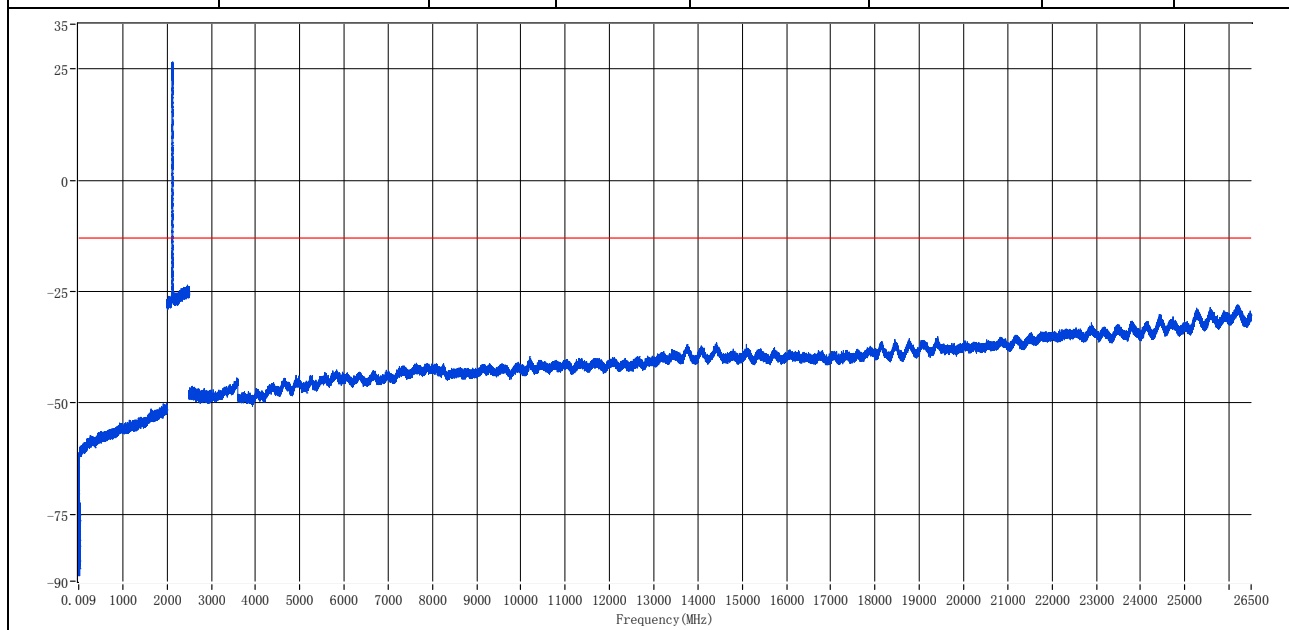


2.1.10 EUT Conf. TX_20M_B_TM1.1

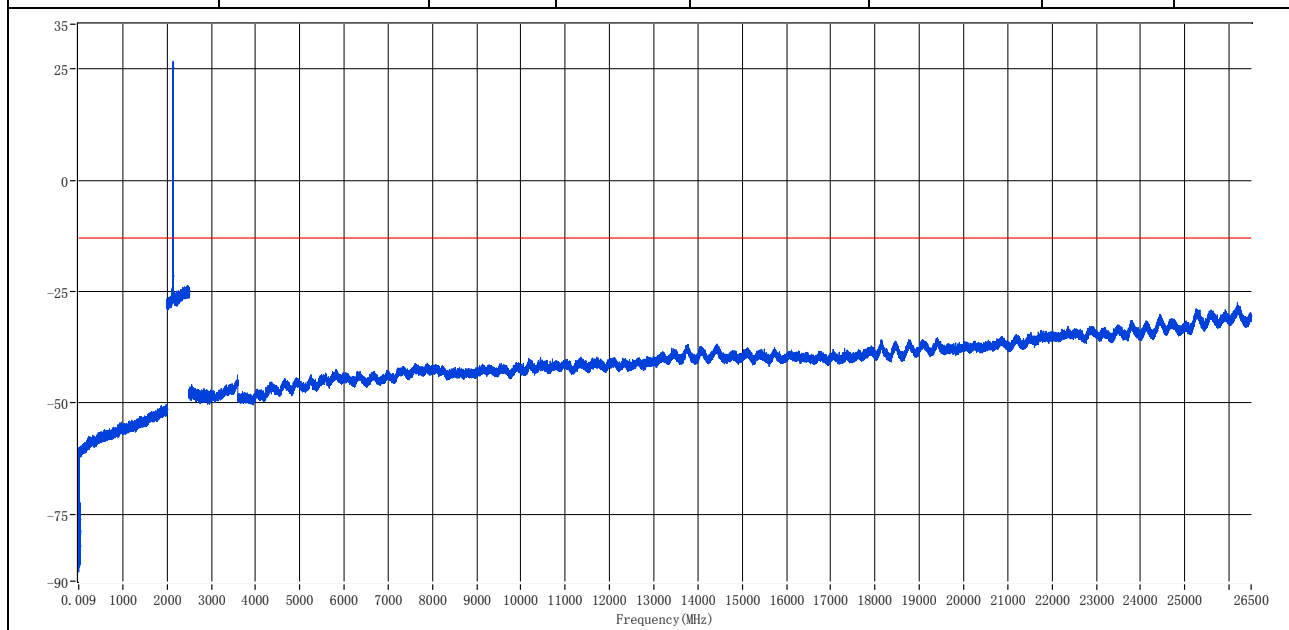
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.502 k	-61.17	-13.00	Pass
0.15	30	0.01	RMS	195.770 k	-61.77	-13.00	Pass
30	2000	1	RMS	1.995 G	-50.05	-13.00	Pass
2000	2500	1	RMS	2.126 G	26.53	-13.00	Fail
2500	3000	1	RMS	2.572 G	-46.25	-13.00	Pass
3000	26500	1	RMS	26.200 G	-28.02	-13.00	Pass



NOTE: The failed emission is the fundamental frequency, which should be exempted.

