

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B17_5MHz_ERP

Band: 17 / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	706.5	1	0	24.60	-4.60	17.85	<=34.77	Pass
			13	24.78	-4.60	18.03	<=34.77	Pass
			24	24.69	-4.60	17.94	<=34.77	Pass
		12	0	23.55	-4.60	16.80	<=34.77	Pass
			6	23.69	-4.60	16.94	<=34.77	Pass
			13	23.70	-4.60	16.95	<=34.77	Pass
		25	0	23.62	-4.60	16.87	<=34.77	Pass
	710	1	0	24.67	-4.60	17.92	<=34.77	Pass
			13	24.82	-4.60	18.07	<=34.77	Pass
			24	24.70	-4.60	17.95	<=34.77	Pass
		12	0	23.56	-4.60	16.81	<=34.77	Pass
			6	23.71	-4.60	16.96	<=34.77	Pass
			13	23.62	-4.60	16.87	<=34.77	Pass
		25	0	23.61	-4.60	16.86	<=34.77	Pass
	713.5	1	0	24.74	-4.60	17.99	<=34.77	Pass
			13	24.90	-4.60	18.15	<=34.77	Pass
			24	24.81	-4.60	18.06	<=34.77	Pass
		12	0	23.78	-4.60	17.03	<=34.77	Pass
			6	23.82	-4.60	17.07	<=34.77	Pass
			13	23.69	-4.60	16.94	<=34.77	Pass
		25	0	23.72	-4.60	16.97	<=34.77	Pass
16QAM	706.5	1	0	23.77	-4.60	17.02	<=34.77	Pass
			13	23.91	-4.60	17.16	<=34.77	Pass
			24	23.81	-4.60	17.06	<=34.77	Pass
		12	0	22.56	-4.60	15.81	<=34.77	Pass
			6	22.68	-4.60	15.93	<=34.77	Pass
			13	22.68	-4.60	15.93	<=34.77	Pass
		25	0	22.62	-4.60	15.87	<=34.77	Pass
	710	1	0	23.80	-4.60	17.05	<=34.77	Pass
			13	23.98	-4.60	17.23	<=34.77	Pass
			24	23.89	-4.60	17.14	<=34.77	Pass
		12	0	22.59	-4.60	15.84	<=34.77	Pass
			6	22.72	-4.60	15.97	<=34.77	Pass
			13	22.63	-4.60	15.88	<=34.77	Pass
		25	0	22.61	-4.60	15.86	<=34.77	Pass
	713.5	1	0	23.75	-4.60	17.00	<=34.77	Pass
			13	23.91	-4.60	17.16	<=34.77	Pass
			24	23.78	-4.60	17.03	<=34.77	Pass
		12	0	22.80	-4.60	16.05	<=34.77	Pass
			6	22.80	-4.60	16.05	<=34.77	Pass
			13	22.66	-4.60	15.91	<=34.77	Pass
		25	0	22.77	-4.60	16.02	<=34.77	Pass
64QAM	706.5	1	0	22.90	-4.60	16.15	<=34.77	Pass
			13	23.05	-4.60	16.30	<=34.77	Pass
			24	22.94	-4.60	16.19	<=34.77	Pass
		12	0	21.49	-4.60	14.74	<=34.77	Pass
			6	21.63	-4.60	14.88	<=34.77	Pass
			13	21.68	-4.60	14.93	<=34.77	Pass
		25	0	21.58	-4.60	14.83	<=34.77	Pass

	710	1	0	22.95	-4.60	16.20	<=34.77	Pass
			13	23.09	-4.60	16.34	<=34.77	Pass
			24	22.99	-4.60	16.24	<=34.77	Pass
		12	0	21.54	-4.60	14.79	<=34.77	Pass
			6	21.61	-4.60	14.86	<=34.77	Pass
			13	21.58	-4.60	14.83	<=34.77	Pass
	713.5	25	0	21.65	-4.60	14.90	<=34.77	Pass
			0	22.95	-4.60	16.20	<=34.77	Pass
			13	23.07	-4.60	16.32	<=34.77	Pass
		1	24	22.93	-4.60	16.18	<=34.77	Pass
			0	21.86	-4.60	15.11	<=34.77	Pass
			6	21.92	-4.60	15.17	<=34.77	Pass
		12	13	21.76	-4.60	15.01	<=34.77	Pass
			0	21.78	-4.60	15.03	<=34.77	Pass
			0	21.78	-4.60	15.03	<=34.77	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.1.2 B17_10MHz_ERP

Band: 17 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	709	1	0	24.70	-4.60	17.95	<=34.77	Pass
			25	24.83	-4.60	18.08	<=34.77	Pass
			49	24.79	-4.60	18.04	<=34.77	Pass
		25	0	23.55	-4.60	16.80	<=34.77	Pass
			13	23.70	-4.60	16.95	<=34.77	Pass
			25	23.57	-4.60	16.82	<=34.77	Pass
		50	0	23.59	-4.60	16.84	<=34.77	Pass
	710	1	0	24.72	-4.60	17.97	<=34.77	Pass
			25	24.81	-4.60	18.06	<=34.77	Pass
			49	24.86	-4.60	18.11	<=34.77	Pass
		25	0	23.53	-4.60	16.78	<=34.77	Pass
			13	23.74	-4.60	16.99	<=34.77	Pass
			25	23.63	-4.60	16.88	<=34.77	Pass
		50	0	23.58	-4.60	16.83	<=34.77	Pass
	711	1	0	24.79	-4.60	18.04	<=34.77	Pass
			25	24.86	-4.60	18.11	<=34.77	Pass
			49	24.96	-4.60	18.21	<=34.77	Pass
		25	0	23.61	-4.60	16.86	<=34.77	Pass
			13	23.84	-4.60	17.09	<=34.77	Pass
			25	23.60	-4.60	16.85	<=34.77	Pass
		50	0	23.61	-4.60	16.86	<=34.77	Pass
16QAM	709	1	0	24.14	-4.60	17.39	<=34.77	Pass
			25	24.22	-4.60	17.47	<=34.77	Pass
			49	24.24	-4.60	17.49	<=34.77	Pass
		25	0	22.55	-4.60	15.80	<=34.77	Pass
			13	22.80	-4.60	16.05	<=34.77	Pass
			25	22.68	-4.60	15.93	<=34.77	Pass
		50	0	22.63	-4.60	15.88	<=34.77	Pass
	710	1	0	23.80	-4.60	17.05	<=34.77	Pass
			25	23.92	-4.60	17.17	<=34.77	Pass
			49	23.92	-4.60	17.17	<=34.77	Pass
		25	0	22.55	-4.60	15.80	<=34.77	Pass
			13	22.76	-4.60	16.01	<=34.77	Pass
			25	22.58	-4.60	15.83	<=34.77	Pass
		50	0	22.52	-4.60	15.77	<=34.77	Pass
	711	1	0	23.70	-4.60	16.95	<=34.77	Pass

		25	25	23.82	-4.60	17.07	<=34.77	Pass
			49	23.80	-4.60	17.05	<=34.77	Pass
			0	22.69	-4.60	15.94	<=34.77	Pass
		50	13	22.89	-4.60	16.14	<=34.77	Pass
			25	22.68	-4.60	15.93	<=34.77	Pass
			0	22.61	-4.60	15.86	<=34.77	Pass
64QAM	709	1	0	22.91	-4.60	16.16	<=34.77	Pass
			25	23.05	-4.60	16.30	<=34.77	Pass
			49	23.05	-4.60	16.30	<=34.77	Pass
		25	0	21.64	-4.60	14.89	<=34.77	Pass
			13	21.83	-4.60	15.08	<=34.77	Pass
			25	21.74	-4.60	14.99	<=34.77	Pass
		50	0	21.62	-4.60	14.87	<=34.77	Pass
	710	1	0	22.82	-4.60	16.07	<=34.77	Pass
			25	22.96	-4.60	16.21	<=34.77	Pass
			49	22.94	-4.60	16.19	<=34.77	Pass
		25	0	21.67	-4.60	14.92	<=34.77	Pass
			13	21.83	-4.60	15.08	<=34.77	Pass
			25	21.73	-4.60	14.98	<=34.77	Pass
		50	0	21.59	-4.60	14.84	<=34.77	Pass
	711	1	0	22.80	-4.60	16.05	<=34.77	Pass
			25	22.96	-4.60	16.21	<=34.77	Pass
			49	22.97	-4.60	16.22	<=34.77	Pass
		25	0	21.68	-4.60	14.93	<=34.77	Pass
			13	21.88	-4.60	15.13	<=34.77	Pass
			25	21.70	-4.60	14.95	<=34.77	Pass
		50	0	21.62	-4.60	14.87	<=34.77	Pass
Note1: ERP=Conducted Power+Antenna Gain-2.15								

