1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 Band5_ERP

Band: 5								
ENV	Mode		Frequency (MHz)	Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
	Network	Subset				Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	22.38	-0.13	22.25	<=38.45	Pass
			836.6	22.35	-0.13	22.22	<=38.45	Pass
			846.6	22.33	-0.13	22.2	<=38.45	Pass
	HSDPA	Subtest 1	826.4	20.15	-0.13	20.02	<=38.45	Pass
		Subtest 2	826.4	20.15	-0.13	20.02	<=38.45	Pass
		Subtest 3	826.4	20.16	-0.13	20.03	<=38.45	Pass
		Subtest 4	826.4	20.14	-0.13	20.01	<=38.45	Pass
		Subtest 1	836.6	20.15	-0.13	20.02	<=38.45	Pass
		Subtest 2	836.6	20.08	-0.13	19.95	<=38.45	Pass
		Subtest 3	836.6	20.11	-0.13	19.98	<=38.45	Pass
		Subtest 4	836.6	20.09	-0.13	19.96	<=38.45	Pass
		Subtest 1	846.6	20.12	-0.13	19.99	<=38.45	Pass
		Subtest 2	846.6	20.13	-0.13	20	<=38.45	Pass
		Subtest 3	846.6	20.13	-0.13	20	<=38.45	Pass
		Subtest 4	846.6	20.13	-0.13	20	<=38.45	Pass
	HSUPA	Subtest 1	826.4	17.95	-0.13	17.82	<=38.45	Pass
		Subtest 2	826.4	17.61	-0.13	17.48	<=38.45	Pass
		Subtest 3	826.4	17.93	-0.13	17.8	<=38.45	Pass
		Subtest 4	826.4	17.93	-0.13	17.8	<=38.45	Pass
		Subtest 5	826.4	17.59	-0.13	17.46	<=38.45	Pass
		Subtest 1	836.6	17.89	-0.13	17.76	<=38.45	Pass
		Subtest 2	836.6	18.08	-0.13	17.95	<=38.45	Pass
		Subtest 3	836.6	18.06	-0.13	17.93	<=38.45	Pass
		Subtest 4	836.6	17.83	-0.13	17.7	<=38.45	Pass
		Subtest 5	836.6	18.07	-0.13	17.94	<=38.45	Pass
		Subtest 1	846.6	17.87	-0.13	17.74	<=38.45	Pass
		Subtest 2	846.6	17.51	-0.13	17.38	<=38.45	Pass
		Subtest 3	846.6	17.81	-0.13	17.68	<=38.45	Pass
		Subtest 4	846.6	17.86	-0.13	17.73	<=38.45	Pass
		Subtest 5	846.6	17.80	-0.13	17.67	<=38.45	Pass
Note1: ERP=Conducted Power+Antenna Gain-2.15								

2. Frequency Stability

2.1 Test Result

2.1.1 Band5

Band: 5							
Network	Frequency (MHz)	Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
					Result	Limit	
RMC	826.4	20	3.27	-8.261	-0.0100	-2.5 to 2.5	Pass
			3.85	-9.849	-0.0119	-2.5 to 2.5	Pass

			4.43	-11.709	-0.0142	-2.5 to 2.5	Pass
		-30	3.85	-11.437	-0.0138	-2.5 to 2.5	Pass
		-20	3.85	-15.814	-0.0191	-2.5 to 2.5	Pass
		-10	3.85	-10.207	-0.0124	-2.5 to 2.5	Pass
		0	3.85	-12.910	-0.0156	-2.5 to 2.5	Pass
		10	3.85	-10.142	-0.0123	-2.5 to 2.5	Pass
		30	3.85	-8.647	-0.0105	-2.5 to 2.5	Pass
		40	3.85	-15.242	-0.0184	-2.5 to 2.5	Pass
		50	3.85	-11.079	-0.0134	-2.5 to 2.5	Pass
			3.27	-8.047	-0.0096	-2.5 to 2.5	Pass
		20	3.85	-13.175	-0.0157	-2.5 to 2.5	Pass
			4.43	-12.782	-0.0153	-2.5 to 2.5	Pass
		-30	3.85	-10.550	-0.0126	-2.5 to 2.5	Pass
		-20	3.85	-7.668	-0.0092	-2.5 to 2.5	Pass
	836.6	-10	3.85	-12.002	-0.0143	-2.5 to 2.5	Pass
		0	3.85	-7.124	-0.0085	-2.5 to 2.5	Pass
		10	3.85	-7.260	-0.0087	-2.5 to 2.5	Pass
		30	3.85	-10.200	-0.0122	-2.5 to 2.5	Pass
		40	3.85	-8.490	-0.0101	-2.5 to 2.5	Pass
		50	3.85	-9.770	-0.0117	-2.5 to 2.5	Pass
			3.27	-11.544	-0.0136	-2.5 to 2.5	Pass
		20	3.85	-4.342	-0.0051	-2.5 to 2.5	Pass
			4.43	-7.324	-0.0087	-2.5 to 2.5	Pass
		-30	3.85	-11.287	-0.0133	-2.5 to 2.5	Pass
		-20	3.85	-3.805	-0.0045	-2.5 to 2.5	Pass
	846.6	-10	3.85	-7.617	-0.0090	-2.5 to 2.5	Pass
		0	3.85	-11.058	-0.0131	-2.5 to 2.5	Pass
		10	3.85	-6.001	-0.0071	-2.5 to 2.5	Pass
		30	3.85	-7.911	-0.0093	-2.5 to 2.5	Pass
		40	3.85	-9.935	-0.0117	-2.5 to 2.5	Pass
		50	3.85	-12.467	-0.0147	-2.5 to 2.5	Pass
HSDPA			3.27	-10.221	-0.0124	-2.5 to 2.5	Pass
		20	3.85	-10.107	-0.0122	-2.5 to 2.5	Pass
			4.43	-6.223	-0.0075	-2.5 to 2.5	Pass
		-30	3.85	-9.363	-0.0113	-2.5 to 2.5	Pass
		-20	3.85	-6.337	-0.0077	-2.5 to 2.5	Pass
	826.4	-10	3.85	-8.426	-0.0102	-2.5 to 2.5	Pass
		0	3.85	-10.092	-0.0122	-2.5 to 2.5	Pass
		10	3.85	-10.929	-0.0132	-2.5 to 2.5	Pass
		30	3.85	-5.987	-0.0072	-2.5 to 2.5	Pass
		40	3.85	-8.898	-0.0108	-2.5 to 2.5	Pass
		50	3.85	-8.905	-0.0108	-2.5 to 2.5	Pass
			3.27	-9.921	-0.0119	-2.5 to 2.5	Pass
		20	3.85	-10.679	-0.0128	-2.5 to 2.5	Pass
			4.43	-11.866	-0.0142	-2.5 to 2.5	Pass
		-30	3.85	-14.184	-0.0170	-2.5 to 2.5	Pass
		-20	3.85	-12.224	-0.0146	-2.5 to 2.5	Pass
	836.6	-10	3.85	-11.537	-0.0138	-2.5 to 2.5	Pass
		0	3.85	-11.501	-0.0137	-2.5 to 2.5	Pass
		10	3.85	-10.164	-0.0121	-2.5 to 2.5	Pass
		30	3.85	-6.251	-0.0075	-2.5 to 2.5	Pass
		40	3.85	-10.543	-0.0126	-2.5 to 2.5	Pass
		50	3.85	-12.074	-0.0144	-2.5 to 2.5	Pass
			3.27	-13.804	-0.0163	-2.5 to 2.5	Pass
	846.6	20	3.85	-13.061	-0.0154	-2.5 to 2.5	Pass
			4.43	-12.732	-0.0150	-2.5 to 2.5	Pass
		-30	3.85	-12.181	-0.0144	-2.5 to 2.5	Pass

		-20	3.85	-9.062	-0.0107	-2.5 to 2.5	Pass
		-10	3.85	-9.828	-0.0116	-2.5 to 2.5	Pass
		0	3.85	-13.869	-0.0164	-2.5 to 2.5	Pass
		10	3.85	-14.577	-0.0172	-2.5 to 2.5	Pass
		30	3.85	-13.583	-0.0160	-2.5 to 2.5	Pass
		40	3.85	-8.841	-0.0104	-2.5 to 2.5	Pass
		50	3.85	-9.856	-0.0116	-2.5 to 2.5	Pass
HSUPA	826.4	20	3.27	-11.523	-0.0139	-2.5 to 2.5	Pass
			3.85	-15.585	-0.0189	-2.5 to 2.5	Pass
			4.43	-5.686	-0.0069	-2.5 to 2.5	Pass
		-30	3.85	-9.120	-0.0110	-2.5 to 2.5	Pass
		-20	3.85	-10.929	-0.0132	-2.5 to 2.5	Pass
		-10	3.85	-15.965	-0.0193	-2.5 to 2.5	Pass
		0	3.85	-11.880	-0.0144	-2.5 to 2.5	Pass
		10	3.85	-11.086	-0.0134	-2.5 to 2.5	Pass
		30	3.85	-12.510	-0.0151	-2.5 to 2.5	Pass
		40	3.85	-9.391	-0.0114	-2.5 to 2.5	Pass
		50	3.85	-9.599	-0.0116	-2.5 to 2.5	Pass
	836.6	20	3.27	-11.594	-0.0139	-2.5 to 2.5	Pass
			3.85	-15.163	-0.0181	-2.5 to 2.5	Pass
			4.43	-14.963	-0.0179	-2.5 to 2.5	Pass
		-30	3.85	-12.460	-0.0149	-2.5 to 2.5	Pass
		-20	3.85	-14.656	-0.0175	-2.5 to 2.5	Pass
		-10	3.85	-9.284	-0.0111	-2.5 to 2.5	Pass
		0	3.85	-11.365	-0.0136	-2.5 to 2.5	Pass
		10	3.85	-13.182	-0.0158	-2.5 to 2.5	Pass
		30	3.85	-11.344	-0.0136	-2.5 to 2.5	Pass
		40	3.85	-13.604	-0.0163	-2.5 to 2.5	Pass
		50	3.85	-16.515	-0.0197	-2.5 to 2.5	Pass
	846.6	20	3.27	-9.112	-0.0108	-2.5 to 2.5	Pass
			3.85	-13.003	-0.0154	-2.5 to 2.5	Pass
			4.43	-11.644	-0.0138	-2.5 to 2.5	Pass
		-30	3.85	-10.886	-0.0129	-2.5 to 2.5	Pass
		-20	3.85	-12.016	-0.0142	-2.5 to 2.5	Pass
		-10	3.85	-10.736	-0.0127	-2.5 to 2.5	Pass
		0	3.85	-8.376	-0.0099	-2.5 to 2.5	Pass
		10	3.85	-12.116	-0.0143	-2.5 to 2.5	Pass
		30	3.85	-6.995	-0.0083	-2.5 to 2.5	Pass
		40	3.85	-12.224	-0.0144	-2.5 to 2.5	Pass
		50	3.85	-7.503	-0.0089	-2.5 to 2.5	Pass

3. Modulation Characteristics

3.1 Test Result

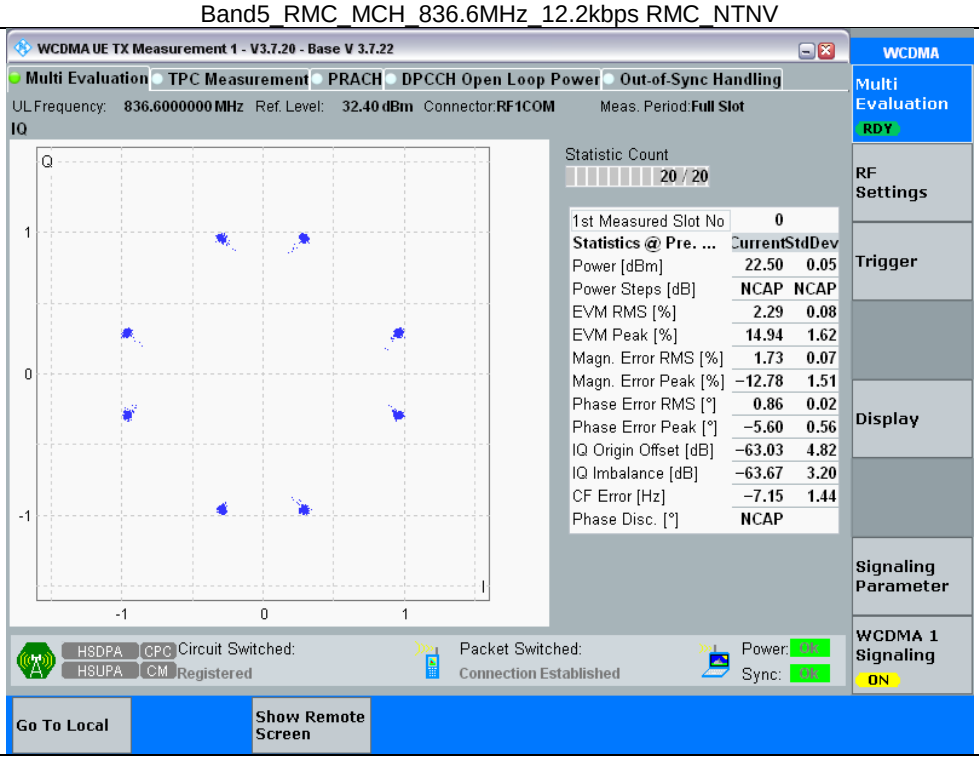
3.1.1 Band5

Band: 5						
ENV	Mode		Frequency (MHz)	Modulation Characteristics		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	836.6	Refer To Test Graph		Pass
	HSDPA	Subtest 1	836.6	Refer To Test Graph		Pass
	HSUPA	Subtest 1	836.6	Refer To Test Graph		Pass