2.1.11 EUT Conf. TX_20M_M_TM1.1

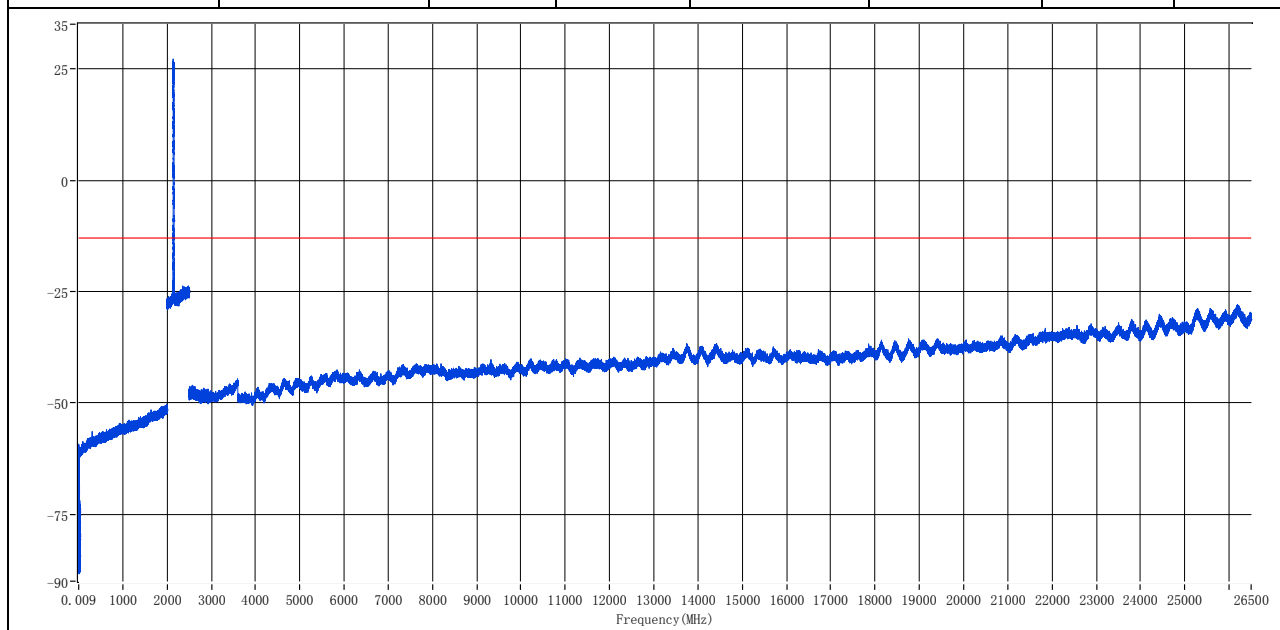
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.093 k	-59.99	-13.00	Pass
0.15	30	0.01	RMS	171.890 k	-60.78	-13.00	Pass
30	2000	1	RMS	1.998 G	-50.34	-13.00	Pass
2000	2500	1	RMS	2.138 G	26.65	-13.00	Fail
2500	3000	1	RMS	2.560 G	-45.92	-13.00	Pass
3000	26500	1	RMS	26.192 G	-27.51	-13.00	Pass



NOTE: The failed emission is the fundamental frequency, which should be exempted.

2.1.12 EUT Conf. TX_20M_T_TM1.1

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.488 k	-59.25	-13.00	Pass
0.15	30	0.01	RMS	166.915 k	-61.39	-13.00	Pass
30	2000	1	RMS	1.991 G	-50.31	-13.00	Pass
2000	2500	1	RMS	2.140 G	27.14	-13.00	Fail
2500	3000	1	RMS	2.575 G	-46.05	-13.00	Pass
3000	26500	1	RMS	26.187 G	-28.03	-13.00	Pass

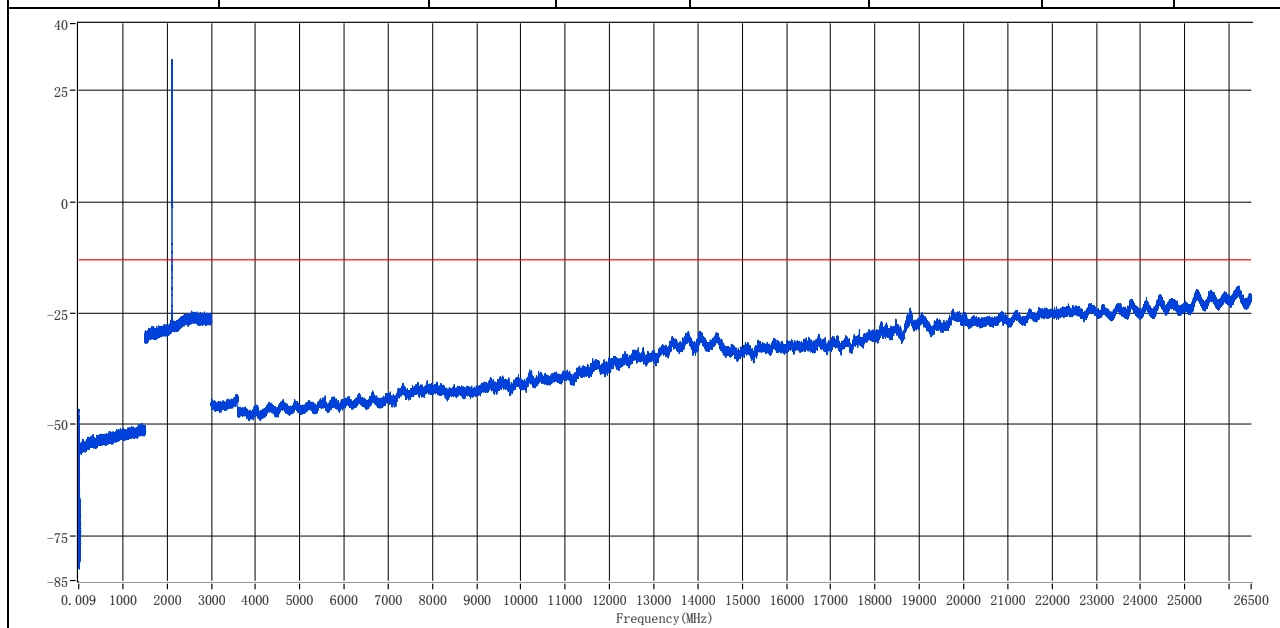


NOTE: The failed emission is the fundamental frequency, which should be exempted.

2.2 Port B

2.2.1 EUT Conf. TX_5M_B_TM1.1

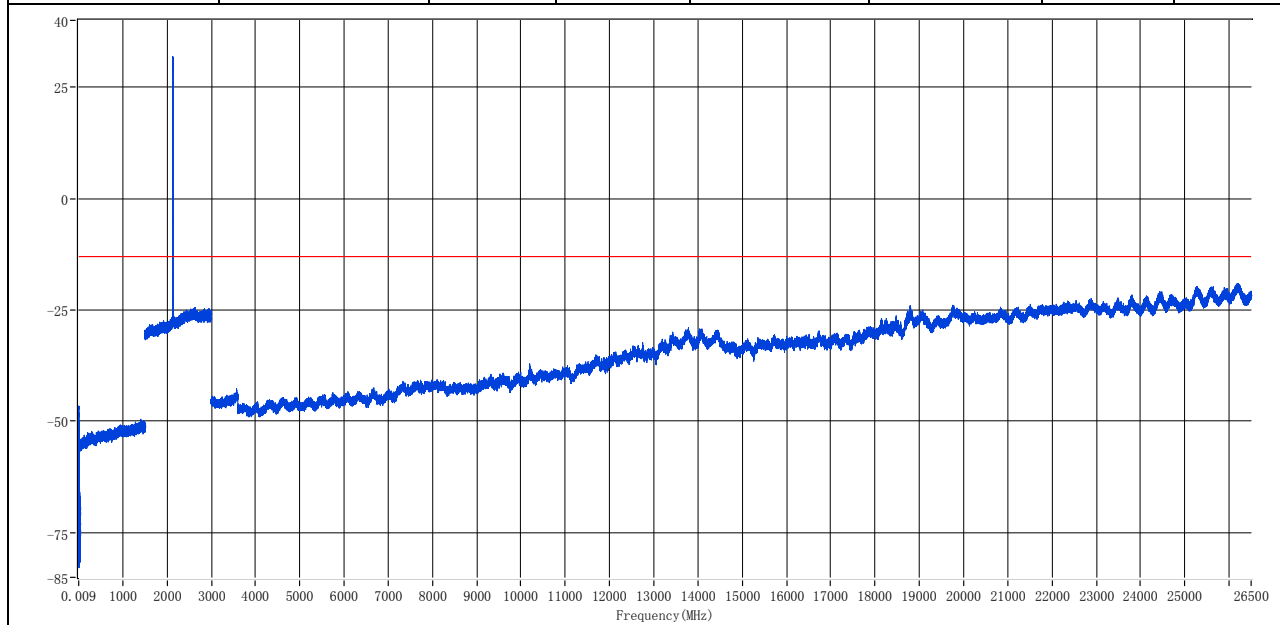
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.347 k	-46.53	-13.00	Pass
0.15	30	0.01	RMS	286.315 k	-58.18	-13.00	Pass
30	1500	1	RMS	1.437 G	-49.71	-13.00	Pass
1500	3000	1	RMS	2.114 G	31.97	-13.00	Fail
3000	26500	1	RMS	26.227 G	-18.89	-13.00	Pass



