

5. Peak-Average Ratio

5.1 Test Result

5.1.1 B5_1.4MHz

Band: 5 / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	824.7	6	0	4.54	<=13	Pass
	836.5	6	0	4.67	<=13	Pass
	848.3	6	0	4.06	<=13	Pass
16QAM	824.7	6	0	5.45	<=13	Pass
	836.5	6	0	5.56	<=13	Pass
	848.3	6	0	4.99	<=13	Pass

5.1.2 B5_3MHz

Band: 5 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	825.5	15	0	4.83	<=13	Pass
	836.5	15	0	4.89	<=13	Pass
	847.5	15	0	4.88	<=13	Pass
16QAM	825.5	15	0	5.67	<=13	Pass
	836.5	15	0	5.89	<=13	Pass
	847.5	15	0	5.73	<=13	Pass

5.1.3 B5_5MHz

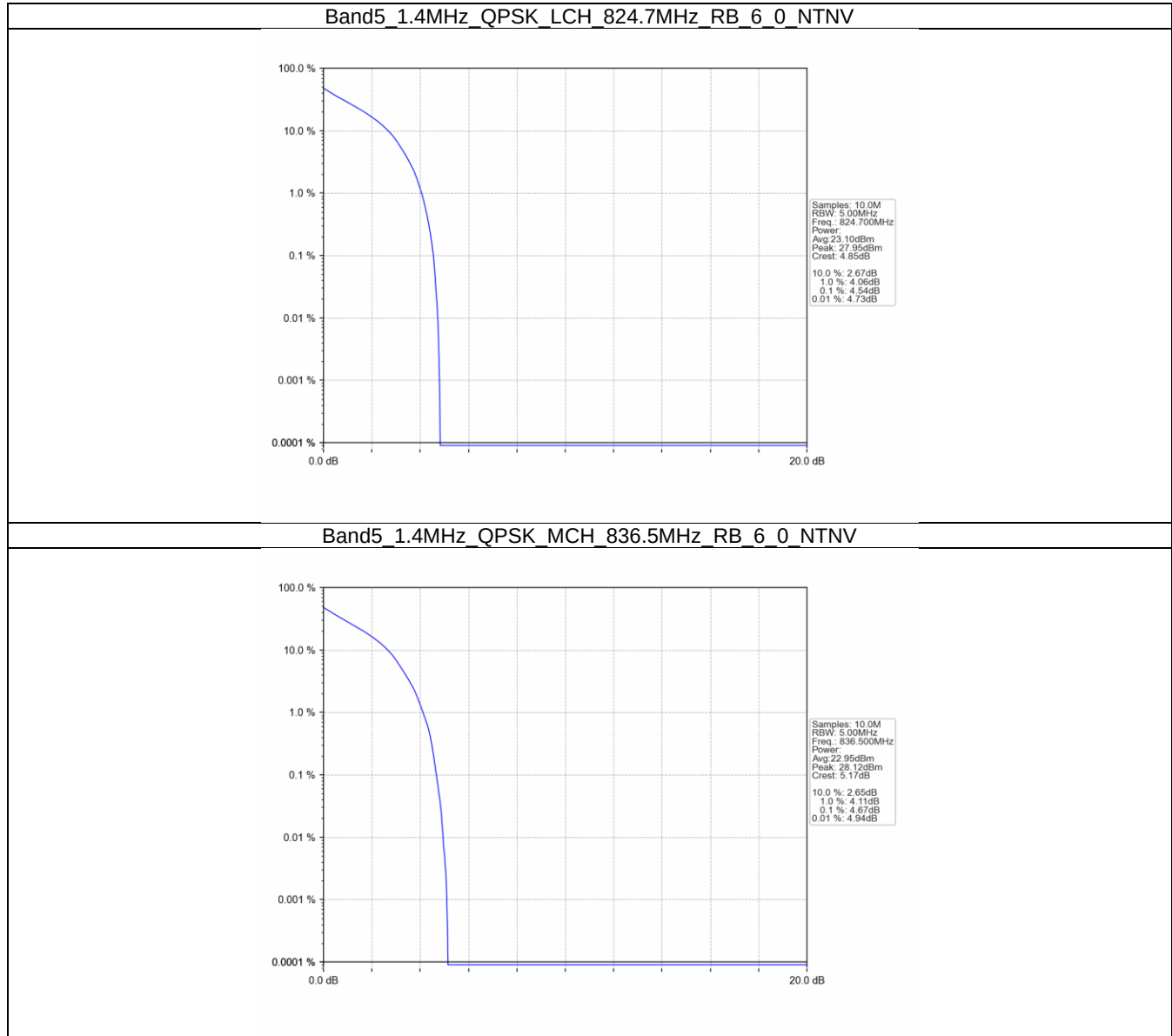
Band: 5 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	826.5	25	0	5.37	<=13	Pass
	836.5	25	0	5.42	<=13	Pass
	846.5	25	0	5.22	<=13	Pass
16QAM	826.5	25	0	6.10	<=13	Pass
	836.5	25	0	6.13	<=13	Pass
	846.5	25	0	5.98	<=13	Pass

5.1.4 B5_10MHz

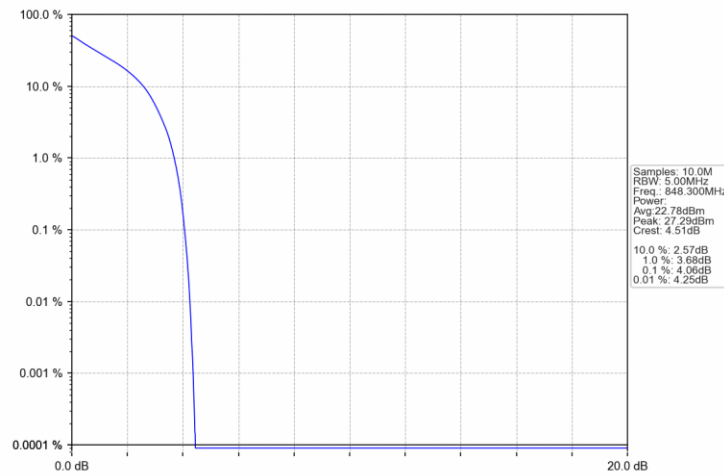
Band: 5 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	829	50	0	5.43	<=13	Pass
	836.5	50	0	5.37	<=13	Pass
	844	50	0	5.20	<=13	Pass
16QAM	829	50	0	6.22	<=13	Pass
	836.5	50	0	6.12	<=13	Pass
	844	50	0	5.99	<=13	Pass

5.2 Test Graph

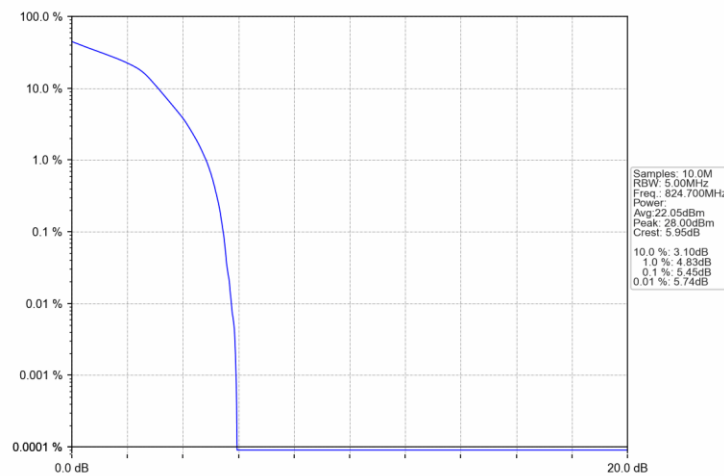
5.2.1 B5_1.4MHz



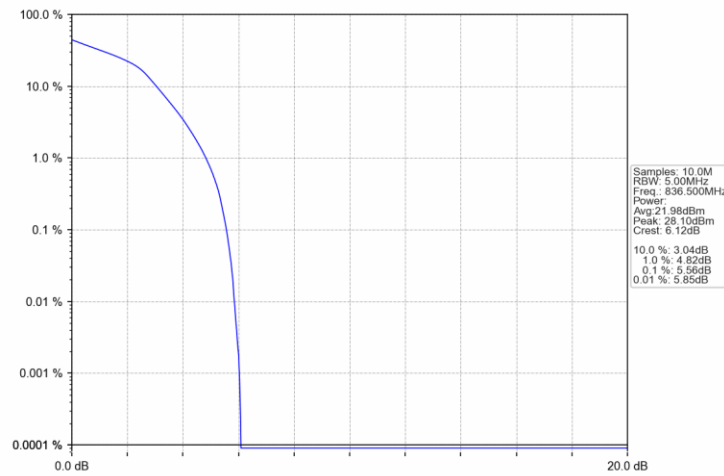
Band5 1.4MHz QPSK HCH 848.3MHz RB 6 0 NTV



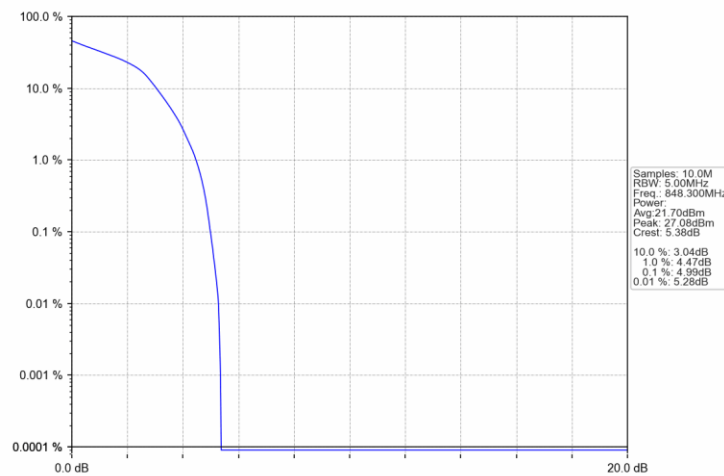
Band5 1.4MHz 16QAM LCH 824.7MHz RB 6 0 NTV



Band5 1.4MHz 16QAM MCH 836.5MHz RB 6 0 NTNV

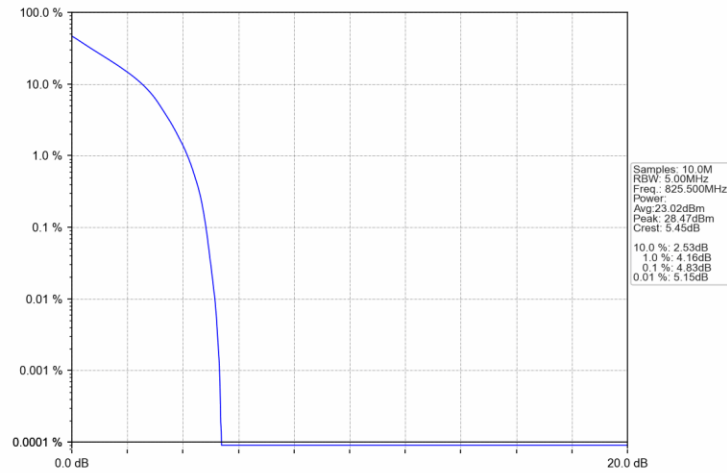


Band5 1.4MHz 16QAM HCH 848.3MHz RB 6 0 NTNV

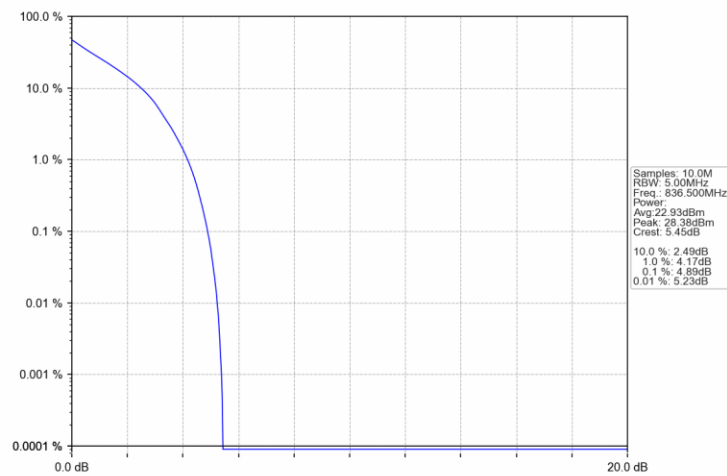


5.2.2 B5_3MHz

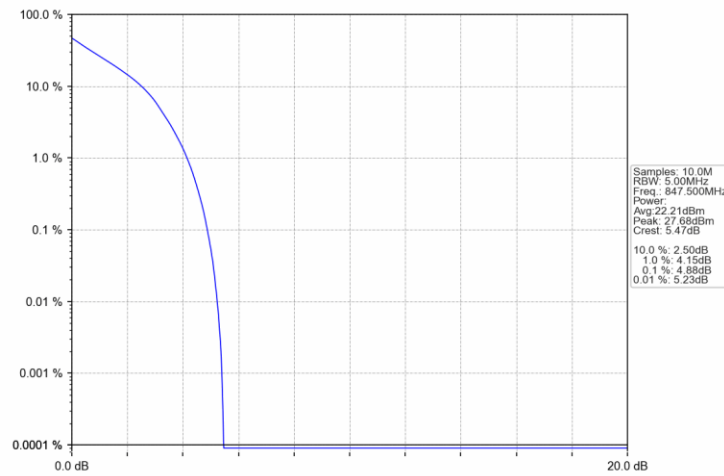
Band5_3MHz_QPSK_LCH_825.5MHz_RB_15_0_NTNV



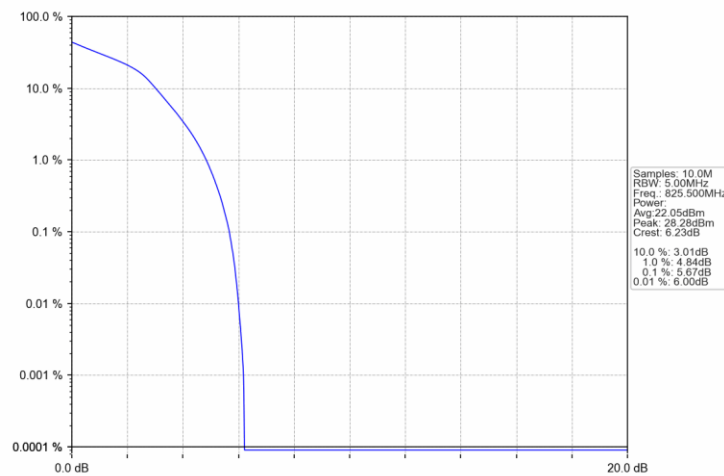
Band5_3MHz_QPSK_MCH_836.5MHz_RB_15_0_NTNV



