

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 Band V_ERP (ANT13)

Band V								
ENV	Mode		Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
	Network	Subset				Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	24.33	-3.91	18.27	<=38.45	Pass
			836.6	24.53	-3.91	18.47	<=38.45	Pass
			846.6	24.48	-3.91	18.42	<=38.45	Pass
	HSDPA	Subtest 1	826.4	22.58	-3.91	16.52	<=38.45	Pass
		Subtest 2	826.4	22.59	-3.91	16.53	<=38.45	Pass
		Subtest 3	826.4	22.53	-3.91	16.47	<=38.45	Pass
		Subtest 4	826.4	22.56	-3.91	16.50	<=38.45	Pass
		Subtest 1	836.6	22.78	-3.91	16.72	<=38.45	Pass
		Subtest 2	836.6	22.83	-3.91	16.77	<=38.45	Pass
		Subtest 3	836.6	22.76	-3.91	16.70	<=38.45	Pass
		Subtest 4	836.6	22.82	-3.91	16.76	<=38.45	Pass
		Subtest 1	846.6	22.80	-3.91	16.74	<=38.45	Pass
		Subtest 2	846.6	22.79	-3.91	16.73	<=38.45	Pass
		Subtest 3	846.6	22.74	-3.91	16.68	<=38.45	Pass
		Subtest 4	846.6	22.73	-3.91	16.67	<=38.45	Pass
	HSUPA	Subtest 1	826.4	20.34	-3.91	14.28	<=38.45	Pass
		Subtest 2	826.4	20.40	-3.91	14.34	<=38.45	Pass
		Subtest 3	826.4	21.75	-3.91	15.69	<=38.45	Pass
		Subtest 4	826.4	20.05	-3.91	13.99	<=38.45	Pass
		Subtest 5	826.4	20.44	-3.91	14.38	<=38.45	Pass
		Subtest 1	836.6	20.57	-3.91	14.51	<=38.45	Pass
		Subtest 2	836.6	21.73	-3.91	15.67	<=38.45	Pass
		Subtest 3	836.6	20.79	-3.91	14.73	<=38.45	Pass
		Subtest 4	836.6	21.68	-3.91	15.62	<=38.45	Pass
		Subtest 5	836.6	20.59	-3.91	14.53	<=38.45	Pass
		Subtest 1	846.6	20.32	-3.91	14.26	<=38.45	Pass
		Subtest 2	846.6	21.91	-3.91	15.85	<=38.45	Pass
		Subtest 3	846.6	20.68	-3.91	14.62	<=38.45	Pass
		Subtest 4	846.6	21.65	-3.91	15.59	<=38.45	Pass
		Subtest 5	846.6	20.52	-3.91	14.46	<=38.45	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

2. Frequency Stability

2.1 Test Result

2.1.1 Band V

Band V							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
RMC	826.4	20	3.7	1.768	0.0021	-2.5 to 2.5	Pass
			3.91	1.366	0.0017	-2.5 to 2.5	Pass
			4.4	1.549	0.0019	-2.5 to 2.5	Pass
		-30	3.91	1.671	0.0020	-2.5 to 2.5	Pass
		-20	3.91	1.731	0.0021	-2.5 to 2.5	Pass

		-10	3.91	1.267	0.0015	-2.5 to 2.5	Pass
		0	3.91	1.132	0.0014	-2.5 to 2.5	Pass
		10	3.91	1.109	0.0013	-2.5 to 2.5	Pass
		30	3.91	1.257	0.0015	-2.5 to 2.5	Pass
		40	3.91	1.416	0.0017	-2.5 to 2.5	Pass
	836.6	50	3.91	1.299	0.0016	-2.5 to 2.5	Pass
		20	3.7	-0.695	-0.0008	-2.5 to 2.5	Pass
			3.91	-0.999	-0.0012	-2.5 to 2.5	Pass
			4.4	-0.316	-0.0004	-2.5 to 2.5	Pass
		-30	3.91	-0.472	-0.0006	-2.5 to 2.5	Pass
		-20	3.91	-0.642	-0.0008	-2.5 to 2.5	Pass
		-10	3.91	-0.177	-0.0002	-2.5 to 2.5	Pass
		0	3.91	-0.637	-0.0008	-2.5 to 2.5	Pass
		10	3.91	-0.341	-0.0004	-2.5 to 2.5	Pass
		30	3.91	-0.635	-0.0008	-2.5 to 2.5	Pass
		40	3.91	-0.343	-0.0004	-2.5 to 2.5	Pass
		50	3.91	-0.699	-0.0008	-2.5 to 2.5	Pass
	846.6	20	3.7	-2.121	-0.0025	-2.5 to 2.5	Pass
			3.91	-1.816	-0.0021	-2.5 to 2.5	Pass
			4.4	-2.200	-0.0026	-2.5 to 2.5	Pass
		-30	3.91	-2.081	-0.0025	-2.5 to 2.5	Pass
		-20	3.91	-1.817	-0.0021	-2.5 to 2.5	Pass
		-10	3.91	-2.065	-0.0024	-2.5 to 2.5	Pass
		0	3.91	-2.029	-0.0024	-2.5 to 2.5	Pass
		10	3.91	-1.985	-0.0023	-2.5 to 2.5	Pass
		30	3.91	-2.019	-0.0024	-2.5 to 2.5	Pass
		40	3.91	-1.875	-0.0022	-2.5 to 2.5	Pass
		50	3.91	-2.291	-0.0027	-2.5 to 2.5	Pass
HSDPA	826.4	20	3.7	1.516	0.0018	-2.5 to 2.5	Pass
			3.91	1.270	0.0015	-2.5 to 2.5	Pass
			4.4	1.232	0.0015	-2.5 to 2.5	Pass
		-30	3.91	1.638	0.0020	-2.5 to 2.5	Pass
		-20	3.91	1.162	0.0014	-2.5 to 2.5	Pass
		-10	3.91	1.607	0.0019	-2.5 to 2.5	Pass
		0	3.91	1.200	0.0015	-2.5 to 2.5	Pass
		10	3.91	1.600	0.0019	-2.5 to 2.5	Pass
		30	3.91	1.656	0.0020	-2.5 to 2.5	Pass
		40	3.91	1.286	0.0016	-2.5 to 2.5	Pass
		50	3.91	1.547	0.0019	-2.5 to 2.5	Pass
	836.6	20	3.7	-0.306	-0.0004	-2.5 to 2.5	Pass
			3.91	-0.781	-0.0009	-2.5 to 2.5	Pass
			4.4	-0.702	-0.0008	-2.5 to 2.5	Pass
		-30	3.91	-0.612	-0.0007	-2.5 to 2.5	Pass
		-20	3.91	-0.914	-0.0011	-2.5 to 2.5	Pass
		-10	3.91	-0.568	-0.0007	-2.5 to 2.5	Pass
		0	3.91	-0.574	-0.0007	-2.5 to 2.5	Pass
		10	3.91	-0.391	-0.0005	-2.5 to 2.5	Pass
		30	3.91	-1.033	-0.0012	-2.5 to 2.5	Pass
		40	3.91	-0.323	-0.0004	-2.5 to 2.5	Pass
		50	3.91	-0.682	-0.0008	-2.5 to 2.5	Pass
	846.6	20	3.7	-2.653	-0.0031	-2.5 to 2.5	Pass
			3.91	-2.721	-0.0032	-2.5 to 2.5	Pass
			4.4	-2.643	-0.0031	-2.5 to 2.5	Pass
		-30	3.91	-2.984	-0.0035	-2.5 to 2.5	Pass
		-20	3.91	-2.694	-0.0032	-2.5 to 2.5	Pass
		-10	3.91	-2.338	-0.0028	-2.5 to 2.5	Pass
		0	3.91	-2.557	-0.0030	-2.5 to 2.5	Pass
		10	3.91	-2.902	-0.0034	-2.5 to 2.5	Pass
		30	3.91	-2.050	-0.0024	-2.5 to 2.5	Pass

HSUPA		40	3.91	-2.658	-0.0031	-2.5 to 2.5	Pass
		50	3.91	-2.177	-0.0026	-2.5 to 2.5	Pass
	826.4	20	3.7	1.406	0.0017	-2.5 to 2.5	Pass
			3.91	0.872	0.0011	-2.5 to 2.5	Pass
			4.4	0.743	0.0009	-2.5 to 2.5	Pass
		-30	3.91	0.654	0.0008	-2.5 to 2.5	Pass
		-20	3.91	0.907	0.0011	-2.5 to 2.5	Pass
		-10	3.91	0.939	0.0011	-2.5 to 2.5	Pass
		0	3.91	0.587	0.0007	-2.5 to 2.5	Pass
		10	3.91	0.444	0.0005	-2.5 to 2.5	Pass
		30	3.91	0.699	0.0008	-2.5 to 2.5	Pass
		40	3.91	0.689	0.0008	-2.5 to 2.5	Pass
		50	3.91	1.147	0.0014	-2.5 to 2.5	Pass
	836.6	20	3.7	-1.309	-0.0016	-2.5 to 2.5	Pass
			3.91	-1.030	-0.0012	-2.5 to 2.5	Pass
			4.4	-0.900	-0.0011	-2.5 to 2.5	Pass
		-30	3.91	-0.502	-0.0006	-2.5 to 2.5	Pass
		-20	3.91	-1.530	-0.0018	-2.5 to 2.5	Pass
		-10	3.91	-0.778	-0.0009	-2.5 to 2.5	Pass
		0	3.91	-0.988	-0.0012	-2.5 to 2.5	Pass
		10	3.91	-0.924	-0.0011	-2.5 to 2.5	Pass
		30	3.91	-1.307	-0.0016	-2.5 to 2.5	Pass
		40	3.91	-0.865	-0.0010	-2.5 to 2.5	Pass
		50	3.91	-0.499	-0.0006	-2.5 to 2.5	Pass
	846.6	20	3.7	-2.331	-0.0028	-2.5 to 2.5	Pass
			3.91	-2.569	-0.0030	-2.5 to 2.5	Pass
			4.4	-2.529	-0.0030	-2.5 to 2.5	Pass
		-30	3.91	-2.719	-0.0032	-2.5 to 2.5	Pass
		-20	3.91	-2.767	-0.0033	-2.5 to 2.5	Pass
		-10	3.91	-2.696	-0.0032	-2.5 to 2.5	Pass
		0	3.91	-2.603	-0.0031	-2.5 to 2.5	Pass
		10	3.91	-2.436	-0.0029	-2.5 to 2.5	Pass
		30	3.91	-2.615	-0.0031	-2.5 to 2.5	Pass
		40	3.91	-2.391	-0.0028	-2.5 to 2.5	Pass
		50	3.91	-2.141	-0.0025	-2.5 to 2.5	Pass

