

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	23.30	-4.96	16.19	<=34.77	Pass
			13	23.31	-4.96	16.20	<=34.77	Pass
			24	23.33	-4.96	16.22	<=34.77	Pass
		12	0	22.37	-4.96	15.26	<=34.77	Pass
			6	22.40	-4.96	15.29	<=34.77	Pass
			13	22.39	-4.96	15.28	<=34.77	Pass
		25	0	22.42	-4.96	15.31	<=34.77	Pass
	710	1	0	23.31	-4.96	16.20	<=34.77	Pass
			13	23.38	-4.96	16.27	<=34.77	Pass
			24	23.46	-4.96	16.35	<=34.77	Pass
		12	0	22.39	-4.96	15.28	<=34.77	Pass
			6	22.44	-4.96	15.33	<=34.77	Pass
			13	22.43	-4.96	15.32	<=34.77	Pass
		25	0	22.46	-4.96	15.35	<=34.77	Pass
	713.5	1	0	23.46	-4.96	16.35	<=34.77	Pass
			13	23.52	-4.96	16.41	<=34.77	Pass
			24	23.53	-4.96	16.42	<=34.77	Pass
		12	0	22.48	-4.96	15.37	<=34.77	Pass
			6	22.47	-4.96	15.36	<=34.77	Pass
			13	22.50	-4.96	15.39	<=34.77	Pass
		25	0	22.53	-4.96	15.42	<=34.77	Pass
16QAM	706.5	1	0	22.23	-4.96	15.12	<=34.77	Pass
			13	22.23	-4.96	15.12	<=34.77	Pass
			24	22.26	-4.96	15.15	<=34.77	Pass
		12	0	21.39	-4.96	14.28	<=34.77	Pass
			6	21.41	-4.96	14.30	<=34.77	Pass
			13	21.39	-4.96	14.28	<=34.77	Pass
		25	0	21.43	-4.96	14.32	<=34.77	Pass
	710	1	0	22.69	-4.96	15.58	<=34.77	Pass
			13	22.76	-4.96	15.65	<=34.77	Pass
			24	22.73	-4.96	15.62	<=34.77	Pass
		12	0	21.44	-4.96	14.33	<=34.77	Pass
			6	21.48	-4.96	14.37	<=34.77	Pass
			13	21.47	-4.96	14.36	<=34.77	Pass
		25	0	21.45	-4.96	14.34	<=34.77	Pass
	713.5	1	0	22.60	-4.96	15.49	<=34.77	Pass
			13	22.62	-4.96	15.51	<=34.77	Pass
			24	22.55	-4.96	15.44	<=34.77	Pass
		12	0	21.51	-4.96	14.40	<=34.77	Pass
			6	21.49	-4.96	14.38	<=34.77	Pass
			13	21.53	-4.96	14.42	<=34.77	Pass
		25	0	21.54	-4.96	14.43	<=34.77	Pass
64QAM	706.5	1	0	21.30	-4.96	14.19	<=34.77	Pass
			13	21.26	-4.96	14.15	<=34.77	Pass
			24	21.31	-4.96	14.20	<=34.77	Pass
		12	0	20.39	-4.96	13.28	<=34.77	Pass
			6	20.40	-4.96	13.29	<=34.77	Pass
			13	20.38	-4.96	13.27	<=34.77	Pass
		25	0	20.34	-4.96	13.23	<=34.77	Pass

	710	1	0	21.72	-4.96	14.61	<=34.77	Pass
			13	21.81	-4.96	14.70	<=34.77	Pass
			24	21.83	-4.96	14.72	<=34.77	Pass
		12	0	20.33	-4.96	13.22	<=34.77	Pass
			6	20.37	-4.96	13.26	<=34.77	Pass
			13	20.37	-4.96	13.26	<=34.77	Pass
		25	0	20.39	-4.96	13.28	<=34.77	Pass
	713.5	1	0	21.70	-4.96	14.59	<=34.77	Pass
			13	21.74	-4.96	14.63	<=34.77	Pass
			24	21.81	-4.96	14.70	<=34.77	Pass
		12	0	20.58	-4.96	13.47	<=34.77	Pass
			6	20.57	-4.96	13.46	<=34.77	Pass
			13	20.59	-4.96	13.48	<=34.77	Pass
		25	0	20.56	-4.96	13.45	<=34.77	Pass
256QAM	706.5	1	0	18.08	-4.96	10.97	<=34.77	Pass
			13	18.09	-4.96	10.98	<=34.77	Pass
			24	18.11	-4.96	11.00	<=34.77	Pass
		12	0	18.38	-4.96	11.27	<=34.77	Pass
			6	18.39	-4.96	11.28	<=34.77	Pass
			13	18.38	-4.96	11.27	<=34.77	Pass
		25	0	18.41	-4.96	11.30	<=34.77	Pass
	710	1	0	18.55	-4.96	11.44	<=34.77	Pass
			13	18.63	-4.96	11.52	<=34.77	Pass
			24	18.67	-4.96	11.56	<=34.77	Pass
		12	0	18.42	-4.96	11.31	<=34.77	Pass
			6	18.43	-4.96	11.32	<=34.77	Pass
			13	18.45	-4.96	11.34	<=34.77	Pass
		25	0	18.40	-4.96	11.29	<=34.77	Pass
	713.5	1	0	18.51	-4.96	11.40	<=34.77	Pass
			13	18.53	-4.96	11.42	<=34.77	Pass
			24	18.55	-4.96	11.44	<=34.77	Pass
		12	0	18.51	-4.96	11.40	<=34.77	Pass
			6	18.51	-4.96	11.40	<=34.77	Pass
			13	18.50	-4.96	11.39	<=34.77	Pass
		25	0	18.53	-4.96	11.42	<=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	23.26	-4.96	16.15	<=34.77	Pass
			25	23.26	-4.96	16.15	<=34.77	Pass
			49	23.45	-4.96	16.34	<=34.77	Pass
		25	0	22.40	-4.96	15.29	<=34.77	Pass
			13	22.40	-4.96	15.29	<=34.77	Pass
			25	22.44	-4.96	15.33	<=34.77	Pass
		50	0	22.38	-4.96	15.27	<=34.77	Pass
	710	1	0	23.28	-4.96	16.17	<=34.77	Pass
			25	23.35	-4.96	16.24	<=34.77	Pass
			49	23.41	-4.96	16.30	<=34.77	Pass
		25	0	22.40	-4.96	15.29	<=34.77	Pass
			13	22.43	-4.96	15.32	<=34.77	Pass
			25	22.45	-4.96	15.34	<=34.77	Pass
		50	0	22.40	-4.96	15.29	<=34.77	Pass
	711	1	0	23.32	-4.96	16.21	<=34.77	Pass

		25	25	23.40	-4.96	16.29	<=34.77	Pass
			49	23.48	-4.96	16.37	<=34.77	Pass
			0	22.41	-4.96	15.30	<=34.77	Pass
			13	22.45	-4.96	15.34	<=34.77	Pass
			25	22.47	-4.96	15.36	<=34.77	Pass
		50	0	22.46	-4.96	15.35	<=34.77	Pass
16QAM	709	1	0	22.96	-4.96	15.85	<=34.77	Pass
			25	22.99	-4.96	15.88	<=34.77	Pass
			49	22.99	-4.96	15.88	<=34.77	Pass
		25	0	21.44	-4.96	14.33	<=34.77	Pass
			13	21.43	-4.96	14.32	<=34.77	Pass
			25	21.46	-4.96	14.35	<=34.77	Pass
		50	0	21.38	-4.96	14.27	<=34.77	Pass
	710	1	0	22.53	-4.96	15.42	<=34.77	Pass
			25	22.57	-4.96	15.46	<=34.77	Pass
			49	22.65	-4.96	15.54	<=34.77	Pass
		25	0	21.39	-4.96	14.28	<=34.77	Pass
			13	21.42	-4.96	14.31	<=34.77	Pass
			25	21.44	-4.96	14.33	<=34.77	Pass
		50	0	21.39	-4.96	14.28	<=34.77	Pass
	711	1	0	22.41	-4.96	15.30	<=34.77	Pass
			25	22.45	-4.96	15.34	<=34.77	Pass
			49	22.60	-4.96	15.49	<=34.77	Pass
		25	0	21.48	-4.96	14.37	<=34.77	Pass
			13	21.53	-4.96	14.42	<=34.77	Pass
			25	21.55	-4.96	14.44	<=34.77	Pass
		50	0	21.46	-4.96	14.35	<=34.77	Pass
64QAM	709	1	0	21.61	-4.96	14.50	<=34.77	Pass
			25	21.65	-4.96	14.54	<=34.77	Pass
			49	21.78	-4.96	14.67	<=34.77	Pass
		25	0	20.42	-4.96	13.31	<=34.77	Pass
			13	20.41	-4.96	13.30	<=34.77	Pass
			25	20.44	-4.96	13.33	<=34.77	Pass
		50	0	20.39	-4.96	13.28	<=34.77	Pass
	710	1	0	21.55	-4.96	14.44	<=34.77	Pass
			25	21.60	-4.96	14.49	<=34.77	Pass
			49	21.70	-4.96	14.59	<=34.77	Pass
		25	0	20.44	-4.96	13.33	<=34.77	Pass
			13	20.46	-4.96	13.35	<=34.77	Pass
			25	20.49	-4.96	13.38	<=34.77	Pass
		50	0	20.40	-4.96	13.29	<=34.77	Pass
	711	1	0	21.59	-4.96	14.48	<=34.77	Pass
			25	21.66	-4.96	14.55	<=34.77	Pass
			49	21.67	-4.96	14.56	<=34.77	Pass
		25	0	20.43	-4.96	13.32	<=34.77	Pass
			13	20.48	-4.96	13.37	<=34.77	Pass
			25	20.50	-4.96	13.39	<=34.77	Pass
		50	0	20.43	-4.96	13.32	<=34.77	Pass
256QAM	709	1	0	18.77	-4.96	11.66	<=34.77	Pass
			25	18.83	-4.96	11.72	<=34.77	Pass
			49	18.91	-4.96	11.80	<=34.77	Pass
		25	0	18.41	-4.96	11.30	<=34.77	Pass
			13	18.39	-4.96	11.28	<=34.77	Pass
			25	18.45	-4.96	11.34	<=34.77	Pass
		50	0	18.39	-4.96	11.28	<=34.77	Pass
	710	1	0	18.13	-4.96	11.02	<=34.77	Pass
			25	18.21	-4.96	11.10	<=34.77	Pass
			49	18.28	-4.96	11.17	<=34.77	Pass
		25	0	18.40	-4.96	11.29	<=34.77	Pass

