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	24.32	-6.70	15.47	<=34.77	Pass
			24	24.33	-6.70	15.48	<=34.77	Pass
		25	0	23.24	-6.70	14.39	<=34.77	Pass
	710	1	0	24.25	-6.70	15.40	<=34.77	Pass
			24	24.31	-6.70	15.46	<=34.77	Pass
		25	0	23.23	-6.70	14.38	<=34.77	Pass
	713.5	1	0	24.38	-6.70	15.53	<=34.77	Pass
			24	24.31	-6.70	15.46	<=34.77	Pass
		25	0	23.23	-6.70	14.38	<=34.77	Pass
16QAM	706.5	1	0	23.09	-6.70	14.24	<=34.77	Pass
			24	23.07	-6.70	14.22	<=34.77	Pass
		25	0	22.27	-6.70	13.42	<=34.77	Pass
	710	1	0	23.27	-6.70	14.42	<=34.77	Pass
			24	23.31	-6.70	14.46	<=34.77	Pass
		25	0	22.27	-6.70	13.42	<=34.77	Pass
	713.5	1	0	23.11	-6.70	14.26	<=34.77	Pass
			24	23.07	-6.70	14.22	<=34.77	Pass
		25	0	22.28	-6.70	13.43	<=34.77	Pass
64QAM	706.5	1	0	22.22	-6.70	13.37	<=34.77	Pass
			24	22.20	-6.70	13.35	<=34.77	Pass
		25	0	21.24	-6.70	12.39	<=34.77	Pass
	710	1	0	22.15	-6.70	13.30	<=34.77	Pass
			24	22.19	-6.70	13.34	<=34.77	Pass
		25	0	21.24	-6.70	12.39	<=34.77	Pass
	713.5	1	0	22.38	-6.70	13.53	<=34.77	Pass
			24	22.33	-6.70	13.48	<=34.77	Pass
		25	0	21.29	-6.70	12.44	<=34.77	Pass
256QAM	706.5	1	0	18.94	-6.70	10.09	<=34.77	Pass
			24	18.94	-6.70	10.09	<=34.77	Pass
		25	0	19.27	-6.70	10.42	<=34.77	Pass
	710	1	0	18.91	-6.70	10.06	<=34.77	Pass
			24	18.96	-6.70	10.11	<=34.77	Pass
		25	0	19.27	-6.70	10.42	<=34.77	Pass
	713.5	1	0	19.44	-6.70	10.59	<=34.77	Pass
			24	19.42	-6.70	10.57	<=34.77	Pass
		25	0	19.21	-6.70	10.36	<=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	24.26	-6.70	15.41	<=34.77	Pass
			49	24.25	-6.70	15.40	<=34.77	Pass
		50	0	23.19	-6.70	14.34	<=34.77	Pass
	710	1	0	24.27	-6.70	15.42	<=34.77	Pass

			49	24.25	-6.70	15.40	<=34.77	Pass
		50	0	23.15	-6.70	14.30	<=34.77	Pass
	711	1	0	24.29	-6.70	15.44	<=34.77	Pass
			49	24.30	-6.70	15.45	<=34.77	Pass
		50	0	23.20	-6.70	14.35	<=34.77	Pass
16QAM	709	1	0	23.77	-6.70	14.92	<=34.77	Pass
			49	23.74	-6.70	14.89	<=34.77	Pass
		50	0	22.19	-6.70	13.34	<=34.77	Pass
	710	1	0	23.77	-6.70	14.92	<=34.77	Pass
			49	23.71	-6.70	14.86	<=34.77	Pass
		50	0	22.16	-6.70	13.31	<=34.77	Pass
	711	1	0	23.76	-6.70	14.91	<=34.77	Pass
			49	23.70	-6.70	14.85	<=34.77	Pass
		50	0	22.20	-6.70	13.35	<=34.77	Pass
64QAM	709	1	0	22.48	-6.70	13.63	<=34.77	Pass
			49	22.47	-6.70	13.62	<=34.77	Pass
		50	0	21.20	-6.70	12.35	<=34.77	Pass
	710	1	0	22.47	-6.70	13.62	<=34.77	Pass
			49	22.47	-6.70	13.62	<=34.77	Pass
		50	0	21.18	-6.70	12.33	<=34.77	Pass
	711	1	0	22.49	-6.70	13.64	<=34.77	Pass
			49	22.49	-6.70	13.64	<=34.77	Pass
		50	0	21.20	-6.70	12.35	<=34.77	Pass
256QAM	709	1	0	19.65	-6.70	10.80	<=34.77	Pass
			49	19.66	-6.70	10.81	<=34.77	Pass
		50	0	19.20	-6.70	10.35	<=34.77	Pass
	710	1	0	19.64	-6.70	10.79	<=34.77	Pass
			49	19.65	-6.70	10.80	<=34.77	Pass
		50	0	19.17	-6.70	10.32	<=34.77	Pass
	711	1	0	19.66	-6.70	10.81	<=34.77	Pass
			49	19.66	-6.70	10.81	<=34.77	Pass
		50	0	19.19	-6.70	10.34	<=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 (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	710	50	0	20	3.7	-4.449	-0.0063	-2.5 to 2.5	Pass
					3.91	-3.591	-0.0051	-2.5 to 2.5	Pass
					4.3	-5.822	-0.0082	-2.5 to 2.5	Pass
				-30	3.91	-5.322	-0.0075	-2.5 to 2.5	Pass
				-20	3.91	-3.777	-0.0053	-2.5 to 2.5	Pass
				-10	3.91	-2.389	-0.0034	-2.5 to 2.5	Pass
				0	3.91	-3.476	-0.0049	-2.5 to 2.5	Pass
				10	3.91	-5.007	-0.0071	-2.5 to 2.5	Pass
				30	3.91	-5.422	-0.0076	-2.5 to 2.5	Pass
				40	3.91	-3.233	-0.0046	-2.5 to 2.5	Pass
				50	3.91	-3.490	-0.0049	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band17_OBW

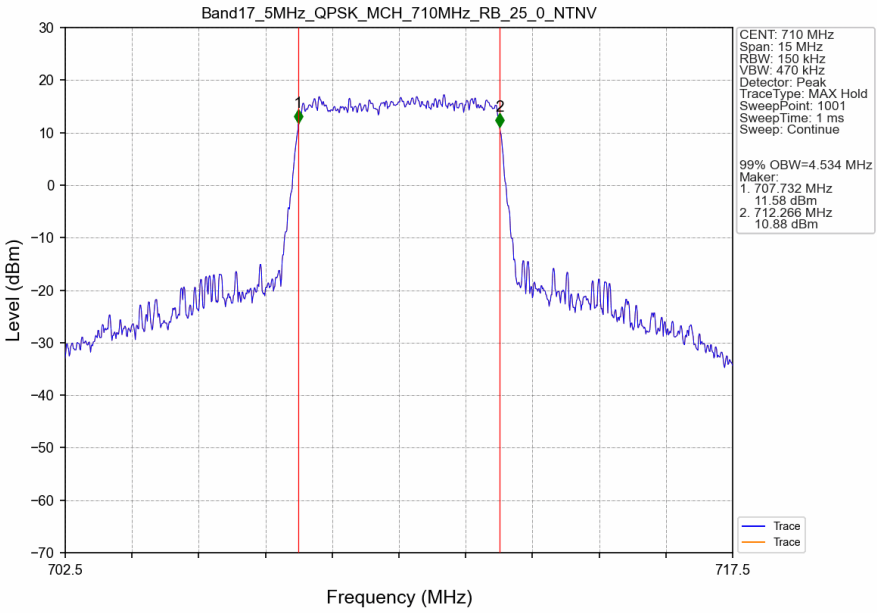
Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	4.534	/	Pass
	16QAM	710	25	0	4.549	/	Pass
10	QPSK	710	50	0	9.016	/	Pass
	16QAM	710	50	0	9.016	/	Pass

