

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	23.12	-4.00	16.97	<=34.77	Pass
			13	23.25	-4.00	17.10	<=34.77	Pass
			24	23.07	-4.00	16.92	<=34.77	Pass
		12	0	22.24	-4.00	16.09	<=34.77	Pass
			6	22.25	-4.00	16.10	<=34.77	Pass
			13	22.21	-4.00	16.06	<=34.77	Pass
		25	0	22.23	-4.00	16.08	<=34.77	Pass
	710	1	0	23.13	-4.00	16.98	<=34.77	Pass
			13	23.20	-4.00	17.05	<=34.77	Pass
			24	23.02	-4.00	16.87	<=34.77	Pass
		12	0	22.14	-4.00	15.99	<=34.77	Pass
			6	22.18	-4.00	16.03	<=34.77	Pass
			13	22.10	-4.00	15.95	<=34.77	Pass
		25	0	22.13	-4.00	15.98	<=34.77	Pass
	713.5	1	0	23.07	-4.00	16.92	<=34.77	Pass
			13	23.24	-4.00	17.09	<=34.77	Pass
			24	23.07	-4.00	16.92	<=34.77	Pass
		12	0	22.11	-4.00	15.96	<=34.77	Pass
			6	22.16	-4.00	16.01	<=34.77	Pass
			13	22.06	-4.00	15.91	<=34.77	Pass
		25	0	22.13	-4.00	15.98	<=34.77	Pass
16QAM	706.5	1	0	22.38	-4.00	16.23	<=34.77	Pass
			13	22.43	-4.00	16.28	<=34.77	Pass
			24	22.27	-4.00	16.12	<=34.77	Pass
		12	0	21.29	-4.00	15.14	<=34.77	Pass
			6	21.29	-4.00	15.14	<=34.77	Pass
			13	21.25	-4.00	15.10	<=34.77	Pass
		25	0	21.29	-4.00	15.14	<=34.77	Pass
	710	1	0	22.30	-4.00	16.15	<=34.77	Pass
			13	22.34	-4.00	16.19	<=34.77	Pass
			24	22.18	-4.00	16.03	<=34.77	Pass
		12	0	21.12	-4.00	14.97	<=34.77	Pass
			6	21.17	-4.00	15.02	<=34.77	Pass
			13	21.06	-4.00	14.91	<=34.77	Pass
		25	0	21.15	-4.00	15.00	<=34.77	Pass
	713.5	1	0	22.31	-4.00	16.16	<=34.77	Pass
			13	22.44	-4.00	16.29	<=34.77	Pass
			24	22.29	-4.00	16.14	<=34.77	Pass
		12	0	21.05	-4.00	14.90	<=34.77	Pass
			6	21.14	-4.00	14.99	<=34.77	Pass
			13	21.05	-4.00	14.90	<=34.77	Pass
		25	0	21.16	-4.00	15.01	<=34.77	Pass
64QAM	706.5	1	0	21.55	-4.00	15.40	<=34.77	Pass
			13	21.58	-4.00	15.43	<=34.77	Pass
			24	21.46	-4.00	15.31	<=34.77	Pass
		12	0	20.29	-4.00	14.14	<=34.77	Pass
			6	20.30	-4.00	14.15	<=34.77	Pass
			13	20.27	-4.00	14.12	<=34.77	Pass
		25	0	20.28	-4.00	14.13	<=34.77	Pass

	710	1	0	21.62	-4.00	15.47	<=34.77	Pass
			13	21.70	-4.00	15.55	<=34.77	Pass
			24	21.52	-4.00	15.37	<=34.77	Pass
		12	0	20.20	-4.00	14.05	<=34.77	Pass
			6	20.25	-4.00	14.10	<=34.77	Pass
			13	20.16	-4.00	14.01	<=34.77	Pass
		25	0	20.24	-4.00	14.09	<=34.77	Pass
	713.5	1	0	21.09	-4.00	14.94	<=34.77	Pass
			13	21.25	-4.00	15.10	<=34.77	Pass
			24	21.11	-4.00	14.96	<=34.77	Pass
		12	0	20.09	-4.00	13.94	<=34.77	Pass
			6	20.14	-4.00	13.99	<=34.77	Pass
			13	20.10	-4.00	13.95	<=34.77	Pass
		25	0	20.13	-4.00	13.98	<=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	23.30	-4.00	17.15	<=34.77	Pass
			25	23.32	-4.00	17.17	<=34.77	Pass
			49	23.12	-4.00	16.97	<=34.77	Pass
		25	0	22.28	-4.00	16.13	<=34.77	Pass
			13	22.19	-4.00	16.04	<=34.77	Pass
			25	22.15	-4.00	16.00	<=34.77	Pass
		50	0	22.17	-4.00	16.02	<=34.77	Pass
	710	1	0	23.29	-4.00	17.14	<=34.77	Pass
			25	23.31	-4.00	17.16	<=34.77	Pass
			49	23.16	-4.00	17.01	<=34.77	Pass
		25	0	22.19	-4.00	16.04	<=34.77	Pass
			13	22.17	-4.00	16.02	<=34.77	Pass
			25	22.10	-4.00	15.95	<=34.77	Pass
		50	0	22.16	-4.00	16.01	<=34.77	Pass
	711	1	0	23.23	-4.00	17.08	<=34.77	Pass
			25	23.31	-4.00	17.16	<=34.77	Pass
			49	23.12	-4.00	16.97	<=34.77	Pass
		25	0	22.20	-4.00	16.05	<=34.77	Pass
			13	22.16	-4.00	16.01	<=34.77	Pass
			25	22.15	-4.00	16.00	<=34.77	Pass
		50	0	22.15	-4.00	16.00	<=34.77	Pass
16QAM	709	1	0	22.44	-4.00	16.29	<=34.77	Pass
			25	22.48	-4.00	16.33	<=34.77	Pass
			49	22.28	-4.00	16.13	<=34.77	Pass
		25	0	21.33	-4.00	15.18	<=34.77	Pass
			13	21.26	-4.00	15.11	<=34.77	Pass
			25	21.19	-4.00	15.04	<=34.77	Pass
		50	0	21.19	-4.00	15.04	<=34.77	Pass
	710	1	0	22.31	-4.00	16.16	<=34.77	Pass
			25	22.32	-4.00	16.17	<=34.77	Pass
			49	22.17	-4.00	16.02	<=34.77	Pass
		25	0	21.28	-4.00	15.13	<=34.77	Pass
			13	21.23	-4.00	15.08	<=34.77	Pass
			25	21.20	-4.00	15.05	<=34.77	Pass
		50	0	21.17	-4.00	15.02	<=34.77	Pass
	711	1	0	22.37	-4.00	16.22	<=34.77	Pass