			13	18.43	-4.96	11.32	<=34.77	Pass
			25	18.43	-4.96	11.32	<=34.77	Pass
		50	0	18.36	-4.96	11.25	<=34.77	Pass
	711	1	0	18.46	-4.96	11.35	<=34.77	Pass
			25	18.52	-4.96	11.41	<=34.77	Pass
			49	18.61	-4.96	11.50	<=34.77	Pass
		25	0	18.43	-4.96	11.32	<=34.77	Pass
			13	18.47	-4.96	11.36	<=34.77	Pass
			25	18.50	-4.96	11.39	<=34.77	Pass
		50	0	18.45	-4.96	11.34	<=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	2.131	0.0030	-2.5 to 2.5	Pass
					NV	-0.835	-0.0012	-2.5 to 2.5	Pass
					HV	-0.231	-0.0003	-2.5 to 2.5	Pass
				-30	NV	-1.368	-0.0019	-2.5 to 2.5	Pass
				-20	NV	-0.100	-0.0001	-2.5 to 2.5	Pass
				-10	NV	-2.134	-0.0030	-2.5 to 2.5	Pass
				0	NV	-0.811	-0.0011	-2.5 to 2.5	Pass
				10	NV	-0.956	-0.0013	-2.5 to 2.5	Pass
				30	NV	-1.543	-0.0022	-2.5 to 2.5	Pass
				40	NV	-2.893	-0.0041	-2.5 to 2.5	Pass
				50	NV	-5.171	-0.0073	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band17_OBW

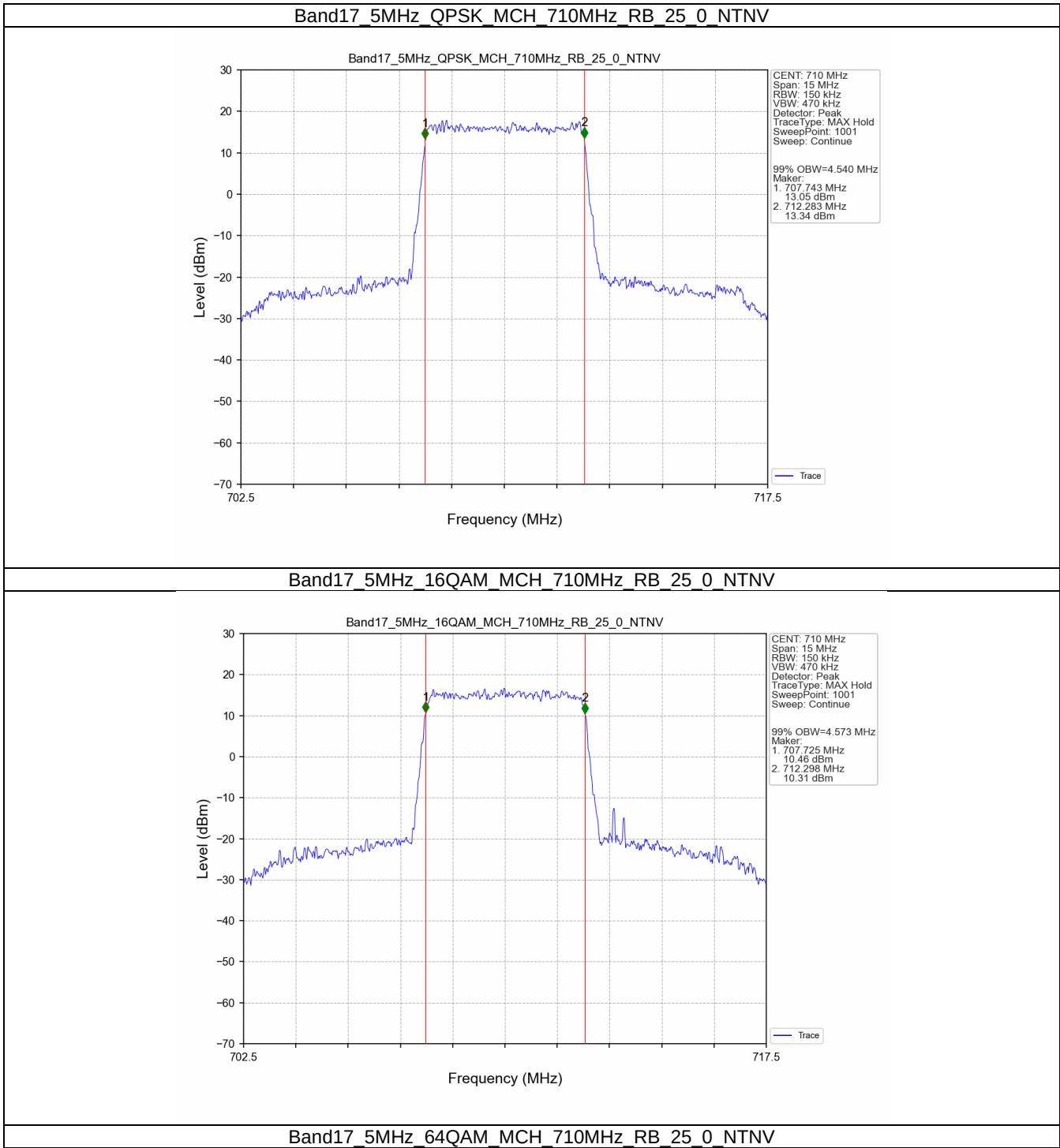
Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	4.540	/	Pass
	16QAM	710	25	0	4.573	/	Pass
	64QAM	710	25	0	4.539	/	Pass
	256QAM	710	25	0	4.551	/	Pass
10	QPSK	710	50	0	9.065	/	Pass
	16QAM	710	50	0	9.066	/	Pass
	64QAM	710	50	0	9.045	/	Pass
	256QAM	710	50	0	9.051	/	Pass

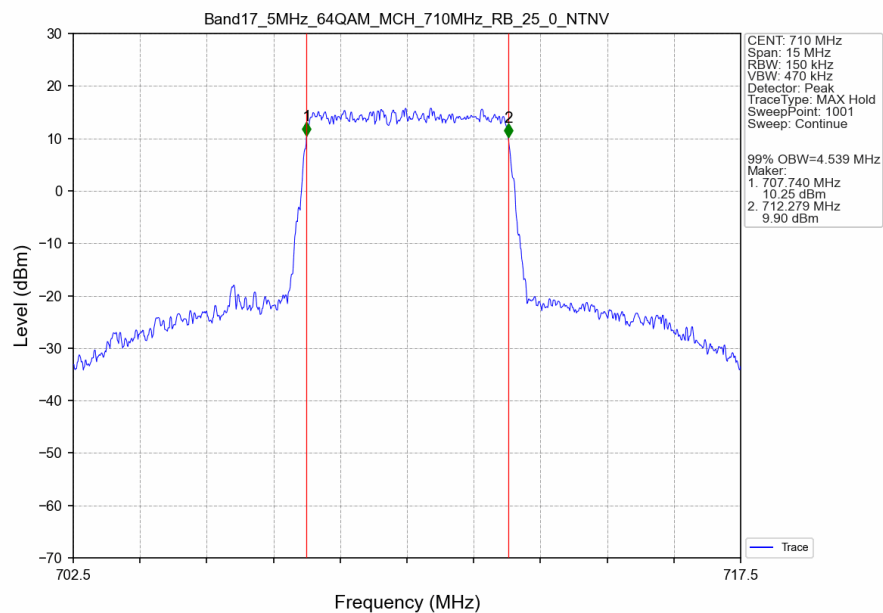
3.1.2 Band17_XDB

Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	5.059	/	Pass
	16QAM	710	25	0	5.081	/	Pass
	64QAM	710	25	0	5.077	/	Pass
	256QAM	710	25	0	5.031	/	Pass
10	QPSK	710	50	0	10.118	/	Pass
	16QAM	710	50	0	10.008	/	Pass
	64QAM	710	50	0	9.968	/	Pass
	256QAM	710	50	0	9.987	/	Pass