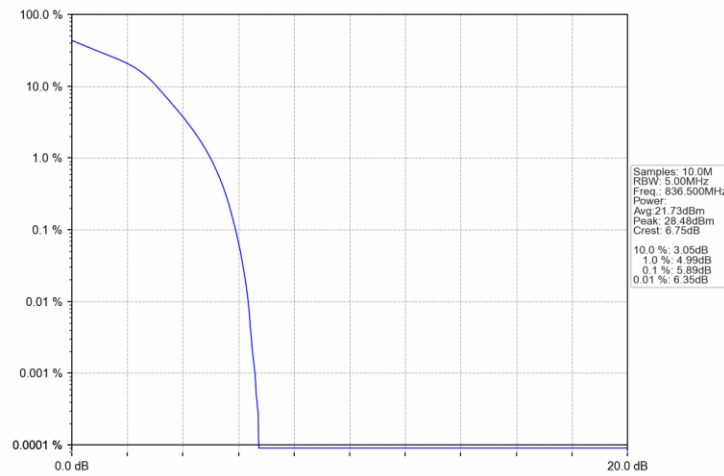
Band5 3MHz QPSK HCH 847.5MHz RB 15 0 NTV



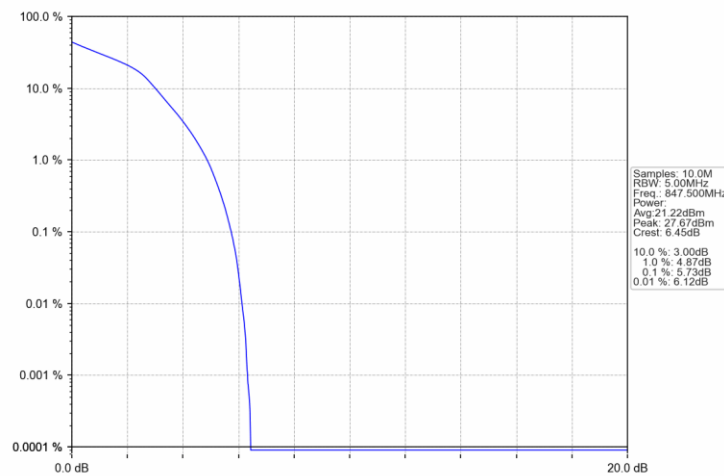
Band5 3MHz 16QAM LCH 825.5MHz RB 15 0 NTV



Band5 3MHz 16QAM MCH 836.5MHz RB 15 0 NTV

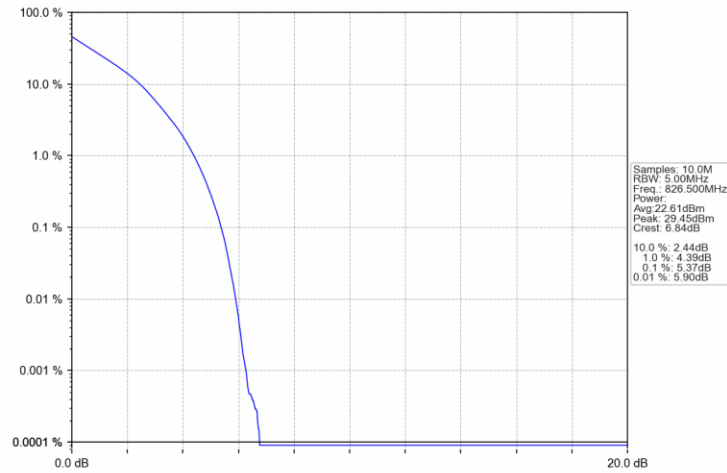


Band5 3MHz 16QAM HCH 847.5MHz RB 15 0 NTV

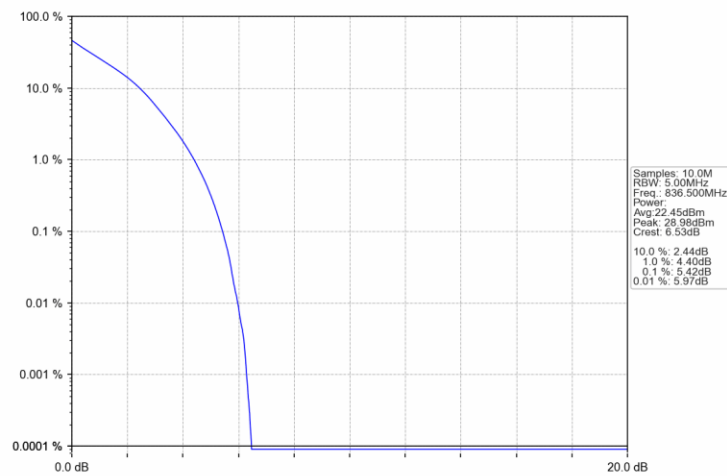


5.2.3 B5_5MHz

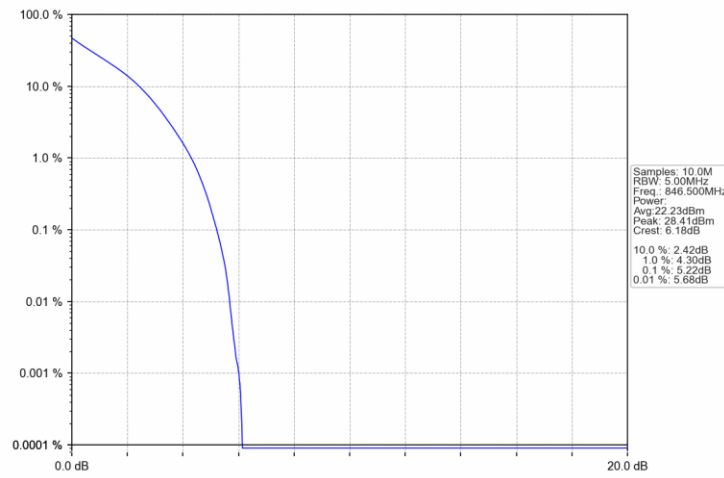
Band5 5MHz QPSK LCH 826.5MHz RB 25 0 NTN



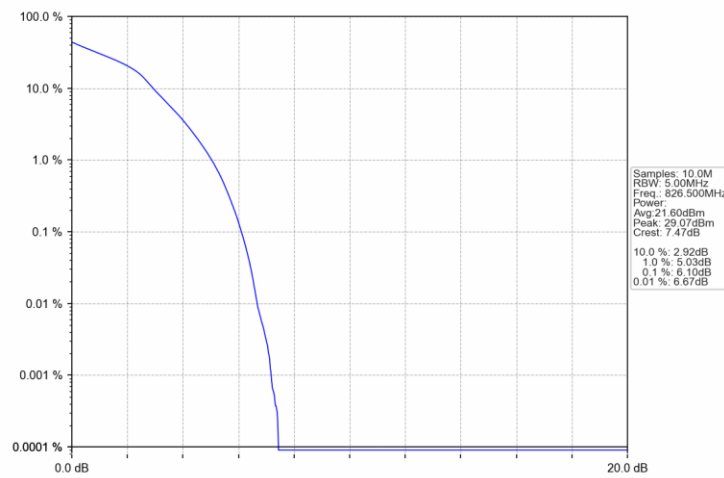
Band5 5MHz QPSK MCH 836.5MHz RB 25 0 NTN



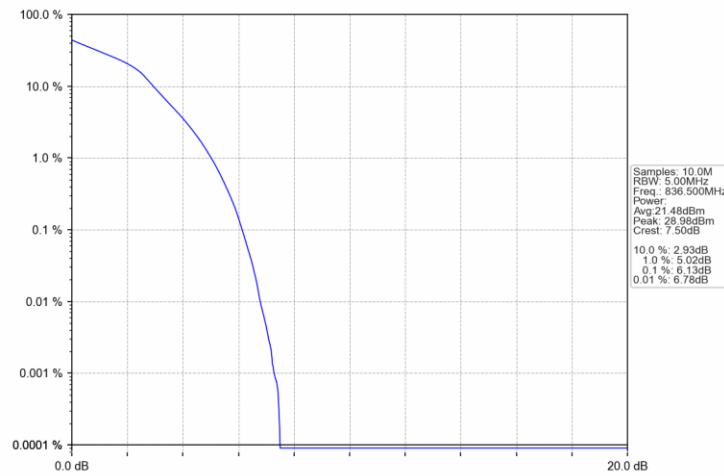
Band5 5MHz QPSK HCH 846.5MHz RB 25 0 NTV



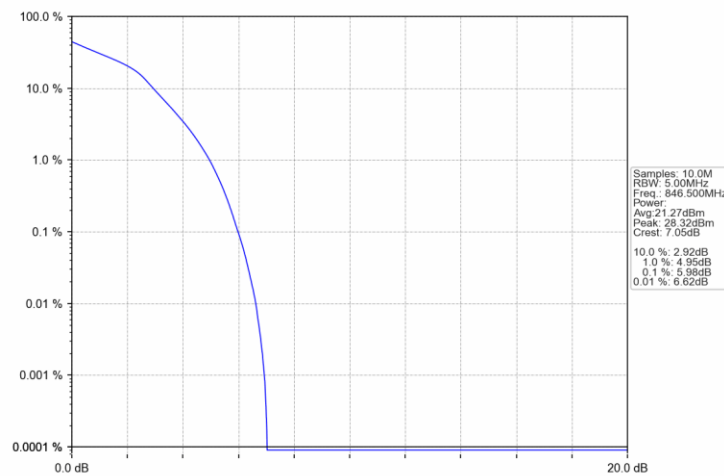
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Band5 5MHz 16QAM MCH 836.5MHz RB 25 0 NTV

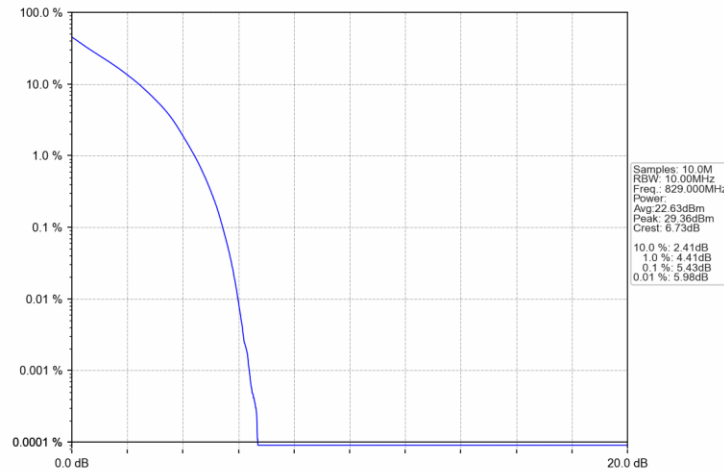


Band5 5MHz 16QAM HCH 846.5MHz RB 25 0 NTV

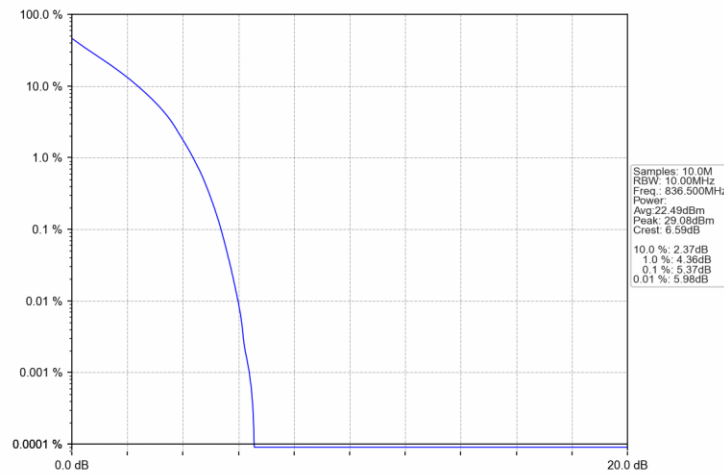


5.2.4 B5_10MHz

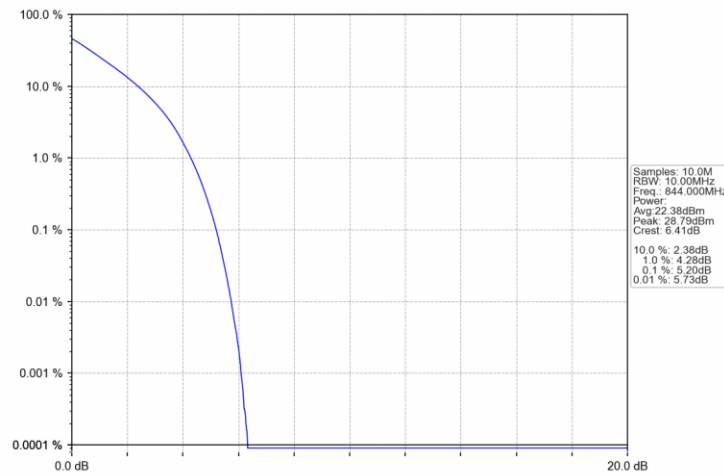
Band5_10MHz_QPSK_LCH_829MHz_RB_50_0_NTNV



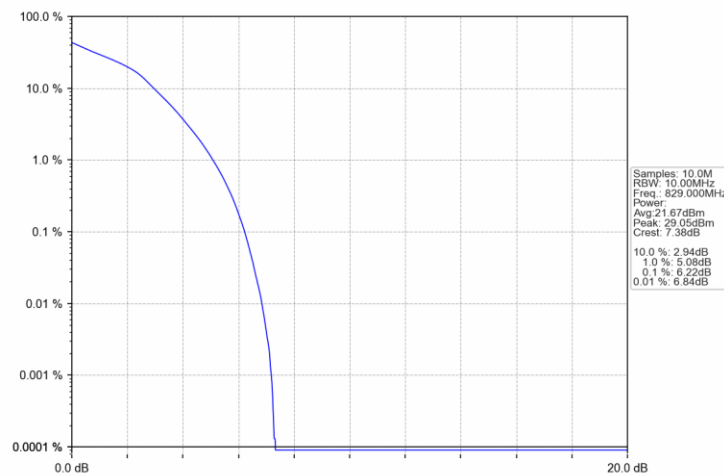
Band5_10MHz_QPSK_MCH_836.5MHz_RB_50_0_NTNV



