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	23.11	-10.10	10.86	<=34.77	Pass
			13	22.92	-10.10	10.67	<=34.77	Pass
			24	23.00	-10.10	10.75	<=34.77	Pass
		12	0	22.08	-10.10	9.83	<=34.77	Pass
			6	22.08	-10.10	9.83	<=34.77	Pass
			13	22.04	-10.10	9.79	<=34.77	Pass
		25	0	22.06	-10.10	9.81	<=34.77	Pass
	710	1	0	22.57	-10.10	10.32	<=34.77	Pass
			13	22.89	-10.10	10.64	<=34.77	Pass
			24	22.99	-10.10	10.74	<=34.77	Pass
		12	0	22.07	-10.10	9.82	<=34.77	Pass
			6	22.05	-10.10	9.80	<=34.77	Pass
			13	21.98	-10.10	9.73	<=34.77	Pass
		25	0	22.06	-10.10	9.81	<=34.77	Pass
	713.5	1	0	22.89	-10.10	10.64	<=34.77	Pass
			13	22.78	-10.10	10.53	<=34.77	Pass
			24	22.91	-10.10	10.66	<=34.77	Pass
		12	0	22.08	-10.10	9.83	<=34.77	Pass
			6	22.01	-10.10	9.76	<=34.77	Pass
			13	22.00	-10.10	9.75	<=34.77	Pass
		25	0	22.07	-10.10	9.82	<=34.77	Pass
16QAM	706.5	1	0	22.13	-10.10	9.88	<=34.77	Pass
			13	22.06	-10.10	9.81	<=34.77	Pass
			24	22.18	-10.10	9.93	<=34.77	Pass
		12	0	21.05	-10.10	8.80	<=34.77	Pass
			6	21.07	-10.10	8.82	<=34.77	Pass
			13	21.06	-10.10	8.81	<=34.77	Pass
		25	0	21.07	-10.10	8.82	<=34.77	Pass
	710	1	0	22.24	-10.10	9.99	<=34.77	Pass
			13	21.96	-10.10	9.71	<=34.77	Pass
			24	22.19	-10.10	9.94	<=34.77	Pass
		12	0	21.04	-10.10	8.79	<=34.77	Pass
			6	21.04	-10.10	8.79	<=34.77	Pass
			13	21.06	-10.10	8.81	<=34.77	Pass
		25	0	21.07	-10.10	8.82	<=34.77	Pass
	713.5	1	0	21.97	-10.10	9.72	<=34.77	Pass
			13	22.10	-10.10	9.85	<=34.77	Pass
			24	22.16	-10.10	9.91	<=34.77	Pass
		12	0	21.11	-10.10	8.86	<=34.77	Pass
			6	21.06	-10.10	8.81	<=34.77	Pass
			13	21.02	-10.10	8.77	<=34.77	Pass
		25	0	21.07	-10.10	8.82	<=34.77	Pass
64QAM	706.5	1	0	20.98	-10.10	8.73	<=34.77	Pass
			13	20.93	-10.10	8.68	<=34.77	Pass
			24	20.89	-10.10	8.64	<=34.77	Pass
		12	0	20.09	-10.10	7.84	<=34.77	Pass
			6	20.05	-10.10	7.80	<=34.77	Pass
			13	20.07	-10.10	7.82	<=34.77	Pass
		25	0	20.06	-10.10	7.81	<=34.77	Pass

	710	1	0	21.21	-10.10	8.96	<=34.77	Pass
			13	20.99	-10.10	8.74	<=34.77	Pass
			24	20.82	-10.10	8.57	<=34.77	Pass
		12	0	20.09	-10.10	7.84	<=34.77	Pass
			6	20.08	-10.10	7.83	<=34.77	Pass
			13	20.04	-10.10	7.79	<=34.77	Pass
		25	0	20.05	-10.10	7.80	<=34.77	Pass
	713.5	1	0	20.76	-10.10	8.51	<=34.77	Pass
			13	20.76	-10.10	8.51	<=34.77	Pass
			24	21.17	-10.10	8.92	<=34.77	Pass
		12	0	20.11	-10.10	7.86	<=34.77	Pass
			6	20.06	-10.10	7.81	<=34.77	Pass
			13	20.05	-10.10	7.80	<=34.77	Pass
		25	0	20.04	-10.10	7.79	<=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	23.07	-10.10	10.82	<=34.77	Pass
			25	22.84	-10.10	10.59	<=34.77	Pass
			49	22.89	-10.10	10.64	<=34.77	Pass
		25	0	21.99	-10.10	9.74	<=34.77	Pass
			13	22.01	-10.10	9.76	<=34.77	Pass
			25	21.92	-10.10	9.67	<=34.77	Pass
		50	0	21.95	-10.10	9.70	<=34.77	Pass
	710	1	0	23.04	-10.10	10.79	<=34.77	Pass
			25	22.74	-10.10	10.49	<=34.77	Pass
			49	22.96	-10.10	10.71	<=34.77	Pass
		25	0	22.00	-10.10	9.75	<=34.77	Pass
			13	22.01	-10.10	9.76	<=34.77	Pass
			25	21.93	-10.10	9.68	<=34.77	Pass
		50	0	21.96	-10.10	9.71	<=34.77	Pass
	711	1	0	23.07	-10.10	10.82	<=34.77	Pass
			25	22.96	-10.10	10.71	<=34.77	Pass
			49	22.75	-10.10	10.50	<=34.77	Pass
		25	0	22.03	-10.10	9.78	<=34.77	Pass
			13	21.97	-10.10	9.72	<=34.77	Pass
			25	21.95	-10.10	9.70	<=34.77	Pass
		50	0	21.97	-10.10	9.72	<=34.77	Pass
16QAM	709	1	0	22.23	-10.10	9.98	<=34.77	Pass
			25	22.09	-10.10	9.84	<=34.77	Pass
			49	22.11	-10.10	9.86	<=34.77	Pass
		25	0	20.98	-10.10	8.73	<=34.77	Pass
			13	21.00	-10.10	8.75	<=34.77	Pass
			25	20.95	-10.10	8.70	<=34.77	Pass
		50	0	20.91	-10.10	8.66	<=34.77	Pass
	710	1	0	21.83	-10.10	9.58	<=34.77	Pass
			25	22.09	-10.10	9.84	<=34.77	Pass
			49	22.14	-10.10	9.89	<=34.77	Pass
		25	0	20.99	-10.10	8.74	<=34.77	Pass
			13	20.98	-10.10	8.73	<=34.77	Pass
			25	20.91	-10.10	8.66	<=34.77	Pass
		50	0	20.96	-10.10	8.71	<=34.77	Pass
	711	1	0	21.87	-10.10	9.62	<=34.77	Pass

