

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	23.23	-1.89	19.19	<=34.77	Pass
			24	22.97	-1.89	18.93	<=34.77	Pass
		25	0	22.10	-1.89	18.06	<=34.77	Pass
	710	1	0	22.92	-1.89	18.88	<=34.77	Pass
			24	22.79	-1.89	18.75	<=34.77	Pass
		25	0	21.84	-1.89	17.80	<=34.77	Pass
	713.5	1	0	23.03	-1.89	18.99	<=34.77	Pass
			24	22.83	-1.89	18.79	<=34.77	Pass
		25	0	21.93	-1.89	17.89	<=34.77	Pass
16QAM	706.5	1	0	22.06	-1.89	18.02	<=34.77	Pass
			24	21.86	-1.89	17.82	<=34.77	Pass
		25	0	21.06	-1.89	17.02	<=34.77	Pass
	710	1	0	22.15	-1.89	18.11	<=34.77	Pass
			24	22.06	-1.89	18.02	<=34.77	Pass
		25	0	20.80	-1.89	16.76	<=34.77	Pass
	713.5	1	0	22.13	-1.89	18.09	<=34.77	Pass
			24	22.01	-1.89	17.97	<=34.77	Pass
		25	0	20.95	-1.89	16.91	<=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	23.23	-1.89	19.19	<=34.77	Pass
			49	22.94	-1.89	18.90	<=34.77	Pass
		50	0	21.97	-1.89	17.93	<=34.77	Pass
	710	1	0	23.21	-1.89	19.17	<=34.77	Pass
			49	22.89	-1.89	18.85	<=34.77	Pass
		50	0	21.92	-1.89	17.88	<=34.77	Pass
	711	1	0	23.28	-1.89	19.24	<=34.77	Pass
			49	22.86	-1.89	18.82	<=34.77	Pass
		50	0	21.99	-1.89	17.95	<=34.77	Pass
16QAM	709	1	0	22.83	-1.89	18.79	<=34.77	Pass
			49	22.52	-1.89	18.48	<=34.77	Pass
		50	0	20.93	-1.89	16.89	<=34.77	Pass
	710	1	0	22.40	-1.89	18.36	<=34.77	Pass
			49	22.04	-1.89	18.00	<=34.77	Pass
		50	0	20.87	-1.89	16.83	<=34.77	Pass
	711	1	0	22.28	-1.89	18.24	<=34.77	Pass
			49	21.93	-1.89	17.89	<=34.77	Pass
		50	0	20.94	-1.89	16.90	<=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	12	0.944	0.0013	-2.5 to 2.5	Pass
					24	1.602	0.0023	-2.5 to 2.5	Pass
					48	1.202	0.0017	-2.5 to 2.5	Pass
				-30	24	1.316	0.0019	-2.5 to 2.5	Pass
				-20	24	0.544	0.0008	-2.5 to 2.5	Pass
				-10	24	0.072	0.0001	-2.5 to 2.5	Pass
				0	24	0.458	0.0006	-2.5 to 2.5	Pass
				10	24	-0.215	-0.0003	-2.5 to 2.5	Pass
				30	24	-0.229	-0.0003	-2.5 to 2.5	Pass
				40	24	-0.501	-0.0007	-2.5 to 2.5	Pass
				50	24	-0.744	-0.0010	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band17_OBW

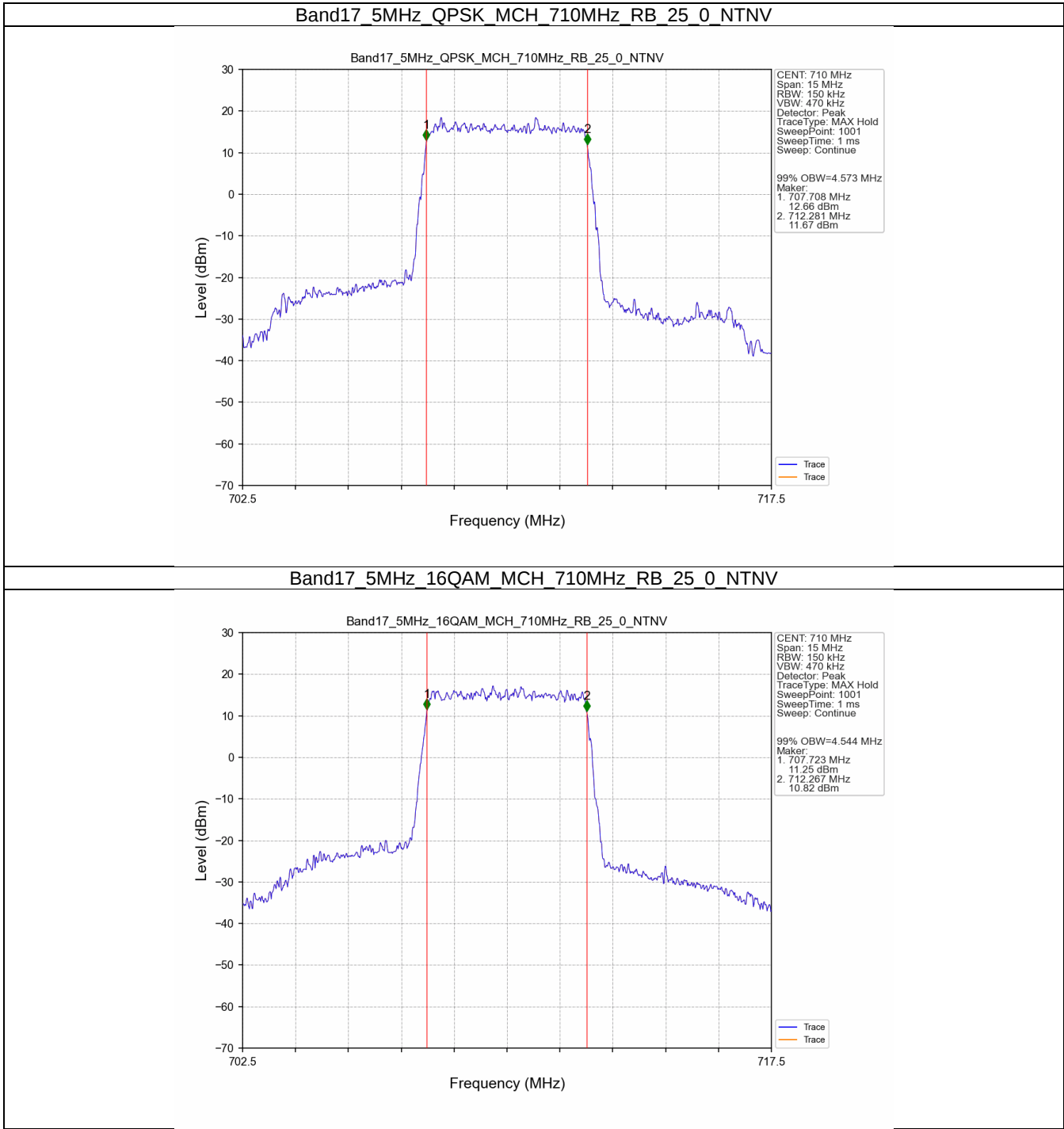
Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	4.573	/	Pass
	16QAM	710	25	0	4.544	/	Pass
10	QPSK	710	50	0	9.047	/	Pass
	16QAM	710	50	0	9.068	/	Pass