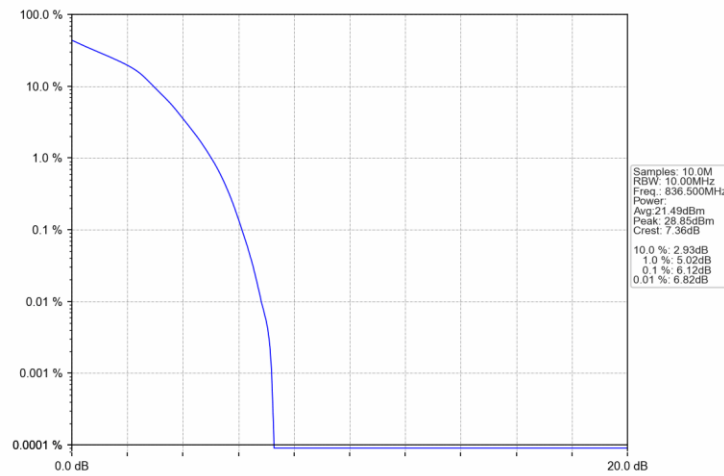
Band5_10MHz_QPSK_HCH_844MHz_RB_50_0_NTNV



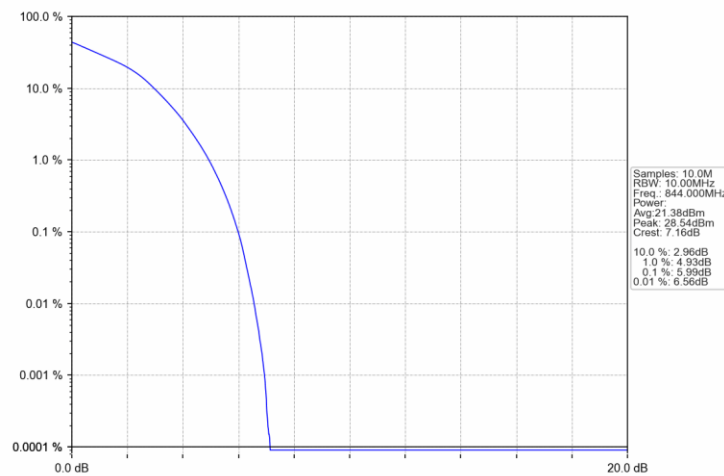
Band5_10MHz_16QAM_LCH_829MHz_RB_50_0_NTNV



Band5 10MHz 16QAM MCH 836.5MHz RB 50 0 NTNV



Band5 10MHz 16QAM HCH 844MHz RB 50 0 NTNV



6. Spurious Emission

6.1 Test Result

6.1.1 B5_1.4MHz

Band: 5 / Bandwidth: 1.4MHz / NTVN						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	824.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	836.5	1	0	Refer To Test Graph		Pass
	848.3	1	0	Refer To Test Graph		Pass
			5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
16QAM	824.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	836.5	1	0	Refer To Test Graph		Pass
	848.3	1	0	Refer To Test Graph		Pass
			5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass

6.1.2 B5_3MHz

Band: 5 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	825.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	836.5	1	0	Refer To Test Graph		Pass
	847.5	1	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
16QAM	825.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	836.5	1	0	Refer To Test Graph		Pass
	847.5	1	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

6.1.3 B5_5MHz

Band: 5 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	826.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	836.5	1	0	Refer To Test Graph		Pass
	846.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
16QAM	826.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

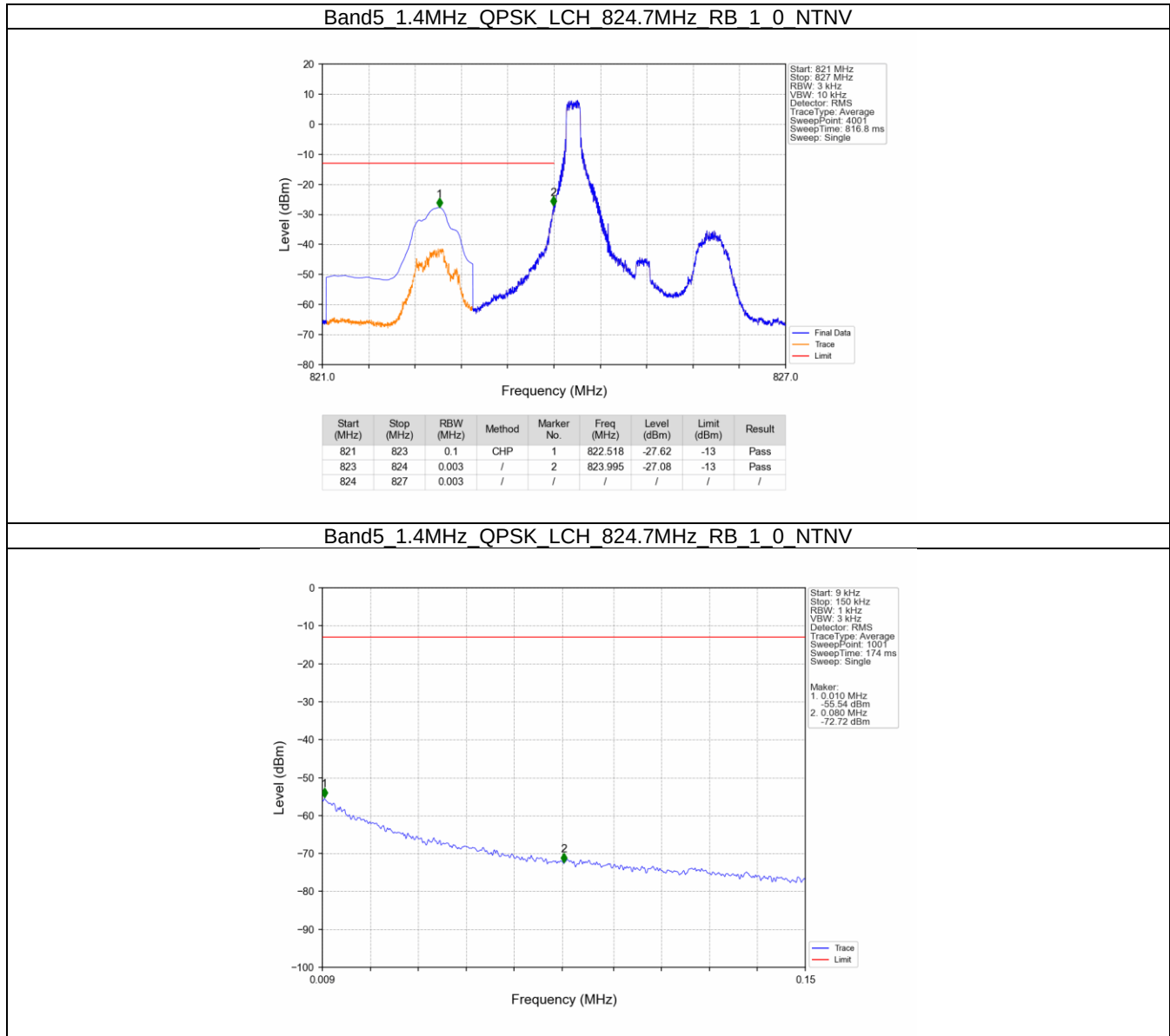
	836.5	1	0	Refer To Test Graph	Pass
	846.5	1	0	Refer To Test Graph	Pass
			24	Refer To Test Graph	Pass
		25	0	Refer To Test Graph	Pass

6.1.4 B5_10MHz

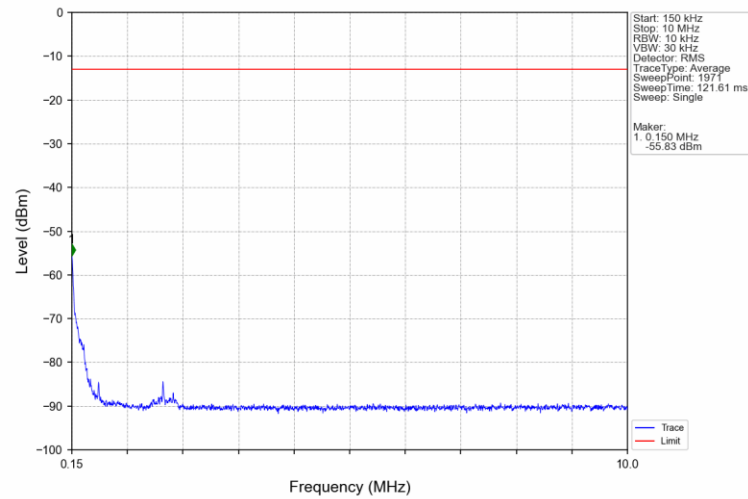
Band: 5 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	829	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	844	1	0	Refer To Test Graph		Pass
		1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph		Pass
			0	Refer To Test Graph		Pass
16QAM	829	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	844	1	0	Refer To Test Graph		Pass
		1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph		Pass
			0	Refer To Test Graph		Pass
			0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

6.2 Test Graph

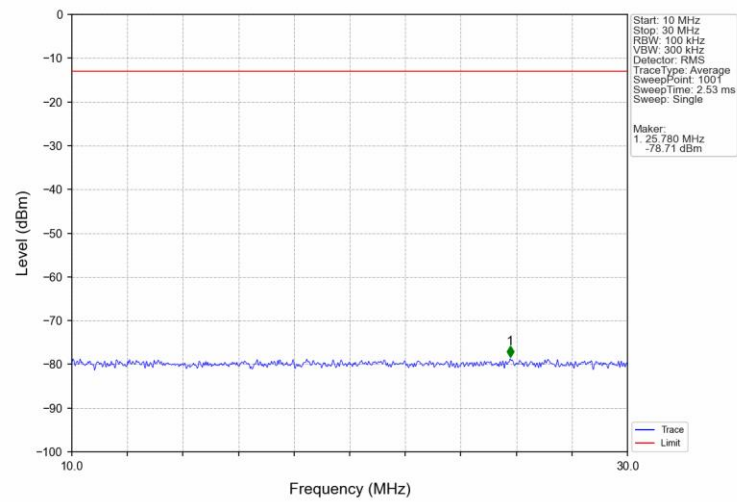
6.2.1 B5_1.4MHz



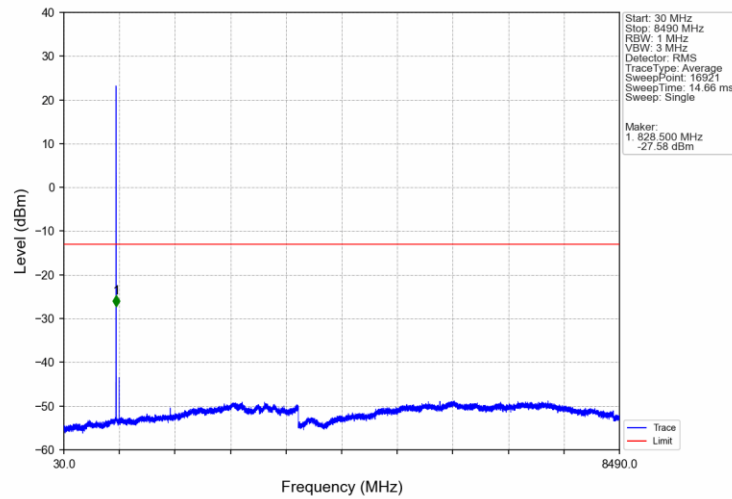
Band5 1.4MHz QPSK LCH 824.7MHz RB 1 0 NTNV



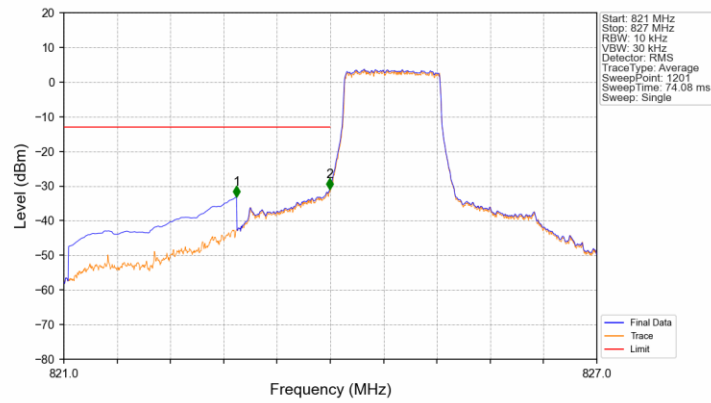
Band5 1.4MHz QPSK LCH 824.7MHz RB 1 0 NTNV



Band5 1.4MHz QPSK LCH 824.7MHz RB 1 0 NTNV

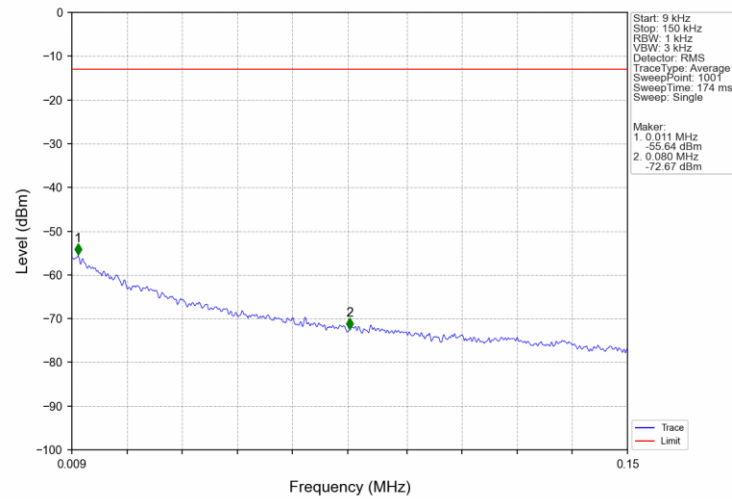


Band5 1.4MHz QPSK LCH 824.7MHz RB 6 0 NTNV

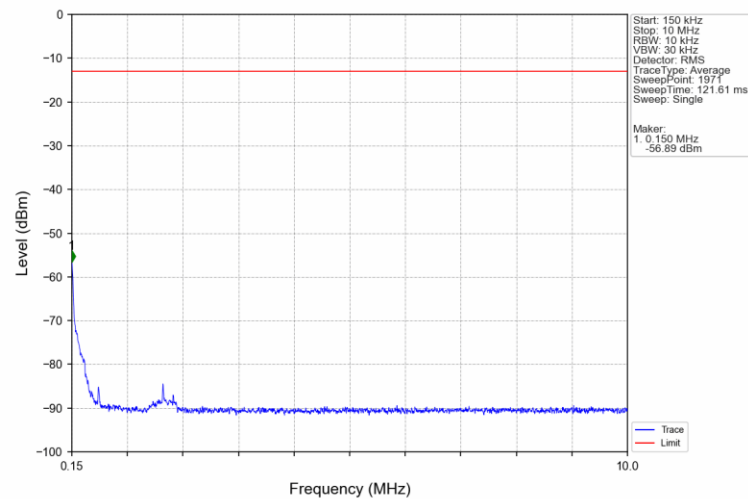


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	823	0.1	CHP	1	822.945	-33.16	-13	Pass
823	824	0.013	CHP	2	823.995	-30.94	-13	Pass
824	827	0.013	CHP	/	/	/	/	/