			25	22.23	-10.10	9.98	<=34.77	Pass
			49	22.26	-10.10	10.01	<=34.77	Pass
		25	0	21.02	-10.10	8.77	<=34.77	Pass
			13	20.97	-10.10	8.72	<=34.77	Pass
			25	20.98	-10.10	8.73	<=34.77	Pass
		50	0	20.99	-10.10	8.74	<=34.77	Pass
64QAM	709	1	0	21.07	-10.10	8.82	<=34.77	Pass
			25	21.08	-10.10	8.83	<=34.77	Pass
			49	20.95	-10.10	8.70	<=34.77	Pass
		25	0	19.96	-10.10	7.71	<=34.77	Pass
			13	19.97	-10.10	7.72	<=34.77	Pass
			25	19.91	-10.10	7.66	<=34.77	Pass
		50	0	19.93	-10.10	7.68	<=34.77	Pass
	710	1	0	21.05	-10.10	8.80	<=34.77	Pass
			25	21.00	-10.10	8.75	<=34.77	Pass
			49	20.99	-10.10	8.74	<=34.77	Pass
		25	0	19.99	-10.10	7.74	<=34.77	Pass
			13	19.97	-10.10	7.72	<=34.77	Pass
			25	19.92	-10.10	7.67	<=34.77	Pass
		50	0	19.94	-10.10	7.69	<=34.77	Pass
	711	1	0	20.87	-10.10	8.62	<=34.77	Pass
			25	20.99	-10.10	8.74	<=34.77	Pass
			49	21.06	-10.10	8.81	<=34.77	Pass
		25	0	19.98	-10.10	7.73	<=34.77	Pass
			13	19.98	-10.10	7.73	<=34.77	Pass
			25	19.89	-10.10	7.64	<=34.77	Pass
		50	0	19.98	-10.10	7.73	<=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	1.800	0.0025	-2.5 to 2.5	Pass
					NV	-7.600	-0.0107	-2.5 to 2.5	Pass
					HV	-5.900	-0.0083	-2.5 to 2.5	Pass
				-30	NV	1.800	0.0025	-2.5 to 2.5	Pass
				-20	NV	-1.800	-0.0025	-2.5 to 2.5	Pass
				-10	NV	-5.500	-0.0077	-2.5 to 2.5	Pass
				0	NV	-6.800	-0.0096	-2.5 to 2.5	Pass
				10	NV	-4.300	-0.0061	-2.5 to 2.5	Pass
				30	NV	-5.400	-0.0076	-2.5 to 2.5	Pass
				40	NV	-1.600	-0.0023	-2.5 to 2.5	Pass
				50	NV	-6.000	-0.0085	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band17_OBW

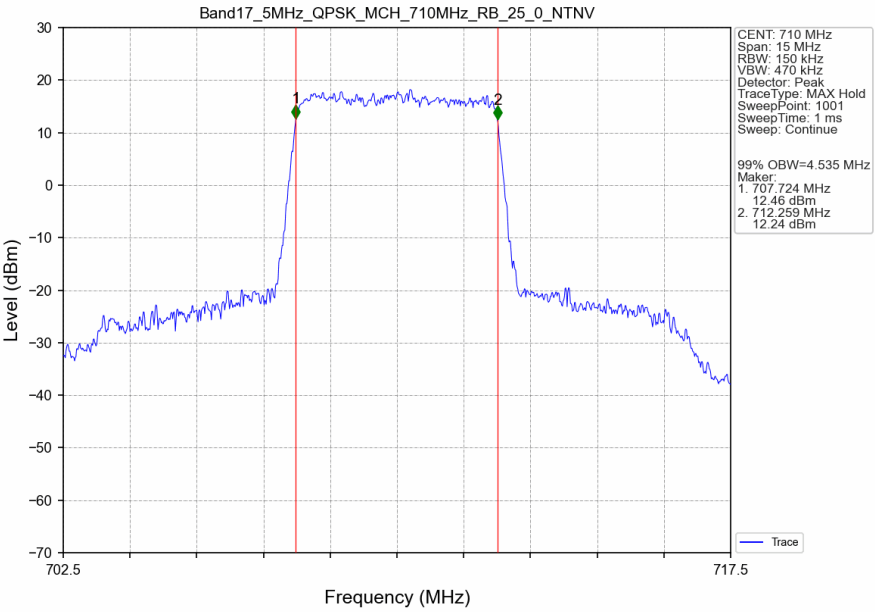
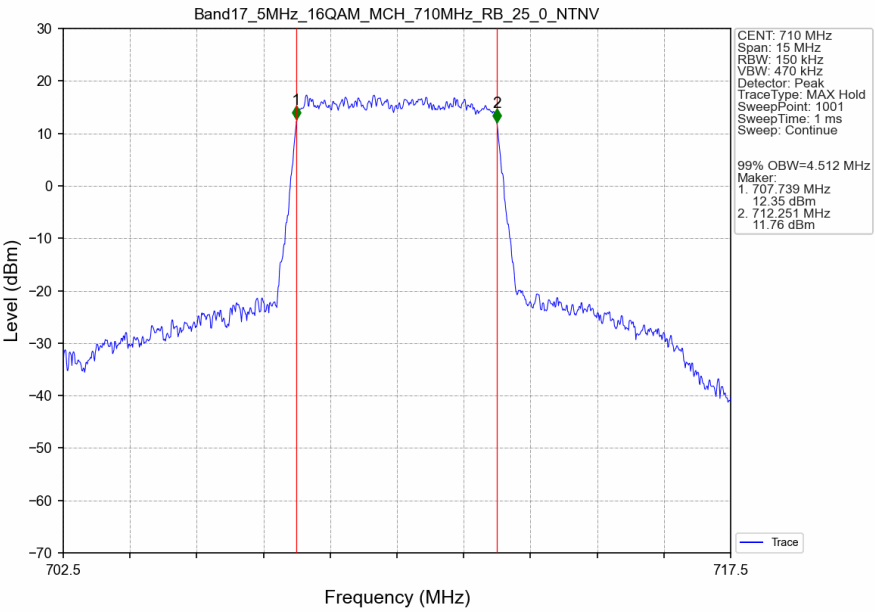
Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	4.535	/	Pass
	16QAM	710	25	0	4.512	/	Pass
10	QPSK	710	50	0	9.042	/	Pass
	16QAM	710	50	0	8.997	/	Pass