3.1.2 Band17_XDB

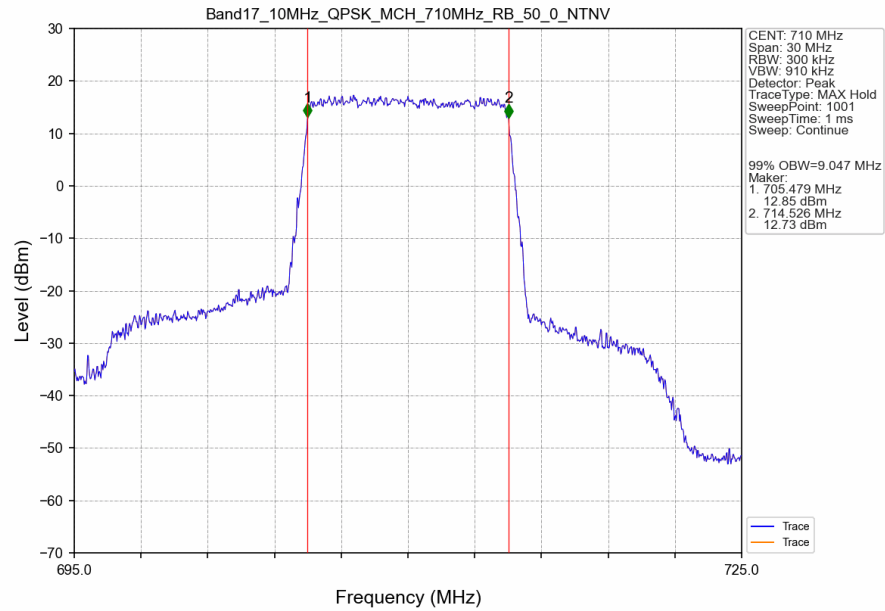
Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	5.075	/	Pass
	16QAM	710	25	0	5.026	/	Pass
10	QPSK	710	50	0	10.076	/	Pass
	16QAM	710	50	0	10.003	/	Pass

