

Appendix A _ Conducted Test Data

A1 Conducted output power and EIRP

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Power (dBm)	Gain (dBi)	EIRP (dBm)	EIRP Limit (dBm)	Verdict
Band4	1.4	19957	1	#0	QAM16	23.13	1	24.13	30	PASS
Band4	1.4	19957	1	#Mid	QAM16	23.36	1	24.36	30	PASS
Band4	1.4	19957	1	#Max	QAM16	23.21	1	24.21	30	PASS
Band4	1.4	19957	3	#0	QAM16	23.59	1	24.59	30	PASS
Band4	1.4	19957	3	#Mid	QAM16	23.58	1	24.58	30	PASS
Band4	1.4	19957	3	#Max	QAM16	23.61	1	24.61	30	PASS
Band4	1.4	19957	6	#0	QAM16	22.17	1	23.17	30	PASS
Band4	1.4	20175	1	#0	QAM16	23.16	1	24.16	30	PASS
Band4	1.4	20175	1	#Mid	QAM16	23.27	1	24.27	30	PASS
Band4	1.4	20175	1	#Max	QAM16	23.10	1	24.10	30	PASS
Band4	1.4	20175	3	#0	QAM16	23.32	1	24.32	30	PASS
Band4	1.4	20175	3	#Mid	QAM16	23.34	1	24.34	30	PASS
Band4	1.4	20175	3	#Max	QAM16	23.27	1	24.27	30	PASS
Band4	1.4	20175	6	#0	QAM16	22.44	1	23.44	30	PASS
Band4	1.4	20393	1	#0	QAM16	23.18	1	24.18	30	PASS
Band4	1.4	20393	1	#Mid	QAM16	23.15	1	24.15	30	PASS
Band4	1.4	20393	1	#Max	QAM16	23.06	1	24.06	30	PASS
Band4	1.4	20393	3	#0	QAM16	23.06	1	24.06	30	PASS
Band4	1.4	20393	3	#Mid	QAM16	23.11	1	24.11	30	PASS
Band4	1.4	20393	3	#Max	QAM16	23.09	1	24.09	30	PASS
Band4	1.4	20393	6	#0	QAM16	22.13	1	23.13	30	PASS
Band4	3	19965	1	#0	QAM16	23.70	1	24.70	30	PASS
Band4	3	19965	1	#Mid	QAM16	23.92	1	24.92	30	PASS
Band4	3	19965	1	#Max	QAM16	24.03	1	25.03	30	PASS
Band4	3	19965	8	#0	QAM16	22.02	1	23.02	30	PASS
Band4	3	19965	8	#Mid	QAM16	21.95	1	22.95	30	PASS
Band4	3	19965	8	#Max	QAM16	22.05	1	23.05	30	PASS
Band4	3	19965	15	#0	QAM16	22.06	1	23.06	30	PASS
Band4	3	20175	1	#0	QAM16	22.84	1	23.84	30	PASS
Band4	3	20175	1	#Mid	QAM16	22.85	1	23.85	30	PASS
Band4	3	20175	1	#Max	QAM16	22.76	1	23.76	30	PASS
Band4	3	20175	8	#0	QAM16	21.91	1	22.91	30	PASS
Band4	3	20175	8	#Mid	QAM16	21.92	1	22.92	30	PASS
Band4	3	20175	8	#Max	QAM16	21.84	1	22.84	30	PASS
Band4	3	20175	15	#0	QAM16	22.02	1	23.02	30	PASS
Band4	3	20385	1	#0	QAM16	23.10	1	24.10	30	PASS
Band4	3	20385	1	#Mid	QAM16	23.32	1	24.32	30	PASS
Band4	3	20385	1	#Max	QAM16	23.14	1	24.14	30	PASS
Band4	3	20385	8	#0	QAM16	22.16	1	23.16	30	PASS

Band4	3	20385	8	#Mid	QAM16	22.22	1	23.22	30	PASS
Band4	3	20385	8	#Max	QAM16	22.24	1	23.24	30	PASS
Band4	3	20385	15	#0	QAM16	22.41	1	23.41	30	PASS
Band4	5	19975	1	#0	QAM16	23.28	1	24.28	30	PASS
Band4	5	19975	1	#Mid	QAM16	23.40	1	24.40	30	PASS
Band4	5	19975	1	#Max	QAM16	23.18	1	24.18	30	PASS
Band4	5	19975	12	#0	QAM16	21.66	1	22.66	30	PASS
Band4	5	19975	12	#Mid	QAM16	21.73	1	22.73	30	PASS
Band4	5	19975	12	#Max	QAM16	21.92	1	22.92	30	PASS
Band4	5	19975	25	#0	QAM16	21.91	1	22.91	30	PASS
Band4	5	20175	1	#0	QAM16	22.83	1	23.83	30	PASS
Band4	5	20175	1	#Mid	QAM16	22.38	1	23.38	30	PASS
Band4	5	20175	1	#Max	QAM16	22.33	1	23.33	30	PASS
Band4	5	20175	12	#0	QAM16	21.65	1	22.65	30	PASS
Band4	5	20175	12	#Mid	QAM16	21.59	1	22.59	30	PASS
Band4	5	20175	12	#Max	QAM16	21.51	1	22.51	30	PASS
Band4	5	20175	25	#0	QAM16	21.98	1	22.98	30	PASS
Band4	5	20375	1	#0	QAM16	23.41	1	24.41	30	PASS
Band4	5	20375	1	#Mid	QAM16	23.58	1	24.58	30	PASS
Band4	5	20375	1	#Max	QAM16	23.53	1	24.53	30	PASS
Band4	5	20375	12	#0	QAM16	22.00	1	23.00	30	PASS
Band4	5	20375	12	#Mid	QAM16	22.05	1	23.05	30	PASS
Band4	5	20375	12	#Max	QAM16	22.17	1	23.17	30	PASS
Band4	5	20375	25	#0	QAM16	22.14	1	23.14	30	PASS
Band4	1.4	19957	1	#0	QPSK	24.24	1	25.24	30	PASS
Band4	1.4	19957	1	#Mid	QPSK	24.38	1	25.38	30	PASS
Band4	1.4	19957	1	#Max	QPSK	24.18	1	25.18	30	PASS
Band4	1.4	19957	3	#0	QPSK	24.19	1	25.19	30	PASS
Band4	1.4	19957	3	#Mid	QPSK	24.17	1	25.17	30	PASS
Band4	1.4	19957	3	#Max	QPSK	24.18	1	25.18	30	PASS
Band4	1.4	19957	6	#0	QPSK	23.34	1	24.34	30	PASS
Band4	1.4	20175	1	#0	QPSK	24.21	1	25.21	30	PASS
Band4	1.4	20175	1	#Mid	QPSK	24.25	1	25.25	30	PASS
Band4	1.4	20175	1	#Max	QPSK	23.93	1	24.93	30	PASS
Band4	1.4	20175	3	#0	QPSK	24.10	1	25.10	30	PASS
Band4	1.4	20175	3	#Mid	QPSK	24.03	1	25.03	30	PASS
Band4	1.4	20175	3	#Max	QPSK	23.97	1	24.97	30	PASS
Band4	1.4	20175	6	#0	QPSK	23.02	1	24.02	30	PASS
Band4	1.4	20393	1	#0	QPSK	23.99	1	24.99	30	PASS
Band4	1.4	20393	1	#Mid	QPSK	24.28	1	25.28	30	PASS
Band4	1.4	20393	1	#Max	QPSK	24.10	1	25.10	30	PASS
Band4	1.4	20393	3	#0	QPSK	24.22	1	25.22	30	PASS
Band4	1.4	20393	3	#Mid	QPSK	24.29	1	25.29	30	PASS
Band4	1.4	20393	3	#Max	QPSK	24.26	1	25.26	30	PASS
Band4	1.4	20393	6	#0	QPSK	23.21	1	24.21	30	PASS