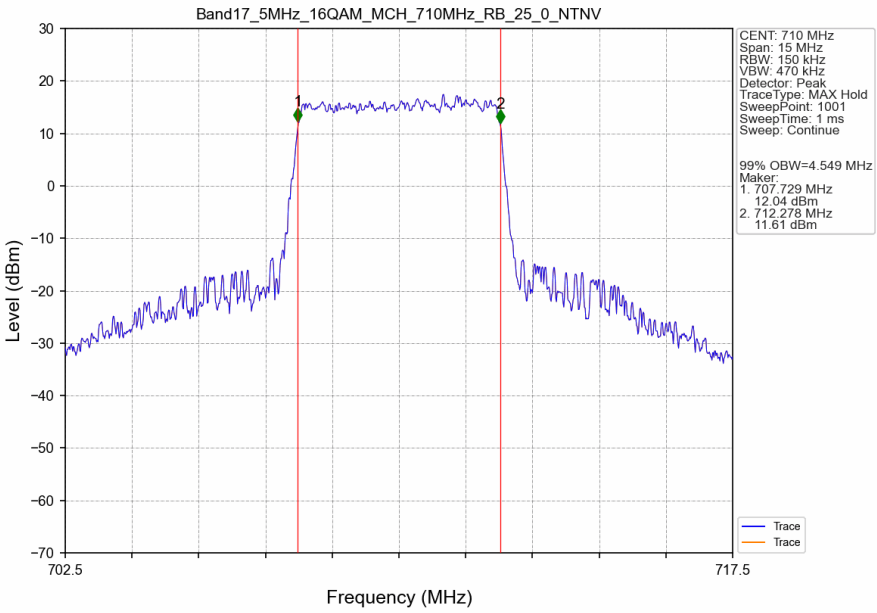
3.1.2 Band17_XDB

Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	5.039	/	Pass
	16QAM	710	25	0	5.002	/	Pass
10	QPSK	710	50	0	10.006	/	Pass
	16QAM	710	50	0	9.897	/	Pass

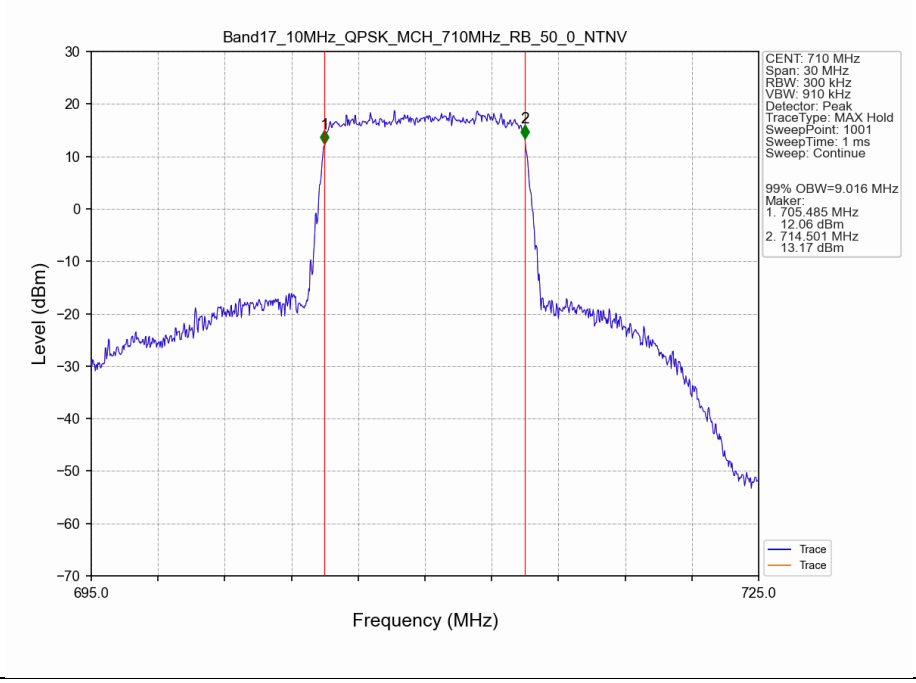
3.2 Test Graph

3.2.1 Band17_OBW

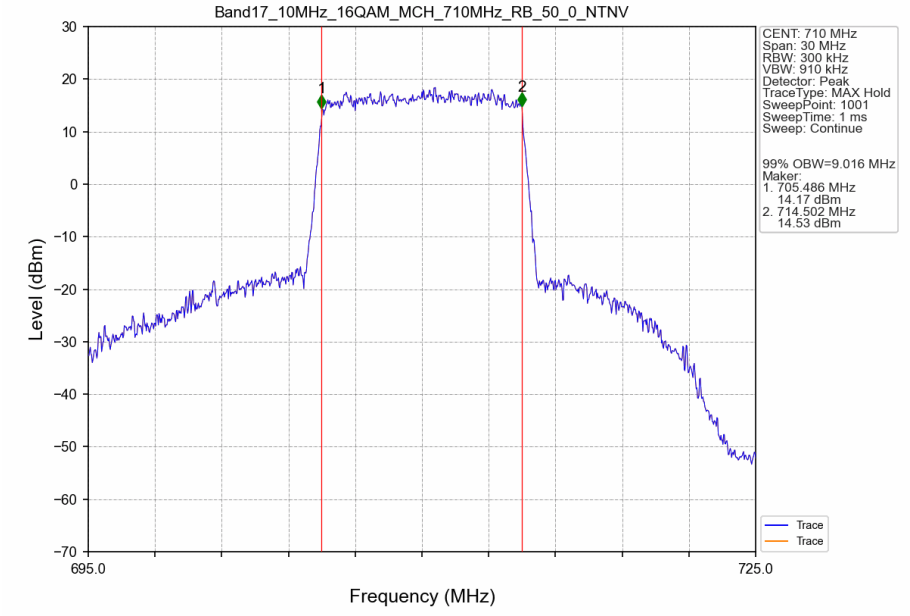
Band17_5MHz_QPSK_MCH_710MHz_RB_25_0_NTNV


