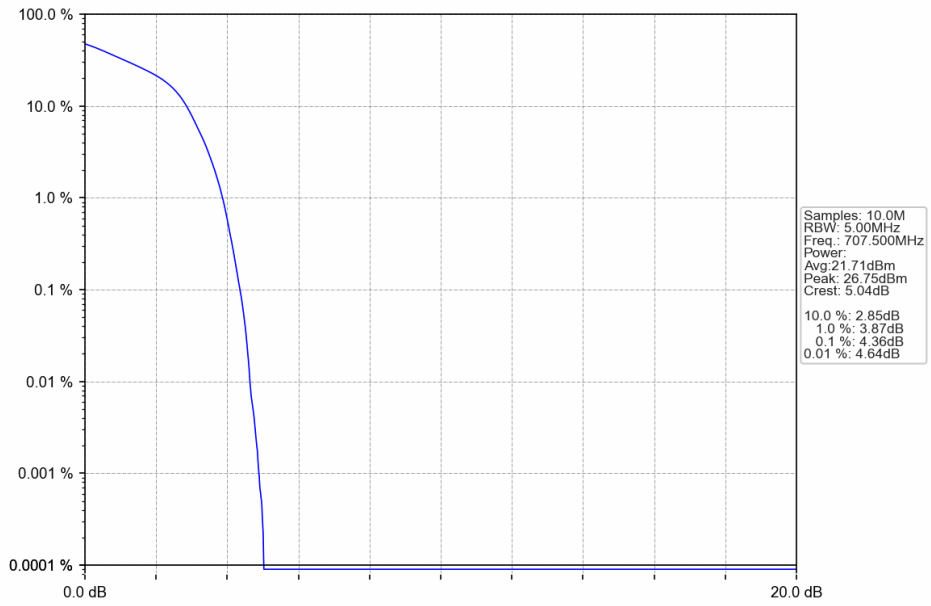
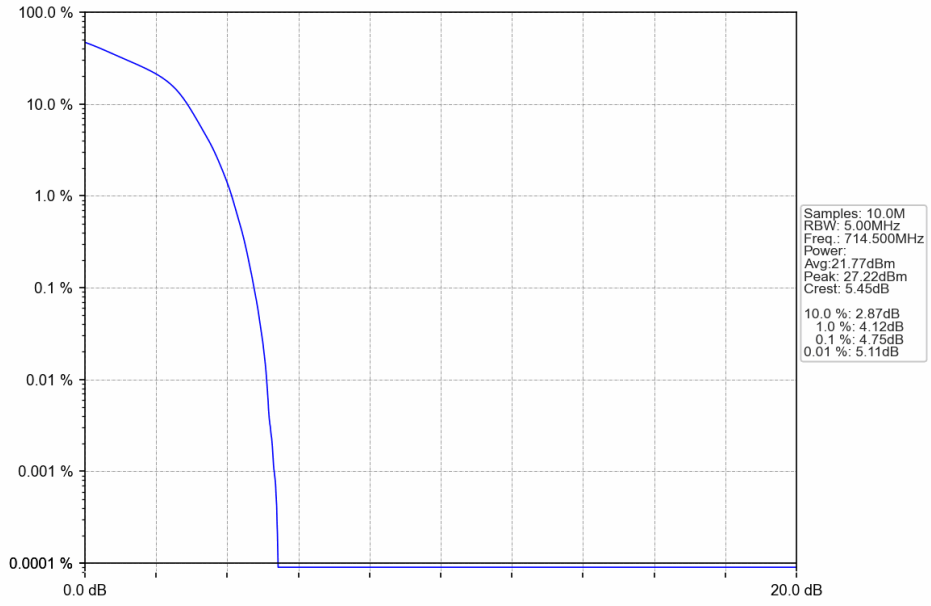
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



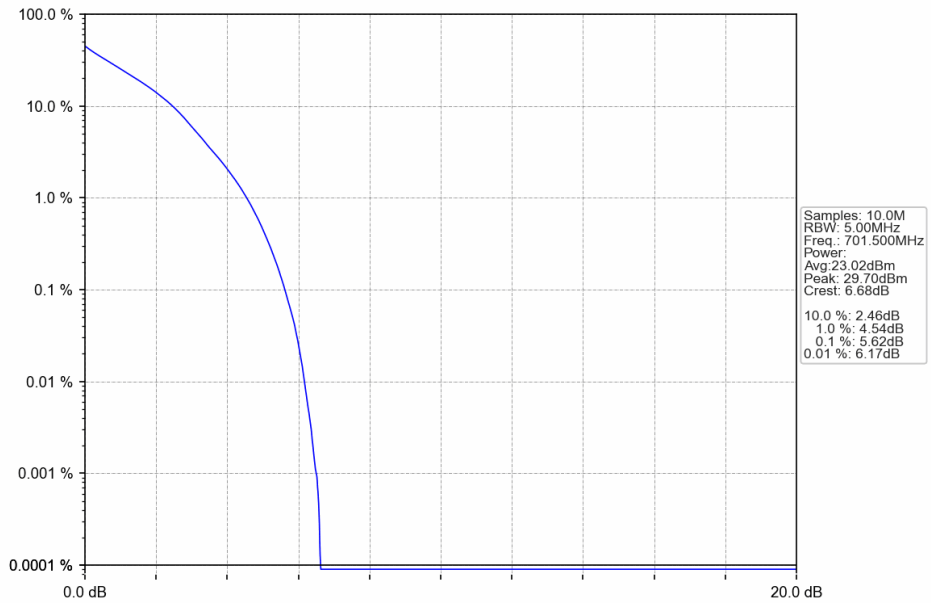
5.3 B12_5MHz

5.3.1 Test Result

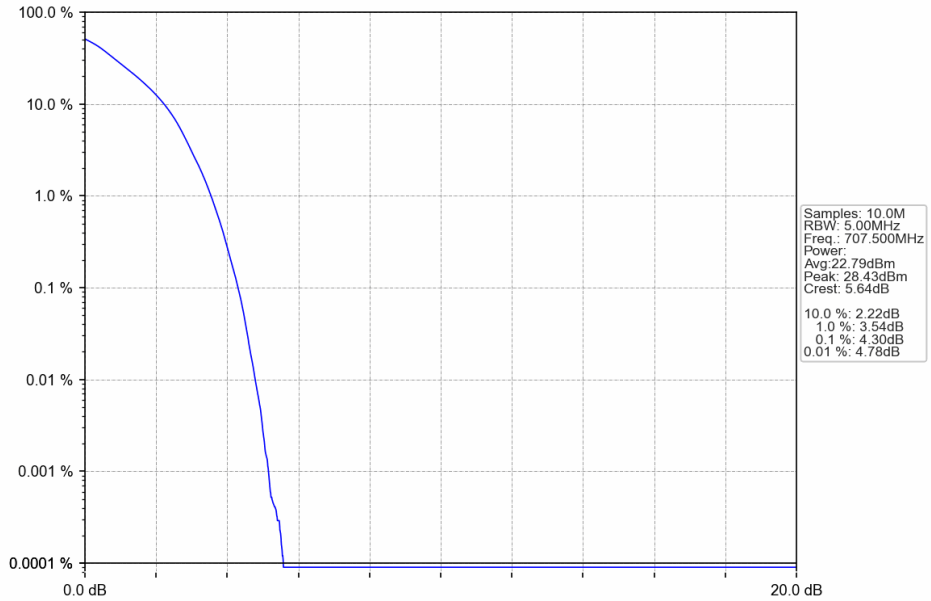
Band: 12 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	701.5	25	0	5.62	<=13	Pass
	707.5	25	0	4.30	<=13	Pass
	713.5	25	0	4.93	<=13	Pass
16QAM	701.5	25	0	6.41	<=13	Pass
	707.5	25	0	5.02	<=13	Pass
	713.5	25	0	5.75	<=13	Pass

5.3.2 Test Graph

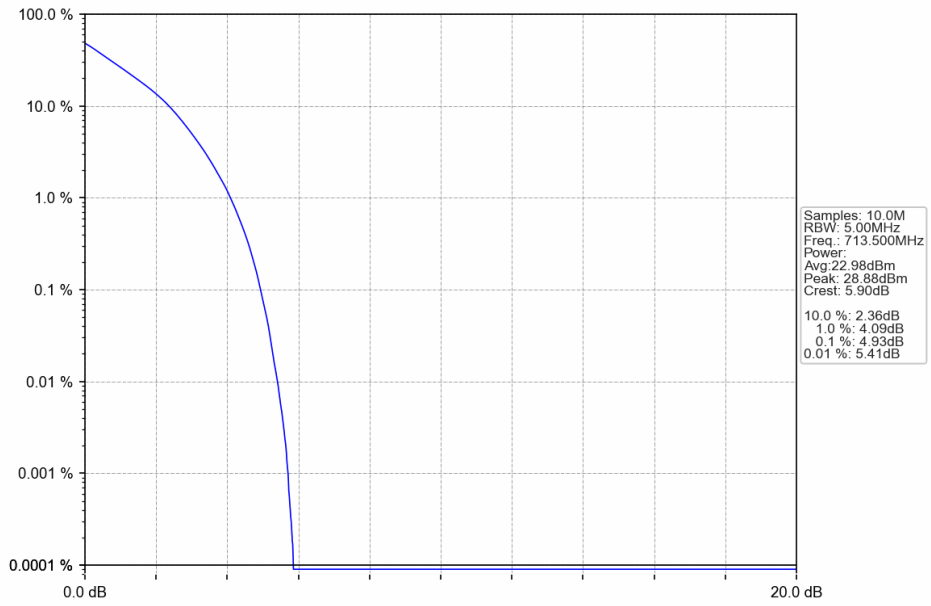
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



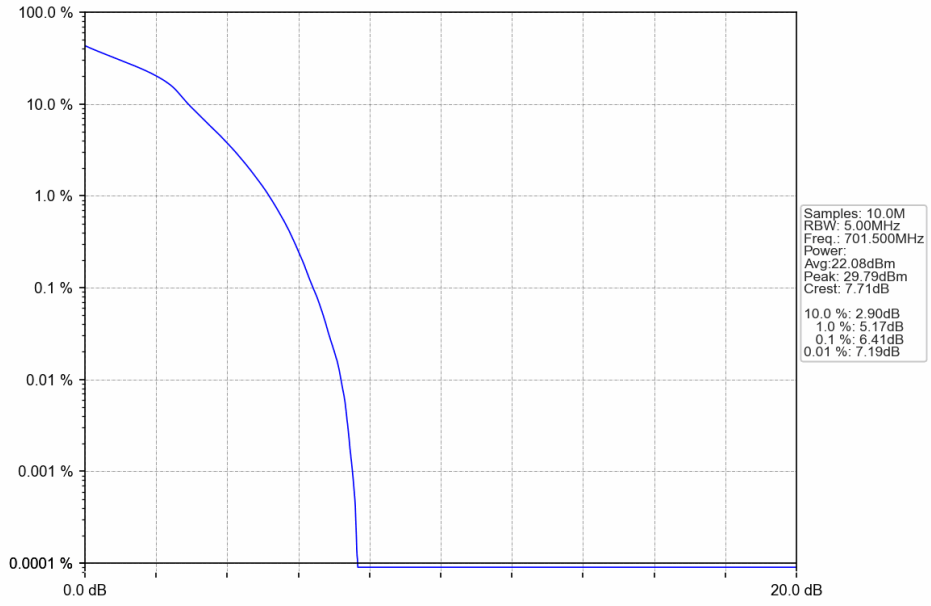
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



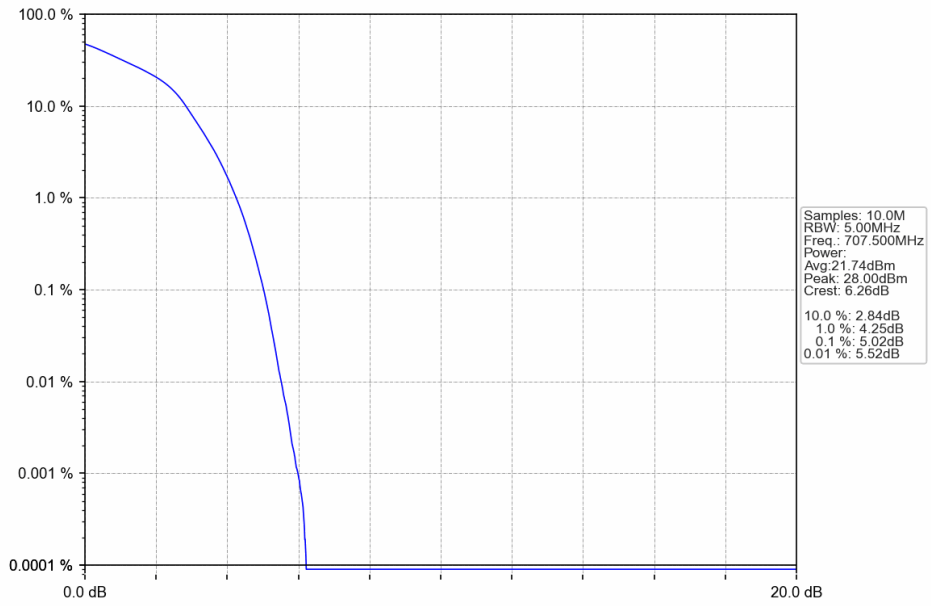
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



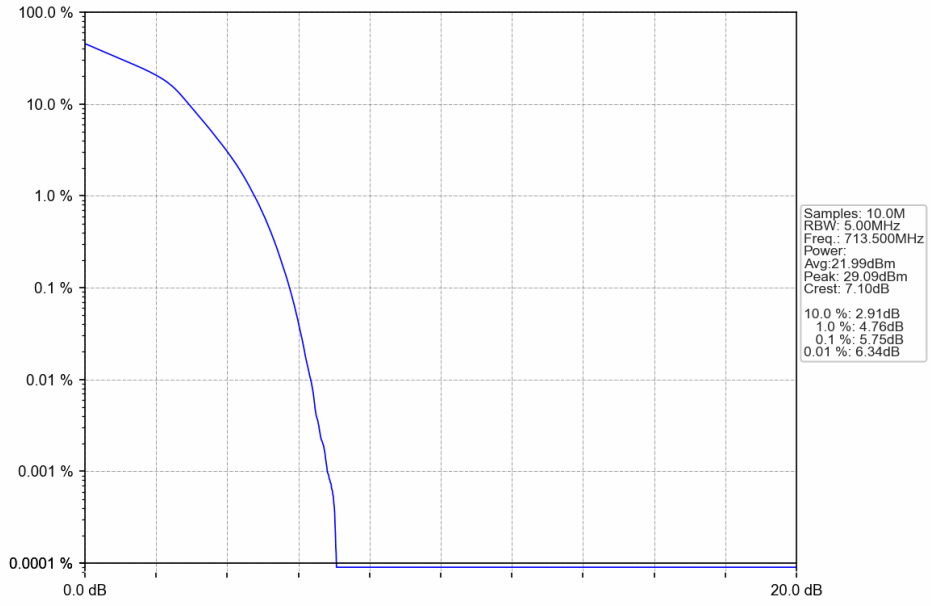
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