			25	22.45	-4.00	16.30	<=34.77	Pass		
			49	22.29	-4.00	16.14	<=34.77	Pass		
		25	0	21.23	-4.00	15.08	<=34.77	Pass		
			13	21.19	-4.00	15.04	<=34.77	Pass		
			25	21.18	-4.00	15.03	<=34.77	Pass		
		50	0	21.12	-4.00	14.97	<=34.77	Pass		
64QAM	709	1	0	21.51	-4.00	15.36	<=34.77	Pass		
			25	21.56	-4.00	15.41	<=34.77	Pass		
			49	21.36	-4.00	15.21	<=34.77	Pass		
		25	0	20.28	-4.00	14.13	<=34.77	Pass		
			13	20.15	-4.00	14.00	<=34.77	Pass		
			25	20.12	-4.00	13.97	<=34.77	Pass		
		50	0	20.20	-4.00	14.05	<=34.77	Pass		
		710	1	0	21.85	-4.00	15.70	<=34.77	Pass	
				25	21.89	-4.00	15.74	<=34.77	Pass	
	49			21.77	-4.00	15.62	<=34.77	Pass		
	25		0	20.33	-4.00	14.18	<=34.77	Pass		
			13	20.28	-4.00	14.13	<=34.77	Pass		
			25	20.24	-4.00	14.09	<=34.77	Pass		
	50		0	20.21	-4.00	14.06	<=34.77	Pass		
	711		1	0	21.24	-4.00	15.09	<=34.77	Pass	
				25	21.27	-4.00	15.12	<=34.77	Pass	
		49		21.12	-4.00	14.97	<=34.77	Pass		
		25	0	20.19	-4.00	14.04	<=34.77	Pass		
			13	20.15	-4.00	14.00	<=34.77	Pass		
			25	20.14	-4.00	13.99	<=34.77	Pass		
		50	0	20.14	-4.00	13.99	<=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	-5.879	-0.0083	-2.5 to 2.5	Pass
					NV	-6.051	-0.0085	-2.5 to 2.5	Pass
					HV	-5.579	-0.0079	-2.5 to 2.5	Pass
				-30	NV	-6.723	-0.0095	-2.5 to 2.5	Pass
				-20	NV	-5.207	-0.0073	-2.5 to 2.5	Pass
				-10	NV	-6.437	-0.0091	-2.5 to 2.5	Pass
				0	NV	-6.766	-0.0095	-2.5 to 2.5	Pass
				10	NV	-6.566	-0.0092	-2.5 to 2.5	Pass
				30	NV	-2.918	-0.0041	-2.5 to 2.5	Pass
				40	NV	-6.380	-0.0090	-2.5 to 2.5	Pass
				50	NV	-3.476	-0.0049	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band17_OBW

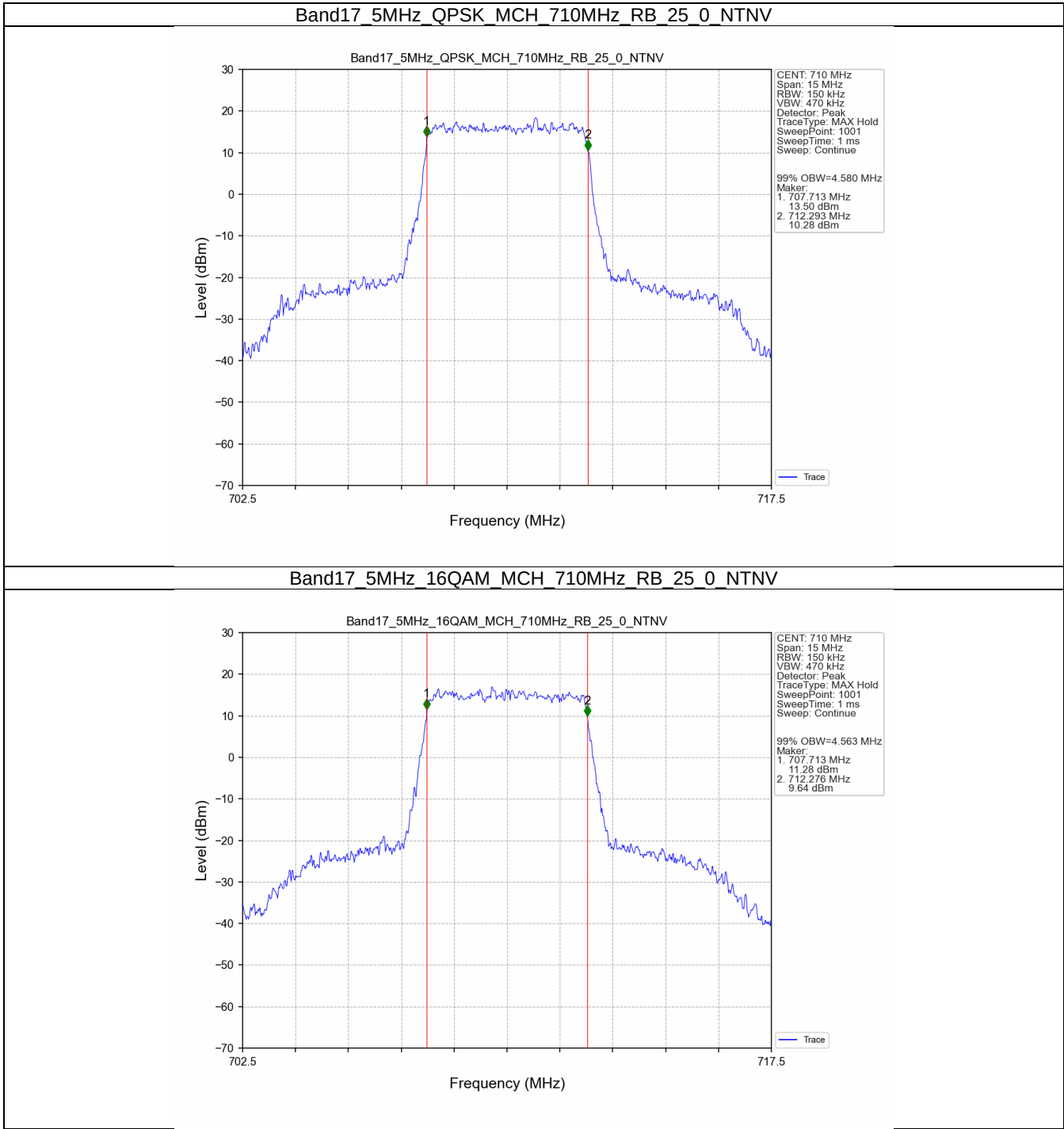
Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	4.580	/	Pass
	16QAM	710	25	0	4.563	/	Pass
	64QAM	710	25	0	4.575	/	Pass
10	QPSK	710	50	0	9.101	/	Pass
	16QAM	710	50	0	9.089	/	Pass
	64QAM	710	50	0	9.098	/	Pass

3.1.2 Band17_XDB

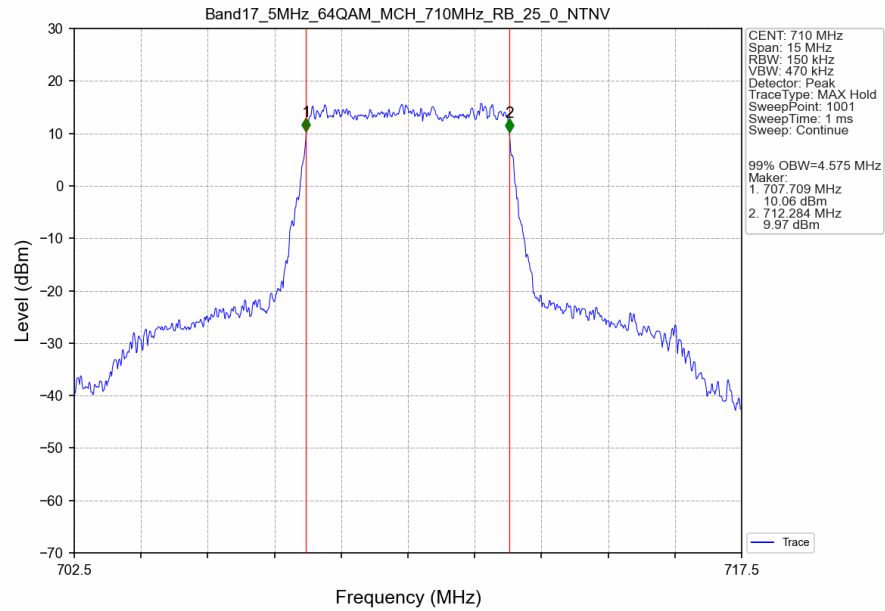
Band: 17 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	710	25	0	5.221	/	Pass
	16QAM	710	25	0	5.296	/	Pass
	64QAM	710	25	0	5.281	/	Pass
10	QPSK	710	50	0	10.492	/	Pass
	16QAM	710	50	0	10.180	/	Pass
	64QAM	710	50	0	10.453	/	Pass