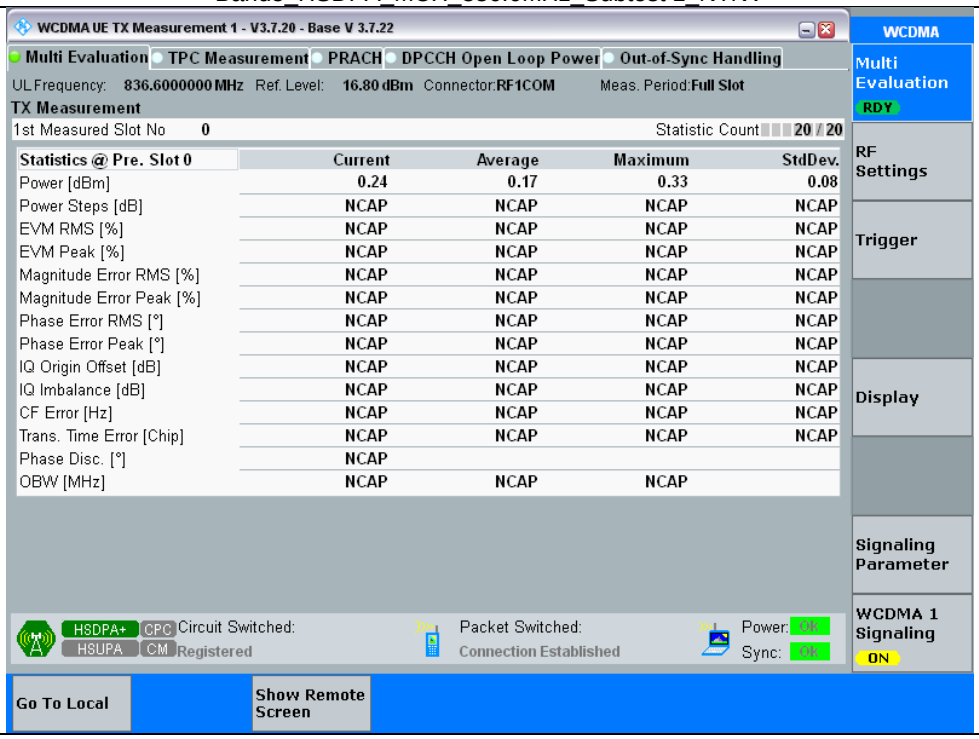
3.2 Test Graph

3.2.1 Band5

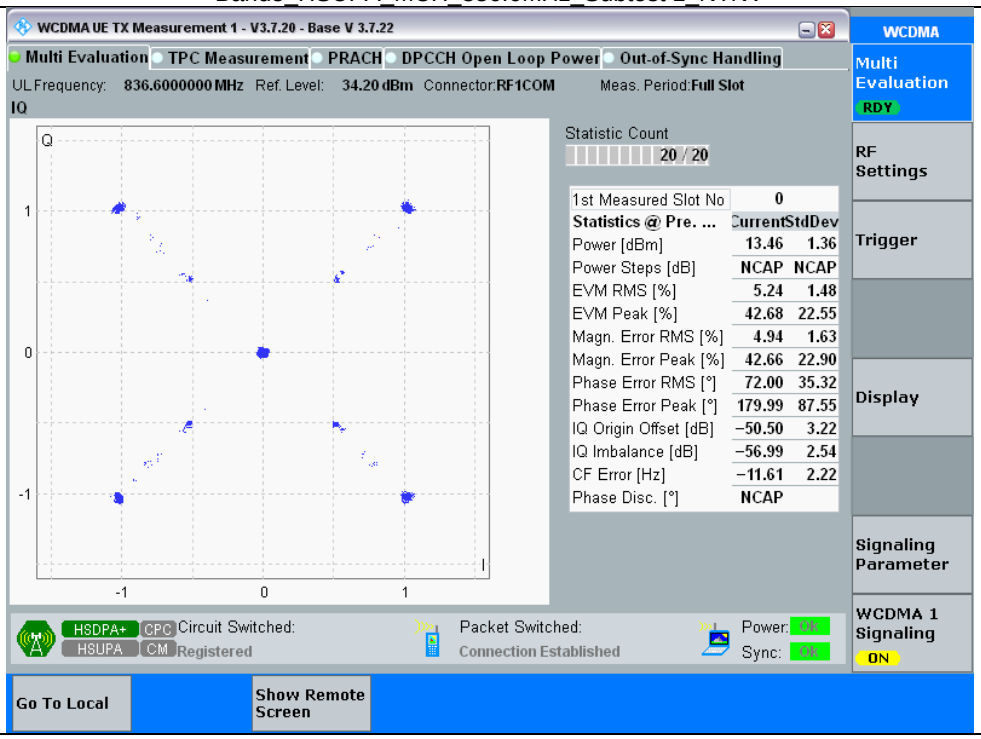
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



4. 99% & 26dB Bandwidth

4.1 Test Result

4.1.1 Band5_OBW

Band: 5						
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	4.181	/	Pass
			836.6	4.180	/	Pass
			846.6	4.176	/	Pass
	HSDPA	Subtest 1	826.4	4.229	/	Pass
			836.6	4.237	/	Pass
			846.6	4.204	/	Pass
	HSUPA	Subtest 1	826.4	4.217	/	Pass
			836.6	4.230	/	Pass
			846.6	4.230	/	Pass

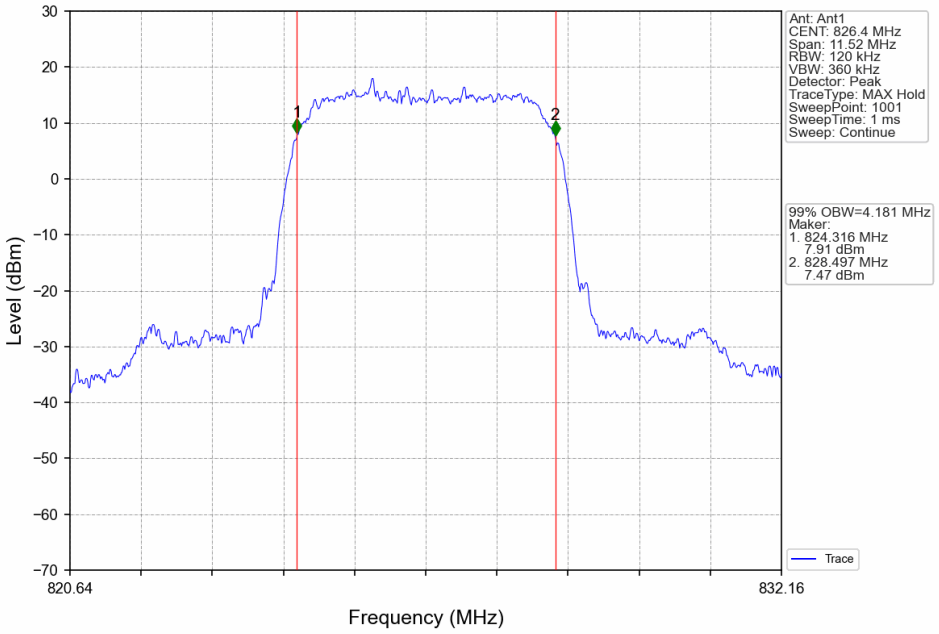
4.1.2 Band5_XDB

Band: 5						
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	4.732	/	Pass
			836.6	4.736	/	Pass
			846.6	4.745	/	Pass
	HSDPA	Subtest 1	826.4	5.665	/	Pass
			836.6	5.429	/	Pass
			846.6	5.333	/	Pass
	HSUPA	Subtest 1	826.4	5.337	/	Pass
			836.6	5.873	/	Pass
			846.6	5.728	/	Pass

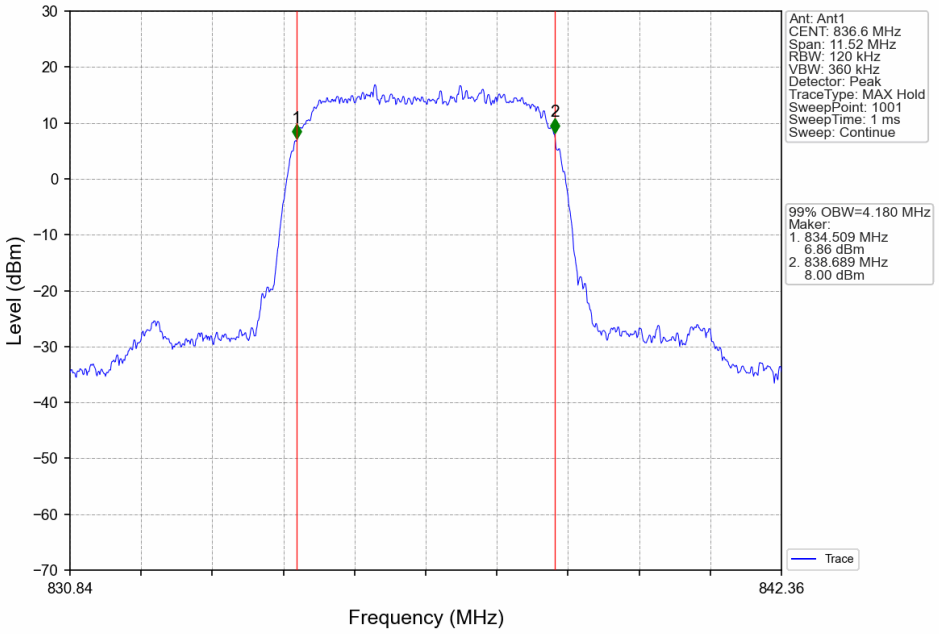
4.2 Test Graph

4.2.1 Band5_OBW

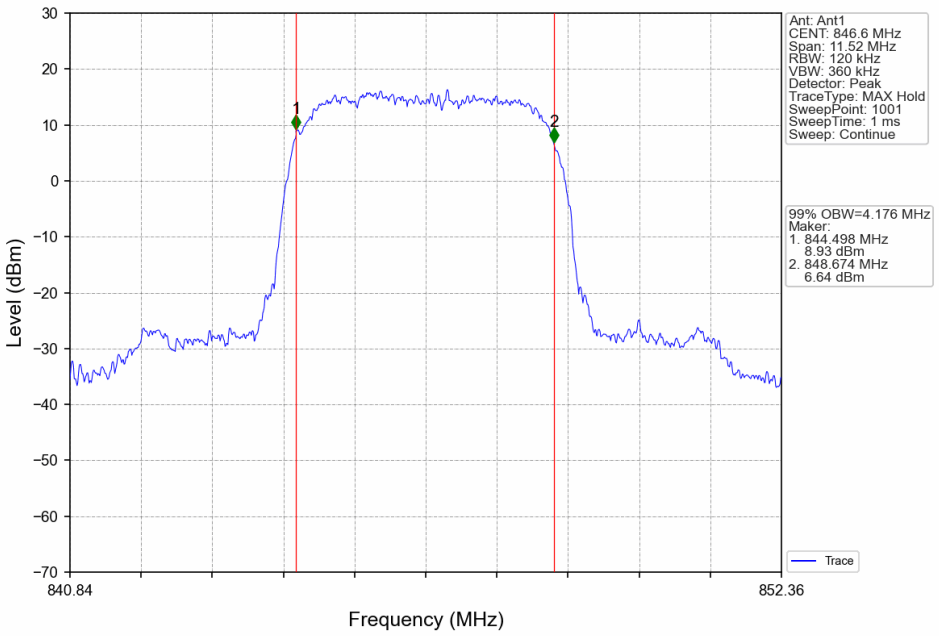
Band5_RMC_LCH_826.4MHz_12.2kbps RMC_NTNV



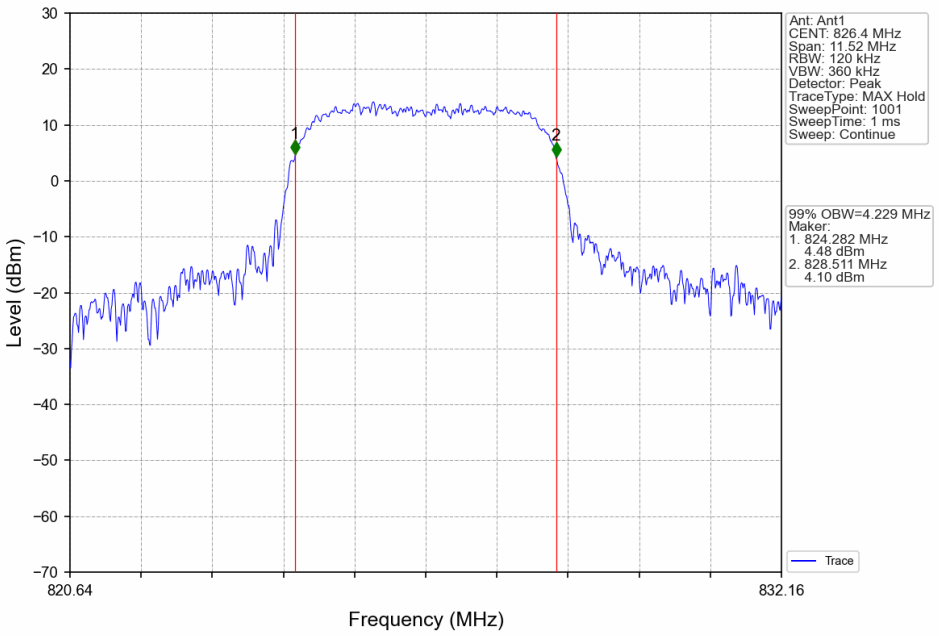
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



