

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	24.28	-2.20	19.93	<=34.77	Pass
			13	24.41	-2.20	20.06	<=34.77	Pass
			24	24.31	-2.20	19.96	<=34.77	Pass
		12	0	23.45	-2.20	19.10	<=34.77	Pass
			6	23.33	-2.20	18.98	<=34.77	Pass
			13	23.41	-2.20	19.06	<=34.77	Pass
		25	0	23.49	-2.20	19.14	<=34.77	Pass
	710	1	0	24.29	-2.20	19.94	<=34.77	Pass
			13	24.46	-2.20	20.11	<=34.77	Pass
			24	24.40	-2.20	20.05	<=34.77	Pass
		12	0	23.34	-2.20	18.99	<=34.77	Pass
			6	23.32	-2.20	18.97	<=34.77	Pass
			13	23.32	-2.20	18.97	<=34.77	Pass
		25	0	23.43	-2.20	19.08	<=34.77	Pass
	713.5	1	0	24.24	-2.20	19.89	<=34.77	Pass
			13	24.37	-2.20	20.02	<=34.77	Pass
			24	24.35	-2.20	20.00	<=34.77	Pass
		12	0	23.42	-2.20	19.07	<=34.77	Pass
			6	23.26	-2.20	18.91	<=34.77	Pass
			13	23.31	-2.20	18.96	<=34.77	Pass
		25	0	23.50	-2.20	19.15	<=34.77	Pass
16QAM	706.5	1	0	22.86	-2.20	18.51	<=34.77	Pass
			13	23.29	-2.20	18.94	<=34.77	Pass
			24	23.18	-2.20	18.83	<=34.77	Pass
		12	0	22.32	-2.20	17.97	<=34.77	Pass
			6	22.50	-2.20	18.15	<=34.77	Pass
			13	22.42	-2.20	18.07	<=34.77	Pass
		25	0	22.29	-2.20	17.94	<=34.77	Pass
	710	1	0	22.78	-2.20	18.43	<=34.77	Pass
			13	23.50	-2.20	19.15	<=34.77	Pass
			24	23.23	-2.20	18.88	<=34.77	Pass
		12	0	22.40	-2.20	18.05	<=34.77	Pass
			6	22.49	-2.20	18.14	<=34.77	Pass
			13	22.44	-2.20	18.09	<=34.77	Pass
		25	0	22.35	-2.20	18.00	<=34.77	Pass
	713.5	1	0	23.57	-2.20	19.22	<=34.77	Pass
			13	23.39	-2.20	19.04	<=34.77	Pass
			24	23.27	-2.20	18.92	<=34.77	Pass
		12	0	22.55	-2.20	18.20	<=34.77	Pass
			6	22.48	-2.20	18.13	<=34.77	Pass
			13	22.48	-2.20	18.13	<=34.77	Pass
		25	0	22.28	-2.20	17.93	<=34.77	Pass
64QAM	706.5	1	0	22.04	-2.20	17.69	<=34.77	Pass
			13	22.02	-2.20	17.67	<=34.77	Pass
			24	22.57	-2.20	18.22	<=34.77	Pass
		12	0	21.60	-2.20	17.25	<=34.77	Pass
			6	21.52	-2.20	17.17	<=34.77	Pass
			13	21.52	-2.20	17.17	<=34.77	Pass
		25	0	21.57	-2.20	17.22	<=34.77	Pass

	710	1	0	22.30	-2.20	17.95	<=34.77	Pass	
			13	22.48	-2.20	18.13	<=34.77	Pass	
			24	22.45	-2.20	18.10	<=34.77	Pass	
		12	0	21.56	-2.20	17.21	<=34.77	Pass	
			6	21.54	-2.20	17.19	<=34.77	Pass	
			13	21.32	-2.20	16.97	<=34.77	Pass	
		25	0	21.57	-2.20	17.22	<=34.77	Pass	
		713.5	1	0	22.59	-2.20	18.24	<=34.77	Pass
				13	22.55	-2.20	18.20	<=34.77	Pass
	24			22.61	-2.20	18.26	<=34.77	Pass	
	12		0	21.64	-2.20	17.29	<=34.77	Pass	
			6	21.58	-2.20	17.23	<=34.77	Pass	
			13	21.51	-2.20	17.16	<=34.77	Pass	
	25	0	21.56	-2.20	17.21	<=34.77	Pass		
256QAM	706.5	1	0	19.60	-2.20	15.25	<=34.77	Pass	
			13	19.45	-2.20	15.10	<=34.77	Pass	
			24	19.49	-2.20	15.14	<=34.77	Pass	
		12	0	19.56	-2.20	15.21	<=34.77	Pass	
			6	19.51	-2.20	15.16	<=34.77	Pass	
			13	19.55	-2.20	15.20	<=34.77	Pass	
		25	0	19.57	-2.20	15.22	<=34.77	Pass	
	710	1	0	19.56	-2.20	15.21	<=34.77	Pass	
			13	19.39	-2.20	15.04	<=34.77	Pass	
			24	19.58	-2.20	15.23	<=34.77	Pass	
		12	0	19.47	-2.20	15.12	<=34.77	Pass	
			6	19.53	-2.20	15.18	<=34.77	Pass	
			13	19.54	-2.20	15.19	<=34.77	Pass	
		25	0	19.56	-2.20	15.21	<=34.77	Pass	
	713.5	1	0	19.68	-2.20	15.33	<=34.77	Pass	
			13	19.45	-2.20	15.10	<=34.77	Pass	
			24	19.42	-2.20	15.07	<=34.77	Pass	
		12	0	19.64	-2.20	15.29	<=34.77	Pass	
			6	19.51	-2.20	15.16	<=34.77	Pass	
			13	19.40	-2.20	15.05	<=34.77	Pass	
		25	0	19.59	-2.20	15.24	<=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	24.35	-2.20	20.00	<=34.77	Pass
			25	24.34	-2.20	19.99	<=34.77	Pass
			49	24.33	-2.20	19.98	<=34.77	Pass
		25	0	23.31	-2.20	18.96	<=34.77	Pass
			13	23.31	-2.20	18.96	<=34.77	Pass
			25	23.33	-2.20	18.98	<=34.77	Pass
		50	0	23.48	-2.20	19.13	<=34.77	Pass
	710	1	0	24.57	-2.20	20.22	<=34.77	Pass
			25	24.47	-2.20	20.12	<=34.77	Pass
			49	24.55	-2.20	20.20	<=34.77	Pass
		25	0	23.34	-2.20	18.99	<=34.77	Pass
			13	23.31	-2.20	18.96	<=34.77	Pass
			25	23.32	-2.20	18.97	<=34.77	Pass
		50	0	23.34	-2.20	18.99	<=34.77	Pass
	711	1	0	24.57	-2.20	20.22	<=34.77	Pass