3.2 Test Graph

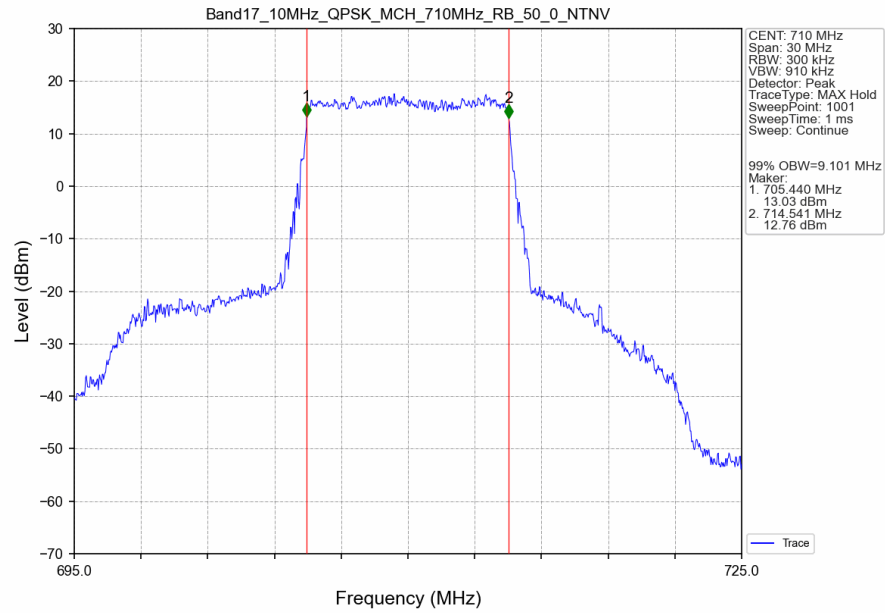
3.2.1 Band17_OBW



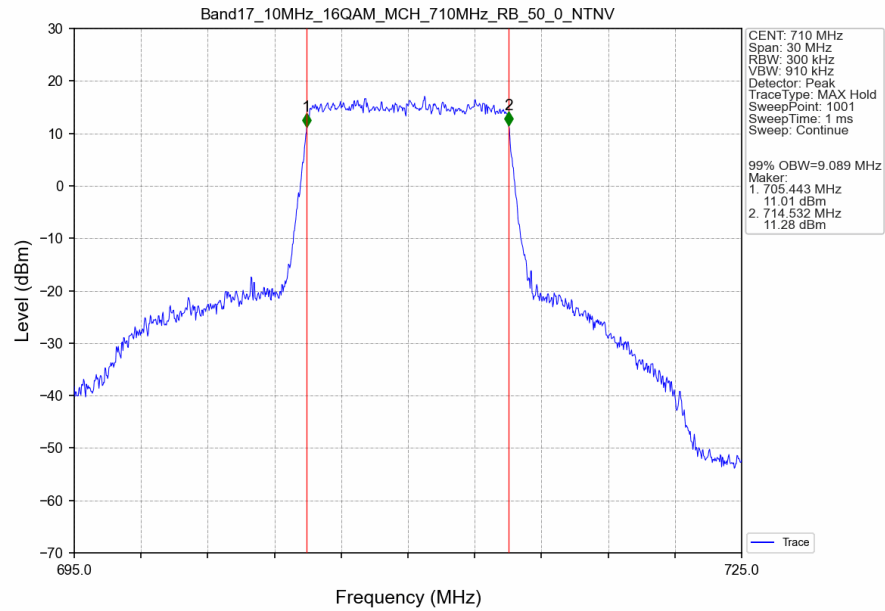
Band17 5MHz 64QAM MCH 710MHz RB 25 0 NTNV



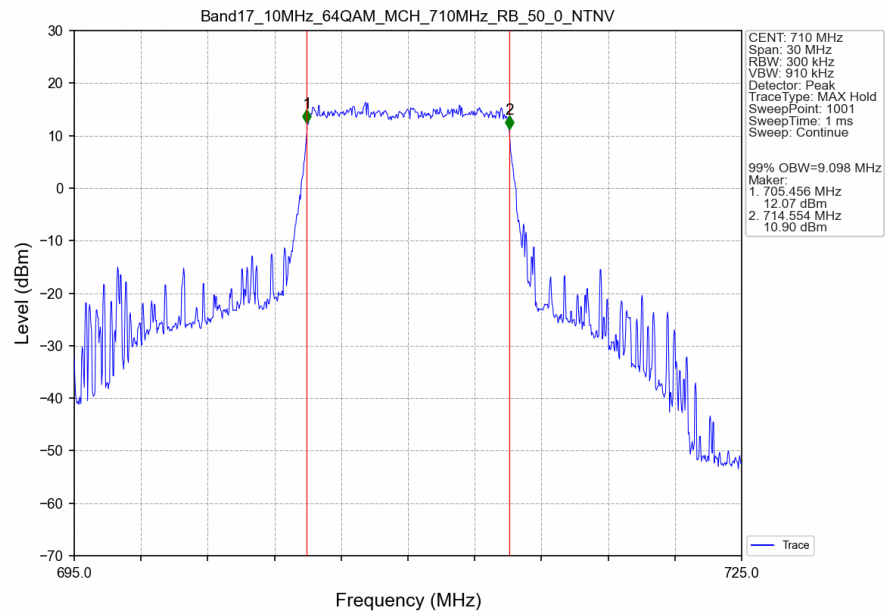
Band17 10MHz QPSK MCH 710MHz RB 50 0 NTNV



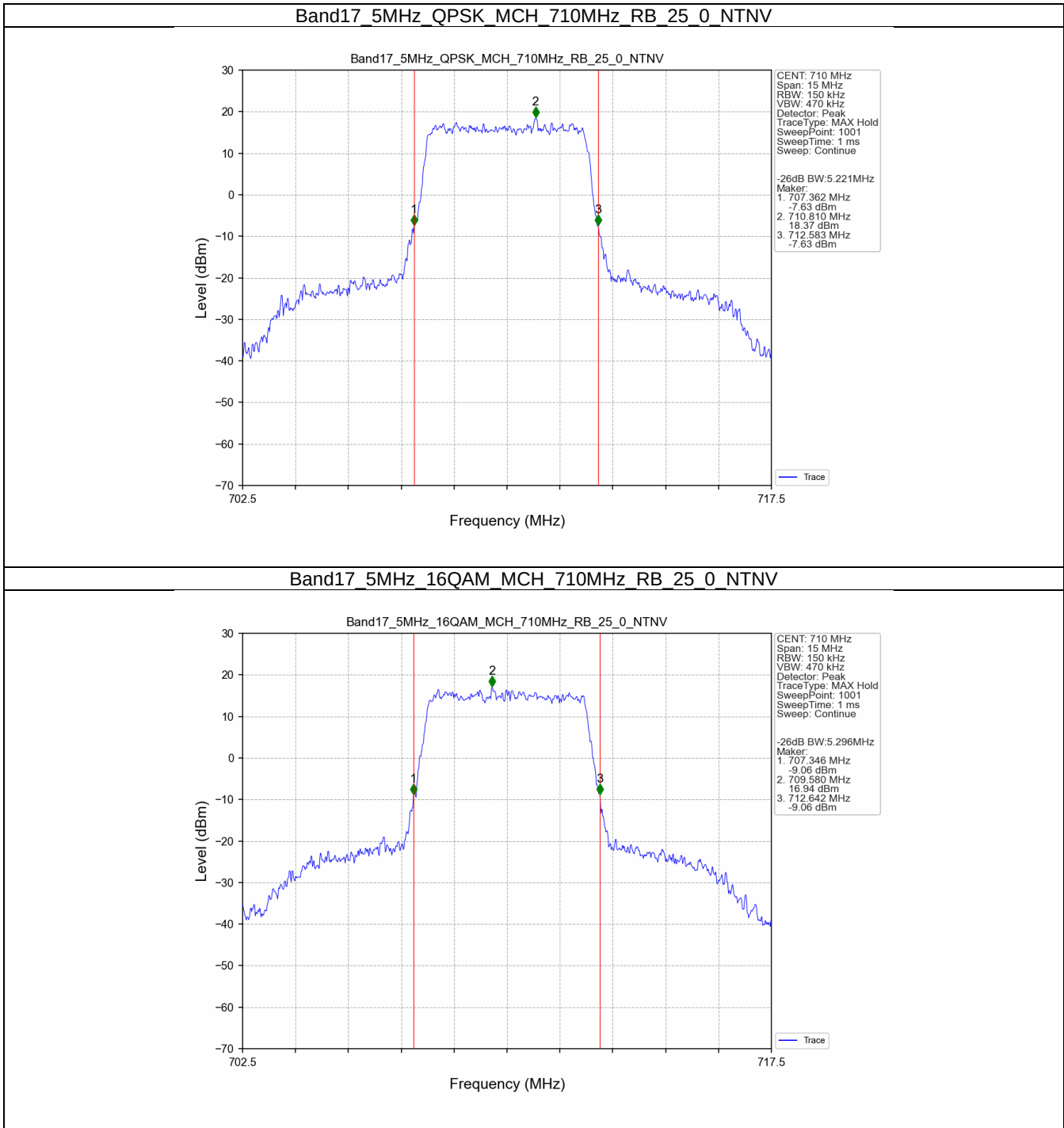
Band17 10MHz 16QAM MCH 710MHz RB 50 0 NTNV



