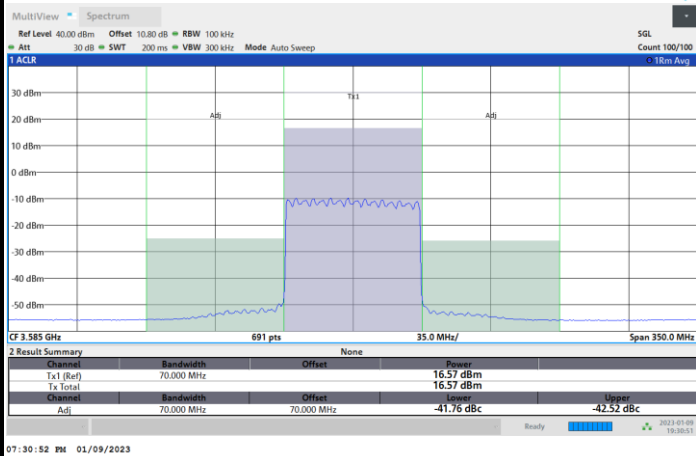


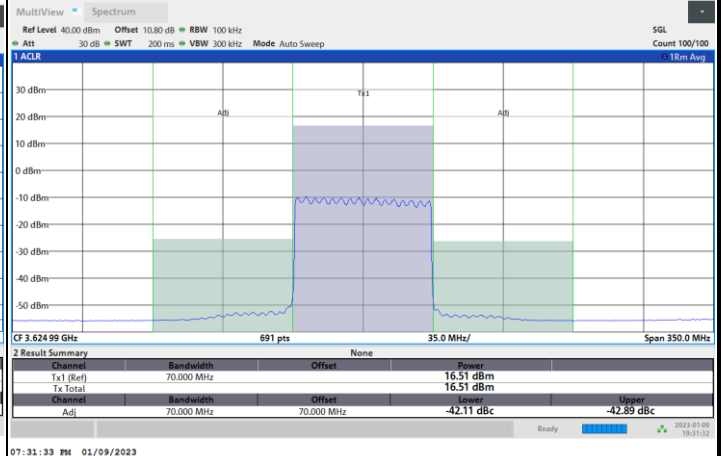


FR1 n48 / 70MHz / CP OFDM / QPSK / Full RB

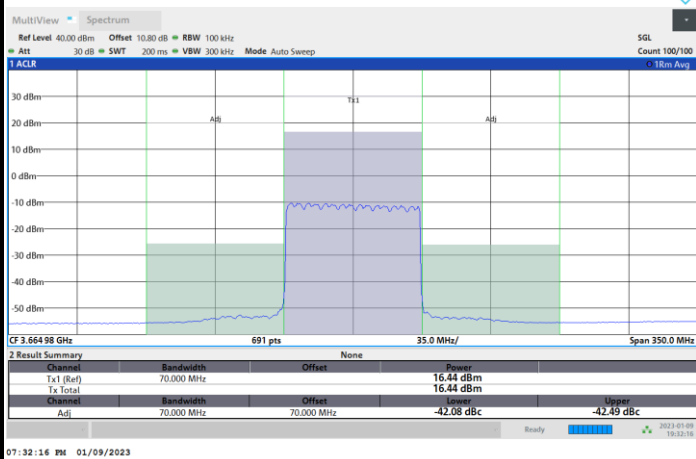
Lowest Channel



Middle Channel



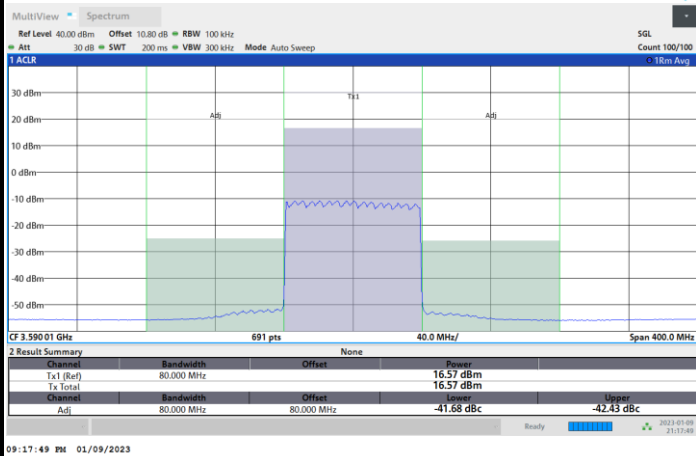
Highest Channel



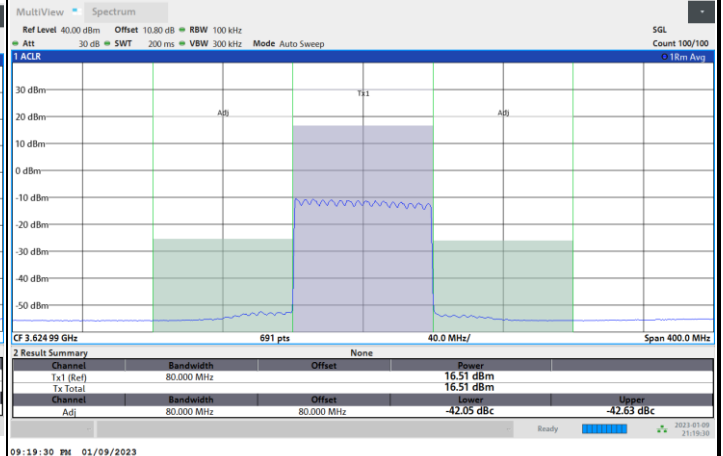


FR1 n48 / 80MHz / CP OFDM / QPSK / Full RB

Lowest Channel



Middle Channel



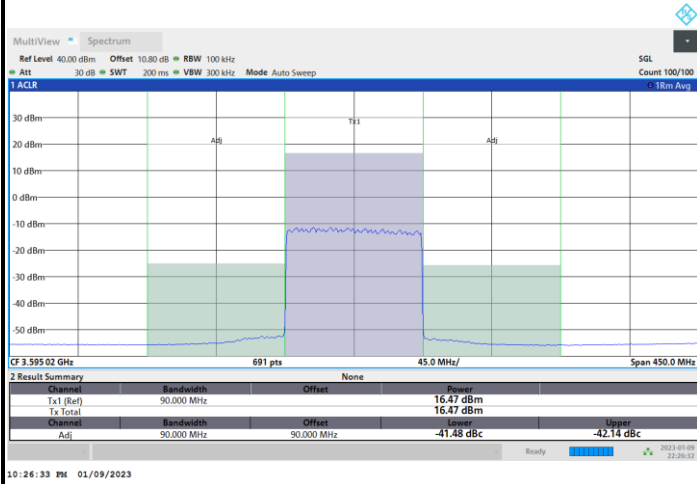
Highest Channel



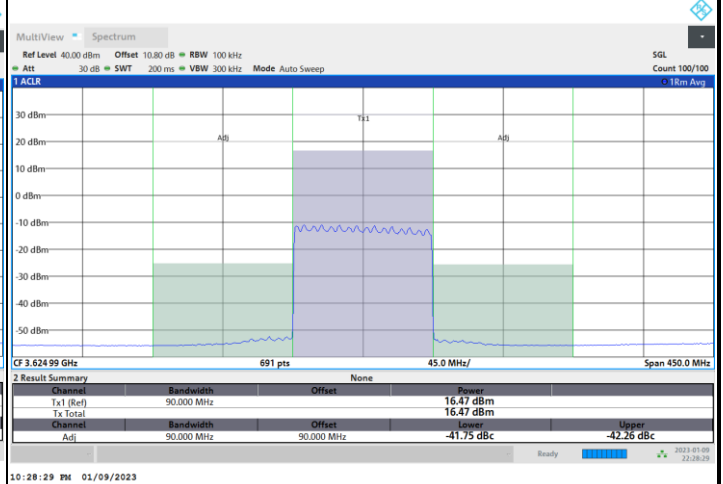