4. 99% & 26dB Bandwidth

4.1 Test Result

4.1.1 Band V_OBW

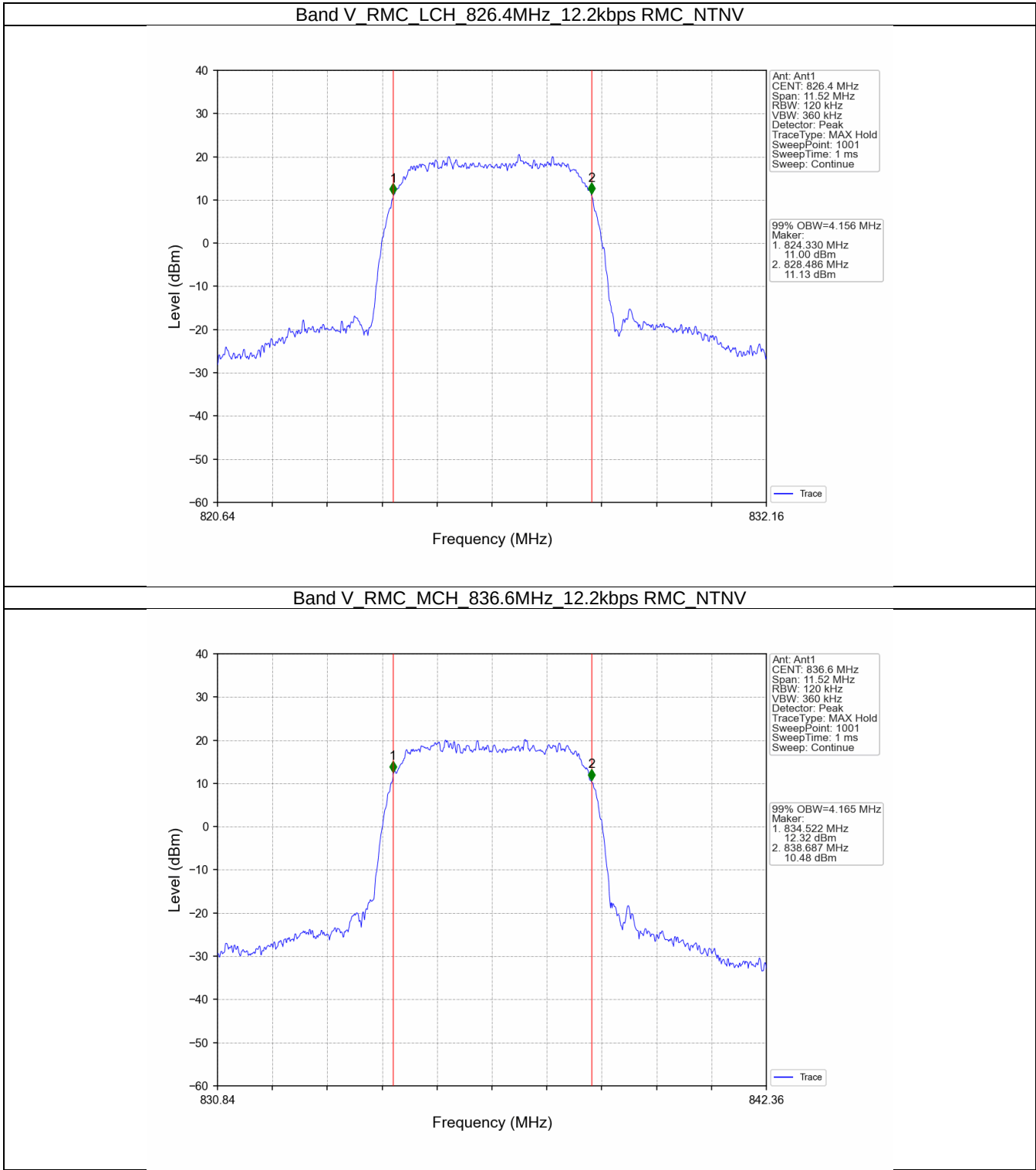
Band V						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	4.156	/	Pass
			836.6	4.165	/	Pass
			846.6	4.146	/	Pass
	HSDPA	Subtest 1	826.4	4.167	/	Pass
			836.6	4.136	/	Pass
			846.6	4.140	/	Pass
	HSUPA	Subtest 1	826.4	4.148	/	Pass
			836.6	4.183	/	Pass
			846.6	4.120	/	Pass

4.1.2 Band V_XDB

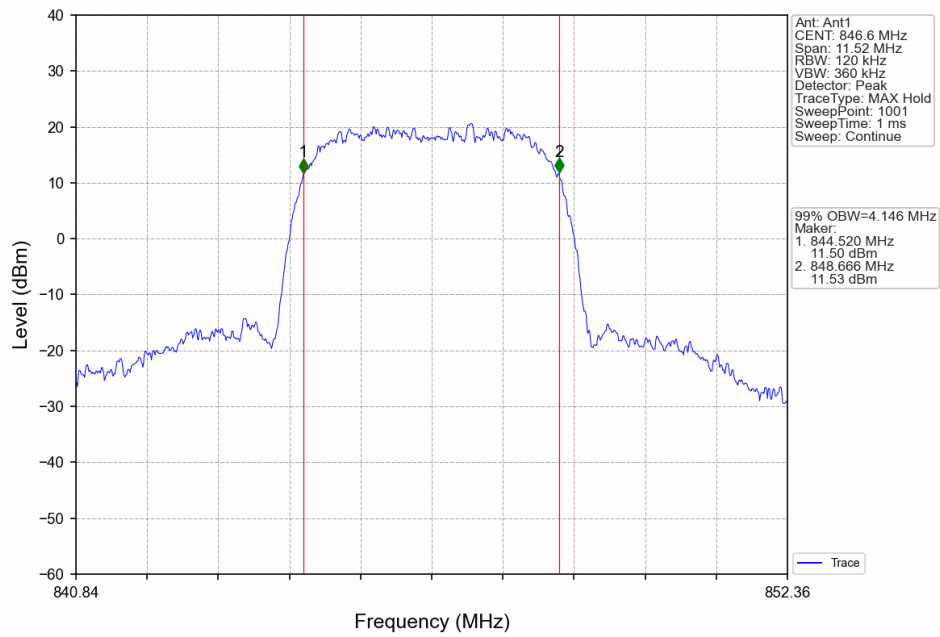
Band V						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	4.773	/	Pass
			836.6	4.753	/	Pass
			846.6	4.766	/	Pass
	HSDPA	Subtest 1	826.4	4.743	/	Pass
			836.6	4.729	/	Pass
			846.6	4.734	/	Pass
	HSUPA	Subtest 1	826.4	4.722	/	Pass
			836.6	4.747	/	Pass
			846.6	4.718	/	Pass

4.2 Test Graph

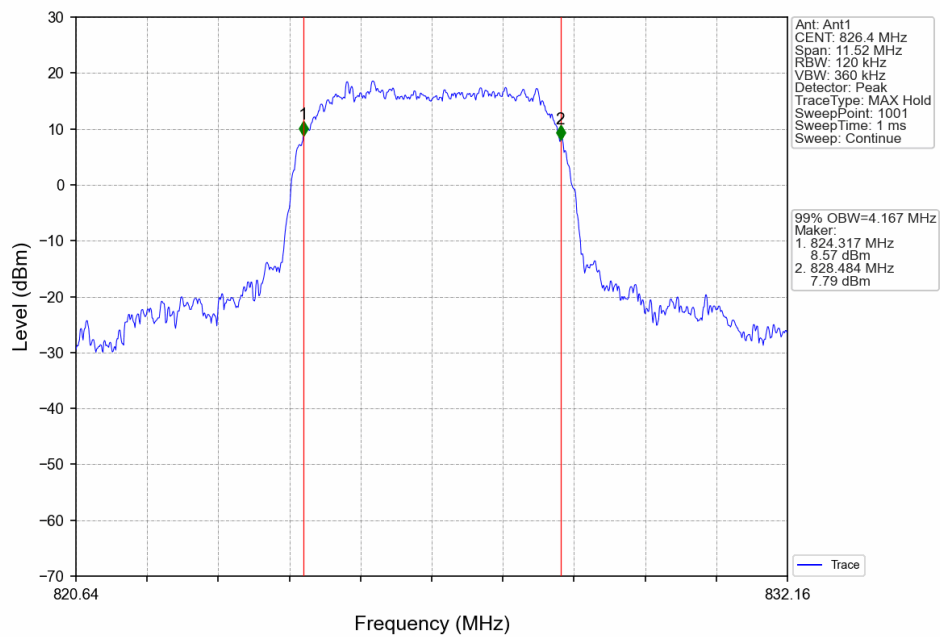
4.2.1 Band V_OBW



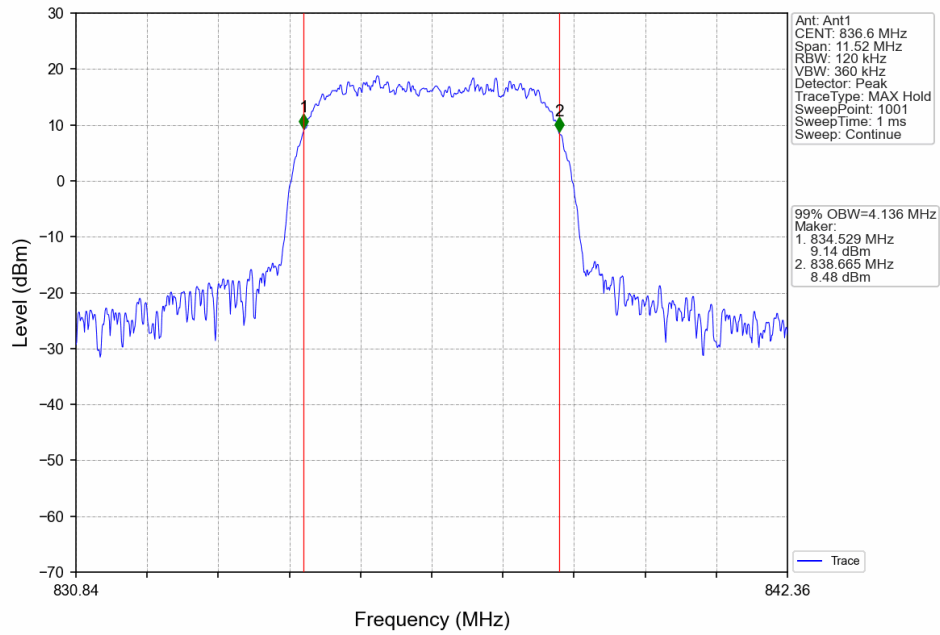
Band V_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



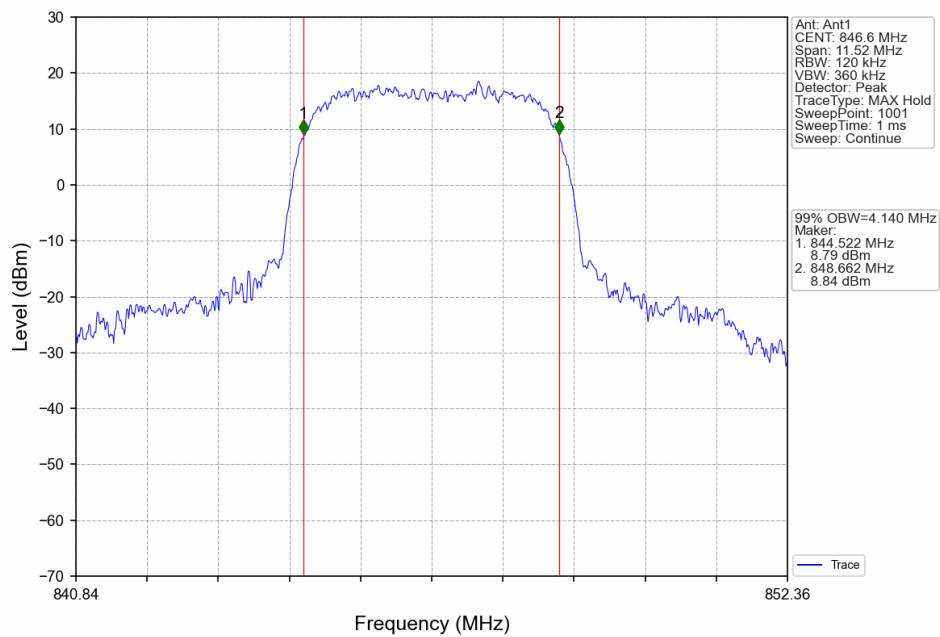
Band V_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



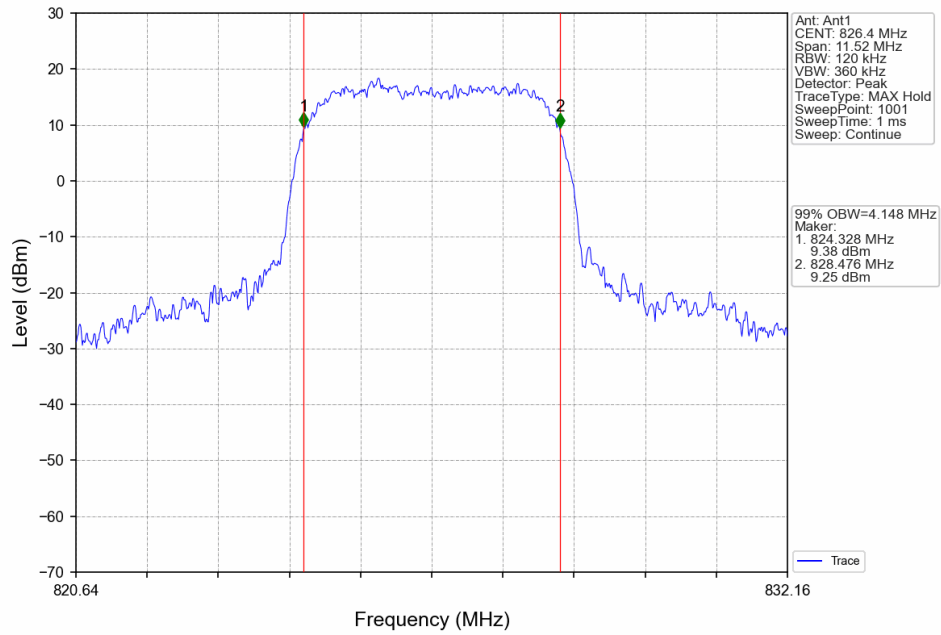
Band V_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