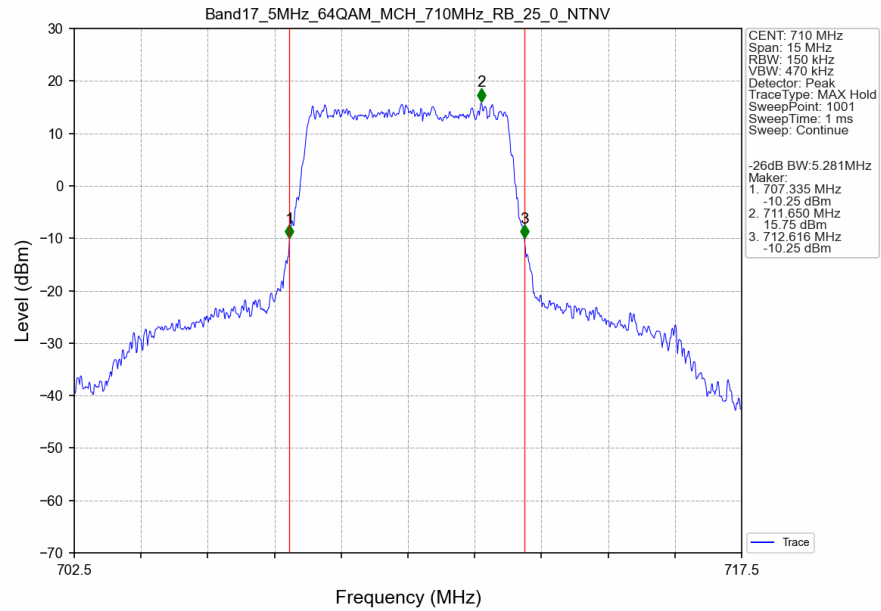
Band17 10MHz 64QAM MCH 710MHz RB 50 0 NTNV



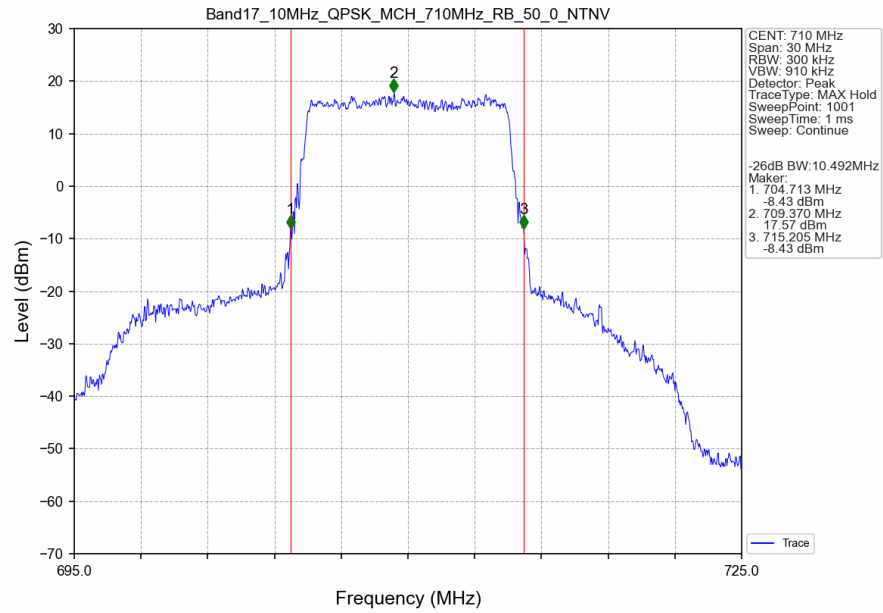
3.2.2 Band17_XDB



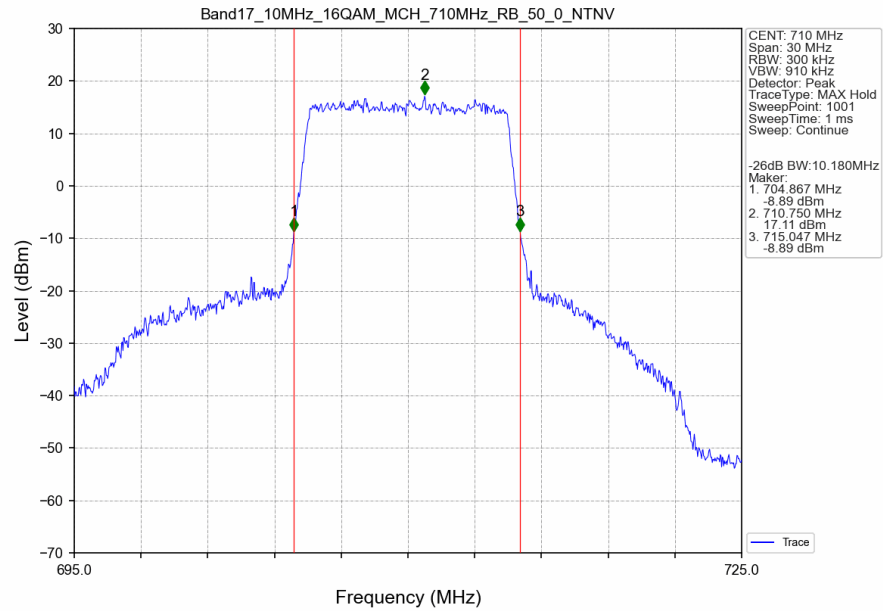
Band17 5MHz 64QAM MCH 710MHz RB 25 0 NTNV



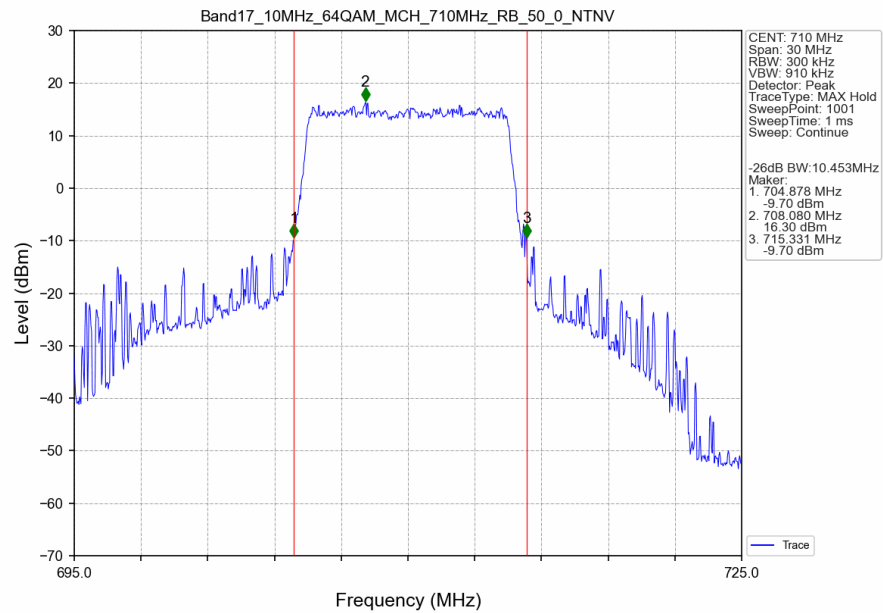
Band17 10MHz QPSK MCH 710MHz RB 50 0 NTNV