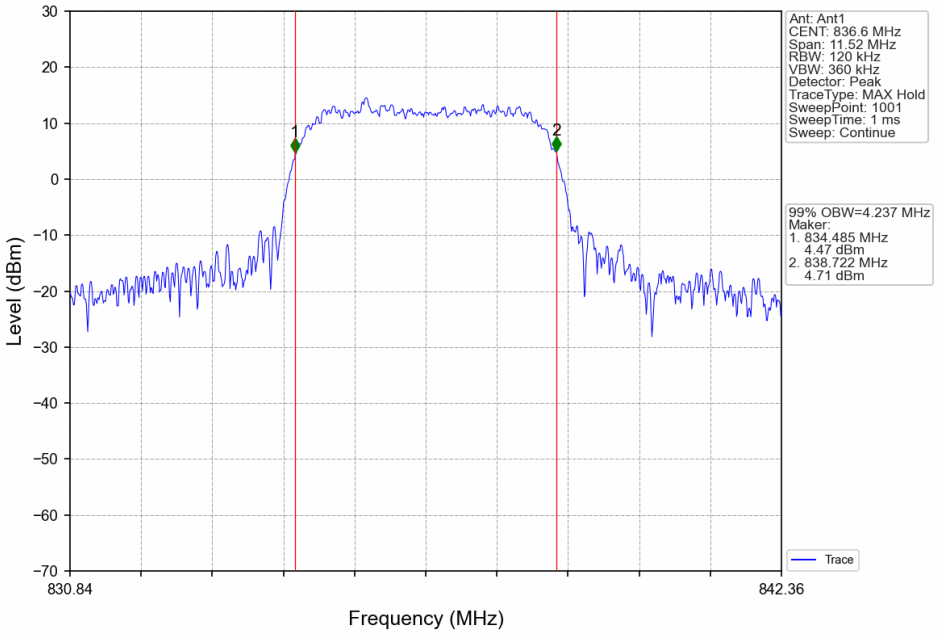
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



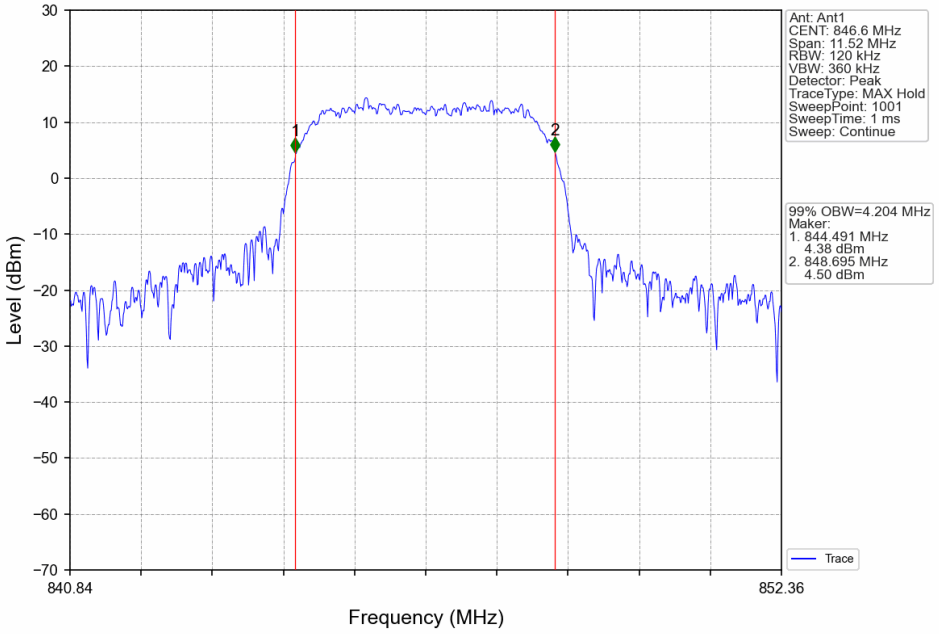
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



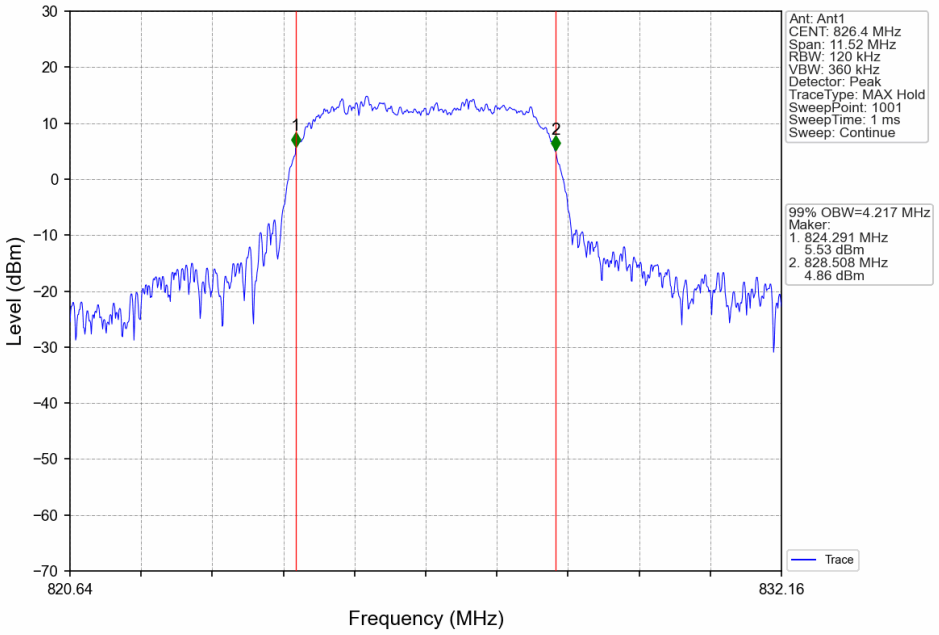
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



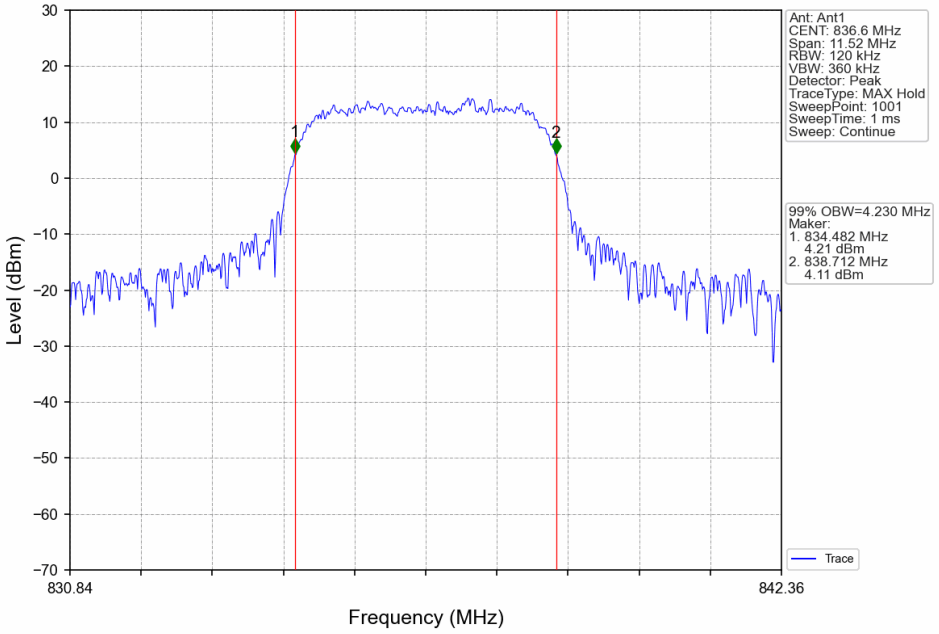
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



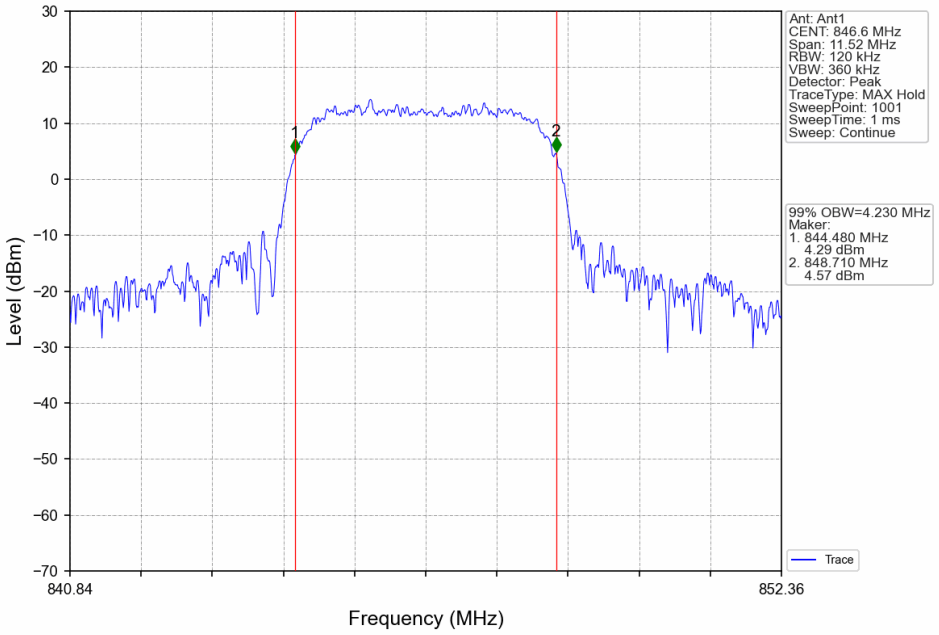
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV

