

5. Peak-Average Ratio

5.1 Test Result

5.1.1 B12_1.4MHz

Band: 12 / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	699.7	6	0	5.45	<=13	Pass
	707.5	6	0	5.41	<=13	Pass
	715.3	6	0	5.25	<=13	Pass
16QAM	699.7	6	0	6.16	<=13	Pass
	707.5	6	0	6.14	<=13	Pass
	715.3	6	0	6.04	<=13	Pass

5.1.2 B12_3MHz

Band: 12 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	700.5	15	0	5.76	<=13	Pass
	707.5	15	0	5.69	<=13	Pass
	714.5	15	0	5.50	<=13	Pass
16QAM	700.5	15	0	6.46	<=13	Pass
	707.5	15	0	6.36	<=13	Pass
	714.5	15	0	6.30	<=13	Pass

5.1.3 B12_5MHz

Band: 12 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	701.5	25	0	5.76	<=13	Pass
	707.5	25	0	5.73	<=13	Pass
	713.5	25	0	5.66	<=13	Pass
16QAM	701.5	25	0	6.44	<=13	Pass
	707.5	25	0	6.42	<=13	Pass
	713.5	25	0	6.30	<=13	Pass

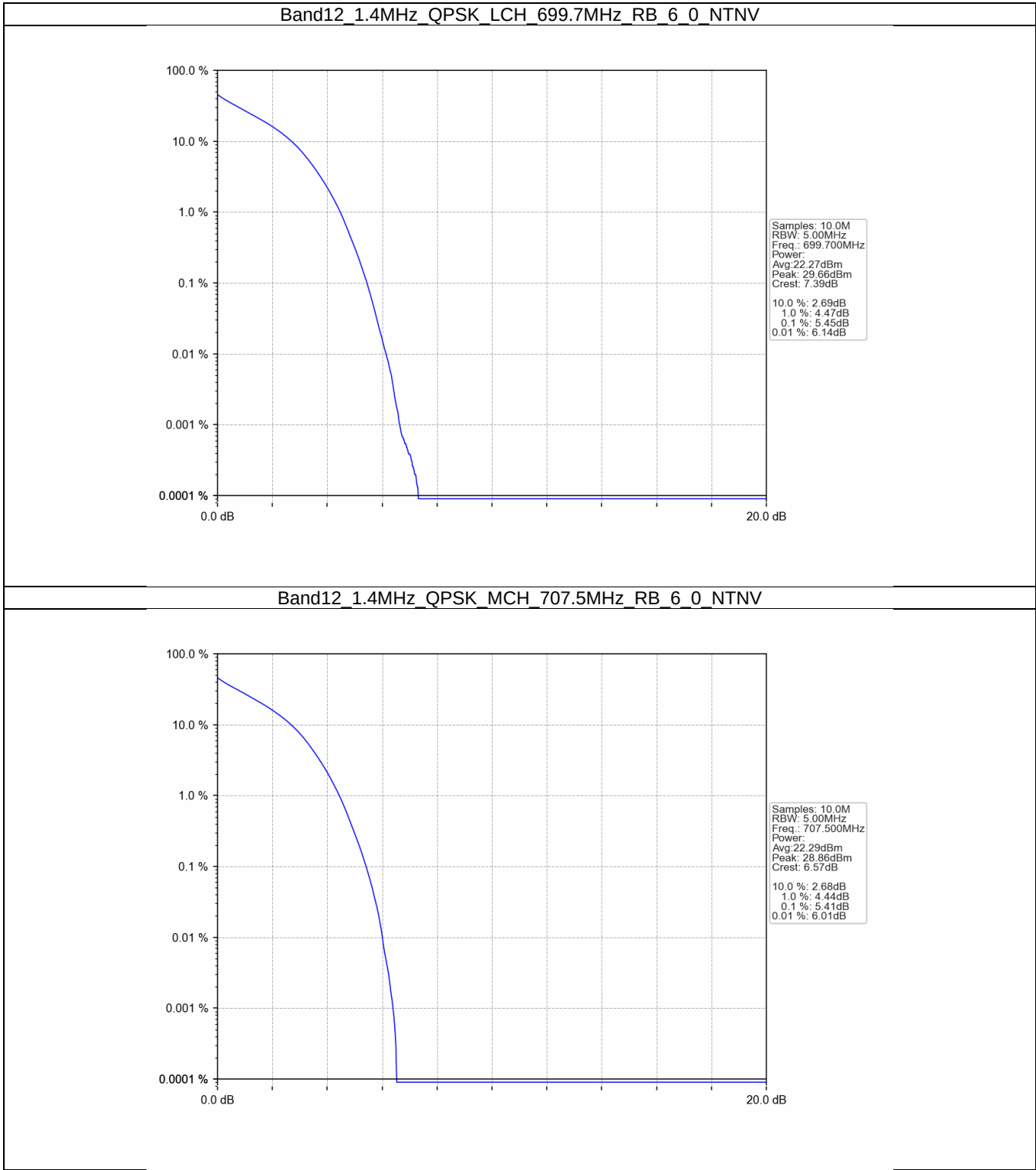
5.1.4 B12_10MHz

Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	704	50	0	5.70	<=13	Pass
	707.5	50	0	5.73	<=13	Pass
	711	50	0	5.67	<=13	Pass
16QAM	704	50	0	6.44	<=13	Pass
	707.5	50	0	6.45	<=13	Pass

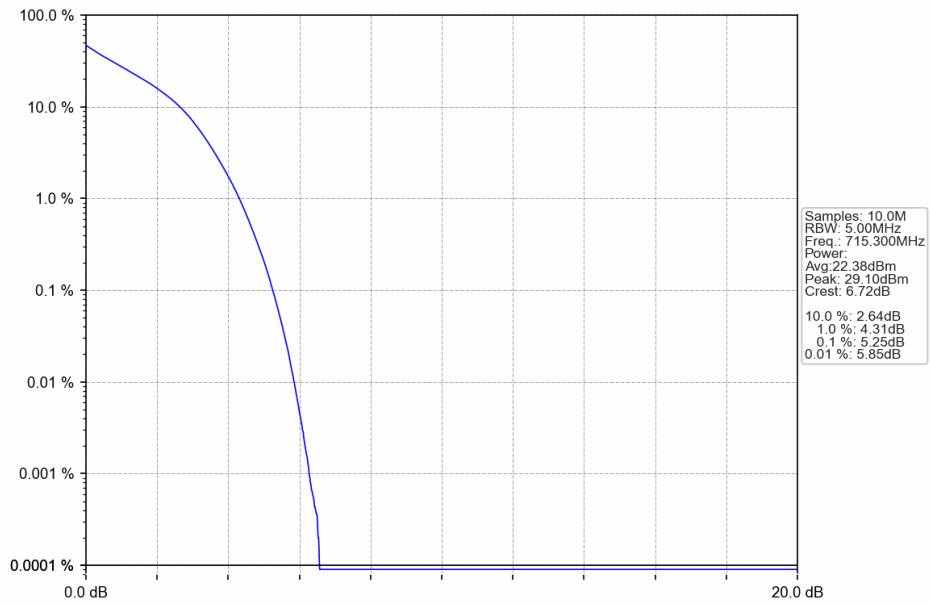
	711	50	0	6.37	<=13	Pass
--	-----	----	---	------	------	------

5.2 Test Graph

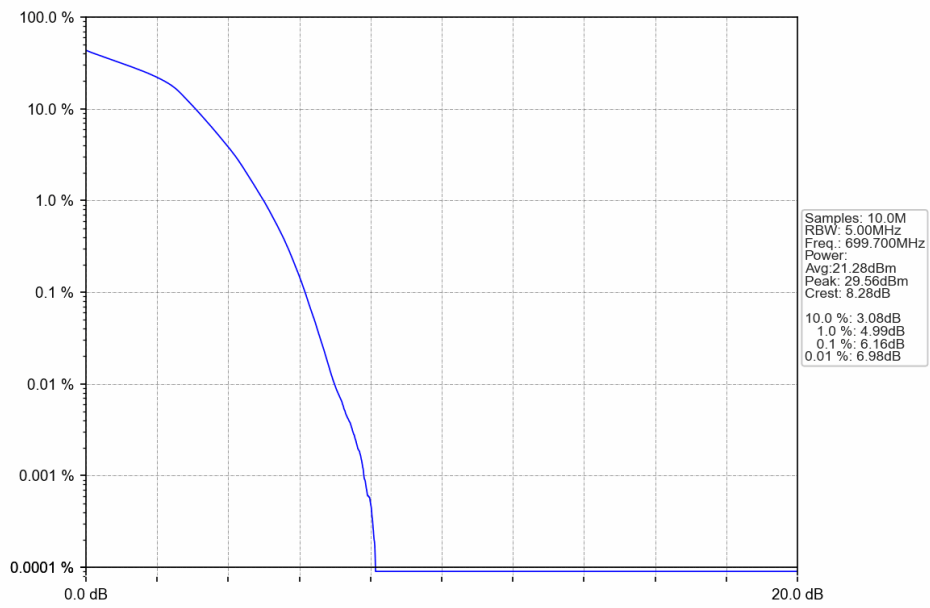
5.2.1 B12_1.4MHz



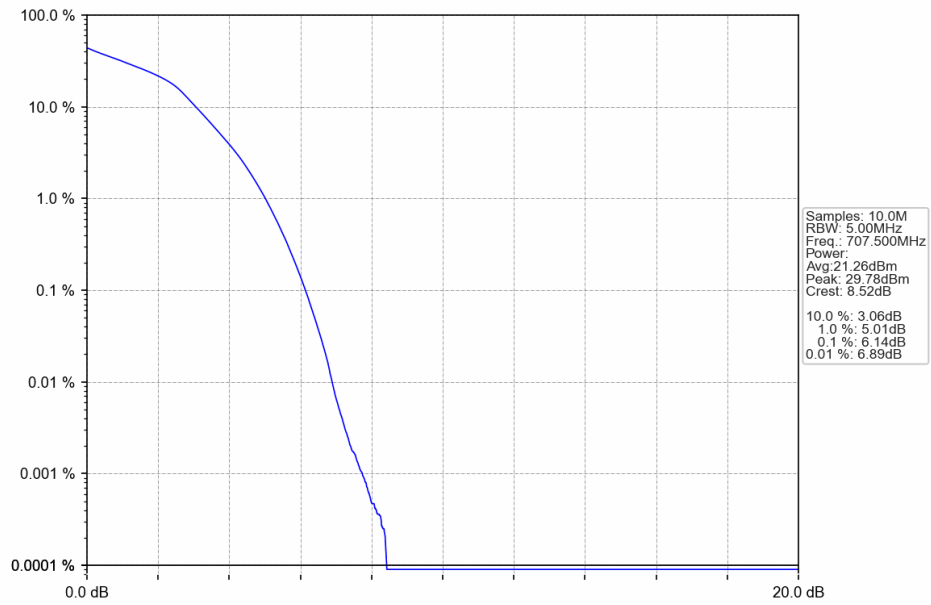
Band12 1.4MHz QPSK HCH 715.3MHz RB 6 0 NTNV



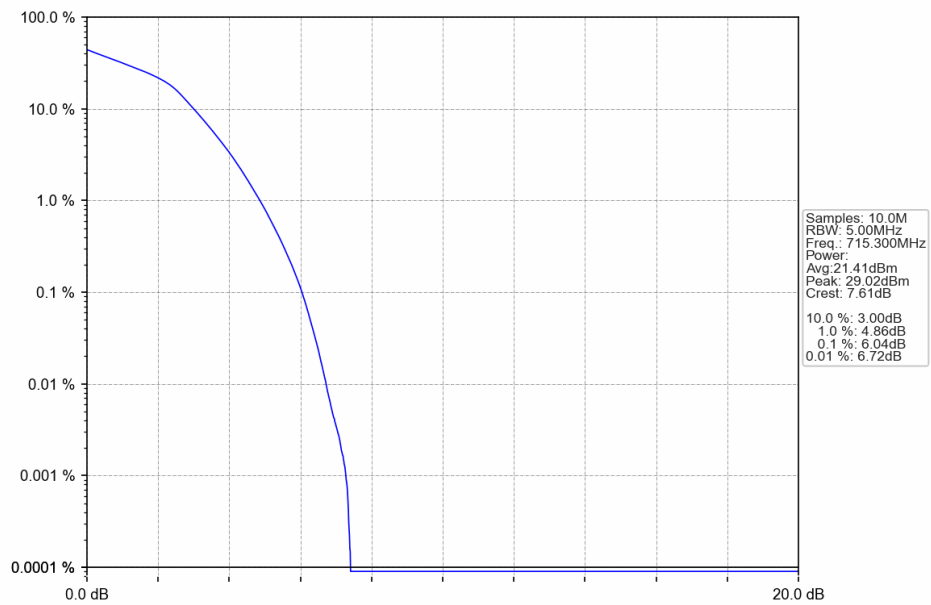
Band12 1.4MHz 16QAM LCH 699.7MHz RB 6 0 NTNV



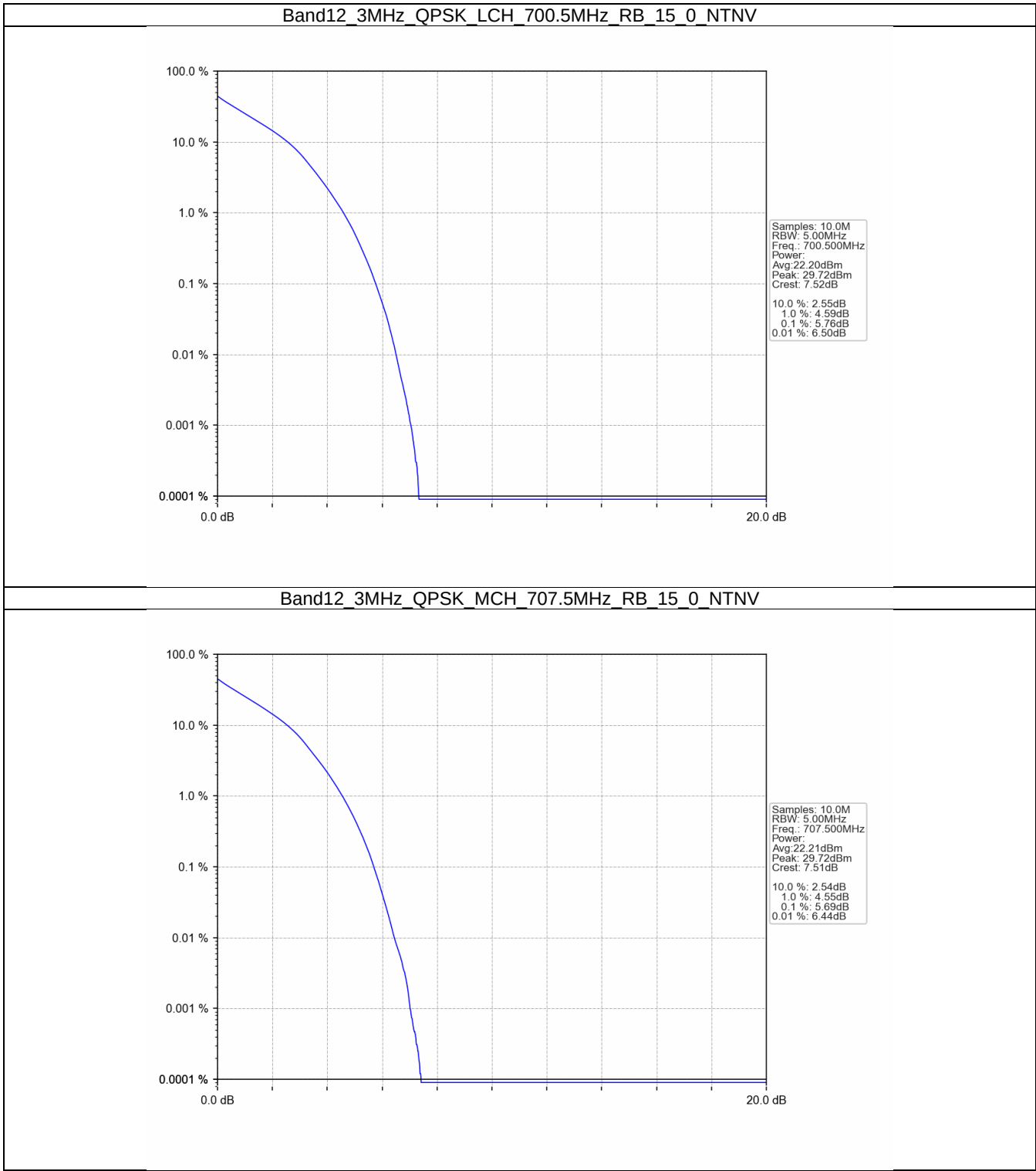
Band12 1.4MHz 16QAM MCH 707.5MHz RB 6 0 NTNV



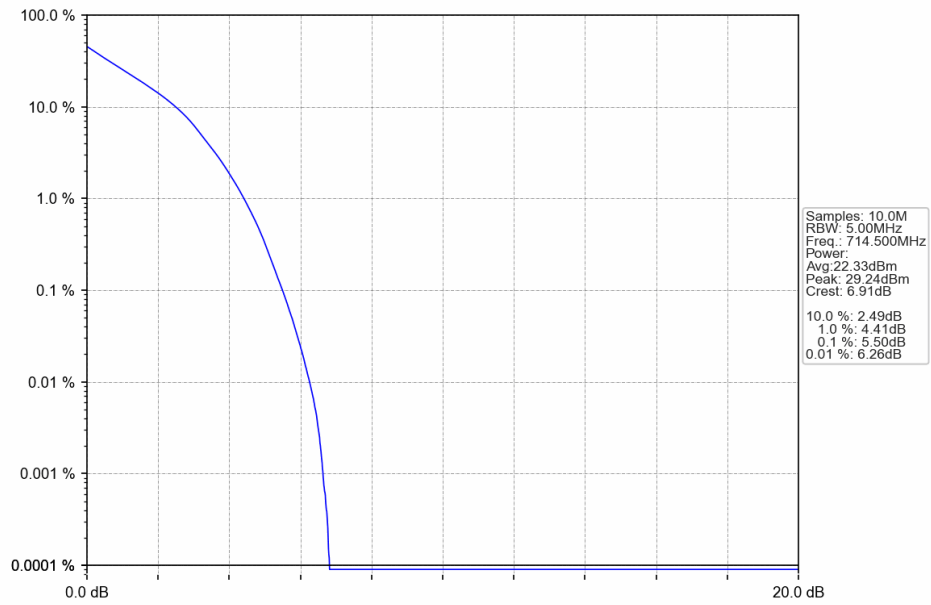
Band12 1.4MHz 16QAM HCH 715.3MHz RB 6 0 NTNV



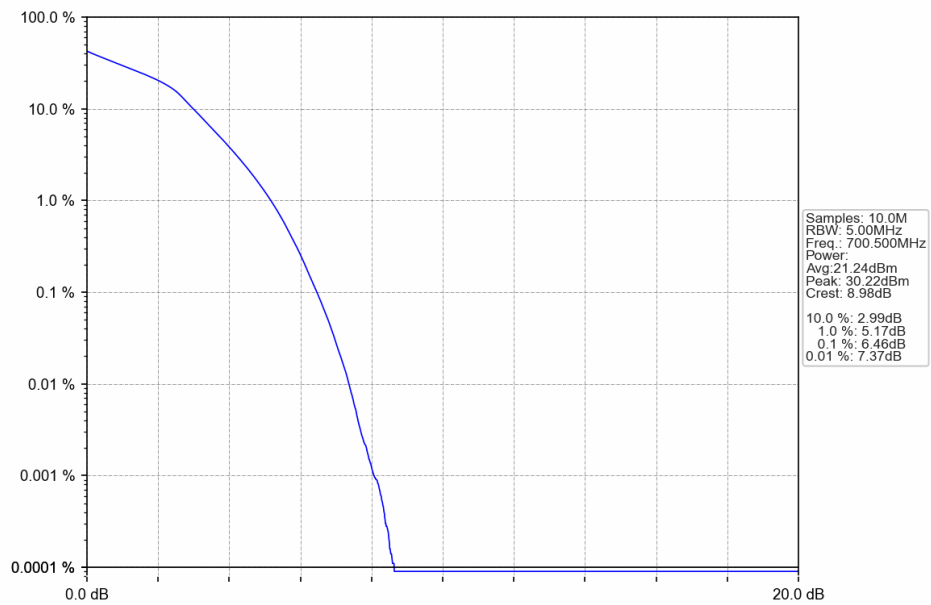
5.2.2 B12_3MHz



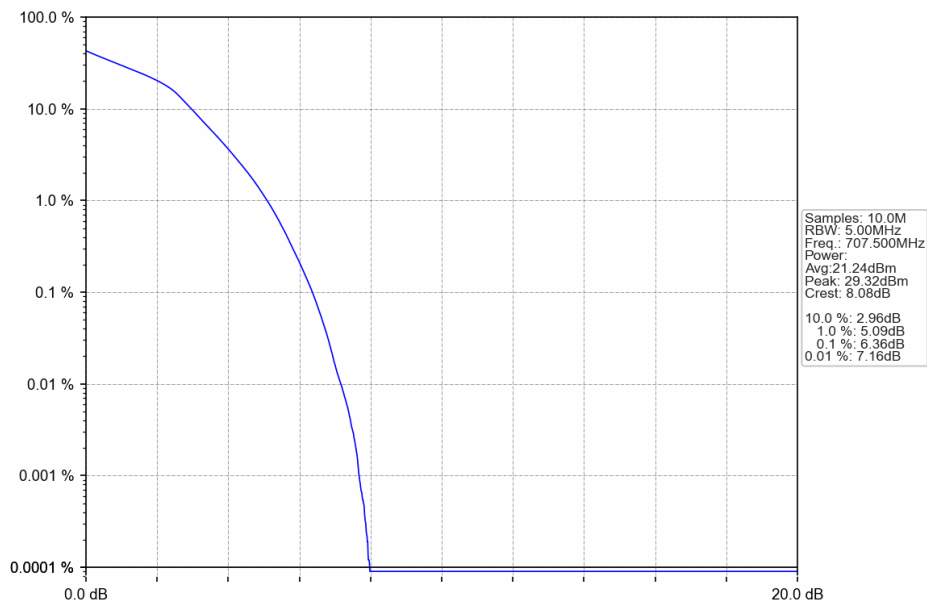
Band12 3MHz QPSK HCH 714.5MHz RB 15 0 NTNV