3.1.2 Band17_XDB

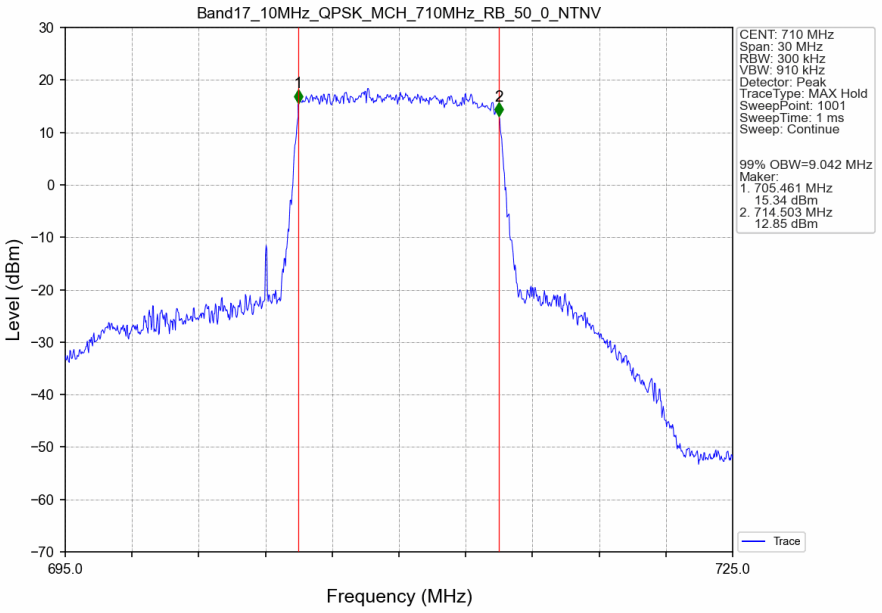
Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	5.014	/	Pass
	16QAM	710	25	0	5.034	/	Pass
10	QPSK	710	50	0	9.908	/	Pass
	16QAM	710	50	0	9.910	/	Pass

3.2 Test Graph

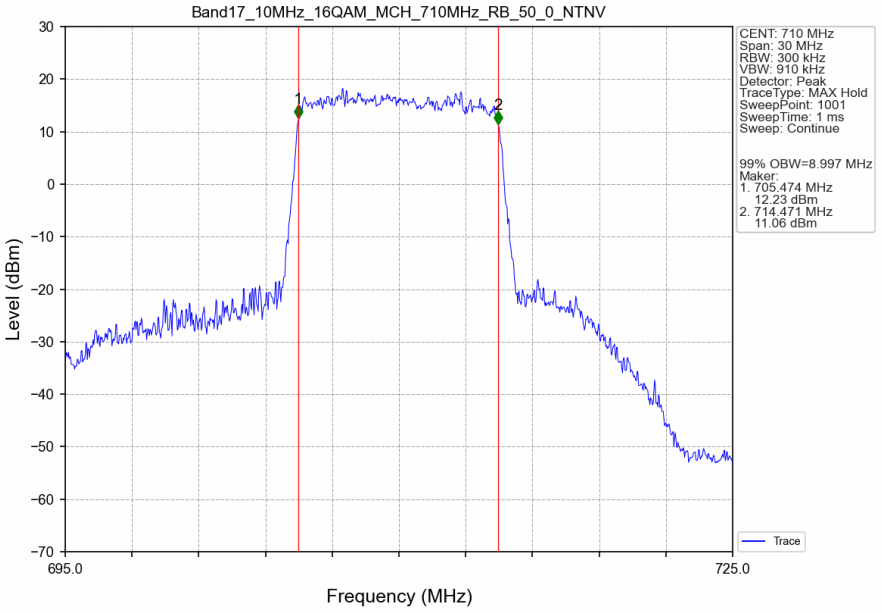
3.2.1 Band17_OBW

Band17_5MHz_QPSK_MCH_710MHz_RB_25_0_NTNV

Band17_5MHz_16QAM_MCH_710MHz_RB_25_0_NTNV


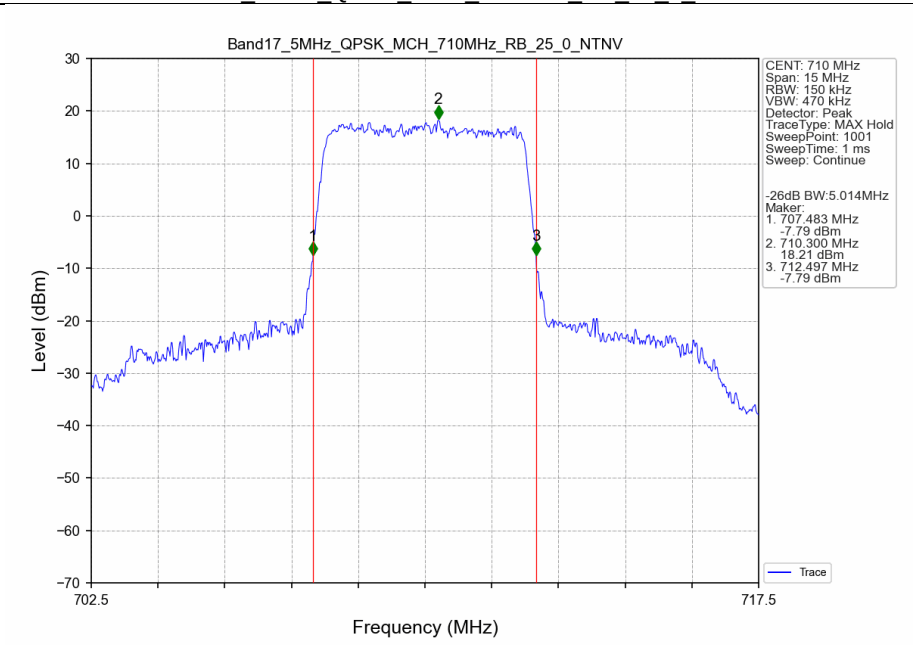
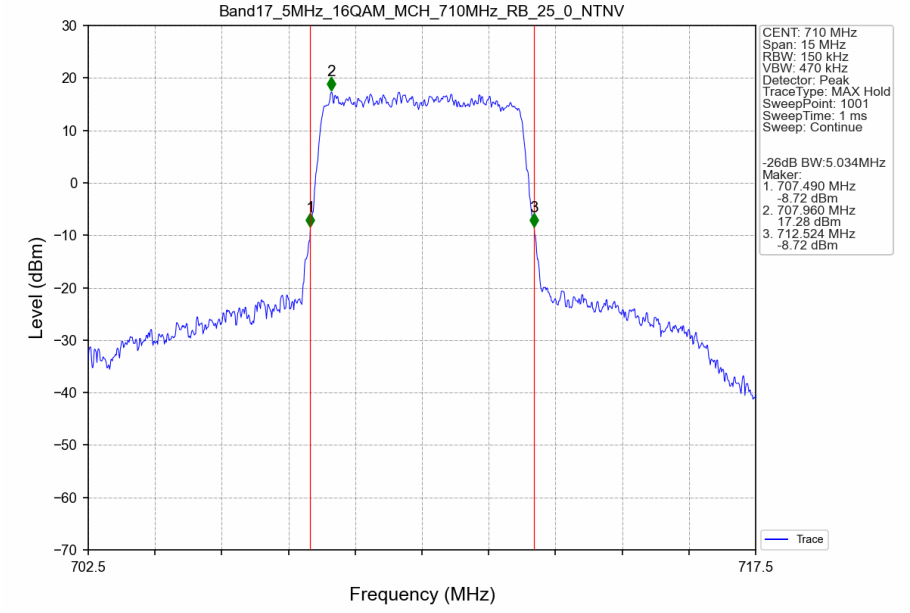
Band17_10MHz_QPSK_MCH_710MHz_RB_50_0_NTNV