2. Frequency Stability

2.1 Test Result

2.1.1 B17_10MHz

Band: 17 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	710	50	0	20	LV	-1.388	-0.0020	-2.5 to 2.5	Pass
					NV	-6.183	-0.0087	-2.5 to 2.5	Pass
					HV	-5.425	-0.0076	-2.5 to 2.5	Pass
				-30	NV	-3.327	-0.0047	-2.5 to 2.5	Pass
				-20	NV	-2.720	-0.0038	-2.5 to 2.5	Pass
				-10	NV	-1.793	-0.0025	-2.5 to 2.5	Pass
				0	NV	-3.693	-0.0052	-2.5 to 2.5	Pass
				10	NV	-1.528	-0.0022	-2.5 to 2.5	Pass
				30	NV	-2.891	-0.0041	-2.5 to 2.5	Pass
				40	NV	-6.367	-0.0090	-2.5 to 2.5	Pass
				50	NV	-2.281	-0.0032	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band17_OBW

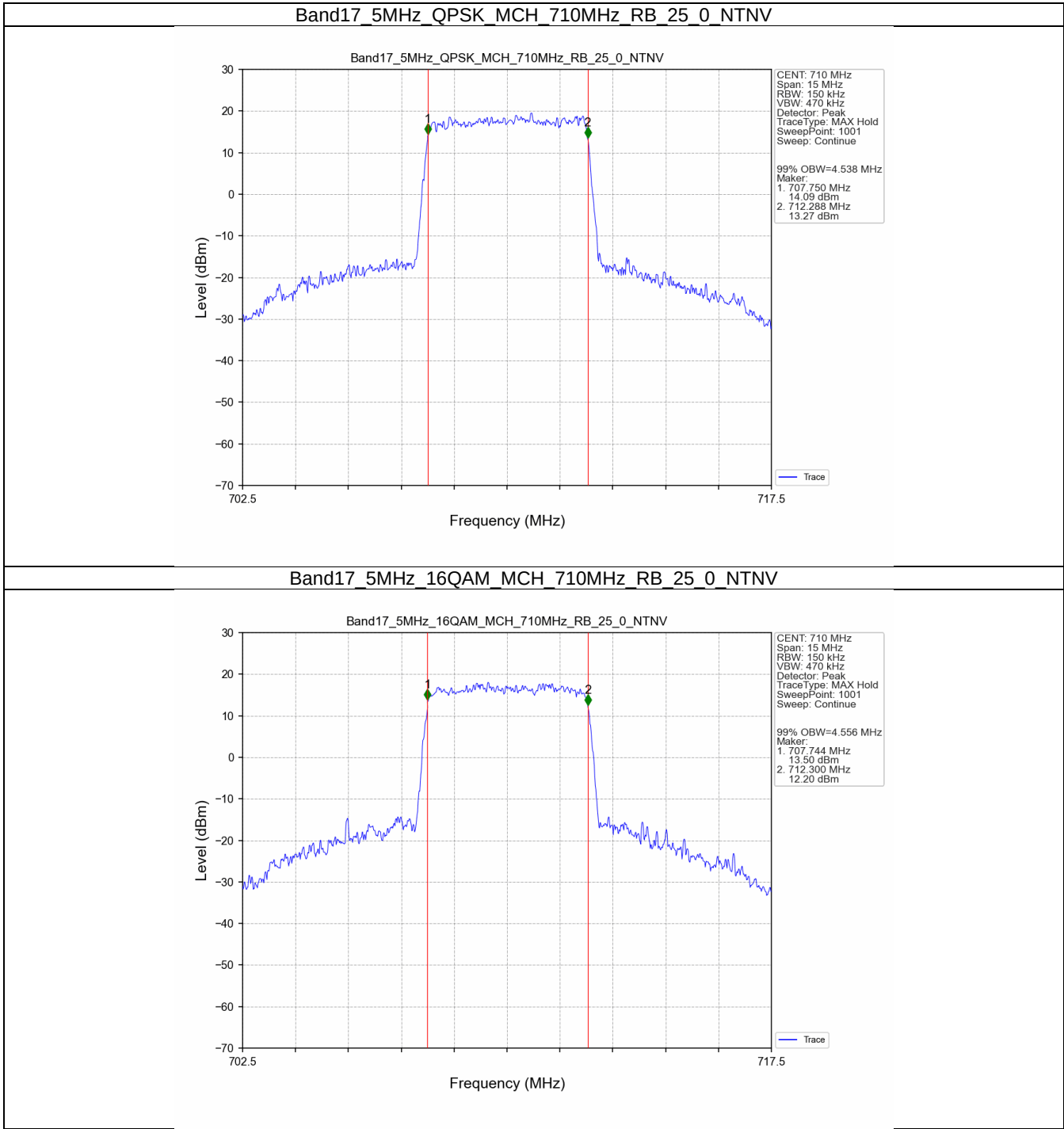
Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	4.538	/	Pass
	16QAM	710	25	0	4.556	/	Pass
	64QAM	710	25	0	4.547	/	Pass
10	QPSK	710	50	0	9.024	/	Pass
	16QAM	710	50	0	8.992	/	Pass
	64QAM	710	50	0	9.037	/	Pass

3.1.2 Band17_XDB

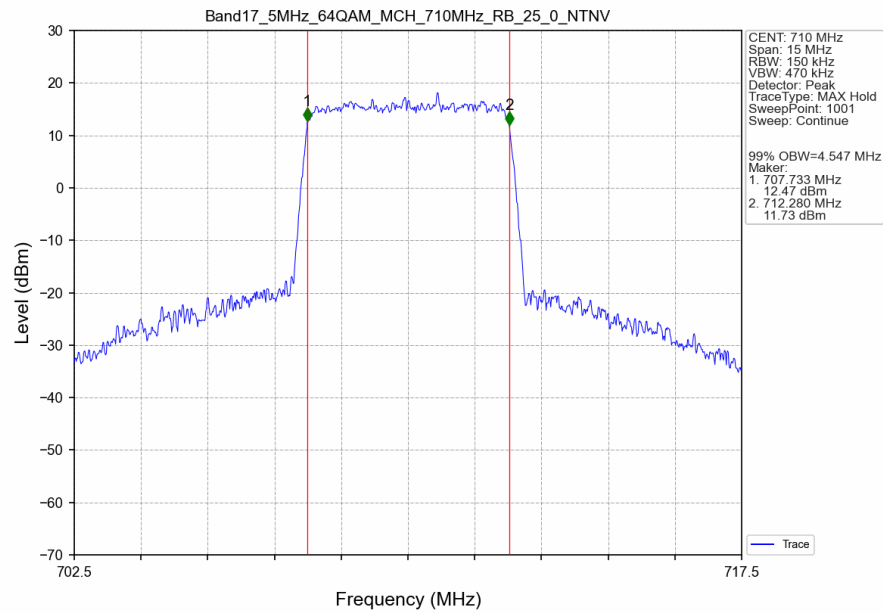
Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	4.984	/	Pass
	16QAM	710	25	0	4.996	/	Pass
	64QAM	710	25	0	4.967	/	Pass
10	QPSK	710	50	0	9.934	/	Pass
	16QAM	710	50	0	9.835	/	Pass
	64QAM	710	50	0	9.839	/	Pass