Band5 1.4MHz QPSK MCH 836.5MHz RB 1 0 NTV

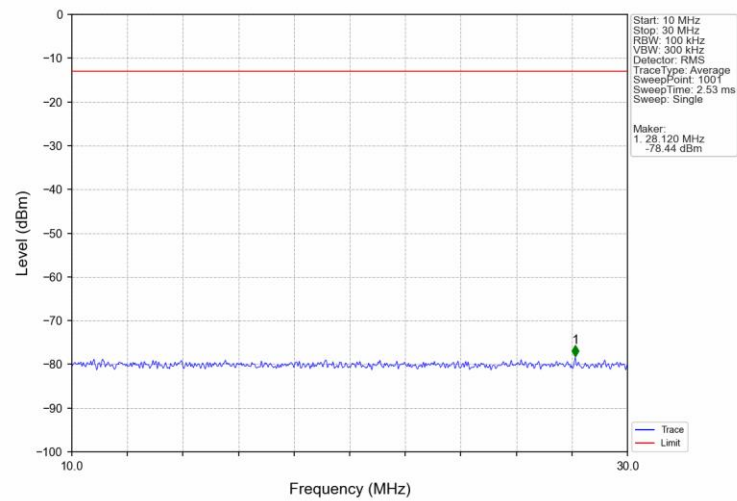


Band5 1.4MHz QPSK MCH 836.5MHz RB 1 0 NTV

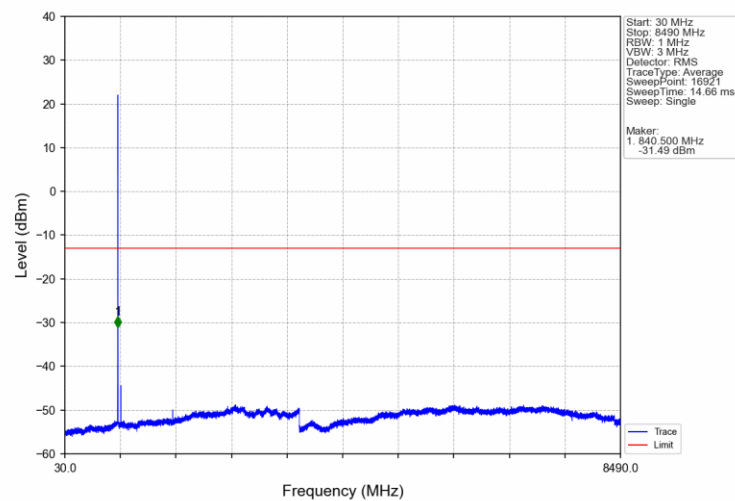




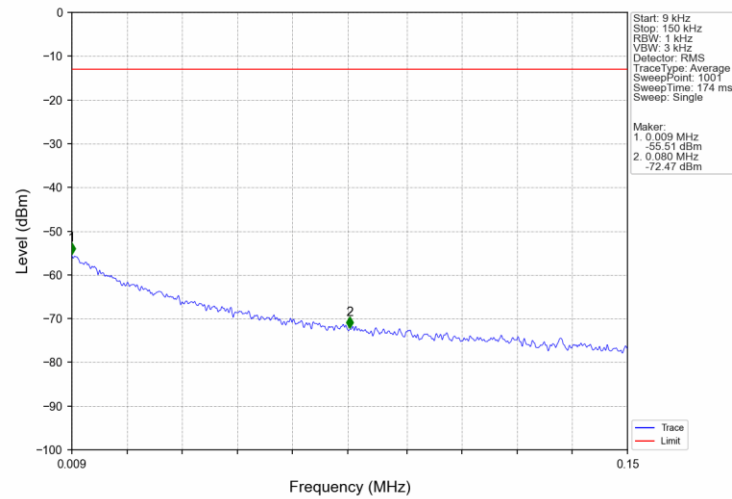
Band5 1.4MHz QPSK MCH 836.5MHz RB 1 0 NTNV



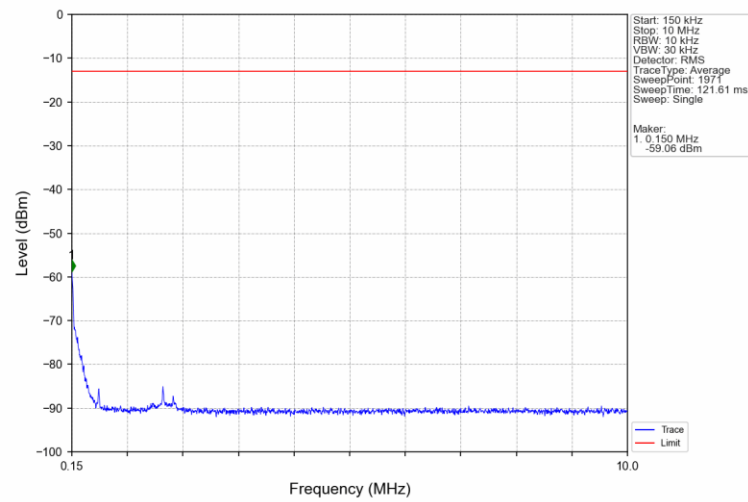
Band5 1.4MHz QPSK MCH 836.5MHz RB 1 0 NTNV



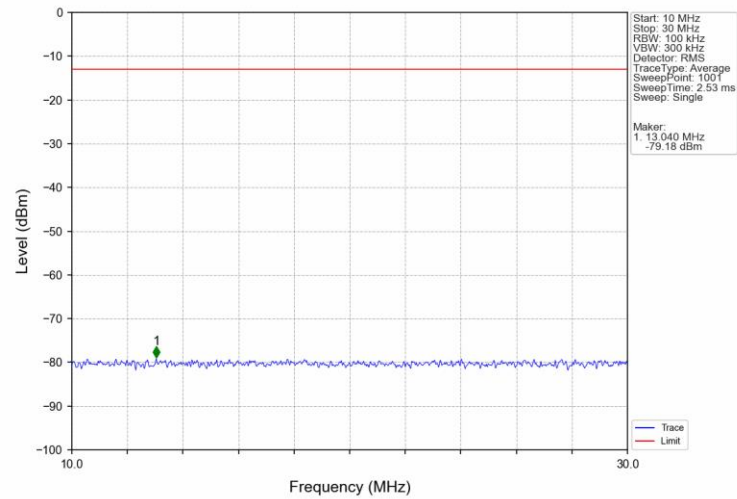
Band5 1.4MHz QPSK HCH 848.3MHz RB 1 0 NTNV



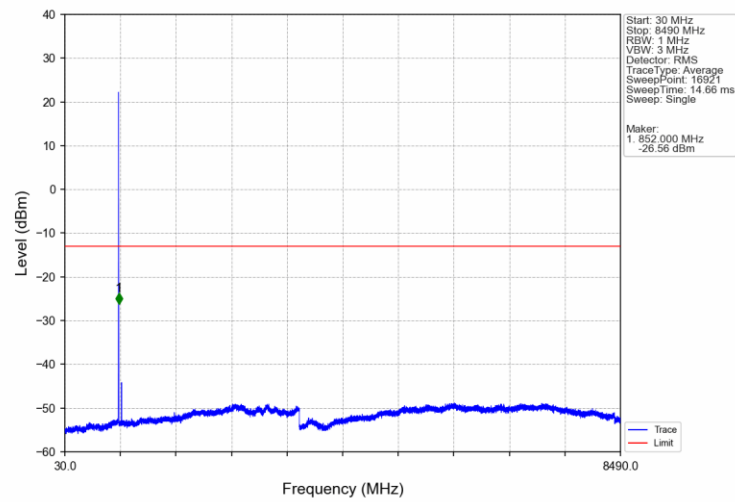
Band5 1.4MHz QPSK HCH 848.3MHz RB 1 0 NTNV



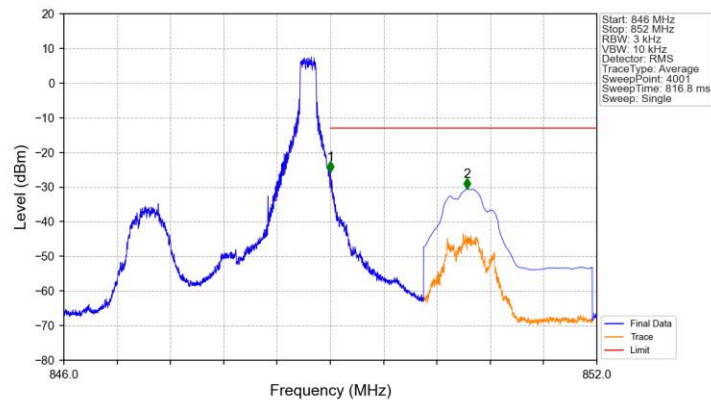
Band5 1.4MHz QPSK HCH 848.3MHz RB 1 0 NTNV



Band5 1.4MHz QPSK HCH 848.3MHz RB 1 0 NTNV

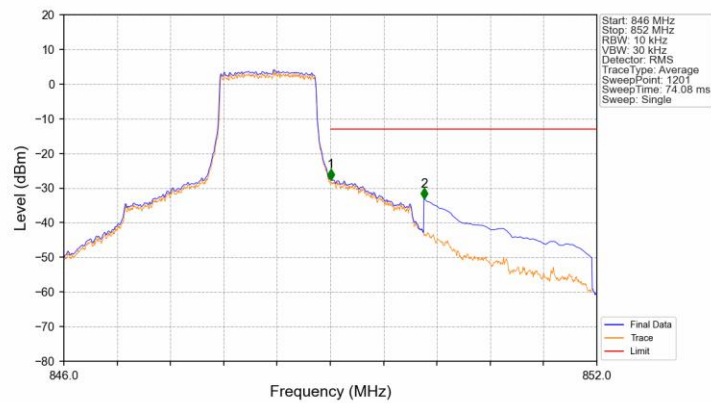


Band5 1.4MHz QPSK HCH 848.3MHz RB 1 5 NTNV



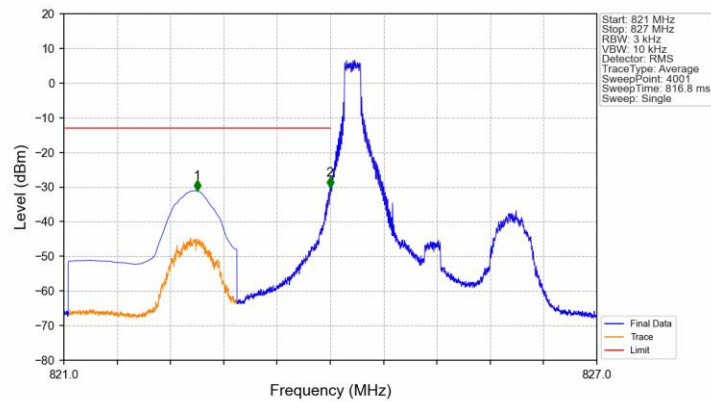
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
846	849	0.003	/	/	/	/	/	/
849	850	0.003	/	1	849.003	-25.62	-13	Pass
850	852	0.1	CHP	2	850.542	-30.54	-13	Pass

Band5 1.4MHz QPSK HCH 848.3MHz RB 6 0 NTNV



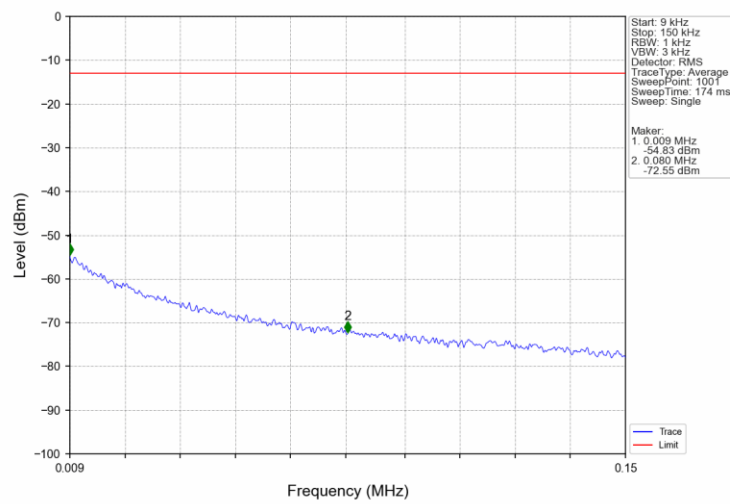
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
846	849	0.014	CHP	/	/	/	/	/
849	850	0.014	CHP	1	849.005	-27.58	-13	Pass
850	852	0.1	CHP	2	850.055	-33.17	-13	Pass

Band5 1.4MHz 16QAM LCH 824.7MHz RB 1 0 NTNV

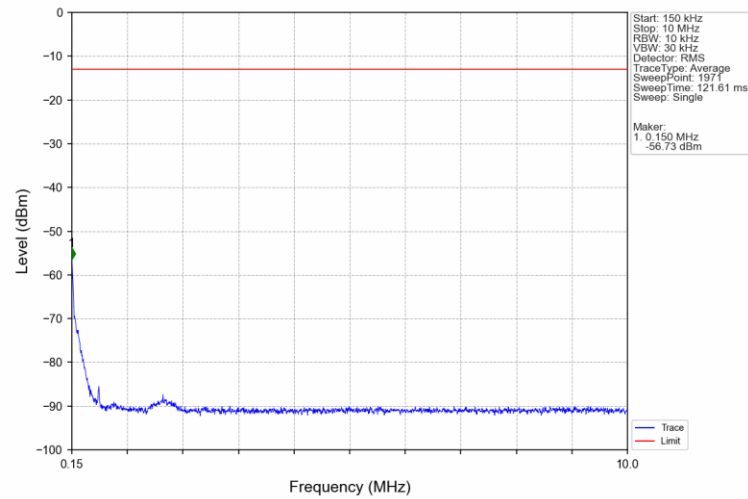


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	823	0.1	CHP	1	822.501	-31.05	-13	Pass
823	824	0.003	/	2	823.997	-30.28	-13	Pass
824	827	0.003	/	/	/	/	/	/