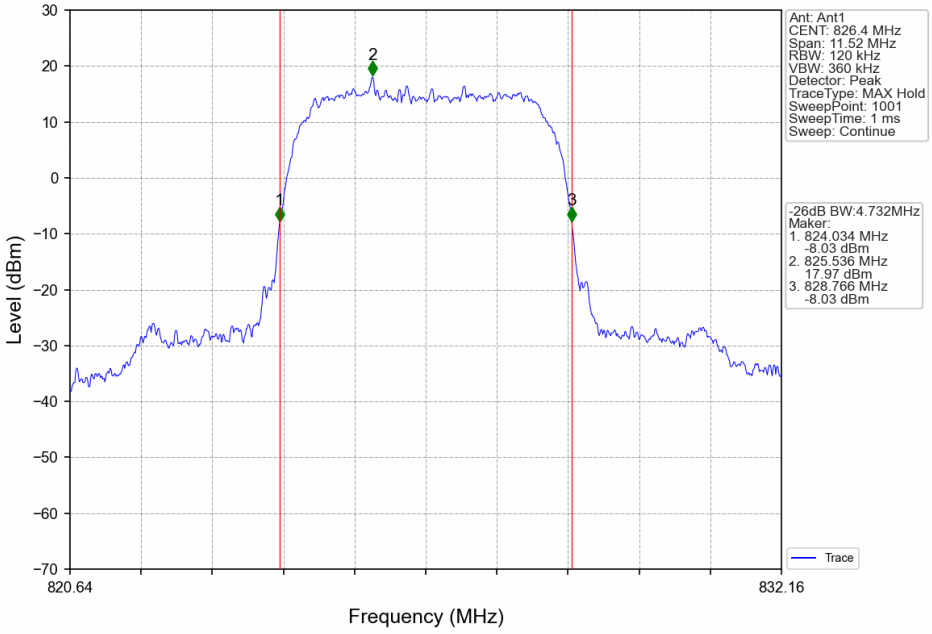


Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV

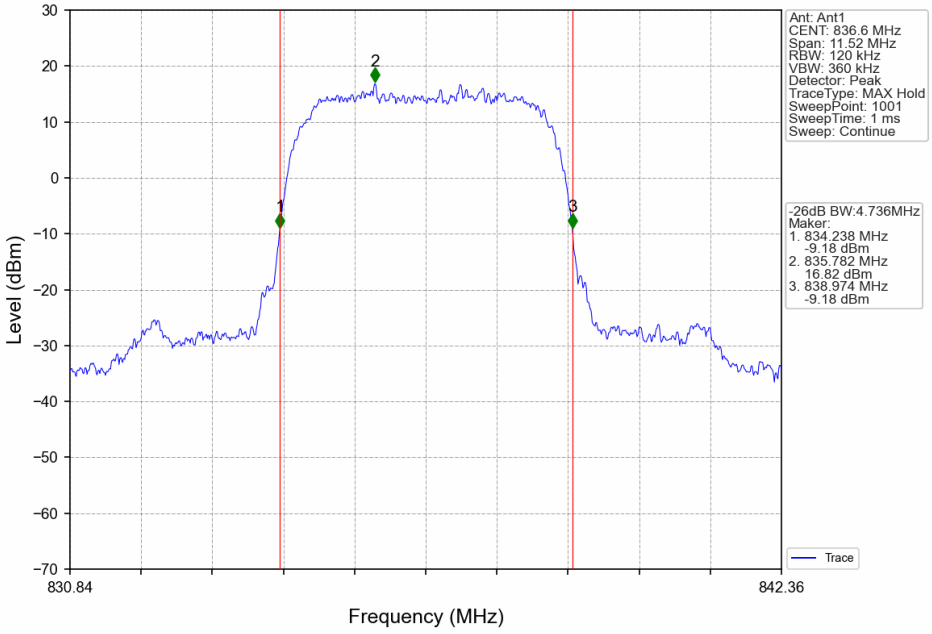


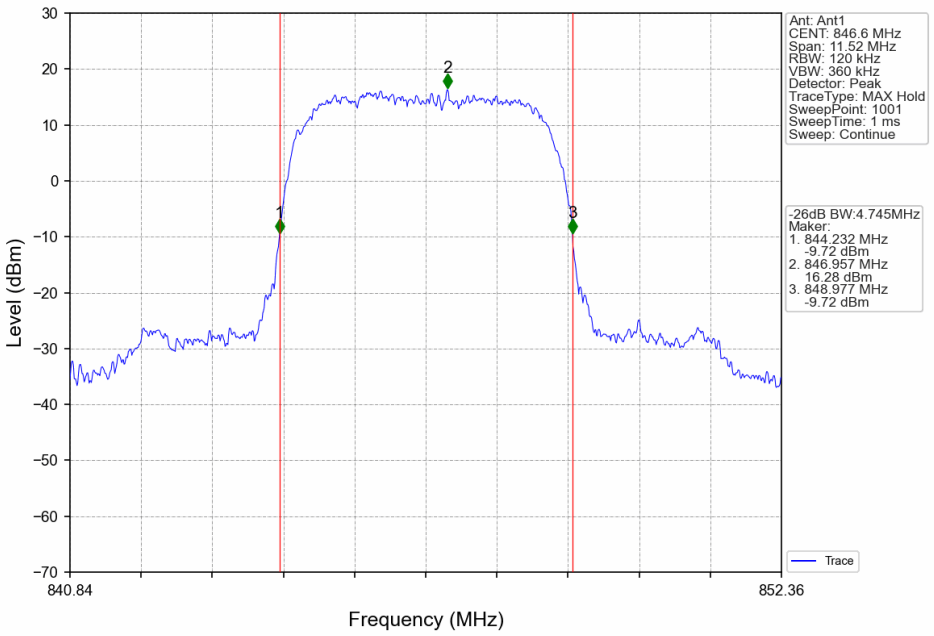
4.2.2 Band5_XDB

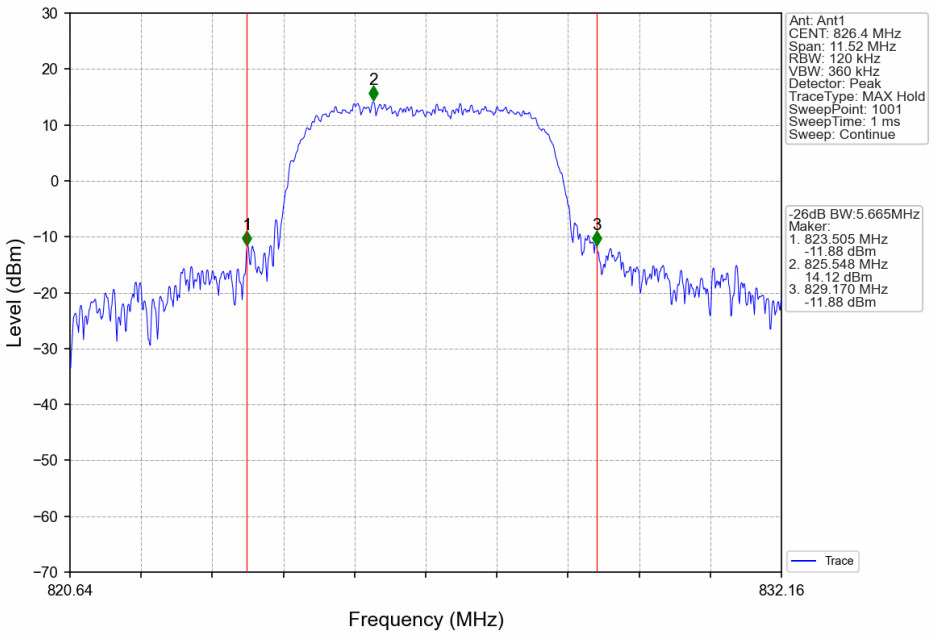
Band5_RMC_LCH_826.4MHz_12.2kbps RMC_NTNV



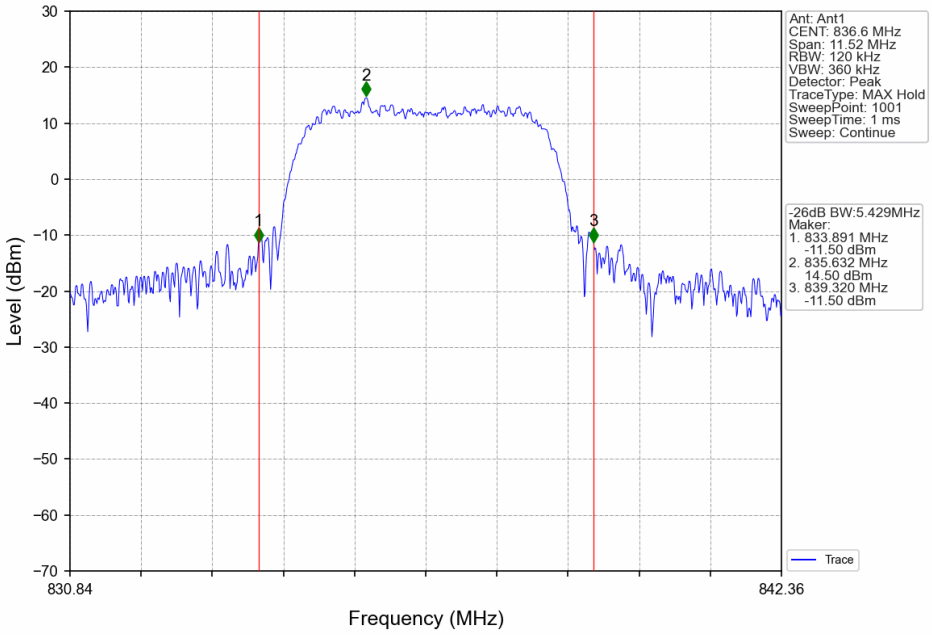
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



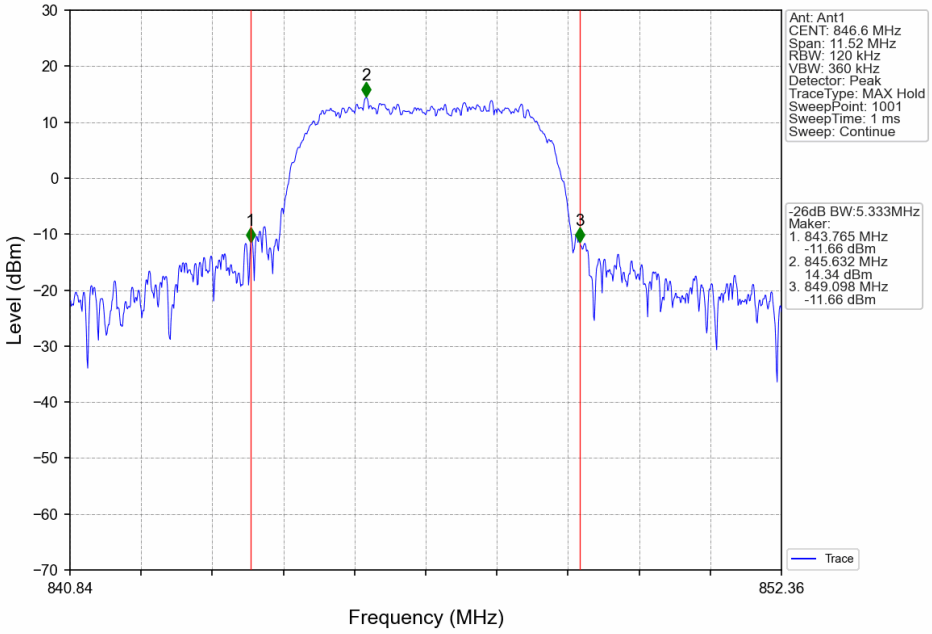
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV


Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV


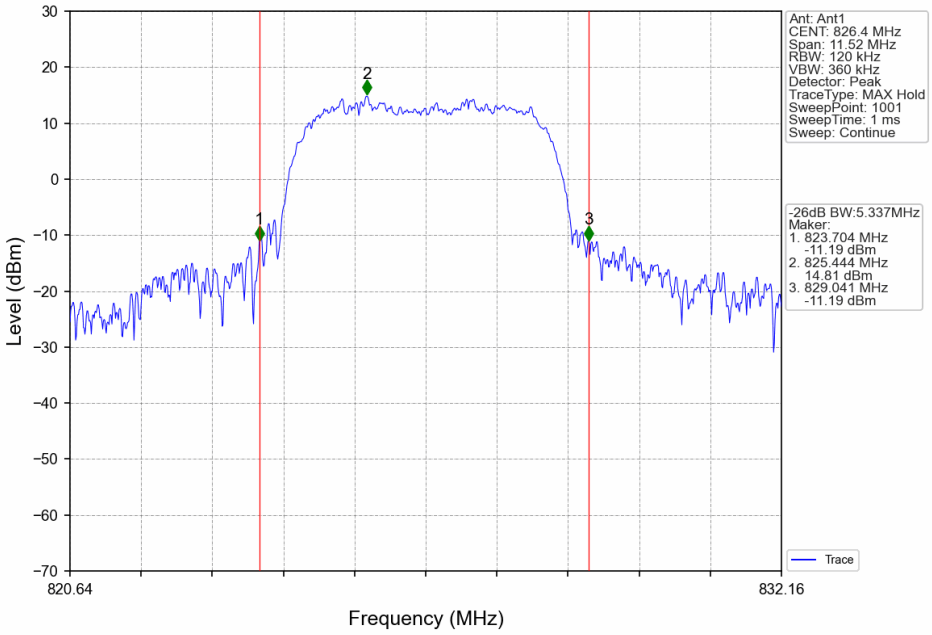
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



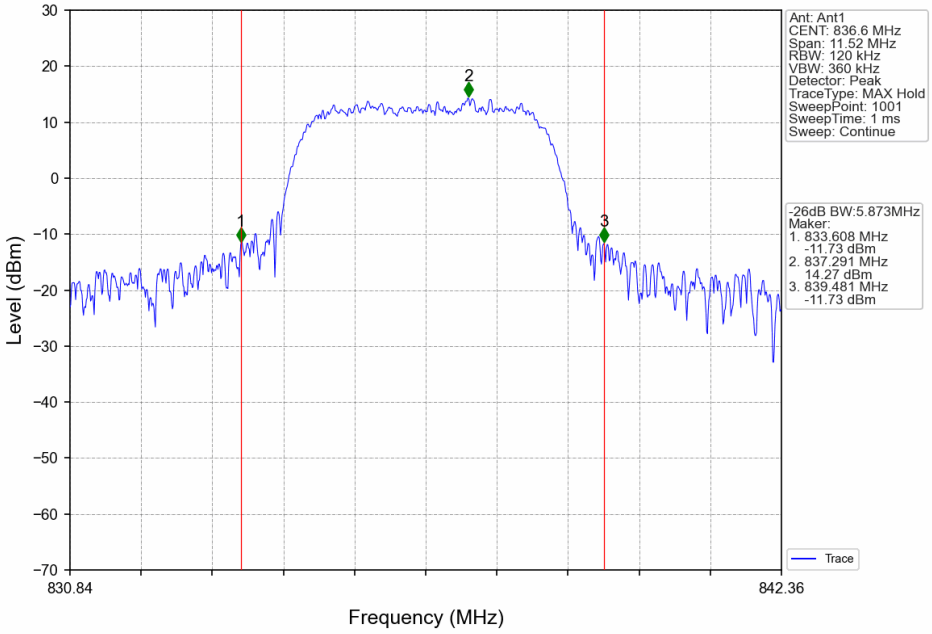
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



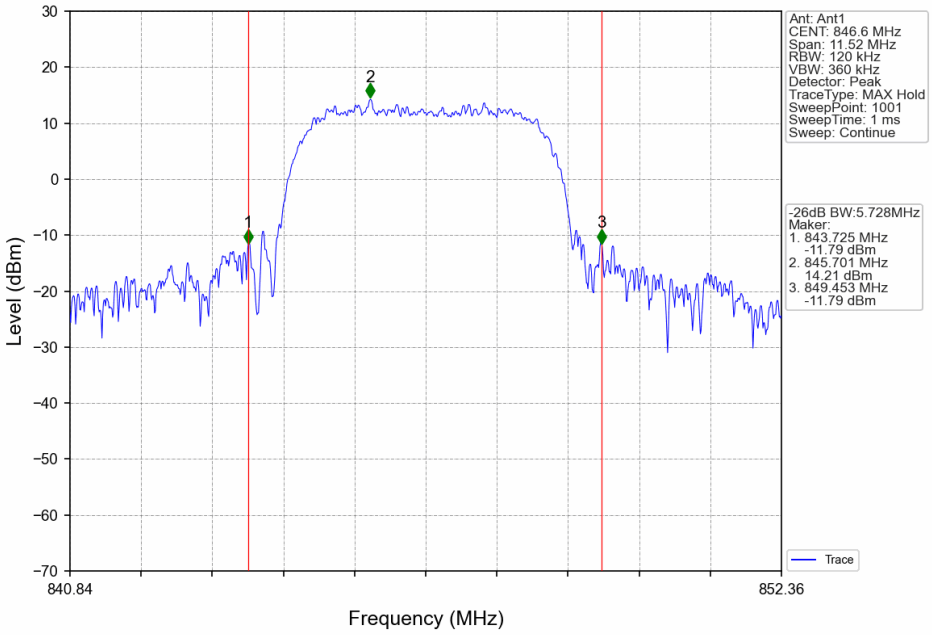
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