3.2 Test Graph

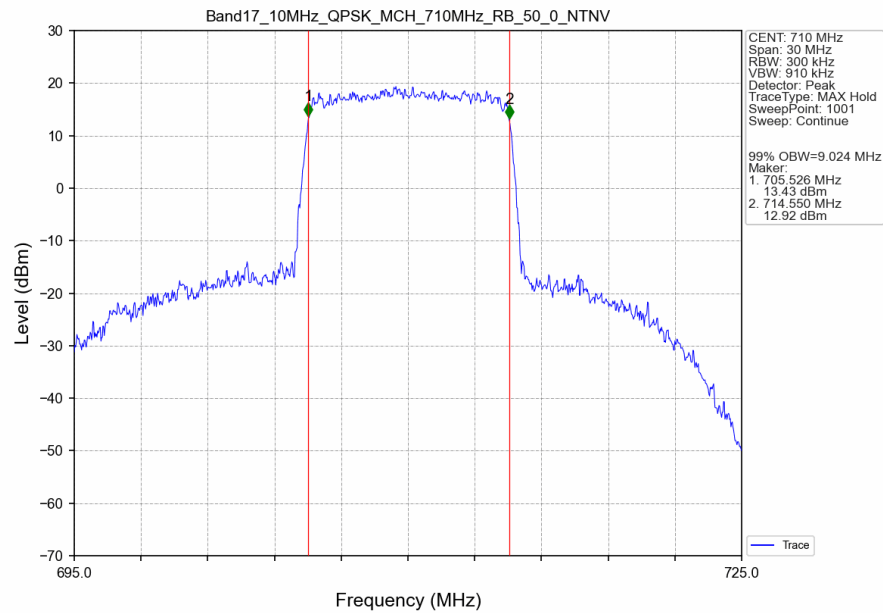
3.2.1 Band17_OBW



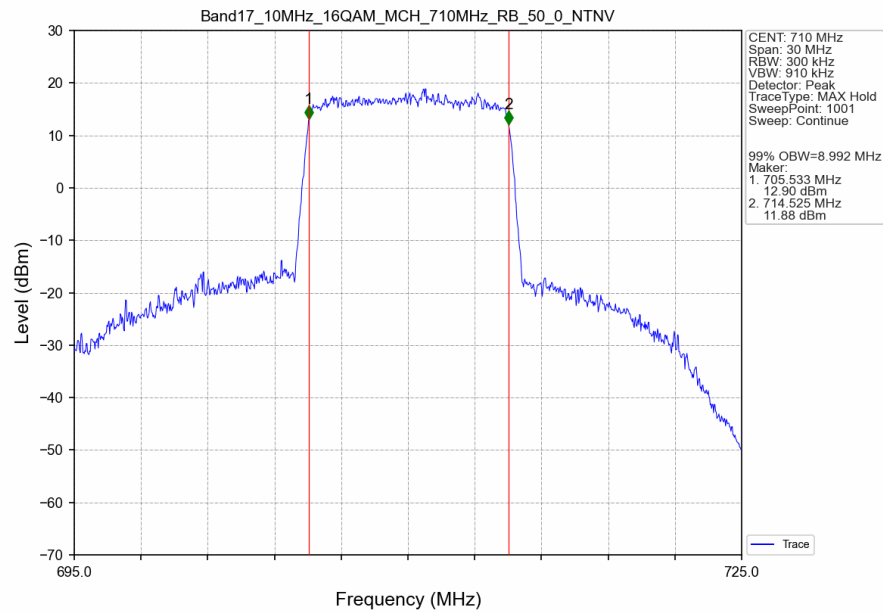
Band17 5MHz 64QAM MCH 710MHz RB 25 0 NTNV



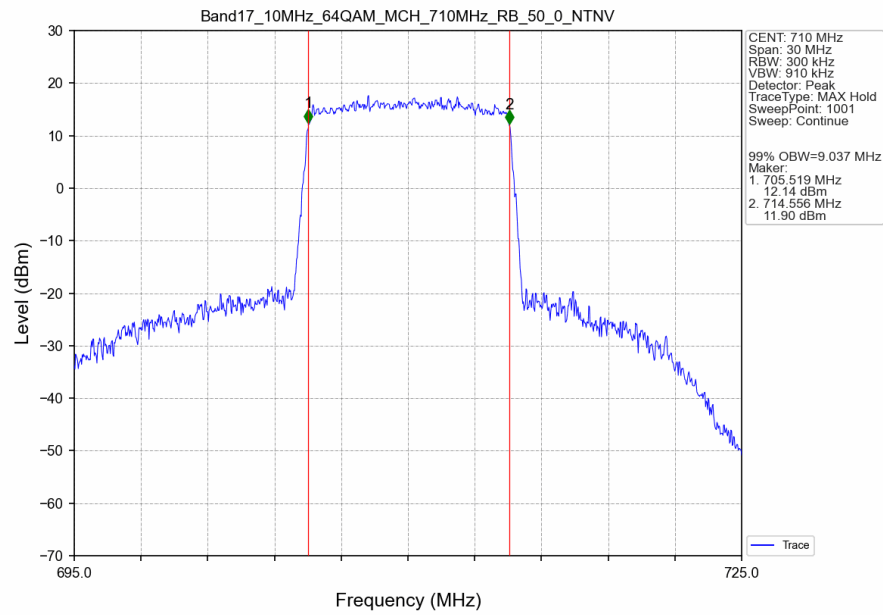
Band17 10MHz QPSK MCH 710MHz RB 50 0 NTNV



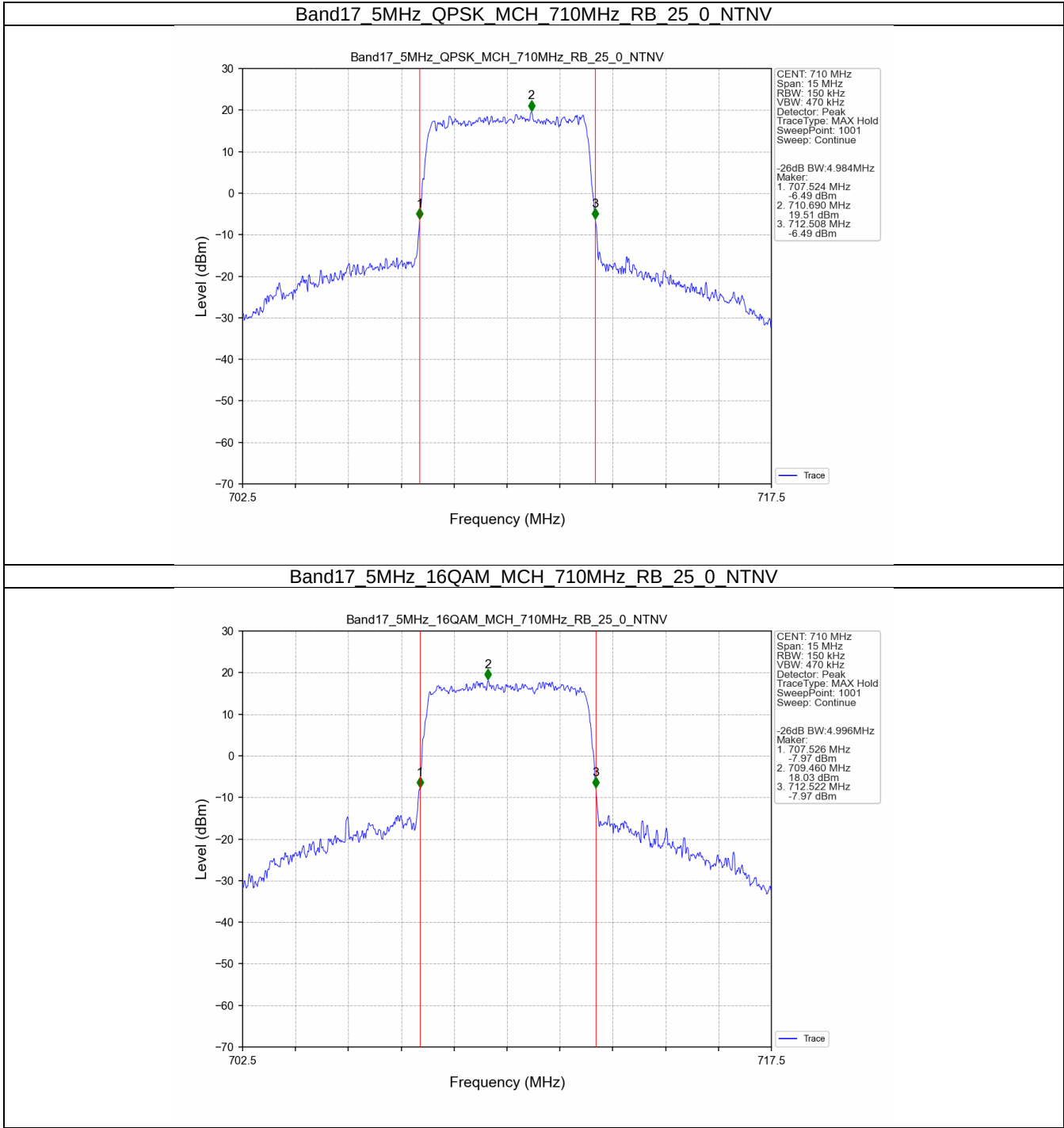
Band17 10MHz 16QAM MCH 710MHz RB 50 0 NTNV