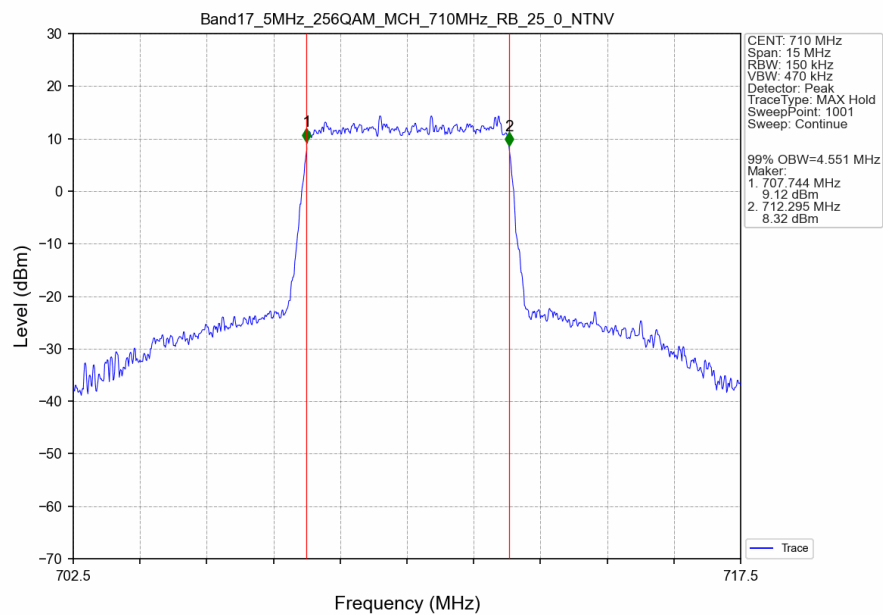
3.2 Test Graph

3.2.1 Band17_OBW

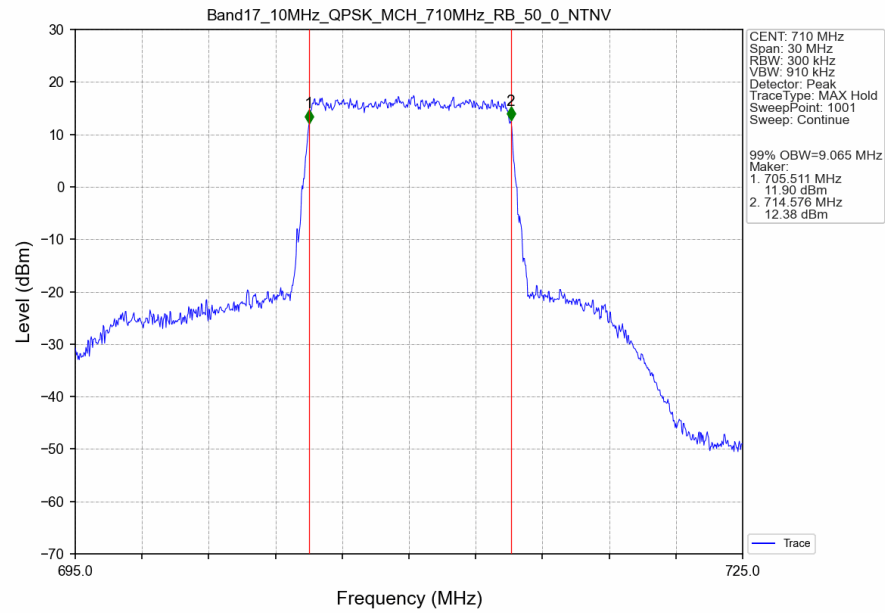




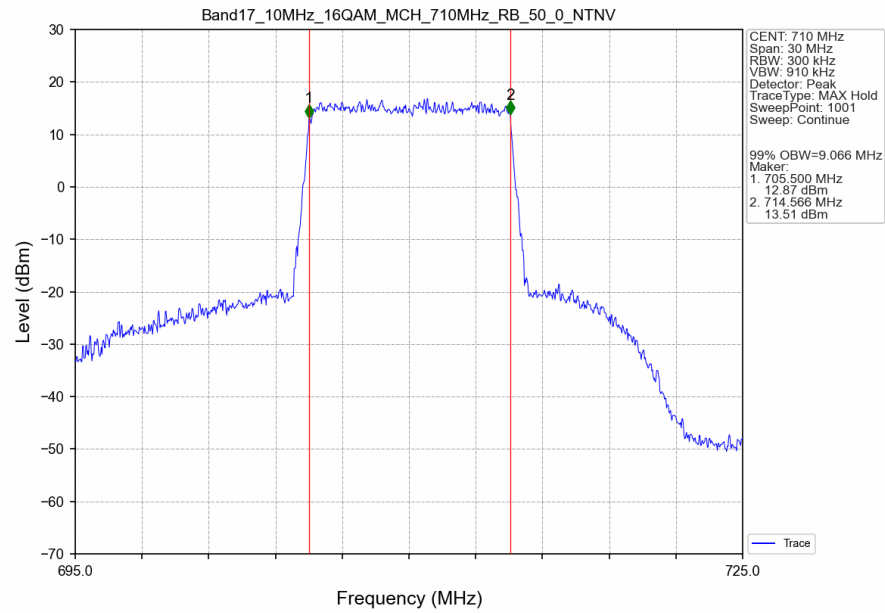
Band17_5MHz_256QAM_MCH_710MHz_RB_25_0_NTNV



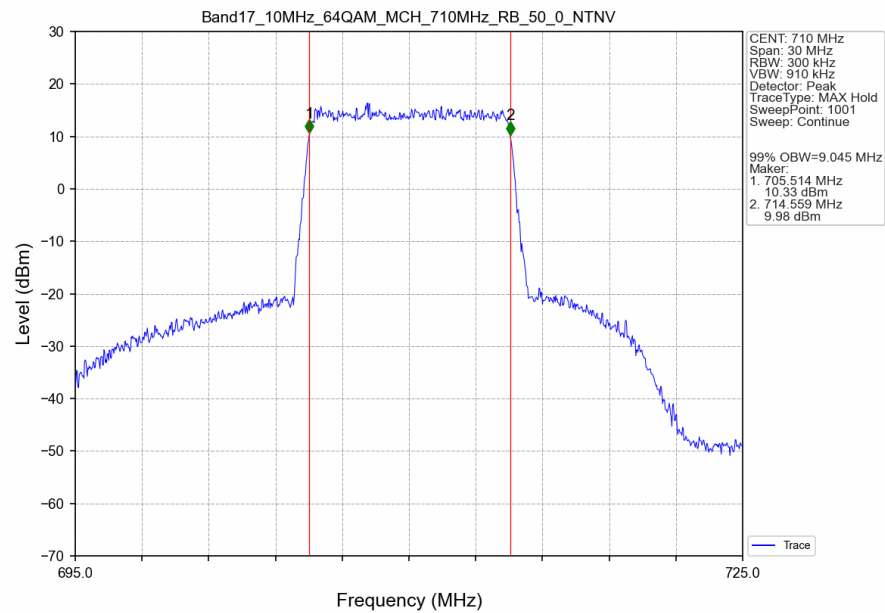
Band17_10MHz_QPSK_MCH_710MHz_RB_50_0_NTNV



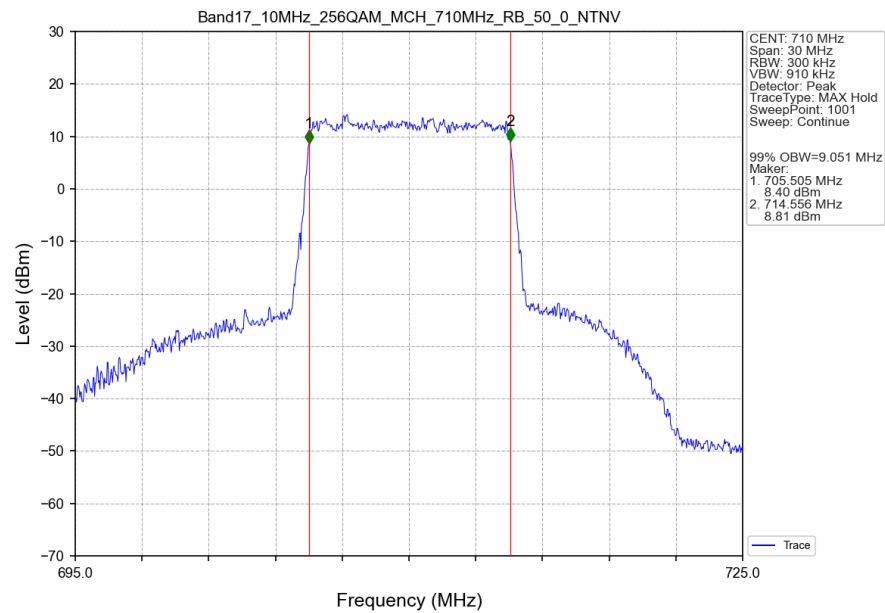
Band17_10MHz_16QAM_MCH_710MHz_RB_50_0_NTNV