			25	24.38	-2.20	20.03	<=34.77	Pass
			49	24.34	-2.20	19.99	<=34.77	Pass
		25	0	23.36	-2.20	19.01	<=34.77	Pass
			13	23.37	-2.20	19.02	<=34.77	Pass
			25	23.31	-2.20	18.96	<=34.77	Pass
		50	0	23.29	-2.20	18.94	<=34.77	Pass
16QAM	709	1	0	23.79	-2.20	19.44	<=34.77	Pass
			25	23.12	-2.20	18.77	<=34.77	Pass
			49	23.66	-2.20	19.31	<=34.77	Pass
		25	0	22.47	-2.20	18.12	<=34.77	Pass
			13	22.46	-2.20	18.11	<=34.77	Pass
			25	22.49	-2.20	18.14	<=34.77	Pass
		50	0	22.45	-2.20	18.10	<=34.77	Pass
	710	1	0	23.77	-2.20	19.42	<=34.77	Pass
			25	23.60	-2.20	19.25	<=34.77	Pass
			49	23.63	-2.20	19.28	<=34.77	Pass
		25	0	22.49	-2.20	18.14	<=34.77	Pass
			13	22.44	-2.20	18.09	<=34.77	Pass
			25	22.39	-2.20	18.04	<=34.77	Pass
		50	0	22.40	-2.20	18.05	<=34.77	Pass
	711	1	0	23.66	-2.20	19.31	<=34.77	Pass
			25	23.62	-2.20	19.27	<=34.77	Pass
			49	23.04	-2.20	18.69	<=34.77	Pass
		25	0	22.45	-2.20	18.10	<=34.77	Pass
			13	22.48	-2.20	18.13	<=34.77	Pass
			25	22.35	-2.20	18.00	<=34.77	Pass
		50	0	22.35	-2.20	18.00	<=34.77	Pass
64QAM	709	1	0	22.79	-2.20	18.44	<=34.77	Pass
			25	22.28	-2.20	17.93	<=34.77	Pass
			49	22.61	-2.20	18.26	<=34.77	Pass
		25	0	21.55	-2.20	17.20	<=34.77	Pass
			13	21.46	-2.20	17.11	<=34.77	Pass
			25	21.43	-2.20	17.08	<=34.77	Pass
		50	0	21.52	-2.20	17.17	<=34.77	Pass
	710	1	0	22.79	-2.20	18.44	<=34.77	Pass
			25	22.57	-2.20	18.22	<=34.77	Pass
			49	22.67	-2.20	18.32	<=34.77	Pass
		25	0	21.47	-2.20	17.12	<=34.77	Pass
			13	21.51	-2.20	17.16	<=34.77	Pass
			25	21.48	-2.20	17.13	<=34.77	Pass
		50	0	21.49	-2.20	17.14	<=34.77	Pass
	711	1	0	22.80	-2.20	18.45	<=34.77	Pass
			25	22.43	-2.20	18.08	<=34.77	Pass
			49	22.55	-2.20	18.20	<=34.77	Pass
		25	0	21.51	-2.20	17.16	<=34.77	Pass
			13	21.50	-2.20	17.15	<=34.77	Pass
			25	21.42	-2.20	17.07	<=34.77	Pass
		50	0	21.43	-2.20	17.08	<=34.77	Pass
256QAM	709	1	0	19.77	-2.20	15.42	<=34.77	Pass
			25	19.60	-2.20	15.25	<=34.77	Pass
			49	19.66	-2.20	15.31	<=34.77	Pass
		25	0	19.41	-2.20	15.06	<=34.77	Pass
			13	19.51	-2.20	15.16	<=34.77	Pass
			25	19.54	-2.20	15.19	<=34.77	Pass
		50	0	19.53	-2.20	15.18	<=34.77	Pass
	710	1	0	19.83	-2.20	15.48	<=34.77	Pass
			25	19.66	-2.20	15.31	<=34.77	Pass
			49	19.62	-2.20	15.27	<=34.77	Pass
		25	0	19.54	-2.20	15.19	<=34.77	Pass
			0	19.54	-2.20	15.19	<=34.77	Pass

			13	19.48	-2.20	15.13	<=34.77	Pass
			25	19.45	-2.20	15.10	<=34.77	Pass
		50	0	19.49	-2.20	15.14	<=34.77	Pass
	711	1	0	19.70	-2.20	15.35	<=34.77	Pass
			25	19.55	-2.20	15.20	<=34.77	Pass
			49	19.64	-2.20	15.29	<=34.77	Pass
		25	0	19.45	-2.20	15.10	<=34.77	Pass
			13	19.52	-2.20	15.17	<=34.77	Pass
			25	19.48	-2.20	15.13	<=34.77	Pass
		50	0	19.48	-2.20	15.13	<=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	-1.717	-0.0024	-2.5 to 2.5	Pass
					NV	-1.302	-0.0018	-2.5 to 2.5	Pass
					HV	-1.831	-0.0026	-2.5 to 2.5	Pass
				-30	NV	-1.359	-0.0019	-2.5 to 2.5	Pass
				-20	NV	-4.578	-0.0064	-2.5 to 2.5	Pass
				-10	NV	-2.260	-0.0032	-2.5 to 2.5	Pass
				0	NV	-3.405	-0.0048	-2.5 to 2.5	Pass
				10	NV	-3.633	-0.0051	-2.5 to 2.5	Pass
				30	NV	-1.373	-0.0019	-2.5 to 2.5	Pass
				40	NV	-2.747	-0.0039	-2.5 to 2.5	Pass
				50	NV	-4.678	-0.0066	-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	4.554	/	Pass
	16QAM	710	25	0	4.542	/	Pass
10	QPSK	710	50	0	9.035	/	Pass
	16QAM	710	50	0	9.027	/	Pass