5. Peak-Average Ratio

5.1 Test Result

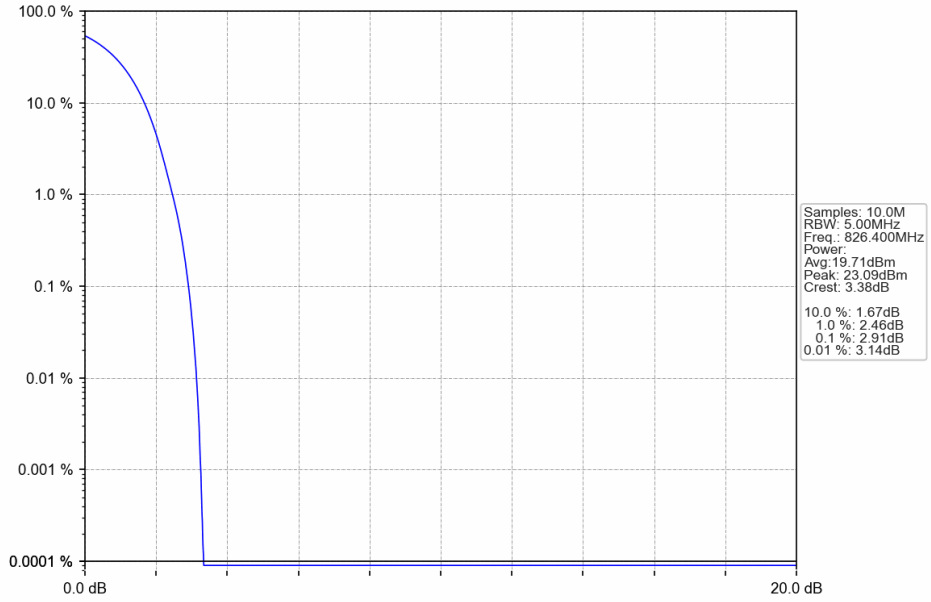
5.1.1 Band5

Band: 5						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	2.91	<=13	Pass
			836.6	2.97	<=13	Pass
			846.6	2.90	<=13	Pass
	HSDPA	Subtest 1	826.4	5.91	<=13	Pass
			836.6	5.93	<=13	Pass
			846.6	5.80	<=13	Pass
	HSUPA	Subtest 1	826.4	5.75	<=13	Pass
			836.6	5.97	<=13	Pass
			846.6	6.03	<=13	Pass

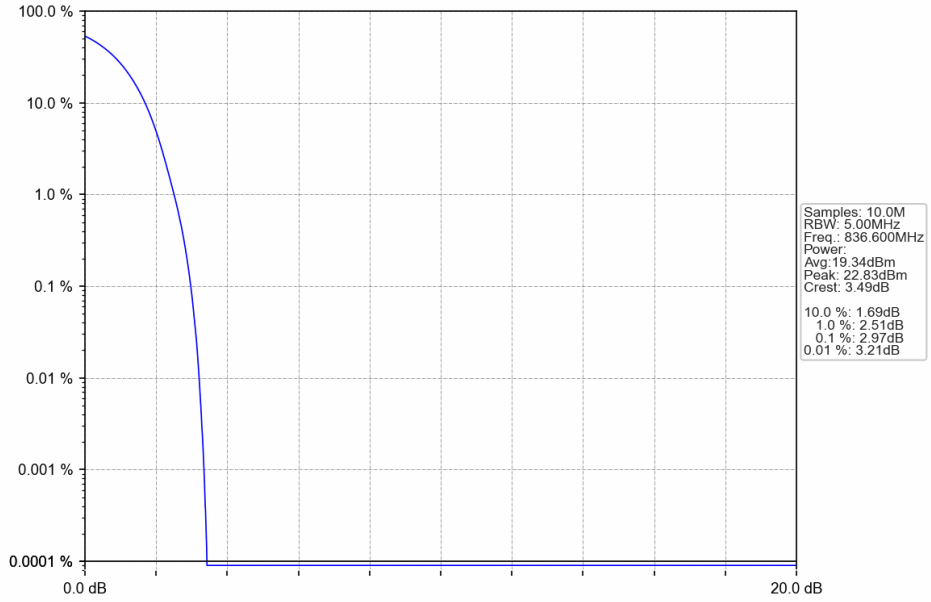
5.2 Test Graph

5.2.1 Band5

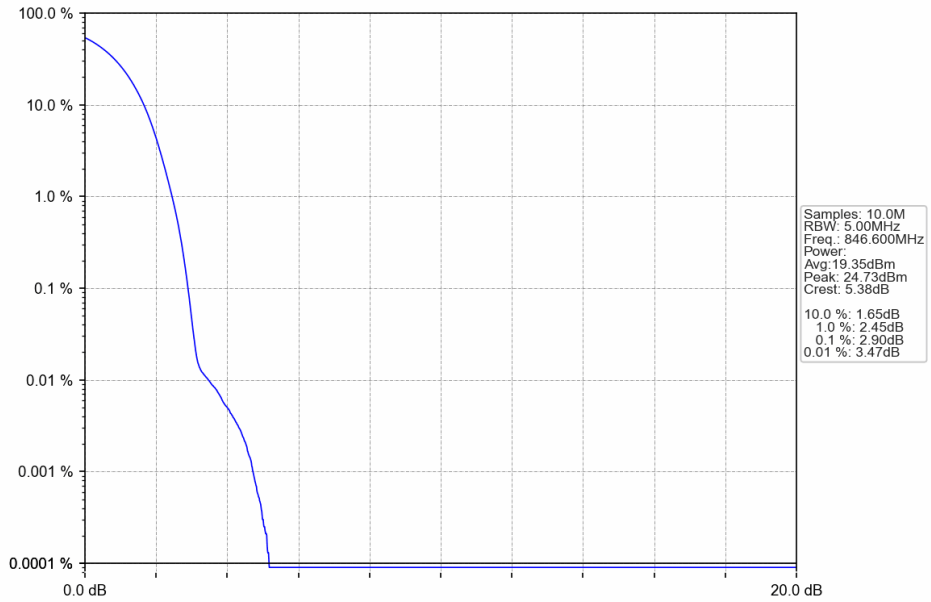
Band5_RMC_LCH_826.4MHz_12.2kbps RMC_NTNV



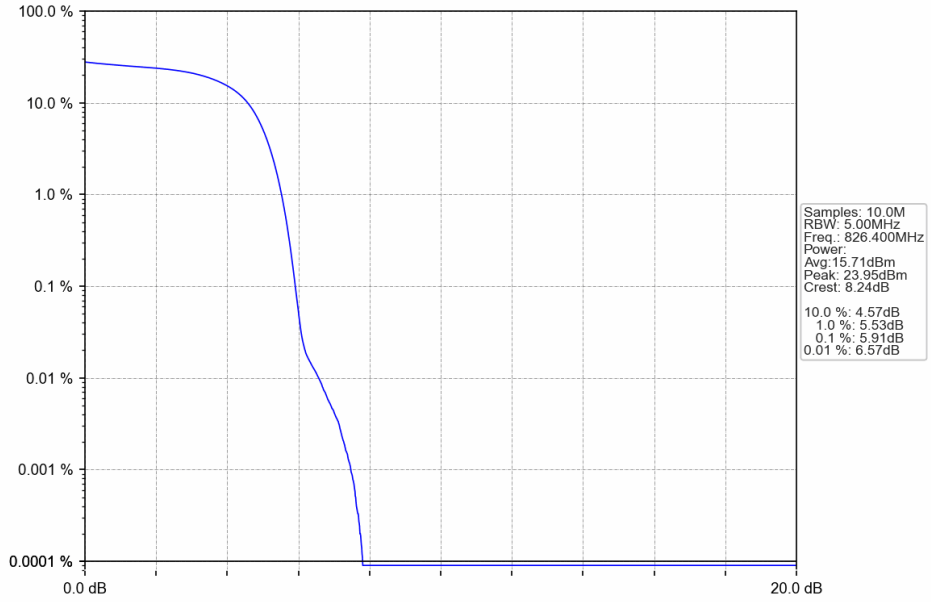
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



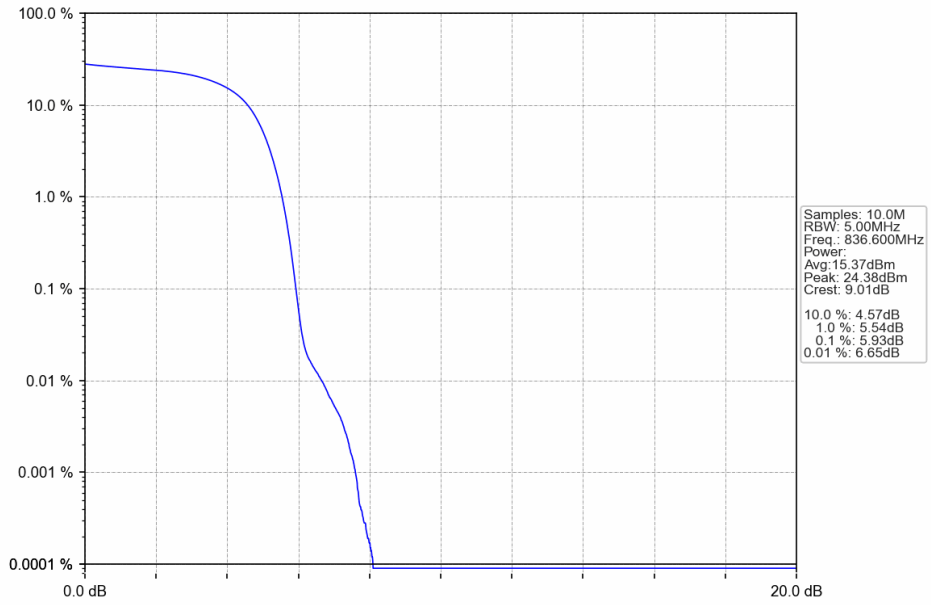
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



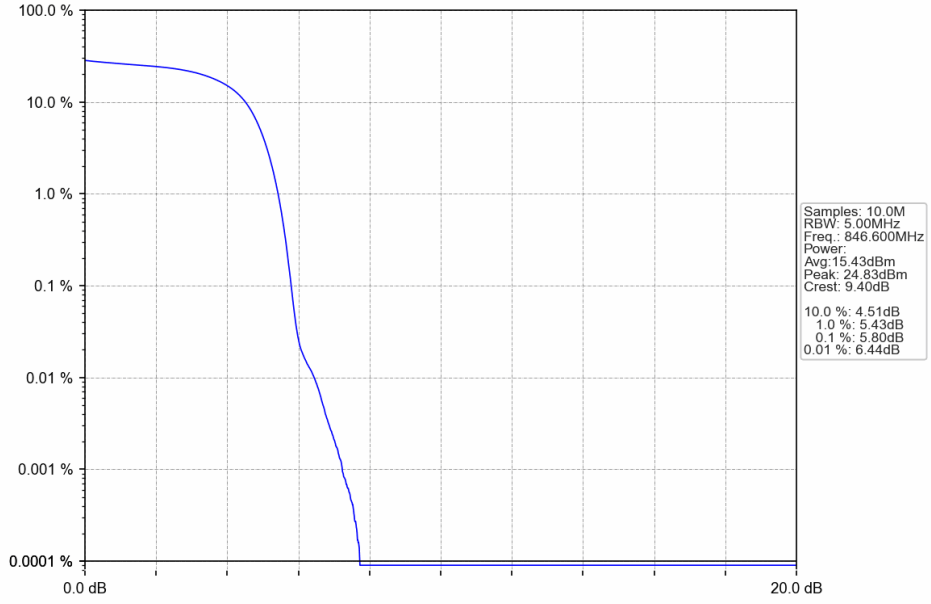
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