FR1 n48 / 90MHz / CP OFDM / QPSK / Full RB

Lowest Channel



Middle Channel



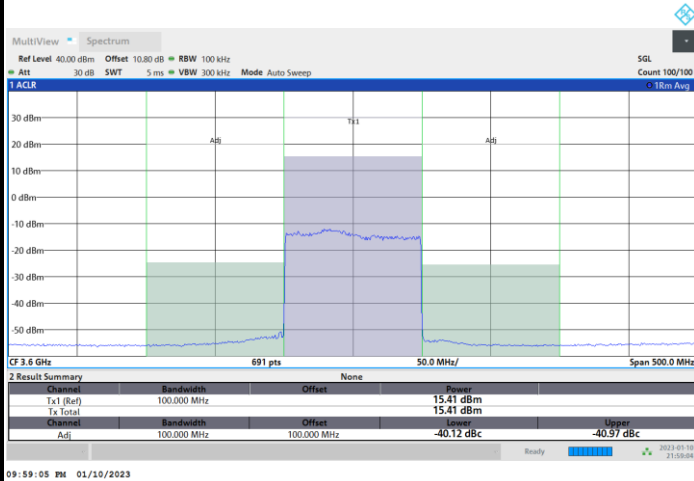
Highest Channel



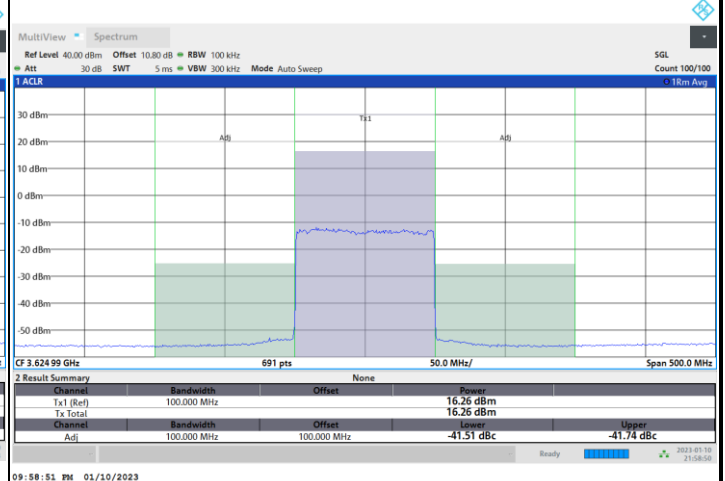


FR1 n48 / 100MHz / CP OFDM / QPSK / Full RB

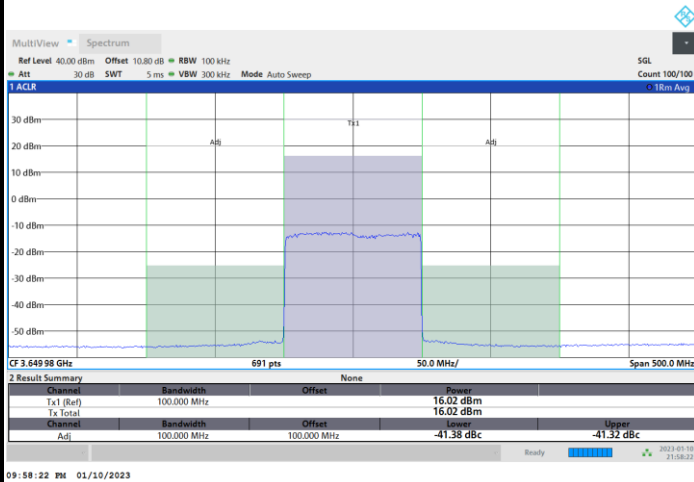
Lowest Channel



Middle Channel



Highest Channel

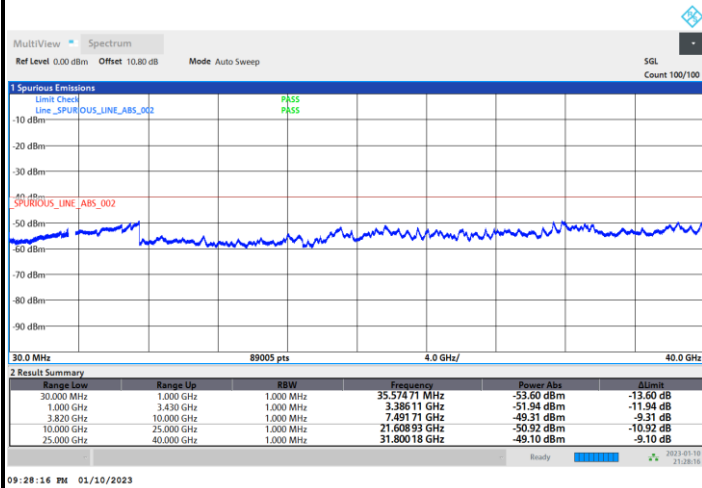




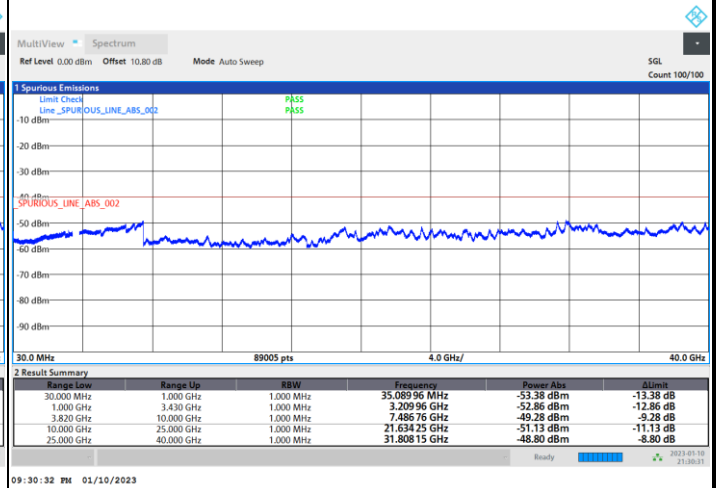
Conducted Spurious Emission

FR1 n48 / 10MHz / DFT-S OFDM / QPSK / 1RB1

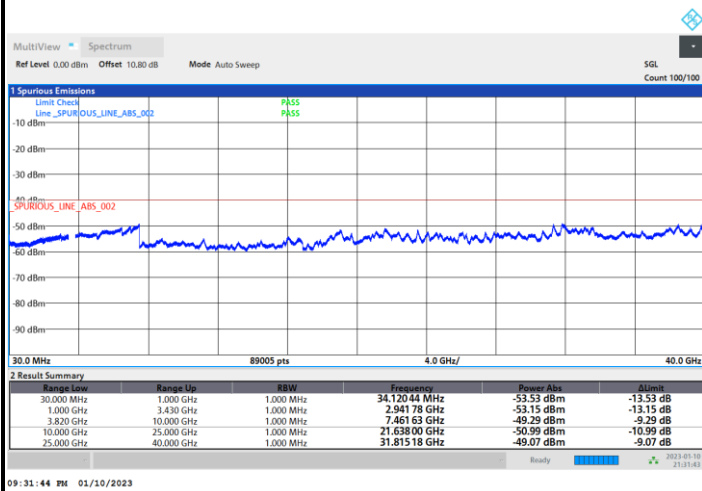