3.2 Test Graph

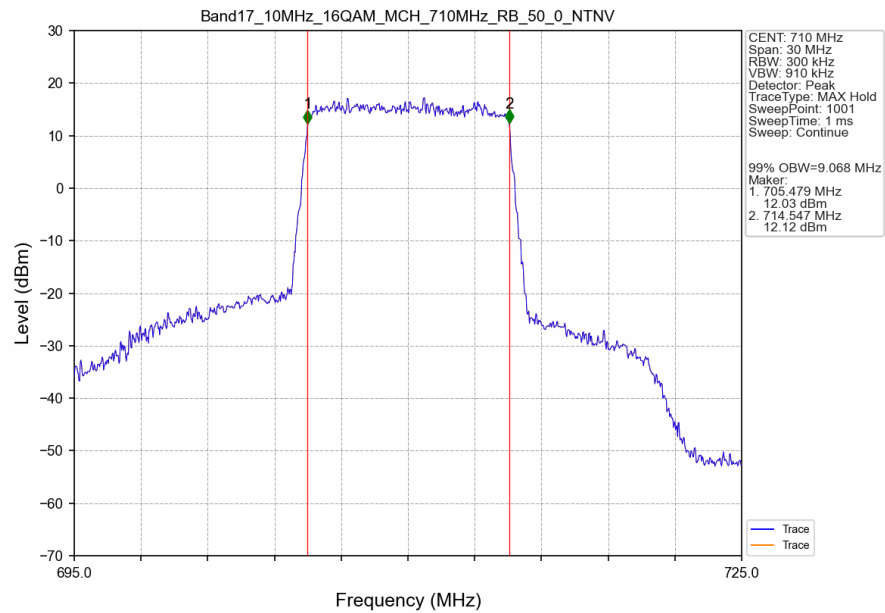
3.2.1 Band17_OBW



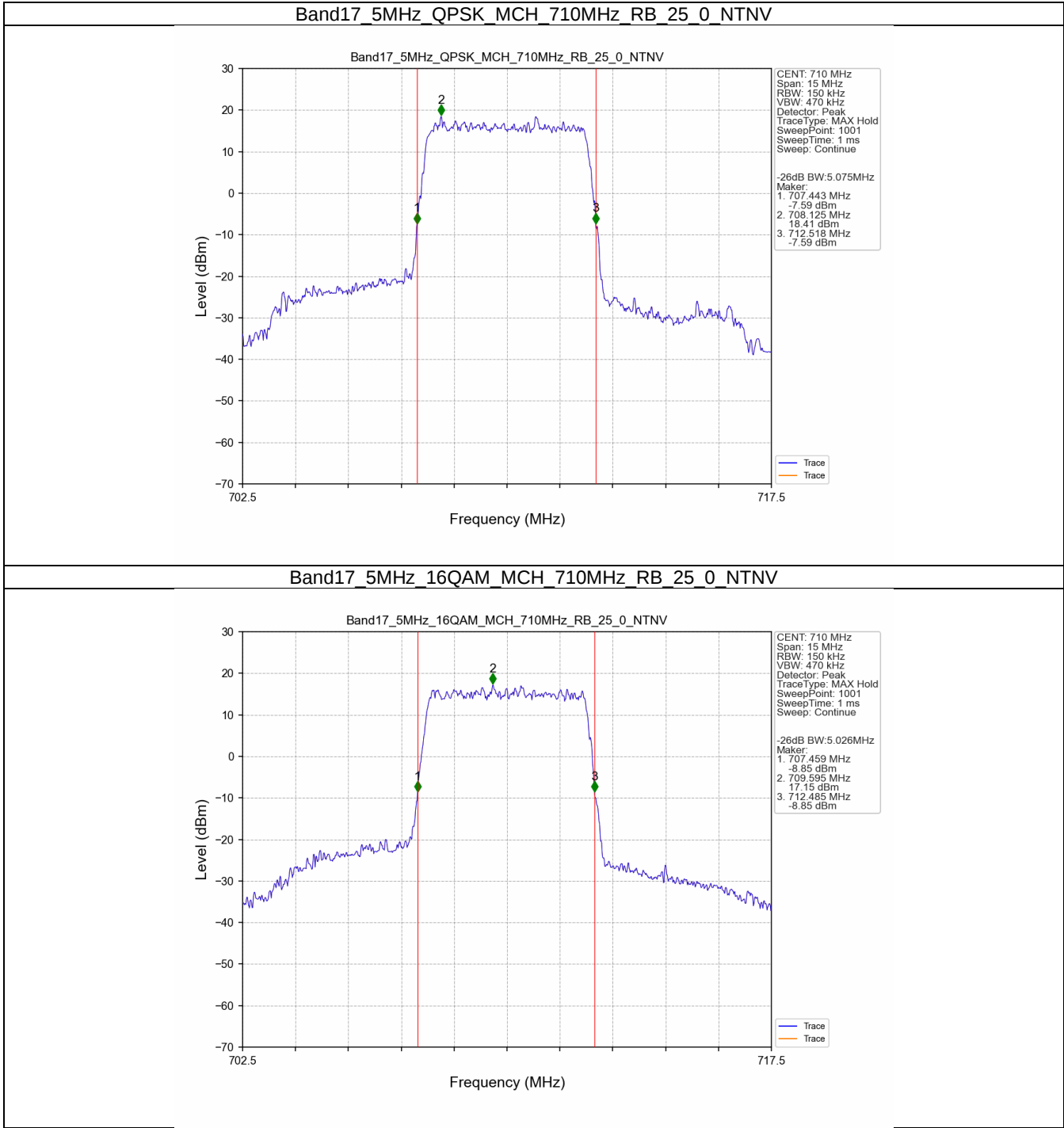
Band17_10MHz_QPSK_MCH_710MHz_RB_50_0_NTNV



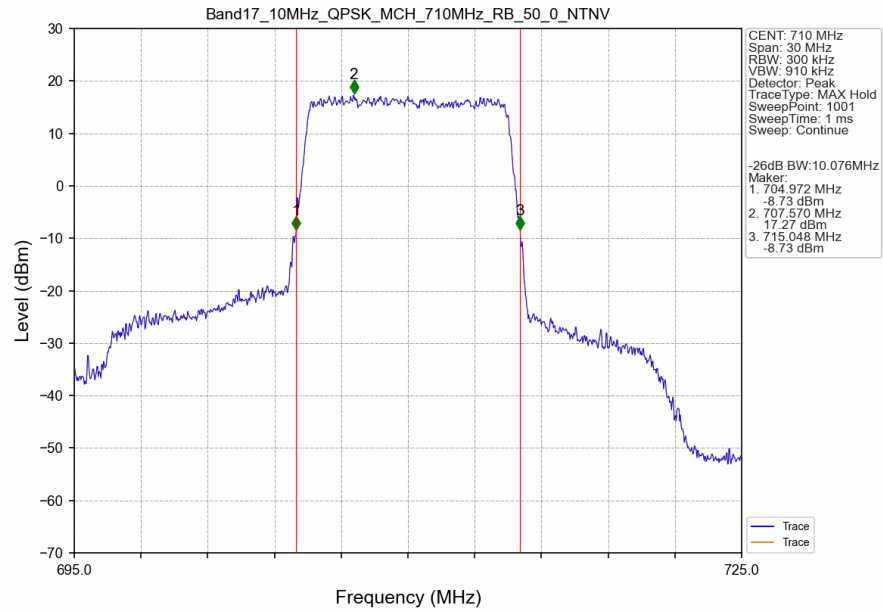
Band17_10MHz_16QAM_MCH_710MHz_RB_50_0_NTNV