Band4	3	19965	1	#0	QPSK	24.15	1	25.15	30	PASS
Band4	3	19965	1	#Mid	QPSK	24.26	1	25.26	30	PASS
Band4	3	19965	1	#Max	QPSK	24.17	1	25.17	30	PASS
Band4	3	19965	8	#0	QPSK	23.12	1	24.12	30	PASS
Band4	3	19965	8	#Mid	QPSK	23.06	1	24.06	30	PASS
Band4	3	19965	8	#Max	QPSK	23.06	1	24.06	30	PASS
Band4	3	19965	15	#0	QPSK	23.03	1	24.03	30	PASS
Band4	3	20175	1	#0	QPSK	23.78	1	24.78	30	PASS
Band4	3	20175	1	#Mid	QPSK	23.97	1	24.97	30	PASS
Band4	3	20175	1	#Max	QPSK	23.97	1	24.97	30	PASS
Band4	3	20175	8	#0	QPSK	23.04	1	24.04	30	PASS
Band4	3	20175	8	#Mid	QPSK	23.04	1	24.04	30	PASS
Band4	3	20175	8	#Max	QPSK	22.88	1	23.88	30	PASS
Band4	3	20175	15	#0	QPSK	23.02	1	24.02	30	PASS
Band4	3	20385	1	#0	QPSK	24.21	1	25.21	30	PASS
Band4	3	20385	1	#Mid	QPSK	24.23	1	25.23	30	PASS
Band4	3	20385	1	#Max	QPSK	24.27	1	25.27	30	PASS
Band4	3	20385	8	#0	QPSK	23.08	1	24.08	30	PASS
Band4	3	20385	8	#Mid	QPSK	23.13	1	24.13	30	PASS
Band4	3	20385	8	#Max	QPSK	23.15	1	24.15	30	PASS
Band4	3	20385	15	#0	QPSK	23.13	1	24.13	30	PASS
Band4	5	19975	1	#0	QPSK	23.85	1	24.85	30	PASS
Band4	5	19975	1	#Mid	QPSK	24.20	1	25.20	30	PASS
Band4	5	19975	1	#Max	QPSK	23.78	1	24.78	30	PASS
Band4	5	19975	12	#0	QPSK	22.85	1	23.85	30	PASS
Band4	5	19975	12	#Mid	QPSK	23.03	1	24.03	30	PASS
Band4	5	19975	12	#Max	QPSK	22.93	1	23.93	30	PASS
Band4	5	19975	25	#0	QPSK	22.86	1	23.86	30	PASS
Band4	5	20175	1	#0	QPSK	23.57	1	24.57	30	PASS
Band4	5	20175	1	#Mid	QPSK	23.92	1	24.92	30	PASS
Band4	5	20175	1	#Max	QPSK	23.69	1	24.69	30	PASS
Band4	5	20175	12	#0	QPSK	22.99	1	23.99	30	PASS
Band4	5	20175	12	#Mid	QPSK	22.92	1	23.92	30	PASS
Band4	5	20175	12	#Max	QPSK	22.88	1	23.88	30	PASS
Band4	5	20175	25	#0	QPSK	23.02	1	24.02	30	PASS
Band4	5	20375	1	#0	QPSK	23.93	1	24.93	30	PASS
Band4	5	20375	1	#Mid	QPSK	24.15	1	25.15	30	PASS
Band4	5	20375	1	#Max	QPSK	24.23	1	25.23	30	PASS
Band4	5	20375	12	#0	QPSK	23.27	1	24.27	30	PASS
Band4	5	20375	12	#Mid	QPSK	23.33	1	24.33	30	PASS
Band4	5	20375	12	#Max	QPSK	23.34	1	24.34	30	PASS
Band4	5	20375	25	#0	QPSK	23.26	1	24.26	30	PASS

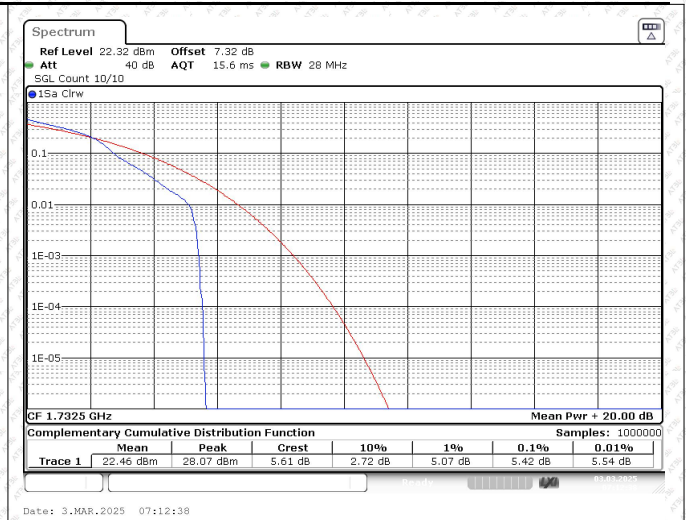
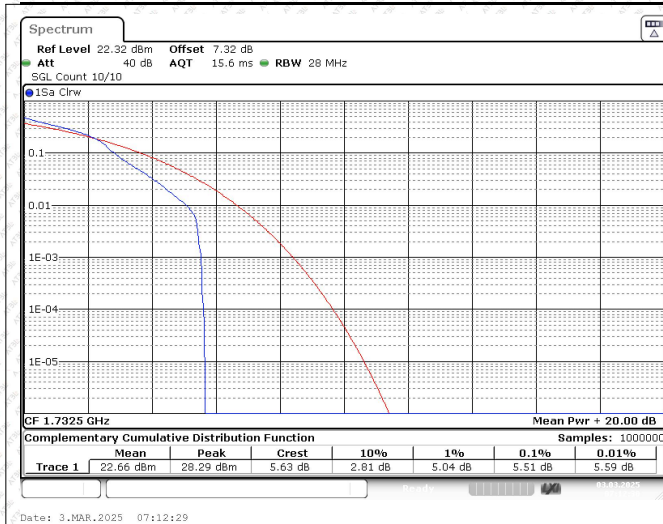
A2 Frequency stability

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Voltage (Vdc)	Temperature (°C)	Result (Hz)	Result (ppm)	Verdict
Band4	5	20175	25	#0	QPSK	VL	NT	2.47	0.001	PASS
Band4	5	20175	25	#0	QPSK	VN	NT	1.47	0.001	PASS
Band4	5	20175	25	#0	QPSK	VH	NT	-0.87	0.000	PASS

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Voltage (Vdc)	Temperature (°C)	Result (Hz)	Result (ppm)	Verdict
Band4	5	20175	25	#0	QPSK	NV	-30	0.46	0.000	PASS
Band4	5	20175	25	#0	QPSK	NV	-20	2.69	0.002	PASS
Band4	5	20175	25	#0	QPSK	NV	-10	1.23	0.001	PASS
Band4	5	20175	25	#0	QPSK	NV	0	2.03	0.001	PASS
Band4	5	20175	25	#0	QPSK	NV	10	1.04	0.001	PASS
Band4	5	20175	25	#0	QPSK	NV	20	-0.03	0.000	PASS
Band4	5	20175	25	#0	QPSK	NV	30	-2.69	-0.002	PASS
Band4	5	20175	25	#0	QPSK	NV	40	2.06	0.001	PASS
Band4	5	20175	25	#0	QPSK	NV	50	-0.54	0.000	PASS

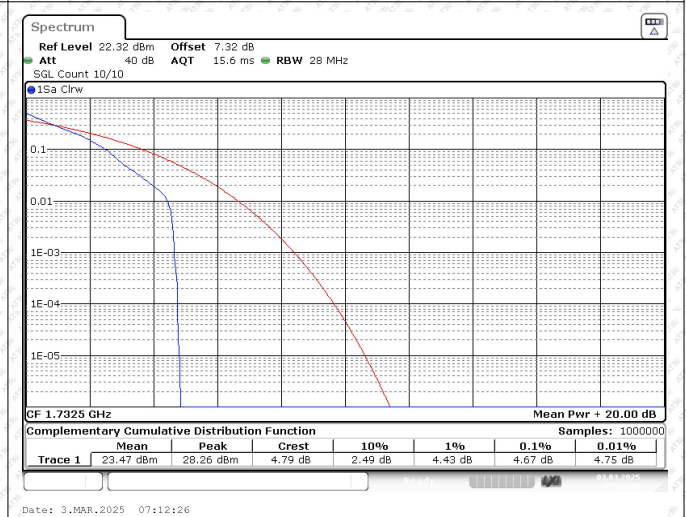
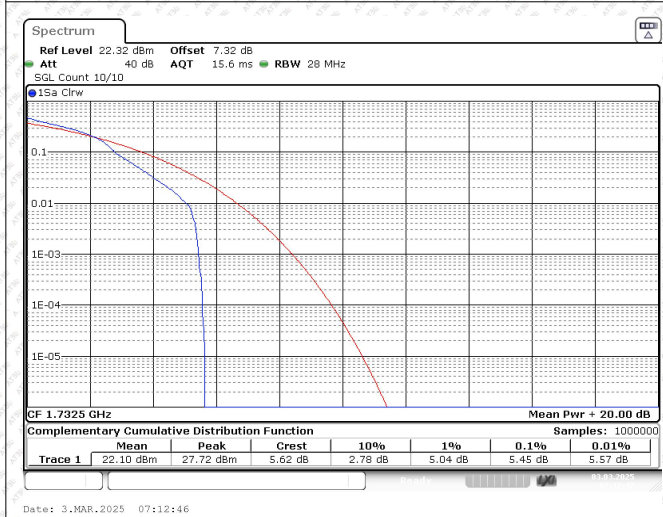
A3 Peak-to-Average Ratio

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Result (dB)	high Limit (dB)	Verdict
Band4	1.4	20175	1	#0	QAM16	5.51	13	PASS
Band4	3	20175	1	#0	QAM16	5.42	13	PASS
Band4	5	20175	1	#0	QAM16	5.45	13	PASS
Band4	1.4	20175	1	#0	QPSK	4.67	13	PASS
Band4	3	20175	1	#0	QPSK	4.67	13	PASS
Band4	5	20175	1	#0	QPSK	4.61	13	PASS