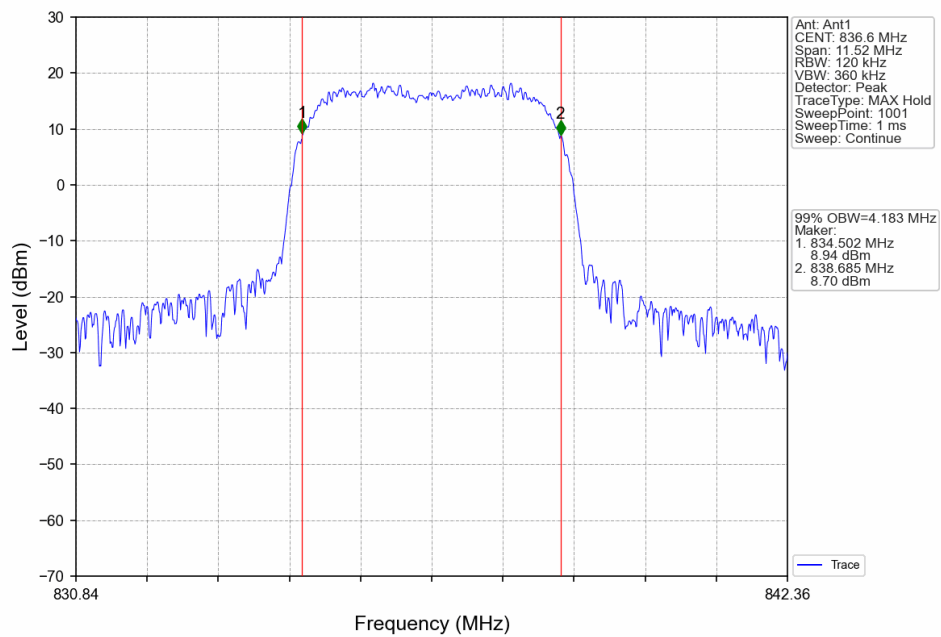
Band V_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



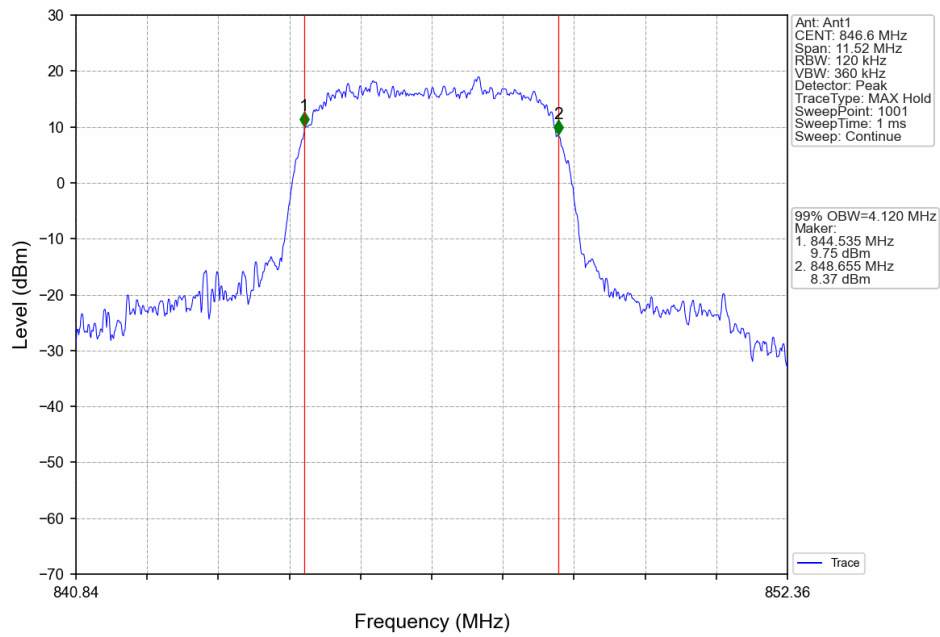
Band V_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



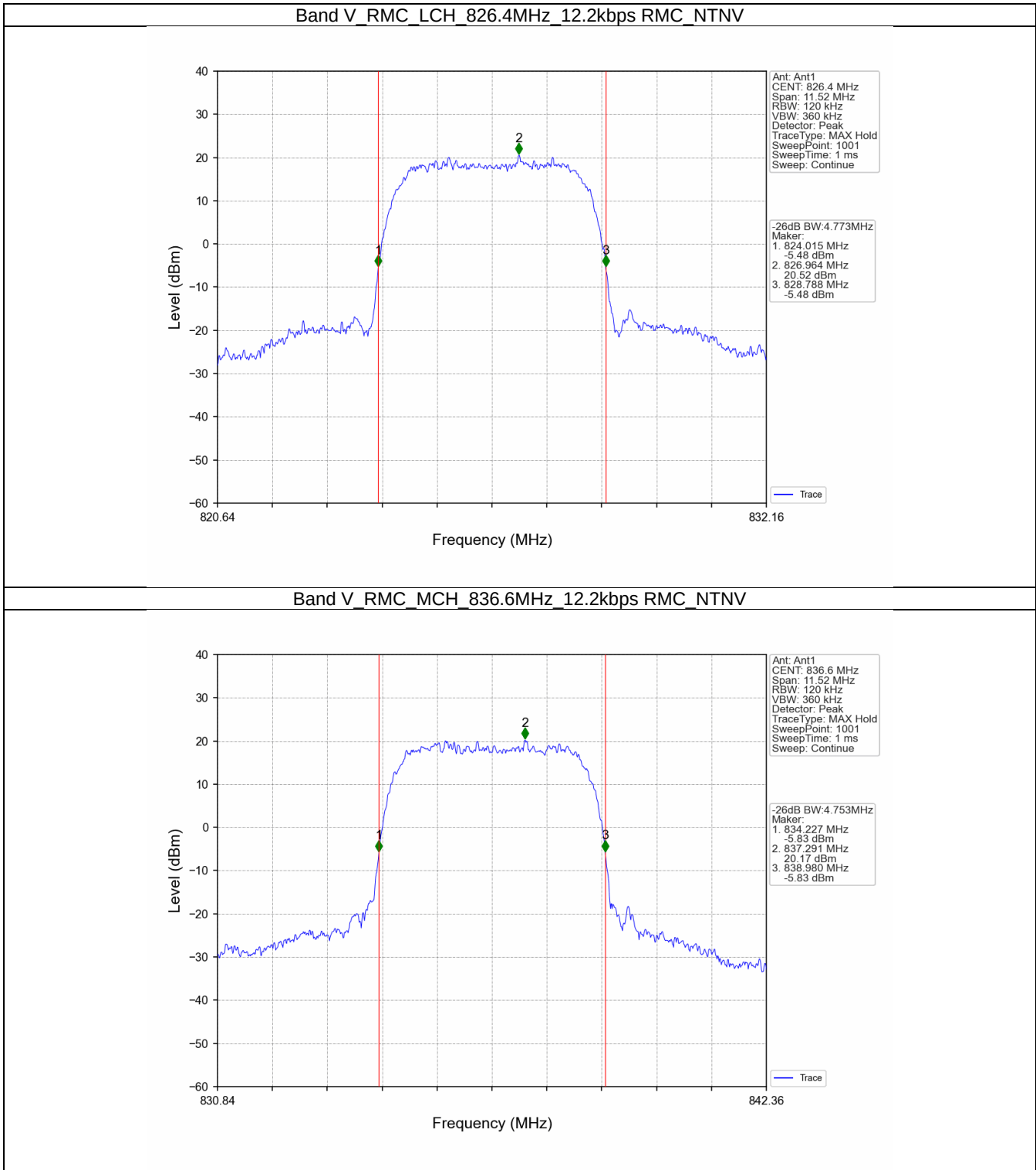
Band V_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



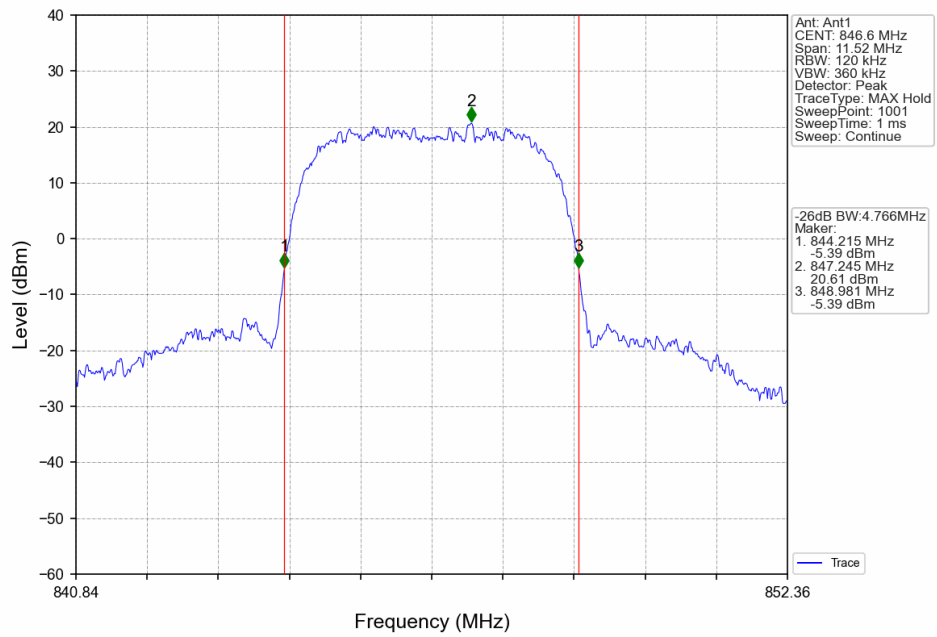
Band V_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



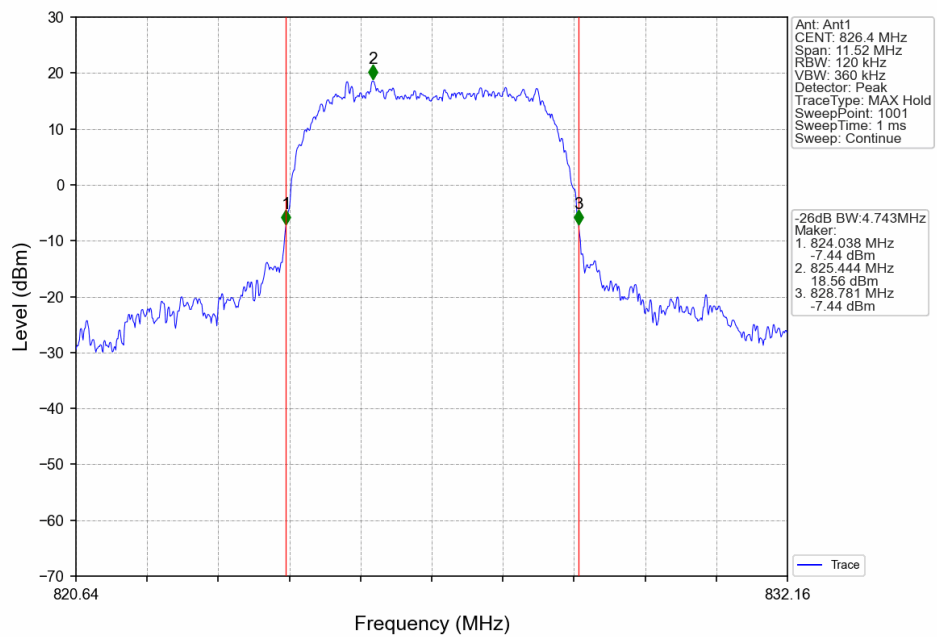
4.2.2 Band V_XDB



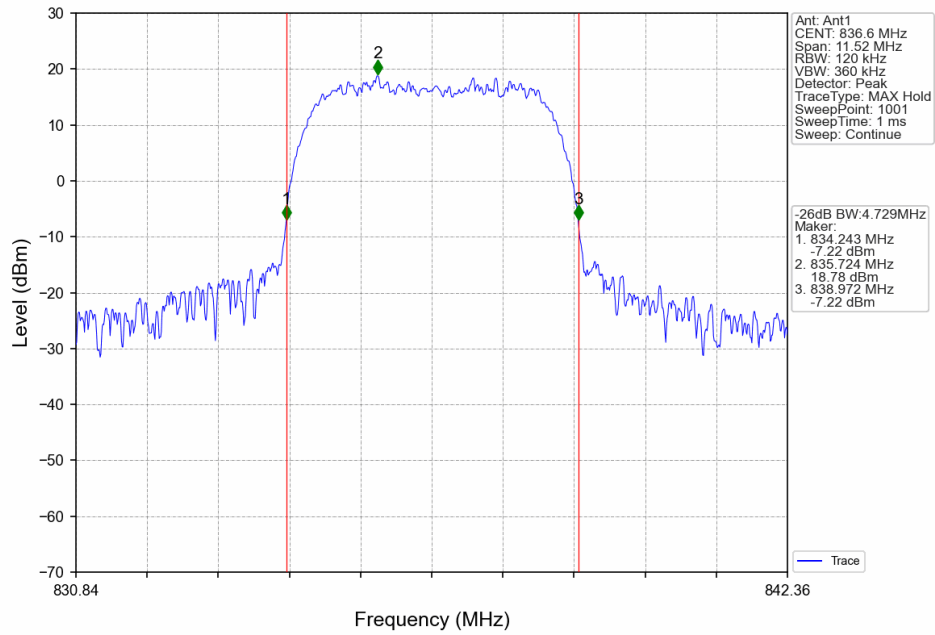
Band V_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