Band17_5MHz_16QAM_MCH_710MHz_RB_25_0_NTNV


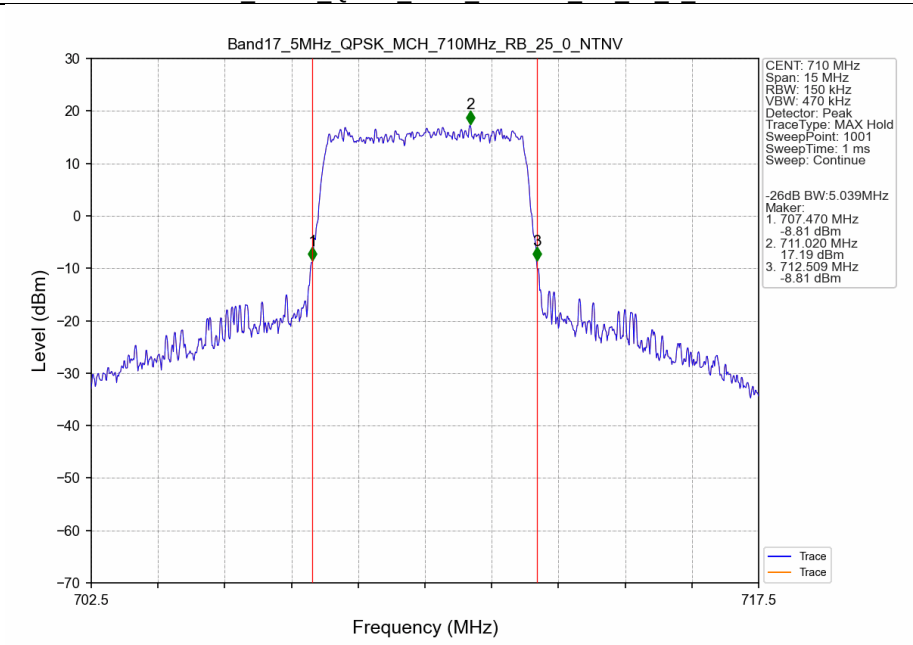
Band17_10MHz_QPSK_MCH_710MHz_RB_50_0_NTNV

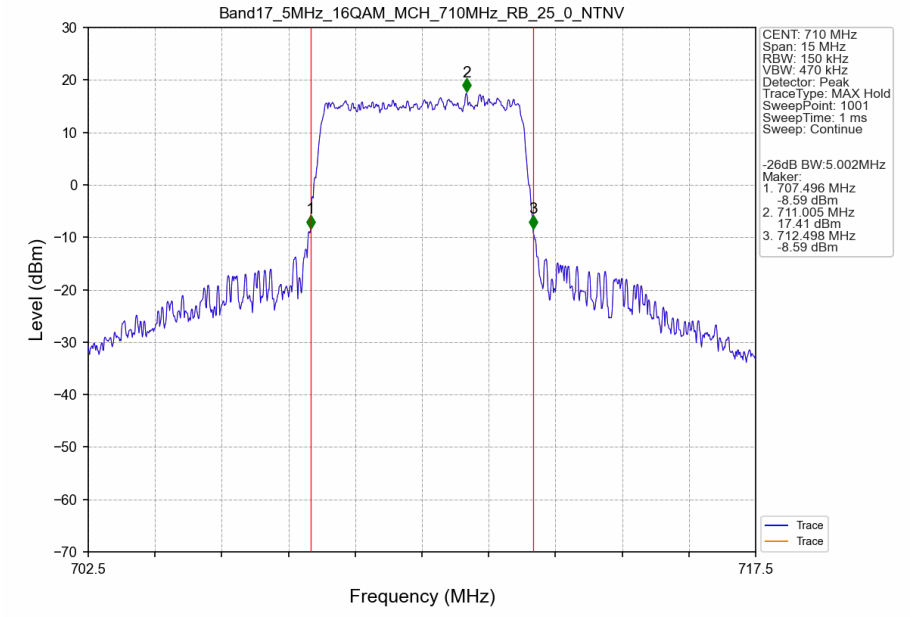


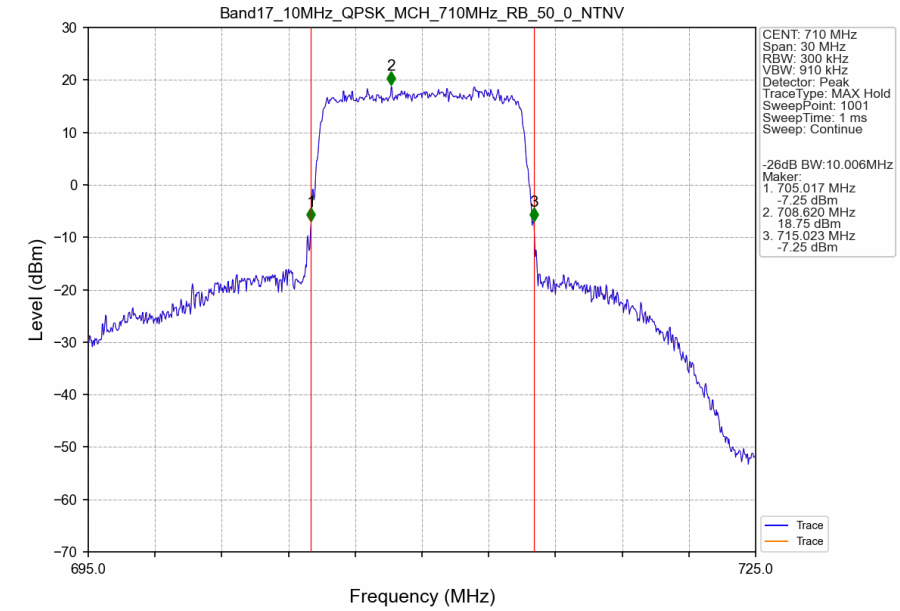
Band17_10MHz_16QAM_MCH_710MHz_RB_50_0_NTNV