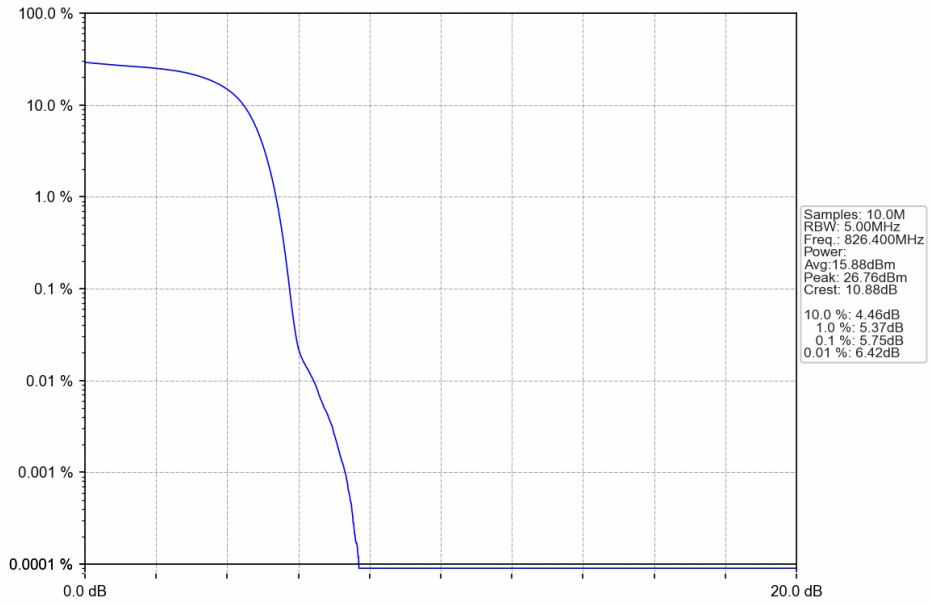
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



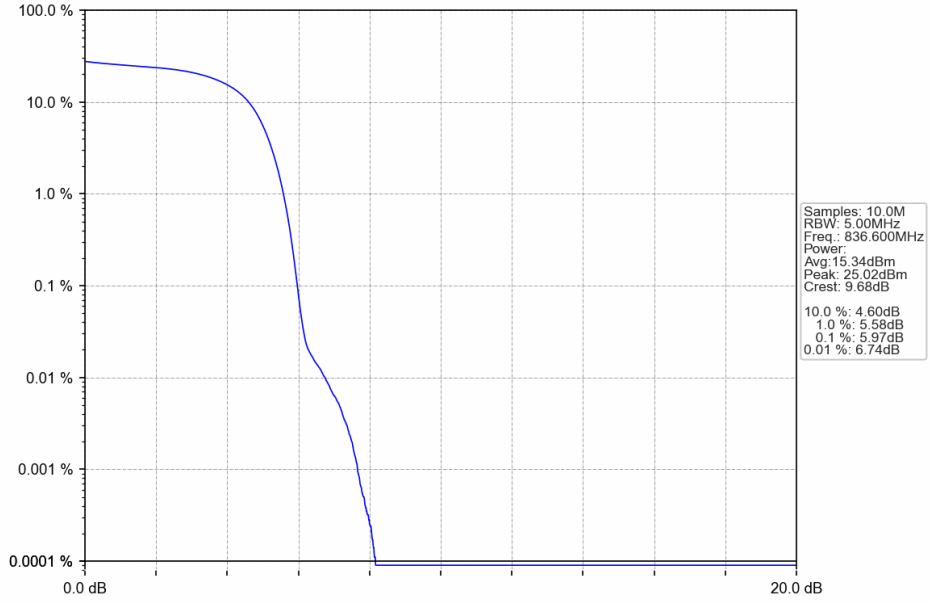
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



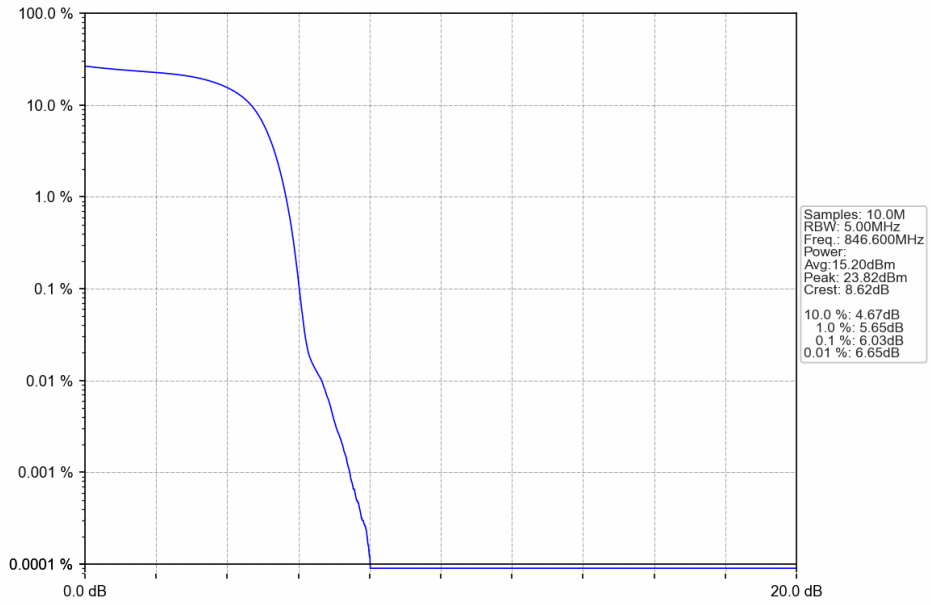
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



6. Spurious Emission

6.1 Test Result

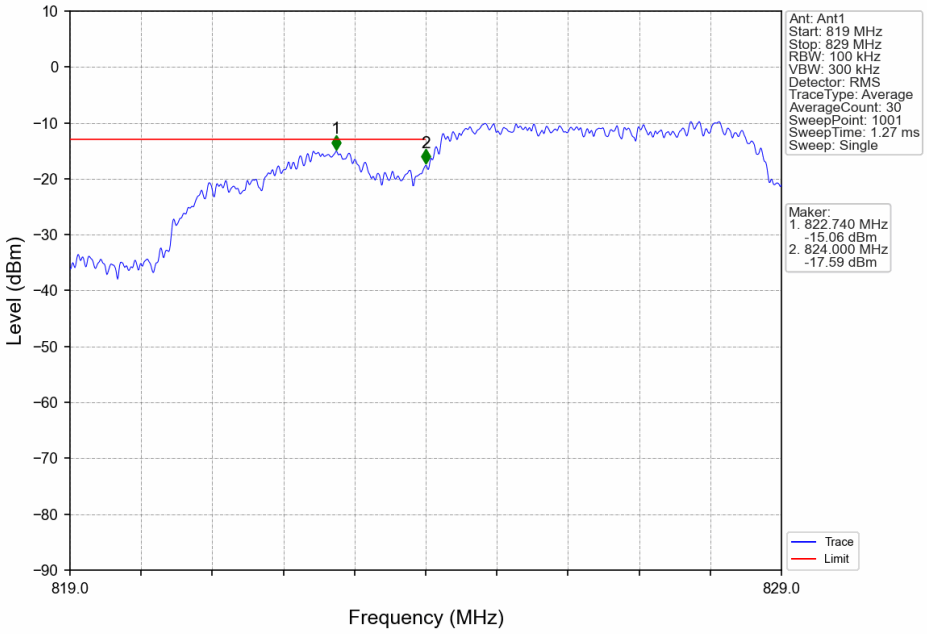
6.1.1 Band5

Band: 5						
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

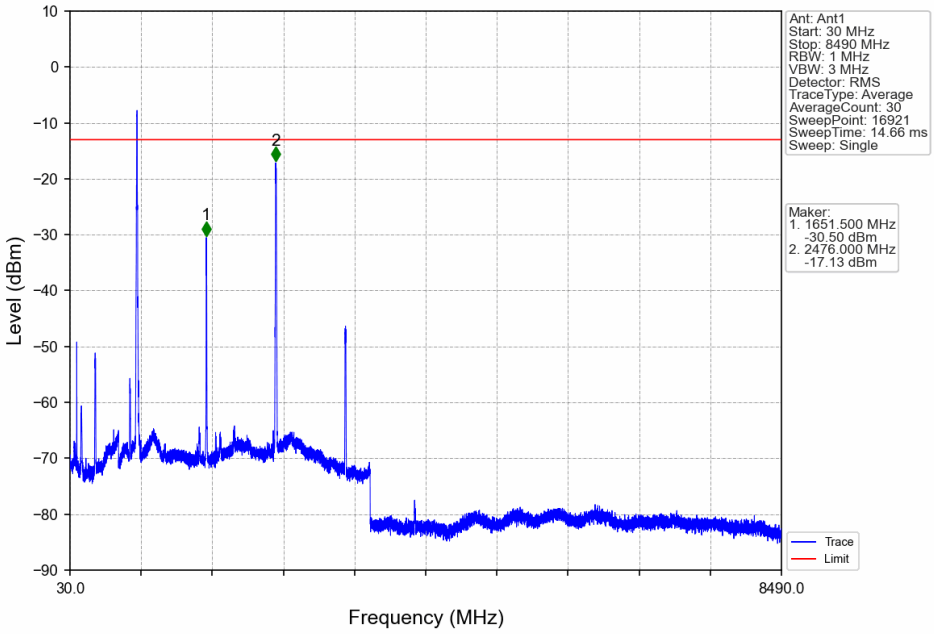
6.2 Test Graph

6.2.1 Band5

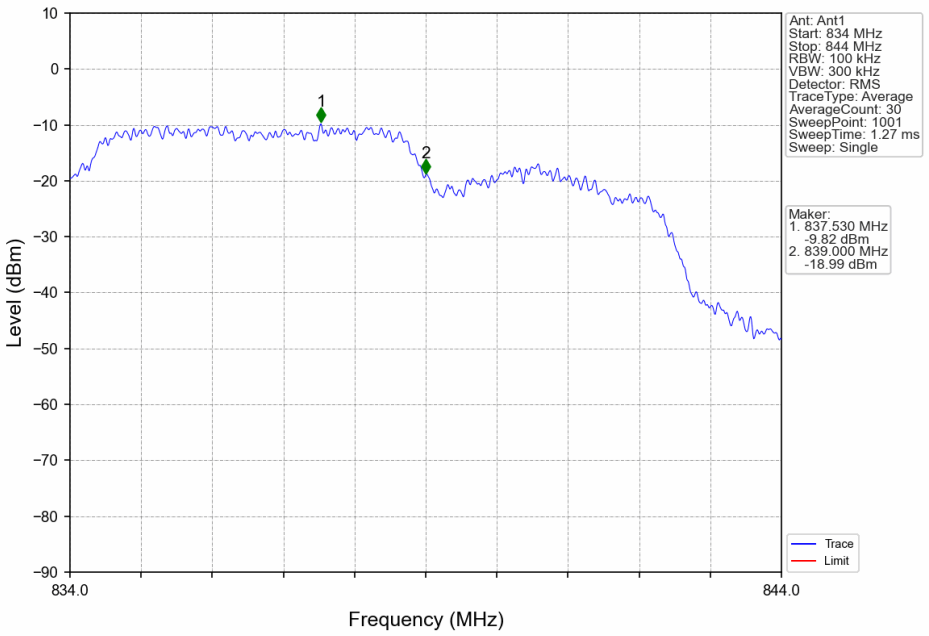
Band5_RMC_LCH_826.4MHz_12.2kbps RMC_NTNV



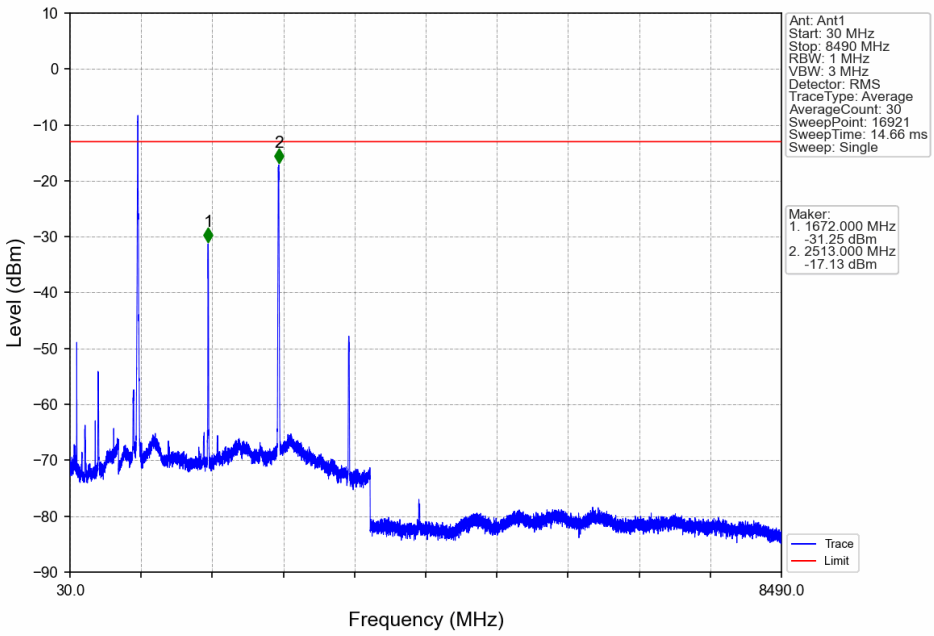
Band5_RMC_LCH_826.4MHz_12.2kbps RMC_NTNV