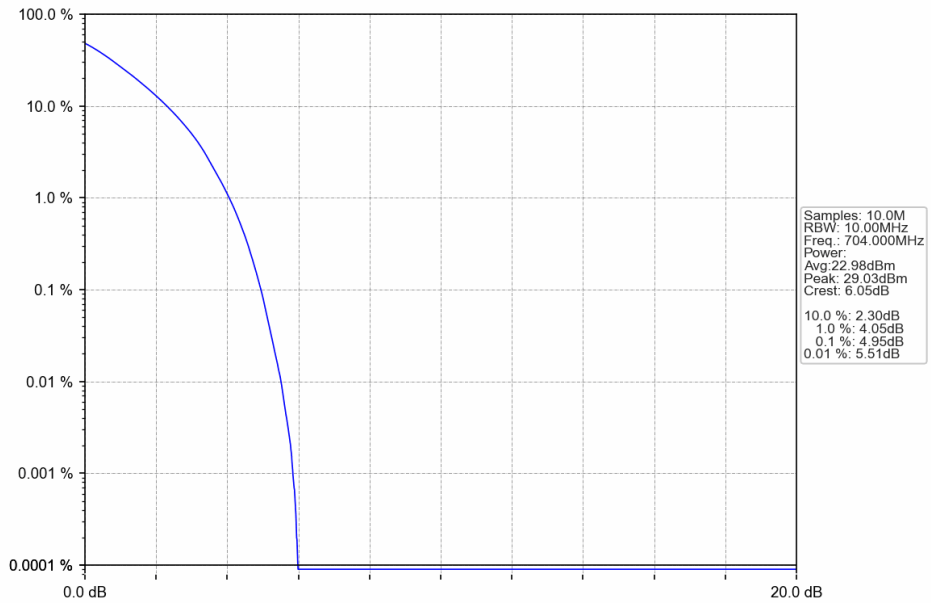
5.4 B12_10MHz

5.4.1 Test Result

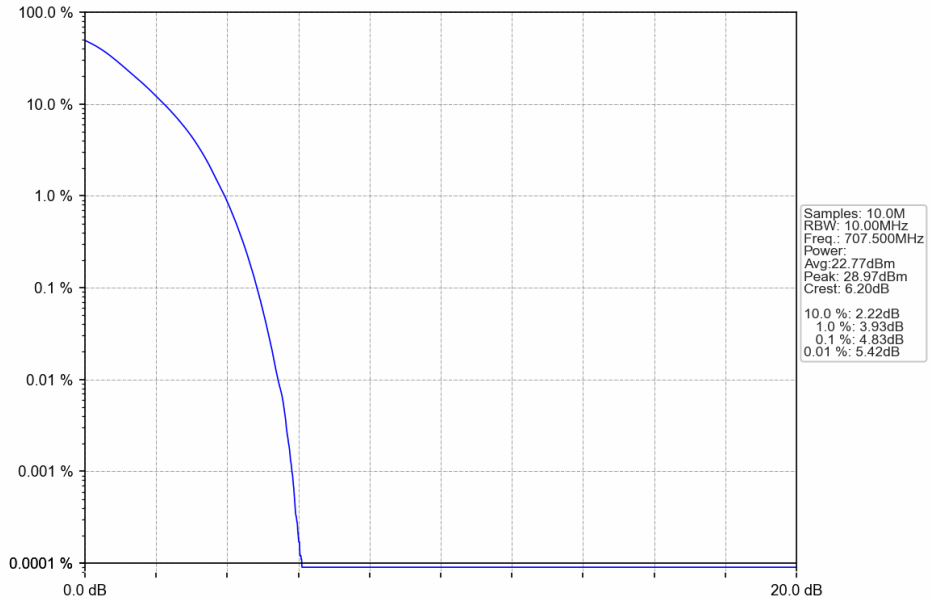
Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	704	50	0	4.95	<=13	Pass
	707.5	50	0	4.83	<=13	Pass
	711	50	0	4.75	<=13	Pass
16QAM	704	50	0	5.71	<=13	Pass
	707.5	50	0	5.59	<=13	Pass
	711	50	0	5.65	<=13	Pass

5.4.2 Test Graph

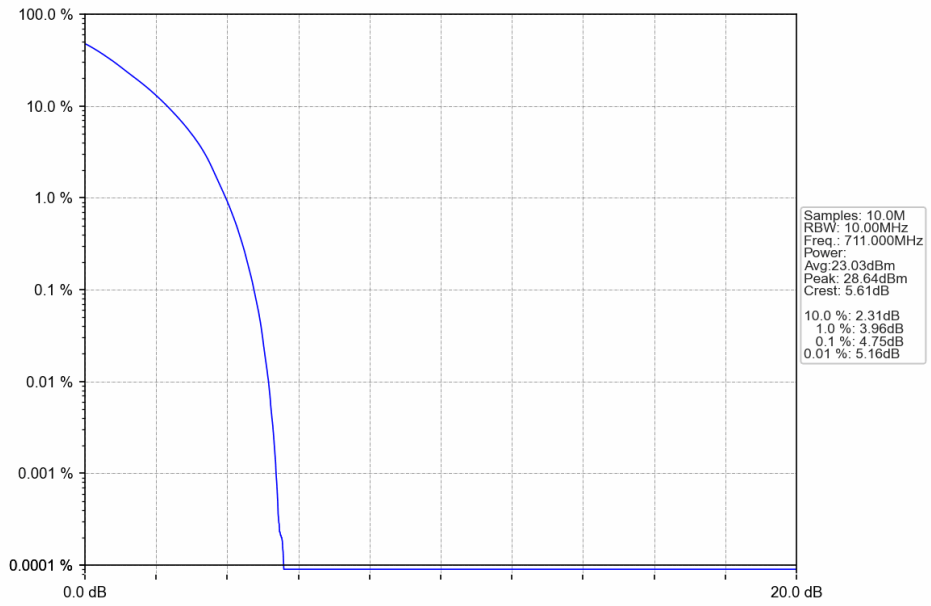
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



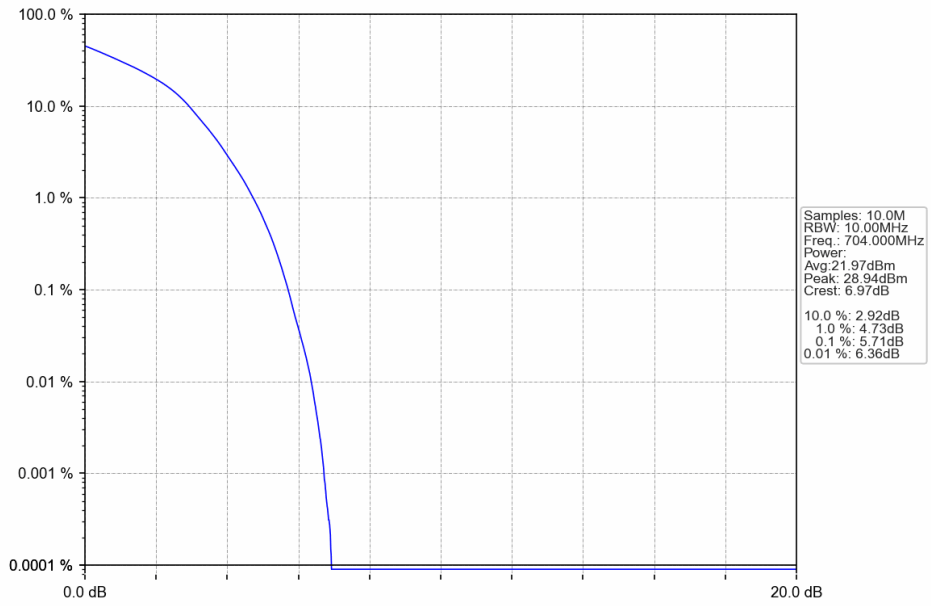
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



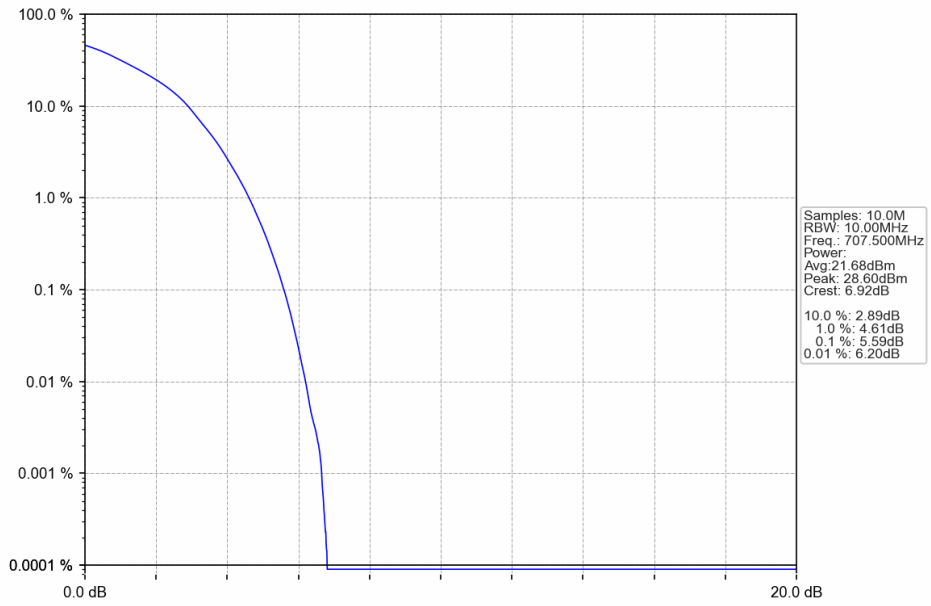
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



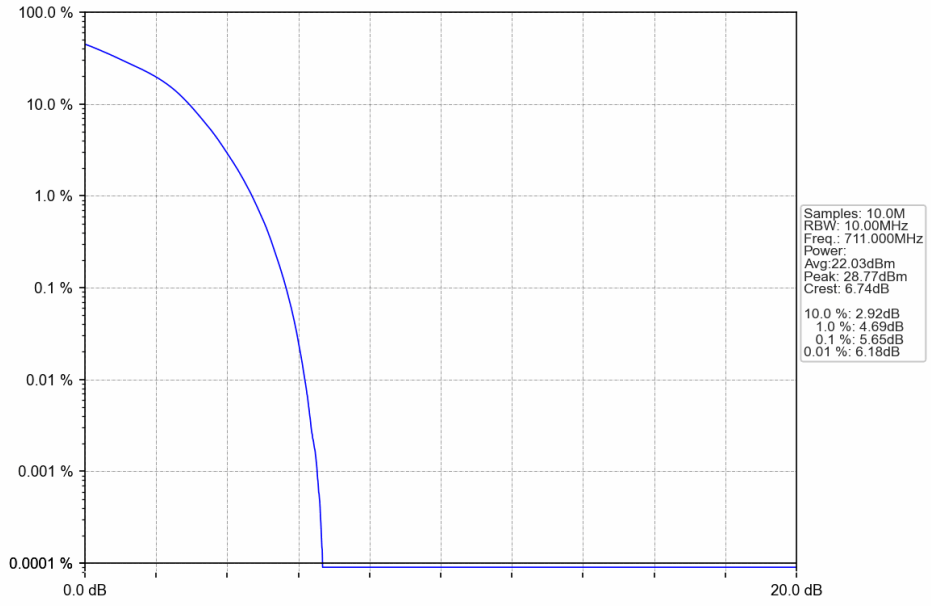
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



6. Spurious Emission

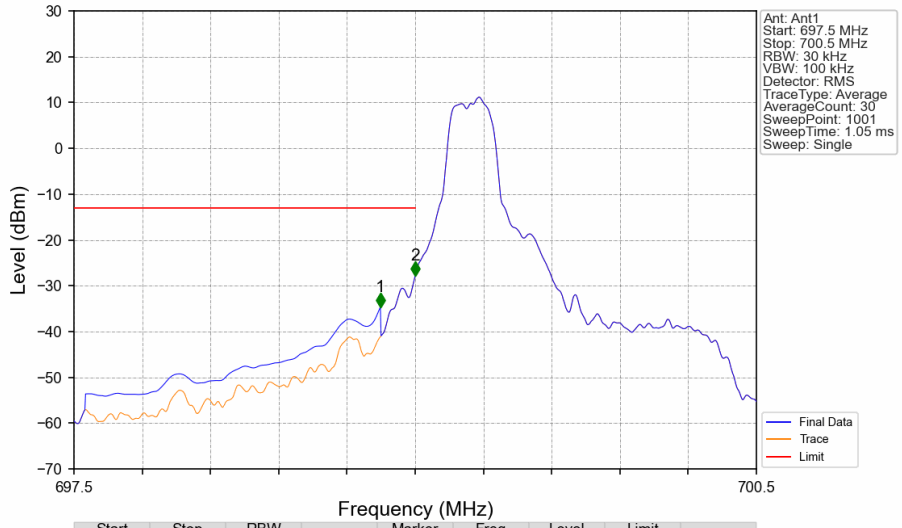
6.1 B12_1.4MHz

6.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	699.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	715.3	1	0	Refer To Test Graph		Pass
			5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
16QAM	699.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	715.3	1	0	Refer To Test Graph		Pass
			5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass

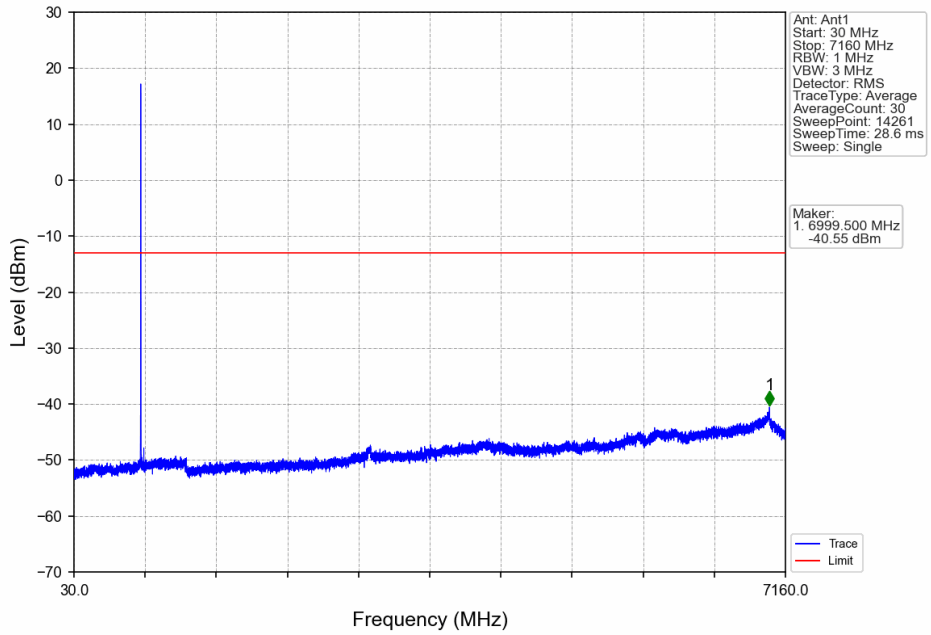
6.1.2 Test Graph

Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_1_0_NTNV

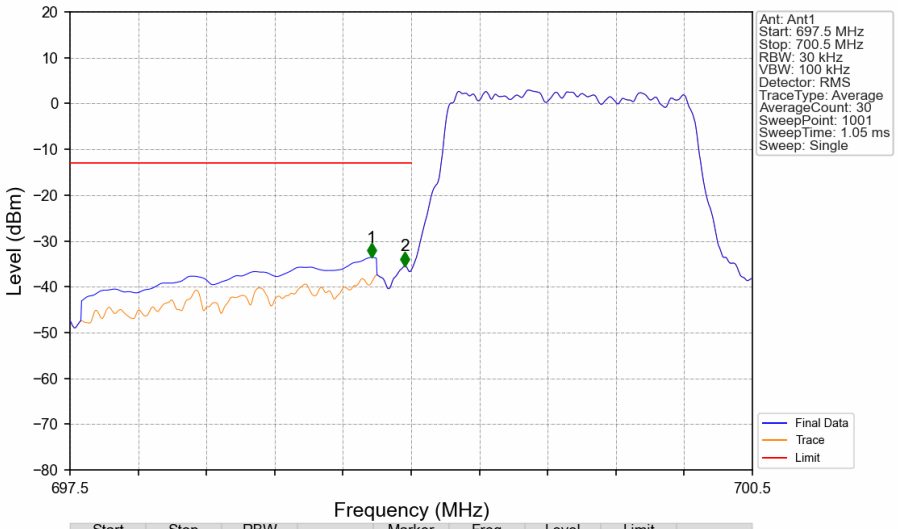


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.847	-34.64	-13	Pass
698.9	699	0.03	/	2	699.000	-27.78	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_1_0_NTNV