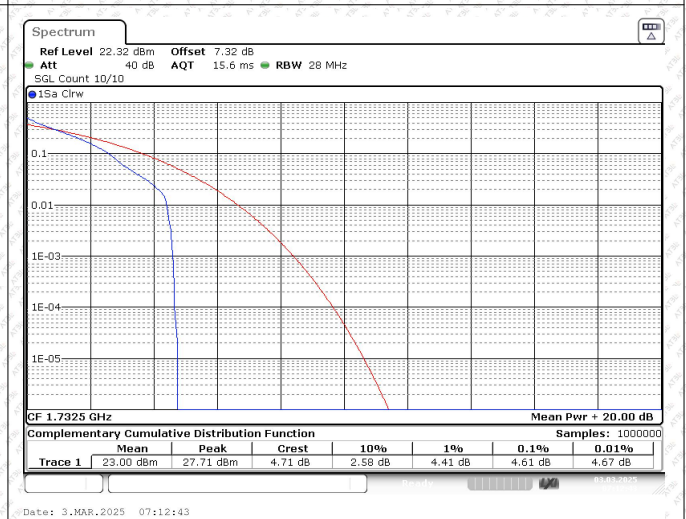
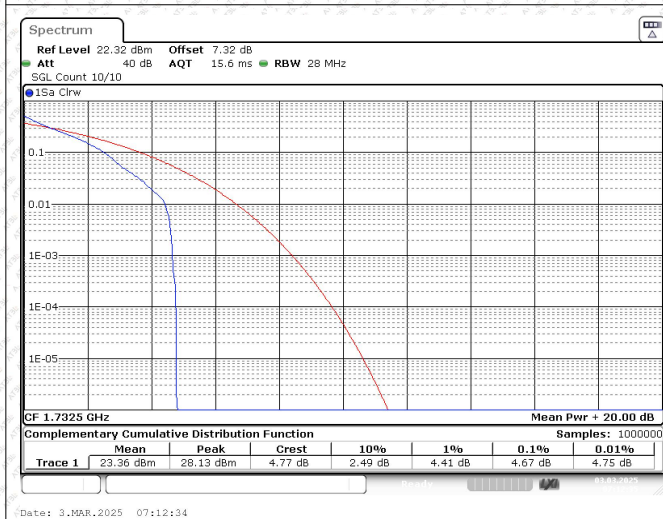
Band4 QAM16 BW=1.4MHz Channel=20175 RB Size=1 Position=#0

Band4 QAM16 BW=3MHz Channel=20175 RB Size=1 Position=#0



Band4 QAM16 BW=5MHz Channel=20175 RB Size=1 Position=#0

Band4 QPSK BW=1.4MHz Channel=20175 RB Size=1 Position=#0

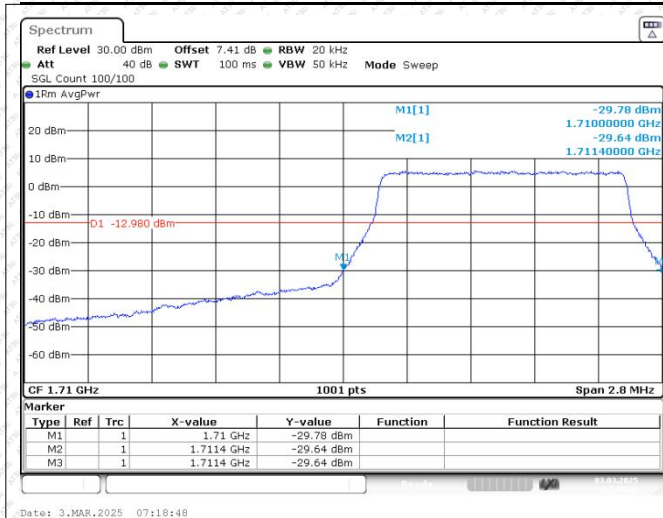


Band4 QPSK BW=3MHz Channel=20175 RB Size=1 Position=#0

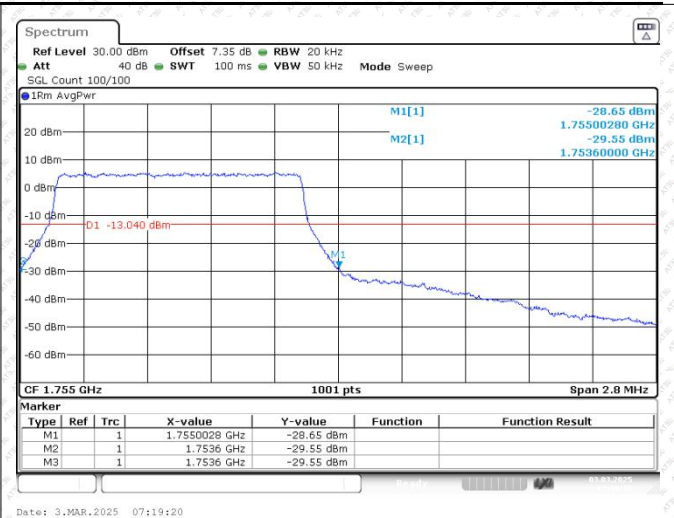
Band4 QPSK BW=5MHz Channel=20175 RB Size=1 Position=#0

A5 Band edge

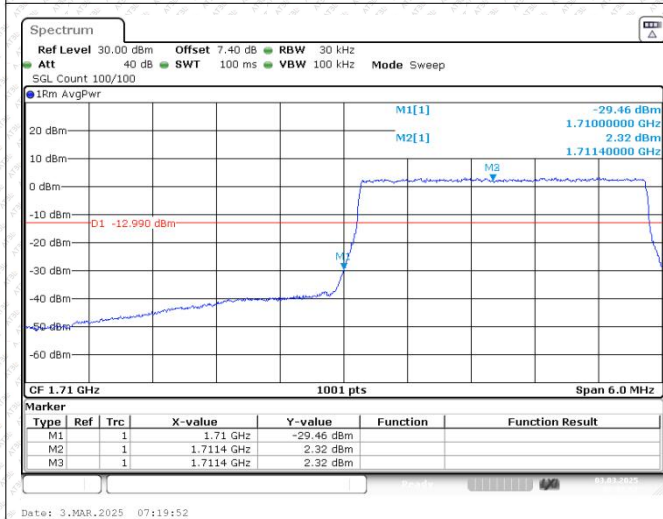
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band4	1.4	19957	6	#0	QAM16	1710.00	-29.78	-13	PASS
Band4	1.4	20393	6	#0	QAM16	1755.00	-28.64	-13	PASS
Band4	3	19965	15	#0	QAM16	1710.00	-29.45	-13	PASS
Band4	3	20385	15	#0	QAM16	1755.00	-28.31	-13	PASS
Band4	5	19975	25	#0	QAM16	1710.00	-30.54	-13	PASS
Band4	5	20375	25	#0	QAM16	1755.00	-28.84	-13	PASS
Band4	1.4	19957	6	#0	QPSK	1710.00	-28.55	-13	PASS
Band4	1.4	20393	6	#0	QPSK	1755.01	-27.01	-13	PASS
Band4	3	19965	15	#0	QPSK	1710.00	-27.28	-13	PASS
Band4	3	20385	15	#0	QPSK	1755.00	-27.44	-13	PASS
Band4	5	19975	25	#0	QPSK	1710.00	-28.69	-13	PASS
Band4	5	20375	25	#0	QPSK	1755.00	-27.35	-13	PASS



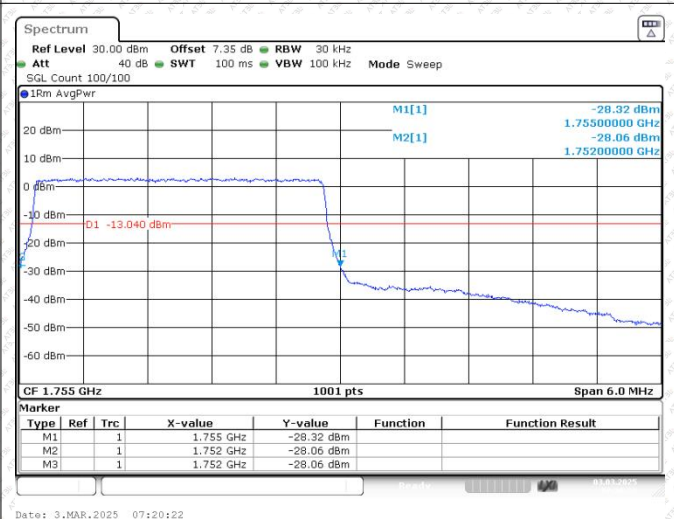
Band4 QAM16 BW=1.4MHz Channel=19957 RB Size=6 Position=#0



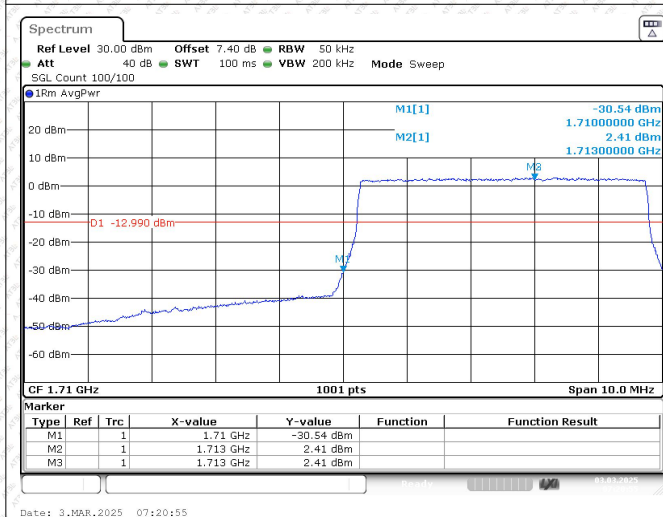
Band4 QAM16 BW=1.4MHz Channel=20393 RB Size=6 Position=#0



