

Appendix B.12

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	23.15	-0.90	20.10	<=34.77	Pass
			13	23.31	-0.90	20.26	<=34.77	Pass
			24	22.85	-0.90	19.80	<=34.77	Pass
		12	0	22.05	-0.90	19.00	<=34.77	Pass
			6	22.05	-0.90	19.00	<=34.77	Pass
			13	22.01	-0.90	18.96	<=34.77	Pass
		25	0	22.01	-0.90	18.96	<=34.77	Pass
	710	1	0	23.07	-0.90	20.02	<=34.77	Pass
			13	23.21	-0.90	20.16	<=34.77	Pass
			24	23.00	-0.90	19.95	<=34.77	Pass
		12	0	21.97	-0.90	18.92	<=34.77	Pass
			6	22.03	-0.90	18.98	<=34.77	Pass
			13	21.97	-0.90	18.92	<=34.77	Pass
		25	0	21.97	-0.90	18.92	<=34.77	Pass
	713.5	1	0	23.00	-0.90	19.95	<=34.77	Pass
			13	23.11	-0.90	20.06	<=34.77	Pass
			24	22.90	-0.90	19.85	<=34.77	Pass
		12	0	22.09	-0.90	19.04	<=34.77	Pass
			6	21.99	-0.90	18.94	<=34.77	Pass
			13	21.93	-0.90	18.88	<=34.77	Pass
		25	0	22.01	-0.90	18.96	<=34.77	Pass
16QAM	706.5	1	0	21.58	-0.90	18.53	<=34.77	Pass
			13	21.83	-0.90	18.78	<=34.77	Pass
			24	21.63	-0.90	18.58	<=34.77	Pass
		12	0	20.96	-0.90	17.91	<=34.77	Pass
			6	21.00	-0.90	17.95	<=34.77	Pass
			13	20.94	-0.90	17.89	<=34.77	Pass
		25	0	20.92	-0.90	17.87	<=34.77	Pass
	710	1	0	21.60	-0.90	18.55	<=34.77	Pass
			13	22.46	-0.90	19.41	<=34.77	Pass
			24	21.53	-0.90	18.48	<=34.77	Pass
		12	0	20.89	-0.90	17.84	<=34.77	Pass
			6	20.95	-0.90	17.90	<=34.77	Pass
			13	20.81	-0.90	17.76	<=34.77	Pass
		25	0	20.63	-0.90	17.58	<=34.77	Pass
	713.5	1	0	21.78	-0.90	18.73	<=34.77	Pass
			13	21.60	-0.90	18.55	<=34.77	Pass
			24	21.40	-0.90	18.35	<=34.77	Pass
		12	0	20.88	-0.90	17.83	<=34.77	Pass
			6	20.94	-0.90	17.89	<=34.77	Pass
			13	20.91	-0.90	17.86	<=34.77	Pass
		25	0	20.83	-0.90	17.78	<=34.77	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.1.2 B17_10MHz_ERP

Band: 17 / Bandwidth: 10MHz / NTVN								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	709	1	0	23.21	-0.90	20.16	<=34.77	Pass
			25	23.37	-0.90	20.32	<=34.77	Pass
			49	23.11	-0.90	20.06	<=34.77	Pass
		25	0	22.25	-0.90	19.20	<=34.77	Pass
			13	22.16	-0.90	19.11	<=34.77	Pass
			25	21.96	-0.90	18.91	<=34.77	Pass
		50	0	22.18	-0.90	19.13	<=34.77	Pass
	710	1	0	23.19	-0.90	20.14	<=34.77	Pass
			25	23.23	-0.90	20.18	<=34.77	Pass
			49	22.92	-0.90	19.87	<=34.77	Pass
		25	0	22.17	-0.90	19.12	<=34.77	Pass
			13	22.18	-0.90	19.13	<=34.77	Pass
			25	21.92	-0.90	18.87	<=34.77	Pass
		50	0	22.07	-0.90	19.02	<=34.77	Pass
	711	1	0	23.13	-0.90	20.08	<=34.77	Pass
			25	23.23	-0.90	20.18	<=34.77	Pass
			49	22.93	-0.90	19.88	<=34.77	Pass
		25	0	22.11	-0.90	19.06	<=34.77	Pass
			13	22.11	-0.90	19.06	<=34.77	Pass
			25	21.96	-0.90	18.91	<=34.77	Pass
		50	0	22.08	-0.90	19.03	<=34.77	Pass
16QAM	709	1	0	21.85	-0.90	18.80	<=34.77	Pass
			25	21.93	-0.90	18.88	<=34.77	Pass
			49	21.74	-0.90	18.69	<=34.77	Pass
		25	0	21.06	-0.90	18.01	<=34.77	Pass
			13	21.26	-0.90	18.21	<=34.77	Pass
			25	20.88	-0.90	17.83	<=34.77	Pass
		50	0	21.04	-0.90	17.99	<=34.77	Pass
	710	1	0	21.67	-0.90	18.62	<=34.77	Pass
			25	21.95	-0.90	18.90	<=34.77	Pass
			49	21.45	-0.90	18.40	<=34.77	Pass
		25	0	20.99	-0.90	17.94	<=34.77	Pass
			13	21.05	-0.90	18.00	<=34.77	Pass
			25	20.97	-0.90	17.92	<=34.77	Pass
		50	0	21.04	-0.90	17.99	<=34.77	Pass
	711	1	0	21.76	-0.90	18.71	<=34.77	Pass
			25	22.01	-0.90	18.96	<=34.77	Pass
			49	21.63	-0.90	18.58	<=34.77	Pass
		25	0	21.06	-0.90	18.01	<=34.77	Pass
			13	20.99	-0.90	17.94	<=34.77	Pass
			25	20.84	-0.90	17.79	<=34.77	Pass
		50	0	21.01	-0.90	17.96	<=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 (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	710	50	0	20	3.27	3.600	0.0051	-2.5 to 2.5	Pass
					3.85	1.400	0.0020	-2.5 to 2.5	Pass
					4.43	0.000	0.0000	-2.5 to 2.5	Pass
				-30	3.85	-0.600	-0.0008	-2.5 to 2.5	Pass
				-20	3.85	0.800	0.0011	-2.5 to 2.5	Pass
				-10	3.85	1.000	0.0014	-2.5 to 2.5	Pass
				0	3.85	-0.100	-0.0001	-2.5 to 2.5	Pass
				10	3.85	0.600	0.0008	-2.5 to 2.5	Pass
				30	3.85	-0.100	-0.0001	-2.5 to 2.5	Pass
				40	3.85	1.200	0.0017	-2.5 to 2.5	Pass
				50	3.85	3.500	0.0049	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band17_OBW