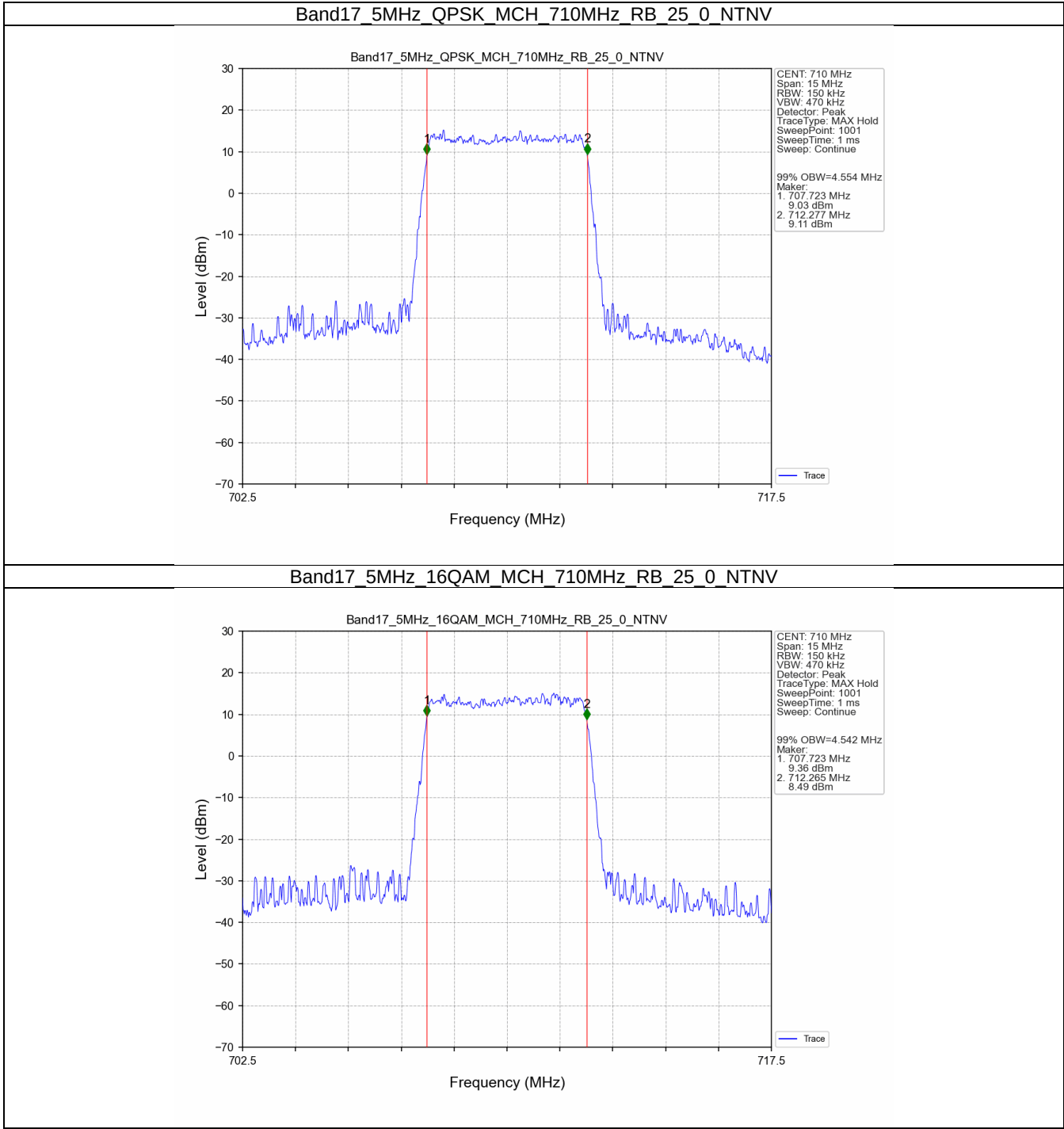
3.1.2 Band17_XDB

Band: 17 / NTV					
Bandwidth (MHz)	Modulation	Frequency	RB Allocation	26dB Bandwidth (MHz)	Verdict

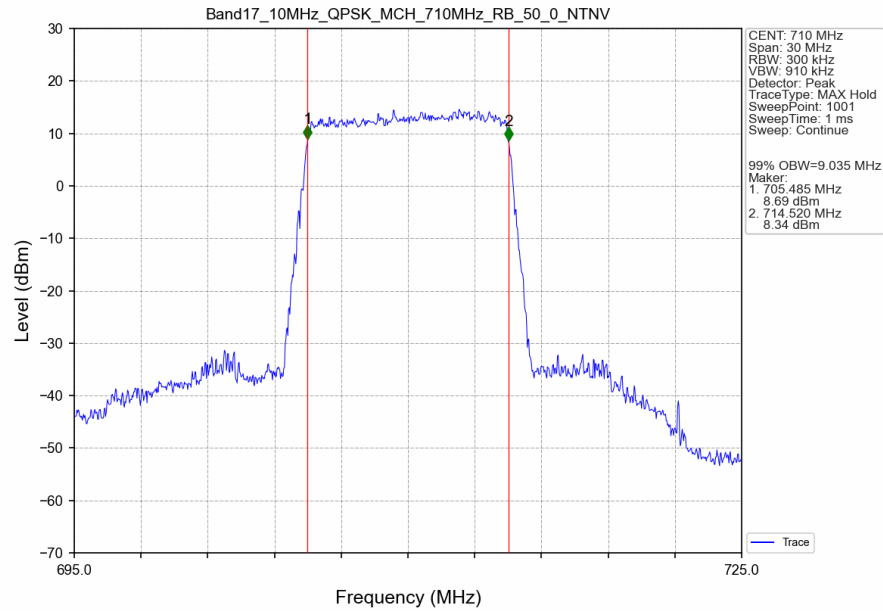
		(MHz)	Size	Offset	Result	Limit	
5	QPSK	710	25	0	5.077	/	Pass
	16QAM	710	25	0	5.070	/	Pass
10	QPSK	710	50	0	9.977	/	Pass
	16QAM	710	50	0	9.896	/	Pass

3.2 Test Graph

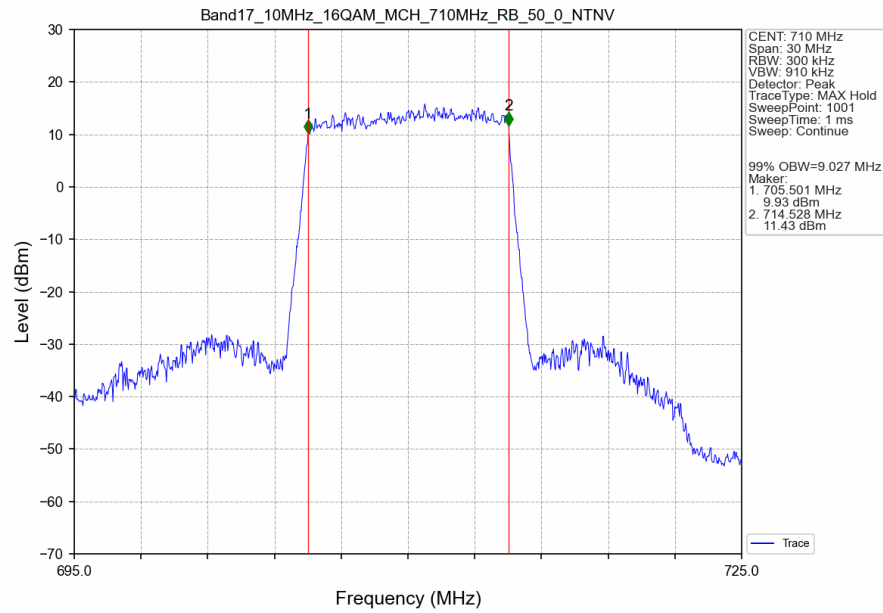
3.2.1 Band17_OBW



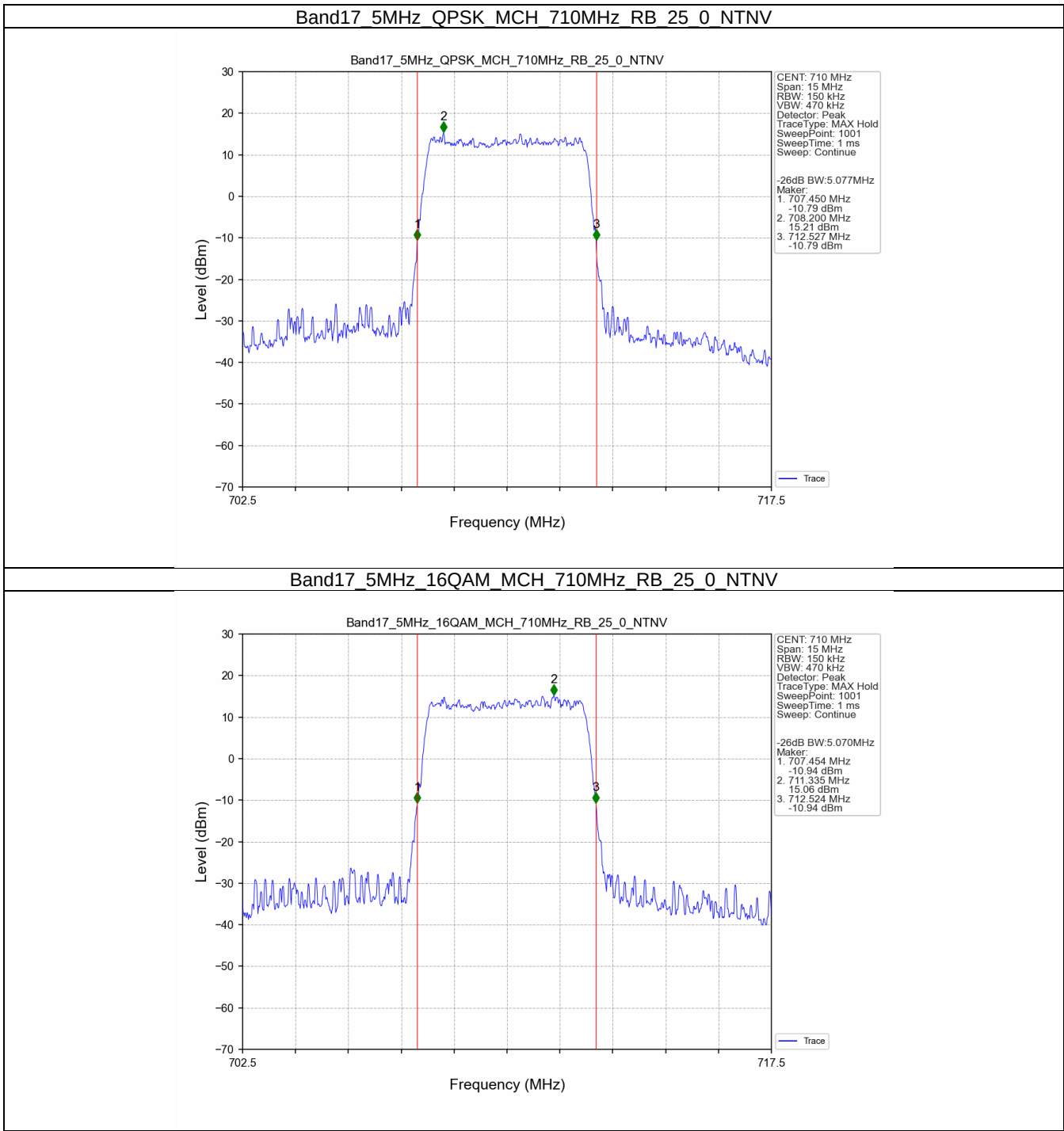
Band17_10MHz_QPSK_MCH_710MHz_RB_50_0_NTNV