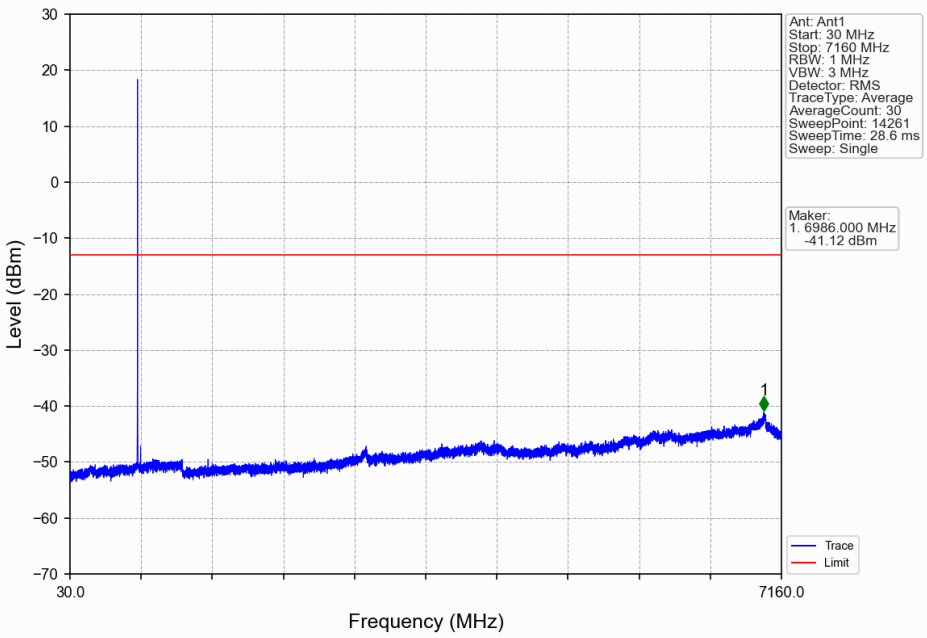


Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV

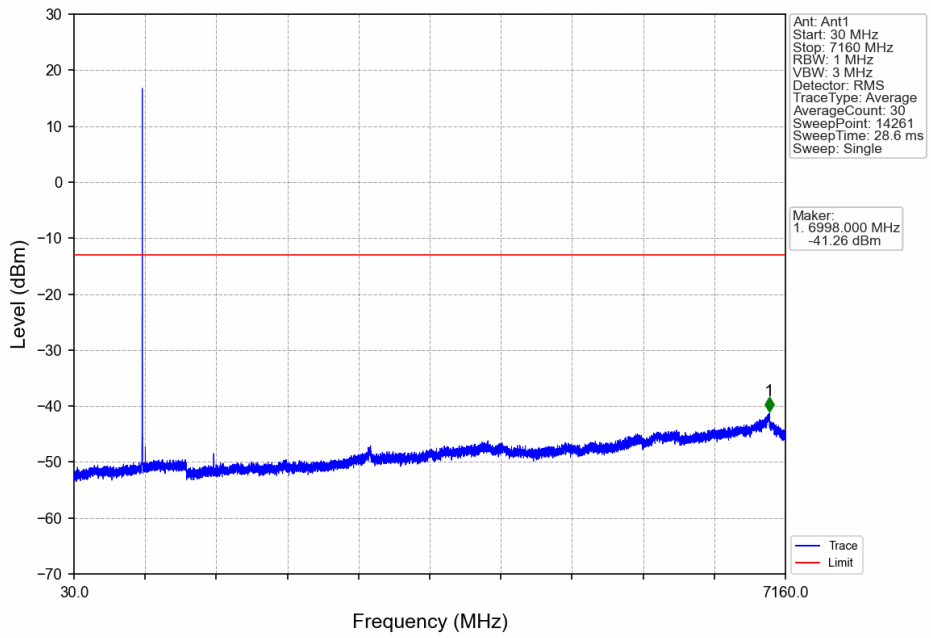


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.826	-33.58	-13	Pass
698.9	699	0.03	/	2	698.973	-35.49	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

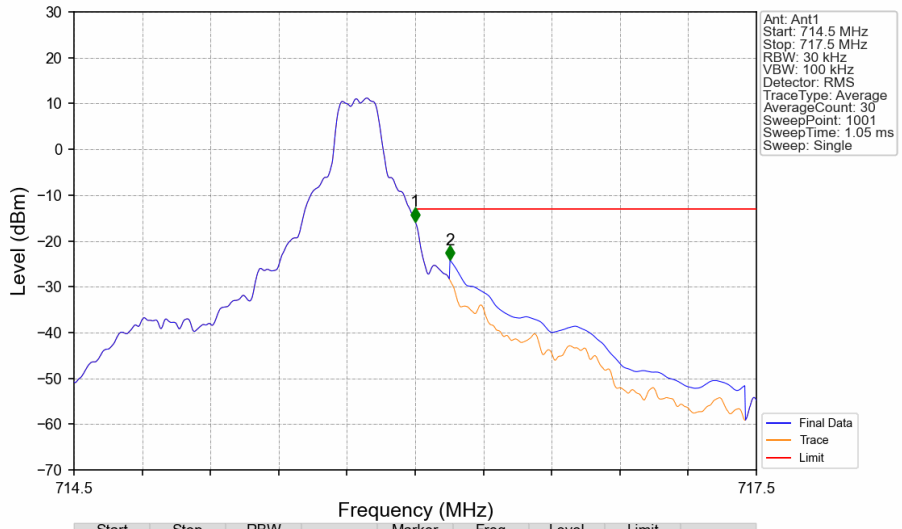
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_0_NTNV

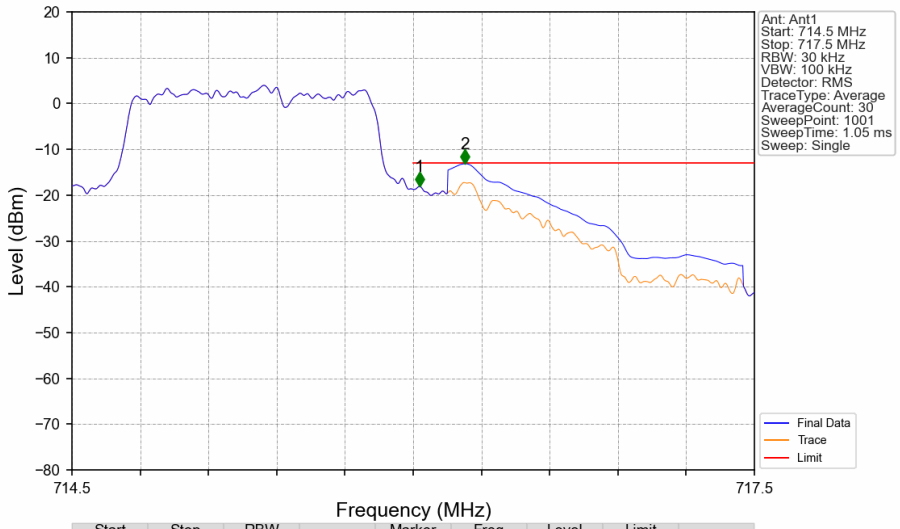


Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_5_NTNV



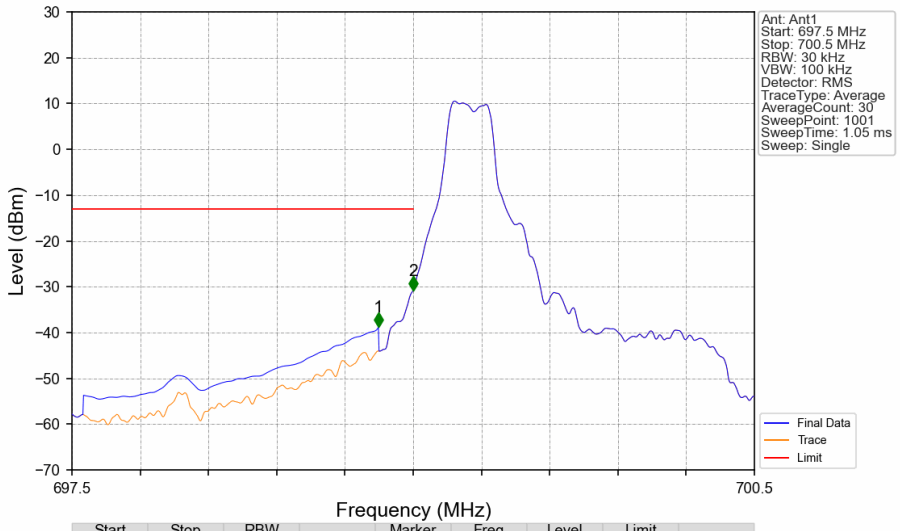
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-15.79	-13	Pass
716.1	717.5	0.1	CHP	2	716.153	-24.13	-13	Pass

Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



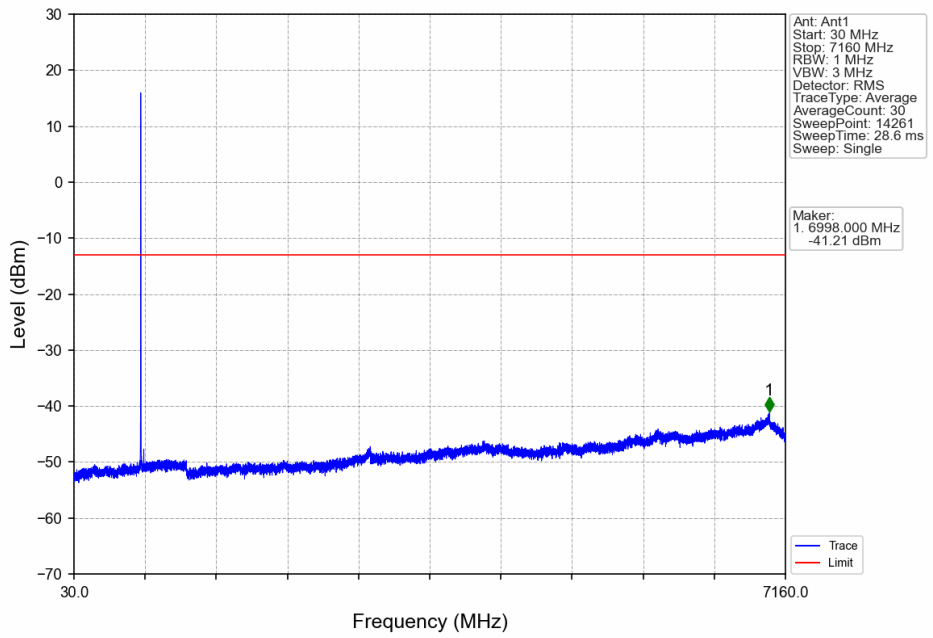
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.027	-18.13	-13	Pass
716.1	717.5	0.1	CHP	2	716.228	-13.16	-13	Pass

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV

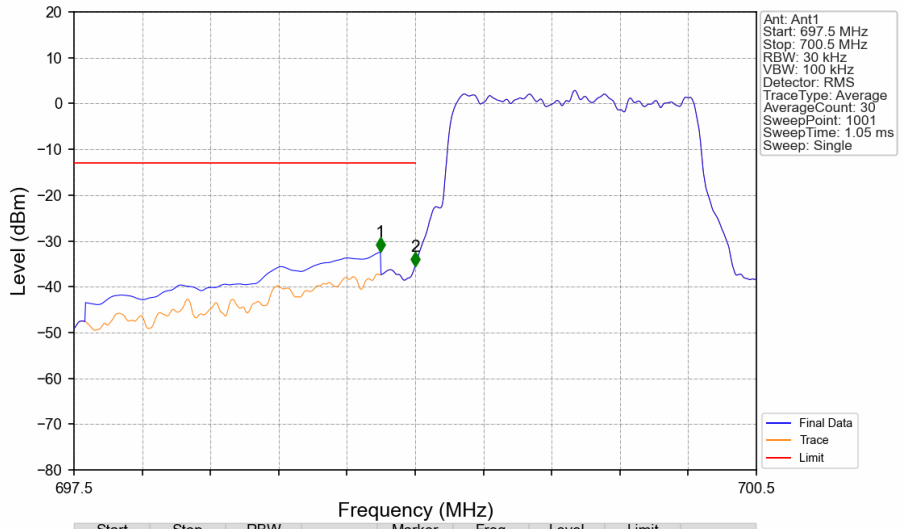


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.847	-38.85	-13	Pass
698.9	699	0.03	/	2	699.000	-30.83	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV

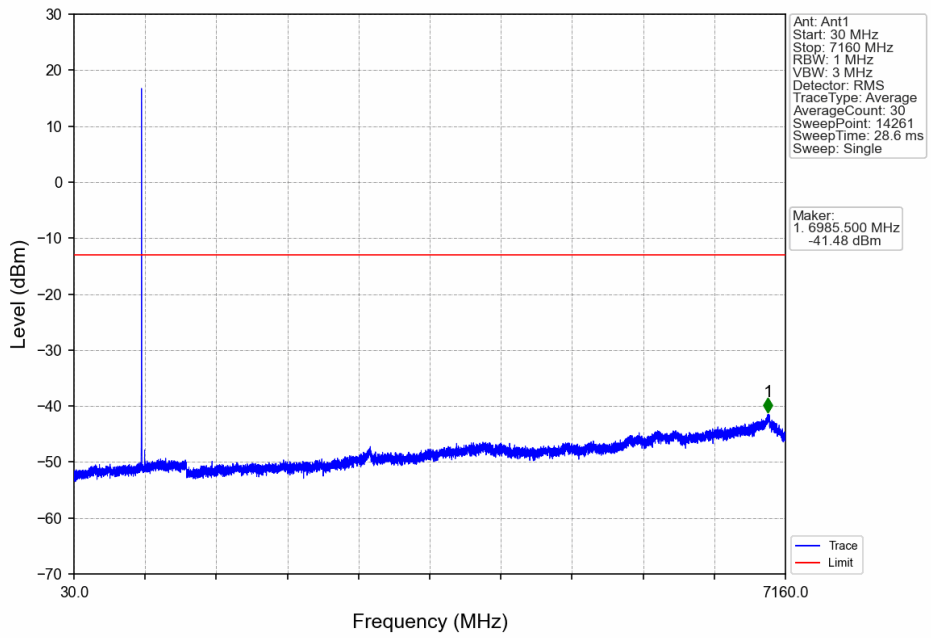


Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV

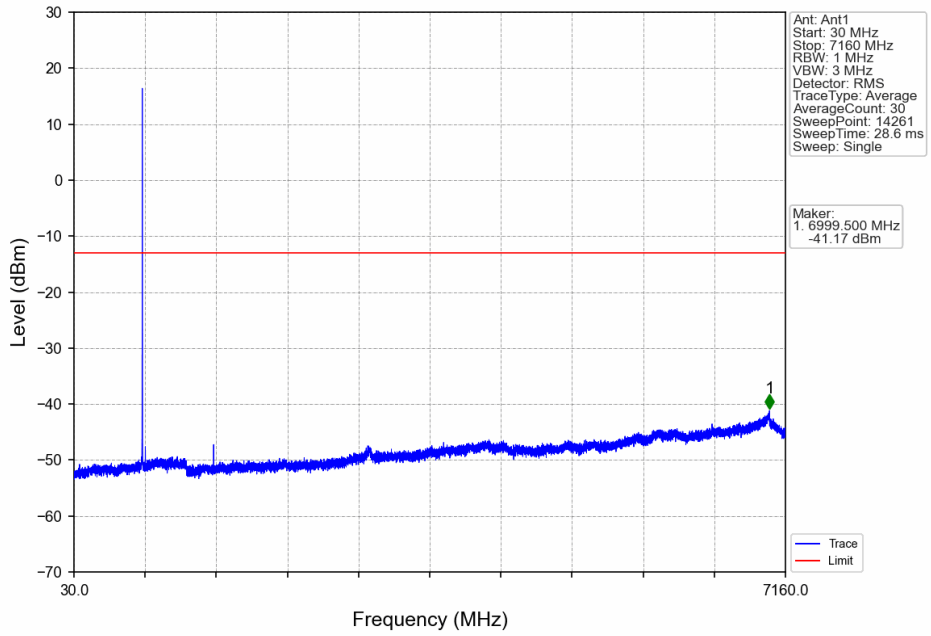


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.847	-32.40	-13	Pass
698.9	699	0.03	/	2	699.000	-35.51	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

