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	23.79	-2.75	18.89	<=34.77	Pass
			13	23.82	-2.75	18.92	<=34.77	Pass
			24	23.61	-2.75	18.71	<=34.77	Pass
		12	0	22.96	-2.75	18.06	<=34.77	Pass
			6	22.98	-2.75	18.08	<=34.77	Pass
			13	22.91	-2.75	18.01	<=34.77	Pass
		25	0	22.92	-2.75	18.02	<=34.77	Pass
	710	1	0	24.15	-2.75	19.25	<=34.77	Pass
			13	24.00	-2.75	19.10	<=34.77	Pass
			24	23.95	-2.75	19.05	<=34.77	Pass
		12	0	22.97	-2.75	18.07	<=34.77	Pass
			6	22.88	-2.75	17.98	<=34.77	Pass
			13	22.92	-2.75	18.02	<=34.77	Pass
		25	0	22.95	-2.75	18.05	<=34.77	Pass
	713.5	1	0	23.95	-2.75	19.05	<=34.77	Pass
			13	23.42	-2.75	18.52	<=34.77	Pass
			24	23.16	-2.75	18.26	<=34.77	Pass
		12	0	22.96	-2.75	18.06	<=34.77	Pass
			6	22.90	-2.75	18.00	<=34.77	Pass
			13	22.80	-2.75	17.90	<=34.77	Pass
		25	0	22.87	-2.75	17.97	<=34.77	Pass
16QAM	706.5	1	0	23.07	-2.75	18.17	<=34.77	Pass
			13	23.08	-2.75	18.18	<=34.77	Pass
			24	22.77	-2.75	17.87	<=34.77	Pass
		12	0	21.99	-2.75	17.09	<=34.77	Pass
			6	21.98	-2.75	17.08	<=34.77	Pass
			13	21.98	-2.75	17.08	<=34.77	Pass
		25	0	22.00	-2.75	17.10	<=34.77	Pass
	710	1	0	23.23	-2.75	18.33	<=34.77	Pass
			13	23.23	-2.75	18.33	<=34.77	Pass
			24	22.79	-2.75	17.89	<=34.77	Pass
		12	0	22.01	-2.75	17.11	<=34.77	Pass
			6	22.04	-2.75	17.14	<=34.77	Pass
			13	21.95	-2.75	17.05	<=34.77	Pass
		25	0	21.87	-2.75	16.97	<=34.77	Pass
	713.5	1	0	22.95	-2.75	18.05	<=34.77	Pass
			13	22.54	-2.75	17.64	<=34.77	Pass
			24	22.96	-2.75	18.06	<=34.77	Pass
		12	0	21.98	-2.75	17.08	<=34.77	Pass
			6	22.00	-2.75	17.10	<=34.77	Pass
			13	21.83	-2.75	16.93	<=34.77	Pass
		25	0	21.90	-2.75	17.00	<=34.77	Pass
64QAM	706.5	1	0	22.78	-2.75	17.88	<=34.77	Pass
			13	22.11	-2.75	17.21	<=34.77	Pass
			24	21.70	-2.75	16.80	<=34.77	Pass
		12	0	22.00	-2.75	17.10	<=34.77	Pass
			6	22.03	-2.75	17.13	<=34.77	Pass
			13	21.95	-2.75	17.05	<=34.77	Pass
		25	0	22.00	-2.75	17.10	<=34.77	Pass

	710	1	0	22.68	-2.75	17.78	<=34.77	Pass
			13	22.88	-2.75	17.98	<=34.77	Pass
			24	22.64	-2.75	17.74	<=34.77	Pass
		12	0	21.89	-2.75	16.99	<=34.77	Pass
			6	22.01	-2.75	17.11	<=34.77	Pass
			13	21.93	-2.75	17.03	<=34.77	Pass
		25	0	21.97	-2.75	17.07	<=34.77	Pass
	713.5	1	0	22.87	-2.75	17.97	<=34.77	Pass
			13	22.73	-2.75	17.83	<=34.77	Pass
			24	22.74	-2.75	17.84	<=34.77	Pass
		12	0	21.94	-2.75	17.04	<=34.77	Pass
			6	21.91	-2.75	17.01	<=34.77	Pass
			13	21.83	-2.75	16.93	<=34.77	Pass
		25	0	21.89	-2.75	16.99	<=34.77	Pass
256QAM	706.5	1	0	19.09	-2.75	14.19	<=34.77	Pass
			13	18.89	-2.75	13.99	<=34.77	Pass
			24	18.92	-2.75	14.02	<=34.77	Pass
		12	0	18.99	-2.75	14.09	<=34.77	Pass
			6	19.01	-2.75	14.11	<=34.77	Pass
			13	18.98	-2.75	14.08	<=34.77	Pass
		25	0	18.94	-2.75	14.04	<=34.77	Pass
	710	1	0	18.93	-2.75	14.03	<=34.77	Pass
			13	18.93	-2.75	14.03	<=34.77	Pass
			24	18.75	-2.75	13.85	<=34.77	Pass
		12	0	18.93	-2.75	14.03	<=34.77	Pass
			6	18.92	-2.75	14.02	<=34.77	Pass
			13	18.96	-2.75	14.06	<=34.77	Pass
		25	0	18.93	-2.75	14.03	<=34.77	Pass
	713.5	1	0	18.69	-2.75	13.79	<=34.77	Pass
			13	18.98	-2.75	14.08	<=34.77	Pass
			24	18.83	-2.75	13.93	<=34.77	Pass
		12	0	18.92	-2.75	14.02	<=34.77	Pass
			6	18.91	-2.75	14.01	<=34.77	Pass
			13	18.83	-2.75	13.93	<=34.77	Pass
		25	0	18.81	-2.75	13.91	<=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	24.01	-2.75	19.11	<=34.77	Pass
			25	23.66	-2.75	18.76	<=34.77	Pass
			49	23.54	-2.75	18.64	<=34.77	Pass
		25	0	22.96	-2.75	18.06	<=34.77	Pass
			13	23.00	-2.75	18.10	<=34.77	Pass
			25	22.97	-2.75	18.07	<=34.77	Pass
		50	0	22.99	-2.75	18.09	<=34.77	Pass
	710	1	0	23.93	-2.75	19.03	<=34.77	Pass
			25	23.81	-2.75	18.91	<=34.77	Pass
			49	23.28	-2.75	18.38	<=34.77	Pass
		25	0	22.93	-2.75	18.03	<=34.77	Pass
			13	22.98	-2.75	18.08	<=34.77	Pass
			25	22.89	-2.75	17.99	<=34.77	Pass
		50	0	22.85	-2.75	17.95	<=34.77	Pass
	711	1	0	23.97	-2.75	19.07	<=34.77	Pass