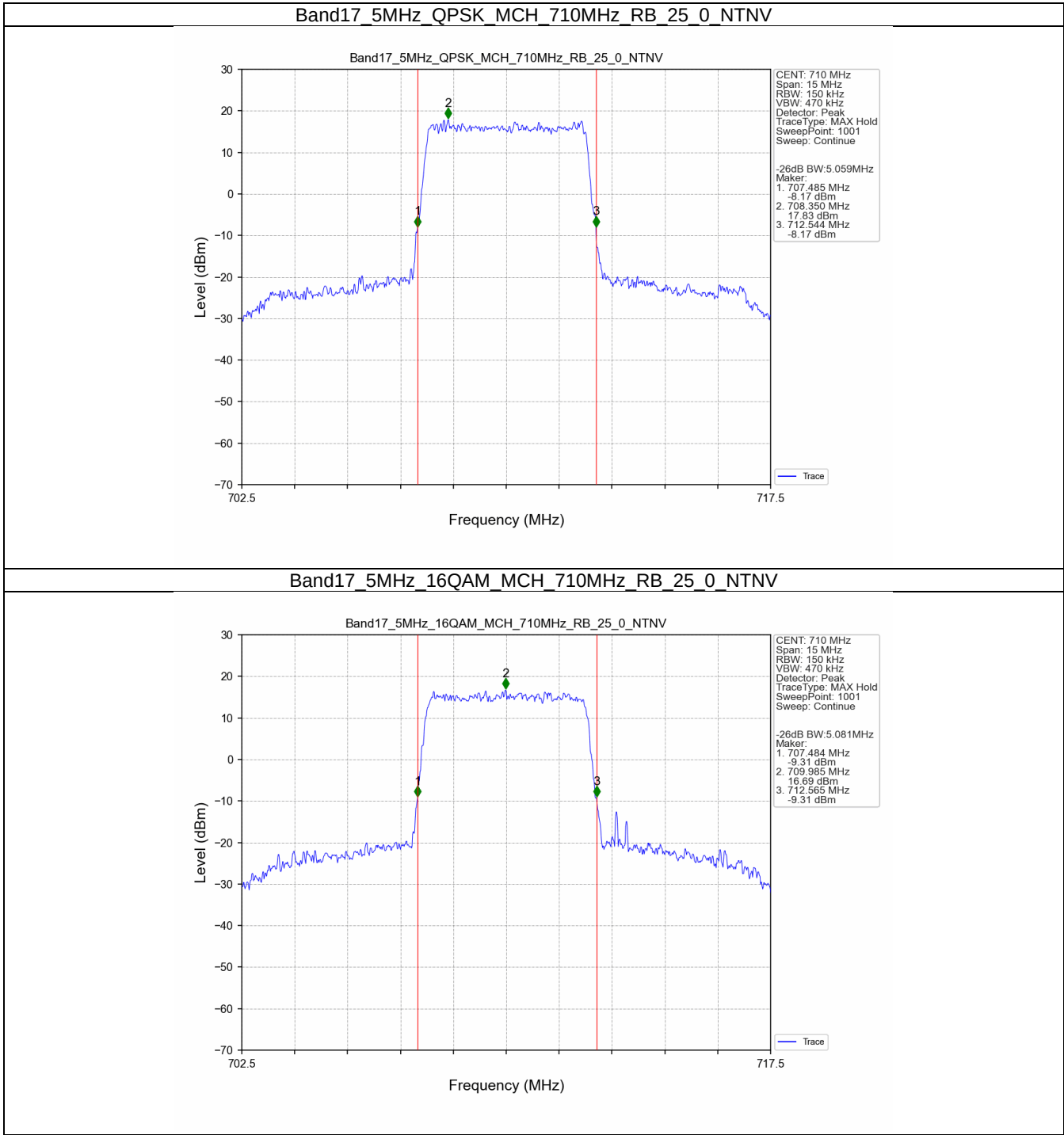
Band17_10MHz_64QAM_MCH_710MHz_RB_50_0_NTNV



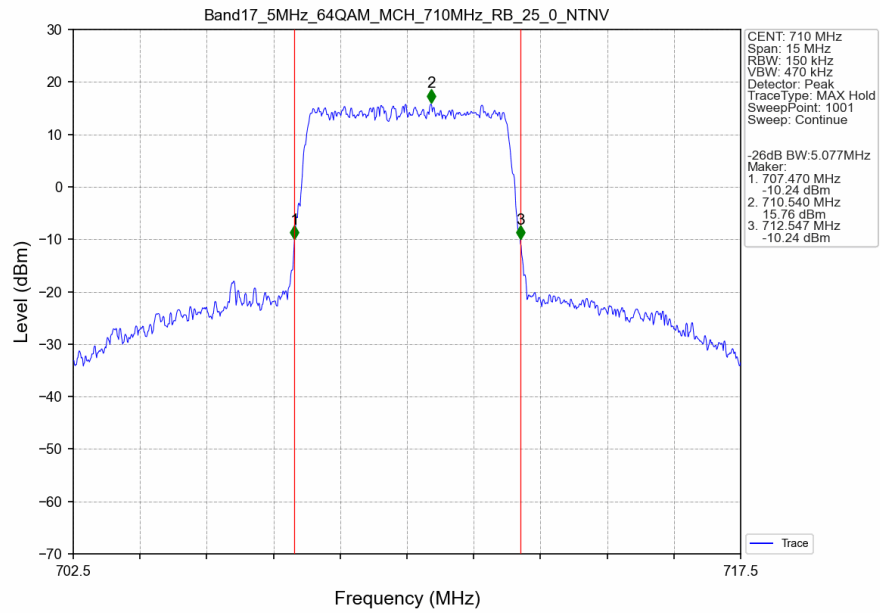
Band17_10MHz_256QAM_MCH_710MHz_RB_50_0_NTNV



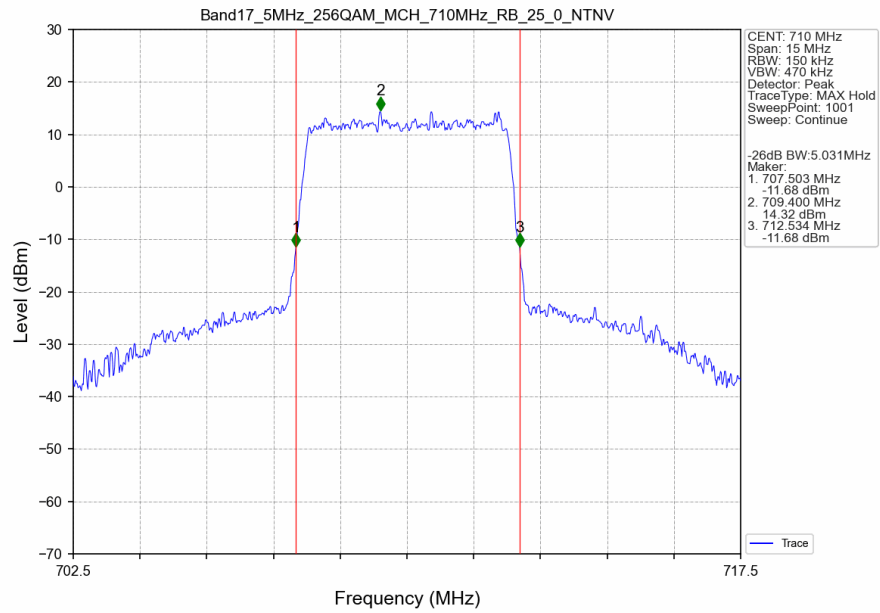
3.2.2 Band17_XDB



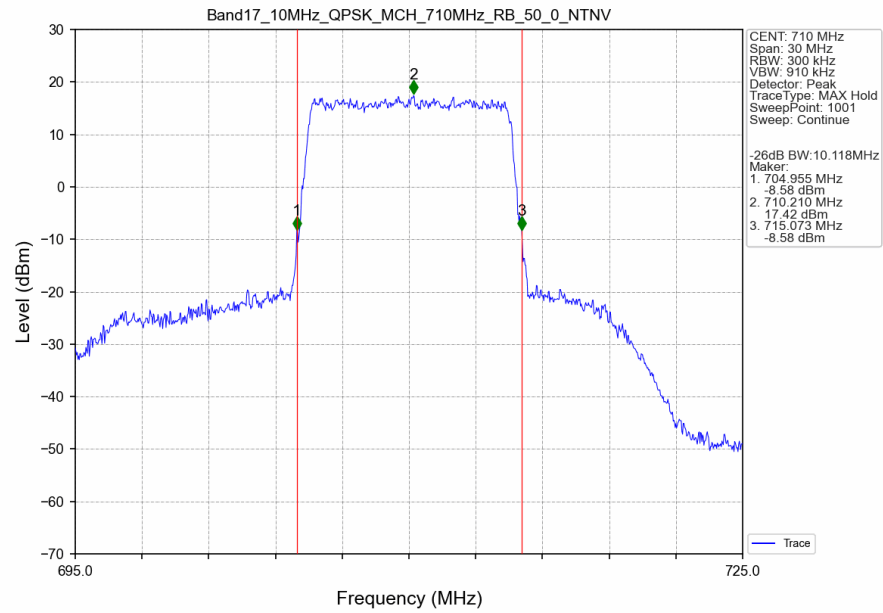
Band17_5MHz_64QAM_MCH_710MHz_RB_25_0_NTNV