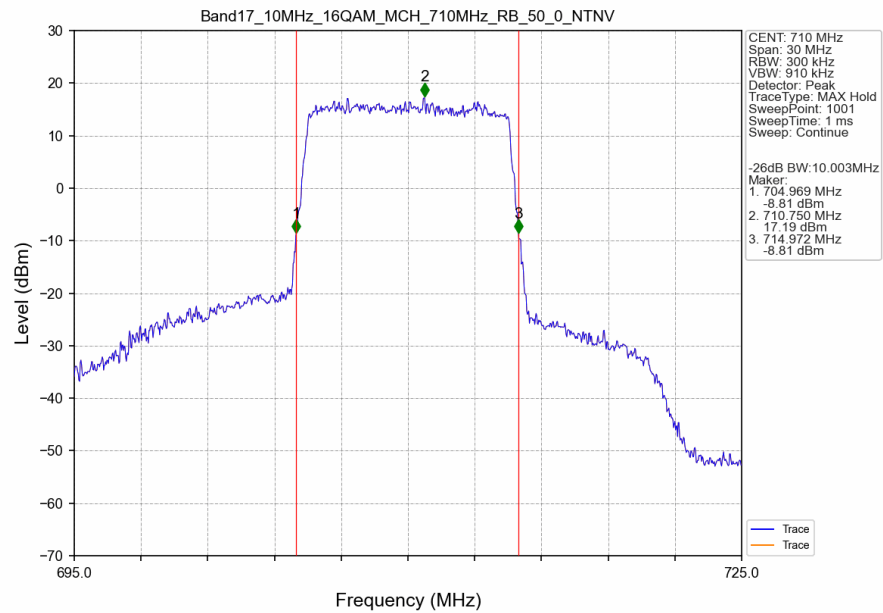
3.2.2 Band17_XDB



Band17_10MHz_QPSK_MCH_710MHz_RB_50_0_NTNV



Band17_10MHz_16QAM_MCH_710MHz_RB_50_0_NTNV



4. Peak-Average Ratio

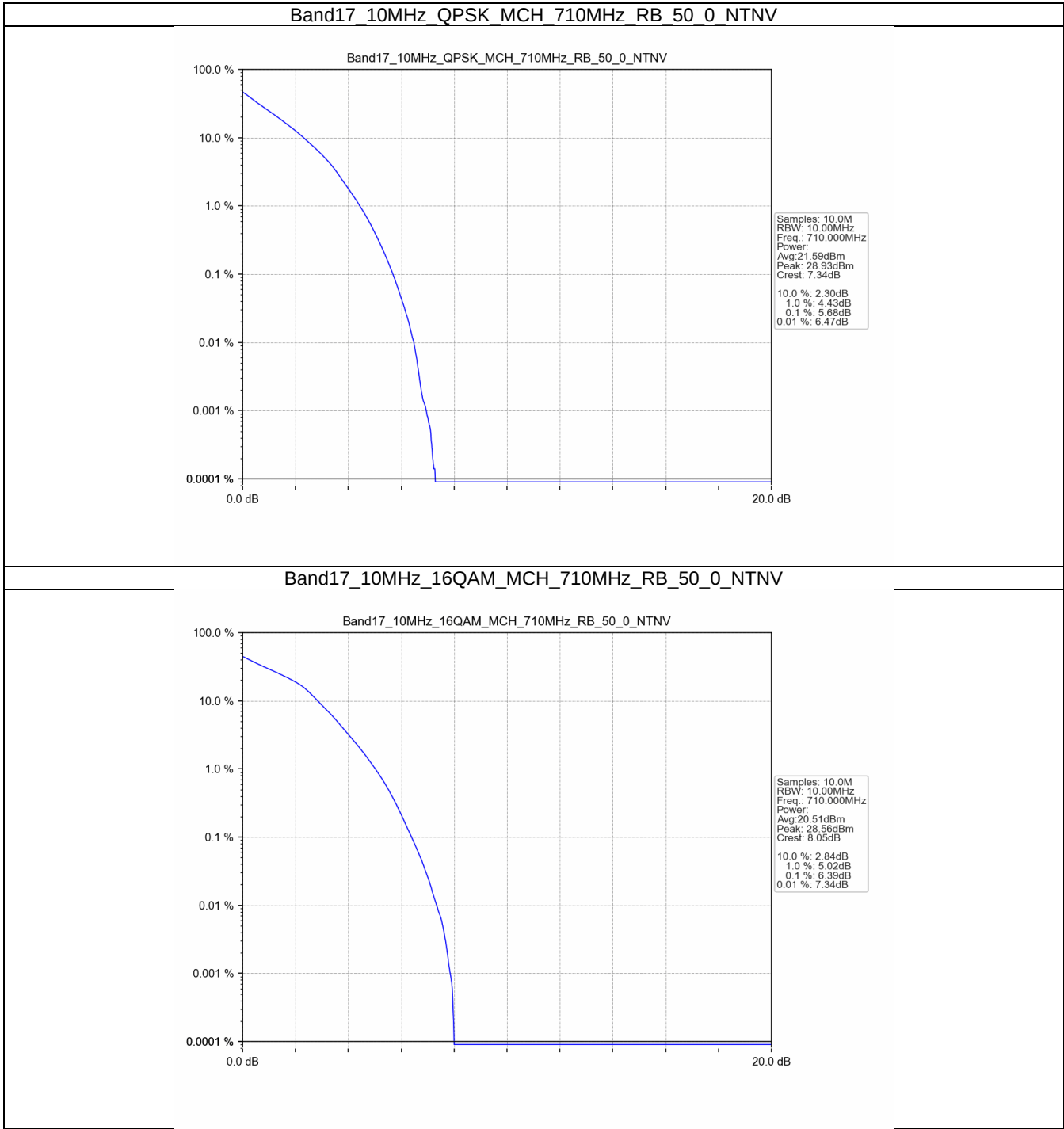
4.1 Test Result

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	5.68	<=13	Pass
16QAM	710	50	0	6.39	<=13	Pass