NOTE: The failed emission is the fundamental frequency, which should be exempted.

2.2.2 EUT Conf. TX_5M_M_TM1.1

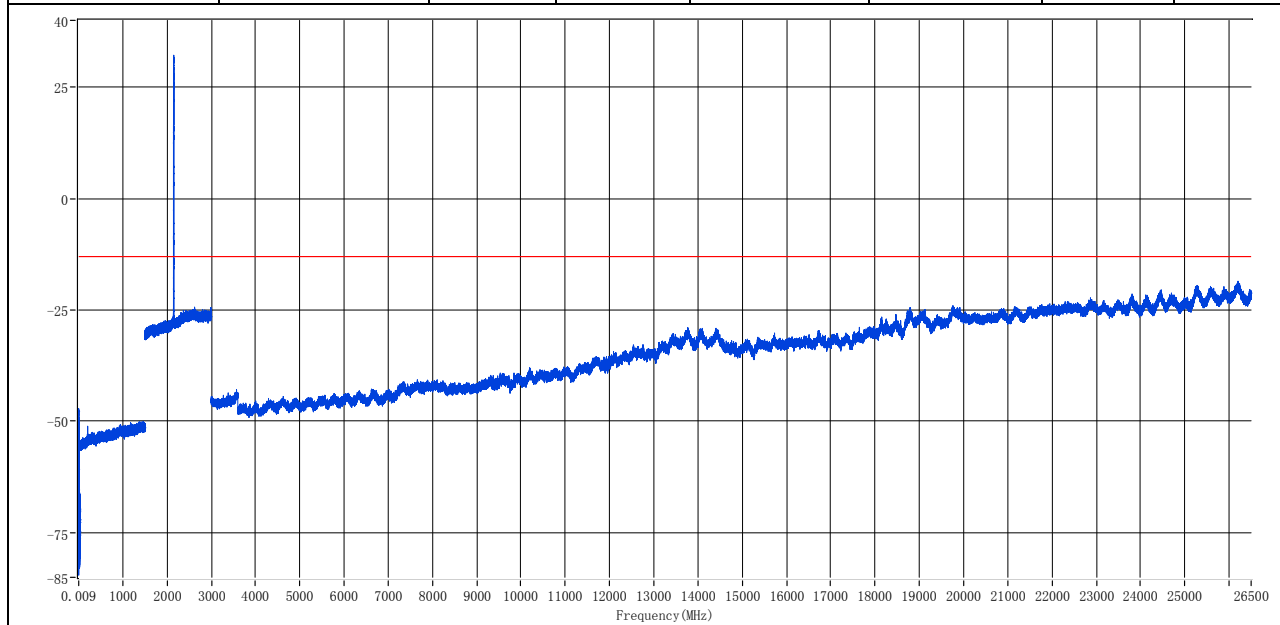
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.709 k	-46.56	-13.00	Pass
0.15	30	0.01	RMS	152.985 k	-54.61	-13.00	Pass
30	1500	1	RMS	1.405 G	-49.51	-13.00	Pass
1500	3000	1	RMS	2.132 G	31.88	-13.00	Fail
3000	26500	1	RMS	26.202 G	-19.08	-13.00	Pass



NOTE: The failed emission is the fundamental frequency, which should be exempted.

2.2.3 EUT Conf. TX_5M_T_TM1.1

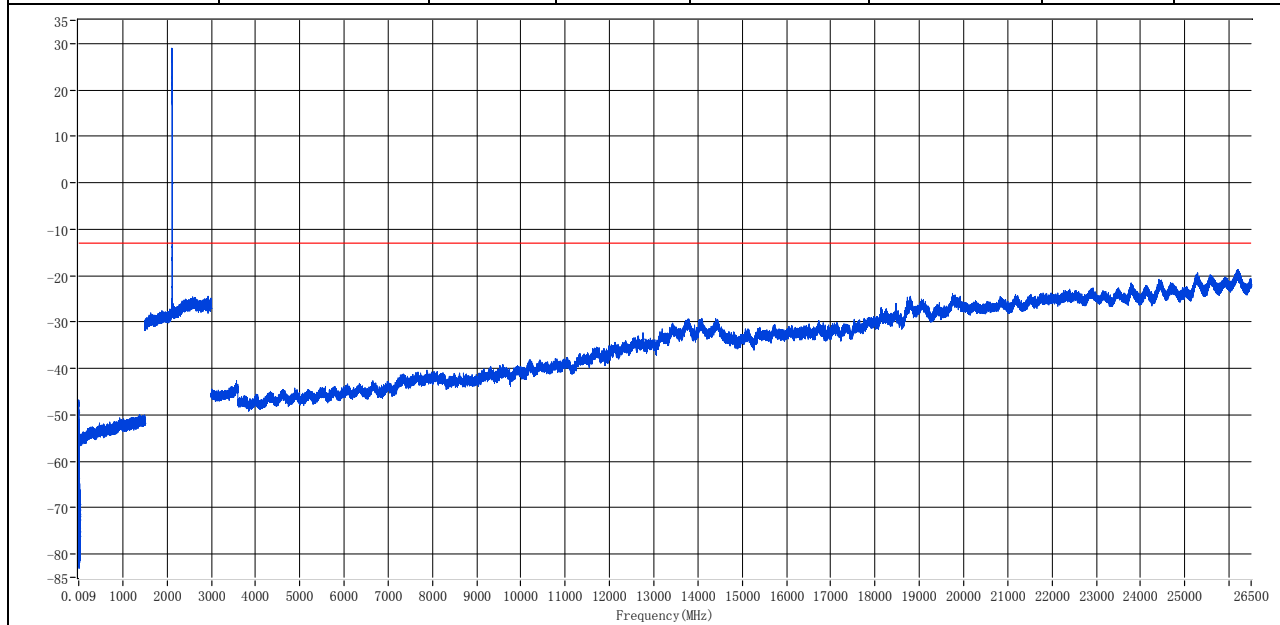
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.474 k	-47.11	-13.00	Pass
0.15	30	0.01	RMS	160.945 k	-55.91	-13.00	Pass
30	1500	1	RMS	1.435 G	-50.10	-13.00	Pass
1500	3000	1	RMS	2.152 G	32.15	-13.00	Fail
3000	26500	1	RMS	26.205 G	-18.58	-13.00	Pass



NOTE: The failed emission is the fundamental frequency, which should be exempted.