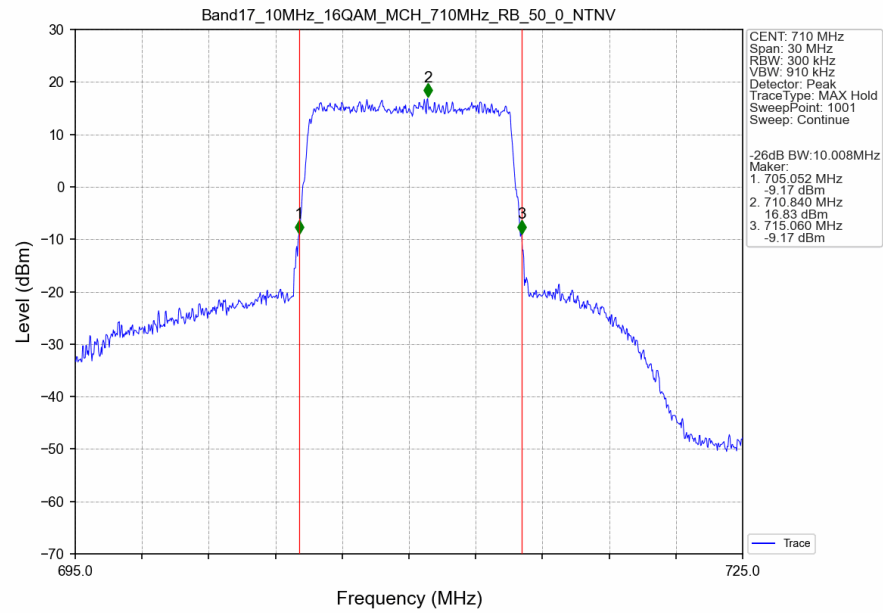
Band17_5MHz_256QAM_MCH_710MHz_RB_25_0_NTNV



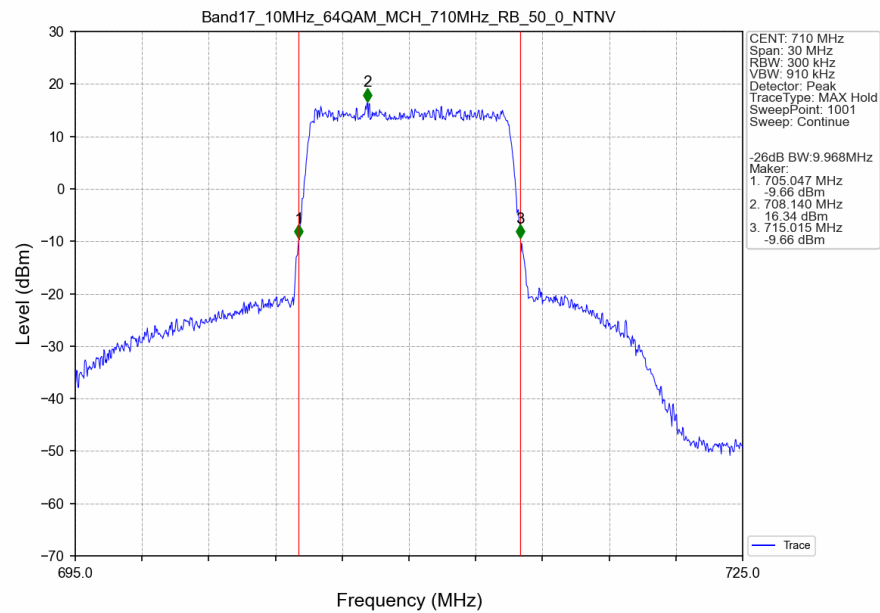
Band17_10MHz_QPSK_MCH_710MHz_RB_50_0_NTNV



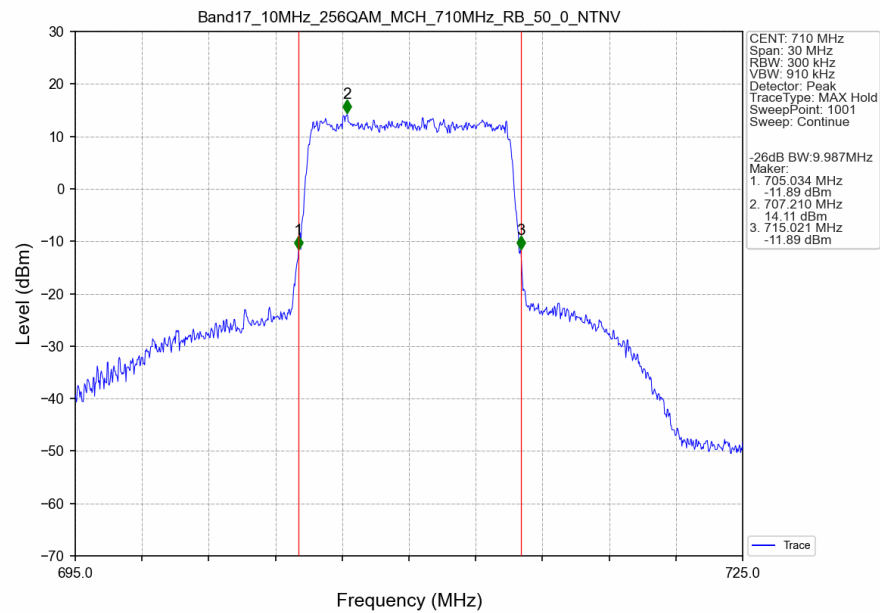
Band17_10MHz_16QAM_MCH_710MHz_RB_50_0_NTNV