Band17 10MHz 16QAM MCH 710MHz RB 50 0 NTV



Band17 10MHz 64QAM MCH 710MHz RB 50 0 NTV



4. Peak-Average Ratio

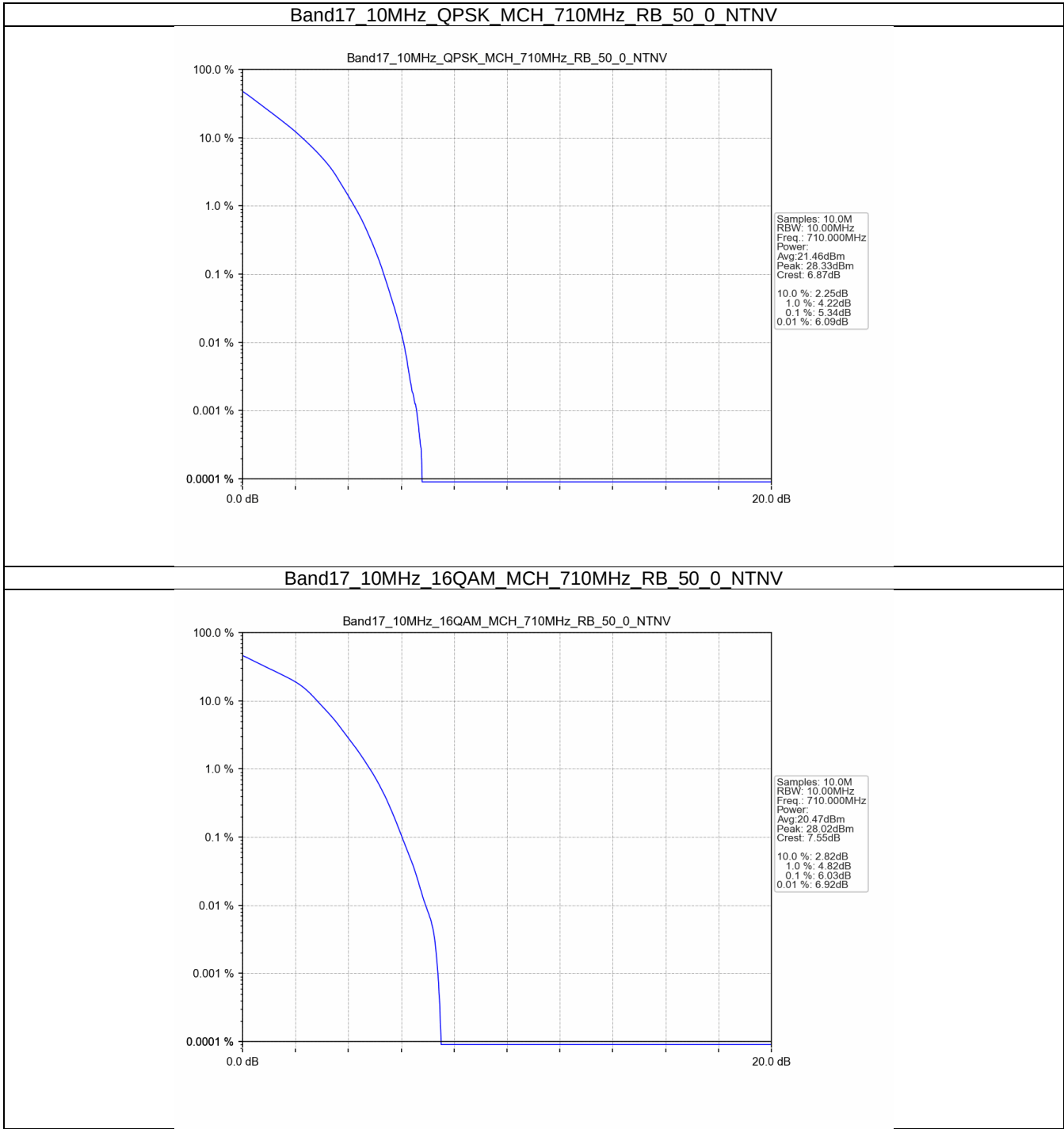
4.1 Test Result

4.1.1 B17_10MHz

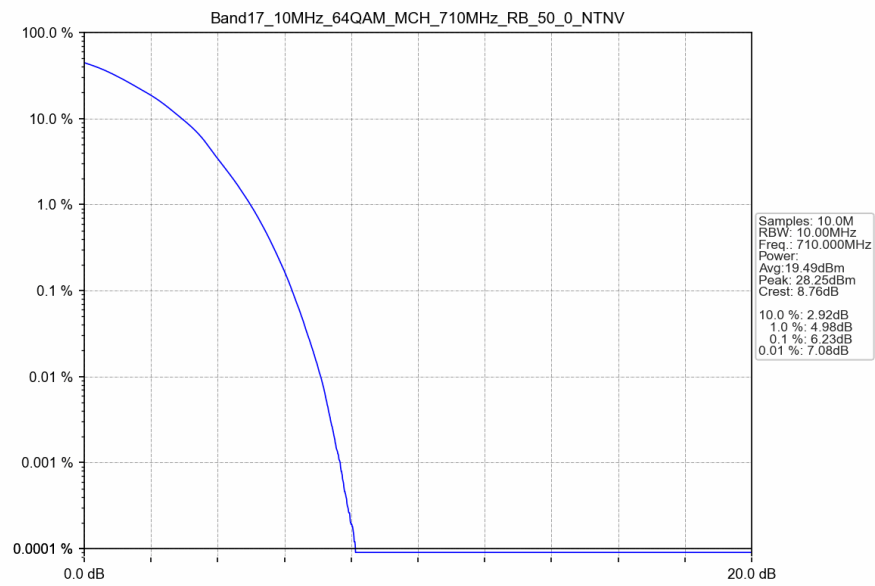
Band: 17 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	710	50	0	5.34	<=13	Pass
16QAM	710	50	0	6.03	<=13	Pass
64QAM	710	50	0	6.23	<=13	Pass