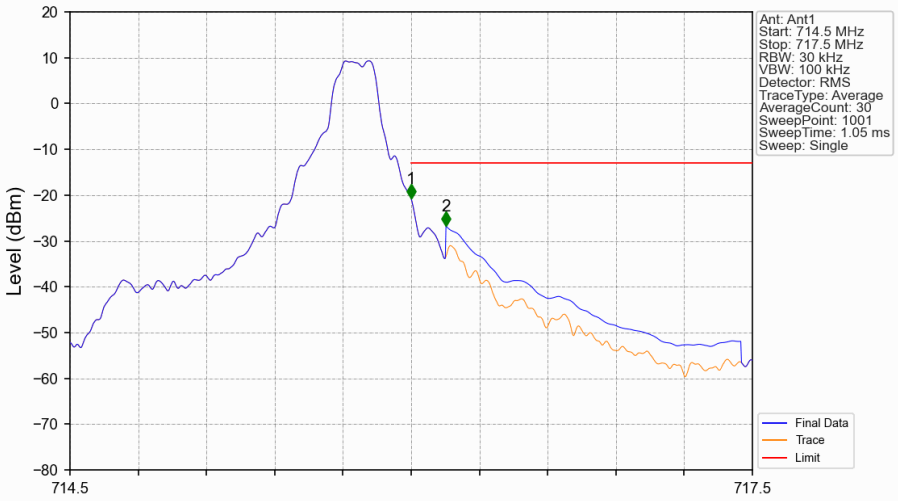
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_1_0_NTNV

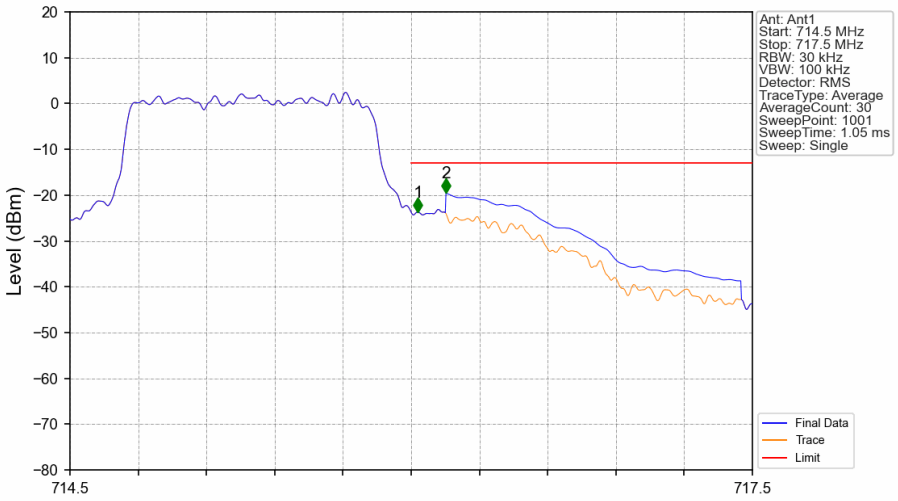


Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_1_5_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-20.79	-13	Pass
716.1	717.5	0.1	CHP	2	716.153	-26.74	-13	Pass

Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.030	-23.70	-13	Pass
716.1	717.5	0.1	CHP	2	716.153	-19.57	-13	Pass

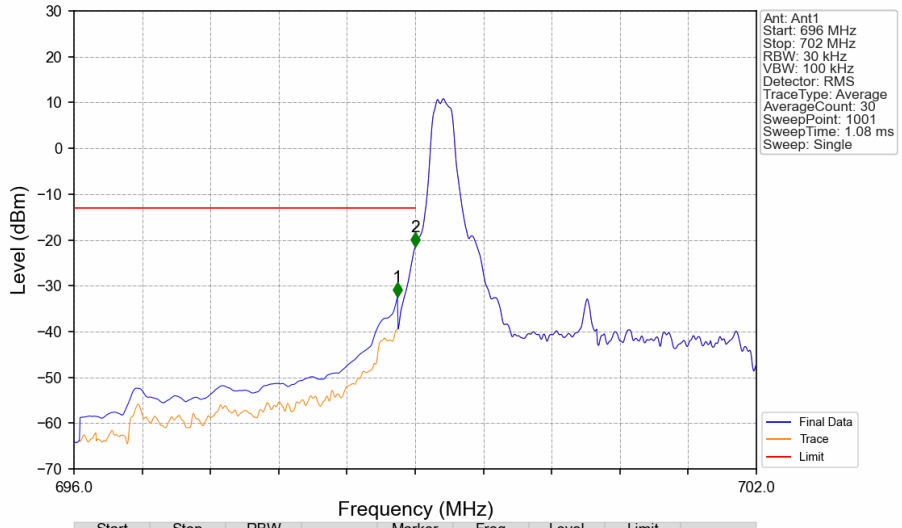
6.2 B12_3MHz

6.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	700.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	714.5	1	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
16QAM	700.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	714.5	1	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

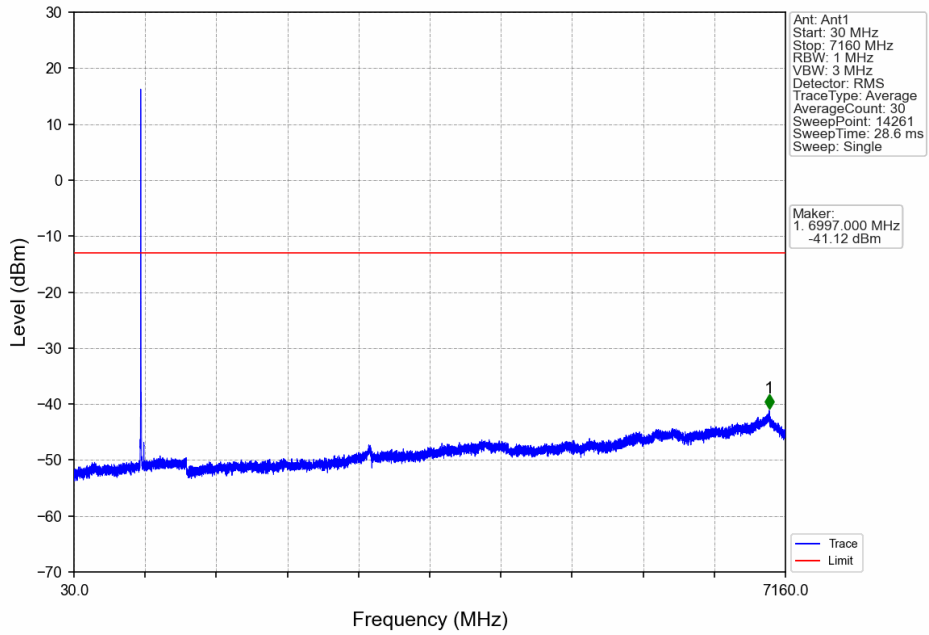
6.2.2 Test Graph

Band12_3MHz_QPSK_LCH_700.5MHz_RB_1_0_NTNV

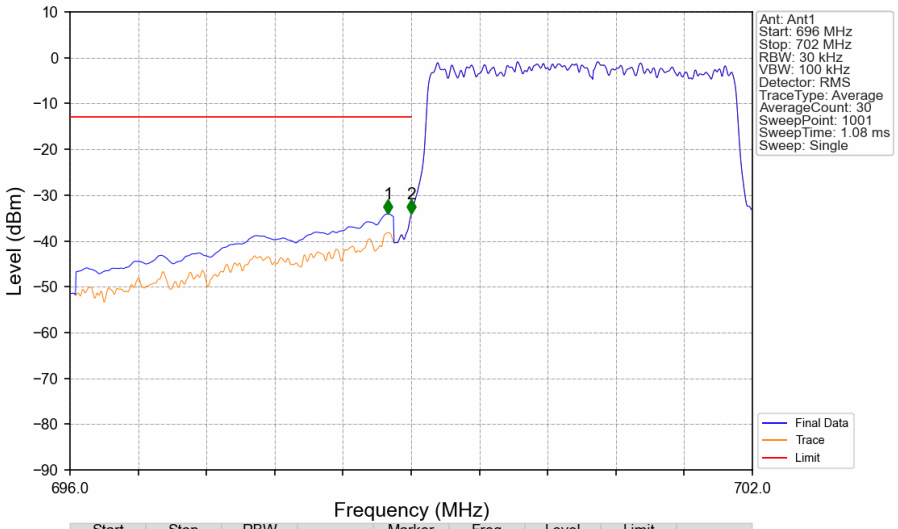


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.844	-32.46	-13	Pass
698.9	699	0.03	/	2	699.000	-21.47	-13	Pass
699	702	0.03	/	/	/	/	/	/

Band12_3MHz_QPSK_LCH_700.5MHz_RB_1_0_NTNV

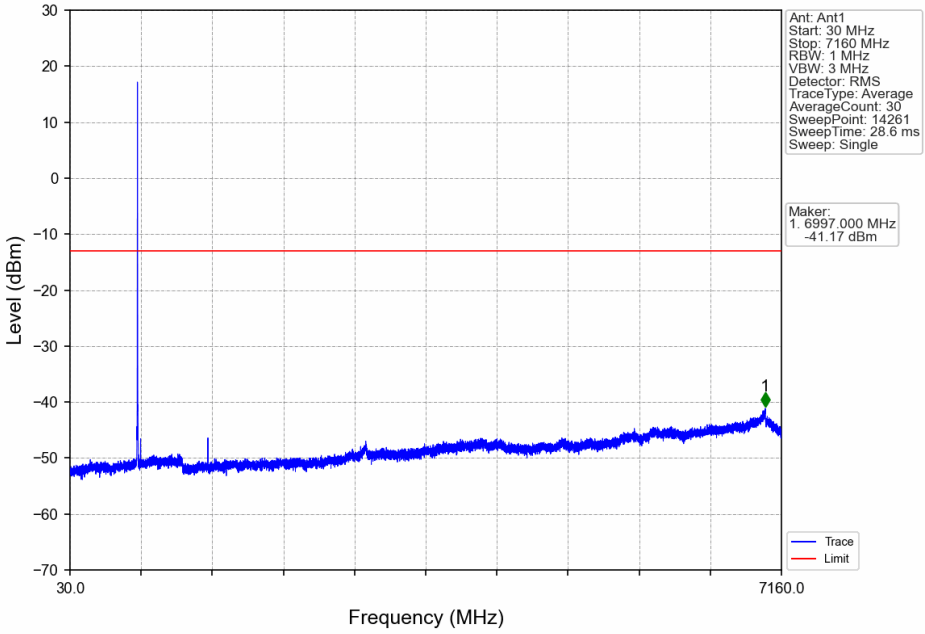


Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV

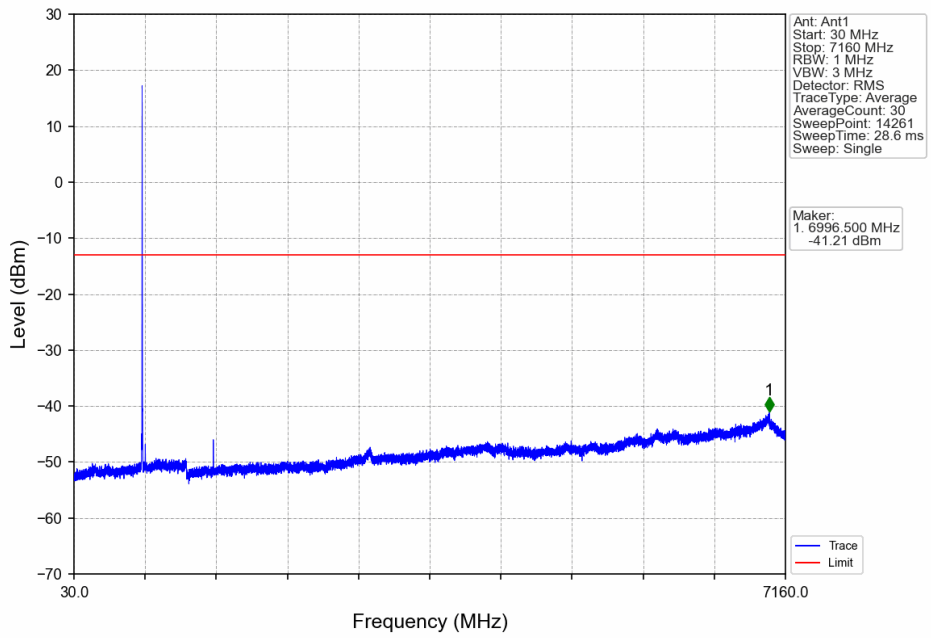


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.796	-34.06	-13	Pass
698.9	699	0.03	/	2	699.000	-34.11	-13	Pass
699	702	0.03	/	/	/	/	/	/

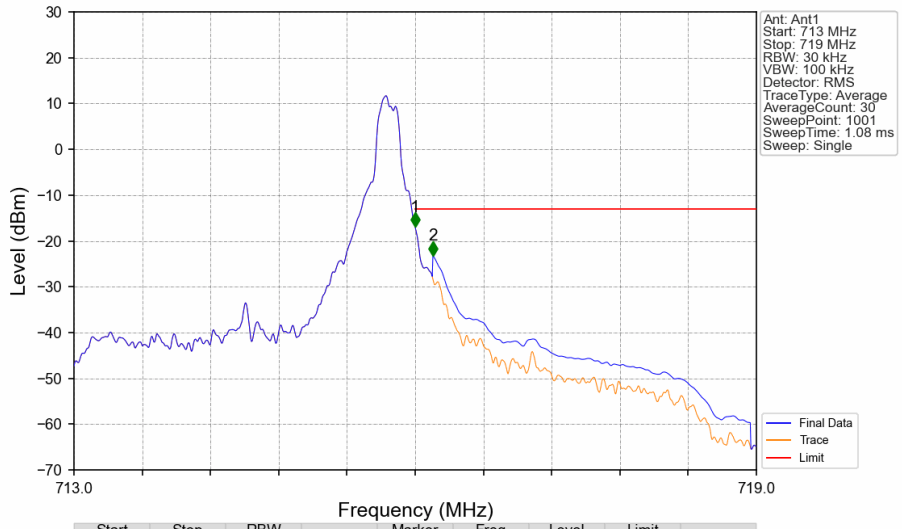
Band12_3MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_0_NTNV

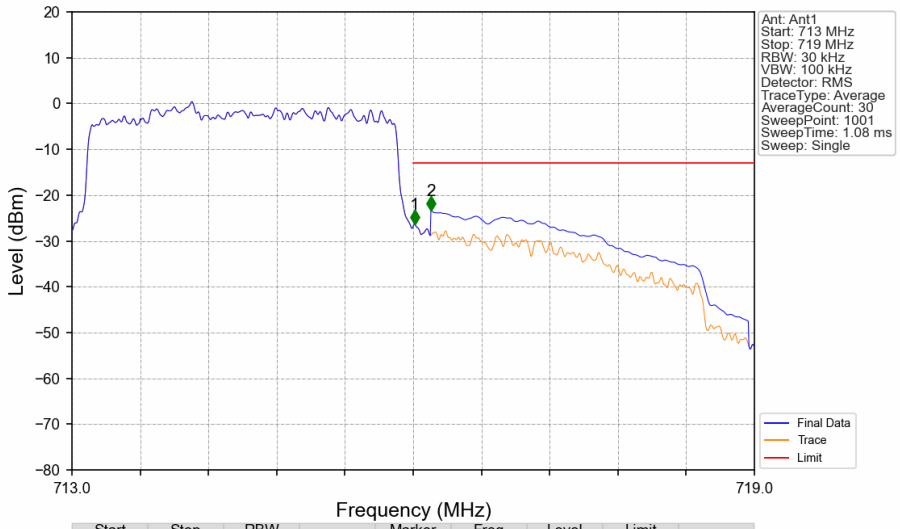


Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_14_NTNV



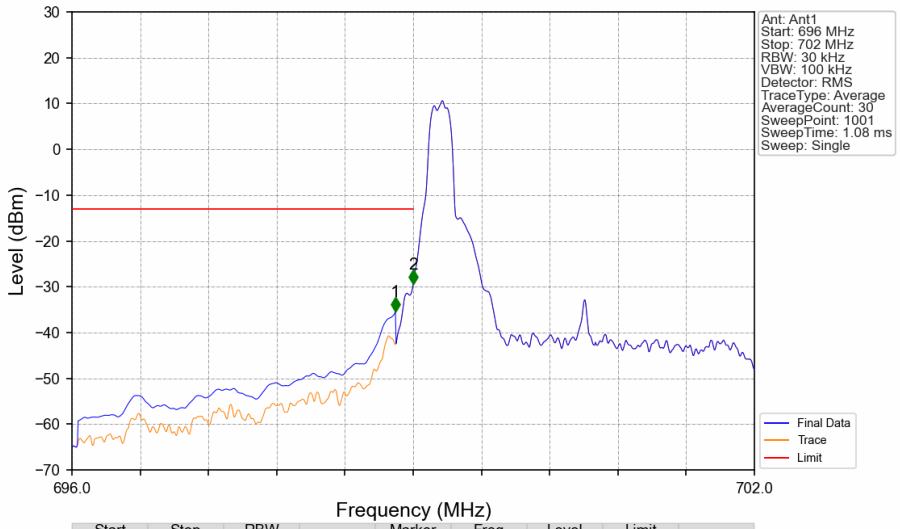
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-16.98	-13	Pass
716.1	719	0.1	CHP	2	716.156	-23.17	-13	Pass

Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



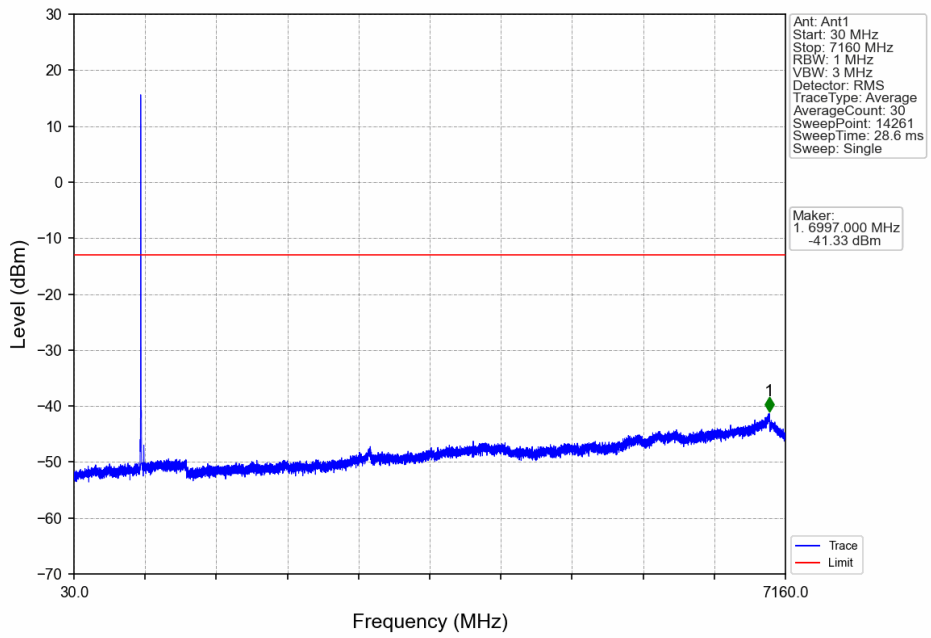
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.012	-26.41	-13	Pass
716.1	719	0.1	CHP	2	716.156	-23.36	-13	Pass

Band12_3MHz_16QAM_LCH_700.5MHz_RB_1_0_NTNV

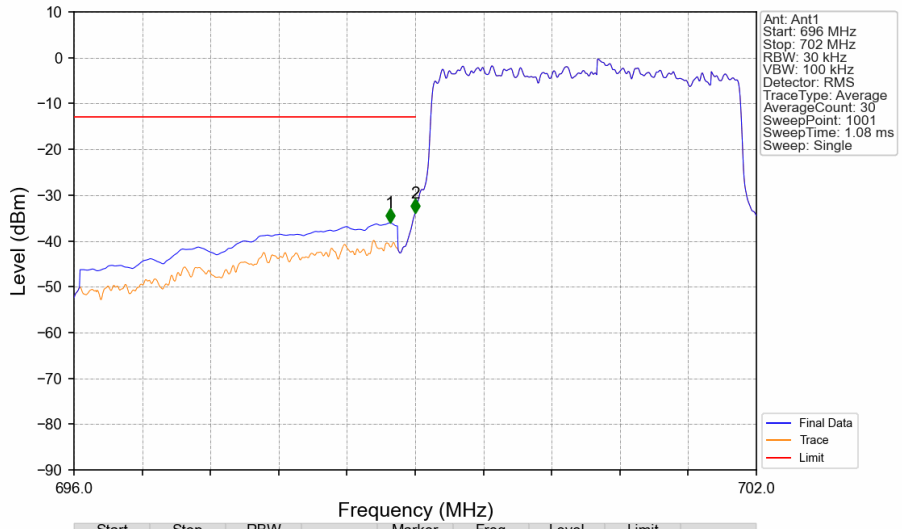


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.844	-35.47	-13	Pass
698.9	699	0.03	/	2	699.000	-29.44	-13	Pass
699	702	0.03	/	/	/	/	/	/

Band12_3MHz_16QAM_LCH_700.5MHz_RB_1_0_NTNV

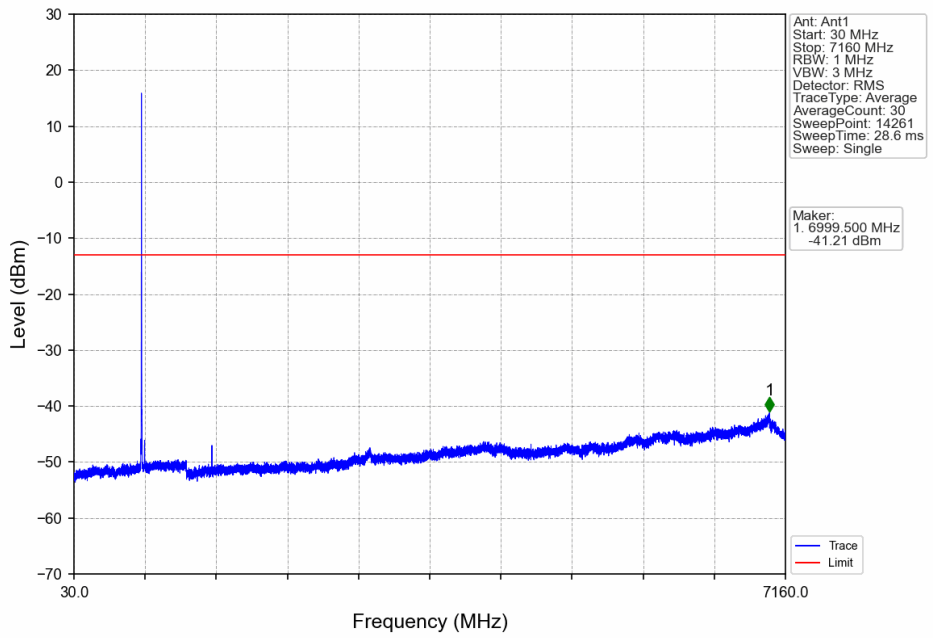


Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV

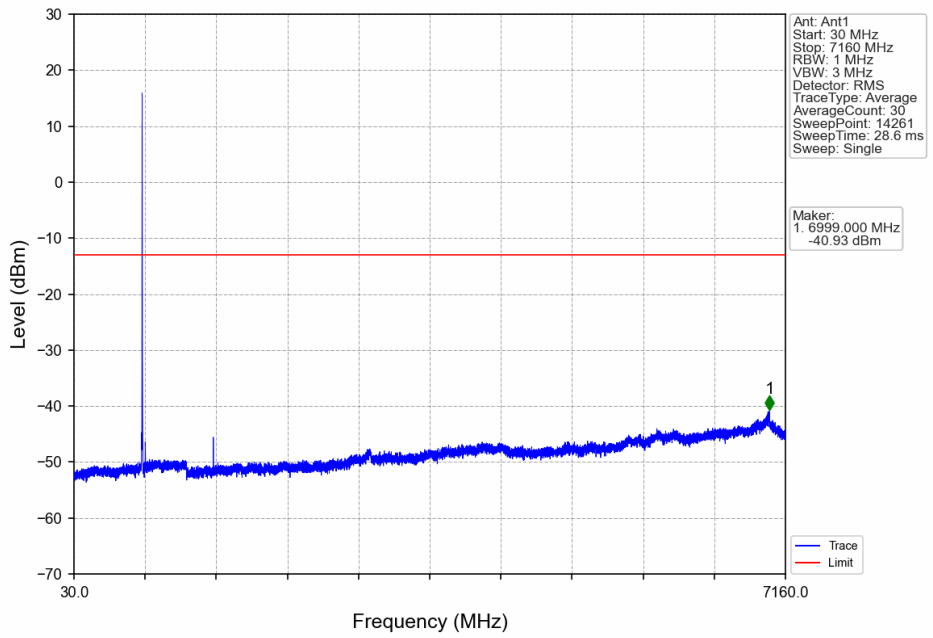


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.778	-36.05	-13	Pass
698.9	699	0.03	/	2	699.000	-33.96	-13	Pass
699	702	0.03	/	/	/	/	/	/

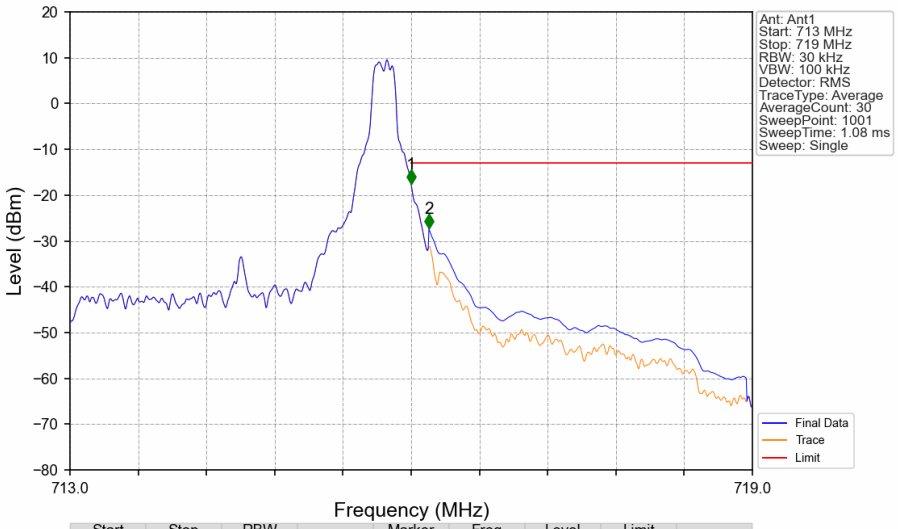
Band12_3MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_3MHz_16QAM_HCH_714.5MHz_RB_1_0_NTNV

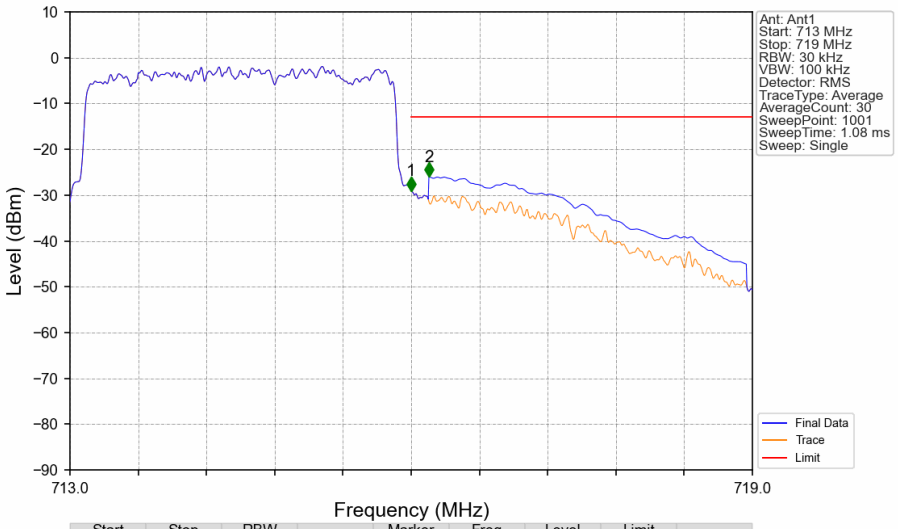


Band12_3MHz_16QAM_HCH_714.5MHz_RB_1_14_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-17.57	-13	Pass
716.1	719	0.1	CHP	2	716.156	-27.33	-13	Pass

Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-29.07	-13	Pass
716.1	719	0.1	CHP	2	716.156	-25.95	-13	Pass

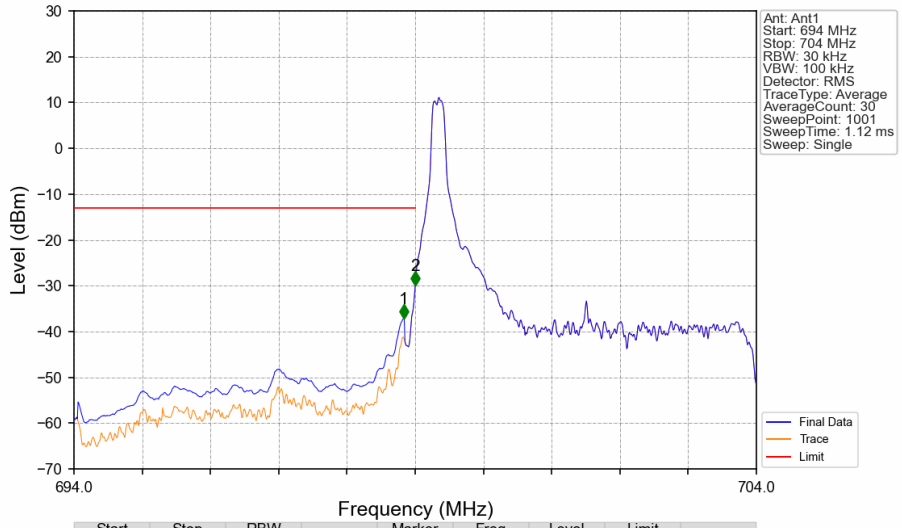
6.3 B12_5MHz

6.3.1 Test Result

Band: 12 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	701.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	713.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
16QAM	701.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	713.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