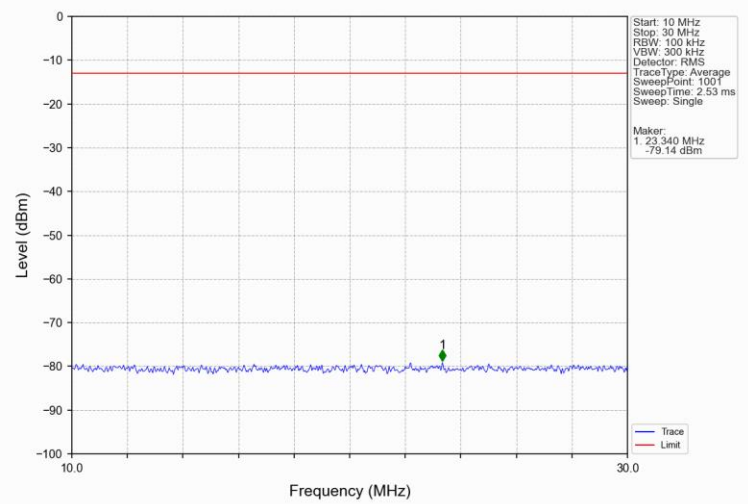
Band5 1.4MHz 16QAM LCH 824.7MHz RB 1 0 NTNV



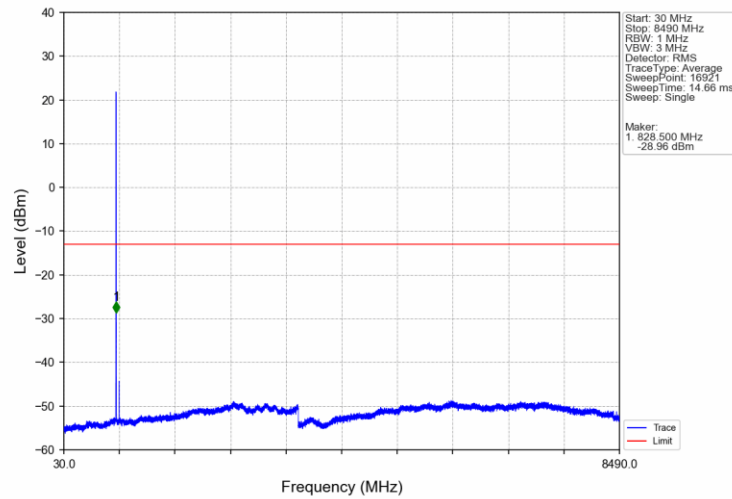
Band5 1.4MHz 16QAM LCH 824.7MHz RB 1 0 NTV



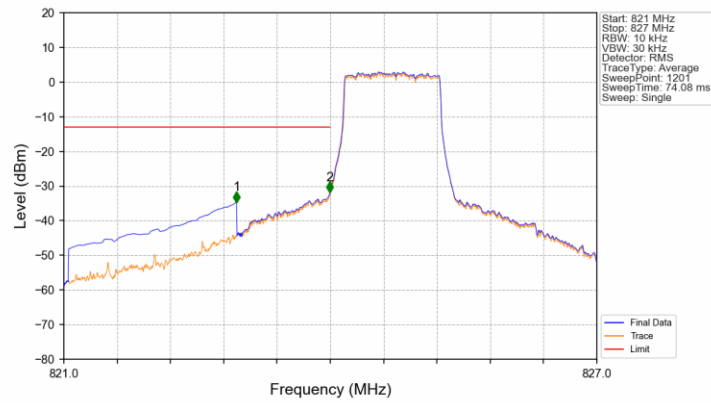
Band5 1.4MHz 16QAM LCH 824.7MHz RB 1 0 NTV



Band5 1.4MHz 16QAM LCH 824.7MHz RB 1 0 NTNV

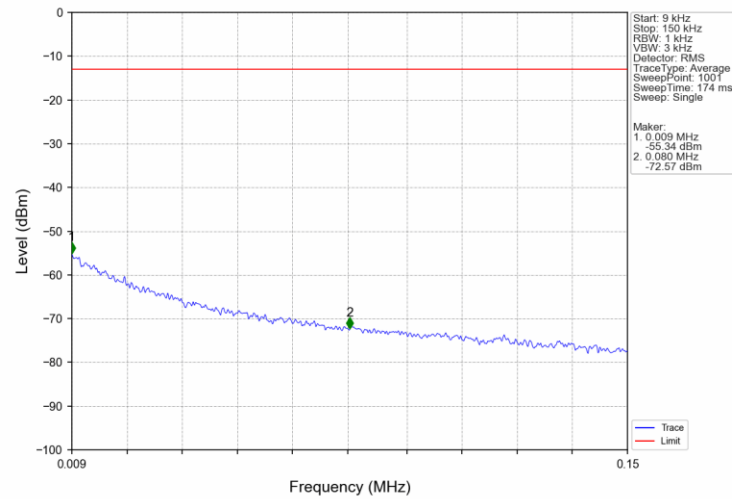


Band5 1.4MHz 16QAM LCH 824.7MHz RB 6 0 NTNV

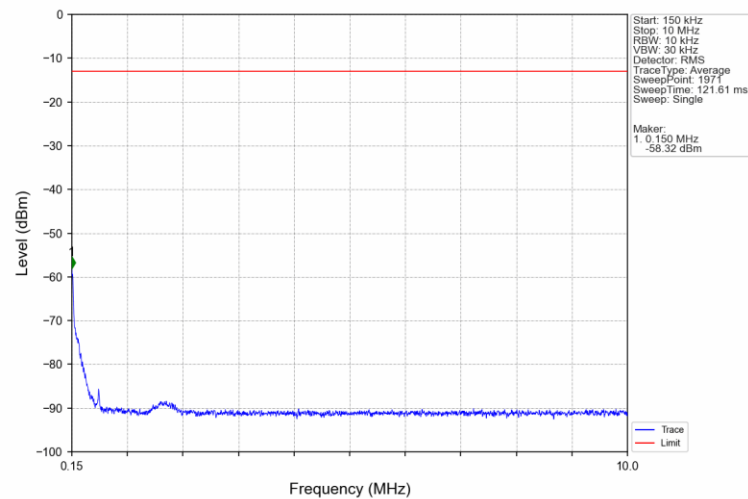


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	823	0.1	CHP	1	822.945	-34.68	-13	Pass
823	824	0.013	CHP	2	823.995	-31.86	-13	Pass
824	827	0.013	CHP	/	/	/	/	/

Band5 1.4MHz 16QAM MCH 836.5MHz RB 1 0 NTNV

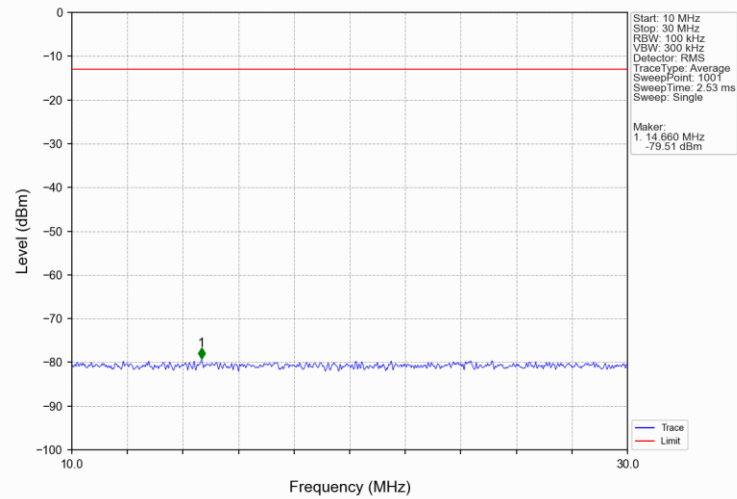


Band5 1.4MHz 16QAM MCH 836.5MHz RB 1 0 NTNV

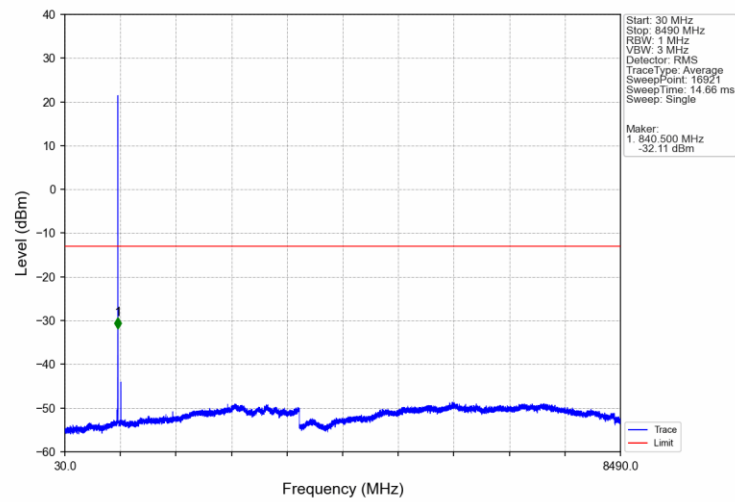




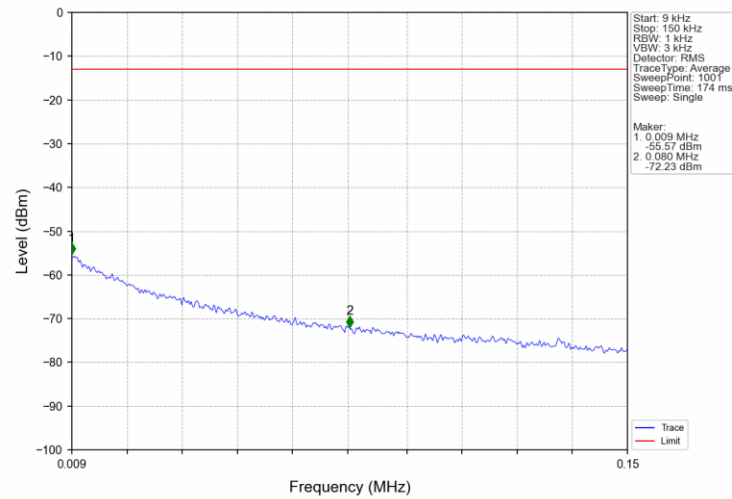
Band5 1.4MHz 16QAM MCH 836.5MHz RB 1 0 NTNV



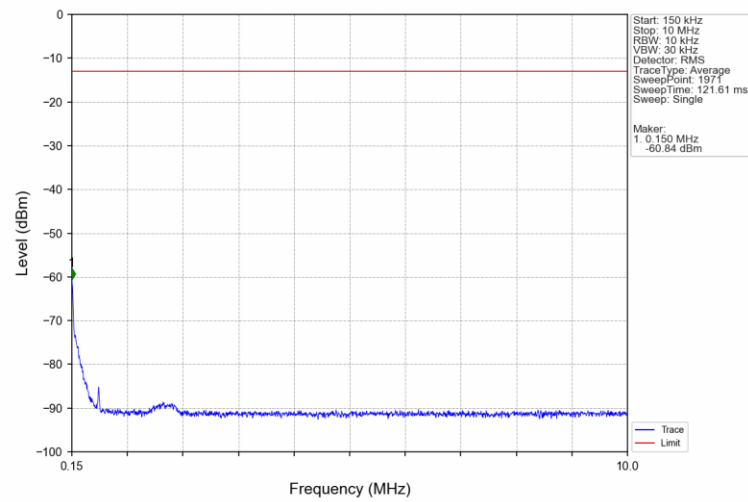
Band5 1.4MHz 16QAM MCH 836.5MHz RB 1 0 NTNV



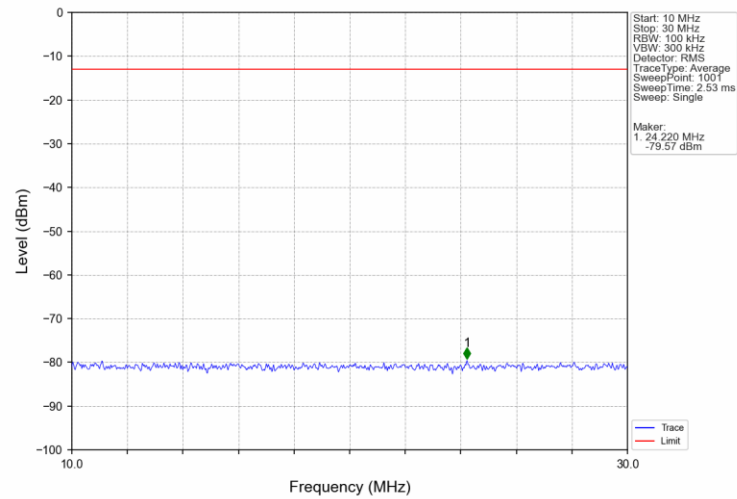
Band5 1.4MHz 16QAM HCH 848.3MHz RB 1 0 NTNV



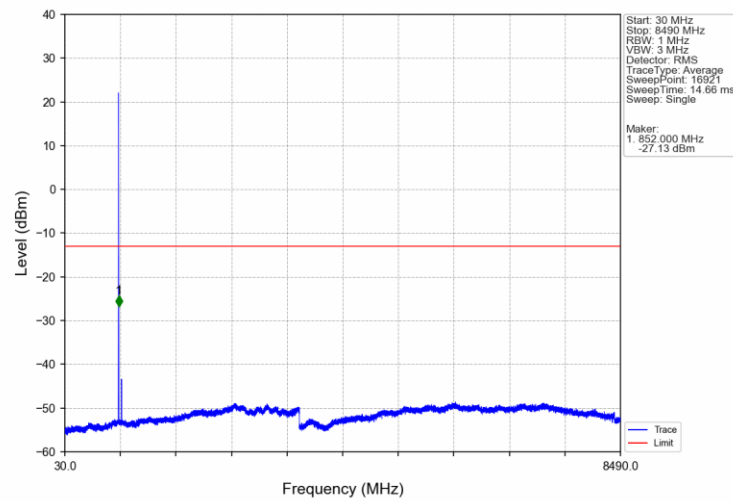
Band5 1.4MHz 16QAM HCH 848.3MHz RB 1 0 NTNV