Band17_10MHz_64QAM_MCH_710MHz_RB_50_0_NTNV



Band17_10MHz_256QAM_MCH_710MHz_RB_50_0_NTNV



4. Peak-Average Ratio

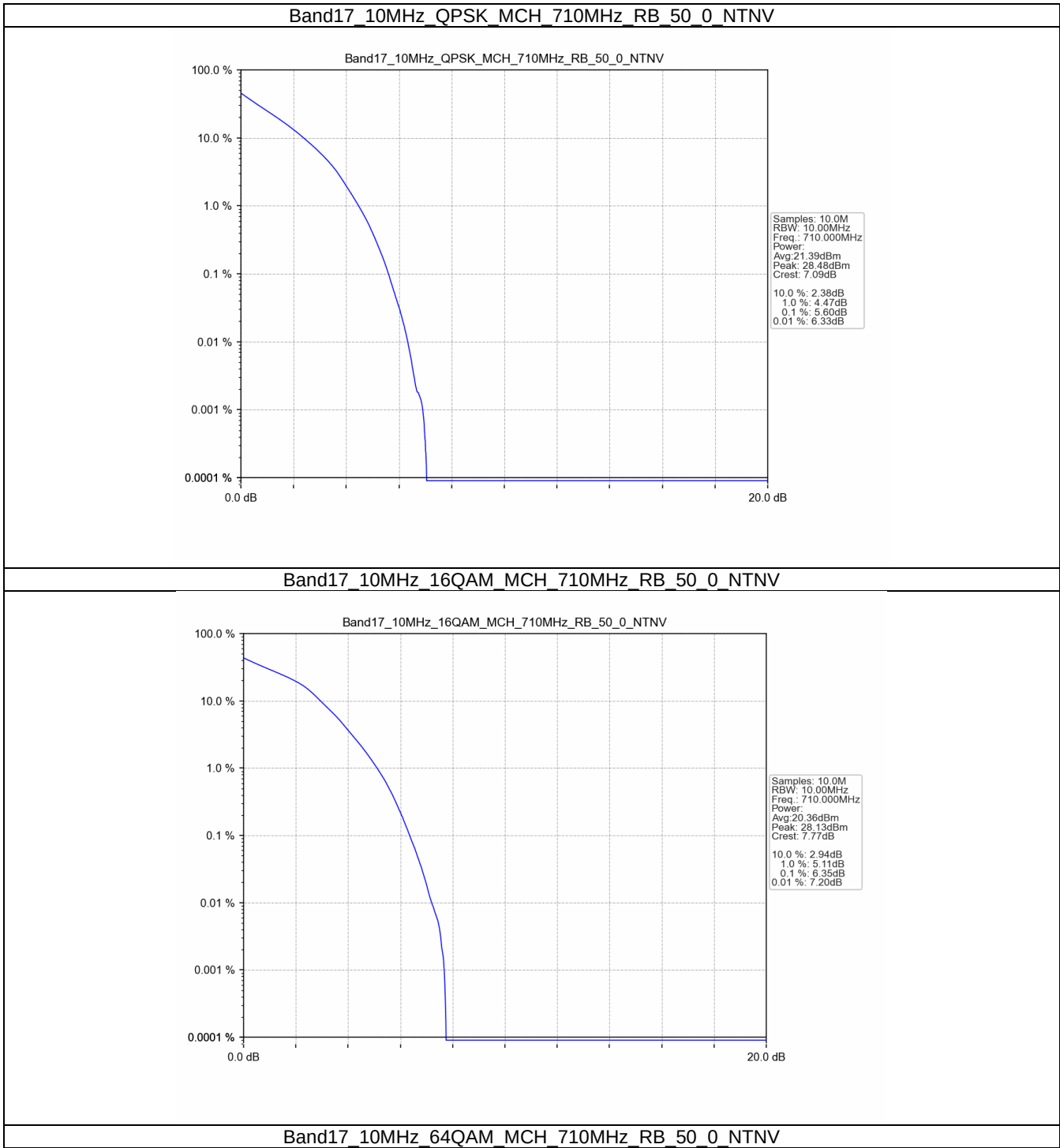
4.1 Test Result

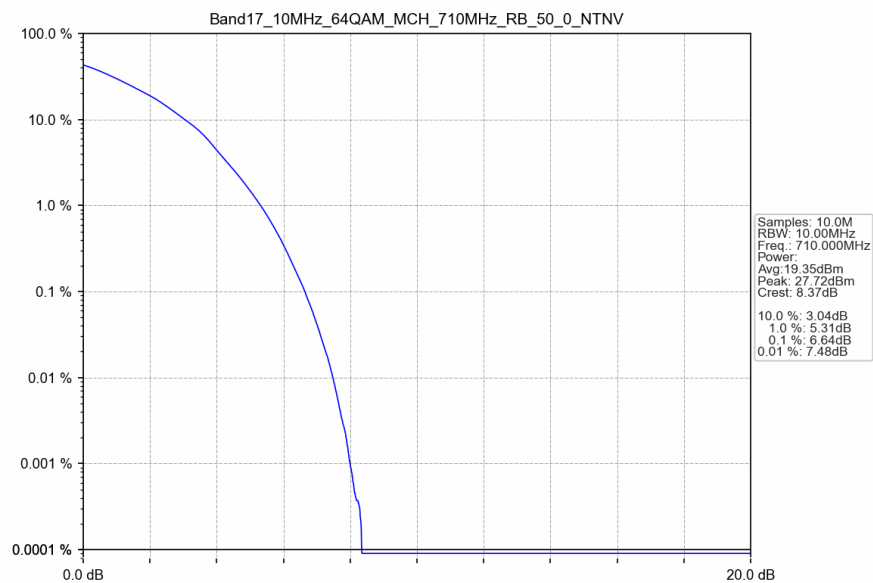
4.1.1 B17_10MHz

Band: 17 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	710	50	0	5.60	<=13	Pass
16QAM	710	50	0	6.35	<=13	Pass
64QAM	710	50	0	6.64	<=13	Pass
256QAM	710	50	0	6.84	<=13	Pass

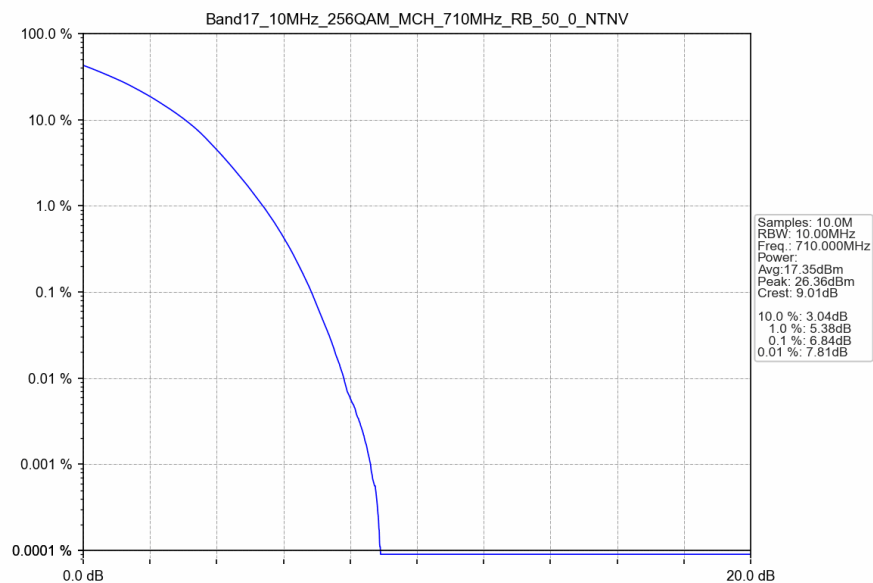
4.2 Test Graph

4.2.1 B17_10MHz





Band17_10MHz_256QAM_MCH_710MHz_RB_50_0_NTNV



5. Spurious Emission

5.1 Test Result

5.1.1 B17_5MHz

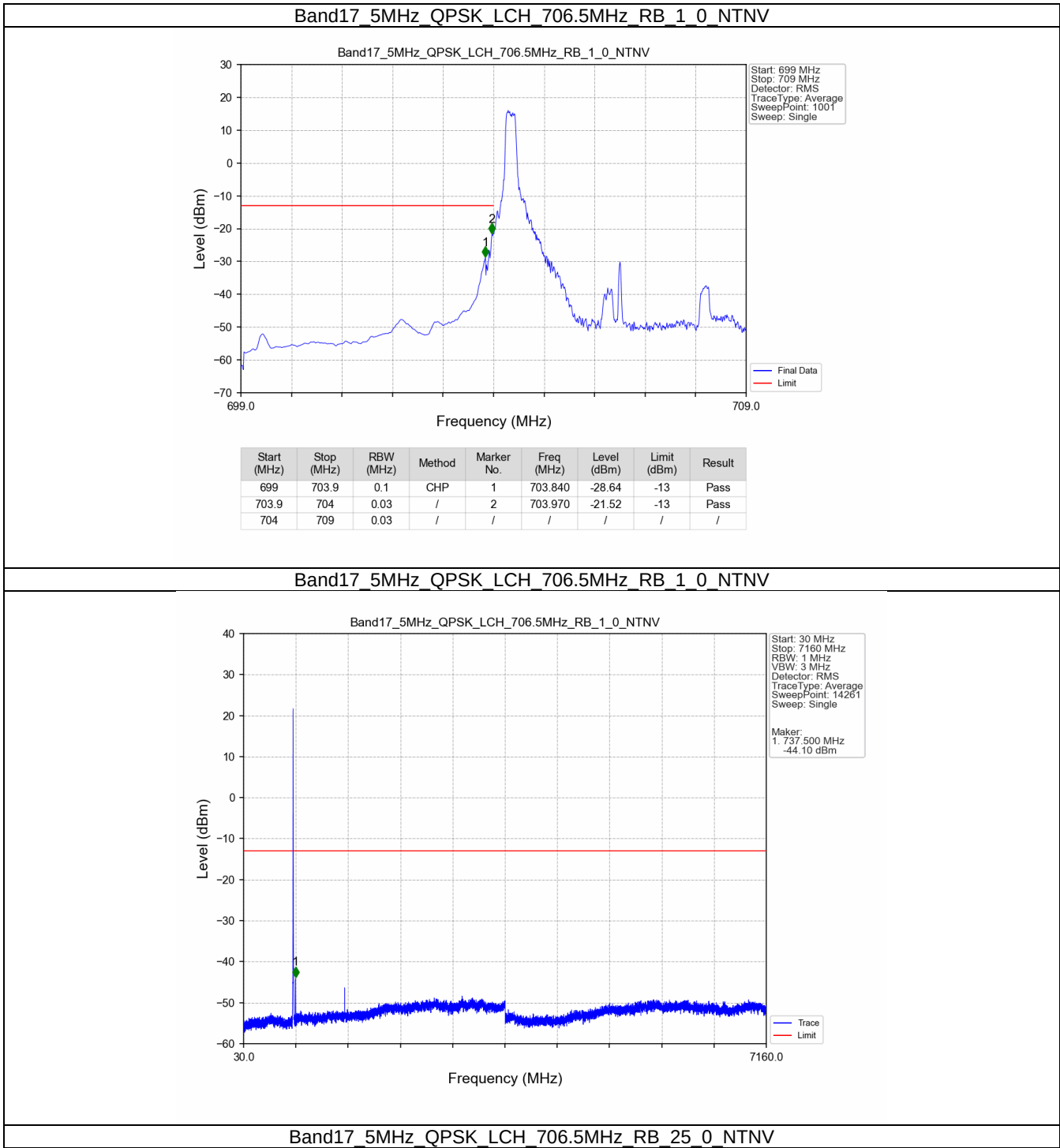
Band: 17 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	706.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	710	1	0	Refer To Test Graph		Pass
	713.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