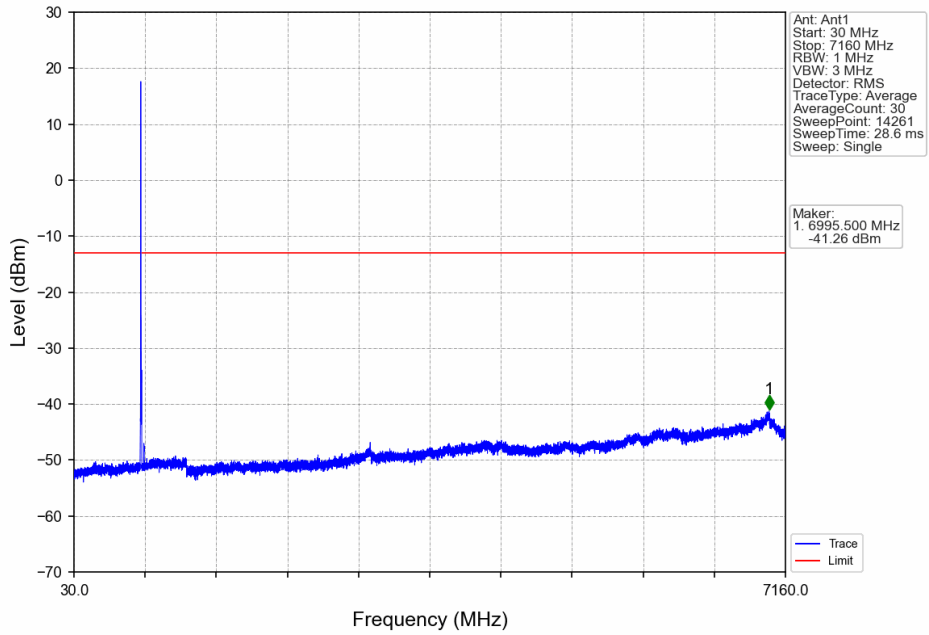
6.3.2 Test Graph

Band12_5MHz_QPSK_LCH_701.5MHz_RB_1_0_NTNV

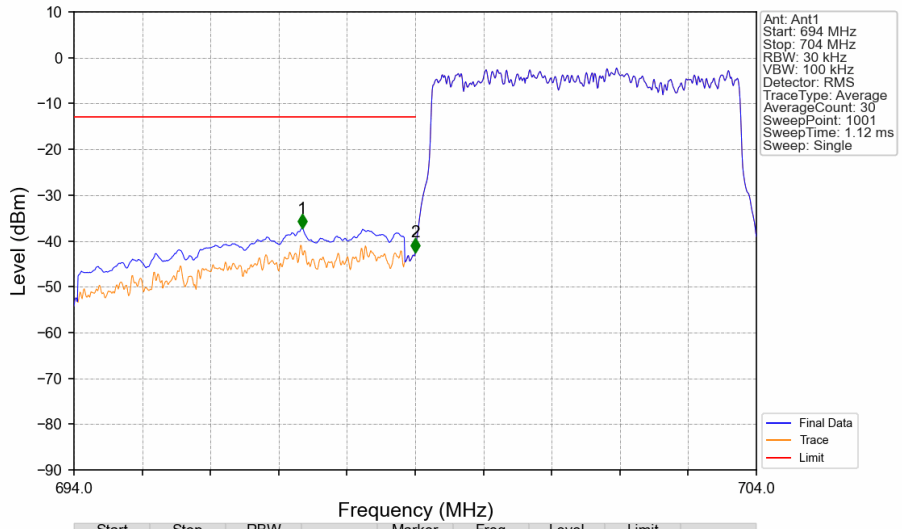


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	698.830	-37.26	-13	Pass
698.9	699	0.03	/	2	699.000	-29.95	-13	Pass
699	704	0.03	/	/	/	/	/	/

Band12_5MHz_QPSK_LCH_701.5MHz_RB_1_0_NTNV

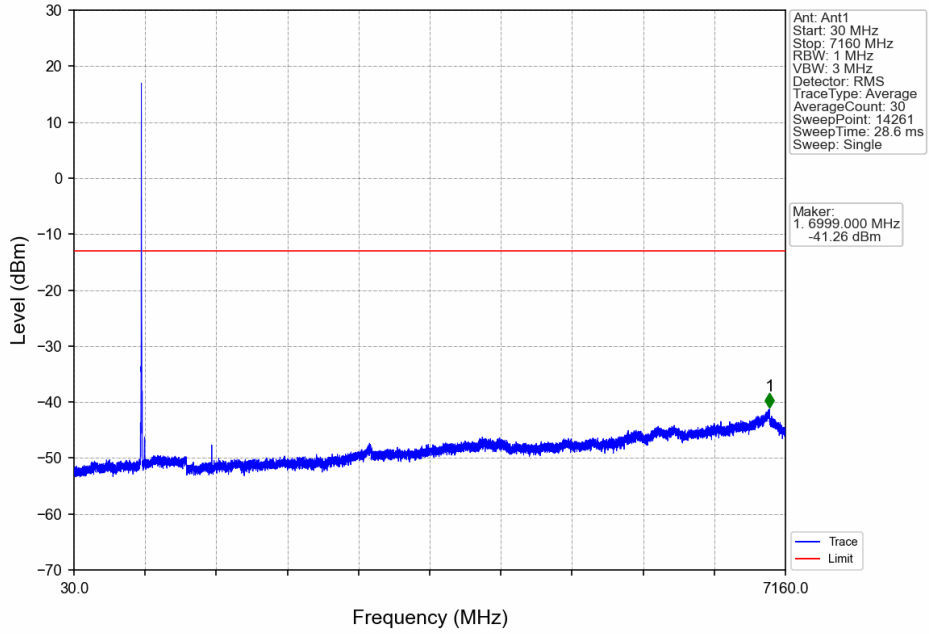


Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV

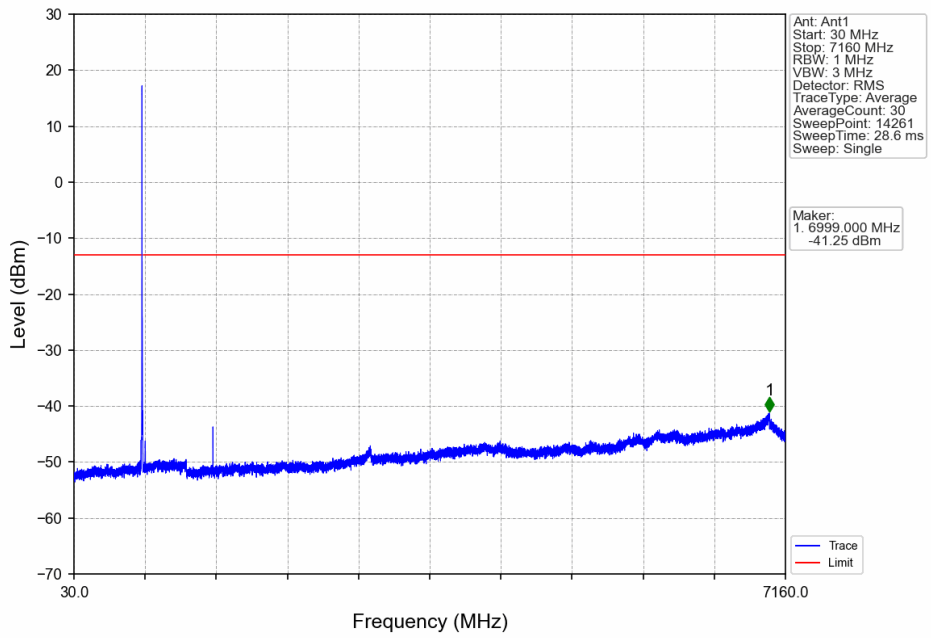


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	697.340	-37.25	-13	Pass
698.9	699	0.03	/	2	699.000	-42.49	-13	Pass
699	704	0.03	/	/	/	/	/	/

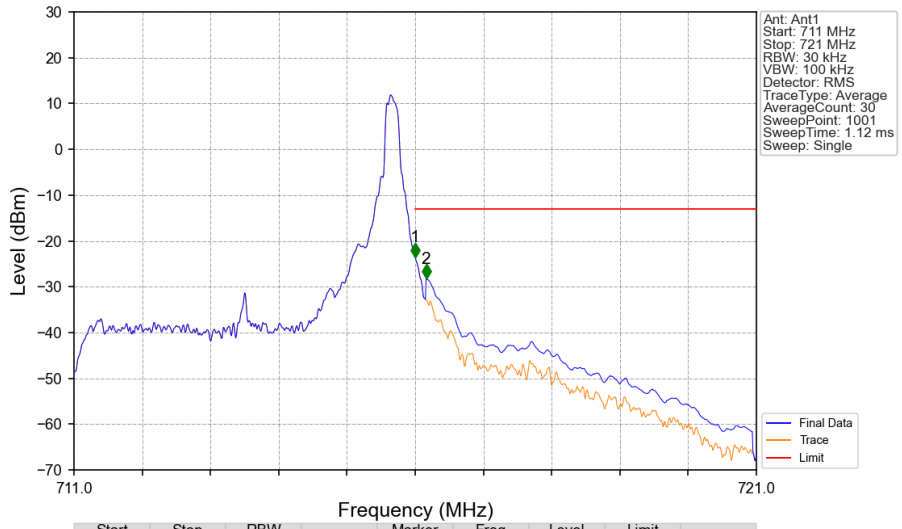
Band12_5MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_0_NTNV

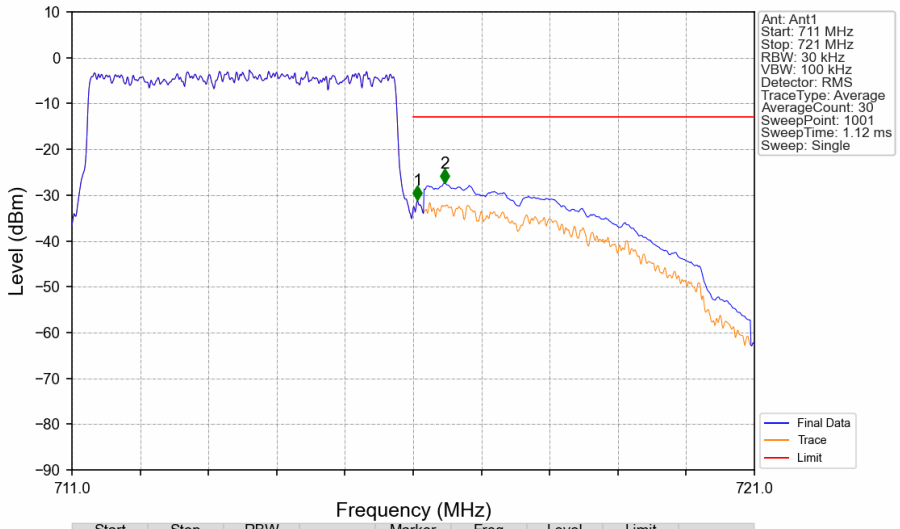


Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_24_NTNV



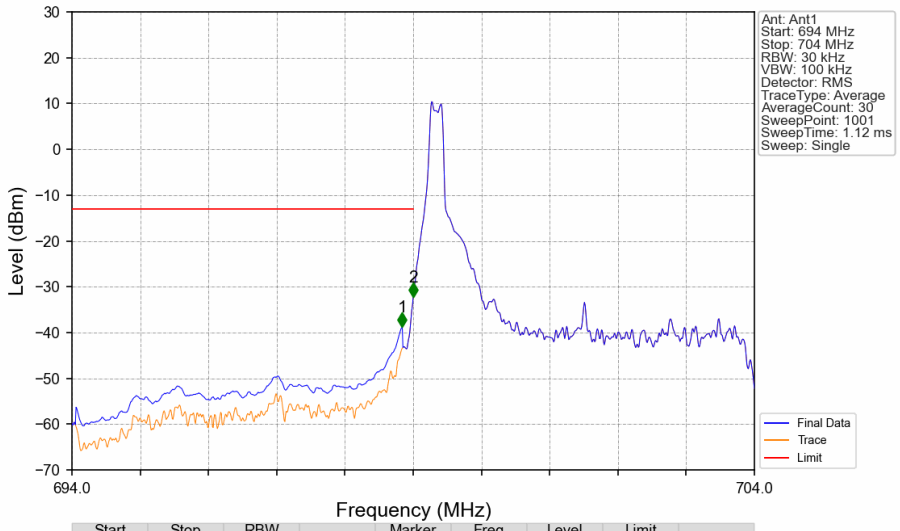
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-23.53	-13	Pass
716.1	721	0.1	CHP	2	716.160	-28.23	-13	Pass

Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



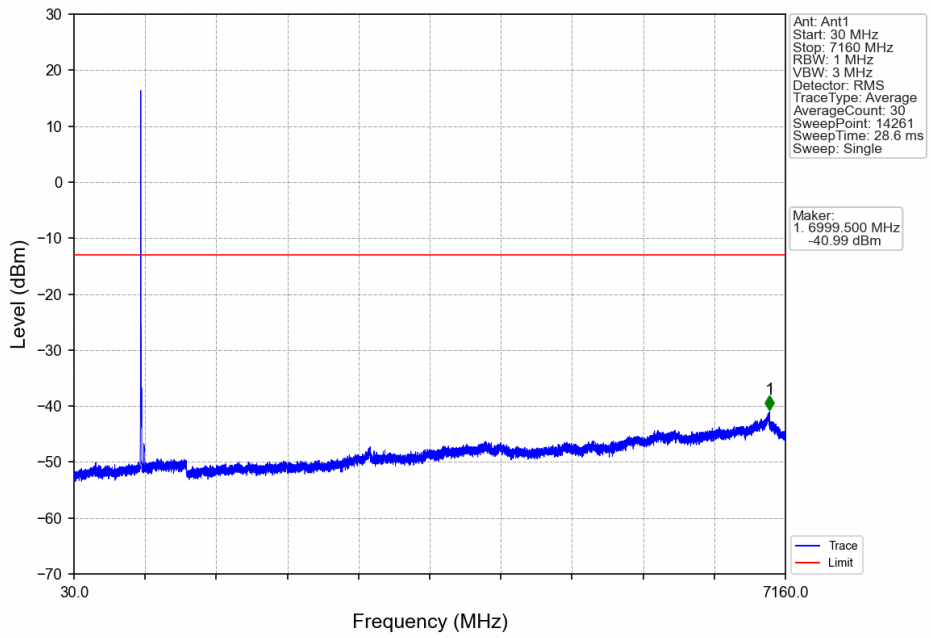
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.060	-31.13	-13	Pass
716.1	721	0.1	CHP	2	716.460	-27.45	-13	Pass

Band12_5MHz_16QAM_LCH_701.5MHz_RB_1_0_NTNV

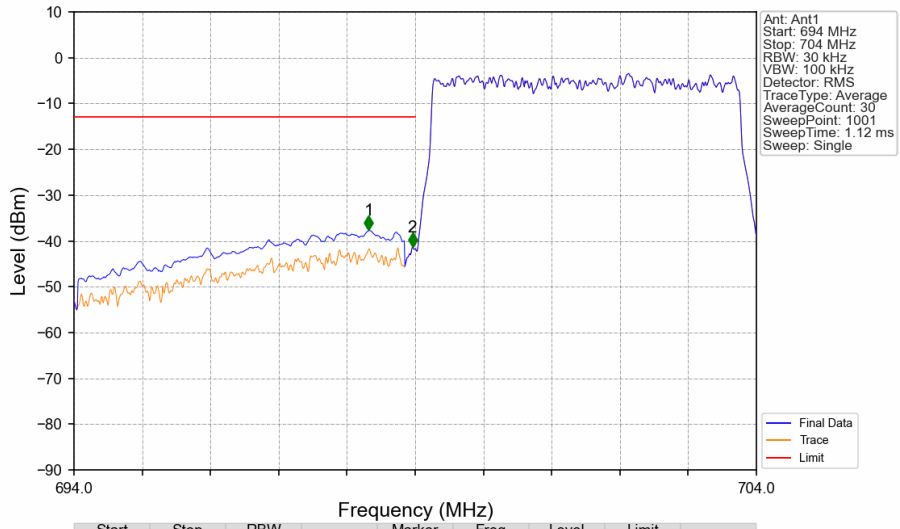


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	698.840	-38.81	-13	Pass
698.9	699	0.03	/	2	699.000	-32.33	-13	Pass
699	704	0.03	/	/	/	/	/	/