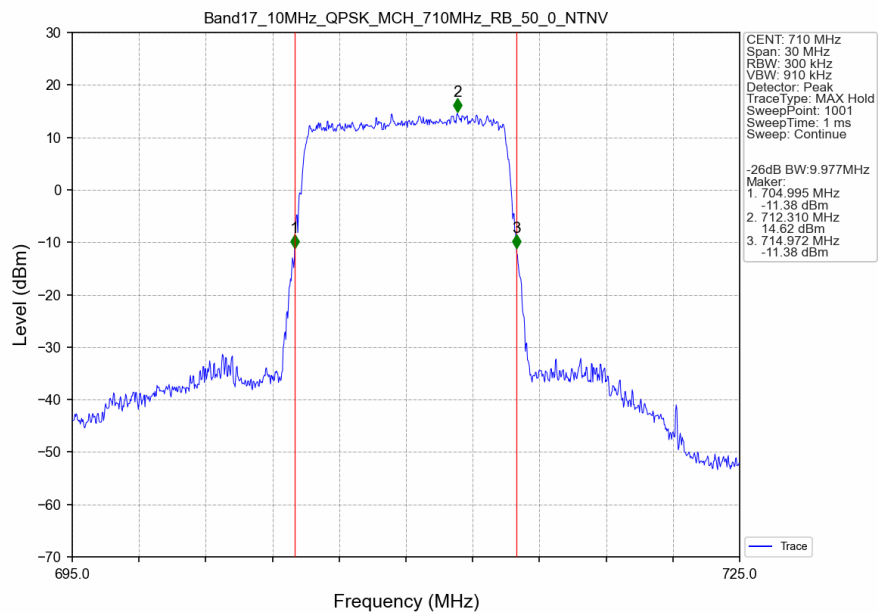
Band17_10MHz_16QAM_MCH_710MHz_RB_50_0_NTNV