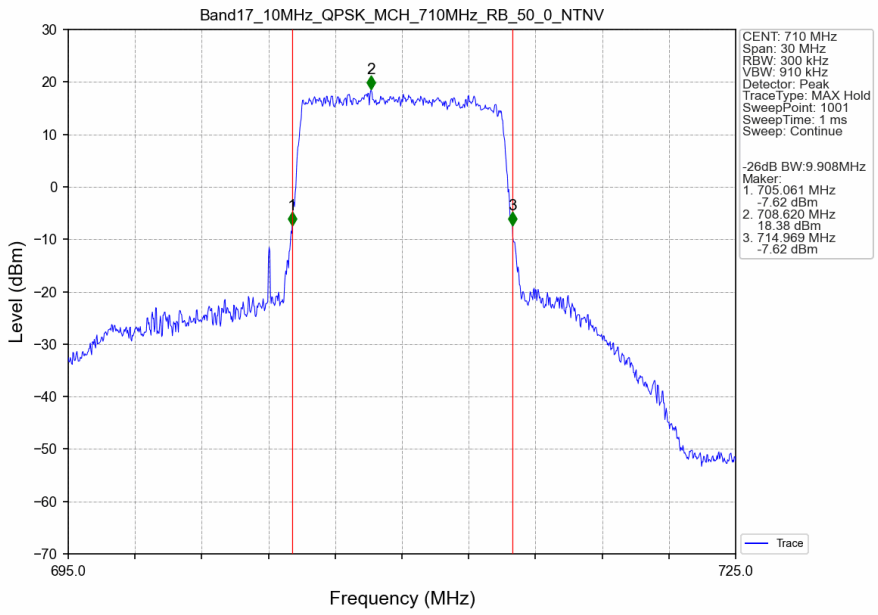
Band17_10MHz_16QAM_MCH_710MHz_RB_50_0_NTNV



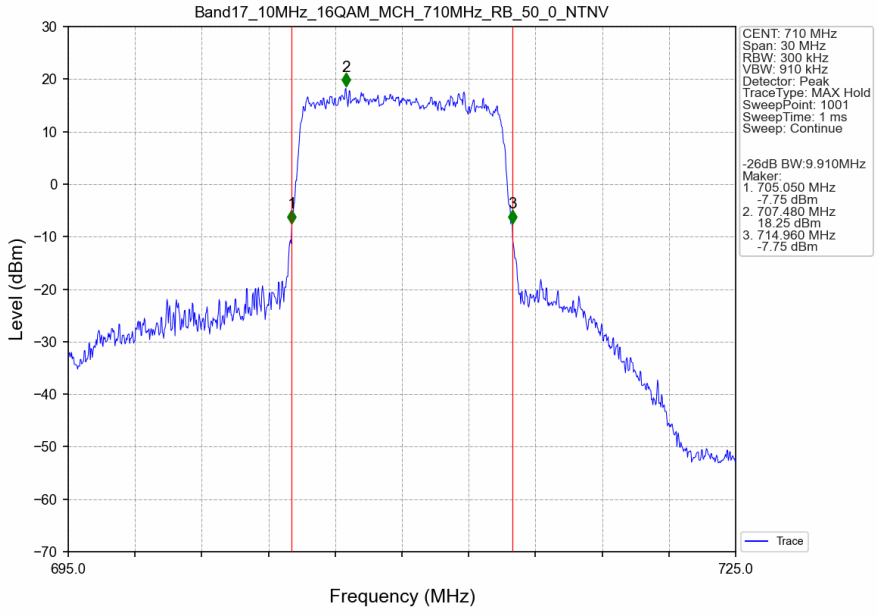
3.2.2 Band17_XDB

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

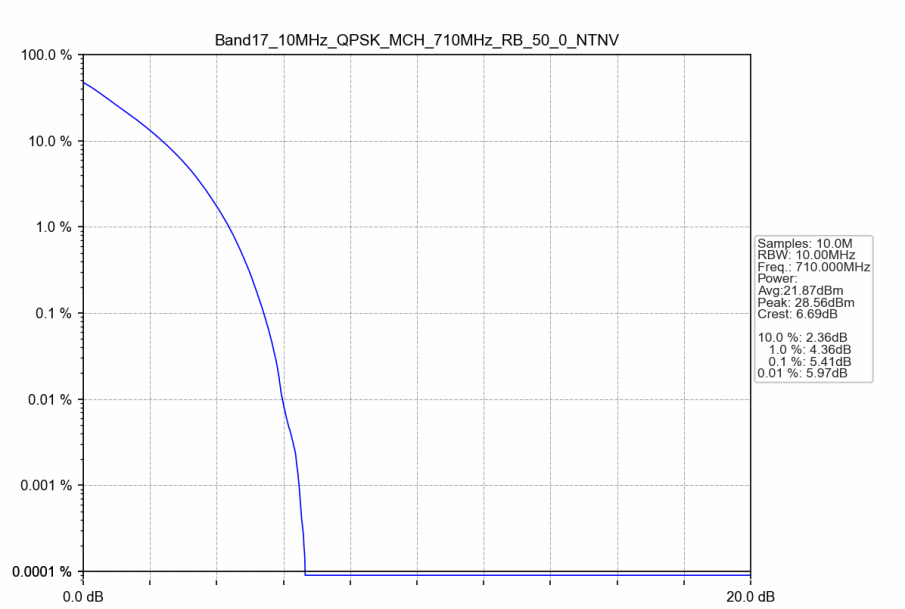
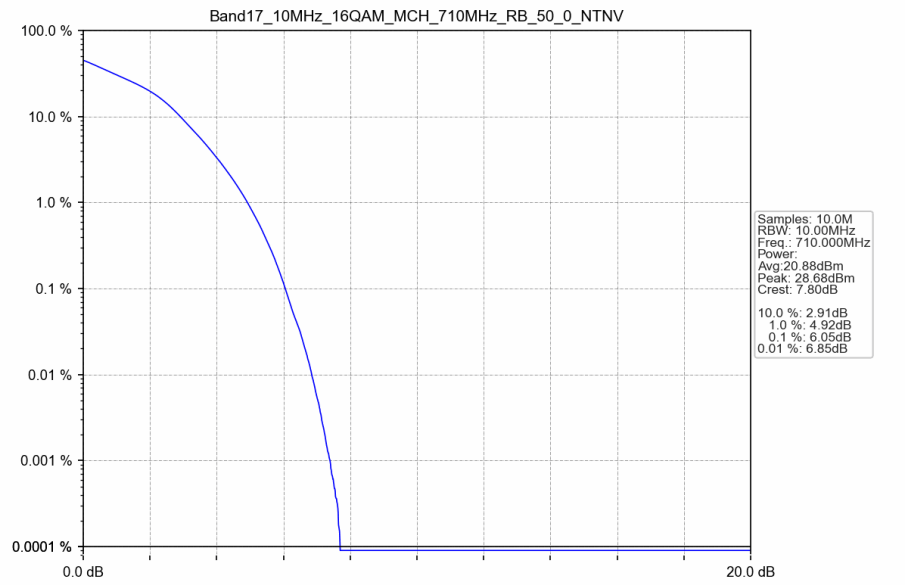
4.1 Test Result