			25	23.60	-2.75	18.70	<=34.77	Pass
			49	23.35	-2.75	18.45	<=34.77	Pass
		25	0	23.01	-2.75	18.11	<=34.77	Pass
			13	22.95	-2.75	18.05	<=34.77	Pass
			25	22.87	-2.75	17.97	<=34.77	Pass
		50	0	22.92	-2.75	18.02	<=34.77	Pass
16QAM	709	1	0	22.73	-2.75	17.83	<=34.77	Pass
			25	23.25	-2.75	18.35	<=34.77	Pass
			49	22.72	-2.75	17.82	<=34.77	Pass
		25	0	21.94	-2.75	17.04	<=34.77	Pass
			13	22.08	-2.75	17.18	<=34.77	Pass
			25	21.99	-2.75	17.09	<=34.77	Pass
		50	0	21.93	-2.75	17.03	<=34.77	Pass
	710	1	0	23.22	-2.75	18.32	<=34.77	Pass
			25	22.96	-2.75	18.06	<=34.77	Pass
			49	22.51	-2.75	17.61	<=34.77	Pass
		25	0	21.94	-2.75	17.04	<=34.77	Pass
			13	22.02	-2.75	17.12	<=34.77	Pass
			25	21.91	-2.75	17.01	<=34.77	Pass
		50	0	21.87	-2.75	16.97	<=34.77	Pass
	711	1	0	21.94	-2.75	17.04	<=34.77	Pass
			25	23.19	-2.75	18.29	<=34.77	Pass
			49	22.51	-2.75	17.61	<=34.77	Pass
		25	0	22.03	-2.75	17.13	<=34.77	Pass
			13	22.05	-2.75	17.15	<=34.77	Pass
			25	21.89	-2.75	16.99	<=34.77	Pass
		50	0	21.96	-2.75	17.06	<=34.77	Pass
64QAM	709	1	0	23.05	-2.75	18.15	<=34.77	Pass
			25	22.59	-2.75	17.69	<=34.77	Pass
			49	22.61	-2.75	17.71	<=34.77	Pass
		25	0	21.96	-2.75	17.06	<=34.77	Pass
			13	22.06	-2.75	17.16	<=34.77	Pass
			25	21.98	-2.75	17.08	<=34.77	Pass
		50	0	22.01	-2.75	17.11	<=34.77	Pass
	710	1	0	22.73	-2.75	17.83	<=34.77	Pass
			25	23.43	-2.75	18.53	<=34.77	Pass
			49	22.72	-2.75	17.82	<=34.77	Pass
		25	0	21.92	-2.75	17.02	<=34.77	Pass
			13	21.97	-2.75	17.07	<=34.77	Pass
			25	21.94	-2.75	17.04	<=34.77	Pass
		50	0	21.88	-2.75	16.98	<=34.77	Pass
	711	1	0	22.43	-2.75	17.53	<=34.77	Pass
			25	22.68	-2.75	17.78	<=34.77	Pass
			49	22.86	-2.75	17.96	<=34.77	Pass
		25	0	21.93	-2.75	17.03	<=34.77	Pass
			13	22.14	-2.75	17.24	<=34.77	Pass
			25	21.85	-2.75	16.95	<=34.77	Pass
		50	0	21.92	-2.75	17.02	<=34.77	Pass
256QAM	709	1	0	18.86	-2.75	13.96	<=34.77	Pass
			25	19.06	-2.75	14.16	<=34.77	Pass
			49	18.69	-2.75	13.79	<=34.77	Pass
		25	0	18.99	-2.75	14.09	<=34.77	Pass
			13	18.97	-2.75	14.07	<=34.77	Pass
			25	18.93	-2.75	14.03	<=34.77	Pass
		50	0	18.93	-2.75	14.03	<=34.77	Pass
	710	1	0	18.83	-2.75	13.93	<=34.77	Pass
			25	19.18	-2.75	14.28	<=34.77	Pass
			49	18.64	-2.75	13.74	<=34.77	Pass
		25	0	18.86	-2.75	13.96	<=34.77	Pass

			13	18.60	-2.75	13.70	<=34.77	Pass
			25	18.79	-2.75	13.89	<=34.77	Pass
		50	0	18.89	-2.75	13.99	<=34.77	Pass
	711	1	0	18.59	-2.75	13.69	<=34.77	Pass
			25	18.65	-2.75	13.75	<=34.77	Pass
			49	18.89	-2.75	13.99	<=34.77	Pass
		25	0	18.93	-2.75	14.03	<=34.77	Pass
			13	18.93	-2.75	14.03	<=34.77	Pass
			25	18.87	-2.75	13.97	<=34.77	Pass
		50	0	18.96	-2.75	14.06	<=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	LV	-0.100	-0.0001	-2.5 to 2.5	Pass
					HV	-0.200	-0.0003	-2.5 to 2.5	Pass
					NV	-0.500	-0.0007	-2.5 to 2.5	Pass
				-30	NV	-0.500	-0.0007	-2.5 to 2.5	Pass
				-20	NV	0.000	0.0000	-2.5 to 2.5	Pass
				-10	NV	-0.600	-0.0008	-2.5 to 2.5	Pass
				0	NV	-0.600	-0.0008	-2.5 to 2.5	Pass
				10	NV	-2.300	-0.0032	-2.5 to 2.5	Pass
				30	NV	-0.300	-0.0004	-2.5 to 2.5	Pass
				40	NV	0.400	0.0006	-2.5 to 2.5	Pass
				50	NV	1.100	0.0015	-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	4.539	/	Pass
10	QPSK	710	50	0	9.098	/	Pass
	16QAM	710	50	0	9.075	/	Pass

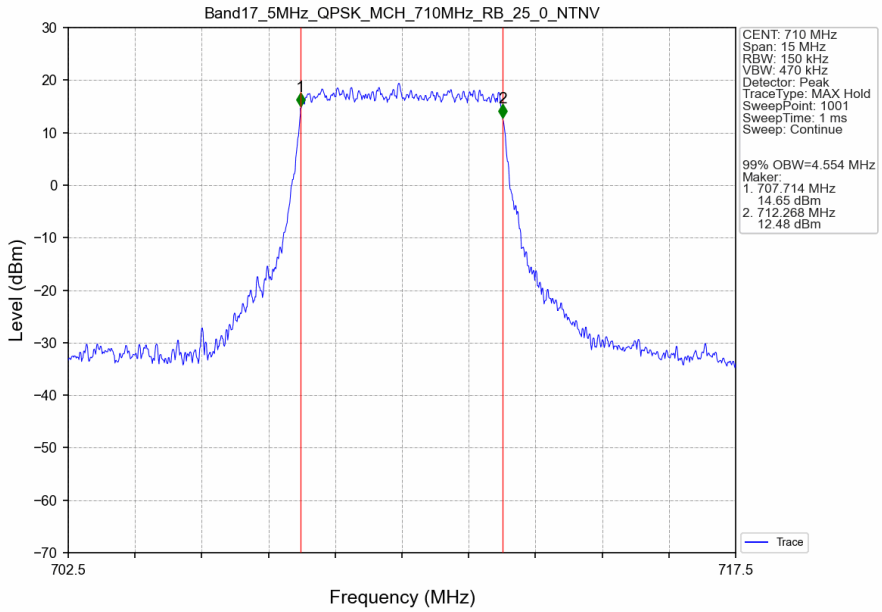
3.1.2 Band17_XDB

Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	5.198	/	Pass
	16QAM	710	25	0	5.201	/	Pass
10	QPSK	710	50	0	10.189	/	Pass
	16QAM	710	50	0	10.241	/	Pass