Lowest Channel



Middle Channel



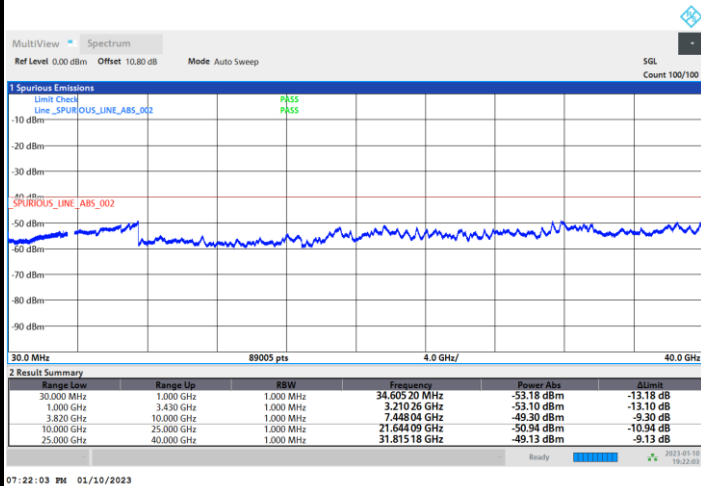
Highest Channel



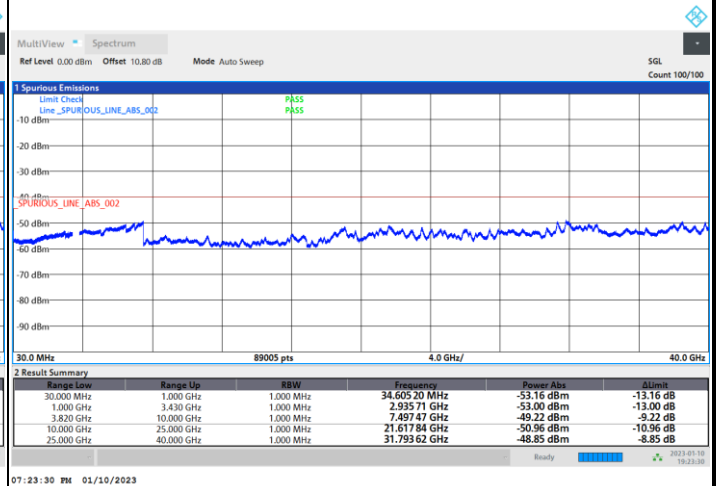


FR1 n48 / 15MHz / DFT-S OFDM / QPSK / 1RB1

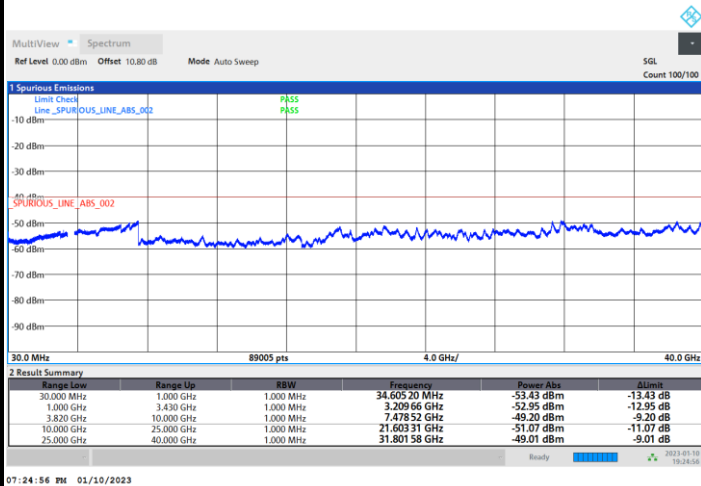
Lowest Channel



Middle Channel



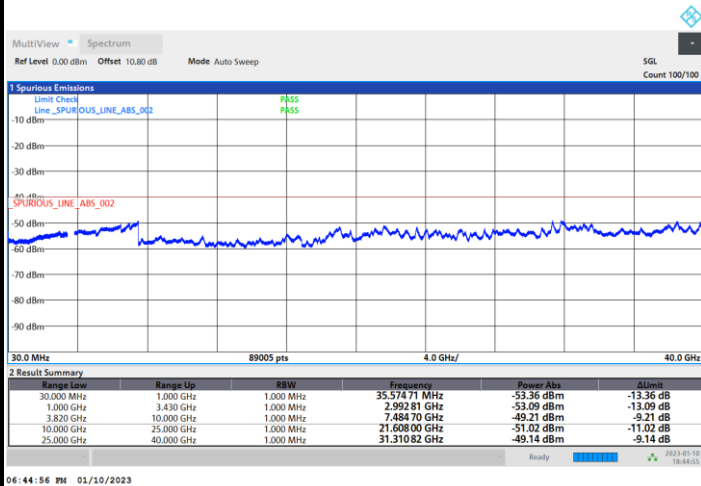
Highest Channel



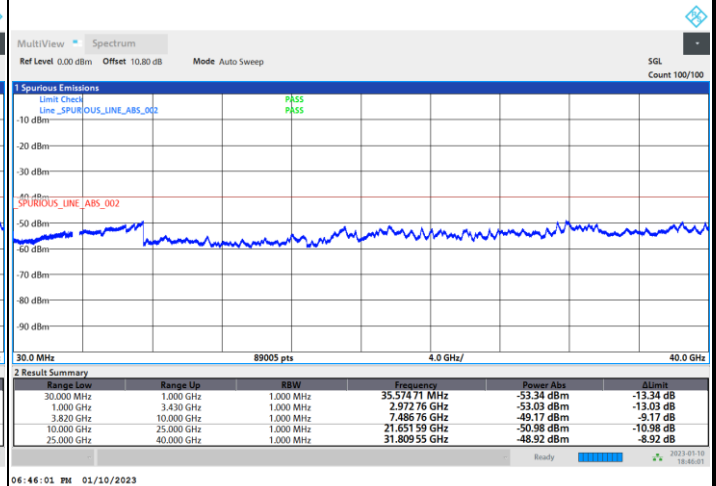


FR1 n48 / 20MHz / DFT-S OFDM / QPSK / 1RB1

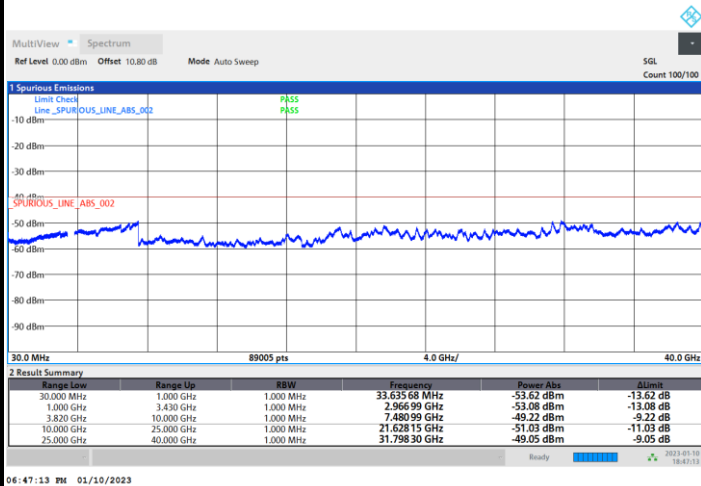
Lowest Channel



Middle Channel



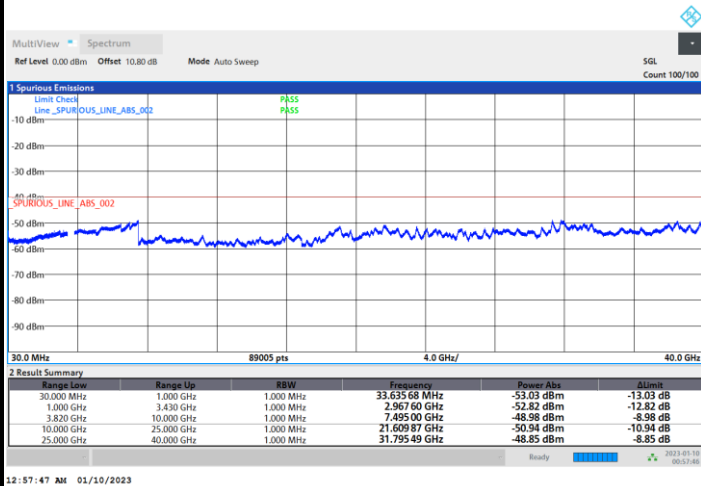