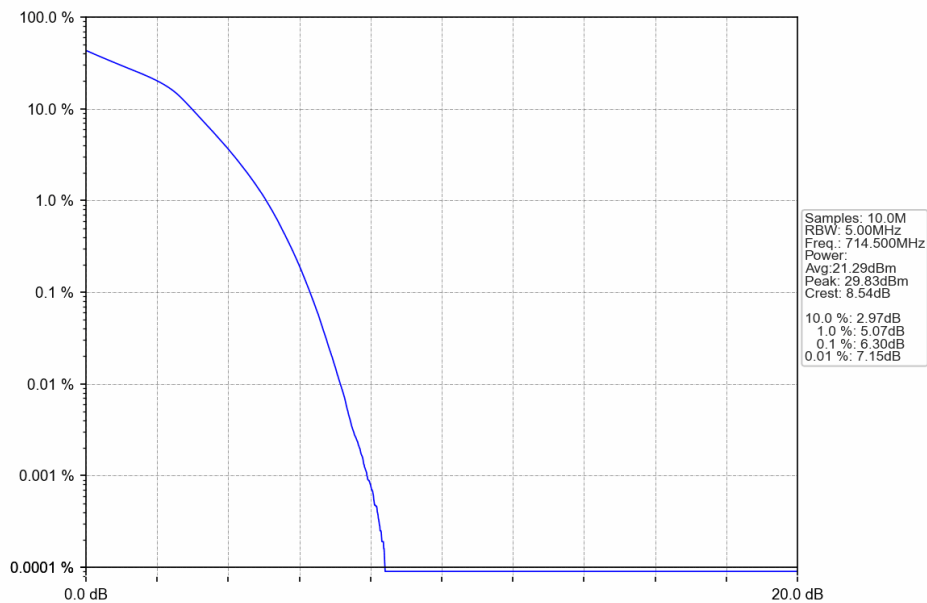
Band12 3MHz 16QAM LCH 700.5MHz RB 15 0 NTNV



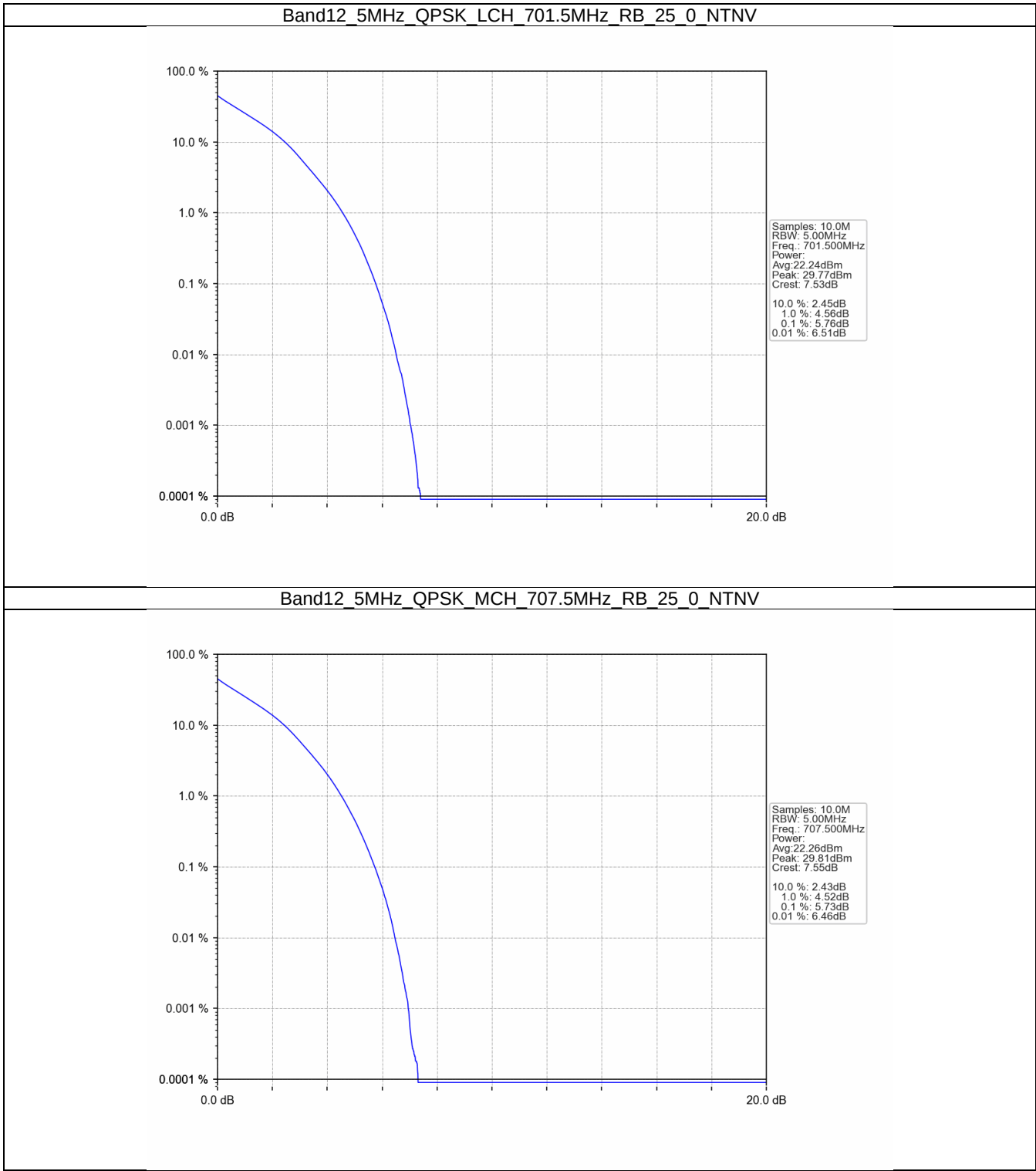
Band12 3MHz 16QAM MCH 707.5MHz RB 15 0 NTNV



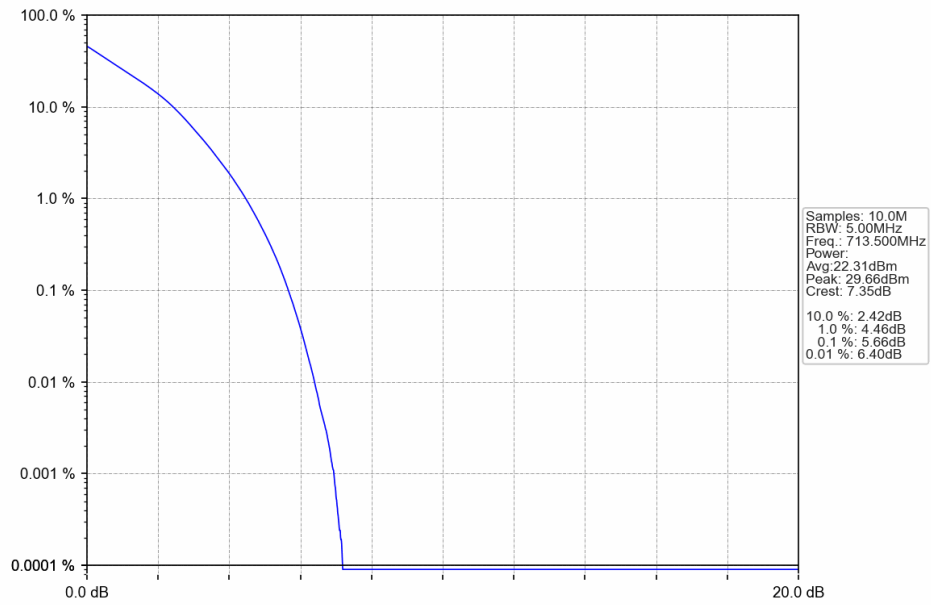
Band12 3MHz 16QAM HCH 714.5MHz RB 15 0 NTNV



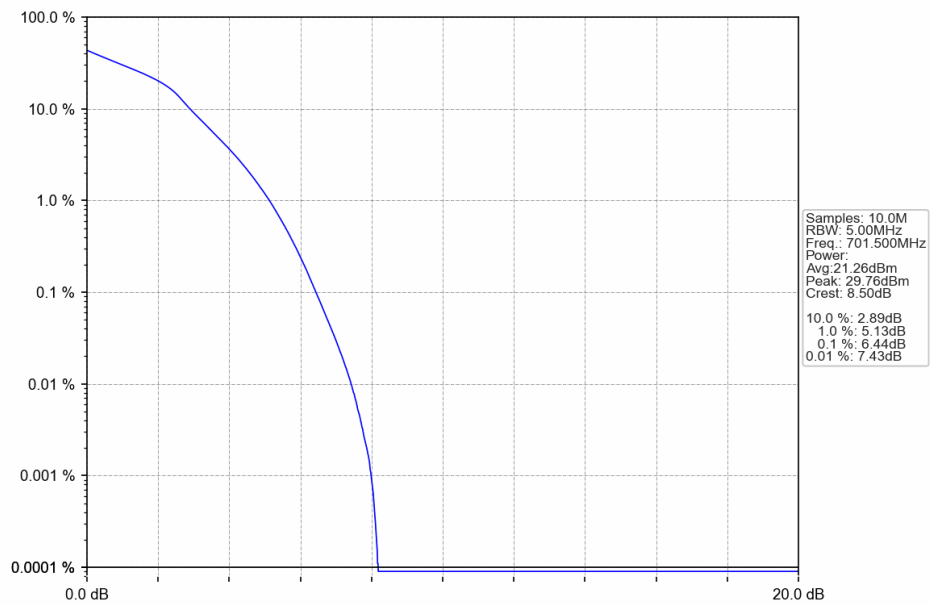
5.2.3 B12_5MHz



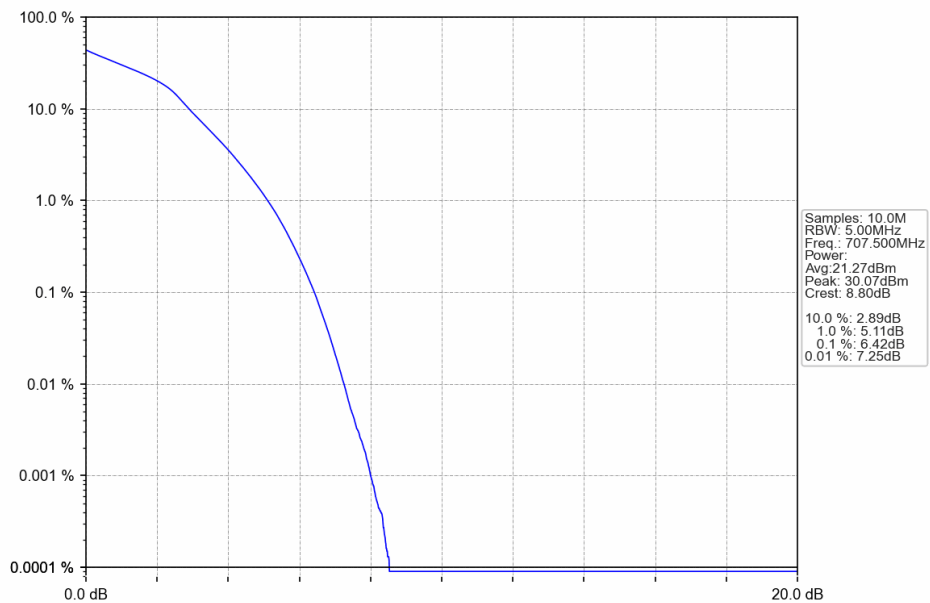
Band12 5MHz QPSK HCH 713.5MHz RB 25 0 NTN



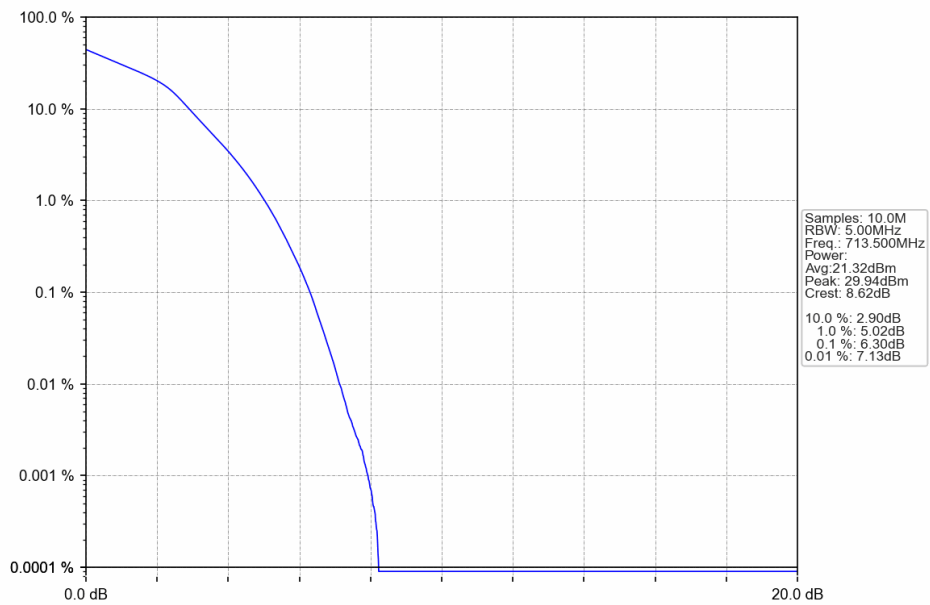
Band12 5MHz 16QAM LCH 701.5MHz RB 25 0 NTN



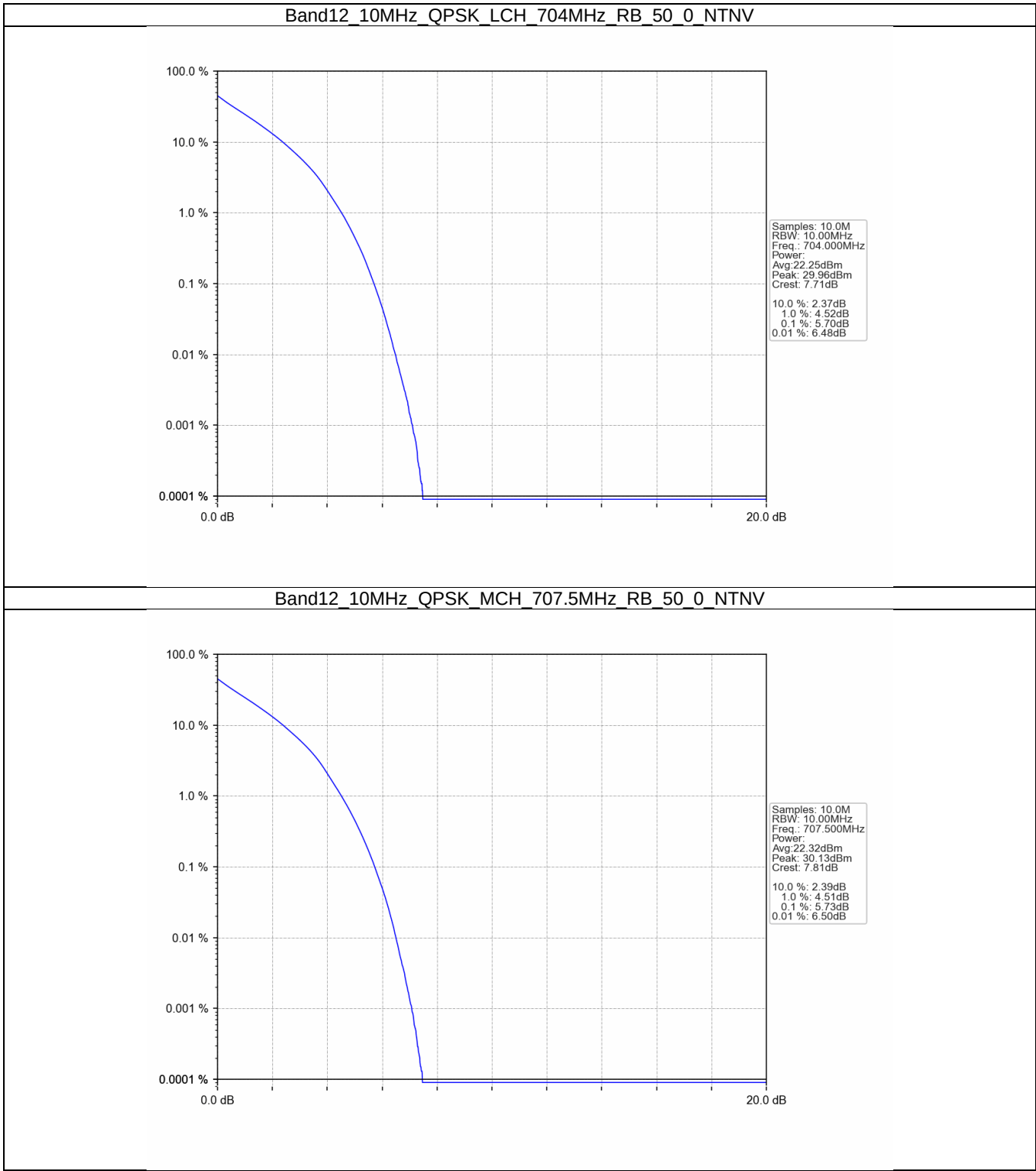
Band12 5MHz 16QAM MCH 707.5MHz RB 25 0 NTV



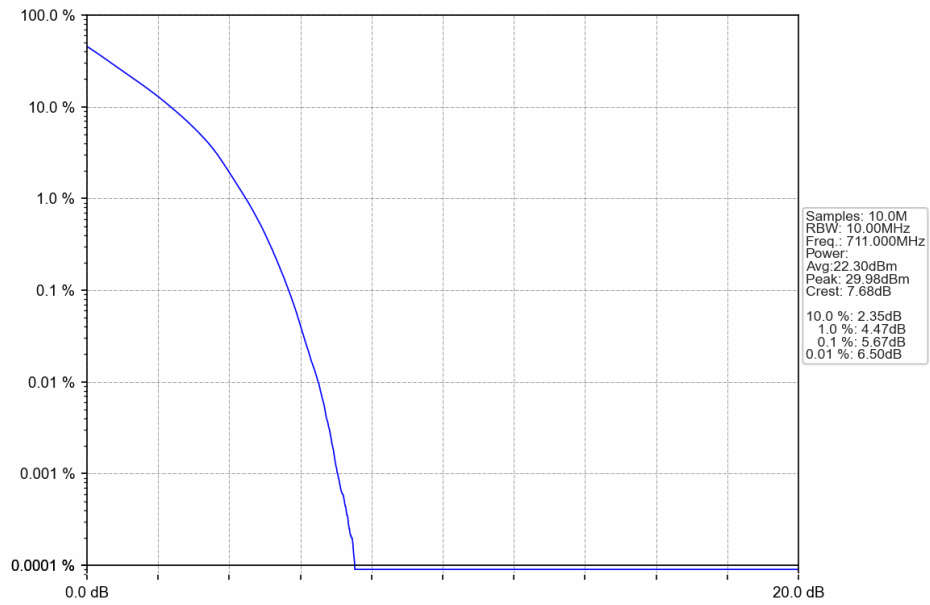
Band12 5MHz 16QAM HCH 713.5MHz RB 25 0 NTV