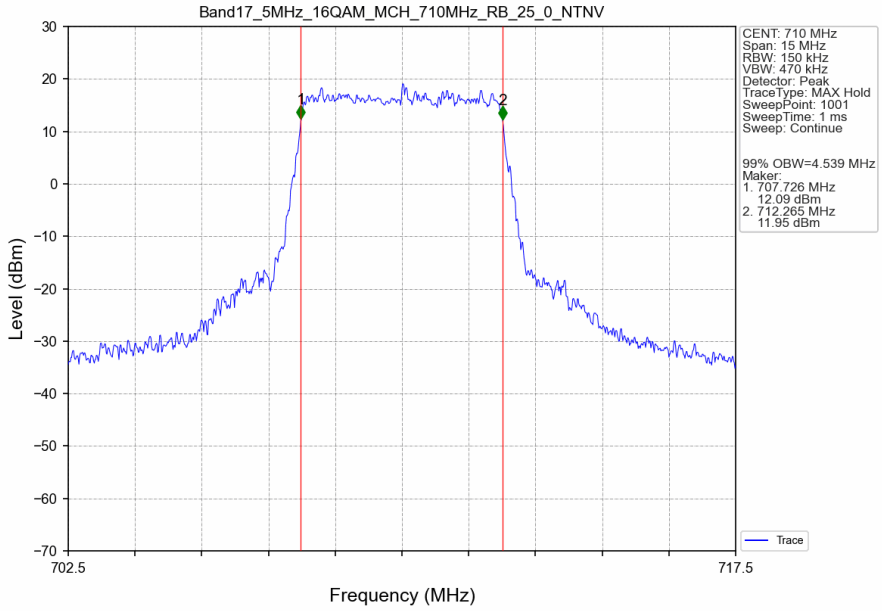
3.2 Test Graph

3.2.1 Band17_OBW

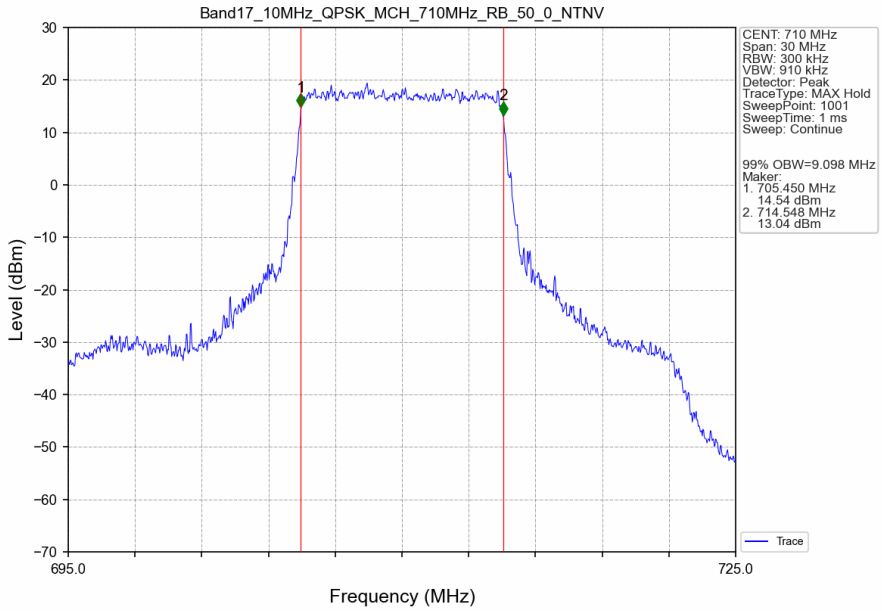
Band17_5MHz_QPSK_MCH_710MHz_RB_25_0_NTNV



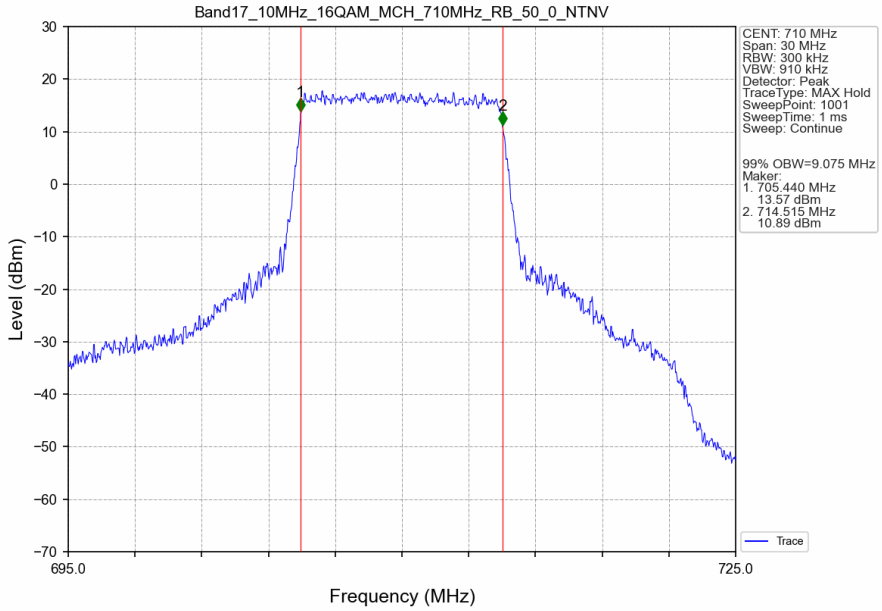
Band17_5MHz_16QAM_MCH_710MHz_RB_25_0_NTNV