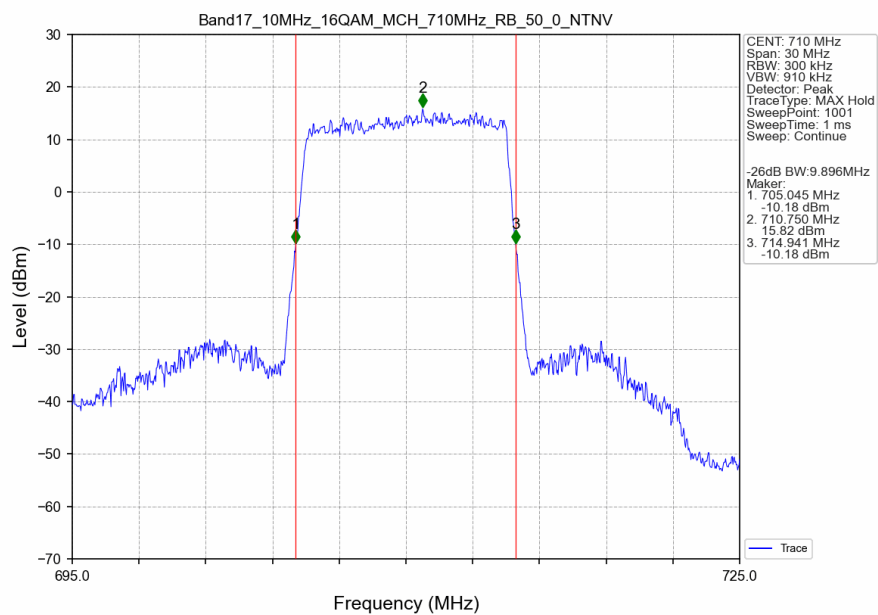
3.2.2 Band17_XDB



Band17_10MHz_QPSK_MCH_710MHz_RB_50_0_NTNV



Band17_10MHz_16QAM_MCH_710MHz_RB_50_0_NTNV



4. Peak-Average Ratio

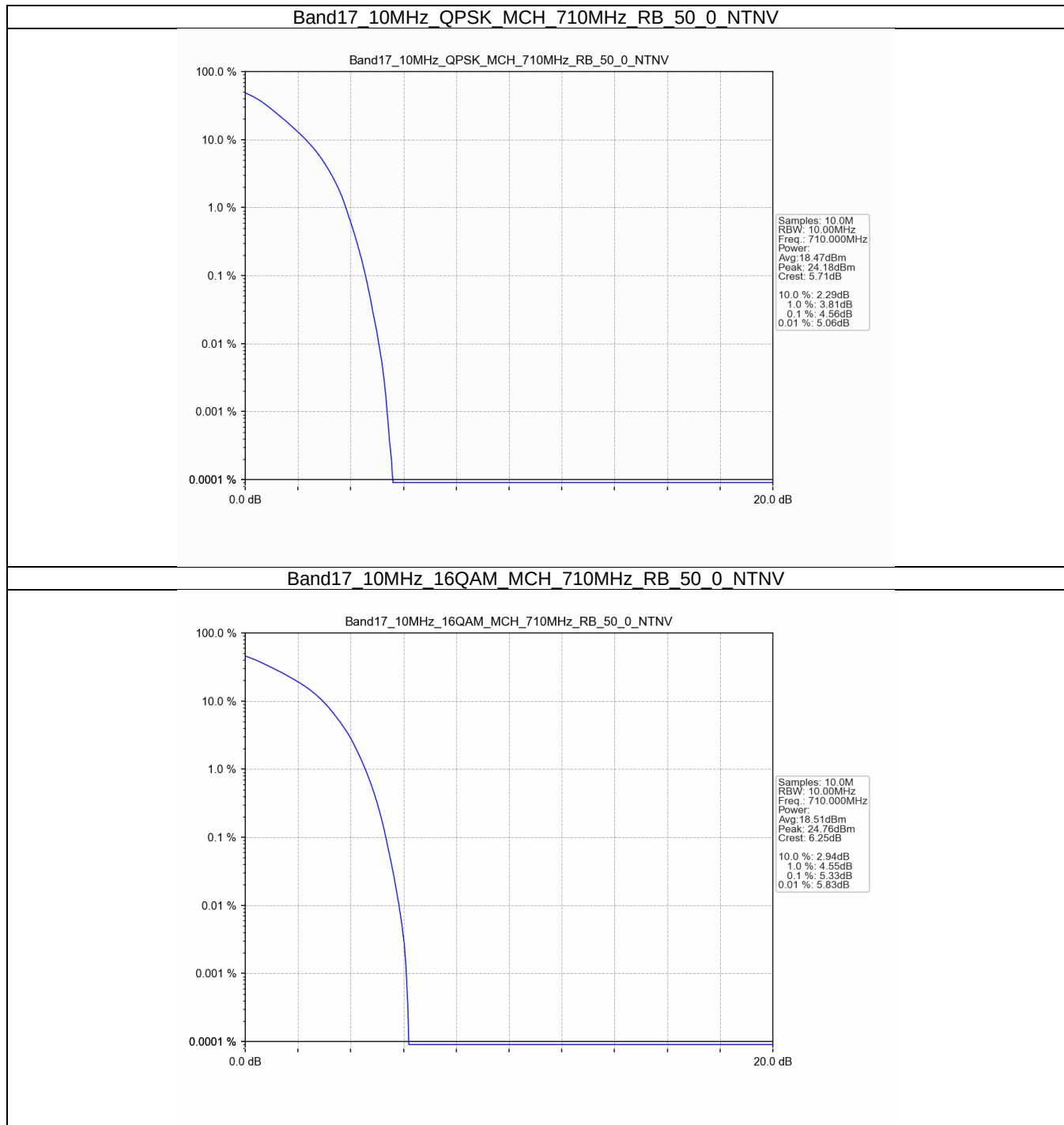
4.1 Test Result

4.1.1 B17_10MHz

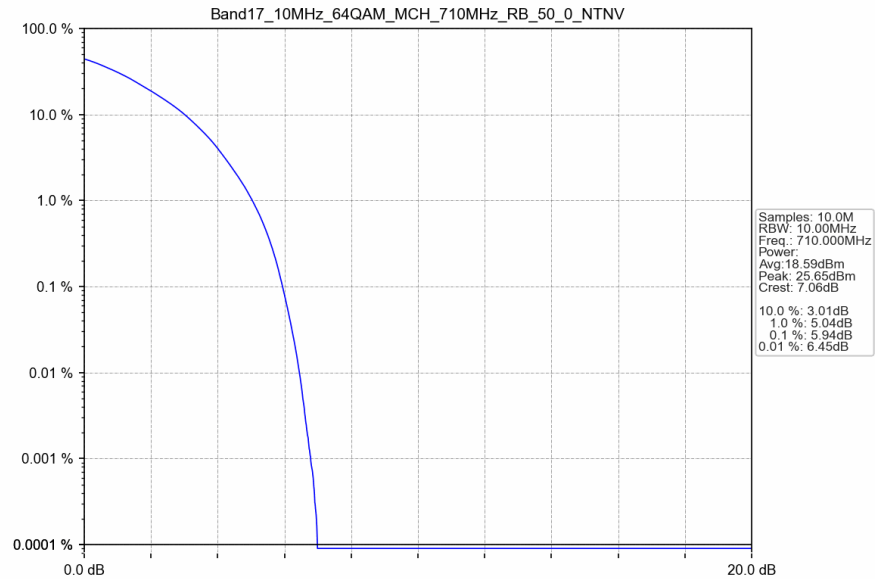
Band: 17 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	710	50	0	4.56	<=13	Pass
16QAM	710	50	0	5.33	<=13	Pass
64QAM	710	50	0	5.94	<=13	Pass
256QAM	710	50	0	6.49	<=13	Pass