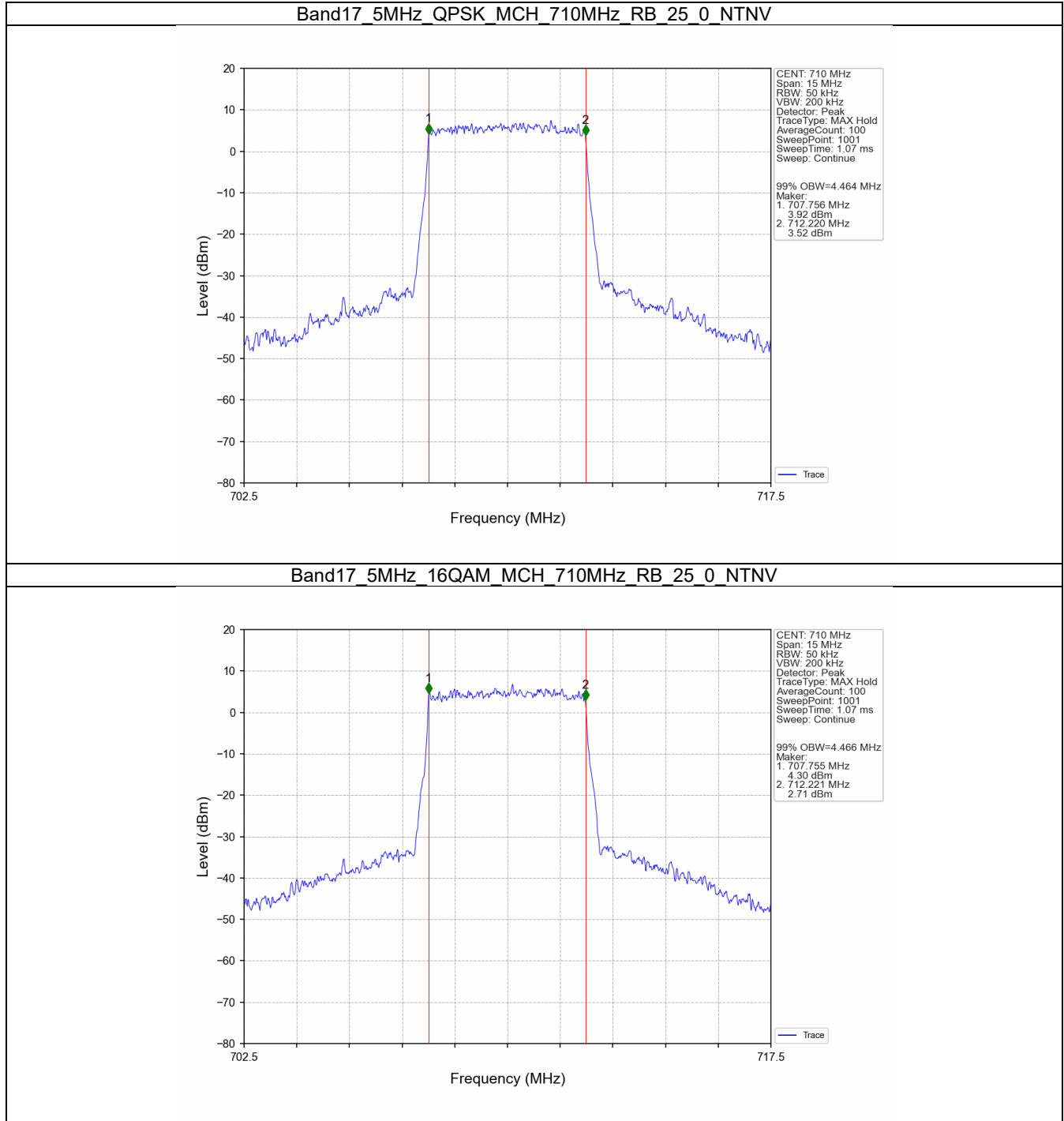
Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	4.464	/	Pass
	16QAM	710	25	0	4.466	/	Pass
10	QPSK	710	50	0	8.949	/	Pass
	16QAM	710	50	0	8.911	/	Pass

3.1.2 Band17_XDB

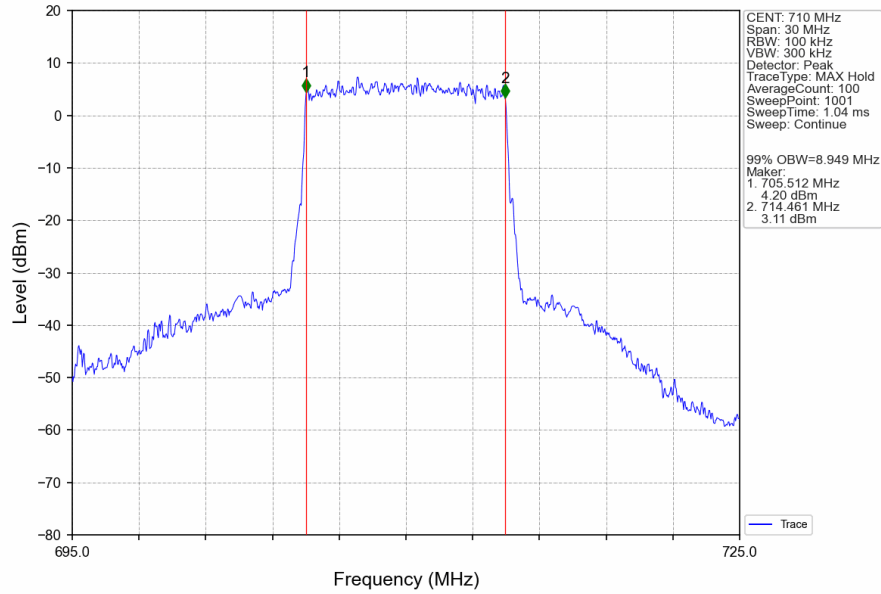
Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	4.916	/	Pass
	16QAM	710	25	0	4.939	/	Pass
10	QPSK	710	50	0	9.659	/	Pass
	16QAM	710	50	0	9.572	/	Pass

