

1. Effective (Isotropic) Radiated Power Output Data

1.1 Band5_ERP

1.1.1 Test Result

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	20.90	0.48	19.23	<=38.45	Pass	
			836.6	20.87	0.48	19.20	<=38.45	Pass	
			846.6	20.78	0.48	19.11	<=38.45	Pass	
	HSDPA	Subtest 1	826.4	18.66	0.48	16.99	<=38.45	Pass	
		Subtest 2	826.4	18.65	0.48	16.98	<=38.45	Pass	
		Subtest 3	826.4	18.69	0.48	17.02	<=38.45	Pass	
		Subtest 4	826.4	18.67	0.48	17.00	<=38.45	Pass	
		Subtest 1	836.6	18.61	0.48	16.94	<=38.45	Pass	
		Subtest 2	836.6	18.61	0.48	16.94	<=38.45	Pass	
		Subtest 3	836.6	18.62	0.48	16.95	<=38.45	Pass	
		Subtest 4	836.6	18.61	0.48	16.94	<=38.45	Pass	
		Subtest 1	846.6	18.39	0.48	16.72	<=38.45	Pass	
		Subtest 2	846.6	18.40	0.48	16.73	<=38.45	Pass	
		Subtest 3	846.6	18.40	0.48	16.73	<=38.45	Pass	
		Subtest 4	846.6	18.41	0.48	16.74	<=38.45	Pass	
		HSUPA	Subtest 1	826.4	16.66	0.48	14.99	<=38.45	Pass
			Subtest 2	826.4	16.42	0.48	14.75	<=38.45	Pass
			Subtest 3	826.4	16.18	0.48	14.51	<=38.45	Pass
			Subtest 4	826.4	16.65	0.48	14.98	<=38.45	Pass
			Subtest 5	826.4	16.46	0.48	14.79	<=38.45	Pass
			Subtest 1	836.6	16.39	0.48	14.72	<=38.45	Pass
			Subtest 2	836.6	16.63	0.48	14.96	<=38.45	Pass
			Subtest 3	836.6	16.62	0.48	14.95	<=38.45	Pass
	Subtest 4		836.6	16.45	0.48	14.78	<=38.45	Pass	
	Subtest 5		836.6	16.62	0.48	14.95	<=38.45	Pass	
	Subtest 1		846.6	16.51	0.48	14.84	<=38.45	Pass	
	Subtest 2		846.6	16.52	0.48	14.85	<=38.45	Pass	
	Subtest 3	846.6	16.52	0.48	14.85	<=38.45	Pass		
	Subtest 4	846.6	16.56	0.48	14.89	<=38.45	Pass		
	Subtest 5	846.6	16.30	0.48	14.63	<=38.45	Pass		
Note1: ERP=Conducted Power+Antenna Gain-2.15									

2. Frequency Stability

2.1 Band5

2.1.1 Test Result

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	-0.072	-0.0001	-2.5 to 2.5	Pass
			3.85	0.243	0.0003	-2.5 to 2.5	Pass
			4.43	-0.236	-0.0003	-2.5 to 2.5	Pass
		-30	3.85	-0.894	-0.0011	-2.5 to 2.5	Pass
		-20	3.85	-1.073	-0.0013	-2.5 to 2.5	Pass
		-10	3.85	-0.808	-0.0010	-2.5 to 2.5	Pass
		0	3.85	-1.094	-0.0013	-2.5 to 2.5	Pass
		10	3.85	-1.602	-0.0019	-2.5 to 2.5	Pass
		30	3.85	-1.044	-0.0013	-2.5 to 2.5	Pass
		40	3.85	-1.059	-0.0013	-2.5 to 2.5	Pass
		50	3.85	-0.393	-0.0005	-2.5 to 2.5	Pass
	836.6	20	3.27	-0.837	-0.0010	-2.5 to 2.5	Pass
			3.85	-1.602	-0.0019	-2.5 to 2.5	Pass
			4.43	-0.393	-0.0005	-2.5 to 2.5	Pass
		-30	3.85	-0.679	-0.0008	-2.5 to 2.5	Pass
		-20	3.85	-0.451	-0.0005	-2.5 to 2.5	Pass
		-10	3.85	-0.608	-0.0007	-2.5 to 2.5	Pass
		0	3.85	-0.279	-0.0003	-2.5 to 2.5	Pass
		10	3.85	-0.508	-0.0006	-2.5 to 2.5	Pass
		30	3.85	-1.023	-0.0012	-2.5 to 2.5	Pass
		40	3.85	-0.336	-0.0004	-2.5 to 2.5	Pass
		50	3.85	-0.458	-0.0005	-2.5 to 2.5	Pass
	846.6	20	3.27	0.358	0.0004	-2.5 to 2.5	Pass
			3.85	-0.336	-0.0004	-2.5 to 2.5	Pass
			4.43	0.222	0.0003	-2.5 to 2.5	Pass
		-30	3.85	0.358	0.0004	-2.5 to 2.5	Pass
		-20	3.85	0.465	0.0005	-2.5 to 2.5	Pass
		-10	3.85	0.772	0.0009	-2.5 to 2.5	Pass
		0	3.85	0.043	0.0001	-2.5 to 2.5	Pass
		10	3.85	0.479	0.0006	-2.5 to 2.5	Pass
		30	3.85	1.166	0.0014	-2.5 to 2.5	Pass
		40	3.85	0.043	0.0001	-2.5 to 2.5	Pass
HSDPA	826.4	20	3.27	-0.637	-0.0008	-2.5 to 2.5	Pass
			3.85	-0.114	-0.0001	-2.5 to 2.5	Pass
			4.43	-0.343	-0.0004	-2.5 to 2.5	Pass
		-30	3.85	-0.300	-0.0004	-2.5 to 2.5	Pass
		-20	3.85	-0.014	0.0000	-2.5 to 2.5	Pass
		-10	3.85	-1.194	-0.0014	-2.5 to 2.5	Pass
		0	3.85	-0.379	-0.0005	-2.5 to 2.5	Pass
		10	3.85	-1.109	-0.0013	-2.5 to 2.5	Pass
		30	3.85	-1.552	-0.0019	-2.5 to 2.5	Pass
		40	3.85	-0.651	-0.0008	-2.5 to 2.5	Pass
		50	3.85	-0.951	-0.0012	-2.5 to 2.5	Pass
	836.6	20	3.27	-0.057	-0.0001	-2.5 to 2.5	Pass
			3.85	0.157	0.0002	-2.5 to 2.5	Pass
			4.43	-0.229	-0.0003	-2.5 to 2.5	Pass
		-30	3.85	0.165	0.0002	-2.5 to 2.5	Pass
		-20	3.85	-0.851	-0.0010	-2.5 to 2.5	Pass

		-10	3.85	-0.544	-0.0007	-2.5 to 2.5	Pass
		0	3.85	0.544	0.0007	-2.5 to 2.5	Pass
		10	3.85	0.029	0.0000	-2.5 to 2.5	Pass
		30	3.85	-0.193	-0.0002	-2.5 to 2.5	Pass
		40	3.85	0.236	0.0003	-2.5 to 2.5	Pass
		50	3.85	-0.250	-0.0003	-2.5 to 2.5	Pass
	846.6	20	3.27	0.515	0.0006	-2.5 to 2.5	Pass
			3.85	-0.651	-0.0008	-2.5 to 2.5	Pass
			4.43	-0.057	-0.0001	-2.5 to 2.5	Pass
		-30	3.85	0.200	0.0002	-2.5 to 2.5	Pass
		-20	3.85	-0.129	-0.0002	-2.5 to 2.5	Pass
		-10	3.85	0.150	0.0002	-2.5 to 2.5	Pass
		0	3.85	-0.272	-0.0003	-2.5 to 2.5	Pass
		10	3.85	0.014	0.0000	-2.5 to 2.5	Pass
		30	3.85	-0.215	-0.0003	-2.5 to 2.5	Pass
		40	3.85	0.329	0.0004	-2.5 to 2.5	Pass
		50	3.85	0.393	0.0005	-2.5 to 2.5	Pass
HSUPA	826.4	20	3.27	1.466	0.0018	-2.5 to 2.5	Pass
			3.85	1.109	0.0013	-2.5 to 2.5	Pass
			4.43	0.229	0.0003	-2.5 to 2.5	Pass
		-30	3.85	0.701	0.0008	-2.5 to 2.5	Pass
		-20	3.85	1.559	0.0019	-2.5 to 2.5	Pass
		-10	3.85	1.388	0.0017	-2.5 to 2.5	Pass
		0	3.85	1.874	0.0023	-2.5 to 2.5	Pass
		10	3.85	1.273	0.0015	-2.5 to 2.5	Pass
		30	3.85	0.644	0.0008	-2.5 to 2.5	Pass
		40	3.85	1.166	0.0014	-2.5 to 2.5	Pass
	836.6	20	3.27	1.137	0.0014	-2.5 to 2.5	Pass
			3.85	1.438	0.0017	-2.5 to 2.5	Pass
			4.43	1.030	0.0012	-2.5 to 2.5	Pass
		-30	3.85	1.109	0.0013	-2.5 to 2.5	Pass
		-20	3.85	3.126	0.0037	-2.5 to 2.5	Pass
		-10	3.85	1.452	0.0017	-2.5 to 2.5	Pass
		0	3.85	0.908	0.0011	-2.5 to 2.5	Pass
		10	3.85	1.602	0.0019	-2.5 to 2.5	Pass
		30	3.85	0.858	0.0010	-2.5 to 2.5	Pass
		40	3.85	1.395	0.0017	-2.5 to 2.5	Pass
	846.6	20	3.27	0.873	0.0010	-2.5 to 2.5	Pass
			3.85	1.674	0.0020	-2.5 to 2.5	Pass
			4.43	2.167	0.0026	-2.5 to 2.5	Pass
		-30	3.85	1.445	0.0017	-2.5 to 2.5	Pass
		-20	3.85	1.481	0.0017	-2.5 to 2.5	Pass
		-10	3.85	1.266	0.0015	-2.5 to 2.5	Pass
		-10	3.85	1.531	0.0018	-2.5 to 2.5	Pass
		0	3.85	1.416	0.0017	-2.5 to 2.5	Pass
		10	3.85	1.466	0.0017	-2.5 to 2.5	Pass
		30	3.85	2.339	0.0028	-2.5 to 2.5	Pass
		40	3.85	1.566	0.0018	-2.5 to 2.5	Pass
		50	3.85	1.903	0.0022	-2.5 to 2.5	Pass