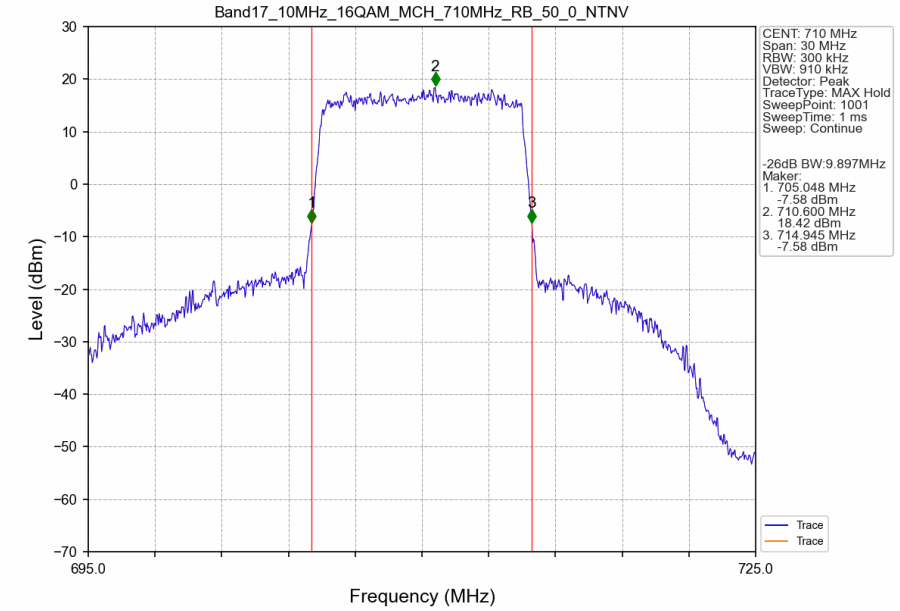


3.2.2 Band17_XDB

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

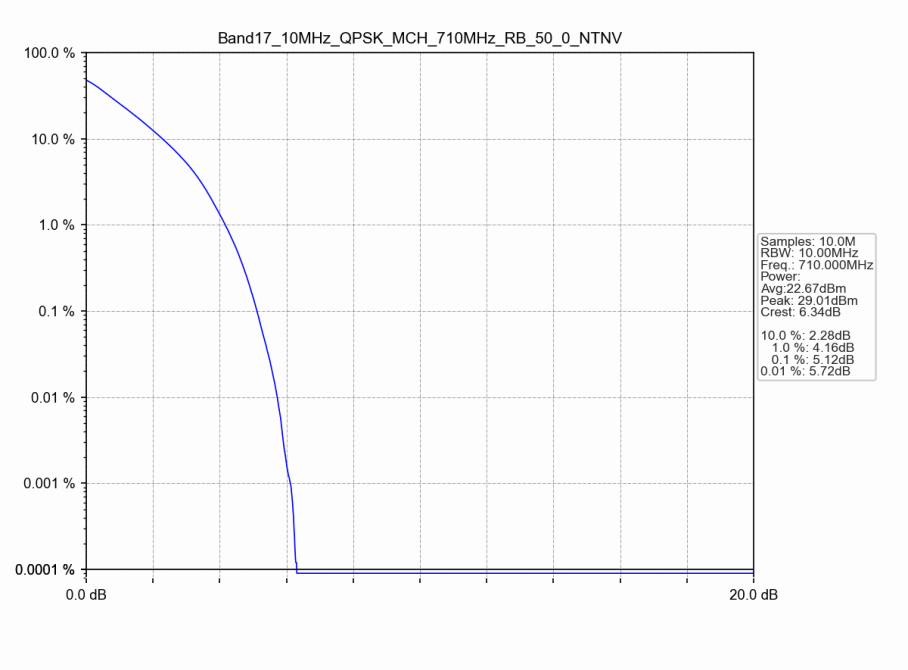
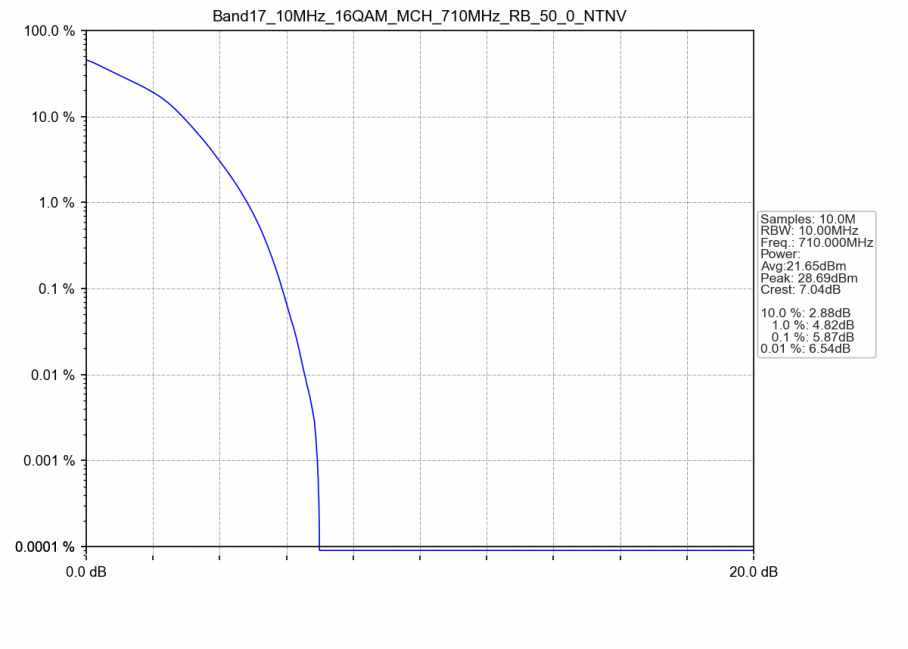
4.1 Test Result