3.2 Test Graph

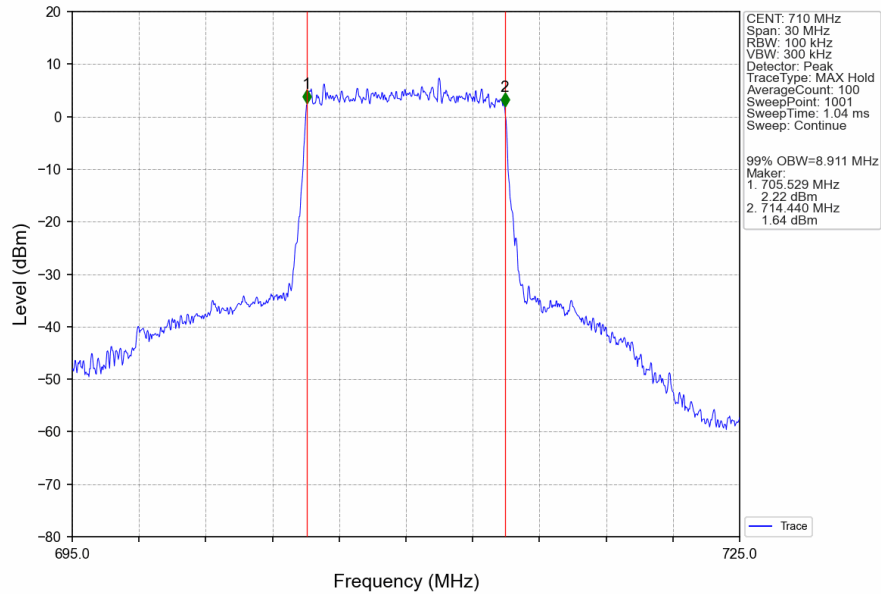
3.2.1 Band17_OBW



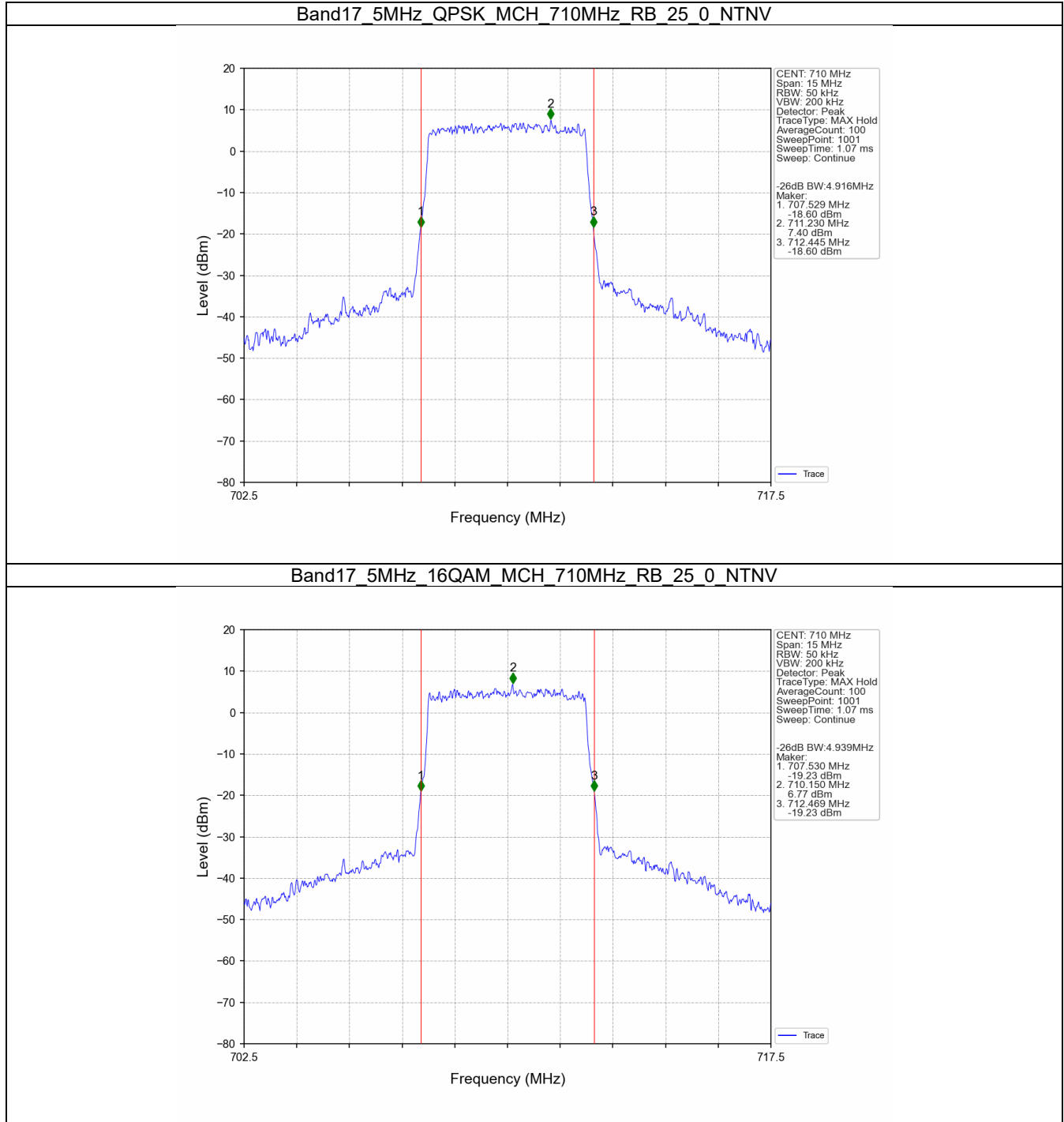
Band17_10MHz_QPSK_MCH_710MHz_RB_50_0_NTNV