Band17_10MHz_QPSK_MCH_710MHz_RB_50_0_NTNV

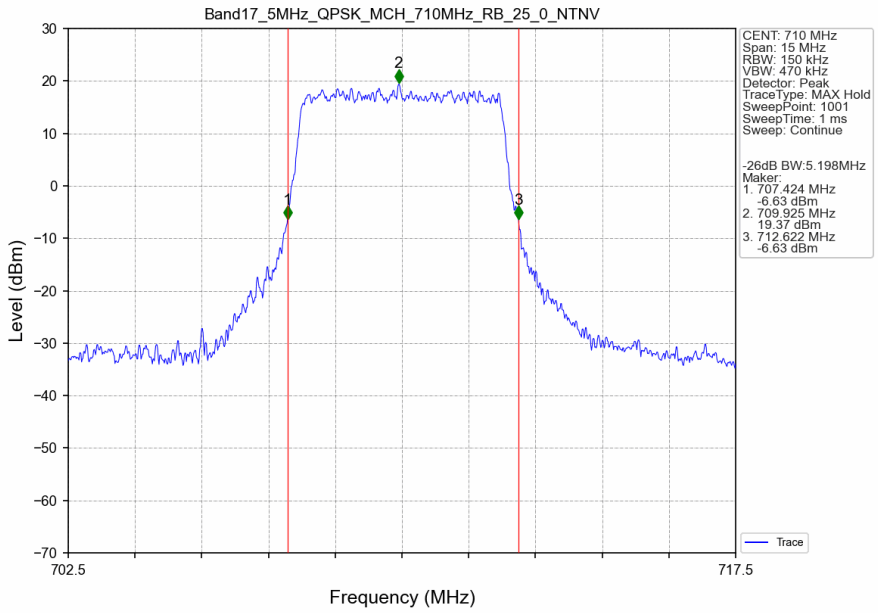


Band17_10MHz_16QAM_MCH_710MHz_RB_50_0_NTNV

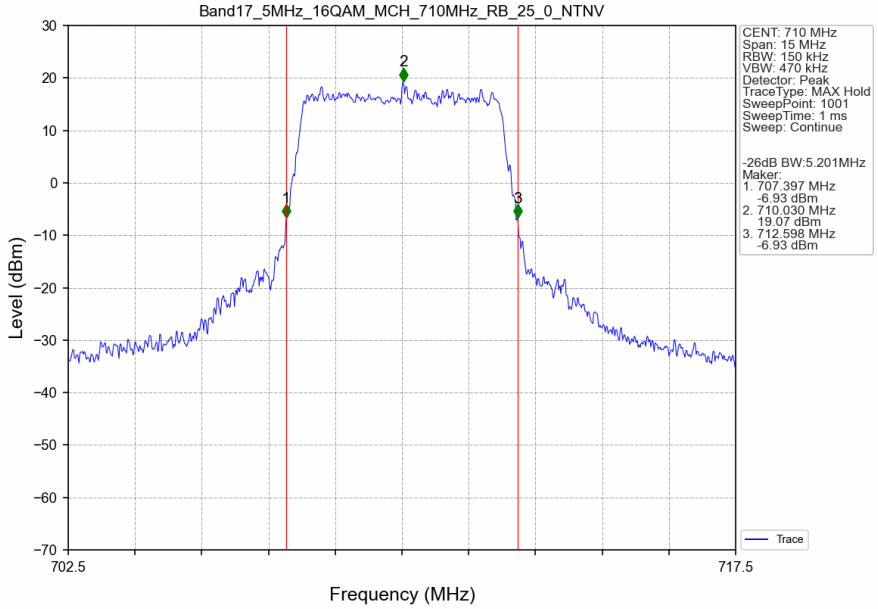


3.2.2 Band17_XDB

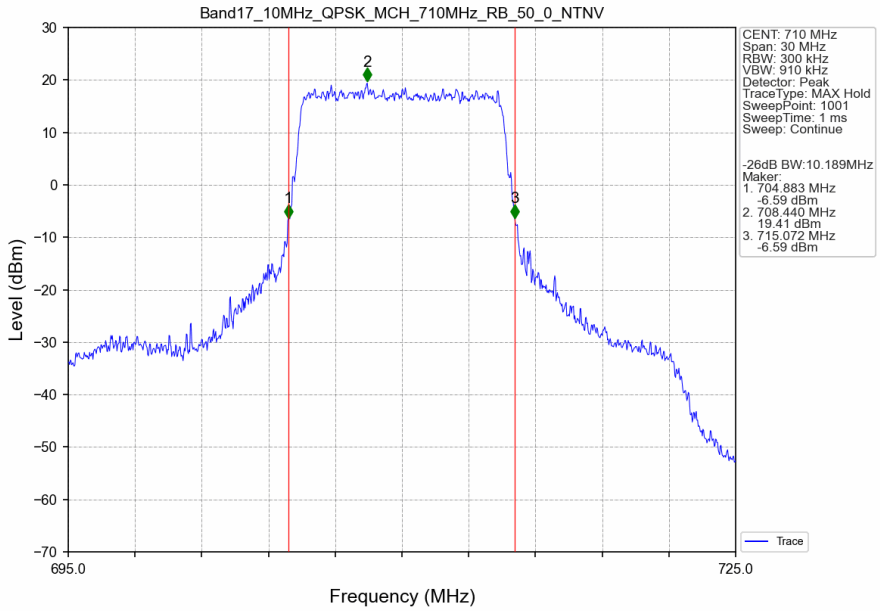
Band17_5MHz_QPSK_MCH_710MHz_RB_25_0_NTNV



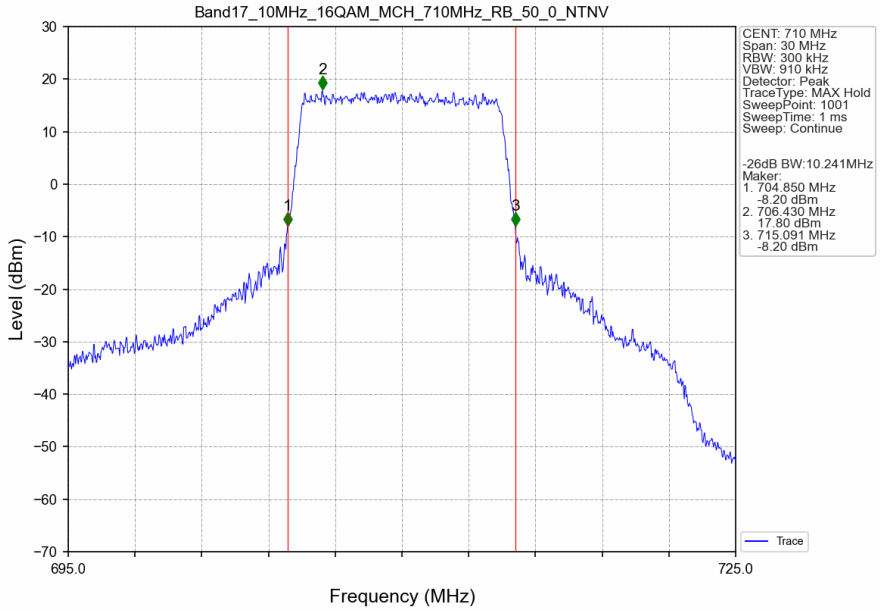
Band17_5MHz_16QAM_MCH_710MHz_RB_25_0_NTNV



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

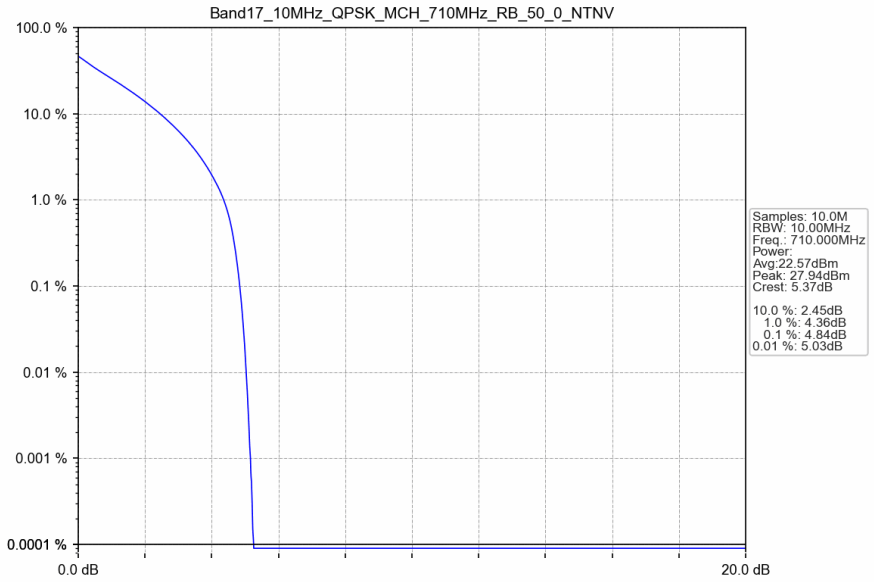
4.1.1 B17_10MHz

Band: 17 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	710	50	0	4.84	<=13	Pass
16QAM	710	50	0	5.87	<=13	Pass
64QAM	710	50	0	5.86	<=13	Pass
256QAM	710	50	0	6.73	<=13	Pass