4.2 Test Graph

4.2.1 B17_10MHz



5. Spurious Emission

5.1 Test Result

5.1.1 B17_5MHz

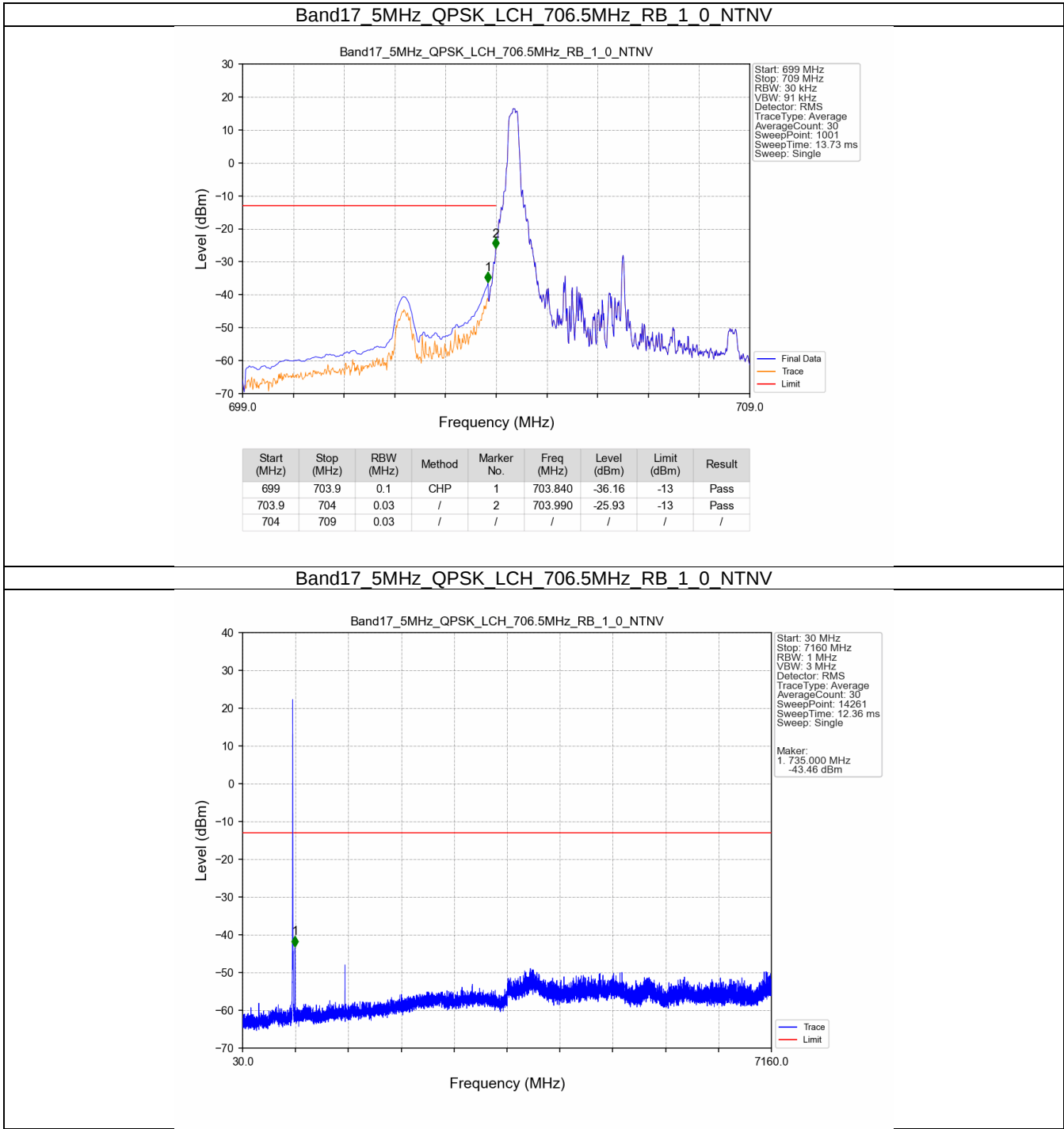
Band: 17 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	706.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	710	1	0	Refer To Test Graph		Pass
	713.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B17_10MHz

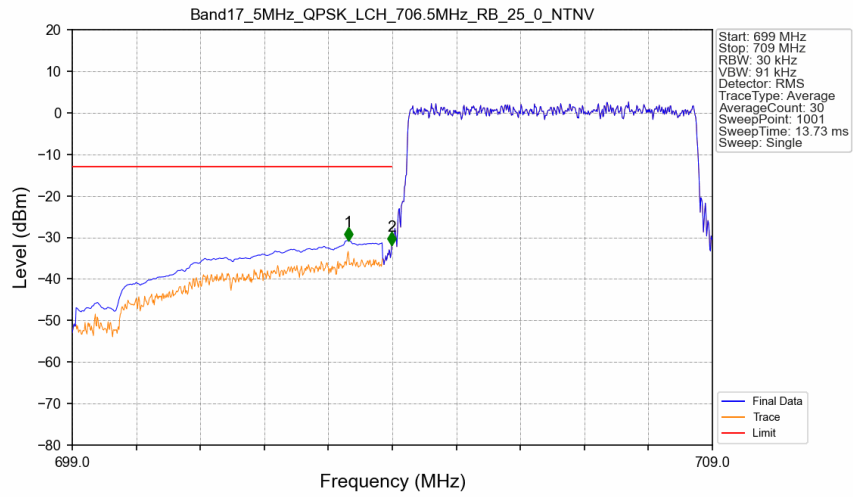
Band: 17 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	709	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	710	1	0	Refer To Test Graph		Pass
	711	1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph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