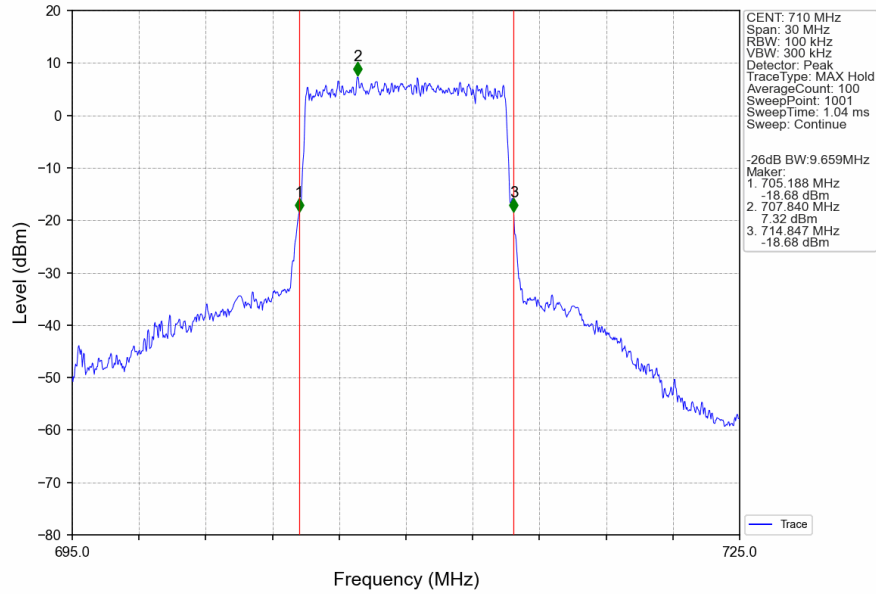
Band17_10MHz_16QAM_MCH_710MHz_RB_50_0_NTNV