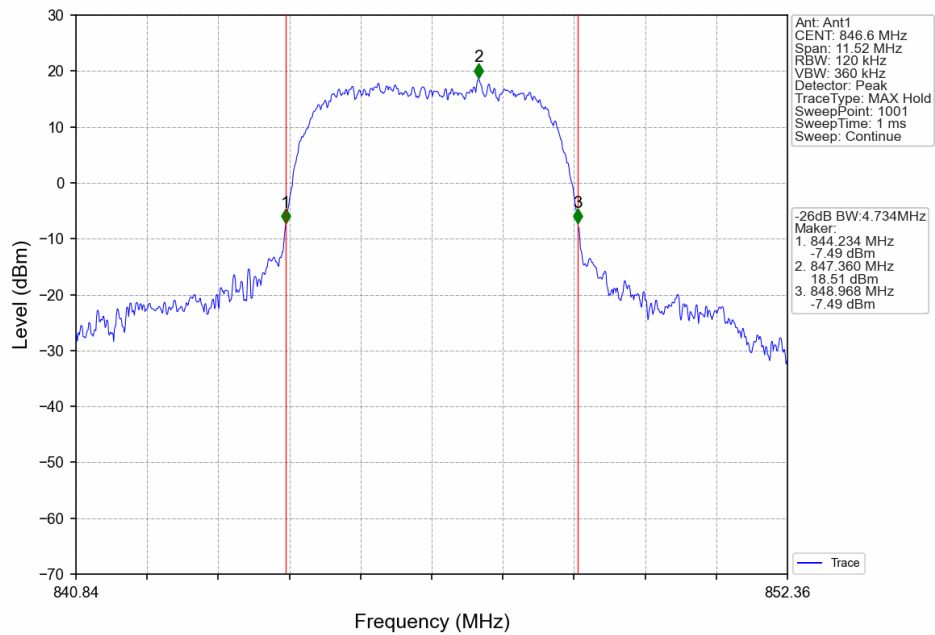
Band V_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



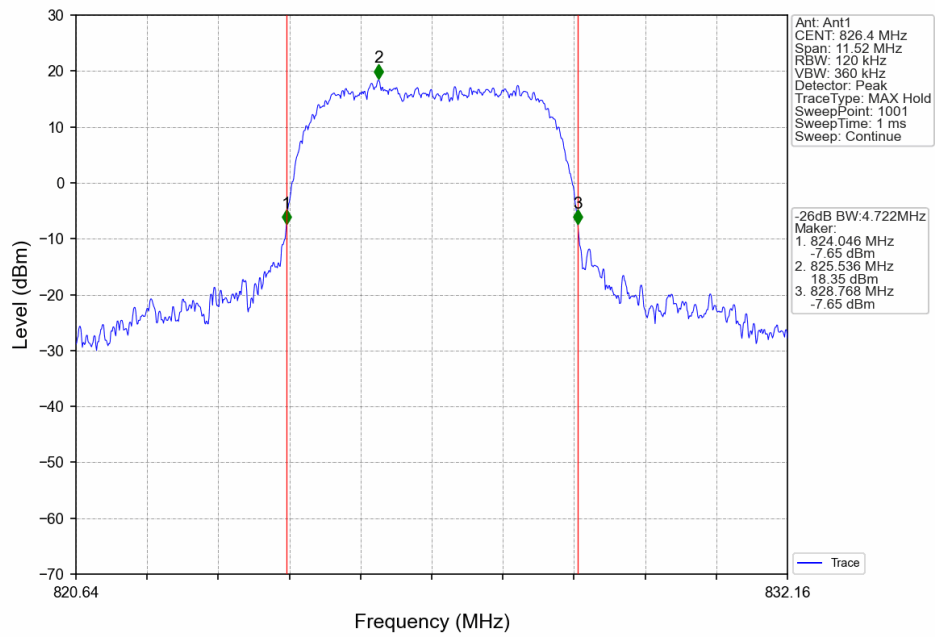
Band V_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



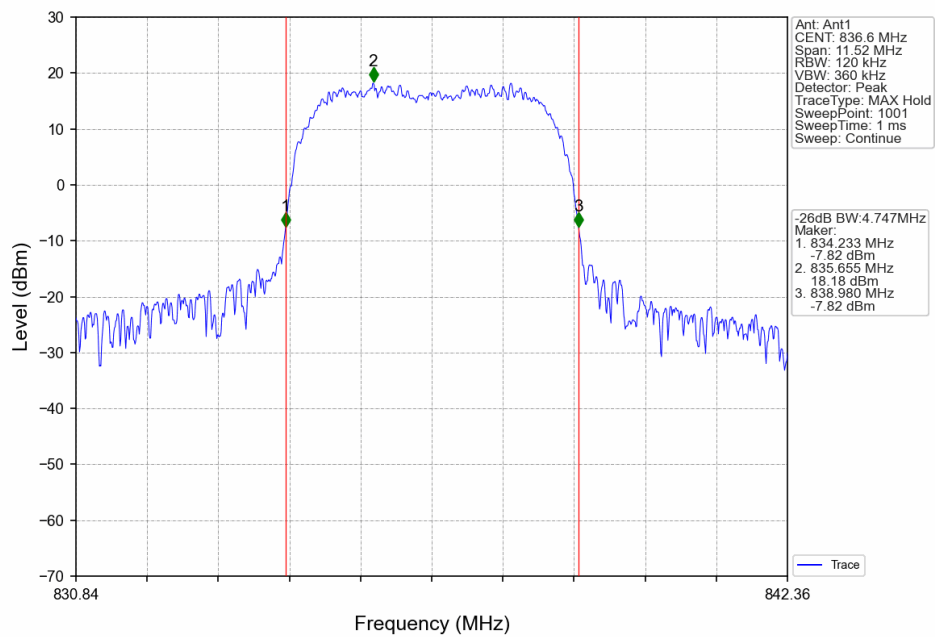
Band V_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



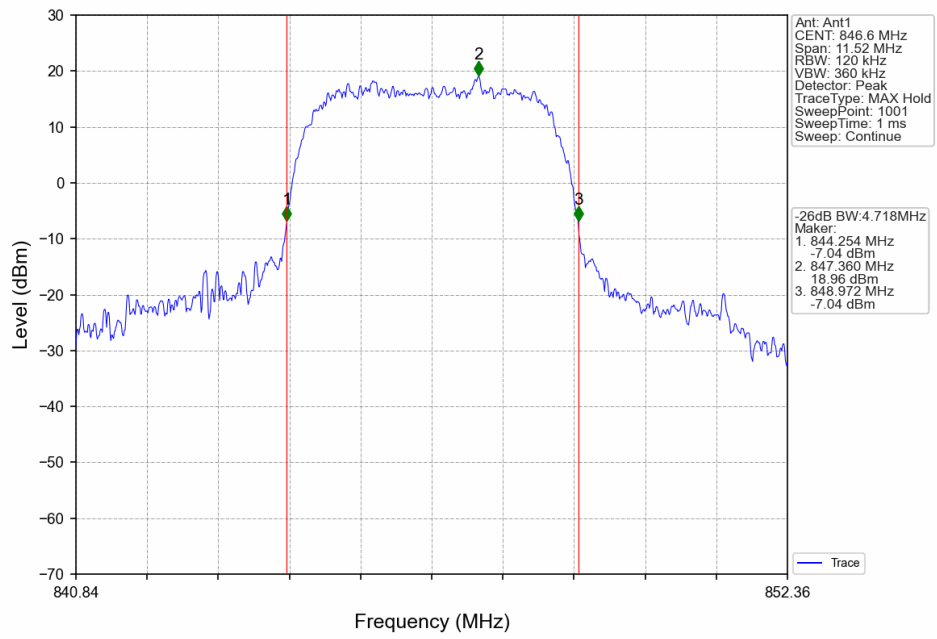
Band V_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band V_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band V_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



5. Peak-Average Ratio

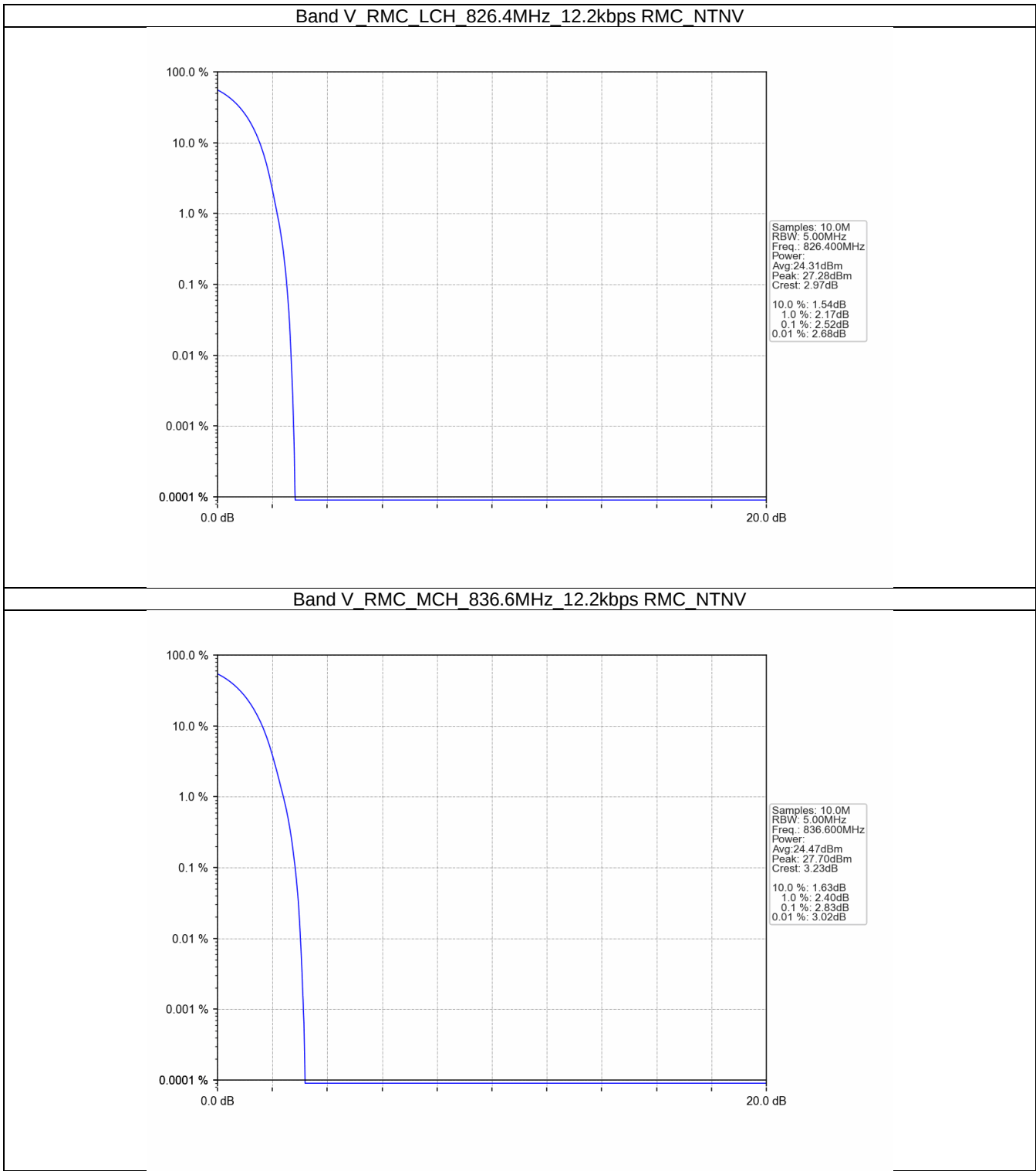
5.1 Test Result

5.1.1 Band V

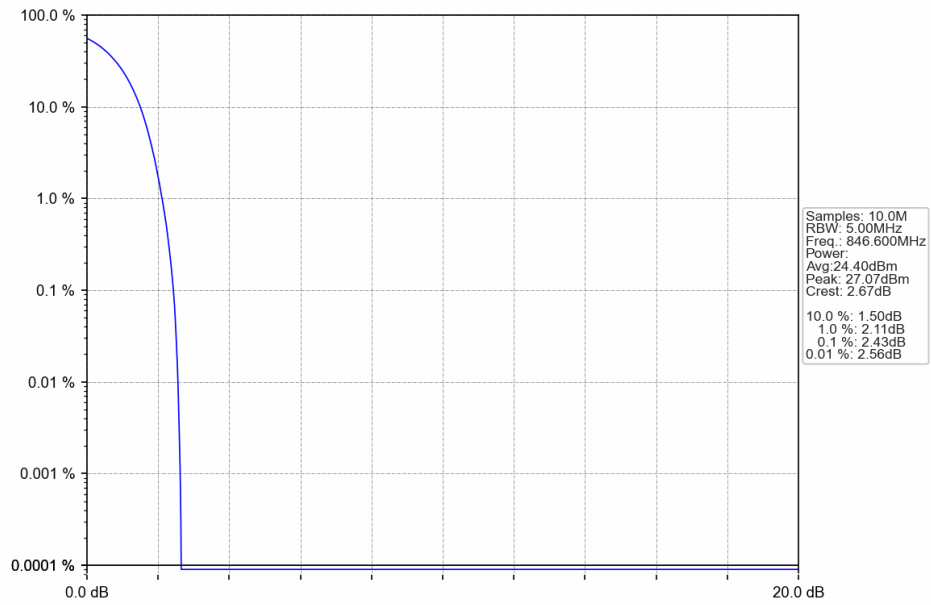
Band V						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	2.52	<=13	Pass
			836.6	2.83	<=13	Pass
			846.6	2.43	<=13	Pass
	HSDPA	Subtest 1	826.4	5.50	<=13	Pass
			836.6	5.65	<=13	Pass
			846.6	5.40	<=13	Pass
	HSUPA	Subtest 1	826.4	5.49	<=13	Pass
			836.6	5.59	<=13	Pass
			846.6	5.39	<=13	Pass