4.2 Test Graph

4.2.1 B17_10MHz



Band17 10MHz 64QAM MCH 710MHz RB 50 0 NTNV



5. Spurious Emission

5.1 Test Result

5.1.1 B17_5MHz

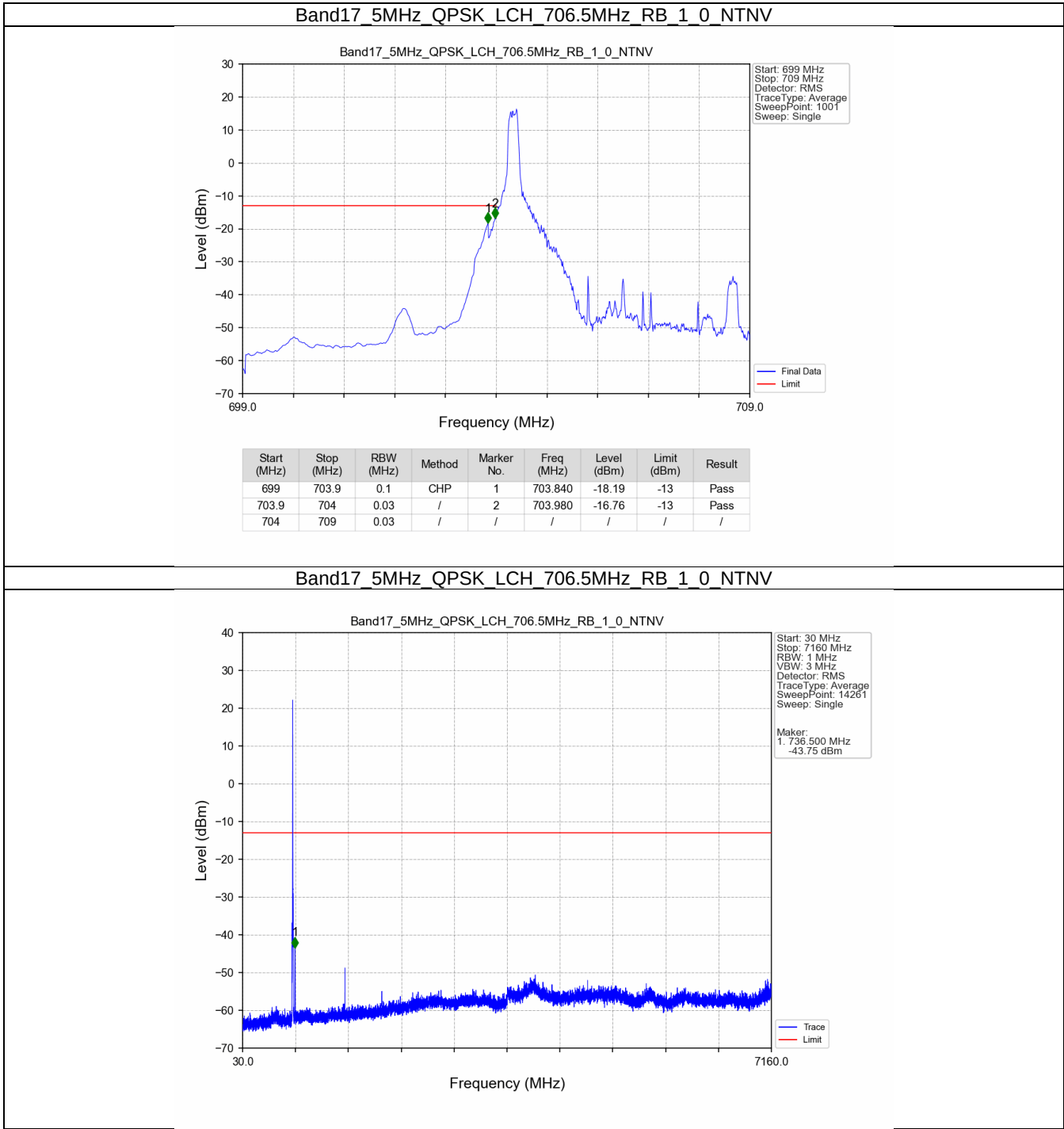
Band: 17 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	706.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	710	1	0	Refer To Test Graph		Pass
	713.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B17_10MHz

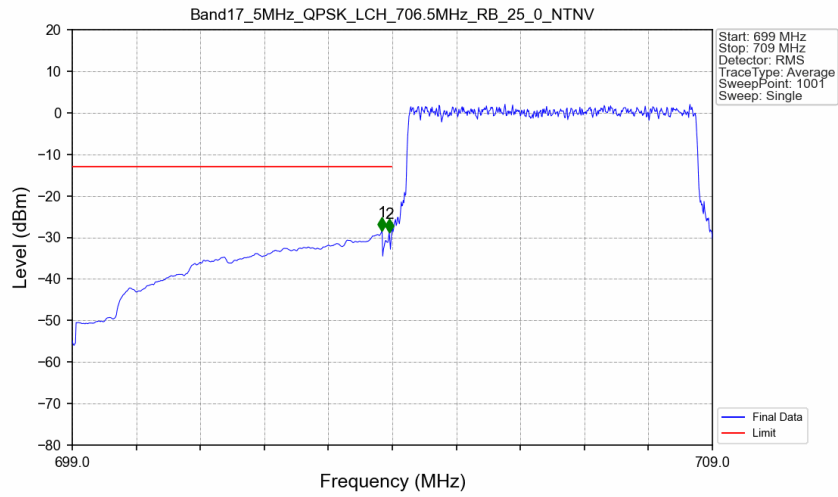
Band: 17 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	709	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	710	1	0	Refer To Test Graph		Pass
	711	1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph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

5.2 Test Graph

5.2.1 B17_5MHz

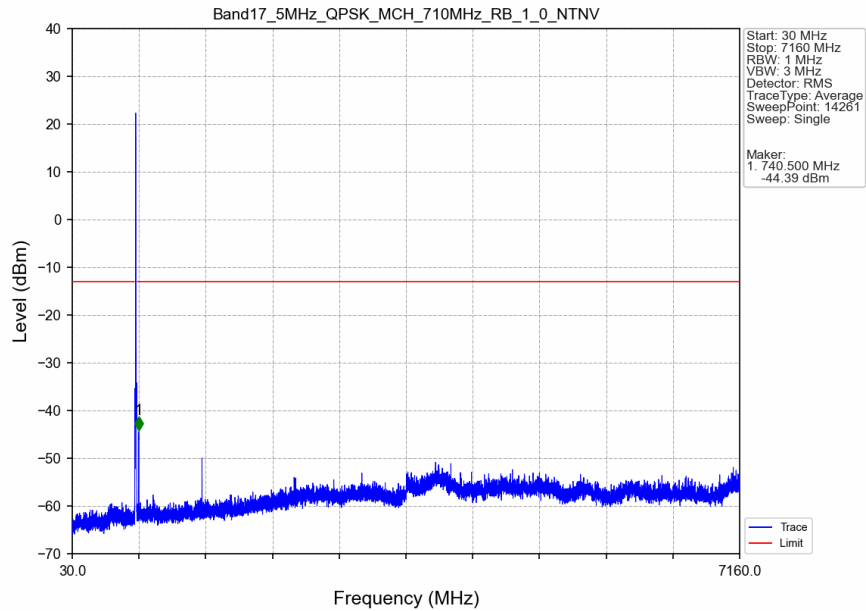


Band17 5MHz QPSK LCH 706.5MHz RB 25 0 NTV

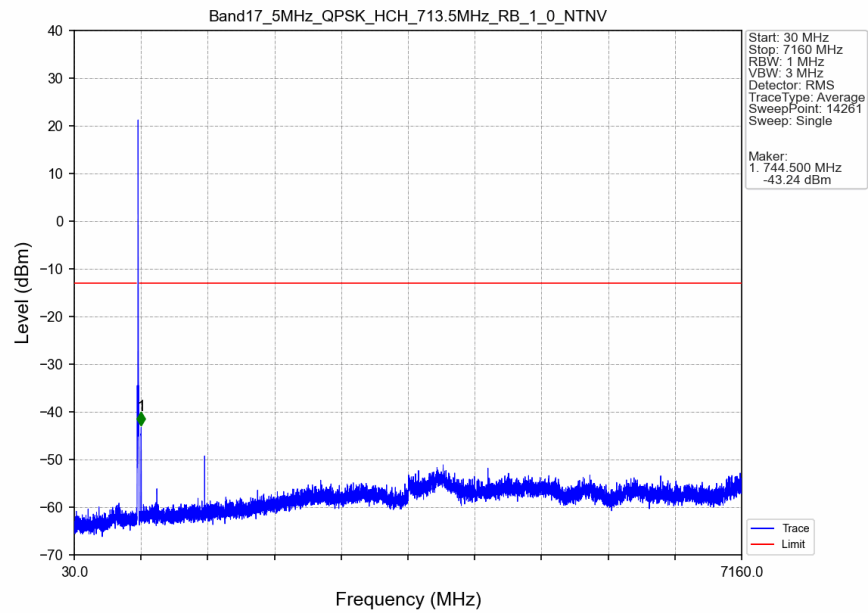


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
699	703.9	0.1	CHP	1	703.840	-28.34	-13	Pass
703.9	704	0.03	/	2	703.950	-28.76	-13	Pass
704	709	0.03	/	/	/	/	/	/