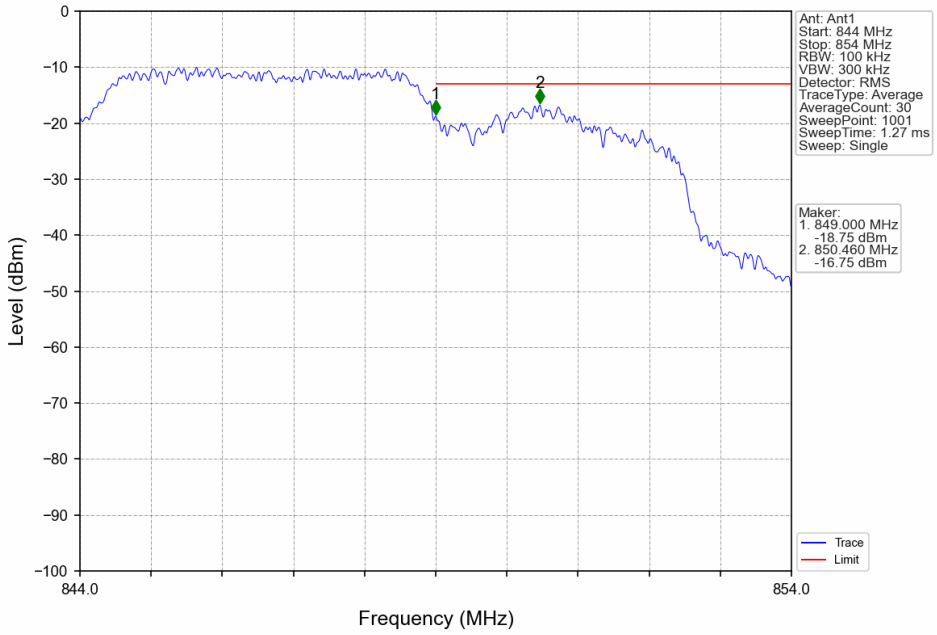
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



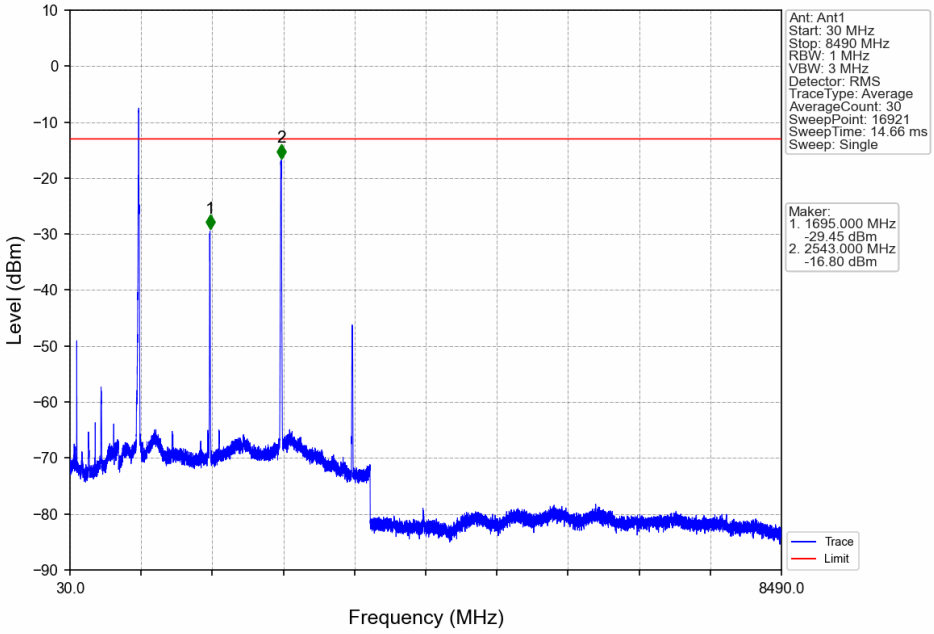
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



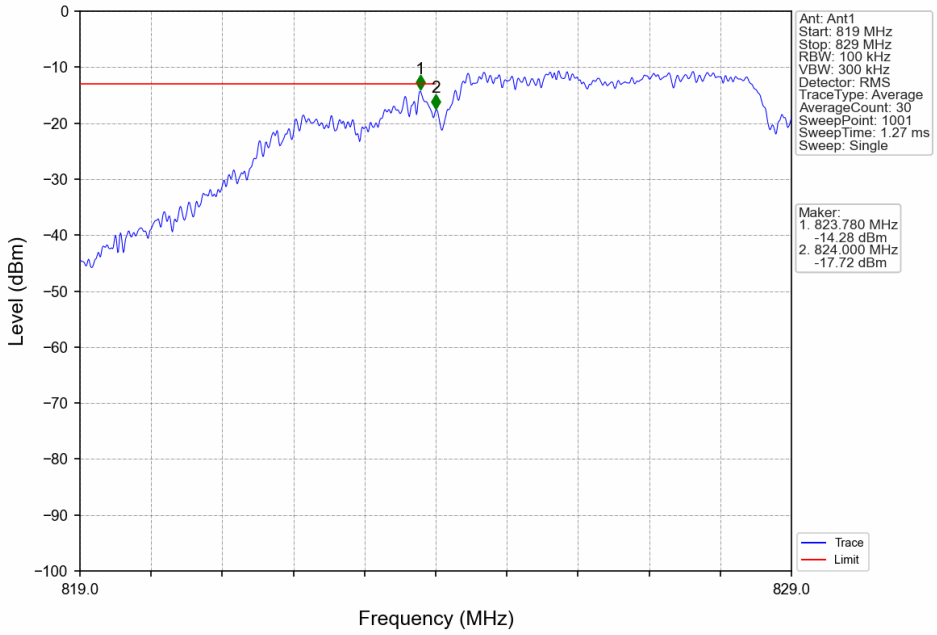
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



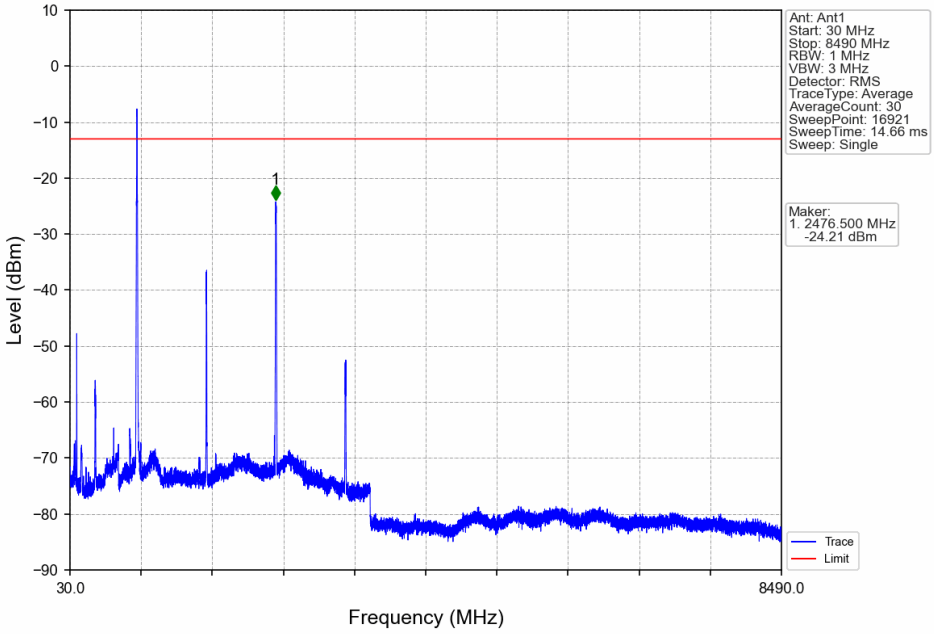
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



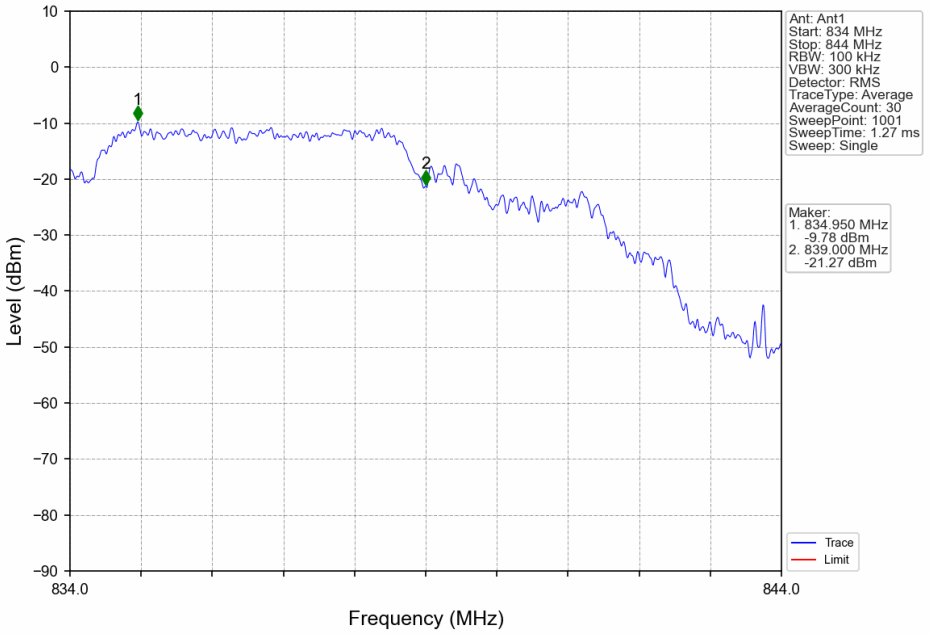
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



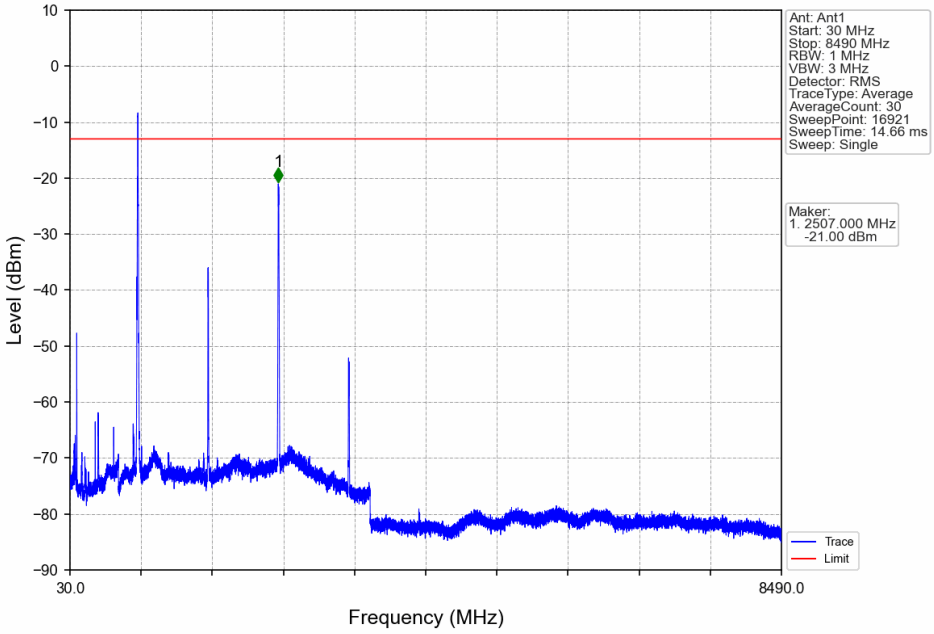
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



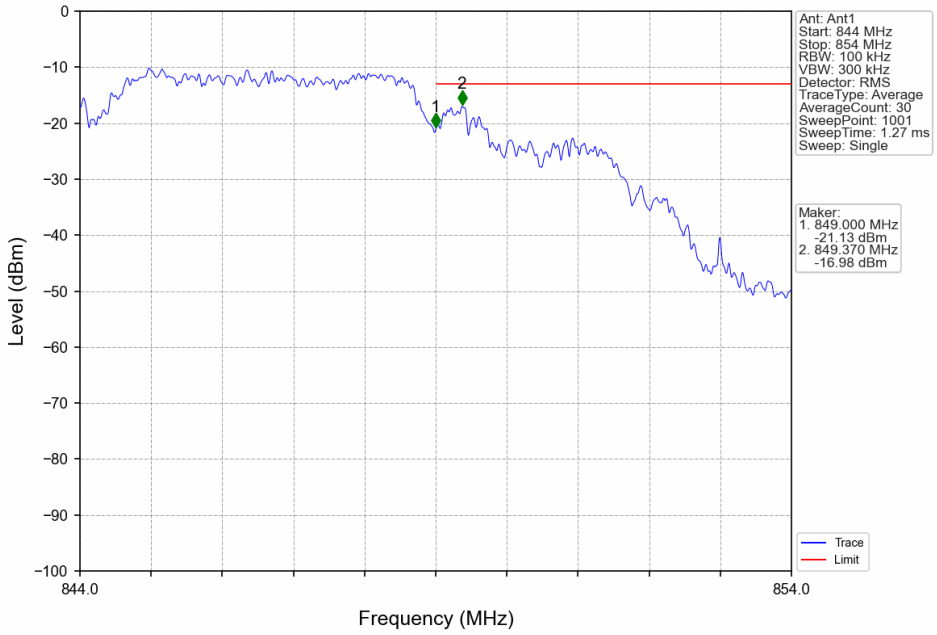
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