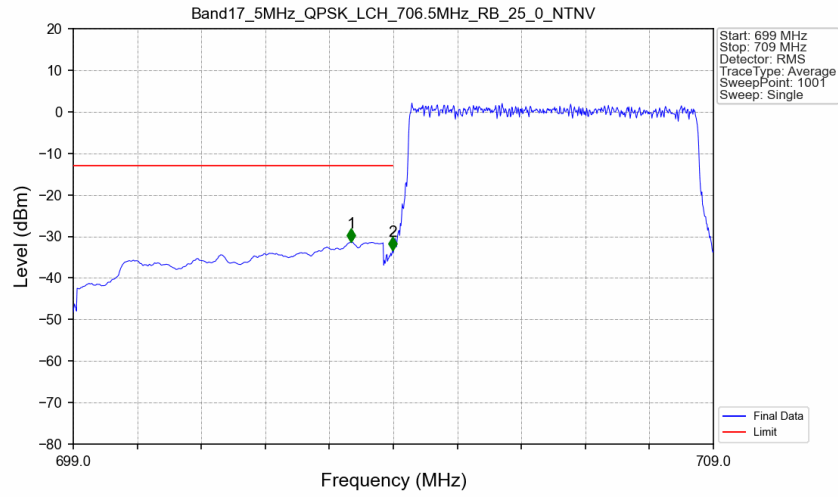
5.1.2 B17_10MHz

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 Test Graph

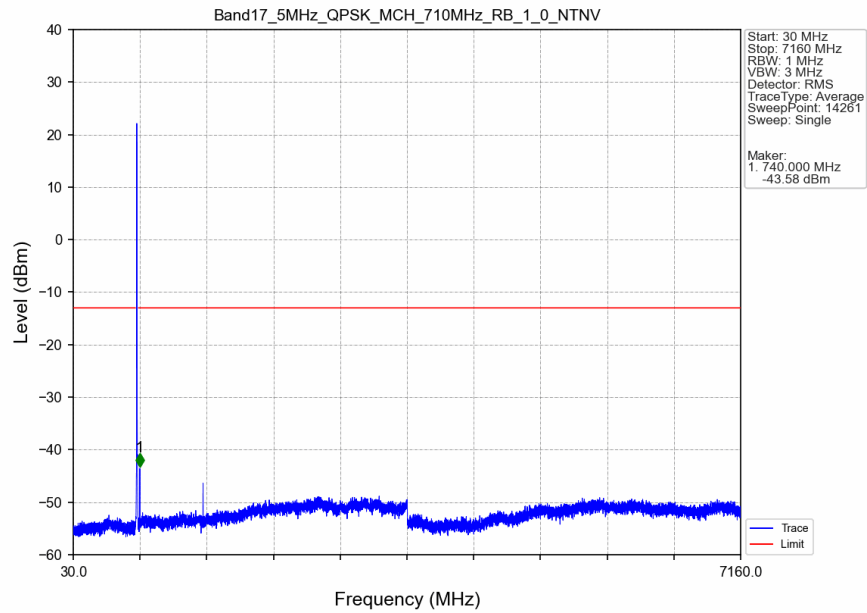
5.2.1 B17_5MHz



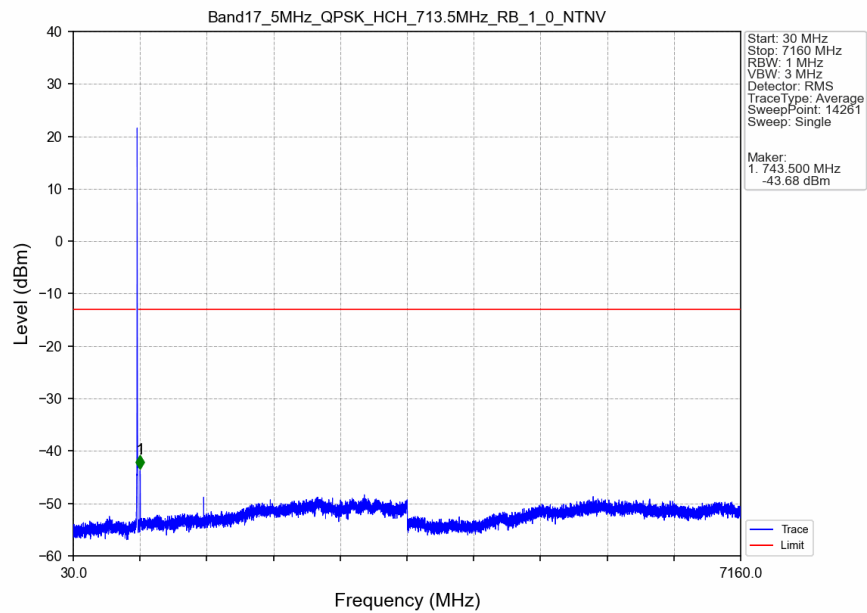


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
699	703.9	0.1	CHP	1	703.340	-31.36	-13	Pass
703.9	704	0.03	/	2	703.990	-33.32	-13	Pass
704	709	0.03	/	/	/	/	/	/

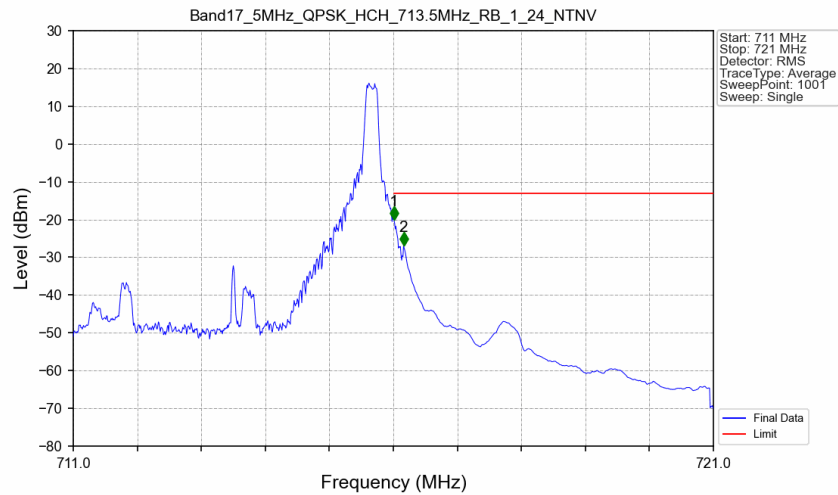
Band17_5MHz_QPSK_MCH_710MHz_RB_1_0_NTNV



Band17_5MHz_QPSK_HCH_713.5MHz_RB_1_0_NTNV

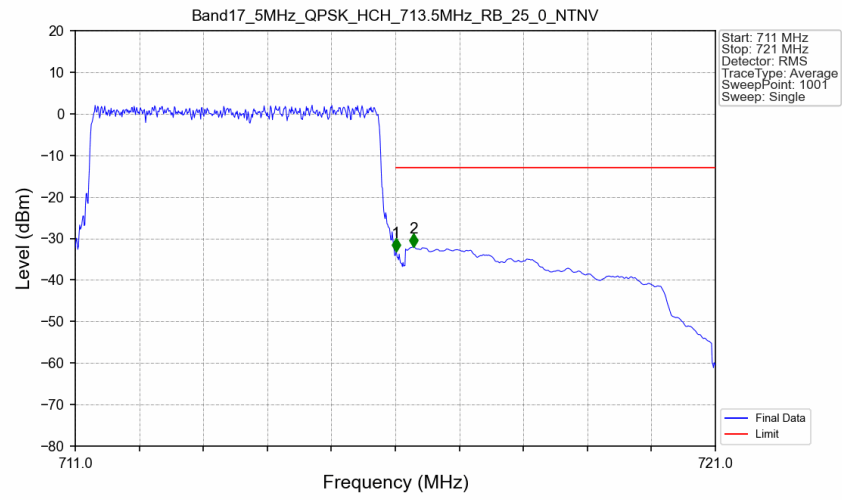


Band17_5MHz_QPSK_HCH_713.5MHz_RB_1_24_NTNV



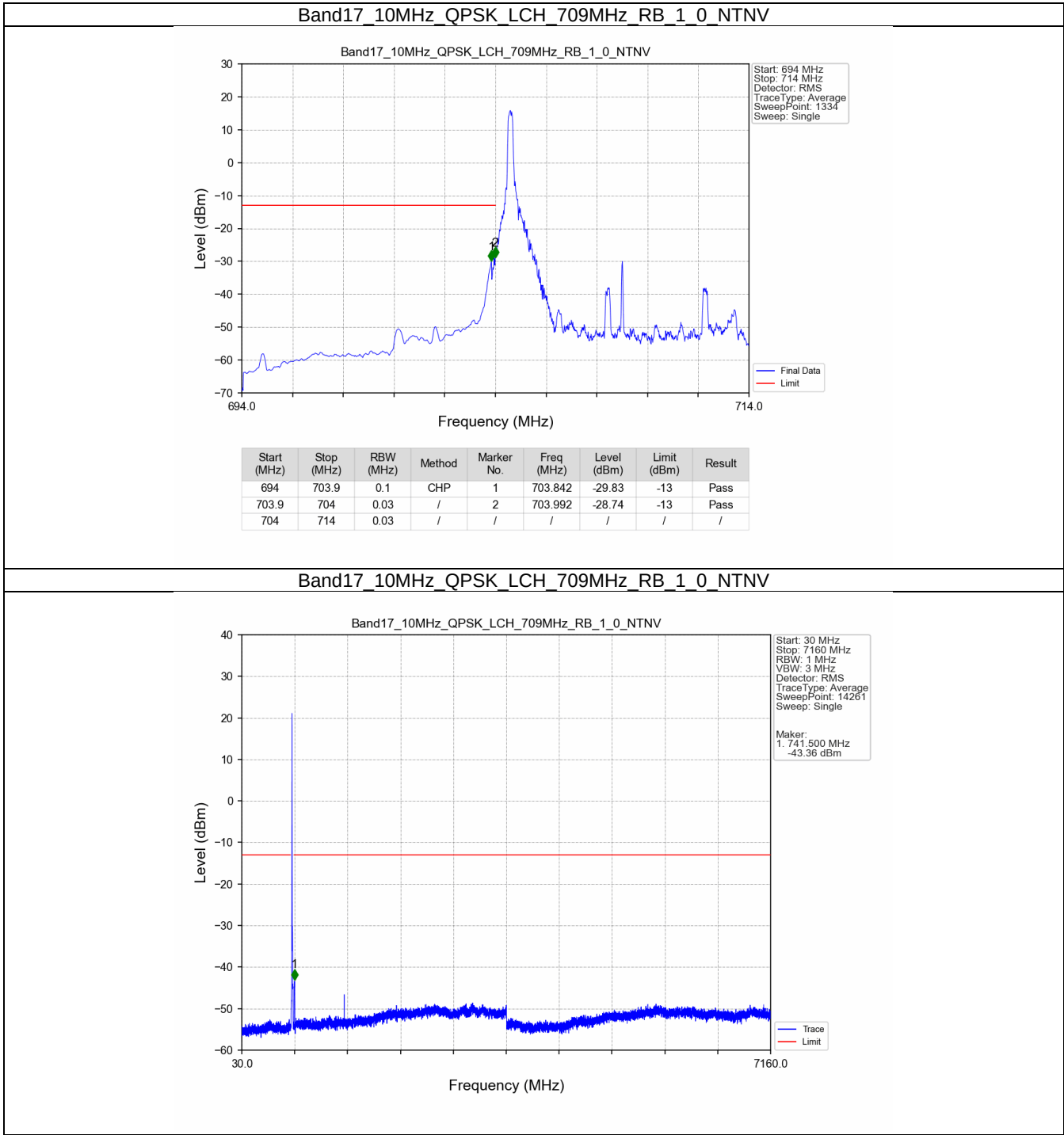
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.010	-20.06	-13	Pass
716.1	721	0.1	CHP	2	716.160	-26.87	-13	Pass