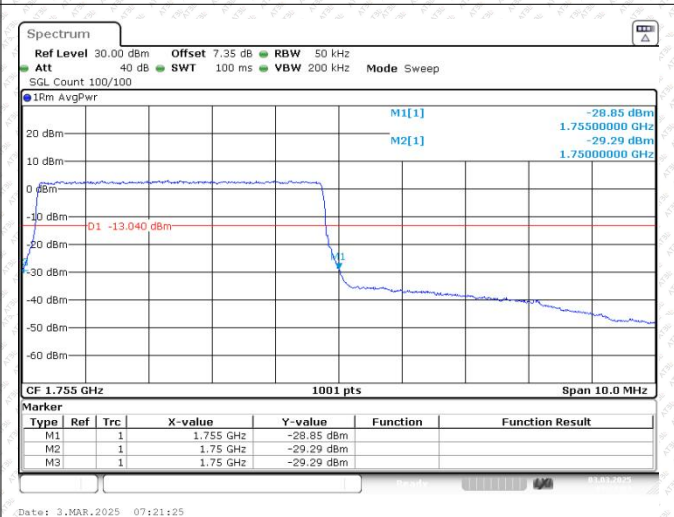
Band4 QAM16 BW=3MHz Channel=19965 RB Size=15 Position=#0



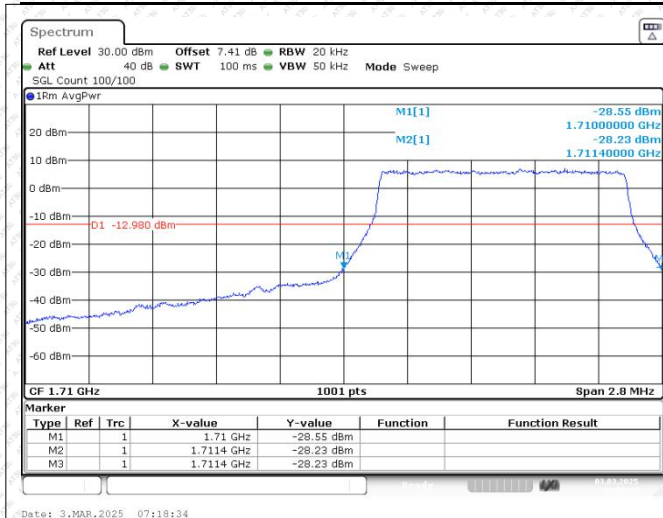
Band4 QAM16 BW=3MHz Channel=20385 RB Size=15 Position=#0



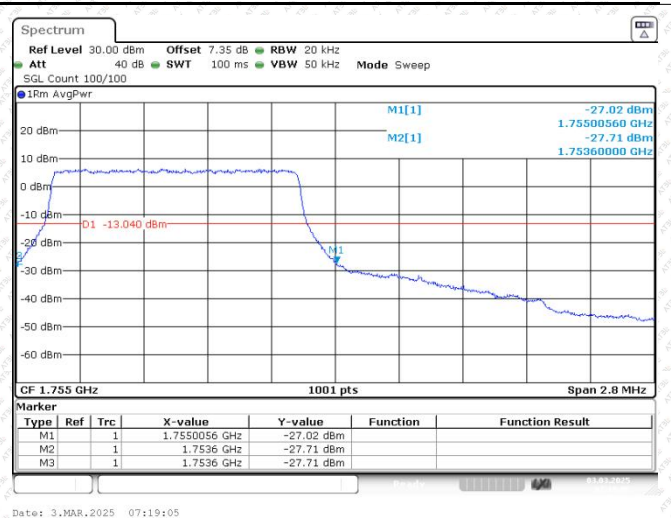
Band4 QAM16 BW=5MHz Channel=19975 RB Size=25 Position=#0



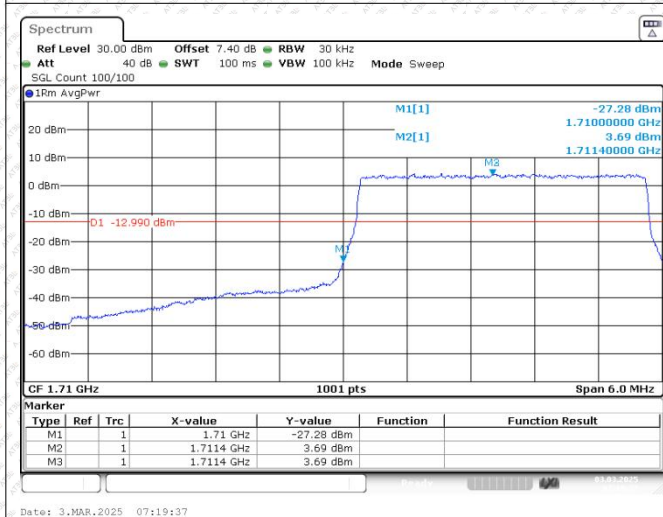
Band4 QAM16 BW=5MHz Channel=20375 RB Size=25 Position=#0



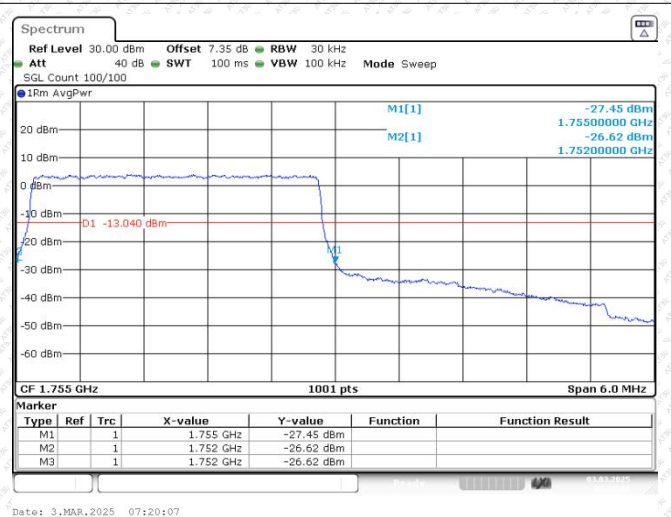
Band4 QPSK BW=1.4MHz Channel=19957 RB Size=6 Position=#0



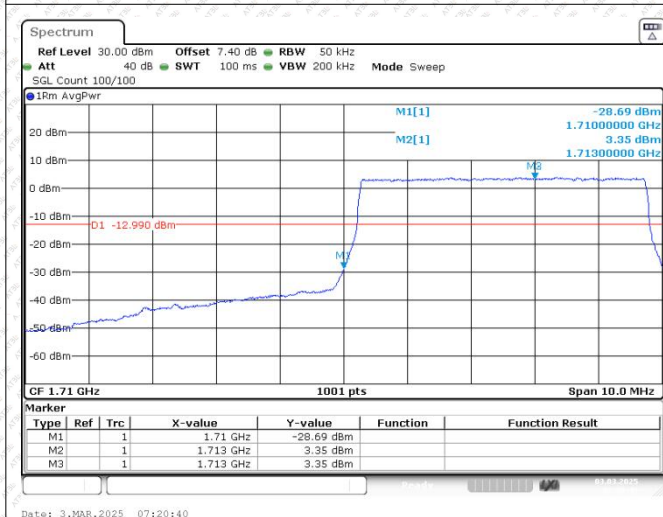
Band4 QPSK BW=1.4MHz Channel=20393 RB Size=6 Position=#0



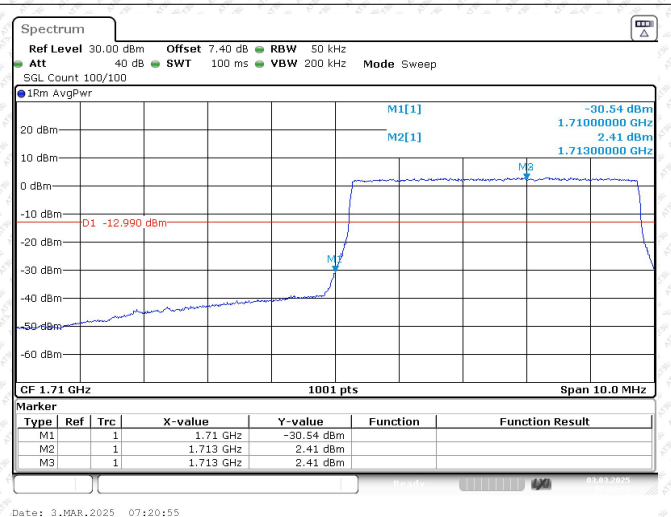
Band4 QPSK BW=3MHz Channel=19965 RB Size=15 Position=#0



Band4 QPSK BW=3MHz Channel=20385 RB Size=15 Position=#0



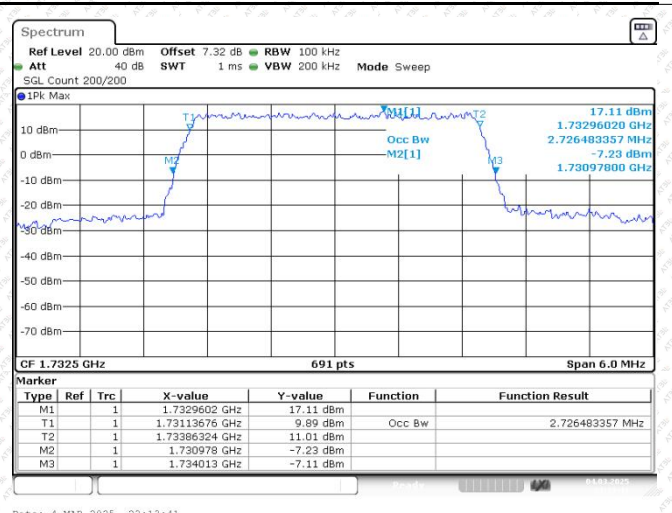
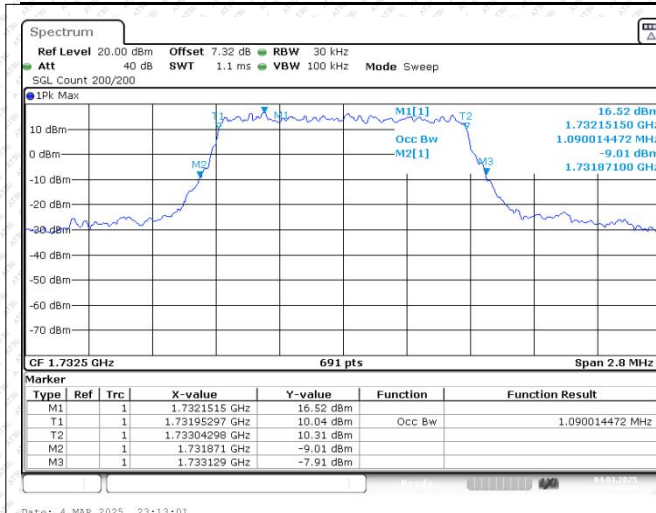
Band4 QPSK BW=5MHz Channel=19975 RB Size=25 Position=#0