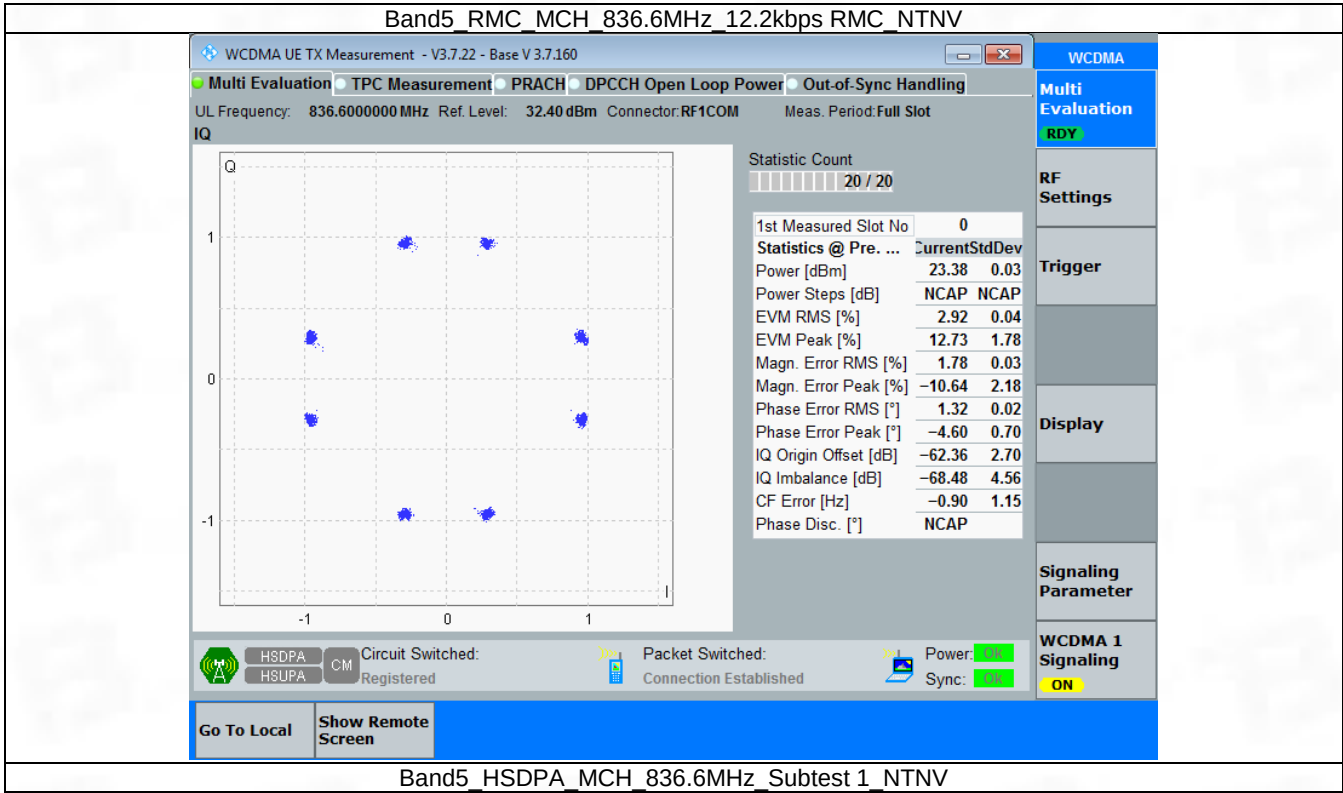
3. Modulation Characteristics

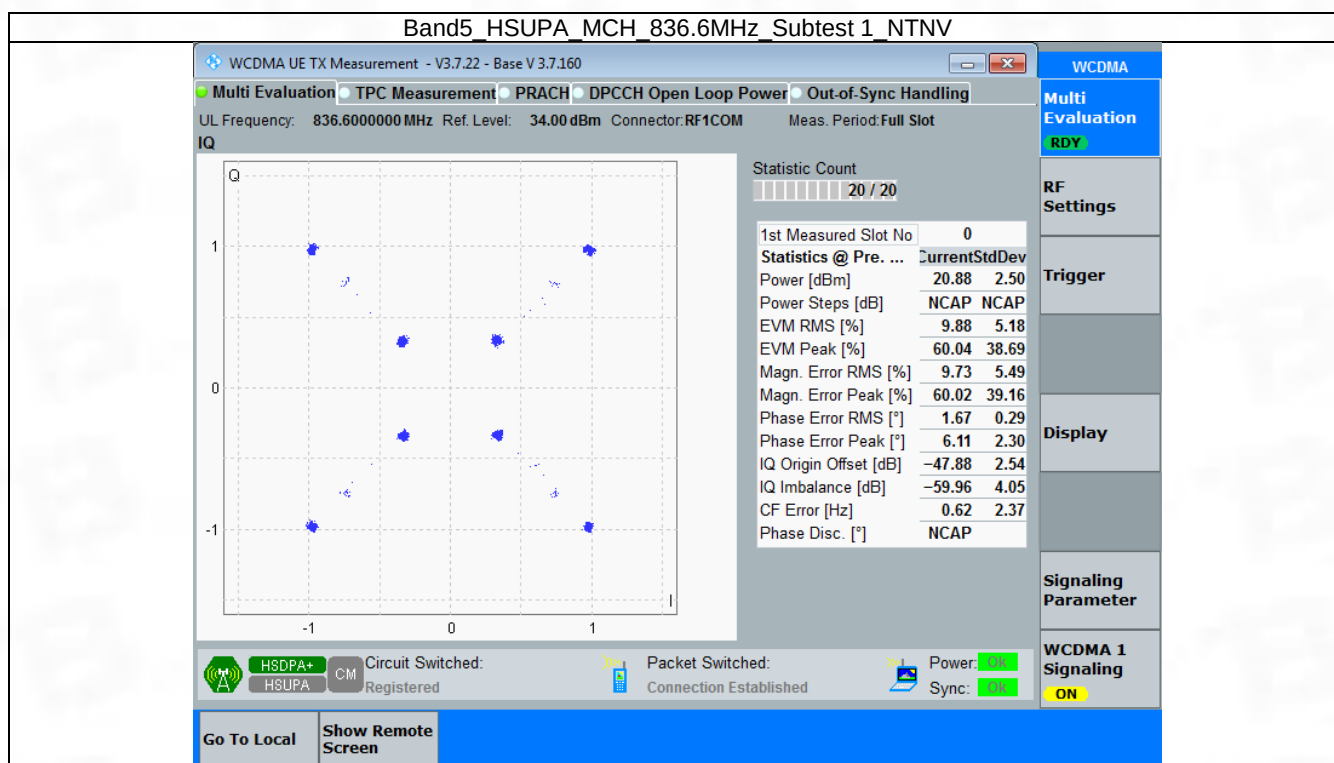
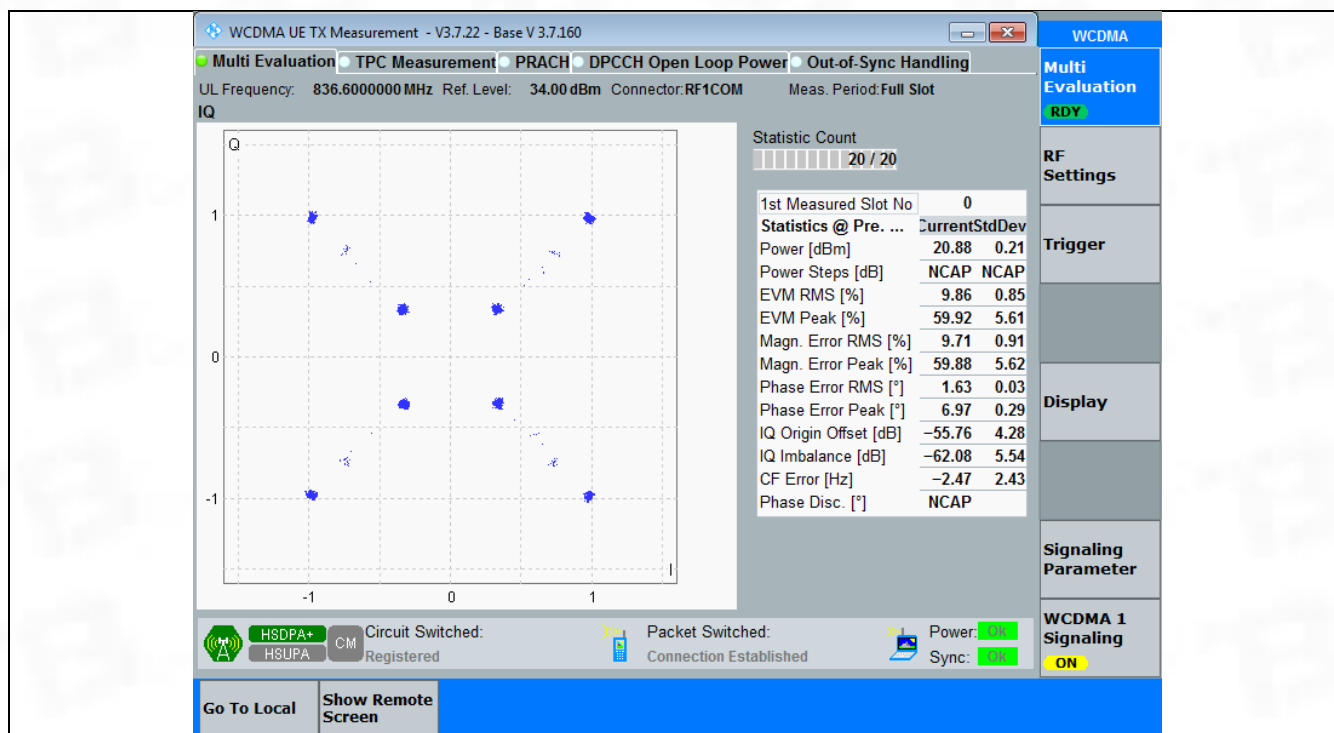
3.1 Band5

3.1.1 Test Result

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

3.1.2 Test Graph





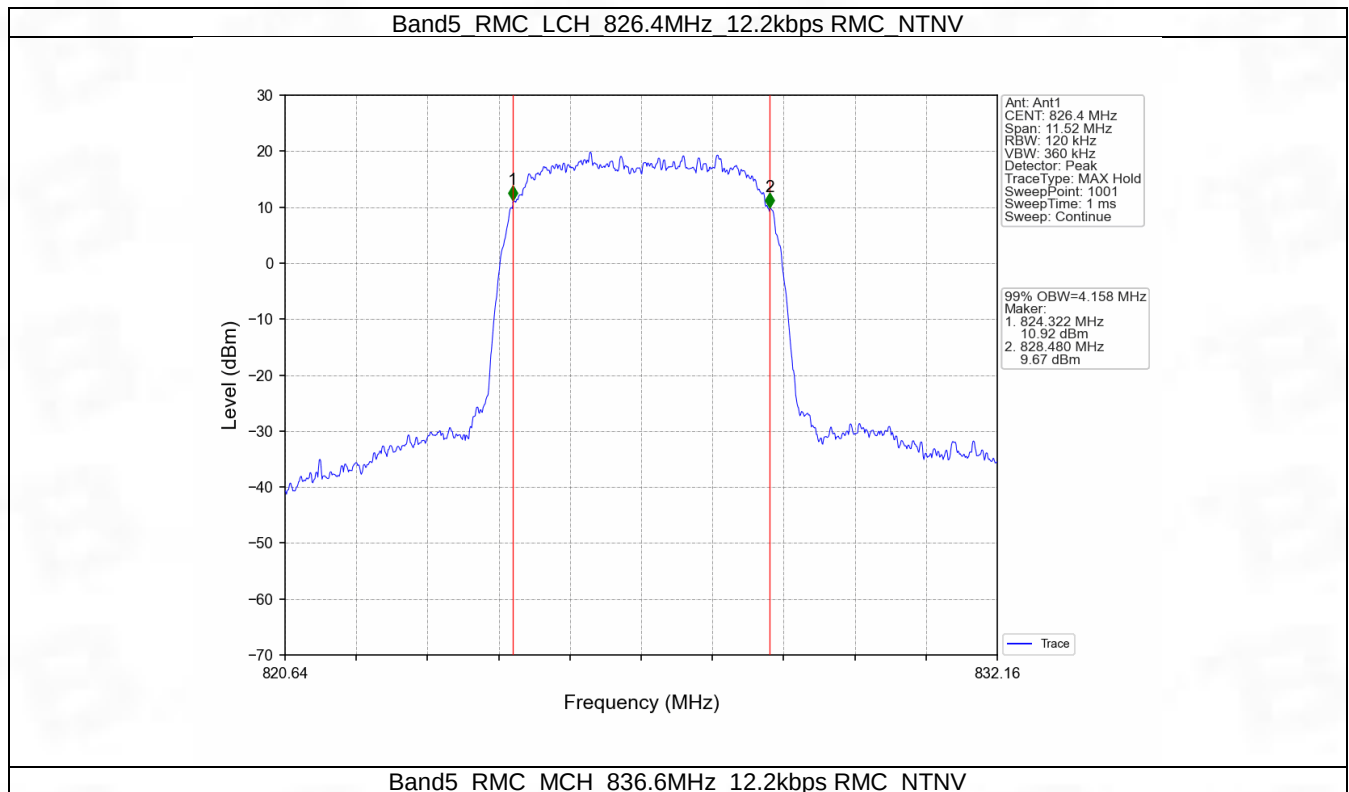
4. 99% & 26dB Bandwidth

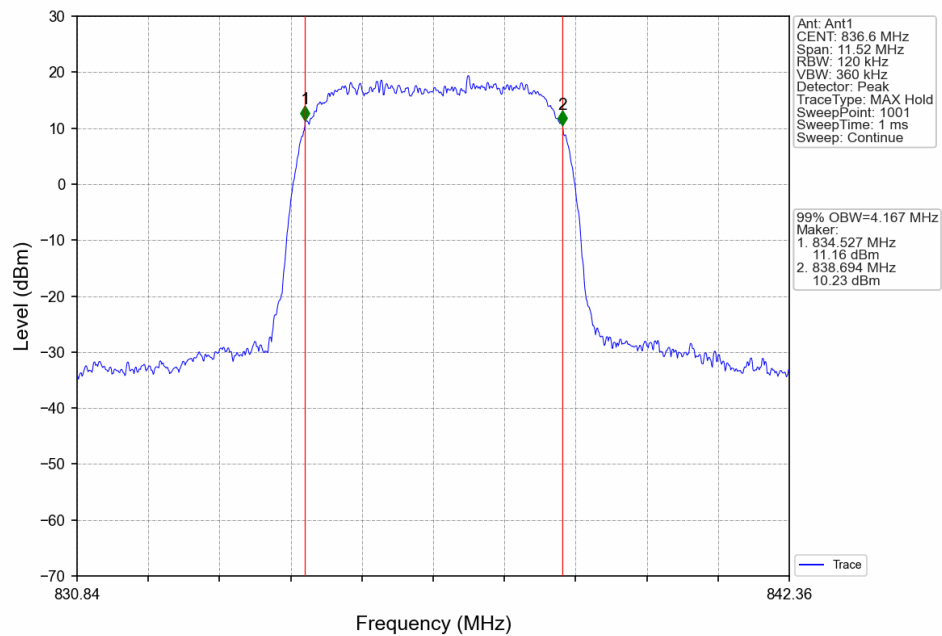
4.1 Band5_OBW

4.1.1 Test Result

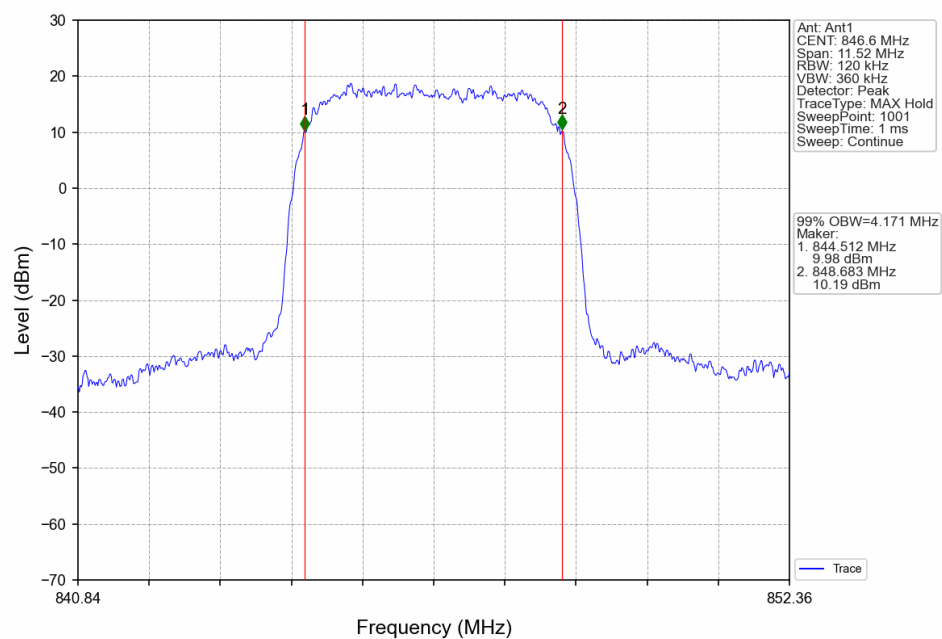
Band: 5					
ENV	Mode		Frequency (MHz)	99% Occupied Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	RMC	12.2kbps RMC	826.4	4.158	Pass
			836.6	4.167	Pass
			846.6	4.171	Pass
	HSDPA	Subtest 1	826.4	4.161	Pass
			836.6	4.179	Pass
			846.6	4.145	Pass
	HSUPA	Subtest 1	826.4	4.170	Pass
			836.6	4.177	Pass
			846.6	4.159	Pass