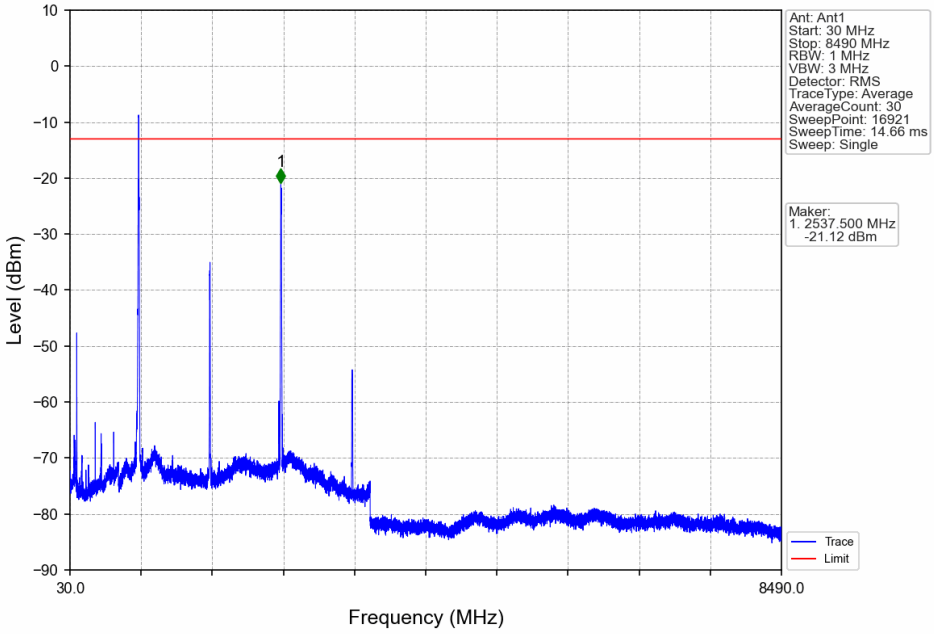
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



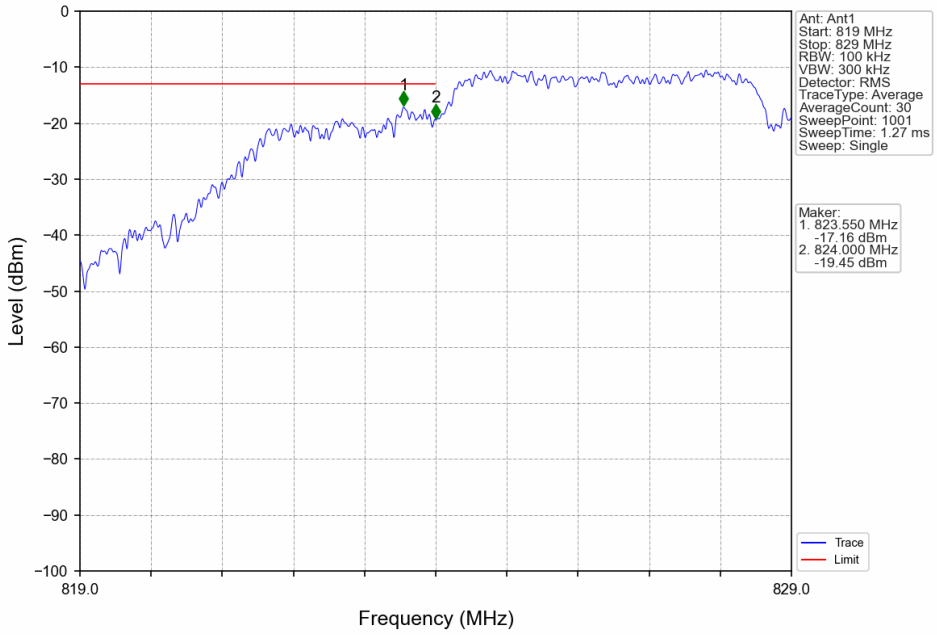
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



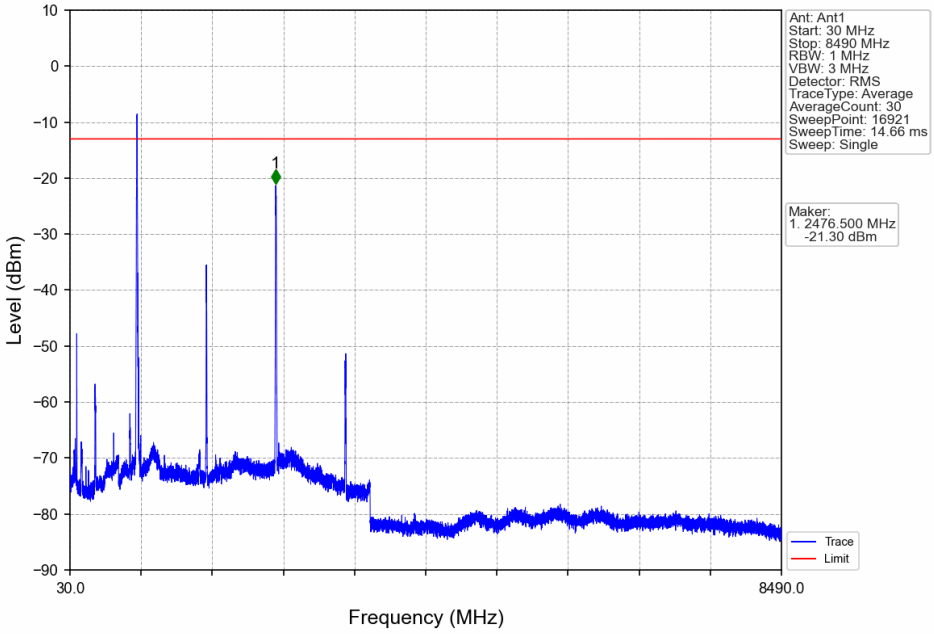
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



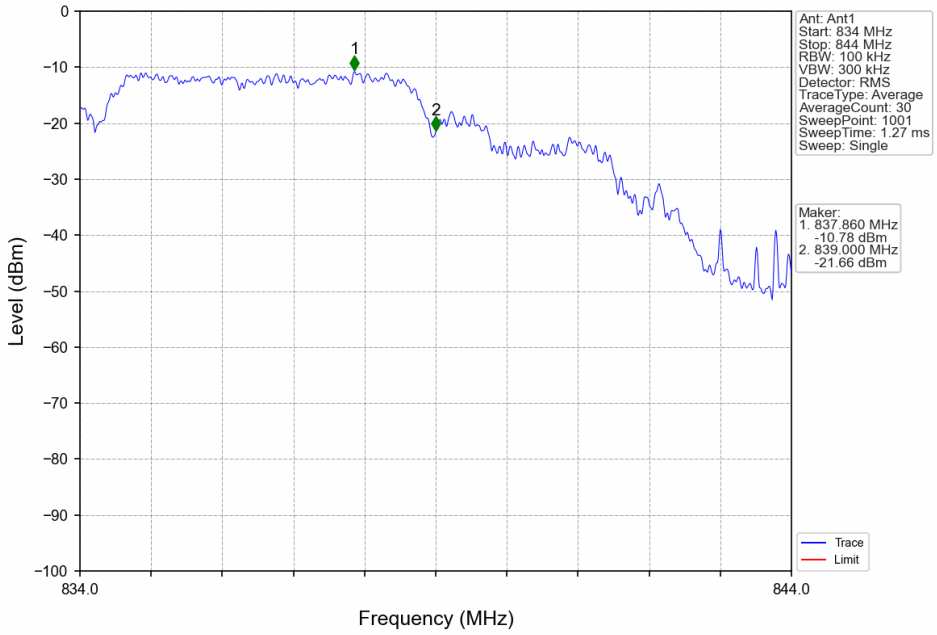
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



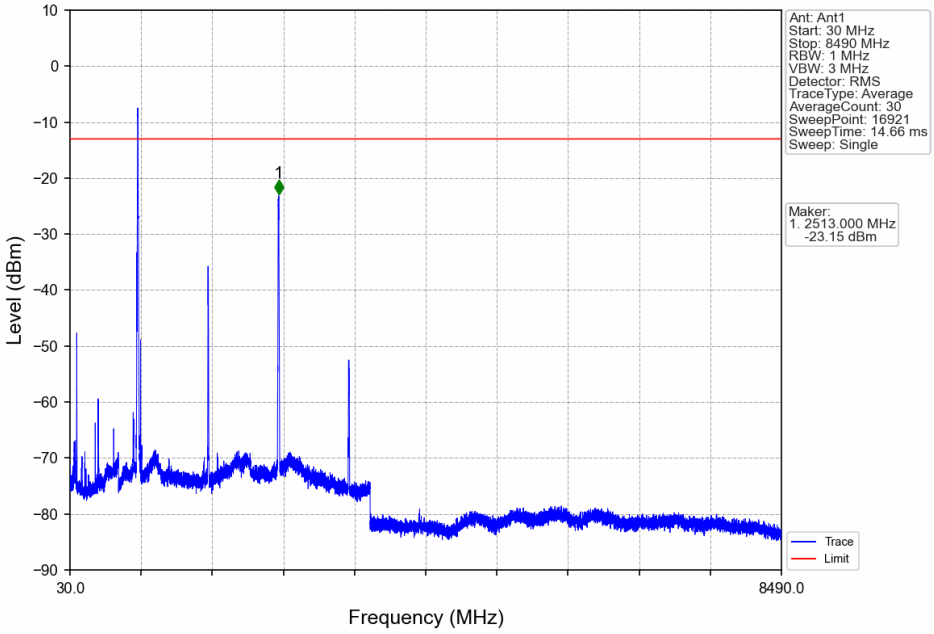
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



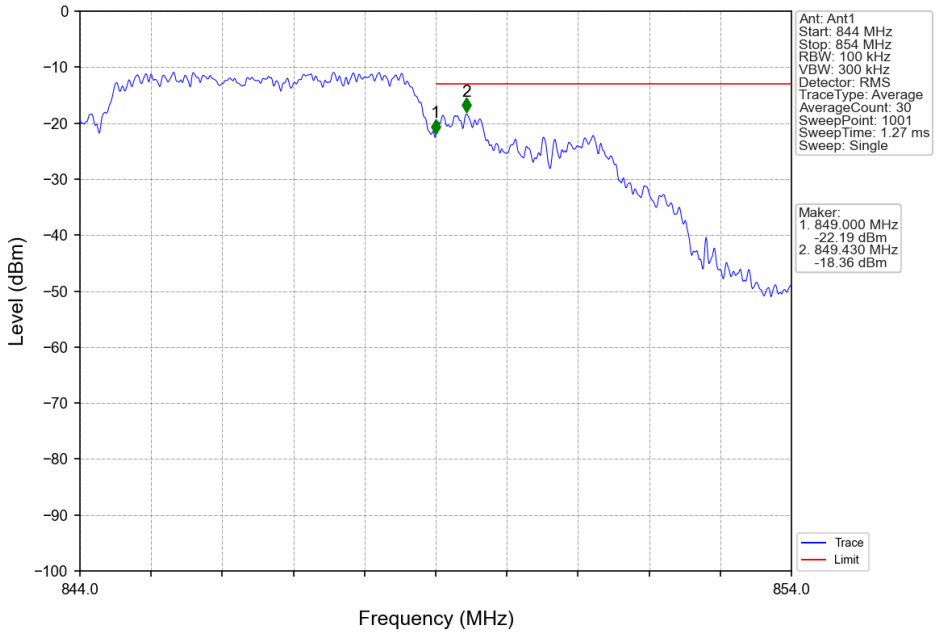
Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



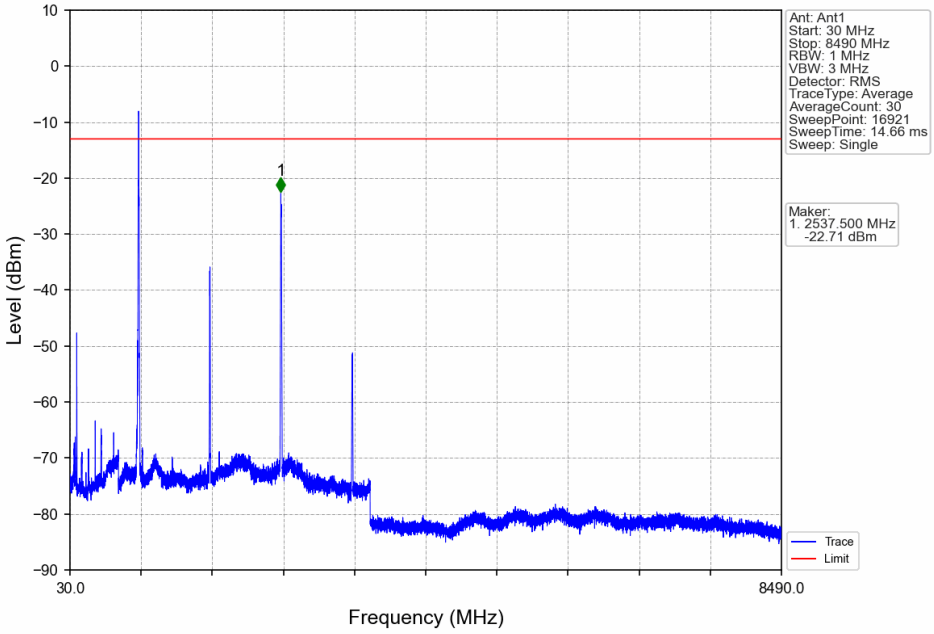
Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



7. Form731

7.1 Test Result

7.1.1 Form731_Power

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
5	3.84	826.4	846.6	0.1730	0.0197	ppm	4M24F9W	22H	22.38

7.1.2 Form731_ERP

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
5	3.84	826.4	846.6	0.1054	0.0197	ppm	4M24F9W	22H	20.23