Band4 QAM16 BW=5MHz Channel=19975 RB Size=25 Position=#0

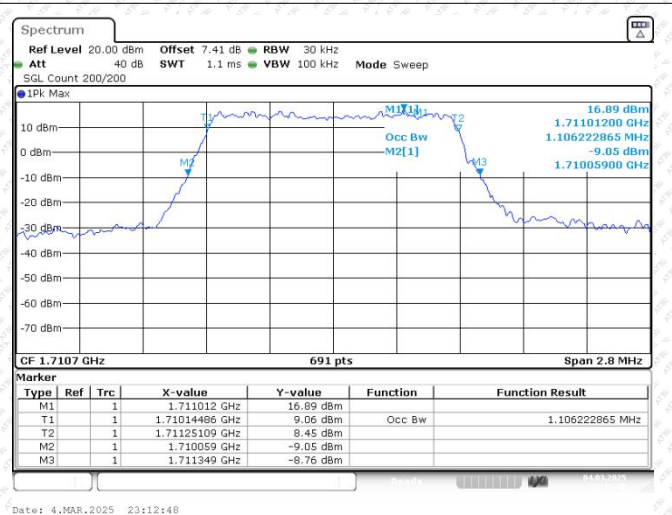
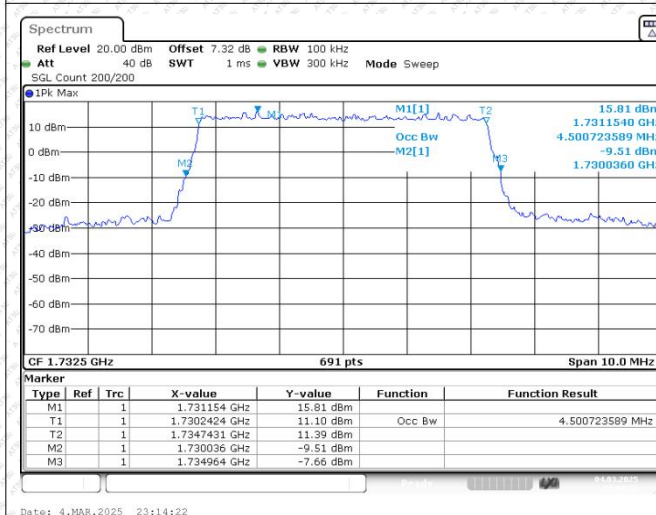
A4 Occupied bandwidth

Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	99% OBW (MHz)	-26dB EBW (MHz)	Verdict
Band4	1.4	19957	6	#0	QAM16	1.106	1.290	PASS
Band4	1.4	20175	6	#0	QAM16	1.090	1.258	PASS
Band4	1.4	20393	6	#0	QAM16	1.094	1.286	PASS
Band4	3	19965	15	#0	QAM16	2.726	3.043	PASS
Band4	3	20175	15	#0	QAM16	2.726	3.035	PASS
Band4	3	20385	15	#0	QAM16	2.726	3.043	PASS
Band4	5	19975	25	#0	QAM16	4.486	4.971	PASS
Band4	5	20175	25	#0	QAM16	4.501	4.928	PASS
Band4	5	20375	25	#0	QAM16	4.501	4.957	PASS
Band4	1.4	19957	6	#0	QPSK	1.090	1.307	PASS
Band4	1.4	20175	6	#0	QPSK	1.094	1.290	PASS
Band4	1.4	20393	6	#0	QPSK	1.090	1.294	PASS
Band4	3	19965	15	#0	QPSK	2.735	3.035	PASS
Band4	3	20175	15	#0	QPSK	2.726	3.035	PASS
Band4	3	20385	15	#0	QPSK	2.726	3.043	PASS
Band4	5	19975	25	#0	QPSK	4.486	4.942	PASS
Band4	5	20175	25	#0	QPSK	4.501	4.942	PASS
Band4	5	20375	25	#0	QPSK	4.501	4.957	PASS



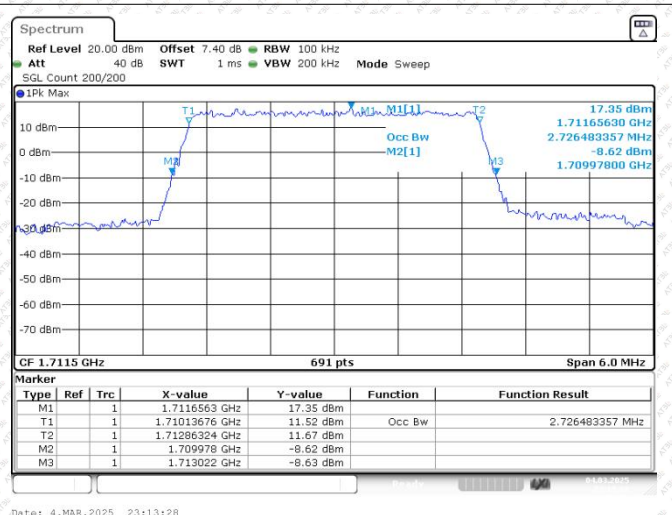
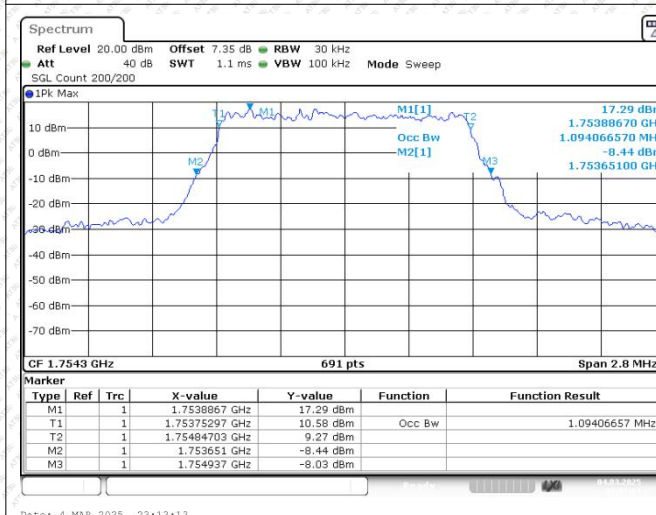
Band4 QAM16 BW=1.4MHz Channel=20175 RB Size=6 Position=#0

Band4 QAM16 BW=3MHz Channel=20175 RB Size=15 Position=#0



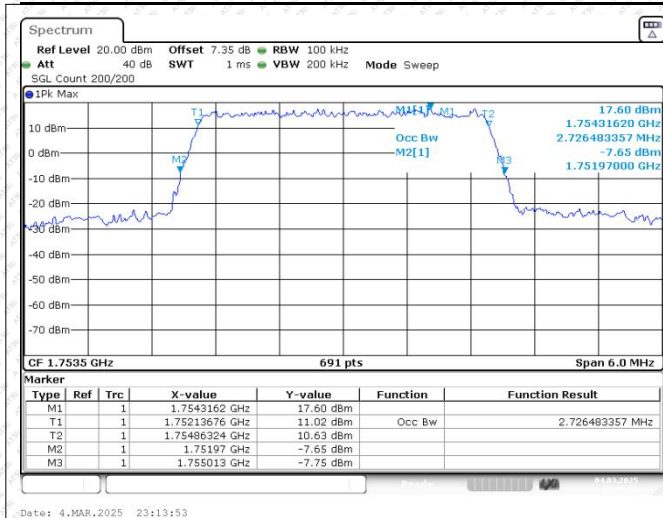
Band4 QAM16 BW=5MHz Channel=20175 RB Size=25 Position=#0