5.2 Test Graph

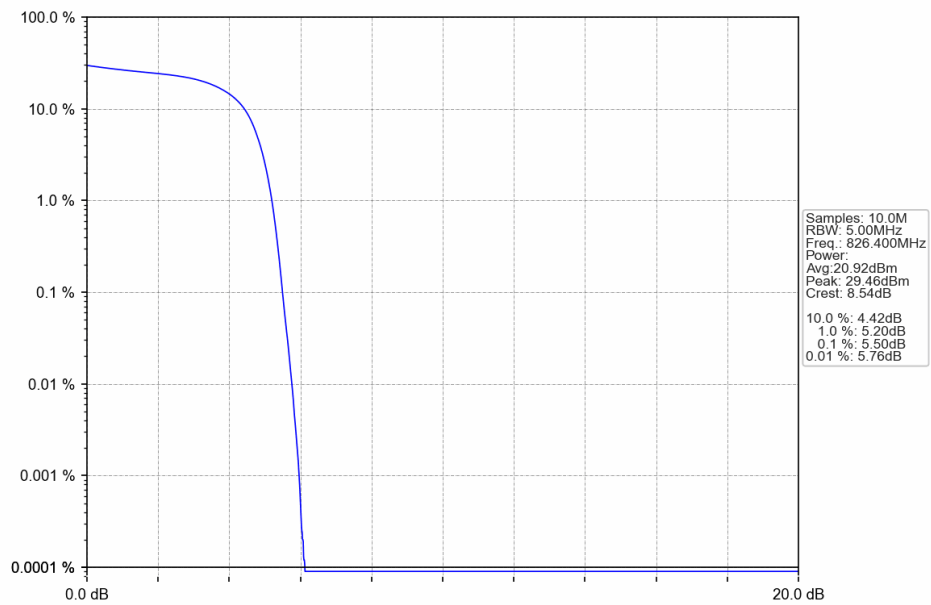
5.2.1 Band V



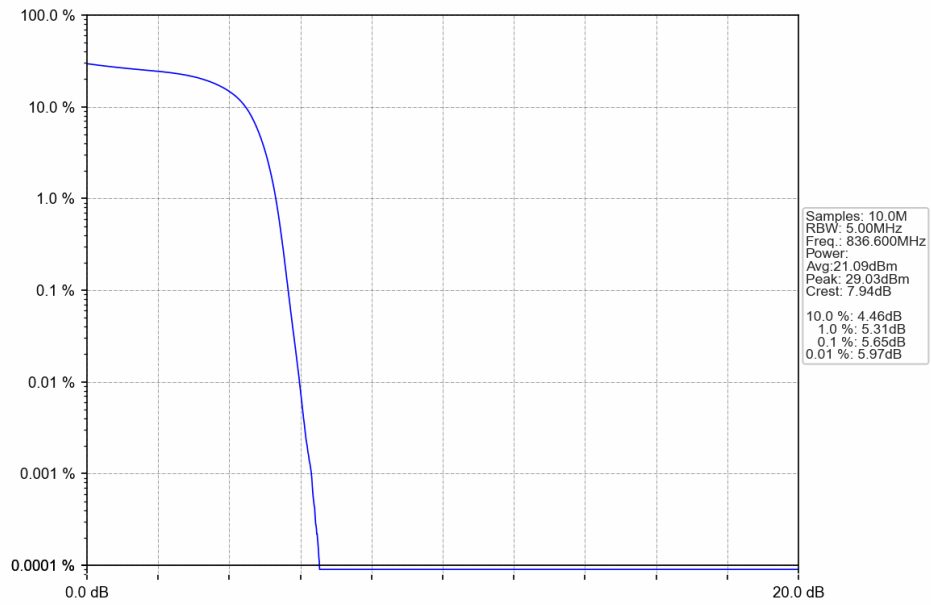
Band V_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



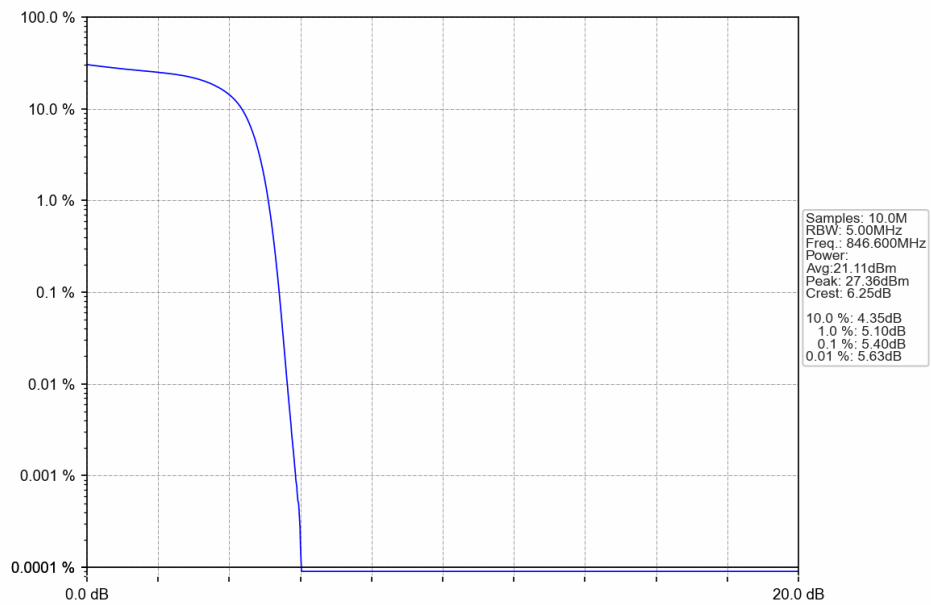
Band V_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



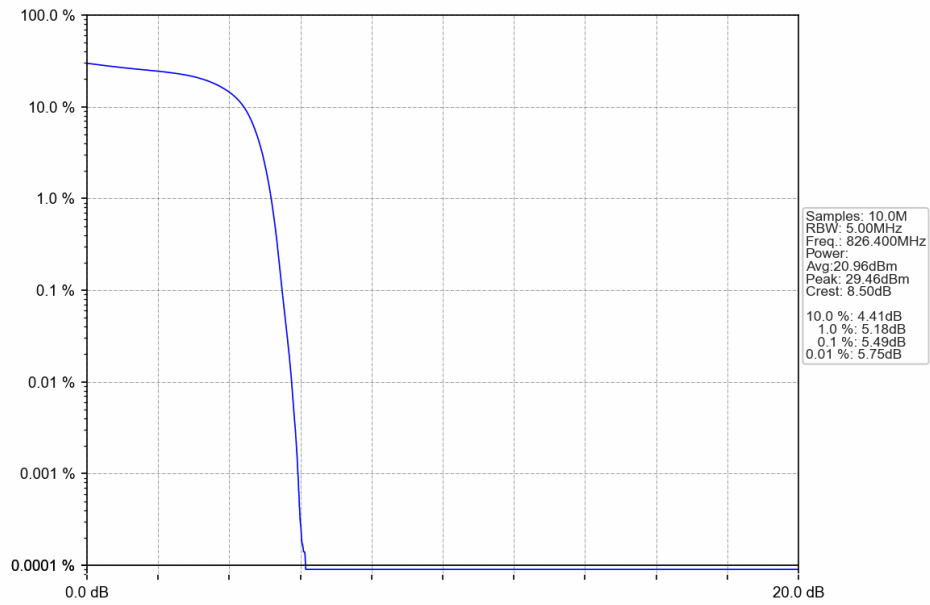
Band V_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



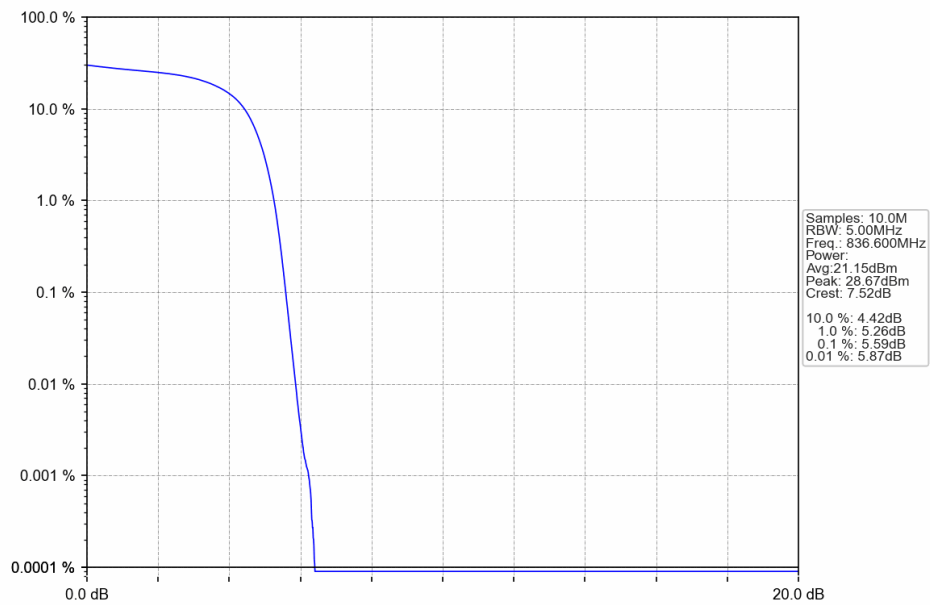
Band V_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



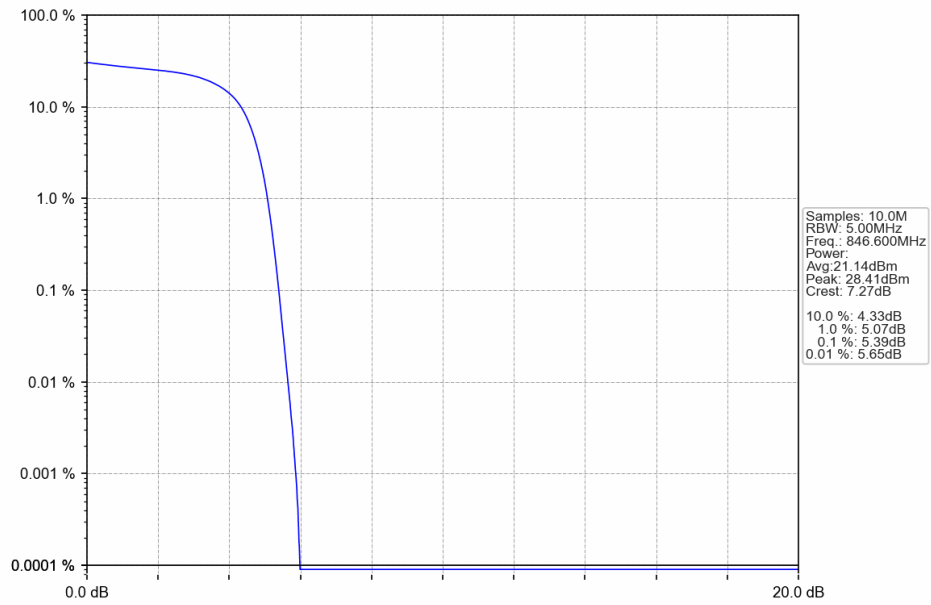
Band V_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band V_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band V_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