2.2.4 EUT Conf. TX_10M_B_TM1.1

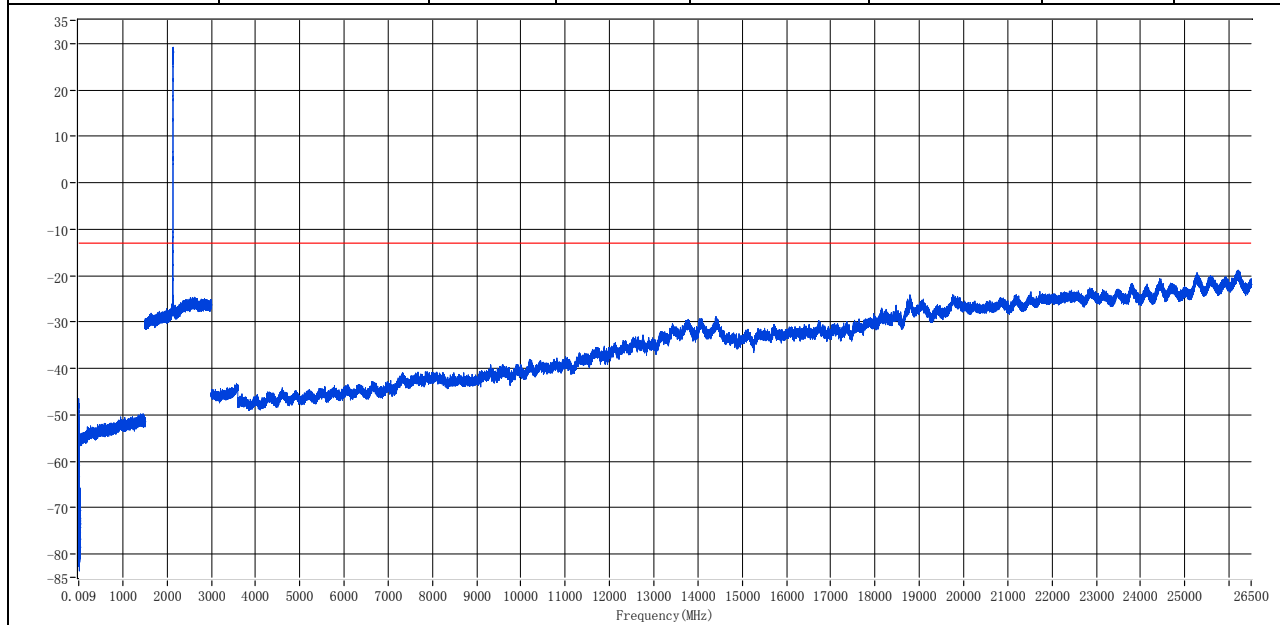
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.498 k	-46.75	-13.00	Pass
0.15	30	0.01	RMS	276.365 k	-58.36	-13.00	Pass
30	1500	1	RMS	1.376 G	-49.99	-13.00	Pass
1500	3000	1	RMS	2.112 G	28.99	-13.00	Fail
3000	26500	1	RMS	26.201 G	-18.67	-13.00	Pass



NOTE: The failed emission is the fundamental frequency, which should be exempted.

2.2.5 EUT Conf. TX_10M_M_TM1.1

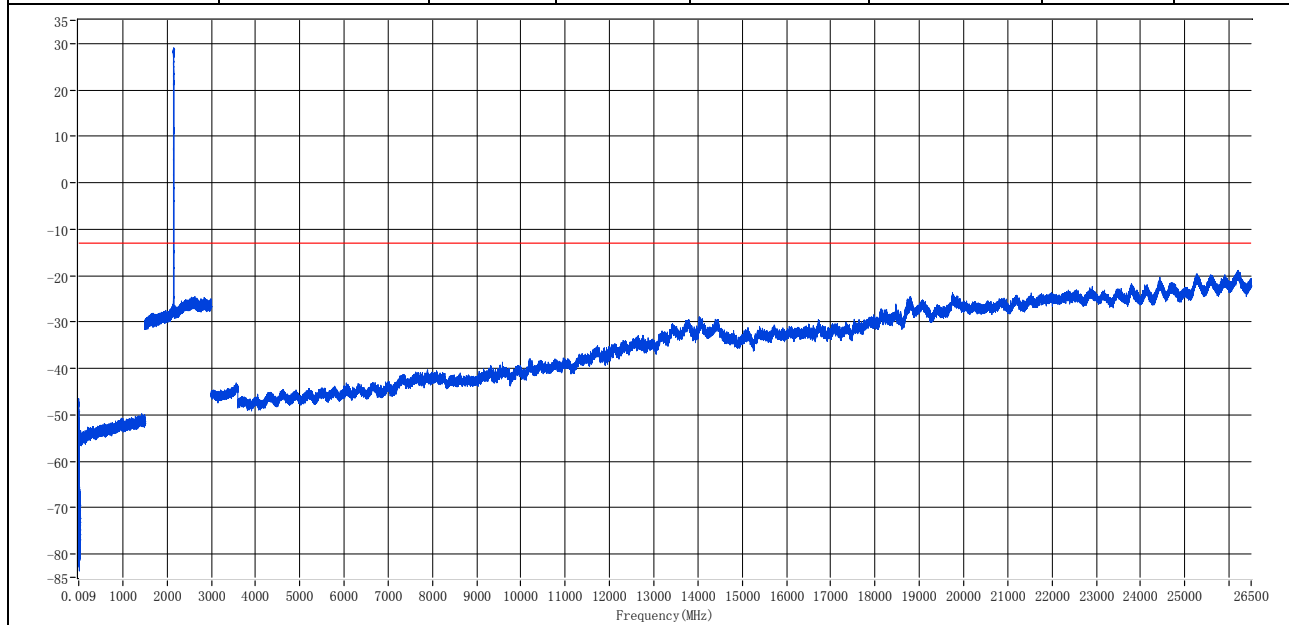
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.573 k	-46.53	-13.00	Pass
0.15	30	0.01	RMS	156.965 k	-57.35	-13.00	Pass
30	1500	1	RMS	1.459 G	-49.79	-13.00	Pass
1500	3000	1	RMS	2.136 G	29.23	-13.00	Fail
3000	26500	1	RMS	26.205 G	-18.80	-13.00	Pass



NOTE: The failed emission is the fundamental frequency, which should be exempted.