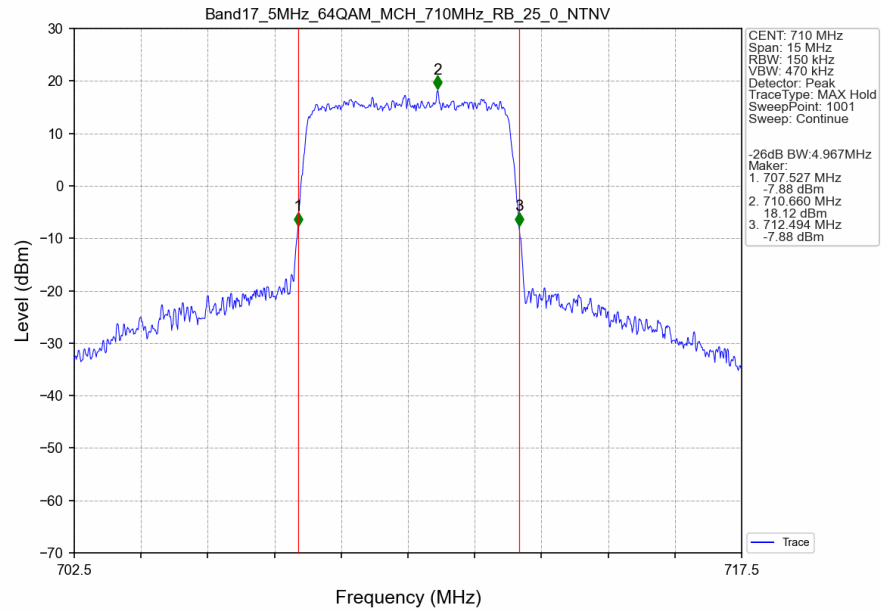
Band17 10MHz 64QAM MCH 710MHz RB 50 0 NTNV



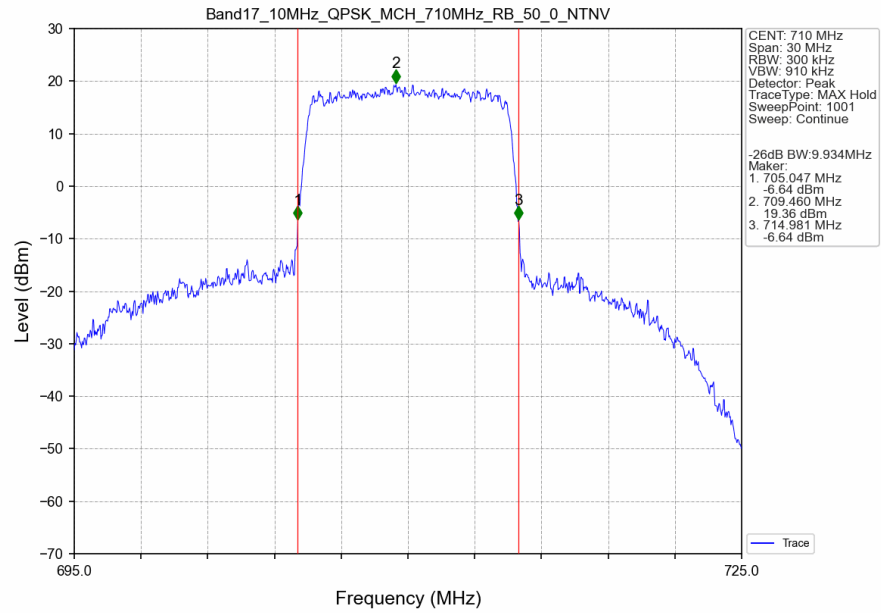
3.2.2 Band17_XDB



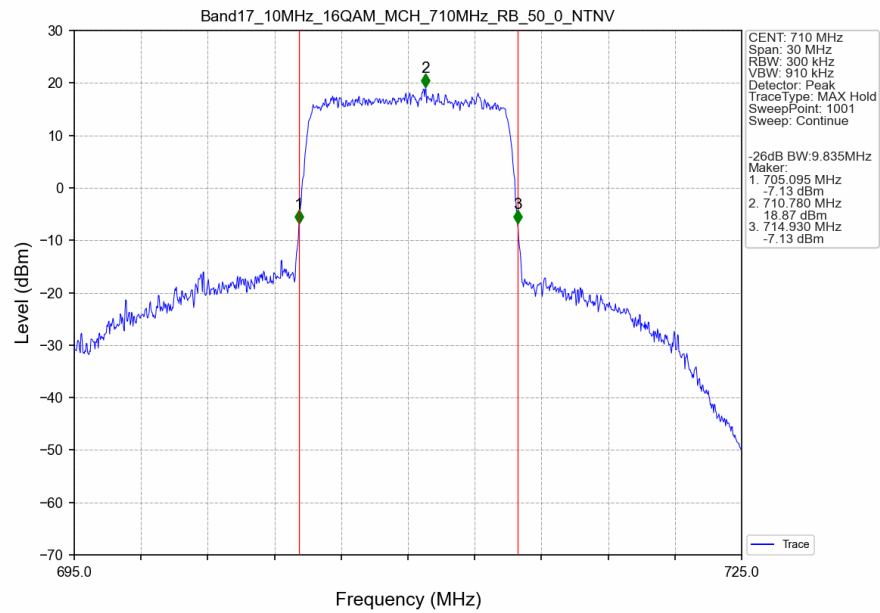
Band17 5MHz 64QAM MCH 710MHz RB 25 0 NTN