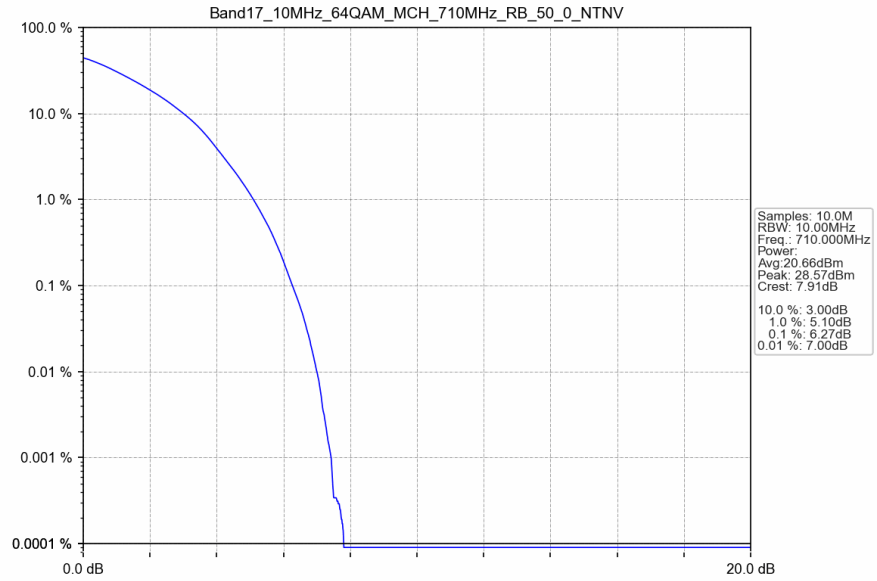
4.1.1 B17_10MHz

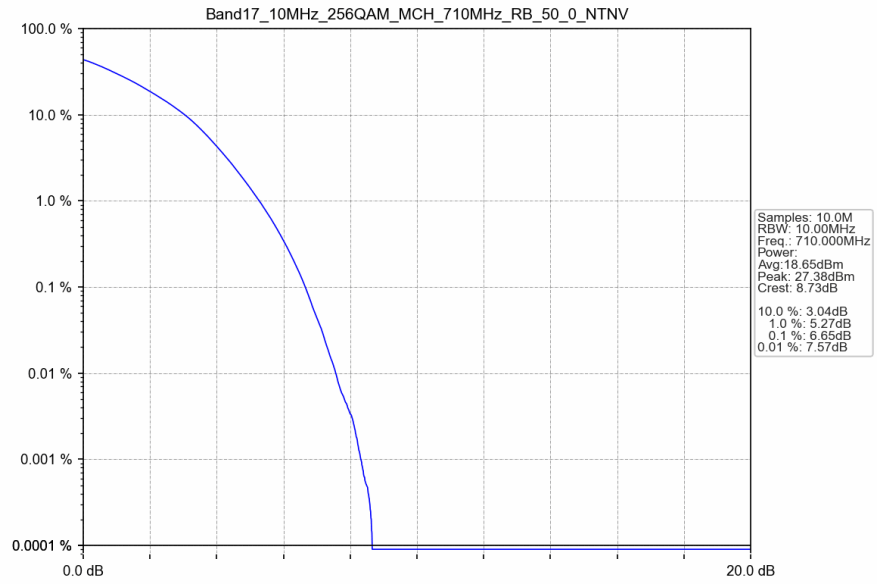
Band: 17 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	710	50	0	5.12	<=13	Pass
16QAM	710	50	0	5.87	<=13	Pass
64QAM	710	50	0	6.27	<=13	Pass
256QAM	710	50	0	6.65	<=13	Pass

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

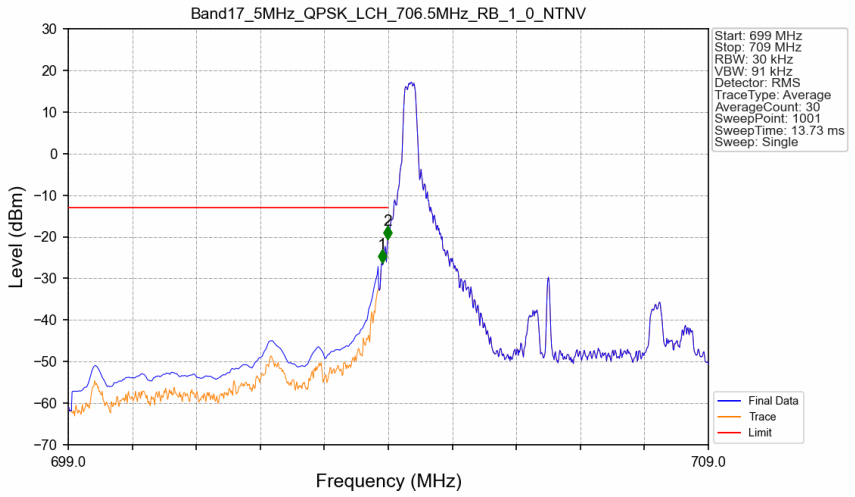
5.1.2 B17_10MHz

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

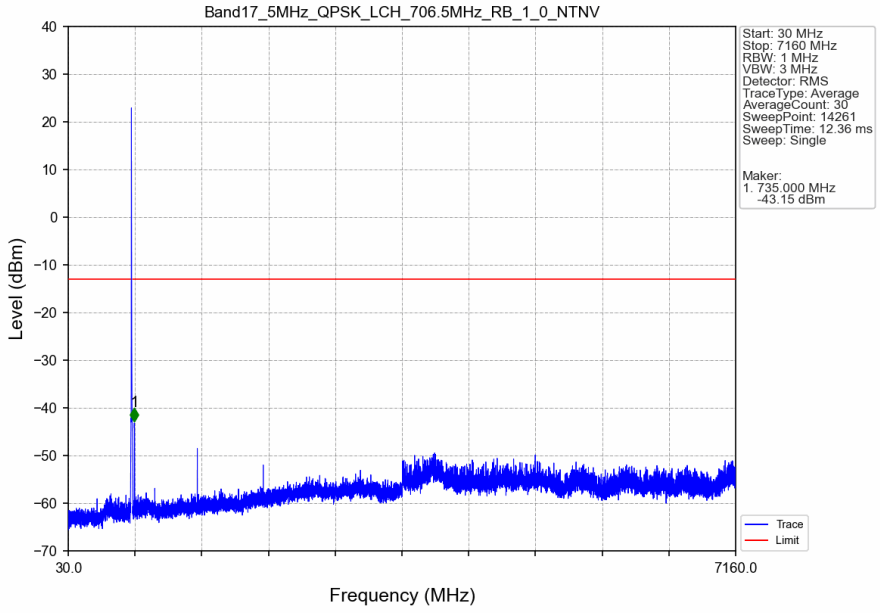
5.2.1 B17_5MHz

Band17_5MHz_QPSK_LCH_706.5MHz_RB_1_0_NTNV

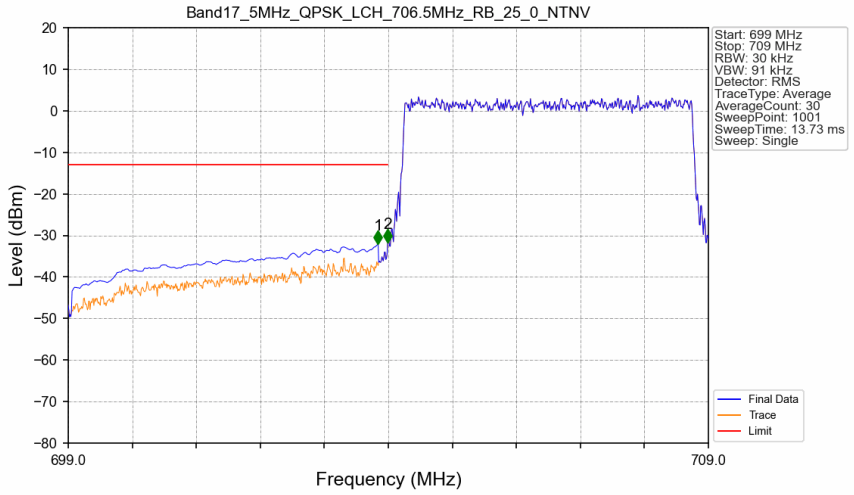


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
699	703.9	0.1	CHP	1	703.900	-26.29	-13	Pass
703.9	704	0.03	/	2	703.990	-20.63	-13	Pass
704	709	0.03	/	/	/	/	/	/