Band4 QAM16 BW=1.4MHz Channel=19957 RB Size=6 Position=#0

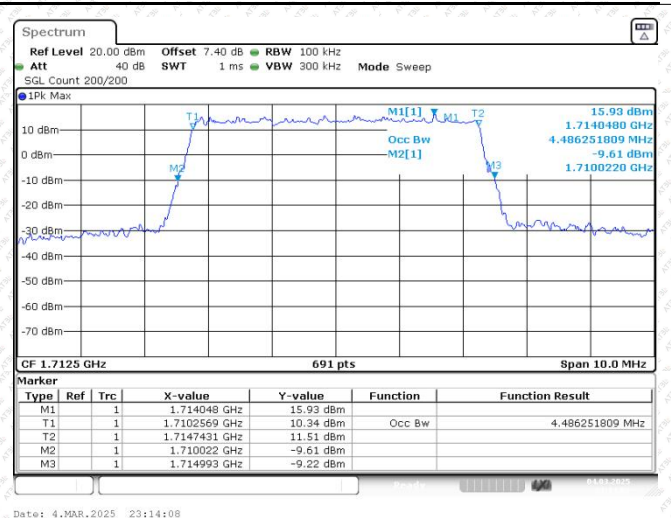


Band4 QAM16 BW=1.4MHz Channel=20393 RB Size=6 Position=#0

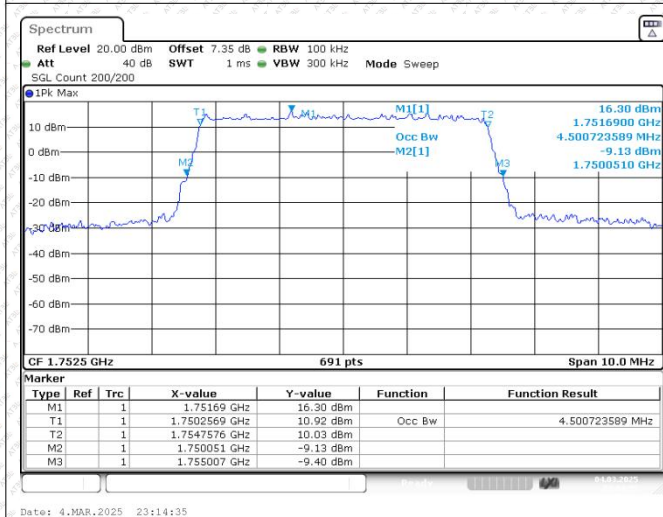
Band4 QAM16 BW=3MHz Channel=19965 RB Size=15 Position=#0



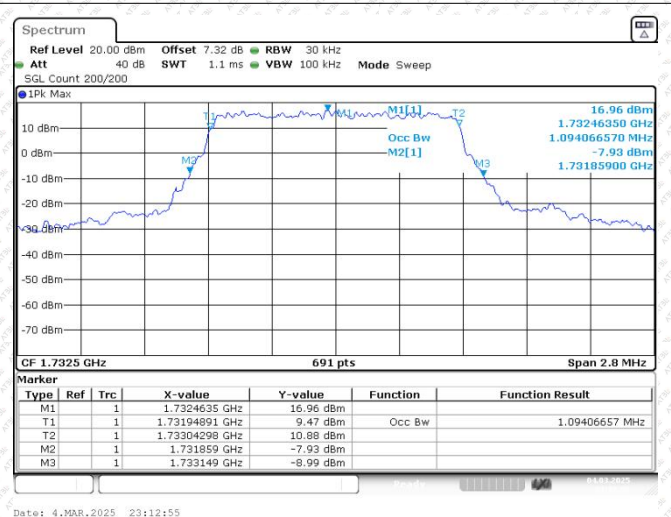
Band4 QAM16 BW=3MHz Channel=20385 RB Size=15 Position=#0



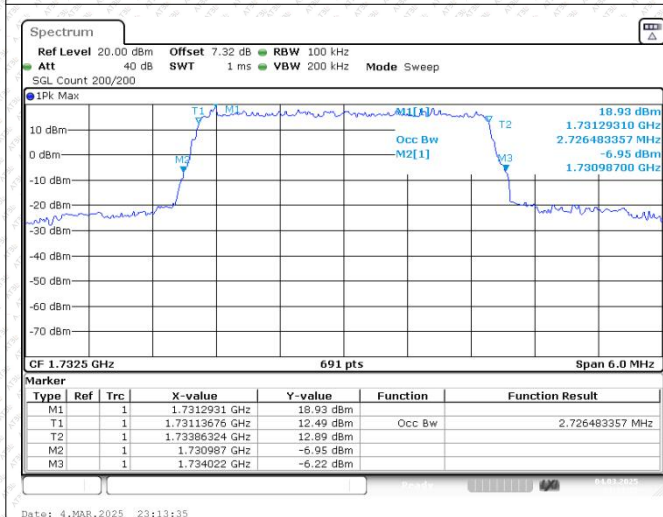
Band4 QAM16 BW=5MHz Channel=19975 RB Size=25 Position=#0



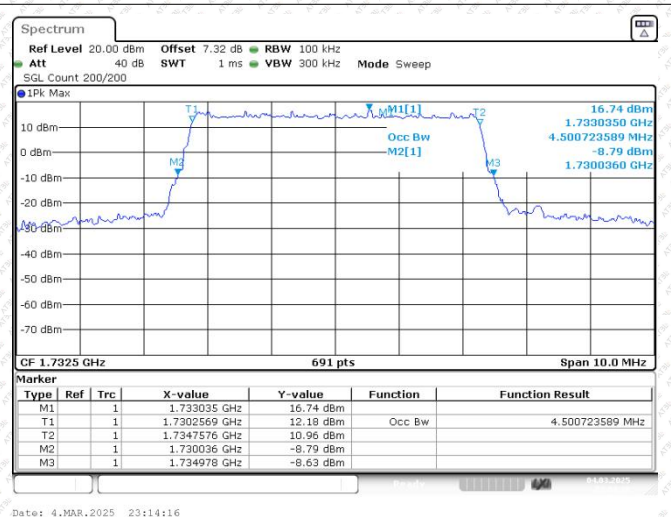
Band4 QAM16 BW=5MHz Channel=20375 RB Size=25 Position=#0



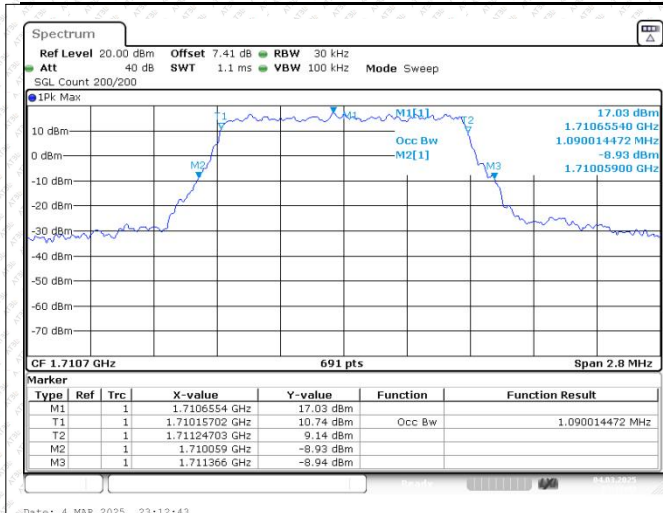
Band4 QPSK BW=1.4MHz Channel=20175 RB Size=6 Position=#0



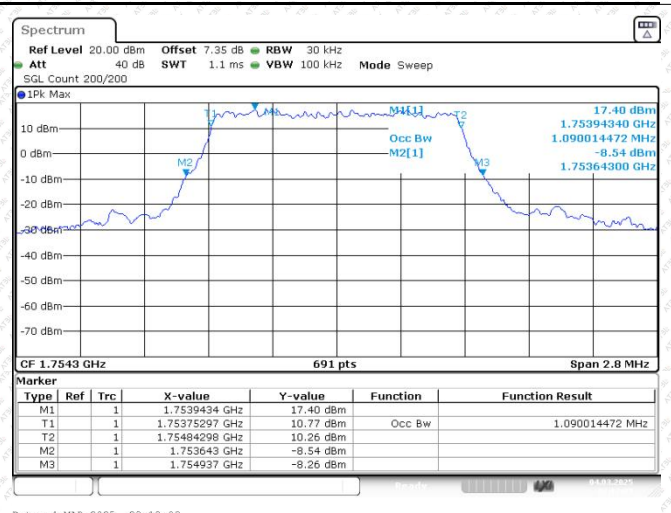
Band4 QPSK BW=3MHz Channel=20175 RB Size=15 Position=#0



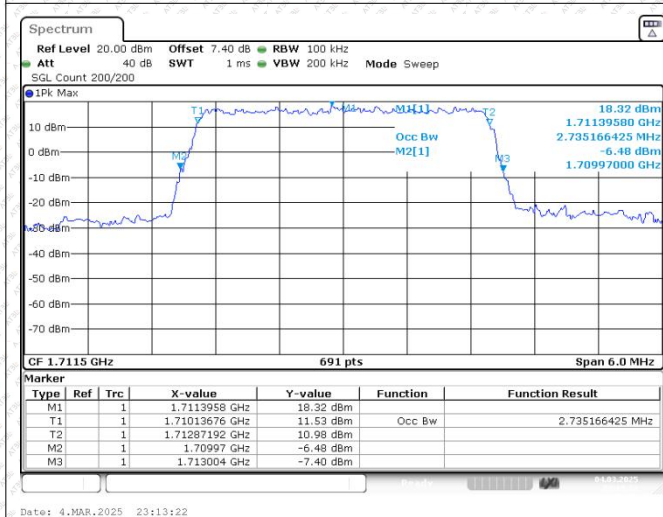
Band4 QPSK BW=5MHz Channel=20175 RB Size=25 Position=#0



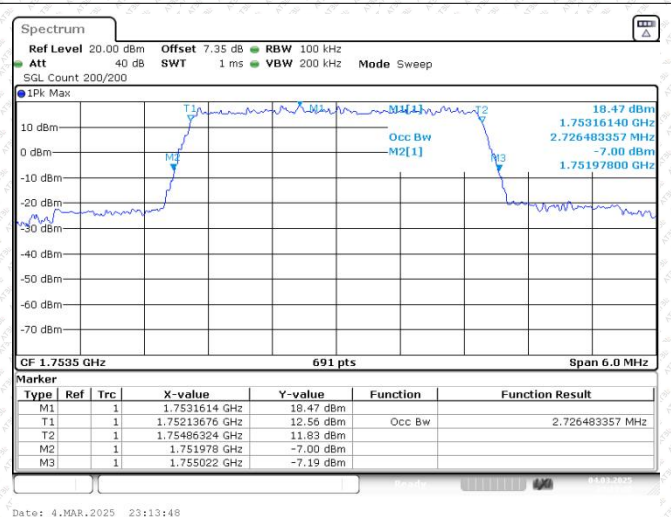
Band4 QPSK BW=1.4MHz Channel=19957 RB Size=6 Position=#0