Band12_5MHz_16QAM_LCH_701.5MHz_RB_1_0_NTNV

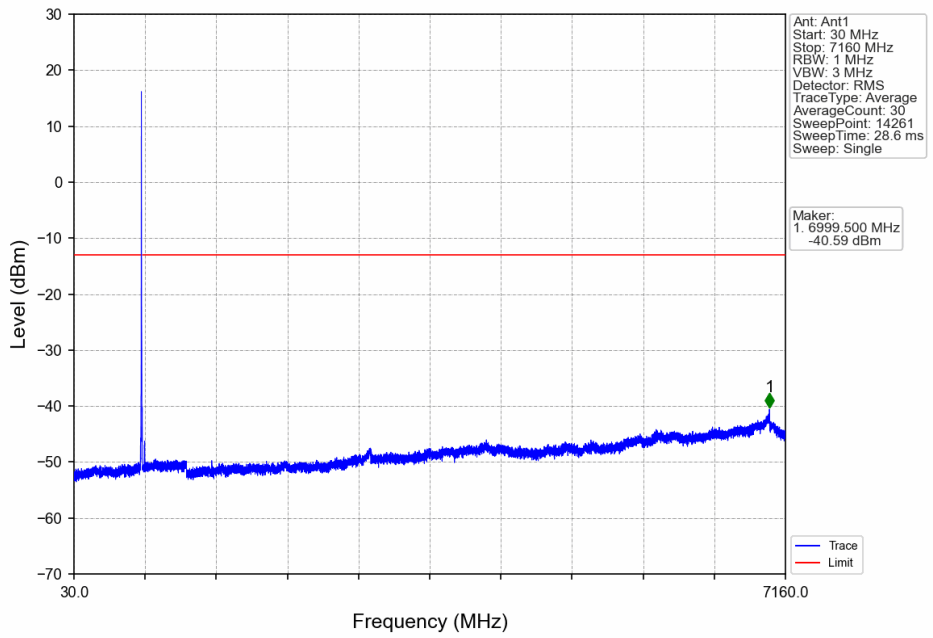


Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV

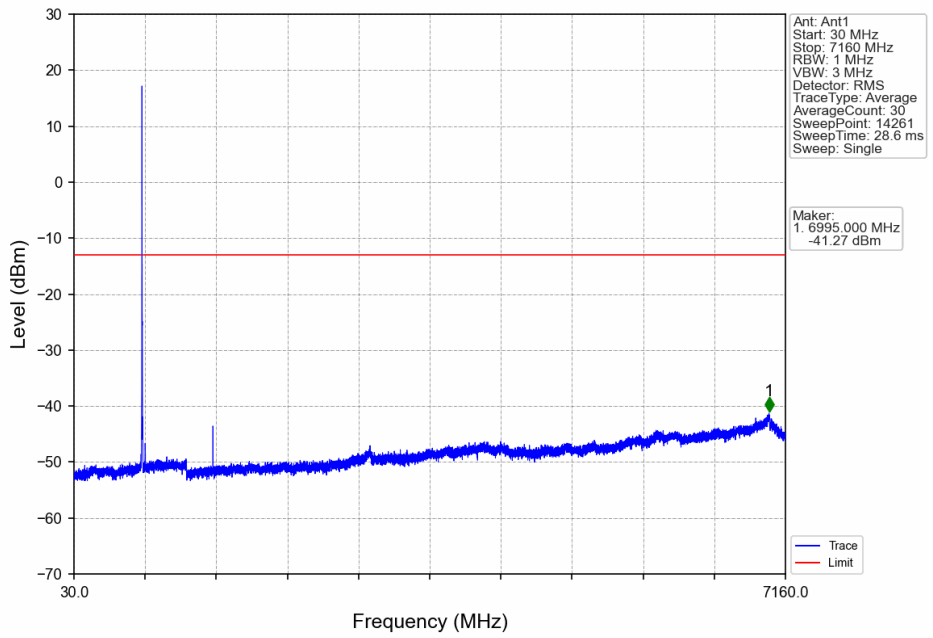


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	698.320	-37.69	-13	Pass
698.9	699	0.03	/	2	698.960	-41.30	-13	Pass
699	704	0.03	/	/	/	/	/	/

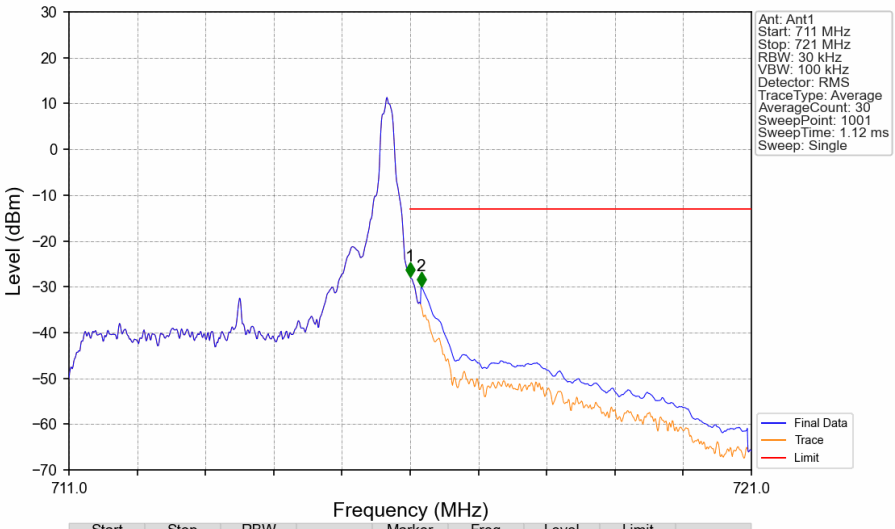
Band12_5MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_5MHz_16QAM_HCH_713.5MHz_RB_1_0_NTNV

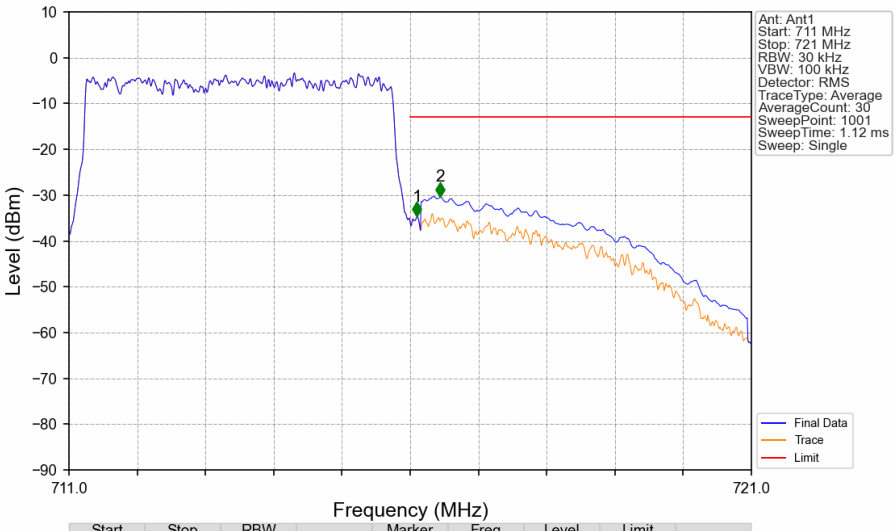


Band12_5MHz_16QAM_HCH_713.5MHz_RB_1_24_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-27.76	-13	Pass
716.1	721	0.1	CHP	2	716.160	-29.87	-13	Pass

Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.100	-34.68	-13	Pass
716.1	721	0.1	CHP	2	716.440	-30.32	-13	Pass

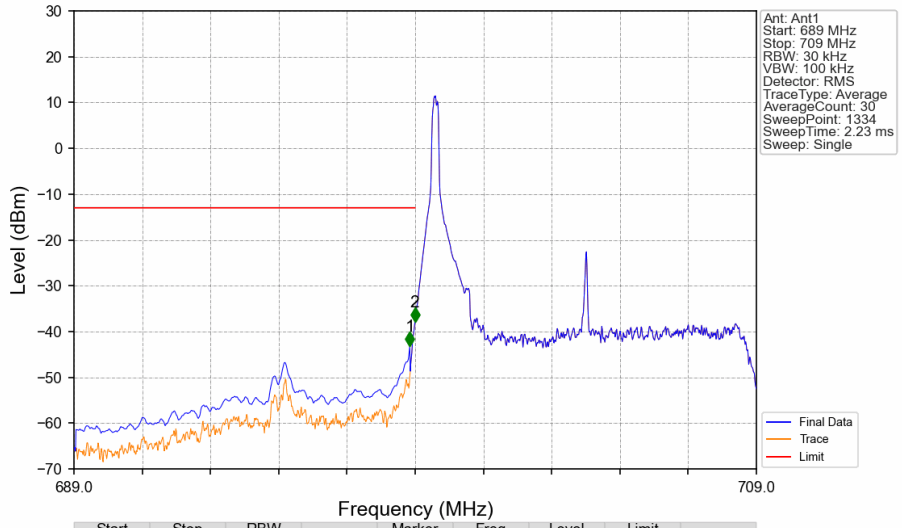
6.4 B12_10MHz

6.4.1 Test Result

Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	704	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	711	1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
16QAM	704	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	711	1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

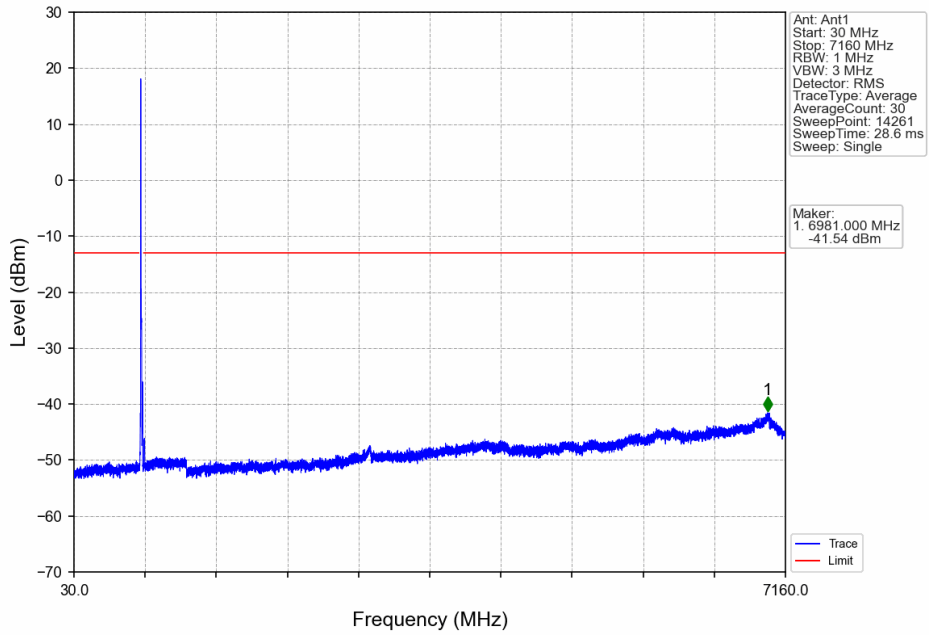
6.4.2 Test Graph

Band12_10MHz_QPSK_LCH_704MHz_RB_1_0_NTNV

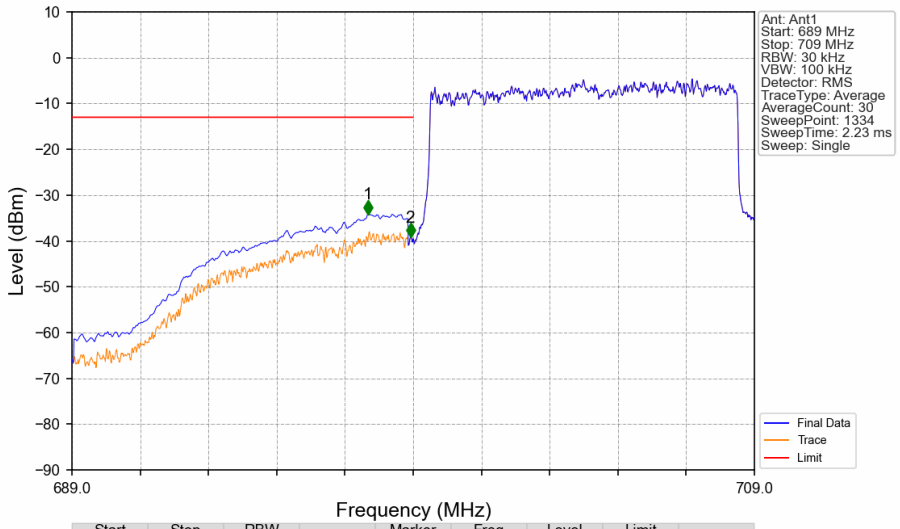


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	698.842	-43.16	-13	Pass
698.9	699	0.03	/	2	698.992	-37.84	-13	Pass
699	709	0.03	/	/	/	/	/	/

Band12_10MHz_QPSK_LCH_704MHz_RB_1_0_NTNV

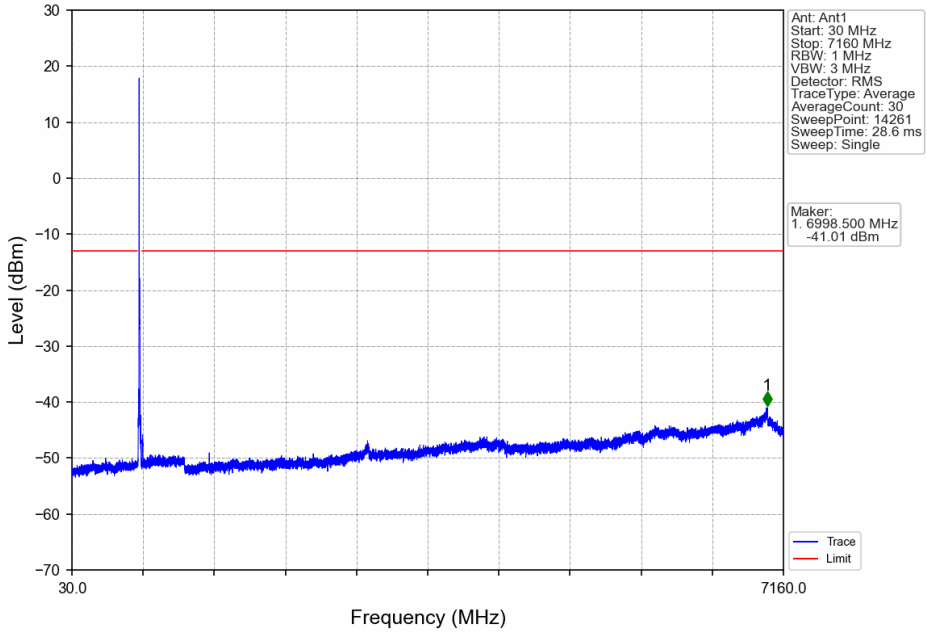


Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV

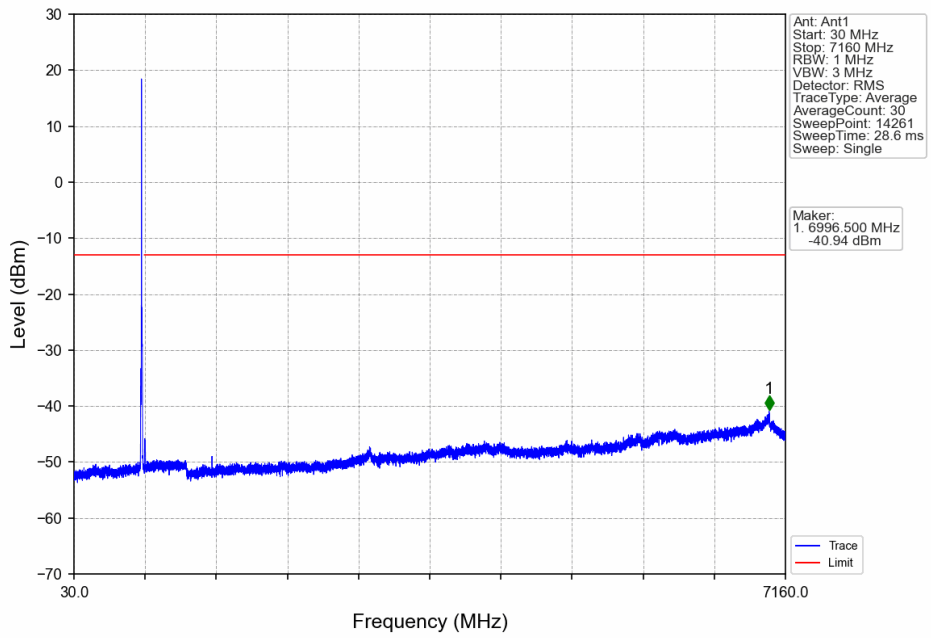


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	697.672	-34.19	-13	Pass
698.9	699	0.03	/	2	698.917	-39.21	-13	Pass
699	709	0.03	/	/	/	/	/	/