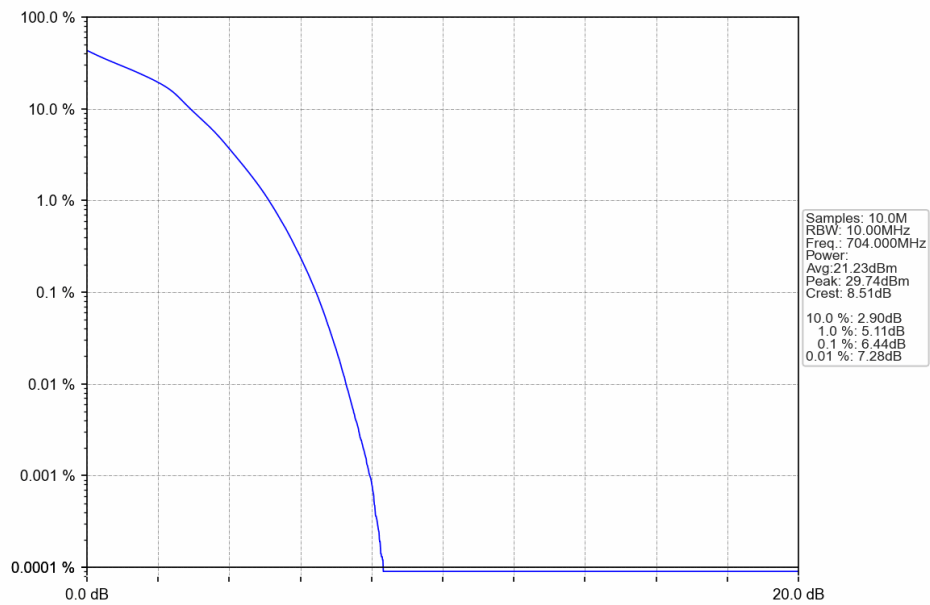
5.2.4 B12_10MHz



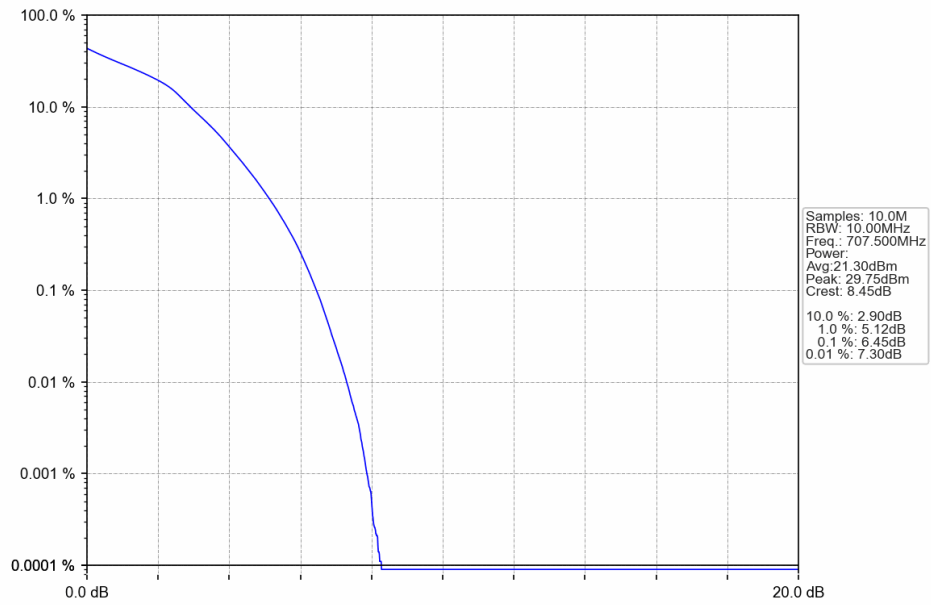
Band12 10MHz QPSK HCH 711MHz RB 50 0 NTN



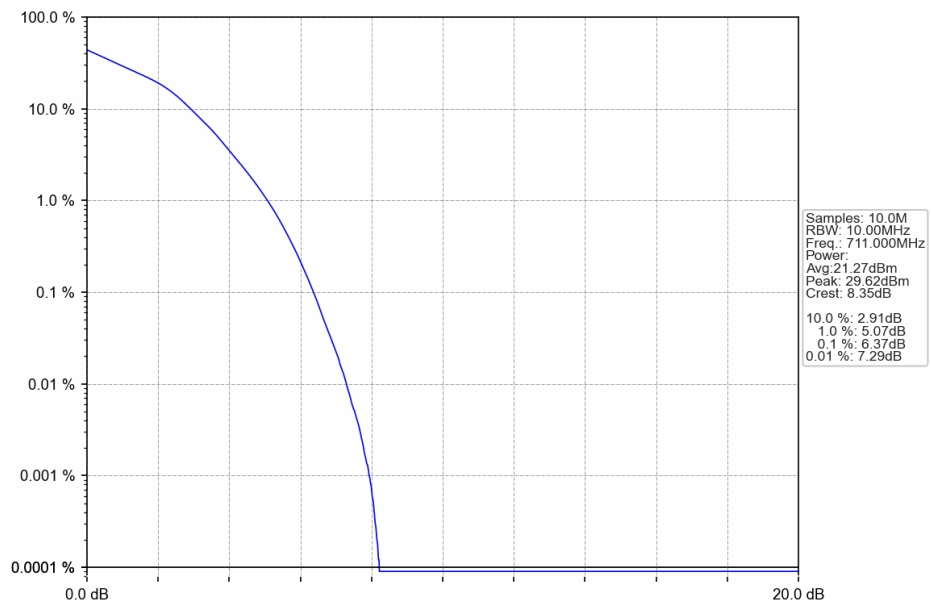
Band12 10MHz 16QAM LCH 704MHz RB 50 0 NTN



Band12 10MHz 16QAM MCH 707.5MHz RB 50 0 NTNV



Band12 10MHz 16QAM HCH 711MHz RB 50 0 NTNV



6. Spurious Emission

6.1 Test Result

6.1.1 B12_1.4MHz

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
	715.3	1	0	Refer To Test Graph		Pass
		1	5	Refer To Test Graph		Pass
		6	0	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
	715.3	1	0	Refer To Test Graph		Pass
		1	5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass

6.1.2 B12_3MHz

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
	714.5	1	0	Refer To Test Graph		Pass
		1	14	Refer To Test Graph		Pass
		15	0	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
	714.5	1	0	Refer To Test Graph		Pass
		1	14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

6.1.3 B12_5MHz

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
	713.5	1	0	Refer To Test Graph		Pass
		1	24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
16QAM	701.5	1	0	Refer To Test Graph		Pass

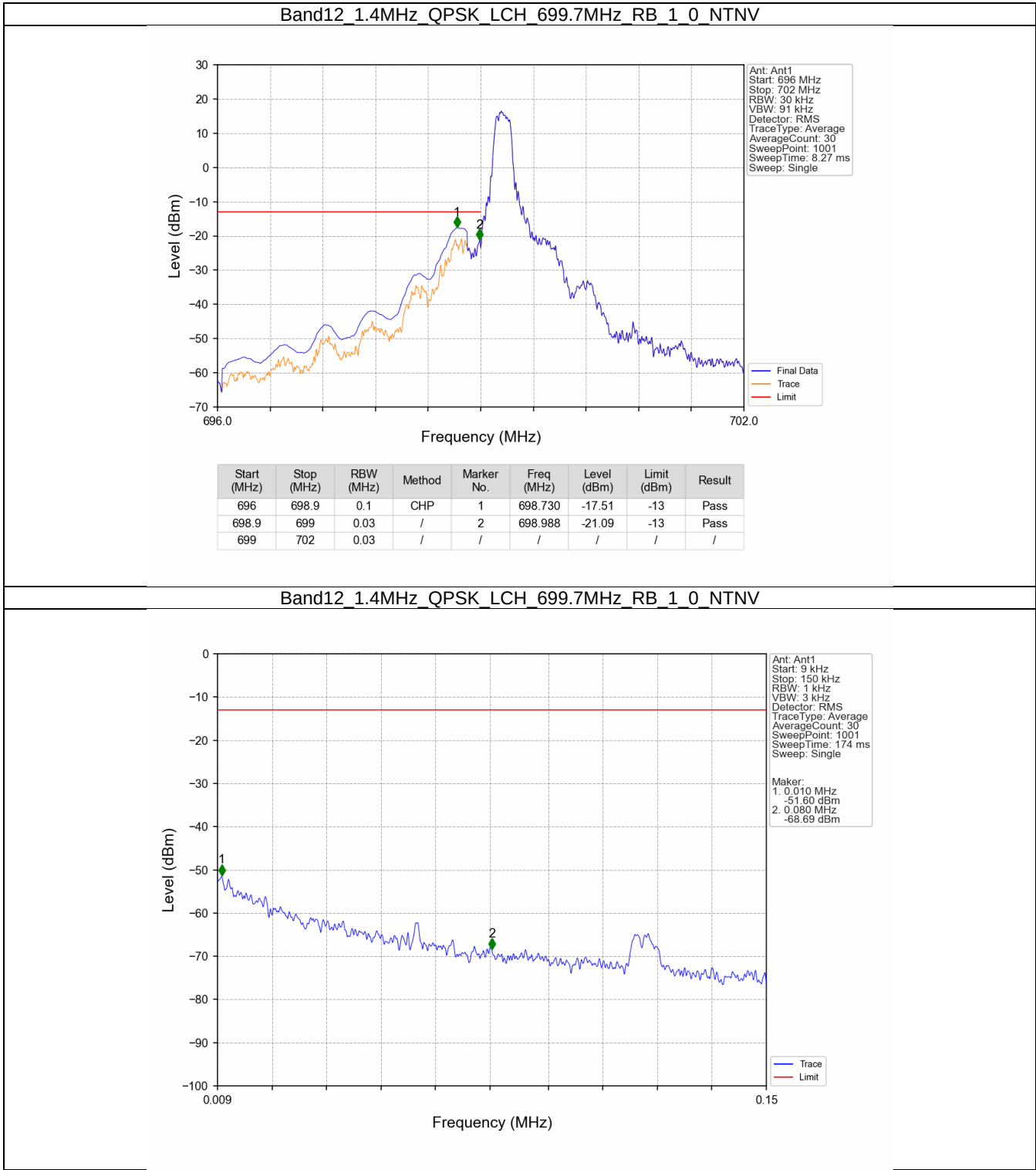
		25	0	Refer To Test Graph	Pass
	707.5	1	0	Refer To Test Graph	Pass
	713.5	1	0	Refer To Test Graph	Pass
			24	Refer To Test Graph	Pass
		25	0	Refer To Test Graph	Pass

6.1.4 B12_10MHz

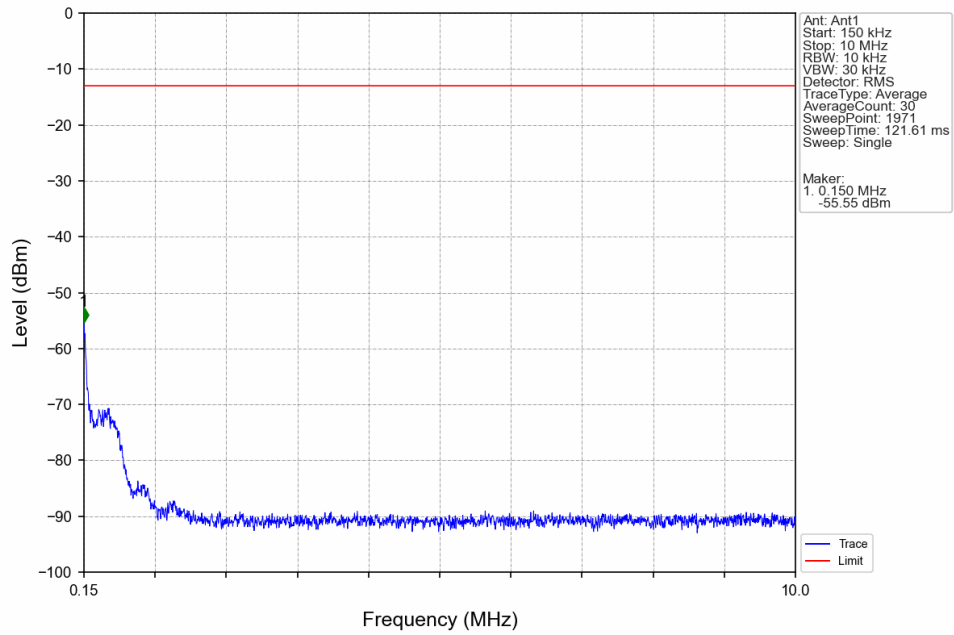
Band: 12 / Bandwidth: 10MHz / NTNV					
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission	
		Size	Offset	Result	Limit
QPSK	704	1	0	Refer To Test Graph	Pass
		50	0	Refer To Test Graph	Pass
	707.5	1	0	Refer To Test Graph	Pass
	711	1	0	Refer To Test Graph	Pass
			49	Refer To Test Graph	Pass
	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

6.2 Test Graph

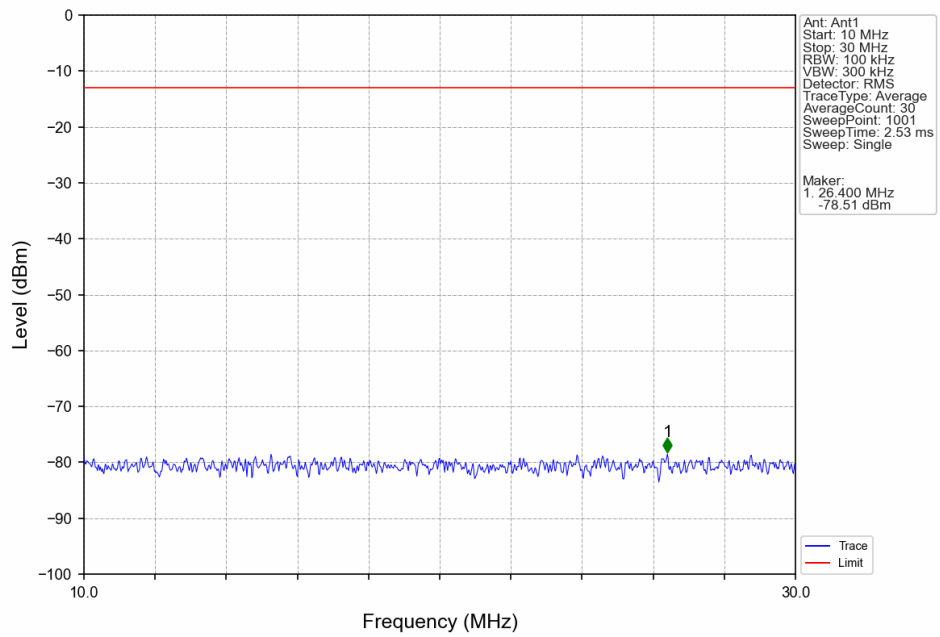
6.2.1 B12_1.4MHz



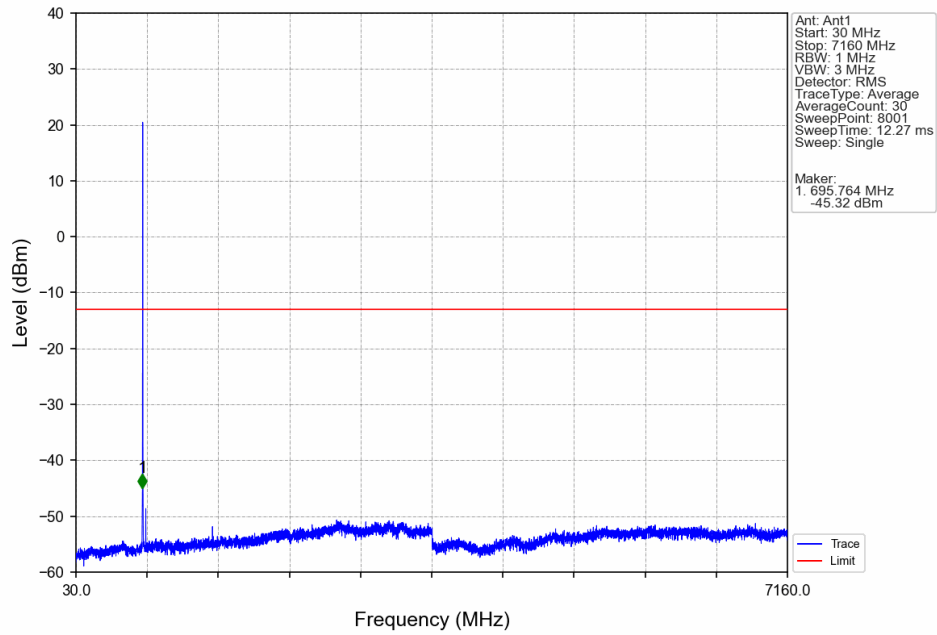
Band12 1.4MHz QPSK LCH 699.7MHz RB 1 0 NTNV



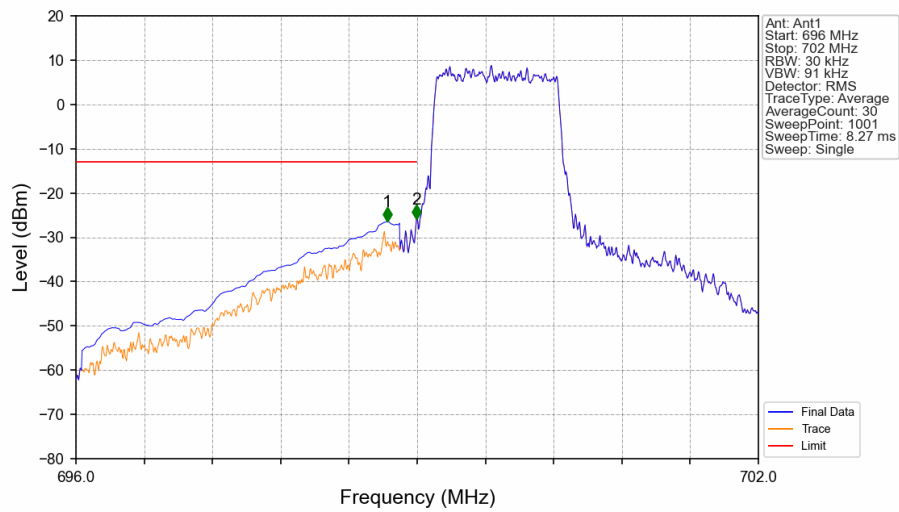
Band12 1.4MHz QPSK LCH 699.7MHz RB 1 0 NTNV



Band12 1.4MHz QPSK LCH 699.7MHz RB 1 0 NTNV

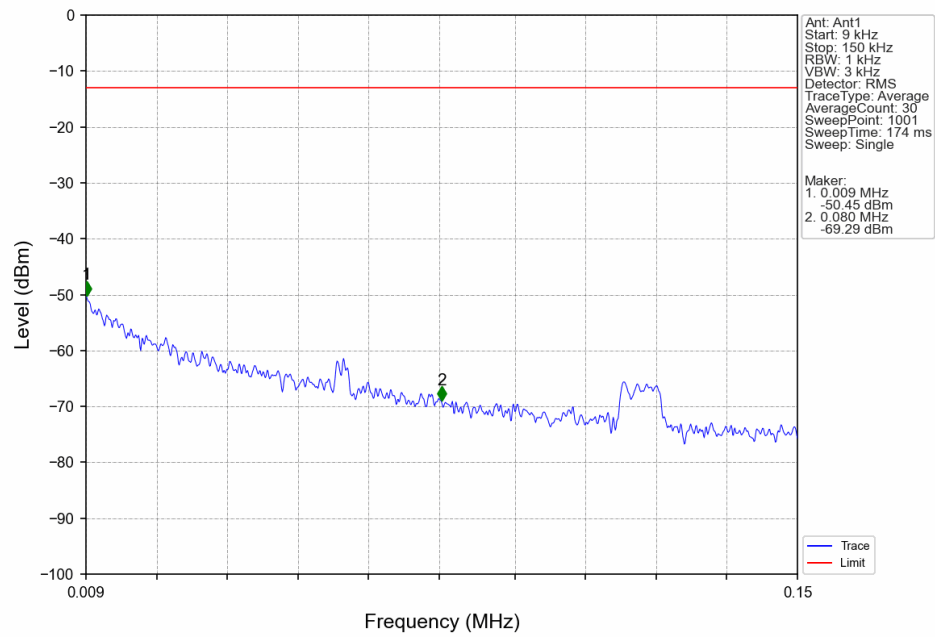


Band12 1.4MHz QPSK LCH 699.7MHz RB 6 0 NTNV

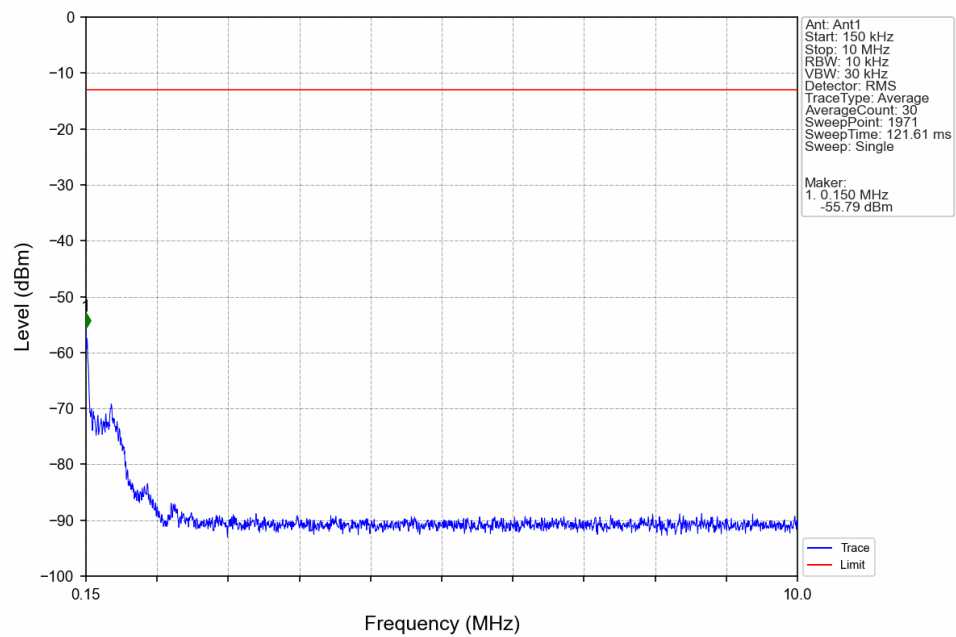


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.736	-26.41	-13	Pass
698.9	699	0.03	/	2	698.994	-25.91	-13	Pass
699	702	0.03	/	/	/	/	/	/