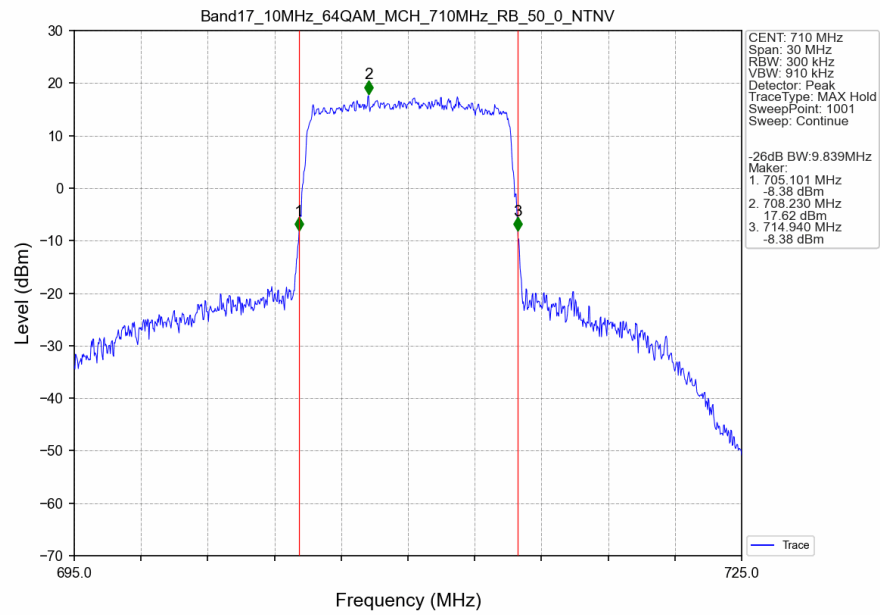
Band17 10MHz QPSK MCH 710MHz RB 50 0 NTN



Band17 10MHz 16QAM MCH 710MHz RB 50 0 NTN



Band17 10MHz 64QAM MCH 710MHz RB 50 0 NTN



4. Peak-Average Ratio

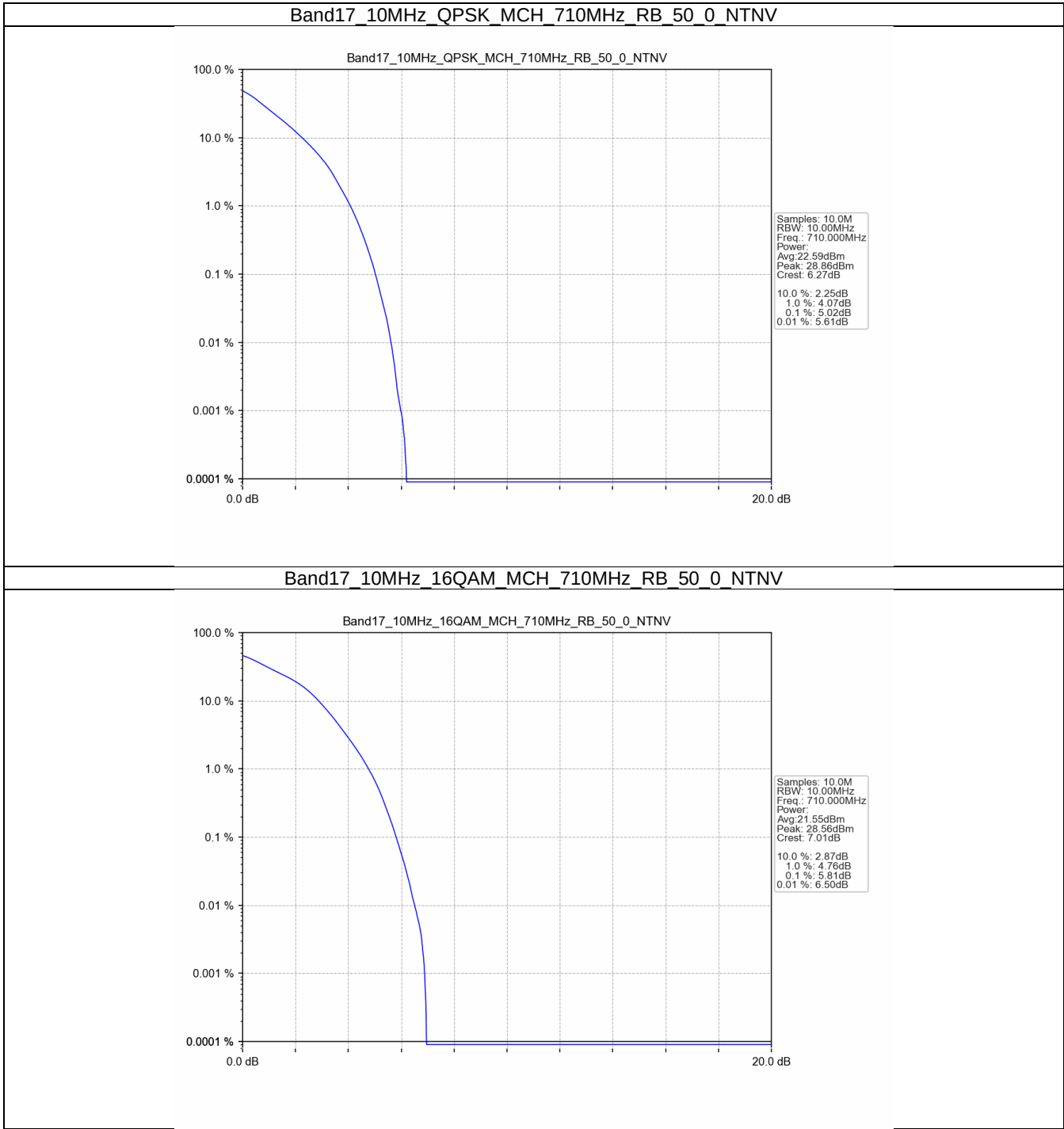
4.1 Test Result

4.1.1 B17_10MHz

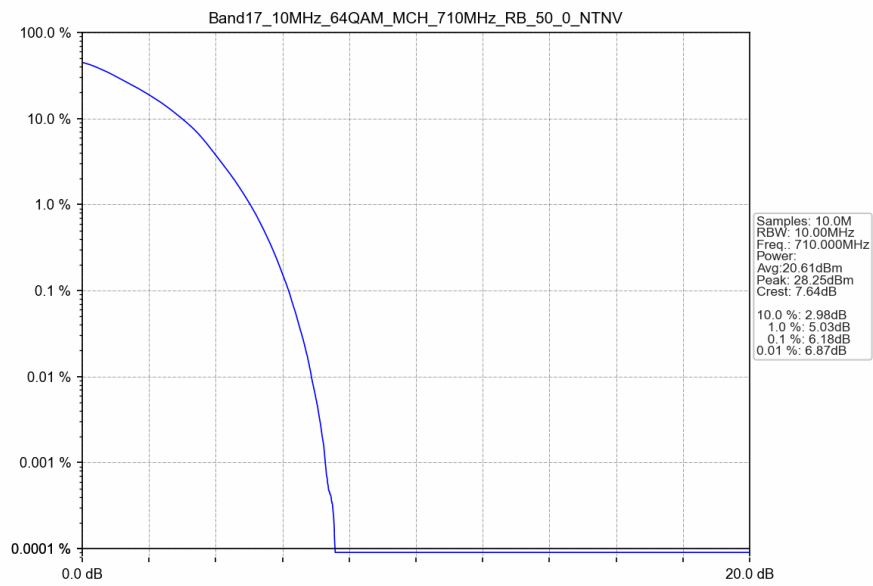
Band: 17 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	710	50	0	5.02	<=13	Pass
16QAM	710	50	0	5.81	<=13	Pass
64QAM	710	50	0	6.18	<=13	Pass