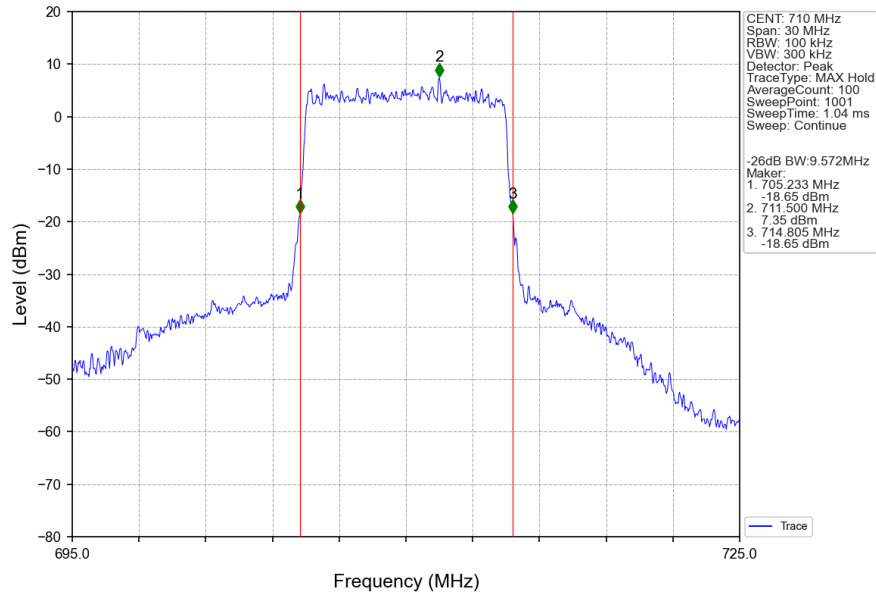
3.2.2 Band17_XDB



Band17_10MHz_QPSK_MCH_710MHz_RB_50_0_NTNV



Band17_10MHz_16QAM_MCH_710MHz_RB_50_0_NTNV



4. Peak-Average Ratio

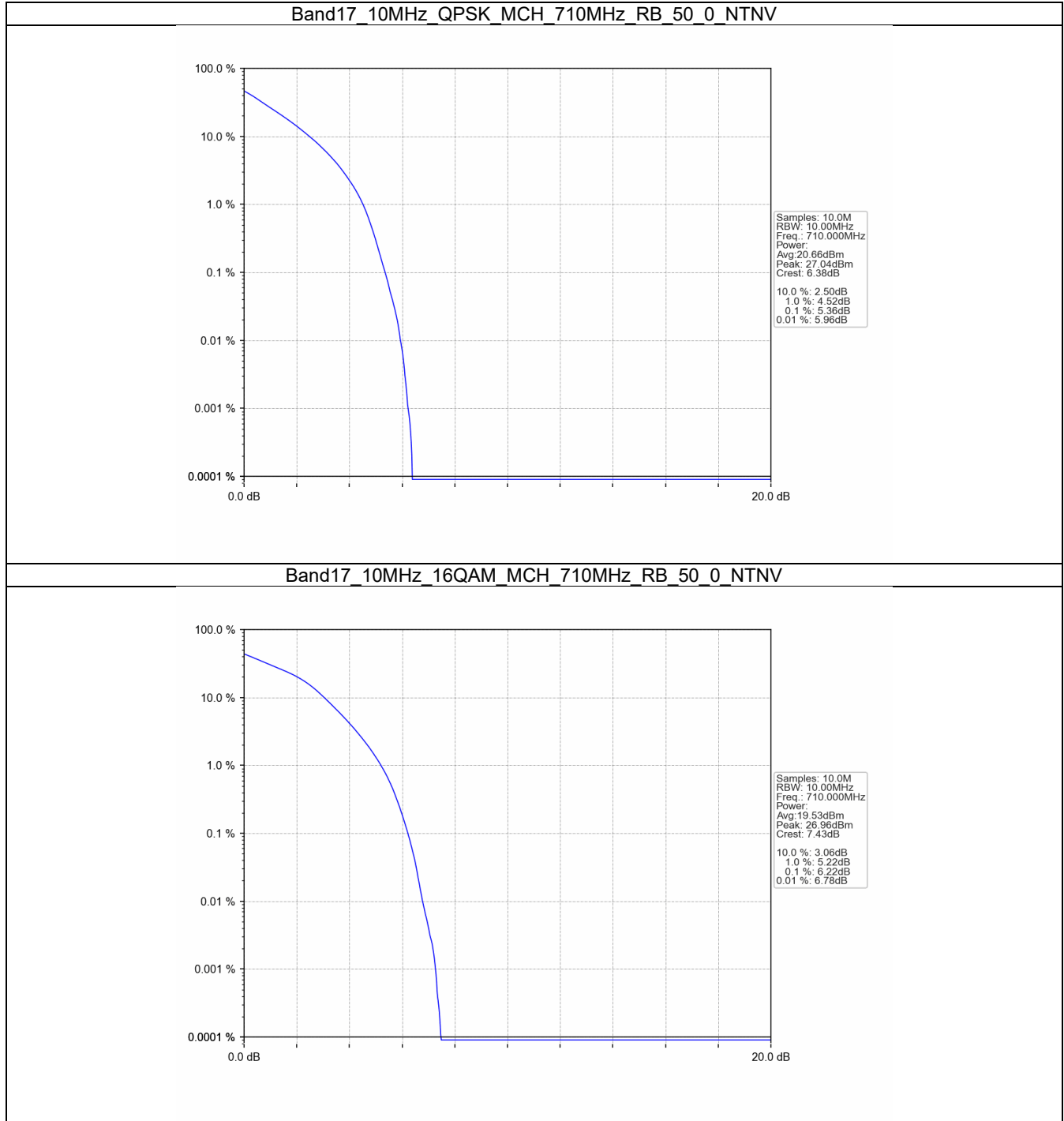
4.1 Test Result

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	5.36	≤ 13	Pass
16QAM	710	50	0	6.22	≤ 13	Pass

4.2 Test Graph

4.2.1 B17_10MHz



5. Spurious Emission

5.1 Test Result

5.1.1 B17_5MHz

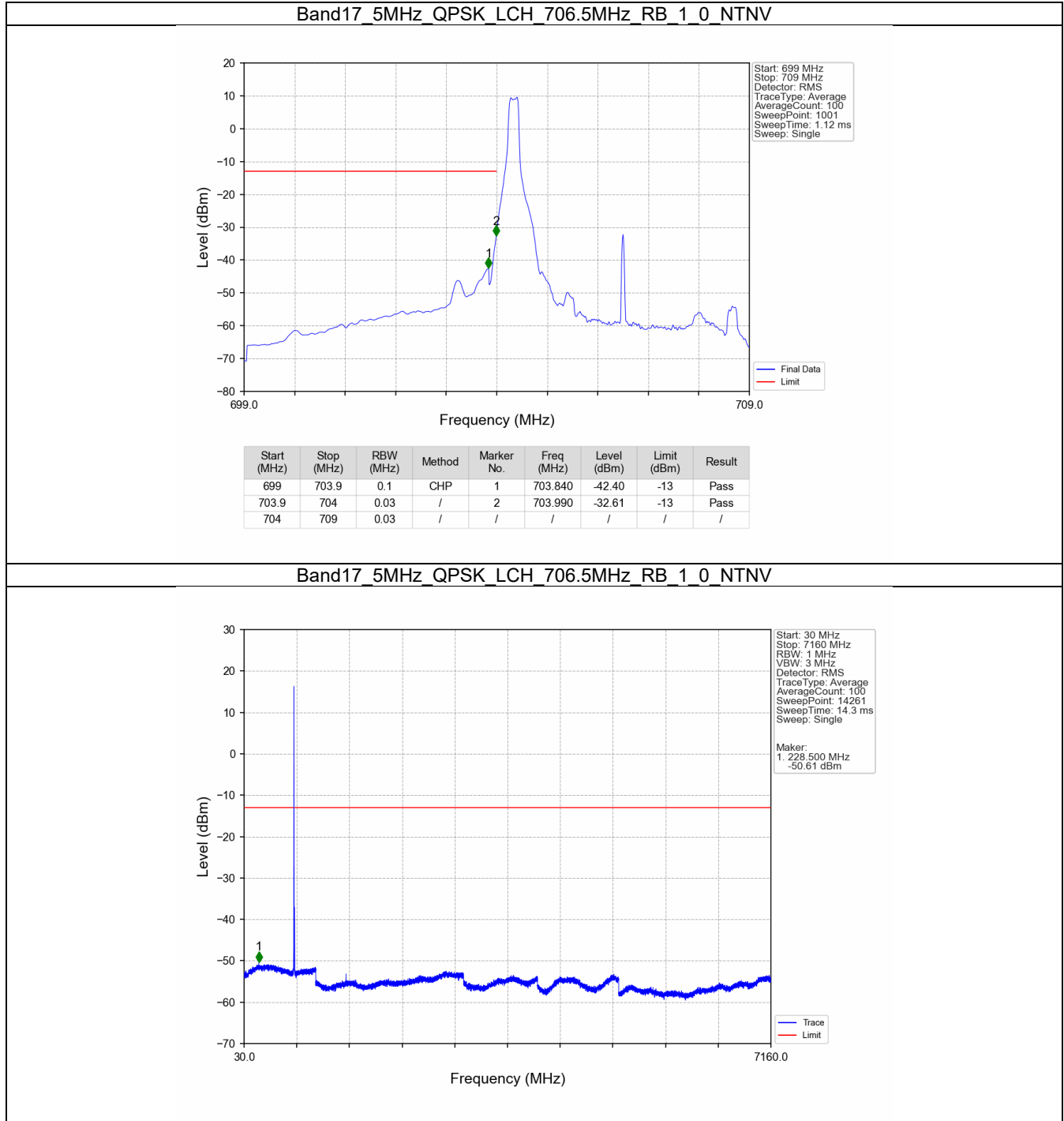
Band: 17 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	706.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	710	1	0	Refer To Test Graph		Pass
	713.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B17_10MHz

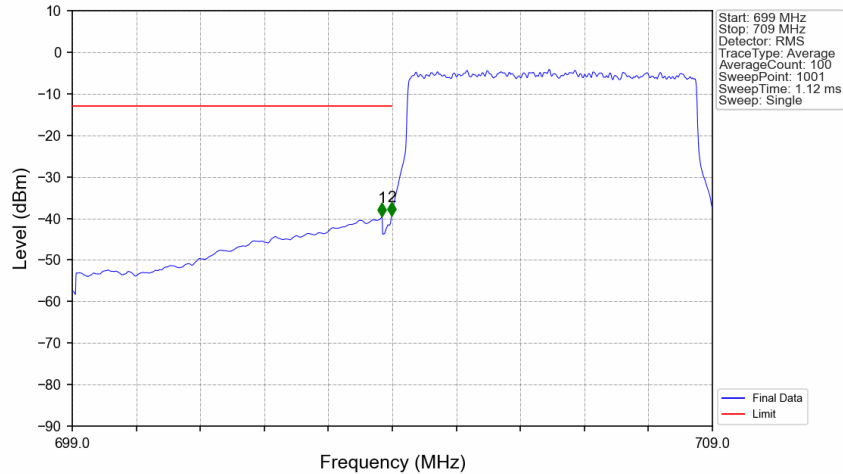
Band: 17 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	709	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	710	1	0	Refer To Test Graph		Pass
	711	1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph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