2.2.6 EUT Conf. TX_10M_T_TM1.1

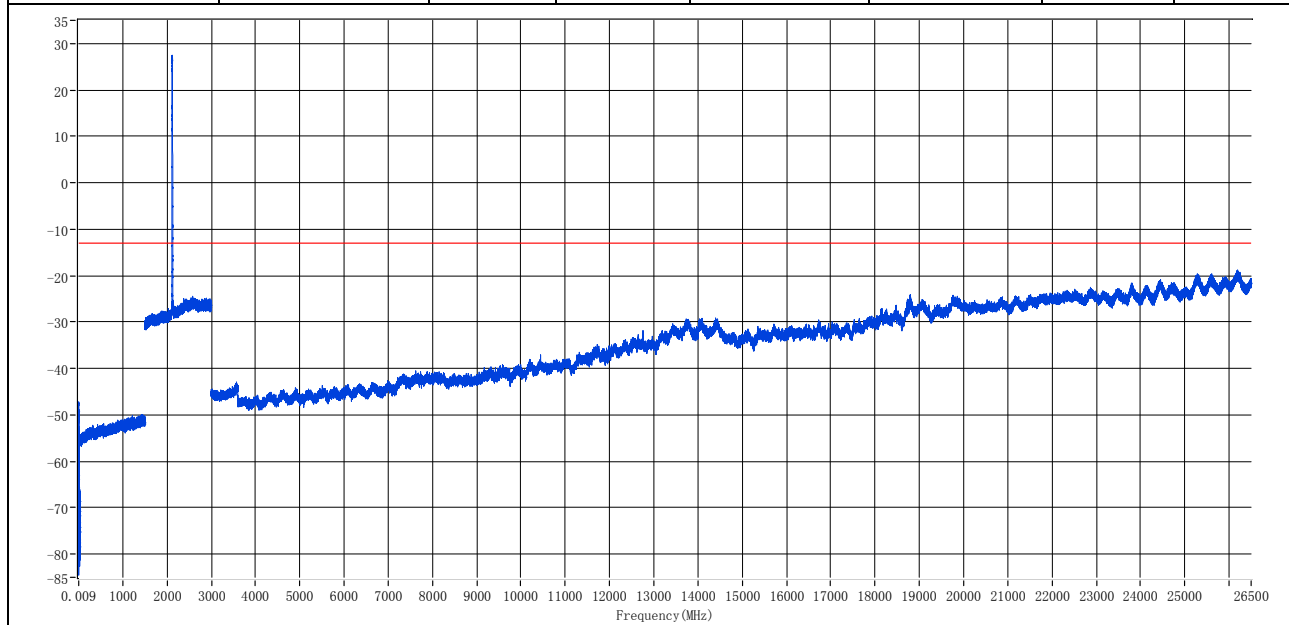
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.479 k	-46.50	-13.00	Pass
0.15	30	0.01	RMS	176.865 k	-54.12	-13.00	Pass
30	1500	1	RMS	1.426 G	-49.79	-13.00	Pass
1500	3000	1	RMS	2.150 G	29.09	-13.00	Fail
3000	26500	1	RMS	26.212 G	-18.84	-13.00	Pass



NOTE: The failed emission is the fundamental frequency, which should be exempted.

2.2.7 EUT Conf. TX_15M_B_TM1.1

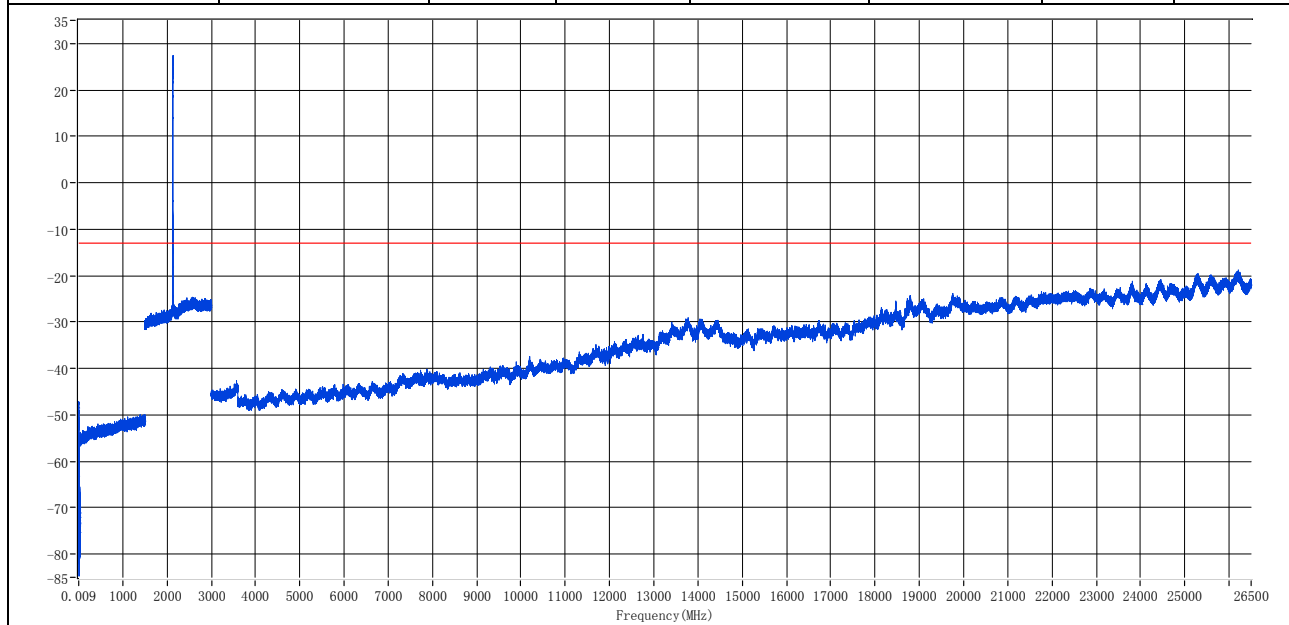
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.460 k	-47.22	-13.00	Pass
0.15	30	0.01	RMS	232.585 k	-56.53	-13.00	Pass
30	1500	1	RMS	1.450 G	-49.98	-13.00	Pass
1500	3000	1	RMS	2.119 G	27.45	-13.00	Fail
3000	26500	1	RMS	26.199 G	-18.82	-13.00	Pass



NOTE: The failed emission is the fundamental frequency, which should be exempted.