5.2 Test Graph

5.2.1 B17_5MHz

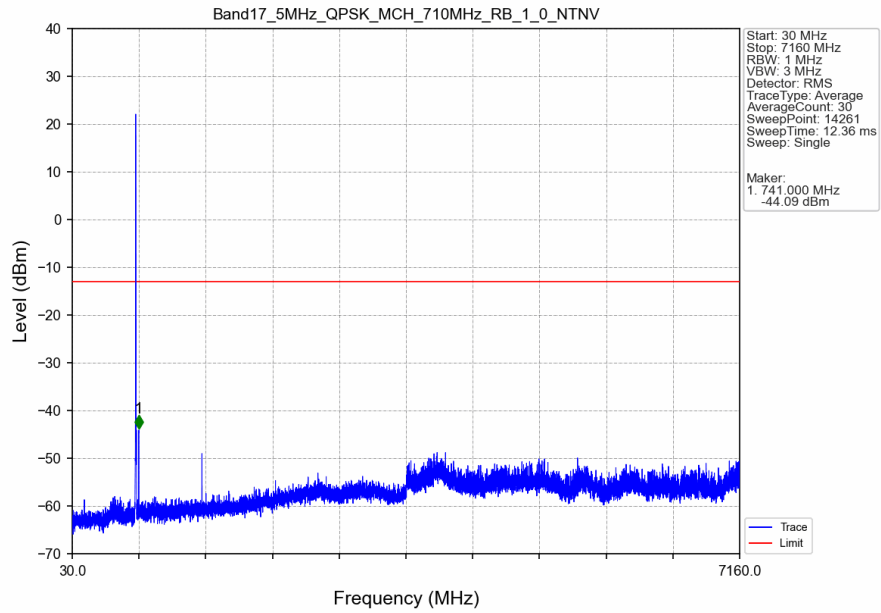


Band17 5MHz QPSK LCH 706.5MHz RB 25 0 NTV

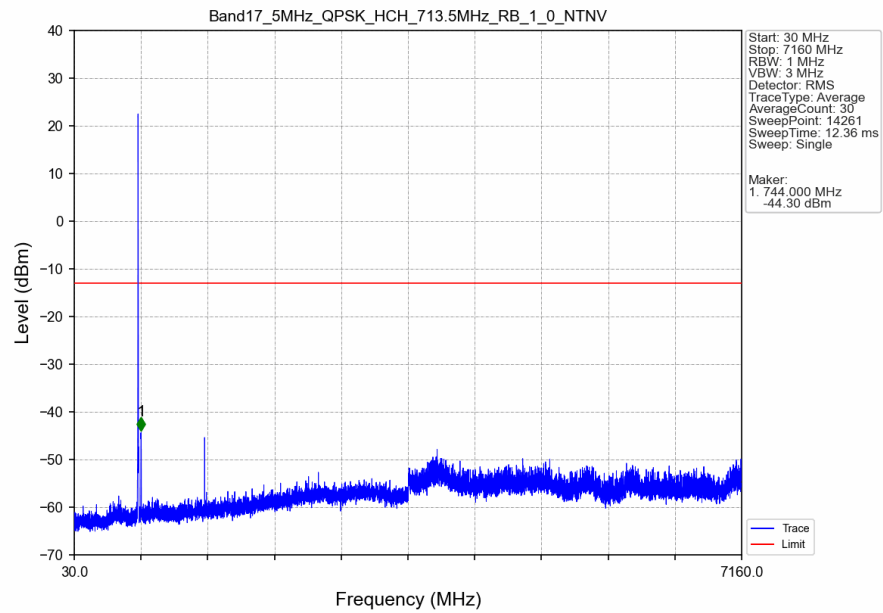


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
699	703.9	0.1	CHP	1	703.310	-30.78	-13	Pass
703.9	704	0.03	/	2	703.990	-31.86	-13	Pass
704	709	0.03	/	/	/	/	/	/