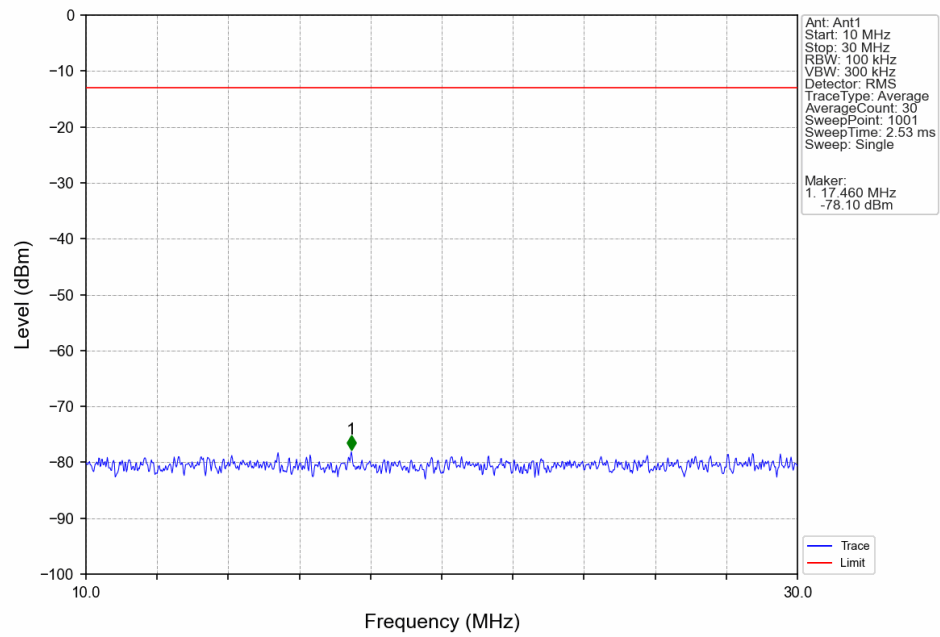
Band12 1.4MHz QPSK MCH 707.5MHz RB 1 0 NTV



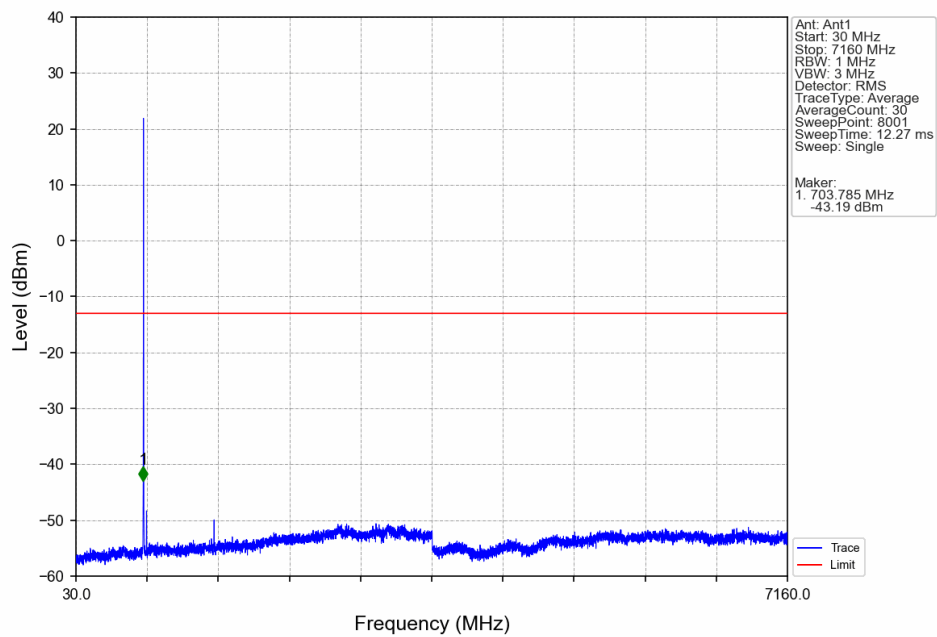
Band12 1.4MHz QPSK MCH 707.5MHz RB 1 0 NTV



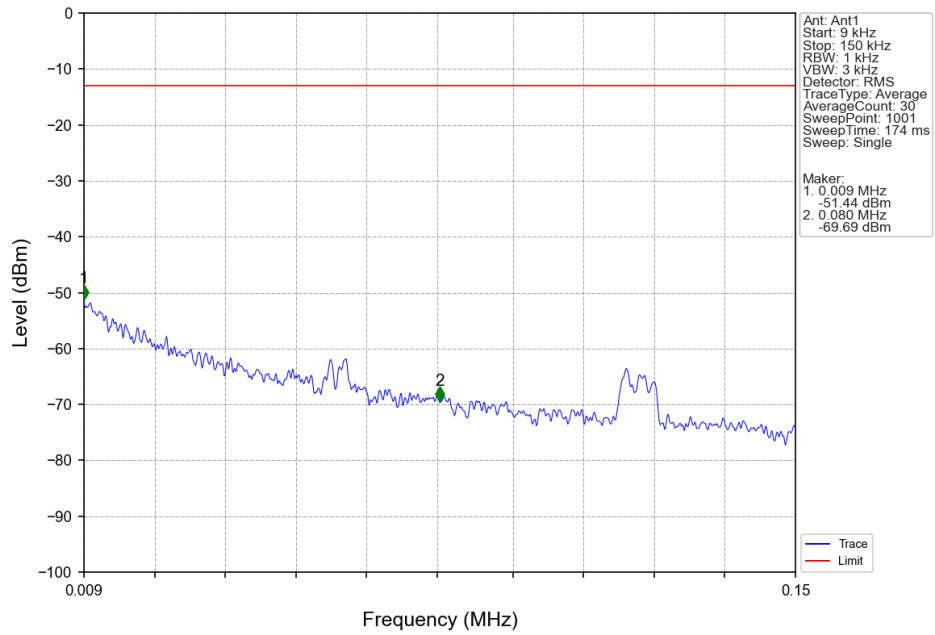
Band12 1.4MHz QPSK MCH 707.5MHz RB 1 0 NTNV



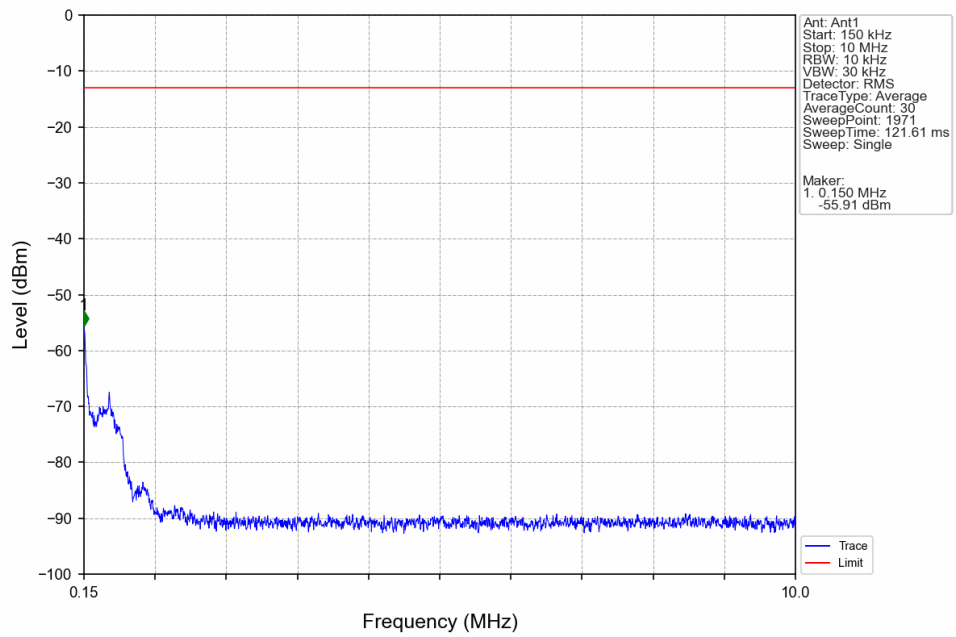
Band12 1.4MHz QPSK MCH 707.5MHz RB 1 0 NTNV



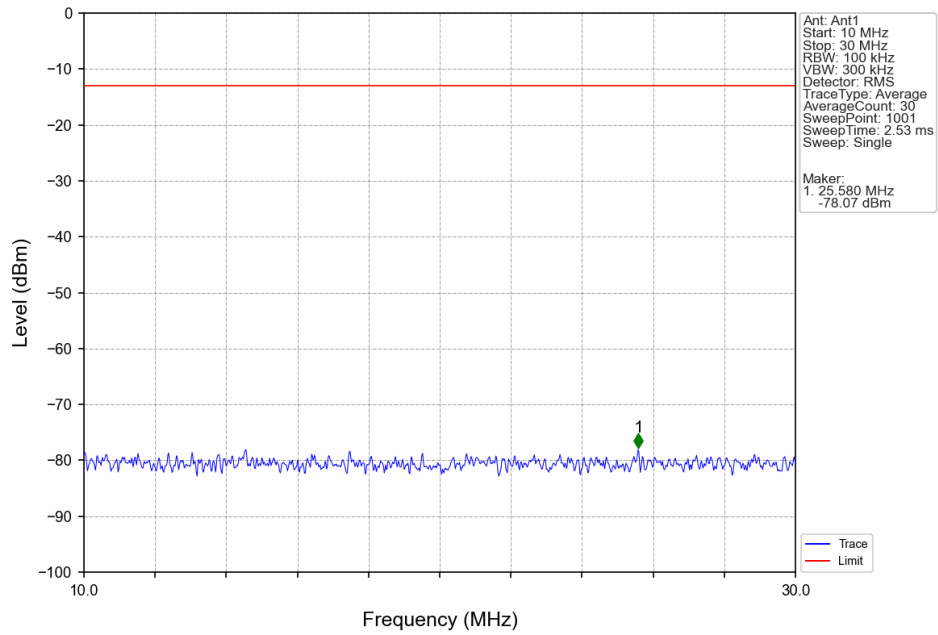
Band12 1.4MHz QPSK HCH 715.3MHz RB 1 0 NTNV



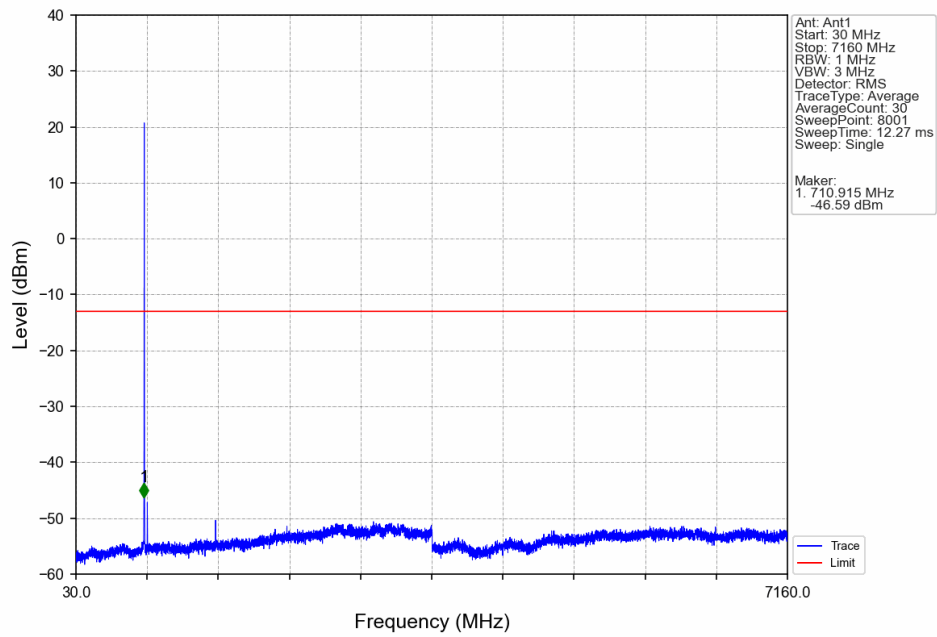
Band12 1.4MHz QPSK HCH 715.3MHz RB 1 0 NTNV



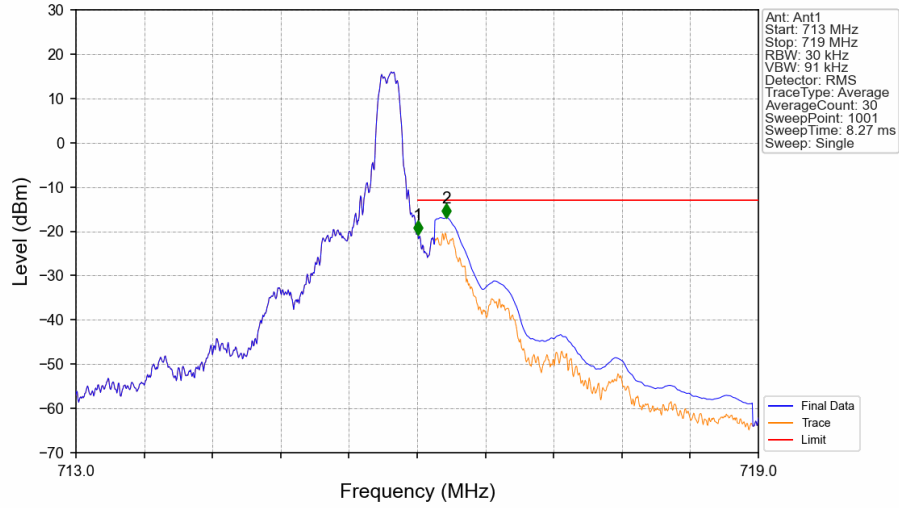
Band12 1.4MHz QPSK HCH 715.3MHz RB 1 0 NTV



Band12 1.4MHz QPSK HCH 715.3MHz RB 1 0 NTV

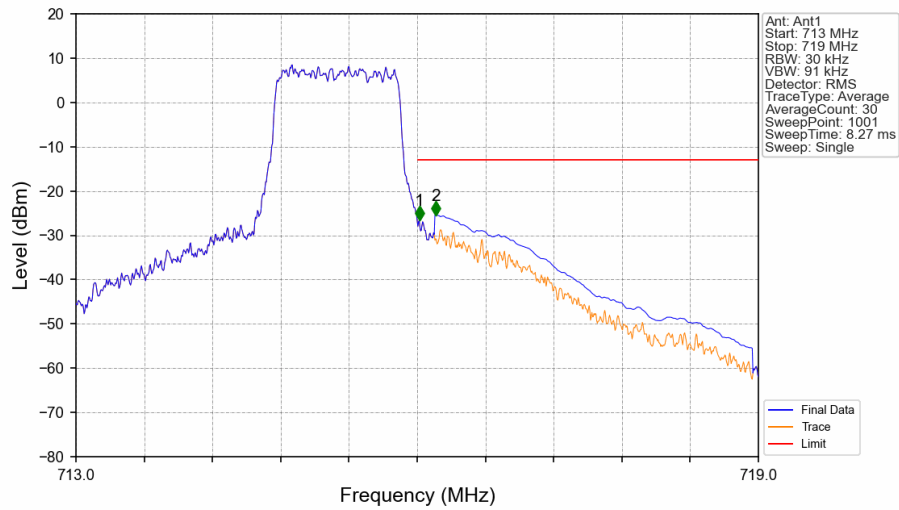


Band12 1.4MHz QPSK HCH 715.3MHz RB 1 5 NTV



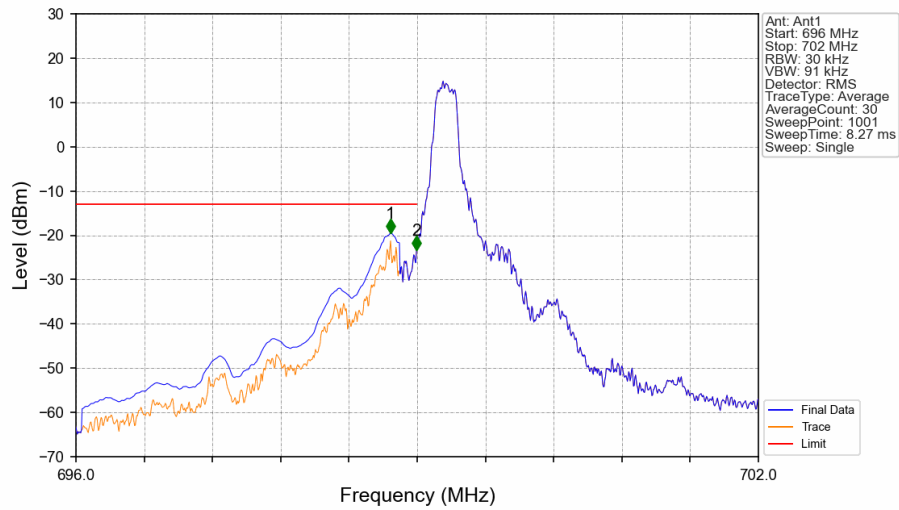
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.006	-20.83	-13	Pass
716.1	719	0.1	CHP	2	716.258	-16.91	-13	Pass

Band12 1.4MHz QPSK HCH 715.3MHz RB 6 0 NTV



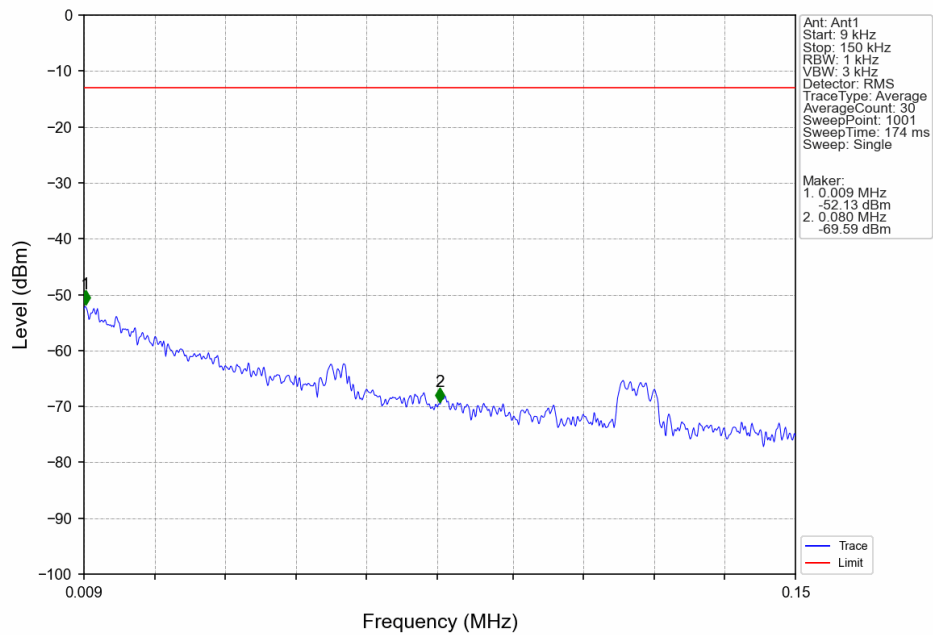
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.018	-26.62	-13	Pass
716.1	719	0.1	CHP	2	716.162	-25.43	-13	Pass

Band12 1.4MHz 16QAM LCH 699.7MHz RB 1 0 NTNV

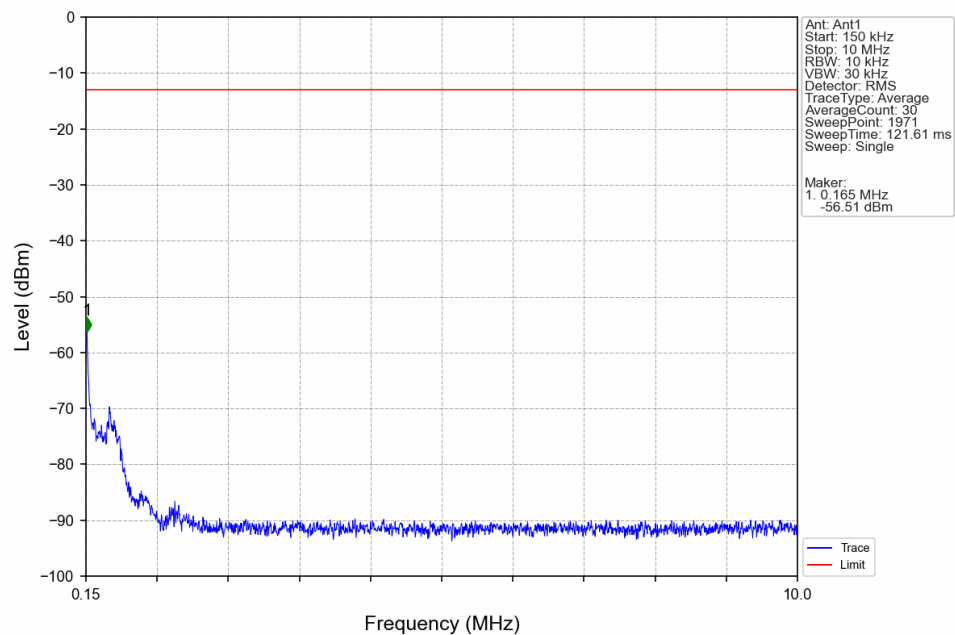


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.766	-19.47	-13	Pass
698.9	699	0.03	/	2	698.994	-23.35	-13	Pass
699	702	0.03	/	/	/	/	/	/