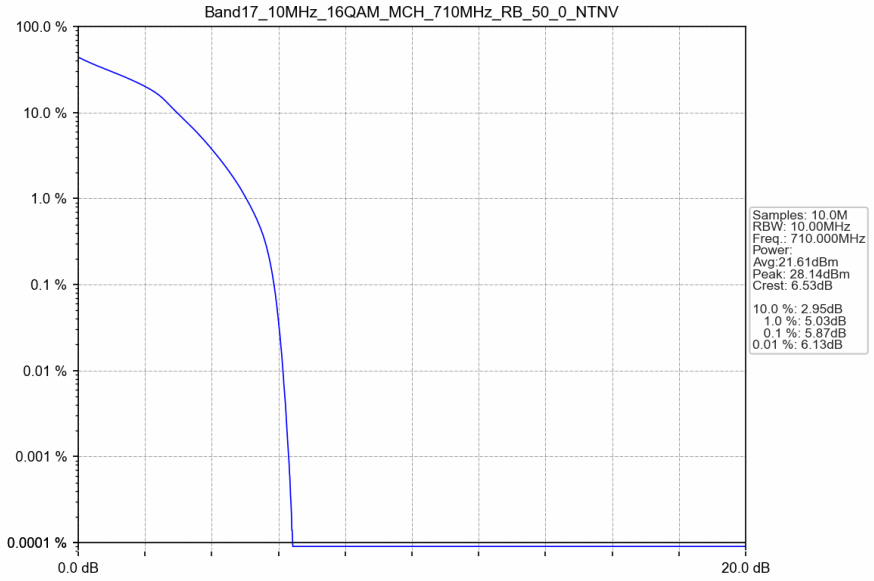
4.2 Test Graph

4.2.1 B17_10MHz

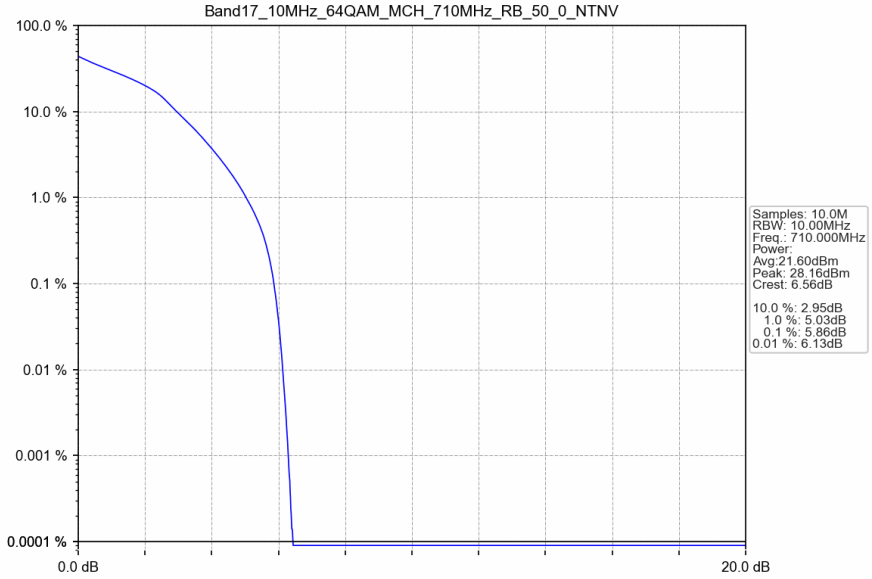
Band17_10MHz_QPSK_MCH_710MHz_RB_50_0_NTNV



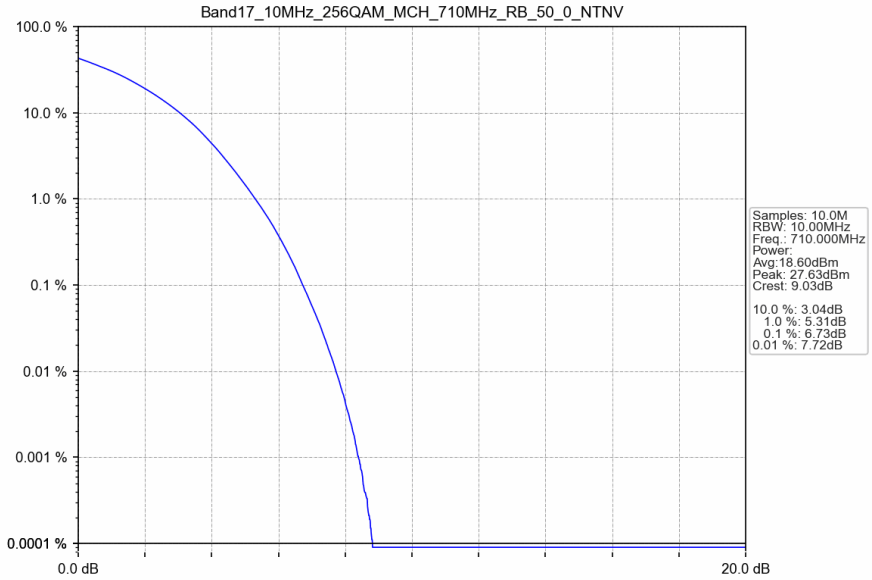
Band17_10MHz_16QAM_MCH_710MHz_RB_50_0_NTNV