4.1.2 Test Graph

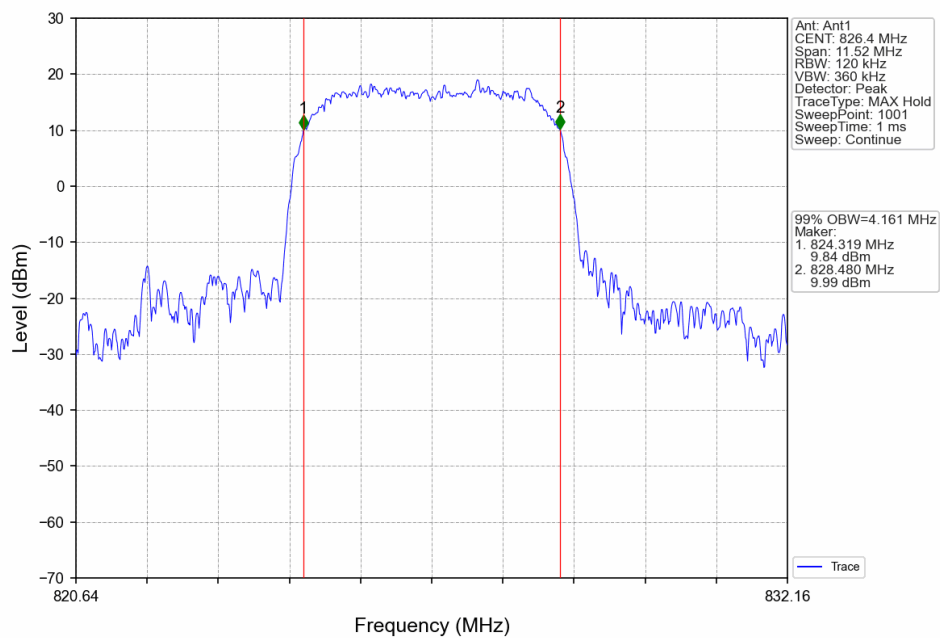




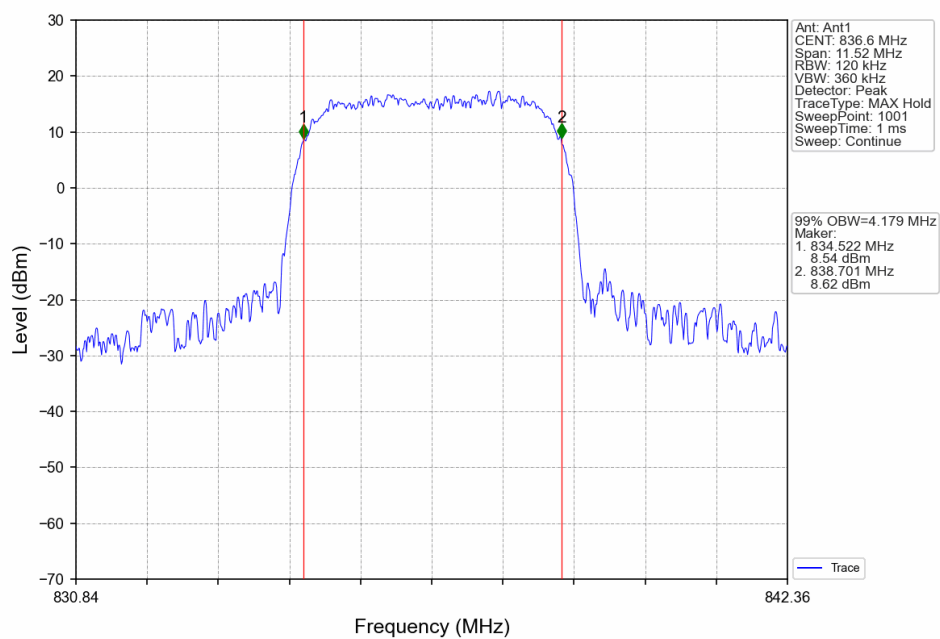
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



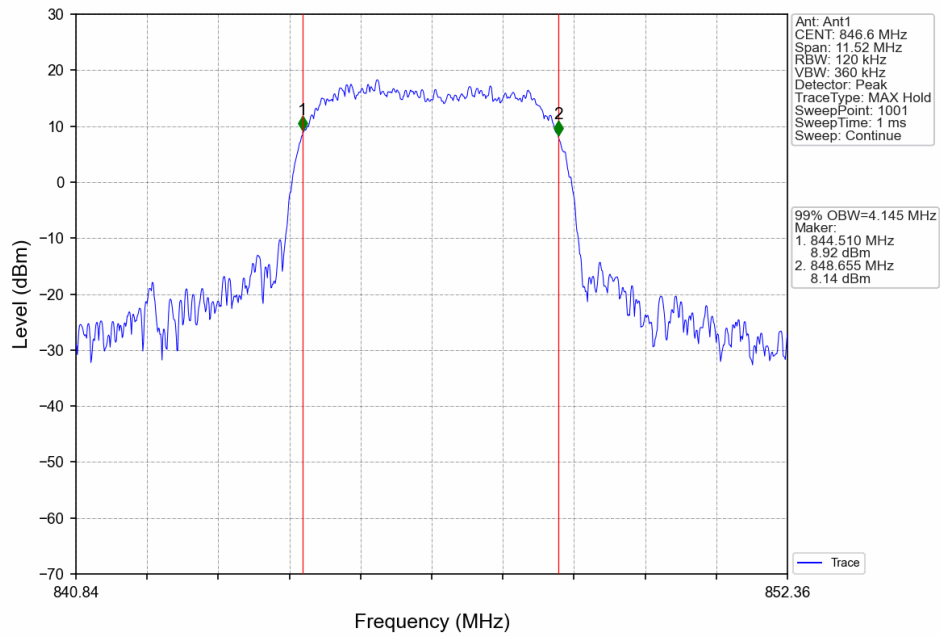
Band5_HSDPA_LCH_826.4MHz_Subtest 1 NTN



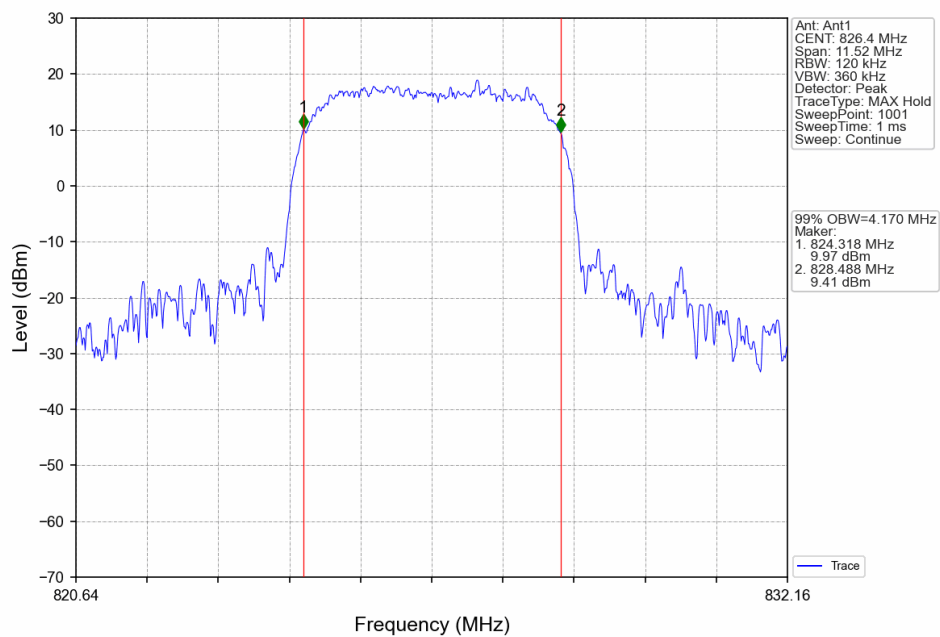
Band5_HSDPA_MCH_836.6MHz_Subtest1_NTNV



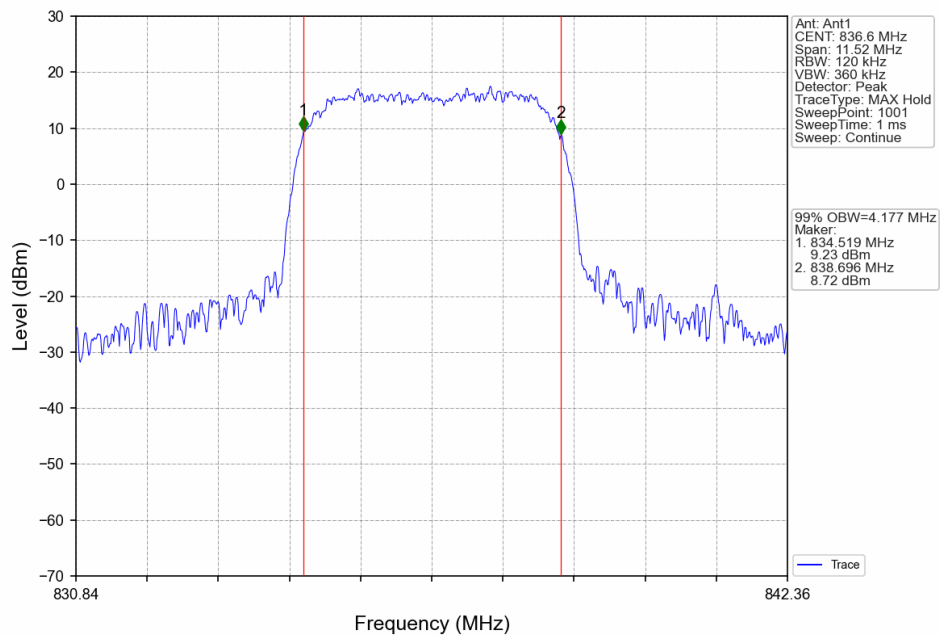
Band5_HSDPA_HCH_846.6MHz_Subtest1_NTNV



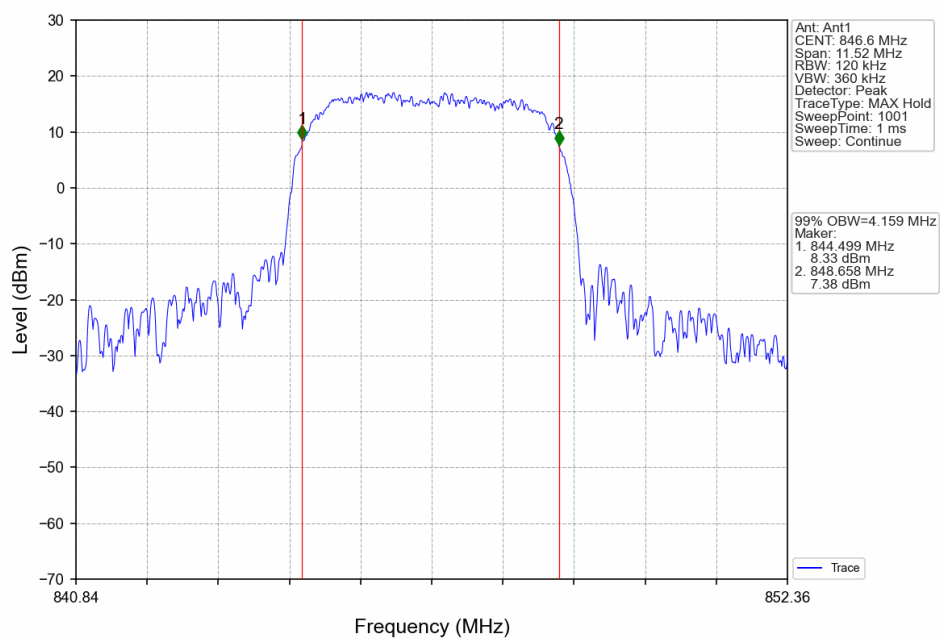
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV