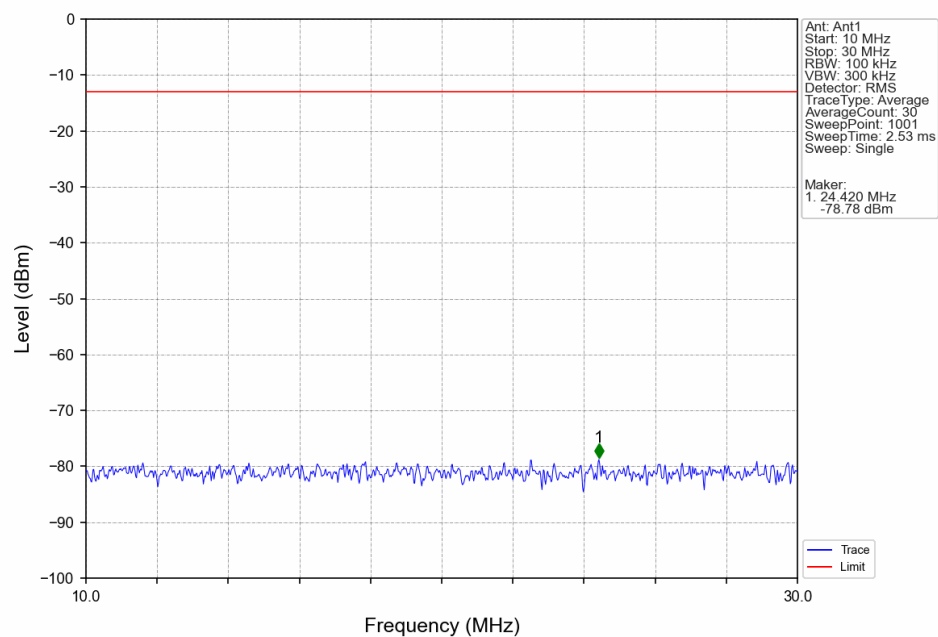
Band12 1.4MHz 16QAM LCH 699.7MHz RB 1 0 NTNV



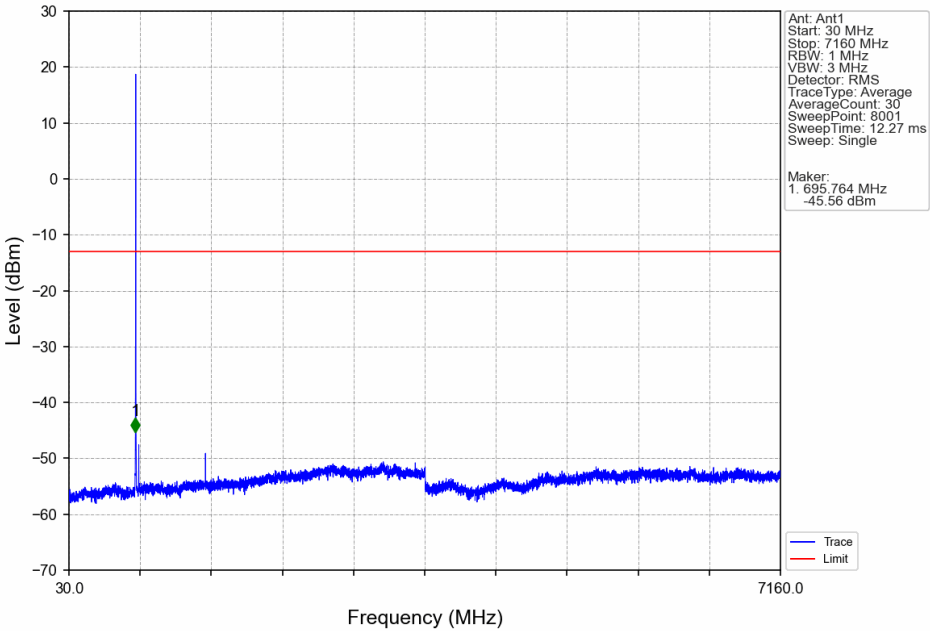
Band12 1.4MHz 16QAM LCH 699.7MHz RB 1 0 NTNV



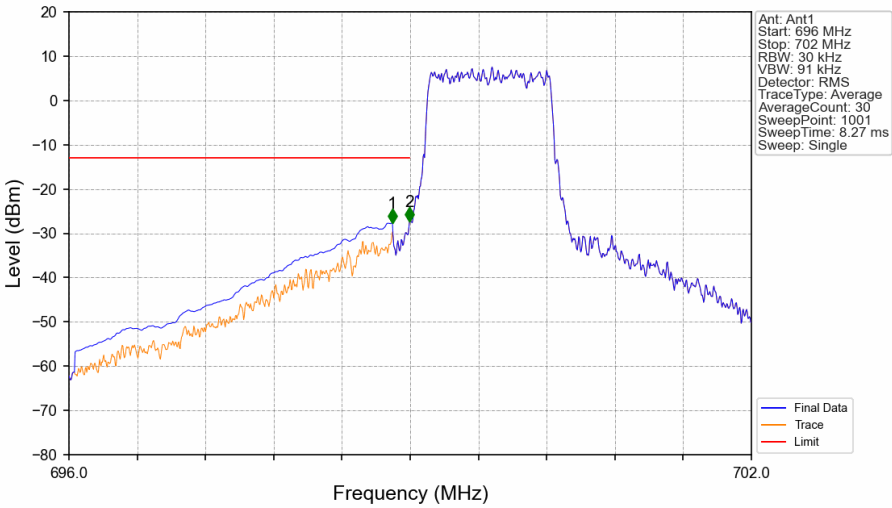
Band12 1.4MHz 16QAM LCH 699.7MHz RB 1 0 NTNV



Band12 1.4MHz 16QAM LCH 699.7MHz RB 1 0 NTNV

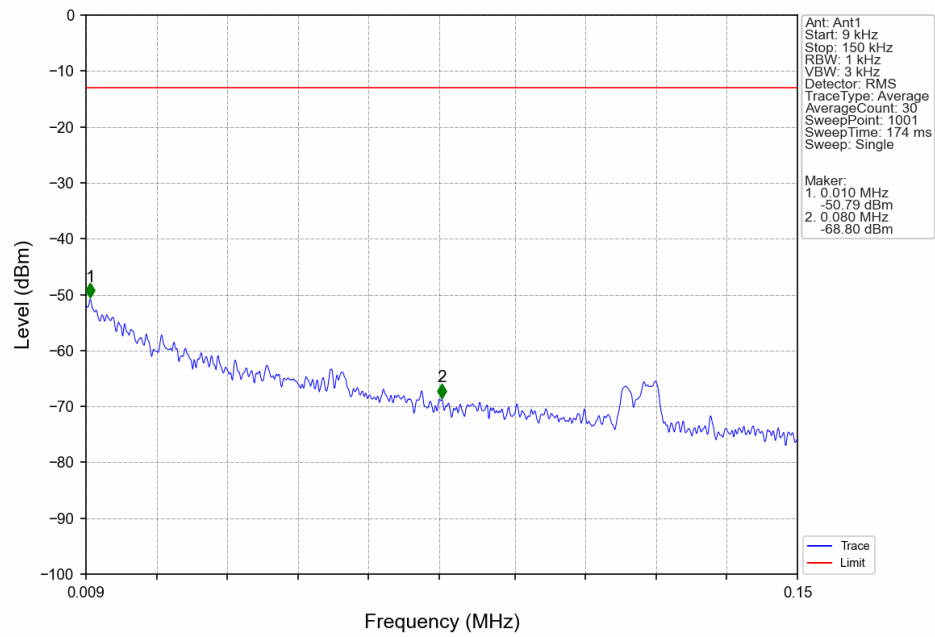


Band12 1.4MHz 16QAM LCH 699.7MHz RB 6 0 NTNV

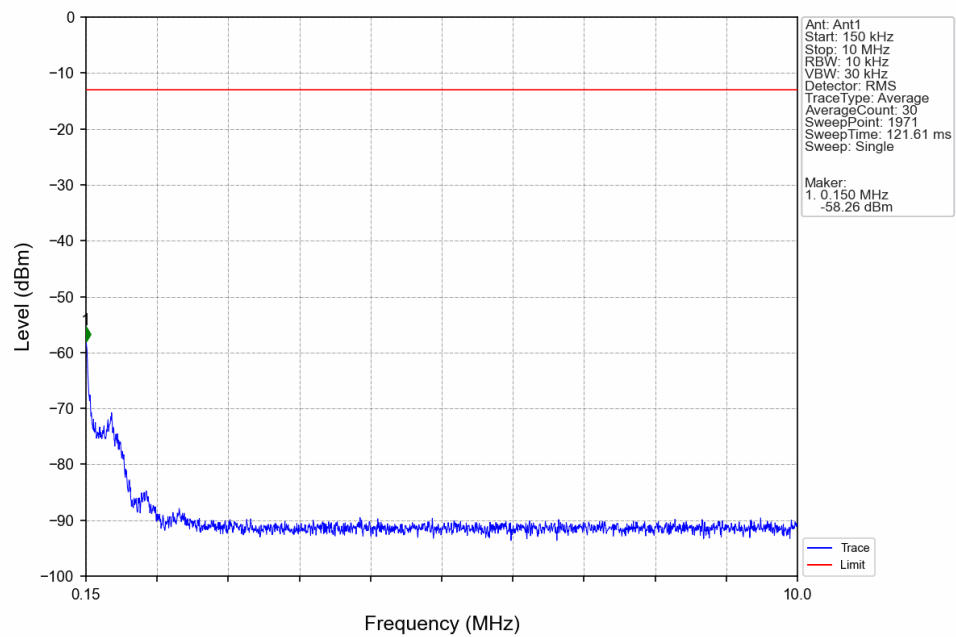


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.844	-27.65	-13	Pass
698.9	699	0.03	/	2	698.994	-27.29	-13	Pass
699	702	0.03	/	/	/	/	/	/

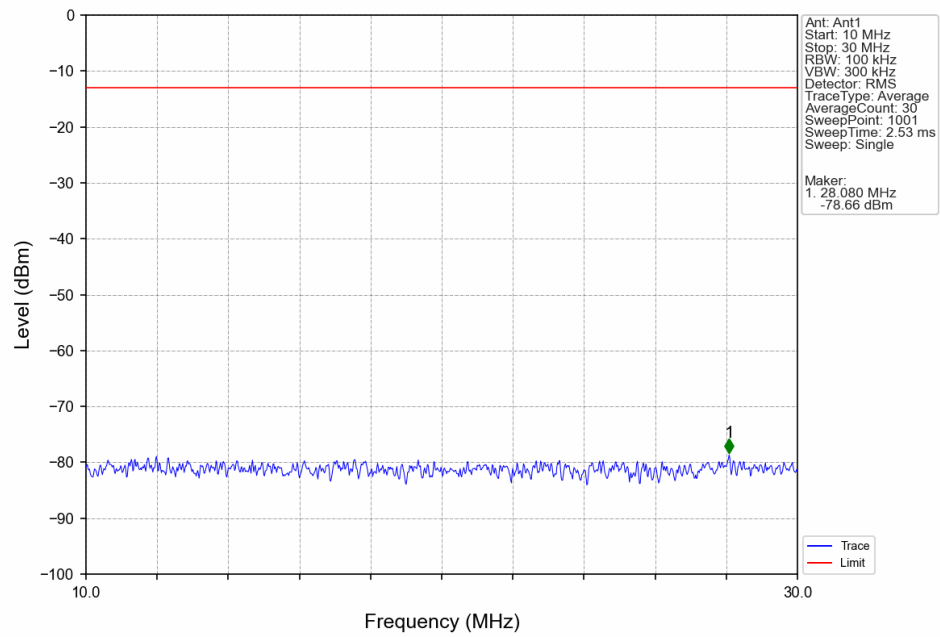
Band12 1.4MHz 16QAM MCH 707.5MHz RB 1 0 NTNV



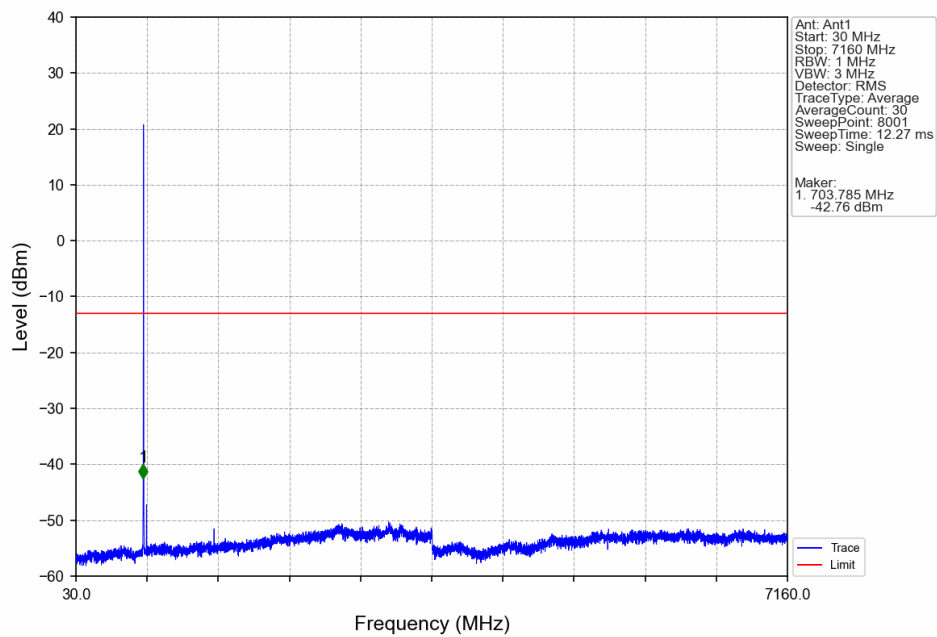
Band12 1.4MHz 16QAM MCH 707.5MHz RB 1 0 NTNV



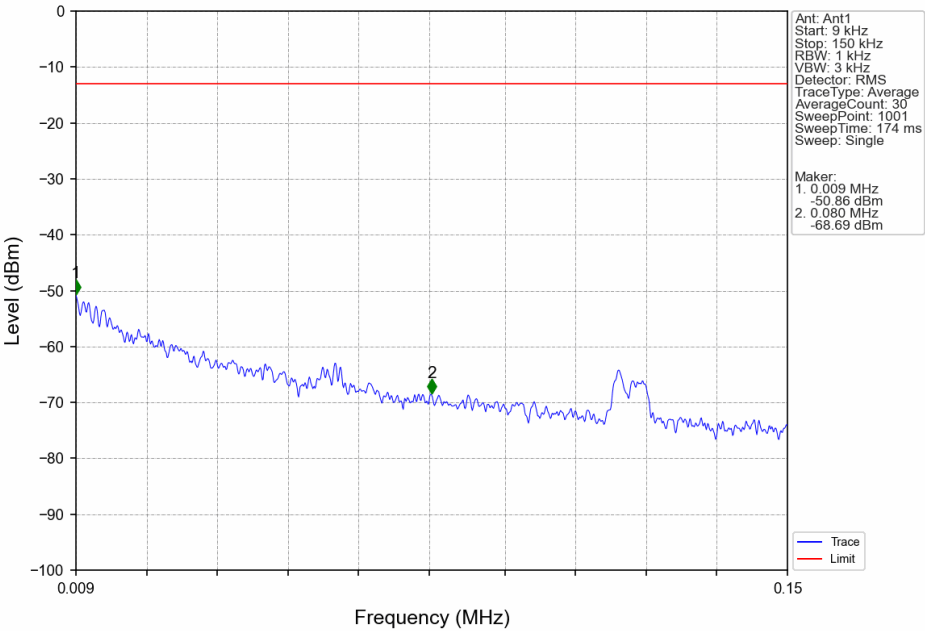
Band12 1.4MHz 16QAM MCH 707.5MHz RB 1 0 NTV



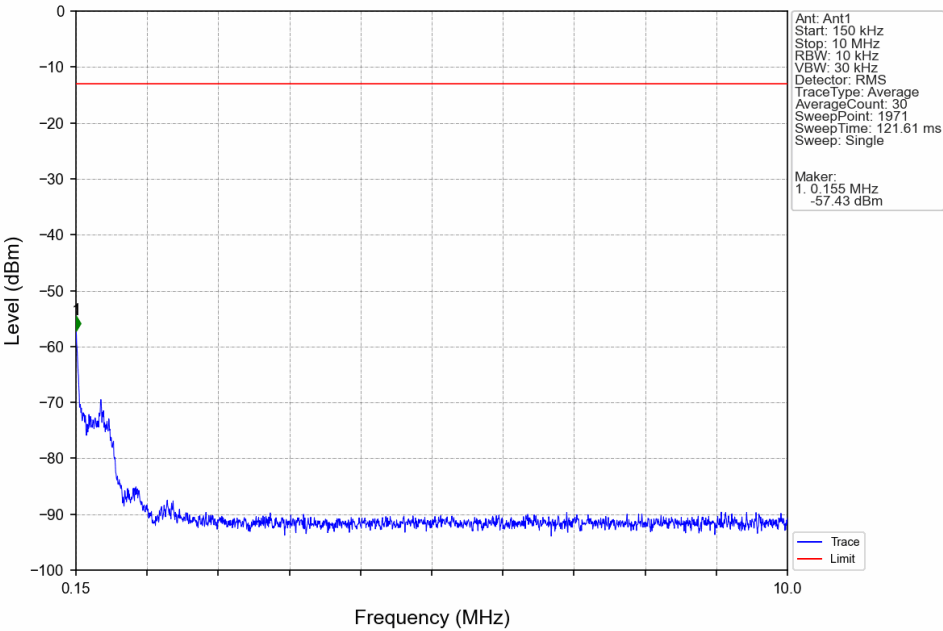
Band12 1.4MHz 16QAM MCH 707.5MHz RB 1 0 NTV



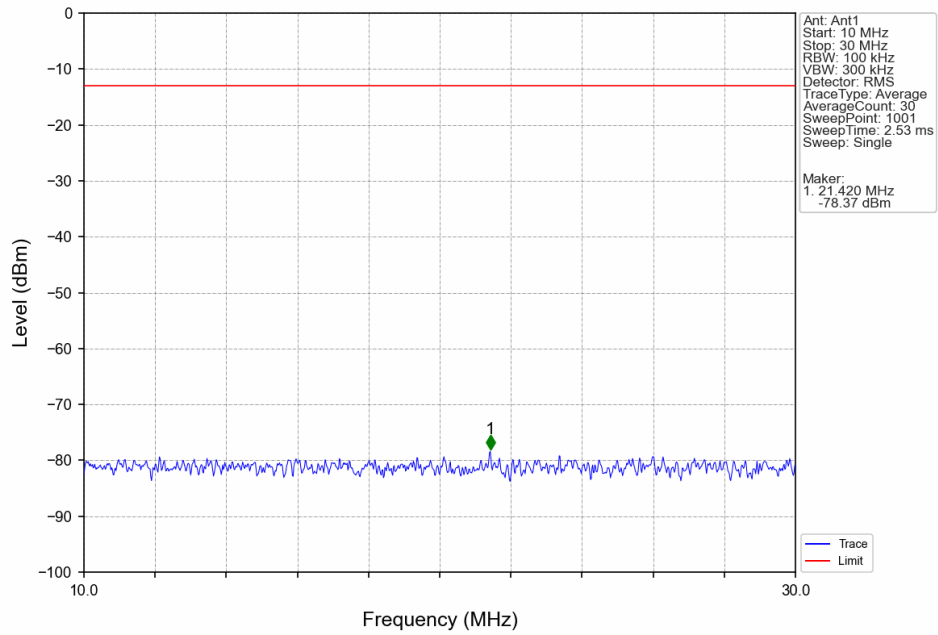
Band12 1.4MHz 16QAM HCH 715.3MHz RB 1 0 NTNV



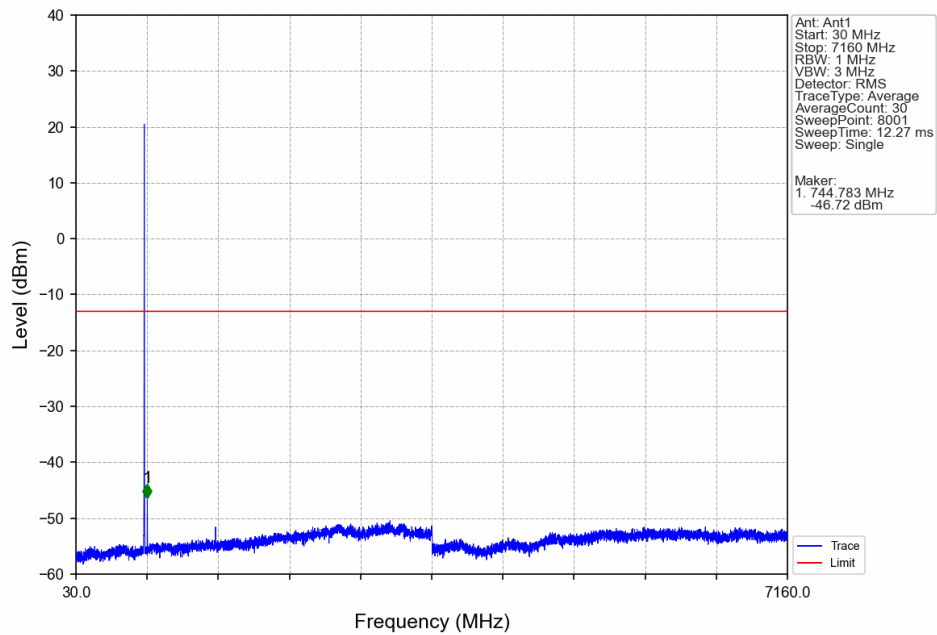
Band12 1.4MHz 16QAM HCH 715.3MHz RB 1 0 NTNV



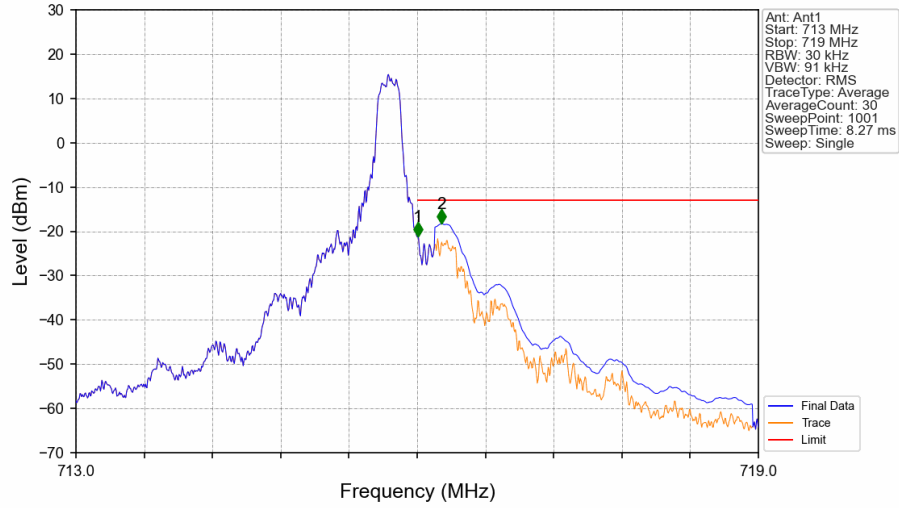
Band12 1.4MHz 16QAM HCH 715.3MHz RB 1 0 NTV