4.2 Test Graph

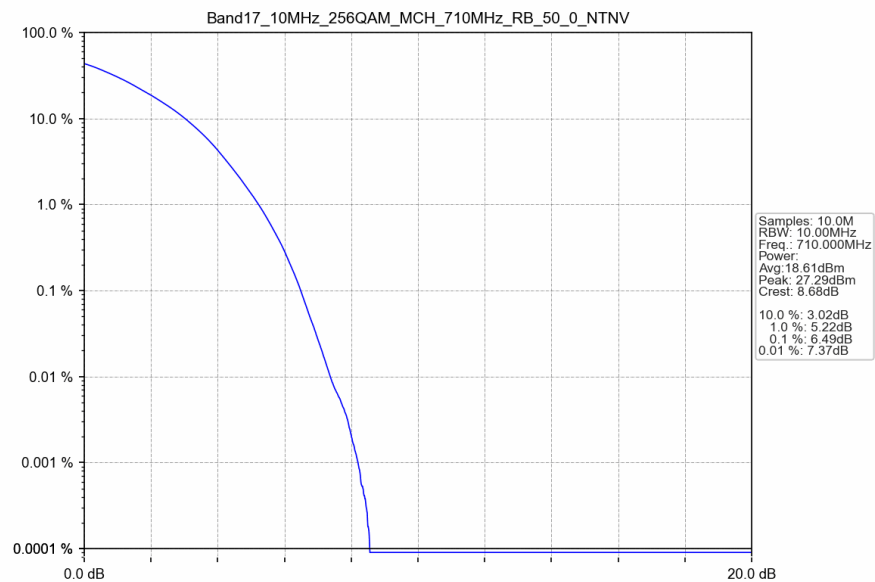
4.2.1 B17_10MHz



Band17_10MHz_64QAM_MCH_710MHz_RB_50_0_NTNV



Band17_10MHz_256QAM_MCH_710MHz_RB_50_0_NTNV



5. Spurious Emission

5.1 Test Result

5.1.1 B17_5MHz

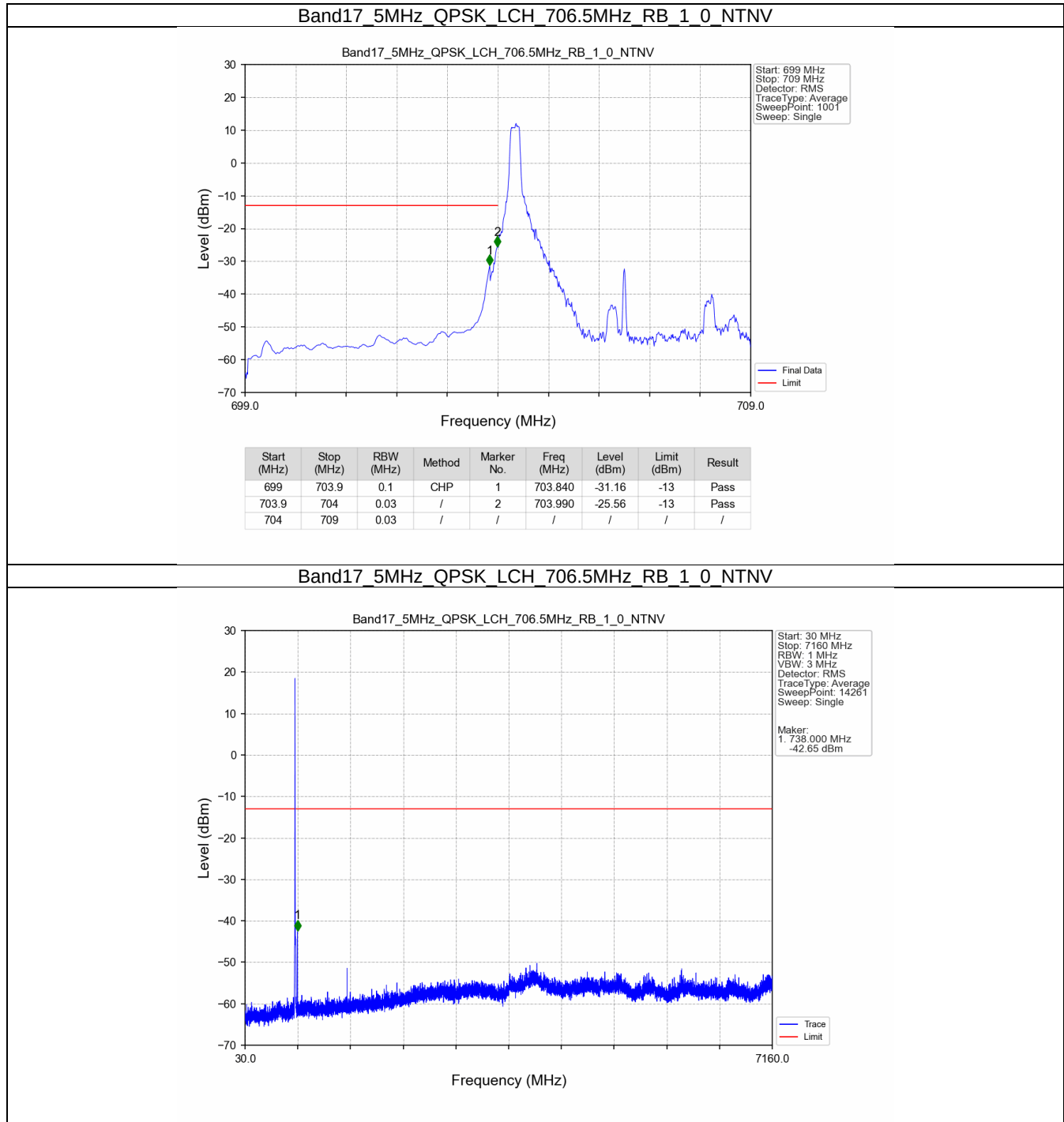
Band: 17 / Bandwidth: 5MHz / NTVN						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	706.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	710	1	0	Refer To Test Graph		Pass
	713.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

5.1.2 B17_10MHz

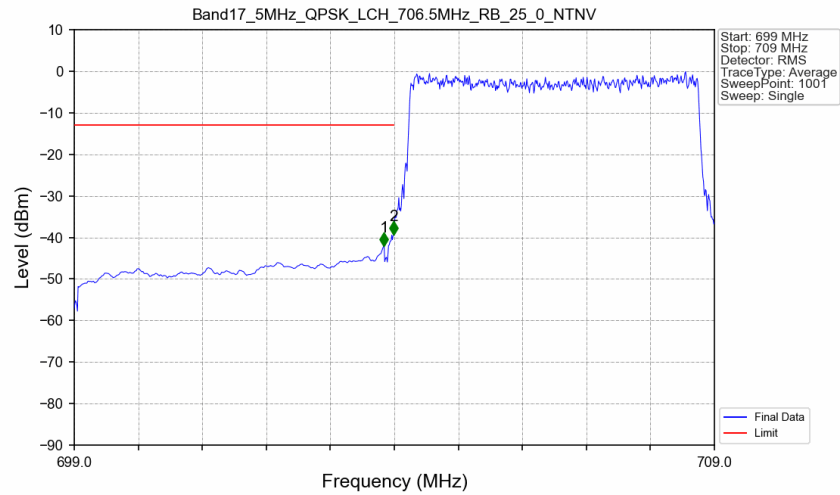
Band: 17 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	709	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	710	1	0	Refer To Test Graph		Pass
	711	1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

5.2.1 B17_5MHz

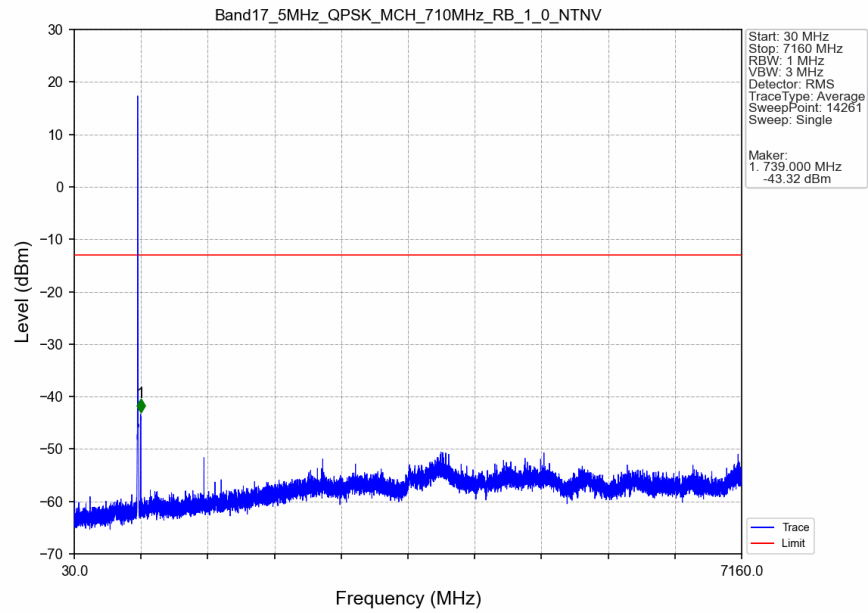


Band17_5MHz_QPSK_LCH_706.5MHz_RB_25_0_NTNV

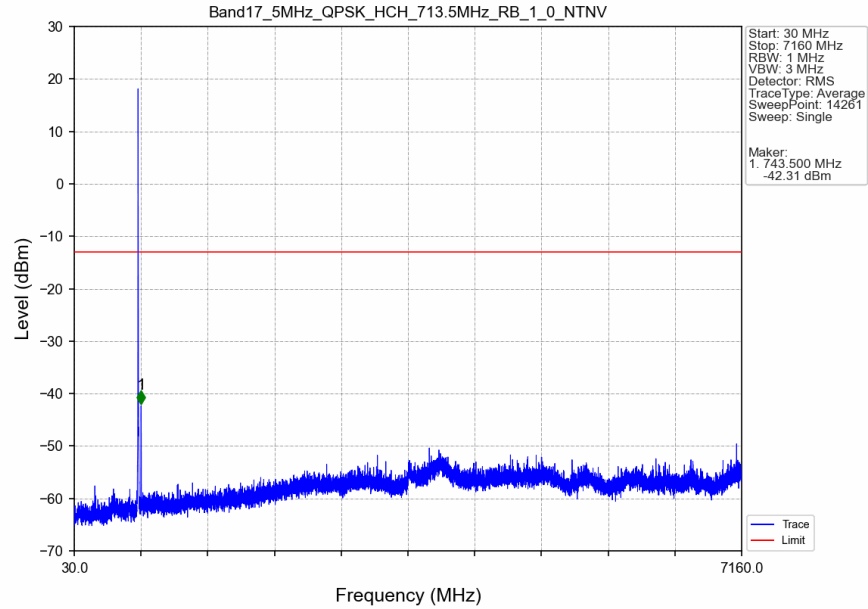


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
699	703.9	0.1	CHP	1	703.840	-42.01	-13	Pass
703.9	704	0.03	/	2	703.990	-39.31	-13	Pass
704	709	0.03	/	/	/	/	/	/