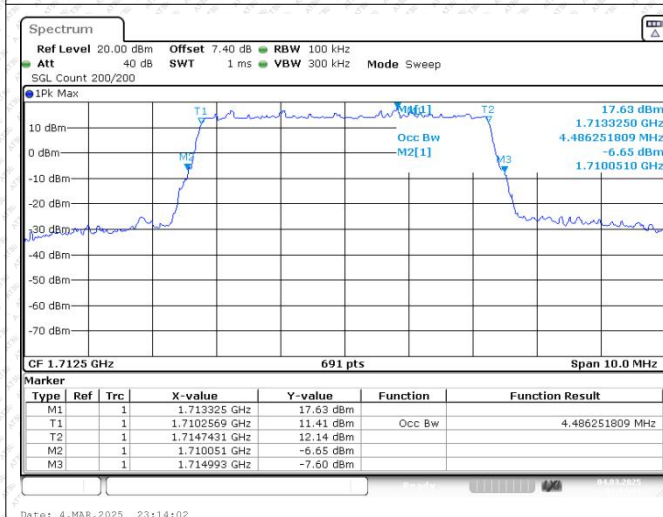
Band4 QPSK BW=1.4MHz Channel=20393 RB Size=6 Position=#0



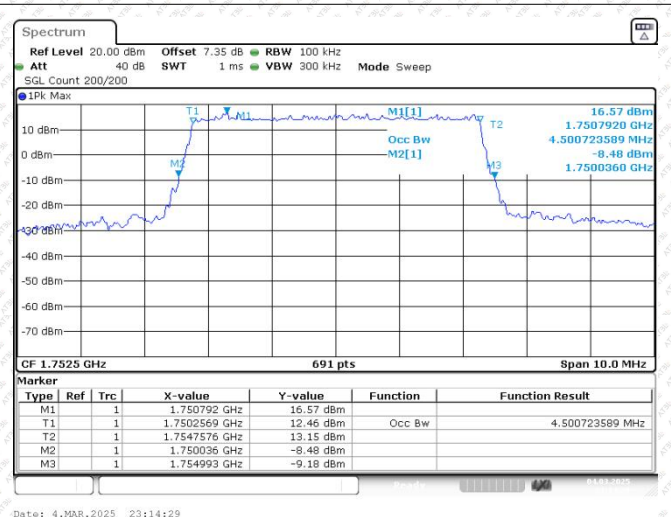
Band4 QPSK BW=3MHz Channel=19965 RB Size=15 Position=#0



Band4 QPSK BW=3MHz Channel=20385 RB Size=15 Position=#0



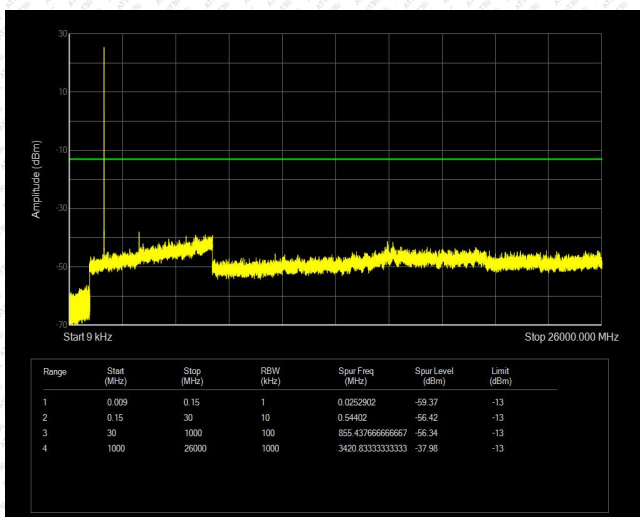
Band4 QPSK BW=5MHz Channel=19975 RB Size=25 Position=#0



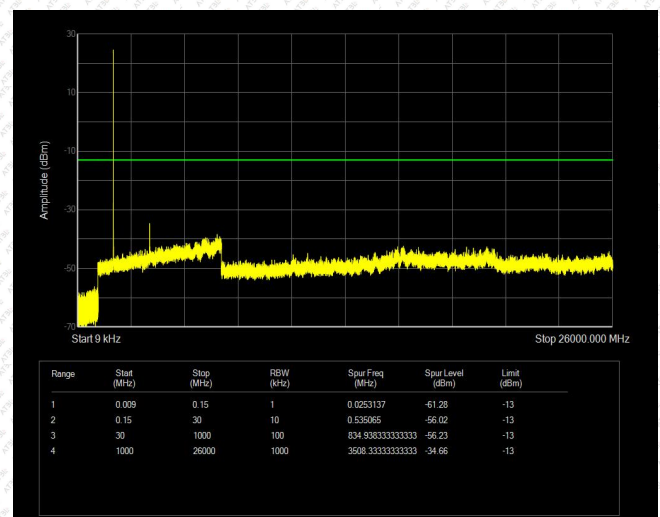
Band4 QPSK BW=5MHz Channel=20375 RB Size=25 Position=#0

A6 Out-of-band emissions

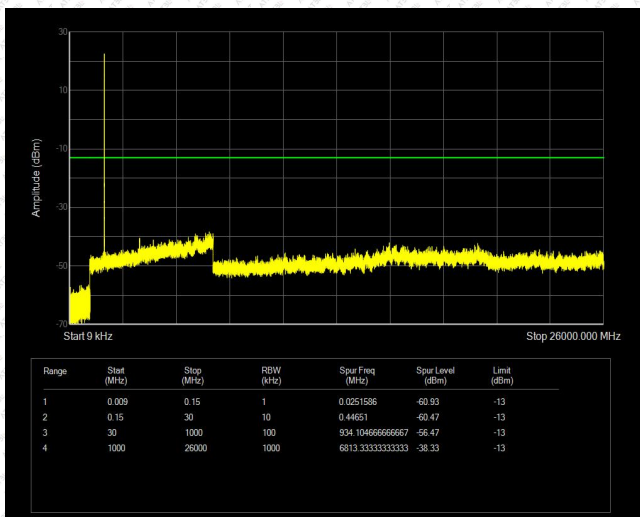
Band	Bandwidth (MHz)	UL Channel	RB Size	RB Position	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
Band4	1.4	19957	6	#0	QAM16	3420.83	-37.98	-13	PASS
Band4	1.4	20393	6	#0	QAM16	3508.33	-34.66	-13	PASS
Band4	3	19965	15	#0	QAM16	6813.33	-38.33	-13	PASS
Band4	3	20385	15	#0	QAM16	3507.50	-36.82	-13	PASS
Band4	5	19975	25	#0	QAM16	6994.17	-37.45	-13	PASS
Band4	5	20375	25	#0	QAM16	3502.50	-36.53	-13	PASS
Band4	1.4	19957	6	#0	QPSK	3420.83	-38.15	-13	PASS
Band4	1.4	20393	6	#0	QPSK	3507.50	-36.70	-13	PASS
Band4	3	19965	15	#0	QPSK	6823.33	-38.99	-13	PASS
Band4	3	20385	15	#0	QPSK	3508.33	-37.60	-13	PASS
Band4	5	19975	25	#0	QPSK	6846.67	-39.22	-13	PASS
Band4	5	20375	25	#0	QPSK	3506.67	-38.02	-13	PASS



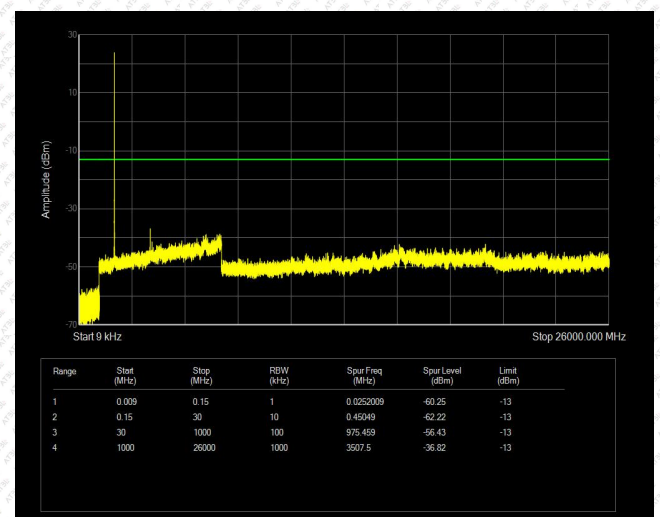
Band4 QAM16 BW=1.4MHz Channel=19957 RB Size=6 Position=#0