Band12 1.4MHz 16QAM HCH 715.3MHz RB 1 0 NTV

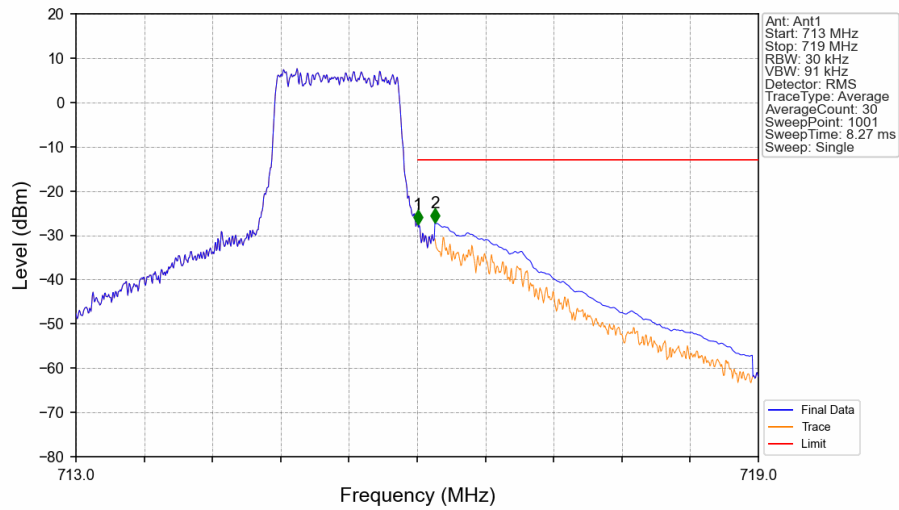


Band12 1.4MHz 16QAM HCH 715.3MHz RB 1 5 NTNV



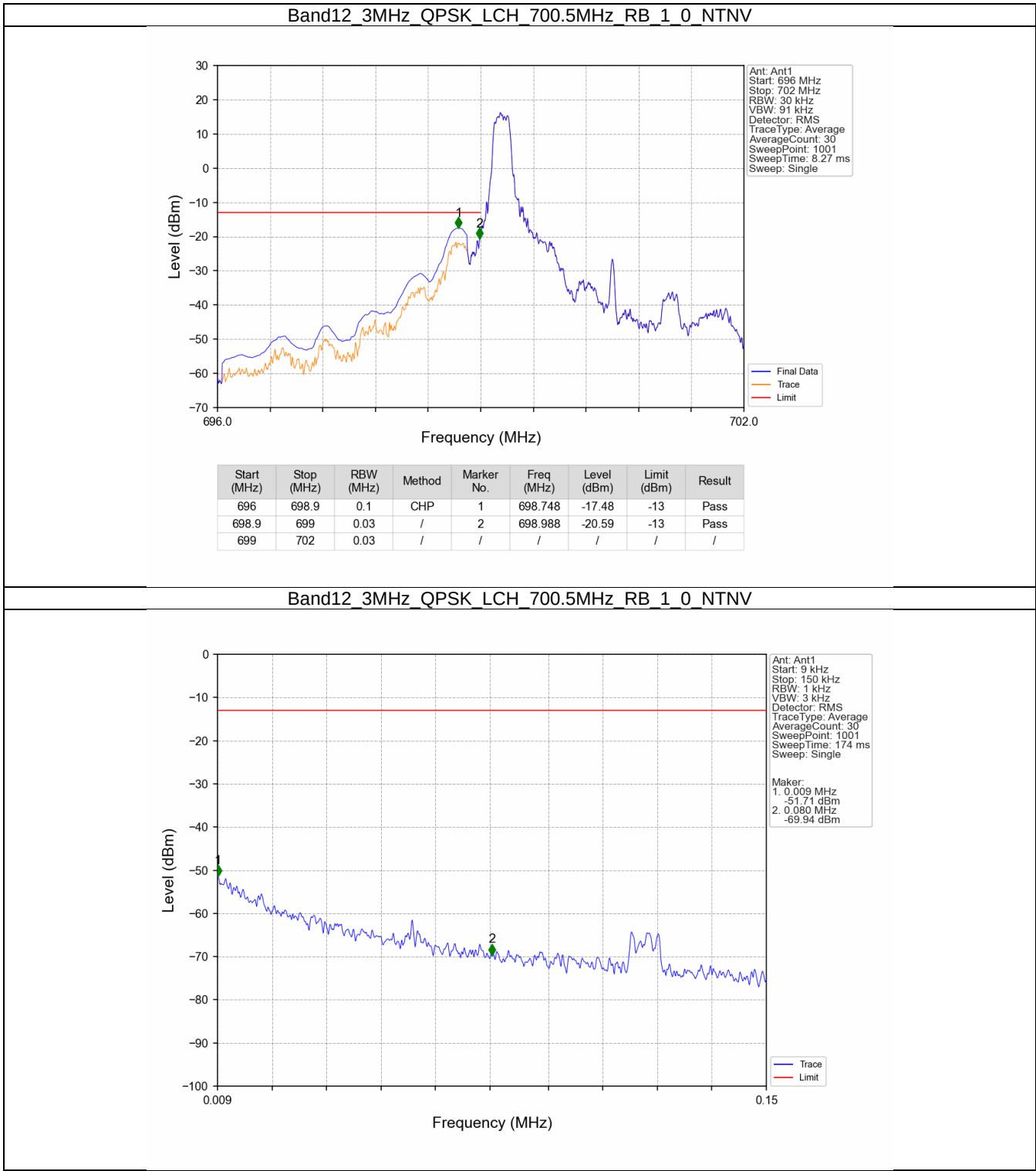
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.006	-21.14	-13	Pass
716.1	719	0.1	CHP	2	716.216	-18.30	-13	Pass

Band12 1.4MHz 16QAM HCH 715.3MHz RB 6 0 NTNV

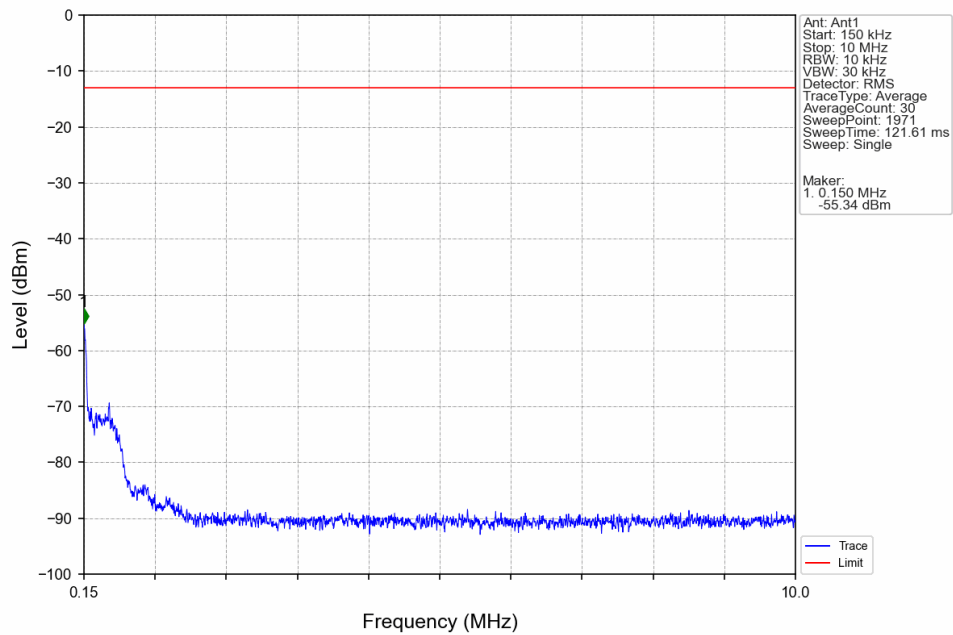


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.006	-27.52	-13	Pass
716.1	719	0.1	CHP	2	716.156	-27.16	-13	Pass

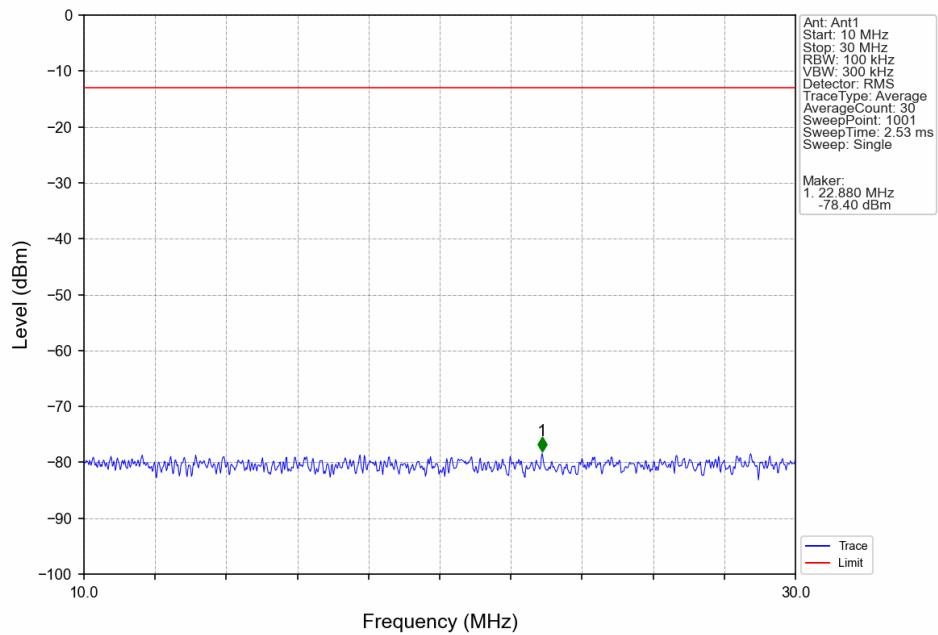
6.2.2 B12_3MHz



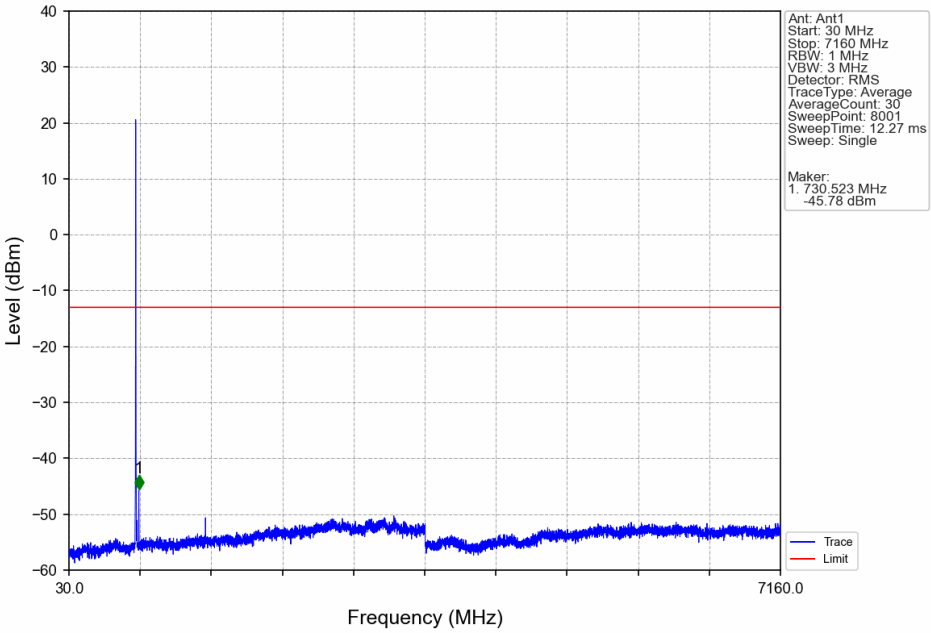
Band12 3MHz QPSK LCH 700.5MHz RB 1 0 NTN



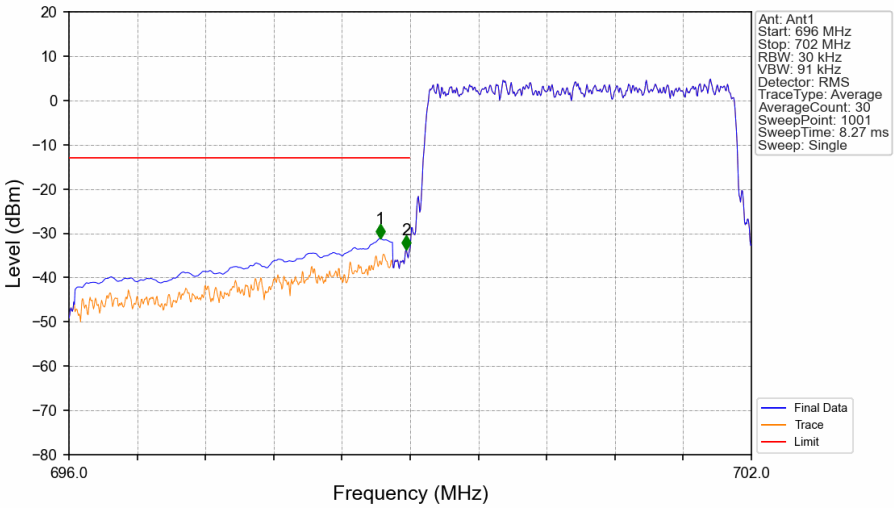
Band12 3MHz QPSK LCH 700.5MHz RB 1 0 NTN



Band12 3MHz QPSK LCH 700.5MHz RB 1 0 NTN

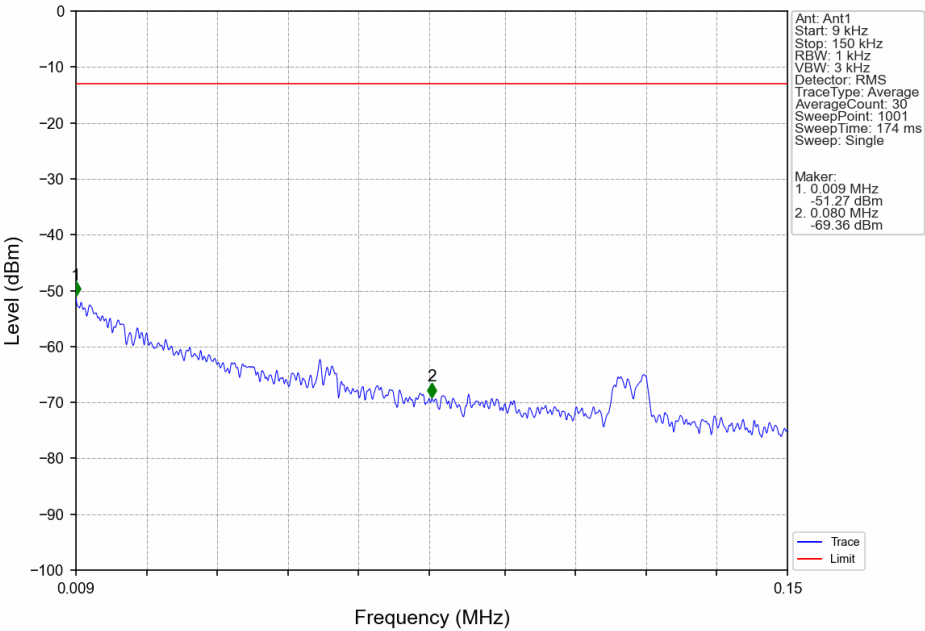


Band12 3MHz QPSK LCH 700.5MHz RB 15 0 NTN

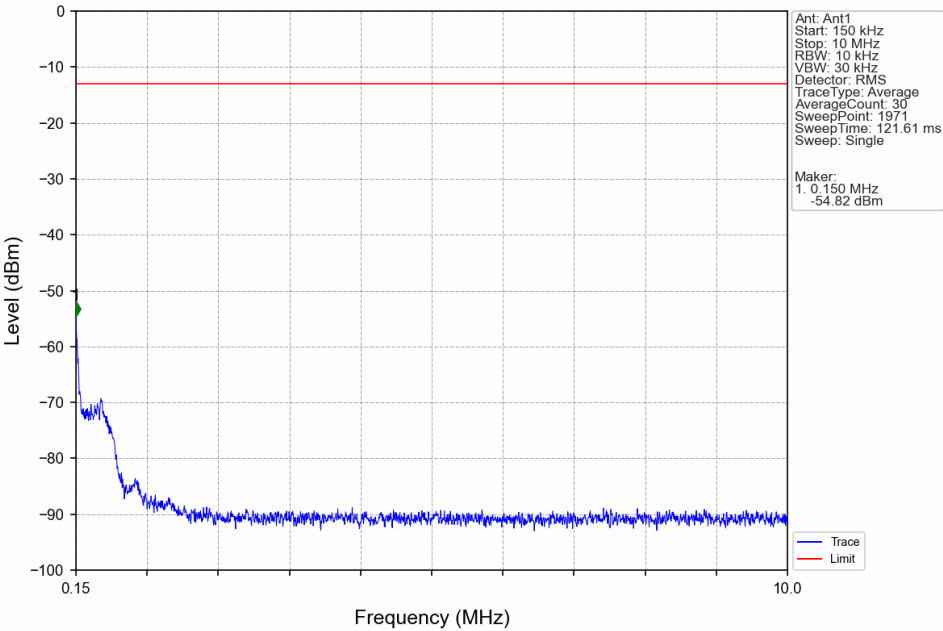


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.736	-31.20	-13	Pass
698.9	699	0.03	/	2	698.964	-33.68	-13	Pass
699	702	0.03	/	/	/	/	/	/

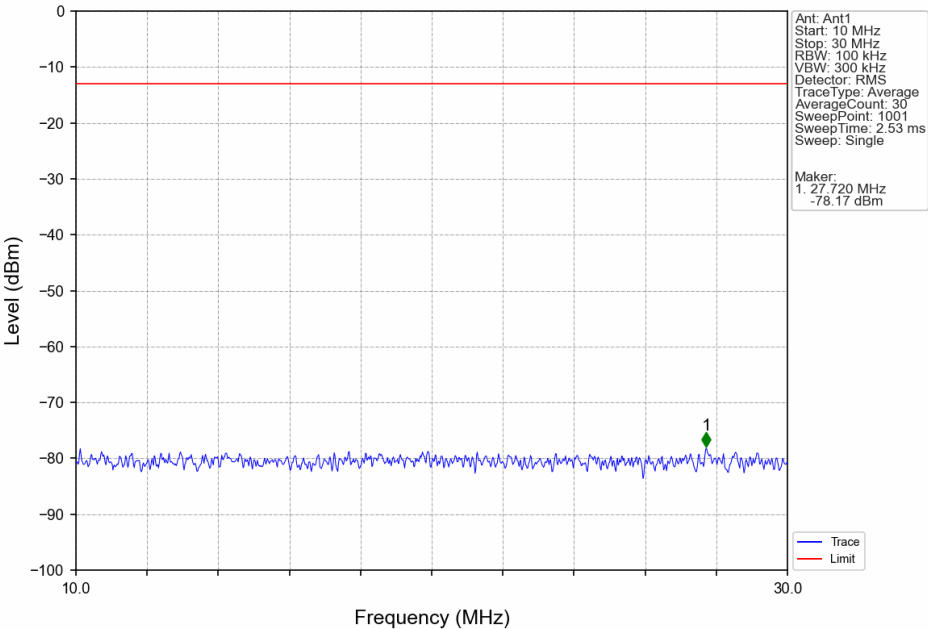
Band12 3MHz QPSK MCH 707.5MHz RB 1 0 NTN



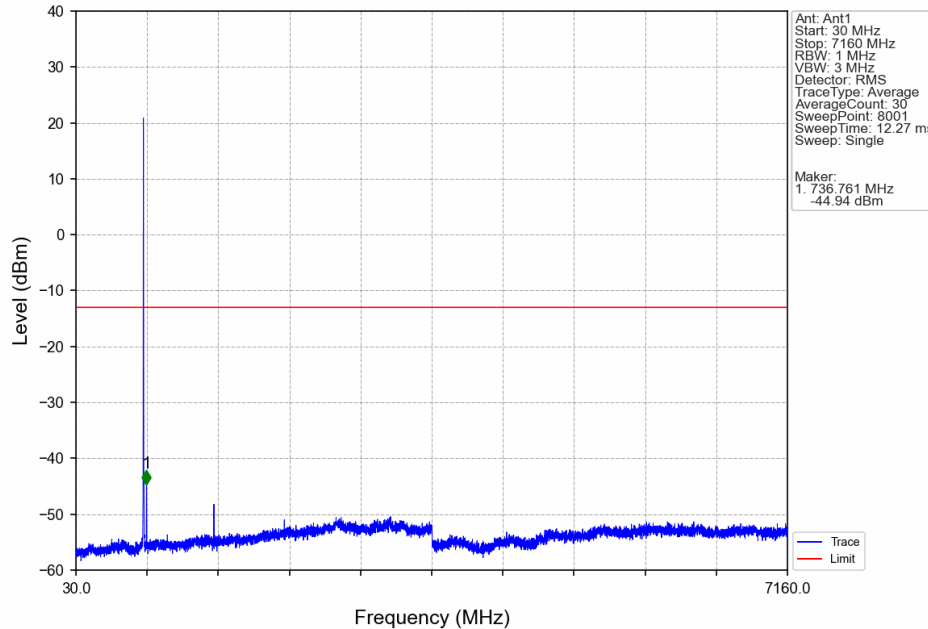
Band12 3MHz QPSK MCH 707.5MHz RB 1 0 NTN