Band17_5MHz_QPSK_LCH_706.5MHz_RB_1_0_NTNV

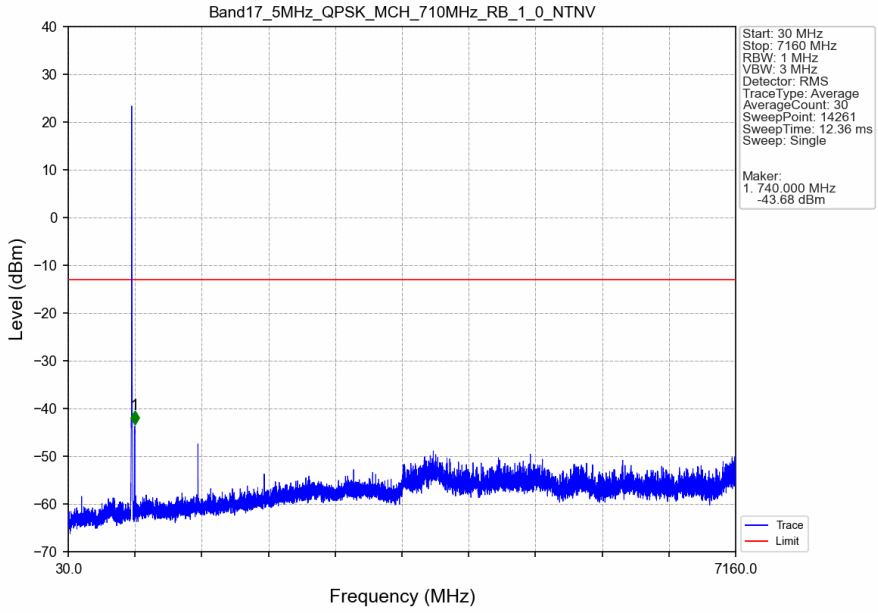


Band17_5MHz_QPSK_LCH_706.5MHz_RB_25_0_NTNV

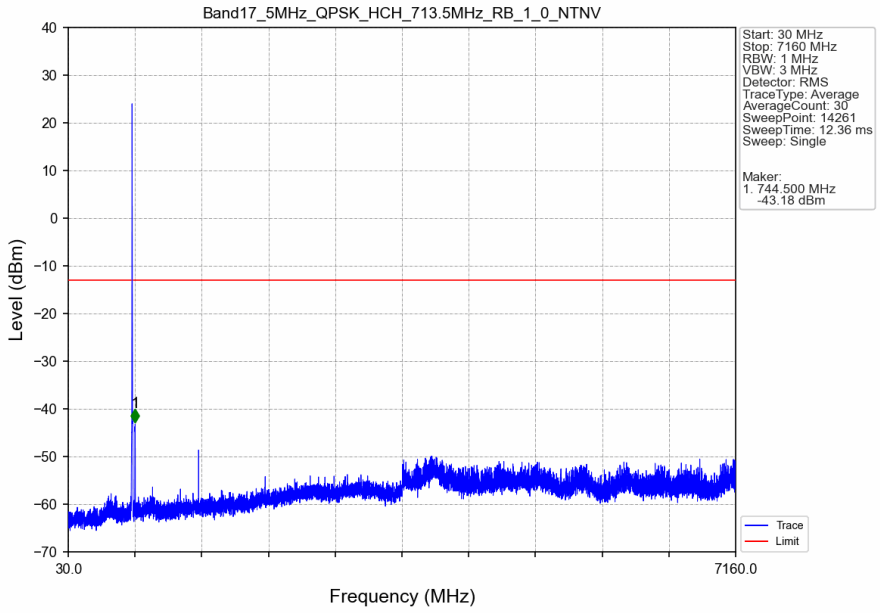


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
699	703.9	0.1	CHP	1	703.840	-32.05	-13	Pass
703.9	704	0.03	/	2	703.990	-31.62	-13	Pass
704	709	0.03	/	/	/	/	/	/

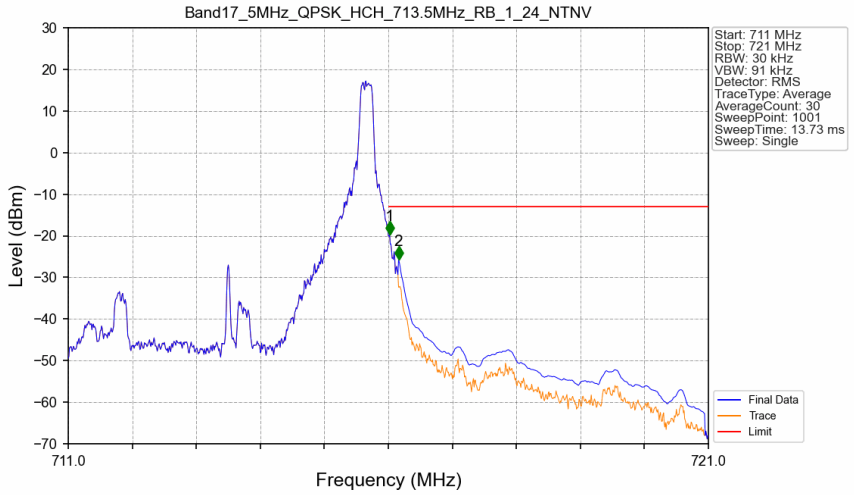
Band17_5MHz_QPSK_MCH_710MHz_RB_1_0_NTNV



Band17_5MHz_QPSK_HCH_713.5MHz_RB_1_0_NTNV

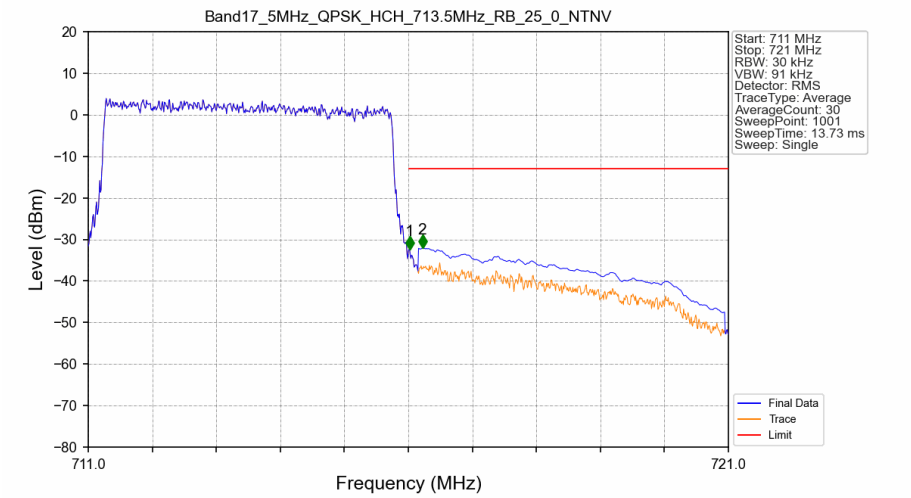


Band17_5MHz_QPSK_HCH_713.5MHz_RB_1_24_NTNV



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	716.020	-19.74	-13	Pass
716.1	721	0.1	CHP	2	716.160	-25.66	-13	Pass

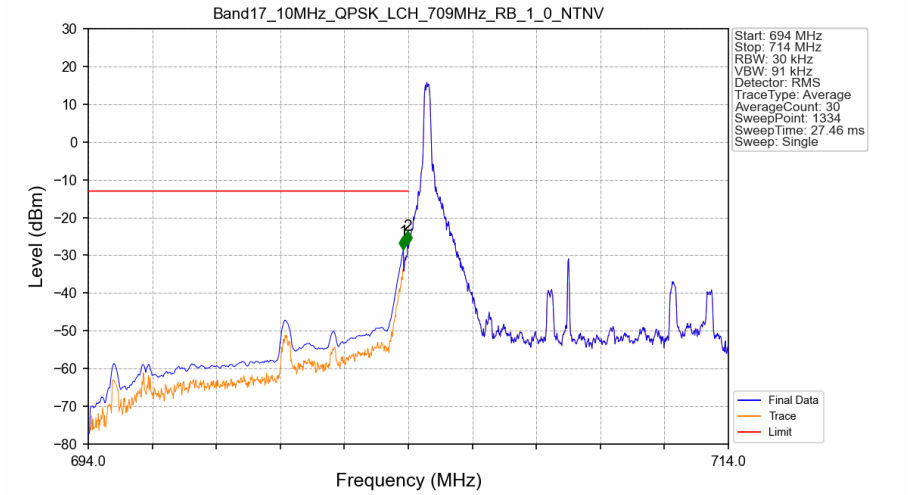
Band17_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