Highest Channel



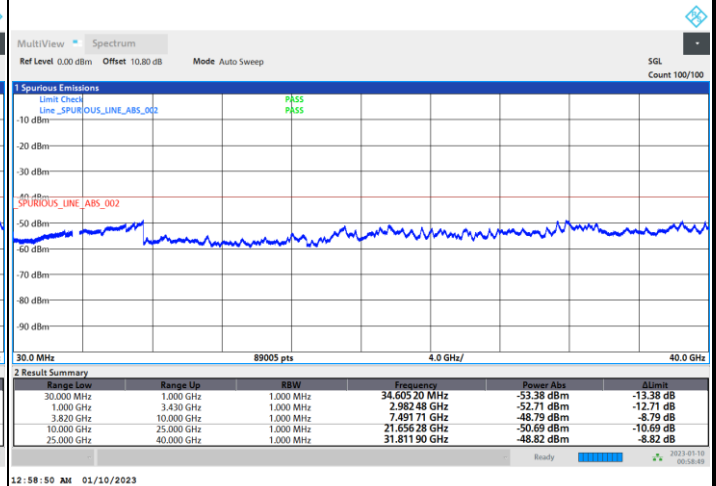


FR1 n48 / 30MHz / DFT-S OFDM / QPSK / 1RB1

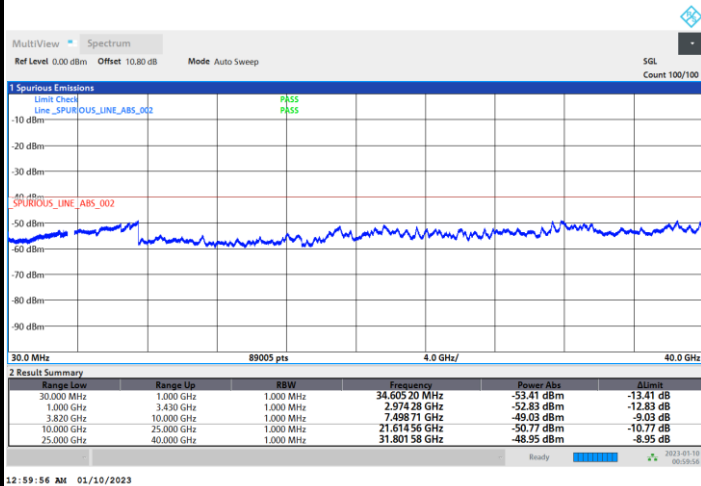
Lowest Channel



Middle Channel



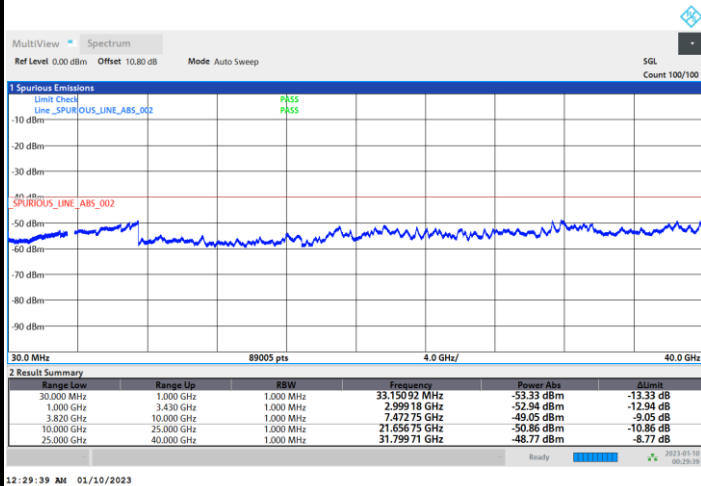
Highest Channel



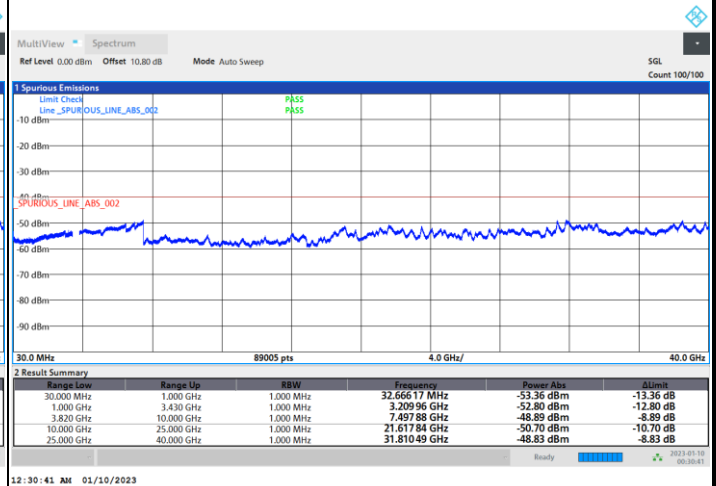


FR1 n48 / 40MHz / DFT-S OFDM / QPSK / 1RB1

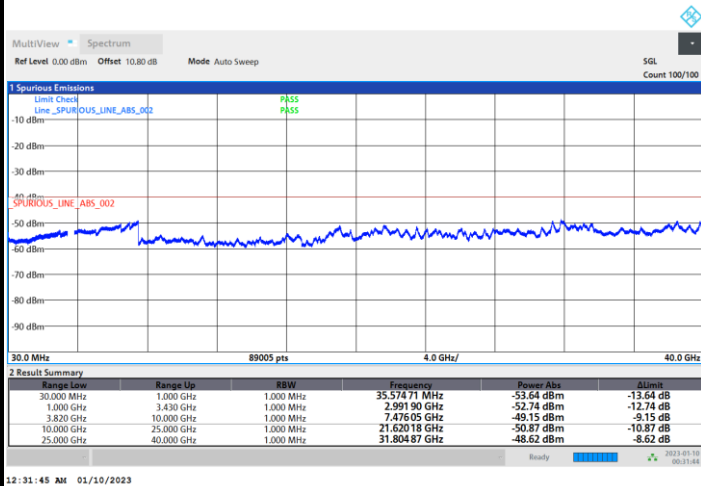
Lowest Channel



Middle Channel



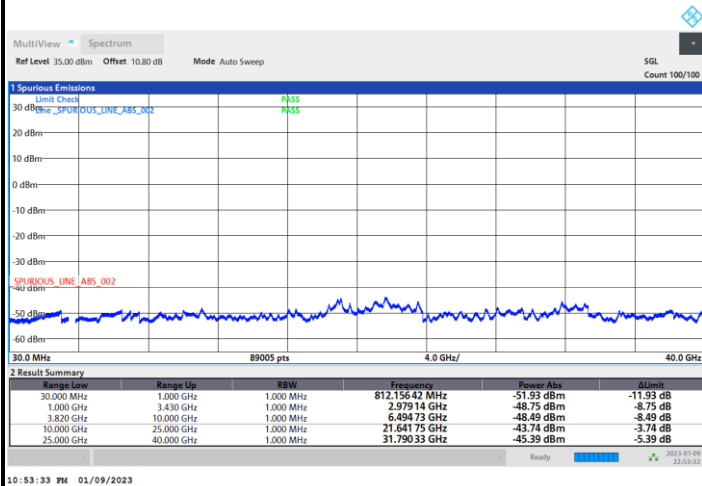
Highest Channel



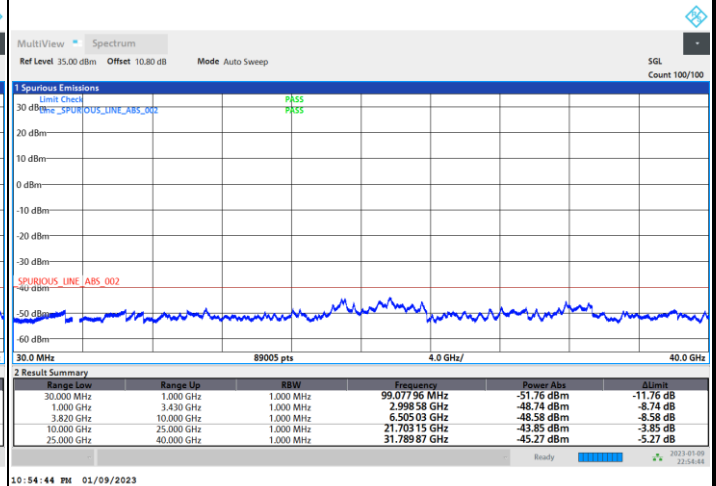