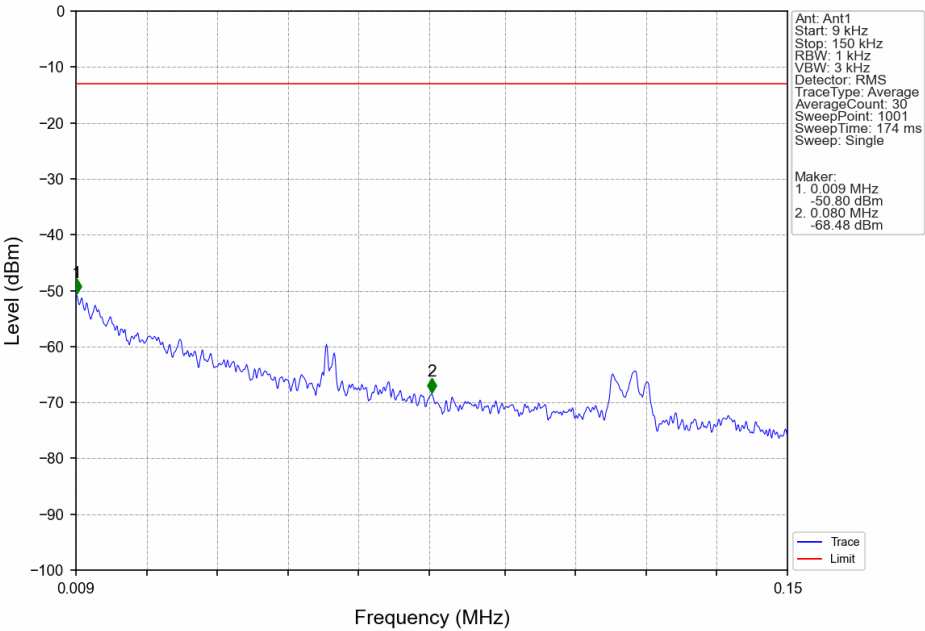
Band12 3MHz QPSK MCH 707.5MHz RB 1 0 NTN



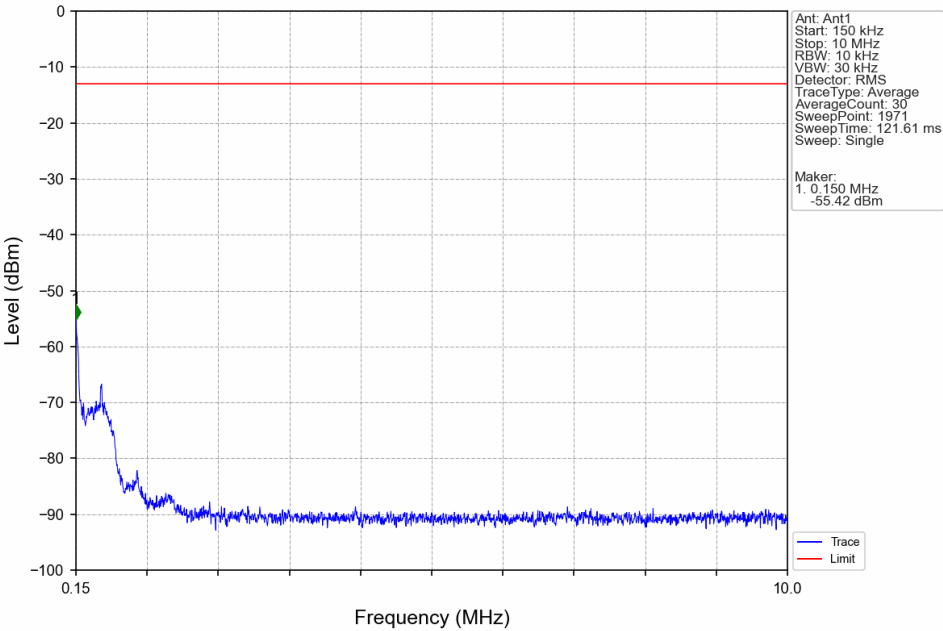
Band12 3MHz QPSK MCH 707.5MHz RB 1 0 NTN



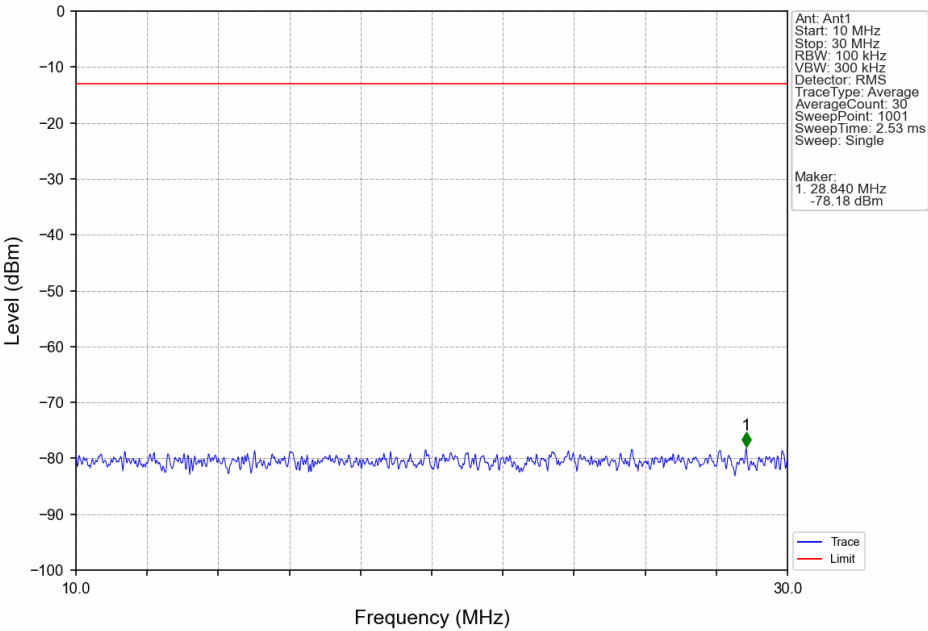
Band12 3MHz QPSK HCH 714.5MHz RB 1 0 NTN



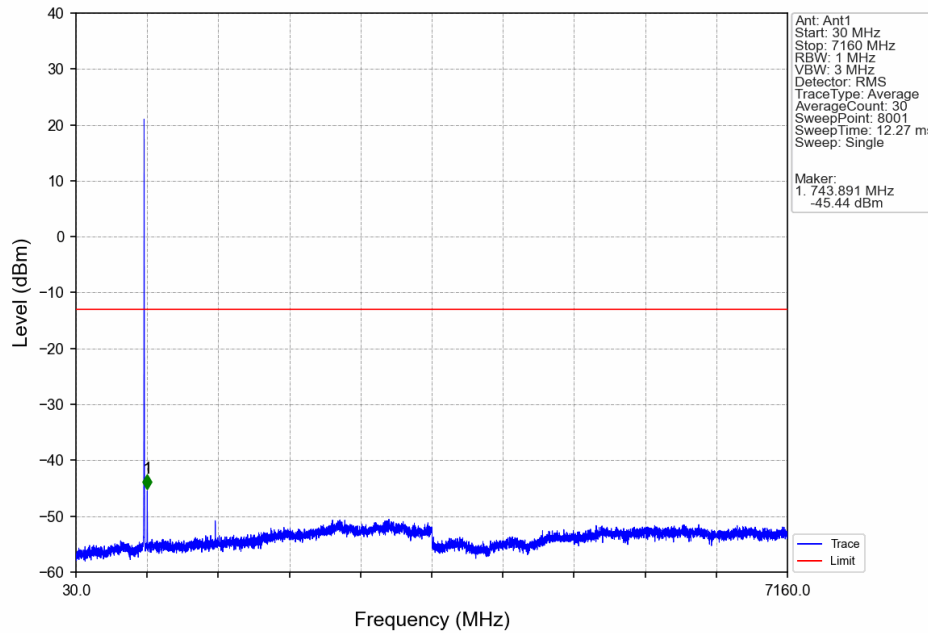
Band12 3MHz QPSK HCH 714.5MHz RB 1 0 NTN



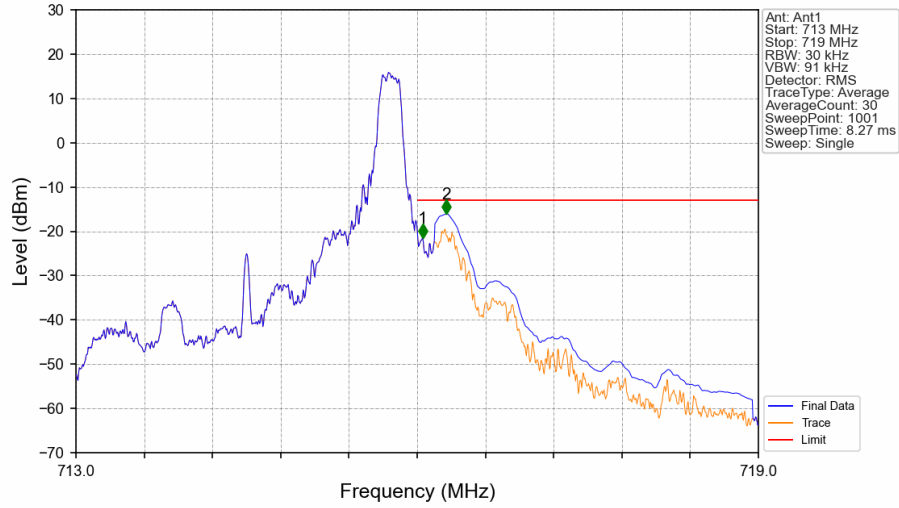
Band12 3MHz QPSK HCH 714.5MHz RB 1 0 NTN



Band12 3MHz QPSK HCH 714.5MHz RB 1 0 NTN

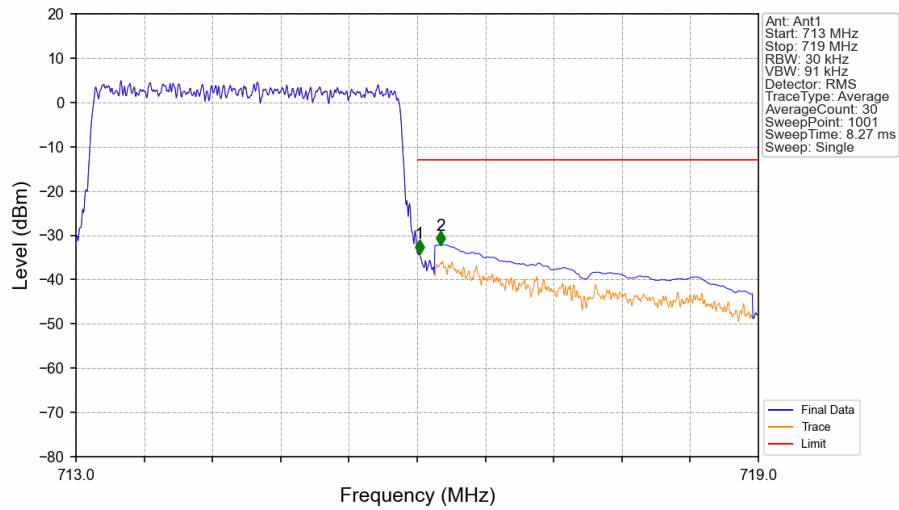


Band12 3MHz QPSK HCH 714.5MHz RB 1 14 NTV



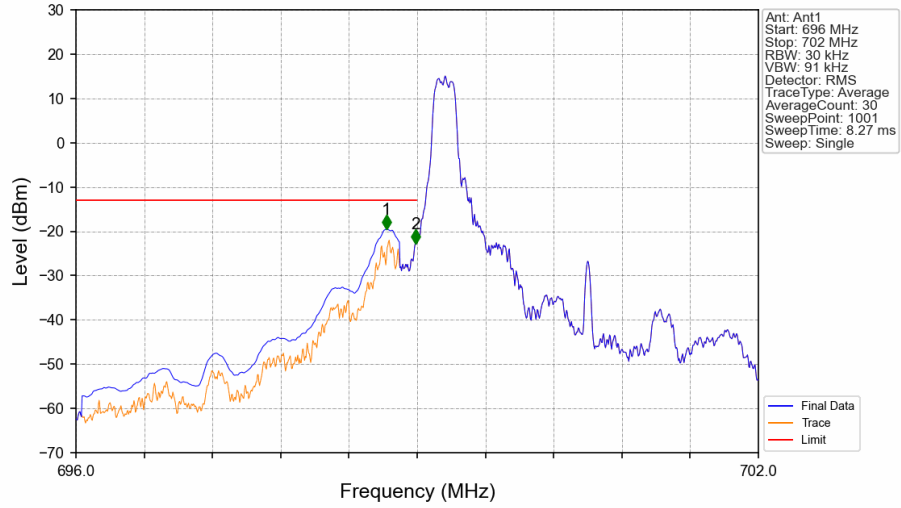
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.048	-21.46	-13	Pass
716.1	719	0.1	CHP	2	716.258	-16.05	-13	Pass

Band12 3MHz QPSK HCH 714.5MHz RB 15 0 NTV



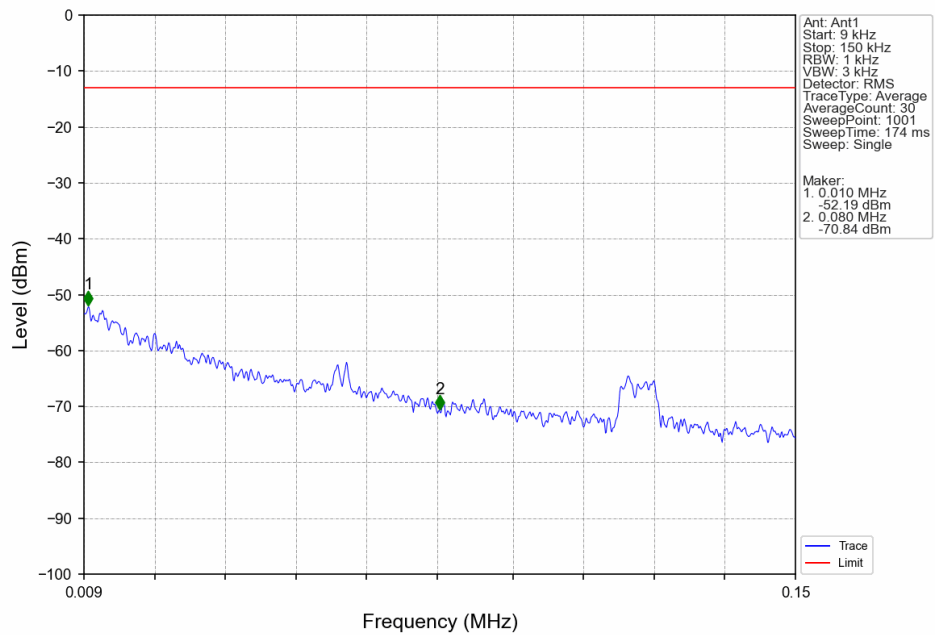
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.018	-34.13	-13	Pass
716.1	719	0.1	CHP	2	716.204	-32.17	-13	Pass

Band12 3MHz 16QAM LCH 700.5MHz RB 1 0 NTNV

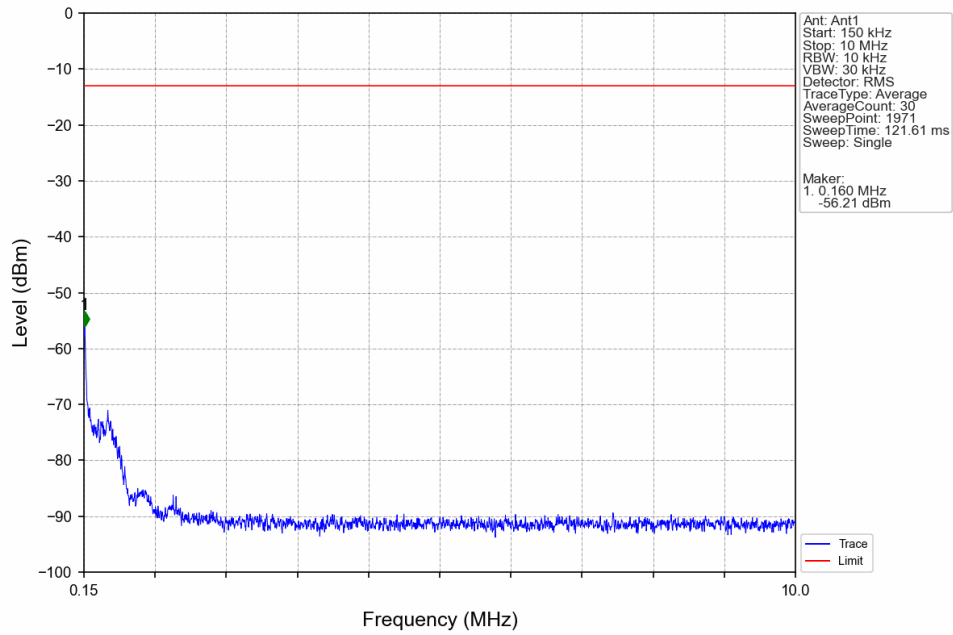


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.730	-19.48	-13	Pass
698.9	699	0.03	/	2	698.988	-22.76	-13	Pass
699	702	0.03	/	/	/	/	/	/

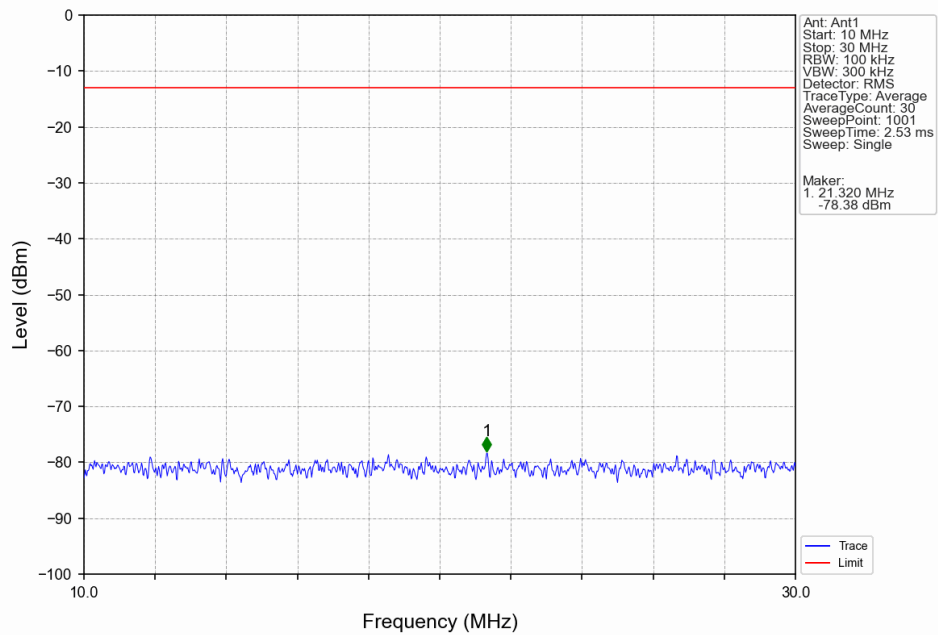
Band12 3MHz 16QAM LCH 700.5MHz RB 1 0 NTNV



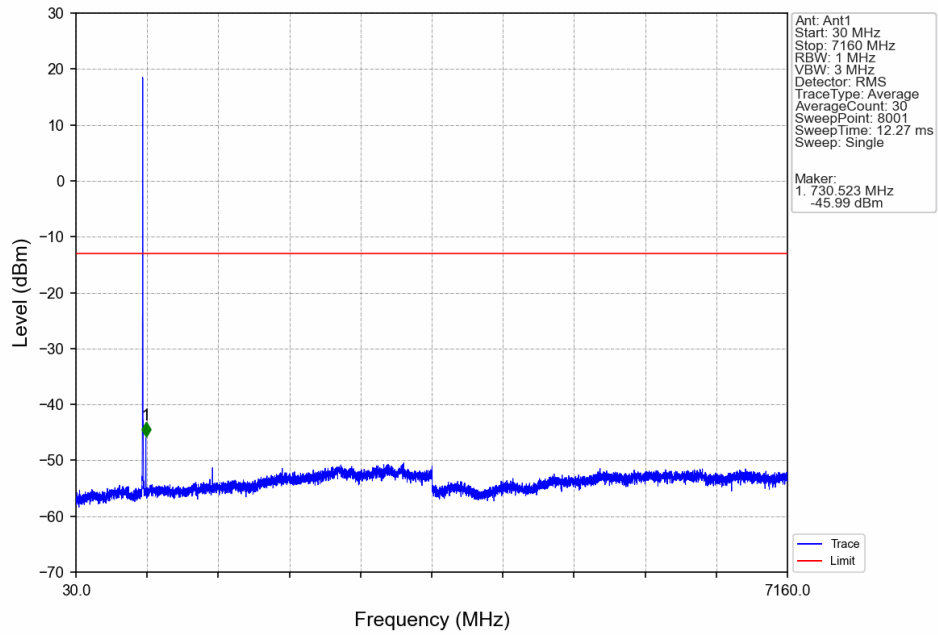
Band12 3MHz 16QAM LCH 700.5MHz RB 1 0 NTNV



