.57	18.60	V
	26819	-58.24	-13	-45.24	-77.32	-71.21	3.92	19.05	V



Highest	7923	-41.37	-13	-28.37	-71.61	-48.66	1.95	11.39	H
	11884	-34.49	-13	-21.49	-72.63	-42.26	2.56	12.48	H
	15845	-33.67	-13	-20.67	-73.03	-45.11	2.78	16.37	H
	19806	-60.84	-13	-47.84	-72.72	-72.93	3.20	17.44	H
	23768	-54.32	-13	-41.32	-70.77	-66.96	3.74	18.54	H
	27729	-58.03	-13	-45.03	-77.64	-71.52	3.95	19.59	H
									H
	7923	-41.55	-13	-28.55	-72.14	-48.84	1.95	11.39	V
	11884	-35.02	-13	-22.02	-72.73	-42.79	2.56	12.48	V
	15845	-33.57	-13	-20.57	-73.15	-45.01	2.78	16.37	V
	19806	-55.12	-13	-42.12	-66.71	-67.21	3.20	17.44	V
	23768	-52.72	-13	-39.72	-68.81	-65.36	3.74	18.54	V
	27729	-58.03	-13	-45.03	-77.3	-71.52	3.95	19.59	V
									V

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