4.1.1 B17_10MHz

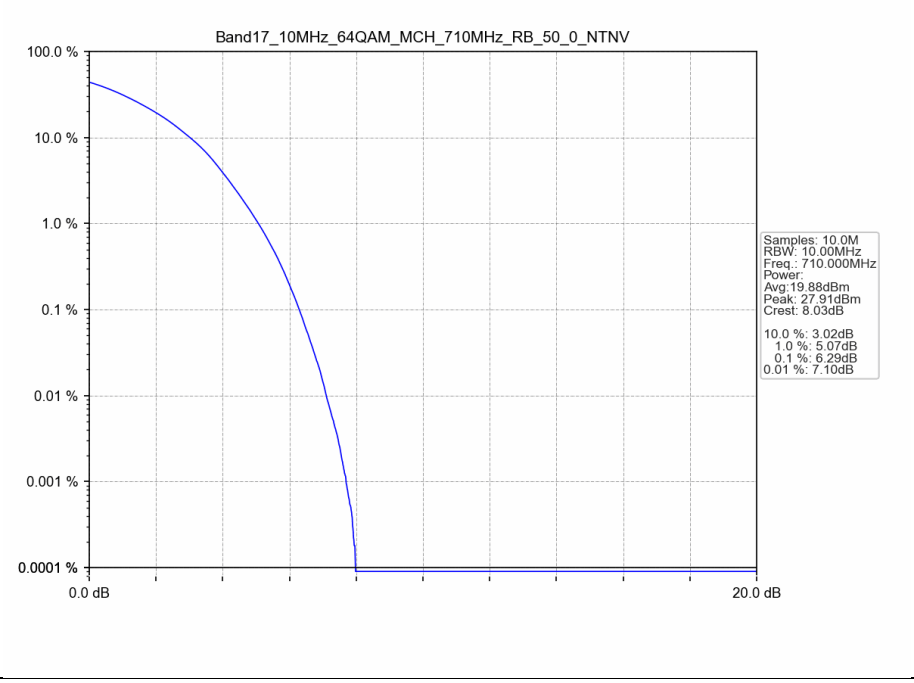
Band: 17 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	710	50	0	5.41	<=13	Pass
16QAM	710	50	0	6.05	<=13	Pass
64QAM	710	50	0	6.29	<=13	Pass

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



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

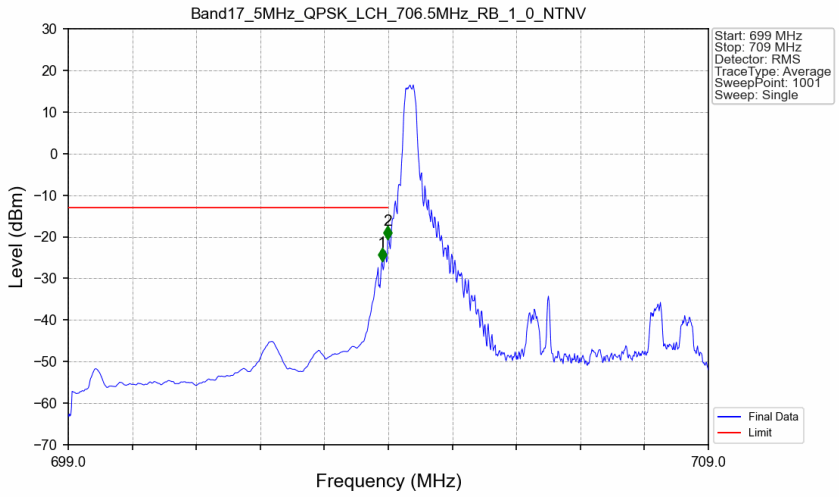
5.1.2 B17_10MHz

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

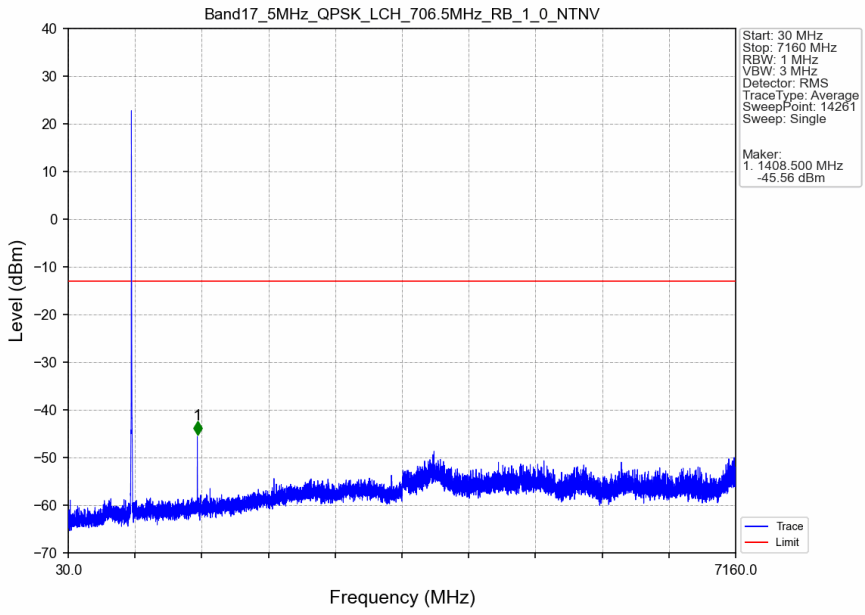
5.2.1 B17_5MHz

Band17_5MHz_QPSK_LCH_706.5MHz_RB_1_0_NTNV

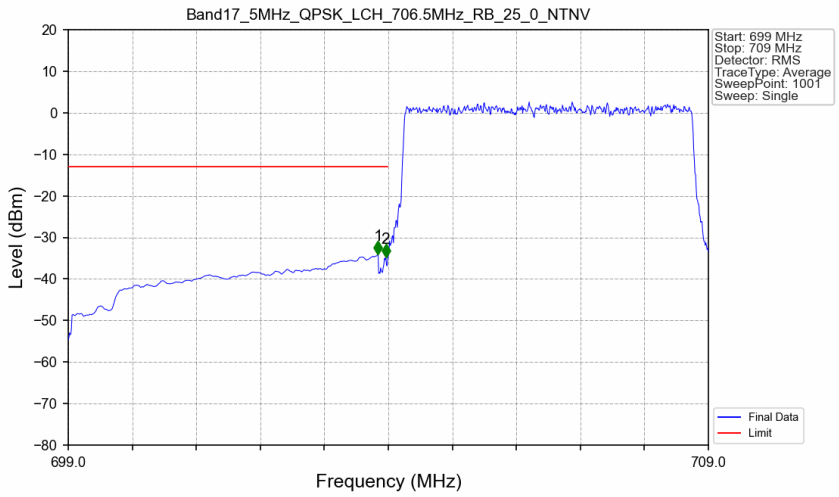


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
699	703.9	0.1	CHP	1	703.900	-25.94	-13	Pass
703.9	704	0.03	/	2	703.990	-20.61	-13	Pass
704	709	0.03	/	/	/	/	/	/