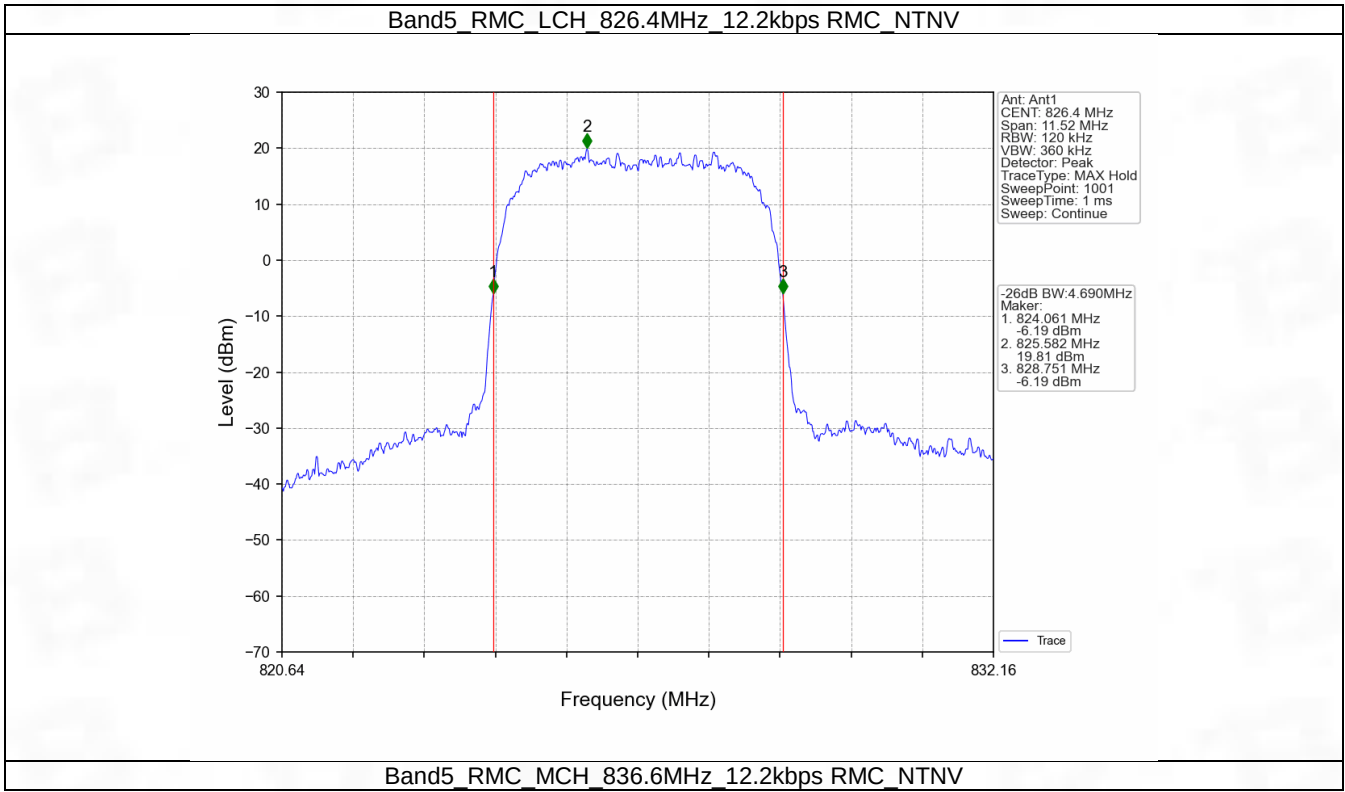


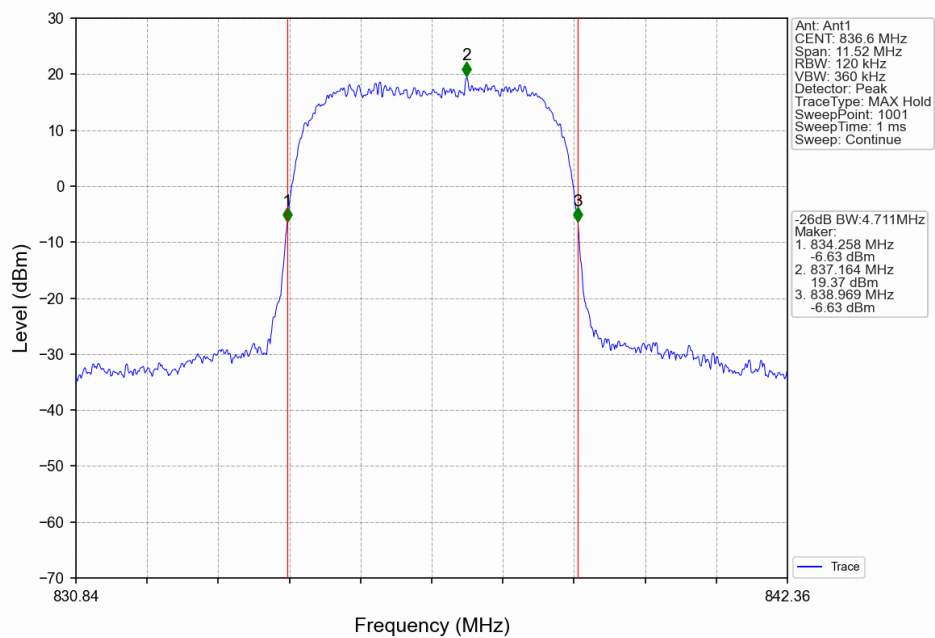
4.2 Band5_XDB

4.2.1 Test Result

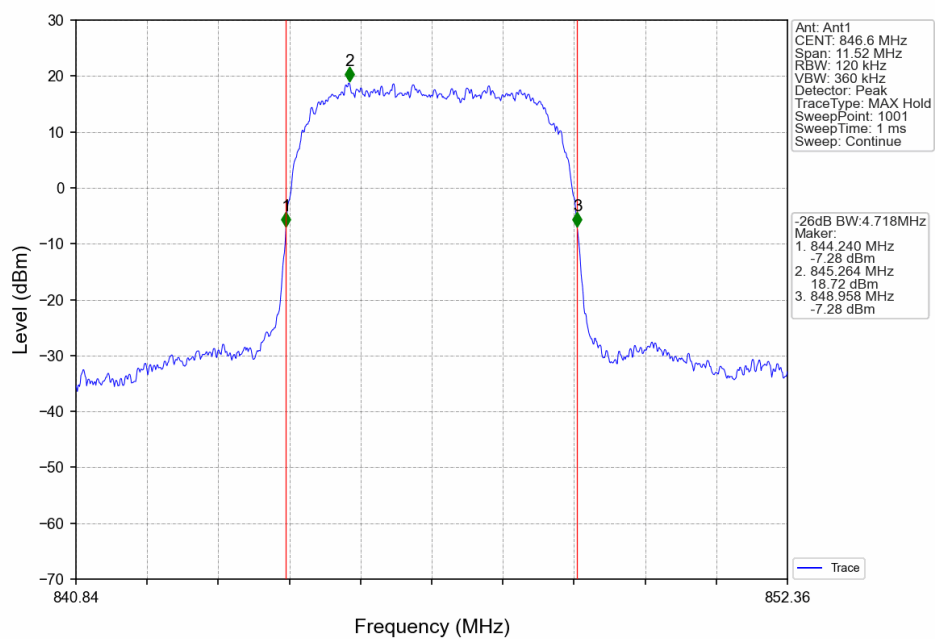
Band: 5					
ENV	Mode		Frequency (MHz)	26dB Bandwidth (MHz)	Verdict
	Network	Subset		Result	
NTNV	RMC	12.2kbps RMC	826.4	4.690	Pass
			836.6	4.711	Pass
			846.6	4.718	Pass
	HSDPA	Subtest 1	826.4	4.705	Pass
			836.6	4.724	Pass
			846.6	4.684	Pass
	HSUPA	Subtest 1	826.4	4.696	Pass
			836.6	4.731	Pass
			846.6	4.724	Pass

4.2.2 Test Graph

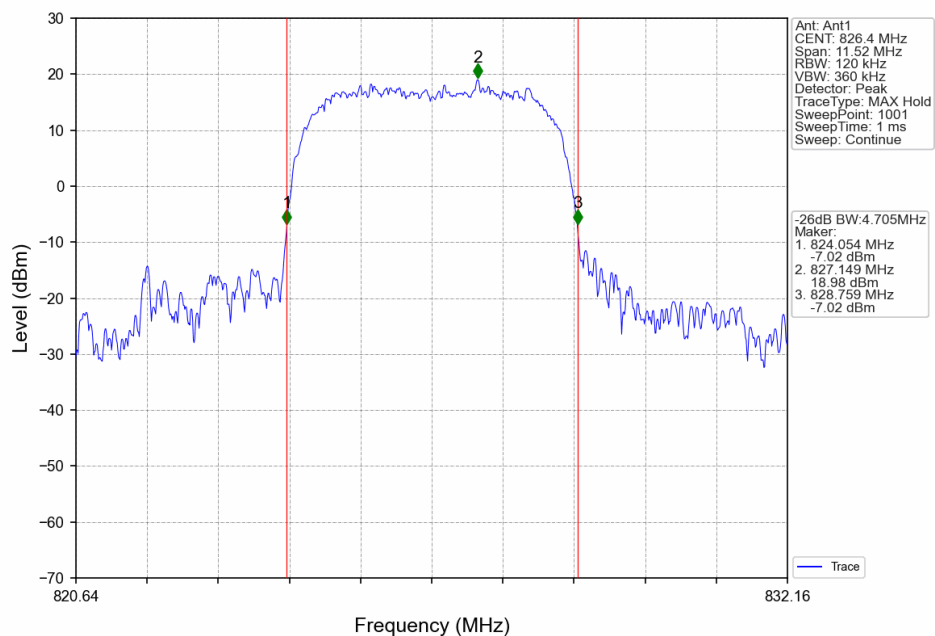




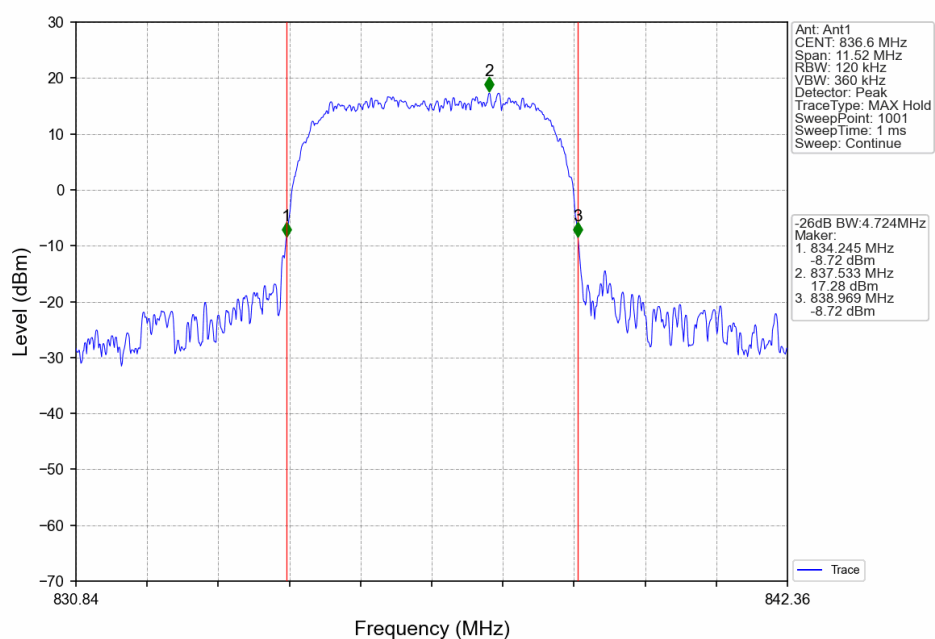
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



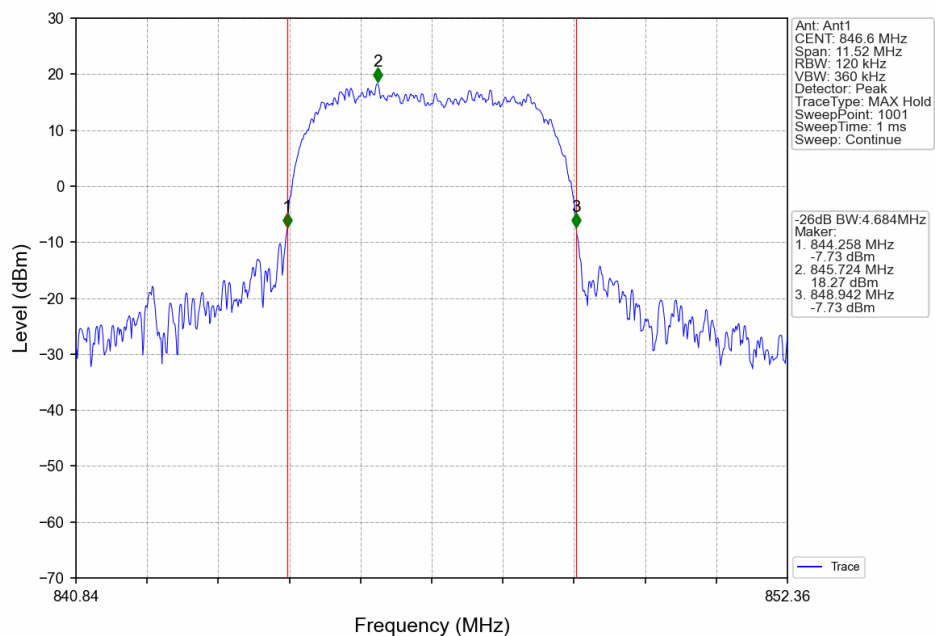
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



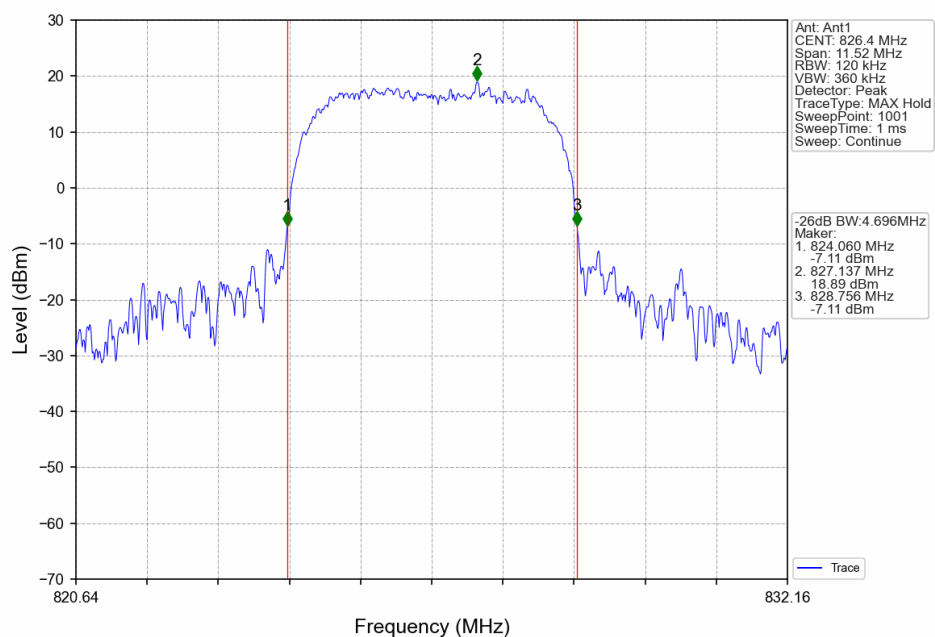
Band5_HSDPA_MCH_836.6MHz_Subtest1_NTNV



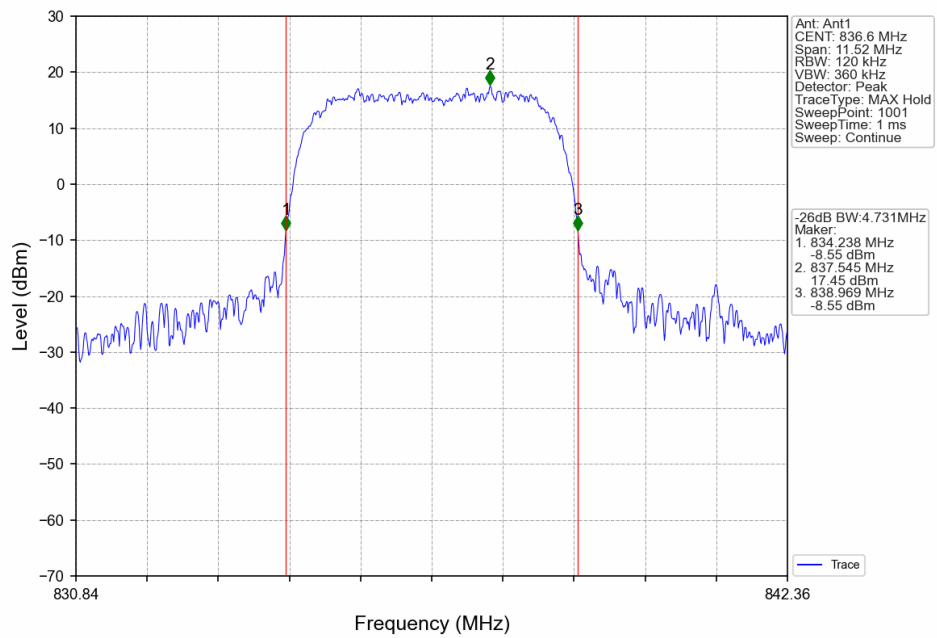
Band5_HSDPA_HCH_846.6MHz_Subtest1_NTNV



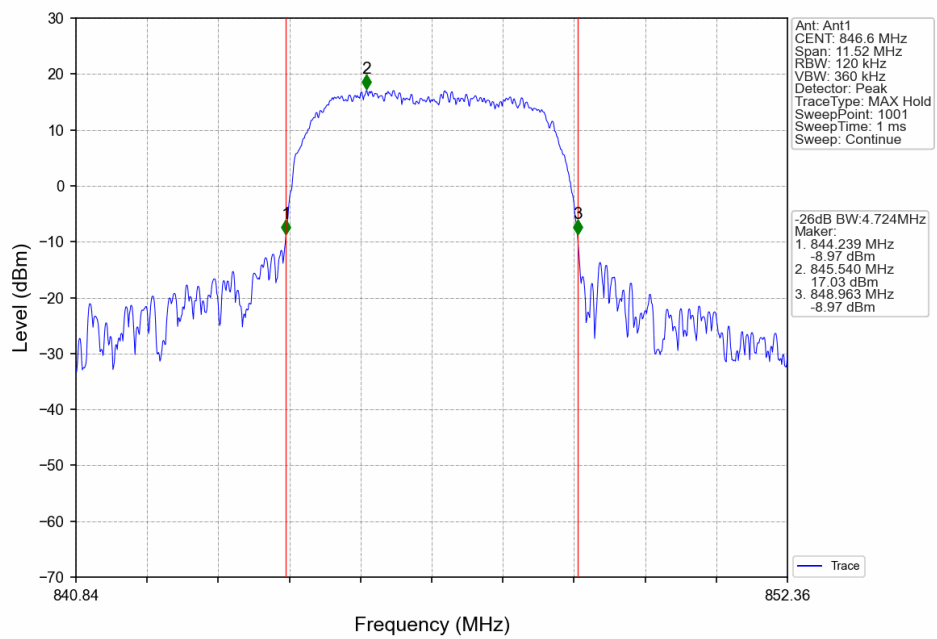
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