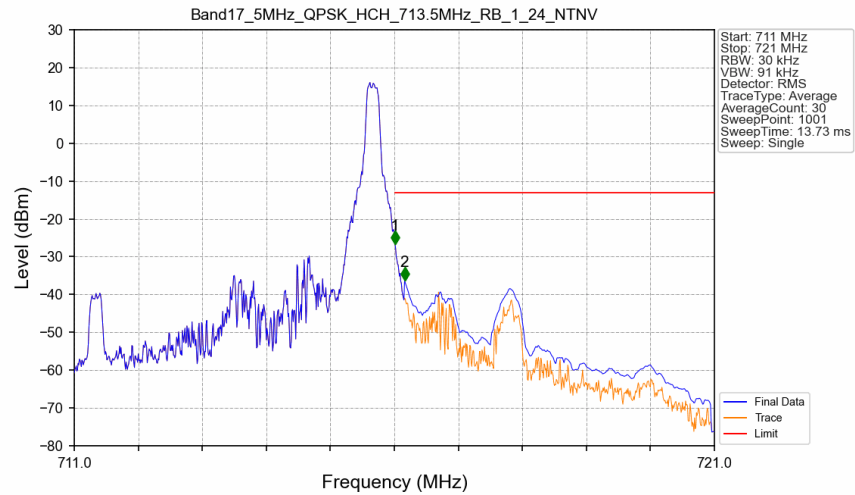
Band17 5MHz QPSK MCH 710MHz RB 1 0 NTV



Band17 5MHz QPSK HCH 713.5MHz RB 1 0 NTV

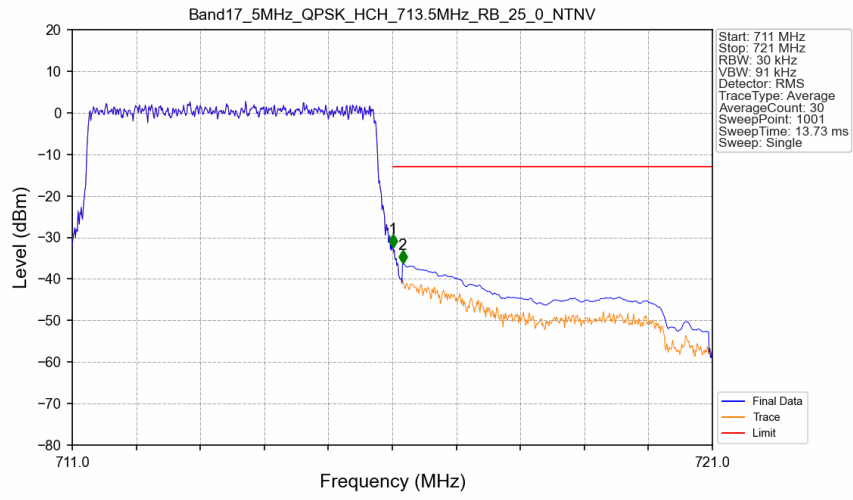


Band17 5MHz QPSK HCH 713.5MHz RB 1 24 NTV



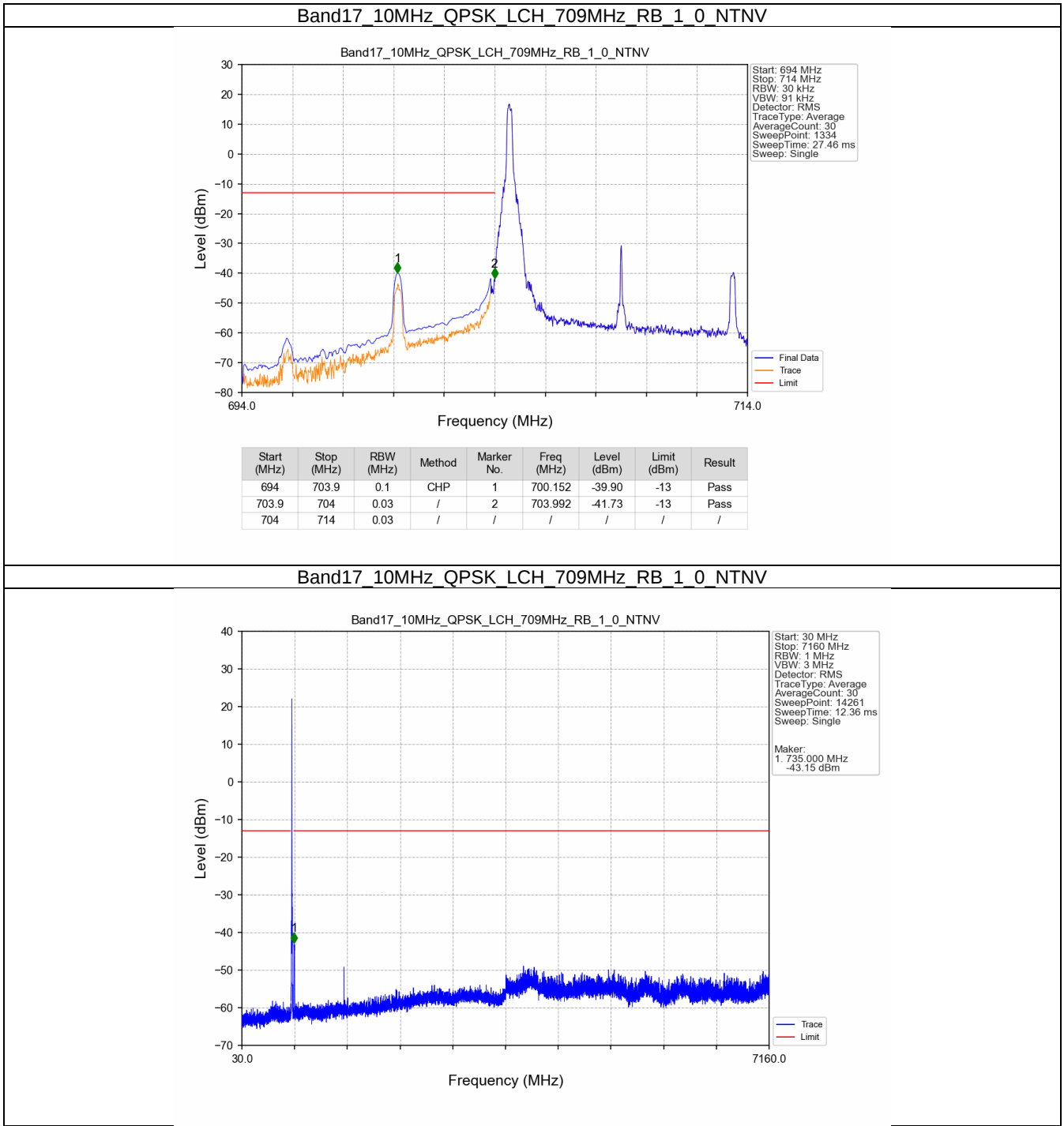
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.010	-26.63	-13	Pass
716.1	721	0.1	CHP	2	716.160	-36.17	-13	Pass

Band17 5MHz QPSK HCH 713.5MHz RB 25 0 NTN

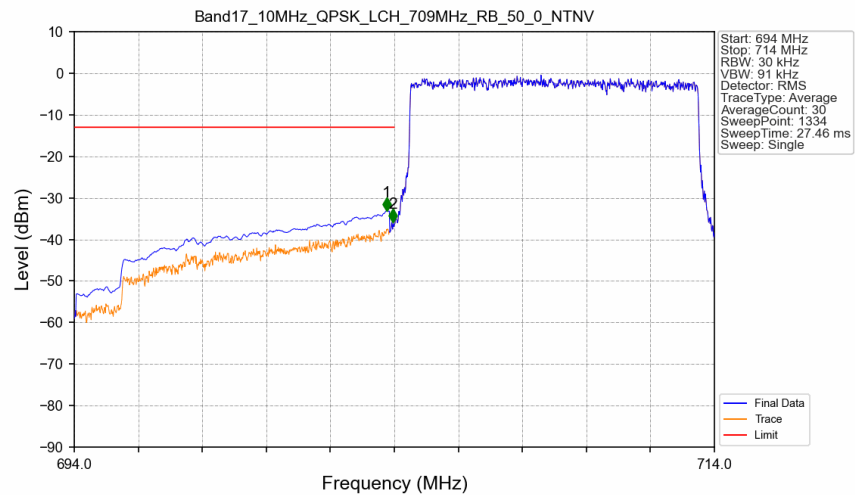


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.010	-32.38	-13	Pass
716.1	721	0.1	CHP	2	716.160	-36.16	-13	Pass