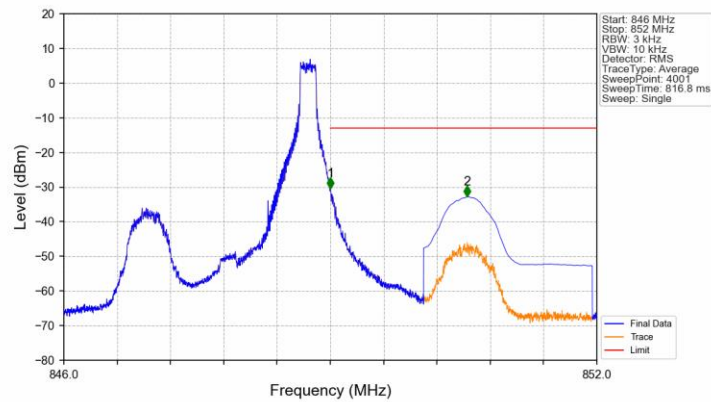
Band5 1.4MHz 16QAM HCH 848.3MHz RB 1 0 NTV



Band5 1.4MHz 16QAM HCH 848.3MHz RB 1 0 NTV

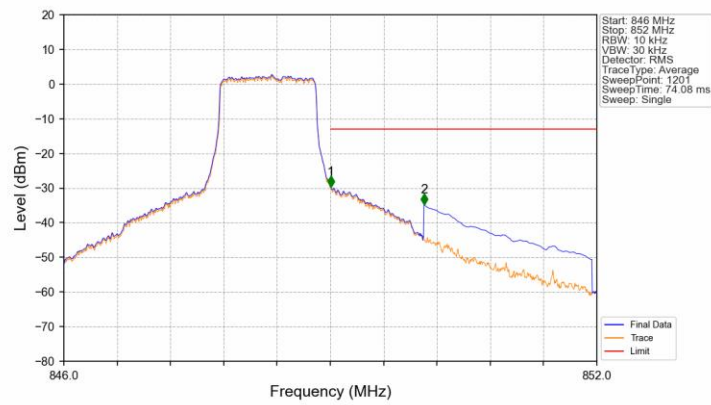


Band5 1.4MHz 16QAM HCH 848.3MHz RB 1 5 NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
846	849	0.003	/	/	/	/	/	/
849	850	0.003	/	1	849.003	-30.41	-13	Pass
850	852	0.1	CHP	2	850.540	-32.80	-13	Pass

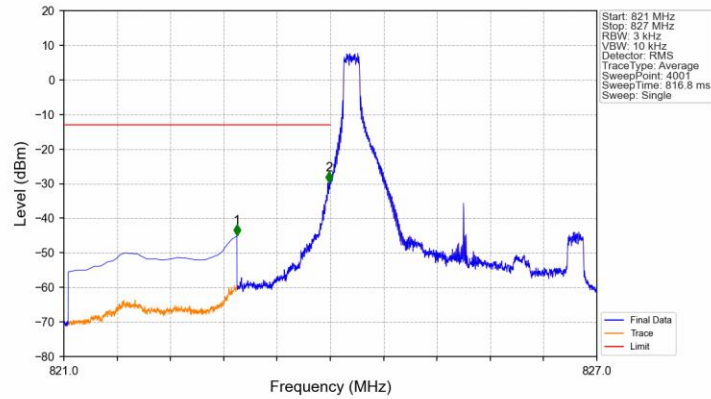
Band5 1.4MHz 16QAM HCH 848.3MHz RB 6 0 NTNV



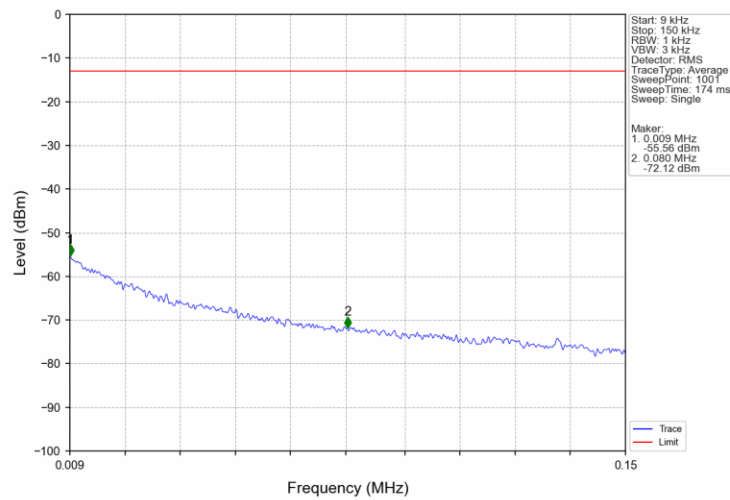
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
846	849	0.013	CHP	/	/	/	/	/
849	850	0.013	CHP	1	849.005	-29.62	-13	Pass
850	852	0.1	CHP	2	850.055	-34.84	-13	Pass

6.2.2 B5_3MHz

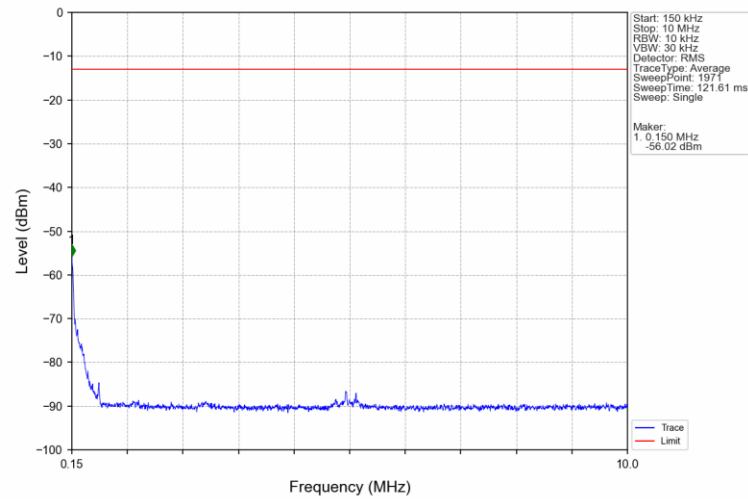
Band5 3MHz QPSK LCH 825.5MHz RB 1 0 NTN



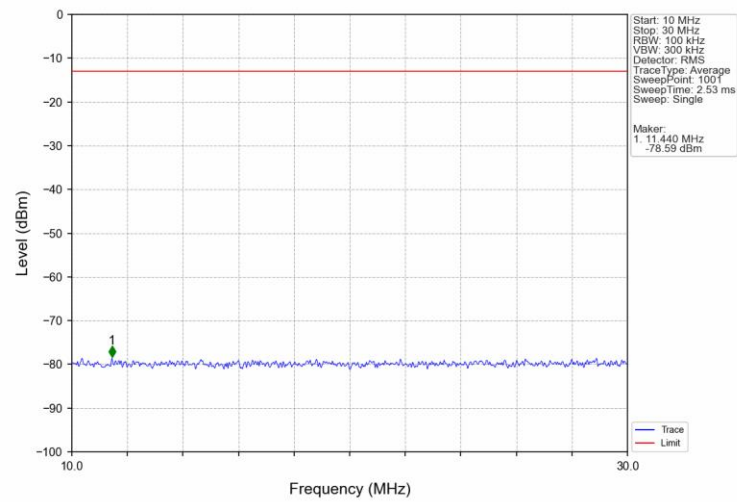
Band5 3MHz QPSK LCH 825.5MHz RB 1 0 NTN



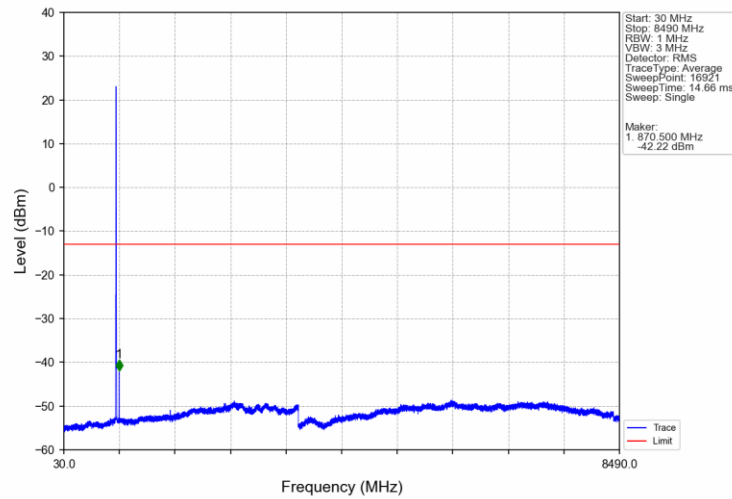
Band5_3MHz_QPSK_LCH_825.5MHz_RB_1_0_NTNV



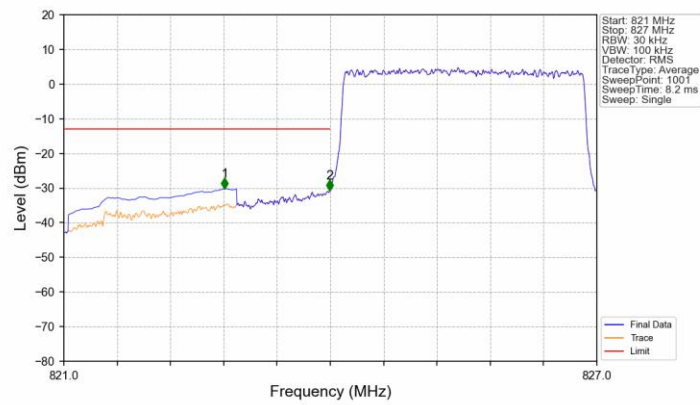
Band5_3MHz_QPSK_LCH_825.5MHz_RB_1_0_NTNV



Band5 3MHz QPSK LCH 825.5MHz RB 1 0 NTV

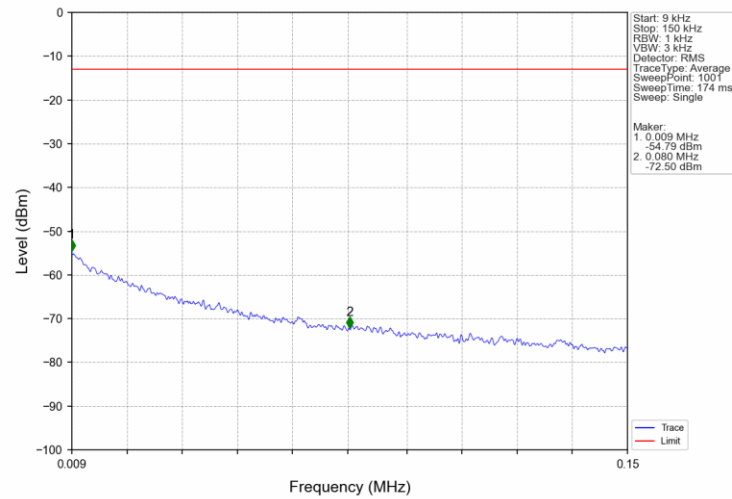


Band5 3MHz QPSK LCH 825.5MHz RB 15 0 NTV

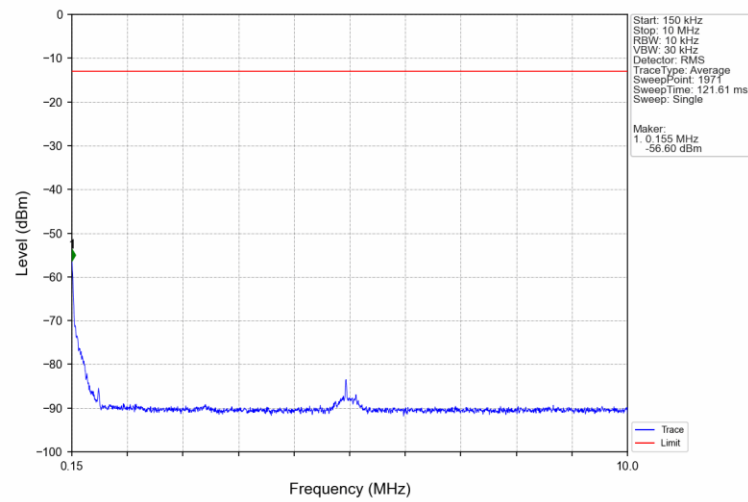


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	823	0.1	CHP	1	822.812	-30.23	-13	Pass
823	824	0.03	/	2	823.994	-30.78	-13	Pass
824	827	0.03	/	/	/	/	/	/