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	716.020	-32.38	-13	Pass
716.1	721	0.1	CHP	2	716.220	-32.08	-13	Pass

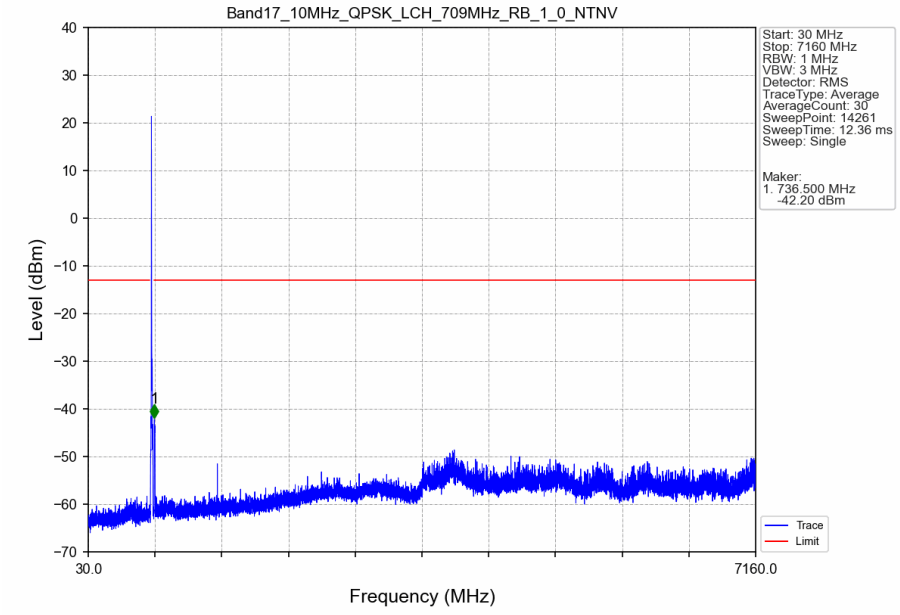
5.2.2 B17_10MHz

Band17_10MHz_QPSK_LCH_709MHz_RB_1_0_NTNV

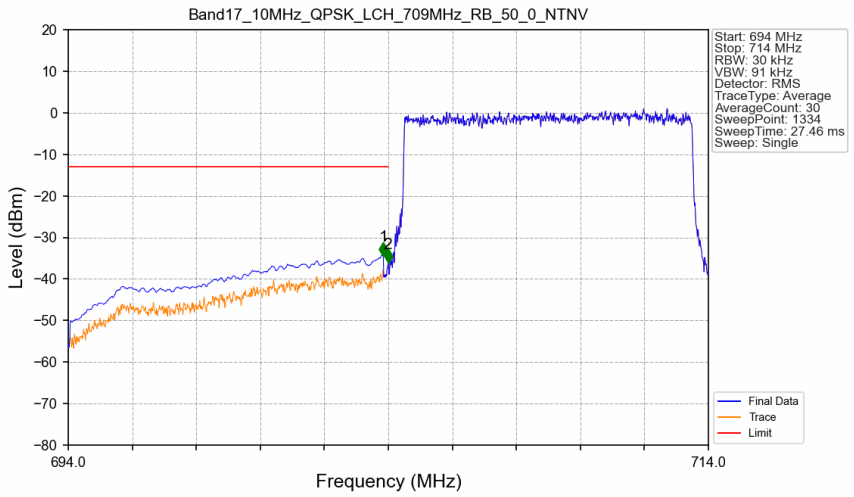


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	703.9	0.1	CHP	1	703.842	-28.36	-13	Pass
703.9	704	0.03	/	2	703.977	-26.97	-13	Pass
704	714	0.03	/	/	/	/	/	/