5.2 Test Graph

5.2.1 B17_5MHz

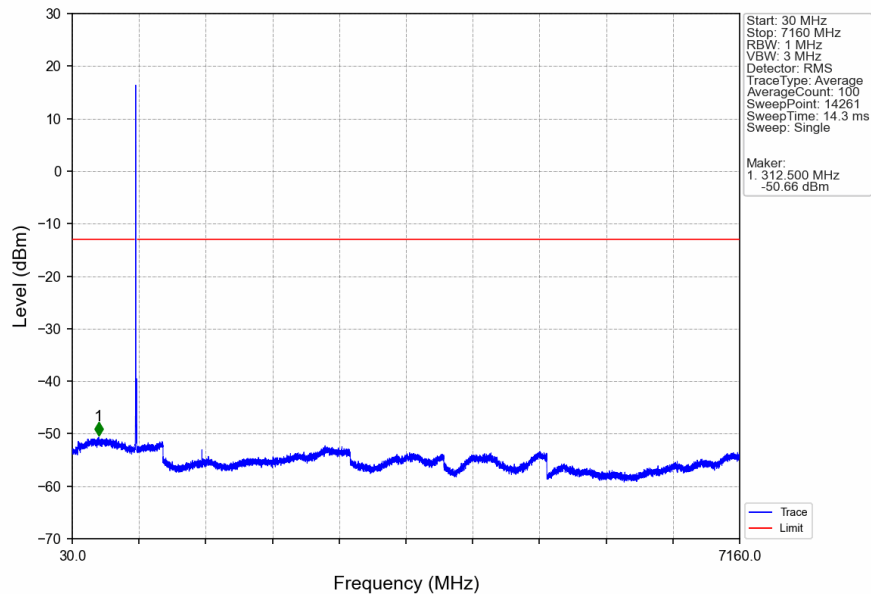


Band17_5MHz_QPSK_LCH_706.5MHz_RB_25_0_NTNV

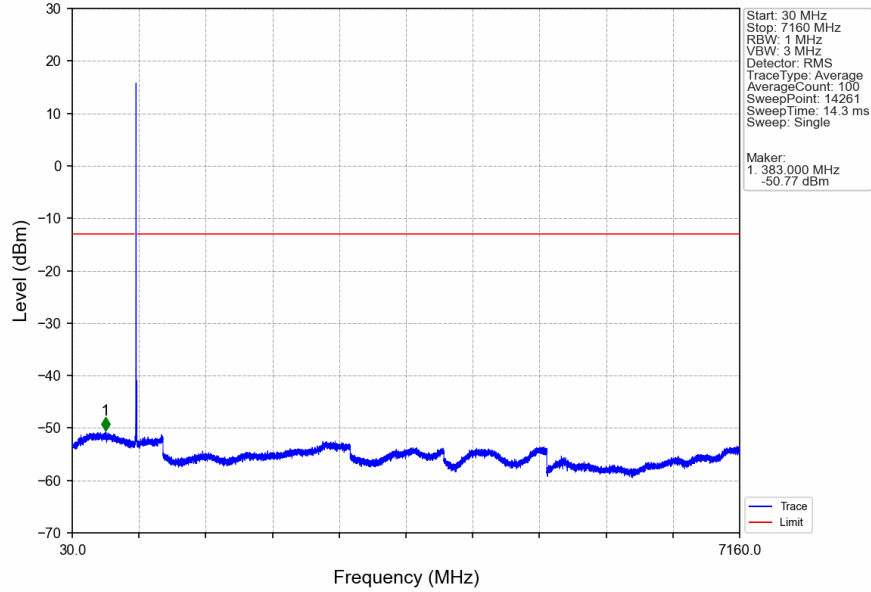


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
699	703.9	0.1	CHP	1	703.840	-39.54	-13	Pass
703.9	704	0.03	/	2	703.990	-39.38	-13	Pass
704	709	0.03	/	/	/	/	/	/

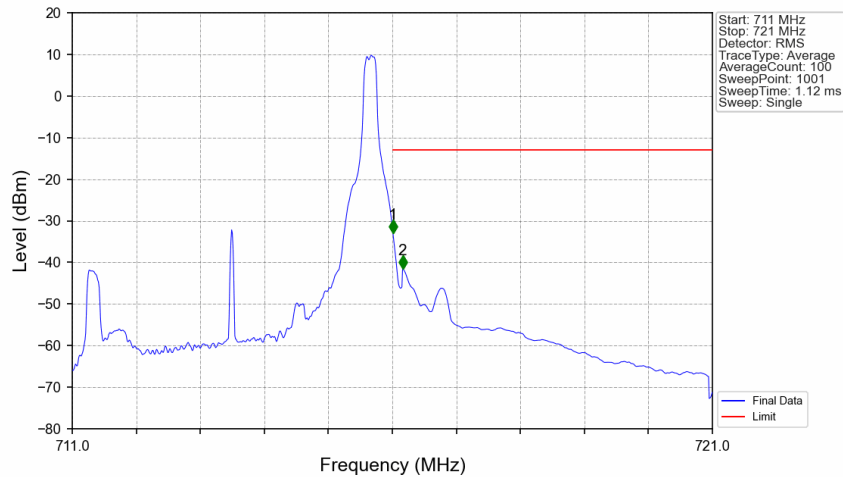
Band17_5MHz_QPSK_MCH_710MHz_RB_1_0_NTNV



Band17_5MHz_QPSK_HCH_713.5MHz_RB_1_0_NTNV

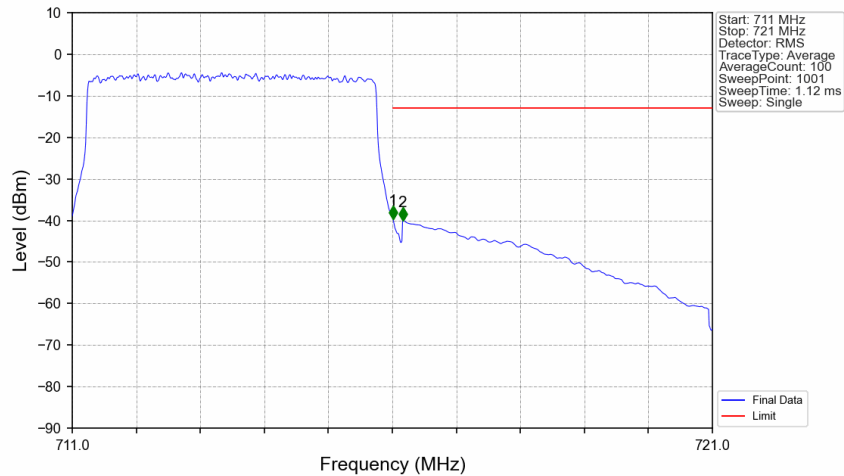


Band17_5MHz_QPSK_HCH_713.5MHz_RB_1_24_NTNV



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	-32.93	-13	Pass
716.1	721	0.1	CHP	2	716.160	-41.47	-13	Pass