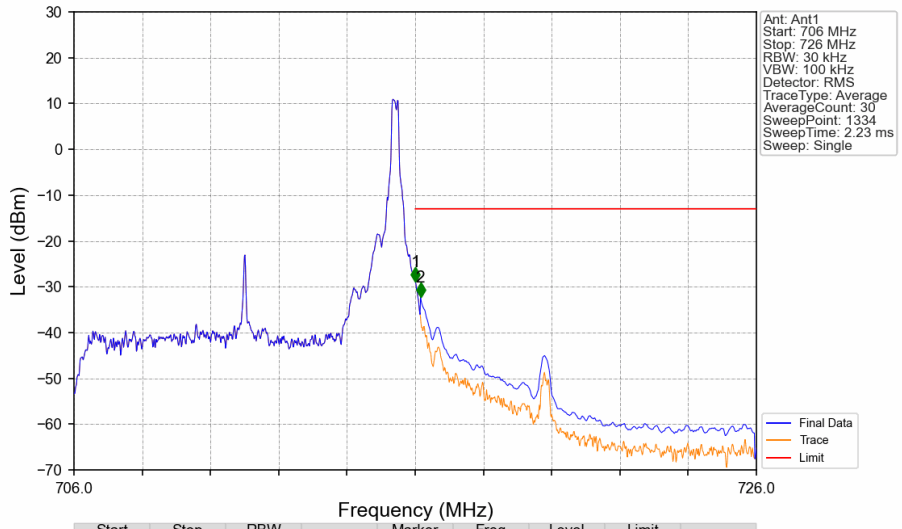
Band12_10MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_10MHz_QPSK_HCH_711MHz_RB_1_0_NTNV

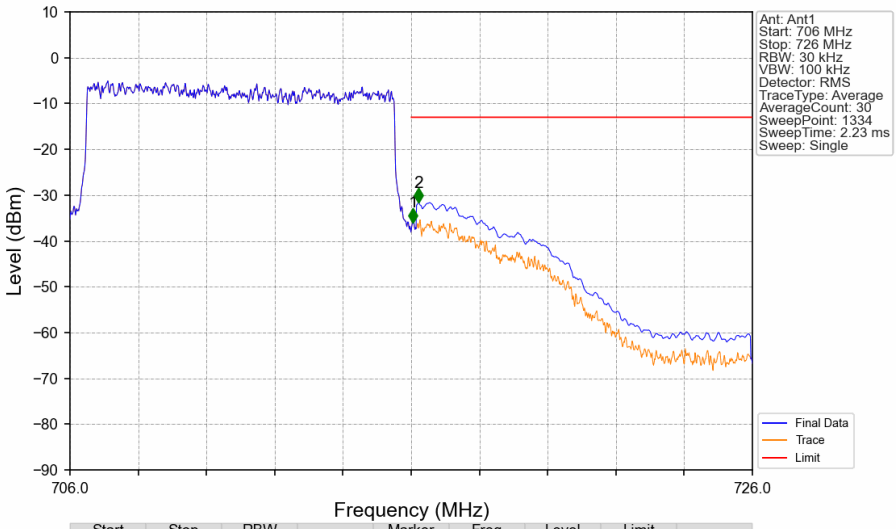


Band12_10MHz_QPSK_HCH_711MHz_RB_1_49_NTNV



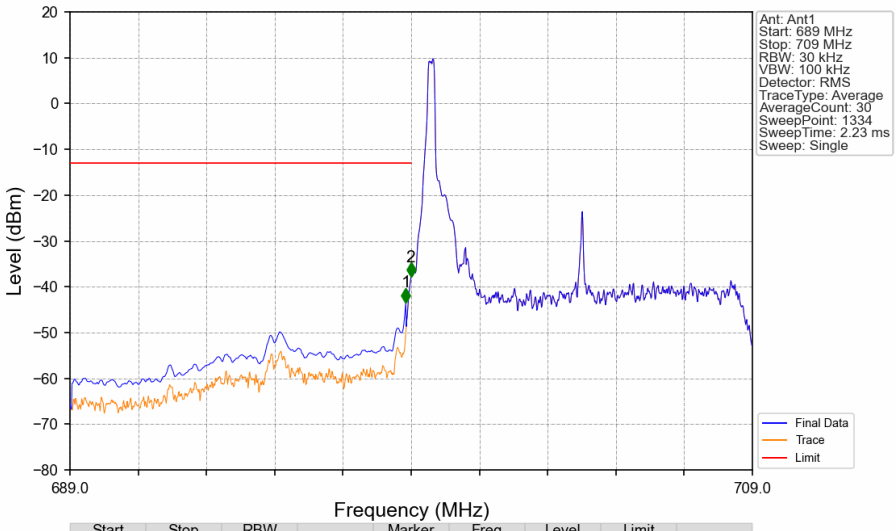
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.008	-28.89	-13	Pass
716.1	726	0.1	CHP	2	716.158	-32.24	-13	Pass

Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



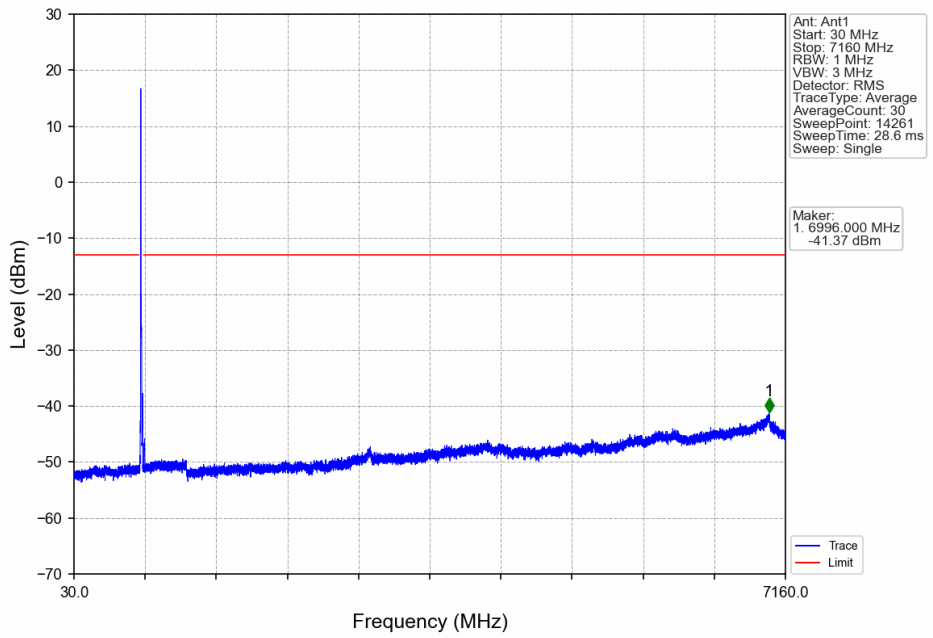
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.053	-35.96	-13	Pass
716.1	726	0.1	CHP	2	716.218	-31.58	-13	Pass

Band12_10MHz_16QAM_LCH_704MHz_RB_1_0_NTNV

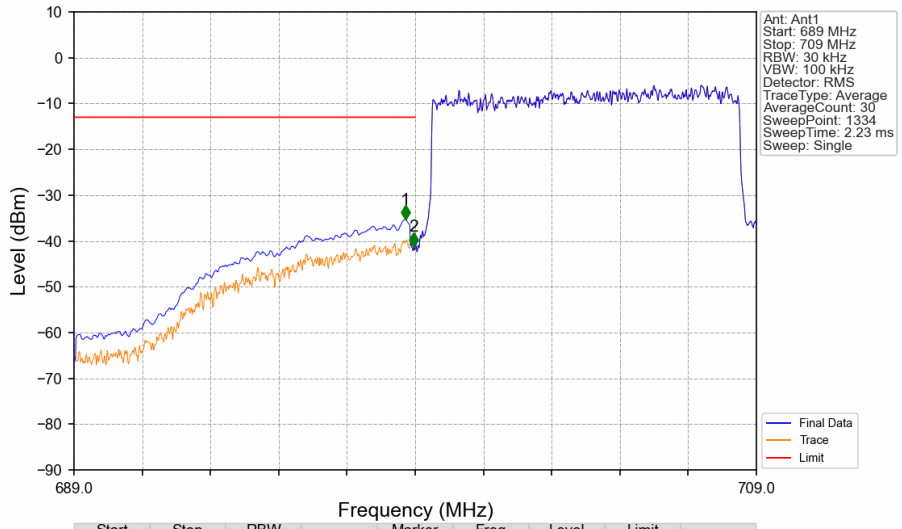


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	698.842	-43.43	-13	Pass
698.9	699	0.03	/	2	698.992	-37.86	-13	Pass
699	709	0.03	/	/	/	/	/	/

Band12_10MHz_16QAM_LCH_704MHz_RB_1_0_NTNV

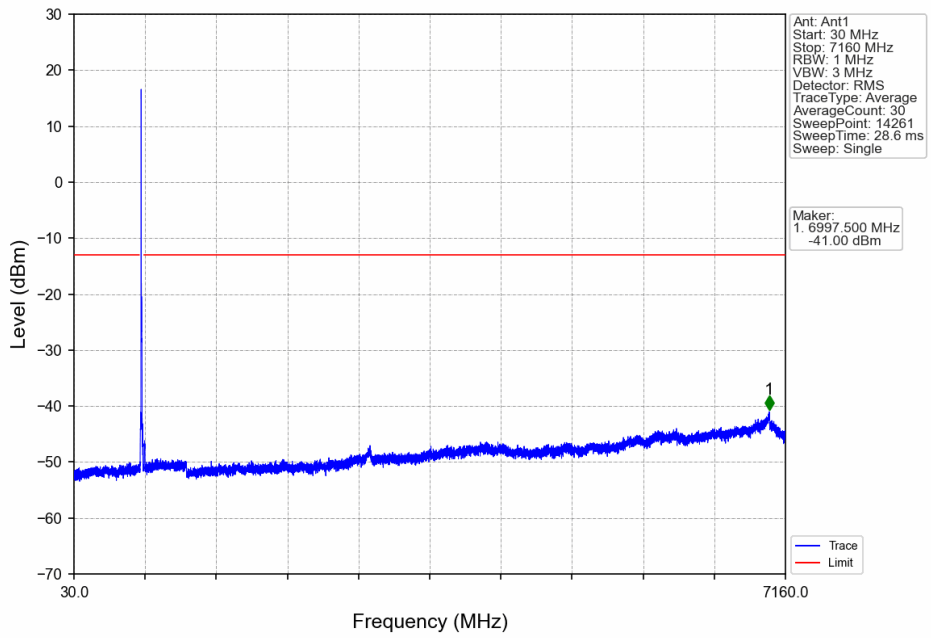


Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV

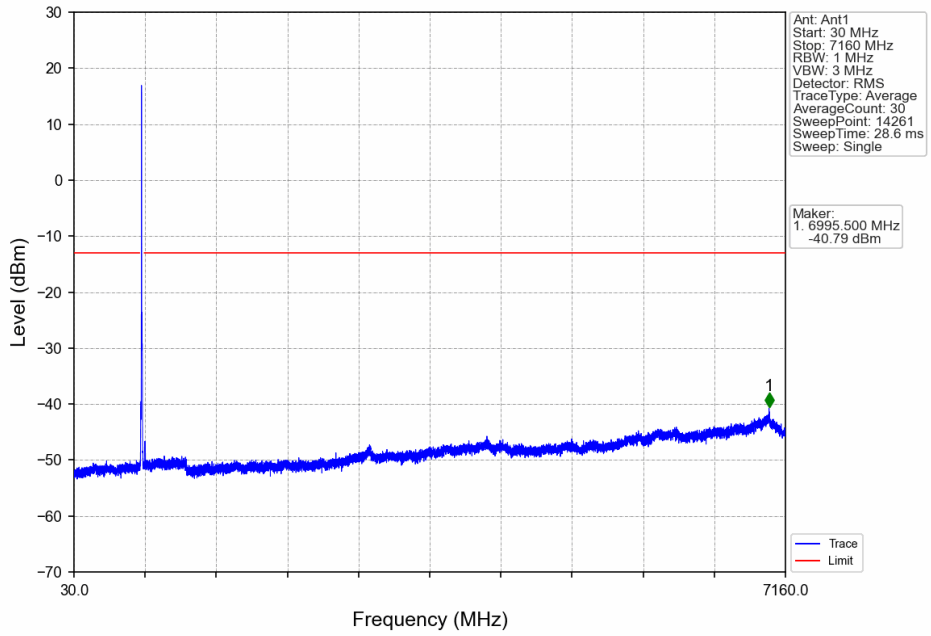


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	698.707	-35.34	-13	Pass
698.9	699	0.03	/	2	698.962	-41.24	-13	Pass
699	709	0.03	/	/	/	/	/	/

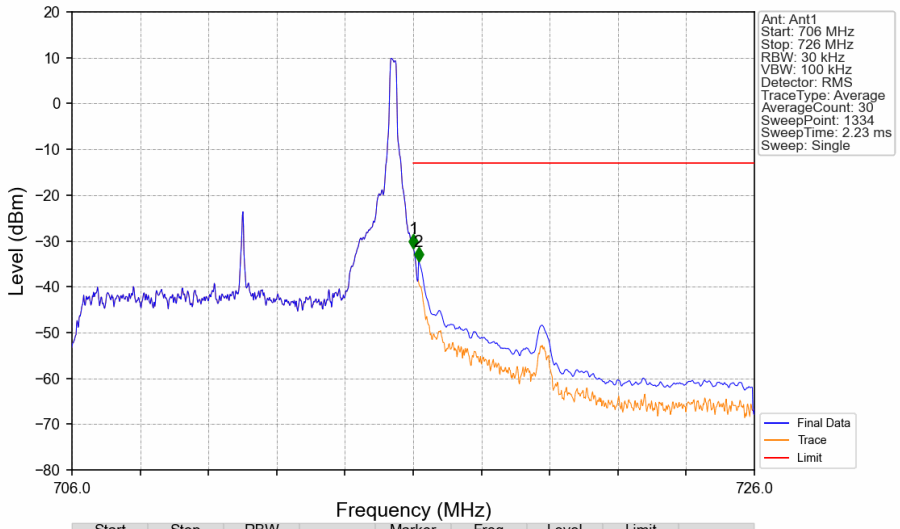
Band12_10MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_1_0_NTNV

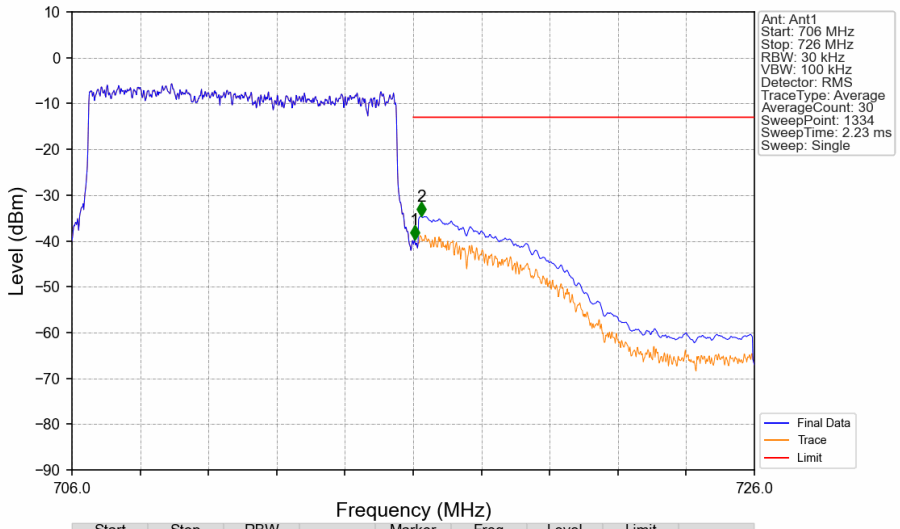


Band12_10MHz_16QAM_HCH_711MHz_RB_1_49_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.008	-31.62	-13	Pass
716.1	726	0.1	CHP	2	716.158	-34.46	-13	Pass

Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.038	-39.77	-13	Pass
716.1	726	0.1	CHP	2	716.233	-34.63	-13	Pass