4.2 Test Graph

4.2.1 B17_10MHz



Band17 10MHz 64QAM MCH 710MHz RB 50 0 NTNV



5. Spurious Emission

5.1 Test Result

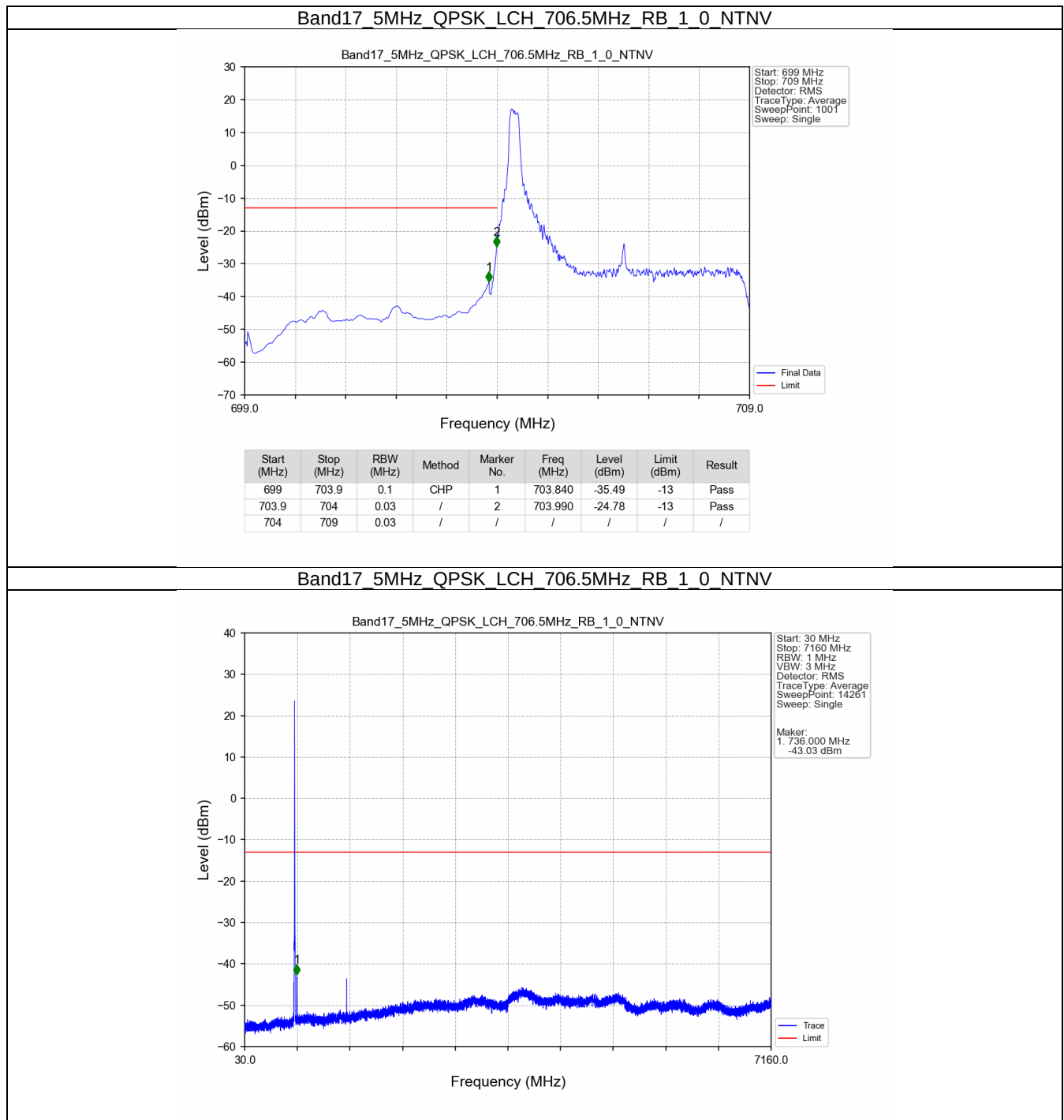
5.1.1 B17_5MHz

Band: 17 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	706.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	710	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

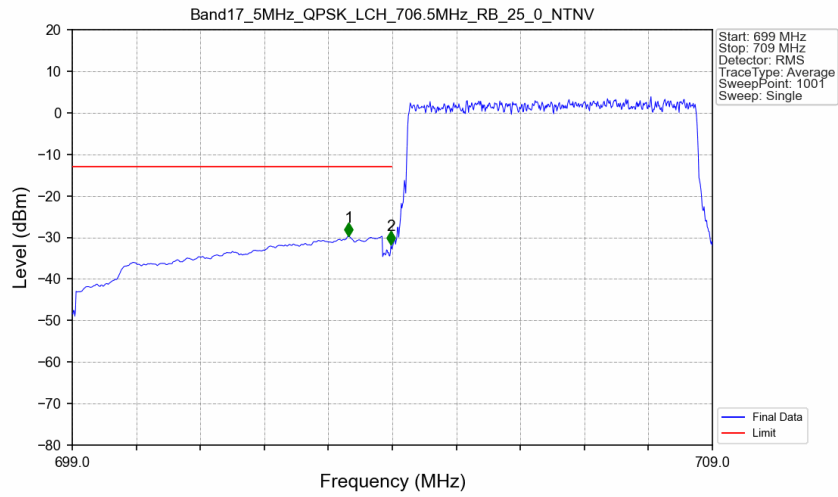
5.1.2 B17_10MHz

Band: 17 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	709	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	710	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

5.2.1 B17_5MHz

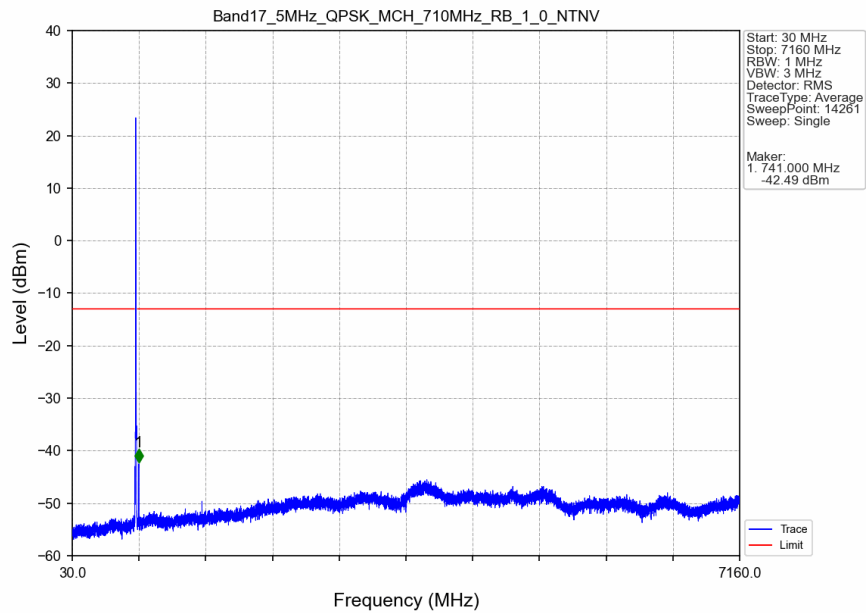


Band17_5MHz_QPSK_LCH_706.5MHz_RB_25_0_NTNV

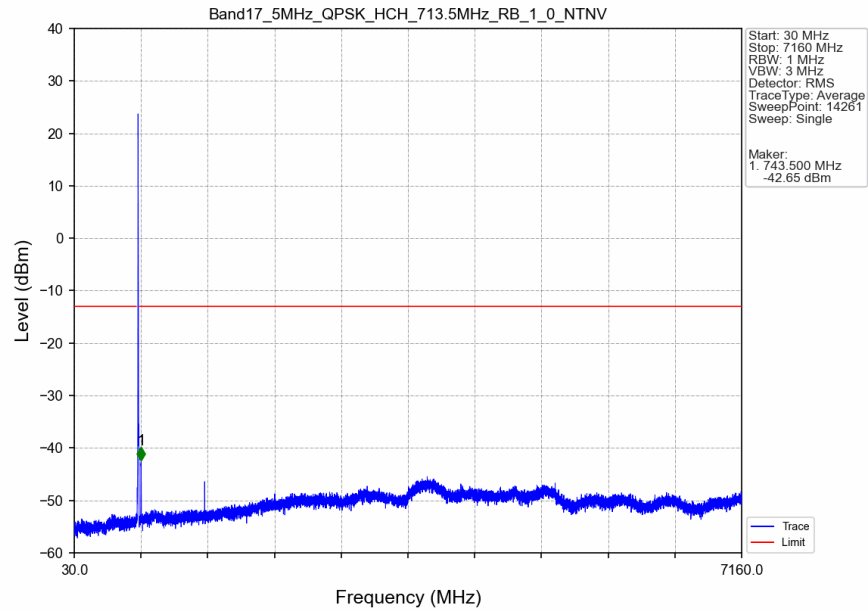


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
699	703.9	0.1	CHP	1	703.320	-29.69	-13	Pass
703.9	704	0.03	/	2	703.980	-31.71	-13	Pass
704	709	0.03	/	/	/	/	/	/