6. Spurious Emission & Band Edges

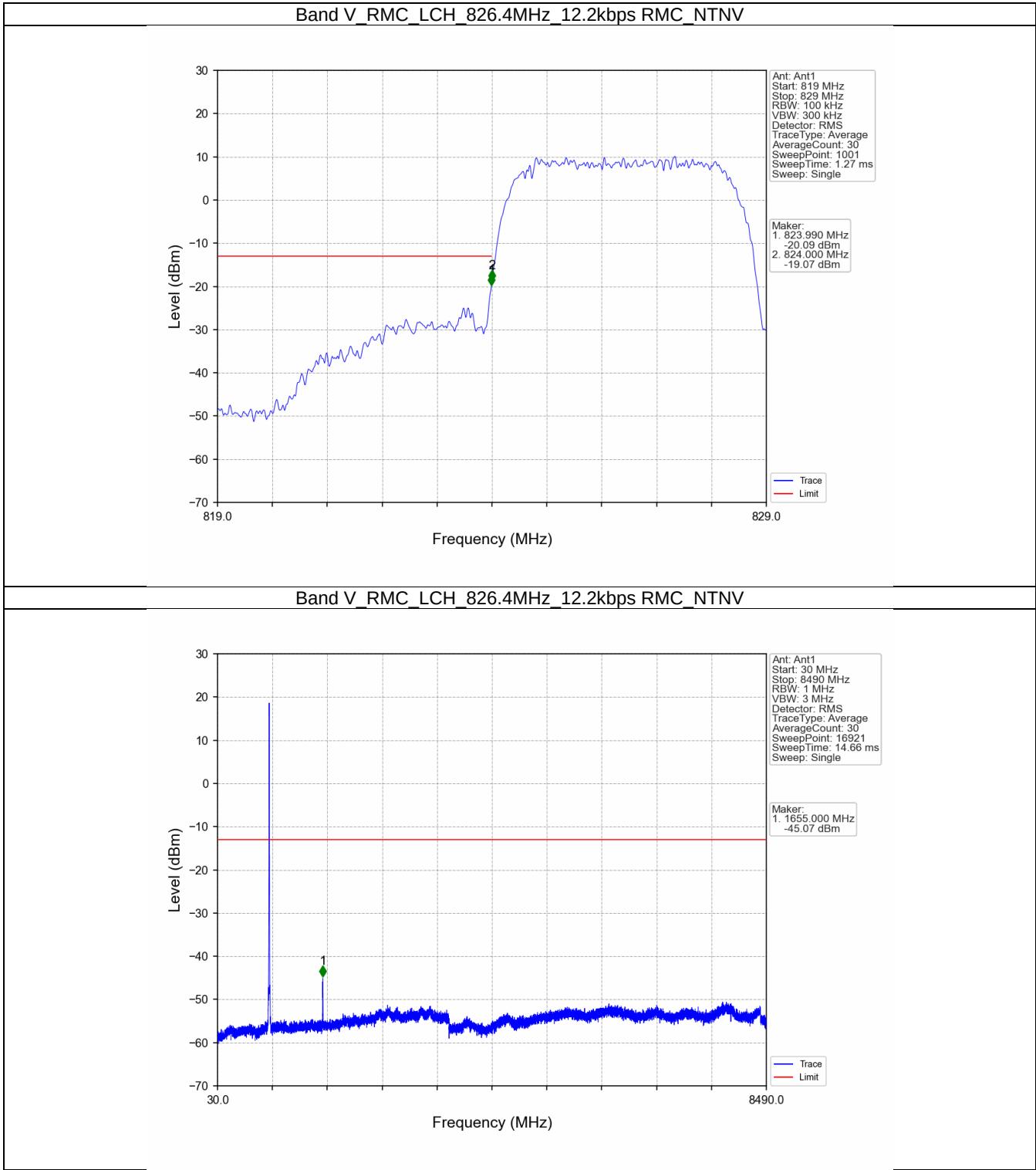
6.1 Test Result

6.1.1 Band V

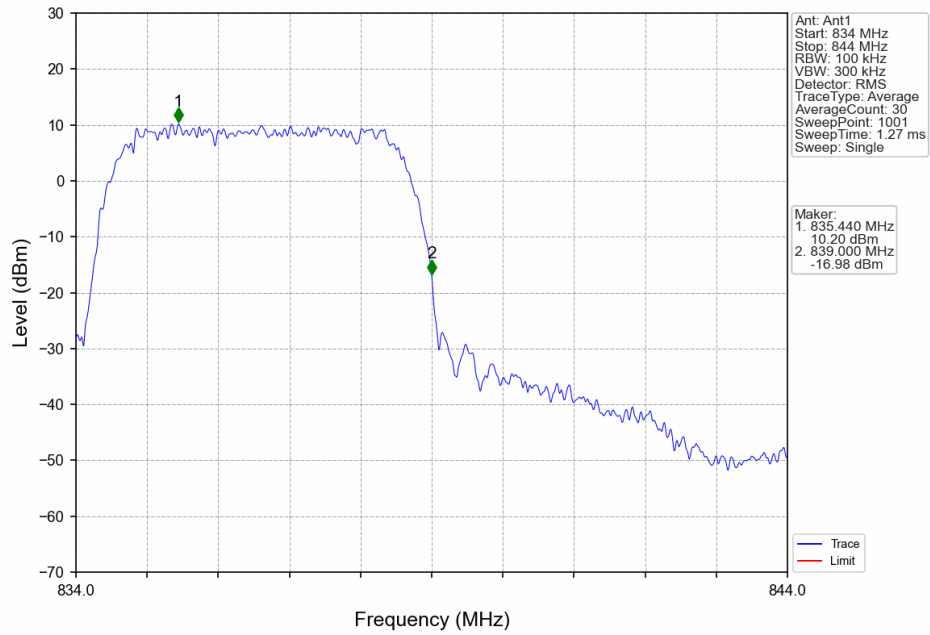
Band V						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	Refer To Test Graph	Pass	
			836.6	Refer To Test Graph	Pass	
			846.6	Refer To Test Graph	Pass	
	HSDPA	Subtest 1	826.4	Refer To Test Graph	Pass	
			836.6	Refer To Test Graph	Pass	
			846.6	Refer To Test Graph	Pass	
	HSUPA	Subtest 1	826.4	Refer To Test Graph	Pass	
			836.6	Refer To Test Graph	Pass	
			846.6	Refer To Test Graph	Pass	

6.2 Test Graph

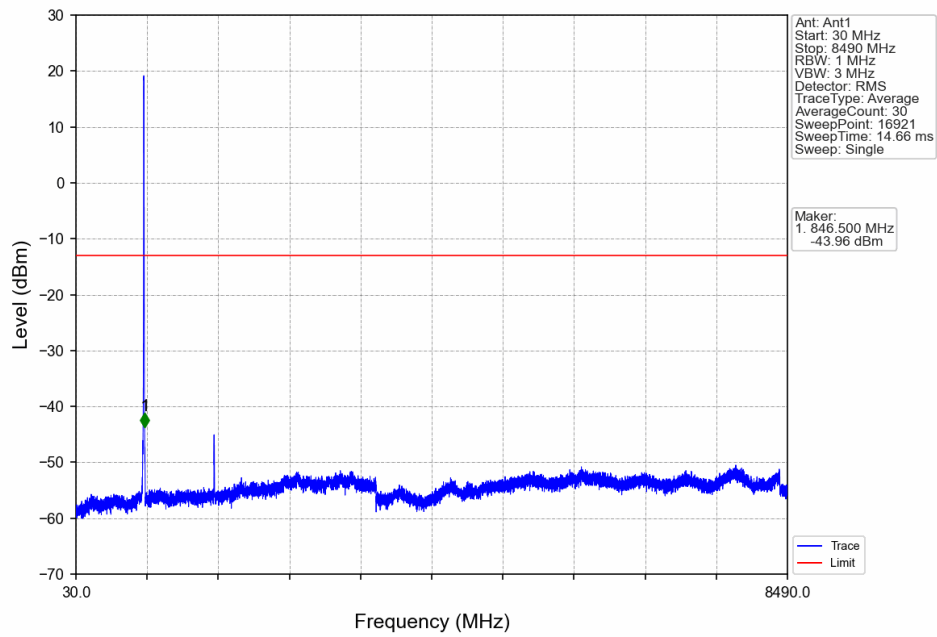
6.2.1 Band V



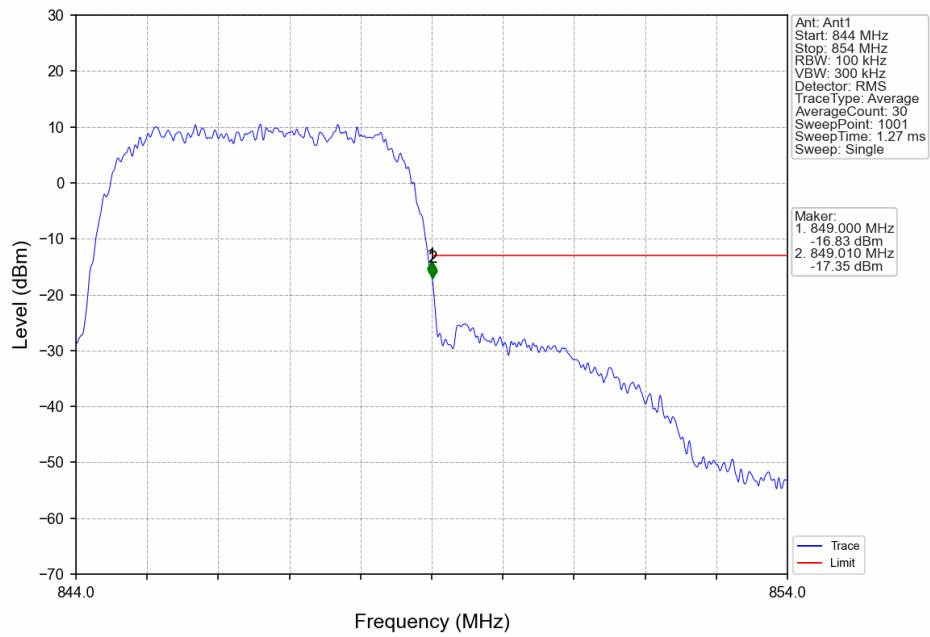
Band V_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



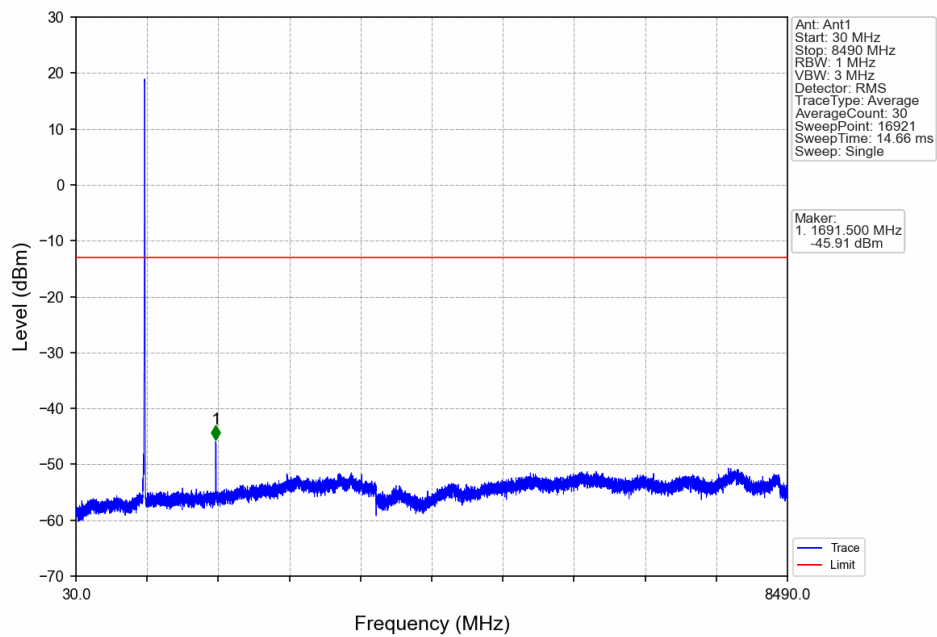
Band V_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