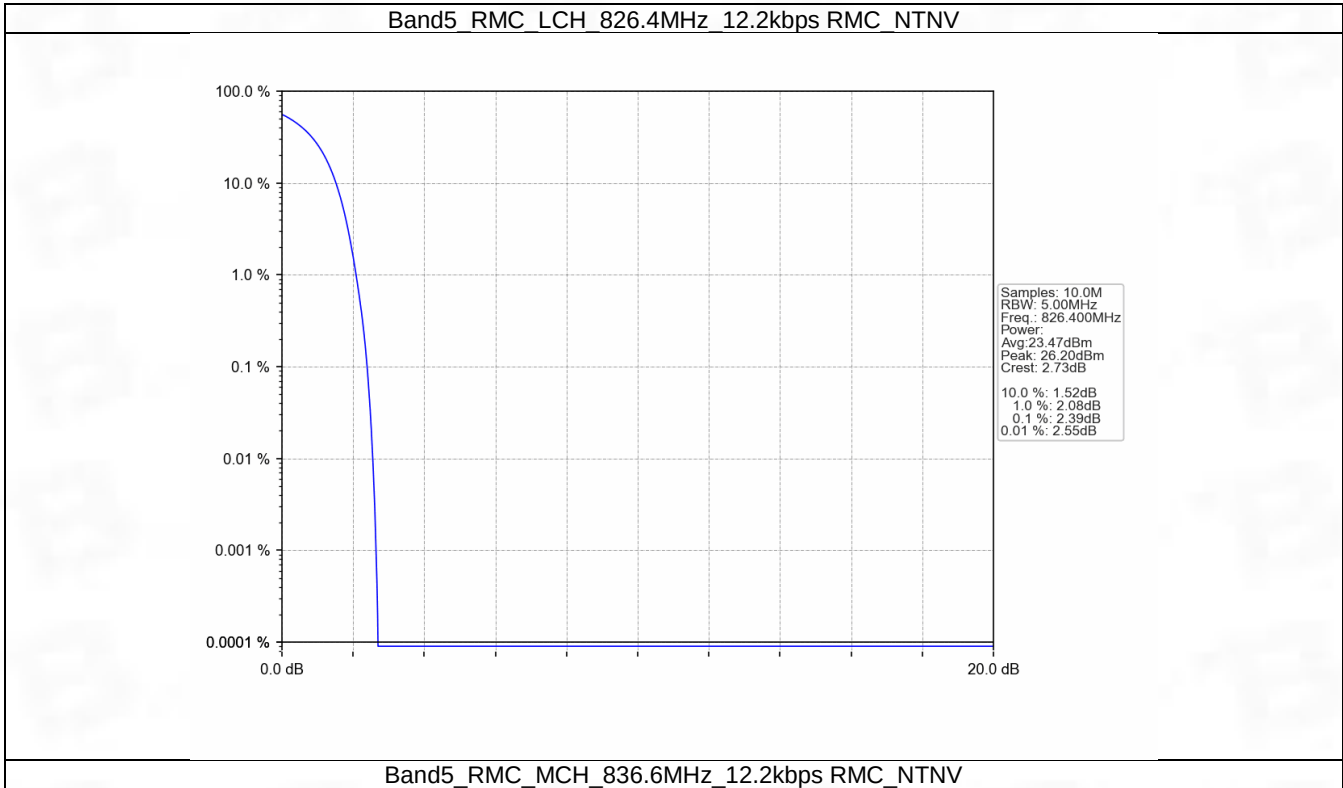
5. Peak-Average Ratio

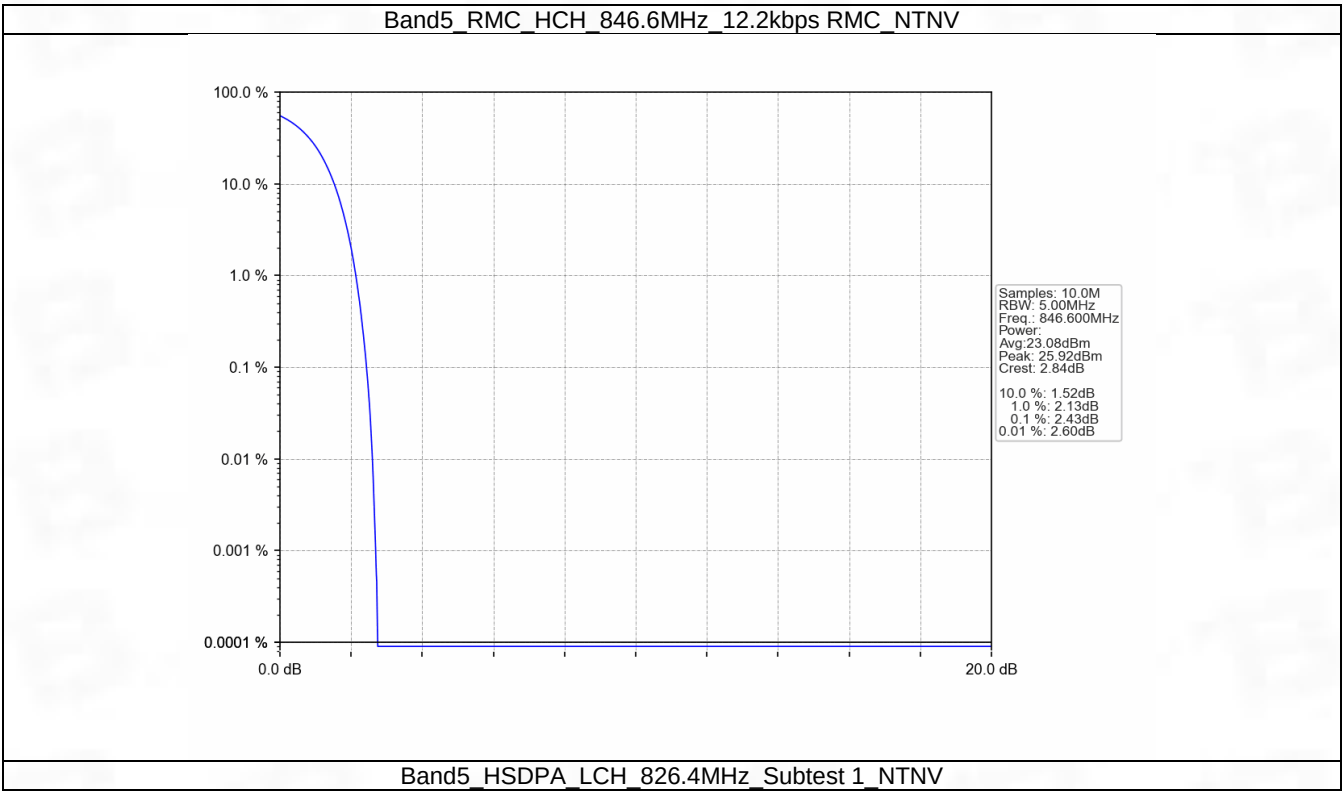
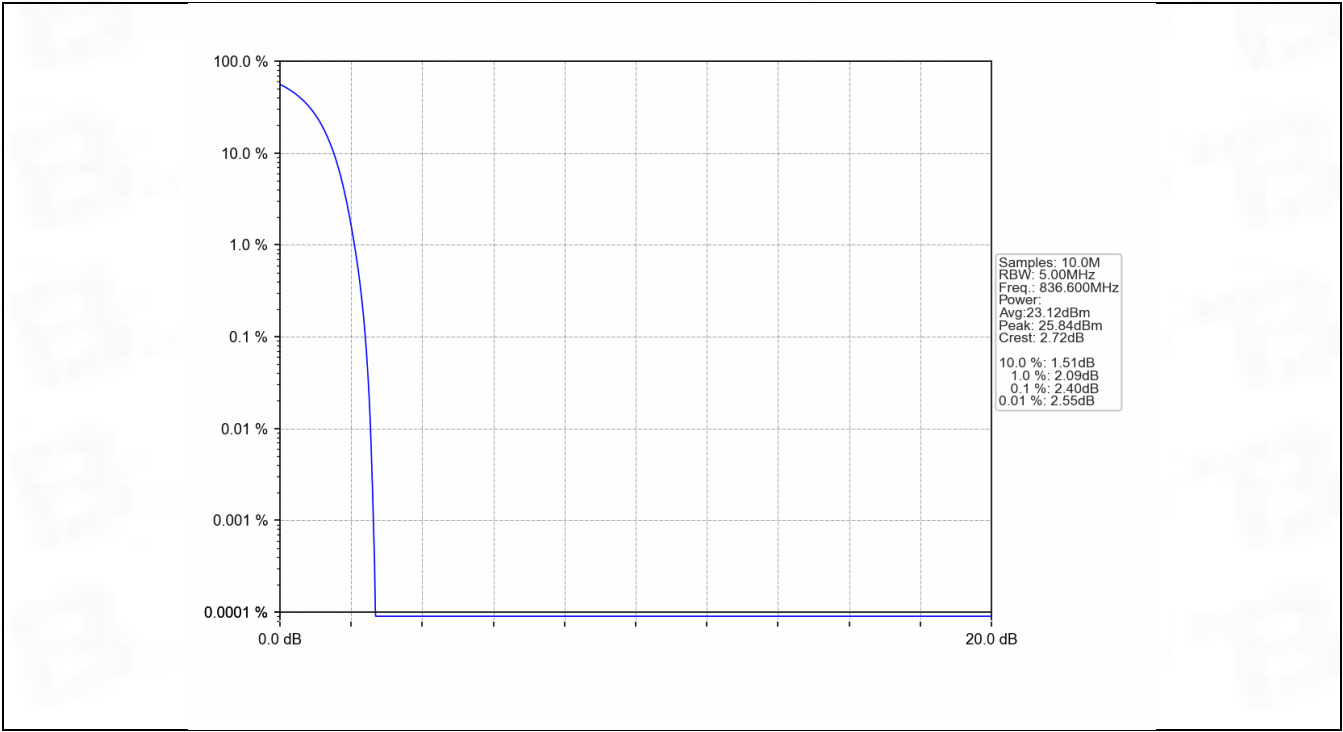
5.1 Band5