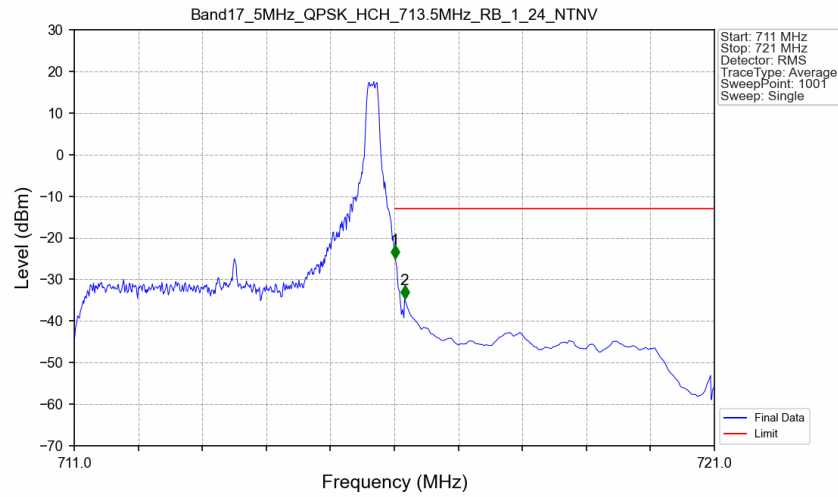
Band17_5MHz_QPSK_MCH_710MHz_RB_1_0_NTNV



Band17 5MHz QPSK HCH 713.5MHz RB 1 0 NTV

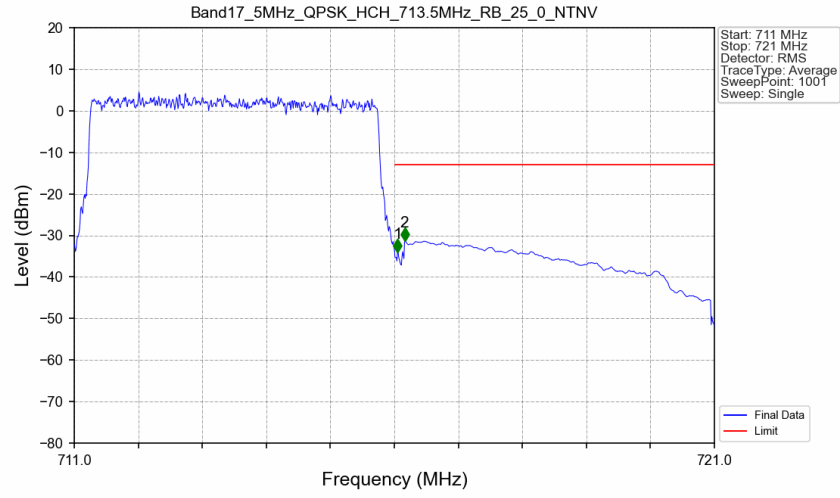


Band17 5MHz QPSK HCH 713.5MHz RB 1 24 NTV



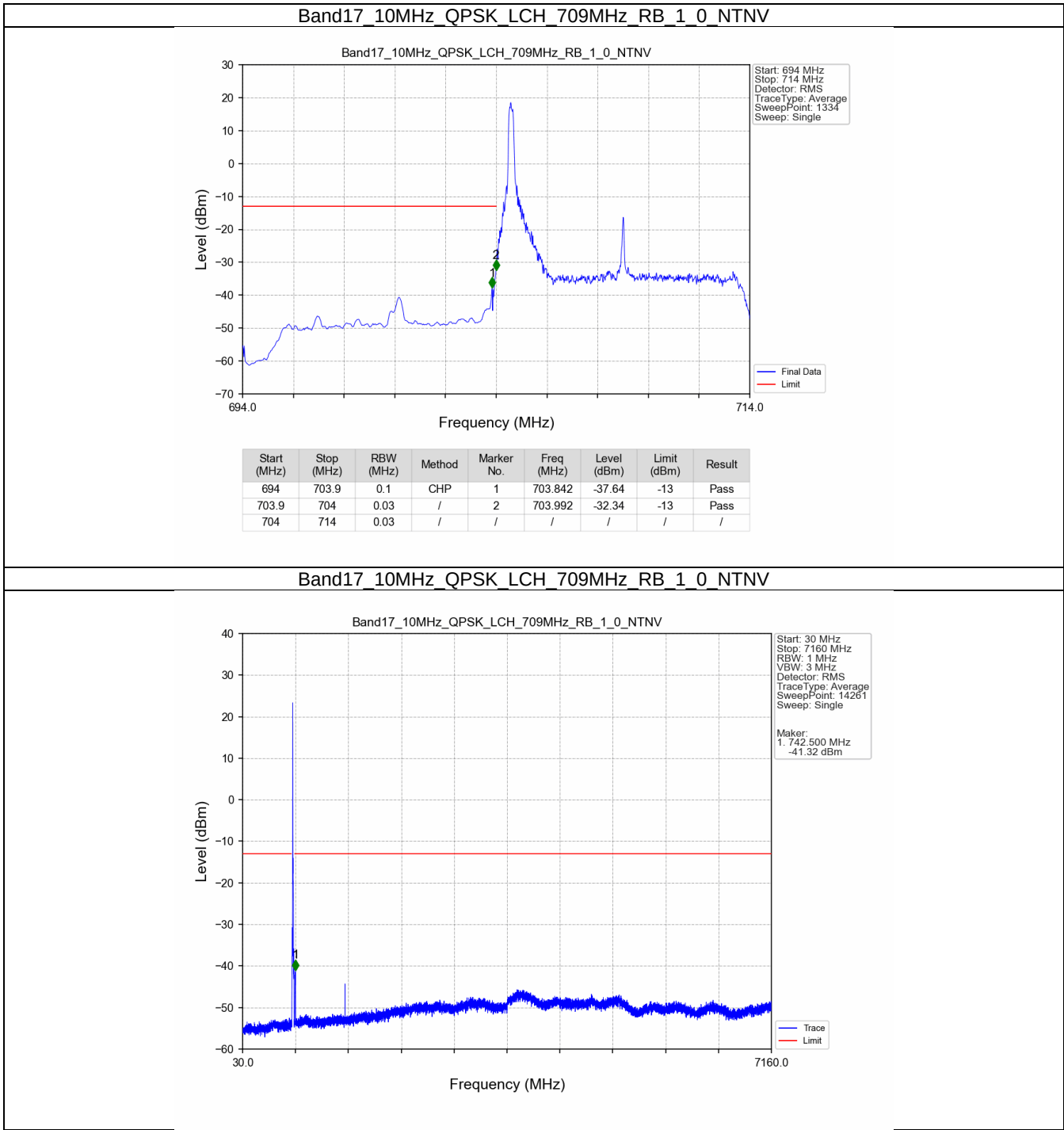
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.010	-24.93	-13	Pass
716.1	721	0.1	CHP	2	716.160	-34.69	-13	Pass