5.2.2 B17_10MHz

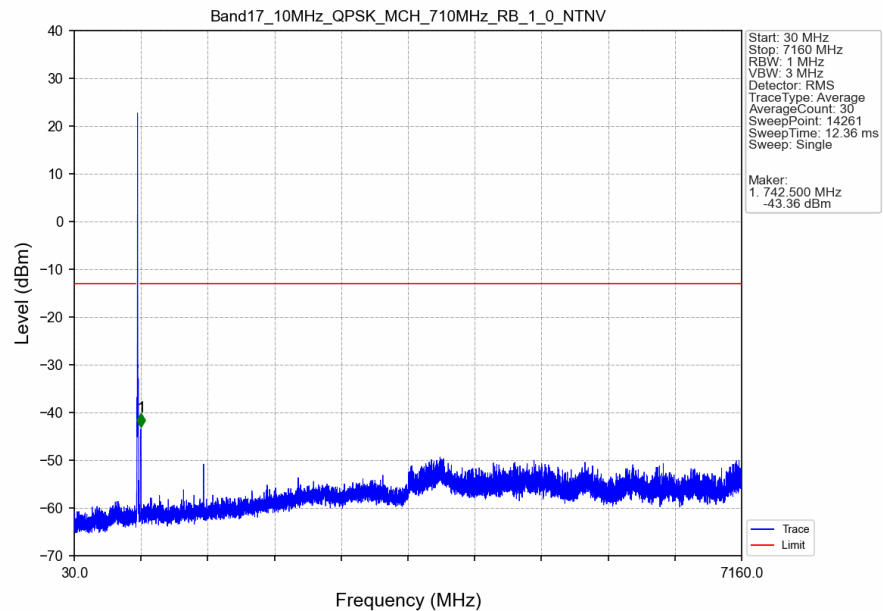


Band17_10MHz_QPSK_LCH_709MHz_RB_50_0_NTNV

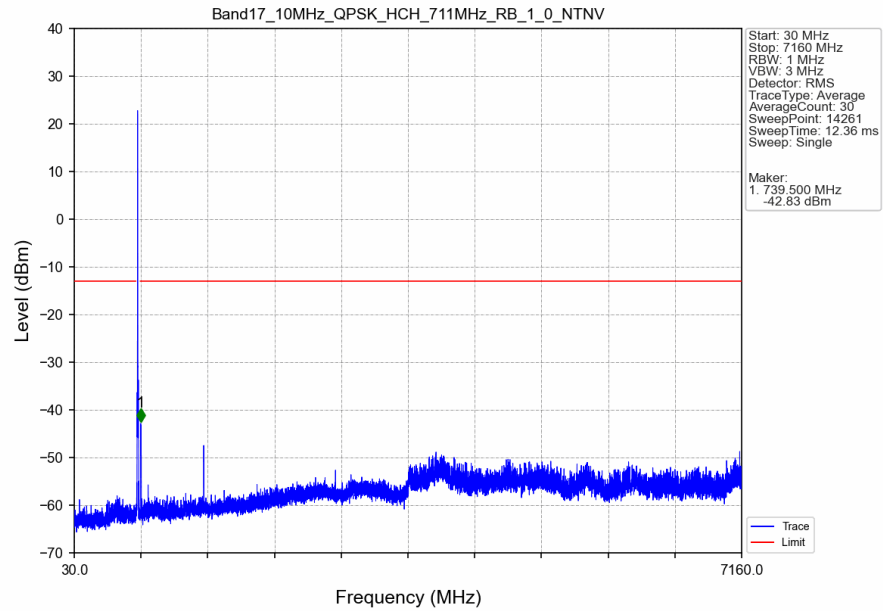


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	703.9	0.1	CHP	1	703.752	-33.14	-13	Pass
703.9	704	0.03	/	2	703.962	-35.78	-13	Pass
704	714	0.03	/	/	/	/	/	/

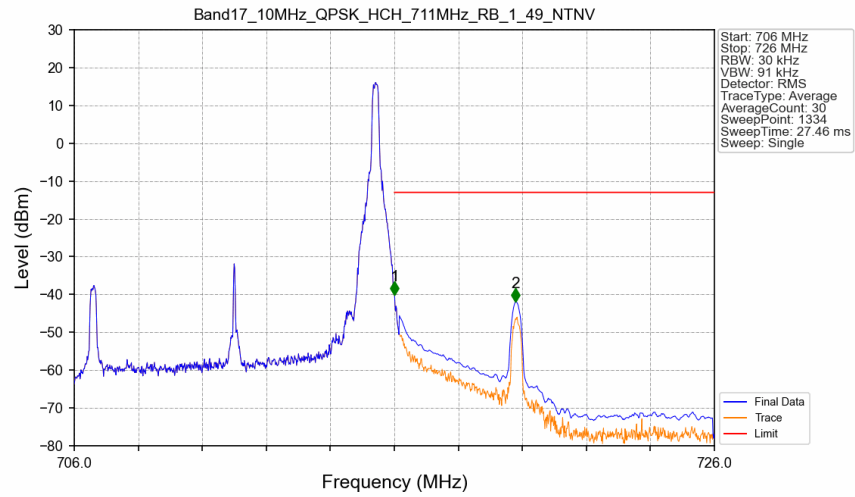
Band17_10MHz_QPSK_MCH_710MHz_RB_1_0_NTNV



Band17 10MHz QPSK HCH 711MHz RB 1 0 NTN

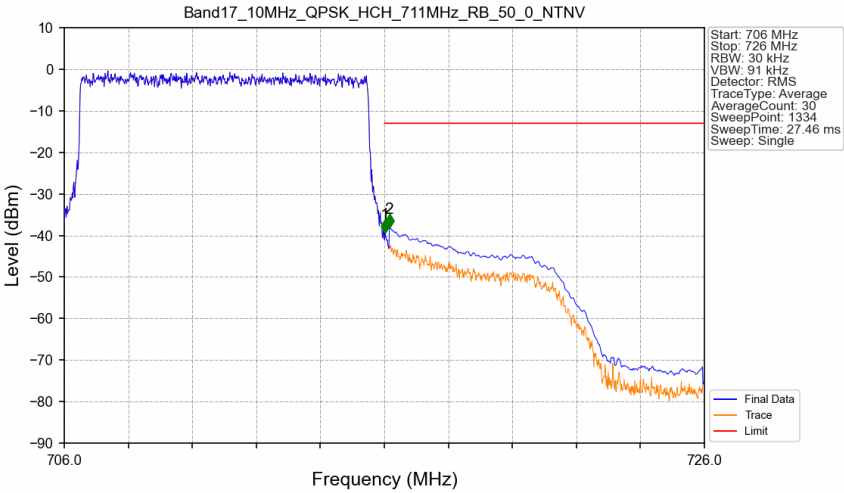


Band17 10MHz QPSK HCH 711MHz RB 1 49 NTN



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	-40.00	-13	Pass
716.1	726	0.1	CHP	2	719.788	-41.91	-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	-39.29	-13	Pass
716.1	726	0.1	CHP	2	716.158	-38.10	-13	Pass

6. Field Strength of Spurious Radiation

LTE Band 17-Low channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0				
Frequency	Spurious Emission Level		Limit	Margin
(MHz)	Polaxis	(dBm)	(dBm)	(dB)
1409	H	-56.37	-13	43.37
2113.5	H	-54.15	-13	41.15
2818	H	-56.93	-13	43.93
1409	V	-57.76	-13	44.76
2113.5	V	-52.52	-13	39.52
2818	V	-57.51	-13	44.51

LTE Band 17-Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0				
Frequency	Spurious Emission Level		Limit	Margin
(MHz)	Polaxis	(dBm)	(dBm)	(dB)
1411	H	-58.88	-13	45.88
2116.5	H	-52.47	-13	39.47
2822	H	-56.71	-13	43.71
1411	V	-55.2	-13	42.2
2116.5	V	-50.87	-13	37.87
2822	V	-56.03	-13	43.03

LTE Band 17-High channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0				
Frequency	Spurious Emission Level		Limit	Margin
(MHz)	Polaxis	(dBm)	(dBm)	(dB)
1413	H	-61.72	-13	48.72
2119.5	H	-50.16	-13	37.16
2826	H	-56.81	-13	43.81
1413	V	-56.54	-13	43.54
2119.5	V	-51.14	-13	38.14
2826	V	-56.97	-13	43.97