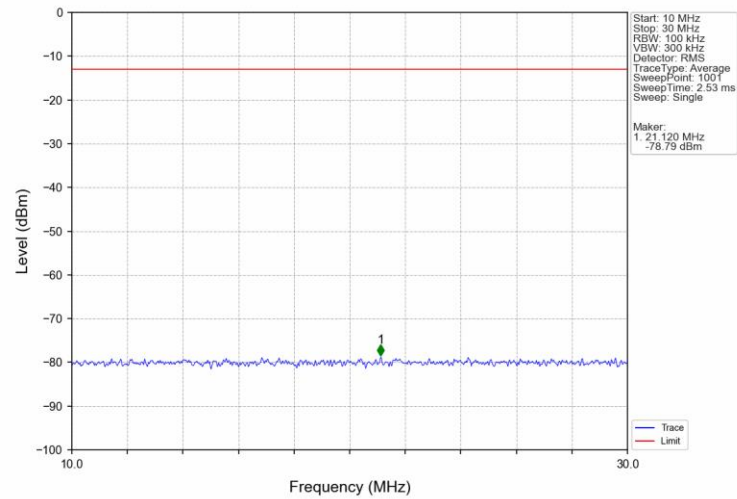
Band5 3MHz QPSK MCH 836.5MHz RB 1 0 NTN



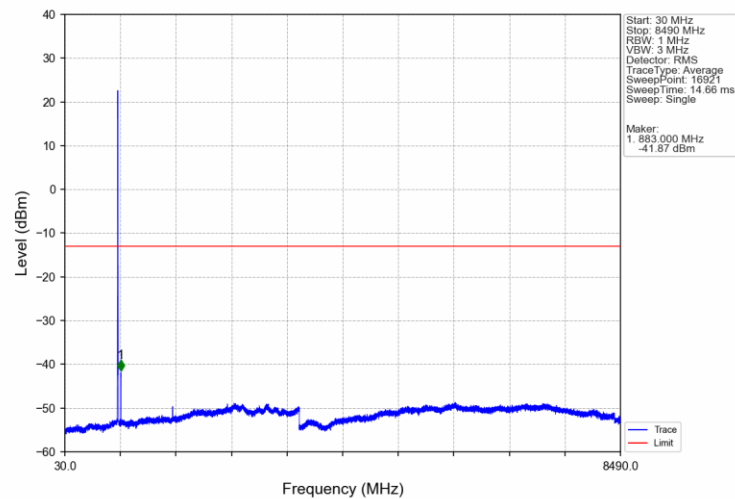
Band5 3MHz QPSK MCH 836.5MHz RB 1 0 NTN



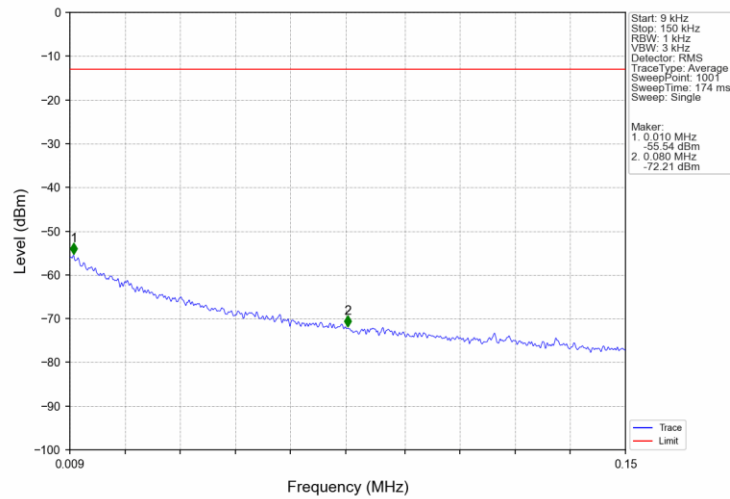
Band5 3MHz QPSK MCH 836.5MHz RB 1 0 NTN



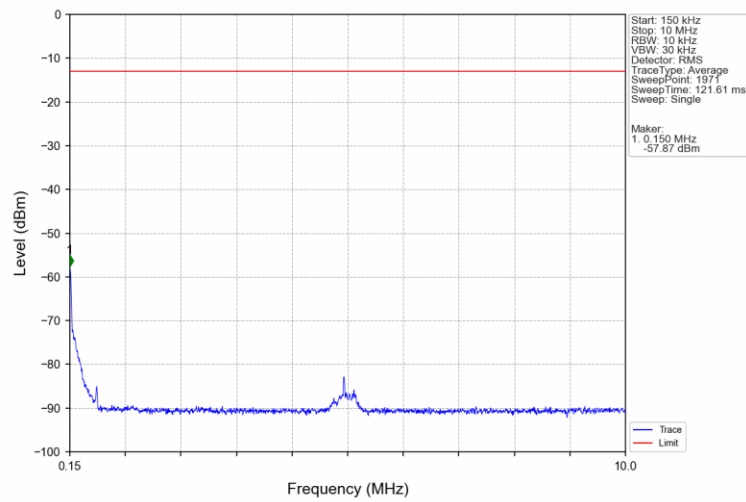
Band5 3MHz QPSK MCH 836.5MHz RB 1 0 NTN



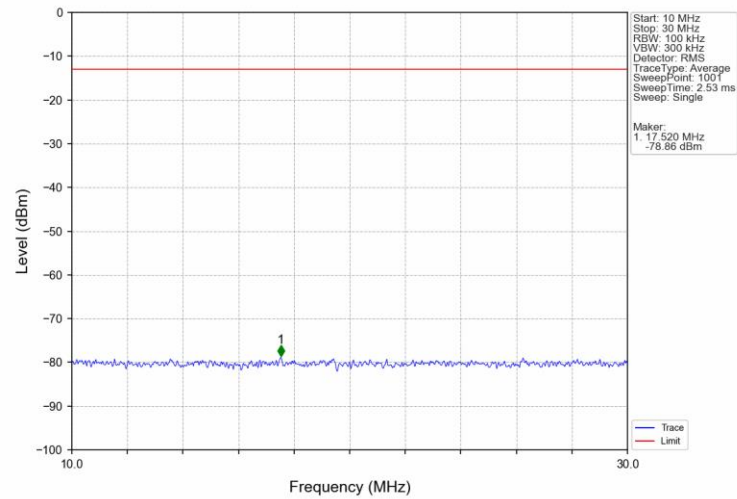
Band5 3MHz QPSK HCH 847.5MHz RB 1 0 NTN



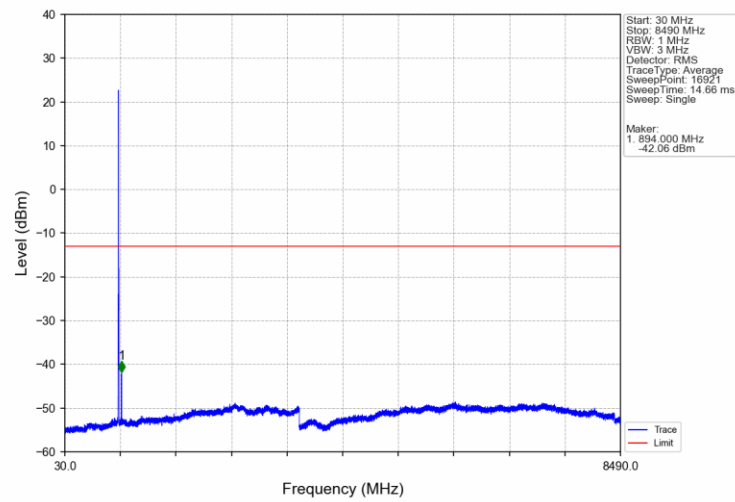
Band5 3MHz QPSK HCH 847.5MHz RB 1 0 NTN



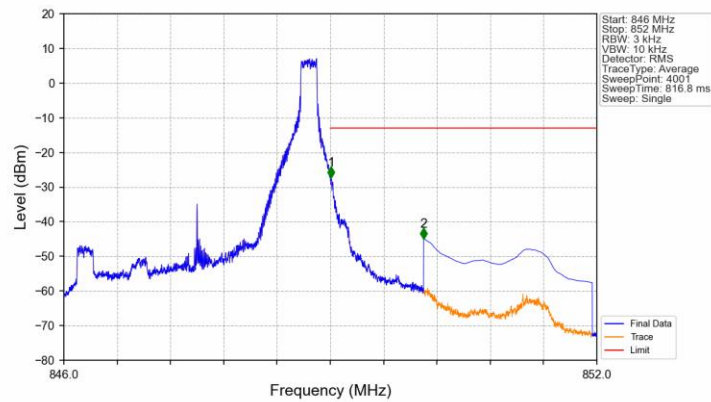
Band5_3MHz_QPSK_HCH_847.5MHz_RB_1_0_NTNV



Band5_3MHz_QPSK_HCH_847.5MHz_RB_1_0_NTNV

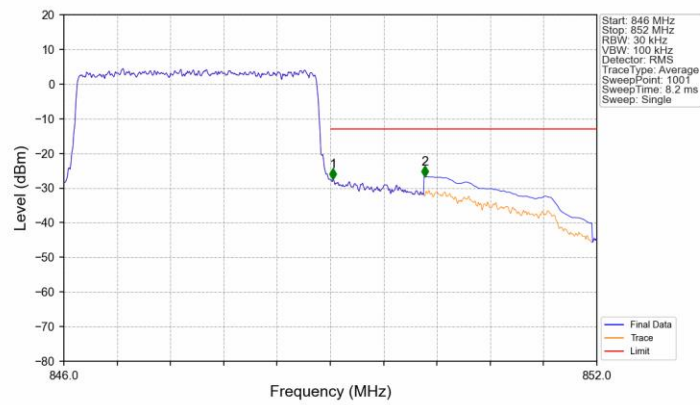


Band5_3MHz_QPSK_HCH_847.5MHz_RB_1_14_NTNV



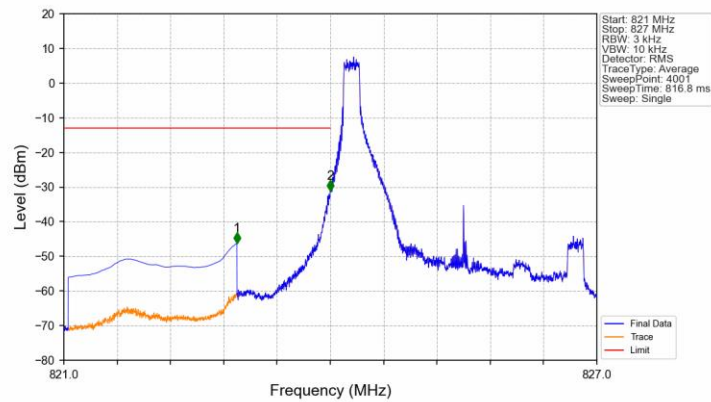
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
846	849	0.003	/	/	/	/	/	/
849	850	0.003	/	1	849.009	-27.30	-13	Pass
850	852	0.1	CHP	2	850.052	-45.01	-13	Pass

Band5_3MHz_QPSK_HCH_847.5MHz_RB_15_0_NTNV



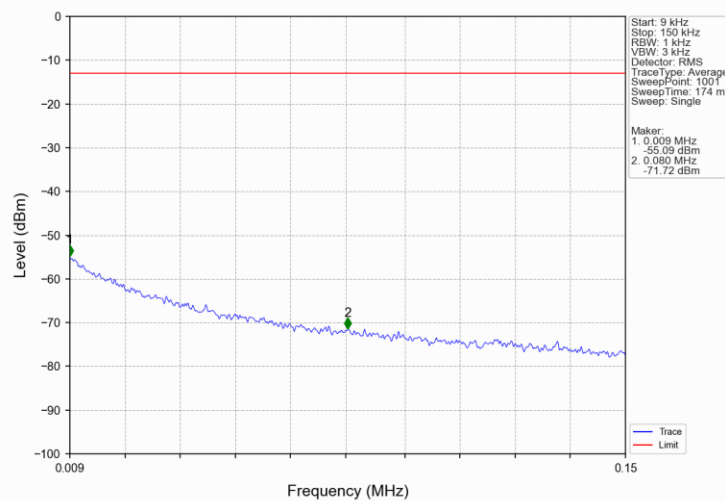
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
846	849	0.03	/	/	/	/	/	/
849	850	0.03	/	1	849.030	-27.55	-13	Pass
850	852	0.1	CHP	2	850.062	-26.71	-13	Pass

Band5_3MHz_16QAM_LCH_825.5MHz_RB_1_0_NTNV

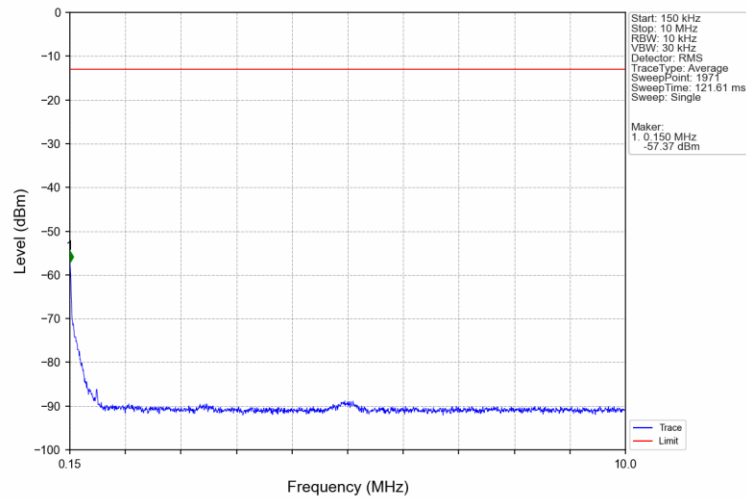


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	823	0.1	CHP	1	822.948	-46.25	-13	Pass
823	824	0.003	/	2	823.999	-31.09	-13	Pass
824	827	0.003	/	/	/	/	/	/

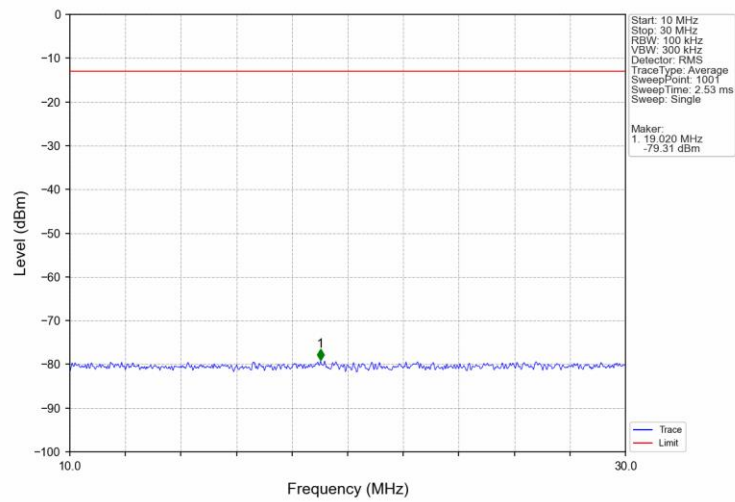
Band5_3MHz_16QAM_LCH_825.5MHz_RB_1_0_NTNV



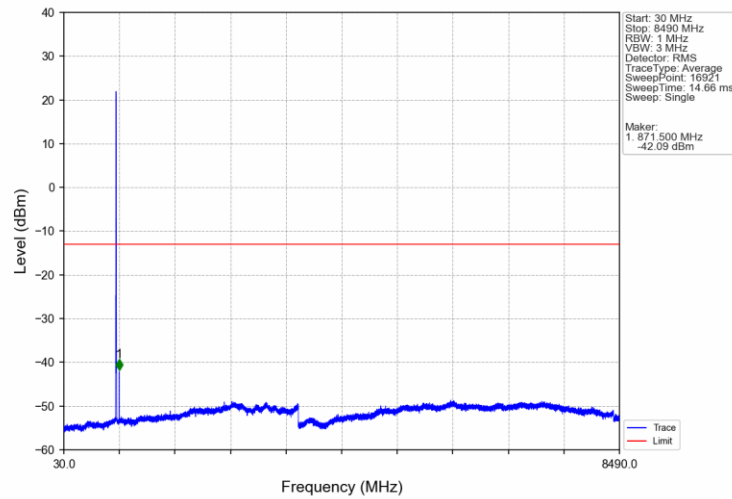
Band5_3MHz_16QAM_LCH_825.5MHz_RB_1_0_NTNV