Band17_10MHz_64QAM_MCH_710MHz_RB_50_0_NTNV



Band17_10MHz_256QAM_MCH_710MHz_RB_50_0_NTNV



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

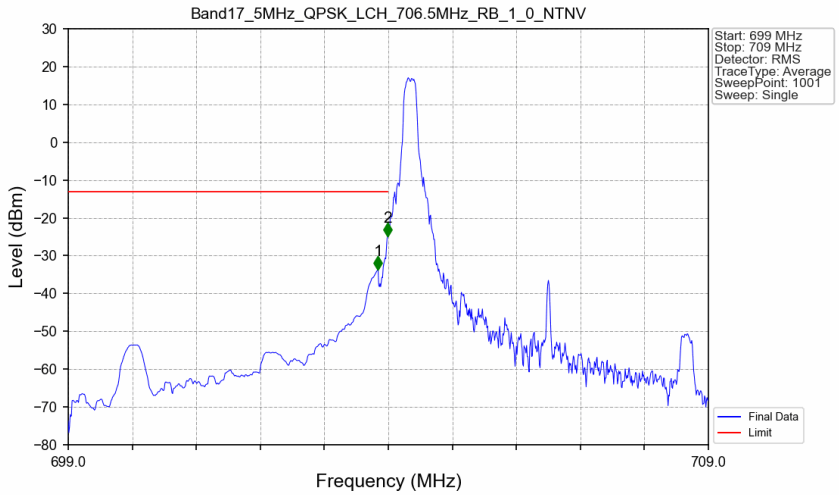
5.1.2 B17_10MHz

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

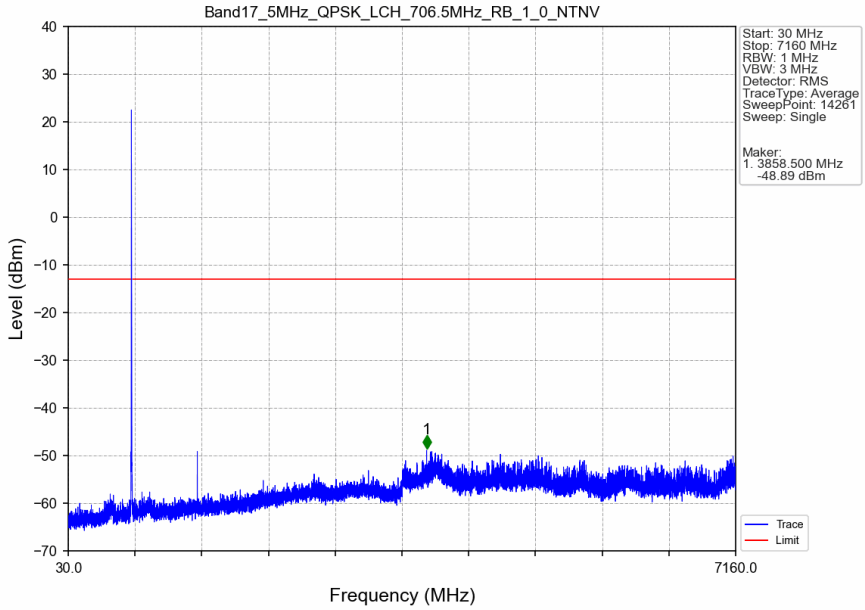
5.2.1 B17_5MHz

Band17_5MHz_QPSK_LCH_706.5MHz_RB_1_0_NTNV

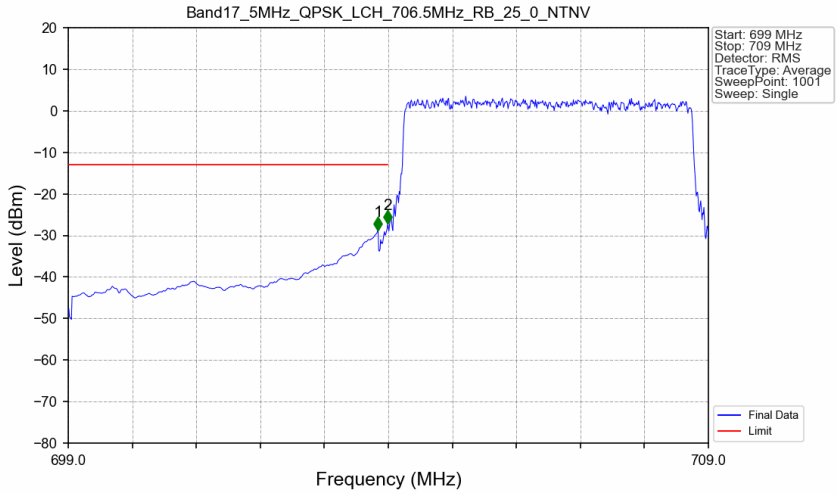


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
699	703.9	0.1	CHP	1	703.840	-33.63	-13	Pass
703.9	704	0.03	/	2	703.990	-24.79	-13	Pass
704	709	0.03	/	/	/	/	/	/

Band17_5MHz_QPSK_LCH_706.5MHz_RB_1_0_NTNV

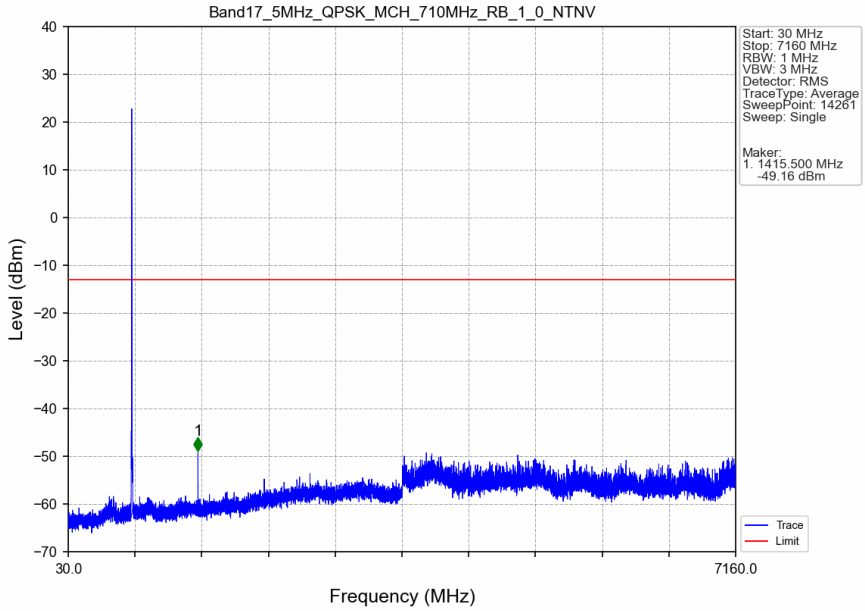


Band17_5MHz_QPSK_LCH_706.5MHz_RB_25_0_NTNV

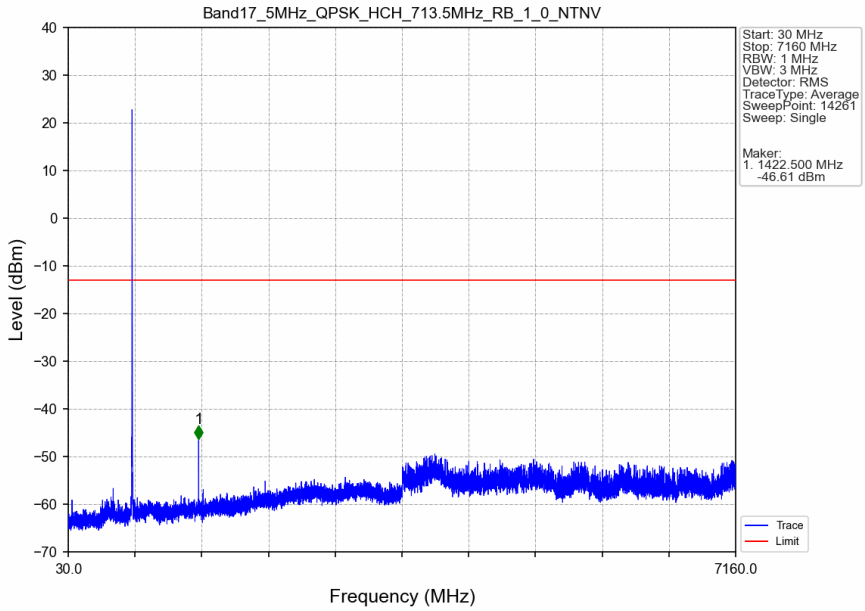


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
699	703.9	0.1	CHP	1	703.840	-28.74	-13	Pass
703.9	704	0.03	/	2	703.990	-27.20	-13	Pass
704	709	0.03	/	/	/	/	/	/