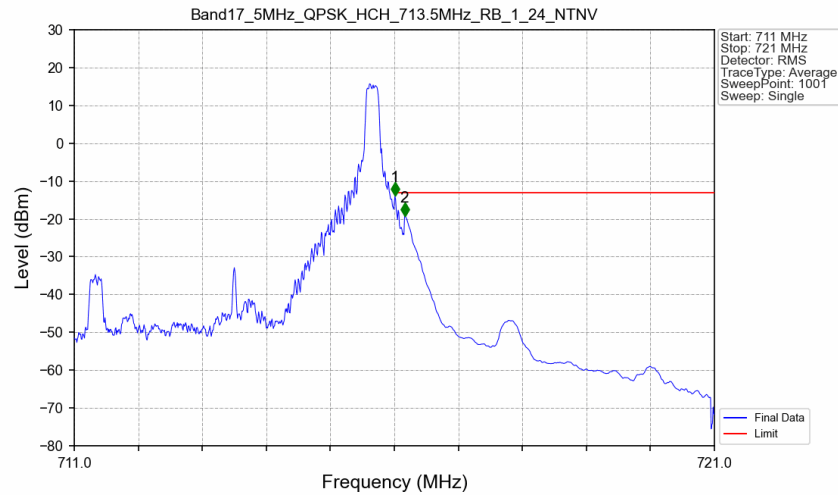
Band17 5MHz QPSK MCH 710MHz RB 1 0 NTV



Band17 5MHz QPSK HCH 713.5MHz RB 1 0 NTNV

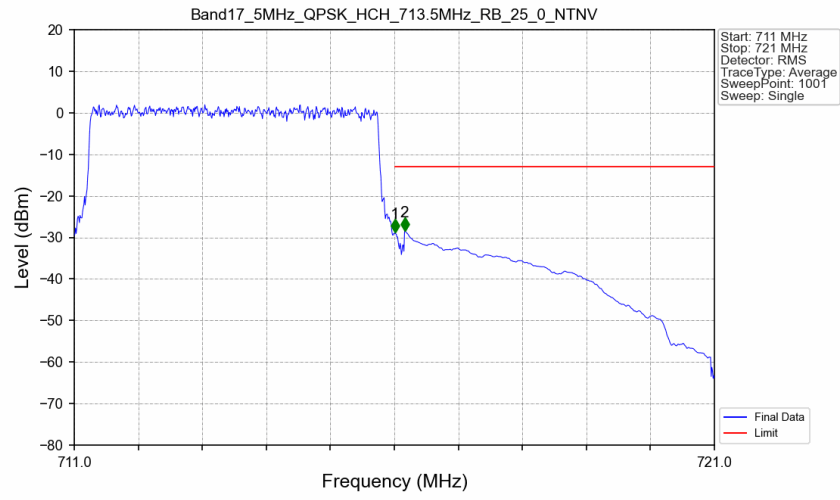


Band17 5MHz QPSK HCH 713.5MHz RB 1 24 NTNV



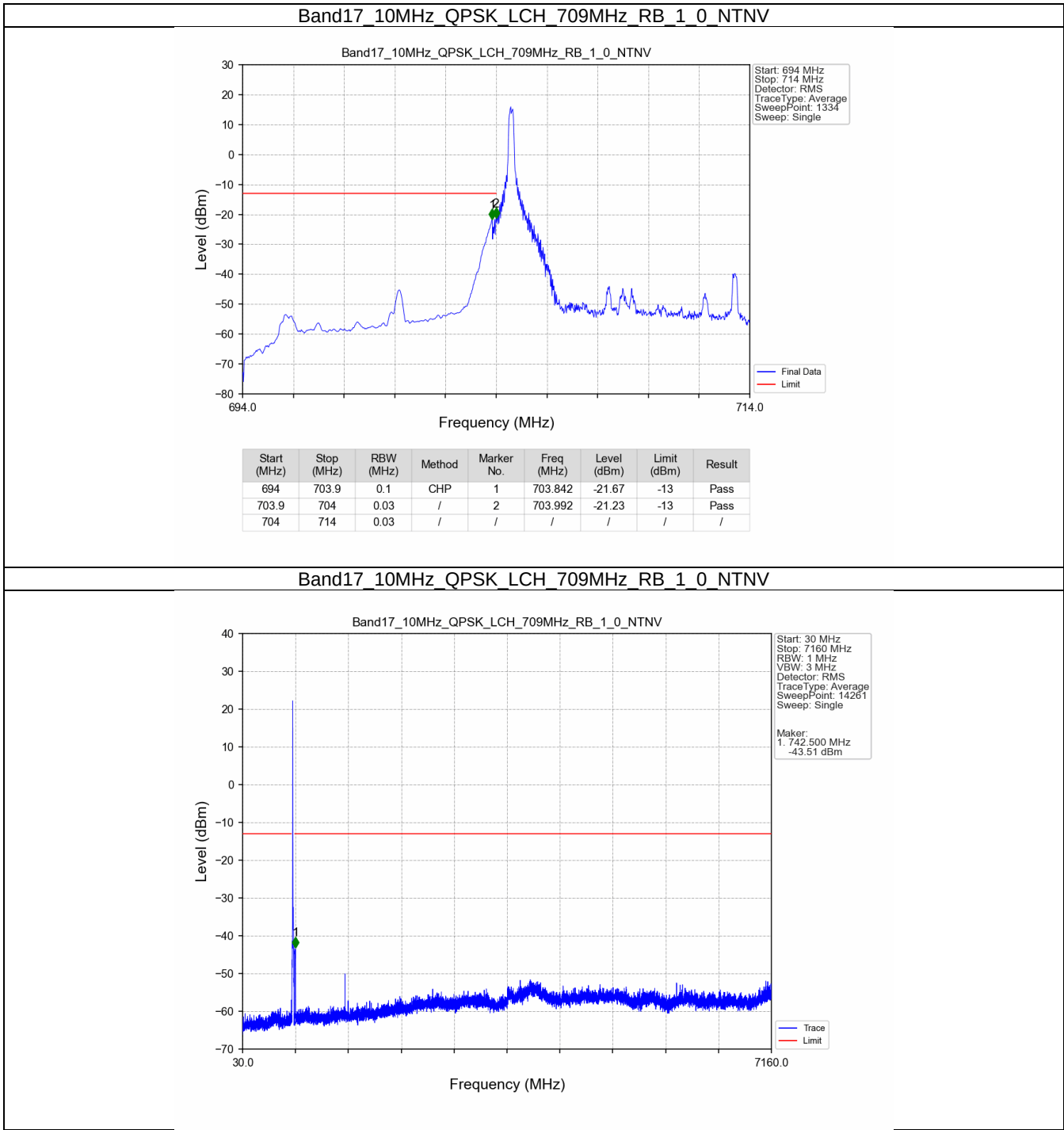
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.010	-13.91	-13	Pass
716.1	721	0.1	CHP	2	716.160	-19.29	-13	Pass