2.2.8 EUT Conf. TX_15M_M_TM1.1

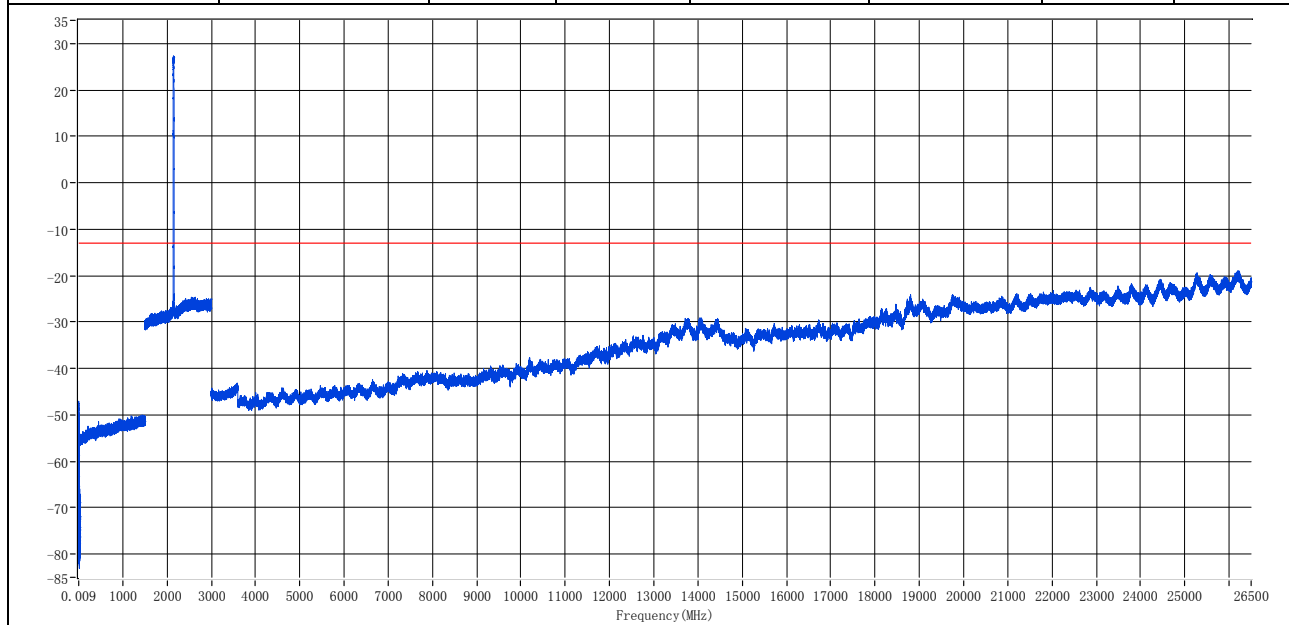
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.413 k	-47.11	-13.00	Pass
0.15	30	0.01	RMS	224.625 k	-58.21	-13.00	Pass
30	1500	1	RMS	1.477 G	-49.96	-13.00	Pass
1500	3000	1	RMS	2.138 G	27.39	-13.00	Fail
3000	26500	1	RMS	26.206 G	-18.79	-13.00	Pass



NOTE: The failed emission is the fundamental frequency, which should be exempted.

2.2.9 EUT Conf. TX_15M_T_TM1.1

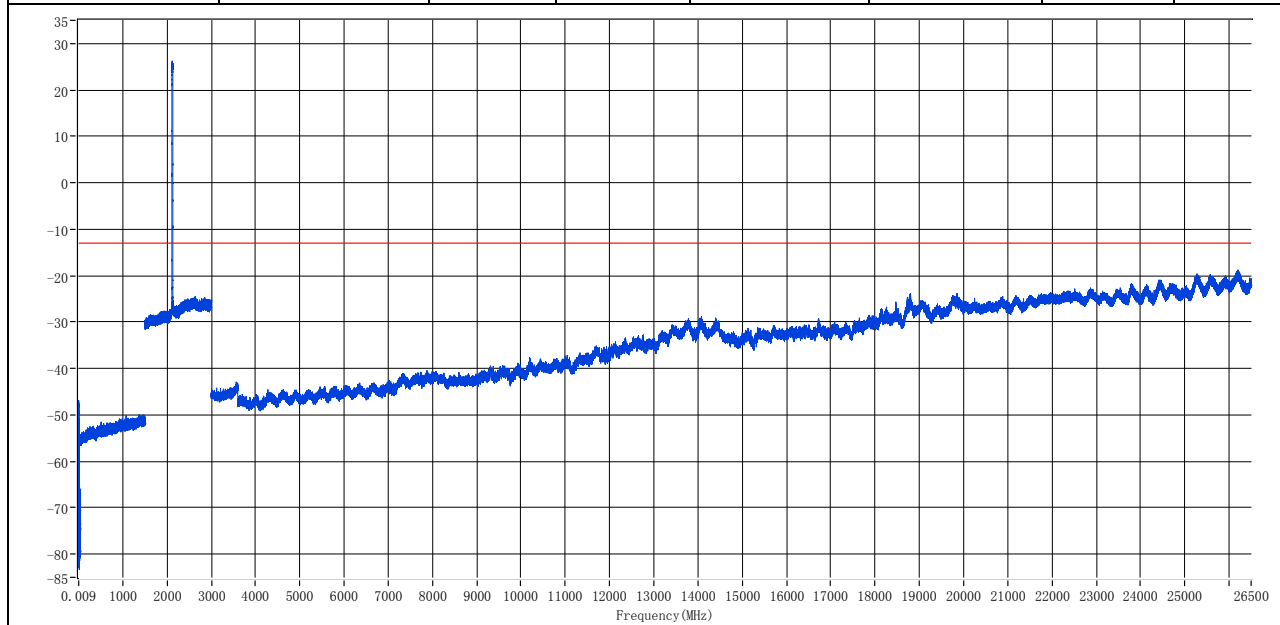
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.413 k	-47.04	-13.00	Pass
0.15	30	0.01	RMS	155.970 k	-55.50	-13.00	Pass
30	1500	1	RMS	1.435 G	-50.01	-13.00	Pass
1500	3000	1	RMS	2.152 G	27.30	-13.00	Fail
3000	26500	1	RMS	26.200 G	-18.97	-13.00	Pass



NOTE: The failed emission is the fundamental frequency, which should be exempted.

2.2.10 EUT Conf. TX_20M_B_TM1.1

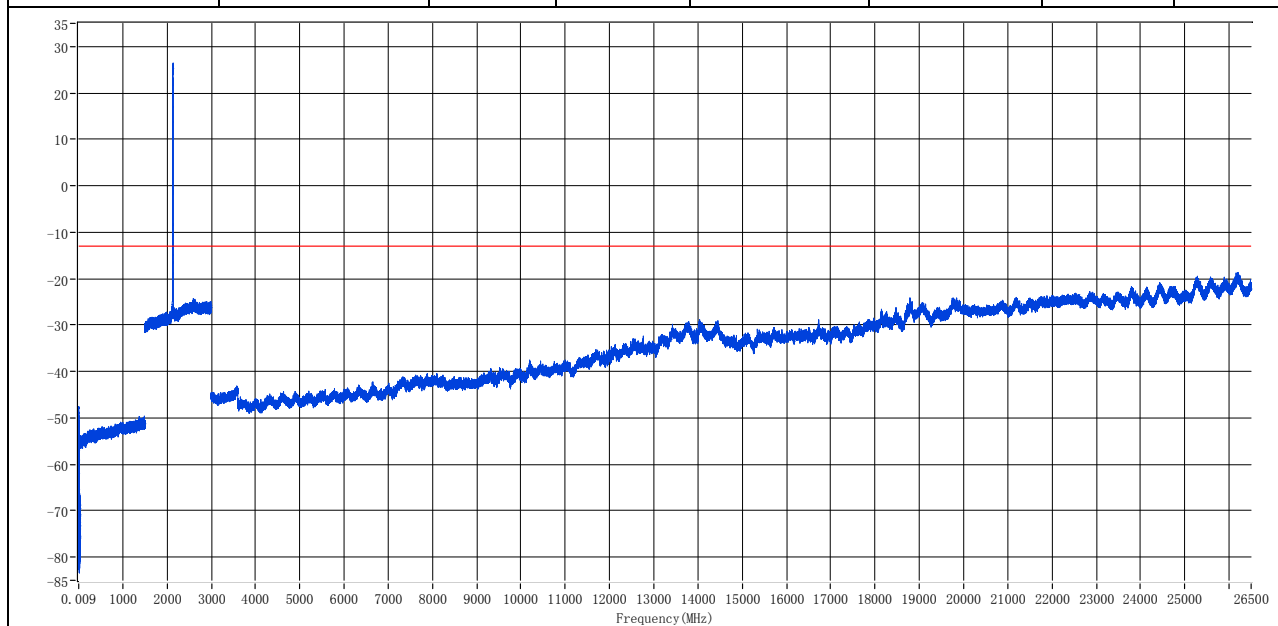
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.361 k	-46.96	-13.00	Pass
0.15	30	0.01	RMS	156.965 k	-56.58	-13.00	Pass
30	1500	1	RMS	1.375 G	-49.95	-13.00	Pass
1500	3000	1	RMS	2.113 G	26.26	-13.00	Fail
3000	26500	1	RMS	26.204 G	-18.79	-13.00	Pass



NOTE: The failed emission is the fundamental frequency, which should be exempted.