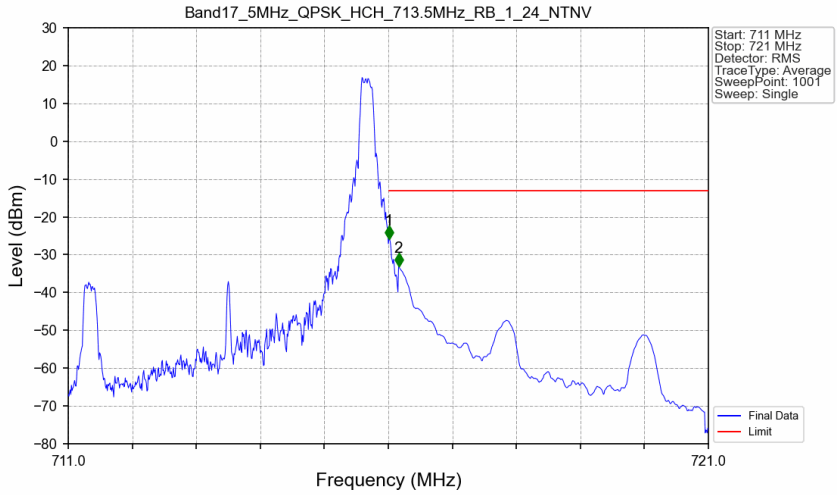
Band17_5MHz_QPSK_MCH_710MHz_RB_1_0_NTNV



Band17_5MHz_QPSK_HCH_713.5MHz_RB_1_0_NTNV

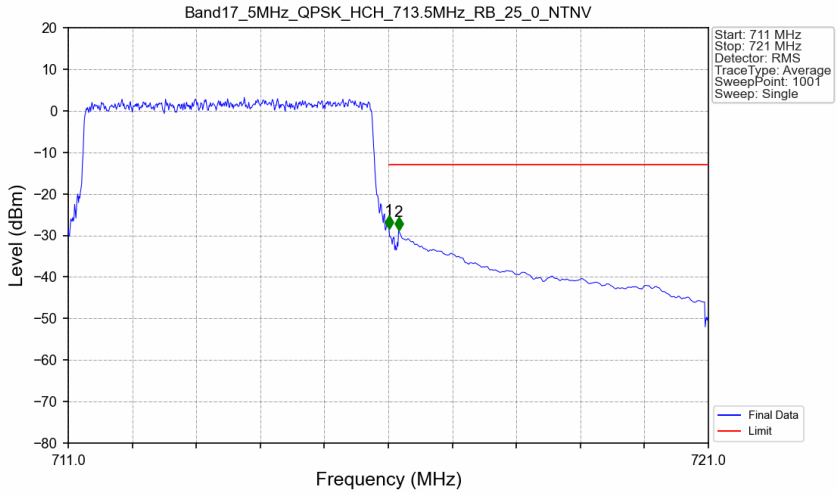


Band17_5MHz_QPSK_HCH_713.5MHz_RB_1_24_NTNV



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	-25.81	-13	Pass
716.1	721	0.1	CHP	2	716.160	-33.04	-13	Pass

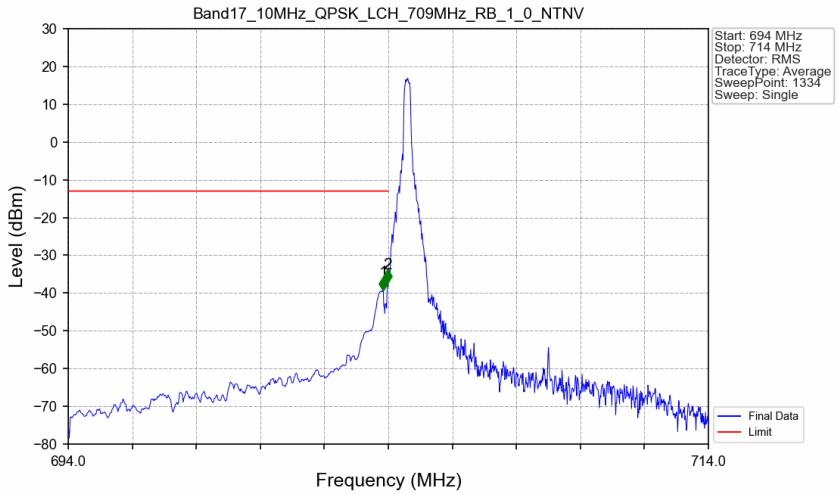
Band17_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



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	-28.42	-13	Pass
716.1	721	0.1	CHP	2	716.160	-28.83	-13	Pass

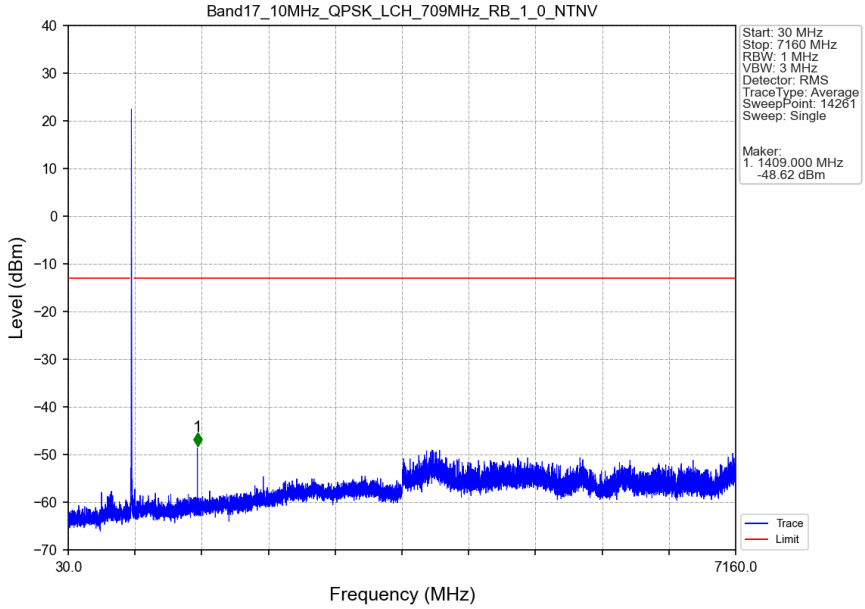
5.2.2 B17_10MHz

Band17_10MHz_QPSK_LCH_709MHz_RB_1_0_NTNV

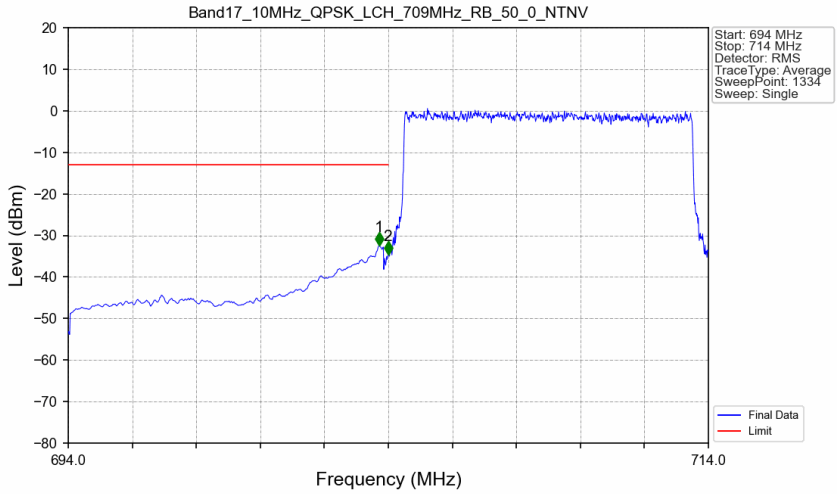


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	703.9	0.1	CHP	1	703.842	-39.35	-13	Pass
703.9	704	0.03	/	2	703.977	-37.30	-13	Pass
704	714	0.03	/	/	/	/	/	/