FR1 n48 / 50MHz / DFT-S OFDM / QPSK / 1RB1

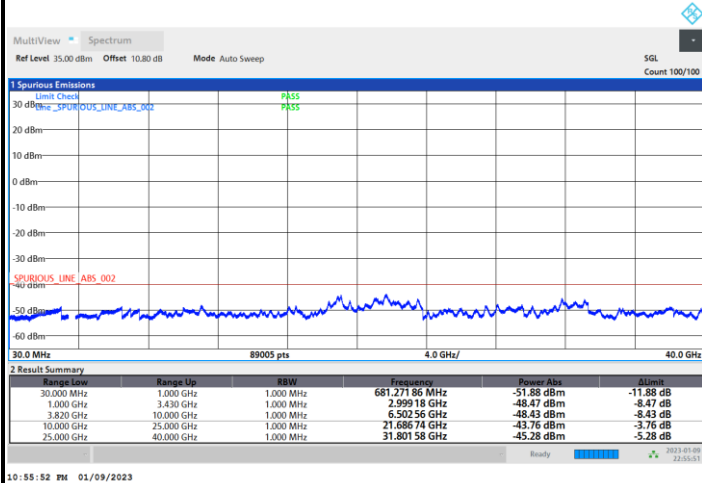
Lowest Channel



Middle Channel



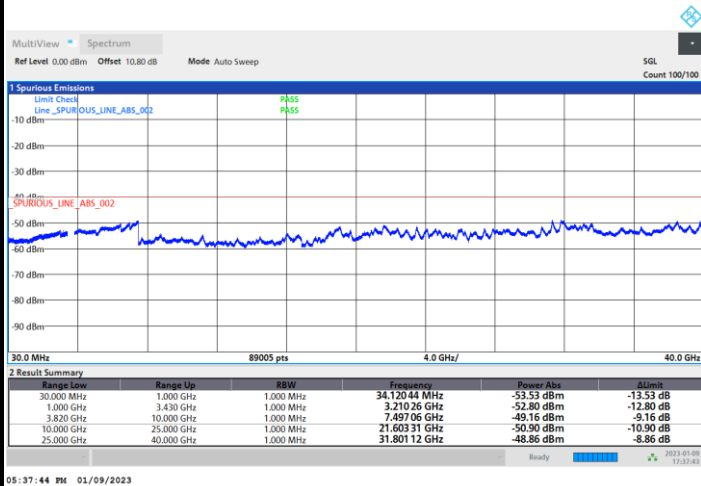
Highest Channel



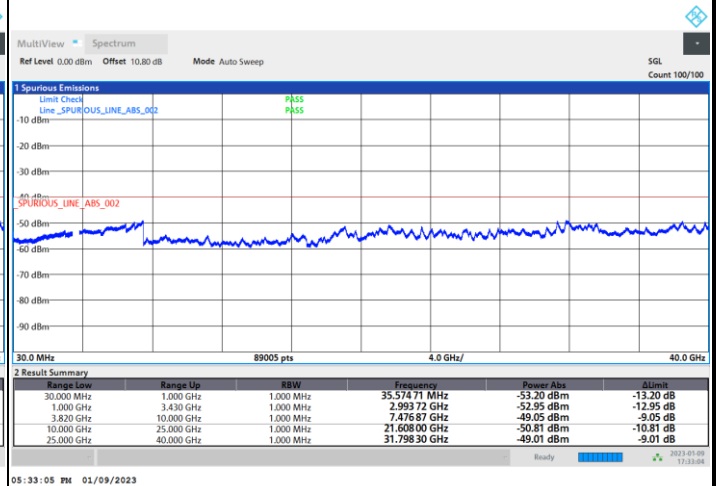


FR1 n48 / 60MHz / DFT-S OFDM / QPSK / 1RB1

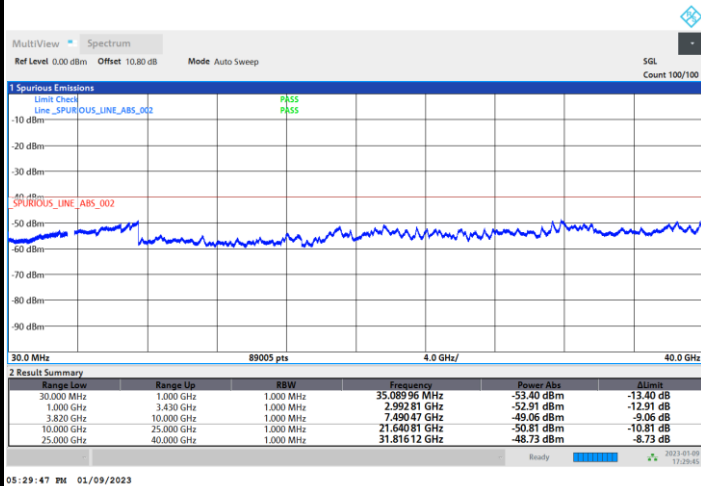
Lowest Channel



Middle Channel



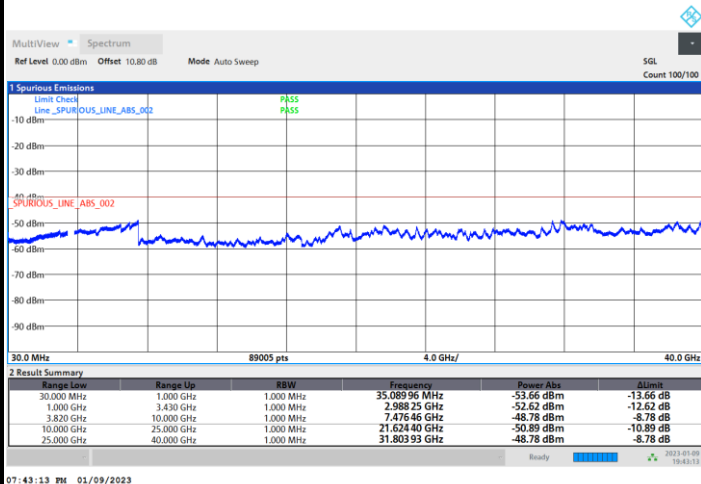
Highest Channel





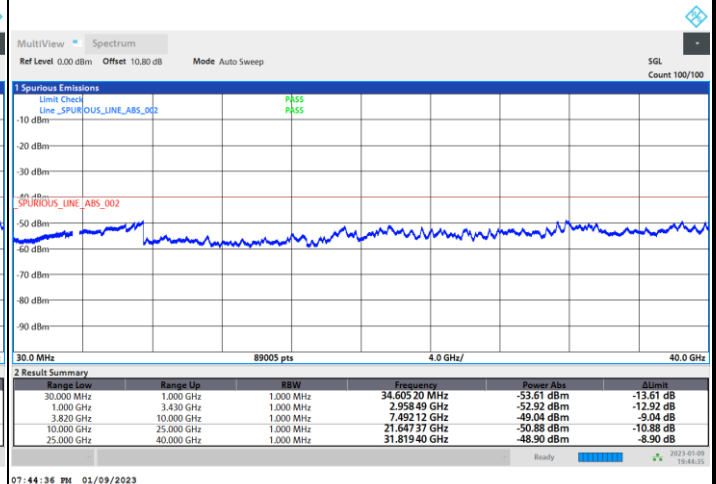
FR1 n48 / 70MHz / DFT-S OFDM / QPSK / 1RB1