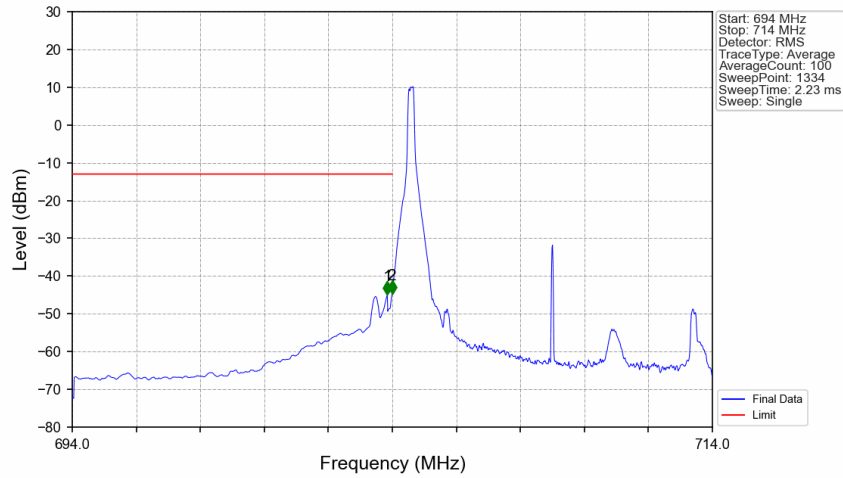
Band17_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



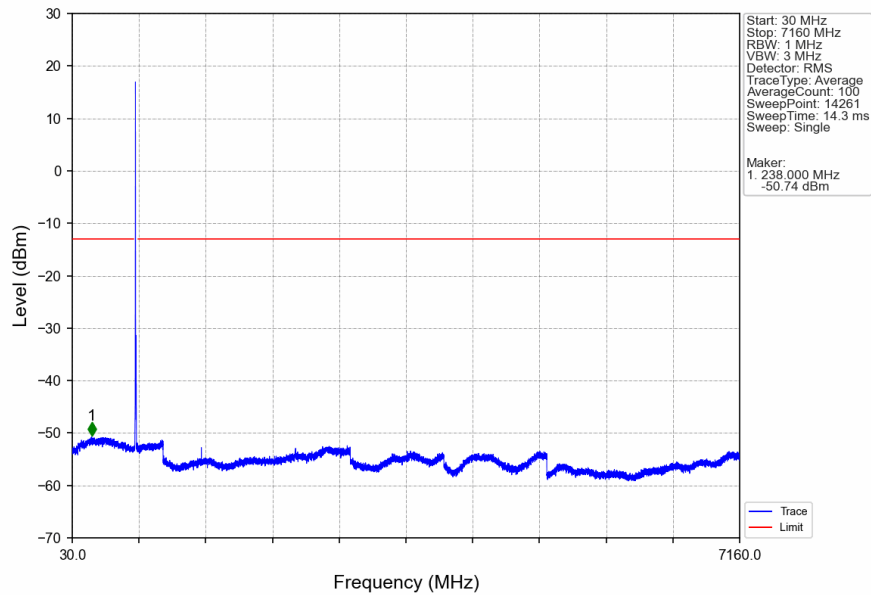
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.010	-39.59	-13	Pass
716.1	721	0.1	CHP	2	716.160	-40.03	-13	Pass

5.2.2 B17_10MHz

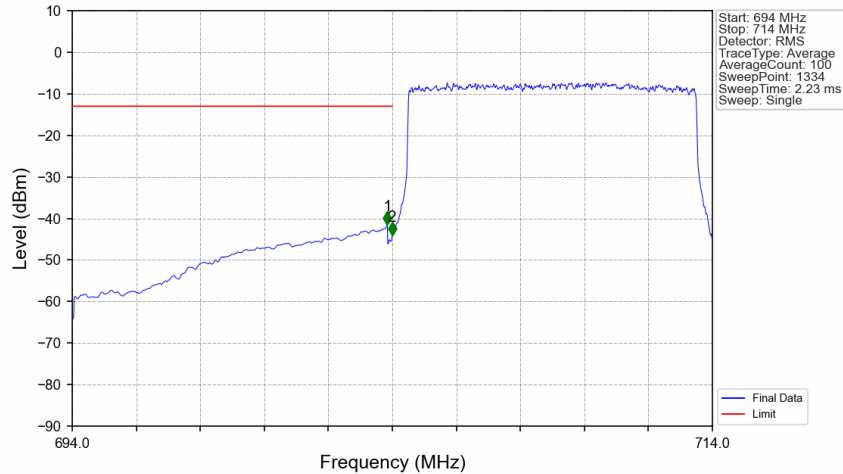
Band17_10MHz_QPSK_LCH_709MHz_RB_1_0_NTNV