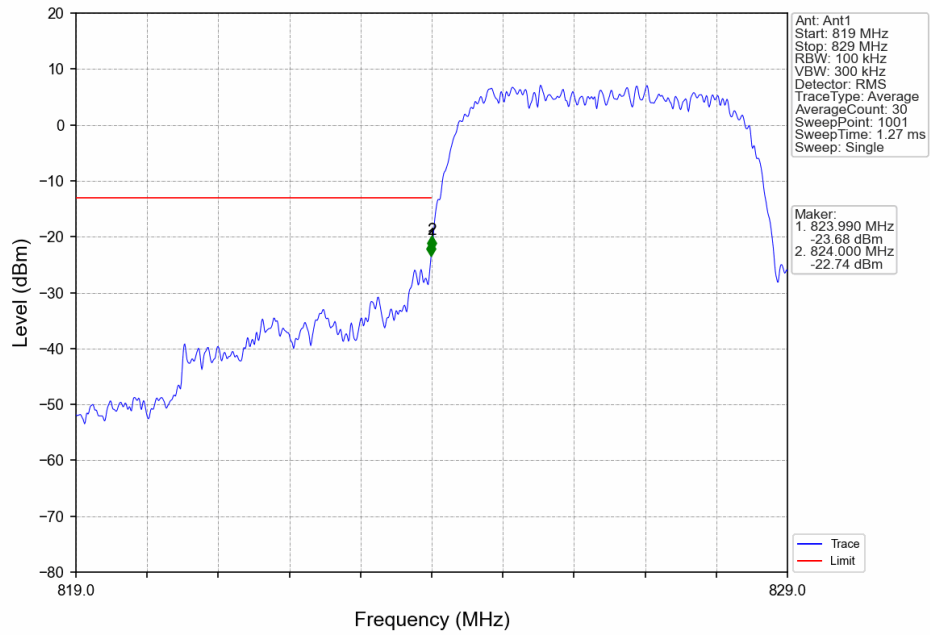
Band V_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



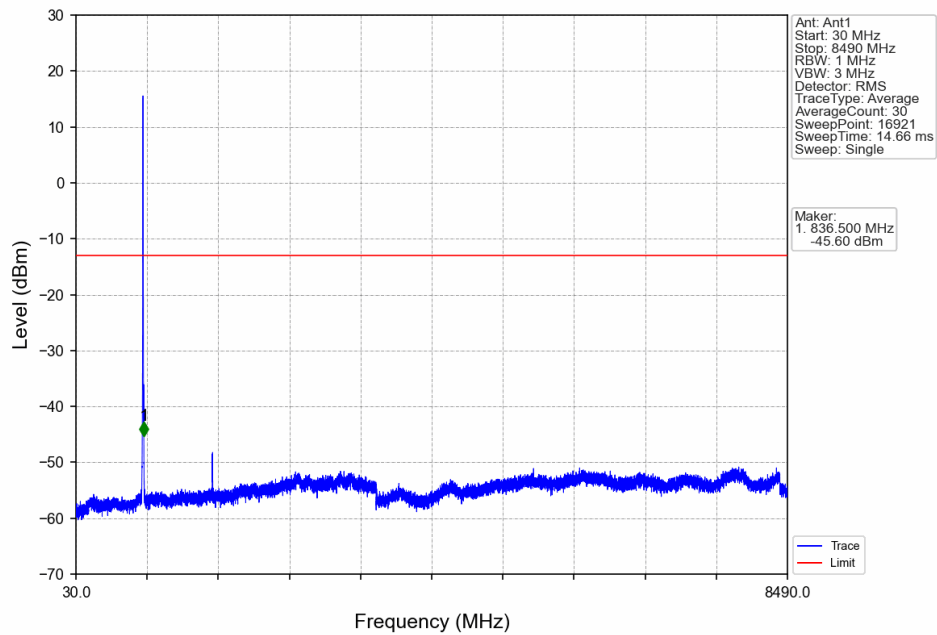
Band V_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



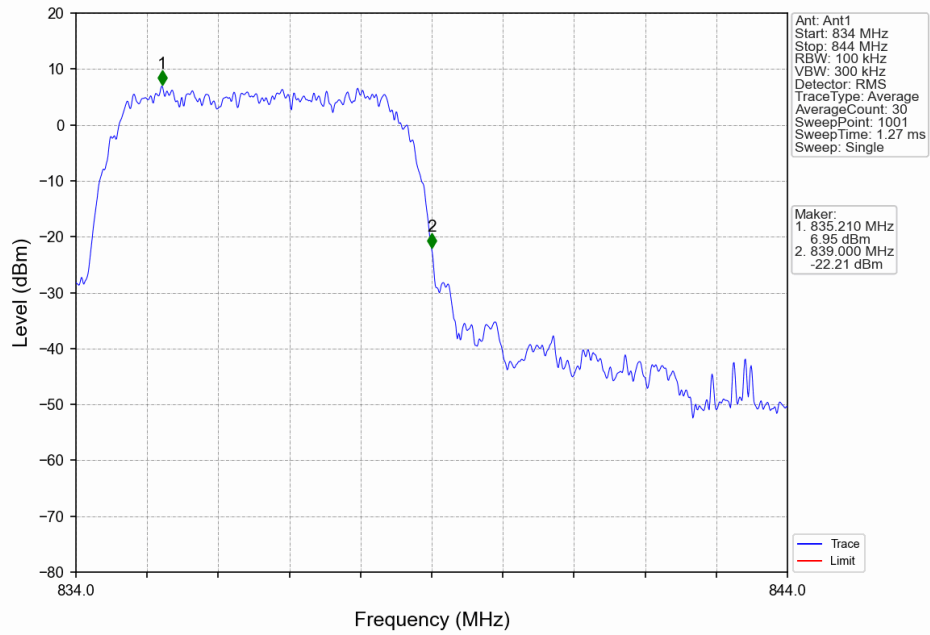
Band V_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



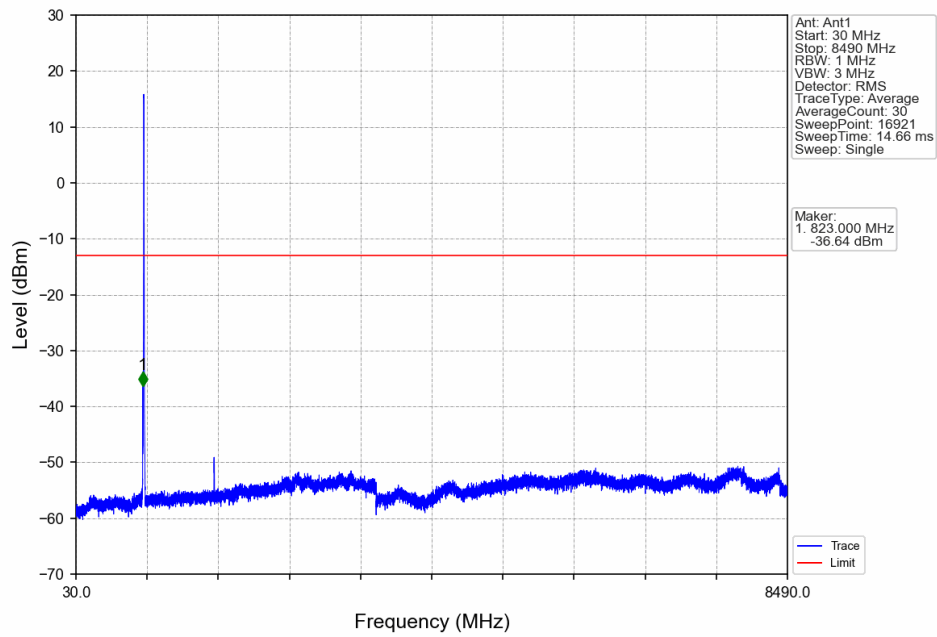
Band V_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



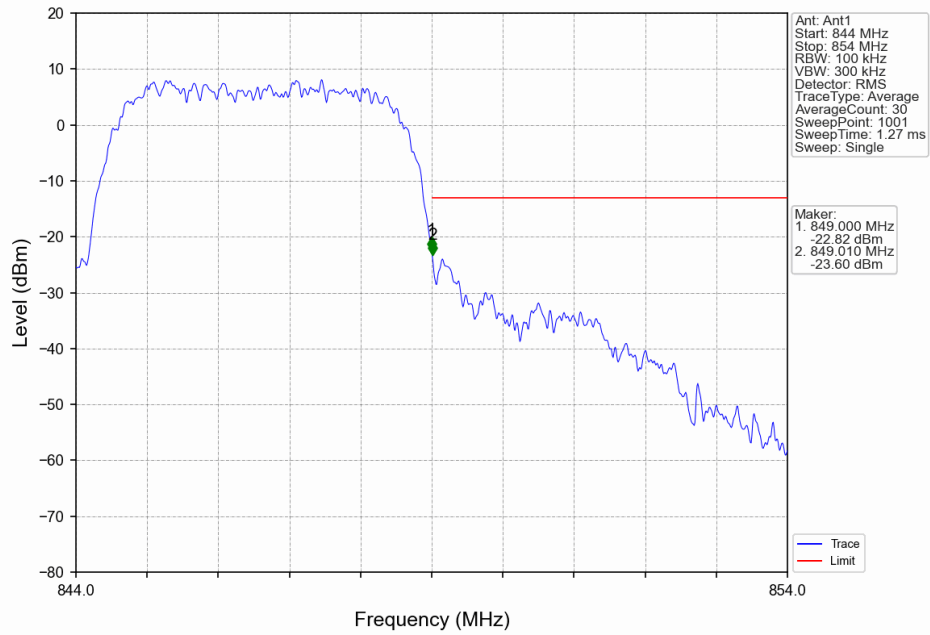
Band V_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



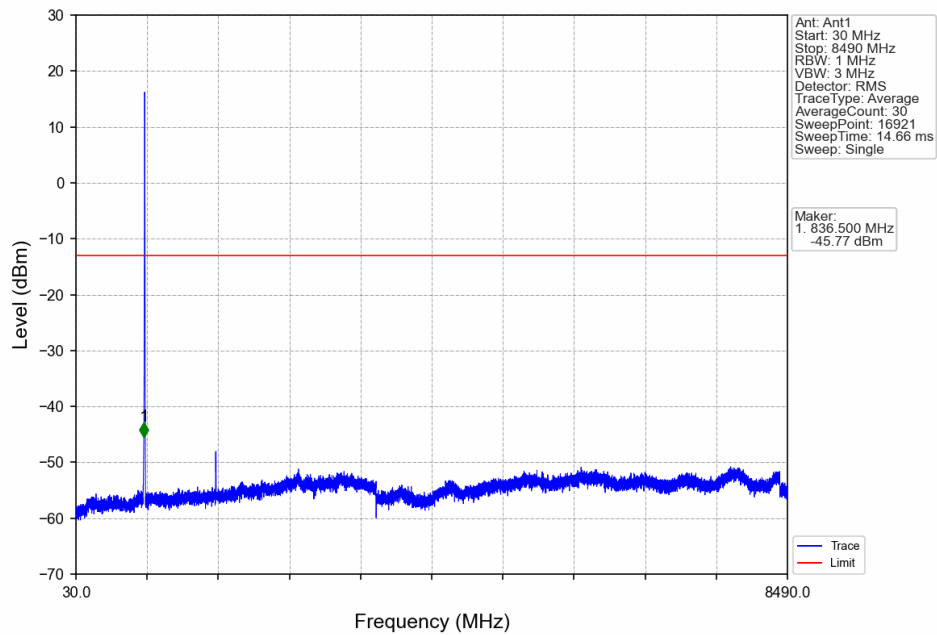
Band V_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



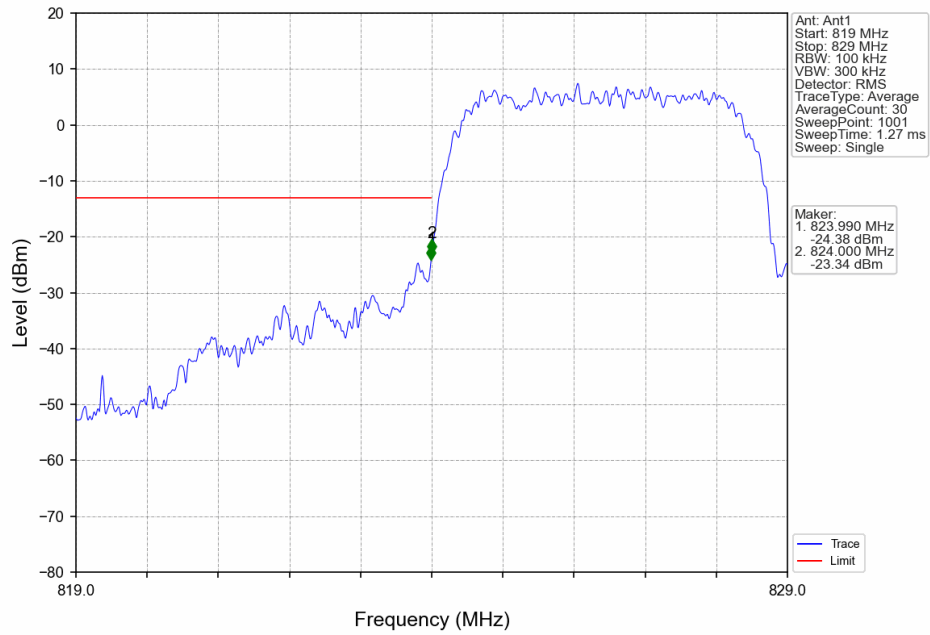
Band V_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