2.2.11 EUT Conf. TX_20M_M_TM1.1

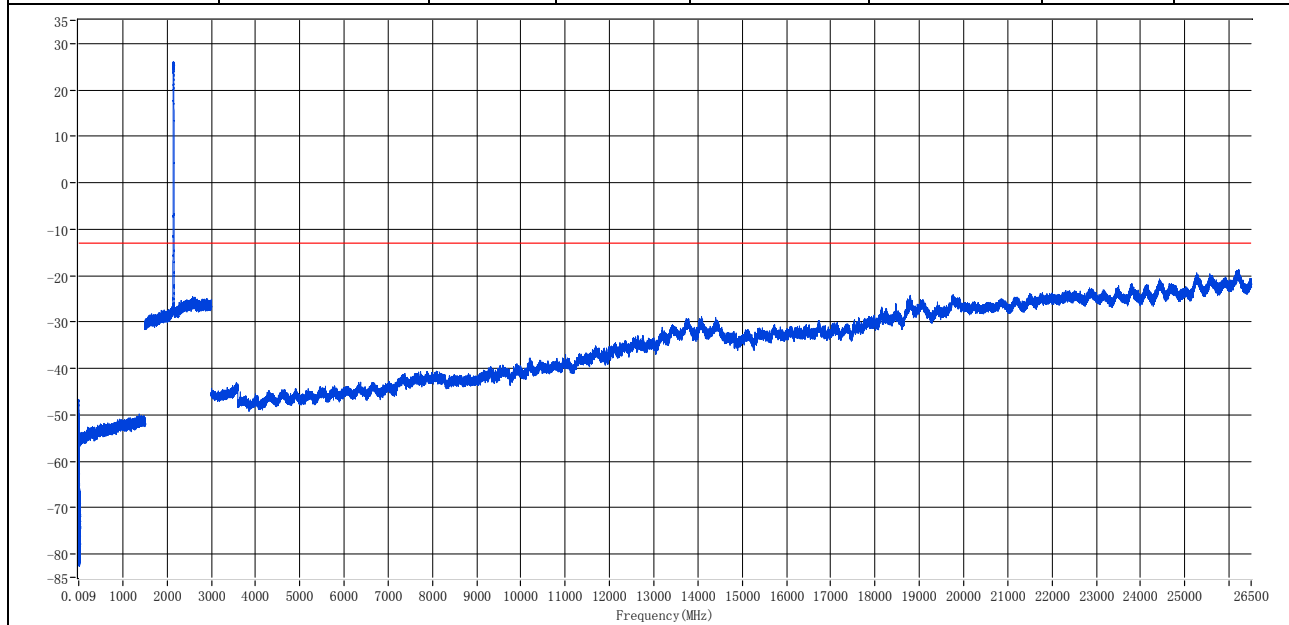
Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.549 k	-47.55	-13.00	Pass
0.15	30	0.01	RMS	162.935 k	-57.11	-13.00	Pass
30	1500	1	RMS	1.486 G	-49.62	-13.00	Pass
1500	3000	1	RMS	2.135 G	26.47	-13.00	Fail
3000	26500	1	RMS	26.203 G	-18.64	-13.00	Pass



NOTE: The failed emission is the fundamental frequency, which should be exempted.

2.2.12 EUT Conf. TX_20M_T_TM1.1

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
0.009	0.15	0.001	RMS	34.643 k	-46.67	-13.00	Pass
0.15	30	0.01	RMS	158.955 k	-58.26	-13.00	Pass
30	1500	1	RMS	1.371 G	-49.79	-13.00	Pass
1500	3000	1	RMS	2.152 G	26.05	-13.00	Fail
3000	26500	1	RMS	26.216 G	-18.69	-13.00	Pass



NOTE: The failed emission is the fundamental frequency, which should be exempted.



Appendix F: Field Strength of Spurious Radiation



1 Result Table

NOTE 1: For the MIMO application, the test is performed at one antenna port with the limit requirement adjusted by antenna ports number (i.e. the -13 dBm limit is reduced to “-13 [dBm] - 10 *log(N) [dB]”, in which N denotes the antenna ports number used by MIMO application).

NOTE 2: For measurement uses the Peak method.