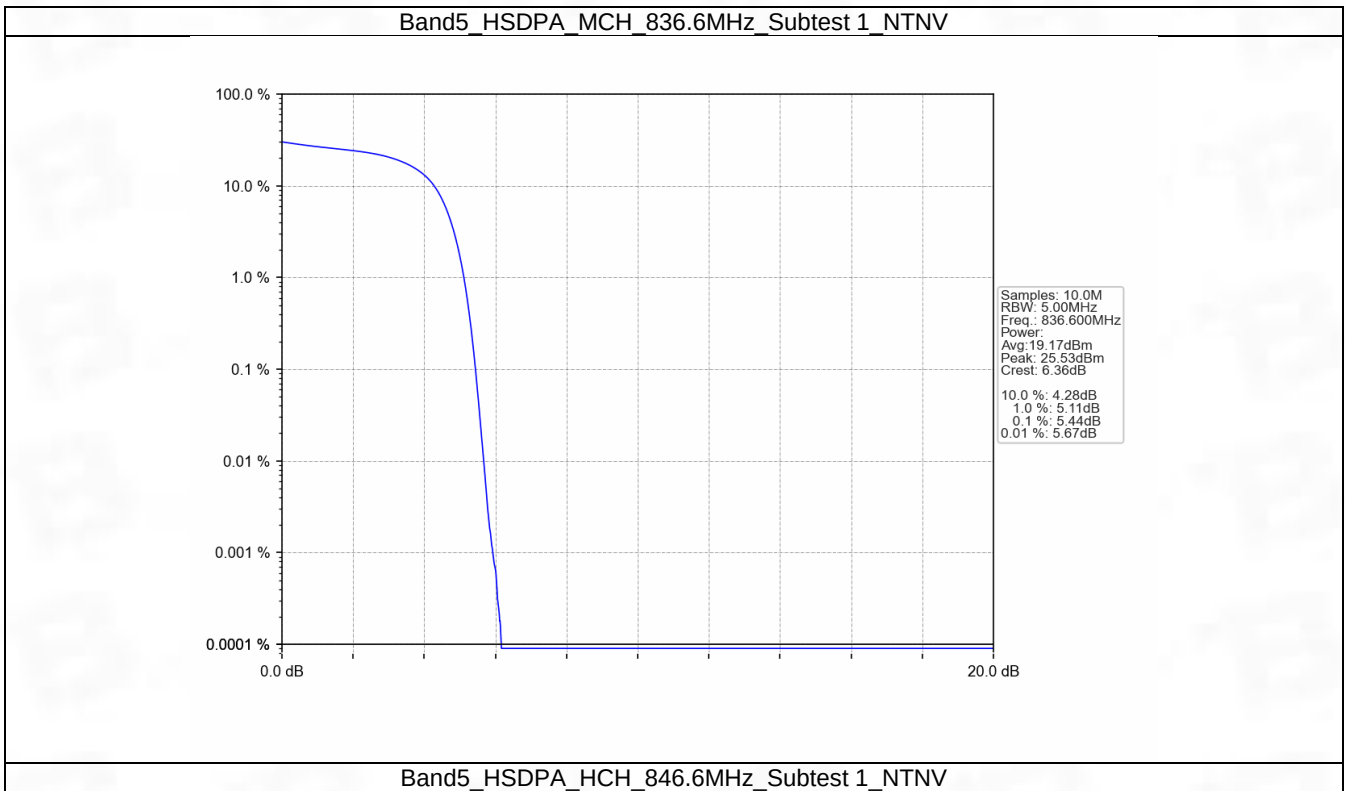
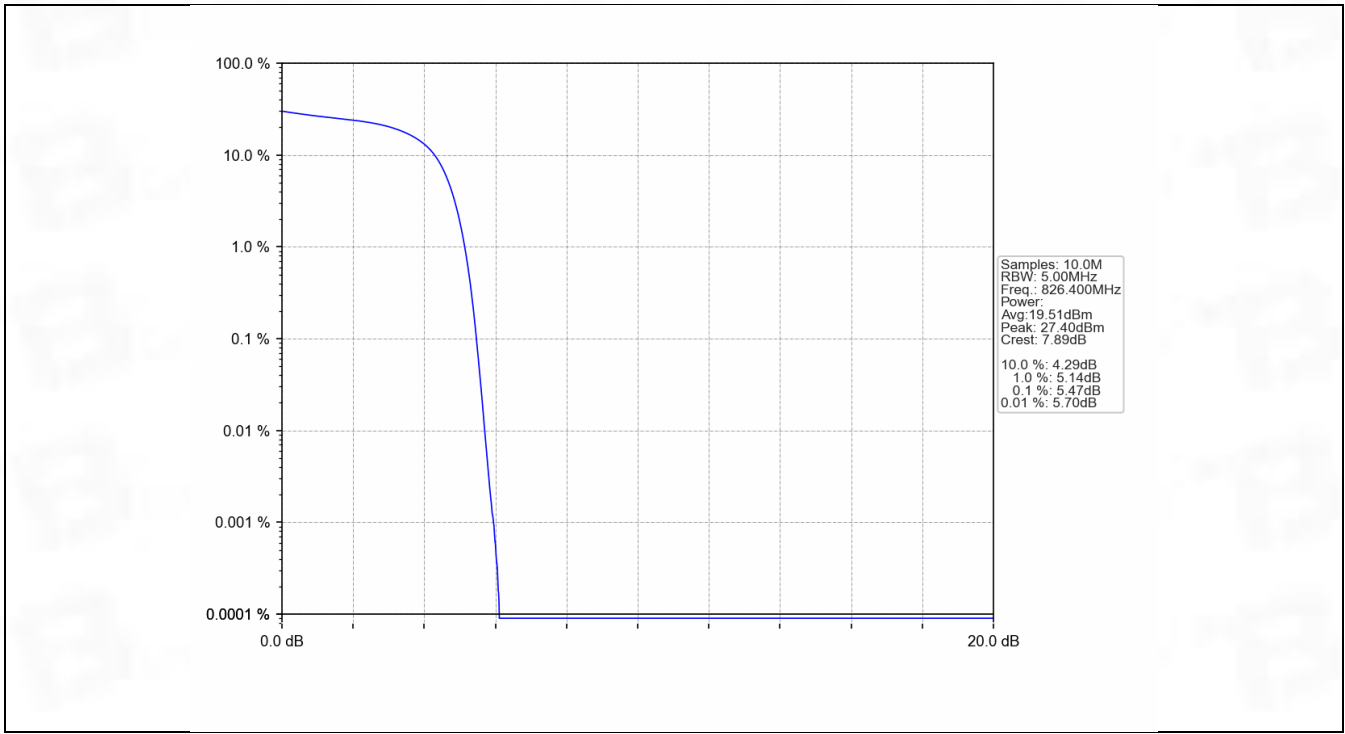
5.1.1 Test Result

Band: 5						
ENV	Mode		Frequency (MHz)	Peak-Average Ratio (dB)		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	2.39	<=13	Pass
			836.6	2.40	<=13	Pass
			846.6	2.43	<=13	Pass
	HSDPA	Subtest 1	826.4	5.47	<=13	Pass
			836.6	5.44	<=13	Pass
			846.6	5.51	<=13	Pass
	HSUPA	Subtest 1	826.4	5.52	<=13	Pass
			836.6	5.43	<=13	Pass
			846.6	5.53	<=13	Pass

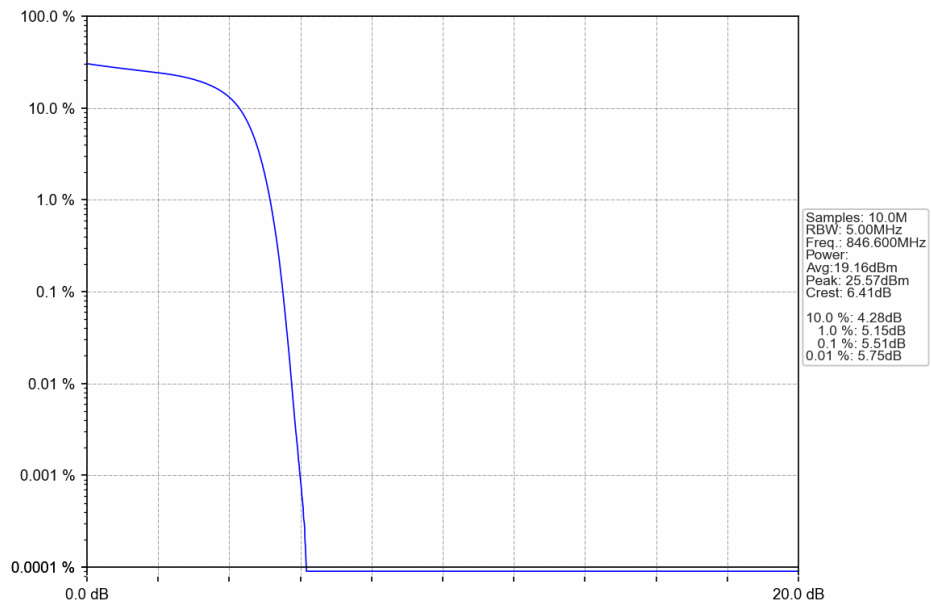
5.1.2 Test Graph



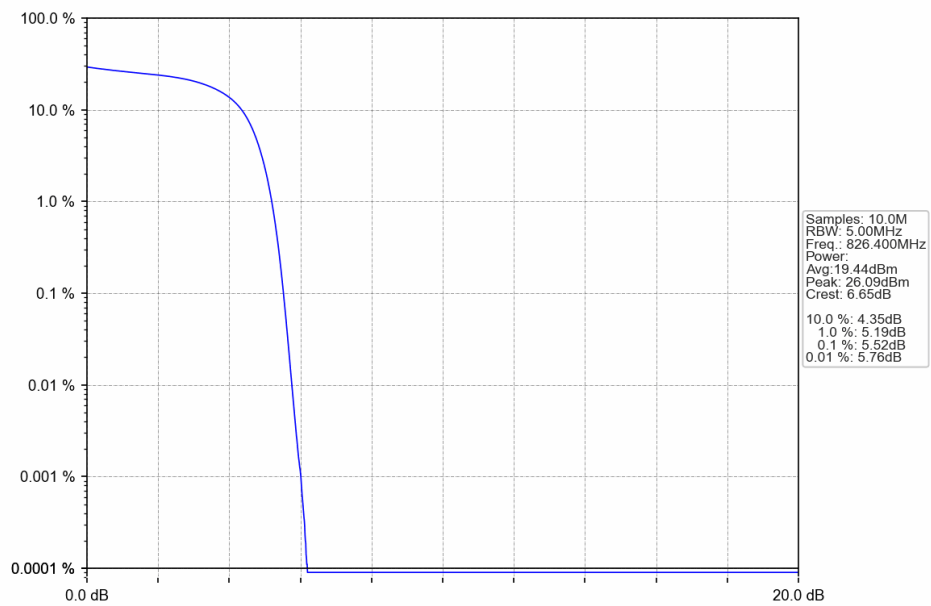




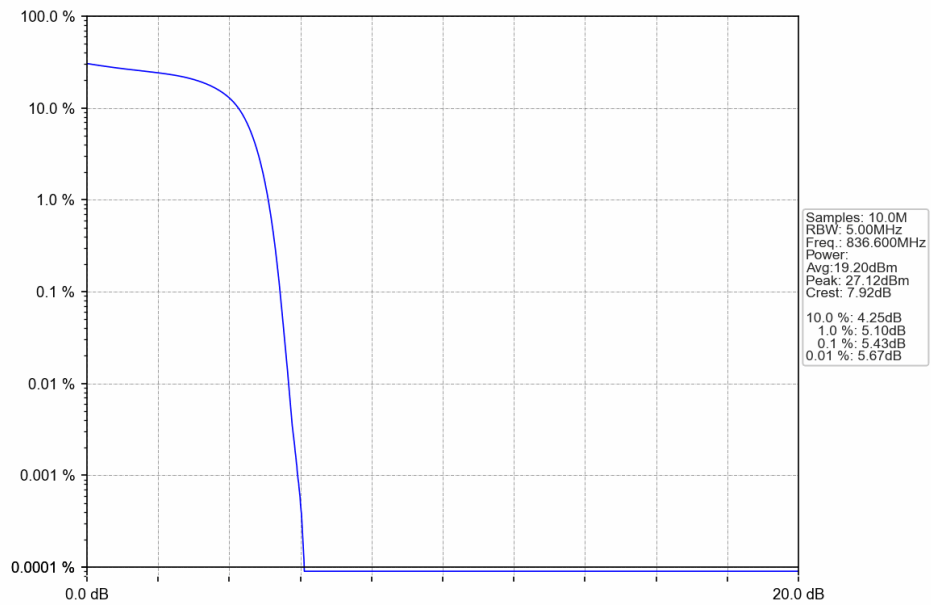
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



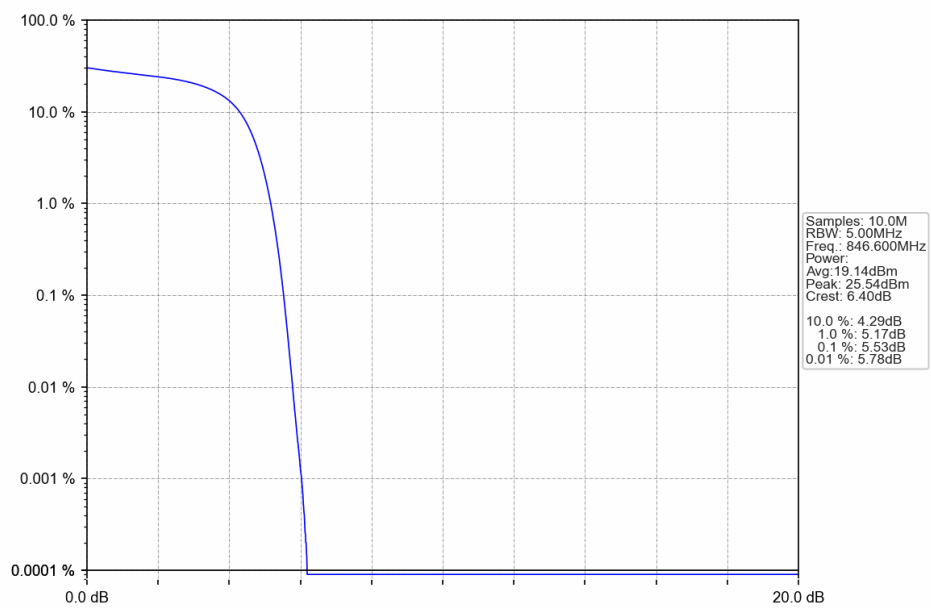
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