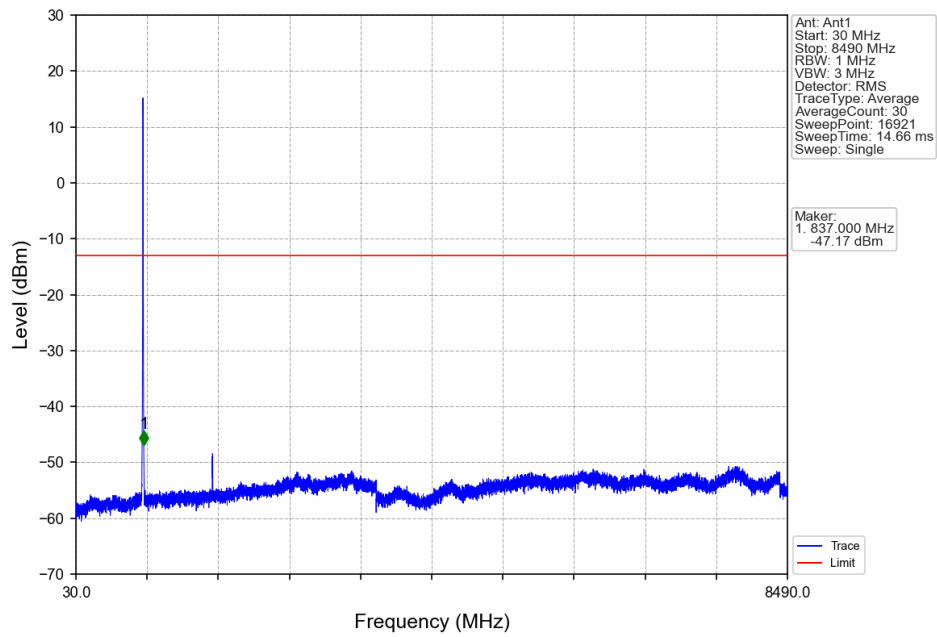
Band V_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



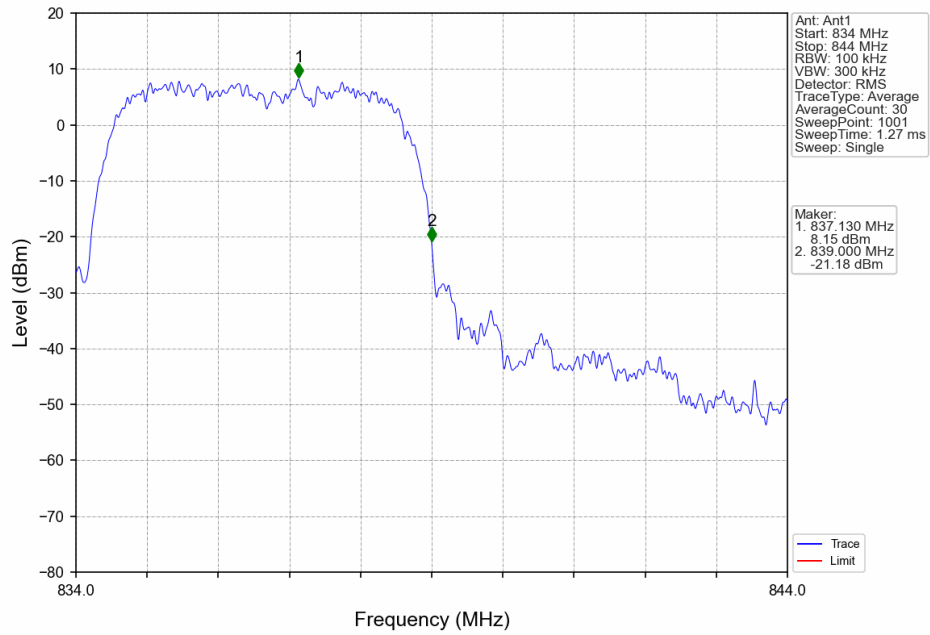
Band V_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



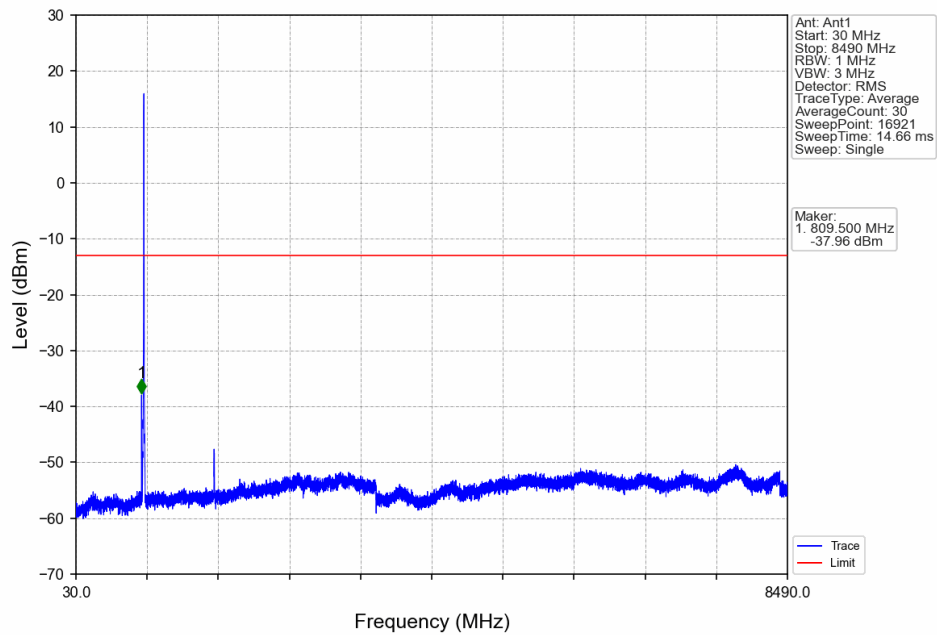
Band V_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



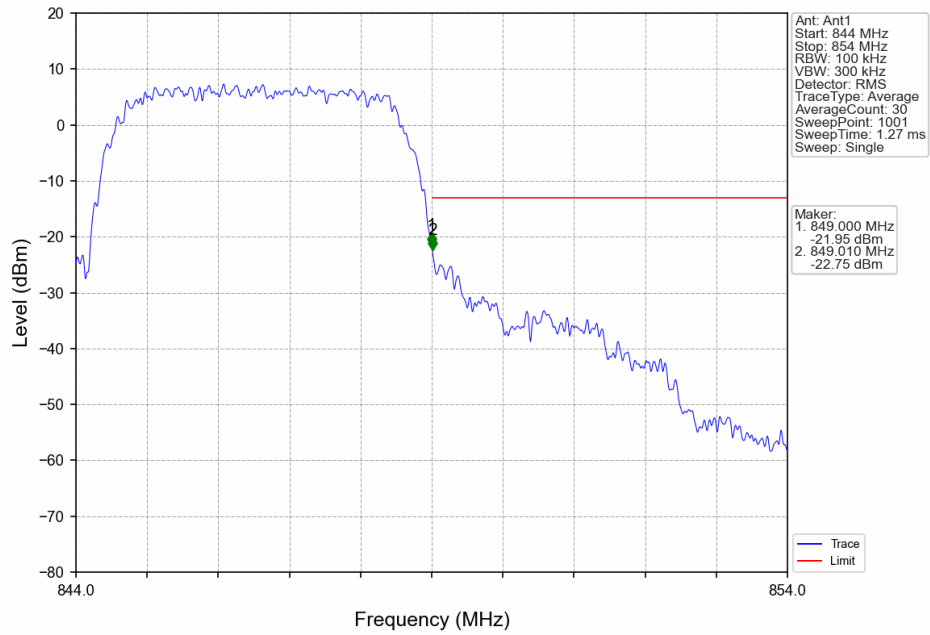
Band V_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



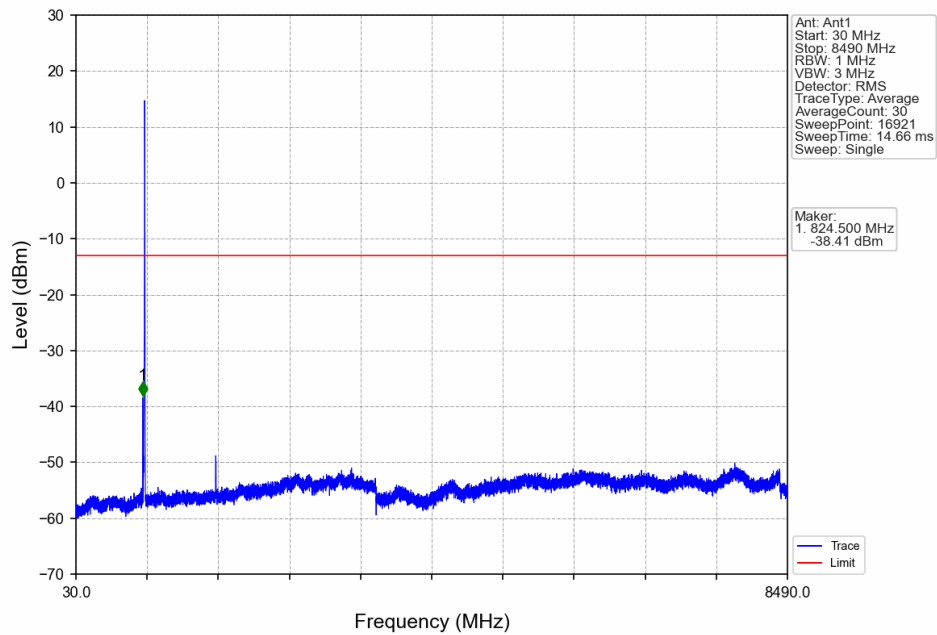
Band V_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band V_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



Band V_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



Field Strength of Spurious Radiation

WCDMA Band V ANT31-Low channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1652.8	-71.24	-13	-58.24	-74.11	2.62	5.49	Horizontal	Pass
2479.2	-69.3	-13	-56.3	-72.0	3.07	5.77	Horizontal	Pass
3305.6	-66.99	-13	-53.99	-71.37	3.3	7.68	Horizontal	Pass
1652.8	-70.9	-13	-57.9	-73.77	2.62	5.49	Vertical	Pass
2479.2	-69.14	-13	-56.14	-71.84	3.07	5.77	Vertical	Pass
3305.6	-67.48	-13	-54.48	-71.86	3.3	7.68	Vertical	Pass

WCDMA Band V ANT31-Middle channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1672.8	-71.43	-13	-58.43	-74.24	2.63	5.44	Horizontal	Pass
2509.2	-68.73	-13	-55.73	-71.49	3.08	5.84	Horizontal	Pass
3345.6	-67.54	-13	-54.54	-72.0	3.32	7.78	Horizontal	Pass
1672.8	-71.81	-13	-58.81	-74.62	2.63	5.44	Vertical	Pass
2509.2	-69.26	-13	-56.26	-72.02	3.08	5.84	Vertical	Pass
3345.6	-67.3	-13	-54.3	-71.76	3.32	7.78	Vertical	Pass

WCDMA Band V ANT31-High channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1693.2	-72.55	-13	-59.55	-75.31	2.63	5.39	Horizontal	Pass
2539.8	-69.44	-13	-56.44	-72.26	3.09	5.91	Horizontal	Pass
3386.4	-67.0	-13	-54.0	-71.55	3.34	7.89	Horizontal	Pass
1693.2	-72.64	-13	-59.64	-75.4	2.63	5.39	Vertical	Pass
2539.8	-69.44	-13	-56.44	-72.26	3.09	5.91	Vertical	Pass
3386.4	-67.17	-13	-54.17	-71.72	3.34	7.89	Vertical	Pass

Remark:

- The field strength is calculated by adding the S.G.Power, Antenna Gain & Cable Loss. The basic equation with a sample calculation is as follows:

$$\text{EIRP} = \text{S.G. Power} + \text{Antenna Gain} - \text{Cable Loss}$$

$$\text{Over Limit} = \text{Limit} - \text{EIRP}$$
- All antennas of RSE are tested, and only the worst data is presented.

---End of Attachment---