Band17_10MHz_QPSK_LCH_709MHz_RB_1_0_NTNV

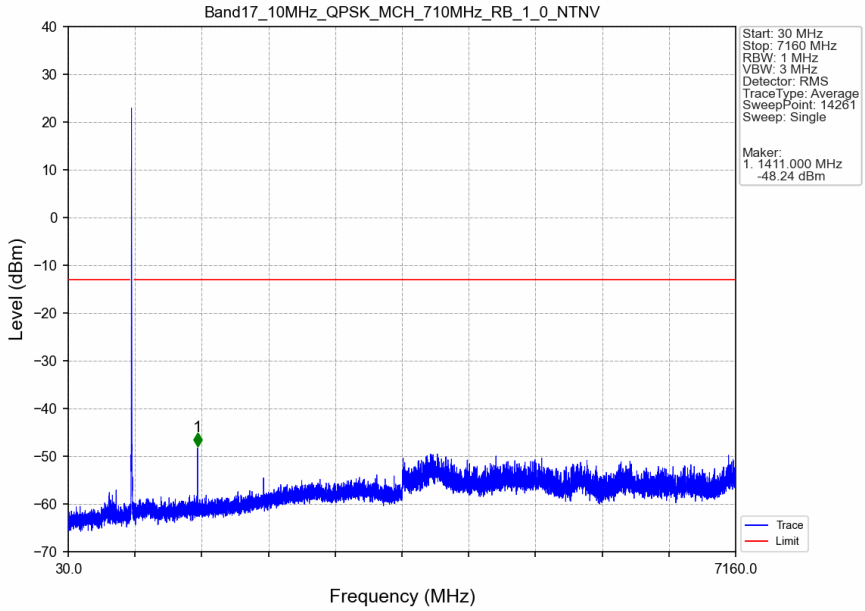


Band17_10MHz_QPSK_LCH_709MHz_RB_50_0_NTNV

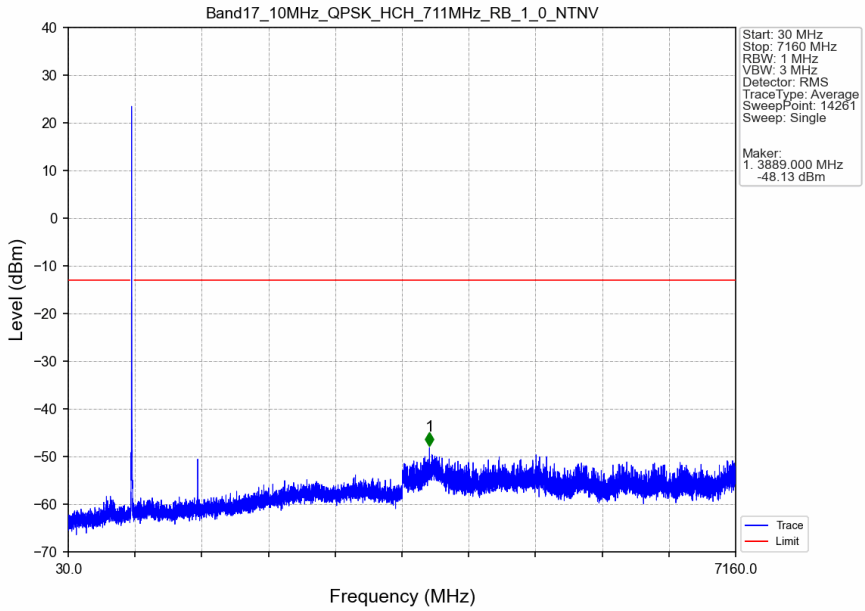


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	703.9	0.1	CHP	1	703.707	-32.45	-13	Pass
703.9	704	0.03	/	2	703.992	-34.66	-13	Pass
704	714	0.03	/	/	/	/	/	/

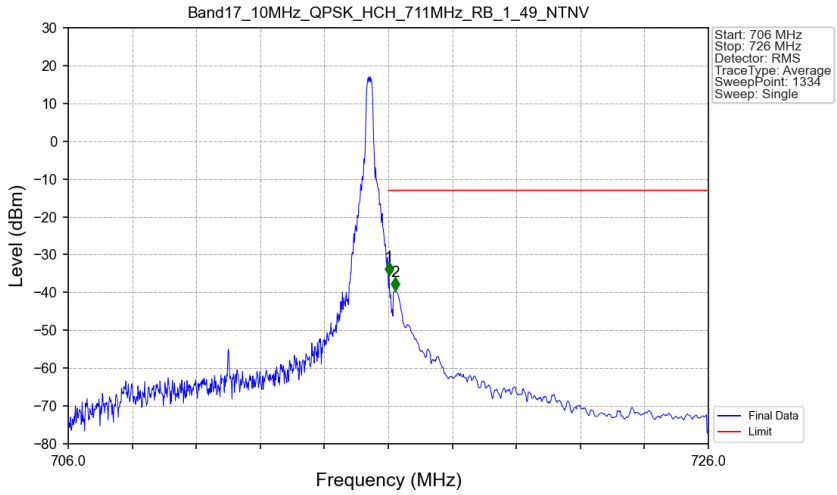
Band17_10MHz_QPSK_MCH_710MHz_RB_1_0_NTNV



Band17_10MHz_QPSK_HCH_711MHz_RB_1_0_NTNV

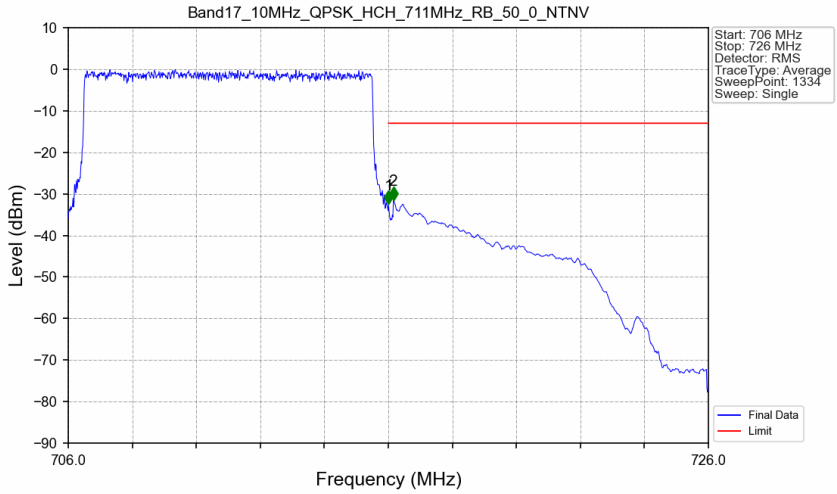


Band17_10MHz_QPSK_HCH_711MHz_RB_1_49_NTNV



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	716.023	-35.55	-13	Pass
716.1	726	0.1	CHP	2	716.218	-39.43	-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	-32.37	-13	Pass
716.1	726	0.1	CHP	2	716.158	-31.38	-13	Pass