Band17_10MHz_QPSK_LCH_709MHz_RB_1_0_NTNV

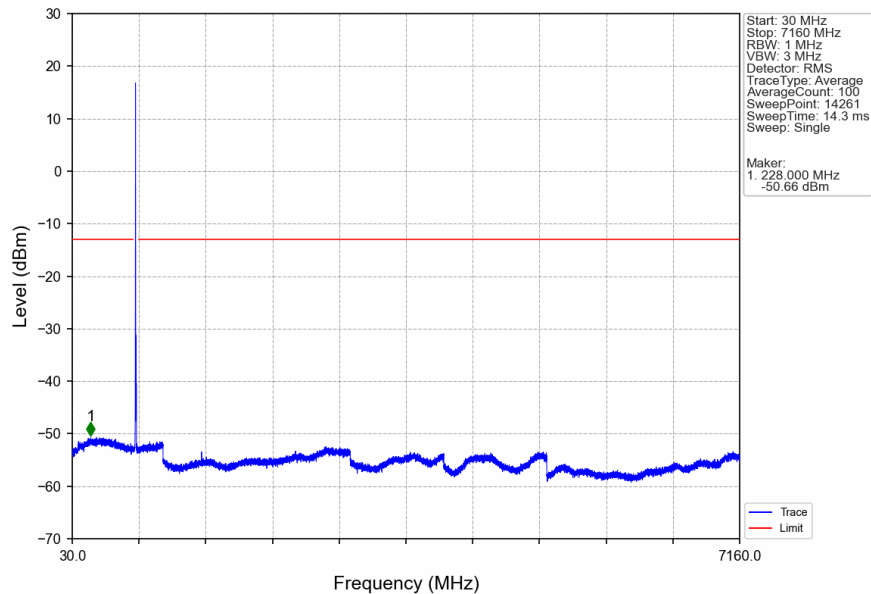


Band17_10MHz_QPSK_LCH_709MHz_RB_50_0_NTNV

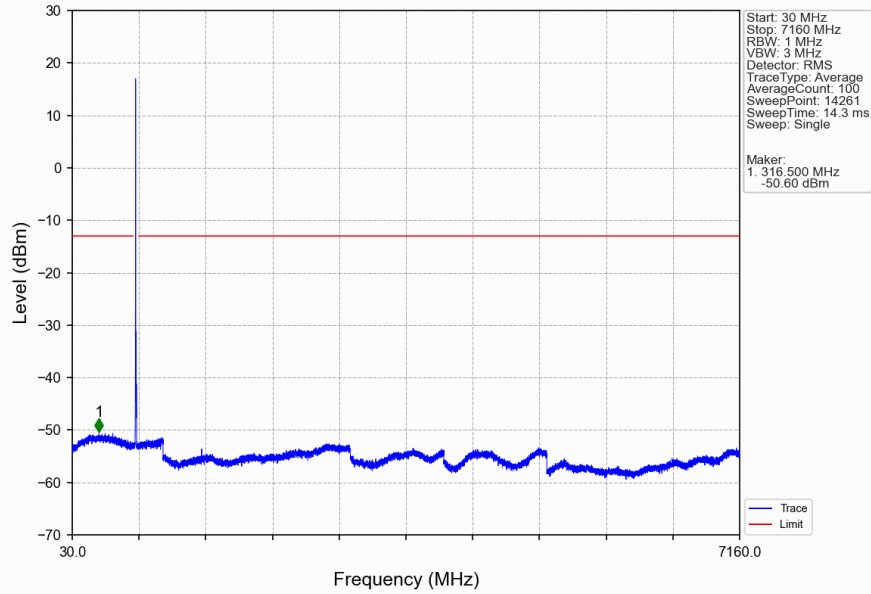


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	703.9	0.1	CHP	1	703.842	-41.48	-13	Pass
703.9	704	0.03	/	2	703.992	-44.12	-13	Pass
704	714	0.03	/	/	/	/	/	/

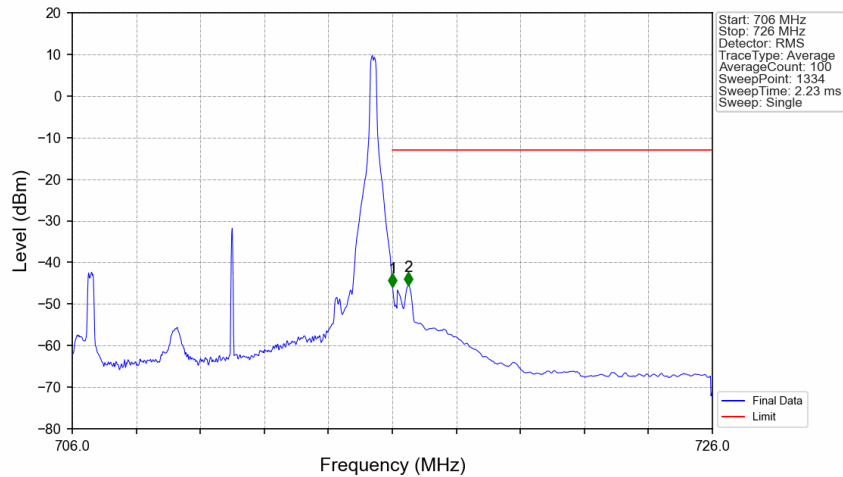
Band17_10MHz_QPSK_MCH_710MHz_RB_1_0_NTNV



Band17_10MHz_QPSK_HCH_711MHz_RB_1_0_NTNV

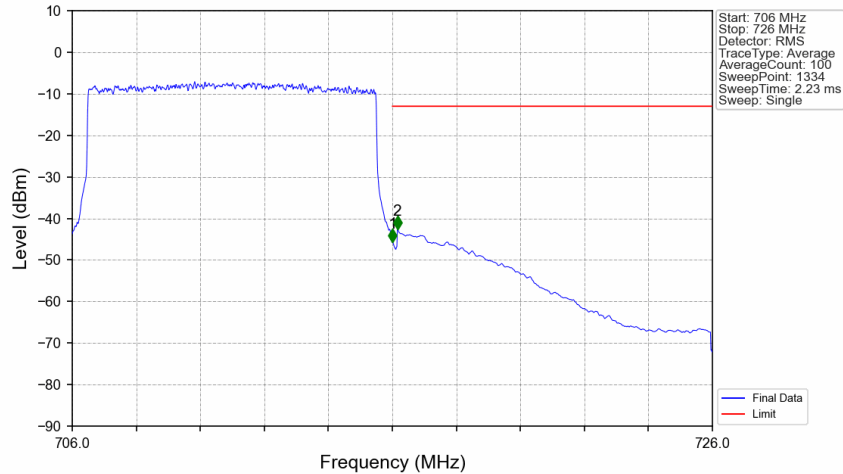


Band17_10MHz_QPSK_HCH_711MHz_RB_1_49_NTNV



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	-45.93	-13	Pass
716.1	726	0.1	CHP	2	716.503	-45.55	-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	-45.60	-13	Pass
716.1	726	0.1	CHP	2	716.158	-42.64	-13	Pass

- End of the Appendix -