EUT Conf.	Maximum Emission [dBm]	Verdict
EUT Conf. TX_5M_M_TM1.1	<-16	Pass

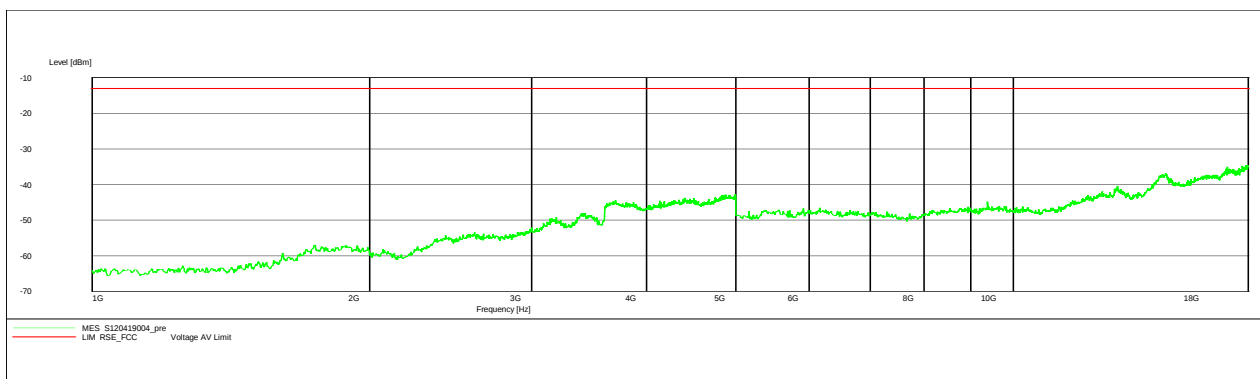
2 Test Plot

2.1 EUT Conf. TX_5M_M_TM1.1

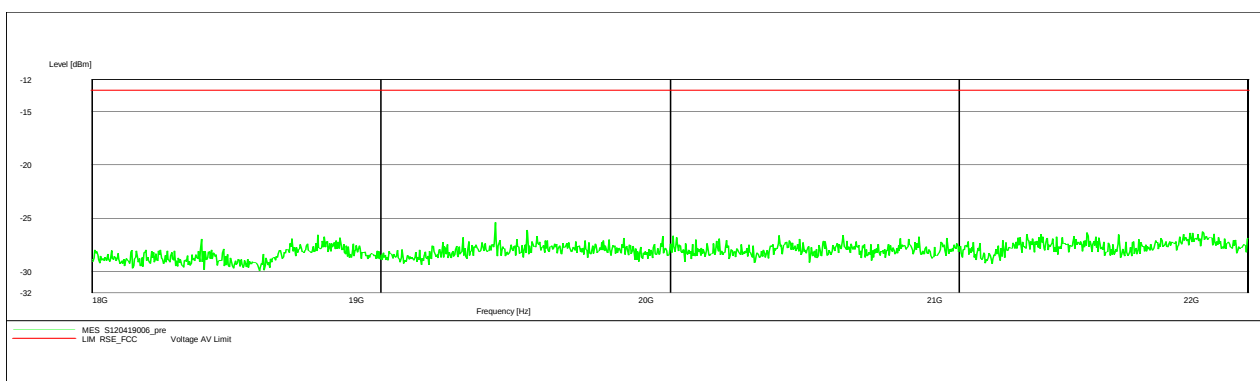
30MHz-1GHz



1GHz-18GHz



18GHz-22GHz





Appendix G: Frequency Stability

1 Frequency Error vs. Temperature:

EUT Conf.	Voltage	Temperature	Freq. Error [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Verdict
EUT Conf. TX_5M_M_TM1.1	100%	-30 °C	-0.06	-0.00003	-0.00044	Pass
		-20 °C	-2.11	-0.00099	-0.00140	Pass
		-10 °C	-1.68	-0.00079	-0.00120	Pass
		0 °C	0.04	0.00002	-0.00039	Pass
		+10 °C	-1.28	-0.00060	-0.00101	Pass
		+20 °C	0.87	0.00041	0	Pass
		+30 °C	0.66	0.00031	-0.00010	Pass
		+40 °C	-1.39	-0.00065	-0.00106	Pass
		+50 °C	-2.53	-0.00119	-0.00159	Pass

2 Frequency Error vs. Voltage:

EUT Conf.	Temperature	Voltage	Freq. Error [Hz]	Freq. vs. rated [ppm]	Freq. vs. 20 °C [ppm]	Verdict
EUT Conf. TX_5M_M_TM1.1	+20 °C	85 %	1.53	0.00072	0.00006	Pass
		100 %	1.66	0.00078	0	Pass
		115 %	-2.18	-0.00102	-0.00180	Pass



Appendix H: Receiver Spurious Emissions, Conducted

NOTE 1: The requirements are only applicable to IC requirements.

NOTE 2: For the MIMO application, the test is performed at one antenna port with the limit requirement adjusted by antenna ports number (i.e. the -57 dBm limit is reduced to “-57 [dBm] - 10 *log(N) [dB]” and the -53 dBm limit is reduced to “-53 [dBm] - 10 *log(N) [dB]”, in which N denotes the antenna ports number used by MIMO application).

NOTE 3: For the averaged unwanted emissions measurements, the measurement points in each sweep is greater than twice the Span/RBW in order to ensure bin-to-bin spacing of < RBW/2 so that narrowband signals are not lost between frequency bins. As to the present test item, the “Measurement Points = k * (Span / RBW)” with k between 4 and 5, which results in an acceptable level error of less than 0.5 dB. The setting of Measurement Points for all tests in this Appendix is as follow:

Port	Start Frequency [MHz]	Stop Frequency [MHz]	Measurement Points
Port A	30	1000	60002
	1000	12000	60002
Port B	30	1000	60002
	1000	3000	30001
	3000	12000	60002

1 Result Table

Port A:

EUT Conf.	Maximum Emission [dBm]	Verdict
EUT Conf. RX_5M_M	<-60/-56	Pass

Port B:

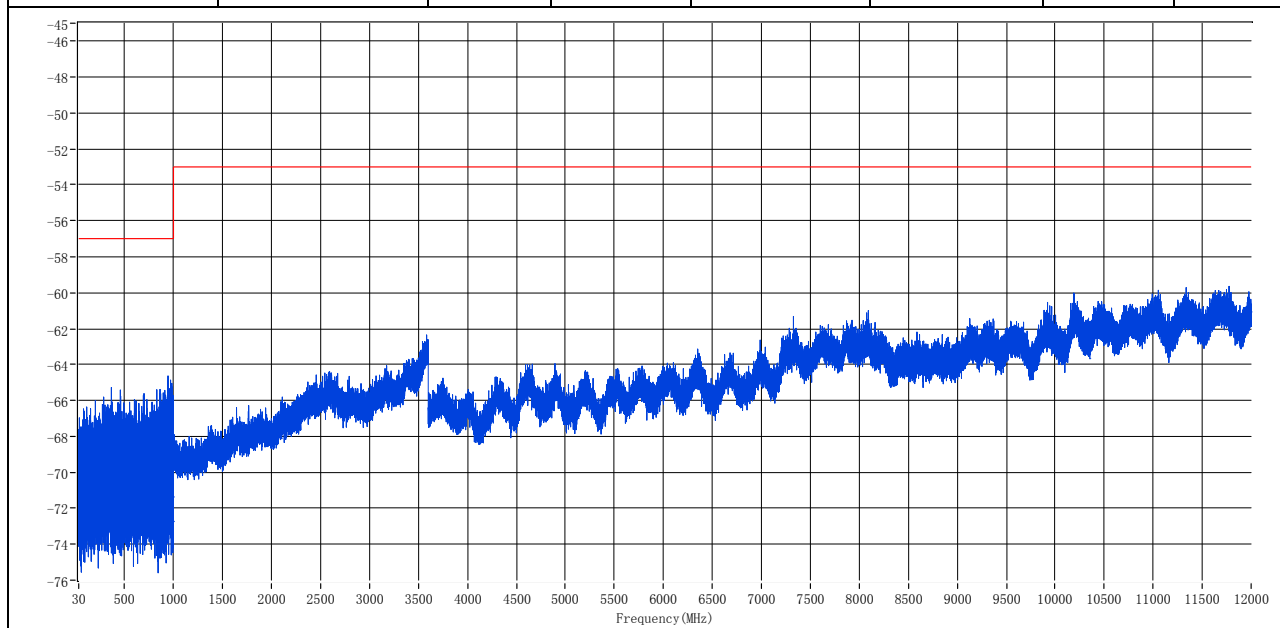
EUT Conf.	Maximum Emission [dBm]	Verdict
EUT Conf. RX_5M_M	<-60/-56	Pass

2 Test Plot

2.1 Port A

2.1.1 EUT Conf. RX_5M_M

Start Frequency [MHz]	Stop Frequency [MHz]	RBW [MHz]	Detector	Frequency [Hz]	Emission [dBm]	Limit [dBm]	Verdict
30	1000	0.12	MaxPeak	942.558 M	-64.64	-57.00	Pass
1000	12000	1	Average	11.774 G	-59.64	-53.00	Pass



2.2 Port B

2.2.1 EUT Conf. RX_5M_M