Lowest Channel



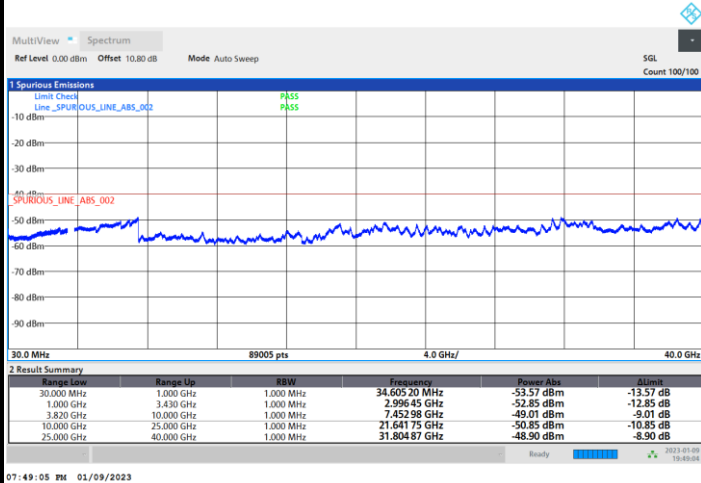
07:43:13 PM 01/09/2023

Middle Channel



07:44:36 PM 01/09/2023

Highest Channel

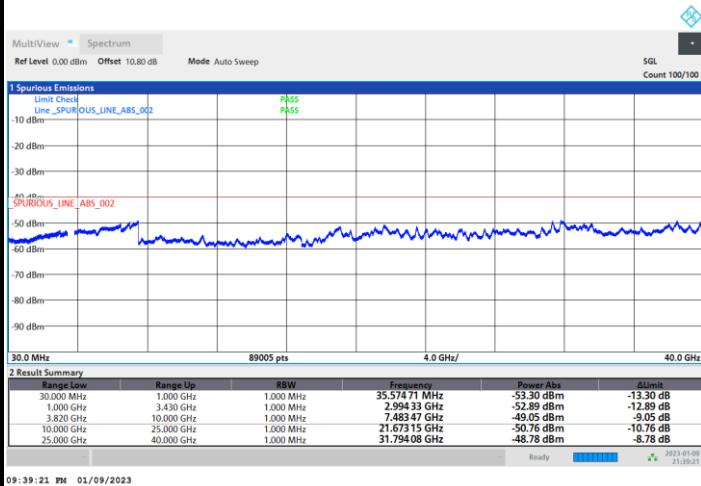


07:49:08 PM 01/09/2023

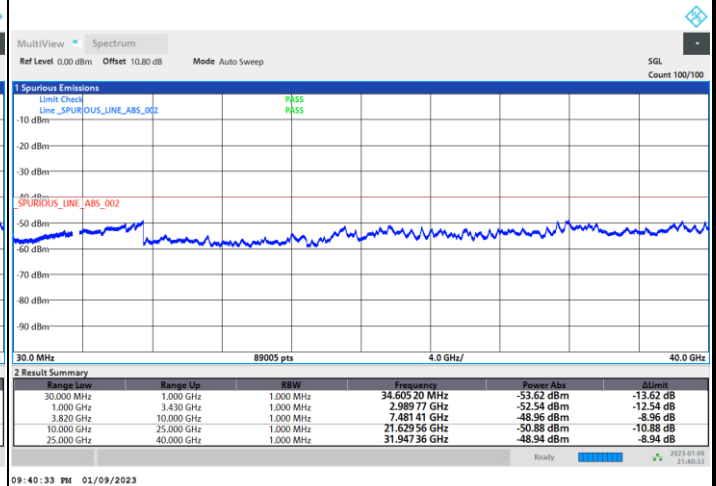


FR1 n48 / 80MHz / DFT-S OFDM / QPSK / 1RB1

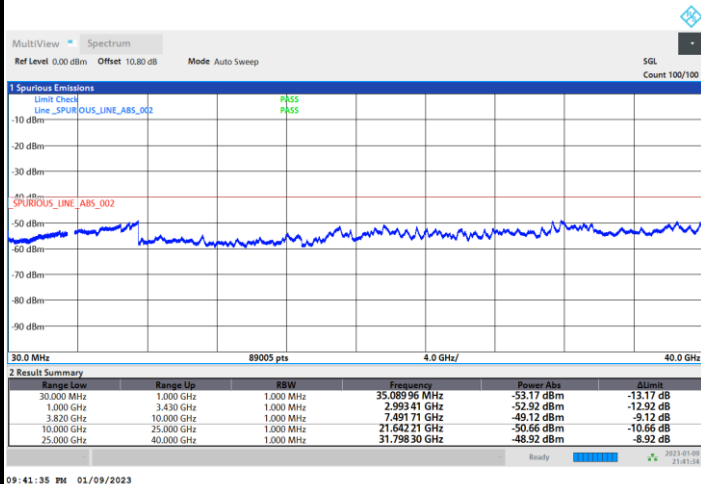
Lowest Channel



Middle Channel



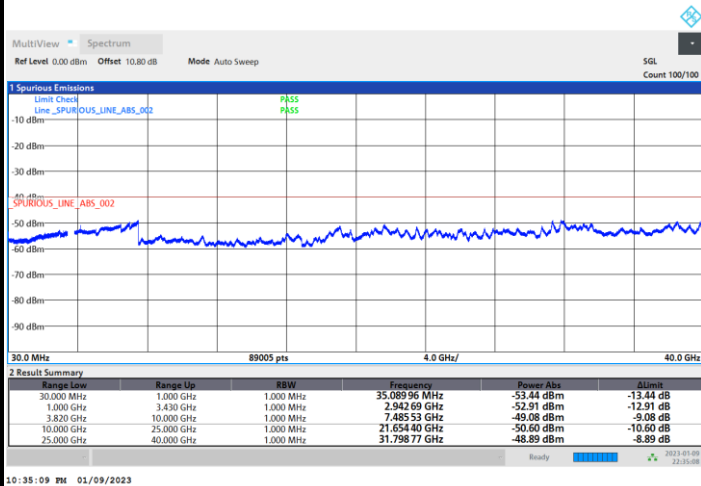
Highest Channel



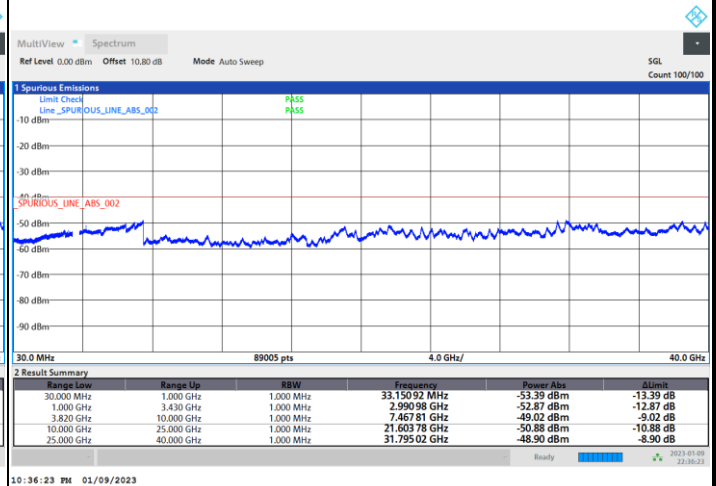


FR1 n48 / 90MHz / DFT-S OFDM / QPSK / 1RB1

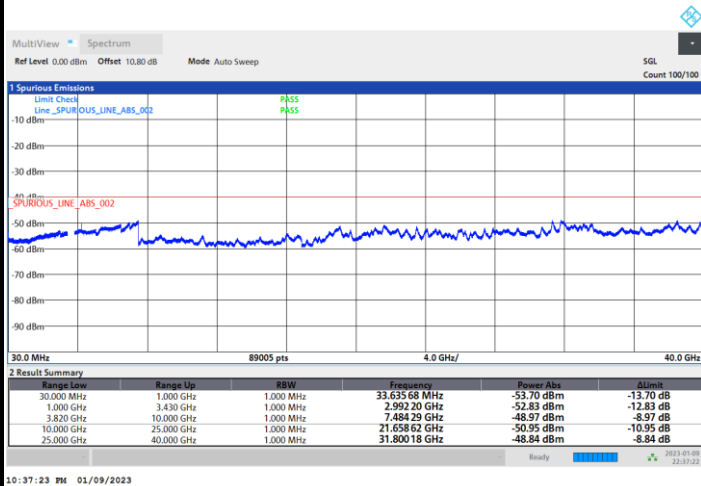
Lowest Channel



Middle Channel



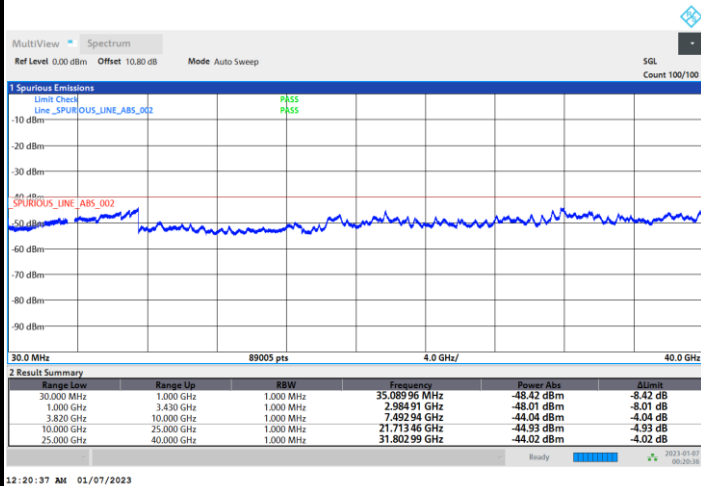