Band17_5MHz_QPSK_LCH_706.5MHz_RB_1_0_NTNV

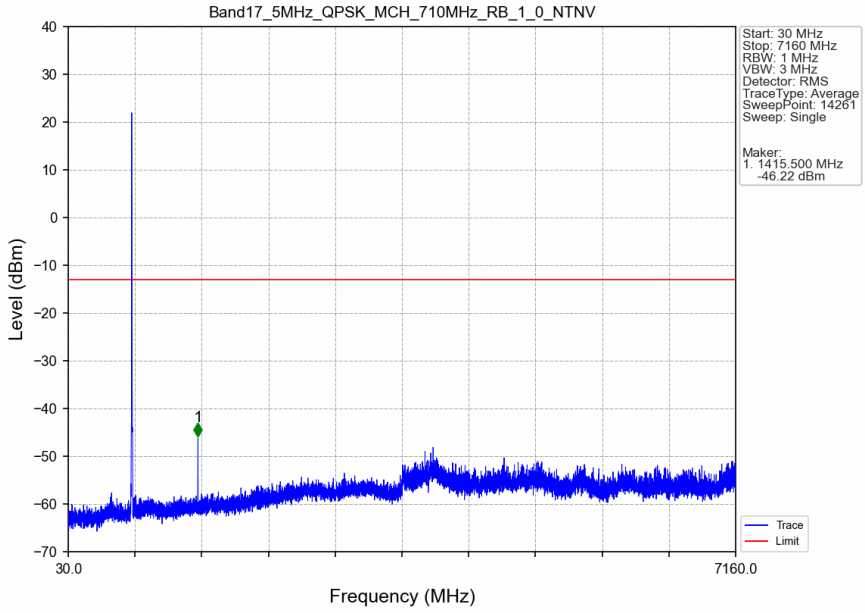


Band17_5MHz_QPSK_LCH_706.5MHz_RB_25_0_NTNV

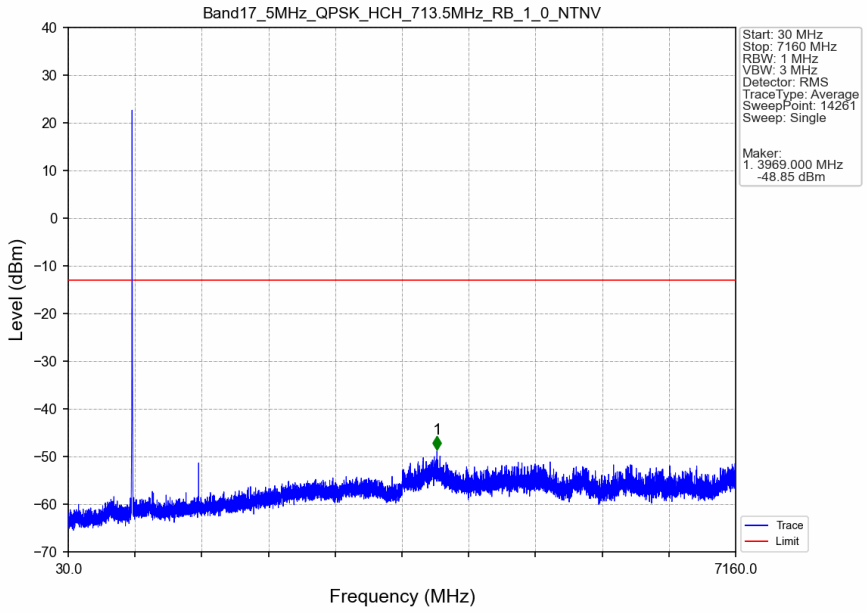


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
699	703.9	0.1	CHP	1	703.840	-34.08	-13	Pass
703.9	704	0.03	/	2	703.960	-34.71	-13	Pass
704	709	0.03	/	/	/	/	/	/

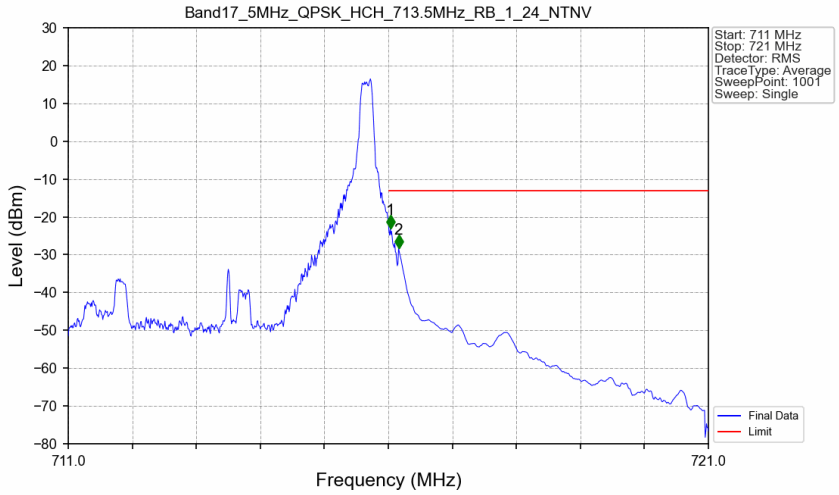
Band17_5MHz_QPSK_MCH_710MHz_RB_1_0_NTNV



Band17_5MHz_QPSK_HCH_713.5MHz_RB_1_0_NTNV

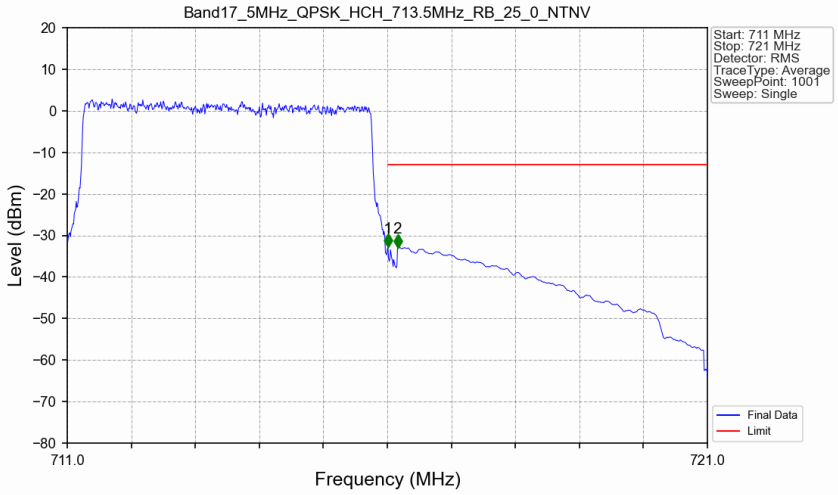


Band17_5MHz_QPSK_HCH_713.5MHz_RB_1_24_NTNV



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	716.030	-23.12	-13	Pass
716.1	721	0.1	CHP	2	716.160	-28.28	-13	Pass