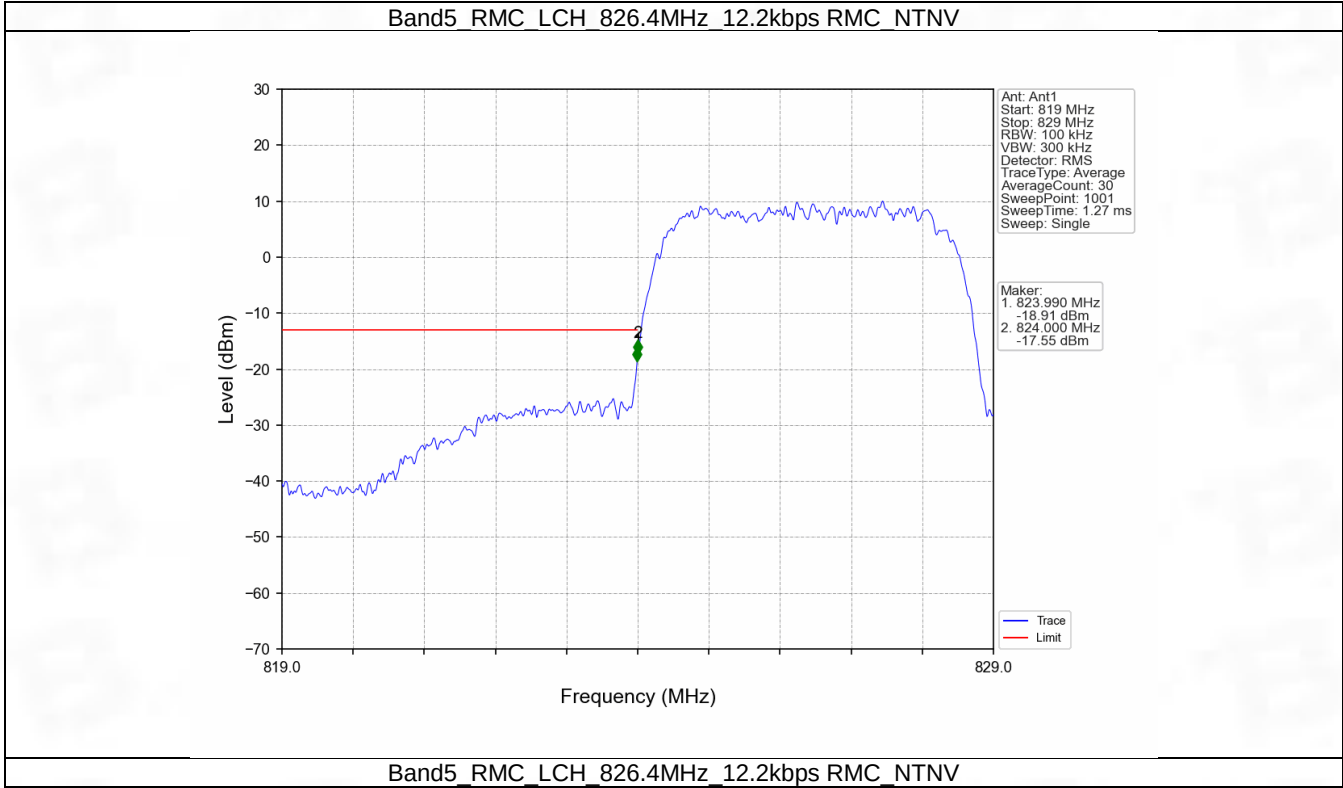
6. Spurious Emission

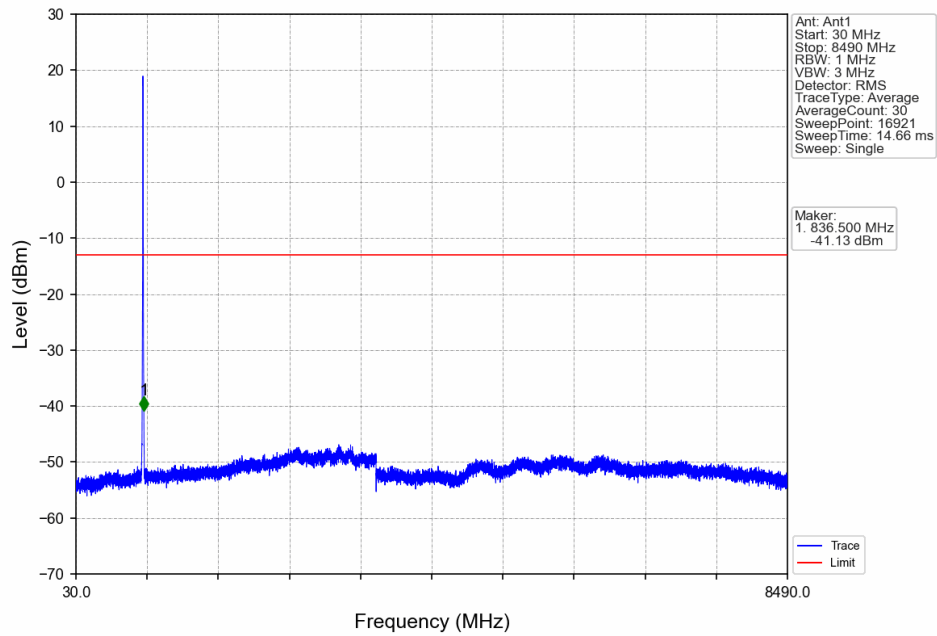
6.1 Band5

6.1.1 Test Result

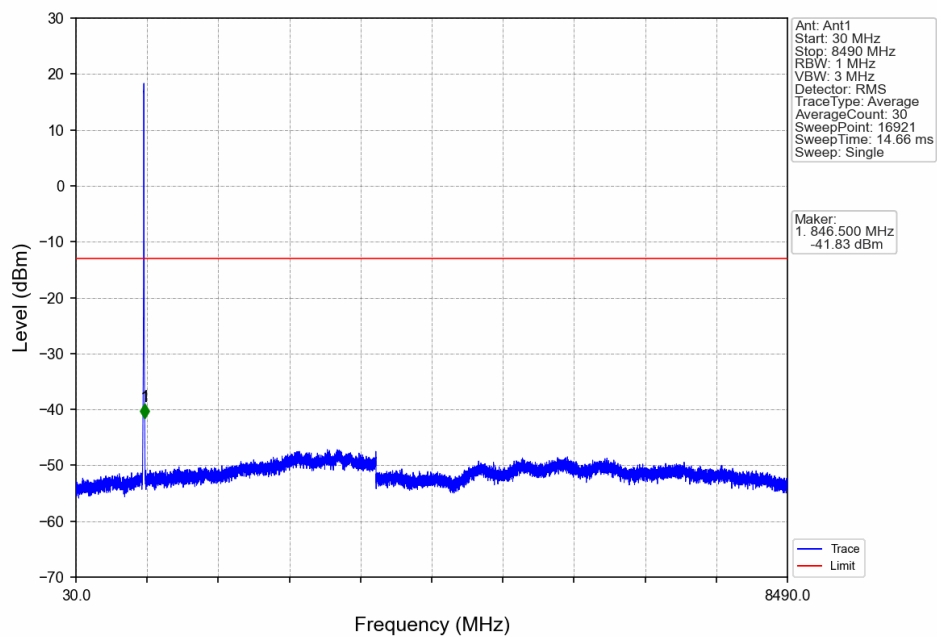
Band: 5						
ENV	Mode		Frequency (MHz)	Spurious Emission		Verdict
	Network	Subset		Result	Limit	
NTNV	RMC	12.2kbps RMC	826.4	Refer To Test Graph		Pass
			836.6	Refer To Test Graph		Pass
			846.6	Refer To Test Graph		Pass
	HSDPA	Subtest 1	826.4	Refer To Test Graph		Pass
			836.6	Refer To Test Graph		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

6.1.2 Test Graph

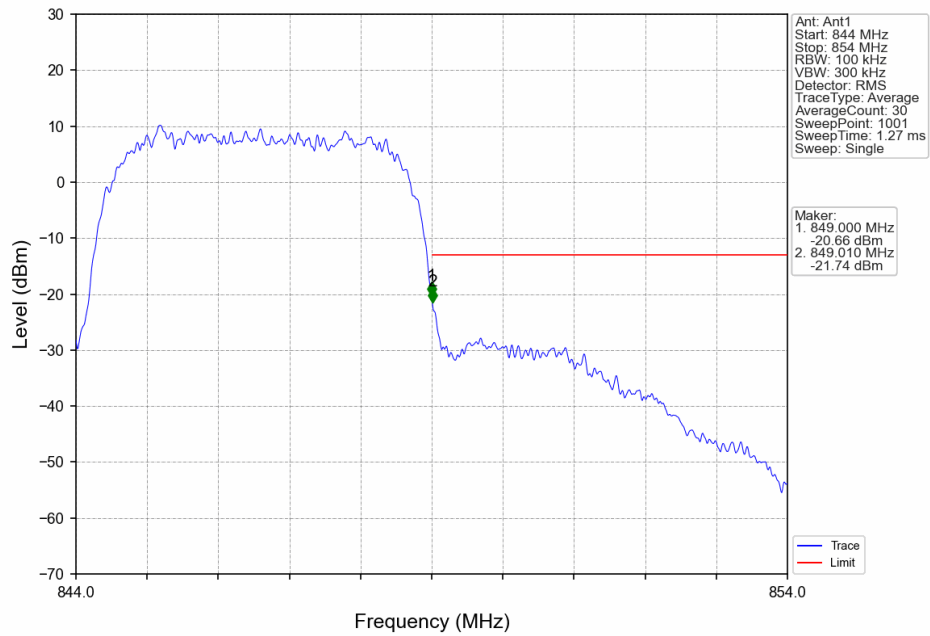




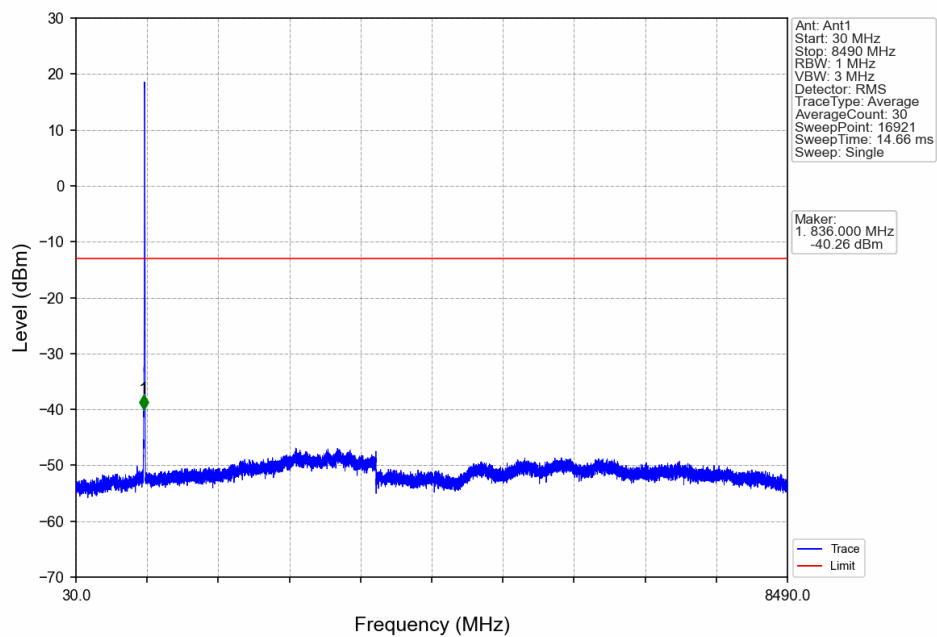
Band5_RMC_MCH_836.6MHz_12.2kbps RMC_NTNV



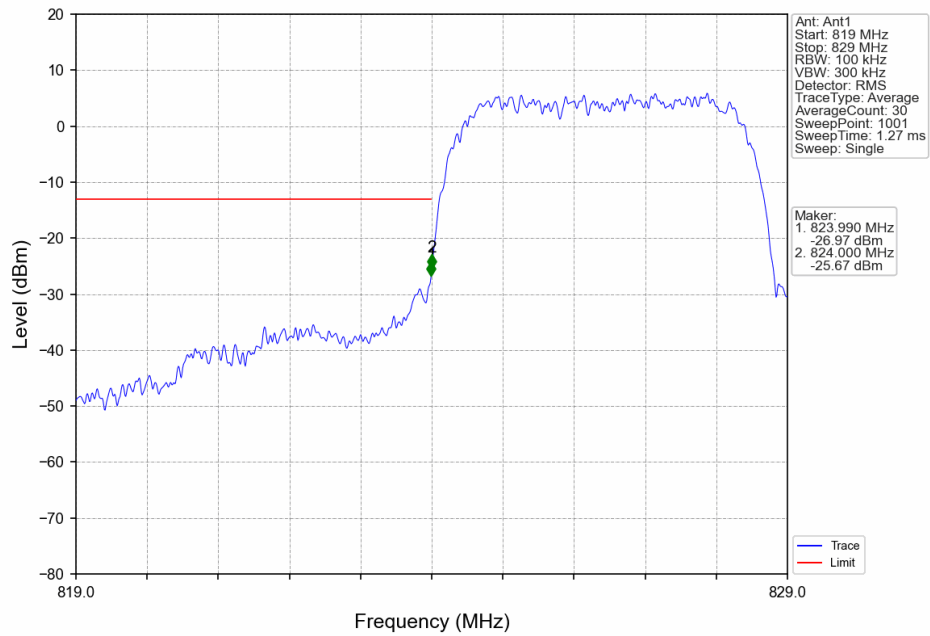
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



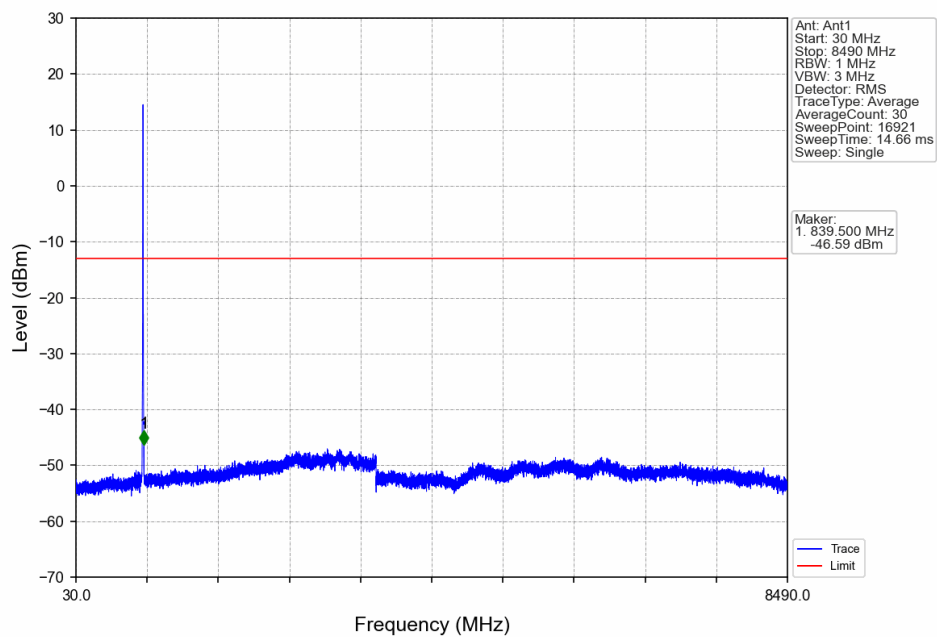
Band5_RMC_HCH_846.6MHz_12.2kbps RMC_NTNV



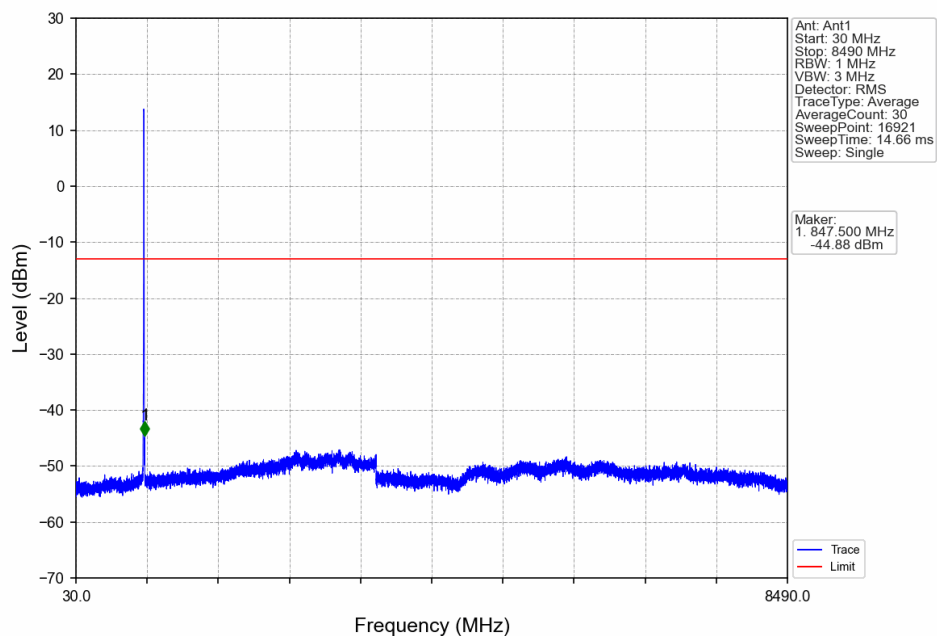
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