Band17 5MHz QPSK HCH 713.5MHz RB 25 0 NTN

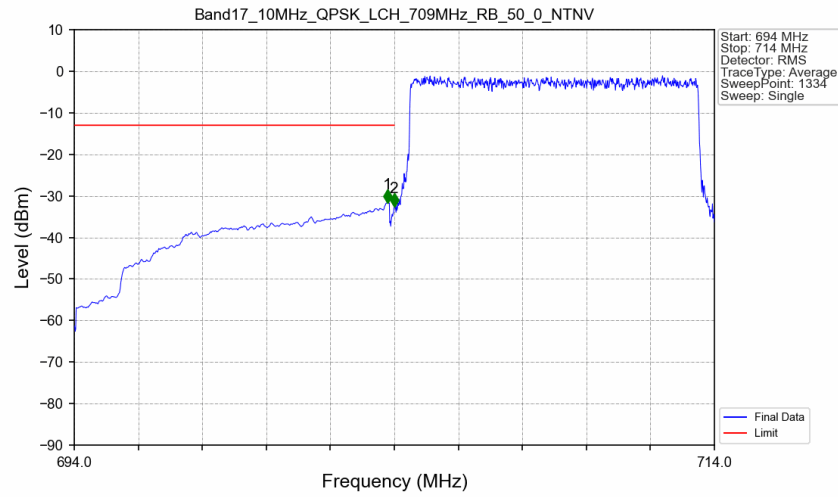


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.010	-28.76	-13	Pass
716.1	721	0.1	CHP	2	716.160	-28.44	-13	Pass

5.2.2 B17_10MHz

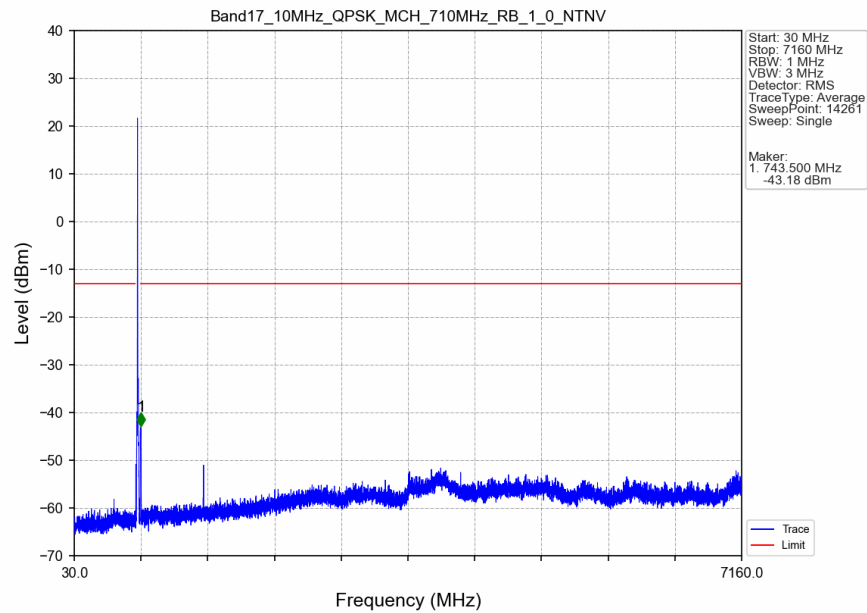


Band17 10MHz QPSK LCH 709MHz RB 50 0 NTN

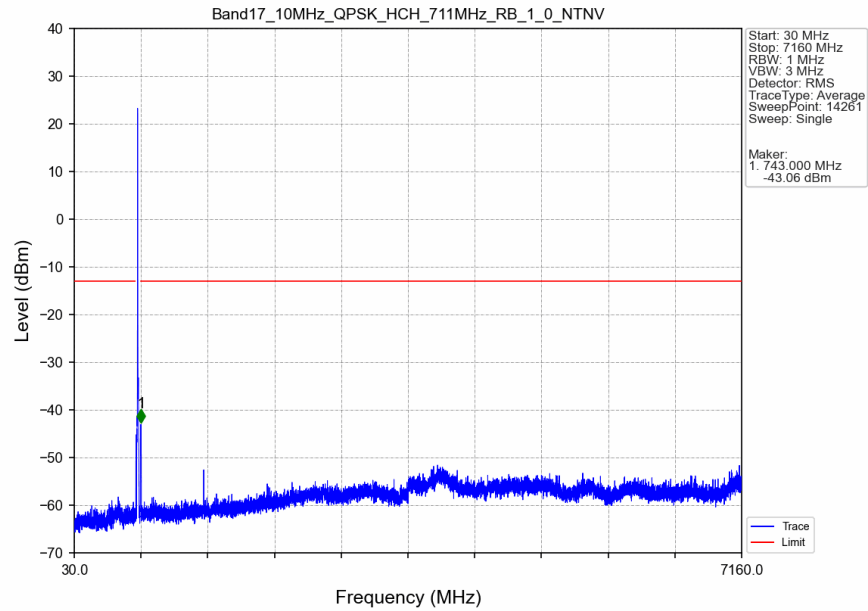


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	703.9	0.1	CHP	1	703.782	-31.66	-13	Pass
703.9	704	0.03	/	2	703.992	-32.50	-13	Pass
704	714	0.03	/	/	/	/	/	/

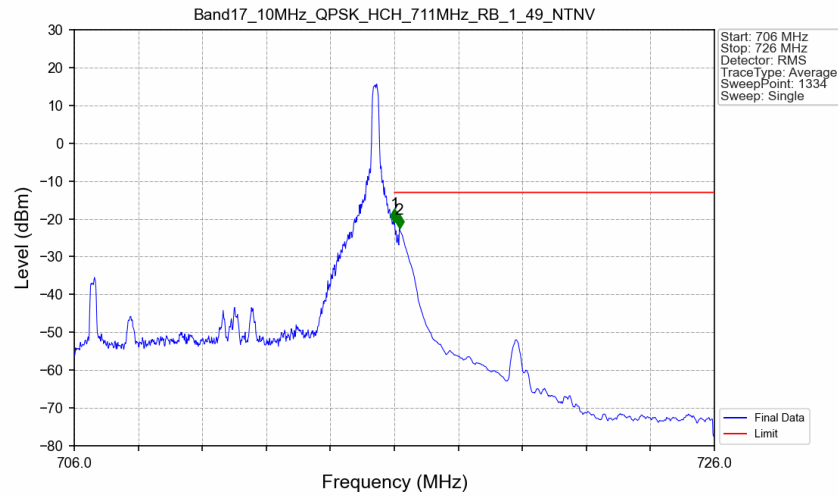
Band17 10MHz QPSK MCH 710MHz RB 1 0 NTN



Band17 10MHz QPSK HCH 711MHz RB 1 0 NTNV

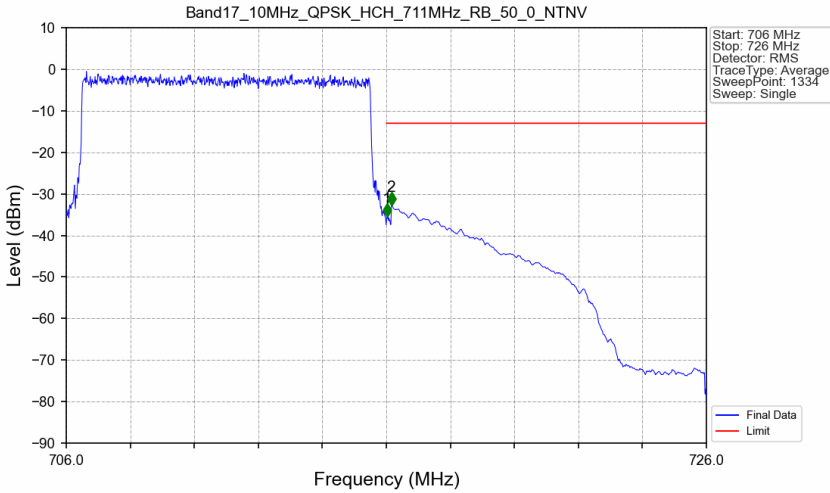


Band17 10MHz QPSK HCH 711MHz RB 1 49 NTNV



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	-20.87	-13	Pass
716.1	726	0.1	CHP	2	716.158	-22.39	-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	-35.43	-13	Pass
716.1	726	0.1	CHP	2	716.158	-32.78	-13	Pass