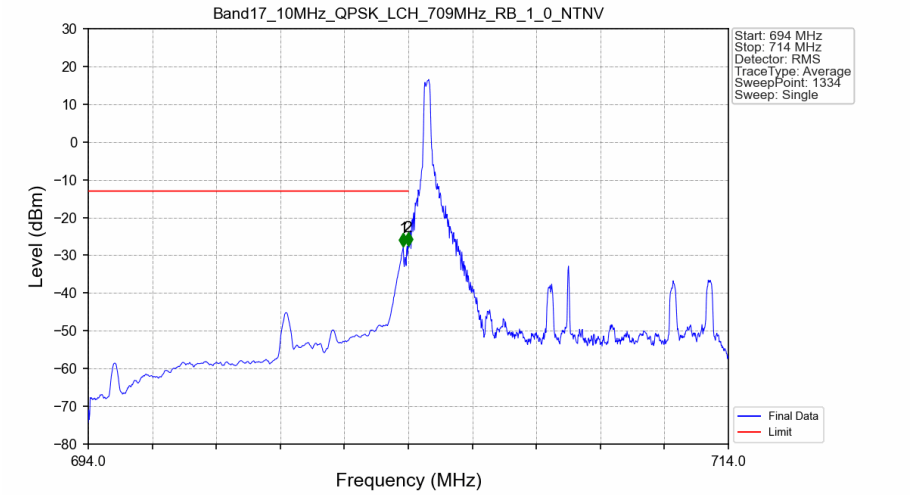
Band17_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



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	-32.73	-13	Pass
716.1	721	0.1	CHP	2	716.160	-32.86	-13	Pass

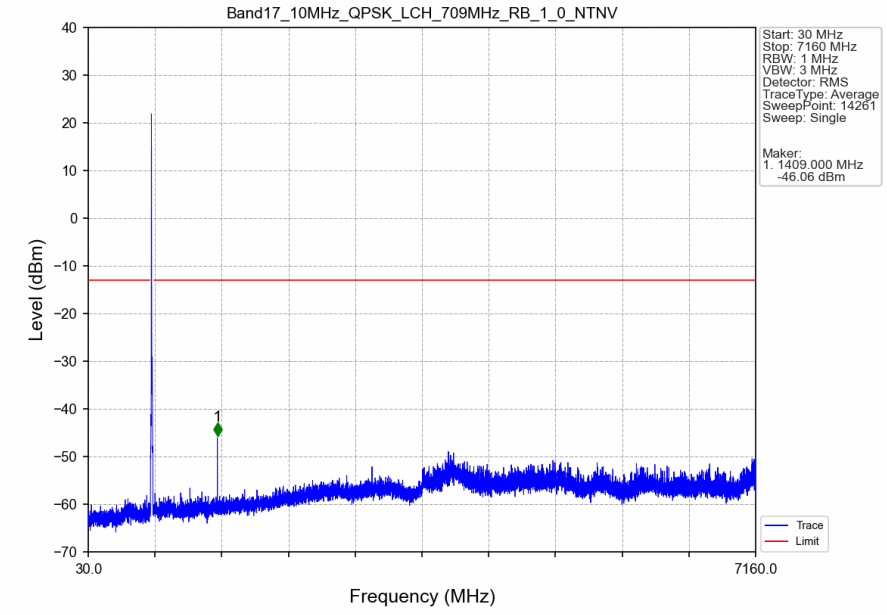
5.2.2 B17_10MHz

Band17_10MHz_QPSK_LCH_709MHz_RB_1_0_NTNV

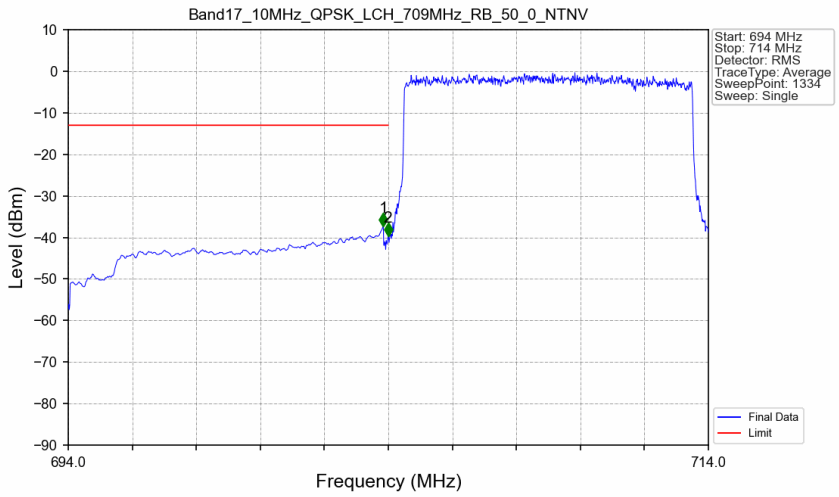


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	703.9	0.1	CHP	1	703.842	-27.68	-13	Pass
703.9	704	0.03	/	2	703.992	-27.50	-13	Pass
704	714	0.03	/	/	/	/	/	/