Highest Channel



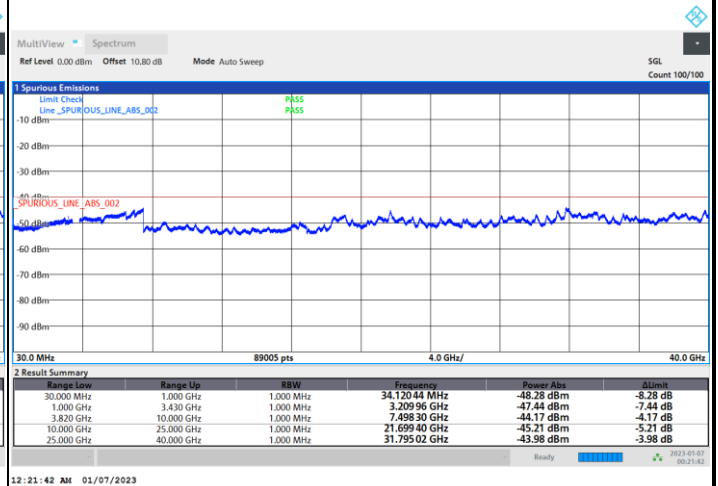


FR1 n48 / 100MHz / DFT-S OFDM / QPSK / 1RB1

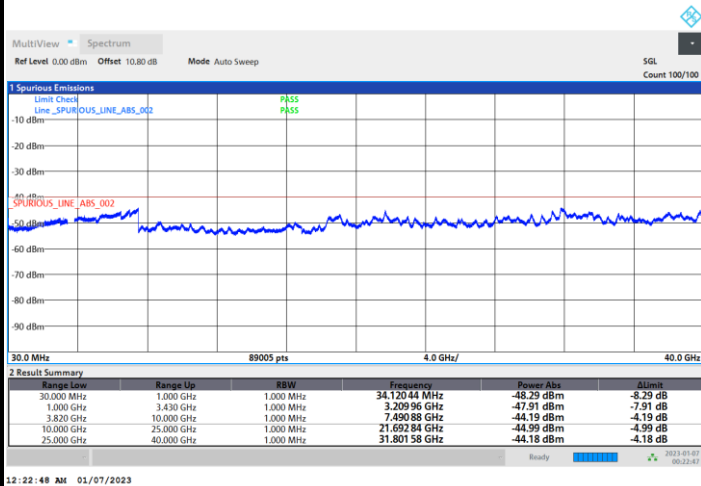
Lowest Channel



Middle Channel



Highest Channel



Frequency Stability

Test Conditions		FR1 n48 (PI/BPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 20MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0006	PASS
40	Normal Voltage	0.0000	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0009	
0	Normal Voltage	0.0011	
-10	Normal Voltage	0.0010	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0009	
20	Normal Voltage	0.0011	
20	Battery End Point	0.0012	