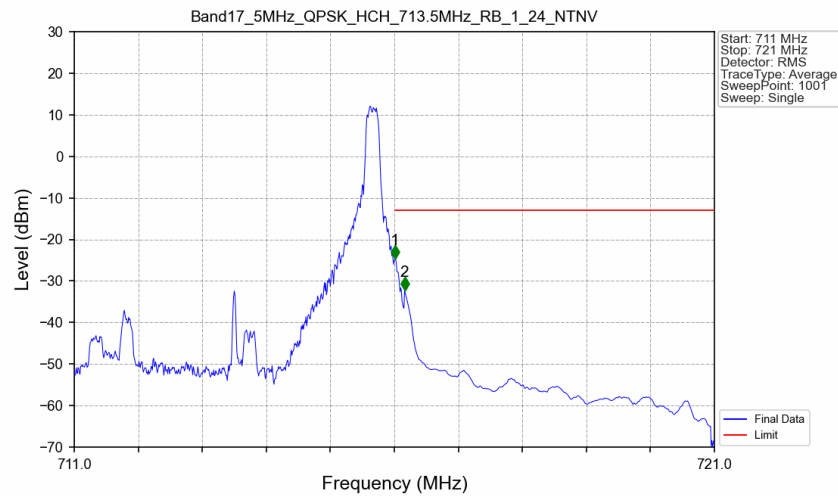
Band17_5MHz_QPSK_MCH_710MHz_RB_1_0_NTNV



Band17_5MHz_QPSK_HCH_713.5MHz_RB_1_0_NTNV

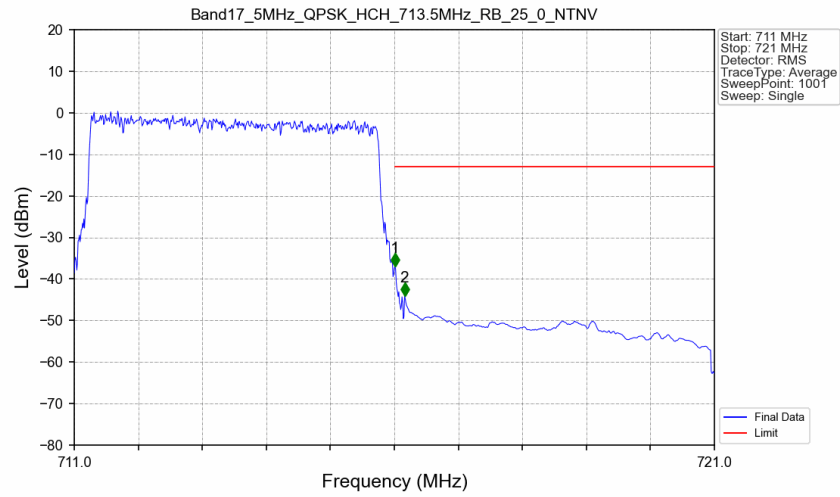


Band17_5MHz_QPSK_HCH_713.5MHz_RB_1_24_NTNV



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	716.010	-24.60	-13	Pass
716.1	721	0.1	CHP	2	716.160	-32.18	-13	Pass

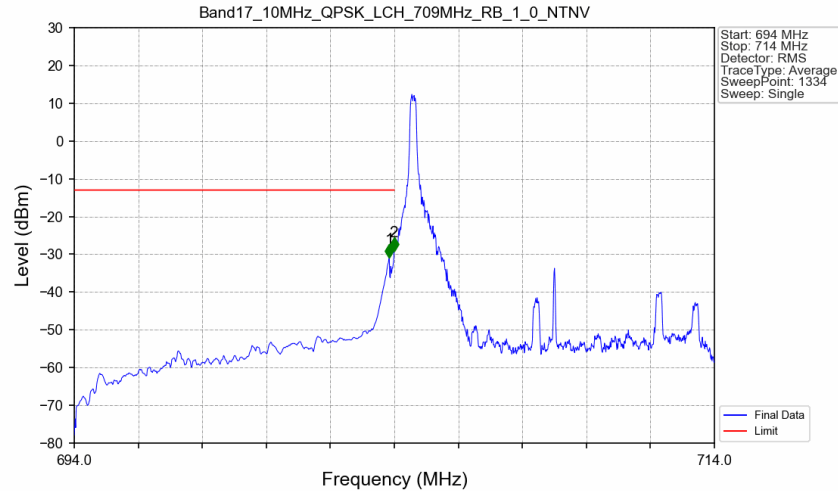
Band17_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



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	716.010	-36.95	-13	Pass
716.1	721	0.1	CHP	2	716.160	-43.98	-13	Pass

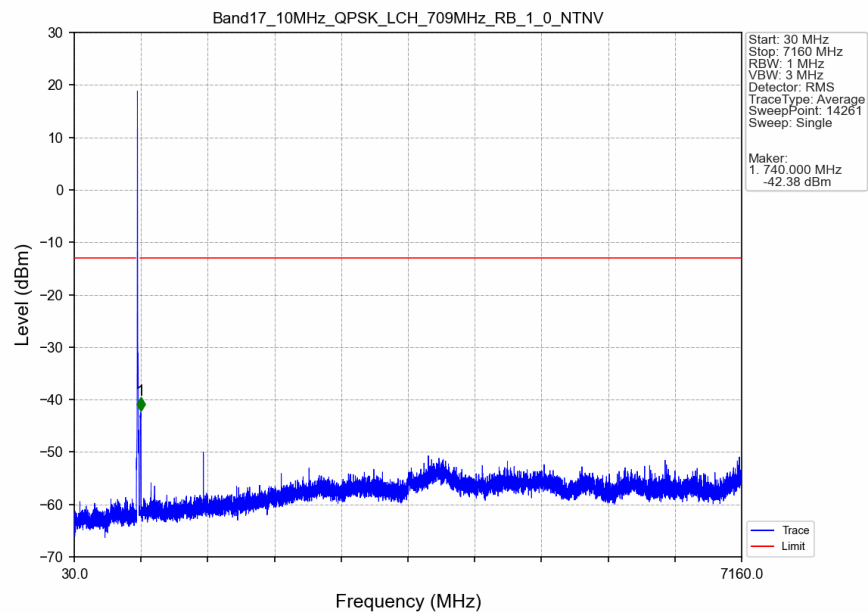
5.2.2 B17_10MHz

Band17_10MHz_QPSK_LCH_709MHz_RB_1_0_NTNV

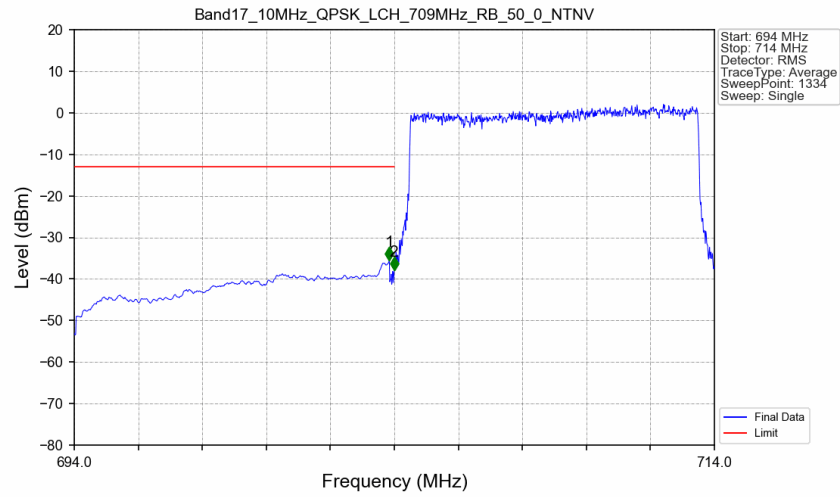


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	703.9	0.1	CHP	1	703.842	-30.84	-13	Pass
703.9	704	0.03	/	2	703.992	-29.07	-13	Pass
704	714	0.03	/	/	/	/	/	/