Band17 5MHz QPSK HCH 713.5MHz RB 25 0 NTN

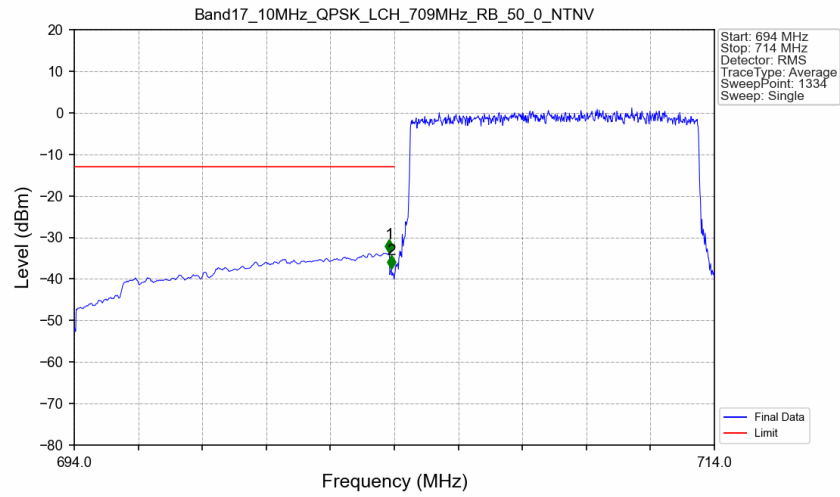


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.050	-34.05	-13	Pass
716.1	721	0.1	CHP	2	716.160	-31.27	-13	Pass

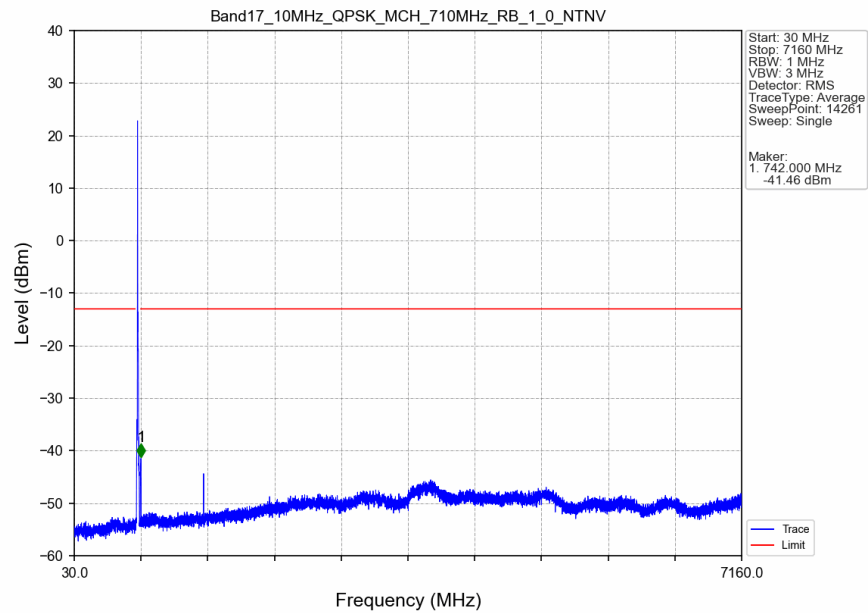
5.2.2 B17_10MHz



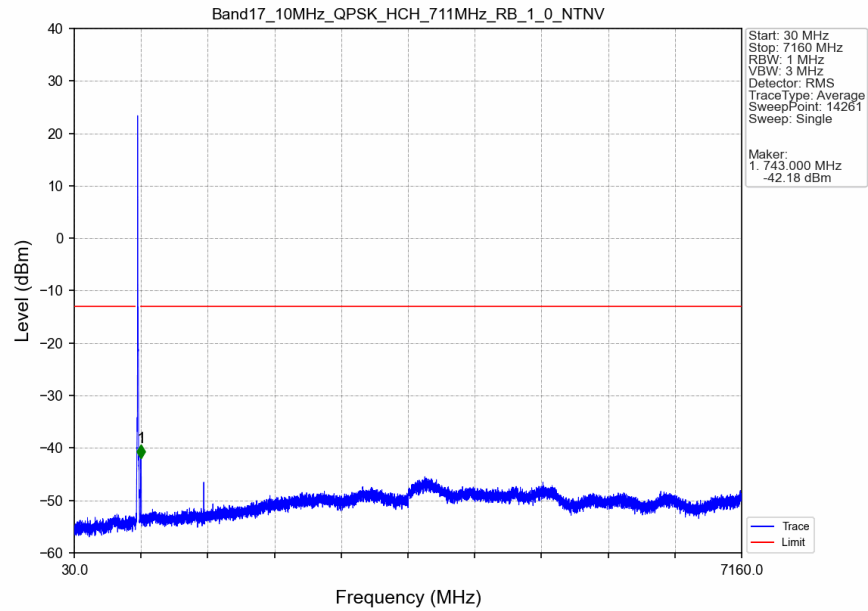
Band17 10MHz QPSK LCH 709MHz RB 50 0 NTN



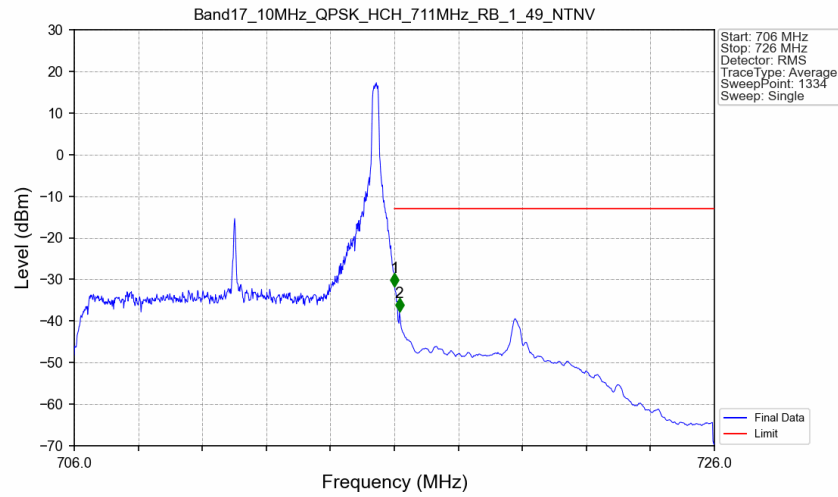
Band17 10MHz QPSK MCH 710MHz RB 1 0 NTN



Band17 10MHz QPSK HCH 711MHz RB 1 0 NTNV

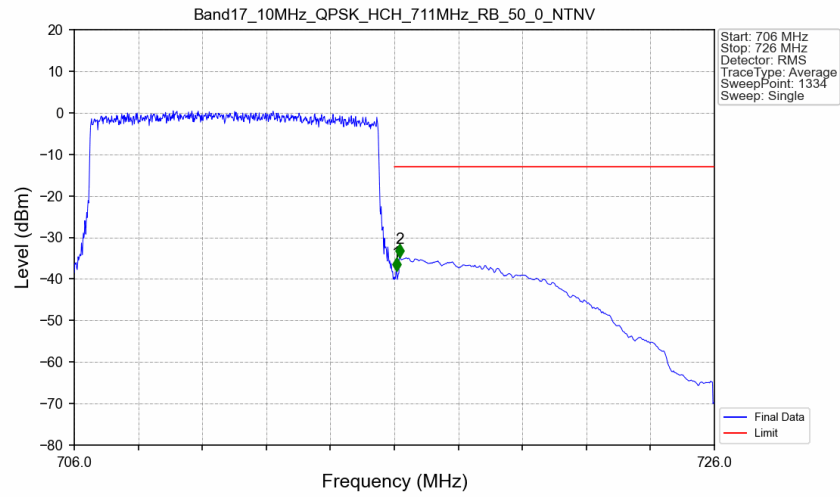


Band17 10MHz QPSK HCH 711MHz RB 1 49 NTNV



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	-31.67	-13	Pass
716.1	726	0.1	CHP	2	716.158	-37.73	-13	Pass

Band17_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	716.068	-38.07	-13	Pass
716.1	726	0.1	CHP	2	716.173	-34.70	-13	Pass