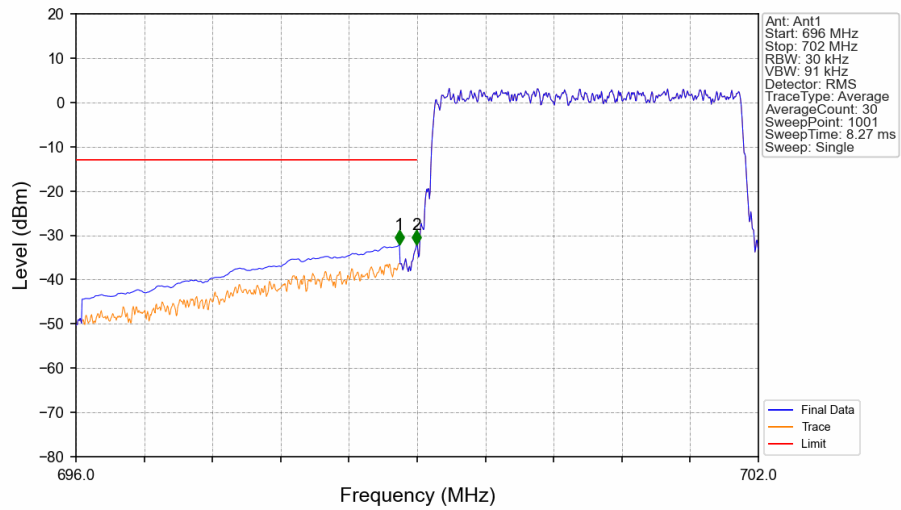
Band12 3MHz 16QAM LCH 700.5MHz RB 1 0 NTNV



Band12 3MHz 16QAM LCH 700.5MHz RB 1 0 NTV

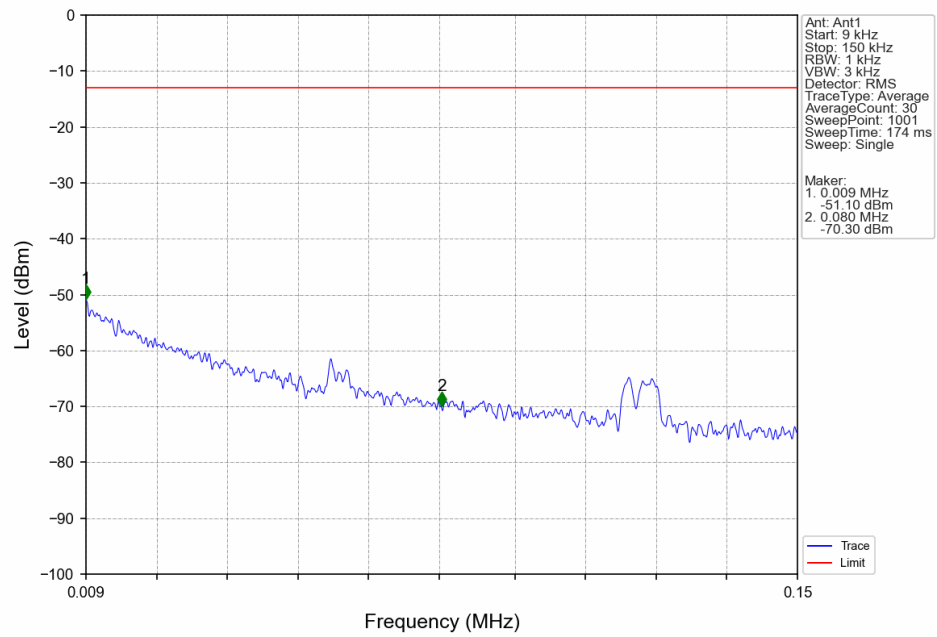


Band12 3MHz 16QAM LCH 700.5MHz RB 15 0 NTV

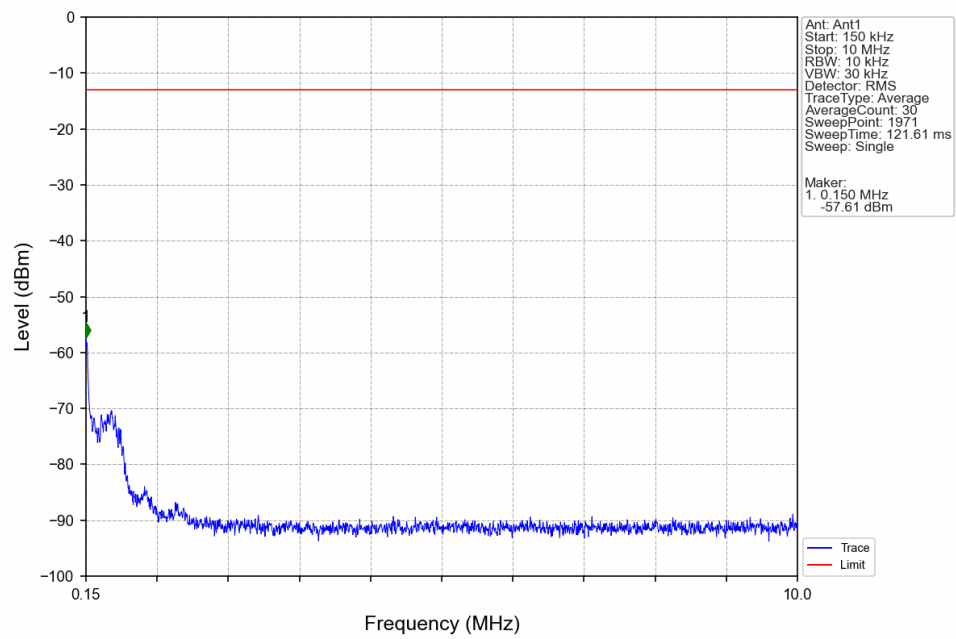


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.844	-32.06	-13	Pass
698.9	699	0.03	/	2	698.994	-32.11	-13	Pass
699	702	0.03	/	/	/	/	/	/

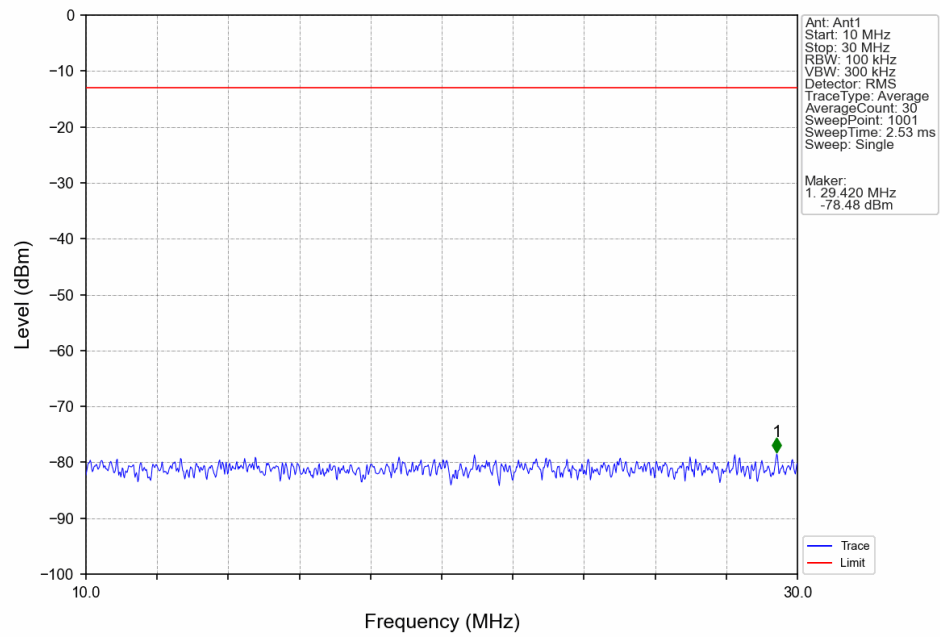
Band12 3MHz 16QAM MCH 707.5MHz RB 1 0 NTNV



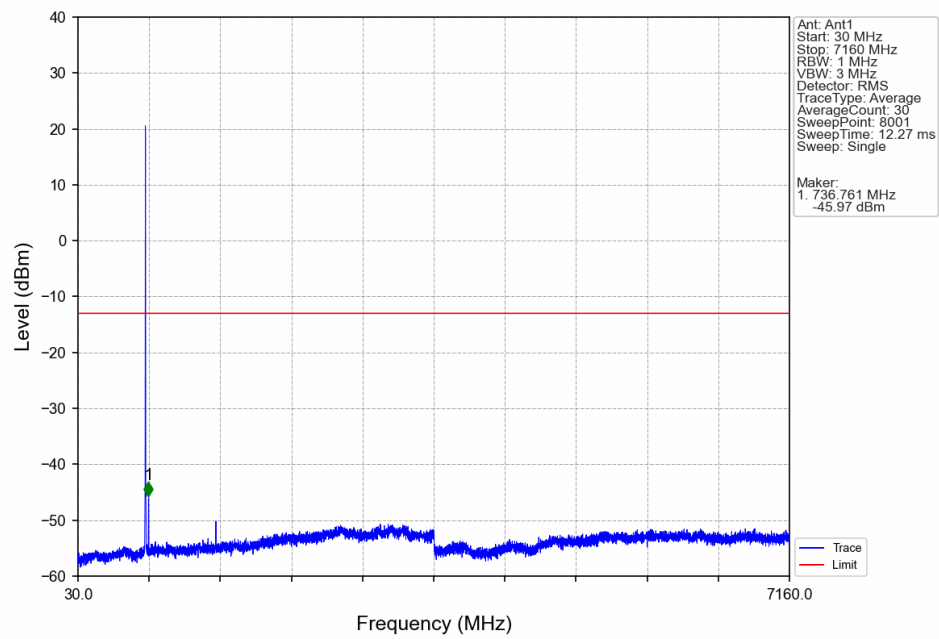
Band12 3MHz 16QAM MCH 707.5MHz RB 1 0 NTNV



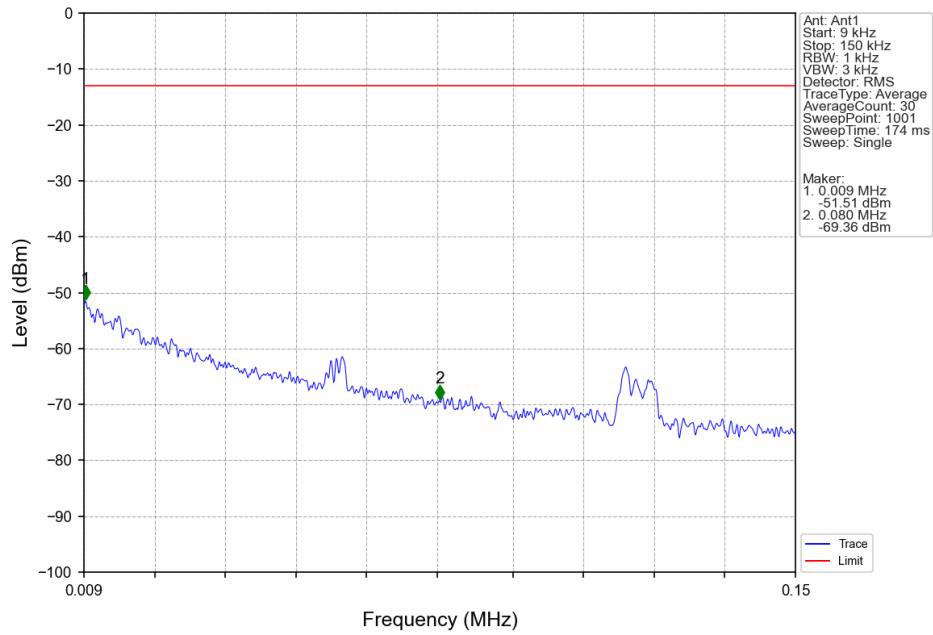
Band12 3MHz 16QAM MCH 707.5MHz RB 1 0 NTNV



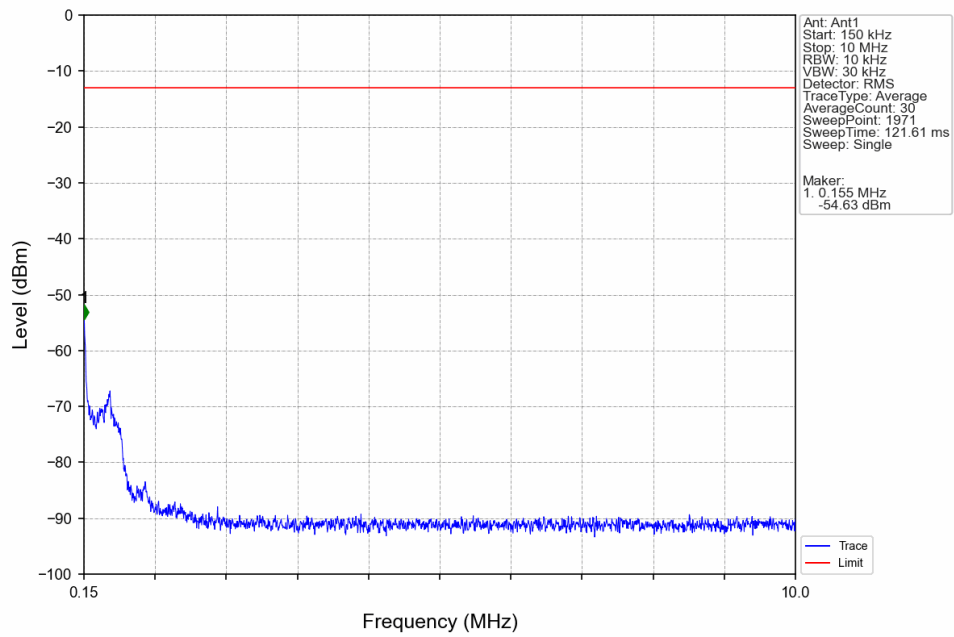
Band12 3MHz 16QAM MCH 707.5MHz RB 1 0 NTNV



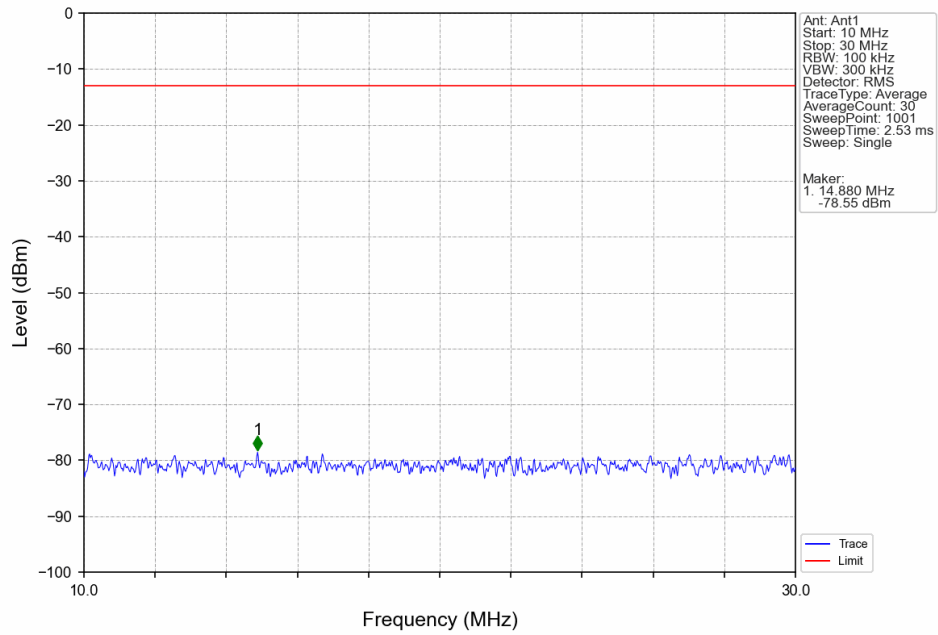
Band12 3MHz 16QAM HCH 714.5MHz RB 1 0 NTNV



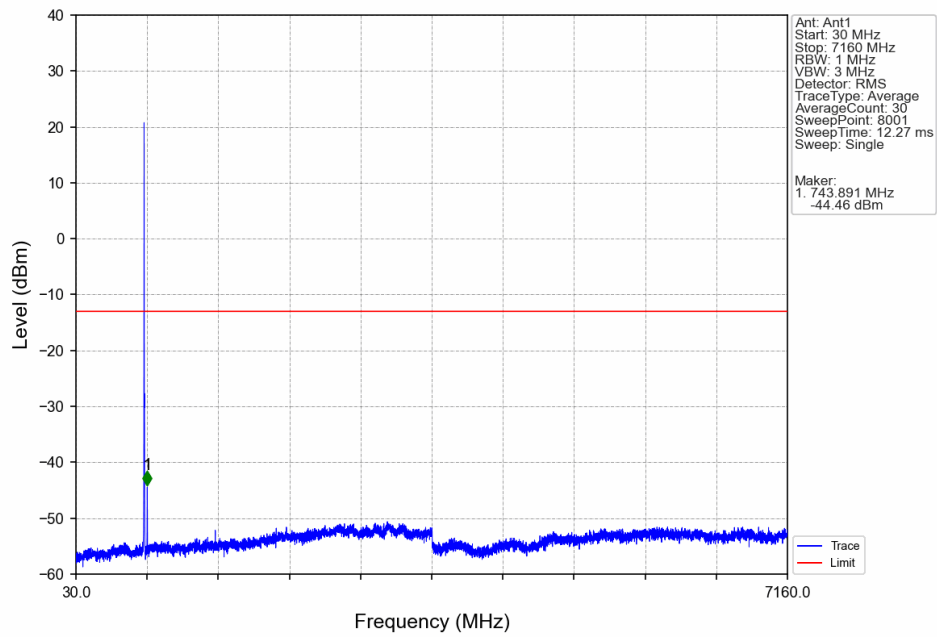
Band12 3MHz 16QAM HCH 714.5MHz RB 1 0 NTNV



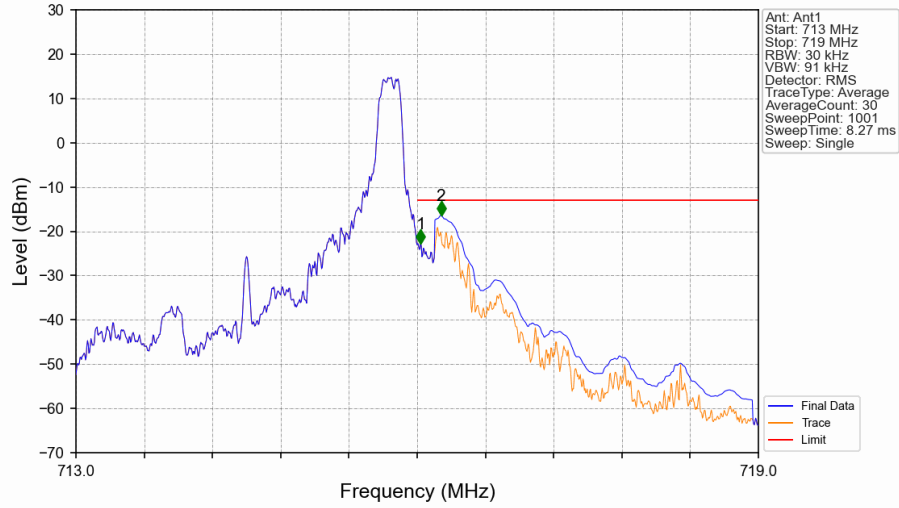
Band12 3MHz 16QAM HCH 714.5MHz RB 1 0 NTV



Band12 3MHz 16QAM HCH 714.5MHz RB 1 0 NTV

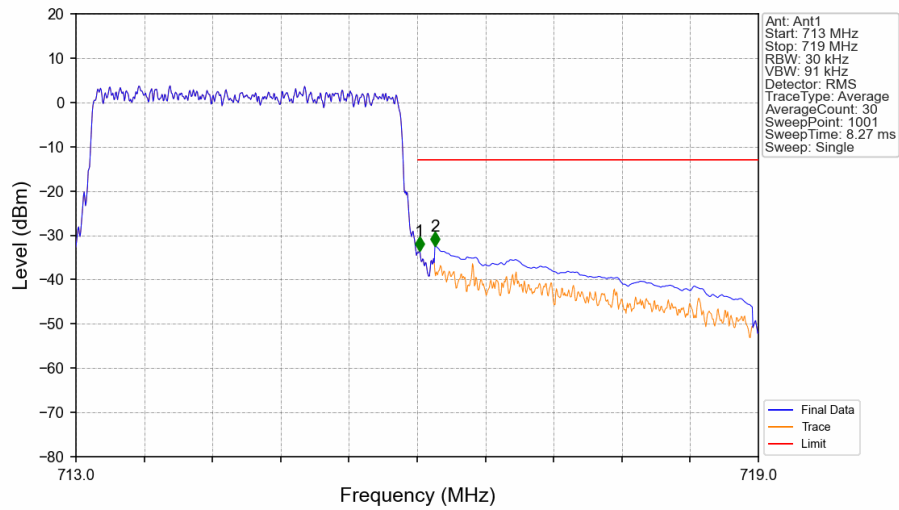


Band12 3MHz 16QAM HCH 714.5MHz RB 1 14 NTV



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	716.030	-22.71	-13	Pass
716.1	719	0.1	CHP	2	716.210	-16.40	-13	Pass

Band12 3MHz 16QAM HCH 714.5MHz RB 15 0 NTV



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	716.018	-33.45	-13	Pass
716.1	719	0.1	CHP	2	716.156	-32.43	-13	Pass

6.2.3 B12_5MHz