Band17_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV

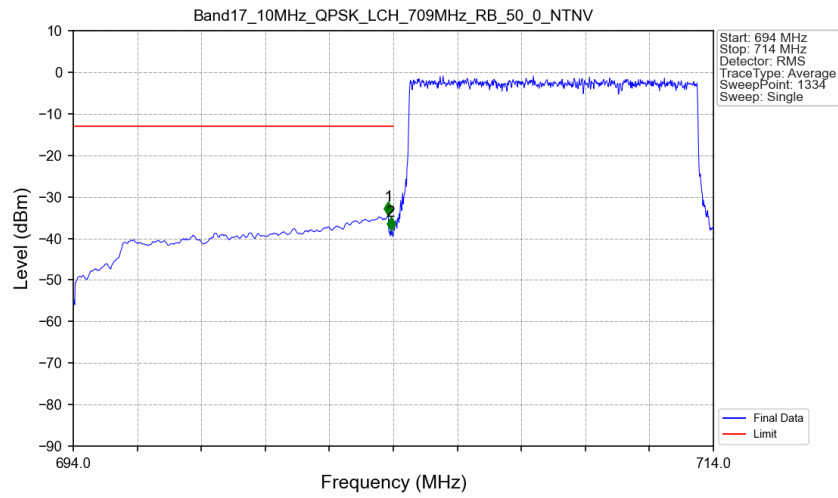


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.010	-33.22	-13	Pass
716.1	721	0.1	CHP	2	716.280	-32.06	-13	Pass

5.2.2 B17_10MHz

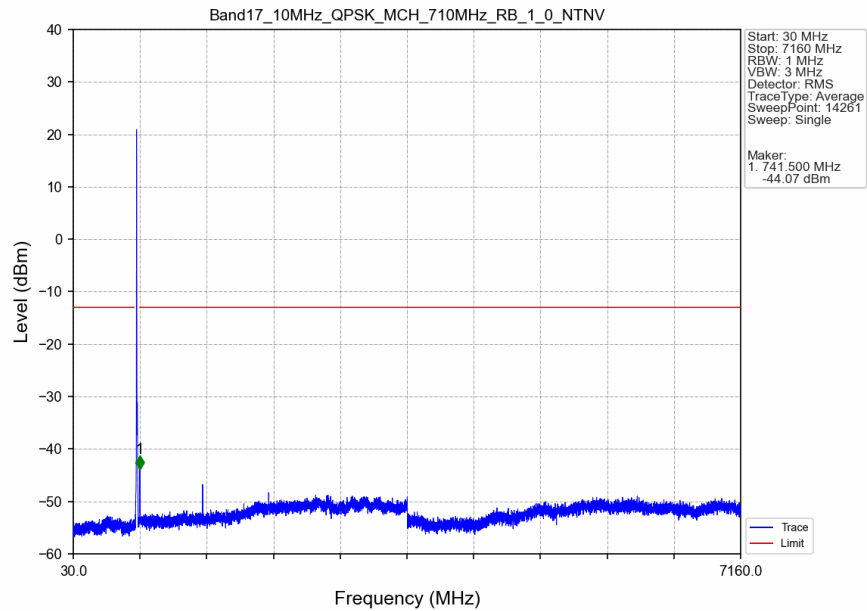


Band17_10MHz_QPSK_LCH_709MHz_RB_50_0_NTNV

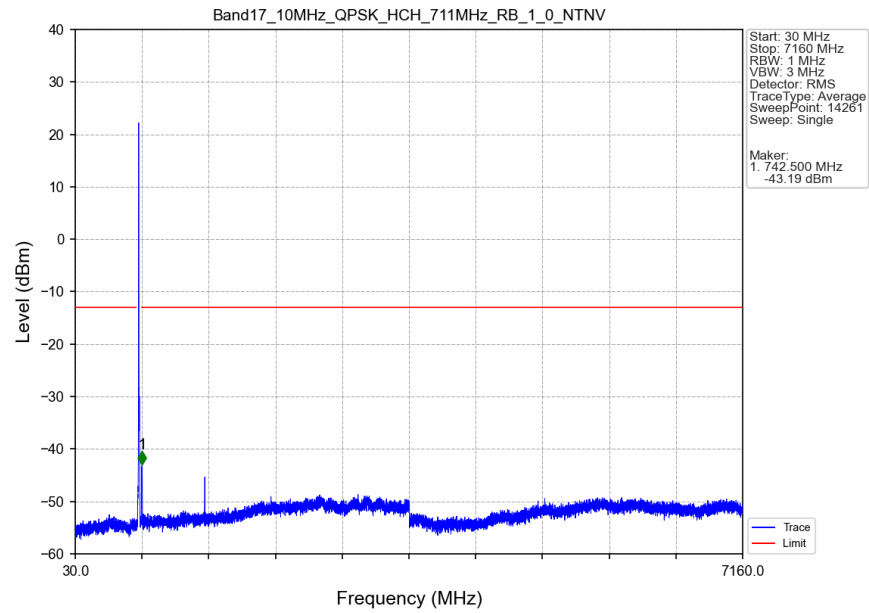


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	703.9	0.1	CHP	1	703.842	-34.46	-13	Pass
703.9	704	0.03	/	2	703.917	-37.97	-13	Pass
704	714	0.03	/	/	/	/	/	/

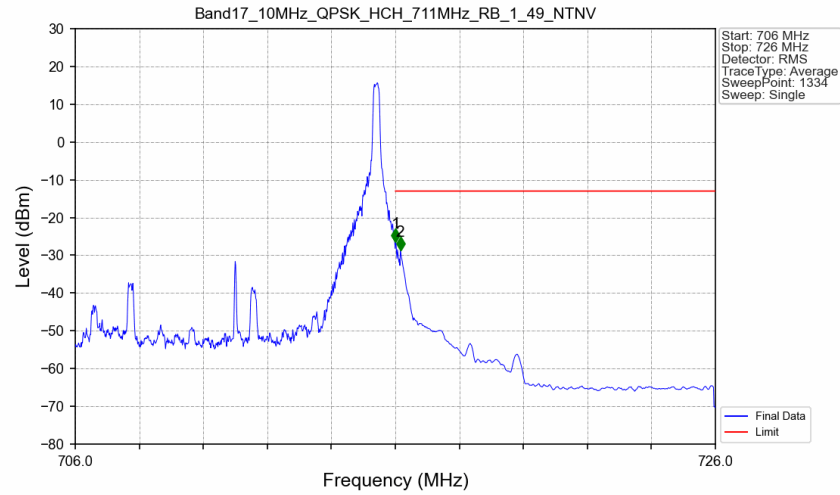
Band17_10MHz_QPSK_MCH_710MHz_RB_1_0_NTNV



Band17_10MHz_QPSK_HCH_711MHz_RB_1_0_NTNV

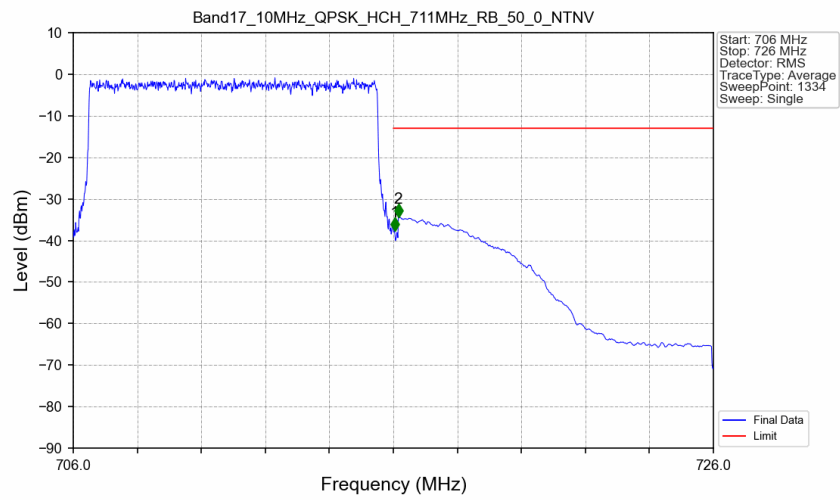


Band17_10MHz_QPSK_HCH_711MHz_RB_1_49_NTNV



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	-26.43	-13	Pass
716.1	726	0.1	CHP	2	716.158	-28.74	-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	716.038	-37.67	-13	Pass
716.1	726	0.1	CHP	2	716.158	-34.31	-13	Pass