Note:

1. Normal Voltage = 4.2 V. ; Battery End Point (BEP) = 3.4 V. ; Maximum Voltage = 4.3 V.
2. The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

<OA5 Antenna>

5G NR n48

5G NR n48/ 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	7103	-57.70	-40	-17.70	-55.36	-67.40	1.84	11.54	H
	10654	-54.62	-40	-14.62	-56.31	-63.09	2.23	10.71	H
	14205	-49.89	-40	-9.89	-57.69	-59.52	2.65	12.28	H
	21307	-61.82	-40	-21.82	-75.49	-76.67	3.32	18.17	H
	24858	-59.25	-40	-19.25	-76.73	-74.02	3.71	18.49	H
	28410	-57.26	-40	-17.26	-76.77	-72.73	3.99	19.45	H
	7103	-57.20	-40	-17.20	-55.11	-66.90	1.84	11.54	V
	10654	-55.04	-40	-15.04	-56.32	-63.51	2.23	10.71	V
	14205	-50.10	-40	-10.10	-57.77	-59.73	2.65	12.28	V
	21307	-61.89	-40	-21.89	-75.25	-76.74	3.32	18.17	V
	24858	-59.04	-40	-19.04	-76.2	-73.81	3.71	18.49	V
	28410	-57.87	-40	-17.87	-76.97	-73.34	3.99	19.45	V
Middle	7153	-57.77	-40	-17.77	-55.58	-67.35	1.84	11.42	H
	10729	-54.08	-40	-14.08	-55.9	-62.52	2.23	10.66	H
	14305	-50.31	-40	-10.31	-58.14	-59.89	2.64	12.22	H
	21457	-61.21	-40	-21.21	-75.34	-76.20	3.36	18.35	H
	25033	-60.13	-40	-20.13	-77.62	-74.86	3.71	18.44	H
	28610	-57.34	-40	-17.34	-77.06	-72.73	3.99	19.38	H
	7153	-57.24	-40	-17.24	-55.37	-66.82	1.84	11.42	V
	10729	-54.74	-40	-14.74	-56.21	-63.18	2.23	10.66	V
	14305	-50.48	-40	-10.48	-58.4	-60.06	2.64	12.22	V
	21457	-62.19	-40	-22.19	-76.02	-77.18	3.36	18.35	V
	25033	-60.08	-40	-20.08	-77.26	-74.81	3.71	18.44	V
	28610	-58.05	-40	-18.05	-77.36	-73.44	3.99	19.38	V



Highest	7203	-57.75	-40	-17.75	-55.7	-67.21	1.84	11.30	H
	10804	-53.50	-40	-13.50	-55.45	-61.90	2.22	10.62	H
	14405	-50.31	-40	-10.31	-58.17	-59.84	2.63	12.16	H
	18006	-61.50	-40	-21.50	-72.21	-75.87	3.23	17.60	H
	21607	-61.69	-40	-21.69	-76.02	-76.80	3.40	18.51	H
	25208	-59.04	-40	-19.04	-76.59	-73.94	3.75	18.65	H
	7203	-57.45	-40	-17.45	-55.79	-66.91	1.84	11.30	V
	10804	-53.98	-40	-13.98	-55.66	-62.38	2.22	10.62	V
	14405	-49.81	-40	-9.81	-57.97	-59.34	2.63	12.16	V
	18006	-61.93	-40	-21.93	-72.33	-76.30	3.23	17.60	V
	21607	-61.52	-40	-21.52	-75.53	-76.63	3.40	18.51	V
	25208	-59.02	-40	-19.02	-76.27	-73.92	3.75	18.65	V

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

<EA 1_5 Antenna>

5G NR n48

5G NR n48/ 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	7103	-58.26	-40	-18.26	-55.92	-67.96	1.84	11.54	H
	10654	-54.79	-40	-14.79	-56.48	-63.26	2.23	10.71	H
	14205	-51.00	-40	-11.00	-58.8	-60.63	2.65	12.28	H
	21307	-61.79	-40	-21.79	-75.46	-76.64	3.32	18.17	H
	24858	-58.81	-40	-18.81	-76.29	-73.58	3.71	18.49	H
	28410	-56.81	-40	-16.81	-76.32	-72.28	3.99	19.45	H
	7103	-52.13	-40	-12.13	-50.04	-61.83	1.84	11.54	V
	10654	-55.57	-40	-15.57	-56.85	-64.04	2.23	10.71	V
	14205	-50.88	-40	-10.88	-58.55	-60.51	2.65	12.28	V
	21307	-62.40	-40	-22.40	-75.76	-77.25	3.32	18.17	V
	24858	-59.19	-40	-19.19	-76.35	-73.96	3.71	18.49	V
	28410	-57.81	-40	-17.81	-76.91	-73.28	3.99	19.45	V
Middle	7153	-58.54	-40	-18.54	-56.35	-68.12	1.84	11.42	H
	10729	-54.70	-40	-14.70	-56.52	-63.14	2.23	10.66	H
	14305	-51.25	-40	-11.25	-59.08	-60.83	2.64	12.22	H
	21457	-61.58	-40	-21.58	-75.71	-76.57	3.36	18.35	H
	25033	-59.63	-40	-19.63	-77.12	-74.36	3.71	18.44	H
	28610	-57.03	-40	-17.03	-76.75	-72.42	3.99	19.38	H
	7153	-50.82	-40	-10.82	-48.95	-60.40	1.84	11.42	V
	10729	-54.82	-40	-14.82	-56.29	-63.26	2.23	10.66	V
	14305	-51.09	-40	-11.09	-59.01	-60.67	2.64	12.22	V
	21457	-61.77	-40	-21.77	-75.6	-76.76	3.36	18.35	V
	25033	-60.19	-40	-20.19	-77.37	-74.92	3.71	18.44	V
	28610	-57.49	-40	-17.49	-76.8	-72.88	3.99	19.38	V



Highest	7203	-58.53	-40	-18.53	-56.48	-67.99	1.84	11.30	H
	10804	-53.69	-40	-13.69	-55.64	-62.09	2.22	10.62	H
	14405	-50.88	-40	-10.88	-58.74	-60.41	2.63	12.16	H
	18006	-62.16	-40	-22.16	-72.87	-76.53	3.23	17.60	H
	21607	-61.72	-40	-21.72	-76.05	-76.83	3.40	18.51	H
	25208	-58.84	-40	-18.84	-76.39	-73.74	3.75	18.65	H
	7203	-56.26	-40	-16.26	-54.6	-65.72	1.84	11.30	V
	10804	-54.30	-40	-14.30	-55.98	-62.70	2.22	10.62	V
	14405	-50.87	-40	-10.87	-59.03	-60.40	2.63	12.16	V
	18006	-61.93	-40	-21.93	-72.33	-76.30	3.23	17.60	V
	21607	-61.64	-40	-21.64	-75.65	-76.75	3.40	18.51	V
	25208	-59.09	-40	-19.09	-76.34	-73.99	3.75	18.65	V

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