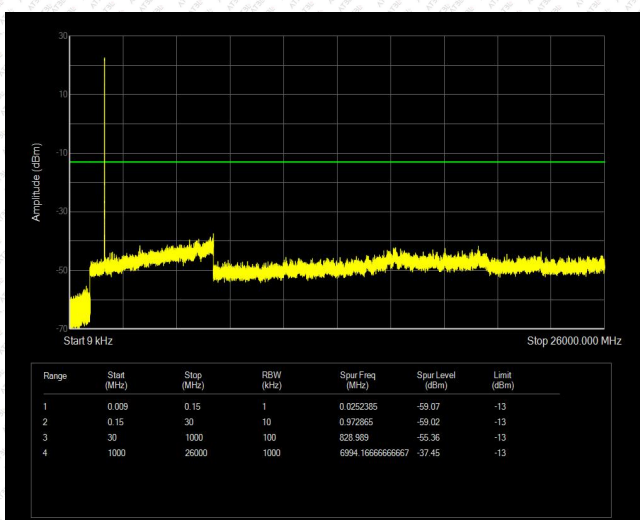
Band4 QAM16 BW=1.4MHz Channel=20393 RB Size=6 Position=#0



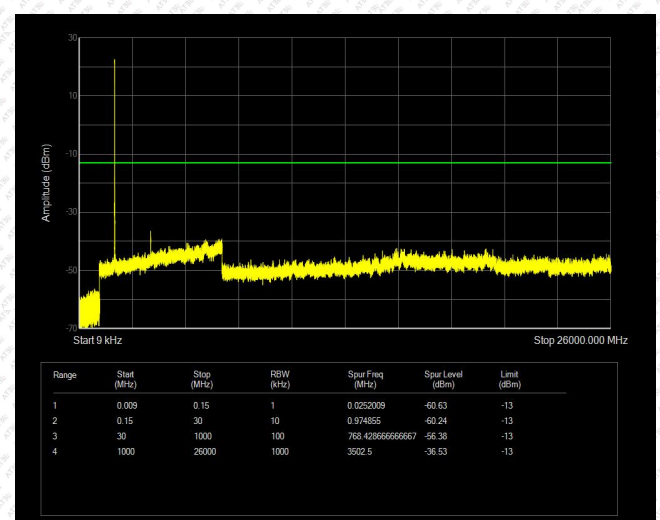
Band4 QAM16 BW=3MHz Channel=19965 RB Size=15 Position=#0



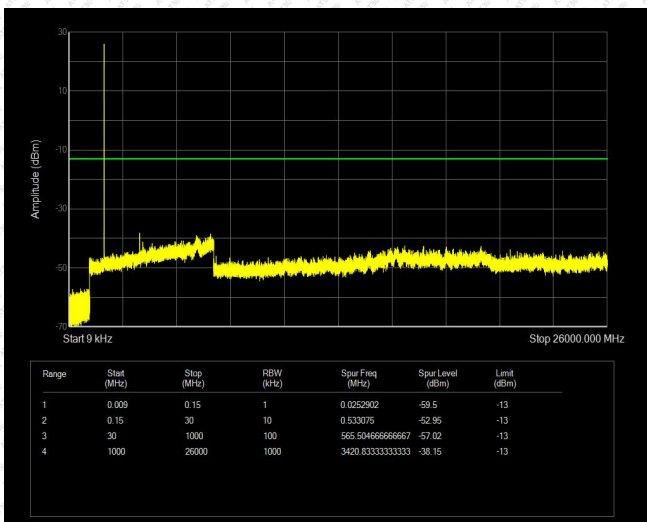
Band4 QAM16 BW=3MHz Channel=20385 RB Size=15 Position=#0



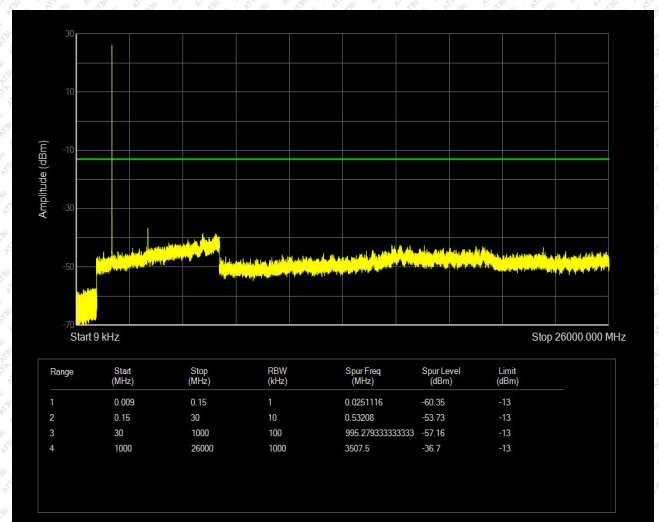
Band4 QAM16 BW=5MHz Channel=19975 RB Size=25 Position=#0



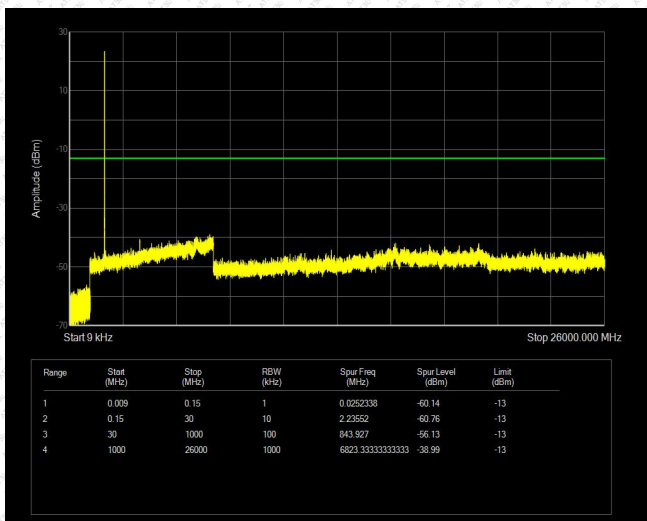
Band4 QAM16 BW=5MHz Channel=20375 RB Size=25 Position=#0



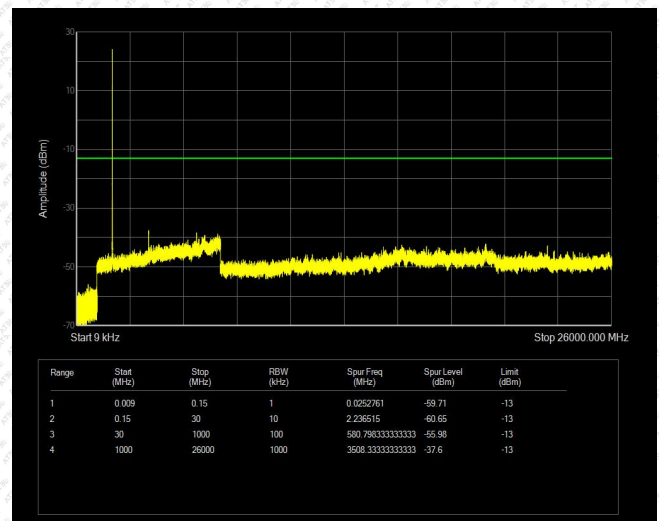
Band4 QPSK BW=1.4MHz Channel=19957 RB Size=6 Position=#0



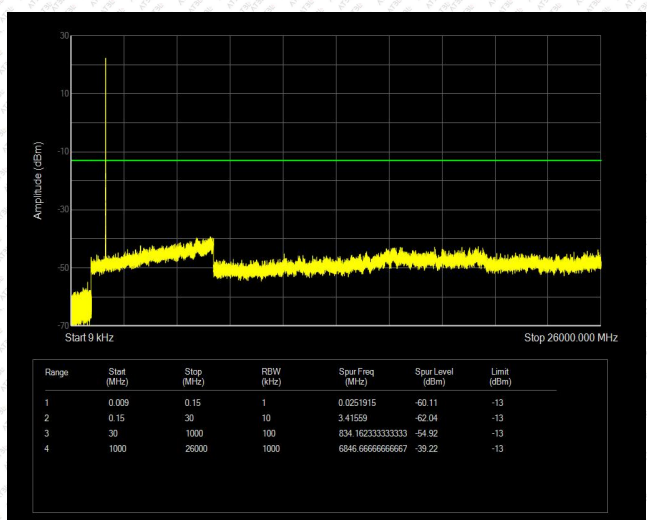
Band4 QPSK BW=1.4MHz Channel=20393 RB Size=6 Position=#0



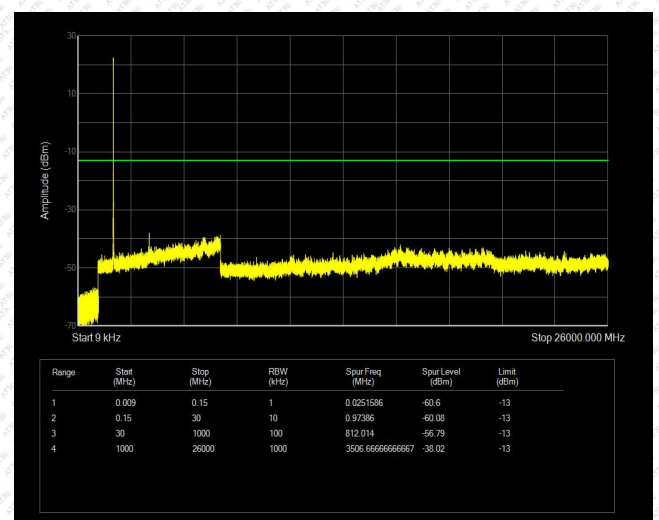
Band4 QPSK BW=3MHz Channel=19965 RB Size=15 Position=#0



Band4 QPSK BW=3MHz Channel=20385 RB Size=15 Position=#0



Band4 QPSK BW=5MHz Channel=19975 RB Size=25 Position=#0



Band4 QPSK BW=5MHz Channel=20375 RB Size=25 Position=#0

*****END OF THE APPENDIX A LTE Band 4*****