Band17_10MHz_QPSK_LCH_709MHz_RB_1_0_NTNV

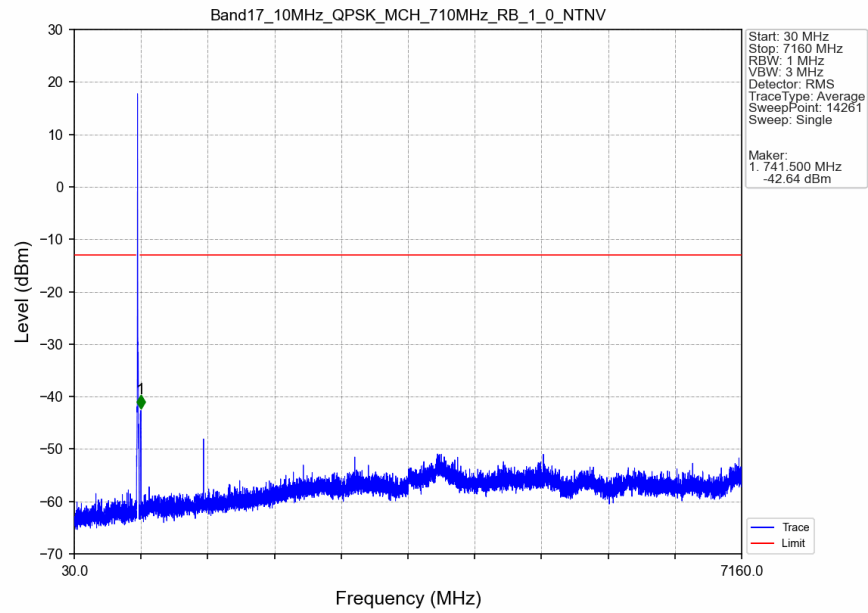


Band17_10MHz_QPSK_LCH_709MHz_RB_50_0_NTNV

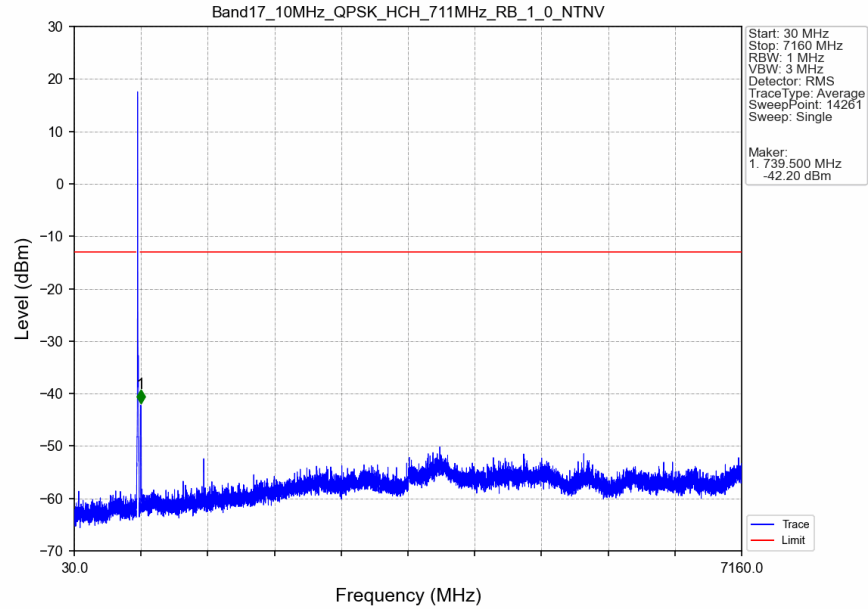


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	703.9	0.1	CHP	1	703.842	-35.53	-13	Pass
703.9	704	0.03	/	2	703.992	-37.83	-13	Pass
704	714	0.03	/	/	/	/	/	/

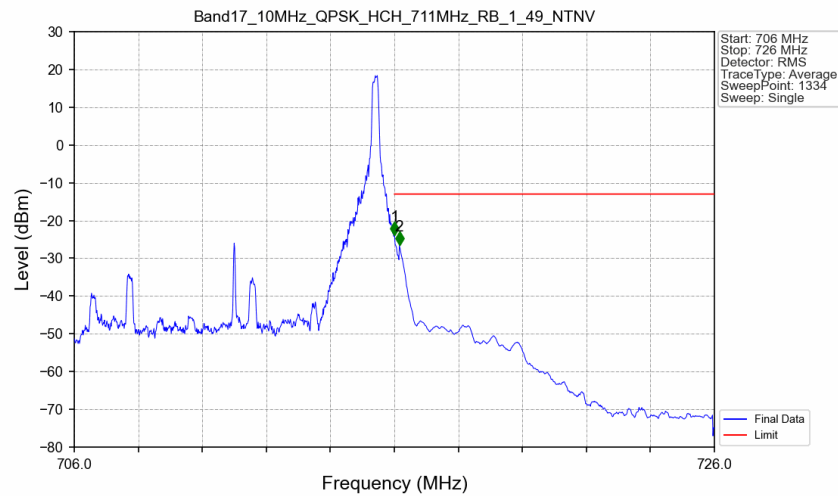
Band17_10MHz_QPSK_MCH_710MHz_RB_1_0_NTNV



Band17_10MHz_QPSK_HCH_711MHz_RB_1_0_NTNV

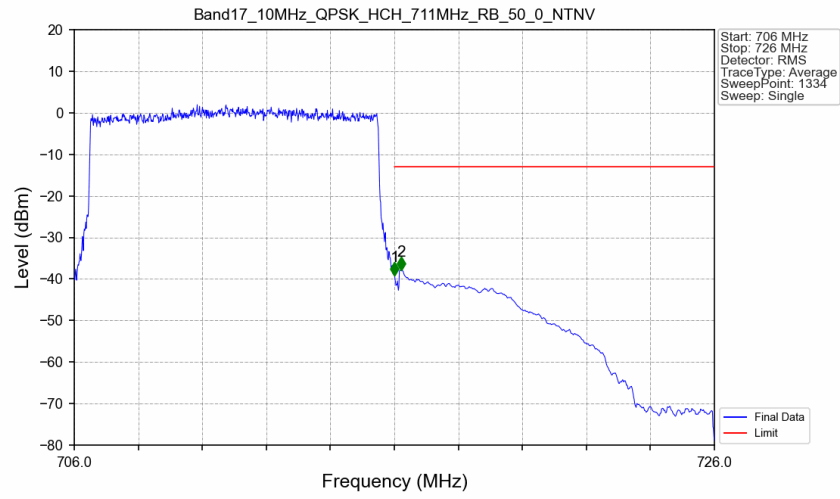


Band17_10MHz_QPSK_HCH_711MHz_RB_1_49_NTNV



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	-23.83	-13	Pass
716.1	726	0.1	CHP	2	716.158	-26.51	-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	716.008	-39.06	-13	Pass
716.1	726	0.1	CHP	2	716.218	-37.92	-13	Pass