Band17_10MHz_QPSK_LCH_709MHz_RB_1_0_NTNV

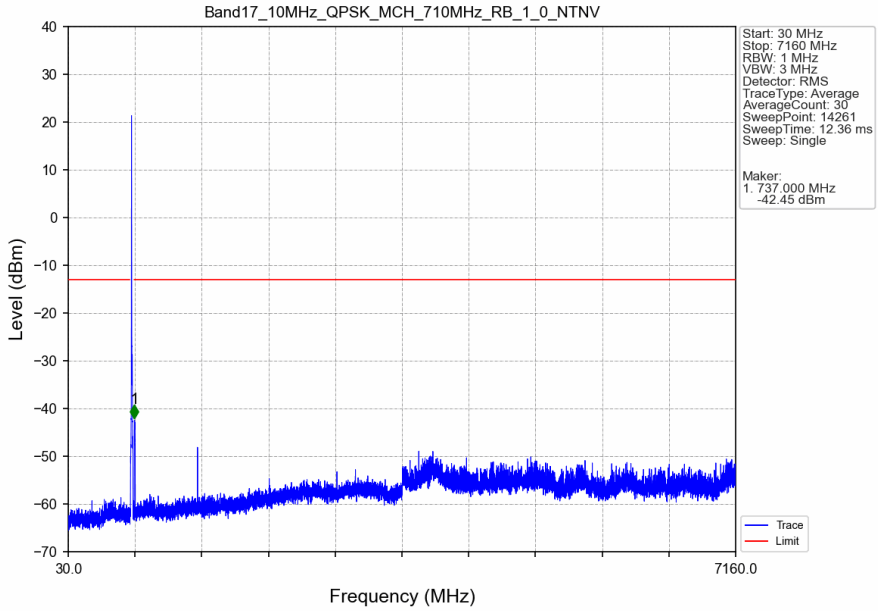


Band17_10MHz_QPSK_LCH_709MHz_RB_50_0_NTNV

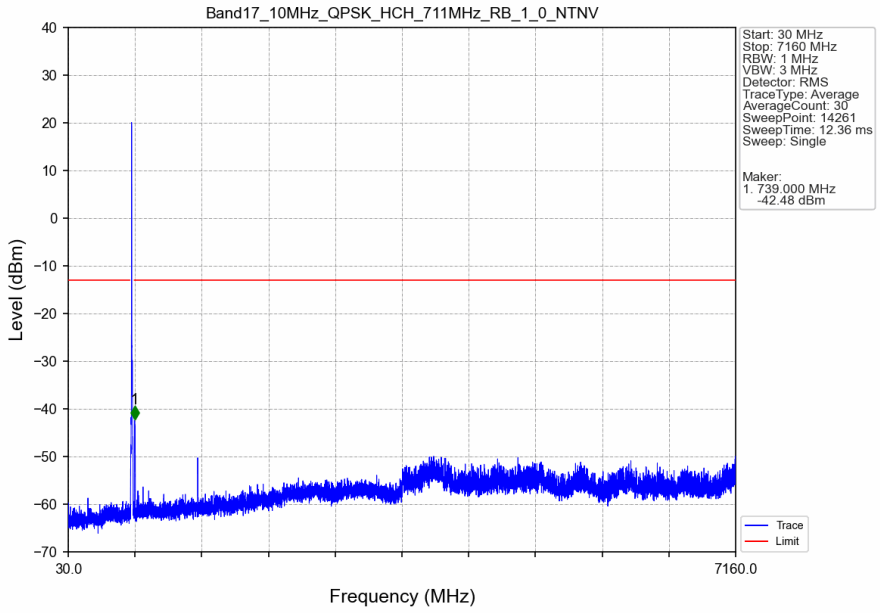


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	703.9	0.1	CHP	1	703.842	-34.32	-13	Pass
703.9	704	0.03	/	2	703.992	-36.11	-13	Pass
704	714	0.03	/	/	/	/	/	/

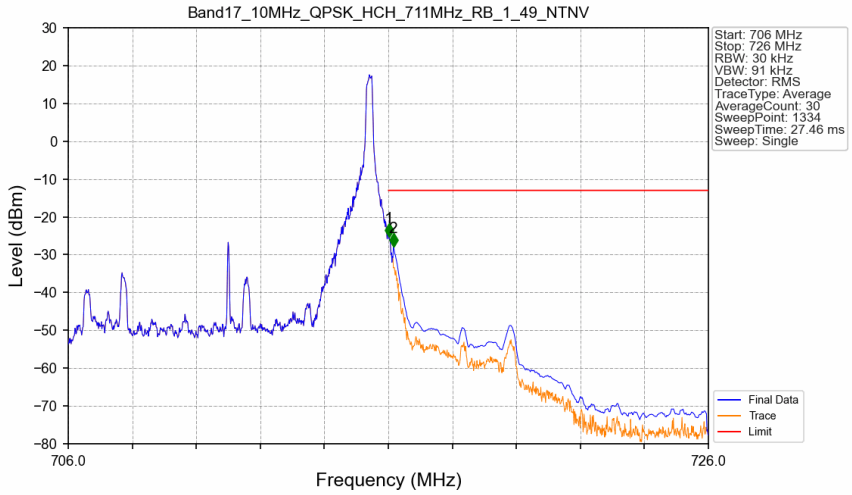
Band17_10MHz_QPSK_MCH_710MHz_RB_1_0_NTNV



Band17_10MHz_QPSK_HCH_711MHz_RB_1_0_NTNV

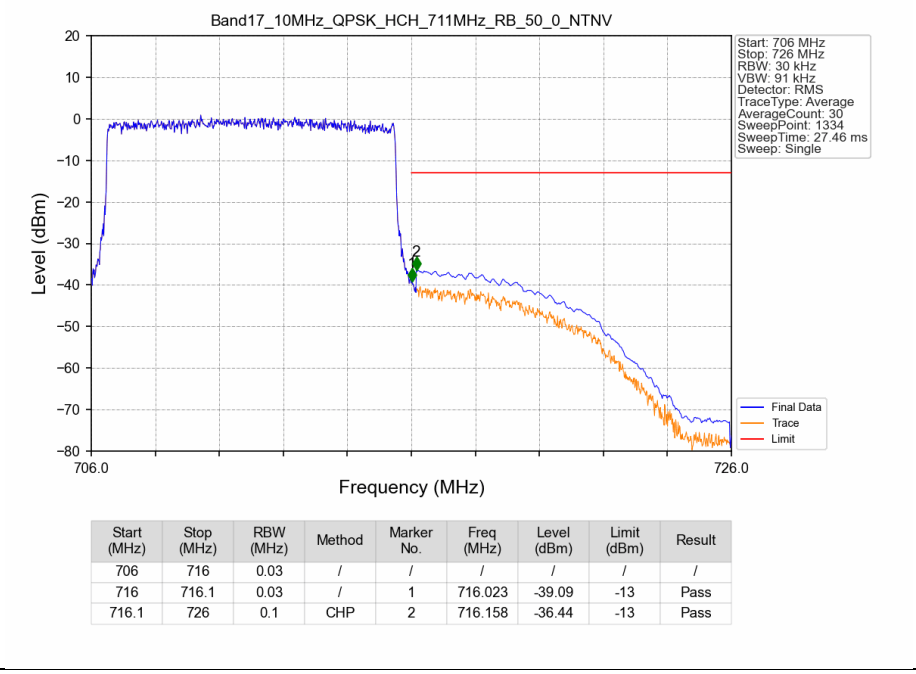


Band17_10MHz_QPSK_HCH_711MHz_RB_1_49_NTNV



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	-25.17	-13	Pass
716.1	726	0.1	CHP	2	716.158	-27.91	-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	-39.09	-13	Pass
716.1	726	0.1	CHP	2	716.158	-36.44	-13	Pass

6. Field Strength of Spurious Radiation

LTE Band 17 ANT13-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	-63.79	-13	-50.79	-66.61	2.48	5.3	Horizontal	Pass
2113.5	-65.29	-13	-52.29	-67.38	2.8	4.89	Horizontal	Pass
2818.0	-63.86	-13	-50.86	-67.26	3.12	6.52	Horizontal	Pass
1409.0	-65.24	-13	-52.24	-68.06	2.48	5.3	Vertical	Pass
2113.5	-64.68	-13	-51.68	-66.77	2.8	4.89	Vertical	Pass
2818.0	-63.33	-13	-50.33	-66.73	3.12	6.52	Vertical	Pass

LTE Band 17 ANT13-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	-64.66	-13	-51.66	-67.49	2.49	5.32	Horizontal	Pass
2116.5	-65.55	-13	-52.55	-67.65	2.8	4.9	Horizontal	Pass
2822.0	-63.69	-13	-50.69	-67.09	3.13	6.53	Horizontal	Pass
1411.0	-65.39	-13	-52.39	-68.22	2.49	5.32	Vertical	Pass
2116.5	-65.24	-13	-52.24	-67.34	2.8	4.9	Vertical	Pass
2822.0	-63.38	-13	-50.38	-66.78	3.13	6.53	Vertical	Pass

LTE Band 17 ANT13-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	-65.8	-13	-52.8	-68.64	2.49	5.33	Horizontal	Pass
2119.5	-64.78	-13	-51.78	-66.88	2.81	4.91	Horizontal	Pass
2826.0	-63.86	-13	-50.86	-67.27	3.13	6.54	Horizontal	Pass
1413.0	-64.62	-13	-51.62	-67.46	2.49	5.33	Vertical	Pass
2119.5	-63.92	-13	-50.92	-66.02	2.81	4.91	Vertical	Pass
2826.0	-62.94	-13	-49.94	-66.35	3.13	6.54	Vertical	Pass