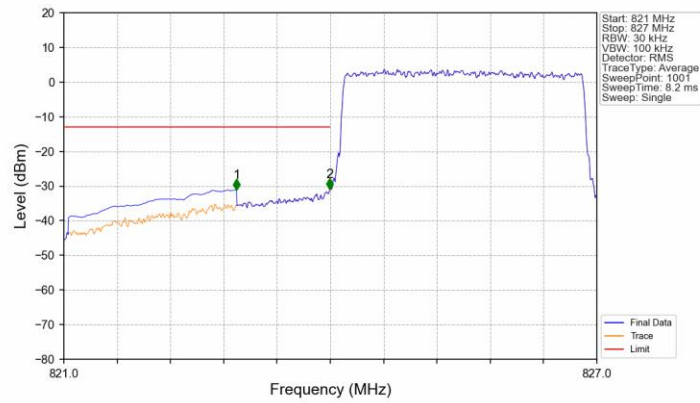
Band5_3MHz_16QAM_LCH_825.5MHz_RB_1_0_NTNV



Band5 3MHz 16QAM LCH 825.5MHz RB 1 0 NTN

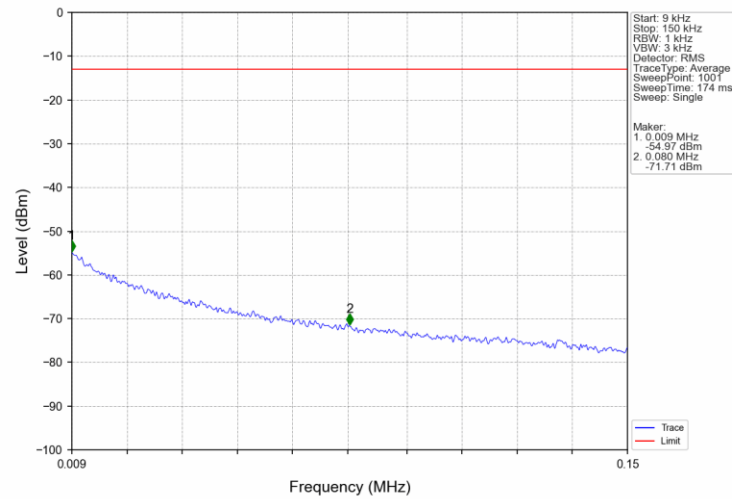


Band5 3MHz 16QAM LCH 825.5MHz RB 15 0 NTN

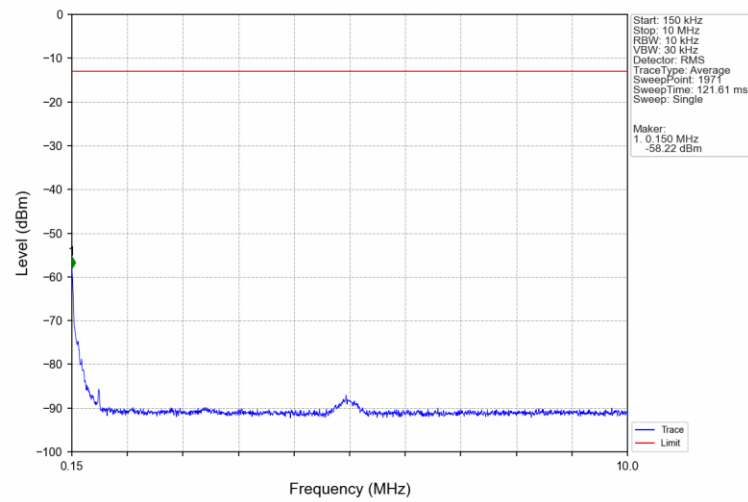


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	823	0.1	CHP	1	822.944	-31.08	-13	Pass
823	824	0.03	/	2	823.994	-30.99	-13	Pass
824	827	0.03	/	/	/	/	/	/

Band5 3MHz 16QAM MCH 836.5MHz RB 1 0 NTNV

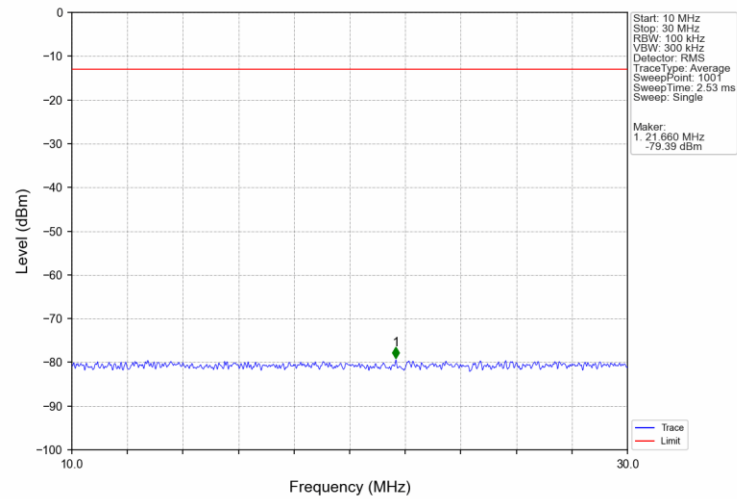


Band5 3MHz 16QAM MCH 836.5MHz RB 1 0 NTNV

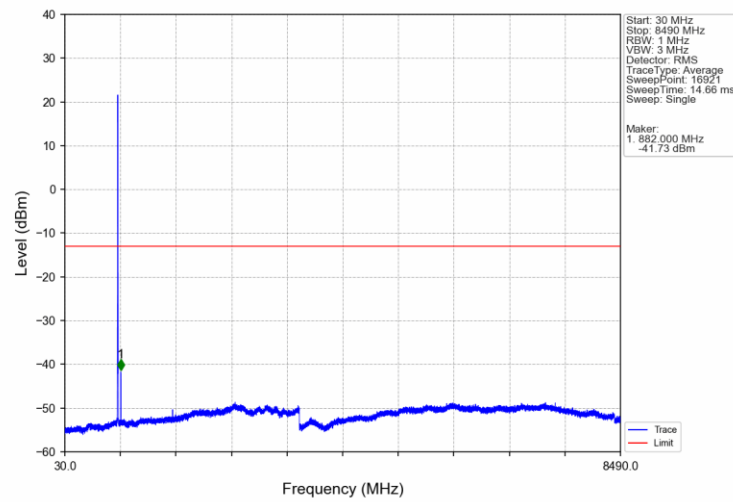




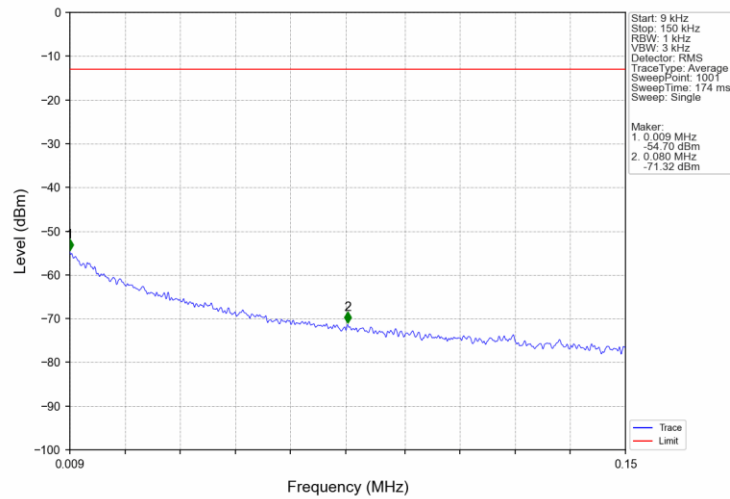
Band5 3MHz 16QAM MCH 836.5MHz RB 1 0 NTNV



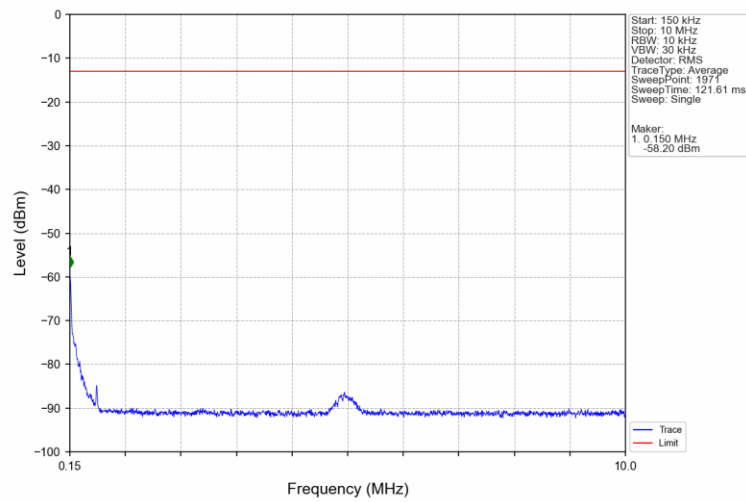
Band5 3MHz 16QAM MCH 836.5MHz RB 1 0 NTNV



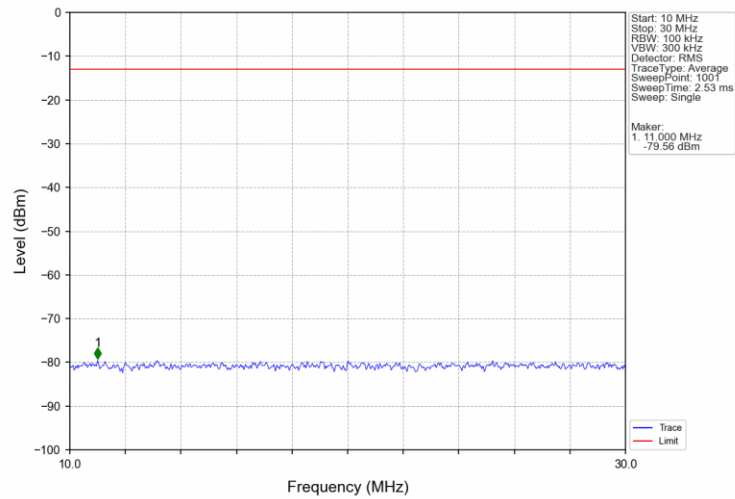
Band5_3MHz_16QAM_HCH_847.5MHz_RB_1_0_NTNV



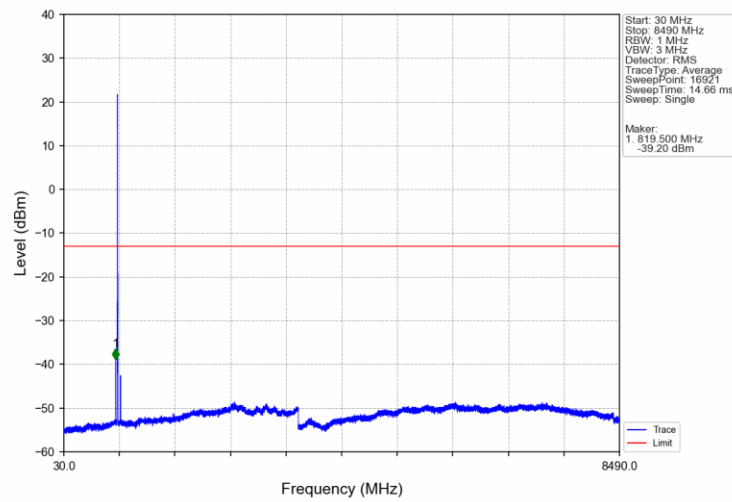
Band5_3MHz_16QAM_HCH_847.5MHz_RB_1_0_NTNV



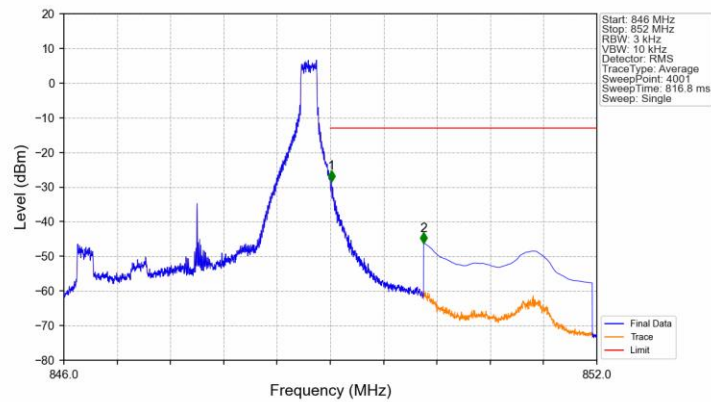
Band5_3MHz_16QAM_HCH_847.5MHz_RB_1_0_NTNV



Band5_3MHz_16QAM_HCH_847.5MHz_RB_1_0_NTNV

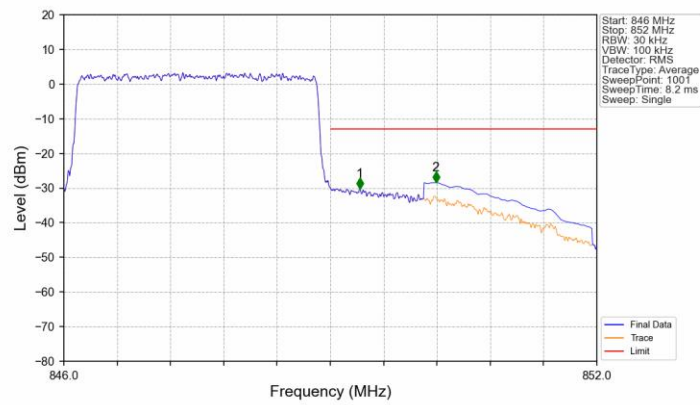


Band5 3MHz 16QAM HCH 847.5MHz RB 1 14 NTV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
846	849	0.003	/	/	/	/	/	/
849	850	0.003	/	1	849.012	-28.30	-13	Pass
850	852	0.1	CHP	2	850.052	-46.18	-13	Pass

Band5 3MHz 16QAM HCH 847.5MHz RB 15 0 NTV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
846	849	0.03	/	/	/	/	/	/
849	850	0.03	/	1	849.330	-30.14	-13	Pass
850	852	0.1	CHP	2	850.188	-28.38	-13	Pass