Band17_10MHz_QPSK_LCH_709MHz_RB_1_0_NTNV

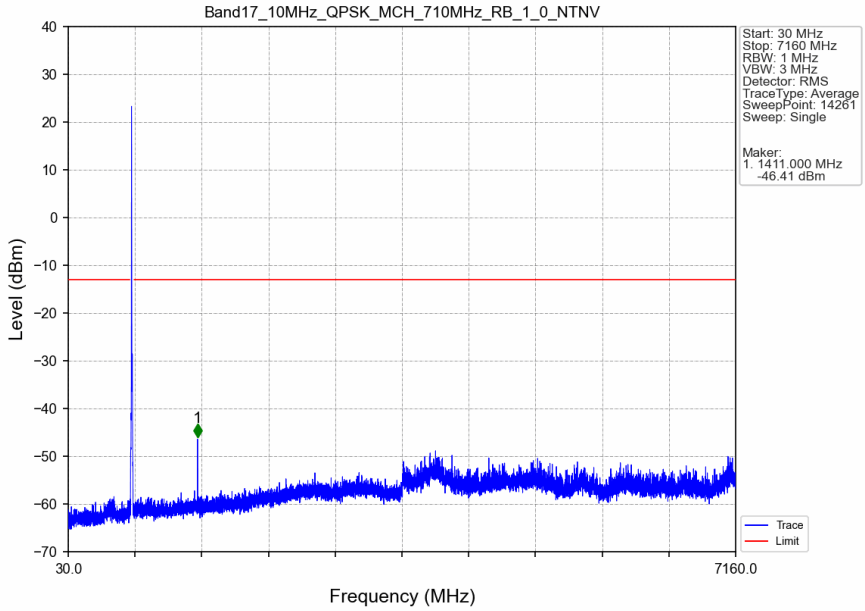


Band17_10MHz_QPSK_LCH_709MHz_RB_50_0_NTNV

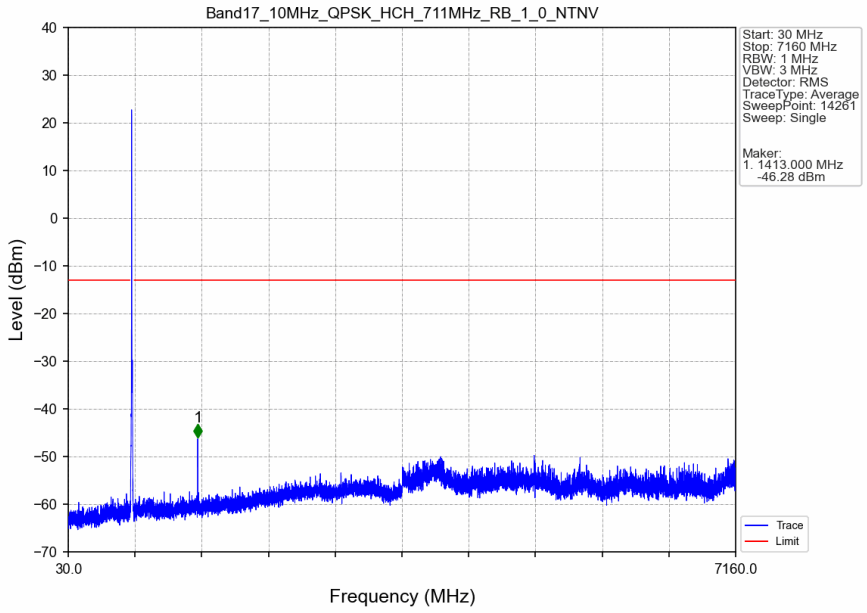


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	703.9	0.1	CHP	1	703.842	-37.32	-13	Pass
703.9	704	0.03	/	2	703.992	-39.67	-13	Pass
704	714	0.03	/	/	/	/	/	/

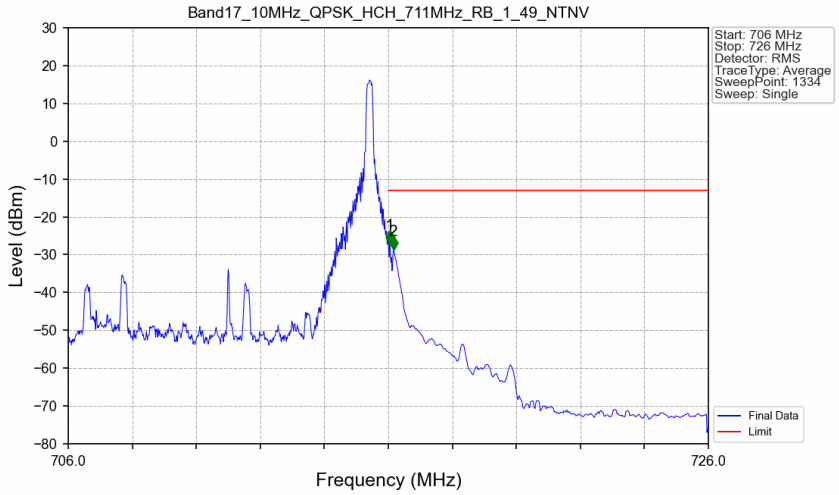
Band17_10MHz_QPSK_MCH_710MHz_RB_1_0_NTNV



Band17_10MHz_QPSK_HCH_711MHz_RB_1_0_NTNV

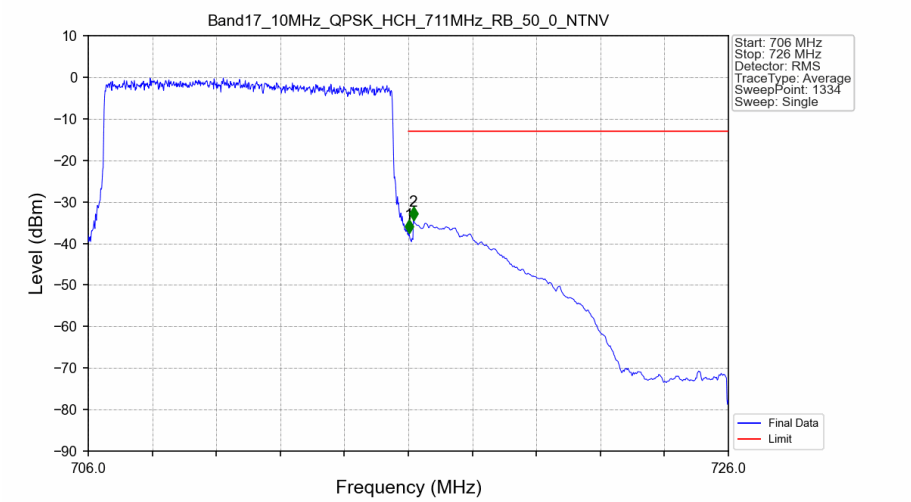


Band17_10MHz_QPSK_HCH_711MHz_RB_1_49_NTNV



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	716.038	-27.06	-13	Pass
716.1	726	0.1	CHP	2	716.158	-28.58	-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	716.023	-37.45	-13	Pass
716.1	726	0.1	CHP	2	716.158	-34.37	-13	Pass

6. Field Strength of Spurious Radiation

LTE Band 17-Low channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
1409.0	-65.86	-13	-52.86	-68.68	2.48	5.3	Horizontal	Pass
2113.5	-63.29	-13	-50.29	-65.38	2.8	4.89	Horizontal	Pass
2818.0	-60.61	-13	-47.61	-64.01	3.12	6.52	Horizontal	Pass
1409.0	-66.0	-13	-53.0	-68.82	2.48	5.3	Vertical	Pass
2113.5	-61.63	-13	-48.63	-63.72	2.8	4.89	Vertical	Pass
2818.0	-61.32	-13	-48.32	-64.72	3.12	6.52	Vertical	Pass

LTE Band 17-Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
1411.0	-65.83	-13	-52.83	-68.66	2.49	5.32	Horizontal	Pass
2116.5	-62.68	-13	-49.68	-64.78	2.8	4.9	Horizontal	Pass
2822.0	-59.18	-13	-46.18	-62.58	3.13	6.53	Horizontal	Pass
1411.0	-67.43	-13	-54.43	-70.26	2.49	5.32	Vertical	Pass
2116.5	-63.02	-13	-50.02	-65.12	2.8	4.9	Vertical	Pass
2822.0	-60.97	-13	-47.97	-64.37	3.13	6.53	Vertical	Pass

LTE Band 17-High channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
1413.0	-66.63	-13	-53.63	-69.47	2.49	5.33	Horizontal	Pass
2119.5	-61.75	-13	-48.75	-63.85	2.81	4.91	Horizontal	Pass
2826.0	-60.54	-13	-47.54	-63.95	3.13	6.54	Horizontal	Pass
1413.0	-66.07	-13	-53.07	-68.91	2.49	5.33	Vertical	Pass
2119.5	-62.38	-13	-49.38	-64.48	2.81	4.91	Vertical	Pass
2826.0	-61.08	-13	-48.08	-64.49	3.13	6.54	Vertical	Pass