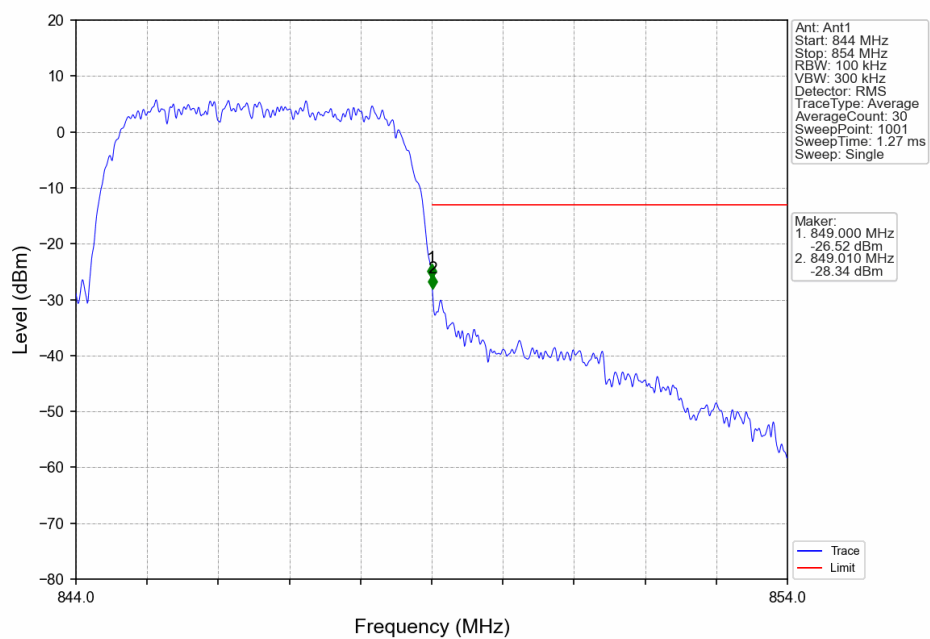
Band5_HSDPA_LCH_826.4MHz_Subtest 1_NTNV



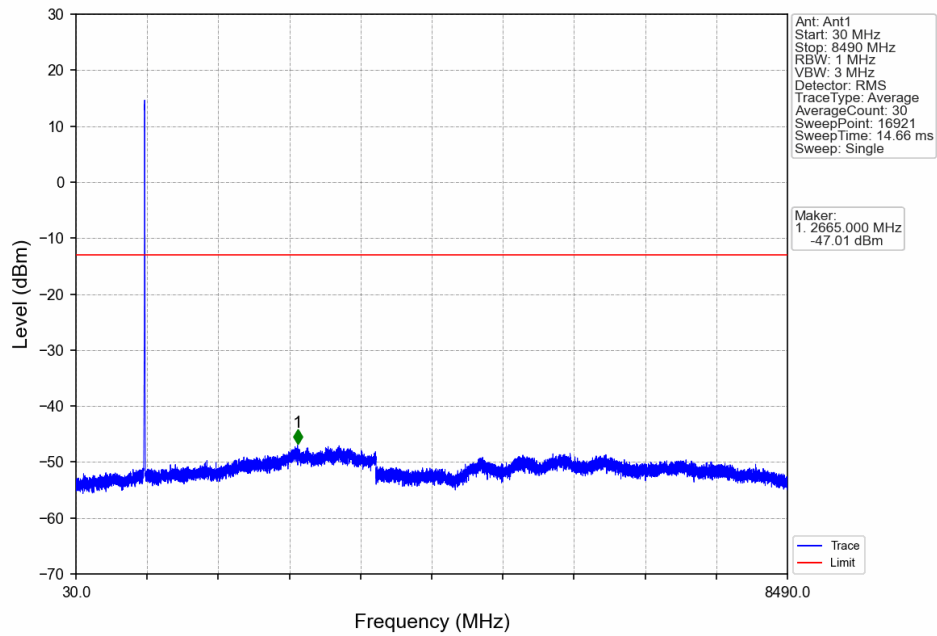
Band5_HSDPA_MCH_836.6MHz_Subtest 1_NTNV



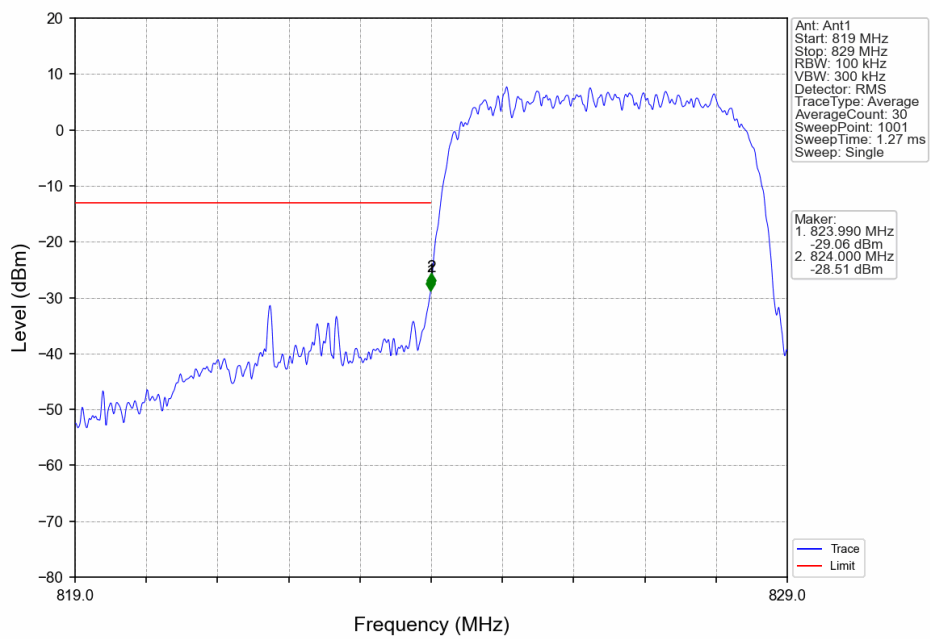
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



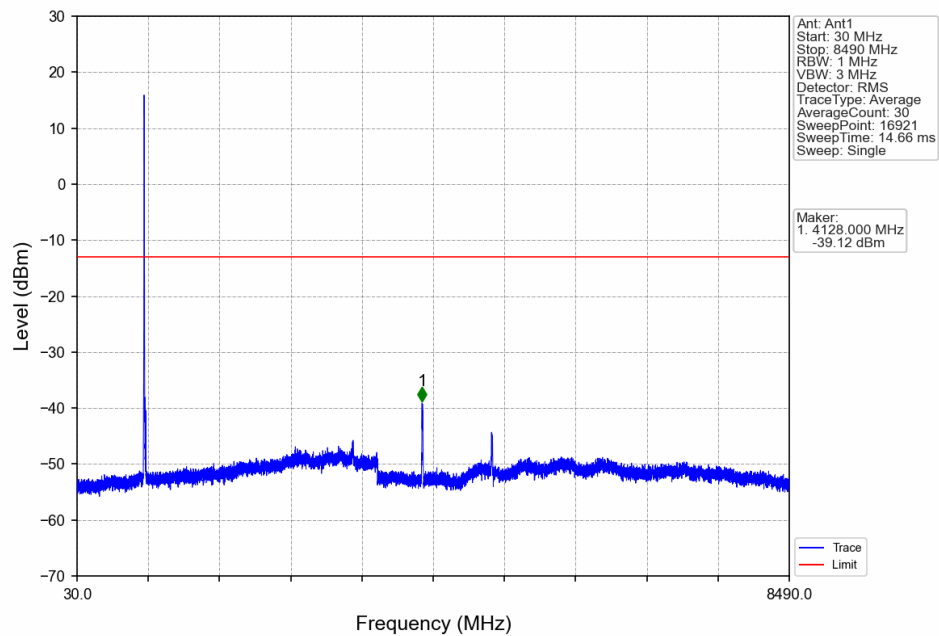
Band5_HSDPA_HCH_846.6MHz_Subtest 1_NTNV



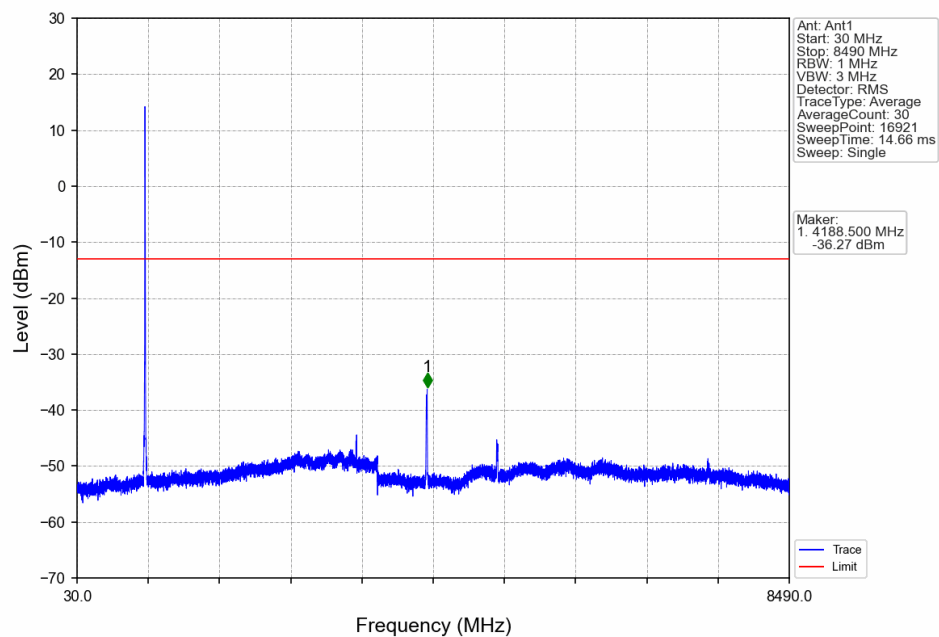
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



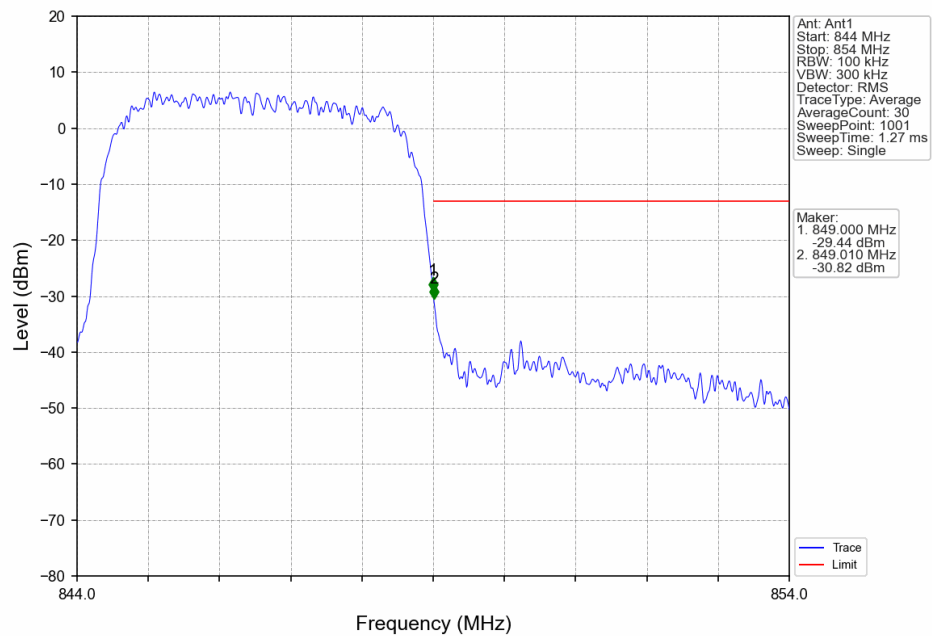
Band5_HSUPA_LCH_826.4MHz_Subtest 1_NTNV



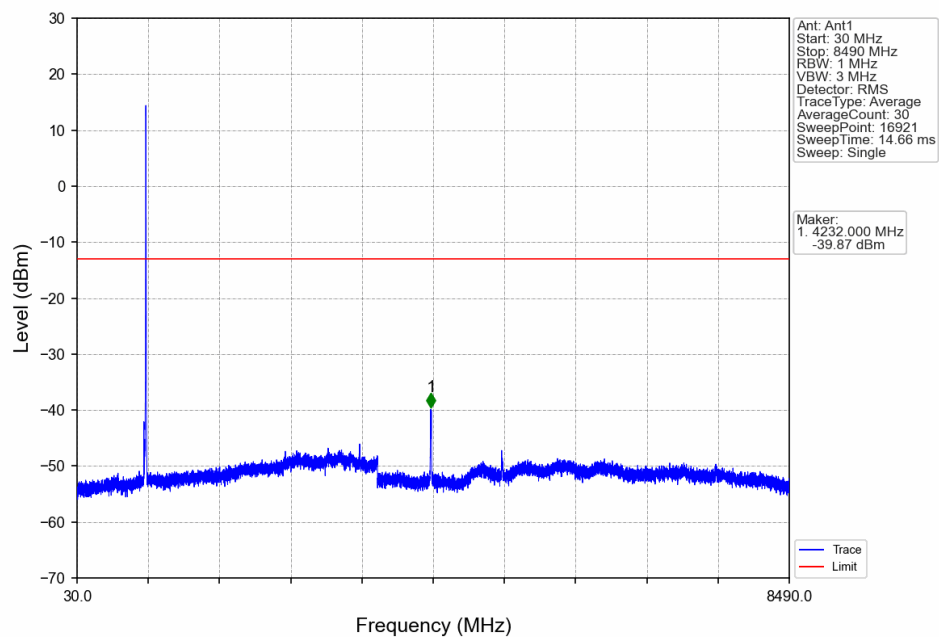
Band5_HSUPA_MCH_836.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



Band5_HSUPA_HCH_846.6MHz_Subtest 1_NTNV



7. Form731

7.1 Form731_Power

7.1.1 Test Result

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	0.1230	0.0070	ppm	4M18F9W	22H	20.90

7.2 Form731_ERP

7.2.1 Test Result

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	0.0838	0.0070	ppm	4M18F9W	22H	19.23